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PREFACE

In this Encyclopædia are included all the indigenous, cultivated, and exotic plants which are now found in, or have been introduced into, Britain. The object of the work is to give a natural history of these plants, accompanied by such descriptions, engraved figures, and elementary details, as shall enable a beginner, who is a mere English reader, to discover the name of any plant which he may find in flower, refer it to its proper place, both in the Natural and Artificial Systems of Classification, and acquire all the information respecting it which is useful or interesting. It must be evident to all who are conversant with the present state of botany, and who know the number of plants which have been introduced into Britain, that to accomplish such an object within the limits of a volume is a task of no ordinary difficulty; some explanation of the manner in which it has been executed may therefore be required.

The Work is divided into Two Parts. The First Part (p. [1]) contains the Linnean or Artificial Arrangement of all the genera and species, with all the details comprehended in botanical description and natural and artificial botanical history, and with engraved portraits of one or more species of each genus. The Second Part (p. 1051.) contains the Jussieuean or Natural Arrangement of all the genera, without repetition of the species or any details connected with them: but as the names of the natural orders are added after each genus in the Artificial System, and as each genus in both arrangements is numbered, a direct reference may be had from the second arrangement to the first, and from the first to the second; reference may also be had indirectly, through the medium of the Contents and Index.

An Introduction is given to each system of arrangement (p. [1.] & 1051.), and a General Introduction to the whole work (p. xix.), in which its uses are explained. When the beginner has a plant in flower and would ascertain its name, he will turn to the Linnean System, as explained in the Introduction to that system (p. [1.]); and, when he has but a small part of any plant, he will turn to the Natural System, as directed in the General Introduction (p. xix.).

All the Technical Terms, or words not usually found in an English dictionary, are explained in the Glossary (p. 1094.); and engravings are given of such of the objects designated as might occasion any difficulty to a beginner. This Glossary and the two Introductions (p. [1.] & 1051.) form together a complete Grammar of Botany.

The Table of Synonymes in various languages (p. 1108.) may, to a certain extent, be considered as presenting the Popular Floras of the various countries where these names are used; since it is only to the remarkable plants of a country that vernacular names are given.

The signs used for the habits of plants (column 3.), and their duration in the garden (col. 4.), are improvements in botanical description by the Editor*, now applied for the first time. The twenty-three varieties of habit are indicated by figures of the plants themselves; as a grass for a grass, a bulb for a bulb, a plant floating on water for an aquatic, &c., &c., to recollect which requires no exertion of memory. A perennial is indicated by a triangle, instead of the old sign, ♃; an annual remains a circle as before, ○, because, among other reasons, gardeners sow patches of annual flowers in circles; and a biennial is a double circle, ◎, instead of the old sign, ♂. The bark stove is a square, □; the dry stove three sides of a square, ⊐; the green-house two and a half sides of a square, ⌴; and the frame two sides of a square, ⌴; because these forms, if supposed to indicate the sections of plant-houses enclosed by glazed sashes, as actually built, will represent the different structures which are meant to be indicated. By combining the signs of duration with habitation, ⧈ ⧊ ◫ ◍, &c. &c., much room is saved in abridged botanical description. Thus, in consequence of the single innovation of the triangle and the

* Originally exhibited in the *Encyclopædia of Gardening*, 2d edit. 1824, p. 126.

LOUDON'S

ENCYCLOPÆDIA

OF

PLANTS;

COMPRISING THE

SPECIFIC CHARACTER, DESCRIPTION, CULTURE, HISTORY, APPLICATION IN THE ARTS,
AND EVERY OTHER DESIRABLE PARTICULAR RESPECTING ALL THE PLANTS
INDIGENOUS TO, CULTIVATED IN, OR INTRODUCED
INTO

BRITAIN.

EDITED BY

MRS. LOUDON

ASSISTED BY

GEORGE DON, F.L.S.

AND

DAVID WOOSTER,

LATE CURATOR OF THE IPSWICH MUSEUM.

NEW IMPRESSION.

LONDON:

LONGMANS, GREEN, AND CO.

1866.

square, we have simplified and extended the power of indicating the habits and habitations of plants by signs from ten, the usual number in the most complete botanical catalogues, to forty, the number employed in this work.

No farther explanation of the nature and uses of this work appearing necessary, it only remains to present the thanks of the Proprietors and of the Editor to AYLMER BOURKE LAMBERT, Esq., F.R.S. V.P.L.S. F.G.S. &c., for allowing Mr. SOWERBY the freest use of his rich botanical library and extensive herbarium, for the selection of subjects to be engraved; and to DAVID DON, Esq., Lib. L.S., Mr. LAMBERT'S librarian, for his unremitted and unwearied exertions, during upwards of seven years, to facilitate the labours of Mr. SOWERBY. To ROBERT BROWN, Esq., F.R.S. V.P.L.S. &c.; to the Council of the Linnæan Society; and, again, to DAVID DON, Esq., in his capacity of librarian to the Linnæan Society, the Proprietors are much indebted for similar services; and they beg leave to thank, in a very particular manner, Messrs. LODDIGES of Hackney, for original drawings of many species, made from living plants in their unrivalled collection of exotics. Without the herbarium of Mr. LAMBERT, and the Hot-houses of Messrs. LODDIGES, this work could not have been produced.

It remains only for the Editor to state, that the botanical merits of this publication belong entirely to Professor LINDLEY, F.R.S. L.S. G.S. &c.; and J. D. C. SOWERBY, Esq., F.L.S., &c. The former gentleman determined the genera and the number of species to be arranged under them; prepared the specific characters, derivations, and accentuations; either wrote or examined the notes; and corrected the whole while passing through the press: the latter, assisted by DAVID DON, Esq., and Messrs LODDIGES, sought out the figures, dried specimens or living plants, necessary for illustration, and made drawings of them on the blocks to be engraved, in that accurate and scientific manner, and with that appropriate taste, for which his late father was long so much distinguished, and for which he himself has not yet been equalled in this or in any country. All that the Editor can deem to be his own is the plan of the work; and if this be found not to have failed in answering those expectations which the state of science, in botany and the compilation of books, might have warranted in 1822, when this work was commenced, he will have obtained all the approbation to which he is entitled.

Bayswater, May, 1829. J. C. L.

The SUPPLEMENTS which accompany the present edition of the *Encyclopædia of Plants* contain the most important species and varieties of plants which have been introduced into British gardens, or been originated there between 1827 and 1855. A new General Index is also given. The First Additional Supplement was prepared by Mr. W. H. BAXTER, Curator of the Royal Botanic Garden, Oxford; and revised by GEORGE DON, Esq., F.L.S.; and the Second Additional Supplement has been prepared by Mr. DON, assisted by Mr. DAVID WOOSTER, late Curator of the Museum at Ipswich. The drawings of the plants for the woodcuts of both Supplements have been made by J. D. C. SOWERBY, Esq., F.L.S.

The First Additional Supplement was prepared by my late husband; and in the present one I have endeavoured, as closely as possible, to follow the same plan. As, however, the publication of this Second Additional Supplement was unavoidably delayed from the difficulty of finding living specimens or dried plants, to serve as copy for some of the woodcuts, I have, assisted by Mr. WOOSTER, added an Appendix containing the most important of the plants which have been introduced since the letterpress of the Supplement was completed. In preparing this Appendix I have been greatly indebted to the *Bon Jardinier* for the present year, published by M. LOUIS VILMORIN, of Paris; and to Messrs. VEITCH, of Exeter, whose very able collector, Mr. LOBB, has introduced so many new and valuable plants.

Bayswater, April, 1855. J. W. L.

☞ To indicate when a reference to the Supplement is necessary, a cross (+) is placed in the body of the work before such genera as are divided or repeated, and also in those places where new genera should have come in; and a § before such species as have some further information given respecting them in the Supplement.

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NAMES OF BOOKS REFERRED TO.

A ac pa 860. Act par.	Mémoires de l'Académie Royale des Sciences 1 vol. 4to 1666—1788 Paris
Abb ins. 780	Abbott's Natural History of the Insects of Carolina Folio
Abel China, 394	Abel (Clarke) A Voyage to China. 4to
Ac E 886.	Acta Eruditorum quæ Lipsiæ publicantur 50 vols 4to 1682-1731
Act. bon 176	De Bononiense Scientiarum et Artium Instituto Commentarii 4to Bononiæ 7 vols 1748—1791.
Act. helv 540 Ac h 828	Acta Helvetica physico-mathematico-botanico-medica. 8 vols 4to Basileæ, 1757—1777
Act holm. 944.	Kongl. svenska vetenskaps academiens Handlingar. 8vo Stockholm, 1739—1816
Act. petr. 58.	Commentarii Academiæ Scientiarum Imperialis Petropolitanæ 14 vols 4to Petropoli, 1728—1751
Act ups 90	Acta literaria et Scientiarum Upsaliæ publicata 8vo 1720—1816
Allion 94	Allioni (Carolus) Rariorum Pedemontii Stirpium Specimen 1 vol 4to Taurini, 1755
All auc 16	*Id.* Auctuarium ad Floram Pedemontanam. 1 fasc 4to. Taurini, 1789
All ped. 16	*Id* Flora Pedemontana, 3 vols fol. Taurini, 1785
Alp æg 196.	Alpinus (Prosper) De Plantis Ægypti liber. 4to Venetiis, 1592
Alp ex 94	*Id* De Plantis exoticis libri duo 4to Venetiis, 1629
Amœn ac. 334 Am ac 382	Linnæi Amœnitates Academicæ, seu dissertationes antehac seorsim editæ 10 vols 8vo Holmiæ and Lipsiæ, 1749, et seq.
Am. rut. 14	Ammann (Johan) Stirpium rariorum in Imperio Rutheno sponte provenientium Icones et Descriptiones. 4to. Petrop 1739
And ger 578	Andrews (Henry) Coloured Engravings of Geraniums. Fol London.
And. hea 304.	*Id* Coloured Engravings of Heaths, with botanical descriptions. 3 vols. fol. London, 1802—1809.
Ann. bot. 4.	Annals of Botany, by C König and J. Sims. 2 vols. 8vo London, 1805 and 1806.
Ann. mus 354 An mu 88.	Annales du Muséum d'Histoire Naturelle. 20 vols. 4to Paris, 1802—1813
Ard. me. 176.	Arduini (Pietro). Memoria di Osservazioni e di Sperienze sopra la Coltura e gli Usi di varie Piante 4to. Padova, 1766
Ard. spec. 24	*Id.* Animadversionum botanicarum Specimen. 4to. Patavii, 1759
As. r. 2.	Asiatic Researches, or the Transactions of the Society instituted in Bengal. 4to. Calcutta, 1788, &c.
Asso arr 556.	De Asso (Ignatius) Synopsis Stirpium indigenarum Arragoniæ. 4to Marsiliæ, 1779.
Aublet, 16 Aub guian.	Aublet (Fusée) Histoire des Plantes de la Guiane Française 4 vols 4to London, 1773
Balb diss 676 Balb miss 66	Balbis (Joh Baptist) Miscellanea Botanica. 4to 1804.
Banks ic Kæ. 806.	Banks (Josephus) Icones selectæ Plantarum quas in Japonia collegit et delineavit E Kæmpfer Fol. London, 1791
Banks r. hous 26	*Id.* Reliquiæ Houstonianæ. 4to. London, 1781
Barr ic 24. Bar rar 204.	Barrelier (Jacobus) Plantæ per Galliam, Hispaniam, et Italiam observatæ Fol Parisiis, 1714.
Bartr trav 480 Bartr iter c ic	Bartram's Travels in North America 8vo
Batarra, 990	Batarra (John Ant) Fungorum Agri Arminensis Historia 4to. Faventiæ, 1759
Batsch cent. 988 Bats cont. 990.	Batsch (Aug Joh Georg Carl) Elenchus Fungorum 4to Halæ, 1783—1789
Bauh pin 672	Bauhin (Caspar) Pinax Theatri Botanici. 4to Basilcæ, 1623.
Bauh prod. 24	*Id* Prodromus Theatri Botanici, in quo plantæ supra 600 proponuntur 4to Franc Mœn 1620.
Bea. fl d'Oware, 788 Beauv Ow 36.	Palisot de Beauv Flore des Royaumes d'Oware et de Benin Folio Paris, 1805
Bell taur. 486.	Bellardi (Ludovico) Osservazioni Botaniche, con un Saggio d' Appendice alla Flora Pedemontana. 8vo Torino, 1788
Ber ca 722 Be c 288.	Bergius (Peter Jonas) Descriptiones Plantarum ex Capite Bonæ Spei 8vo Stockholm, 1767
Berl. mag 1036	Berlinischer Magazin, oder gesammlte schriften. 4 vols 8vo Berlin, 1765—1767
Besl eys æs 90. B ey a 160	Besler (Basilius) Hortus Eystettensis. 2 vols fol. Nuremberg, 1612.
Bieb cent. 278. B cen 16.	Bieberstein (Marschall von) Centuriæ plantarum rariorum Rossiæ meridionalis. Charkoviæ Fol.
Bivon cent 676 Biv cen. sic 724	Bivona Bernardi (Antonio) Sicularum plantarum Centuria prima. 8vo Panormi, 1806
Blackw 34 Blackw hor 622	Blackwell (Eliz) A curious herbal containing 600 cuts of the useful plants. 2 vols fol London, 1737
Bocc mus 88.	Boccone (Paolo) Museo di Piante rare della Sicilia, Malta, Corsica, Italia, Piemonte, et Germania. 4to Venetia, 1697
Bocc sic 158.	*Id.* Icones et Descriptiones rariorum Plantarum Siciliæ, Melitæ, Galliæ, et Italiæ 4to Londini, 1674.
Boerh 22. Boer. lug 600.	Boerhaave (Hermannus). Index Plantarum quæ in Horto Acad Lugd Bat reperiuntur 8vo. Lugd. Bat. 1710.

Bolton fung. 986.	Bolton (James). A History of Funguses growing about Halifax. 4to. Huddersfield, 1788—1791
Bolton fil. 878.	*Id.* Filices Britannicæ. 4to London, 1785—1790
Bot. cab. 2.	The Botanical Cabinet. By Conrad Loddiges and Sons 14 vols 12mo, and 4to, published monthly
Bot. mag 2.	The Botanical Magazine. 8vo, 55 vols. London, 1787—1829
Bot. reg. 2.	The Botanical Register. 8vo, 14 vols. London, 1815—1829
Bot. rep. 4.	The Botanist's Repository for new and rare Plants 10 vols 4to London, 1797 et seqq
Brad. succ 262	Bradley (Richard) Historia Plantarum Succulentarum. 4to London, 1716—1727
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GENERIC AND SPECIFIC NAMES.

Abel.	*Abel* A traveller in China, and author of a Notice of Chinese plants.
Ach.	*Acharius.* A Swedish professor, and writer upon Lichens
Ad., Adans.	*Adanson.* A French systematical botanist.
Afz.	*Afzelius.* A Swedish professor.
Ag, Agh., Agdh	*Agardh* A Swedish professor, and writer upon A'lgæ, &c
Ait	*Aiton.* The superintendant of the King's garden at Kew
Alb	*Albertini* A writer upon Fúngi
Alb &Schwe.	*Albertini and Schweinitz.* Writers upon Fúngi
All.	*Allioni.* An Italian botanist.
Amm	*Ammann* An old Russian botanist
And, Andr, Andrz	*Andrzejowski.* A Russian botanist.
Ard.	*Arduini.* An Italian botanist.
Aub, Aubl.	*Aublet.* A French traveller in Guiana.
Balb	*Balbis.* A French professor of botany.
Ban	*Banks.* A great traveller and patron of science
Bat.	*Batard.* A writer upon the Flora of France.
Batsch.	*Batsch.* A writer upon Fúngi.
Baumg	*Baumgarten* A German botanist.
B. C.	*Botanical Cabinet.* By Loddiges and Sons.
Beauv	*Palisot de Beauvois* A French traveller and botanist.
Bell.	*Bellardi.* An Italian botanist.
Berg	*Bergius.* A Swedish writer upon Cape plants.
Bern, Bernh	*Bernhardi.* A German botanist.
Bert., Bertol	*Bertolini.* A writer upon the Flora of Italy.
Bess.	*Besser.* A Russian professor, resident in the Crimea.
Bieb	*Bieberstein.* A Russian botanist of great note.
Biv	*Bivona* A Sicilian botanist.
B M	*Botanical Magazine* By Curtis, Sims, &c.
Boer.	*Boerhaave.* An old Dutch botanist.
Bohm	*Bohmer.* A German botanical writer
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Bon, Bonpl.	*Bonpland.* A French traveller in South America, and botanist.
Bork.	*Borkhausen.* A writer upon the Flora of Hesse Darmstadt.
Bory.	*Bory de St. Vincent* A French traveller and botanist.
Bosc.	*Bosc.* A French botanist, and traveller in North America.
Bouch.	*Boucher.* A writer upon the French Flora.
B. P.	*Brown's Prodromus Floræ Novæ Hollandiæ.*
Br.	*Robert Brown.* A celebrated English botanist, and traveller in New Holland.
Bradl.	*Bradley.* An old English writer upon succulent plants.
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Brid.	*Bridel.* A German writer upon mosses.
Brot.	*Brotero* A Portuguese botanist.
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Cham	*Chamisso* A German traveller round the world.
Chois	*Choisy.* A Swiss botanist.
Clus	*Clusius* An old French botanist and traveller.
Colcb	*Colebrooke* A celebrated English writer upon Indian plants
Comm	*Commelin.* A Dutch garden botanist.
Corr, Correa	*Corréa de Serra.* A Portuguese botanist and diplomatist.
Crz	*Crantz.* An Austrian botanist.
Curt	*Curtis.* An English writer upon plants
Cuss.	*Cusson* A Swiss writer upon Umbelliferæ, whose wife burnt his herbarium.
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Desf.	*Desfontaines.* A French botanist, and traveller in Barbary
Desv	*Desvaux* A French professor of botany.
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Dittm	*Dittmarr.*
Domb	*Dombey.* A French traveller in South America.
Donn.	*Donn* An English gardener and botanist
Dufr	*Dufresne* A French writer upon Valerians.
Duh	*Duhamel* A celebrated French physiological botanist.
Dum	*Dumont Courset* A writer upon French garden plants
Dun.	*Dunal.* A French professor of botany.
Durot	*Du Roi* A German writer upon plants.
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Ehrenb.	*Ehrenberg.* A German traveller in Arabia, &c.
Esp	*Esper.* A German writer on Fúngi.
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Fl. Per, Flp.	*Flora Peruviana.* By Ruiz and Pavon
Forsk.	*Forskahl.* A Danish naturalist, and traveller in Arabia

Forst.	*Forster.* A traveller in the South Seas with Captain Cook
Fr.	*Fries.* A Swedish botanist, and writer upon Fungi
Frax.	*Fraxer* A gardener and collector of plants in North America.
Frol.	*Frölich* A German writer upon Gentiana.
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Gae, Gært.	*Gærtner* A celebrated German carpologist.
Gay	*Gay.* A French botanist
Gledtsch.	*Gledtsch.* A German botanist
Gmel., Gm.	*Gmelin.* A Russian botanist, and traveller in Siberia.
Gouan	*Gouan.* A French botanist.
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Hayne.	*Hayne.* A German botanist
Hedw.	*Hedwig.* A German cryptogamic botanist.
Heist.	*Heister.* A German botanist
Herb.	*Of the Herbarium*
Herit.	*Heritier.* A French botanist.
Hill.	*Hill.* An English compiler of botanical matters.
H. K.	*Hortus Kewensis.* A catalogue of the plants growing in the King's garden at Kew.
Hoff, Hoffm.	*Hoffmann.* A German writer upon Umbelliferæ, &c
Holmsk.	*Holmskiold* A Danish botanist.
Hook.	*Hooker.* An English botanist, and professor at Glasgow.
Hoppe	*Hoppe.* A German botanist, and collector of plants
Horn, Hornem.	*Hornemann.* A Danish botanist and professor.
Hort	*Of the gardens.*
Host	*Host* An Austrian writer upon Grapes and European plants.
H Par.	*Of the Paris garden*
Hud., Huds.	*Hudson.* An English writer upon British plants
Humb.	*Humboldt* A celebrated Prussian traveller and philosopher
Jack, Jacks.	*Jackson* An English botanist
Ja., Jac., Jacq.	*Jacquin.* An Austrian traveller in South America, and botanist
Jon.	*Jones.* An accomplished writer upon Indian matters
J., Juss.	*Jussieu* A celebrated French systematic botanist.
Kaulf	*Kaulfuss.* A German writer upon Ferns.
Ker.	*Ker.* An English garden botanist.
Kit.	*Kitaibel* A Hungarian botanist.
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Kon.	*Konig* Several German naturalists of this name.
Kunth.	*Kunth.* A Prussian botanist
Kunz.	*Kunze.* A German cryptogamic botanist.
Lag.	*Lagasca.* A Spanish botanist and professor.
Lam.	*Lamarck.* A French botanist.
La Peyr., Lap.	*La Peyrouse* A French writer upon the plants of the Pyrenees.
Lawr.	*Lawrence* (Miss). An English flower painter.
Lax.	*Laxmann.* A German writer on Siberian plants.
Ledeb.	*Ledebur.* A botanist, and traveller in Siberia.
Lehm.	*Lehmann.* A German botanist
L. fil.	*Linnæus the younger* The son of the great Linnæus
L'Her.	*L'Heritier.* A French botanist.
Lightf.	*Lightfoot.* A writer upon the Scottish Flora.
Lind., Lindl.	*Lindley.* An English botanist, and professor in London.
L. K. *Lk., Link.*	*Link.* A Prussian botanist *Link.*
L., Linn.	*Linnæus.* The celebrated Swedish reformer of natural history.
Lob.	*Lobel.* An old writer upon plants.
Lodd.	*Loddiges.* English nurserymen and botanists.
Loe	*Loesel.* An old Prussian botanist.
Lois.	*Loiseleur Deslongchamps.* A French botanist.
Lour.	*Loureiro.* A Portuguese traveller in Cochin China.
L. T.	*Linnean Society's Transactions.*
Lyngb	*Lyngbye.* A Danish writer upon cryptogamic matters
Marcg	*Marcgraan.* An old Dutch traveller in Brazil
Mart.	*Martius.* A Bavarian botanist, and traveller in Brazil.
Mass	*Masson.* A collector of plants at the Cape, and elsewhere.
Mayer.	*Mayer.* Several German botanists of this name
M. B	*Marschall v. Bieberstein.* A writer upon Russian botany.
Med	*Medicus* A German botanist of the last century
Menz	*Menzies* A Scotch botanist, and traveller round the world with Vancouver
Mert	*Mertens.* A German professor
Mey	*Meyer* A German botanist.
Mi, Mich	*Michaux.* A French botanist, and traveller in North America.
Mik	*Mikan.* A German writer on Brazilian plants
Mill.	*Miller* An English gardener and botanist
Mir.	*Marbel* A French physiological botanist.
Mohr	*Mohr.* A German cryptogamic writer
Mol.	*Molina* An Italian writer upon the natural history of Chili.
Monch	*Monch* A German botanist.
Morett.	*Moretti*
Moug.	*Mougeot* A German cryptogamic botanist.
Muhl, Mhl	*Muhlenberg.* A North American botanist.
Murr.	*Murray.* A German botanist.
Mutis	*Mutis* A Spanish botanist, resident in New Grenada.
Mx	*Michaux.* See above
Neck	*Necker* A German writer upon botanical affairs
Nees	*Nees v Esenbeck* A German botanist
Nois	*Noisette.* A French nurseryman
Nor	*Noronha* A Spanish botanist who visited Madagascar
Nutt	*Nuttall* A North American botanist.
Ort	*Ortega* A Spanish botanist
Otth	*Otth* A French writer in Decandolle's Prodromus
Otto.	*Otto* A Prussian gardener
Pall	*Pallas* A Russian traveller and naturalist
Panz	*Panzer* A German botanist.
P de B, Pal de Beauv	*Palisot de Beauvois.* A French botanist, and traveller in Africa
Pers	*Persoon.* A German botanist.
Pet.	*Petiver* An old English botanist.
Pet Th	*Du Petit Thouars* A French botanist, and traveller in Madagascar.
Ph., Psh	*Pursh.* A Prussian botanist, and traveller in North America.
P L	*Paradisus Londinensis*
Plin	*Pliny.* An ancient writer upon natural history.
Plu.	*Plumier.* A French botanist, and traveller in the West Indies
Poir	*Poiret.* A French botanical compiler.
Post.	*Poiteau.* A French botanist and draughtsman.
Poll	*Pollich* A German writer on the plants of the Palatinate.
Pour.	*Pourret.* A French botanist
P S	*Persoon's Synopsis.*
Radd.	*Raddi* An Italian cryptogamic botanist, and traveller in Brazil.
Raf., Rafi.	*Rafinesque Schmalz.* A modern writer upon botanical matters.
R & S.	*Romer and Schultes.* German editors of Linnæus's Species Plantarum.
R.B., R. Br., R. Brown.	*Robert Brown.* A distinguished English botanist, and traveller in New Holland.
Rchb.	*Reichenbach.* A German botanist.
Rebent.	*Rebentisch.* A Prussian botanist.
Red	*Redouté* A French botanical draughtsman.
Reth.	*Relhan.* A writer upon the Flora of Cambridgeshire.
Retz., Rtz	*Retzius.* A German botanist.
Rich.	*Richard.* A French botanist.

Risso.	*Risso.* An Italian writer upon Oranges
R. I..	*Redouté's Liliacées*
Rosc.	*Roscoe.* An English botanist, and writer upon Scitamineæ.
Roth.	*Rottboll.* A Danish botanist.
Roth, Rth.	*Roth.* A German botanical writer.
Roxb , Rox.	*Roxburgh.* An Indian botanist.
Roy , Royen.	*Van Royen* A Dutch botanist.
Rudge.	*Rudge* An English writer upon botanical subjects.
Rudol	*Rudolph.* A German botanist.
Sab., Sabine	*Sabine.* An English amateur of botany.
Sal , Salisb.	*Salisbury.* An English botanist
Salm.	*The Prince of Salm Dyck.* A noble German amateur
Savi	*Savi.* An Italian botanist
Sc., Sch.	*Schkuhr.* A German writer upon Grasses and Ferns.
Schæff	*Schæffer.* A German writer upon Fúngi
Schl ,Schlect.	*Schlechtendahl* A German botanist.
Schleich.	*Schleicher.* A Swiss plant collector.
Schm , Schmidt.	*Schmidt* A Bohemian botanist
Schneev.	*Schneevoght.* A Dutch nurseryman
Schott	*Schott*
Schousb.	*Schousboe.* A writer upon the Flora of Morocco.
Schr.	*Schreber.* A German botanist
Schrad	*Schrader.* A German botanist
Schrank.	*Schrank.* A Bavarian botanist.
Schult.	*Schultes.* A German botanist.
Schum	*Schumacher* A Danish botanist
Schw , Schwægr.	*Schwægrichen.* A German cryptogamic botanist
Scop.	*Scopoli* An Italian botanist.
Sib.	*Sibthorp.* An English botanist, and traveller in Greece
Sims	*Sims* An English garden botanist
S M.	*Sole's Monograph of Mints*
Sm	*Smith* An English botanist, and purchaser of the Linnean Herbarium.
Smith Fl. Brit	*Smith's Flora Britannica*
Sol	*Solander* A Swedish botanist, and companion of Sir Joseph Banks in Cook's voyage round the world
Sowerb.	*Sowerby* An English botanical draughtsman.
Spar.	*Sparmann* A Swedish travelling botanist.
Spr.,Sprcng.	*Sprengel.* A German botanist.
St , Stev	*Steven.* A Russian botanist.
Steph.	*Stephan.* A Russian botanist.
Stern.	*Sternberg.* A noble German botanist.
St Hil.	*Auguste St. Hilaire.* A French botanist, and traveller in Brazil.
Strauss.	*Strauss.* A German writer on Coffee.
Sturm.	*Sturm* A German botanical draughtsman
Sw., Swz.	*Swartz* A Swedish botanist, and traveller in the West Indies
Ten.	*Tenore* A Neapolitan botanist.
Th , Thunb	*Thunberg.* A Swedish botanical traveller.
Thuill.	*Thuillier.* A French botanist.
Tode	*Tode* A German writer on Fúngi.
Tou.	*Tourey.* A North American botanist.
Trent	*Trentepohl*
Trev	*Trevíranus*
Turner.	*Turner* An old English herbalist.
Turp.	*Turpin* A French botanist and draughtsman.
Turr , Turra.	*Turra.* An Italian botanist.
Tuss.	*Tussac* A French writer on the Flora of the Antilles
Va , Vahl	*Vahl.* A Danish botanist.
Vaill.	*Vaillant.* A French botanist and traveller.
Vand.	*Vandelli* A Portuguese botanist.
Vent., Ven , V.	*Ventenat.* A French botanist
Vig.	*Viguier.* A writer upon Poppies.
Vill.	*Villars.* A French botanist
Viviani.	*Viviani* An Italian botanist.
W	*Willdenow.* A German botanist
Wahl	*Wahlenberg* A Swedish botanist
Waldst	*Waldstein* A noble German patron of botany
Wall.	*Wallroth* A German botanist
Walt	*Walter.* A writer on the Flora of Carolina.
W & K.	*Waldstein and Kitaibel* Authors of the Flora of Hungary
Wats.	*Watson* An English writer upon Trees and Shrubs
W E.,W en	*Willdenow's Enumeration of the Plants in the Berlin Garden*
Web	*Weber* A German cryptogamic botanist.
Weihe.	*Weihe* A German writer on Rúbi
Wendl.,Wnl.	*Wendland.* A German garden botanist
With.	*Witherring.* An English botanist.
Wood.	*Woodville.* An English writer on Medicinal Plants
Woods.	*Woods.* An English writer on Roses.
Wulf., Wulfen.	*Wulfen.* A German botanist.

ADDITIONAL AUTHORITIES FOR GENERIC AND SPECIFIC NAMES.

A. B.	*Arboretum et Fruticetum Britannicum* By J. C. Loudon, F.L.S., &c. 8 vols. 8vo. London, 1835—1838.
Adams.	*F. Adams.* A Russian botanist, who travelled through Arctic and Eastern Siberia
Aud.	*Audibert* A French collector.
B. & W.	*Bartling*, M.D., and *Wendland*, of Göttingen, botanists
Barrl.	*Barrelier* A French botanist of 1714.
Bart.	*Barton*, M D. Formerly a professor at Philadelphia.
Bate.	*James Bateman*, Esq., F.L.S., &c. Author of the splendid Orchidaceæ of Mexico and Guatemala.
Bedf.	*Duke of Bedford.* A great promoter of botany.
Benth.	*Bentham.* An English botanist, secretary to the Horticultural Society, London
Berl. MS.	*Berlandier MSS.*
Bl / *Blume.*	*Blume*, M.D. A Dutch botanist.
Boj.	*Bojer* A professor of botany in the Isle of France.
Booth.	*William Beattie Booth.* Describer of the camellias figured in Chandler's Illustrations of the Camelliæ
Bor	*W. Borrer*, Esq. A writer on British plants, and one of the authors of Lichenographia Britannica
Bot. / *Botanist*	*The Botanist.* A monthly publication, conducted by B Maund, Esq , F.L.S., assisted by Professor Henslow.
Brig.	*J Brignoli.* Professor at Verona
Brong.	*A. Brongniart* A French botanist.
Bunge.	*Dr Alexander Bunge* A botanist and traveller in China.
Caley.	*George Caley* For ten years a botanical collector in New South Wales, and afterwards curator of the botanic garden at St Vincent.
Carey.	*W Carey*, D.D , of Serampore.
Coll. / *Colla.*	*J F. Colladon* A Genevese botanist.
Dav.	*H. Davies*, D.D A Welsh botanist
D Don	*David Don.* Librarian to the Linnæan Society, professor of botany, &c.
Delan.	*Delaney* An English artist

Dens. — *John Denson*, A.L.S. Curator of the botanic garden, Bury St. Edmunds, from 1821 to 1829.

Deppe. — *Deppe.* A writer on the botany of Mexico.

Desp. — *Desportes.* A French botanist.

Dou. / *Doug.* — *David Douglas* Late a collector of plants in California, &c.

Dun. — *Dun.* See *Dunal*

Duval. — *Duval.* A French botanist.

Ell. — *Elliot* An American botanist.

Endl. — *Stephen Endlicher.* A German botanist and author

F. & M. — *Fischer*, a Russian botanist, *and Meyer*, a German botanist.

Feu. — *Feuillée.* A Chilian botanist.

G. & H. — *Dr Gillies, and Sir W. J. Hooker*

Gaud. — *Gaudichaud.* A French botanist.

G. Don. — *George Don*, F.L.S. Author of "A General System of Gardening and Botany," &c. 4 vols. 4to

G. E. Sm. — *Gerard Edwards Smith*, Esq., &c. Author of a Flora of South Kent.

Gill. — *Dr Gillies.* A Scotch botanist.

Gmg. — *Gmgins.* A French botanist

G. M. — *Gardener's Magazine.* By J. C Loudon, F L S., 1826—1840 16 vols 8vo (Continued monthly)

Govan — *Dr. Govan* Some time superintendant of the botanic gardon at Saharumpur.

Graf — *John Graffer.* Author of a descriptive catalogue of upwards of 1100 species and varieties of herbaceous or perennial plants 8vo 1789

Grah — *Dr. Graham* Regius professor of botany at Edinburgh

Guss. — *Joannes Gussone*, M D Director of the royal botanic garden at Palermo, and a botanical author.

H & A — *Sir W J Hooker*, F R S , &c , *and Arnott*, M A , F R S.E , &c Authors of the botany of Captain Beechey's Voyage to the Pacific, &c.

Ham. — *Dr. Hamilton* A Scotch botanist and traveller in the East Indies

H B / *Hort Brit* — *Hortus Britannicus* By J. C Loudon, F L S., &c 8vo. New ed 1839.

H B. et K. — *Humboldt, Bonpland, and Kunth* German botanists.

H & B. — *Humboldt and Bonpland* German botanists.

H Bel. — *Of the Belgian Garden*

Hensl. — *Rev. J S Henslow.* Professor of botany in the university of Cambridge.

Herb — *Hon and Rev W. Herbert.* An assiduous botanist.

Hogg. — *Hogg* A nurseryman at New York

Hoss — *Franz Hoss* Author of Anleit die Baume und Strauche Oesterreichs, &c., 1830

H. S. — *Of the London Horticultural Society's Garden, Chiswick*

H. tr. — *Transactions of the London Horticultural Society*

Hug. — *Baron C. de Hugel*, of Vienna

J C — *J Cree*, of the Addleston Nursery.

K & W. — *Knowles and Westcott.* Conductors of the Floral Cabinet.

Karw. — *Baron Karwinski* A zealous promoter of botany in Germany.

Koch. — *Koch.* A professor at Erlang

Lab. — *Labillardière.* A French botanist.

Lal. — *La Llave* A Mexican botanist

Lamb. — *A. B Lambert*, Esq. The most liberal botanist in England.

Lar. — *Laroche.* A French botanist.

Lee. — *Lee.* A nurseryman at Hammersmith

Less / *Lessing.* — *C. F. Lessing.* A writer on Compositæ, and resident at Berlin

Lez. — *John Lezarza.* A French botanical author.

Liboscb. — *Liboschutz.* A foreign botanist.

Lk. & O — *Link and Otto.* Prussian botanists.

Loud. / *Loudon.* — *J. C. Loudon.* Author of various agricultural, horticultural, and botanical works.

Lowe. — *Rev. R. T. Lowe.* Travelling bachelor of the university of Cambridge.

M. & S. — *Mocino and Sessé.* Mexican botanists.

Mast. — *W. Masters*, F.H.S., of the Canterbury Nursery, and curator of the Canterbury Museum.

Maund. — *B. Maund*, F L.S., &c. Conductor of the Botanic Garden and the Botanist.

Merat. — *X. V. Merat.* Author of the Nouvelle Flore des Environs de Paris.

Miers. — *Miers.* A South American collector.

Moc. — *Mocino.* A Mexican botanist.

Neck. — *Necker.* A German writer upon botanical affairs.

Panz. — *George Wolfg. Panzer.* A foreign botanical author.

Pat. / *Patr.* — *Patrin.* A Russian traveller.

Pax. / *Paxt.* — *Joseph Paxton*, F L S , H S., &c. Editor of the Magazine of Botany, and gardener to his Grace the Duke of Devonshire at Chatsworth.

P. B. W. — *Philip Barker Webb* A traveller in the Canaries, &c

Penny. — *George Penny*, A.L S. Botanical cultivator in the Epsom Nursery.

Pf — *Dr. Pfeiffer*, of Cassel, a writer in the Garten Zeitung

Pohl. — *Pohl* A German botanist

Pop — *Poppig.* A German botanist.

Presl — *Presl* A Bohemian botanist.

R. & P. — *Ruiz and Pavon* Spanish botanists and travellers in Peru and Chile.

Reboul — *M. Reboul* Author of a monograph on Tulipa.

Remw. — *Remwardt* A botanist of Frankfort

Rh. — *Rhede.* Author of Hortus Malabaricus

Riv — *Rivinus.* A German botanist

Robil. — *Robillard* A French botanist.

Robs — *Robson* An English botanist

Rochler. — *Rochler* Author of a Catalogue of Garden Plants

Rol — *Rolander* A Swedish botanist

Roll. — *Rollison* A nurseryman near London.

Ronalds. — *Ronalds* A nurseryman at Brentford.

Royle — *Dr Royle*, V P R S , &c. Professor of Mat Med in King's College Author of Illustrations of the Natural History of the Himalayas, &c

S. & C. — *Schlechtendahl and Chamisso* German botanists.

S & D — *Schaede and Deppe* Writers on the botany of Mexico.

Sch fil — *Schultes fils* A Bavarian botanist.

Schlecht — *Schlechtendahl* A German botanist

Schrad — *Schrader* A German botanist

Schultes fil. — See *Sch fil* above

Sessé — *Sessé* A Mexican botanist.

Sieb — *Sieber* A botanical collector

Spach — *Spach* A writer in the Annales des Sciences Naturelles

Stack. — *Stackhouse.* An English botanist

St Hil. — See *Hil*

Str — *Hon W F Strangways* A learned investigator of the Flora of Europe

Swt. — *Robt. Sweet.* An English botanist, and author of several botanical, &c., works

Swz — *Swartz* A Swedish botanist and traveller in the West Indies.

Turcz. — See *Turcz.*

Thore. — *Thore* A French botanist

Thou. — *Du Petit Thouars.* A French botanist and traveller in Madagascar.

Tou. — *Tournefort.* An old French botanist and traveller in Greece and Asia Minor

Trin. — *Trinius* A writer on Grasses.

Turcz. — *Turczaninoff* A botanical collector in the service of Russia, in Irkutzk.

Urv — *D'Urville* A captain in the French navy.

Vahl — *Vahl* A botanical author.

Wal. — *Dr. Wallich.* Superintendant of the botanic garden at Calcutta.

Wan — *Wangenheim* A German botanist

Westc. — *Westcott.* One of the conductors of the Floral Cabinet.

Youell. — *Youell* A nurseryman at Yarmouth, Norfolk.

Zea — *Zea.* A Spanish botanist.

Zuc. / *Zuccarini.* — *J. G. Zuccarini.* Author of a monograph on the genus Oxalis, and of other papers.

TABLE OF ABBREVIATIONS AND REFERENCES

Used in Columns 3, 4, 5, 6, 7, 8, 9, 10, 11, *and* 12.

Column 3 *Habit.*

- Deciduous tree
- Evergreen tree.
- Palm tree
- Deciduous shrub.
- Evergreen shrub.
- Deciduous under-shrub.
- Evergreen under-shrub.
- Deciduous twiner, ligneous or herbaceous.
- Evergreen twiner, lig or herb.
- Deciduous climber, lig. or herb.
- Evergreen climber, lig. or herb.
- Deciduous trailer, lig or herb.
- Evergreen trailer, lig. or herb.
- Deciduous creeper, lig or herb
- Evergreen creeper, lig or herb.
- Deciduous herbaceous plant.
- Evergreen herbaceous plant.
- Grass
- Bulbous plant
- Fusiform-rooted plant.
- Tuberous-rooted plant.
- Aquatic
- Parasite

Column 4 *Duration and Habitation*

- Perennial.
- Biennial
- Annual.
- Bark, or moist, stove.
- Dry stove.
- Green-house.
- Frame
- Bark stove perennial.
- Dry stove perennial.
- Green-house perennial.
- Frame perennial.
- Bark stove biennial.
- Dry stove biennial
- Green-house biennial
- Frame biennial.
- Bark stove annual.
- Dry stove annual.
- Green-house annual.
- Frame annual

Column 5 *Popular Character.*

ag	agricultural.	m	medicinal.
cl	clothing	or	ornamental.
clt	cultivated in its native country.	p	poisonous.
		pr	pretty
		rk	for rock-work.
cu	curious.	ro	robust.
cul	culinary	spl	splendid.
de	delicate.	tm	timber tree.
dy	dyeing plant.	un	unattractive.
ec	economical.	w	weed, abundant in cultivated soils in its native country.
el	elegant.		
esc	esculent.		
fr	fruit tree.		
fra	fragrant.		
gr	grotesque.		

Column 6. *Height.*

flt floating.

Column 7. *Time of Flowering.*

ja	January.	s	September.
f	February.	o	October.
mr	March	n	November.
ap	April.	d	December
my	May	sp	Spring.
jn	June	su	Summer.
jl	July.	aut	Autumn.
au	August.	w	Winter

all sea all seasons
wet w wet weather.

Column 8 *Color of the Flower.*

Ap	apetalous	Li	lilac
Ærug	ærugi-nous.	Lu	lurid.
		O	orange
B	blue	Och	ochraceous
Bd	blood.	Ol	olive
Bh	blush.	Oliva	olivaceous
Bk	black.	P	purple.
Bksh	blackish.	Pa	pale
Br	brown	Pk	pink or rose.
Bri	brick-co-lored.	Pl	pellucid
		R	red
Brsh	brownish	Ro	rosy.
Bsh	bluish.	Rsh	reddish
Bt	bright	Ru	rufous.
C	crimson	Rus	russet
Cæs	cæsious.	Rust	rusty-co-lored
Ch	chestnut.		
Ci	citron.	S	scarlet.
Cin	cinereous	Saf	saffron.
Cop	copper-co-lored.	Sil	silvery
		Smo	smoky ash-color
Crea	cream-co-lored	Spot	spotted.
		St	striped.
D	dark	Str	straw
Din	dingy.	Su	sulphur
Dl	dull.	Tan	tan-color-ed.
Dp	deep.		
F	flesh	Taw	tawny
Fer	ferruginous	Test	testaceous.
Fi	fiery.	Tran	transpa-rent.
Fla	flame-co-lored		
		Umb	umber co-lored.
Fui	fulvid.		
Fus	fuscous.	V	violet.
G	green	Va	variegated.
Gl	glaucous.	Ve	vermilion.
Go	golden	Vy	veiny.
Gsh	greenish.	W	white.
Gy	grey	Wsh	whitish.
Hoa	hoary	Y	yellow.
L	light.	Ysh	yellowish.
Ld	livid.		
Lem	lemon-co-lored.		

Column 9 *Native Country.*

C G H.	Cape of Good Hope.
E. Ind.	E. Indies
N Amer.	North America.
N Eur	North of Europe.
N. Holl	New Holland.
N. S. W	New South Wales.
S. Amer.	South America.
S. Eur.	South of Europe
V Di L.	Van Diemen's Land.
W. Ind.	West Indies.

Column 10. *Year of Introduction of Exotics, and Localities of British Species.*

al. bogs	alpine bogs.
al. b. p.	alpine bushy places.
al. hea.	alpine heaths.
al. lak.	alpine lakes.
al ma.	alpine marshes.
al. me.	alpine meadows.
al. riv	alpine rivers.
al roc.	alpine rocks.
a r. tr.	alpine rocks and trees.
ba.	banks.
bar gr.	barren ground
bar he.	barren heaths.
bar pa.	barren pastures
ba. s p	barren sandy places.
bog h	boggy heaths
bog pl.	bogky places.
bo. m. bgs m	bogs on mountains.
bo me.	boggy meadows.
bor fi.	borders of fields
br	branches
bu fi	bushy fields.
bu hi	bushy hills
bu pl.	bushy places
cal. ba	calcareous banks
cal ro	calcareous rocks.
ch ba	chalky banks.
ch. cl	chalky cliffs.
ch fi	chalky fields.
ch hil.	chalky hills
ch pa.	chalky pastures.
ch so.	chalky soil
ch wo	chalky woods
clov fi	clover fields
clt. gr	cultivated ground
cor fi	corn fields
dit.	ditches
dit. ba	ditch banks
d.m pl.	dry mountainous places
dr co	dry commons
dr fi	dry fields.
dr. he.	dry heaths
dr pa.	dry pastures
dr wo	dry woods
d. st.pl	dry stony places
d st w	dry stony woods
dungh.	dunghills
ed.of d	edges of ditches
gra. ba.	gravelly banks.
gra.he.	gravelly heaths
gra. pa.	gravelly pastures
gra. so	gravelly soil.
hea.	heaths
hea. w	heaths and woods.
hed.	hedges
hed. b	hedge banks
highl v	Highland valleys
hil. pa.	hilly pastures.
ir bog.	Irish bogs.
ir mo.	Irish mountains.
ir. roc.	Irish rocks.
ir. sho.	Irish shores.
ir. thi.	Irish thickets.
lak.	lakes.
m. al.p	moist alpine places
mar	marshes.
mar la.	margins of lakes.
m. a.w.	moist alpine woods.
m. c. h.	moist chalky hills.
m.ch.s.	moist chalky soil.
mea.	meadows.
me pa.	meadows and pastures.
m. h. m. he	mountainous heaths.
m hed.	moist hedges.
mic.ro.	micaceous rocks.
m. me	moist meadows.
moi fi.	moist fields.
moi.gr.	moist ground.
moi h.	moist heaths.
moi pl.	moist places.
moi.ro.	moist rocks.
moi. w.	moist woods.
mo. pl.	mountainous places.
mos b.	mossy bogs.
moun.	mountains.
m. pas.	moist pastures
ms pas.	mountainous pastures.
m. r. h	mountainous rocky heaths.
mrit. r	maritime rocks.
m. r tr	moist rocks and trees.

m. s pl.	moist shady places
m. thi.	mountainous thickets.
m. wo.	mountainous woods.
mud.d.	muddy ditches.
mud s.	muddy shores
n. of e.	north of England
n of s.	north of Scotland.
old w old wa	old walls
os. hol.	osier holts.
pas.	pastures.
pea. d.	peaty ditches.
riv. ba.	river banks.
rivul.	rivulets
ro sid.	road sides.
rub	rubbish
sa.hea.	sandy heaths
sal. m.	salt marshes
sa. ma.	sandy marshes
san fi	sandy fields
san gr.	sandy ground.
san pl.	sandy places
san sh	sandy shores.
sa. pas.	sandy pastures
sa.w d.	salt-water ditches
sa.w p	sandy wet places
sc alp	Scottish alps.
sc. bog.	Scottish bogs.
sc isl.	Scottish islands.
s. cliffs	sea cliffs
sc. ma.	Scottish marshes
sc mo.	Scottish mountains.
sc pas.	Scottish pastures.
sc roc.	Scottish rocks
sc. sh	Scottish shores
sc. thi.	Scottish thickets
sc wds sc. wo	Scottish woods.
sea co	sea coast.
sea sh	sea shore
sev isl.	Severn isles.
sha.ba.	shady banks.
sha bo.	shady bogs.
sha. la.	shady lanes.
sha. pl.	shady places
sh roc.	shady rocks
s. m. pl.	shady moist places.
so. co.	south coast.
so. of s.	south of Scotland
sp. bo.	spongy bogs
sta.wa.	stagnant water.
st.in w.	stones in water.
sto hi.	stony hills.
sto pa.	stony pastures.
sto pl.	stony places.
sto wa.	stones and walls.
sun hi.	sunny hills.
sun ro	sunny rocks.
thick	thickets.
tr.	trees
tr.& st.	trees and stones.
tru tr.	trunks of trees
tur bo.	turfy bogs
tur he.	turfy heath
unc gr.	uncultivated ground.
unc pl.	uncultivated places
wa. gr.	waste ground.
w al h.	wet alpine heaths
w alp	Welsh alps.
wat.co.	watery commons.
wat. pl.	watery places.
w. bog	Welsh bogs.
w co	wet commons.
w gr	wet ground.
w lak.	Welsh lakes
w. roc.	Welsh rocks
w sa p.	wet sandy places.
w s.gr.	wet shady ground.
w sh p	wet shady places
wy.sh.p	watery shady places.
w. thi.	wet thickets.

COLUMN 11. *Propagation.*

B	by budding.
C	cuttings.
D	division of the plant.
G	grafting.
I	inarching.
L	layers.
Ls	leaves.
O	offsets.
R	division of the root.
S	seeds
Sk	suckers.

COLUMN 12. *Soil.*

aq.	watery places
co.	common garden soil.
c p.	common peat, or bog.
h	heavy rich clay.
h l.	heavy loam.
l	loam.
l p.	loam and peat, most loam.
lt.	light vegetable soil.
lt.l	light loam.
m s.	moist soil.
p	peat.
p l.	peat and loam, most peat.
r.	rich garden soil.
r m.	rich mould.
ru.	rubbish.
s	sand.
s l.	sandy loam.
s p.	sandy peat.
s p l.	sand, peat, and loam.

RULES FOR PRONOUNCING BOTANICAL NAMES.

SYLLABLES.

In classical words *there are as many syllables as there are vowels*; except when *u* with any other vowel follows *g*, *q*, or *s*, and when two vowels unite to form a diphthong The diphthongs are *æ*, *œ*, *ai*, *ei*, *oi*, *ui*, *au*, *eu*, and *ou* These seldom coalesce in final syllables; *oo*, *ee*, *ea*, and other combinations which never occur as diphthongs in classical words, follow, in commemorative names, the pronunciation of their primitives, as Teédia, Woódsia

VOWELS

In this work *the accented vowels* are indicated by the mark placed over each, but as this only points out the vowel on which the stress is laid, the following observations will be found useful in showing when the vowel is to be sounded long, and when short In addition to the primary accent, every word of more than three syllables contains a secondary accent, which is regulated by the same rules The secondary accent must always be at least two syllables before the primary accent, as in Chĕlidònium, for its place the ear is a sufficient guide, and even were it entirely omitted, still, however inharmonious, it would not be incorrect

Every accented penultimate vowel is pronounced long, when followed by a vowel or a single consonant, as Achillèa tomentòsa, but it is shortened when followed by two consonants or a double one, as Sórbus, Táxus; except when the first consonant is a mute and the second a liquid, as A'brus

Every accented antepenultimate vowel, except *u*, is pronounced short, as Hellĕborus, Hŭmulus; but when succeeded by a single consonant, followed by *e* or *i* and another vowel, it is lengthened, as Stellària, except *i*, which is short, as Tĭlia.

A unaccented, ending a word, is pronounced like the interjection *ah*, as Stĭcta (*ah*)

E final, with or without a consonant preceding, always forms a distinct syllable, as Silène, *A'loe*; also when the vowel is followed by a final consonant as Tri-cho-ma-nes, not Tri-cho-manes

I unaccented, if final, sounds as if written *eye*, as Spica vènti (*eye*); but, when it ends a syllable not final, it has the sound of *e*, as Méspilus (*Mespelus*), Smithii (*Smithe-eye*)

Y is subject to the same rules as *i*

The diphthongs *æ* and *œ* conform to the rules for *e*, *ei* is generally pronounced like *eye*, the other diphthongs have the common English sounds

CONSONANTS.

C and *g* are hard before *a*, *o*, and *u*, as Córnus, Gàlium, soft before *e*, *i*, and *y*, as Cetrària, Citrus.

T, *s*, and *c*, before *ia*, *ie*, *ii*, *io*, *iu*, and *eu*, when preceded by the accent, change their sounds, *t* and *c*, into *sh*, as Blètia, Vícia, and *s* into *zh*, as Blàsia but, when the accent is on the first diphthongal vowel, the preceding consonant preserves its sound, as aurantiacum.

Ch, before a vowel, is pronounced like *k*, as Chelidònium (*kel*), Cólchicum (*kolkekum*); but in commemorative names it follows their primitives, as Richardsònia, in which the *ch* is soft

Cm, *cn*, *ct*, *gm*, *gn*, *mn*, *tm*, *ps*, *pt*, and other uncombinable consonants, when they begin a word, are pronounced with the first letter mute, as Ptèris (*teris*), Cnicus (*nikus*), Gmelina (*melina*), Gnidia (*nidia*); in the middle of a word they separate as in English, as Lap-sàna, Lĕrn-na.

Ph, followed by a mute, is not sounded; but, followed by a vowel or a liquid, sounds like *f*, as Phlèum (*fleum*).

Sch sounds like *sk*, as Schœ'nus (*skenus*); in *ll* and *zm* both letters are heard.

S, at the end of a word, has its pure hissing sound, as Dáctylis, except when preceded by *e*, *r*, or *n*, when it sounds like *z*, as Ribes (*ez*)

X, at the beginning of a word, sounds like *z*, as Xánthium; in any other situation it retains its own sound, as Táxus, Tamarix. (*Extracted from the Gardener's Magazine*, vol. v. p 232)

GENERAL INTRODUCTION.

THE science of Botany consists of two departments, Phytology and Physiology. This Encyclopædia is exclusively devoted to the former department, and it is limited to the plants in Britain, indigenous and exotic.

Phytology, or the History of Plants, comprehends the knowledge of the external parts of plants, the determination of their names. their classification, their uses, their individual history, and their geography. The object of this work is to convey, in the most convenient manner and in the least possible space, a knowledge of the various particulars which arrange themselves under these heads.

A knowledge of the external parts of plants will be readily and agreeably obtained by turning over the first 700 pages of this work at random, looking at the engravings, and comparing them with the names and descriptions to which they refer; the same process will enable the reader to recognise, at sight, the 10,000 species figured in the 700 pages. In this way, botanical figures supply the place of a botanical garden; and the beginner learns the natures, the technology, and the general appearances of plants, almost as easily and naturally in the one case as he does in the other.

To determine the name of an unknown plant, it is necessary to be furnished with a specimen of it in flower. The parts of the plant including those of the flower being already known by the process above mentioned, its class will be ascertained by the Table of the Linnean System (p. 2.), and its order, genus, species, &c., by turning to the page referred to at the end of the class. Thus, if you hold in your hand a specimen of *Phillyrèa angustifòlia* in flower, on counting the stamens and pistils you find it belongs to Class II. Order 1., from which, in the Table in p. 2., you are referred to the details of the class in p. 8.; you there find, under Order 1., the characters of all the genera of that order, and that the flower which you hold in your hand best agrees with the definition given of the genus *Phillyrèa*, No. 33. But you wish to know the species; and, *Phillyrèa* being No. 33., you turn to that number in the details of the genera in the subsequent pages. After comparing its leaves with the specific character given of the different species, you find it best agrees with *P. angustifòlia*; and, finding this species numbered 143., you look for that number in the two plates of engravings in the lower parts of the pages, and find a figure which confirms your decision. By reading the abridgements in the line which follows the word angustifòlia, together with the note to the generic name *Phillyrèa* at the bottom of the page, you find in an abridged form its English name, habit, habitation in the garden, popular character, the height to which it grows, its time of flowering, the colour of its flower, its native country, the year of its introduction into Britain, its propagation, the soil in which it grows, a reference to a work where it is figured and described at greater length, and its uses in the arts, or whatever else is remarkable in its history. You find, also, the natural order to which the genus belongs, the etymology of the name, the French or German name, if the plant has a vernacular name in these languages, and, both generic and specific names being accentuated, you have the pronunciation. On turning to the Table of Synonymous Names (p. 1108.), you will find its vernacular name in the languages of the countries where it is common. If it is not so common in any country as to have received a vernacular name, it will not be found in that list. Finally, if you should not understand any of the terms used in the definition of the specific characters or in the notes, on turning to the Glossary (p. 1094.) you will find them explained, and illustrated where necessary by engravings.

When the beginner has a leaf or any part of a plant not in flower, he may ascertain, by turning to the Introduction to the Natural System (p. 1051.), to which of the three grand divisions of the vegetable kingdom it belongs, and may learn other particulars, according to circumstances which it is unnecessary to detail. Without the flower, he will not be able by the Natural System to determine the name of a plant; but, what is often much more important, with a very small portion of any part of a plant he will be able to discover some thing of its nature, an advantage which does not belong to the System of Linnæus.

The classification or arrangement of plants is made by botanists with a view to two objects: the first, to facilitate the discovery of their names, and thus to know them individually; the second, to give general ideas respecting their natures, and thus to know them as belonging to large masses or groups. Hitherto, no system has been discovered which has attained both these objects in an equal degree of perfection; but the Linnean Arrangement has made the greatest advances in teaching how to discover the names of plants, and the Jussieuean in teaching us their natures, and how to recognise them as belonging to certain masses or groups. In order that the student may acquire both these kinds of knowledge, we have given both arrangements. We have begun with the Linnean, not only as being best adapted for beginners, but because it is necessary to know how to discover the name of a plant, as well as to be able practically to recognise a number of plants, before attempting to know their natures, or to combine them in masses or groups.

"The standing objection to botany," says White of Selbourne, "has always been, that it is a pursuit that amuses the fancy and exercises the memory without improving the mind or advancing any real knowledge; and where the science is carried no farther than a mere systematic classification, the charge is but too true. But the botanist, who is desirous of wiping off this aspersion, should be by no means content with a list of names; he should study plants philosophically, — should investigate the laws of vegetation, — should examine the powers and virtues of efficacious herbs, — should promote their cultivation, and graft the gardener, the planter, and the husbandman, on the phytologist: not that system is by any means to be thrown aside; without system the field of nature would be a pathless wilderness; but system should be subservient to, not the main object of, our pursuit."

"After all that has been effected, or is likely to be accomplished hereafter," Professor Lindley observes, "there will always be more difficulty in acquiring a knowledge of the Natural System of Botany than of the Linnean. The latter skims only the surface of things, and leaves the student in the fancied possession of a sort of information which it is easy enough to obtain, but which is of little value when acquired; the former requires a minute investigation of every part and every property known to exist in plants, but when understood has conveyed to the mind a store of information, of the utmost use to man, in every station of life. Whatever the difficulties may be of becoming acquainted with plants according to this method, they are inseparable from botany, which cannot be usefully studied without encountering them." *

The History of Plants comprehends every thing relating to their use in the arts, or in any way as connected with man, with animals, or with civilisation. The Geography of Plants relates to the countries in which they are indigenous or acclimated, and to the soils and situations in which they grow or may be grown. Every thing essential in relation to these points will, as we have already stated, be found after the name of each species in the text, after the name of the genus in the notes below, under the natural order to which the genus belongs in the Natural Arrangement (Part II. p. 1051.), in the Table of Synonymes (p. 1108.), or in the Glossary (p. 1094.).

The General Index (p. 1143.) contains not only the names of the genera, and of the classes and orders of both systems, but those of all the remarkable species, and the more important systematic and British synonymes both of genera and species. The various names being included in the same alphabet, this Index may therefore be consulted as a Dictionary of Plants.

* Synopsis of the British Flora, arranged according to the Natural Orders, &c., pref. p. xi.

THE

ENCYCLOPÆDIA OF PLANTS.

PART I.

LINNEAN ARRANGEMENT.

THE main object of the artificial system of botanical arrangement is to facilitate the discovery of the names of plants. For this purpose some one organ, common to plants in general, is fixed on; and, according to certain conditions in which this organ is found, individual species are referred to their places in the system, as words, by their initial letters, are referred to their places in an alphabetical dictionary.

In the progress of artificial systems different organs have been fixed on by different botanists; but those which have been most extensively employed are the corollas by Tournefort, and the stamens and pistils, by Linnæus. The system of Tournefort has been a good deal employed in France, and may be considered as the artificial system of that country, that of Linnæus has been employed in most other countries, and is justly esteemed by far the most perfect artificial system which has hitherto been produced. It is, therefore, adopted in this work.

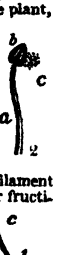
The application of the Linnean system in practice, Sir J. E. Smith observes, is, above all other systems, easy and intelligible. Even in pursuing the study of the natural affinities of plants, this botanist affirms "that it would be as idle to lay aside the continual use of the Linnean system, as it would be for philologists and logicians to slight the convenience, and indeed necessity, of the alphabet, and to substitute the Chinese character in its stead." (*Introduct to Bot.*) "The student of the Linnean artificial system," he elsewhere observes, "will soon perceive that it is to be understood merely as a dictionary, to make out any plant that may fall in his way" (*Gram of Bot.*) "If we examine," says Decandolle, "the artificial systems which have been hitherto devised, we shall find the most celebrated of them, that which was proposed by Linnæus, to possess a decided superiority over all others, not only because it is consistently derived from one simple principle, but also because the author of it, by means of a new nomenclature, has given to his terms the greatest distinctness of meaning" (*Elements of the Philos. of Plants, by Decandolle and Sprengel.*) Whether or not subsequent advances in science may enable botanists to dispense with the Linnean system altogether, it is not for us to affirm, but in the meantime nothing can be more certain than that the Linnean system is the best leading arrangement for such a work as the present, in the existing state of botanical knowledge in Britain *

According to the Linnean system all plants are furnished with flowers, either conspicuous or inconspicuous. The plants with conspicuous flowers are arranged according to the number and position of their stamens and pistils; those with inconspicuous flowers are arranged according to the situation of the flowers on the plant, or according to other circumstances in the plant itself.



1

To discover the name of a plant by the Linnean system, therefore, all that is necessary for a beginner is to possess a specimen of it in flower, and to be able to know its different parts by the names given them by botanists. To discover the class, order, and genus of a plant, it is only necessary to be able to distinguish and name the different parts of the flower. These parts are: the calyx or cup (*fig.* 1 *a*), which is that leaf, or those leaves, by which the flower is usually enclosed when in bud, and which, when the flower is expanded, appear under it. The corolla (*corona*, a crown) is the coloured leaf, or leaves, of a flower (*fig* 1. *b*). The stamen (or first principle of any thing) is the thread-like process, or processes, immediately within the leaves of the corolla (*fig* 2.). It consists of two parts, the filament or thread (*a*), and the anther (*b*); this anther contains what is called the pollen, or fructifying meal (*c*). In the centre of the flower is the pistil (*fig.* 3.): it consists of three parts, the germen, or rudiments of the fruit or seed (*a*), the style (*b*), and the stigma or summit(*c*), which crowns the style, and is destined to receive the fructifying pollen.



2



3

The pistil and stamen are the essential parts of a flower. The corolla or the calyx may be wanting, and yet the flower will be termed perfect, because the absence of those parts is no obstacle to reproduction. Even the style and the filament may be absent without preventing the formation or ripening of the fruit; and there are many flowers which have the anther sitting close to the corolla, &c., without a filament, and the stigma to the germen without a style, but the anther, the germen, and the stigma are essential.

The seed is contained in the pericarp, or seed-vessel, which is the germen when grown to maturity. The name of seed-vessel varies according to its form, substance, &c.; but the word pericarp (*peri*, about, *karpos*, a fruit) is applicable to all its varieties. The receptacle is the base or medium which connects the other parts of the fructification. (*Magazine of Natural History*, vol. i. p. 233.)

The degree of knowledge conveyed by the following Table, and the preceding observations, will enable a beginner to discover the class, order, and genus of any plant which he may find in flower.

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* The best work in the English language for acquiring a knowledge of the Linnean system of botany is *Smith's Introduction to Botany*, there are also various other works nearly as good, and detailed and familiar *Introductions* to both the *Linnean* and *Jussieuean Systems* will be found in the first and second volumes of *The Magazine of Natural History.*

LINNEAN ARRANGEMENT.

First Grand Division. — *Plants with conspicuous Flowers* (*Phanerogàmia*).

In the same flower,
Male and female organs distinct,
Stamens not united either above or below,
Generally of equal length,

Stamens and Pistils

In Number,

Classes.		Orders.
One,	1. Monándria (*monos*, one, *aner*, a man). Example, *Lìthrum capitàtum.* 1	2. Monogynia (*monos*, one, *gyne*, a woman), Digynia (*dis*, twice, *gyne*, a woman).
Two,	2. Diándria (*dis*, twice, *aner*, a man). *Verónica Chamædrys.* 8	3. Monogynia, Digynia, Trigynia (*tris*, thrice, *gyne*, a woman).
Three,	3. Triándria (*tris*, thrice, *aner*, man). *Poa ánn* 30	3. Monogynia, Digynia, Trigynia.
Four,	4. Tetrándria (*tetra*, four, *aner*, a man) *Córnus sanguínea.* 76	3. Monogynia, Digynia, Tetragynia (*tetra*, four, *gyne*, a woman).
Five,	5. Pentándria (*pente*, five, *aner*, a man). *Lysimàchia ephémerum.* 108	6. Monogynia, Digynia, Trigynia, Tetragynia, Pentagynia (*pente*, five, *gyne*, a woman), Polygynia (*polys*, many, *gyne*, a woman).
Six,	6. Hexándria (*hex*, six, *aner*, a man) *Scilla bifólia.* 236	4. Monogynia, Digynia, Trigynia, Polygynia
Seven,	7. Heptándria (*hepta*, seven, *aner*, a man) *Æsculus Hippocástanum* 296	4. Monogynia, Digynia, Tetragynia, Heptagynia (*hepta*, seven, *gyne*, a woman).
Eight,	8. Octándria (*okto*, eight, *aner*, a man) *Fuchsia coccínea.* 300	4. Monogynia, Digynia, Trigynia, Tetragynia.
Nine,	9 Enneándria (*ennea*, nine, *aner*, a man) *Rhèum Rhapónticum.* 332	3 Monogynia, Trigynia, Hexagynia (*hex*, six, *gyne*, a woman)
Ten,	10. Decándria (*deka*, ten, *aner*, a man) *Saxífraga umbròsa.* 338	5 Monogynia, Digynia, Trigynia, Pentagynia, Decagynia (*deka*, ten, *gyne*, a woman).
Twelve,	11. Dodecándria (*dodeka*, twelve, *aner*, a man). *Sempervivum tectórum* 392	6 Monogynia, Digynia, Trigynia, Tetragynia, Pentagynia, Dodecagynia (*dodeka*, twelve, *gyne*, woman).
Many, frequently twenty, attached to the calyx,	12 Icosándria (*eikos*, twenty, *aner*, a man) *Cratægus Oxyacántha* 408	3 Monogynia, Di-pentagynia (*dyo*, two, *pente*, five, *gyne*, a woman), Polygynia
Many, generally upwards of twenty, not attached to the calyx,	13. Polyándria (*polys*, many, *aner*, a man) *Clématis erécta.* 456	5 Monogynia, Digynia, Trigynia, Pentagynia, Polygynia.

Of unequal length,

Two long, and two short,	14 Didynàmia (*dis*, twice, *dyo*, two, *nema*, a filament) *Teucrium lucidum.* 490	2 Gymnospérmia (*gymnos*, naked, *sperma*, seed), Angiospérmia (*aggeion*, a vessel, *sperma*, seed).
Four long, and two short,	15. Tetradynàmia (*tetra*, four, *dyo*, two, *nema*, a filament) *Ráphanus sativus.* 536	2 Siliculòsa (*silicula*, a silicle), Siliquòsa (*siliqua*, a silique)

Stamens united,

by the filaments, into one body,	16 Monadélphia (*monos*, one, *adelphos*, brother) *Málva fragrans.* 560	7 Triándria, Pentándria, Heptándria, Octándria, Decándria, Dodecándria, Polyándria
by the filaments, into two bodies,	17. Diadélphia (*dis*, twice, *adelphos*, a brother) *Onónis arvénsis.* 598	4 Pentándria, Hexándria, Octándria, Decándria
by the filaments, into many bodies	18. Polyadélphia (*polys*, many, *adelphos*, brother). *Hypéricum quadrán.* 650	4 Decándria, Dodecándria, Icosándria, Polyándria.
by the anthers or tops, into a cylinder,	19. Syngenèsia (*syn*, together, *genesis*, origin). *Cichórium Intybus.* 660	5. Polygàmia æquàlis (equal), Polygàmia superflua (superfluous), Polygàmia frustrànea (*frustra*, in vain), Polygàmia necessària (necessary), Polygàmia segregàta (separated).

Male organs (stamens) attached to, and standing upon the female (pistil),	20. Gynándria (*gyne*, a woman, *aner*, a man). *Ophrys apífera.* 748	3. Monándria, Diándria, Hexándria.

In different flowers,

on the same plant,	21. Monœcia (*monos*, one, *oikos*, house) *Cucúrbita Pépo.* 768	8. Monándria, Diándria, Triándria, Tetrándria, Pentándria, Hexándria, Polyándria, Monadélphia.
on different plants,	22 Dioecia (*dis*, twice, *oikos*, house) *Cánnabis sativa* 816	14. Monándria, Diándria, Triándria, Tetrándria, Pentándria, Hexándria, Octándria, Enneándria, Decándria, Dodecándria, Icosándria, Polyándria, Monadélphia, Gynándria.
on the same or different plants along with hermaphrodite flowers,	23. Polygàmia (*polys*, many, *gamos*, marriage) *Gleditschia triacánthos.* 852	2. Monœcia, Dioecia.

Second Grand Division — *Plants with inconspicuous Flowers* (*Cryptogàmia*).

Reproductive organs scarcely visible, so that they have not been distinctly described,

24. Cryptogàmia (*kryptos*, concealed, *gamos*, marriage), 874

11 Gonopterides (*gonos*, seed, *pteris*, fern), Stachyopterides (*stachys*, a spike, *pteris*, fern), Poropterides (*poros*, a pore, *pteris*, fern), Filices (*filix*, a fern), Hydropterides (*hydor*, water, *pteris*, fern), Schizmatopterides (*schizma*, a cleft, *pteris*, fern), Musci (*muscus*, moss), Hepaticæ (*hepar*, a liver), Algæ (*alga*, sea weed), Lichens (Greek name), Fungi (*fungus*, a mushroom)

To discover the particular species or variety of a plant it is necessary to become acquainted with the forms and different conditions of the leaves, stems, and other parts of the bodies of plants, as well as with their flowers, and this knowledge, as we have before stated (p xix.), will be obtained with the greatest facility by turning to the Glossary (p. 1094.), and comparing the definitions with the engraved figures.



Class I. — MONANDRIA. 1 Stamen.

This class, which is not large, contains chiefly exotic plants, and of these the tribe of Scitamineæ is considered one of the most beautiful families of the vegetable kingdom. The useful productions are chiefly the Ginger, Cardamom, and Turmerick, spices highly esteemed, and in general use wherever they are known, and can be procured. The Salicornia, a native of our sea-shores, is burned for kelp, and pickled for culinary purposes. Almost all the plants of this class are aquatics, or grow in marshes. They chiefly thrive best in a sandy loam, from which their roots should be well cleaned every year.

The genera of the Scitamineæ and Cannеæ have been remodelled by Roscoe, whose arrangement has received considerable improvement from the hand of the late Dr. Roxburgh. The nature of the floral envelope of those plants has long been a subject of dispute among botanists, some considering the colored inner segments to be true petals and to be variable in numbers, and others, supposing them to be part of the calyx and constant in number, their occasional variation in number being capable of explanation. Persoon (*Synopsis*, p 1) is of opinion that many of the genera of the first section ought to be referred to Gynandria. According to Willdenow and others, the following species belonging to other classes have only one stamen

Monogynia. Mangifera indica; Alchemilla aphanes, several species of Scirpus, Cyperus, Schœnus, Kyllinga, Cryptostomum monandrum, Chorizandra, Polycnemum monandrum, Hopea.

Digynia. Lacistema, Leersia, Salsola, and many grasses.

Order 1 MONOGYNIA.  1 Stamen 1 Style

§ 1. *Germen inferior, anther simple, style erect, free. Flowers spathaceous.*

1. *Canna.* Anther attached to the edge of the petal-like filament. Style thick, club-shaped. Stigma linear, obtuse.
2. *Maranta.* Anther attached to the petal-like filament Style petal-shaped. Stigma three-sided. Flowers panicled.
3. *Calathea* Anther attached to the petal-like filament. Style petal-shaped. Stigma cuculiate Flowers in close heads.
4. *Thalia.* Anther attached to its proper filament Style depressed. Stigma depressed, perforated, and gaping.
5. *Phrynium.* Anther attached to its proper filament. Style united to the tube of the corolla, hooked at the end. Stigma funnel-shaped. Seeds with an arillus.

§ 2. *Germen inferior, anther double, style inclosed in the furrow formed by the anther. Flowers spathaceous*

6. *Hedychium.* Anther naked Tube of the corolla long and slender, with both limbs 3-partite, the interior one resupinate. Capsule dry
7. *Roscoea.* Anther 2-lobed, incurved, surrounding the style with an appendage split at the base Outer limb of the corolla 3-partite, with the upper segment erect and fornicate Inner limb 2-lipped.
8. *Alpinia.* Anther not crowned. Interior limb of the corolla with one lip. Capsule berried. Seeds with an arillus.
9. *Heliconia.* Anther in some marginal. Filament linear, longer than the anther, with a very short rounded entire or 2-lobed appendage. Capsules crustaceous Seeds with an arillus
10. *Zingiber* Inner limb of the corolla with one lip Anther with a simple recurved horn at the end.
11. *Costus.* Interior limb of the corolla nearly campanulate, split at the back. Filament lanceolate. Anther in the centre of it or at some distance from the end. Seeds naked.
12. *Kæmpferia.* Tube of the corolla long and slender, with both limbs 3-partite. Anther with a 2-lobed crest.
13. *Amomum.* Inner limb of the corl with 1 lip. Anther with an entire or 2-lobed crest Seeds with an arillus.
14. *Curcuma.* Both limbs of the corolla 3-partite. Anther with two spurs at the base. Seeds with an arillus.
15. *Globba.* Inner limb of the corolla 2-lobed or none Filament hollow at the base, with a wedge-shaped lip Anther with an appendage or none. Seeds attached to 3 parietal placentas
16. *Mantisia.* Outer limb of the corolla 3-partite, inner filiform with a double trifid limb Filament 4-partite at the end.

§ 3. *Germen superior, corolla irregular.*

17. *Phlydrum.* Calyx 2-leaved colored. Filaments 3 united at the base, the two lateral ones barren and petal-shaped. Seeds numerous, minute.

§ 4 *Germen inferior, corolla irregular Flowers naked*

18. *Lagenia.* Cal. 4-leaved. Cor. 4-petaled, unequal. Filaments two one antheriferous, the other petal-shaped-abortive. Caps. 4-valved, 4-celled, many seeded.

§ 5. *Germen inferior, corolla regular, flowers naked.*

19. *Boerhaavia.* Cal. 1-leaved, ob-conic, inclosing the seed. Cor. plaited, on the end of the calyx.
20. *Centranthus.* Cor. 5-lobed, regular, spurred. Caps. 1-celled, crowned with the limb of the calyx expanded into a plumose pappus.

§ 6. *Apetalous.*

21. *Pallichia.* Cal. 1-leaved, 5-toothed. Seed 1. Fruit upon the heaped, berried scales of the receptacle
22. *Salicornia.* Cal. turbinate, entire, fleshy. Stamen inserted into the bottom of the cal. Style 2-fid. Utricle inclosed in the fleshy calyx. Seed vertically compressed.
23. *Hippuris.* Cal. entire, minute. Style in the hollow of the anther. Germen inferior, one seeded, crowned by the rim of the calyx.
24. *Zostera.* Spadix linear in the sheath of the leaf, bearing seed on one side. Stamens opposite the germs and alternate with them, sessile. Caps. one-seeded.
25. *Chlorendium.* Stamen irregular, fleshy, lobed, fixed to the side of the germen. Stigma capitate. A fungus.

Order 2. DIGYNIA.  1 Stamen. 2 Styles.

26. *Cordyperanum.* Cal. 2-leaved. Cor. 0. Seed one, oval, convex-plane. (Stamens often 5.)
27. *Callitriche.* Cal. 2-leaved. Pet. 0. Caps. 2-celled, 4-seeded.
28. *Bitteria.* Cal. trifid. Cor. 0. Seed one, immersed in a berried calyx.
29. *Aspicarpa.* Cal. 5-parted. Cor. 0. Stamen included. Germen and Stigma 2-lobed. Fruit cartilaginous, 1-seeded.

Systematic Name and Authority.	English Name.	Habit.	Habitation in the Garden.	Popular Character.	Height in Feet.	Time of Flowering.	Color of the Flower.	Native Country.	Year of Introduction of Exotics, and Localities of British Species.	Propagation.	Soil.	Reference to Figures.
†1. CAN'NA. *W.*	INDIAN SHOT.				*Cannæ*	*Sp* 17—20.						
1 pátens *Rosc.*	spreading		or	2	my	R.Y	Rio Jan.	1778	R	r m	Bot. reg 576
2 índica *Rosc.*	common		or	2	ja.d	R	India	1570.	R	r.m	Red. iii 201
β maculáta	*spotted*		or	2	ja d	R.Y	India	...	R	r m	Hook. ex. fl. 58
3 coccínea *Rosc.*	scarlet		or	2	ja.d	S	S Amer	1731.	R	r.m	Bot. mag. 452
4 lútea *Rosc*	yellow		or	2	ja.d	Y	E. Indies	1629	R	r.m	Bot. mag. 2085
5 Lambérti *Lind.*	Lambert's		or	4	my	S	Trinidad	1819	R	r.m	Bot. reg 470
6 gigantéa *R. L*	gigantic		or	5	d ja	R.Y	S Amer	1809.	R	r m	Bot. reg. 206
7 occidentália *Rosc.*	western		or	3	s.d	R Y	W Indies	1822.	R	r m	Bot reg. 772
8 limbáta *Rosc.*	bordered		or	3	ja d	R	Brazil	1818.	R	r.m	Bot. reg. 771
9 variábilis *W.*	variable		or	3	ja.d	R	Iydia	1822.	R	r.m	
10 rúbra *W*	red		or	3	ja d	R.Y	W Indies	1820.	R	r.m	
11 rubricaúlis *Lk.*	red-stemmed		or	3	my	R	.....	1821.	R	r.m	
12 edúlis *B R*	eatable		or	3	a.d	R	Peru	1820.	R	r.m	Bot. reg. 775
13 speciósa *B M*	shewy		or	3	au s	R	.....	1820.	R	r.m	Bot. mag. 2317
14 pedunculáta *B M.*	stalked		or	6	a.d	O	.....	1820	R	r.m	Bot. mag 2328
15 flaccida *Rosc*	flaccid		or	5	jl	R	S Carol	1788	R	r.m	Sal. st. ra. 3. t. 2
16 glaúca *Rosc*	glaucous		or	2	jn au	Y	S. Amer	1732	R	r m	Ex. b. 2 t. 102
β rufa	*rufous*		or	2	jn au	Br	S Amer.	...	R	r.m	Bot. mag. 2302
17 iridiflóra *Fl Per*	nodding flow		or	6	d.ja	R	Peru	1816.	R	r.m	Bot. mag. 1963
†2 MARAN'TA *W.*	ARROW ROOT.				*Cannæ.*	*Sp* 7—20.						
18 arundinácea *W*	Indian		or	2	jl au	W	S. Amer	1732	R	s l	Bot. mag. 2807
19 obliqua *Rudge.*	oblique		or	2	d	R	Guiana	1803	R	s.l	Ru. p. g. p. 8. t. 2
20 lútea *Jacq*	yellow		or	2	jn jl	Y w	Caraccas	1809	R	s.l	Jac. ic r. 2. 201
21 angustifólia *B M*	narrow-leaved		or	2	jl au	R	W Indies	1820	R	s.l	Bot. mag. 2898
22 Tónchat *W.*	ovate		or	8	jl au	R	E Indies	1819	R	s l	Rumph. 4. t. 7
23 gibba *L K*	gibbous		or	4	au	O	E Indies	1818	R	s l	
24 comósa *W.*	close-spiked		or	2	jn jl	Y w	Surinam	1812.	R	s.l	
†3. CALATHE'A. *Mey*	CALATHEA				*Cannæ*	*Sp* 1—4.						
25 zebrína *Lind.* *Maránta zebrina* B M	striped-leaved		or	2	ja.d	R Y	Brazil	1815	R	s.p	Bot. reg. 385
4. THA'LIA *W*	THALIA.				*Cannæ*	*Sp* 1—2.						
26 dealbáta *Rosc*	mealy		or	4	jl au	W	S Carol	1791	R	p.l	Bot. mag. 1690
†5. PHRY'NIUM *W.*	PHRYNIUM.				*Cannæ*	*Sp* 2.						
27 capitátum *W*	headed		or	5		W	E. Indies	1807	R	s.l	As. r. 11. t. 3
28 dichótomum *Roxb*	forked		or	5	jl au	W	E. Indies	1810.	R	s.l	
†6. HEDY'CHIUM *W*	GARLAND FLOWERS				*Scitamineæ*	*Sp* 9—14.						
29 coronárium *Roxb*	sweet-scented		or	5	jn s	Y	E. Indies	1791	R	p l	Bot. mag. 708
30 angustifólium *Rox*	scarlet		or	5	jn s	S	E. Indies	1815	R	s.l	Bot. reg. 157
31 elátum *Br.*	tall		or	5	jn.d	Y	E. Indies	1818	R	s.l	Bot. reg. 596
32 Gardneriánum *Wall*	Gardner's		or	7	jn au	Y	E. Indies	1819	R	r s	Bot. reg. 771
33 flavéscens *B C*	pale-yellow		or	6	jn	Y	India	1822.	R	s l	Bot. cab. 728
34 spicátum *B M.*	spiked		or	3	jn	Y	E. Indies	1810	R	co	Bot. mag. 2800
35 grácile *Roxb*	slender		or	3	jn	W	Bengal	1823.	R	s l	
36 flávum *Roxb*	yellow		or	3	jn au	Y	Nepal	1822.	R	s l	Bot. cab. 604
37 heteromállum *B R.*	variable		or	3	jn au	Y	India	1822.	R	s l	Bot. reg. 767



History, Use, Propagation, Culture,

1 *Canna* From a Celtic word signifying a cane or mat. *Le Balisier*, Fr *Blumenrohr*, Ger. *Canna*, Ital. The first three species are found wild within the tropics on all the continents, and chiefly in moist woods, or spongy woody wastes. In America and the Brazils, they are known by the name of wild plantain, and their leaves are used as envelopes for many objects of commerce; from which circumstance, the French name of the plant (*balisier*) is said to have arisen; *balija* being Spanish for an envelope. Clusius says he saw the C. lutea flowering by house-sides in Spain and Portugal, and that the inhabitants there use the seed for making their rosaries: in the East Indies the seeds are sometimes used as shot. The roots of C edulis are eaten, dressed in various ways, in Peru The seeds of most of the species are round, hard, black, shining, heavy, and about one sixteenth of an inch diameter These grow readily, or the plants may be propagated by dividing the roots, Miller recommends rich garden earth; Sweet (*Bot Cultiv* p 34) light rich soil for all the species. Most of these, if planted in a warm border early in summer, will flower there during the season.

2. *Maranta.* So named from Bartholomeo Maranti, a Venetian physician, who wrote three books chiefly to illustrate Dioscorides; died 1554. *Galangre*, Fr *Galgant*, Ger The M. arundinacea is called Indian arrow-root, because its thick fleshy root was thought to extract the poison from wounds inflicted by the poisoned arrows of the Indians. In the West Indies it is used as an alexipharmic, to resist the force of poisons;

Essential specific Character.

1 Inner limb of the corolla 3-fid, Seg. ovate equal sprdg. with long claws, Lip bifid, rev. Leaves ovate lanc
2 Inner limb of the corolla trifid, Segments lanceolate acuminate straight
3 Inner limb of the corolla trifid, Segments straight emarginate
4 Inner limb of the corolla bifid
5 Peduncle short inclosed in the upper leaf, Inner limb of the corolla trifid, Segments ovate lanceolate sub-erect, Lip erect spreading entire
6 Peduncles elong Inner limb of corolla 3fid, Seg lanceol. spathul. reflexed spreading, Lip oblong entire
7 Segments of cor. 2 entire ovate unequal, Lip bifid bent down
8 Segments of cor. 3 broad emarginate and crenate · the claws long, Lip. 2-fid bent down
9 Leaves of cal. lanceolate acute, Cor 5 parted, Leaves ovate-obl acute at both ends cordate
10 Leaves of cal. oblong obtuse, Cor 6 parted, Leaves ovate-obl acute at both ends cordate
11 Leaves sessile ovate with the sheaths and nerves very red, Inner limb 4 parted
12 Leaves smooth and stems colored at the base, Roots tuberous and large, Middle seg. of corolla very short
13 Flowers sessile in pairs, Segments of cor 2 erect bifid, Lip spotted revolute
14 Flowers on stalks: outer segments reflexed, inner 3 erect, Leaves lanceolate pointed at each end
15 Inner limb of the corolla trifid, Segments flaccid
16 Inner limb of the corolla trifid, Segments ovate straight, Lip three-lobed fringed.

17 Stem and Leaves beneath downy, sheaths curled and colored at the edge, Flowers cernuous

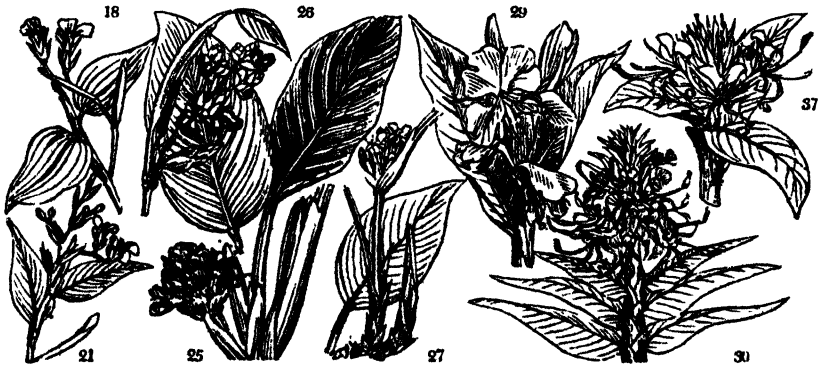
18 Culm branched herbaceous, Leaves ovate lanceolate somewhat hairy underneath
19 Leaves ellipt oblique at end, Spikes elong. in fasc. Bract. erect, 2-fid. imbricate acute pubesc
20 Culm branched knotty ovate smooth, Spikes terminal subternate, Bracteas colored
21 Stem knotty, Leaves lanc. narrow, Panicle wavy, Inner braits colored, Calyx ovate
22 Stem shrubby branching, Leaves ovate smooth
23 Leaves oblong lanc pubesc Fl. stalks 2-fid Germ very hairy
24 Stemless, Scape naked, Spikes comose, Bracteas reflexed

25 Flowers in dense heads shorter than the leaves which are striped with purple

26 Calyx two-flowered, Culm reedy powdered, Leaves ovate revolute at the apex

27 Stemless, Leaves radical
28 Shrubby, dichotomous, Leaves cordate

29 Leaves lanceolate, Spikes compact imbricated, Segments of the cleft lip of the corolla lunulate
30 Leaves linear lanc Spikes open, Fasc of flowers subtern Seg of cleft lip obl the other 5 segs. of cor. lin.
31 Leaves obl lanc. smooth, Spikes loose, Fascic tern 3 fid Inner segs. of the cor linear-cuneate, Lip bifid
32 Spike many-fl loose, Fascicles many-fl. distant, Lip obovate bifid, Filament colored longer than corolla
33 Leaves lanceolate, Spike loose ovate, Petals linear, Lip ovate 2-lob. Fil the same length as petals
34 Spathes truncate 1-fl. Outer segments of cor. linear, Lip roundish 2-lobed longer than the style
35 Leaves lanceolate, Spike terml open, Flowers sol scattered, Lip bifid sessile stigm ½-lanceol. Pet. linear
36 Leaves broad, Spike terml imbricate, Bract. 4-fl Cor with linear segm Lip obcordate retuse
37 Upper leaves wavy silky beneath, Spike loose conical, Filament much longer than corolla



and Miscellaneous Particulars

washed, pounded, and blanched, it makes a fine powder and starch, and may be used as food, resembling in many respects the salep. A light loamy soil suits all the species, which, though tender, are readily propagated by dividing the root.

3. *Calathea.* So named by Meyer, probably from the cup-like stigma of the genus. It is much admired on account of its singularly striped foliage, to which the specific name alludes, and its ovate spike of purple flowers, about the size of a large pine-cone

4 *Thalia.* In memory of John Thalius, a German physician, at Nordhuys, author of Plantæ Hercynæ, 1588. An aquatic, and if planted two or three feet under water, will survive our winters, in the open air. It flowers beautifully.

5 *Phrynium.* Φρυνος, a plant which grows in marshes, the habitation of frogs, from φρυνος, a frog. The leaves are used in Malabar and China, for wrapping up cakes in the oven; before expansion they infuse them in spirit of rice or sugar diluted with three times its quantity of water, to make vinegar. *Loureiro.*

6 *Hedychium.* From a Greek word signifying sweet, from the grateful odour it emits. This beautiful genus requires a light rich soil, and large pots to make the plants flower freely H. angustifolium deserves a place in every collection.

7. ROSCO'EA. *Sm.*	Roscoea.				*Scitamineæ*	*Sp.*	1—5.					
38 purpúrea *Sm*	purple	⅄	⧍	or	1	P	Nepal	1820.	R	s.l	Ex. b. t. 108	
†8. ALPI'NIA. *W.*	Alpinia.				*Scitamineæ*	*Sp*	13—19.					
39 comósa *Jacq.*	close-spiked	⅄	⧍	or	1		Caraccas	1752.	R	s.l	Ja. ic rar. v. 3	
40 Galánga *W*	loose-flowered	⅄	⧍	clt	6	oc.f	W Y	E. Indies	...	R	s.l	Ru. am 5 t. 63
41 racemósa *Ros*	clustered	⅄	⧍	or	5	jl.s	W	W.Indies	1752.	R	s.l	Pl. ic. 11. t. 20
42 occidentális *Sw.*	occidental	⅄	⧍	or	6		W	Jamaica	1793.	R	s.l	
43 nútans *Ros.*	nodding	⅄	⧍	or	13	ap jn	Pk	E Indies	1792	R	s.l	Ex. b 2. t 106
44 cérnua *B M.*	drooping	⅄	⧍	or	6	ap jn	Pk	E Indies	1804.	R	s.l	Bot. mag 1900
45 calcaráta *Ros*	upright	⅄	⧍	or	3	s	W	E Indies	1800.	R	s.l	Bot. rep 421
46 malaccénsis *Ros.*	petiolate	⅄	⧍	or	5	ap.my	W	E Indies	1799.	R	s.l	Bot. reg 328
47 mútica *Roxb*	spurless	⅄	⧍	or	5	au	W	E Indies	1811.	R	s.l	
48 Cardamómum *Roxb*	cardamoms	⅄	⧍	clt	8	au	W.P	E. Indies	1815	R	s l	R mal. 11 t 4, 5
49 spicáta *Roxb*	spiked	⅄	⧍	or	2			Sumatra	1822.	R	r,m	
50 tubuláta *B R*	tubular	⅄	⧍	or	2	jl.au	R	Demarara	1820	R	s.l	Bot reg. 777
51 Allúghas *W.*	Ceylon	⅄	⧍	or	2	f m	R	E. Indies	1796.	R	s.l	Bot. rep 501
9 HELLE'NIA *R B*	Hellenia.				*Scitamineæ*	*Sp.*	1					
52 cærúlea *Br.*	blue	⅄	⧍	or	2	B	N Holl.	1820.				
10 ZIN'GIBER. *Rosc*	Ginger				*Scitamineæ.*	*Sp*	8—16.					
53 pandurátum *Roxb*	fiddle-lipped	⅄	⧍	or	3	my jn	Pk	E Indies	1812.	R	s.l	
54 Mióga *Ros*	Japanese	⅄	⧍	or	2	my jn	Pk	Japan	1796	R	r m	Kæm ic 1
55 officinále *Ros*	narrow-leaved	⅄	⧍	clt	2	jn au	R	E. Indies	1605	R	r m	Jac vin. 1 t. 73
56 Zerúmbet *Ros*	broad-leaved	⅄	⧋	or	4	au	Y.G	E Indies	1690	R	r m	Ex b. 2 t 112
57 Casumúnar *Roxb*	downy-leaved	⅄	⧋	or	2	s n	W.Y	E. Indies	1807	R	r m	Bot. mag 1426
58 purpúreum *Rosc*	purple-bracted	⅄	⧋	or	2	s	P	E. Indies	1796	R	s l	
59 róseum *Roxb*	rosy	⅄	⧋	or	2	au	R Y	E. Indies	1822	R	s.l	Roxb. cor. 2. 126
60 squarrósum *Roxb.*	squarrose	⅄	⧋	or	2	au	Pk	E. Indies	1822.	R	s.l	
11 COS'TUS. *Rosc*	Costus.				*Scitamineæ.*	*Sp*	6—13					
61 arábicus *L.*	Arabian	⅄	⧋	or	2	au	W	both Ind.	1752.	R	s l	
62 spicátus *W*	spiked	⅄	⧋	or	1	jn	Y	W Indies	1793	R	s l	Jacq am t. 1
63 speciósus *Rosc*	shewy	⅄	⧋	or	3	au	W	E. Indies	1799	R	s l	Jacq ic. 1
β angustifolius	*narrow-leaved*	⅄	⧋	or	3	au	W	E. Indies	1799	R	s l	Bot rcg 665
64 áfer *B. R.*	African	⅄	⧋	or	2	jn jl	W	S. Leone	1822	R	s l	Bot. reg 683
β hirsutus	*hairy*	⅄	⧋	or	2	jn jl	W	S Leone	1822	R	s l	
65 spiralis *Rox*	spiral	⅄	⧋	or	4	n d	Sc	St. Vinc.	...	R	s.l	Jacq schb 1 t. 1
Alp spiralis												
66 villosissimus *Jacq*	villous	⅄	⧋	or	6	n d	Y	St. Vinc.	1822.	R	s l	
†12. KÆMPFE'RIA *W*	Galangale				*Scitamineæ.*	*Sp*	6—8.					
67 rotúnda *L*	round-rooted	⅄	⧋	or	1	jl.au	R.W	E. Indies	1764	R	s l	Bot mag. 920
68 Galánga *L*	officinal	⅄	⧋	clt	1	jn s	W P	E Indies	1728	R	s l	Bot. mag 850
69 angustifólia *Jacq*	narrow-leaved	⅄	⧋	or	1	m ap	W B	E. Indies	1797.	R	s l	Red ht. 7 t 389
70 panduráta *B Reg*	fiddle-shaped	⅄	⧋	or	1	ap jn	P	E. Indies	1797	R	s l	Bot reg. 173
71 latifólia *Donn*	broad-leaved	⅄	⧋	or	1	ap jn	W	E Indies	1803	R	s l	
72 ovalifólia *Roxb*	oval	⅄	⧋	or	1	jl	W.P	Malacca	1822	R	s l	
13. AMO'MUM *Rosc.*	Amomum				*Scitamineæ*	*Sp*	7—20					
73 Afzélii *Ros.*	sweet-scented	⅄	⧋	or	3	my jn	Pk	S. Leone	1795	R	r m	Ann bot. 1 t 13
74 grandiflórum *E B*	large-flowered	⅄	⧋	or	3	jn jl	W	S Leone	1795.	R	r m	Ex. bot t 111
75 angustifólium *Rox.*	narrow-leaved	⅄	⧋	or	8	jn jl	R	Madagasc.	...	R	r m	Sonn it 2 t. 137
76 Grana Paradisi *W.*	grain of parad	⅄	⧋	clt	1	f mr	R	Madagasc.	...	R	r m	Rh mal. 11 t. 6
77 dealbátum *Roxb*	insipid	⅄	⧋	or	3	mr ap	W	Bengal	1819	R	s l	
78 sylvéstre *W*	wild	⅄	⧋	or	1	mr ap	W	E. Indies	1819	R	s l	Slo Jam. 1. t. 105
79 subulátum *Roxb*	subulate	⅄	⧋	or	3	mr ap	Y	Bengal	1822	R	s l	



History, Use, Propagation, Culture,

7. *Roscoea* Named by Sir J. E. Smith, in honour of W. Roscoe, Esq, the accomplished historian of the Medicis, and the first botanist who elucidated the plants of the order Scitamineæ. The species are little known, but are both beautiful and curious

8. *Alpinia.* After Prosper Alpini, an Italian physician and botanist, who practised at Cairo between 1580 and 1584, and died in 1615. *Canne de Rivierre*, Fr. A splendid genus, requiring rich soil, a moist heat, and plenty of room. A racemosa answers best when treated as an aquatic.

9. *Hellenia* In honour of C. N. Hellenius, Professor at Abo, who, in 1798, published several academical dissertations The same culture answers this plant as recommended for Hedychium

10. *Zingiber.* From the original Indian appellation. *Zingembre*, Fr. *Ginfer*, Ger ; and *Zinzer*, Ital. Many of the specific names employed in the genus are derived from the vernacular names of the species. The roots of *Z. officinale*, and zerumbet, much used in the kitchen and in medicine, form a considerable export from our West India Islands. As a medicine, ginger is particularly useful in flatulent colic, debility, and laxity of the system, and in torpid and phlegmatic constitutions, to excite a brisker action of the vessels. The roots of ginger are taken up when the stalks fade, and, being first washed and scalded, are afterwards dried in the sun. This forms black ginger, the white sort is never scalded, but only washed and dried. When the root is to be

38 Flowers large terminal in the sheaths of the top of the stem, Leaves obl. acute sm.

39 Spike terminal comose, Bracteas colored longer than the flowers, Leaves oblong-ovate pubescent
40 Leaves sessile broad lanc Panicle terml. Lip obl unguiculated bifid, Caps. obov smooth, Seeds few
41 Lip trifid, Leaves ovate-lanc. apex revolute, Caps striated
42 Lip emarginate, Leaves lanceolate ovate very smooth [and bifid, Caps sphær open. on sides, Seeds few
43 Leaves lanc. short stkd. small, Rac. comp droop Lip broad 3-lob lateral incurv into a tube · external curled
44 Racemes terminal drooping, Lip bifid, Leaves lanc. acumin Margins rough with little spinous teeth
45 Leaves linear-lanc. polished, Spike compound erect, Lip ovate-obl. apex curled and bifid
46 Racemes spiked, Lip round und. 2-lob. Caps vill. Leaves obl. villous beneath
47 Racemes compound, Lip 3-lob no spur, Caps. berried, Leaves narrow shining
48 Scape radical compound flexuose procumbent, Lip 3-lob. calcarate
49 Spike terminal oblong compactly imbricated with narrow sharp bractes
50 Leaves bifar. very remote scape sheathed radical, Bracts dry pointed perm. Cor. tub. Lip included, Anth. sess
51 Nectary 2-leaved, Capsules spongy, Leaves smooth entire

52 Lip emarg Leaves and colored capsules smooth, Style hairy

53 Spikes radical, Leaves stalked broad smooth, Ligula large, Lip fiddle-shaped
54 Segments of the corolla concave acute equal, Lip ovate concave
55 Leaves sub-sessile linear-lanceolate smooth, Spikes elevated oblong, Bracteas acute, Lip 3-lobed
56 Stems decl Leaves bifar sess. lanc Spike long-ped. oval close obt Bract. broad obov obt margs col Lip 3-lob.
57 Stem erect, Leaves narr sess Spikes compact cone-shaped, Bracteas ovate-pointed, Lip 3-lobed
58 Spikes lat. Bracteas ovate col. Segm. of cor erect, Nect. 2-lob.
59 Spikes lat. Leaves short-stalked lanc Spikes lax ½ in the earth, Lip entire
60 Spikes lat. squarr ½ in the earth, Bract. narrow recurv. Lip 3-lobed

61 Nect. ovate entire, Leaves smooth on both sides
62 Nect. wavy sub-3-fid. Leaves pointed entire shining, Spike close
63 Nect. obsol. 3-lob. fringed wavy, Leaves silky beneath

64 Cal. short with 3 grnish. blunt teeth, Fil sm. at back, Leaves lanc hairy or sm Spike turb close, Br. obt herb

65 Nect. concave entire, Leaves long-ellipt. thick shining

66 Leaves rounded and stem very hairy, Flowers crisp

67 Dorsal segments of nectary lanc. acute frontal 2 part Segments obovate, Leaves oblong colored beneath
68 Dorsal segments of nect. obtuse obsoletely 3-lobed frontal 2-lobed wavy, Leaves ovate pale beneath
69 Dorsal segments of nect linear obtuse frontal emarg Leaves lanc pale beneath
70 Leaves stalked broad lanc smooth, Spike central, Cor with inferior segment very large and panduriform
71 Leaves orbiculate ovate wavy woolly beneath
72 Leaves oval, Spike central, Anther crest jagged

73 Scape very short, Flowers heaped, Leaves distant ovate acum. entire smooth
74 Scape short, Flowers numerous close, Sterile stem simple, Leaves ellipt. lanc pointed
75 Scape naked very short, Spike capitate, Leaves linear lanceolate
76 Scape branching lax, Leaves ovate
77 Leaves broad villous beneath, Spikes radical, Lip round oval, Crest broad truncated, Caps. 9 winged
78 Scape naked, Spike elong Bract. inflated, Leaves broad lanceol.
79 Leaves lanceol smooth, Spikes obovate echinated, Lip oblong



and Miscellaneous Particulars

preserved in syrup, it is taken up and scalded before fully grown After steeping and washing in water, it is put in jars, and covered with a thin syrup (Browne's Jamaica.) Z. zerumbet is used in the East in cataplasms and fomentations, but not as internal medicine.

11. *Costus* From its name in Arabic, *gosth* Jacquin has shewn that the *costus* of the moderns is not the same as the plant so called by the ancients. *Costwurtz*, Ger., and *costo*, Ital. All the species grow in woods in their native countries, and their roots partake somewhat of the qualities of ginger.

12 *Kæmpferia* In honor of Engelbert Kæmpfer, the Japanese traveller, born in Lemgow in Westphalia in 1651; died in 1716. *Zedoaire*, Fr. and *Grosse Galgant*, Ger. This is a curious genus of low stemless plants, with tuberous roots, a pleasant aromatic smell, and sharpish taste. The root is purple without and white within, and is esteemed a stomachic and cephalic. When the plants are not in a growing state, they require little or no water; otherwise like bulbs which are kept always moist, they will not flower freely.

13. *Amomum* From *a*, privative, and *μασσω*, impurity, it has always been esteemed a powerful counter poison; or perhaps a corruption of *phamámá*, the Arabic appellation of the plant. *L'amome des pédes*, Fr. *Ingwer* and *Gengiowo*, Ital. Most of the species formerly included under this genus are placed by Roscoe under Zingiber.

14. CURCU'MA. *W.*	TURMERIC.				*Scitamineæ. Sp.* 16—18.							
80 Zedoária *Ros.*	broad-leaved		or	3	ap.au	R	E. Indies	1797.	R	r.m	Bot. mag. 1546
81 Zerúmbet *Roxb.*	Zedoary		clt	3	ap.au	Y	E. Indies	1807	R	r m	Bot. mag. 2000
82 æruginósa *Roxb.*	green-rooted		or	5	ap.au	R.Y	E. Indies	1807.	R	r.m	
83 rubéscens *Roxb.*	reddish		or	3	my.s	Y	E. Indies	1805.	R	r.m	Rosc. scit. ic.
84 cæsia *Roxb.*	cæsious		or	1	ap jn	Y	Bengal	1819.	R	s.l	
85 comósa *Roxb*	many-flowered		or	2	my	R.Y	E. Indies	1819.	R	s l	
86 elàta *Roxb*	tall		or	3	my	Cr	E Indies	1819.	R	s.l	Rosc scit. ic.
87 ferruginea *Roxb*	sweet-rooted		or	1	my	Y	E. Indies	1819	R	s l	Rosc. scit. ic.
88 leucorhiza *Roxb*	white-rooted		or	1	my	R.Y	E. Indies	1819.	R	s.l	
89 xanthorhiza *Roxb.*	yellow-rooted		or	4	my	R	Amboyna	1819.	R	s.l	
90 rubricaúlis *Lk*	red-stemmed		or	1	my	R	E. Indies	1822.	R	s l	
91 angustifólia *Roxb.*	narrow-leaved		or	3	jl	Y	E. Indies	1822.	R	s l	As res. 11. 5
92 viridiflóra *Roxb*	green-flowered		or	2	jl au	Y G	Sumatra	1822	R	s.l	
93 petiolàta *Roxb*	long-stalked		or	2	au	Y	Pegu	1822.	R	s l	Rosc. scit. ic.
94 Amáda *Roxb*	Mango-ginger		clt	2	ap jn	R.Y	Bengal	1819.	R	s l	Rosc. scit. ic.
95 lónga *Ros.*	long-rooted		clt	2	au		E. Indies	1759.	R	s.l	Jac. vind. 3. t. 4
15 GLOB'BA. *Ros.*	GLOBBA.				*Scitamineæ Sp* 3—11							
96 marantina *Ros*	round-headed		or	1½	jl.au	Y	E Indies	1800	R	s.l	Ex. bot. 2 t. 103
97 sessilifólra *B M*	sessile-flower'd		or	1½	au	Y	Pegu	1807	R	s.l	Bot mag 1428
98 Careyána *Roxb*	Dr Carey's		or	1½	au	Y	Pegu	1822	R	s.l	Bot. cab. 691
16. MANTI'SIA *Sims*	MANTISIA				*Scitamineæ Sp* 1							
99 saltatória *B M.*	opera girls		or	1	jn	P	E. Indies	1808.	R	s.l	Bot. mag. 1320
17 PHILY'DRUM *B P.*	PHILYDRUM				*Related to Junceæ*, R. B *Sp.* 1—2							
100 lanuginósum *B P*	woolly		or	3	jn jl	Y	China	1801.	C	l p	Bot. mag. 783
18. LOPE'ZIA *Cav*	LOPEZIA				*Onagrariæ. Sp* 4—5							
101 hirsúta *H K*	hairy		or	1½	s n	R	Mexico	1796	S	co	Jac c s 5, t 15, f 4
102 racemósa *H K*	smooth		or	1½	au o	R	Mexico	1792	S	co	Bot mag. 254
103 coronáta *H K.*	coronet-flower.		or	1½	jl s	R	Mexico	1805	S	co	Bot rep 551
104 cordáta *Horn*	cordate		or	1½	jl.s	P	Mexico	1821	S	co	
19 BOERHAA'VIA *W*	HOGWEED.				*Nyctagineæ Sp* 5—25							
105 erécta *W*	upright		or	1½	jl s	W	India	1733	S	co	Jac vind 1 t. 5, 6
106 diffúsa *W*	spreading		or	1	au s	Cr	India	1690	S	co	Her par 2. 7. ic.
107 hirsuta *W*	scarlet-trailing		or	1	my au	R	Jamaica	1733	S	co	Jac. vind 1 t 7
108 scandens *W*	climbing		or	6	ap s	G	Jamaica	1691	S	co	Jac. vind. 1. t. 4
109 viscósa *Lag*	clammy		or	3	ap s	Sc	Peru	1821	C	co	
20 CENTRAN'THUS	*Mich* CENTRANTHUS				*Valerianeæ Sp* 3—4.							
110 rúber *D C.*	red		or	1½	my jl	Cr	Britain	mea.	R	co	Eng bot. 1531
111 angustifólius *D C.*	narrow-leaved		or	1½	my jl	Cr	S Europe	1759	R	co	Fl græc 29
112 calcitrapa *Dufr*	cut-leaved		or	1	my jl	P	Portugal	1683.	S	co	Fl. græc. 30
21 POLLI'CHIA *W*	POLLICHIA				*Chenopodeæ Sp.* 1.							
113 campéstris *W*	short-leaved		or	6	s	Ap	C B S	1780	C	co	Sm spicil. 1 t. 1
22 SALICOR'NIA. *W*	GLASSWORT				*Chenopodeæ Sp* 5—18.							
114 arábica *W*	Arabian		or	1	jn jl	Ap	Arabia	1758	C	s l	Mor 2. t. 33 f 7
115 fruticósa *W*	shrubby		or	1	au s	Ap	Britain	sea sh	S	s	Eng bot 2467
116 radicans *E B*	rooting		or	1	s	Ap	Britain	sea sh	S	s	Eng bot 1691
117 herbácea *W*	marsh		clt	1	au s	Ap	Britain	sea sh	S	s	Eng bot 415
118 procúmbens *E B*	procumbent		clt	½	au	Ap	England	sal. m	S	l	Eng bot. 1691
23 HIPPU'RIS. *W*	MARESTAIL				*Halorageæ Sp* 1							
119 vulgáris *W*	common		clt	1	my jn	Ap	Britain	dit	R	co	Eng bot 763



History, Use, Propagation, Culture,

14. *Curcuma.* From the Arabic *kurkum* or *hercum Babilonischer safran*, Ger C. longa was formerly much used in cookery to give things a color, and is still so used in the East Indies, for dyeing The root was reputed aperient and resolvent, and was given in jaundice · it tinges the urine of a deep yellow. The roots of C. zerumbet powdered and mixed with the powdered wood of Cæsalpinia Sappan is copiously thrown about by the Hindoos during their holidays in March. The tubers of many species yield a very beautiful pure starch like arrowroot, which in some places, especially Travancore, forms a large part of the diet of the inhabitants.

15. *Globba.* Its Indian name, and that also by which it is known in the Moluccas *Globée*, Fr Most of the species produce spikes of smoky-colored berries about the size of grapes, and which are sometimes eaten.

16. *Mantisia.* The flowers bear a singular resemblance to some of the insects called mantis. The name of the species is derived from a fanciful notion that the flowers are like a dancing figure attached to a wire.

17. *Philydrum.* Φιλεω and ὑδωρ, a lover of water, in allusion to the places in which it grows. A pretty biennial plant, requiring but little protection from frost.

18. *Lopezia.* Dedicated by Cavanilles to the memory of the licentiate Thomas Lopez, a Spanish botanist, who is said to have directed his attention to the natural history of the New World. The species are chiefly elegant annuals, and well deserving of cultivation.

19. *Boerhaavia.* So named in honor of the famous Boerhaave of Leyden, born at Voorhoot in 1668, and died

90 Spikes lateral, Bulbs small with long palm tub. yell. inside, Leaves broad sessile silky beneath all green
91 Spikes lat. Tub palm. pale straw-col Leaves gr stalk. brd with a pur. cloud down the mid. Fl. short. than brac.
92 Spikes lateral, Roots æruginous within, Leaves stalked with a faint rusty cloud beyond their middle above
93 Spikes lat. Roots pearl col. inside, Leaves broad on winged red stalks above the sheaths: rib and scape red
94 Spikes lateral, Roots green inside palmate, Leaves narr with a rusty cloud in middle
95 Spikes lateral clavate comose, Roots ovate pale yell inside, Leaves all green
96 Spikes lateral, Tubers large incurved pale yellow, Leaves sessile villous beneath all green
97 Spikes lat Roots palm. scented pale yell. inside palmd. Leaves and sheath rusty with a pale red spot in mid.
98 Spikes lat. few-flowered comose, Tubers long spreading pale inside, Leaves smooth pure green
99 Spikes lat. Tubers all yellow, Leaves sessile green broad with a purple cloud down the middle
90 Spikes lat. Leaves stalked oblong with red sheaths
91 Spikes lat. Root with pale pendulous tubers, Leaves stalked narrow, Flowers longer than bractes
92 Spikes central, Tubers palmate deep yellow, Leaves long stalked broad-lanceolate, Plant all green
93 Spikes central, Leaves on long stalks cordate, Coma lilac
94 Spikes central few-flowered, Tubers palmate pale yellow inside, Leaves broad smooth on long stalks
95 Spikes central, Roots deep orange inside, Leaves long stalked broad green

96 Leaves lanceolate, Spike terminal sub-sessile cone-shaped bulbiferous, Anther 4-horned
97 Spike whorled, Lateral segments of cor longest, Appendage cordate, Bractes lanc. withering, Bulbiferous
98 Leaves ovate lanc. villous beneath, Racemes compound term. bulbif Anther naked roundish

99 The only species

100 Flowers bright yellow, Leaves hairy

101 Leaves ovate villous, Stem round
102 Leaves ovate attenuate at base, with the 4-cornered stem smooth
103 Leaves shining, Stems angular, from the decurrent stalks, Corymbs leafy at the base
104 Leaves roundish cordate ciliated smooth, Branches angular

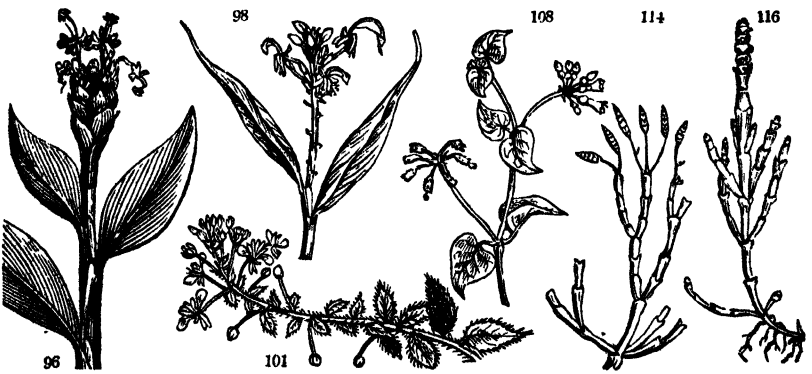
105 Stem 4-cornered smooth, Joints clammy, Flowers panicled, Leaves angular dotted with black beneath
106 Stem round pubescent, Flowers in capitate corymbs
107 Stem roundish hairy, Leaves ovate acute sub-repand, Flowers in heads diandrous
108 Stem climbing, Leaves all cordate, Flowers in umbels diandrous
109 Villous viscid, Leaves ovate acute sub-repand, Stem procumbent, Flowers in heads triandrous

110 Leaves entire lanceolate, Stem ½-shrubby at base, Flowers corymbose, Stamens nearly twice as long as cor
111 Leaves linear, Stem herbaceous, Flowers corymbose, Stamens nearly thrice as long as corolla
112 Rad. leaves ovate cauline pinnatifid, Stem upright smooth, Flowers panicled

113 Stems branching declining, Flowers minute sessile in axillary heads

114 Leaves alternate sheathing obtuse gaping on one side
115 Stem erect shrubby, Joints of the young branches 2-sided, Scales of flowers truncate membranous
116 Stem shrubby procumb. rooting, Joints compressed emarg cylindr Spikes obl Style deeply divided, Stam 2
117 Herbaceous spreading, Joints emarginate compressed at end, Spikes axillary opp stalked, Scales blunt
118 Herbaceous procumbent, Joints obconic, Branches simp Spikes fastigiate, Stamens 2

119 Leaves whorled 10-12 linear acute



and Miscellaneous Particulars

in 1759 *La Tassole*, Fr He was the first friend and protector of Linnæus. All the plants of this genus are possessed of little beauty.

20. *Centranthus* From κεντρον, a spur, and ανθος, a flower, in allusion to the calcarate corolla.

21. *Pollichia.* In honor of Jean Ad. Pollich, a German botanist, who published in 1776, a history of the plants of the Palatinate. The only species is an obscure herbaceous plant.

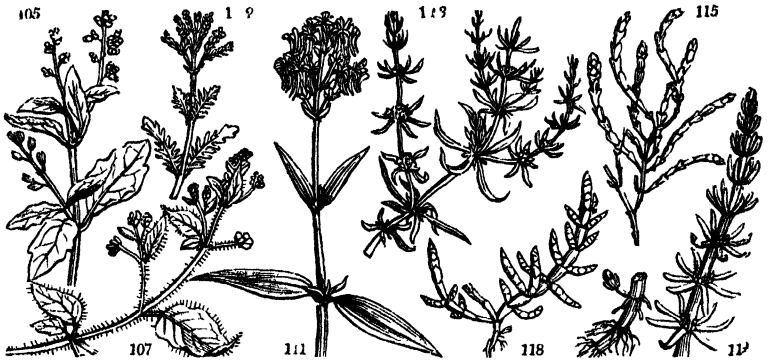
22. *Salicornia.* From sal, salt, and cornu, a horn, saltwort, marsh samphire. *Le Christemarine*, Fr *Glass schmaltz*, Ger., and *Erba-cali*, Ital. S. herbacea is gathered when in flower, and pickled in salt and vinegar like samphire, for culinary purposes. The whole plant has a saltish taste, and is greedily devoured by cattle. All the species, excepting the S. arabica, abound on the shores of the Mediterranean, and are there burnt for soda, which is much used in the manufactures of soap and glass, especially at Marseilles.

23. *Hippuris* From ἱππος, a horse, and ὐρα, a tail. *La Peese d'eau, ou pin aquatic*. Fr *Schaftholm*, Ger., and *Hippuride*, Ital The flower of this plant is one of the simplest among perfect plants, it has only one stamen and one pistil, unprotected by either calyx or corolla, and it produces only one seed The situation of the leaves in whorls is not usual in European plants, excepting in the stellatæ of Linnæus. The flowers in the beginning of summer are mostly hermaphrodite, but in autumn many of them are female By absorbing a great quantity of inflammable air, this plant is reputed to assist in purifying the putrid air of marshes. It is eaten by wild ducks.

24. ZOSTE'RA. *L.*	Sea Wrackgrass.				*Fluviales.*	*Sp.* 1.						
120 marina *L.*	common	⛵	△	ec	au.s	Ap	Britain	sea sh.	S	s		Eng. bot. 467
25. CHLORAN'THUS. *W.*	Chloranthus.				*Chloranthææ.*	*Sp.* 3—4						
121 inconspicuus *W.*	trailing	⛵	□	cu 1	ap s	Ap	China	1781.	C	co		
122 monostáchys *Lindl.*	herbaceous	⛵	⊠	cu 1	f.my	Ap	China	1819.	C	co		Lind. coll. 17
123 monánder *Br.*	upright	⛵	□	cu 1½	jn	Ap	China	1817.	C	co		

DIGYNIA.

26. CORISPER'MUM. *W.*	Tickseed.				*Chenopodeæ.*	4—9.						
124 hyssópifólium *W.*	hyssop-leaved	○			1½ jl	Ap	Europe	1739.	S	co		Fl. græc. 1. t. 1
125 squarrósum *W.*	rough-spiked	○			1 au.s	Ap	Russia	1759.	S	co		Pall ross. 2. t.99
126 Redówskii *Fisch.*	Redowsky's	○			½ jl au	Ap	Siberia	1822.	S	co		
127 intermédium *Schw.*	intermediate	○			½ jl.au	Ap	Poland	1822.	S	co		
27. CALLITRICHE. *W.*	Water Starwort				*Halorageæ*	*Sp.* 1.						
128 aquática *E. B*	common	⛵	○		½ ap.o	W	Britain	dit	S	aq		Eng. bot. 722
28. BLI'TUM. *W*	Strawberry Blite				*Chenopodeæ*	*Sp* 3						
129 capitátum *W.*	berry-headed	○	or		2 my au	Ap	Austria	1633.	S	ru		Pt.etT fl p 1 t. 2
130 virgátum *W*	slender	○	or		2 my s	Ap	S. Europe	1680	S	ru		Bot. mag 276
131 chenopodioides *Lam*	goosefoot	○			2½ my au	Ap	Crimea	1797	S	co		M h 1 t 32 f.11
29. ASPICAR'PA *Rich.*	Aspicarpa				*Malpighiaceæ*	*Sp* 1						
132 úrens *Rich*	stinging	⛵	⊠		5½ jn jl	Ap	S. Amer	1821	C	co		Mem m 2 13



History, Use, Propagation, Culture,

24. *Zostera.* From ζωστηρ, a riband; the leaves of Z oceanica are a foot long and an inch broad, resembling a riband. *La Zostére*, Fr, and *Seetang*, Ger This plant abounds on the coast of Yarmouth, where it is thrown on shore in such abundance that mounds are made with it to enclose the encroachments of the sea. It is also used as thatch, and said to endure for upwards of a century; by exposure it bleaches white In Sweden and Holland it is used as a manure, and is preferred to hay for stuffing beds Horses and swine eat it, but cows are not fond of it The rush-like envelopes of Italian liquor-flasks are prepared from this plant

25. *Chloranthus* So named from χλοεος, green, and ἀνθος, a flower, on account of the greenish hue of its inconspicuous inflorescence The structure of the flower is very curious, and so anomalous, as to render it difficult to tell to what class of Linnæus it is referable For further remarks upon this subject, see Mr. Lindley's *Collectanea Botanica*, p 17

26. *Corispermum* From κορις, a bug or tick, and σπερμα, a seed *Le Corrisperme*, Fr, and *Der Wanzen-*



Class II. — DIANDRIA. 2 Stamens.

This class, which is not large, and so entirely artificial that no other characters than those of the Linnæan definition can be assigned to it, contains some elegant and fragrant plants belonging to Jasmineæ, Scrophularineæ, and Labiatæ. examples of the two latter orders are Veronica and Salvia, extensive genera chiefly of hardy herbaceous plants The most useful of the class are the pepper and the olive the jasmine is used in perfumery, the sage and rosemary in cookery, and the privet and syringa for garden hedges One or two species are employed in medicine, several are border flowers; but the greater number of the class are plants of curiosity.

Cedarium is a leguminous plant, and is widely removed from its natural place, which is Diadelphia; so are Salvia, Monarda, Rosmarinus, Veronica, and many others, which would have been naturally referred to Didynamia.

Under this class Persoon has placed the genus Gunnera, which Willdenow injudiciously referred to Gynandria. A great variety of diandrous plants are scattered through the other classes of Linnæus, but as such plants are chiefly, with the exception, perhaps, of grasses, diandrous, on account of the incomplete formation of some of their stamens, the rudiments of which are usually obvious, it is scarcely necessary to particularise more than the following, viz :—

D. MONOGYNIA Viola diandra, Salicornia herbacea, virginica; Anychia dichotoma; several species of Boerhaavia. D. DIGYNIA. Polycnemum salsum, Bufonia tenuifolia. D TRIGYNIA. Holosteum diandrum.

Order 1. MONOGYNIA.  2 Stamens. 1 Style.

§ 1 *Flowers complete, inferior, monopetalous, regular.*

30. *Cedarium.* Cal. 5-cut, with a persistent tube Cor flattish Legumen one-seeded, filled with a soft fæcula.

31. *Maytenus.* Cal. 5 lobed Cor campanulate, entire. Caps compressed, 2-valved, with 2 cells, and 2 seeds.

120 Leaves entire somewhat 3-nerved, Stems nearly round

121 Spikes compound, Stem decumbent
122 Spike simple solitary, Stem upright
123 Spikes 2-4 simple, Stem upright, Leaves thick

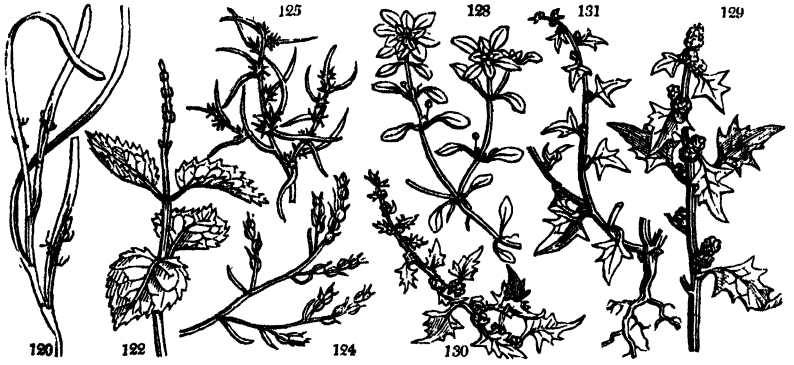
DIGYNIA.

124 Spikes terminal, Flowers distant, Leaves nerveless and bractes unarmed
125 Spikes axillary, Flowers close imbricat. Leaves nerveless and bractes mucronate pungent
126 Spikes terminal, Flowers becoming remote, Leaves nerveless and bractes pungent, Fruit incurved
127 Spikes terminal and axillary, Flowers imbricate, Leaves and bractes mucronate, Stem villous

128 A small floating plant resembling Lemna

129 Heads in terminal spikes
130 Heads lateral scattered
131 Heads axillary small not juicy, Stem very branching

132 A stinging twining perennial plant



and Miscellaneous Particulars.

same, Ger. The species abound in the south of Russia in marshy steppes with Salsola and Atriplex. Round the Caspian sea they grow six feet high, are red in winter, and eaten by camels

27. *Callitriche* From καλλος or καλος, and θριξ, hair *Le Callitrice*, Fr. *Der Wasserstern*, Ger, and *Callitrica*, Ital. A little aquatic plant, liable to variation in its appearance; on which account some botanists have divided it into several species.

28 *Blitum.* From βλιτον, insipid, or, according to Dr. Theis, from the Celtic *blith*, which has the same import. *Le Blète*, Fr. *Die Beermelde*, Ger, and *Blito*, Ital After the flowers are past, the heads swell to the size of wood-strawberries, and when ripe have the same color and appearance They are succulent, stain the hands, and were formerly used by cooks for coloring puddings Some consider the B virgatum as only a variety of the other

29. *Aspicarpa* From ασπις, a round shield, and καρπος, fruit, in reference to the form of the ripe fruit.

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32. *Olea* Cor. 4-cleft. Segments subovate Drupe one-seeded.
33. *Phillyrea.* Cor. 4-cleft. Berry one-seeded.
34. *Chionanthus* Cor. 4-cleft. Segments very long Drupe one-seeded, with a furrowed nut
35. *Notelæa* Cal. 4-toothed. Cor 4 short oval petals united by the base of the stamens Filaments 4-horned. Style 0. Stigma bifid. Drupe with a papery putamen.
36. *Ligustrum.* Cor. 4-cleft. Berry 4-seeded
37. *Syringa.* Cor. 4-cleft Capsule of two cells
38. *Nyctanthes.* Cor. 4-cleft. Segments truncated. Caps. with two cells edged Seeds solitary
39. *Jasminum.* Cor 5 or 8-cleft Berry with two divisions. Seeds solitary with an arillus.

§ 2. *Flowers complete, inferior, monopetalous, irregular*

40. *Veronica.* Cor 4-cleft: limb flattish; the lowest segment the narrowest. Capsule 2-celled.
41. *Galipea.* Cor 4 or 5-cleft, hypocrateriform. Stam. 4 2-sterile.
42. *Schwenkia.* Cor. nearly equal: the orifice plaited, stellate, and glandular. Stam. 5: 3-sterile Capsule 2-celled.
43. *Gratiola.* Cor. 4-cleft, 2-lipped, resupinate Stamens 4: 2-sterile. Caps 2-celled.
44. *Schizanthus* Cal 5-parted. Cor 2-lipped resupinate: the upper lip 5-parted, the lower 3-parted Stam. 4, 2-sterile. Caps. 2-valved, 2-celled.
45. *Elytraria.* Cal 4-5-parted. Cor. 5-cleft, nearly equal. Caps. 2-valved, 2-celled. Seeds attached below to a dissepiment contrary to the valves
46. *Hypoestes.* Cal. 5-cleft equal, with a 4-cleft 3-flowered involucrum. Cor. 2-lipped. Stamens 2. Anthers 1-celled. Seeds fixed by little hooks.
47. *Justicia.* Cal. 5-parted equal. Cor. 2-lipped or ringent: the lower lip divided. Anthers 2-celled. Seeds attached by little hooks.
48. *Dicliptera.* Cal. 5-parted. Cor. bilabiate. Caps. with two elastic valves, 1 2-celled, the dissepiment retaining the seeds by its inflexed toothed edge
49. *Eranthemum.* Cal. 5-parted. Cor. 5-cleft, with the tube curved in the middle. Caps. many seeded.
50. *Wulfenia.* Cor. 4-cleft: smooth bearded. Cal 5-parted. Caps. 2-celled.
51. *Calceolaria.* Cor. ringent, inflated. Cal. 4-cleft. Caps. 2-celled, 4-valved.
52. *Pinguicula.* Cor. ringent, spurred. Cal. 5-cleft. Caps. 1-celled.
53. *Utricularia.* Cor. ringent, spurred Cal 2-leaved. Caps. 1-celled.

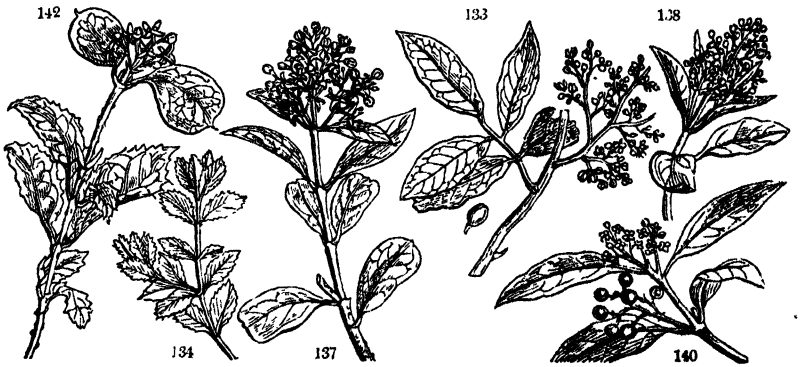
54. *Stachytarpheta.* Cal. tubular, 4-toothed. Cor. hypocrateriform, unequal, 5-cleft, curved. Stam. 4: 2 sterile Seeds two.
55 *Lycopus* Cor 4-cleft, nearly equal, with one segment emarginate. Stamens distant. Seeds naked.
56. *Amethystea.* Cor 5-cleft, nearly equal, with the lowest segment concave. Stamens near each other. Seeds naked.
57. *Ziziphora* Cal. cylindrical with ten lines, somewhat 2-lipped, 5-toothed, closed with hairs. Cor. 2-lipped. Seeds 4 naked.
58. *Cunila* Cal. oblong, 5-toothed, closed with hairs. Cor 2-lipped. Seeds 4 naked.
59. *Hedeoma.* Cal 2-lipped, gibbous at the base Cor ringent. Stamens 4: 2 sterile.
60. *Monarda.* Cor. ringent. helmet linear, wrapping up the anthers Seeds naked.
61 *Rosmarinus* Cor ringent. Helmet arched, bifid. Stamens curved, with a tooth. Seeds naked.
62. *Salvia* Cor ringent Filaments stalked cross-wise. Seeds naked.
63. *Collinsonia.* Cor somewhat ringent the lip very finely divided. Seeds naked.
64 *Catalpa* Cor 5-cleft, irregular Cal 2-parted. Stam. 3 sterile. Caps. 2-celled. Seeds at each end with a membranous pappus
65. *Ghinsa.* Cor ringent. Cal. with 5 bristles. Fruit, a fleshy 4-celled nut.

§ 9 *Flowers complete, inferior, polypetalous.*

66 *Fontanesia* Cor with 2 petals Cal 4-parted Caps. 2-celled, not opening.
67 *Linociera* Cor with 4 petals Cal 4-toothed. Berry with 2 cells
68 *Ancistrum* Cal 1-leaved, armed with barbed spines. Cor. 4 petals inserted into edge of calyx. Stam. 2-4-5. Stigm. finely divided Seed one, inclosed in the calyx.

MONOGYNIA.

30 CODA'RIUM *Vahl.*	WILD TAMARIND			*Leguminosæ*	*Sp* 1—2.								
133 acutifólium *Afz*	shining-leaved	♀	□	or	20		G		S. Leone	1800.	C	l.p	Rœ arc. 1. 31. t. 6
131 MAYTE'NUS. *Mol*	MAYTENUS			*Celastrinæ*	*Sp* 1.								
134 boária *Mol*	yellow-fruited	♀	⎯	or	15		W		Chili	1822.	C	co	Feuill. ch. 3. t.27
32. O'LEA *W.*	OLIVE.			*Olcinæ.*	*Sp* 8—12								
135 oleáster *Hoffm.*	bastard	♣	□	or	5	jn.au	W		Portugal	1821.	C	co	
136 europæa *W.*	European olive	♀	□	fr	15	jn au	W		S. Europe	1570.	C	r m	Flora Græca t. 3
β *longifolia*	*long-leaved*	♀	□	fr	15	jn au	W		S. Europe	....	C	r m	
γ *latifolia*	*broad-leaved*	♀	□	fr	15	jn au	W		S Europe	....	C	r m	Bot. cab. 456
δ *ferruginea*	*iron-colored*	♀	□	fr	15	jn au	W		S Europe	....	C	r m	
ε *obliqua*	*twisted-leaved*	♀	□	fr	15	jn au	W		S Europe	....	C	r.m	
ζ *buxifolia*	*box-leaved*	♀	□	fr	15	jn au	W		S Europe	....	C	r m	
137 capénsis *W en*	leathery-leav'd	♣	□	or	5	jn s	W		C B S	1730.	C	p l	Bot reg 613
138 undulàta *W en*	wave-leaved	♣	□	or	6	ap my	W		C B S.	1730.	C	p l	Bot. cab. 379
139 verrucósa *W*	warted	♣	□	or	6	ap my	W		C B S	1814.	C	p l	
140 americána *W.*	American	♣	□	or	6	jn	W		N Amer	1758	S	s p	Cat. car. 1. t. 61
141 excélsa *W*	laurel-leaved	♀	□	or	15	my	W		Madeira	1784	S	p l	
142 frágrans *W.*	fragrant	♣	□	or	4	jn au	Y		China	1771.	L	p l	Bot. mag. 1552



History, Use, Propagation, Culture,

30 *Codarium* So named by Dr Afzelius, from κωδαξιον, a leathern pouch, in allusion to the pods of the tree. These are filled with an abundant pithy fæcula, which is eaten by the inhabitants of the coast of Guinea, where the fruit is called wild tamarinds

31 *Maytenus* The barbarous name of the shrub, and applied as a generic name by Molina. It has the habit of a Rhamnus, and will probably form an hardy inhabitant of our gardens.

32. *Olea* From ελαια, the Greek name for the plant, a word derived in its turn, as De Théis conjectures, from the Celtic *olew*, oil. Olea is commonly put for the tree, oliva, for the fruit; and oleum, for the juice of the fruit. *L'olivier*, Fr. *Oelbaum*, Ger, and *Ulivo*, Ital. The cultivated olive came originally from Asia, and grows abundantly about Aleppo and Lebanon, it is naturalised in different parts of the south of France, Spain, and Italy, and found in hedges and woods, but the fruit of that kind is small and of no use. O e var. longifolia, is the variety chiefly cultivated in the south of France and in Italy O e. var latifolia, is chiefly cultivated in Spain, its fruit is near twice the size of the common olive of Provence or Italy, but the oil is so rank of flavor as to be too strong for most English palates The oil and fruit, in a pickled state, are sent chiefly from Languedoc, Leghorn, and Naples to England, the best oil is from Leghorn, and the best pickles from Genoa and Marseilles The tree seldom exceeds thirty feet in height, is branchy, glaucous, evergreen; and of so great longevity, that some plantations in Italy, as at Terni, are supposed to have existed from the time of Pliny. The tree delights in schistous, calcareous steeps, and does not thrive in elevated situations, or at a distance from the sea. The best oil is produced from fruit grown in calcareous soils Olive oil may be said to form the cream and butter of Spain and Italy; and the tree has been celebrated in all ages as the bounteous gift of heaven, and as the emblem of peace and plenty.

Olive oil is made by crushing the fruit to a paste, then pressing it through a woollen bag, adding hot water as long as any oil is produced. The oil is afterwards skimmed off the water, and put in tubs, barrels, and bottles for use The best olive oil is of a bright pale-amber color without smell, and bland to the taste. Kept warm, it becomes rancid, and it freezes at 38° Fah. It is of the same nature with all mild expressed vegetable oils, of these the most fluid are preferred, and hence the oils of olives and almonds are those chiefly used in medicine. Oily substances do not unite with the contents of acid stomachs, but to healthy patients they afford much

69 *Ornus.* Cal. 4-parted. Cor of 4 petals. Fruit, a winged Samara of two cells.

§ 10. *Flowers complete, superior.*

70. *Morina.* Cal. of the fruit toothed with bristles · of the flower bifid.
71 *Circæa.* Cal 2-leaved Cor. with two obcordate petals.
72. *Fedia* Caps. 3-locular, crowned with the upright (not involute) limb of the calyx. Corolla irregular.

§ 11. *Flowers incomplete, with no corolla.*

73. *Pimelea.* Cal. funnel-shaped, with a 4-cleft limb Stigma capitate.
74 *Cladium.* Cal. many-valved, 1-flowered: valves glumaceous, imbricated, the exterior smallest. Nut with a double coat.

Order 2. DIGYNIA.  2 Stamens. 2 Styles.

75 *Gunnera* Cor O Cal 2-toothed. Seed one, inclosed in a tough coat
76 *Anthoxanthum.* Glume membranous, 3-flowered. Lateral florets neuter with one palea bearded, intermediate floret hermaphrodite, much shorter than the lateral ones. Paleæ obtuse, beardless. Seed free.

Order 3 TRIGYNIA.  2 Stamens. 3 Styles.

77 *Piper.* Cal. O. Cor. O. Berry 1-seeded. Spadix simple, slender, covered with little flower-bearing scales

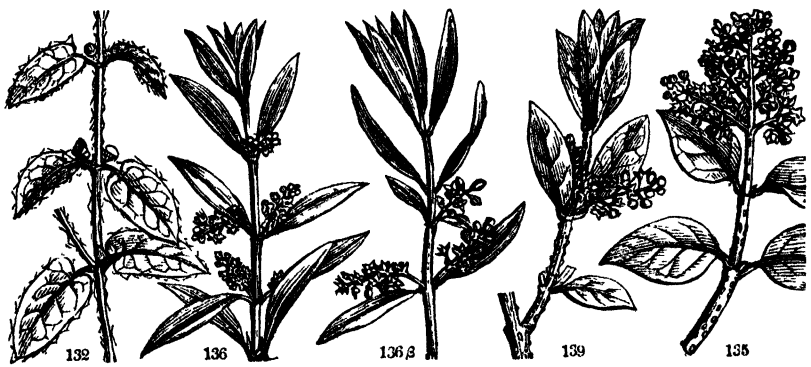
MONOGYNIA.

133 Leaves unequally pinnate, Leaflets oval acute the inner the smallest

134 Leaves sessile two inches long opposite or alternate oblong smooth serrated

135 Leaves oblong pointed entire the young ones only hoary beneath, Branches spiny
136 Leaves lanceolate pointed entire hoary beneath, Branches angular not spiny
- β Leaves linear-lanceolate flat silky beneath
- γ Leaves oblong flat hoary beneath
- δ Leaves narrow acute at each end, rusty beneath
- ε Leaves oblong bent obliquely pale beneath
- ζ Leaves oblong ovate, Branches divaricate

137 Leaves oblong, Flowers racemose panicled terminal
138 Leaves elliptical wavy, Stalks of leaves green
139 Leaves lanceolate flat white beneath, Branches warted
140 Leaves elliptic-lanceolate, Bractes all persistent connate ovate, Racemes sub-compound narrow
141 Leaves elliptic acute, Bractes perfoliate the lower cup-shaped persistent the upper large leafy deciduous
142 Leaves elliptic-lanceolate sub-serrate, Flowers single lateral in bunches



and Miscellaneous Particulars.

nourishment, and medicinally are supposed to correct acrimony, to lubricate, and relax Olive oil is applied externally to bites and stings of poisonous animals, and to burns alone, with chalk, or in liniments and poultices. The ancients rubbed their bodies with it in dropsies and for various purposes; but it is now little used excepting for coughs and in worm cases.

Pickled olives are prepared from unripe fruit by repeatedly steeping them in water, to which quicklime or any alkaline substance is sometimes added to shorten the operation Afterwards they are soaked in pure water, and then taken out and bottled in salt and water, with or without an aromatic They are eaten abroad as a whet before and during the principal meals, and in this country chiefly at the dessert. They are supposed to excite appetite and promote digestion. The finest kind of the prepared fruit is called by the merchants *Picholine*, after one Picholini, an Italian, who first discovered the art of pickling olives.

The culture of the olive abroad may be said to resemble that of grass orchards in Britain. It is propagated by suckers, large cuttings, or truncheons planted in trenches four feet deep, into which it is still the custom to deposit stones for encouraging moisture about the roots, as described by Virgil (*Georg* II. 346.) It is also propagated by chips of the stool, in the following manner. An old tree is cut down, and the ceppo, or stock, is cut into pieces of nearly the size and shape of a mushroom, and which, from that circumstance, are called uovoli Care is taken that each uovolo shall have a small portion of bark. After being dipped in manure, the uovoli are planted thick in a bed and covered with earth to the depth of three inches; they soon throw up shoots, and are transplanted at the end of one year, and in three more are fit to be finally removed to the olive plantation.

The olive in Britain grows readily by cuttings, or may be grafted on the privet. With protection during frost, it may be maintained against a wall in the latitude of London Some trees so treated, produced a crop in the garden of Camden House, Kensington, in 1719, and in Devonshire, some trees have stood the winter for many years as standards, though without ripening their fruit. Large plants are frequently imported from Genoa, along with orange and pomegranate trees.

O fragrans is highly odoriferous both in the leaves and blossoms; the plant is much esteemed on that account in China, and the leaves used at once to adulterate and flavor teas.

33 PHILLYRE'A. *L.*	PHILLYREA.				*Oleinæ*	*Sp.* 9.							
143 angustifólia *W. en.*	narrow-leaved	♣	or	8	my jn	W	S. Europe	1597.	L	a.l	Lam. ill. t. 8. f. 3
β rosmarinifólia	*rosemary-leav.*	♣	or	8	my.jn	W	S. Europe	1597.	L	a.l	
γ brachiáta	*brachiate*	♣	or	8	my.jn	W	S. Europe	1597.	L	a.l	
144 média *W. en*	twiggy	♣	or	15	my.jn	W	S. Europe	1597.	L	a.p	Duham. t. 27
β buxifólia	*box-leaved*	♣	or	15	my jn	W	S. Europe	1597.	L	a.p	
145 virgata *W en*	privet-leaved	♣	or	15	my jn	W	S. Europe	1597.	L	a.l	
146 péndula *W en.*	drooping	♣	or	15	my.jn	W	S. Europe	1597.	L	a.l	
147 oleæfólia *W en.*	olive-leaved	♣	or	15	my.jn	W	S. Europe	1597.	L	a.l	Pluk. al. t. 310. f. 5
148 lævis *W. en*	smooth-leaved	♣	or	15	my.jn	W	S. Europe	1597.	L	a.l	
149 ilicifólia *W. en*	holly-leaved	♣	or	15	my jn	W	S. Europe	1597.	L	a.l	
150 latifólia *W en.*	broad-leaved	♣	or	15	my.jn	W	S. Europe	1597.	C	r m	Fl. græc. 1. t. 2
151 obliqua *W en.*	oblique-leaved	♣	or	15	my jn	W	S. Europe	1597.	C	r m	
34. CHIONAN'THUS. *W*	FRINGE-TREE				*Oleinæ.*	*Sp.* 3.							
152 virginica *W*	smooth-leaved	♣	or	30	my jl	W	N. Amer.	1736.	L	p l	Cat. car 1. t. 69
153 maritima *Ph*	pubescent	♣	or	10	my jl	W	N. Amer	1736.	L	p.l	
154 axillàris *Br*	axil-flowering	♣	or	7	my jl	W	E. Indies	1810.	C	p l	
35. NOTELÆ'A. *B P.*	NOTELÆA.				*Oleinæ*	*Sp.* 3							
155 longifólia *B P*	long-leaved	♣ ▭	or	3	mr jn	W	N.S.W	1790.	C	a.p	Bot. rep t. 316
156 ligustrina *Vent.*	privet-leaved	♣ ▭	or	3	jl au	W	V. Di L.	1807.	C	a.p	Vent.choix.26 b
157 rigida *Desf.*	rigid	♣ ▭	or	3	jl.au	W	V Di L.	1821.	C	a.p	
†36. LIGUSTRUM *W.*	PRIVET.				*Oleinæ.*	*Sp.* 2—4.							
158 lúcidum *H. K.*	wax-tree	♣	or	8	jn.s	W	China	1794.	g l s l		Bot mag 2565
β floribúndum	*flowering*	♣	or	8	jn s	W	China	1794.	g l s l		
159 vulgáre *W*	common	♣	or	10	jn jl	W	Britain	hedg	S	co	Eng. bot 64
β sempervirens	*evergreen*	♣	or	8	jn jl	W	Italy	...	L	co	
γ xanthocárpum	*yellow-berried*	♣	or	8	jn jl	W	Italy	...	L	co	
†37 SYRIN'GA *W.*	LILAC				*Oleinæ*	*Sp.* 3—4.							
160 vulgáris *W*	common	♣	or	8	my	B	Persia	1597.	Sk	co	Schk han 1 t 2
β violácea	*purple*	♣	or	8	my	P	Persia	...	Sk	co	Bot. mag 183
γ álba	*white*	♣	or	5	my	W	Persia	...	Sk	co	
161 chinénsis *W*	Chinese	♣	or	4	my jn	V	China	1795.	L	l p	Duham 2 t 63
δ rothomagénsis Turp	*hybrid*	♣	or	4	mn.jn	V	China	...	L	l p	
162 pérsica *W*	Persian	♣	or	5	my	P	Persia	1640.	L	s p	Bot. mag 486
β alba	*white*	♣	or	2	my	W	Persia	...	L	s p	
γ lacinsáta	*cut-leaved*	♣	or	5	my	P	Persia	...	L	l p	Schm ar. 2. t. 79
38 NYCTAN'THES *W*	NYCTANTHES.				*Jasmineæ*	*Sp.* 1							
163 arbor tristis *W.*	square-stalked	♣ ▭	or	15	...	W	E. Indies	1781	C	r m	Bot reg 399
†39 JASMI'NUM *W*	JASMINE				*Jasmineæ*	*Sp* 18—40							
164 Sambac *W.*	single Arabian	♣ ▭	or	6	ja.d	W	E. Indies	1665	C	r m	Bot reg 1
β fl pleno	*double ditto*	♣ ▭	or	6	ja d	W	E. Indies	1700.	C	r m	Bot rep 497
γ trifoliátum	*Tuscan*	♣ ▭	or	6	ja.d	W	E. Indies	1730.	C	r m	Bot mag 1785
165 hirsútum *Ex. B*	hairy Indian	♣ ▭	or	3	my au	W	E. Indies	1759	C	r m	Ex bot 2 t. 118
166 campanulátum *Lk.*	campanulate	♣ ▭	or	4	...	...	...	1822.	C	r m	
167 laurifólium *Roxb*	laurel-leaved	♣ ▭	or	4	my s	W	E. Indies	1819	C	r m	Bot. reg 521



History, Use, Propagation, Culture,

33 *Phillyrea* Said to derive its name from φυλλον, a leaf, an etymology far from satisfactory. The genus consists of ornamental evergreen shrubs, the supposed varieties of which have been considered distinct species by most modern botanists Some authors have united the genus with Olea; but they have not been followed generally

34. *Chionanthus* From χιον, snow, and ανθος, a flower. *Le Chionanthe*, Fr *Der Schneeblume*, Ger, and *Albero de neve*, Ital. Both species are highly ornamental shrubs or low trees; their leaves are above half a foot in length, and 1½ inch in breadth, their flowers white, in numerous long bunches, and their fruit of the size and color of a sloe They are propagated by seeds or grafting on the common ash

35. *Notelæa.* From νοτος, south, and ελαια, olive, the olive of the south A small ornamental genus of nearly hardy shrubs, which would probably endure the climate of this country in a favorable situation.

36. *Ligustrum.* From ligare, *to tie*, on account of its long pliable branches *La Troëne*, Fr *Der Liguster*, Ger, and *Legustro*, Ital. The privet in old authors is called primprivet, as Professor Martyn conjectures, from its patience under the shears Few shrubs exceed it as a garden hedge-plant. it will thrive in the middle of coal-burning cities, in the shade, and under the drip of trees, though to flower well it requires an open airy situation. Cows, sheep, and goats eat it, but horses refuse it.

The Sphinx ligustri, *L*, or privet hawkmoth, and Phalæna syringaria feed on it in the caterpillar state: the blister beetle, Lytta vesicatoria, from which cantharides is formed, is also found on it Fully grown, the wood is fit for the turner, and a rose-colored pigment may be prepared from the berries, which, with alum, dye wool and silk of a durable green. The berries remain on the tree during winter in elegant purple clusters, and are not eaten by birds excepting in very severe weather, when bullfinches and some others feed on them. Like most plants that have been long in cultivation, the privet varies in its leaves, flowers, and fruit, and in the duration of the former. In its cultivated state it is always evergreen; found wild in woods and hedges, is ge-

148 Leaves linear lanceolate entire

144 Leaves lanceolate entire or serrate in the middle, Leaves 3-nerved

145 Leaves oblong lanceolate sub-serrate in the middle obsoletely veined, Branches erect
146 Leaves oblong lanceolate acute obsoletely serrated at the point veiny, Branches veiny
147 Leaves oblong lanceolate nearly entire obtuse narrowed at the base veiny
148 Leaves elliptic oblong nearly entire veiny somewhat obtuse
149 Leaves ovate oblong rounded at the base veiny serrated, Serratures with stiff points
150 Leaves ovate rounded at the base serrated acute veiny
151 Leaves oblong serrated acute at each end veiny

152 Racemes terminal, Stalks 3-flowered, Petals linear lanceolate, Leaves coriaceous
153 Leaves obovate lanceolate membranaceous pubescent, Panicles very lax, Fruit elliptic
154 Spikes axillary very short, Leaves oblong elliptic acute

155 Leaves lanceolate pointed sub-reclinate, Racemes length of the leaf-stalks
156 Leaves lanceolate acute sub-erect, Racemes as long as the leaves
157 Leaves opposite rigid broad lanceolate entire, Bunches axillary

158 Leaves ovate oblong pointed shining above, Flowers spreading

159 Leaves ellipt-lanceolate smooth, Racemes compound dense

160 Leaves ovate cordate, Branches stiff white colored

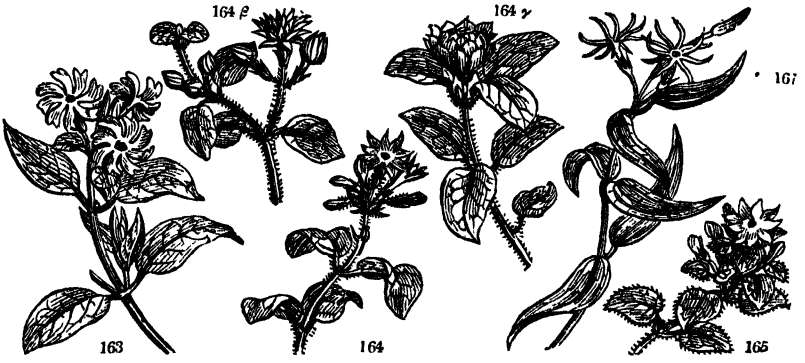
161 Leaves ovate-lanceolate, Branches stiff mottled

162 Leaves lanceolate, Branches virgate mottled

163 A delightfully fragrant plant, Leaves cordate, Flowers panicled

164 Leaves opposite sub-sessile oblong or cordate, Calyx with subulate teeth, Berries globular

165 Leaves cordate downy, Umbels terminal sessile many-flowered
166 Branches round pubescent, Leaves ternate oval pointed, Calyx bell-shaped with very short teeth
167 Leaves opp shining lanc 3-nerv Fl 1.5 ax and term Cal 6.7 toothed, Cor 9 12 part. Seg lin the length of tube



and Miscellaneous Particulars

nerally deciduous. Sometimes the leaves grow by threes, are enlarged at the base and variegated The regular number of stamens is two; but sometimes there are three or four in a flower The berries are usually purple or black, but some have been seen of a white color; and a yellow fruited variety is common in the gardens. A kind of vegetable wax is said to be obtained from L. lucidum in China.

37 *Syringa* Some say from Συριγξ, an Arcadian nymph, or, more properly, here, a pipe The tubes of the finest Turkish pipes are manufactured from the wood of it; but the true root of the word is to be found in *surinz*, its native name in Barbary. Lilac is a Persian word signifying a flower. *Le Lilas*, Fr. *Die Spreue*, Ger., and *Syringa*, Ital. All the species are most beautiful flowering shrubs, readily propagated by suckers, which they throw up in abundance The common lilac seems to have been introduced before or during the reign of Henry VIII.; for in the inventory taken by order of Cromwell of the articles in the gardens of the palace of Nonsuch, are mentioned six lilackes; trees which bear no fruit, but only a pleasant smell. S. persica is well adapted for forcing in pots; but so treated its flowers are without fragrance.

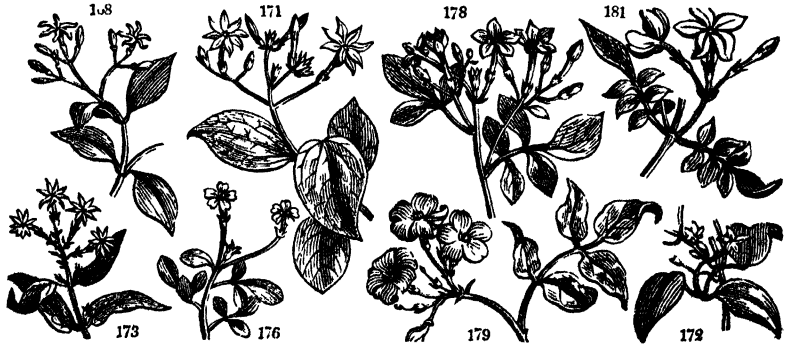
38. *Nyctanthes* From νυξ, night, and ανθος, flower, night-flower, its flowers expanding and smelling only in the night. *L Arbor triste*, Fr. *Der Trauerige baum*, Ger. It grows freely in loam and peat soil mixed, but seldom produces its exquisitely fragrant flowers in England. Sweet thinks it is generally kept too warm, and recommends a trial in the greenhouse or open air, but its appearance would probably be little improved by any manner of treatment, as it has but an indifferent aspect in its own country. Cuttings not too ripe, root readily in sand under a hand-glass

39. *Jasminum* From the Arabian jasmin (yasmyn). Linnæus obtained a fanciful etymology from ια, a violet, and οσμη, smell *Le Jasmine*, Fr *Der Schasmine*, Ger, and *Il Gelsomino*, Ital The flowers of *J sambac* are of exquisite fragrance, and in high esteem both in the East and West Indies It grew in the Hampton Court garden at the end of the 17th century; but being lost there, was known in Europe only in the garden of

168	grácile *B. P.*	slender	or	3	ja.d	W	Norfolk I.	1791.	C	s.p	Bot. rep. 127	
169	glaúcum *W.*	glaucous	or	3	au	W	C.B.S.	1774.	C	l.p	Sal. st. ra. t. 8	
170	tranérve *W.*	three-nerved	or	20	...	W	Sylhet	1804.	C	l p		
171	simplicifólium *W*	simple-leaved	or	3	jn.jl	W	S. Seas	1800.	C	r.m	Bot. mag. 980	
172	paniculátum *Roxb.*	panicled	or	5	ja	W	China	1818.	C	r.m	Bot. cab. 469	
173	undulátum *Vahl.*	wavy	or	5	ja	W	China	1819.	C	r.m	Bot. reg. 436	
174	auriculatum *Vahl.*	auriculated	or	10	my.s	W	E. Indies	1790.	C	r.m	Bot. reg 264	
175	asóricum *W.*	Asorian	or	5	ap.n	Y	Madeira	1724.	C	r.m	Bot. reg. 89	
176	frúticans *W.*	comm. yellow	or	3	ap o	Y	S. Europe	1570.	C	r m	Bot. mag. 461	
177	húmile *W*	Italian	or	3	jn s	Y	S. Europe	1656.	L	co	Bot. reg. 350	
178	odoratissimum *W*	sweet-scented	or	3	my.n	W	Madeira	1656.	C	r m	Bot. mag 285	
179	revolútum *B. R*	curled flowered	or	12	m o	Y	E. Indies	1812.	C	r m	Bot. reg. 178	
180	officinále *W*	common white	or	15	jn o	W	.....	1548.	C	co	Bot. mag. 31	
181	grandiflórum *W*	Catalonian	or	15	jn.o	W	E. Indies	1629.	C	r.m	Bot reg. 91	

*40. VERO'NICA *W* Speedwell. *Scrophularinæ.* *Sp.* 84—136.

§182	sibírica *W*	Siberian	or	3	jl.au	B	Siberia	1779.	D	co	Am. rut. 20 t. 4
§183	virginica *W*	Virginian	or	5	jl s	W	Virginia	1714.	D	co	Hoff. got. 15. t. 1
	β incarnáta	*flesh-colored*	or	1	jl s	F	.....	...	D	co	
184	foliósa *Schr*	leafy	or	2	jl.s	B	Hungary	1805.	D	co	Wa. & K. 2. t 102
185	crenulàta *Vahl*	notch-flowered	or	1½	jl.s	B	S. Europe	1814.	D	co	Hoff ph t. E. f 3
186	maritima *Schr*	sea-side	or	2	jl.s	B	Sweden	1570.	D	co	Sc. v. p. 29. t.1. f 1
187	angustifólia *Fisch*	narrow-leaved	or	1½	jl.s	B	Siberia	1822.	D	co	
188	spúria *Schr*	bastard	or	2	jl s	L B	Siberia	1731.	D	co	Gmel. it. 1 t 39
189	paniculáta *Pall.*	panicled	or	1½	jn.jl	B	Russia	1797.	D	co	
190	complicáta *W. en.*	folded-leaved	or	2	s o	B	S. Europe	1812.	D	s l	Hoff. ph t. E. f 4
191	azórea *Lk*	sky-blue	or	3	jl.s	B	.....	1821.	D	co	
192	polystáchya *Lk*	many-spiked	or	2	jl s	B	.....	1821	D	co	
193	glábra *Schr.*	smooth	or	4	jl s	B	S. Europe	1804.	D	co	Sc. v. p 25. t.1. f.4
	β álba	*white*	or	4	jl.s	W	.....	...	D	co	
194	amethýstina *W en*	fine blue	or	4	jl s	B	S. Europe	1812	D	co	
195	elátior *W en.*	tall	or	7	jl s	B	S. Europe	1808.	D	co	
196	acúta *Mart*	acute	or	5	jn jl	B	.....	1822.	D	co	
197	argúta *Schr*	sharp-notched	or	3	jl s	B	S Europe	1812	D	co	Sc v p 22. t.2. f 2
198	média *Schr.*	long-spiked	or	3	jl s	B	Germany	1804	D	co	Sc.v. p 23. t.1. f.2
199	persicifólia *Schott*	peach-leaved	or	2	jl s	B	... ..	1823.	D	co	
200	austrális *Schr*	pubescent	or	1½	jl s	B	S. Europe	1812	D	co	Sc.v p 24. t 2. f 3
201	longifólia *Schr*	long-leaved	or	3	jl.s	B	S. Europe	1731.	D	co	Sc v. p 24. t.2. f 1
	β incarnáta		or	3	jl s	F	.....	...	D	co	
	γ álba		or	3	jl s	W	.....	...	D	co	
202	grássa *Mart*	short	or	2	jn jl	B	Crimea	1821	D	co	
203	ambígua *Mart*	doubtful	or	3	jn jl	B	Sweden	1823	D	co	
204	neglécta *W en.*	evanescent	or	1½	jl au	D B	Siberia	1797.	D	co	Wa & K 3. t.244
205	incána *Schr*	hoary	or	2	jl s	B	Russia	1759	D	co	Hoff. got. 15. t. 6
206	rígens *Mart*	stiff	or	2	my jn	B	.....	1823	D	co	
207	élegans *D C*	elegant	or	2	my jn	Pk	S. France	1822.	D	co	
208	brevifólia *Lk*	short-leaved	or	1	jn jl	B	.....	1822.	D	co	
209	spicáta *Schr*	spiked	or	1	jl s	B	England	ch pa	D	co	Eng. bot 2
210	clúsii *Schott*	Ecluse's	or	½	jl.s	B	Hungary	1822	D	co	
211	menthæfólia *Schott*	mint-leaved	or	1	jl s	B	Austria	1823	D	co	
212	barrelièri *Schott*	Barrelıers	or	1	jl s	B	S Europe	1823	D	co	
213	orchidéa *Crz.*	orchis-flowrd	or	1	jl s	B	Europe	1819	D	co	Bot. mag 2210
214	hýbrida *Schr*	Welsh	or	1	jl.s	B	England	moun	D	co	Eng bot. 673
215	crassifólia *Kst.*	thick-leaved	or	2½	my jn	V	Europe	1822	D	co	
216	ruthénica *Jacq.*	Hungarian	or	2	my jn	B	Hungary	1821	D	co	
217	Pónæ *W*	Pona's	or	½	my jn	B	Pyrenees	1822.	D	co	
218	villósa *Schr*	villous	or	1½	jl s	B	S Europe	1804	D	co	Sc v p 31 t.1. f 5
219	pinnáta *Schr.*	wing-leaved	or	1	jn au	B	Siberia	1776.	D	co	Hoff. got. 15 t.10
220	incísa *Schr*	cut-leaved	or	2	jn au	B	Siberia	1779.	D	co	
221	lacinıáta *Schr*	jagged-leaved	or	2	jn au	B	Siberia	1780.	D	co	Jung. ic. rar. f 2
222	gentianoides *W*	gentian-leaved	or	2	my jn	D B	Levant	1748	D	co	Bot. mag 1002
223	pállida *Hornem.*	pale	or	2	my jn	B	Tauria	1821	D	co	
224	bellidioides *W*	daisy-leaved	or	½	jn jl	B	Switzerl.	1775.	D	co	Hall. hist. t.15. f 1



History, Use, Propagation, Culture,

the Grand Duke of Tuscany at Pisa, where Evelyn informs us (*Memoirs*, &c. by Bray), the plant was placed under guard that no cuttings might be purloined. A plant sent to Miller in 1730 restored it to England, and it is now a common greenhouse shrub Plants of J humile, also very odoriferous, are commonly imported from Genoa along with orange-trees J officinale has been a favorite wall-shrub from time immemorial. Its native country, as well as the date of its introduction are unknown. Gerarde, in 1597, says it was in common use for covering arbors. J hirsutum is a tall tree, whose sweet-smelling flowers open during the night and fade at sun-

168 Leaves opposite simple ovate ellipt. Calyx smooth campanulate · teeth very short
169 Leaves lanceolate mucronate sub-coriaceous, Flowers 3 terminal
170 Leaves polished 3-nerved pointed, Fl. sol. Cal. 6.7 toothed, Cor 6.8 part. Seg. fillf. longer than the long tube
171 Spreading, Leaves obl. polished, Flowers 3 or many term Cor. 6.8 part. Segm. linear acute equal to tube
172 Erect every part polished, Leaves ternate oval obtusely acuminate, Panicles terminal
173 Leaves simple cordate obl. shining, Branches and flower-stalks hairy, Racemes 3-flow. Calyx-teeth straight
174 Leaves sub-ternate, Leaflets ovate the pair minute or wanting, Teeth of cal. 5 gland Cor 7 part Berr glob.
175 Leaves compound ternate ovate and sub-cordate, Calyx campan. smooth, Segm. of corolla equal to its tube
176 Leaves alternate ternate and simple, Leaflets sub-cuneate, Calyx-teeth subulate
177 Leaves alternate acute ternate and pinnate, Branches angular, Calyx-teeth very short
178 Leaves alternate obtuse ternate and pinnate, Branches slender, Calyx-teeth very short
179 Leaves in about 3 pairs ovate lanc. on short stalks, Cym. term. few or many-fl loose, Anth. mucr. partly exsert.
180 Leaves pinnate acuminate, Buds upright
181 Leaves opposite pinnate exterior 3 or 5 leaflets confluent, Flowers terminal, Buds horizontal

Racemes or Spikes terminal, Leaves whorled and opposite.

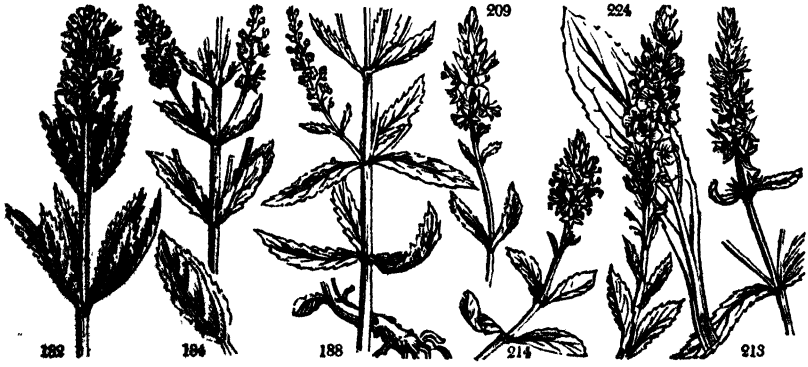
182 Leaves 5 6 or 9 together lanceolate sessile
183 Leaves 4 5 together lanceolate ovate stalked, Flowers cylindrical

184 Leaves 3 or 4 together ovate or ovate-lanceolate sub-biserrate ; serratures unequal
185 Leaves ternate and opposite obl.-lanc. serrate, Cal. acute, Cor. notched. [equal shorter than capsule
186 Leaves 3 or 4 togeth. lin. lanc. from an ov. base acumin. deeply doubly serr with the stem sub-pub Cal. nearly
187 Leaves opp. linear narrowed by degrees very acute remotely serrated, Bractes longer than the flower-stalks
188 Leaves 3 or 4 together nearly sessile lanceolate simply serrate, serratures equal
189 Leaves narrow lanc. remotely serr or lin and very ent. Bract much longer than fl.-stalks, Stem ascending
190 Spikes lateral short nodding, Leaves opp folded together toothed : teeth thick, Segments of corolla entire
191 Leaves lan. lin narr. by deg. to very end finely serr the serrat at base of leaf deep. Bract. longer than flower-st
192 Leaves sub-sess. ovate acute serrated pubes Flower bearing branches in bundles, Flow sub-sess. very small
193 Leaves opp. 3 togeth. sub-cord. lanc. simply serrated with the stem smooth, Serratures remote nearly equal

194 Stem pubes. Leaves opp. and tern lanc. rather fleshy simply and remotely serrate wedge-shaped at the base
195 All over slightly pubes. Leaves 3 togeth lanc acumin sub-cord at base doubly serrate serrat. of base deepest
196 Leaves very long almost coriaceous opp or 3 together on short stalks cordate at base acutely and unequally dentate serrate hanging down
197 Leaves lanceolate acute simply serrate entire at the end, Serratures distant simple equal
198 Leaves opposite and 3 together lanceolate acute serrate with the stem downy, Serratures near unequal
199 Leaves opp. and tern. lanc. very much lengthened out serrated to the very end, Bract longer than fl.-stalk
200 Leaves ovate lanceolate simply serrate entire at the end with the stem pubescent, Serratures near unequal
201 Leaves opposite 3 or 4 together cordate lanceolate acuminate doubly serrated with the stem downy
202 Leaves 3 or 4 tog. at base widely cord lanc deeply doubly acutely uneq dent serr Serr sprdg lowest distant.
203 Leaves 3 or 4 tog. ov. acum. cord. at base doubly acutely and uneq serr beneath and with the stem pubesc.

Racemes terminal, Leaves opposite

204 Hoary, Leaves lanceolate serrate acute at the base wedge-shaped and entire, Stem erect
205 Hoary, Leaves lanceolate crenate and nearly entire obtuse, Stem erect
206 Leaves on short stalks stiffish cordate at the base pointed closely acutely and doubly serrate, Stem pubescent
207 Leaves ovate oblong crenate stalked obtuse with the stem pubescent, Spikes many, Bractes very small
208 Stem simp. pub. Lvs. op. lan obl by deg narr fr. base point. ser ent at end, up. ones sub-ser Br lon than fl.-st.
209 Slightly pub. Lvs cren. the rad. ov obl. running down into stalk, Caul lanc sess Fl spkd Br and cal. pilose
210 Tomentose with stlkd. glands, Lvs. tooth rad ov runn down into st. Caul. lan stlkd Fl in spks Br & cal ent.
211 Villous, Leaves serr. rad. ovate, Caul obl acute stalkd. at base and end entire, Fl in racemes, Bractes linear
212 Villous, Leaves cren rad. ov. Caul obl obtuse sub-sess Flow in racemose spikes, Br and cal smooth ciliate
213 Slightly pubesc. Leaves crenulate radical oblong ovate running down into stalk, Cauline lanceol. acuminate sub-sessile, Flowers in close spikes
214 Lvs. uneq. tooth serr with stem pub rad stlkd ov. Caul sub-sess ellipt obl. Fl in spks. Br lin lon than cal.
215 Leaves opp. ov lanc. runn down into st the lower cren the upp. ent. Spks term or 3 tog Fl. like an orchis
216 Leaves ov lan. uneq. ser. Br lan as long as cal Cal 4 part. uneq Seg ov obl. Caps smth rather long than cal.
217 Leaves cordate ovate sessile very obtuse with the very simple stem hairy, Racemes few-fl Calyx smooth
218 Leaves oblong ovate cut and serrated with the stem somewhat villous
219 Stem ascending, Leaves in fasc the lower pinnate, the upper pinnatifid and simp Leafl and div fillf. sprdg
220 Leaves in fasc. stalked pinnatifid lanc Segm nearly entire, Racemes several, Seg of the Calyx lanceolate
221 Leaves in fasc. on short stalks linear pinnatifid Seg entire, Raceme nearly sol Seg of calyx oblong ovate
222 Raceme corymbose term. Leaves radical obl connate sheathing cartil crenate or ent. Stem simp ascending
223 Stem ascend. feeble, Lvs. lanc obt. sub-serr · lower sheathing, Rac loose, Up. seg of cor wider than side ones
224 Leaves obov. cren. with simple ascend. stem pilose, Cauline lvs remote, Rac corymb hairy about 5-flowered



and Miscellaneous Particulars.

rise. All the species thrive in any light loamy soil or loam and peat, and cuttings root freely in sand under a hand-glass.

40. *Veronica.* A word said to have been altered from Betonica (See that name.) *La Veronique*, Fr, and *Ehrenpreise*, Ger. V. officinalis has been much recommended in Sweden and Germany as a substitute for tea, than which Professor Martyn says, it is more astringent and less grateful. Witherng prefers V Chamædrys for the same purpose. Several species were formerly in repute in medicine, and given in disorders of the lungs.

225 fruticulósa *W.*	flesh-colored	m.		or	½	jn.au	F	Scotland	Sc. alp.	D	co	Eng. bot. 1903
226 saxátilis *W.*	blue-rock	♆	△	or	½	jl	B	Scotland	Sc. alp.	D	co	Eng. bot. 1027
227 alpina *W.*	alpine	♆	△	or	½	my	B	Scotland	Sc. alp.	D	co	Eng. bot. 484
β integrifólia	*entire-leaved*		△	or	½	my.jn	B	Silesia	1814.	D	co	Kniph. all. 28. t. 3
228 depauperáta *Kit.*	impoverished	♆	△	or	½	ap jl	B	Hungary	1823.	D	a.p	W. & K. 3. t. 245
229 serpyllifólia *W.*	smooth	♆	△	or	½	ap jl	B	Britain	ma.pa.	D	co	Eng. bot. 1075
230 hirsúta *Lk.*	hairy	♆	△	or	½	ap.jl	W	.....	1820.	D	a.p	
231 microphýlla *Kit.*	small-leaved	♆	△	or	½	ap.jl	B	Hungary	1822.	D	a.p	
232 decussáta *W.*	cross-leaved	m.	⌴	or	1	jn.au	B	Falkl. I.	1776.	C	r.m	Bot. mag. 242
233 aphýlla *W.*	naked-stalked	♆	△	or	½	my	B	Italy	1775.	D	co	Seg. ver. 1. t. 3. f. 2
234 Beccabúnga *W.*	Brook-lime	♒	△	clt	2	my.jn	B	Britain	rivul.	D	co	Eng. bot. 655
235 anagállis *W*	long-leav.-wat.	♒	△	or	2	jl	B	Britain	mar.	D	co	Eng. bot. 781
236 scutelláta *W*	marsh	♒	△	or	2	jn.au	F	Britain	mar.	D	co	Eng. bot. 782
237 orientális *W*	various-leaved	♆	△	or	½	jn au	L.B	Levant	1748.	D	co	Bot. cab. 419
238 Jacquini *Schott.*	Jacquins	♆	△	or	1	my 'n	B	Austria	1748.	D	co	Jac. aust. 4. t. 329
239 austríaca *Jac*	Austrian	♆	△	or	1	jn au	L.B	Austria	1748.	D	co	M. his. 2. t. 23. f. 17
240 multífida *W.*	fine-cut	♆	△	or	½	my jl	L.B	Siberia	1748.	D	co	Bot. mag. 1679
241 Allióni *W*	shining-leaved	♆	△	or	½	jn au	L.B	S. Europe	1748.	D	co	All. ped. 1. t. 46. f. 3
242 officinális *W*	officinal	♆	△	or	½	ap.jl	B	Britain	bar. gr.	D	co	Eng. bot. 765
243 prostráta *W*	trailing	♆	△	or	1	my.jn	B	Germany	1774.	D	co	Riv. mon. 85
244 micrántha *Hoff*	small-flowered	♆	△	or	1½	my.jn	W	Portugal	1822.	D	co	Fl. port. t. 57
245 latifólia *W*	broad-leaved	♆	△	or	1	my.jn	W.B	Austria	1748.	D	co	Sw. fl. gard. 23
246 Teúcrium *P. S.*	rugged-leaved	♆	△	or	2	jn.au	L.B	Germany	1596.	D	co	Bot. cab. 425
247 crinita *Kst*	long-bracted	♆	△	or	1	jl.au	B	Hungary	1822.	D		
248 Chamæ'drys *W.*	Germander	♆	△	w	½	jl.au	B	Britain	m. pas.	D	co	Eng. bot. 693
249 urticæfólia *W.*	nettle-leaved	♆	△	or	1	jn.jl	L.B	Austria	1776.	D	co	Jac. aust. 1. t. 59
250 montána *W*	mountain	♆	△	or	½	jl.au	B	Britain	moi. w.	D	co	Eng. bot. 766
251 perfoliáta *B P*	perfoliate	♆	⌴	or	1	jl.au	B	N.S W.	1815.	D	r m	Bot. mag. 1936
252 labiáta *B P.*	labiated	♆	⌴	or	1	ap.jl	L.B	N. Holl.	1802.	C	r.m	Bot. mag. 1660
253 polymórpha *W. en.*	variable	♆	△	or	1	jn.au	B	.....	1817.	D	co	
254 vérna *W.*	vernal		○	w	½	ap.my	B	Britain	san. fi.	S	s	Eng. bot. 25
255 digitáta *W*	digitated		○	w	½	jl	B	S Europe	1805.	S	co	
256 triphýllos *W*	fingered		○	w	½	ap my	B	Britain	san. fi.	S	s	Eng. bot. 26
257 hederifólia *W*	ivy-leaved	♆	△	w	½	mr jn	B	Britain	clt. gr.	D	co	Eng. bot. 784
258 cymbalária *Bertol.*	twining	⚸	○	or	2	au.my	W	S. Europe	1821.	S	co	Fl. graec. t. 9
259 peregrina *W.*	knotgrass-leav.		○	or		mr.jn	W	N. Europe	1680.	S	co	Fl. dan. 407
260 filiformis *W.*	long-stalked	☿	○	or	½	my	L.B	Levant	1780.	S	go	B. cen. 1. t. 40. f. 1
261 crista gálli *Stev.*	cocks-comb	☿	○	or	½	ap.my	B	Caucasus	1813.	S	co	Linn. trans
262 præcox *All*	early		○	or	½	mr	B	S. Europe	1775.	S	co	All. auc. 5. t. 1. f 1
263 acnifólia *W.*	basil-leaved		○	or		ap.my	L.B	S. Europe	1788.	S	co	P. et T. fl. p. 1 t. 23
264 arvénsis *W.*	wall	☿	○	w	½	ap jl	B	Britain	old w.	S	co	Eng. bot. 734
265 agréstis *W.*	field	☿	○	w	½	mr.jl	B	Britain	clt. gr.	S	co	Eng. bot. 783

41 GALIPE'A *Aub* GALIPEA. *Rutaceæ Sp.* 1.

266 trifoliáta *W.*	three-leaved	♣	□	or	4	?...	G	Guiana	1803.	C	p.l	Aublet 662. t. 269

42. SCHWEN'CKIA *W* SCHWENCKIA *Primulaceæ. Sp.* 1—7.

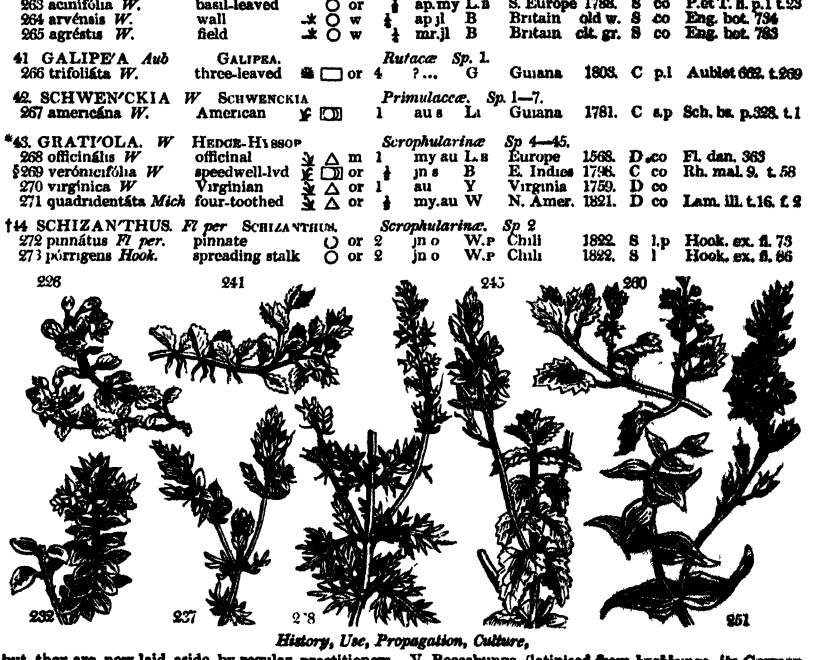
267 americána *W.*	American	♆	◫		1	au s	L.B	Guiana	1781.	C	a.p	Sch. hs. p. 328. t. 1

*43. GRATI'OLA. *W* HEDGE-HYSSOP *Scrophularinæ Sp* 4—45.

268 officinális *W*	officinal	♆	△	m	1	my au	L.B	Europe	1568.	D	co	Fl. dan. 363
§269 verónicifólia *W*	speedwell-lvd	⚸	◫	or	½	jn s	B	E. Indies	1798.	C	co	Rh. mal. 9. t. 58
270 virgínica *W*	Virginian	♆	△	or	1	au	Y	Virginia	1759.	D	co	
271 quadridentáta *Mich*	four-toothed	♆	△	or	½	my.au	W	N. Amer.	1821.	D	co	Lam. ill. t. 16. f. 2

†44 SCHIZAN'THUS. *Fl per* SCHIZANTHUS. *Scrophularinæ. Sp* 2

272 pinnátus *Fl per.*	pinnate		○	or	2	jn o	W.P	Chili	1822.	S	l.p	Hook. ex. fl. 73
273 pórrigens *Hook.*	spreading stalk		○	or	2	jn o	W.P	Chili	1822.	S	l	Hook. ex. fl. 66



History, Use, Propagation, Culture,

but they are now laid aside by regular practitioners. V. Beccabunga (latinised from *bachbunge*, its German appellation: *bach* is a brook; *beck*, provincial English), is sometimes gathered with watercresses, with which it is often found in limpid streams, and used as a spring salad. Almost all the species thrive in any soil or situation; the tallest are ornamental border flowers; the dwarf spreading sorts are well adapted for rock-work, edgings, or to be grown in pots. A few delight in peat soil, and some in moist situations; all are increased by seed, subdividing at the root, or cuttings. V. decussata will endure the open air if protected from frost.

41. *Galipea.* A name framed by Aublet from the vernacular appellation of the plant in French Guiana, where it is a native.

42. *Schwenckia.* John Theodore Schwenck was a professor of medicine at Jena; died in 1671. There was another Schwenck a professor of botany to the garden at Leyden. The genus is, like the merits of the professors, but little known. One inconspicuous species is occasionally seen in our stoves. The

225 Upper leaves obl. sub-serr. Stems erect & shrubby, Rac. many-fl Caps roundish ov scarcely longer than calyx
226 Upper leaves obl. obov sub-serr. Caps. ovate larger than calyx, Stems shrubby diffuse, Corymb term few-fl
227 Leaves smth. ellip ov. ent. or ser Corymb. term. somew spiked, Cal cil. Caps ob Stems tufted herb. simple
β Leaves elliptic ovate obtuse entire
228 Peduncle axillary subracemose few-flow. Leaves obovate obtuse sub-serrated, Fl.-stalks and calyxes pilose
229 Leaves opp oblong crenate with the calyxes smooth, Racemes elongated, Flowers distant, Stem ascending
230 Glandular hairy, Stem ascending, Leaves oblong acute sub-crenate, Raceme elongated
231 Leaves opp ovate irregularly crenate, Stem ascending, Bractes scarcely longer than flower-stalks

Racemes lateral

232 Racemes few-flowered, Leaves elliptical perennial entire, Stem shrubby
233 Radical leaves roundish and oblong, Stem naked very short, Flower-stalk like a scape about 3-flowered
234 Leaves elliptical obtuse on short stalks serrulate, Cal. 4-parted, Stem procumbent below rooting
235 Leaves lanceolate serrate stem clasping, Cal 4-parted, Stem erect
236 Leaves linear lanceol nearly entire, Flow.-stalks pendulous or spreading, Cal. 4-parted, Stem nearly erect
237 Leaves lin. lanc lower pectinate pinnatifid, upper entire, Cal leaves unequal subulate, Stems procumbent
238 Leaves sess. pinnatifid and bipinnatifd, Lower bracte 3-fid longer than fl -st Cal 5-part Stem nearly erect
239 Leaves sess lanceol incise serrate and pinnatifid, Bracte entire shorter than fl -st Cal 4-part Stem feeble
240 Leaves bipinnatifid, Segm lanceol and lin Cal leaves unequal subulate, Stems procumb woody at base
241 Leaves oblong roundish stiff shining, with the procumbent creeping stem smooth, Flowers in close spikes
242 Leaves obovate or roundish serrate, Cal 4-parted, Stem rooting at the bottom
243 Leaves sessile oblong obtuse serrated the upper lanceol flat, Cal 4 or 5-part. Flowering stem ascending
244 Stem erect hairy all over, Lvs. sub-sess oval coarsely and acutely cren hairy, Cal. 4-part. larger than corolla
245 Leaves somewhat heart-shaped ovate sessile unequally obtusely serrate, Stem erect, Cal. 5-leaved
246 Lower leaves oblong coarsely serrated with the stem villous
247 Leaves sub-sessile ovate lanceolate unequally serrated, Cal. 5-parted, Segm and bractea linear subulate
248 Lvs cut serr the upp cord ovate sess the low. ov. stalk. Cal 4-part Stem hairy in 2 rows, Rac. long than stem
249 Leaves sessile cordate ovate acute serrate, Cal 4-parted, Stem erect
250 Leaves cord. ovate obtuse coarsely serrated with the stem and stalks hairy, Cal. 4-part. Rac elong filiform
251 Racemes lateral stalked many-flow Leaves entire very smooth ovate acuminate joined together at the base
252 Racemes very long, Leaves elongate lanceolate acuminate unequally serrate
253 Fl.-stalks rather longer than bract Lvs lanc. wedge-shaped at base simply and doubly toothed, Stem prostrate

Flower-stalks one-flowered

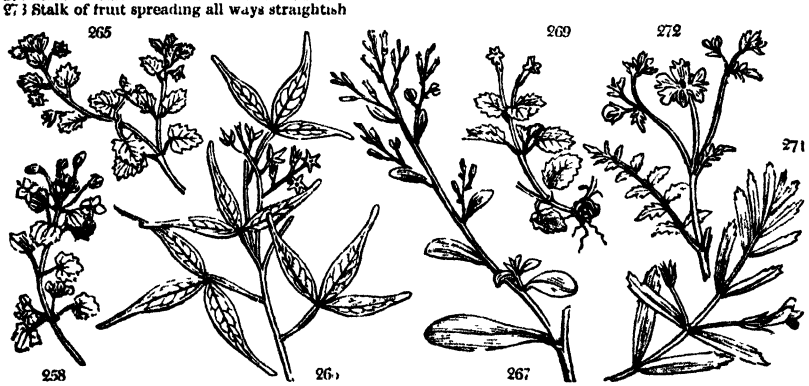
254 Flowers sub-sess. Leaves finger-parted, the upper undivided, Fl.-stalks shorter than the calyx, Stem erect
255 Flowers sessile, Leaves all finger-parted
256 Lower leaves entire middle finger-parted upper trifid, Fl.-stalks longer than calvx, Stem erect spreading
257 Leaves as long as stalk cord rounded 5-lobed the upper 3-lobed, Segm. of cal. cord acute, Stem procumbent
258 Leaves cord. rounded with 5 or 9 but generally 7 teeth obtuse a little fleshy, Cal. of fruit spread. Caps hairy
259 Flowers sessile, Leaves oblong a little serrate longer than calyx, Stem erect
260 Leaves roundish cordate crenate, Flower-stalks very long, Calyx leaves lanceolate
261 Flower-stalks as long as the leaves, Calyx 2-leaved, Leaflets 2-lobed serrate
262 Low. lvs stalk. cord ov serr floral nearly sess short than fl -st Caps obov emarg turgid, Stem rather upr.
263 Flow stalked, Low lvs stalked ov serr floral s -sess as long as fl -st. Caps obcord. comp Stem nearly simple
264 Flow nearly sess Low lvs stalked cord. ov serr caul. cren floral lanc sess longer than stalk, Cal unequal
265 Leaves stalked cord ovate serr Cal leaves ovate, Stem procumb. Fl.-stalks scarcely shorter than the leaves

266 Leaves alternate stalked, lanceolate entire

267 Stem slender simple, Leaves lanceolate, Cor thrice as long as calyx

268 Leaves lanceolate serrate somewhat 3-nerved, Flowers on stalks
269 Leaves oblong acutely serrated, Stem creeping, Flowers racemose [acuminate longer than the calyx
270 Leaves obovate lanc narrowed below remotely toothed nerved smooth, Fl.-stalk alternate very short, Caps
271 Leaves lin lanc. with a few teeth, Fl.-stalks as long as the leaves, Caps much shorter than the subulate calyx

272 Stalk of fruit on one side deflexed at base
273 Stalk of fruit spreading all ways straightish



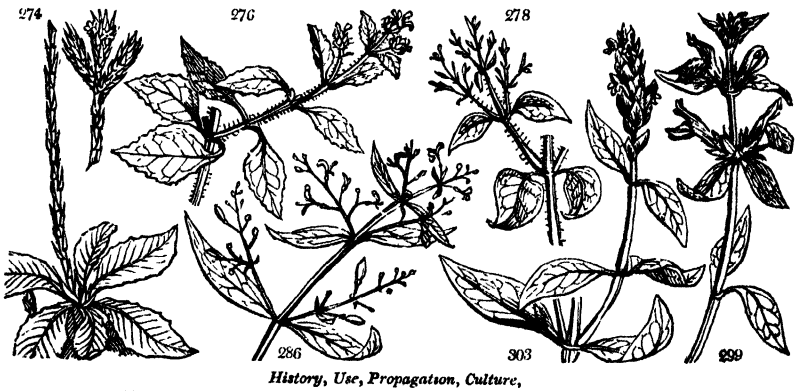
and Miscellaneous Particulars.

appendages to the corolla are very singular, and demand a better explanation of their nature than has yet been offered.

43. *Gratiola.* From *grātia*, grace (of God) Matthiolus called it gratia Dei, in allusion to its effects G officinalis is so bitter and obnoxious to cattle, that Haller assures us, there are meadows about Yverdun rendered entirely useless by its abundance. It is a powerful cathartic, and was long in use as such, but now laid aside.

44. *Sebastiana* So named by the authors of the Flora Peruviana, from σεβίζω, to cut, and ἄνθος, a flower One of the most beautiful of herbaceous genera. Two species or rather varieties are now known, and ornament the green-house with their elegant panicles of lilac and white flowers. They are difficult of cultivation, requiring a very pure and moist atmosphere. They may be propagated by cuttings, but the best plants are raised from seeds, which have not hitherto been obtained, except from flowers artificially impregnated.

45. ELYTRA'RIA. *M.*	ELYTRARIA.			*Acanthaceæ*	*Sp.* 2—5							
274 virgáta *M*	twiggy	☿ △	or	1	jl	W	Carolina	1813	D	s.p	Mich. am. 1. t. 1
275 crenáta *Vahl.*	stemless	☿ ⊠	or	½	jl	W	E. Indies	1820	D	s.p	Roxb. cor. t. 127
Justicia acaulis Roxb.											
46. HYPOES'TES *R Br*	HYPOESTES			*Acanthaceæ*	*Sp* 2—10.							
276 involucráta *Roxb*	involucred	☆ □	or	1½	jl.au	W	E Indies	1811.	C	p.l		
277 purpúrea *W*	purple	☿ ⊠	or	2	my jn	P	China	1822.	C	p.l	Ru. am 6. 22. 2	
†**47. JUSTI'CIA** *W.*	JUSTICIA.			*Acanthaceæ.*	*Sp* 28—137							
278 bicalyculáta *W.*	Malabar	⊡	or	3	au	Li	E. Indies	1755.	S	s.l	Retz. st. 1775. t. 9	
279 Ecbólium *W.*	long-spiked	☆ □	or	3	mr au	B	E. Indies	1759.	C	p.l	Bot. mag. 1847	
280 coccínea *W*	scarlet	☆ □	or	5	f	S	S. Amer	1770	C	p l	Bot. mag. 432	
281 quadrifida *H K*	twiggy	☆ □	or	3	mr s	S	Mexico	1795.	C	p l	Par lon. 50	
282 nigricans *Lour.*	black-striped	☆ □	or	6	mr s,	W R	China	1819	C	p l		
283 nítida *W.*	glossy	☆ □	or	4	mr s	W	W Indies	1790	C	p l	Bot. rep 570	
284 bracteoláta *Jacq.*	small-bracted	☆ □	or	6	jl au	P	Caraccas	1823	C	p l	Jacq. ic. t. 205	
285 pícta *W*	painted	❀ □	or	8	jl.au	Cr	E. Indies	1780.	C	p l	Bot. mag 1870	
286 paniculáta *Vahl*	panicled	✿ □	or	1½	jl.au	Pk	E Indies	1811.	S	p l	Rheed.mal.9.t.56	
287 secúnda *Vahl*	side-flowering	☆ □	or	3	jn jl	R	W. Indies	1793.	C	p.l	Bot. mag. 2060	
288 ciliáris *W*	ciliated	□	or	1	jl au	W	W Indies	1780.	S	s.l	Jacq vin. 2 t.104	
289 lúcida *Vahl*	shining-leaved	☆ □	or	3	jl au	Sc	W Indies	1795	C	p l	Bot. mag. 1014	
290 Gendarússa *W*	willow-leaved	☆ □	or	3	jn jl	La	E. Indies	1800	C	p l	Bot reg 635	
291 carthagínensis *W*	Caribæan	✿ □	or	1½	jn jl	Pu	Carthag.	1792	C	s p l	Bot reg 797	
292 pedunculósa *Mich*	N American	☿ △	or	1½	jl au	La	N Amer	1759	C	s p l	Bot mag 2367	
293 procúmbens *W.*	procumbent	☿ ⊠	or	½	jl au	Pk	E. Indies	1798	L	s p	Plk. al. t. 56. f 3	
294 comáta *W*	balsam herb	☿ ⊠	or	2	jl au		Jamaica	1795	R	s p	Sl jm.1 t.103 f 2	
295 eustachiána *W.*	Eustachian	☆ □	or	3	au s	O	St. Eustac	1799	C	s p	Bot reg. 309	
296 nasúta *W*	white-flowerg	☆ □	m	2	f o	W	E. Indies	1790	C	p l	Bot. mag 325	
297 pectorális *W*	Garden-balsam	☿ ⊠	m	3	my jn	P	W Indies	1787	L	s p	Bot reg 796	
298 periplocifólia *W*	periploca-leav	✿ □	or	1½	jn	P	S Amer	1799	C	s.p	Jac col. s t.7. f 2	
299 furcáta *Va.*	forked	☆ □	or	5	ap au	V	Peru	1795	C	p l	Bot mag 430	
300 lithospermifólia *W*	gromwell-leav	☆ □	or	3	ap au	P	Peru	1796.	C	p.l	Jac schön 1 t.4	
301 caracásana *Jacq*	violet	☆ □	or	5	my jn	V	Caraccas	1822	C	p l	Jac pl. r 2 t.206	
302 adhátoda *W*	Malabar-nut	☿ □	or	10	my jl	P	Ceylon	1699	C	sl	Bot mag. 861	
303 betónica *Va*	betony-leaved	☆ □	or	3	my jl	W	E. Indies	1737	S	p.l	Rheede 2. t. 21	
304 hyssopifólia *W*	Snap-tree	☆ □	or	2	mr au	Y	Canaries	1690.	C	pl	Mill. ic. 9. t. 13	
305 orchioides *W*	broom-leaved	☆ □	or	2	au		C B S.	1774.	C	pl.	Vent mal 51	
48. DICLIP'TERA	DICLIPTERA			*Acanthaceæ*	*Sp.* 5—25							
306 hexangulária *W*	chickw -leaved	⊡	or	2	jl	R	S. Amer	1733	S	s l	Pluk t. 279 f. 6	
307 scorpioides *L*	scorpion-like	☆ □	or	3	jl		Vera Cruz	1802	C	p l	R Houst. p. 3 t. 1	
308 resupinata *W*	resupinate	⊡	or	1½	jl	W R	S Amer	1805	S	p l	Cav ic 3 t. 203	
309 pectináta *Vahl*	small-flowered	☆ □	or	1½	jn jl	B	E Indies	1798	C	p l	Rox cor. 2 t.153	
310 retúsa *Vahl*	blunt	☿ ⊠	or	2	mr ap	P	W Indies	1821	C	l.	Bot cab 724	
†**49 ERAN'THEMUM** *B P*	ERANTHEMUM			*Acanthaceæ*	*Sp* 3—14.							
311 spinósum *B P*	thorny	☆ □	or		jl au		W Indies	1733.	C	s p	Jc am 2. t 2. f 1	
312 pulchéllum *B R*	nervose	☆ □	or	2	ja o	B	E. Indies	1796	C	s p	Bot rep 88	
313 bícolor *B M*	two-coloured	☆ □	or		my au	W R	Luconia	1802	C	s p	Bot. mag 1423	
50 WULFE'NIA *W.*	WULFENIA			*Scrophularinæ*	*Sp* 1							
314 carinthíaca *W*	annual	○	rk	1½	jl.au	B	Carinthia	1817.	S	co	Jacq ic 1. t 2	
†**51. CALCEOLA'RIA.** *W*	SLIPPERWORT			*Scrophularinæ.*	*Sp* 7—55.							
315 pinnáta *W*	wing-leaved	⊙	or	2	jl s	Y	Peru	1773	S	s p	Bot mag 41	
316 scabiosæfólia *R. & S*	scabious-leav	⊙	or	2	my o	Y	Chili	1822	C	co	Bot mag 2405	
317 rugósa *Fl per*	rugose	☆	or	2	au s	Y	Chili	1822	C	co	Hooker fl ex 99	
318 integrifólia *L*	entire-leaved	☆	or	2	au s	Y	Chili	1822	C	co	Bot reg. 744	



History, Use, Propagation, Culture,

45. *Elytraria* From ἐλυτρον, an envelope, its stem being covered with sheaths or scaly envelopes. Little herbaceous plants of no ornament.

46. *Hypoestes*, ὑποστης, is an interior garment: it is probable that the involucrum suggested the application of the name. The plants have the habit of Justicia, from which they have been separated, and are chiefly tropical weeds.

47. *Justicia* In honor of James Justice, F.R S, an eminent Scotch cultivator, author of the *Scotch Gardener's Director*, published in 1784 J pectoralis has the smell of new hay, combined with a refreshing aroma. In Domingo and Martinico the inhabitants make a syrup of it, which they use against disorders of the breast. The bruised leaves are good in wounds, whence the English appellation balsam, and the French name *herbe à charpentière* J nasuta is said to possess extraordinary aphrodisiacal powers, and milk boiled in the roots is much employed on that account by Indian physicians. Rubbed with lime-juice, the roots are used to cure ring-worms. Most of the species are free flowerers, some as J. lucida

274 Flowering scales ovate villous at edge, Leaves lanceolate smooth entire, Scapes very long, Caps. obtuse
275 Stemless, Flowering scales ovate entire, of the scape lanceolate naked at the edge, Leaves oblong crenate

276 Racemes axillary erect shorter than the leaves which are lanceolate toothed and with the stem hairy
277 Spikes axillary and terminal, Bracteas lanceolate smooth, Branches pubescent

Calyx double.

278 Panicles axillary dichotomous

Calyx simple, Flowers labiate

279 Spikes terminal 4-sided imbricated, Bracteas oval, Leaves oblong ovate acuminate, Helmet linear
280 Spikes terminal, Bracteas and leaves elliptical, Helmet lanceol reflexed at the end, Stigma of two plates
281 Leaves linear lanceolate, Flowers nearly solitary sessile tubular 4-cleft
282 Spikes terminal 2-ranked, Bractes setaceous, Leaves linear lanceolate
283 Racemes term somewhat branched, Cal. whorled smooth, Leaves lanc elliptic, sharp at both ends stalked
284 Racemes term comp Pedunc 3 or 4-flowered, Bract. lanc. Leaves oblong pointed, Branches square rough
285 Racemes axillary and terminal, Flowers inflated at the throat whorled, Leaves elliptical variegated
286 Stems 4-sided brachiate, Leaves sub-sess lanc Flowers 1-sided erect, Lip linear revolute, Flowers downy
287 Racemes terminal compound 1-sided many-flowered, Bract. setaceous, Leaves ovate oblong. acuminate
288 Flowers axillary solitary sessile opposite, Calyx hispid, Leaves lanceolate obtuse ciliated at the base
289 Spikes terminal in heads, Leaves elliptic nerved blistered shining, Upper lip of corolla lanceolate
290 Spikes terminal leafy, Flowers whorled, Leaves elongated
291 Spikes axillary and terminal, Bractes oblong imbricate ciliate obtuse
292 Spikes axillary, Flowers close, Flower-stalks elongated alternate, Leaves lanceolate
293 Spikes lateral and terminal, Calyx 4-leaved linear hairy, Lower lip ovate, Leaves oblong
294 Spikes axillary and terminal filiform, Spikelets whorled
295 Spikes axillary and terminal, Flowers in pairs below single above, Bractes wedge-shaped
296 Upper lip of corolla subulate, Flower-stalks axillary dichotomous, Leaves elliptical entire
297 Panicle terminal dichotomous, Flowers spiked distant
298 Upper lip emarg. reflexed, Flowers axillary solitary sub-sess. opposite · term. in spikes, Lvs. ovate lanceolate
299 Lower lip 3-lob Flow axillary solitary and spiked, Lvs ovate oblong narr at each end, with stem pubescent
300 Lower lip 3-lobed, Flowers axillary sessile whorled, Bractes linear lanceolate, Leaves lanceolate.

Calyx simple, Flowers ringent.

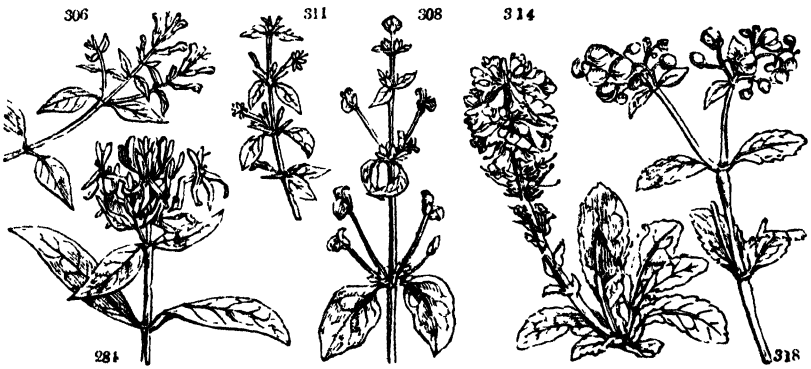
301 Spikes axillary and term. Flowers opposite, Bract. shorter than cal. Stem. and branc round 6-streak Leaves
302 Spikes axillary opposite, Bractes ovate acute nerved [ovate accuminate wavy-stalked
303 Spikes terminal, Bract ovate acuminate netted with veins, Leaves lanceolate ovate stalked
304 Leaves lanceolate entire obtuse, Peduncles axillary 3-flowered 2-edged, Bractes shorter than the calyx
305 Peduncles solitary axillary one-flowered, Leaves lanceolate acute at each end sessile

306 Umbels axillary 3-flowered, Bractes 2 wedge-shaped, Leaves ovate, Flowers in loose spikes
307 Spikes axillary and terminal recurved, Leaves lanc ovate hairy sessile, Bractes 2, Flowers in loose spikes
308 Flowers axillary rather whorled, Bractes 2-valved subcordate, Leaves ovate
309 Spikes axillary and term 1-sided villous, Dorsal bractes lanc 2-ranked with a membran. margin at the base
310 Spikes terminal, Bractes obovate retuse imbricated smooth, Leaves ovate acuminate

311 Flower-stalks about 1-flowered, Leaves oblong, Spines axillary
312 Spikes axillary and terminal imbricate, Bractes oblong veiny, Leaves ovate acuminate
313 Leaves ovate acuminate repand, Corolla with a long tube white with a purple stain

314 Stemless, Leaves radical very smooth coarsely crenate, Flowers on one side

315 Leaves all pinnate pinnæ toothed, of the lower leaves pinnatifid
316 Lower leaves pinnate superior pinnatifid 3-lobed and simple
317 Leaves lanceolate very rugose with spreading teeth, Flowers terminal dichotomous
318 Leaves lanceolate toothed rugose, Flowers terminal dichotomous



and Miscellaneous Particulars.

are shewy, others are the commonest weeds of the tropics, all are readily propagated by cuttings in heat under a glass.

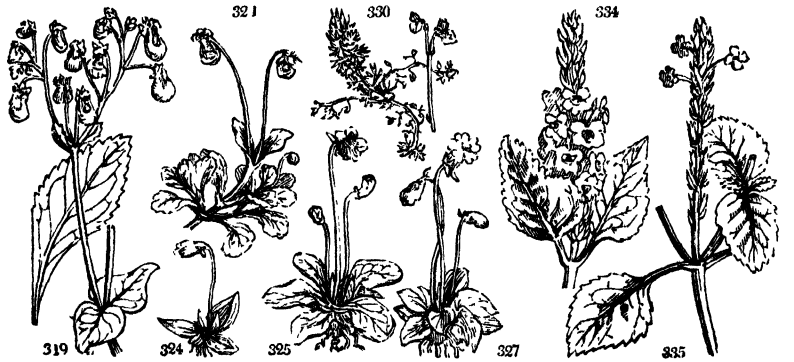
48 *Diclıptera ;* δις, double, and κλυω, to shut. The fruit being compounded of two valves. This genus has been formed like Hypoestes out of the Linnæan Justicia, with which it agrees in habit.

49. *Eranthemum* A name applied by the ancients to their Anthemis, from ηρ, spring, and ανθος, a flower. The word has been applied to the present genus with no apparent reason. The species are very pretty ornaments of the stove

50. *Wulfenia* Named after F X Wulfen, a German botanist, and author of a work on the plants of Carinthia. A small and very beautiful herbaceous plant.

51. *Calceolaria* From calceolus, a slipper, in allusion to the shape of the corolla. C. pinnata may be raised from seed in a hot-bed in spring, and transplanted to the borders with other tender annuals. The regions of Chili and Peru abound in many splendid species, some of which have lately been introduced to this country.

319 corymbósa *Cav*	corymbose		or	1	my.jn	Y	Chili	1822.	S	co	Bot. reg. 723
320 parália *Cav*	sea-side		or	1	my jn	Y	Chili	1822	S	co	Hook. fl ex 75?
321 Fothergillii *W.*	Fothergill's	♃	or	½	my au	O	Falkl I.	1777.	D	l.p	Bot. mag 348
52. PINGUI'CULA *W.*	Butterwort.			*Lentibulariæ*		*Sp* 6—15					
322 lusitánica *W*	pale		cu	½	jn jl	Li	Britain	bogs	D	m s	Eng bot 145
323 vulgáris *W*	common		ec	½	my	V	Britain	bogs	D	m s	Eng. bot 70
324 alpina *W.*	alpine		cu	½	ap	W	Germany	1794	D	l p	Fl. dan 453
325 grandiflóra *W.*	large-flowered		el	½	ap my	B	Britain	ir bog	D	m s	Eng bot. 2184
326 lútea *M*	yellow		el	½	jn jl	Y	Carolina	1816	S	p l	Bot reg. 126
327 edéntula *Hook*	toothless		el	½	ap	Y	N Amer	1823.	D	s p	Hook ex fl 16
53. UTRICULA'RIA.	*W.* Hooded Milfoil.			*Lentibulariæ*		*Sp* 3—63.					
328 vulgáris *W.*	common		cu	½	jn.jl	Y	Britain	sta.wa.	D	aq	Eng. bot. 253
329 minor *W*	lesser		cu	½	jl	Y	Britain	bogs	D	aq	Eng bot 254
330 intermédia *P. S*	intermediate		cu	½	my jn	Y	Britain	bogs	D	aq	Eng. bot. 2489
54. STACHYTA'RPHETA *Vahl.*	Bastard Vervain			*Verbenaceæ*		*Sp* 7—13					
331 índica *Vahl*	Indian		or	2	au s	W	Ceylon	1732	S	s p	
332 jamaicénsis *Vahl*	Jamaica		or	2	jn s	B	W. Indies	1714.	C	p l	Bot. mag 1860
333 orúbica *Vahl*	Orubian		cu	3	jn.au	V	Panama	1699	C	l p	Ehr pict. t.5. f.1
334 mutábilis *Vahl*	chang-flower		or	3	mr s	O	S Amer	1801	C	p l	Bot. mag. 976
335 prismática *Vahl*	Germand leav		or	2	my jn	B	W Indies	1699	C	p l	Jac. ic. 2. t. 208
336 cayennénsis *Rich*	Cayenne		or	3	my jn	B	Cayenne	1822	C	p l	
337 hirsutíssima *Lk*	hairy	♃	or	1½	mr ap	B	Brazil	1822.	D	p l	
55. LYCO'PUS. *W.*	Water Horehound			*Labiatæ*		*Sp* 4—6					
338 europæus *W*	common		ro	3	jl au	W	Britain	riv. ba.	D	m.s	Eng bot 1105
339 exaltátus *W*	tall		ro	6	jl au	W	Italy	1739	D	m s	Fl. græc. 1. t. 12
340 virginicus *W.*	Virginian		ro	3	au.s	W P	Virginia	1760	D	m s	
341 intermédius *Sch*	intermediate		ro	3	jl au	W	Europe	1820	D	m.s	
*56. AMETHYS'TEA *W*	Amethystea			*Labiatæ*		*Sp* 1.					
342 cærúlea *W.*	blue-flowering		pr	1½	jn jl	B	Siberia	1759	S	p l	Bot. mag. 2448
57 ZIZIPH'ORA. *W*	Ziziphora.			*Labiatæ*		*Sp.* 8—12					
343 capitáta *W*	oval-leaved		or	½	jl au	R	Syria	1752	S	co	Fl. græc 1 t. 13
344 hispánica *W.*	Spanish		or	½	jn	R	Spain	1759	S	co	Lam ill t 18 f.1
345 tenúior *W*	spear-leaved		or	½	jn jl	Li	Levant	1752	S	co	Lam. ill t. 18. f 2
346 acinoides *W*	thyme-leaved	♃	rk	½	jl au	R	Siberia	1786	D	s l	
347 serpyllácea *B M*	sweet-scented		rk	½	jl au	R	Caucasus	1803	C	s l	Bot mag 906
348 média *Lk*	intermediate		rk	½	jn au	R	Caucasus	1822	C	co	
349 dasyántha *W en. Pouschkins* B M	hairy flowering		rk	½	jn au	R	Siberia	1803.	C	co	Bot mag 1093
350 taúrica *W en*	Taurian		or	½	jl s	R	Tauria	1816	S	co	
58. CU'NILA *P. S*	Cunila.			*Labiatæ*		*Sp* 2—5					
351 mariána *Ph*	mint-leaved	♃	or	1	jl s	R	N Amer	1759	D	co	Mor h 3 t 19. f 7
352 capitáta *P S*	headed	♃	or	1	jl.au	R	Siberia	1799	D	co	Mem petr 2 t 11
59 HEDEO'MA *P S*	Hedeoma			*Labiatæ*		*Sp* 2—3					
353 pulegioides *Ph*	pennyroy-lvd		or	½	jn au	B	N Amer	1777	S	co	
354 thymoides *P S*	thyme-leaved		or	½		R	France	1699	S	co	Mor. h 3 t 19 f 6
†*60 MONAR'DA *W*	Monarda			*Labiatæ*		*Sp* 13—16.					
§355 fistulósa *Ph*	hollow-stalked	♃	or	3	jn au	P	N Amer	1656	D	r m	Mill ic t 183 f 2
§356 mídia *W en*	purple-bracted	♃	or	2	jn s	P	N Amer	1656	D	r m	
357 móllis *Ph*	soft	♃	or	2	jn s	Li	N Amer	1656	D	r m	



History, Use, Propagation, Culture,

C. corymbosa and paralia, are exceedingly beautiful herbaceous plants of difficult increase The shrubby and branching herbaceous kinds are easily propagated by cuttings

52. *Pinguicula* From pinguis, fat, on account of the greasiness of its leaves In P. vulgaris, the structure of the stigma, and its close application to the stamens is very remarkable. Linnæus says, that the warm milk of the rein-deer poured on the fresh leaves, and set aside for a day or two, becomes acescent, acquires consistence and tenacity, and neither the whey nor the cream separate. In this state it is considered a very grateful food in Sweden and Norway. On cows' milk it acts like common rennet. The plant eaten by sheep has been supposed to produce the liver-rot; but a flat apterous insect, the fasciola hepatica or fluke, found adhering to stones and plants in boggy grounds, as well as in the liver and biliary ducts of sheep affected by the rot, is a more likely cause, and the more especially as no animal whatever will feed on the plant. The species (except P. grandiflora) are cultivated with difficulty in artificial shaded morass P grandiflora will thrive well on a dry northern bed of bog-mould among North American shrubs

53. *Utricularia.* From utricula, a little bottle, from the small inflated appendages to the root. The species are scarcely susceptible of cultivation · they are very numerous in hot countries, and there form the most elegant ornaments of rivulets and pools of water The flowers are fugacious, and so delicate as not to be capable of preservation as dried specimens, in which state their naturally beautiful colors of purple, pink, violet, or yellow, all change to a dead and uniform black.

319 Leaves radical ovate and cordate stalked twice-crenate, Cauline cordate half embracing the stem
320 Leaves unequally toothed · the radical cuneate; upper oblong connate with the Capsules tomentose
321 Leaves spatulate entire hairy above, Flower-stalks like a scape 1-flowered

322 Nectarium conical thick at the end, obtuse shorter than the flowers, Scape villous, Capsules globose
323 Nectarium subulate nearly straight as long as the petals, Upper lip 2-lobed: lower 3-parted, Scape smooth
324 Nectarium conical recurved shorter than the petals [dilated
325 Nectarium subulate straight as long as the flower, Upper lip spreading emarg very large lower 3-lobed throat
326 Nectarium subulate recurved shorter than the campan flower, Throat bearded, Lips toothed, Scape villous
327 Nectarium subulate recurved shorter than the campan cor. 5-lobed: lobes emarg entire, Palate prominent, [Scape pubescent
328 Nectarium conical, Upper lip entire equal to the palate, Leaves very finely divided
329 Nectarium carinate, Upper lip emarg equal to the palate, Lvs dichotomously 3-part. Cor with throat open
330 Nectarium conical, Upper lip entire twice as long as the palate, Leaves dichotomously 3-parted

331 Leaves lanceol. obl. narrower at the base remotely toothed with stem very smooth, Bract. lin. lanceolate
332 Leaves oblong ovate tooth-serrated smooth, Branches hairy, Bractes ovate shorter than calyx
333 Leaves ovate serrate rough rugose, Stem shrubby, Bractes ovate larger than the calyx
334 Leaves serrate ovate rugose with the stem hoary, Bractes lanceolate shorter than the calyx
335 Leaves ovate obtuse serrate, Spikes lax, Bractes subulate shorter than the calyx
336 Leaves ovate crenate serrate smooth very obtuse
337 Leaves ovate acutely crenate with the stem very hairy, Spike very long, Bract appressd smaller than the cal.

338 Leaves ovate lanceolate villous sinuate serrate
339 Leaves pinnatifid hairy, Lobes oblong somewhat toothed
340 Leaves lanceolate the lower pinnatifid at the base. the upper remotely serrated, Stem smooth
341 Leaves pubescent ovate pinnatifid, Segments lanceolate. lowest the shortest, deeply cut at the end

342 Leaves opposite stalked 3-parted coarsely serrated smooth

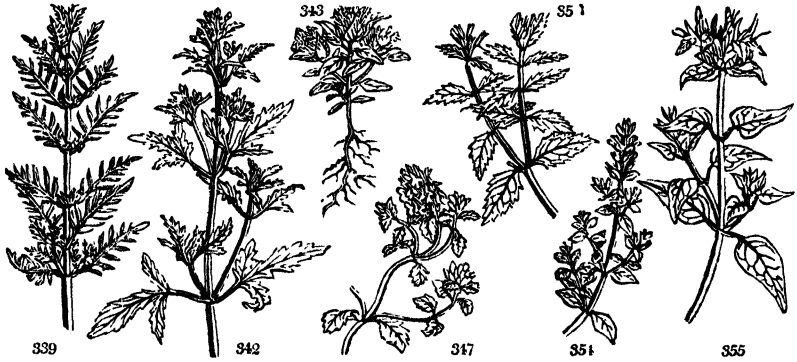
343 Bractes ovate acumin ciliate, Leaves elliptic lanceolate
344 Flowers in spiked racemes, Bractes obovate nerved acute, Leaves ovate
345 Flowers lateral, Leaves lanceolate
346 Leaves lanceolate naked nerved of one shape entire hoary, Flowers in spikes
347 Heads term oval, Leaves ovate sub-serrate those of the flowers nearly of the same shape entire ciliated
348 Leaves ovate acuminate nearly entire nerved, Flowers in heads, Calyx hairy pubescent at base
349 Whorls terminal and axillary close hispid, Leaves ovate sub-ciliate, Stems procumbent hairy

350 Flowers lateral, Leaves lanceolate entire ciliated, Cor with an inflated throat twice as long as calyx

351 Leaves ovate serrate sessile, Flowers axillary and terminal, Stems erect
352 Leaves ovate acuminate, Flowers in heads, Stem decumbent

353 Pubescent, Leaves oblong serrated, Flowers axillary whorled, Lower lip of calyx with 2 ciliated bristles
354 Leaves oval entire, Flowers whorled, Stem square

355 Leaves obl lanc cord pubesc remotely and closely ser Flowers in heads, Involucr purple stem swollen
356 Leaves ovate oblong cordate pubesc coarsely serrated, Flowers in heads, Involucr purple, Stem fistular
357 Leaves obl cord pub remotely serrate upper entire, Flow in heads, Invol pale, Upper lip of cor. bearded



and Miscellaneous Particulars

54 *Stachytarpheta*, σταχυς, a spike, and ταρφυος, dense The name would be better changed, as it has been by Link, to Stachytarpha This genus is partly composed of Verbena, *L* S. mutabilis is a beautiful species, and nearly always in flower All of them strike readily in heat under glass

55 *Lycopus* From λυκος, a wolf, and πους, a foot, on account of a fancied resemblance between the cut leaves and a wolf's foot. *Le Marrube aquatique*, Fr. *Der Wolfsfuss*, Ger, and *Lacopo*, Ital L. europæus is common in most parts of Europe in meadows, but is not eaten by cattle It dyes black, and gives a permanent color to linen, wool, and silk. Withering says, gypsies stain their skin with it. According to Adamson, it has two barren filaments, and Pollich remarks, that there are sometimes 82 flowers in a whorl

56. *Amethystea* From αμεθυστος, the amethyst, alluding to the color of the flower A pretty annual, not very common in gardens

57. *Ziziphora* Etymology uncertain This genus, and the two following, consist of little herbaceous plants resembling thyme they are generally pretty, and easily cultivated It would, perhaps, have been better to unite, with some writers, Ziziphora, Cunila, and Hedeoma, in one genus

58 *Cunila*. A Roman name applied by Linnæus to this genus The plants of Pliny bore some resemblance to those which compose the Linnæan Cunila (See No 57) The leaves of C. mariana are used in decoction for colds.

59. *Hedeoma*, ἡδυοσμα, a Greek name for mint. (See No 57.)

60. *Monarda* In honor of Nicolas Monardes, a physician of Seville in the 16th century Most of the species

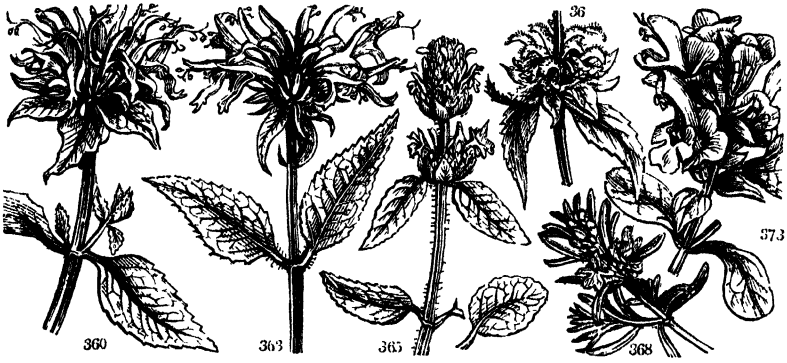
358 oblongáta *Ph.*	long-leaved	☿	△	or	2	jl.s	P	N. Amer	1761.	D	r.l
359 clinopódia *Ph*	wild-basil-leav	☿	△	or	2	jl	P w	N. Amer.	1771	D	r l
360 purpúrea *Ph*	crimson	☿	△	or	3	jn.au	P	N Amer	1789	D	r.l Bot. Cab. 1396
361 altis'sima *W*	tall	☿	△	or	4	jn au	Ll	N. Amer.	1821.	D	r l
362 rugósa *Ph*	white	☿	△	or	1	jl s	W	N. Amer	1761.	D	r l
363 kalmiána *Ph.*	pub. flowered	☿	△	or	¼	jn.au	P	N. Amer.	1813.	D	p l Pursh. fl. am. t.1
364 dídyma *W*	Oswego tea	☿	△	or	3	jn au	R	N. Amer	1752	D	r l Bot. mag 546
§365 ciliáta *Ph*	blue flowered	☿	△	or	1	jl	B	N Amer	1798	D	r.l Pluk. al.t.164 f.3
§366 hirsúta *Ph.*	hairy	☿	△	or	1	jl s	P	N. Amer.	1798.	D	r l
367 punctáta *Ph*	spotted	☿	△	or	2	jn.o	Br	N. Amer.	1714.	S	s.p Bot reg. 87

61. ROSMARI'NUS *W.* Rosemary. *Labiatæ* *Sp* 2.

368 officinális *W.*	common	♃		or	4	ja.ap	P	S Europe	1548	C	co Fl. græc. 1. t 14
β variegáta	*variegated*	♃		or	4						
369 chilénsis *W*	Chile	♃		or	4	jl	P	Chile	1795.	C	s.l

†62 SA'LVIA *W* Sage *Labiatæ* *Sp* 95—170.

370 pomífera *W*	apple-bearing	♃		or	2	jl au	B	Candia	1699.	C	p l Fl græc. 1. t 15
371 calycina *Sm*	large calyxed	♃		or	1	jl au	Pk	Levant	1823	C	co
372 canariénsis *W.*	canary	♃	□	or	4	jn s	P	Canaries	1697.	C	l p Tr pl rar 2 t 19
373 aúrea *W*	gold-flowered	♃	□	or	3	ap n	Y	C G H.	1731.	C	p l Bot mag. 182
374 dentáta *W*	tooth-leaved	♃	□	or	½	d ja		C G H.	1774	C	p l
375 interrúpta *Va*	ash-leaved	♃		or	4	ap s	B	Barbary	1798	C	s l Schousb 6 t 1
376 pilántha *Lk*	hairy-flowered	♃		or	2	jl au	B	.....	1823.	C	co
377 pinnáta *Vahl*	winged-leaved		○	or	1	jl	P	Levant	1731	C	s l Boerh 1 t 167
378 hablitziána *W*	Siberian	♃		or	1½	au	B	Siberia	1795	C	co Bot mag 1429
379 lanceoláta *W en*	lanceolate		○	or	1	my s	B	.....	1813.	S	co Jac ecl. 2 t. 13
380 hirsúta *W en*	hirsute		○	or	1	my jn	B	.....	1801	S	co Jac. sch 3. t 252
381 angustifólia *Ca*	narrow-leaved		△	or	2	jn jl	B	Mexico	1806	C	co Cav ic t. 317
382 azúrea *Ph*	azure-flowered		△	or	6	au	B	Carolina	1806	C	co Bot mag 1728
383 pseúdo-coccínea *W*	pale scarlet		⍓	or	3	jn au	P.R	S Amer	1797.	C	s p Jac. ic 2 t 209
384 bousiána *Jacq* *S amœna B R* 446.	blue Peruvian		△	or	2	mr ap	B	Peru	1821	C	co Jac ecl. 1 t 47
385 mexicána *W*	Mexican	♃	□	or	2	my jl	S	Mexico	1724	C	p l Cav ic. 1 t. 26
386 chamædryoides *Va*	germander	♃	□	or	1½	jn s	B	Mexico	1795	C	p l Bot mag 808
387 cæsia *W en*	grey	♃	□	or	2	jn s	B	S Amer	1813	C	p l
388 hispánica *W*	Spanish		○	or	1½	jn au	Pr B	Spain	1739	D	p l Bot reg 359
389 serótina *W*	late-flowering	♃	□	or	1½	au	B	Ohio	1803	C	s l Jac ic rar 1 t 3
390 dominica *W*	Dominica		⍓	or	¼	jl	W	W Indies	1759	C	s p Sw ob 18 t 1 f 1
391 tiliæfólia *W*	lime-leaved		△	or	4	jn au	B c	S Amer	1793.	C	p l Jac sch 3 t 254
392 polystáchya *W*	many-spiked		△	or	3	o d	B	Mexico	1822	C	co Jac sch 3 t. 318
393 micrántha *Vahl*	small-flowered		△	or	1	my jn	B	Cuba	1823	C	co
394 formósa *W*	shining-leaved	♃	□	or	4	ap o	S	Peru	1783	C	p l Bot mag 976
395 coccínea *W*	scarlet-flower'd	♃	□	or	2	ap o	S	S. Amer	1774	C	p l Murr. 1778 t 1
396 pulchélla *Dec*	pretty		△	or	2	o f	S	S Amer	1821	C	co
397 amarissima *H K*	bitter		△	or	2	jl au	B	Mexico	1803	C	s p Bot reg 347
398 glutinósa *W*	glutinous		△	or	3	jn s	Y	Germany	1790	C	co Mor h.3 t.13.f 18
399 lineatifólia *Lag*	lime-leaved	♃	□	or	3		B	Mexico	1823	C	co
400 ægyptiaca *W*	Egyptian		○	or	¼	jn jl	W	Egypt	1770	S	co Jac vind 2 t 108
401 crética *W*	Cret in	♃		or	½	jn au	V	Crete	1760	C	co Riv mon t 128
402 paniculáta *W*	panicled	♃	□	or	6	jn au	V	C G H	1758	C	p l Mill ic t 225 f 1
403 africána *W*	African	♃	□	or	2	ap jn	V	C G H	1731	C	p l Com hort 2 t 91
404 coloráta *W*	colored calyx	♃	□	or	6	jl au	B	C G H	1758	C	s p Mill ic t 225 t 2
405 officinális *W*	garden	♃		cul	2	jn jl	R c	S Europe	1597	C	co Ger herb 625 f 1



History, Use, Propagation, Culture,

are aromatic, and resemble mint in their habits and mode of culture The leaves of M didyma are sometimes used as tea in North America, its flowers are of a very brilliant scarlet

61 Rosmarinus Two Latin words signifying dew of the sea The shrub grows in the southern parts of Europe in the vicinity of the sea R. officinalis yields, by distillation, a light-pale essential oil of great fragrance, which is imparted to rectified spirit It was formerly recommended for strengthening the nervous system, headaches, &c as well as to strengthen the memory Hence the allusion of the poet, "there's rosemary, that's for remembrance" Rue in former times signified grace, and rosemary, repentance Rosemary was considered as an emblem of fidelity in lovers, it was worn at weddings and funerals, and on the latter occasions is still in some parts of Wales distributed among the company, who throw the sprigs in the grave along with the corpse It is the principal ingredient in Hungary water, and is drunk as tea for headaches, and by nervous persons It prefers a lean dry soil, or rubbish of old buildings, and when it has established itself on a wall, will resist the greatest cold of our winters. Its introduction is beyond record, and was probably by the monks in the dark ages.

62 Salvia. From salvere, to save, on account of its supposed healing qualities This large and very natural

359 Leaves oblong lanceolate rounded and narrowed at the base villous flat, Cor. dotted
359 Leaves ovate lanc rounded and unequal at the base pubesc. remotely serr. Flowers in heads, Bractes pale
360 Smooth, Heads large leafy, Calyx colour bearded, Cor long smooth, Lvs. ov obl coarsely serr. Stem smooth
361 Leaves ovate acuminate rounded at base and equal hairy coarsely serrated, Flowers in heads, Bractes pale
362 Leaves ovate lanceolate cordate smooth rugose [bright crimson
363 Leaves obl. pointed stalked ovate, Flowers in heads, Bract small acute, Stem square pilose, Flowers very long
364 Leaves ovate acum sub-cordate closely serrated smoothish, Flowers in headed whorls, Involucres purple
365 Leaves ovate attenuated, Stems and whorls hairy, Bractes ovate as long as the calyx
366 Very hairy all over, Flowers small in whorls, Leaves ovate acuminate serrate on long stalks, Stem square
367 Leaves lanceolate remotely serrated smooth, Flowers in whorls, Bractes pale

368 Leaves sessile

369 Leaves on stalks

Calyx 3-lobed, enlarged

370 Leaves ovate lanceolate rugose crenulate undulate, Calyx blunt longer than ovate bracte
371 Leaves ovate crenate flat hoary netted with veins, Calyx 3-lobed dilated retuse with little lips
372 Leaves triangular hastate oblong crenated obtuse
373 Hoary, Lower leaves roundish truncate at base smooth · upper oblong entire, Calyx of fruit large
374 Leaves linear oblong serrate, Whorls 2-flowered, Calyx obtuse
375 Leaves interruptedly pinnate, Stem shrubby erect
376 Leaves pinnate in 2 or 3 pairs, Leaflets sess lanceol. obtuse crenulate rugose, hoary beneath, Bract cordate
377 Hairy viscid, Leaves interruptedly pinnate, Leaflets oblong eroded unequal-sided, Calyx inflated
378 Leaves pinnate entire, Leaflets lanceolate nearly equal upper generally in pairs

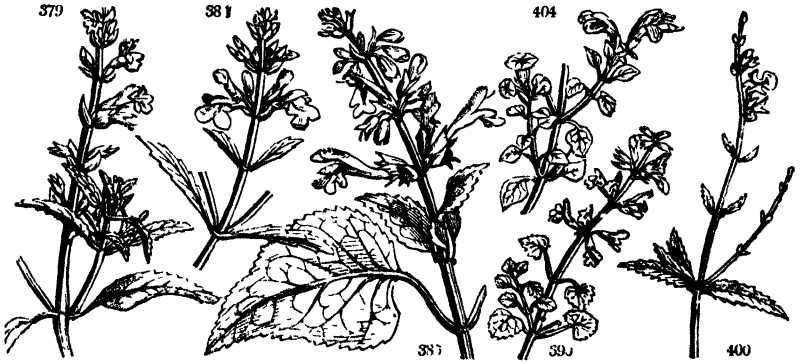
Calyx 3-toothed, sub-cylindrical

379 Leaves lanc obt. remotely serrate stalked beneath pub Spike racemose winged, whorls 2-fl. Bract lanceolate
380 All hairy, Leaves oblong ovate crenate, Flowers in spiked whorls, Bractes roundish acute
381 Leaves lanceolate the lower serrated outwards, with the stem hoary, Lower lip very broad, Calyx acute
382 Leaves linear lanceolate the lower serrated outwards with the stem smooth, Segments of calyx rounded
383 Leaves ovate acute serrated villous on each side, Stem hairy
384 Leaves obl. ov. rugose serr smooth dotted, Flowers in spiked whorls on one side, Bract decid Helmet hairy

385 Lvs somew rhom ov acum serr at base and apex quite ent beneath dev above hoary, Bract decid. hoary
386 Leaves ovate crenate rugulose hoary, Calyx with stellate hairs, Stem decumbent
387 Leaves ov acum serr beneath hoary, Spikes term Lower whorls remote, Bract decid shorter than calyx
388 Leaves ovate serrate, Leaf stalks with a point on each side, Spikes imbricate, Bract ovate ciliated narrowed
389 Leaves sub-cordate obtuse unequally bluntly serrated, Calyx viscid villous as long as corolla
390 Leaves cordate obtuse rugose crenated hoary beneath, Calyx villous viscid as long as corolla
391 Leaves cordate rugose crenate equally serrate acute, Calyx smoothish
392 Leaves ov serr glaucous beneath, Racemes comp Flowers on one side, Leaf stalks with 2 glands at base
393 Leaves cordate crenate blistered wavy at edge obtuse smooth, Bractes ovate shorter than calyx
394 Leaves cordate crenate, Flowers axillary whorled, Stem shrubby
395 Leaves cordate acute tomentose serrate, Corolla twice as long and narrower than the calyx
396 Leaves cord. acute smoothish cren. the upper sess whorls 6-10 fl Helmet hairy entire the length of stamens
397 Leaves cordate crenate stalks with 2 calli, Stem and calyx clammy with hair, Bractes ovate ciliated
398 Villous viscid, Leaves cordate arrow-headed coarsely serrated acuminated, Helmet entire
399 Leaves cord ovate acuminate lucid serrat downy beneath, Spikes numerous axillary and term very dense

Calyx 5-toothed, generally 3-2

400 Leaves linear lanceolate toothed rugose, Bract. ovate mucronate
401 Leaves linear lanceolate, Flowers nearly digynous, Cal. 2-leaved
402 Leaves obovate wedge-shaped toothletted
403 Lower leaves spatulate serrate truncated at base toothed upper oblong nearly entire, Cal hairy
404 Leaves obl nearly entire hoary, Cal hairy of the fruit enlarged veiny with a membranous coloured limb
405 Leaves lanceolate ovate crenulate, Whorls few-flowered, Cal mucronate longer than bractes



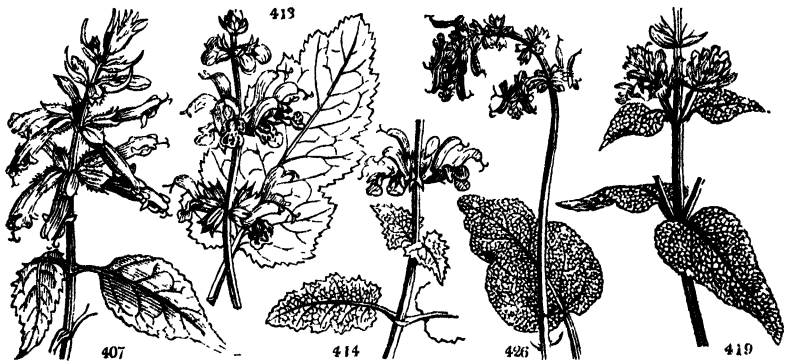
and Miscellaneous Particulars

genus consists of herbs or under-shrubs, the leaves of which have generally a rugose appearance, the smell aromatic, and the flowers commonly in spikes, two or three together from a bracte or leaf. They are all of easy culture, and some of them are ornamental as greenhouse plants or border flowers. The Horminum, Salvia, and Sclarea of Tournefort are included in this genus. The Sclarea or clary is derived from σκληρος, stiff, and Horminum from ὁρμαω, quod ad venerem stimulat. Of S. officinalis there are many varieties, differing in the size, form, and color of the leaves. It was formerly in great repute in medicine as a sudorific, aromatic, astringent, and antiseptic. The Chinese use it as a tonic for debility of the stomach, and strengthening the nervous system, and prefer it for these purposes to their own tea. It is, however, discarded from our pharmacopeiæ, but still used by self-practitioners and herb doctors. In cookery it is used for sauces and stuffings for luscious meats. S. grandiflora is preferred for making tea. S. pomifera produces protuberances as big as oak galls, occasioned like them, by the puncture of an insect. In the isle of Crete, S. officinalis has the same sort of excrescences, and they carry them to market there under the name of sage-apples. S. verbenaca is a native of all the four continents, and very aromatic. A mucilage is produced from its seeds, which, put under the eyelids for a few moments, envelopes any sand or dust there, and brings it out, and hence the name of officinalis christi, clear

406 Spielmánni *W en.*	Spielman's		△	or	2	jn.jl	B	S. Europe	1813.	C	s.l	Scop. del. 3. t. 15
407 spléndens *Ker.*	splendid		△	or	3	o.ja	Sc	Mexico	1822.	C	s.l	Bot. reg. 687
408 phlomoides *W.*	mullein-like		△	or	2	my jn	L B	Spain	1805	C	co	R. pl. h. l. t. l f.1
409 urticifólia *W*	nettle-leaved		△	or	3	jn jl	B	N Amer.	1799	C	p.l	Mor.h.3.t.13.f.31
410 bullàta *W en*	blistered		△	or	2	jl au	R	Portugal	1804	D	co	
411 rugósa *W*	wrinkle-leaved		□	or	2	jl au	W	C G H.	1775.	C	co	
412 verticillàta *W*	whorl-flower'd		△	or	3	jn n	B	Germany	1658	D	s l	Barr. ic. 199
413 índica *W*	Indian		△	or	3	my jl	B	India	1731.	D	co	Bot. mag. 395
414 Tenóru *Spr.*	Tenore's		△	or	2	my jn	B	Italy	1821	D	co	Sw. fl. gard. t. 26
415 verbascifólia *Bieb*	mullein-leaved		△	or	3	my jn	Y	Iberia	1823.	D	co	
416 odoráta *W en.*	sweet-scented		□	or	3	jl	W	Bagdad	1804	C	s l	
417 compréssa *Vahl.*	compressed		△	or	2	my jn	W	East	1822.	D	co	
418 móllis *Donn*	soft		△	or	2	jn jl	R	Siberia	1823	D	co	Jacq ecl. 4. t. 37
419 grandiflóra *W*	great-flowered		△	or	2	jn s	L B	S Europe	1616	D	co	Jacq. ecl. 4. t 36
420 crassifólia *Desf*	thick-leaved		△	or	2	jn jl		S Europe	1804	D	co	
421 praténsis *W*	meadow		△	or	4	my n	V	England	dr pa.	D	co	Eng. bot. 153
422 variegáta *W en*	variegated		△	or	2	jn au	P	Hungary	1814	D	co	
423 hæmatódes *W*	bloody-veined		△	or	2	jl au	P	Italy	1699.	D	co	Mor.h 3.t.14 f.15
424 viscósa *W*	clammy		△	or	1½	my jn	C	Italy	1773	C	p.l	Jac. ic 1. t. 5
425 dasérmas *W*	long-spiked		△	or	2	jl	W	Syria	1773	D	co	Ard spec. 1 t. 1
426 nútans *W*	nodding		△	or	3	jn au	V	Russia	1780	C	co	Bot mag. 2436
427 betonicæfólia *W*	betony-leaved		△	or	3	jn au	V	Russia	1804	C	co	
428 amplexicaúlis *W en*	stem-clasping		△	or	1½	jl s	B	Levant	1813	D	co	
429 austríaca *W.*	Austrian		△	or	1	jn jl	L s	Austria	1776	D	co	Jac aust. 2. t.112
430 syríaca *W.*	Syrian		□	or	1½	jl	W	Levant	1759	C	co	Bauh prod t.114
431 núbia *W*	Nubian		△	or	2	jn jl	B	Africa	1784	C	p l	Murray. 1778 t 3
432 virgáta *W*	long-branched		△	or	4	jl n	W	Armenia	1758	D	co	Jac. schön. l. t.37
433 campéstris *W en*	field		△	or	2	jn jl	B	Tauria	1813	D	co	
434 sylvéstris *W*	spotted-stalk'd		△	or	2	jn o	B	Germany	1759	D	co	Jac aus 3 t 212
435 nemorósa *W*	spear-leaved		△	or	3	jn s	B	Germany	1728	D	co	
436 pátula *W en.*	spreading		◯	or	3	my jl	Pk	Portugal	1805	C	s l	
437 tingitána *W*	Tangier		□	or	3	jl	W	Barbary	1796	C	s l	Riv mon t. 62
438 Sclárea *W*	common Clary		◯	cul	4	jl s	L B	Italy	1562	S	s l	Fl græc 1 t 25
439 spinósa *W*	thorny-calyx		◯	or	1	jn	W	Egypt	1789	C	s l	Jac ic 1 t 7
440 æthiopis *W*	woolly		◯	or	3	my jn	W	Austria	1570	C	s l	Jac aus 3. t 211
441 argéntea *W*	silvery		△	or	3	my jl	W	Crete	1759	D	s l	Fl græc. 1. t. 27
442 applanáta *W*	flattened		◯	or	1½	jn jl	W	Crete	1821	D	co	
443 Horminum *W*	annual clary		○	cul	1½	jn jl		S Europe	1596	S	co	Fl. græc 1. t. 20
α violácea	purple-topped		○	cul	1½	jn jl	P	... ..	...	S	co	
β rúbra	red-topped		○	cul	1½	jn jl	R	. ..	...	S	co	
444 víridis *W*	green-topped		○	or	1½	jl au	Pk	Italy	1759	S	co	Fl græc. 1. t. 19
445 truncáta *W en*	truncated		○	or	1½	jl au	Pk	S Europe	1800	S	co	
446 pyramidális *Pet*	pyramidal		△	or	6	my jn		Naples	1823.	D	co	
447 verbenáca *W*	wild-clary		△	w	2	jn o	V	Britain	pas	R	co	Eng bot. 154
448 oblongáta *Vahl*	oblongate		○	or	1½	jn o	B	... ..	1820	D	co	Jacq ecl. 2 t 14
449 triloba *W*	three-lobed		○	or	2	jn jl	R	S Europe	1596	C	co	11 græc. 1 t. 17
450 lyráta *W*	lyre-leaved		△	or	1	jn jl	L B	N Amer	1728	C	co	Mor 3 t.13 f 27
451 abyssínica *W*	Abyssinian		△	or	1½	jn jl	P	Africa	1775	S	s p	Jac ic 1 t. 6
452 nilótica *W*	Nile		○	or	1	jn au	B	Egypt	1780	C	l p	Jac vind 3 t 92
453 Forskóhlii *W*	Forskohl's		△	or	1½	jn au	Bk	Levant	1800	C	co	Bot mag 988
454 napifólia *W*	rape-leaved		△	or	2	jn jl	D P	Italy	1776	D	co	Jac vind. 2. t.152
455 aurita *W*	eared-leaved		□	or	2	my jn		C G H	1795	C	p l	
456 bicolor *W*	two-coloured		△	or	2	jn jl	V w	Barbary	1793	D	co	Bot mag 1774
457 Barrelièri *Ettl*	Barrelier's		△	or	3	ap my	B	Spain	1821	D	co	Ten. fl nap t. 2
458 laciniáta *W*	torn		△	or	2	ap my	B	.. .	1822	D	co	
459 runcináta *W*	rough-leaved		□	or	2	ap s	B	C G H	1774	C	p l	Jac schön 1 t. 8
460 polymórpha *Lk*	various		◯	or	1	my jl	B	Portugal	1821	C	co	Barr ic 220
461 clandestína *W*	cut-leaved		◯	or	1½	ap jl	B	Italy	1759	S	co	Fl gr 1 p.18.t 24
462 ceratophýlla *W*	horn-leaved		◯	or	1½	jl au	V	Persia	1600	C	s l	Plk al t 124 f 5
463 ceratophylloides *W*	branchy		◯	or	1½	jn au	V	Egypt	1771	C	s l	Ard. spec 2 t. 2
464 bracteáta *W*	long-bracted		△	or	3	jn jl	P	Russia	1821	D	co	Bot. mag 2320

63 COLLINSONIA *W* Collinsonia *Labiatæ, Sp* [illegible]

465 canadénsis *W*	nettle-leaved		△	or	3	au o	L B	N Amer	1735	D	p l	Hort. cliff. t. 5
β cordáta	*cordate*		△	or	3	au o	L B	N Amer	...	D	p l	
γ ovàta	*ovate*		△	or	3	au o	L B	N Amer	..	D	p l	
466 scabriúscula *W*	rough-stalked		△	or	2	jl s	R	E. Florida	1776	D	p l	



History, Use, Propagation, Culture,

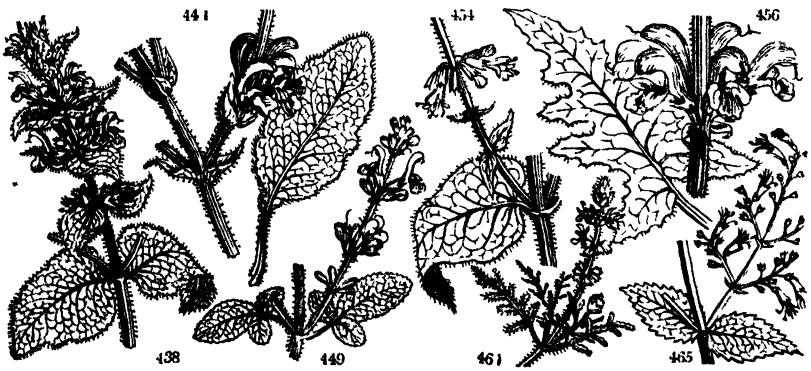
eve or clary The flowers of S glutinosa are used in Holland to give a flavor to the Rhenish wines S Sclarea has a very strong scent, and was formerly used in medicine A wine is made from the herb or flower, boiled with sugar, which has a flavor not unlike Frontignac S indica is a magnificent species, but rather tender in

406 Leaves radical obl. sub-cord. bluntly tooth · cauline tooth cren Whorls 6-fl. Fl horizon. a sing fl.-st. term.
407 Leaves stalked ovate lanceolate flat smooth beneath, Corolla and coloured calyx downy, Style exserted
408 Leaves lanceolate nearly entire with the stem woolly clammy
409 Villous viscid, Leaves ovate oblong toothed running down the stalk
410 Leaves cordate oblong crenated toothed eroded, Stem twiggy, Whorls remote, Helmet linear
411 Leaves cordate oblong lanceolate eroded crenated rugose hairy, Stamens shorter than corolla
412 Leaves cordate crenate toothed, Whorls nearly naked, Style lying on the lip of the corolla
413 Leaves cordate rather lobed at the side · the upper sessile, Whorls nearly naked very distant
414 Leaves sub-cordate oblong crenate naked on each side, Helmet pilose
415 Leaves cord ovate doubly serr rugose woolly, Upper whorls sess. Bract cord mucronate shorter than calyx
416 Leaves hoary on each side rep and uneq tooth low cord upp ov Fl in panic Style twice as long as helmet
417 Rather woolly, Leaves toothed · radical cordate-oblong, Bract roundish cordate unarmed the upper sessile
418 Leaves cordate ovate acute rugose doubly crenate smooth above pubescent beneath, Branches in bundles
419 Leaves cordate oblong crenate, Whorls many-flowered, Cal acute shorter than the bracte
420 Stem woolly, Leaves cord crenulate hoary beneath, Upper whorls dense sessile, Upper lip of cor abbreviate
421 Lvs. cord. obl. cren. or cut the upper stem clasping, Bract nearly as long as cal Helm visc long than lip
422 Lvs cord. obl rugose tooth cren cauline stalked, Spikes twiggy, Bract. short than cal. Hairs of cal. gland.
423 Leaves cordate ovate rugose tomentose, Cal hispid, Root tuberous
424 Villous viscid, Leaves cordate oblong rugose acutish crenulate, Bract cordate roundish acuminate
425 Leaves cordate oblong eroded, Leaf-stalks edged, Stam as long as corolla
426 Leaves obl. cordate, Stem simple without leaves, Racemes in flowers pendulous
427 Leaves cord. lanc. uneq. cren Stem 4-corn. Rac. comp term nearly naked cernuous, Bract coloured ciliate
428 Leaves cord. lanc. ½ stem embracing uneq cren Bract. cord acum shorter than the calyx, Flowers spiked
429 Leaves cordate oblong eroded sinuated, Stem nearly without leaves, Whorls very hairy, Stam very long
430 Leaves cordate toothed lower repand, Bract short acute, Cal tomentose
431 Leaves oblong sub-cordate unequal-sided rugose crenated with a little auricle at the base
432 Leaves oblong cordate rugose crenated, Hairs of the calyx and stem glandular at the end
433 Leaves cord obl. doubly cren somewhat repand hairy, Rac. twiggy, Bract shorter than cal Fl.-sts toment
434 Leaves cord. rugose biserr Bract coloured pointed shorter than the flower, Hairs of stem and calyx simple
435 Leaves cordate lanceolate equally serrate, Bract the length of calyx, Lower lip of corolla reflexed
436 Clammy, Radical leaves cordate toothed sinuated cauline sessile oblong, Bract as long as calyx
437 Leaves cordate oblong eroded toothed very rugose, Bract. cordate mucronate ciliated, Cal. spiny
438 Leaves rugose cordate obl serrate villous, Bract. coloured longer than calyx
439 Leaves oblong repand, Cal spiny, Bract cordate mucronate concave
440 Leaves oblong eroded with the whorls woolly, Bract recurved somewhat spiny
441 Leaves oblong toothed angular woolly, Upper whorls sterile, Bract. concave
442 Lvs sub-cord. obl. obtuse with spread teeth, Stem clammy with hairs, Bract. cord entire equal to spiny cal
443 Leaves obtuse crenated, Upper bract sterile large and coloured

444 Lvs. obt. obl equal cren stalk. · those next the fl stem-embrac the low whorls dist Cal of the fruit reflex
445 Leaves obl obt cren stalk Floral stem-emb whorls 2 approxim the term one having 6 fl Cal. of fruit reflexed
446 Lvs cord. acum plait. erod cren hen white with hairs, Bract col cord acutelong than cal Sp term conic.
447 Leaves serrate sinuated smoothish, Corolla shorter than calyx
448 Leaves lanceolate oblong obtuse smooth, coarsely equally bluntly serrated, Cor narrower than cal
449 Tomentose, Lvs stalked rugose sub 3-lobed the intermediate lobe longer and obl · the lateral obt ovate
450 Radical leaves lyrate toothed, Helmet very short, Stem with very few leaves hairy downwards
451 Lower leaves lyrate upper cordate, Flowers whorled, Cal mucronate ciliated
452 Leaves sinuate angular crenate toothed, Cal teeth spiny with the angles and edge of the orifice ciliated
453 Leaves lyrate auricled, Stem nearly without leaves, Helmet bifid
454 Lvs cord. with spread. teeth the low hastat and lyr Whorls nearly naked, Up lip of cor short. cord. edged
455 Villous, Leaves ovate toothed auricled, Flowers in spiked whorls
456 Radic. lvs cord. palm. or ent. of the stem arrow-head lanc. uneq tooth Bract. reflex short. than nodd. cal.
457 Leaves hastate lanceolate unequally serrated, Stem leafy erect
458 Leaves pinnatifid rugose Segm lin unequal crenated obt. Whorls many-fl Bract. roundish cordate acute
459 Scabrous, Leaves pinnatifid backwards toothed, Flowers in spiked whorls
460 Lower lvs. stalked sinuated pinnatifid rugose smoothish the upper sessile cord. Bract short. than flowers
461 Leaves serrated pinnatifid very rugose smooth, Spike obtuse, Cor twice as long as calyx
462 Leaves very rugose woolly the radical bipinnatifid cauline pinnatifid, Upper whorls sterile
463 Leaves pinnatifid rugose stalked, Whorls all fertile and very hairy
464 Leaves pinnated hairy, Segments of calyx subulate, Bract. leafy longer than cal Whorls many-flowered

465 Leaves ovate and stem smooth

466 Leaves sub-cordate a little hairy, Stem roughish

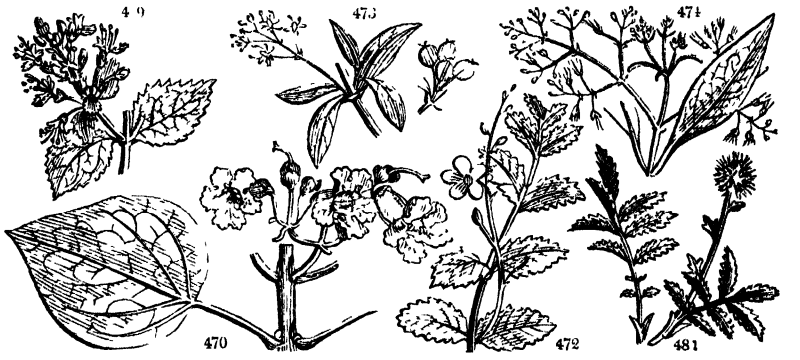


and Miscellaneous Particulars

severe winters S. formosa and S. splendens are very ornamental All the species thrive in light soil, somewhat rich, and are readily propagated by seeds, cuttings, and dividing the roots.

63. *Collinsonia.* In honor of Peter Collinson, F R S, a most distinguished promoter of botany, and a cor-

467 ovális *Ph.*	oval-leaved	♃	△	or	2	au	Y	Carolina	1812.	D	p.l	
468 tuberósa *Ph*	tuberous	♃	△	or	2	au	Y	Carolina	1806.	R	p.l	
469 anisáta *B M.*	anise-scented	♃	△	or	3	o	Y	Carolina	1806.	D	p l	Bot. mag. 1213
†64 CATALPA *Juss.* CATALPA.						*Bignoniaceæ. Sp* 2						
470 syringifólia *H K*	common	♣		or	20	jn.au	W	N Amer.	1726.	S	p.l	Bot. mag. 1094
471 longissima *H. K*	wave-leaved	♣	▭	or	20			W. Indies	1777.	L	s.p	Plum. ic. t. 57
*65 GHI'NIA *W.*	GHINIA.					*Verbenaceæ. Sp* 1—2						
§472 spinósa *W*	thorny-fruited		⊡	cu	2	au	Pl	W. Indies	1733.	S	s.l	Bnks. r. hous. t.2
*66. FONTANE'SIA *W*	FONTANESIA					*Jasmineæ Sp* 1—2.						
473 phillyræoides *W*	phillyrea-leav.	♣	⎵	or	12	au	Y	Syria	1787.	C	s l	Lab. syr. 1. t. 1
67. LINOCIE'RA. *B P.*	LINOCIERA.					*Oleinæ Sp* 1—7						
474 compácta *B P*	Caribean	♣	▭	or			W	W Indies	1793.	C	l.s.p	Jac. col. 2. t.6. f.1
*68 ANCI'STRUM *L*	ANCISTRUM					*Sanguisorbeæ Sp* 8—15.						
§475 latebrósum *Vahl*	hairy	♿	△	cu	1	ap jn	G	C G H.	1774.	C	l.p.s	
§476 pinnatífidum *Fl per*	pinnatifid	♿	△	cu	½	my jn	G	Chile	1822	D	l p s	Fl. per 1. t. 104
§477 ovalifólium *Vahl*	creeping	✱	△	cu	1	my jn	G	Peru	1802.	D	l p.s	
§478 adscéndens *Vahl*	ascending	♿	△	cu	1	my jn	G	Magellan	1822.	D	l p s	
§479 sanguisórbæ *Vahl*	Burnet-leaved	♿	△	cu	1	jn	G	N Zeal.	1796.	D	l p s	Lam ill. t. 12. f.1
§480 lúcidum *Vahl*	shining	♿	△	cu	½	my jn	G	Falkland	1777	D	l p s	Lin. ill 1. t.22. f.3
§481 argénteum *Fl per.*	silky	♿	△	cu	2	my jn	G	Chile	1822	D	l p s	Fl. per. 1. t. 103
§482 lævigátum *H K*	smooth	♿	△	cu	½	jn au	G	Magellan	1790.	D	l.p.s	
69 O'RNUS *P. S*	FLOWERING ASH					*Oleinæ Sp* 3.						
483 europæ'a *P S*	European	♣		or	30	my jn	W	Italy	1810	G	co	Fl græc. 1 t 4
484 rotundifólia *P S*	manna	♣		or	30	ap	W	Italy	1697	G	co	Wild bm t.2 f 1
485 floribúnda *Wall*	many-flowered	♣	⎵	or	30		W	Nepal	1822.	G	co	
70. MORI'NA *W*	MORINA					*Dipsaceæ Sp* 1.						
486 pérsica *W*	Persian	♿	△	or	3	jl au	R w	Persia	1740.	C	s p	Fl. græc. 1. t. 28
71 CIRCÆ'A *W*	ENCHANTER'S NIGHTSHADE.					*Onagrariæ Sp* 3						
487 lutetiána *W*	common	♃	△	or	1	jn au	R	Britain	sha pl	D	co	Eng. bot. 1056
488 intermédia	intermediate	♃	△	cr	½	jn au	R	Europe	1821	D	co	Fl. dan t. 256
489 alpina *W*	mountain	♃	△	or	¼	jn s	R	Britain	moun	D	co	Eng bot. 1057
72 FE'DIA *D C*	FEDIA					*Valerianeæ Sp* 1—2.						
490 cornucópiæ *D C*	red		○	or	1	jn jl	R	S Europe	1796.	S	co	Fl græc. t 32
†73 PIMELE'A *B P*	PIMELEA					*Thymelæ Sp* 4—30						
491 linifólia *B P*	flax-leaved	♣	⎵	or	2	f au	W	N S W	1793.	C	s p	Bot. mag 891
492 rósea *B P*	rose-coloured	♣	⎵	or	2	mr s	Pk	N Holl	1800	C	s p	Bot mag. 1458
493 drupácea *Br*	fleshy-fruited	♣	⎵	or	2	my	W	N Holl.	1817	C	s p	Bot cab 540
494 paucifióra *B P*	few-flowered	♣	⎵	or	3	my	W	V Di. L.	1812	C	l.p	Bot. cab. 179
74 CLA'DIUM *Schr*	CLADIUM					*Cyperaceæ Sp* 1—14						
495 germánicum	prickly-sedge	⁂	△	w	3	jl au	Ap	Britain	mar	D	m s	Eng. bot 950
75 GUNNE'RA *W*	GUNNERA					*Urticeæ Sp* 1—3						
496 perpénsa *W*	common	♿	⎵	cu	1½	jl.au	P	C G H	1688.	D	m.s	Bot. mag 2376



History, Use, Propagation, Culture,

respondent of Linnæus: he died in 1768 *Horse-weed*, Amer The species are American plants of easy cultivation

64 *Catalpa* The Indian name *Die Trompetenblume*, Ger C syringifolia, *H K* is the Bignonia catalpa, *L*, a low-spreading, rather singular looking tree, with succulent shoots easily injured by winds or severe frosts. It requires a sheltered situation and plenty of room The leaves are large and come out late, the flowers are white, shewy, and are succeeded by long pods, but they seldom appear in this climate. One of the oldest catalpas in England is in Gray's Inn gardens, said to have been planted there by Lord Bacon C longissima is an elegant upright tree, known in the West Indies by the name of French oak, and the French call it *chêne-noir*

65 *Ghinia* In honor of an Italian botanist, named Ghini, who founded several botanic gardens

66 *Fontanesia.* So named by Billardiére, in honor of M Desfontaines, the excellent professor of botany at the Jardin du roi at Paris It is rather a tender shrub, requiring shelter in severe weather It grows in common garden soil, and is increased by layers or by cuttings in sand under a hand-glass

67 *Lenociera* Named after Geoffroi Linocier, a French physician A tropical genus of shrubby plants, propagated by cuttings, and of little beauty in a cultivated state

68 *Ancistrum* From ἀνκιστρον, a hook Its calyx is terminated by little hooks These are small herbaceous plants with pretty foliage, but no beauty in their flowers They are only cultivated as objects of curiosity, and are seldom seen.

69 *Ornus* In Greek, ορεινος, from ορος, a mountain The tree grows on mountains. *La Frene à fleurs*, Fr. *Die Blühende Esche*, Ger, and *Frassino florido*, Ital O europæa, *P S* is the Fraxinus ornus, *L* O. rotundifolia, or the manna ash, abounds in the skirts of the mountains in Calabria From the middle of June to the end of July the manna gatherers make an incision across the bole of the tree, which they deepen the second day, inserting a maple leaf, so as to form a sort of cup to receive the gum as it distils from the incision. Sometimes bits of reed or twigs are applied, on which the manna oozes out, and drying with the sun, forms tubular

467 Leaves oblong acute at both ends, Stem smooth, Cal teeth very short, Flowers terminal naked
468 Leaves sub-rhomboidal ovate, Cal teeth bristly longer than the tube, Panicle leafy, Stem much branched
469 Leaves ovate cordate rugose, Flowers tetrandrous

470 Leaves cordate flat
471 Leaves oblong undulated

472 Fruit with 4 spines, Leaves smooth

473 Leaves ovate-oblong pointed at each end, Flowers racemose

474 Racemes compound and decompound, Flowers sessile in threes, Petals subulate

475 Leaflets oblong cut, Flower-stalks like scapes, Spikes elongated prickly, Stems half under ground
476 Leaves linear-lanceol. sub-pinnatifid hairy beneath, Spikes cylindrical, Stem erect
477 Leaves oblong and a little wedge-shaped serrated silky beneath, Spikes globose, Stems creeping
478 Leaflets oblong and obovate serrated smoothish, Spikes round, Stem decumbent
479 Leaves remote, Leaflets wedge-shaped serrated silky beneath, Spikes globose, Stem decumbent
480 Leaves 3-5-parted, Segments linear-villous beneath, Spikes oblong, Stem half under ground
481 Leaflets ovate-oblong serrated silky beneath, Spikes globose, Stem creeping
482 Leaflets oval crenate and cut smooth above hoary beneath, Spike terminal cylindrical, Stem decumbent

483 Leaves lanceolate attenuated stalked serrated
484 Leaves roundish acute doubly serrated nearly sessile
485 Leaflets oblong tapering acuminate acutely and unequally serrated, Male flowers with a corolla

486 A plant like the Acanthus Flowers in whorls

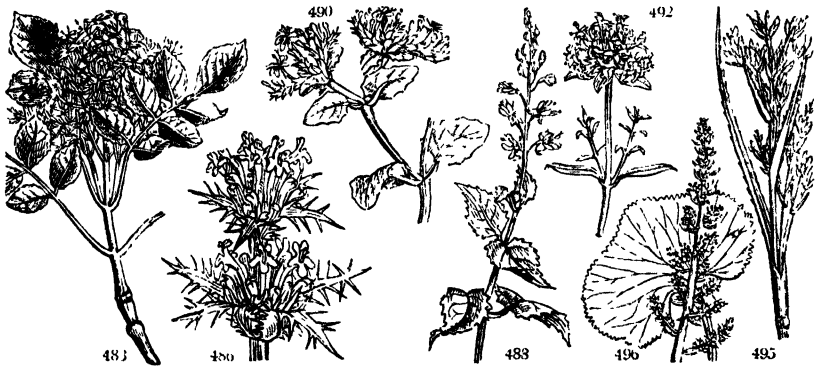
487 Stem pubescent erect, Leaves ovate acute denticulate sub-pubescent
488 Stem erect simple nearly smooth, Leaves cordate with spreading teeth acuminate
489 Stem much branched erect smooth, Leaves cordate smooth shining

490 Upper leaves toothed and angular, Flowers in heads

491 Involl 4-lvd leafl broad ov. smth on both sides much short than the head, Lvs lin.-stalk 1-nerv Cor silky
492 Involl 4-lvd leafl lanceol ovate acute smooth on both sides, Leaves lanceol lin Cor hairy on its lower half
493 Leaves oval-obl. flat pubesc beneath, Floral lvs. longer than the head, Cor cylind. deciduous, Fruit berried
494 Lvs. smooth on both sides lin lanc. twice as narr. as the floral lvs longer than the few-fl head, Cor smooth

495 Culm round, Corymbs dense, Panicle contracted, Flowers in bunches

496 Leaves uniform toothed shorter than the scape in seed, Scape and leafstalks smooth



and Miscellaneous Particulars

pieces called manna in Cannali, which being reckoned more pure, sells higher by one-third than the manna in Tarzeti Manna is a concrete mucilaginous juice, mild, and slightly nauseous. It seems to have no relation to that which nourished the Hebrews in the desert, being, as Rozier observes (Dict. d'Agr.), much more likely to have purged than nourished them The Fraxinus virgata, *P S* also affords manna, but from no other species of ornus can it be procured The Ornus floribunda has lately been discovered in Nepal, where it is called kanga and tahasee

70 *Morina* In memory of Lewis Morin, a French botanist, and son of Peter Morin, a florist celebrated in the 17th century. This plant is of very rare occurrence. It is not unlike the common acanthus, but more beautiful. Propagated by seeds

71 *Circæa* Poetically named after the enchantress Circe The genus grows in damp shady places where shrubs fit for incantations may be supposed to be found. The Greeks had a plant named circæa. All the species are easily cultivated, and are curious on account of their singular flowers C lutetiana has been found in Nepal.

72 *Fedia* A name of Adanson's, which, like many others of the same author, has probably no meaning The genus has been very properly distinguished from Valeriana by Decandolle, as well as from Valerianella, with which it has recently been again confounded. A weed-like annual is the only species yet in our gardens

73 *Pimelea* From πιμελη, fat, but if so, it should be written Pimeleæa. A real and extensive genus of plants, natives of the southern hemisphere. Many of the species are from N. Holland, and are chiefly known by the brief descriptions of Mr R. Brown

74 *Cladium* From κλαδος, a branch or twig A tall sedge-like plant, referred by Linnæus and his school to Schœnus. C. germanicum is the only European species, it is the Schœnus mariscus of English botany The others are chiefly from N Holland.

75. *Gunnera.* After Ernest Gunner, bishop of Norway, of which country he published a Flora A singular plant, cultivated merely as an object of curiosity. It likes a moist peat soil, and the temperature of a cool greenhouse.

DIGYNIA.

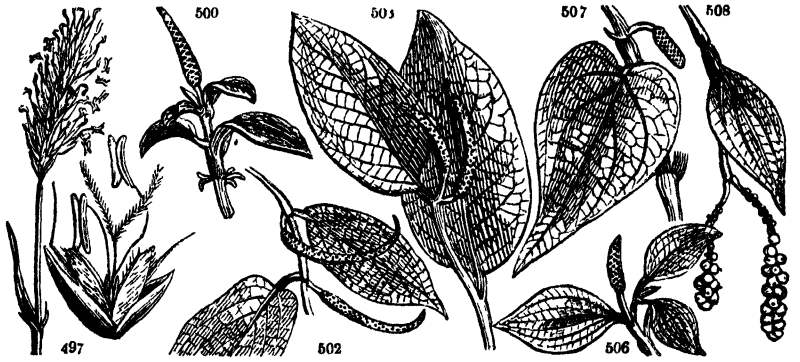
76. ANTHOXANTHUM *W.* SPRING-GRASS. *Gramineæ Sp 3—6.*

497	odorátum *W*	sweet-scented	△	ag	1	my	Ap	Britain	me. pa.	S	h.l	Eng. bot. 647
498	amárum *Brot.*	bitter	△	cu	1	jl	Ap	Morocco	1810	S	co	
499	ovátum *Lag*	ovate	○	cu	1	jl	Ap	Spain	1821.	S	co	

TRIGYNIA.

*77 PIPER. *W* PEPPER *Piperaceæ. Sp. 44—250.*

§500	coriáceum *Vahl.*	leathery		cu	4	my jn	Ap	E. Indies	1815.	C	r m	Bot. cab. 128
501	nitidum *W*	shining-leaved		cu	3	my jn	Ap	Jamaica	1793.	C	r.m	
502	adúncum *W.*	hooked		cu	5	my	Ap	Jamaica	1748.	C	r m	Jac. ic. 2. t. 210
503	mácrophýllum *W.*	broad-leaved		cu	12	...	Ap	W Indies	1800	C	r m	Slo jam 88. f. 1
504	geniculátum *W.*	swollen-joint'd		cu	2	...	Ap	Jamaica	1823.	C	r.m	
505	hispidum *W*	hairy-leaved		cu	6	jl	Ap	Jamaica	1793	C	r m	
506	Amalágo *W.*	rough-leaved		cu	6	jl.au	Ap	Jamaica	1759	C	r m	Slo.hist.1 t.87.f.1
507	Bétle *W*	betle		clt			Ap	E. Indies	1804.	C	r m	Rheede. 7. t. 15
508	nigrum *W.*	black		clt	6		Ap	E. Indies	1790.	C	r m	Lam ill. 79. t. 23
§509	discolor *W.*	discoloured		cu	4	jl au	Ap	W Indies	1821	C	r.m	Bot. cab. 610
510	reticulátum *W*	netted		cu	6	au	Ap	W. Indies	1748.	C	r m	Plumier 57. t.75
511	decumánum *W.*	the great		cu	6		Ap	Carthag	1768	C	r m	Jacq ic. 2. t. 215
512	Siriból *W*	Siriboa		cu	6		Ap	E. Indies	1768.	C	r m	Rumph. 5 t. 117
513	lóngum *P S*	long		clt	6	jn	Ap	E. Indies	1788.	C	r m	Rump 5. t.116.f.2
514	peltátum *W.*	peltated		cu	2		Ap	W. Indies	1748.	C	r m	Plumier. 56. t. 74
515	umbellátum *W*	umbelled	○	cu	3	my jl	Ap	W Indies	1748.	C	l p	Plumier 53. t. 73
516	laurifólium *Mill*	laurel-leaved	○	cu	10		Ap	W Indies	1768.	C	r m	
517	tomentósum *Mill*	downy		cu	14	my jn	Ap	W Indies	1768	C	r m	
518	glábrum *Mill*	smooth		cu	10		Ap	Campeac	1768.	C	r m	
519	racemósum *Mill*	great racemose		cu	10		Ap	Campeac	1768.	C	r m	
§520	brachyphýllum *W*	short-leaved		cu	½		Ap	S Amer	1818	C	r m	
§521	amplexicáule *W*	stem-clasping		cu	1	jn s	Ap	W. Indies	1793.	C	r m	
§522	magnoliæfólium *Vá*	magnolia-lvd		cu	1½	ja mr	Ap	W Indies	1793.	C	r m	Jac. ic 2. t. 213
§523	obtusifólium *W*	obtuse-leaved		cu	1	ap jl	Ap	W Indies	1739.	C	r m	Tr ehrt. 54. t 96
§524	cuneifólium *W. en*	wedge-leaved		cu	1	jn jl	Ap	Caraccas	1809.	C	r m	Jac. ic 2 t 214
§525	alátum *P S.*	winged		cu	1	mr ap	Ap	S Amer.	1812	C	r m	Fl per 31 t 48
§526	acuminátum *W en*	acuminate		cu	1	jn jl	Ap	W Indies	1812	C	r m	Bot. mag. 1882
§527	distáchyon *P S*	two-rowed		cu	1½	jn jl	Ap	S Amer	1793.	C	r m	Plumier 51. t. 67
§528	maculósum *W*	spot-stalked		cu		s	Ap	St Domin	1790	C	r m	Plumier 60. t. 66
§529	pellúcidum *W*	pellucid	○	cu	¼	ap s	Ap	S. Amer	1748	C	r.m	Plumier. 54 t. 72
§530	pubéscens *H S*	pubescent		cu	1	jl o	Ap	S Amer.	1809.	C	r m	
§531	húmile *Vahl*	low		cu	¼	jn jl	Ap	W. Indies	1768.	C	r m	
§532	trifólium *P S*	three-leaved		cu	½	jn au	Ap	S Amer	1802	C	r m	Plumier 52 t. 68
§533	pulchéllum *W*	small-leaved		cu	¼	jl o	Ap	Jamaica	1778	C	r m	Bot cab. 574
§534	pereskiæfólium *W*	cactus-leaved		cu	1	my jn	Ap	S Amer.	1820	C	r m	Hook. ex fl 67
§535	blándum *W*	villous		cu	1½	my n	Ap	Caraccas	1802.	C	r m	Hook. ex fl 21
§536	rubricaúle *Nees*	red-stemmed		cu	1	my jn	Ap	.....	1822	C	r m	Hor. phys br t 8
§537	polystáchion *W*	many-spiked		cu	¼	jn jl	Ap	Jamaica	1775	C	r m	Hook ex fl 23
§538	quadrifólium *W*	four-leaved		cu	½	jn jl	Ap	S. Amer.	1818	C	r m	Hook ex fl 22
§539	inæqualifólium	unequal-leaved		or	1	jl au	Ap	Peru	1800	C	r m	Fl. per 1 t. 46. a
§540	stellátum *P S*	starry		cu	1	my jl	Ap	Jamaica	1802	C	r.m	Jac vind. 2 t.217
§541	incánum *Haw*	great-downy		cu	1	f	Ap	Brazil	1815.	C	r m	Bot. cab. 503
§542	subrotúndum *Haw*	sm clusia-lvd		cu	1	f	Ap	.....	1812	C	r m	
§543	rubéllum *Haw*	red		cu	½	mr ap	Ap	W Indies	1820	C	r m	Hook ex fl 59



History, Use, Propagation, Culture,

76 *Anthoxanthum* From ἄνθος, a flower, and ξανθὸς, yellow, the spikes being yellow This grass has the valves of the calyx sprinkled over with minute yellow dots, similar to those of black-currant berries, hence, possibly, its peculiar scent. It is this grass which gives the peculiar smell to meadow-hay, that made from ray-grass or other sown-grasses having no such odour It is one of the earliest flowering grasses, grows on any soil, but prefers one moderately dry Stillingfleet recommends its being sown with a view to improve the flavor of mutton. But its seeds are collected with so much difficulty that they are too costly to be sown in any great quantity

77 *Piper* Undoubtedly from pippul, the Bengalese name of the long-pepper, notwithstanding the learned derivations of authors from πίπτω, πίπτει, to digest. The plants of this genus are mostly succulent, perennial, herbaceous, or frutescent, often scandent as in that species which furnishes the pepper of commerce, dichotomous and jointed P nigrum furnishes the pepper of commerce It grows wild in the East Indies, and in Cochin China, and is cultivated in Malacca, Java, and especially in Sumatra The pepper or seed is distinguished in the shops as black or white, the former is the dried berry in its natural state, the latter, the berry deprived of its skin, by steeping about a fortnight in water, and then drying in the sun Black pepper is the hottest and strongest. As a spice, pepper differs from most others by its pungency residing not in the volatile parts or essential oil, but in a fixed substance, which does not rise in the heat of boiling water The culture of the plant in the pepper farms of the East very much resembles that of the hop in England Holes are made in prepared ground at from six to twelve feet apart every way, in these from two to six cuttings of the pepper vines are

DIGYNIA.

497 Spike ovate oblong, Flowers on short stalks longer than the beard spreading, Outer glumes ciliated
498 Panicle spike-shaped sub-lanceolate, Leaves smooth glaucous green, Nect. adnate to the seed, Cor. loose
499 Spike ovate dense, Sheaths smooth, Leaves ciliated

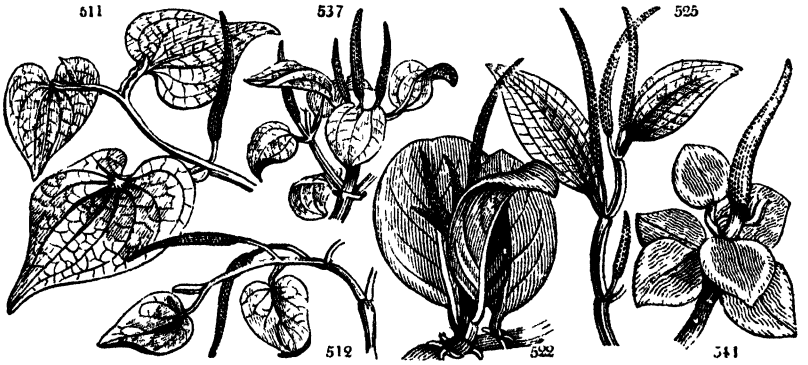
TRIGYNIA.

Shrubby.

500 Leaves broad-lanceolate pointed coriaceous, Berries stalked
501 Lvs elliptic lanc attenuated very smooth dotted shining above at the base unequal, Spikes recurved at tips
502 Leaves ovate oblong or elliptic acuminate unequal at the base rough on each side, Spikes axillary uncinate
503 Leaves ovate oblong many-nerved acuminate smooth unequal at base, Leaf stalks margined, Joints equal
504 Leaves elliptic oblong acuminate many-nerved unequal at the base, Joints knotty
505 Branches round hairy, Leaves ovate oblong above rough veins beneath and stalks hispid
506 Leaves ovate oblong 5-nerved rugose on each side smooth equal at the base
507 Leaves ovate attenuated 7-nerved, Stalks 2-toothed
508 Leaves broad ovate acuminate 7-nerved coriaceous smooth, Joints knotted
509 Leaves broad cordate 5-nerved at the base unequal, beneath discoloured, Spikes lax with remote flowers
510 Leaves cordate acuminate 5-9-nerved very smooth equal to the leaf stalks
511 Leaves cordate acuminate 9-11-nerved veiny rather villous, Leaf stalks partly winged
512 Leaves cordate oblong acuminate about 7-nerved unequal at the base
513 Lower leaves cordate stalked 7-nerved upper cordate oblong sessile 5-nerved
514 Leaves peltate round cordate many-nerved obtuse sub-repand, Spikes in umbels
515 Leaves roundish cordate acute many-nerved, Nerves and stalks villous, Spikes in umbels
516 Leaves lanceolate ovate nerved, Spikes short
517 Leaves ovate lanceolate tomentose, Stem arborescent
518 Leaves ovate lanceolate acuminate smooth 3-nerved
519 Leaves lanceolate ovate rugose, Nerves alternate

Stem fleshy

520 Leaves ovate acute obsoletely 3-nerv rather folded together at the base, Stalks ciliated, Spikes term solitary
521 Leaves stem-clasping broad lanceolate narrowed downwards many-nerved, Stem simple erect
522 Leaves obovate very obtuse, Flower-stalks terminal branched, Stem and branches rooting
523 Leaves obovate nearly retuse edged with red, Spike terminal solitary, Stem decumbent rooting
524 Leaves wedge-shaped about 7-nerved, Spikes terminal conjugate, Stem rooting nearly erect
525 Leaves oblong lanceolate attenuated 5-nerved, Spikes axillary, solitary, the terminal in pairs, Stem winged
526 Leaves lanceolate ovate 5-nerved acute at each end, Spikes terminal 2 or 3 together, Stem nearly erect
527 Leaves ovate acuminate 5-nerved, Spikes conjugate erect, Stem branching rooting
528 Leaves peltate cordate ovate acute, Stem creeping
529 Leaves cordate acute, Spikes lateral and terminal, Stem procumbent
530 Leaves oblong nerveless opposite spikes axillary solitary, Stem pubescent upright
531 Leaves oblong acute nerveless opposite with the erect stem villous
532 Leaves ternate roundish, Stem creeping
533 Leaves 4 together sub-sessile oblong nerveless, Spikes terminal, Stem erect
534 Leaves 3 and 4 together oblong 3-nerved smooth coriaceous, Spikes terminal solitary
535 Leaves 3 and 4 together elliptic lanceolate 3-nerved with the upright stems villous
536 St erect round smth Lvs 4-6 togeth ses lanc. atten at base 3-nerv very smth Sp ter very long sol or double
537 Leaves 3 and 4 together roundish rhomboidal stalked 3-nerved pubescent, Branches erect
538 Leaves 4 together wedge-shaped emarginate sub-sessile, Spikes solitary, Stem erect
539 Very fragrant, Leaves 4, 5, and 6 together sub-sessile reflexed sub-emarginate, Spikes terminal about 4
540 Leaves 3 and 5 together oblong acuminate 3-nerved smooth, Stem erect
541 Hoary with down, Leaves alternate thick round-ovate with a small blunt point, very cordate at the base
542 Leaves obovate rounded stalked very thick green naked
543 Leaves about 4 together roundish convex beneath and coloured, Spikes terminal and axillary sub-solitary



and Miscellaneous Particulars

planted, and afterwards staked with any rough barked wood, on which the plants climb and attach themselves much in the manner of our five-leaved ivy (Ampelopsis). In Sumatra, Marsden informs us (Hist. 107), a tree called the chinkareen is planted for the support of the pepper plant, as the common maple and flowering ash is for the vine in Italy. The shoots bear in the third year, the flowers appear in June, and the berries are ripe, and of a blood-red in September The shoots are then cut down to the ground, and the berries gathered, dried in the sun, and sorted In three or four years more the shoots have attained full growth, and another crop is ready

P. amalago, longum, and various other species afford berries differing very little in quality from those of P nigrum, and sometimes mixed with, or substituted for them.

P betle affords the betel leaf of the southern Asiatics, which serves to enclose a few slices of the areca nut (thence commonly called the betle-nut), and a little shell lime. This, the inhabitants of those countries chew to sweeten the breath, strengthen the stomach, and ward off the calls of hunger, as the European working classes do tobacco It is deemed the extreme of unpoliteness in the east to speak to a superior without a *quid* of betel in the mouth. The teeth of the men in Malabar are ruined by it; but the women preserve theirs to an old age, by staining them black with antimony Such is the consumption of betel in the east, that it occasions a branch of commerce nearly as extensive as that of tobacco in the west.

All the species of pepper introduced in our stoves grow freely in loam and peat, require but little water, and are readily propagated by cuttings



Class III. — TRIANDRIA. 3 Stamens.

This class, which is larger than the two preceding, contains most of the genera of three considerable and very natural orders, the Irideæ, Cyperaceæ, and Gramineæ. The first are chiefly bulbous-rooted sword-leaved plants, with brilliant but transient flowers, the second, sedgy grass-like plants, more curious than useful; and the third, the proper grasses, an order which contributes more extensively and effectually to the support of man and domestic animals than any other, and, unless we except Lolium temulentum, containing no poisonous plant The genera of the grasses, Sir J. E. Smith observes, are not easily defined Schreber and Dr Host among the Germans, and Stillingfleet and Curtis, and more recently, Mr R. Brown, in this country, have paid much attention to the order, but it is among the French that the greatest improvements have been made in the arrangement and distribution of the genera The principal graminologists in that country have been Messrs Desvaux, Palisot de Beauvois, and Kunth, each of whom has divided the Linnæan genera into many others, the greater part of which have been admitted by other botanists, and are consequently adopted here It must, however, be confessed, that if much has been done in remodelling the grasses, yet more remains to be effected, and that much more perspicuity and clearness of definition will be required before their arrangement can be said even to approach perfection In describing the essential characters, the phraseology of the continental botanists has been adopted This not being very familiar to readers in this country, the following explanation of terms may be useful.

The parts here called *Glumæ* are the *Calyx* of Linnæus
Paleæ . . . *Corolla*
Scale . *Nectary*

The terms calyx and corolla applied to the floral envelopes of grasses are improper, as they are not analogous to those organs in other plants, but are rather to be considered as a form of Bracteæ, as are also the inner scales, called Nectarium by Linnæus It has been considered by some writers, proper to place all the grasses in Triandria, without reference to the number of their stamens, but this is manifestly improper, as the whole merit of the artificial system depends upon its principles being closely followed The grasses not in this class are to be found in Monandria, Diandria, Hexandria, and Polygamia The grasses, in an œconomical point of view, have been scientifically experimented on by Sir H. Davy, and Mr Sinclair, the duke of Bedford's gardener at Woburn

Galaxia and Ferraria, which Persoon has placed in this class, we have, with Willdenow, placed in Monadelphia. Tigridia will also be found there The following plants are Triandrous, but as they belong to very natural genera, botanists have deemed it better not to separate them

MONOGYNIA Narcissus triandrus Juncus conglomeratus and effusus Rivina brasiliensis, and some species of Amaranthus, &c Galium trifidum, some Asperulas, Melothria, Laurus triandra, Fagara spinosa and acuminata, Hirtella triandra, Tradescantia multiflora.

DIGYNIA Tripsacum hermaphroditum, some species of Ehrharta, &c

TRIGYNIA Tillæa muscosa, Elatine triandra, Stellaria media, some species of Xanthoxylum, Triplaris americana, &c

Order 1. MONOGYNIA  3 Stamens 1 Style

1 *Flowers with Calyx and Corolla distinct, or with a trifid Corolla only*

78 *Valeriana* Cal very small, finally enlarged into a feathery pappus. Corolla monopetalous, 5-lobed, regular, gibbous at the base Capsule 1-celled

79. *Patrinia* Cal very small, finally enlarged into an irregularly and obsoletely toothed rim Corolla monopetalous, 5-lobed, regular, gibbous at the base Capsule 3-celled, supported on one side by an oval membranous bractea Stamens variable (3 or 5)

80 *Valerianella* Cal very small, finally becoming a straight rim Cor monopetalous 5-fid, regular Capsule 3-celled

81 *Calymenia* Cal 5-fid campanulate Cor funnel-shaped Nut 1-seeded, surrounded by the enlarged calyx

82 *Loeflingia* Cal. 5-leaved, the leaves 2-toothed at the base Cor of 5 petals, which are very minute and connivent Stigma 3-ple Caps 1-celled, 3-valved, many-seeded

83. *Hippocratea* Cal 5-leaved, very small Pet. 5 dilated at the base, hooded at the end Nut fleshy, bearing the stamens. Caps 3, compressed, 2-valved, opening in the middle, 1-celled, with 2-5 compressed winged seeds

84 *Cneorum.* Cal. 3-4-toothed, persistent, small Pet. 3-4 equal. Stigma 3-fid. Drupes 3 or 4 clustered, dry

85 *Comocladia.* Cal. 5-parted Pet 3, larger than the calyx Drupe with 3 spots at the end, and a membranous 1-seeded nut (Stamens and petals vary to 4)

86. *Xyris* Cal 3-valved, cartilaginous, clustered in a head Cor 3-petaled, equal. Caps. 1-3-celled, 3-valved. Stigma 3-fid.

87. *Callisia* Calyx 3-leaved Petals 3. Anthers double Capsule superior, 2-celled, 2-seeded, compressed. Stigmas 3, finely divided

88 *Commelina.* Cal. 3-leaved Pet. 3 Filaments 3 or 4-sterile, furnished with crossing glands Caps. 2-3-celled. Seeds fixed to the valves

89 *Ancilema* Like Commelina, but no involucrum Stamens 6. Anthers 3, sometimes 2-4, dissimilar.

90. *Cartonema.* Cor persistent the 3 outer leaves calycine Stamens persistent, beardless Seeds 2

2 *Flowers with a 5-parted Calyx, and no Corolla.*

91 *Ortegia* Cal. 5-leaved Stigma headed. Caps 1-celled, 3-valved at the end Seeds many, affixed to the bottom of the capsule Stigma 1-3

92 *Polycnemum* Cal. 5-leaved Seed 1, in an utriculus

3. *Flowers 6-parted, coloured the Calyx and Corolla not distinct*

93 *Crocus.* Spatha usually 2-valved Flower funnel-shaped, regular · the outer segments largest. Tube very long, partly under ground. Stigma deeply trifid, with convolute segments

94 *Witsenia* Flower tubular, with a 6-parted limb Stigma slightly trifid or emarginate. Caps 3-celled, many seeded.

95. *Ixia.* Spatha 2-valved Flower with a slender tube and regular limb. Stigmas 3, narrow, recurved. Caps. globose, ovate.

96. *Trichonema.* Spatha 2-valved Flower with a very short tube and an equal regular limb Filaments pubescent Stigmas 3, 2-parted

97. *Geissorhiza* Spathia 2-valved Flower tubular, with a 6-parted spreading regular limb. Style inclined. Caps. oval, 3-cornered.

98. *Hesperantha.* Spatha 2-valved Flower tubular, with a 6-parted regular limb Stigmas 3, divided as far down as the tube Caps oblong 3-cornered.

99. *Sparaxis.* Spatha 2-valved, scarious, membranous, torn at the end. Flower tubular. Stigmas 3, recurved. Caps. oblong, globose.
100. *Tritonia.* Spatha 2-valved. Flower tubular, with a 6-parted nearly regular limb. Stigmas 3, spreading. Seeds neither winged nor berried.
101. *Watsonia.* Spatha 2-valved. Flower tubular, with a 6-parted limb. Stigmas 3, filiform, 2-parted, with recurved segments. Caps. cartilaginous, many-seeded
102. *Babiana.* Spatha 2-valved, the inner valve 2-parted. Flower tubular, with a 6-parted limb. Stigmas 3, spreading. Seeds berried
103. *Lapeyrousia.* Flower hypocrateriform Tube longer than the 6-parted limb. Stigmas 3, 2-parted. Caps. membranous, many-seeded
104. *Melasphærula.* Spatha 2-valved. Flower nearly divided into 6 petals: the segments pointed equal. Stigmas 3, recurved. Caps. 3-lobed.
105. *Gladiolus* Spatha 2-valved. Flower tubular, with a 6-parted irregular limb Stamens ascending. Stigmas 3. Seeds winged.
106. *Anomatheca.* Spatha 2-valved. Flower hypocrateriform. Stigmas 3, 2-parted. Caps frosted over with little warts
107. *Antholyza.* Spatha 2-valved. Flower tubular, with a ringent differently formed limb Stigmas 3, simple. Seeds nearly round.
108. *Xyphidium.* Flower inferior, 6-petaled, regular Caps 3-celled, many-seeded
109. *Leptanthus.* Flower monopetalous, with a very long slender tube, a 6-parted limb, and nearly equal segments Stigma simple.
110 *Wachendorfia.* Flower inferior, 6-parted, irregular. Caps 3-celled Seeds solitary
111. *Hæmodorum.* Flower 6-parted, persistent, smooth Stamens attached to the base of the inner segments of cor. Ovarium 3-celled. Cells 2-seeded. Stigma 1. Caps ½-superior, 3-lobed, 3-celled Seeds peltate, edged
112. *Aristea* Flower superior, 6-petaled, regular, after flowering twisted spirally and persistent. Caps. 3-celled, many seeded.
113 *Dilatris.* Flower superior, 6-petaled, regular One filament shorter than the others, and with a larger anther. Stigma simple. Caps 3-celled. Seeds solitary.
114. *Brodiæa* Flower inferior, tubular, with a 6-cleft regular limb, and a 3-leaved corona in the orifice Caps. 3-celled, many seeded.
115 *Iris.* Flower 6-parted: every other division reflexed. Stigmas shaped like petals
116. *Moræa* Flower 6-petaled, after flowering involute above, spirally twisted beneath, finally falling off. Caps many-seeded.
117. *Marica.* Flower 6-parted, or of 6 petals: the 3 outer segments largest, the inner connivent and very much smaller. Stigma like a petal, 3-fid its segments undivided Caps 3-celled
118 *Pardanthus.* Flower 6-petaled, regular, equal. Caps many-seeded Seeds attached to a central loose receptacle.

4 Flowers glumaceous

α, Leaves with an entire Sheath *Sedges*

119. *Schænus* Spikelets few-flowered, distichous the lower scales empty, the upper enclosing flowers. No bristles under the ovarium
120 *Rhynchospora* Spikelets few-flowered, slender the lower nearly empty, the upper enclosing flowers. Bristles under the ovarium
121. *Fimbristylis* Spikelets imbricated in all directions, many-flowered, none of the scales empty Style jointed at the base, and deciduous. No bristles under the ovarium
122. *Isolepis* Spikelets imbricated in all directions, many-flowered, none of the scales empty. No bristles under the ovarium. Style not jointed at the base, and deciduous
123. *Scirpus* Spikelets imbricated in all directions, many-flowered, none of the scales empty Bristles under the ovarium Style not jointed at the base, and deciduous
124 *Eleocharis.* Spikelets imbricated in all directions, many-flowered, none of the scales empty Bristles under the ovarium. Style jointed at the base, and deciduous
125. *Eriophorum.* Glumes chaffy imbricated in all directions Seed surrounded by very long dense wool
126. *Trichophorum.* Spikelets nearly ovate, imbricated in all directions Bristles about the seed usually six, capillary, finally very much lengthened and exserted
127 *Cyperus* Spikelets in two ranks, imbricated, nearly all the scales enclosing flowers No bristles under the ovarium. Style deciduous, not bulbous
128. *Papyrus.* Spikelets many-flowered Glumes imbricated in two rows, 1-flowered Style 3-fid. Scales 2, membranous, contrary to the glumes No bristles beneath the ovarium. Seed 3-cornered
129 *Kyllinga* Spikelets 1-flowered. Glumes 4, imbricated in two rows, compressed the 2 lower which are smaller and the upper one empty, the intermediate similar to the upper, and including a naked hermaphrodite flower. Style bifid No bristles under the ovarium Seed lenticular
130 *Mariscus.* Spikelets few-flowered. Glumes imbricated in two rows, the lower empty. Stamens sometimes 2. Style trifid Neither scales nor bristles below the ovarium Seed triangular

β Leaves with a split sheath, and a membranous ligule *True grasses*

131. *Remirea.* Spikelets 1-flowered, with imbricated scales, the outer ones nerved, the upper which bears the flower enclosed in them and unlike them. No bristles beneath the ovarium. Seed oblong, enclosed in the uppermost scale become thickened and corky
132 *Lygeum.* Flowers 2 or 3 together, with two valved glumes, at the base united into a 2-celled villous pericarpium. Involucrum a convolute spatha.
133. *Cornucopiæ.* Involucre 1-leaved, cup-shaped or funnel-shaped, many-flowered. Glumes 2-valved, united at base, mitre-formed, equal Palea 1, bladder-like, split on one side, with a beard below the middle. Stigmas long. Seed not furrowed. Flowers in a head.
134. *Cenchrus* Involucrum 1-3-flowered, many parted, bristly without, finally hardened. Glume 2-flowered, 2-valved. the outer valve smallest. Florets dissimilar the outer male or neuter, the inner hermaphrodite No scales.
135 *Pennisetum.* Involucrum double, composed of many bristles the outer unequal, the inner pinnated, bearded. Spikelets 2-3-5. Glume 2-valved, unequal. Lower floret male, upper hermaphrodite, both sessile. Paleæ nearly cartilaginous. Spike compound, with sessile spikelets
136. *Spartina.* Glume 3-valved, 1-flowered, unequal, keeled, very acute Paleæ 2, beardless, bifid, emarginate and toothed, shorter than the glumes Scales fringed Style very long Seed loose, covered with the paleæ Spikelets 1-sided, inserted in a double row Spike compound
137. *Nardus.* Glume 1-valved, 1-flowered Palea 1. Stigma simple Seed covered by the palea.
138. *Oryzopsis* Glume 2-valved, 1-flowered, membranous, a little longer than the hardened paleæ Paleæ 2, the lower villous at the end with a jointed beard, the upper entire. Scales 2, linear, the length of the ovarium Panicle nearly simple and loose

Order 2. DIGYNIA.  3 Stamens. 2 Styles

1. *Inflorescence spiked or panicled. Spikelets either solitary, in pairs, or several together, one or more usually 2-flowered, one of the flowers being sterile or of only one sex Glumes usually of a thinner texture than the Paleæ, which are more or less cartilaginous, the lower one half enfolding the upper, and either beardless or occasionally bearded; neither of them with a keel.* (PANICEA)

139. *Paspalum* Glume 2-valved, 1-flowered, closely pressed to the two plano-convex paleæ. Seed coated with the paleæ. Flowers spiked, attached to one side of the toothed rachis.

140. *Axonopus.* The inflorescence digitate. Spikelets simple. Otherwise, as Paspalum.
141 *Milium.* Glume naked, beardless, 2-valved the valves concave, larger than the paleæ, which are two, concave and equal. Seed coated with the indurated paleæ
142 *Knappia* Glume 1-flowered, 2-valved, truncate, beardless Palea one, torn, the divisions setigerous and united at the base, enfolding the stamens and pistillum. Flowers alternate in a flexuose rachis. Seed loose.
143. *Digitaria* Inflorescence digitate or fascicled Spikelets 1-sided, flower-stalks 2-, or many-flowered. Glume 2-valved, the lower valve very minute Of the lower neuter floret the paleæ membranous. Of the upper hermaphrodite floret the paleæ subcoriaceous, hardened. Seed slightly furrowed.
144 *Panicum* Glume 3-valved valves unequal, the outer being very small. Paleæ two, concave, equal, beardless Seed coated with the hardened paleæ Panicle scattered and loose
145. *Setaria.* Has the same character as Panicum, except that the panicle is spiked.
146 *Echinochloa.* Has the character of Panicum, except that the panicle is composed of alternate spikelets, and the third valve of the glume is bearded
147 *Orthopogon.* Has the character of Echinochloa, except that both the intermediate and third valves of the glume are bearded.
148 *Penicillaria.* Involucrum bristly the bristles equal, pinnated, bearded. Glume 2-valved, very small, membranous Lower floret male, upper hermaphrodite the paleæ subcartilaginous and entire. Anthers villous at the end Spike compound, cylindrical, with stalked involucrated spikelets.
149. *Lappago* Glume 2-valved, valves unequal the lower very minute, membranous, the upper cartilaginous, very large, with soft prickles Paleæ 2-valved, membranous, shorter than the glume. Scales very small, fringed. Panicle simple spike-shaped, the branches 3-flowered.

2. *Inflorescence panicled Spikelets solitary, 1-flowered Glumes membranous, the lower Paleæ coriaceous, bearded, enfolding the upper, which has not two Keels.* (Stipacea.)

150 *Stipa.* Glume 2-valved, 1-flowered, membranous, longer than the two cartilaginous paleæ, of which the lower is convolute, with a long beard at the apex, upper entire Beard jointed at the base, deciduous. Scales oblong, entire. Seed furrowed. Panicle almost simple, lax

3. *Inflorescence panicled, sometimes contracted into the form of a spike. Spikelets solitary, 1-flowered. Glumes and Paleæ of nearly similar texture, most usually with a Keel Lower Paleæ either bearded or beardless, the upper never with two Keels* (Agrostidea)

151 *Muhlenbergia.* Glume 2-valved valves very minute, fringed, three times as short as the paleæ, the lower of which has a bristle Scales ovate, obliquely truncate, gibbous Seed naked, not furrowed. Panicle nearly simple, contracted or spreading
152 *Chæturus* Lower valve of the gluma with a long bristle, upper acute Paleæ membranous, the lower valve trifid, upper bifid Flowers spiked, inserted into the elongated teeth of the rachis.
153. *Lagurus* Glume 2-valved, 1-flowered, each valve ending in a villous beard. Outer paleæ with two terminal beards, and a third, which is dorsal and twisted back Panicle spike-shaped, ovate, hairy
154 *Polypogon* Glume 2-valved, 1-flowered valves nearly equal, obtuse at the end with a long bristle, much longer than the somewhat cartilaginous paleæ Lower palea below its end, which is entire, with a straight short tender bristle, upper bifid, toothed Panicle contracted, like a spike.
155 *Gastridium.* Glume 2-valved valves ventricose at the base, 3 times as long as the hardened coriaceous paleæ Paleæ 2, the lower 3-4-toothed with a bristle under the end, the upper bifid, toothed. Panicle compound, contracted like a spike
156 *Agrostis* Glume naked, beardless, 2-valved valves concave, longer than the paleæ, which are 2, and enclose the seed.
157 *Trichodium* Glume 2-valved, 1-flowered Palea one, shorter than the glumes, bearded, and supported at the base by one or two fascicles of hairs Seed loose, covered by the palea
158 *Tristegis* Glume naked, 3-valved valves concave, the outer very small, the intermediate longer than the paleæ, the third bearded Paleæ 2, concave, equal, obtuse, beardless Seed inclosed in the paleæ.
159 *Sporobolus* Glume naked, beardless, 2-valved valves concave, much shorter than the paleæ, which are two, concave, nearly equal, beardless Seed not inclosed in the paleæ
160 *Atropis* Glume 2-flowered valves nearly equal, navicular, longer than the florets. Lower paleæ trifid at the end, upper entire Seed loose, not furrowed. Panicle contracted, compound.
161. *Cinna* Glume naked, beardless, with 2 concave valves shorter than the paleæ, which are 2, nearly equal, concave, with long points the outer one being bearded or beardless Seed enclosed in the paleæ
162. *Psamma* Glumes nearly beardless Paleæ under the end emarginate, mucronate, shorter than the glumes Scales 2, subulate Style 3-parted. Seed turbinate Spike compound, erect, cylindrical.
163 *Crypsis* Glume 2-valved, 1-flowered, compressed, unequal. Paleæ 2, unequal, longer than the glume. Seed loose, covered by the paleæ
164 *Alopecurus* Glume 2-valved, 1-flowered valves somewhat equal, connate, distinct. Paleæ united into a bladder-like glume split on one side, below the middle (generally), bearded Scales linear, entire. Spike compound, contracted, without involucrum, branches very small, branching
165 *Phleum.* Glume 2-valved, naked, with a point or little beard out of the nerve at its back: valves navicular, including the paleæ, which are 2, navicular and beardless Beard of the glume lengthened. Second floret sessile
166 *Achnodonton* The character of Phleum, except that the beard of the glume is very minute.
167 *Chilochloa* The character of Phleum, except that the second floret is stalked
168 *Phalaris* Glume 2-valved, naked, beardless the valves navicular, inclosing the paleæ, which are two, and navicular also, beardless and naked at the base, but supported by hairs or accessory glumes.

4. *Inflorescence panicled. Spikelets solitary, 2 or many-flowered Glumes with a keel. Paleæ of nearly the same texture as the glumes, the lower carinate or concave, always bearded, the upper with two keels* (Bromea)

169 *Corynephorus* Glume 2-flowered. Valves membranous, longer than the florets Lower palea entire, having at its base a beard, jointed in the middle, woolly, twisting and small below, clavate above, upper bifid-toothed. Panicle compound
170 *Aira.* Spikelets slender. Glume 2-flowered, rarely 3-flowered, beardless, 2-valved, equal to the florets or shorter One of the florets on a stalk Paleæ 2, equal, enclosing the seed when ripe.
171 *Avena* Glumes membranous, 2-7-flowered, longer than the florets. Lower palea twice torn, or, with the upper, bifid-toothed, sometimes eroded, having at the back a plaited twisted beard. Scales ovate. Seed coated, furrowed. Panicle compound, loose
172. *Trisetum.* Lower palea with 2 bristles and a tender flexuose beard above the middle of its back. Scale lanceolate. Other characters of Avena
173. *Danthonia.* Lower palea 2-toothed, with a plaited twisted beard from between the teeth, upper obtusely truncated. Seed loose, not furrowed Panicle simple Other characters of Avena.
174. *Gaudinia.* Glume unequal, obtuse. Lower palea bifid-toothed, bearded at the back above the middle: the bearded twisted and plaited. Upper palea 2-4-toothed. Seed coated, furrowed. Spikelets sessile, alternate, with 9 11 2-ranked flowers.
175 *Arundo.* Glume naked, beardless, 2-valved: the valves wrapping up the paleæ which are 2-bearded and surrounded by bristles. Seed inclosed in the paleæ
176. *Chrysurus — Neuter spikelet.* Glume linear, subulate, with remote florets. Paleæ 1, sterile. *Hermaphrodite spikelet*, 1-flowered Glumes subulate, linear Floret stalked. Lower palea below its end, which is entire, setigerous, the upper entire Seed with two beards, not furrowed. Panicle compound, branching.
177 *Scalcria.* Common involucrum many-leaved: the leaflets sometimes deciduous. Glume 3-4-flowered.

Valves unequal, shorter than the stalked florets. Lower palea irregularly 2-toothed, setigerous. Scales longer than the ovarium, subulate. Spike compound.

178. *Cynosurus.* Involucrum 1-leaved, with pinnatifid divisions, containing two spikelets Glume 4-5-flowered, shorter than the florets. Lower palea very acute, upper bifid-toothed. Scales hairy. Seed coated, furrowed. Spike compound.

179. *Koleria* Spikelets compressed. Glume 2 or 3-flowered, beardless, 2-valved. the valves shorter than the lowest floret. Paleæ 2, the outer beardless or bearded under the point

180 *Dactylis* Many spikelets heaped in a head, 1-sided. Glume 2-7-flowered. Lower palea under the end, which is emarginate, setigerous, upper bifid, toothed. Scales hairy. Seed loose, not furrowed. Panicle compound with short branches

181. *Glyceria* Spikelet slender. Glume 5-7-flowered. Valves 2, truncate, with transparent membranous edges, shorter than the florets Lower palea eroded or many-toothed, navicular, embracing the upper, which is bifid-toothed Scales connate Seed furrowed Panicle nearly simple

182. *Festuca* Glume beardless, 2-valved valves nearly equal, shorter than the lowest floret. Paleæ 2, the outer one bearded at the end Seed inclosed in the paleæ

183 *Mygalurus.* Glume 1 or 2-valved, many-flowered, shorter than the spikelet. one valve very small Paleæ 2, one of them bearded near the end Seed inclosed in the paleæ.

184. *Bromus.* Glume 3-20-flowered Valves shorter than the florets, which are imbricated in two rows. Lower palea cordate, emarginate below the end, sometimes torn in two, with a straight beard. Scales ovate, smooth Seed coated, furrowed Panicle compound

185 *Brachypodium* Spikelets stalked, alternate in each tooth of the rachis Stalks broad and thick. Glume 3-15-flowered Valves shorter than the florets Paleæ entire, lower setigerous at the end, upper bluntly truncated, generally edged with stiff reflexed hairs Scales pilose Seed coated, furrowed

186 *Uniola* Spikelets compressed Florets imbricated in two rows, the lower only abortive Glume 3-20-flowered, shorter than the florets Lower palea navicular at the end, abruptly cut off and mucronate between the lobes, the upper subulate, somewhat bifid-toothed. Scales bifid. Seeds turbinate, with two horns, not furrowed Panicle compound, loose

187. *Tricuspis* Glume 5-7-flowered Valves navicular, shorter than the florets. Lower palea bifid-toothed, between the teeth and on each side mucronate the upper truncate, almost emarginate Seed 2-horned

188 *Diplachne* Glume 7-9-flowered the upper valve mucronate at the end Lower palea twice torn, with a bristle beneath the divisions, upper sub-truncate, emarginate. Seed not furrowed Panicle simple, much branching Branches alternate, filiform

189 *Ceratochloa* Glume 12-18-flowered Valves shorter than the florets Paleæ bifid-toothed the lower mucronate between the teeth Ovarium 3-horned Seed coated, furrowed, 3-horned Panicle nearly simple Spikelets compressed Florets imbricated in two rows

190 *Schismus.* Glume 3-6-flowered Valves the length of the florets, or longer Lower palea cordate, emarginate, its rib extended between the lobes into a filiform mucro, the upper entire. Seed obtuse, nearly furrowed. Panicle simple, contracted, spike-shaped.

191. *Triodia* Glume 3-5-flowered Valves navicular, longer than the florets Paleæ bifid-toothed lower with a thick tooth-shaped mucro between the teeth Scales lanceolate, smooth Ovarium with a bifid diverging beak.

192 *Beckmannia* Spikelets 1-sided, 3-5-flowered Glumes unequal, navicular, with a little stalk at the base, obtuse at the end, spatulate, nearly the length of the florets Paleæ nearly equal. Scales lanceolate. Seed loose, not furrowed. Spike compound 3 spikelets in each tooth of the rachis

193 *Melica.* Glume unequal, 2-5-flowered, membranous, nearly the length of the florets, of which the upper are incomplete, abortive and stalked. Scales truncate, fringed. Seed loose, not furrowed. Panicle simple or compound

194. *Molinia* Glume 2-4-flowered, unequal Paleæ comical, lanceolate, acute, much longer than the glume, the upper barren and abortive, or often in its place, a formless rudiment. Scales subtruncate Seed with two points from the remains of the style, with a broad furrow Panicle compound. Spikelets slender

195 *Briza* Glumes navicular, compressed, nearly cordate at the base, many-flowered (3-14), shorter than the florets which are imbricate in two rows Lower palea cordate at the base, embracing the upper, which is nearly round and much shorter Seed with two short filiform beaks Panicle compound, loose, branches pendulous

196 *Poa* Glume 2-20-flowered Valves shorter than the florets Paleæ sometimes woolly at the base, the upper bifid-toothed Scales smooth Seed furrowed Panicle more or less branching or scattered

197 *Eragrostis* Glume 4-10-flowered Valves shorter than the paleæ, which are imbricated in two ranks Upper palea reflexed, its edges folded back, shell-shaped, entire, fringed, persistent. Seed loose, 2-horned, not furrowed. Panicle compound, more or less scattered

198 *Megastachya* Spikelets elongated the florets imbricated in two rows Glume 5-20-flowered. Valves shorter than the florets Lower palea emarginate, with a point between the divisions, upper bifid-toothed Seed loose, not furrowed. Panicle compound

5 *Inflorescence spiked Spikelets solitary, seldom many-flowered, with the upper flower abortive and differently formed Glumes with a keel, not opposite Lower palea generally bearded, seldom beardless, the upper with two keels* (CHLORIDEÆ)

199 *Sclerochloa* Glume 3-5-flowered Valves obtuse, shorter than the florets Lower palea cordate, emarginate, obtuse, upper entire Scales emarginate Seed with a bifid beak Spike simple Spikelets 1-sided or dichotomous

200 *Eleusine* Glume 5-7-flowered Valves obtuse Paleæ obtuse, upper bifid-toothed Scales truncate, fimbriate Seed inclosed in a separate membrane, broadly and deeply furrowed Inflorescence digitate Spikelets 4-5, erect, 1-sided

201. *Dactyloctenium* Spikelets 1-sided Glume 5-7-flowered Lower valve with a falcate spine shaped mucro. Lower palea navicular, ventricose, subulate, upper bifid-toothed. Scales truncate, fringed. Seed square, warted, obtuse, loose Spikelets digitate, 4-5, erect or horizontal

202 *Leptochloa* Glume 3-5-flowered Valves lanceolate, acute, nearly as long as the florets. Lower palea navicular, acute, upper bifid-toothed Seed loose, furrowed Panicle simple Branches alternate, simple, with nearly 1-sided spikelets

203 *Cynodon* Spikelets 1-sided in a simple row Glumes membranous, persistent, shorter than the florets, and only embracing them at the base. Fertile floret with the upper palea bifid-toothed A rudiment of an abortive floret, stalked, smooth, clavate Scales truncate Seed loose, not furrowed Spike digitate Spikelets 4-5-filiform, simple, slender

204. *Dinebra* Glume 2-5-flowered Valves subulate Paleæ bifid, emarginate, the lower setigerous under the end Scales truncate, or somewhat lanceolate Inflorescence spiked, acuminate, the point of the rachis protruding beyond Spike simple or compound Spikelets 1-sided, alternate, remote, pendulous

205 *Echinaria* Spikelets close together Glume 2-4-flowered Valves mucronate, shorter than the florets Lower palea truncate, fringed, terminated by 5 lanceolate unequal bristles, upper cordate, emarginate, with two similar bristles. Scales truncate. Seed loose, gibbous, not furrowed, with two diverging beaks Spike simple, capitate

6. *Inflorescence spiked Spikelets solitary, in pairs, or several together, 1-flowered, or many-flowered Glumes opposite, equal Lower palea bearded or beardless, upper with two keels* (CEREALIA)

206 *Triticum* Glume 2-valved, many-flowered, shorter than the spikelet the valves nearly equal, bearded, or with one beard enclosing the florets Paleæ 2, one of them being bearded from the end Seed inclosed in the paleæ, rarely otherwise

207. *Lolium* Spikelets sessile, to the lowest a glume of one valve, to the uppermost of two opposite valves Lower palea with a mucro or bristle at the end, upper membranous, bifid-toothed. Scales with two unequal teeth Seed furrowed.

208 *Elymus.* Spikelets in each tooth of the rachis two or more, 3-9-flowered Glume 2-valved, nearly equal, rarely (as in E. Hystrix) absent or nearly so Lower palea entire with a bristle which is sometimes very short, upper somewhat bifid-toothed Scales ovate, hairy Seed furrowed Spike simple

209 *Secale* Spikelets in each tooth of the rachis solitary, 2-3-flowered, the two lower florets fertile, sessile, opposite, the upper abortive Glumes subulate, opposite, entire, shorter than the florets. Lower palea entire, with a very long bristle, upper bifid-toothed Scales obovate, hairy Seed coated, furrowed

210 *Hordeum* Spikelets 1-flowered, three together, the two lateral often barren Glumes 2, subulate Paleæ 2, the lower bearded. Scales 2. Stigmas feathery Seed coated with the paleæ

211 *Macrochloa.* Spikelets 1-flowered. Glumes 2, membranous, beardless Paleæ 2, much shorter than the glumes, villous Stigmas very finely divided.

212 *Ophiurus* Glumes cartilaginous, half immersed in hollows of the rachis, longer than the floret. Paleæ membranous, transparent Ovarium cordate Spike simple

213 *Monerma* Spikelets half immersed in hollows of the rachis Glume 1-valved, cartilaginous, furrowed. Paleæ membranous, transparent Scales lanceolate, entire, smooth Spike simple Rachis jointed, toothed.

7 *Inflorescence spiked, or panicled, jointed Spikelets generally in pairs, 1 or 2-flowered, the one sessile, the other stalked, and usually of one sex only Glumes of a stouter texture than the paleæ, neither keeled nor opposite Paleæ very delicate and membranous, not with a keel, the lower commonly bearded.* (SACCHARINA)

214 *Perotis* Glume 2-valved valves with a long bristle at the end Palea 1, nearly as long as the calyx. Spike nearly simple, involucrated at the base, with woolly hairs

215 *Saccharum* Glume 2-valved, 2-flowered, enveloped in long wool Lower floret neuter with one palea, upper hermaphrodite with two paleæ, the upper of which is very small or obsolete

216 *Imperata* Glume 2-valved valves herbaceous, at the lower part of the back clothed with very long hairs the length of the paleæ, which are two, and beardless, the lowest only half the size of the other Scales none Stamens 2-3

MONOGYNIA.

78 VALERIA'NA *W*	VALERIAN					*Valerianeæ*	*Sp* 12—47						
544 dioica *W*	dœcious	♆	△	or	1	my jl	F	Britain	mar	D	co	Eng bot 628	
545 officinális *W*	great wild	♆	△	m	3	jn jl	F	Britain	mar.	D	co	Eng bot 608	
546 Phu *W*	garden	♆	△	or	3	my jl	W	Germany	1597	D	co	Blackw t 250	
547 trípteris *W*	three-leaved	♆	△	or	1	mr my	W	Switzerl	1752	D	co	Jac aus 3 t 268	
548 montana *W*	mountain	♆	△	or	1	jn jl	L R	Switzerl	1748	D	co	Bot cab 317	
549 céltica *W*	celtic	♆	△	or	½	jn	W	Switzerl	1748	D	co	Jac coll. 1 t 1	
550 tuberósa *W*	tuberous-root	♆	△	or	½	my jn	L R	S Europe	1629	D	co	Mor.h.7.t.15 f 20	
551 saxátilis *W*	rock	♆	△	or	½	jl	W	Austria	1748	D	co	Jac aus. 3 t 267	
552 elongáta *Ja*	elongated	♆	△	or	½	jn jl	Y	Austria	1812	D	co	Jac aus 3 t 219	
553 pyrenáica *W*	heart-leaved	♆	△	or	3	my jn	Pk	Scotland	sc wo	D	co	Eng bot. 1591	
554 sambucifolia *Mik*	elder-leaved	♆	△	or	1	my jn	Pk	Germany	1819	D	co		
555 supina *Vahl*	prostrate	♆	△	or	¼	my jn	Pk	S Europe	1822	D	co	Jac mi 2 t.17 f 2	
9 PATRI'NIA	PATRINIA					*Valerianeæ*	*Sp* 2						
556 sibírica *W*	Siberian		○	or	1	my jn	Y	Siberia	1759	S	co	Bot mag 714	
557 ruthénica *W*	Russian	♆	△	or	1	jn	Y	Siberia	1801	D	co	Bot. mag 2325	
†80 VALERIANE'LLA	LAMB'S LETTUCE					*Valerianeæ*	*Sp* 11—20						
558 echináta *W*	prickly capsul		○	cul	1	jl au	Pk	S Europe	1807	S	co	Col ecph 1 t 206	
559 oltória *W*	common		○	cul	½	ap my	Bk	Britain	cor fi	S	co	Eng bot. 811	
560 dentáta *W*	oval-fruited		○	w	1	ap jn	B	Britain	cor fi	S	co	Eng bot 1370	
561 vesicária *W*	bladdery		○	w	½	ap my	W	Candia	1739	S	co	Fl græc 1 t. 34	
562 coronáta *W*	crowned		○	w	½	ap jn	Pk	Portugal	1731	S	co	Col ecph 1 t 209	
563 discoidea *W*	discoid		○	w	½	ap jl	B	Italy	1731	S	co	Mor h 7 t 16.f 29	
564 carináta *D C*	keeled		○	w	½	ap my	B	France	1819	S	co	Mor h 7 t 16 f 31	
565 eriocárpa *D C*	woolly-fruited		○	w	1	ap my	Lt	France	1821	S	co	Mor h 7.t.16.f.33	
566 rádiata *Vahl*	radiate		○	w	1	ap my	Pk	N Amer	1821	S	co		
567 dasycarpa *M B*	thick-fruited		○	w	1	ap my	Lt	Crimea	1821	S	co		
568 uncináta *M B*	hook-fruited		○	w	1	my jn	Lt	Tauria	1822	S	co		



History, Use, Propagation, Culture,

78 *Valeriana* A word of uncertain import Linnæus derived it from a certain king Valerius. De Théis thinks it altered from the verb *valere*, on account of its medicinal qualities The species are generally ornamental border plants, of easy culture in common earth, and preferring shady moist situations V. dioica has usually the stamens and pistils in separate flowers, situated on different plants This species and V officinalis are considered medicinal, and prescribed in hysterical cases and habitual costiveness Cats are delighted with the roots, which are said to smell like the true Teucrium marum, and rat-catchers employ them to draw the rats together, as they do oil of anise. V Phu has something of the same qualities V. tripteris derives its name from τρεις three, and πτερυξ, a wing, in allusion to the ternary position of its leaves.

8. *Inflorescence panicled Spikelets solitary, 1-flowered Lower paleæ cartilaginous, compressed, keeled Stamens frequently more than 3* (ORYZA)

217 *Leersia* Spikelets 1-flowered Glumes 0 Paleæ 2, beardless, keeled, compressed Scales 2. Stamens 3-6 Stigmas very finely cut Seed loose, inclosed in the paleæ.

9 *Shrubby Inflorescence panicled Spikelets many-flowered Upper palea with two keels* (BAMBUSACEÆ)

218 *Diarrhena* Glume 2-valved valves navicular, rigid, the lower smaller, shorter than the florets Lower palea navicular, rigid, upper membranous, the edges broad, folded back. Scales 2, ovate, entire Ovarium with a hood Seed furrowed, hardened, shining, loose

219 *Arundinaria* Glume 5-7-flowered Valves unequal, with stalked florets Lower palea very acute, upper bifid-toothed. Scales 3, smooth Stigmas 3, feathery Styles 3

Order 3. TRIGYNIA  3 Stamens 3 Styles

220 *Holosteum.* Cal 5-leaved. Petals 5 Caps sub-cylindrical, 1-celled, opening at the end, 6-valved, many-seeded

221 *Polycarpon* Cal 5-leaved, 5-cornered Petals 5, very small, ovate Caps. 1-celled, 3-4-valved valves lanceolate, twisted inwards Seeds many

222 *Lechea* Cal 3-leaved Petals 3, linear Caps 3-celled, 3-valved, and as many inner valves Seed 1.

223 *Erucaulon* Common calyx an imbricated head Petals 3, equal Stamens above the ovarium

224 *Montia* Cal 2-3-leaved. Cor monopetalous, irregular, 5-parted Caps 1-celled, 3-valved, 3-seeded

225 *Mollugo* Cal 5-leaved Cor 0 Caps 3-celled, 3-valved

226. *Minuartia* Cal 5-leaved Cor 0 Caps 3-celled, 3-valved Seeds a few.

227 *Queria* Cal 5-leaved or 5-parted Cor 0 Caps 1-celled. Seed 1

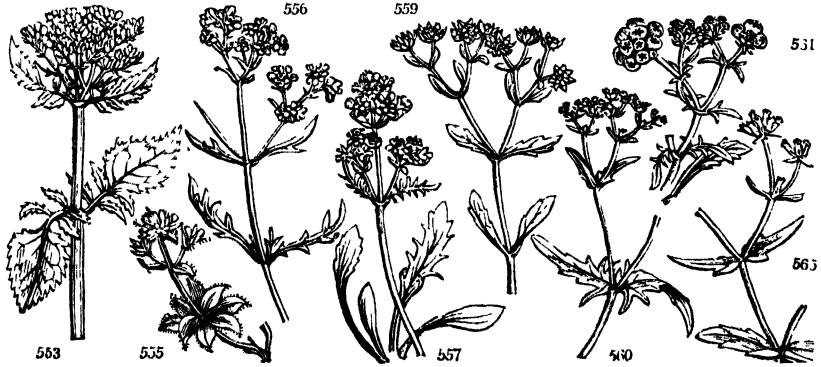
228 *Koniga* Cal 3-leaved Cor 0 Seed 1, ovate, naked.

MONOGYNIA

544 Radical leaves spatulate ovate undivided, cauline pinnatifid, Stem erect, Flowers panicled dioecious
545 Leaves all pinnate pinnæ lanceolate toothed, Stem hollow furrowed, Flowers corymbose
546 Cauline leaves pinnate, radical undivided, Stem smooth slender, Flowers corymbose
547 Leaves toothed radical cordate simple, cauline ternate ovate oblong, Leaflets lateral lanceol Stem erect
548 Leaves oblong rather toothed, lower obtuse, upper acute, Stem erect, Flowers panicled
549 Leaves undivided entire obt radical cuneate obl cauline linear, Stem smooth ascending, Flowers racemose
550 Radical leaves lanceolate oblong entire, cauline pinnatifid, Stem smooth, Flowers pink corymbose
551 Leaves undivided, radical elliptical 3-nerv entire and toothed, caul linear, Stem erect, Corymbs racemose
552 Radical leaves ovate, cauline cordate sessile cut halbert shaped, Flowers racemose
553 Leaves cord uneq toothed lower simple, upper ternate and pinnate, Stem striated, Flowers corymbose
554 Radical lvs pinnated, Leaflets ovate coarsely toothed, caul pinnated downwards, Segm lanceol toothed
555 Leaves simple ciliated, radical obovate, cauline lanceolate, Flowers panicled

556 Leaves membranous pinnatifid, Segm lanceol the terminal very large, Stem smooth, Flowers corymbose
557 Leaves rather fleshy pinnatifid, Segm entire obt of nearly one shape, Stem hairy in 2 rows, Flowers corymb

558 Caps. linear 3-toothed the outer larger recurved, Stem smooth, Flowers in dichotomous spikes
559 Caps naked globose compressed, Stem weak, Flowers in heads
560 Caps polished ovate, Limb of the calyx short 3-5-toothed crowned, Stem smooth, Flowers corymbose
561 Caps ovate villous, Limb of the calyx bladdered crowned, Stem a little villous, Flowers nearly in heads
562 Caps villous, Limb of cal 6-10-tooth crowned, Crown camp Teeth long straight, Stem pubesc Fls in heads
563 Caps vill Limb of cal 10-12-rayed crowned, Crown rotate, Teeth long acute, Stem smooth, Flow in heads
564 Caps naked smooth cleft-keeled elongated, Stem weak, Flowers nearly in heads
565 Caps ovate angular hairy irregularly toothed, Stem angular, Flowers corymbose
566 Caps pubescent naked at the end, Leaves spatulate oblong nearly entire
567 Stem scabrous, Fruit ovate acute 1-toothed at the end pubescent
568 Caps linear 6-toothed, Teeth hooked loose, Stem and radical leaves spatulate, cauline pinnatifid pubescent



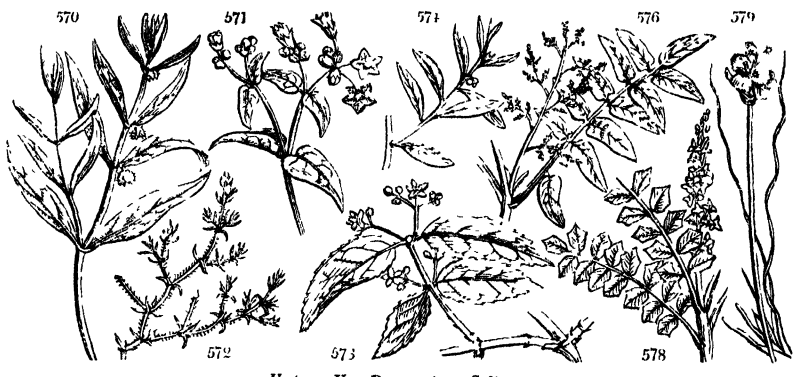
and Miscellaneous Particulars

Phu is the Arabic name of the species so called

79 *Patrinia* Named by M Jussieu in honor of M Patrin, an assiduous French botanist, who travelled in Siberia, where all the species of the genus are found, and whence he sent home collections.

80 *Valerianella* A diminutive of Valeriana, from which the genus has been divided Volitoria (Valeriana locusta, *L.*) *Mache salade de prêtre*, Fr, corn salad or lamb's-lettuce, from its appearing in corn fields about the time when lambs are dropped, furnishes an agreeable salad, the leaves tasting little inferior to young lettuce To have it early, it should be sown in autumn on a warm border All the species are of as easy culture as those of Valeriana.

*81 CALYME'NIA	Umbrella-Wort			*Nyctagineæ*	*Sp* 3—7								
§569 viscósa *W.*	viscid	☿	△ cu	6	my s	P	Peru	1793	C	l p	Bot mag. 434		
§570 aggregáta *Cav*	aggregate		⬡ cu	1	jl au	Pk	N Spain	1811	S	s l	Cav. ic t. 437		
§571 glabrifólia *W en*	smooth-leaved	☿	△ cu	3	jl au	P	N Spain	1811.	C	s l	Cav. ic. t. 379		
82. LÆFLI'NGIA. *W.*	Læflingia.			*Caryophyllæ*	*Sp* 1—3								
572 hispánica *W.*	Spanish		○ w	½	jn	G	Spain	1770.	S	s l	Cav. ic. 1. t. 94		
83. HIPPOCRATE'A	Hippocratea			*Acerinæ*	*Sp* 1—10								
573 volúbilis *W*	climbing	♄	▭ or	20		W	S Amer	1739.	C	p.l	Jac amer. t. 9.		
84 CNEO'RUM *W*	Widow-wail			*Terebintaceæ*	*Sp* 2								
574 tricóccum *W*	smooth		▭ or	6	ap s	Y	S. Europe	1793	C	p l	Lam. ill. t. 27		
575 pulveruléntum *Ven*	powdery		▭ or	6	ap s	Y	Madeira	1822.	C	p l	Vent. cels. 77		
85. COMOCLA'DIA. *W*	Maiden-Plum			*Terebintaceæ*	*Sp* 3—4								
576 integrifólia *W*	entire-leaved	♀	▭ tm	15		W	Jamaica	1778	C	p l	Slo ja.2 t.222. f 1		
577 dentáta *W*	tooth-leaved	♀	▭ tm	30	jl	W	W Indies	1790.	C	p l	J am 13.t 173 f 4		
578 ilicifólia *W*	holly-leaved	♀	▭ tm	15		W	Caribee Is	1789.	C	p.l	Plum. t. 118. f. 1		
86 XY'RIS *L*	Xyris.			*Juncæ*	*Sp* 3—26								
579 operculáta *B P*	rush-leaved	⁂	△ pr	1	jn jl	Y	N S W	1804	S	s p	Bot. mag. 1158		
580 brevifólia *P S*	short-leaved	⁂	△ pr	½	jn au	Y	Carolina	1812	S	s p			
581 lævis *Bi*	smooth	⁂	△ pr	1½	jn au	Y	N Holl	1819					
87 CALLI'SIA *W*	Callisia			*Commelineæ*	*Sp* 1—3								
582 répens *W*	creeping	♃	△ pr	½	jn jl	B	W Indies	1776	R	s.p	Jac. am. 11 t 11		
88 COMMELI'NA *B P*	Commelina			*Commelineæ*	*Sp* 10—60.								
583 communis *W*	common	♃	○ or	2	jn jl	P B	America	1732	S	co	Red hl 206		
584 carolinána *W*	Carolina	♃	△ or	2	jn jl	P B	America	1732	D	r m			
585 africána *W*	African	♃	△ or	1	my o	Y	C G H	1759	R	r m	Bot mag 1431		
586 bengalénsis *W*	Bengal	♃	△ or	3	jn	B	Bengal	1794	R	s p	Mur got p 18 t 5		
587 erécta *W*	upright	☿	△ or	1	au s	B	Virginia	1732.	R	s p	Di el 94 t 77 f 88		
588 virginica *W*	Virginian	♃	△ or	½	jn	B	Virginia	1779	R	s p	P al 125 t 174 f 4		
589 longicáulis *W*	long-stalked	♃	△ or	3	au	B	Caracas	1806	R	s p	Jac ic 2 t 294		
590 móllis *W*	soft	♃	△ or	2	au	B	Caracas	1804	R	s p	Jac ic 2 t 293		
591 tuberósa *W en*	tuberous-root	☿	△ or	1	jn jl	B	Mexico	1732	R	r m	Bot. rep 399		
592 cœléstis *W en*	sky-blue	☿	△ or	1½	jn jl	B		1813	R	r m	Bot mag 1695.		
89 ANEILE'MA *B P*	Aneilema			*Commelineæ*	*Sp* 3—12								
593 bifórum *Bi*	creeping	♃	△ or	1	jl au	B	N Holl	1820	R	co			
594 ambiguum *Beauv*	doubtful	☿	▭ or	3		V	S Leone	1822	D	r m	Beauv Ow t 16		
595 sinicum *Ker*	Chinese	☿	△ or	1	my jn	P B	China	1820	D	r m	Bot reg 659		
90 CARTONE'MA	Cartonema			*Commelineæ*	*Sp* 1								
596 spicátum	spear-leaved		⬡ or	½	jl au	B	E. Indies	1783	S	s p			
91 ORTE'GIA *W*	Ortegia			*Caryophylleæ*	*Sp* 2.								
597 hispanica *W*	Spanish	☽	△ w	5	jn jl	Ap	Spain	1768	D	l p	Cav ic 1 t 47		
598 dichótoma *W*	forked	☽	△ w	½	au s	Ap	Italy	1781	D	l p	All taur 3 t 4 f 1		
92. POLYCNE'MUM *W*	Polycnemum			*Chenopodeæ*	*Sp* 2—12								
599 arvénse *W*	trailing	☽	○ w	¼	jl	Ap	S Europe	1640	S	s l	Jac aus. 4 t 365		
600 recúrvum *Lois*	recurved	☽	○ w		jl	Ap	France	1820	S	s l			
93 CRO'CUS *Ker*	Crocus			*Iridea*	*Sp* 17								
601 vérnus *E B*	spring	♂	△ or	¼	f ap	P	England	mea	O	co	Eng bot 344		
602 albiflórus *Kit*	Austrian vern	♂	△ or	¼	f mr	W	Austria	...	O	co			



History, Use, Propagation, Culture,

81 *Calymenia* So named from καλυπτω, a calyx, and μηνη, a membrane, on account of the membranous calyx by which the genus is distinguished

82. *Lœflingia.* In honor of P Loefling, a Swedish botanist, who published a volume of travels in Spain, &c. These are plants of no beauty, and are only cultivated in botanic gardens

83 *Hippocratea* In honor of the celebrated Hippocrates, the father of physicians, born in the island of Cos, who flourished 450 years before the vulgar æra Plumier, who first fixed the genus, called it Coa, which Linnæus changed to its present name

84 *Cneorum* Κνεωρον is a plant described by Theophrastus, as resembling the olive This is a low yellowish evergreen shrub, which like Veronica decussata, will endure our winters in the open air, with protection during frost It grows naturally in hot dry barren and rocky soils, thrives well in an artificial state in any light earth, ripened cuttings will root in sand under a hand-glass, or it may be raised from seeds, which it produces in abundance

85 *Comocladia* Κομη, hair, and κλαδος, a branch The branches are tufted at the top of the tree C integrifolia is a handsome tree with an erect trunk, dividing into few branches, adorned with pinnated smooth leaves, like a frond, flowers numerous, fruit a deep red, shining, eatable, but not inviting The wood is hard, of a fine grain, and reddish color If C dentata be ever so slightly wounded, it emits a strong smell of dung it grows in Cuba, where the natives have a notion that it is dangerous to sleep under its shade This genus is not frequent in British collections it thrives in loam and peat, and may be propagated by ripened cuttings placed under a hand-glass in moist heat

569 Villous viscid, Leaves cordate, Flowers racemose, Stamens longer than the corolla
570 Leaves lanceolate, Peduncles axillary solitary, Calyxes 3-flowered, Stem ascending
571 Leaves cordate ovate smooth, Peduncles terminal heaped, Stamens shorter than the corolla

572 Flowers triandrous monogynous, Leaves very small: lower linear, upper subulate

573 Leaves oblong-ovate lanceolate or elliptical serrated, Capsules oval

574 Smooth, Flowers axillary
575 Hoary, Leaves flower-bearing powdery, Petals and stamens 4

576 Leaflets stalked ovate-lanceolate entire
577 Leaflets stalked ovate-lanceolate prickly-toothed
578 Leaflets sessile angular-spiny

579 Leaves linear-subulate, Head globose many-flowered, Petals alternate pencil-shaped
580 Scape slender, Head globose
581 Culm 2-edged and leaves smooth very narrow, Head subovate, Scales imbricate on each side, Keel of the glumes ciliate

582 Leaves ovate-lanceolate sessile, Stem procumbent, Flowers axillary sessile

583 Leaves ovate-lanc nearly sessile acute with the creeping stem smooth, Involucr cordate doubled together
584 Flowers uneq. Involucres cord folded together at base with sheaths ciliated, Leaves lanc sess Stem decumb
585 Leaves lanceolate sessile with the decumbent stem smooth, Involucr cordate doubled together
586 Leaves ovate stalked obtuse, Involucres cordate hooded turbinate
587 Leaves ovate-lanceolate rough, Involucres hooded turbinate, Stem erect
588 Leaves lanceolate stalked rough above, Sheaths rusty, Stem erect simple
589 Leaves linear-lanceolate sessile rather hairy, Involucres ovate doubled together, Stem creeping
590 Villous, Leaves ovate stalked, Involucres half round folded in at the edge, Stem creeping
591 Leaves ovate-lanceolate sessile ciliated, Involucres cordate folded together, Stem erect
592 Involucres cord. acumin folded together, Pedunc pubesc. Pedicels smooth, Lvs obl lanc Sheaths ciliated

593 Smooth, Stem creeping, Leaves lanceolate, Flower-stalks 2-flowered
594 Stem solid woody with distant leafy knots, Leaves long ovate acuminate fascicled villous
595 Stem branched diffuse, Leaves ligulate acuminate, Racemes alternate about 7 placed in a panicle form, 3 Stamens bearded 3-naked

596 Leaves lanceolate, Flowers panicled

597 Stem branching, Branches and branchlets opposite, Flower-stalks many-flowered
598 Flower-bearing branches dichotomous, Flowers solitary

599 Leaves subulate prismatic, Spiny at the end
600 Leaves subulate scattered spreading distinct somewhat recurved, Cal nearly as long as capsules

1 *Vernal*

601 Mouth of flower closed by hairs, Segments obtuse, Stigmas dilated, Flowers large early
602 Segments of flower quite entire obt Anthers twice as long as the stigmas, Mouth of flower closed by hairs



and Miscellaneous Particulars

86. *Xyris* Ξυρος, acute Its leaf terminates in a sharp point Under this name a plant is described by Pliny, which resembles an iris Pretty little rush-like plants with yellow flowers, uncommon in collections, but easily cultivated, though rarely flowering.

87 *Callisia* From καλος, pretty; a name aptly given to this plant, which is easily known by its shining leaves edged with purple

88 *Commelina* So named by Plumier, in honor of the brothers, John and Gaspar Commelin, botanists and Dutch merchants Some of the species, such as C. coelestis and tuberosa, are very showy herbaceous plants, others are mere weeds They are all easily cultivated in wet places in the stove or greenhouse, and propagated by the rooting joints of their stem or by division of the roots, or by cuttings

89. *Aneilema.* From ανειλεω, to evolve, the flowers being evolved, as it were, from the spatha. A genus resembling Commelina, from which it is chiefly distinguished by not having its flowers enclosed in a spatha.

90. *Cartonema.* From καρηνον, shorn, and νημα, a filament, in reference to the stamens A plant resembling Commelina.

91. *Ortegia* In honor of Casimir Gomez de Ortega, a Spanish botanist, and professor of botany at Madrid. An insignificant herbaceous plant.

92. *Polycnemum* Πολυς, many, κνημη, knee, on account of the number of joints of the stem A decumbent annual plant of no beauty.

93. *Crocus* A name given by Theophrastus. The story of the youth Crocus being turned into this flower, may be read in Ovid's Metamorphoses This is an ornamental genus of great value in the flower-garden, on

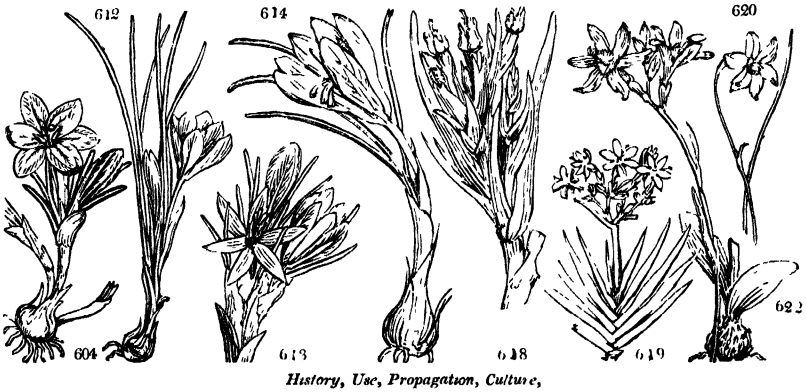
603 minimus *Red.*	least	☿	△	or	½	f mr	P	.....	1629	O	co	
604 versicolor *H K*	party-colored	☿	△	or	½	f mr	La	S Europe	1629	O	co	Bot. mag 1110
605 bifiórus *H K*	Scotch	☿	△	or	½	f mr	W	Crimea	1629	O	co	Bot. mag. 845
606 pusillus *Ten*	Neapolitan	☿	△	or	½	f mr	W br	Naples	1824	O	co	Bot Cab 1454
607 susiánus *H. K.*	cloth of gold	☿	△	or	½	f mr	Y	Turkey	1605	O	co	Bot mag 652
608 reticulátus *M B.*	netted vernal	☿	△	or	½	f mr	B	Crimea	...	O	co	Bot Cab 1822
609 striátus *Lk*	striped vernal	☿	△	or	½	f mr	W	... ..	1820	O	co	
610 sulphúreus *H K*	sulphur-colored	☿	△	or	½	f mr	Y	S Europe	1629	O	co	Bot mag. 938
β flávus	*pale-yellow*	☿	△	or	½	f mr	P Y	S Europe	1629	O	co	Bot mag 1384
611 lúteus *Lam*	common-yell	☿	△	or	½	f mr	Y	Turkey	1629	O	co	Bot mag. 45
612 lagenæflorus *Salisb*	golden	☿	△	or	½	t mr	D Y	Greece	...	O	co	Fl græc 1. t 35
β flávus	*pale*	☿	△	or	½	f mr	P Y	Greece	...	O	co	Bot mag 1111
γ pencillatus	*pencilled*	☿	△	or	½	f mr	P Y	.....	...	O	co	
613 stellaris *Haw*	starry-yellow	☿	△	or	½	t mr	Y	.....	...	O	co	Hor trans 1 t.6
614 sativus *W*	saffron	☿	△	or	½	s o	V	England	mea	O	s l	Eng bot 343
615 serotinus *H K*	late autumnal	☿	△	or	½	s n	V	S Europe	1629	O	co	Bot. mag 1267
616 nudiflórus *H K*	naked autumn	☿	△	or	½	o n	V	England	mea.	O	co	Eng bot. 491
617 Pallásii *M B*	Russian autum.	☿	△	or	½	s o	La	Crimea	1821	O	co	

†94 WITSENIA *Ker* — WITSENIA — *Irideæ* — *Sp* 2—4

618 maúra *H K*	downy-flowered	☿	⧋	or	4	n ja	Y B	C G H	1790	C	s p	Bot reg 5
619 corymbósa *H K*	corymbose	☿	⧋	or	½	ap s	P B	C G H	1803	C	s p	Bot mag 895

95 IXIA *Ker* — IXIA — *Irideæ* — *Sp* 20—30

620 lineáris *H K*	slender	☿	⧋	or	½	ap my	W	C G H	1796	O	s p l	Bot mag 570
621 capillàris	capillary	☿	⧋	or	1½	ap my	V	C G H	1774	O	s p l	Bot mag 617
622 anthèra *W*	rose-colored	☿	⧋	or	2	ap my	Pk	C G H	1774	O	s p l	Bot mag 1013
623 fucáta *Ker*	painted	☿	⧋	or	½	ju jl	Pk	C G H		O	s p l	Bot mag 1379
624 pátens *W*	spreading-flow	☿	⧋	or	1	ap	P	C G H	1770	O	s p l	Bot mag 522
625 leucántha *P S*	white-flowered	☿	⧋	or	1½	my	W	C G H	1779	O	s p l	Jac ic 2 t 278
626 flexuósa *H K*	bending-stalked	☿	⧋	or	2	ap my	Pk	C G H	1767	O	s p l	Bot mag 624
627 hýbrida *Ker*	spurious	☿	⧋	or	1	ap my	W	C G H	1757	O	s p l	Bot mag 127
628 cónica *H K*	orange-colored	☿	⧋	or	1	ap my	O	C G H	1757	O	s p l	Bot mag 539
629 monadélpha *H K*	monadelphous	☿	⧋	or	½	ap my	B	C G H	1792	O	s p l	Bot mag 607
β cárta Andr	*short*	☿	⧋	or	½	ap my	O	C G H	1792	O	s p l	Bot mag 1378
630 columellàris *H K*	variegated	☿	⧋	or	½	au	St	C G H	1790	O	s p l	Bot mag 630
631 amœna *Lk*	pretty	☿	⧋	or	1	ap my	R	C G H	1822	O	s p l	
632 maculáta *W*	spotted	☿	⧋	or	1	my jn	W br	C G H	1780	O	s p l	Bot rep 196
β ochroleùca	*cream-colored*	☿	⧋	or	1	my jn	P Y	C G H	1780	O	s p l	Bot mag 1285
633 capitáta *P S*	headed	☿	⧋	or	2	my jn	Lm	C G H	1780	O	s p l	Bot rep 159
634 viridiflóra *P S*	green-flowered	☿	⧋	or	1	my jn	G	C G H	1780	O	s p l	Bot mag 549
635 erecta *H K*	upright	☿	⧋	or	1½	my jn	Va	C G H	1777	O	s p l	Bot. m 623 1173
636 crateroides *H K*	crimson	☿	⧋	or	½	my jn	D R	C G H	1778	O	s p l	Bot mag 594



History, Use, Propagation, Culture,

account of the early season of flowering, and the brilliancy of the flowers Haworth, who has for thirty years paid particular attention to the Crocus, (*Hort Trans* 1 122) and raised many varieties from seed, found that the blue, purple, and white flowered kinds, ripened their seeds much more readily than the yellow, and that the leaves of the latter were narrower through all the species and varieties When this genus is in flower, the germen is situated underground almost close to the bulb, but some weeks after the decay of the flower, it emerges on a white peduncle, and ripens its seeds above ground This extraordinary mode of semination is peculiarly conspicuous in C nudiflorus, which flowers without leaves in autumn, and throws up its germen the following spring like the Colchicum Though some species of Crocus are, or appear to be, naturalized in a few places, yet they cannot be considered as aboriginal natives Allion affirms the C sativus (the saffron) is indigenous in Savoy, but Ray says nothing is certain as to its native country Professor Martyn considers Asia as its native country, saffron having there first acquired that high reputation in medicine, which it has now almost lost in Europe The Arabic name Z'afarán, and the Moorish and Spanish terms Azafran and Safra, seem to confirm this opinion C vernus, the *saffran printanier*, Fr, is a native of Switzerland and Italy, and is commonly found with white flowers and a purple base Some botanists consider it and C sativus as the only distinct species of the genus Miller describes four, Willdenow four, Sir J E Smith three, as natives of Britain, and Haworth (*Hort Trans* 1 132) no fewer than thirteen species Parkinson certainly cultivated many varieties which are not now known in collections Crocus vernus and versicolor, produce by cultivation varieties of singular beauty, both as to size, color, and marking C sativus, the saffron *Saffran*, Fr. and Ger, and *Zafrano*, Ital, is said to have been first brought into England in the time of Edward III, and introduced to Walden in Essex, to which town it afterwards gave the prænomen It was abundantly cultivated there, and in Cambridge, Suffolk, and Herefordshire, in the beginning of the 17th century; but the article is now so little in repute, or so much cheaper in foreign markets, that at present the culture of saffron is confined to a few parishes round Saffron Walden The bulbs are planted in July in a well pulverized soil, not poor nor a very stiff clay; they are placed in rows six inches apart across the ridges, and three inches bulb from bulb in the row The purple flowers are gathered in September and carried home, where their yellow stigmas and part of the style are picked out and dried on a kiln between layers of paper, and under the pressure of a thick

608 Segments of flower acute, Stigmas small, Flowers small late, Mouth of throat closed by hairs
604 Stigmas convolute hooded lobed as long as the anthers
605 Leaves longer than flowers, Stigmas but little longer than the anthers [membranous
606 Stigma inclosed trifid longer than stamens, Lobes filiform cucullate crisp, Lvs. setaceous, Tunic of the bulbs
607 The three outer segments of flower revolute
608 Stam as long as the truncate torn stigmas, Leaves supporting the flowers, Bulbs coated with net-work
609 Leaves longer than the flowers, Spathes 2 inner narrowest, Limb of cor funnel-shaped, Stigma length of
610 Stigmas unequal much longer than the anthers [anthers flattish jagged

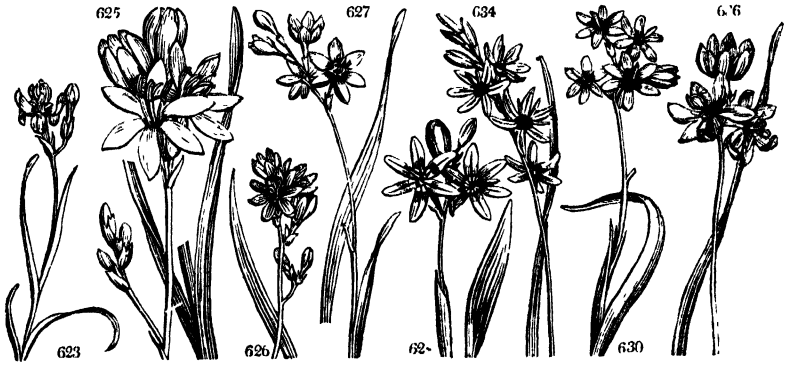
611 Filaments hairy, Anthers longer than the stigma
612 Stigma enclosed trifid, Lobes somewhat linear toothed, Coat of the roots membranous
β Pale cream-coloured flowers
γ Pale cream-coloured flowers, with 3 sky-blue lines on the tube
613 Leaves upright-spreading their keel blunt sides nerveless, Flower in the sun campanulate stellate
2 *Autumnal*
614 Stigmas very long reflexed crenate at the end
615 Stigmas erect much divided, Leaves coming out with the flowers
616 Stigmas erect much divided, Leaves later than the flowers
617 Bulbs with a thready skin, Leaves later than the fl Stam as long as the truncate stigmas, Flower large

618 Flowers spiked, Outer segments of flower downy without
619 Flowers corymbose smooth

620 Leaves linear very narrow convex, Scape simple erect
621 Leaves with a cartilaginous edge, Racemes 1-7-flowered
622 Leaves ensiform, Tube of the flower turbinate [Anthers diverging
623 Leaves grassy, Spike 1-2-flowered, Flower hypocrateriform, Tube clavate straight, Filaments columnar,
624 Tube filiform, Limb bell-shaped spreading, Stigmas longer than the anthers
625 Leaves linear ensiform, Flowers 1-sided, Spathes toothed shorter than the tube
626 Tube slender a little enlarged, Limb below bell-shaped contracted, Segments spreading
627 Leaves slender, Raceme flexuose many-flowered
628 Limb spreading spotted at base, Stigmas not divided lower than the base of the anthers
629 Filaments united in a tube

630 Filaments united at base
631 Leaves lanceolate, Spathe toothed much shorter than the filiform tube, Segments lanceolate
632 Limb campanulate spreading spotted at base, Stigmas divided as low as the tube

633 Smooth with stalked bulbs, Leaves linear ensiform, Flowers in spiked heads, Tube shorter than segments
634 Leaves linear ensiform edged, Scape many-spiked many-flowered, Flowers spotted at base
635 Limb spreading not spotted, Stigm is divided as low as the tube
636 Limb hemispherical campanulate, Stigmas longer than anthers



and Miscellaneous Particulars

board to form the mass into cakes Two pounds of dried cake is the average crop of an acre after the first planting, and twenty-four pounds for the two next years After the third crop the roots are taken up, divided, and transplanted.

The uses of saffron in medicine, domestic economy, and the arts, were formerly very various It is now employed by painters and dyers, and enters into sauces, creams, biscuits, conserves, liqueurs, &c

As a garden-flower, the C vernus is the parent of many varieties, and these may be increased at pleasure by propagating from seeds Haworth directs to sow these immediately after being gathered in light earth, in a shady, but open situation Sift over them half an inch of earth the first autumn, and the second take them up and immediately replant them. Add another half inch of earth the third autumn, and the following spring most of the plants will show flowers in the midst of their fourth crop of leaves Afterwards they may be treated like old bulbs, and planted in the open borders or shrubbery, in patches, rows, or as fancy may direct The bulbs of crocus being renewed every year, and the new bulb formed on the top of the old one, it follows, that at whatever depth they may have been planted, they will in a short time rise to the surface, unlike the tulip and the bulbous iris, whose new bulbs being formed under the old ones, soon sink the plants, unless growing on a hard subsoil Crocus bulbs should be taken up every third year, after the leaves decay, dried in the shade, parted, and replanted three inches deep, and not later than michaelmas. The longer they are kept out of the ground after this period they become the weaker and flower the later In this way, and by preserving them in an icehouse, they may be retarded so as to flower at midsummer or later, and they may be accelerated by heat or blown in water-glasses, or on fancy pots called cats, hedgehogs, &c. common in the seed-shops The yellow-flowered species force better than the blue ones

94. *Witsenia* In honor of Mr Witsen, a Dutch consul in India, a patron of botanical science, and of Thunberg This genus and all the succeeding, as far as Pardanthus, consist of handsome herbaceous and bulbous plants, flowering for the most part in the spring, and not distinguished from each other by very distinct characters The bulbous sorts are easily cultivated in pots, are nearly all natives of the sandy wastes of the Cape of Good Hope, and are capable of succeeding well in a warm open border To make them flower well in pots, they should have no water while they are dormant.

637 retúsa *H K*	sweet-scented	☿	△	or	1	ja.f	Lv	C	G	H	1793	O	s p.l	Bot. mag. 629
638 scillàris *H K*	squill-flowered	☿	△	or	1	ja f	Va	C	G.	H	1787	O	s.p l	Bot. mag 542
639 crispa *H K*	curled-leaved	☿	△	or	1	ap.my	B	C.	G	H	1787.	O	s.p l	Bot. mag. 599

96. TRICHONE'MA *Ker.* Trichonema — *Irideæ* — *Sp.* 6

640 bulbocódium *H. K*	channel-leaved	☿	△	or	½	mr ap	R	S. Europe			1739	O	s p l	Bot. mag 265
641 cruciátum *H K*	square-leaved	☿	△	or	½	my	B	C	G	H	1758	O	s p l	Bot. mag 575
642 cauléscens *B M*	caulescent	☿	△	or	½	jn jl	Y	C.	G.	H	1810.	O	s p l	Bot. mag. 1302
643 pudícum *B M*	blush	☿	△	or	½	au	R	C	G	H	1808	O	s p l	Bot mag 1244
644 speciósum *B M.*	crimson	☿	△	or	½	mr.ap	R	C	G	H	1808	O	s p l	Bot mag. 1476
645 róseum *B M*	rose-coloured	☿	△	or	½	jl	Pk	C.	G	H	1808	O	s p.l	Bot. mag 1225

97. GEISSORHI'ZA. *Ker* Tile-Root — *Irideæ* — *Sp* 7

646 rochénsis *H K.*	plaid	☿	△	or	¾	my	V	C	G	H	1790	R	s p l	Bot mag 508
647 júncea *Lk*	rushy	☿	△	or	1	jn jl	W	C	G	H	1822	O	s p l	
648 setácea *B M*	bristle-leaved	☿	△	or	1	jn jl	Su	C	G	H	1809	O	s p l	Bot. mag. 1255
649 obtusáta *H K.*	yellow-flowered	☿	△	or	1	my	Y	C	G	H	1801	O	s p l	Bot mag 672
650 secúnda *H K*	one-sided	☿	△	or	1	my	W	C	G.	H	1795	O	s p l	Bot. m. 597 1105
651 excísa *H K*	short-leaved	☿	△	or	½	ap my	W	C	G	H	1789	O	s p l	Bot. mag. 584
652 ciliàris *Sal*	cilíated	☿	△	or	1	ap my		C	G.	H	...	O	s.p l	

98. HESPERA'NTHA *Ker* Evening-Flower — *Irideæ* — *Sp* 5

653 radiáta *H K*	nodding-flower	☿	△	or	¼	ap jn	V	C	G	H	1794	O	s p l	Bot mag 573
654 pilósa *B M*	hairy	☿	△	or	½	ap my	V	C	G	H	1811	O	s p.l	Bot mag 1475
655 graminifólia *Sweet*	grass-leaved	☿	△	or	½	au s	V	C	G	H	1808	O	s p l	Bot mag 1274
656 falcáta *H K*	sickle-leaved	☿	△	or	½	ap my	V	C	G.	H	1787	O	s p l	Bot. mag 566
657 cinnamómea *H. K*	curled-leaved	☿	△	or	½	ap my	V	C	G	H	1787	O	s p l	Bot mag. 1054

†99 SPARA'XIS. *Ker* Sparaxis. — *Irideæ* — *Sp* 4

658 tricolor *H K*	three-coloured	☿	△	or	1	my	O	C	G	H	1789	O	s.p l	Bot mag 381
β sanguineo-purpurea	*various-colored*	☿	△	or	1	ap my	R.P	C	G	H	1811	O	s p l	Bot mag 1482
γ violaceo-purpurea	*dark-colored*	☿	△	or	1	ap my	V P	C	G	H	1811	O	s p l	Bot. m 1482 f 2
δ roseo-alba	*light-colored*	☿	△	or	1	ap my	Pk	C	G	H	1811	O	s p l	Bot. m 1482 f 3
659 bicolor *H K*	two-colored	☿	△	or	½	mr ap	B Y	C	G	H	1786	O	s p l	Bot mag 548
660 grandiflóra *H K*	purple-flowered	☿	△	or	¾	ap	P	C	G	H	1758	O	s p l	Bot mag 541
β striata	*streak-flowered*	☿	△	or	¾	ap	St	C	G	H	1758	O	s p l	Bot mag 779
γ lutago	*lily-flowered*	☿	△	or	¾	ap	W	C	G	H	1758	O	s p l	Bot reg 232
661 bulbífera *H K*	bulb-bearing	☿	△	or	¾	my jn	V	C	G	H	1758	O	s p l	Bot. mag. 545

100 TRITO'NIA *Ker* Tritonia — *Irideæ* — *Sp* 15

662 crispa *H K*	curled-leaved	☿	△	or	½	ap my	F	C	G	H	1787	O	s p l	Bot mag 678
663 viridis *H K*	green-flowered	☿	△	or	¾	jl	G	C	G	H	1788	O	s p l	Bot mag 1275
664 rósea *H K.*	rosy	☿	△	or	1½	jn jl	Pk	C	G	H	1793	O	s p l	Bot mag 618
665 capénsis *B M*	Cape	☿	△	or	1	au o	W	C	G	H	1811	O	s p l	Bot mag 1531
666 longiflóra *H K*	long-flowered	☿	△	or	1	ap jn	Y	C	G	H	1774	O	s p l	Bot mag 256
667 tenuiflóra *Vahl*	slender-tubed	☿	△	or	1	ap jn	Y	C	G	H	1811	O	s.p l	B m 1502 f ma
β cóncolor Sweet	*self-colored*	☿	△	or	1	ap jn	Y	C	G	H	1811	O	s p l	B m 1502 f mm.
γ rochénsis B M	*bending-flower*	☿	△	or	1	au	Y	C	G	H	1811	O	s p l	Bot mag 1503
δ pállida Ker	*pale-flowered*	☿	△	or	1	au	Y	C	G	H	1806	O	s p l	Jac ic r 2 t. 262
668 lineáta *H K*	pencilled	☿	△	or	2	my	Str	C	G	H	1774	O	s p l	Bot mag 487
669 securígera *H K*	copper-colored	☿	△	or	½	my	Br	C	G	H	1774	O	s p l	Bot mag 583
670 fláva *H K*	yellow	☿	△	or	½	f mr	Y	C	G.	H	1780	O	s p l	Bot reg 747
671 squálida *H K*	sweet scented	☿	△	or	½	my	Ru	C	G	H	1774	O	s p l	Bot mag 581
672 fenestráta *H K*	open-flowered	☿	△	or	1½	my jn	Y	C	G	H	1801	O	s p l	Bot. mag 704
673 crocáta *H K*	crocus-flowered	☿	△	or	½	mv jn	O	C	G	H	1758.	O	s p l	Bot mag 184
674 deústa *H K*	spotted	☿	△	or	½	my	Ful	C	G	H	1774.	O	s p l	Bot mag 622
675 miniáta *H K*	late-flowered	☿	△	or	½	au	Ful	C	G	H	1795	O	s p l	Bot mag 609
676 refrácta *Ker*	reflexed	☿	△	or	1	my jn	Y	C	G	H	1815	O	s.p l	Bot. reg 135

101 WATSO'NIA *Ker* Watsonia — *Irideæ* — *Sp* 12

677 spicáta *H K*	hollow-leaved	☿	△	or	½	my	Pk	C	G	H	1791	O	s p l	Bot mag 523
678 plantagínea *H K.*	fox-tail	☿	△	or	2	jn jl	W	C	G	H	1774	O	s p l	Bot. mag 553
679 punctáta *H K*	dotted-flowered	☿	△	or	1	ap my	P	C	G	H	1800	O	s p l	Bot rep. 177
680 róseo-álba *B M*	two-colored	☿	△	or	1	jl au	Pk	C	G	H	...	O	s p l	Bot mag 537
β variegata	*variegated*	☿	△	or	1	jl au	St	C	G	H	...	O	s p l	Bot. mag 1193
681 marginàta *H K*	broad leaved	☿	△	or	3	jn	Pk	C	G	H	1774	O	s p l	Bot. mag 608
β minor	*shining-leaved*	☿	△	or	3	o	Pk	C	G	H	1812	O	s p l	Bot. mag 1530



History, Use, Propagation, Culture,

95. ***Ixia.*** Derived from *ἰξὸς*, to fix, in allusion to the viscid nature of the roots of some species.
96. ***Trichonema.*** From *θρὶξ*, hair, and *νημα*, a filament; the filaments being hairy.
97. ***Geissorhiza.*** From *γεισσοω*, to shape like the tiles or eaves of a house, and *ῥίζα*, a root.
98. ***Hesperantha*** From *ἑσπερα*, evening, and *ἀνθος*, a flower, in reference to the time the flowers expand

637 Tube twice as long as spathe, Segments oblong, Stigmas split gaping
638 Tube the length of the spathe, Segments spatulate concave, Stigmas funnel-shaped
639 Leaves curled

640 Leaves linear channelled
641 Leaves linear nerved thickened at the edge
642 Radical leaves with 4 furrows, Outer valve of spathe convolute rigid, Flower turbinate, Segments lanc
643 Leaves twisted, inflated at base, Flower very large spreading, Segm. with a black mark at the base, Stamens bearded at base, Anthers connate
644 Leaves linear, very long, Flowers veiny, spreading on long stalks, Edge of spathe membranous
645 Leaves filiform, Scapes 1-flowered, shorter than the campanulate flower

646 Leaves radical linear acute, Stem smooth, a little honey-pore at the base of the divisions of the flower
647 Leaves filiform, Stem few-flow smooth, spathes scarious much longer than tube, Segments of flower obl
648 Stem simple few-flowered, Radical leaves bristly
649 Radical leaves ensiform-linear obtuse
650 Radical leaves linear-acute, Stem villous
651 Radical leaves ovate oblong
652 A doubtful species, known only by name

653 Leaves fistulous
654 Leaves linear hairy, Stem smooth
655 Leaves linear with stem smooth
656 Radical leaves falcate smooth
657 Radical leaves falcate curled

658 Spathes spotted, Limb of flower regular

659 Spathes spotted, Limb of flower bilabiate
660 Spathes lined, Limb of flower regular segments ovate-oblong

661 Spathes lined, Limb of flower regular segments elliptical

662 Leaves waved curled, Segments of flower flat
663 Scape 3-cornered angles membranous
664 Outer valve of the spathe cuspidate, Tube of the flower very long, Upper segment largest
665 Spathe lanceolate pointed, Flower striped Upper segment erect largest, the rest linear oblong
666 Outer valve of the spathe obtuse 3-toothed, Tube very long, Segments of the limb equal
667 Leaves ensiform, Flowers in two rows, Spathes membranous shorter than tube, Segm of the limb linear

668 Upper segment of flower largest, outer retuse
669 Outer valve of spathe obtuse 3-toothed at end, Three lower segments of the limb with a stalked perpendicular callus at base
670 Outer valve of spathe cuspidate, Three lower segments of limb with a stalked perpendicular callus at base
671 Limb campanulate segments approximated, transparent at the edge towards the base
672 Limb infundibuliform, segments distant, transparent at the edge towards the base
673 Limb campanulate transparent at the base
674 Three outer segments gibbous within, at the base spotted and carinate
675 Leaves ensiform, Scape many spiked, Base of the flower lined not transparent
676 Spikes reflexed one-sided, Flowers infundibuliform, Spathes very short, Leaves linear ensiform

677 Leaves fistular slender
678 Upper leaves linear ensiform; lower fistular compressed
679 Leaves linear very narrow
680 Leaves linear ensiform, Anthers as long as throat, Corolla funnel-shaped with elliptical pointed segments

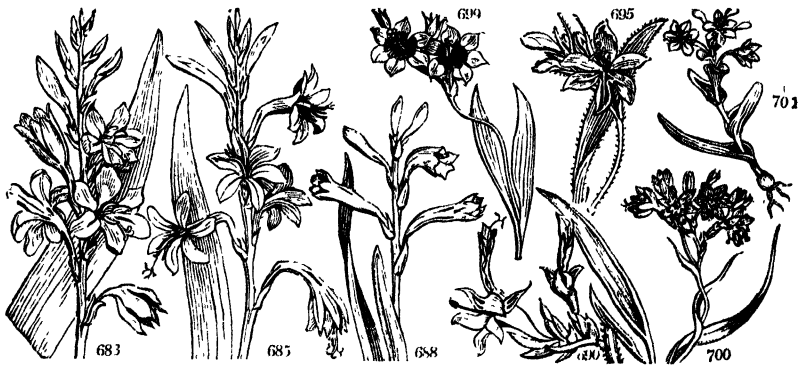
681 Leaves ensiform thickened at the edge, Spikelets several appressed, Flower funnel-shaped



and Miscellaneous Particulars

99. *Sparaxis* From σπαραξω, to tear The generic distinction consists in the lacerated spathas.
100 *Tritonia.* Named by Mr. Bellenden Ker, from Triton, understood, as he informs us, in the sense of a vane or weathercock, in allusion to the variable direction of the stamens in different species
101 *Watsonia* Named by Miller in honor of Dr Wm Watson, his friend. W brevifolia has its blossoms

682	*strictiflóra B M*	upright-flower	☿	△	or	1	jn	R	C. G H	1810	O	s p.l Bot. mag. 1406
683	*rósea H K*	pyramidal	☿	△	or	2	jl au	P	C G H	1803.	O	s p l Bot. mag. 1072
684	*brevifólia H K.*	short-leaved	☿	△	or	1	my	Pk	C. G H	1794.	O	s p.l Bot. mag 601
685	*iridifólia Jacq*	iris-leaved	☿	△	or	2½	my	F	C G H	1795.	O	s.p.l Jac. ic 2. t. 234
	β fúlgida Sal	*scarlet*	☿	△	or	¼	my	R	C G H.	1795.	O	s.p.l Bot. mag 600
686	*meriána H K.*	red-flowered	☿	△	or	1½	my.jn	P	C G H	1750.	O	s p.l Bot m 418.1194
687	*húmilis H K.*	lake-colored	☿	△	or	2	my jl	L	C. G H	1754.	O	s p l Bot m 631 1195
688	*aletroides H K*	aletris-like	☿	△	or	1½	my jl	S	C G H.	1774.	O	s p l Bot mag. 441
	β variegata	*variegated-flow*	☿	△	or	1½	my jl	St	C. G H	1774	O	s p l Bot mag 583
102	BABIA'NA *Ker*	BABIANA					*Iridæ*	*Sp* 11.				
689	Thunbérgn *H K*	many-spiked	☿	△	or	1	ap	P	C G H.	1774	O	s p l
690	*ringens H K.*	gaping-flowered	☿	△	or	½	my.jn	P	C G H	1752	O	s p Com hor 1 t. 41
691	tubulifóra *W*	tube-flowered	☿	△	or	¾	jn	Y R	C G H	1774.	O	s p Bot. mag. 847
	β tubata W	*long-tubed*	☿	△	or	¾	jn	Y W	C G H	1774	O	s p Bot. mag 680
692	spathácea *H K*	stiff-leaved	☿	△	or	¾	jn	L B	C G H	1801	O	s p Bot mag 638
693	sambucina *H K*	elder-scented	☿	△	or	¾	ap my	B	C G H	1799	O	s p Bot mag 1019
694	distícha *B M*	two-ranked	☿	△	or	¾	jn jl	B	C G H	1774	O	s p Bot mag 626
695	plicáta *H K*	sweet-scented	☿	△	or	¾	my jn	P	C G H.	1774	O	s p Bot mag 576
696	stricta *H K*	upright	☿	△	or	1	my jn	B W	C G H	1757	O	s p Bot. m 621
697	sulphúrea *H K*	pale-flowered	☿	△	or	¾	my jn	Y	C G H	1795	O	s p Bot. mag 1053
698	villósa *H K*	dark-red	☿	△	or	½	au	D R	C G H	1778	O	s p Bot mag 583
699	rubro-cyánea *H K*	red and blue	☿	△	or	¼	ap jn	B R	C G H	1794	O	s p Bot mag 410
103	LAPEYRO'USIA *Ker*	LAPEYROUSIA					*Iridæ*	*Sp* 2				
700	corymbósa *H K*	level-topped	☿	△	or	¾	my jn	B	C G H	1791	O	s p Bot mag 595
701	fissifólia *B M*	leafy-spiked	☿	△	or	¼	au s	V	C G H.	1809	O	s p Bot. mag 1246
104	MELASPHÆ'RULA *Ker*	MELASPHÆRULA					*Iridæ*	*Sp* 2				
702	graminea *D C*	grass-leaved	☿	△	or	1	ap au	G	C G H	1787	O	s p Red hl 163
703	iridifólia *D C*	iris-leaved	☿	△	or	1	ap au	Y G	C. G H	1787	O	s p Bot mag 615
†*105	GLADI'OLUS *Ker*	CORN-FLAG					*Iridæ*	*Sp* 28—*5*				
§704	Cunónia *H K.*	scarlet-flowered	☿	△	or	2	my jn	S	C G H	1756	O	s p.l Bot. mag 343
705	Watsónius *H K*	Watson's	☿	△	or	1	f ap	D R	C G H.	1701	O	s p l Bot m 450 569
§706	quadrangulàris *H K*	four-channelled	☿	△	or	2	mr ap	Y	C. G H	1799	O	s p l Bot mag 567
707	viperátus *H K*	perfumed	☿	△	or	¼	ap my	Br Y	C G H	1787.	O	s pl Bot. mag 688
708	alátus *H K*	winged-flower	☿	△	or	¾	my jn	O G	C G H	1795	O	s p l Bot. mag 586
709	namaquensis *H K*	helmet-flower	☿	△	or	¾	my jn	O G	C G H	1800	O	s p l Bot. mag 592
710	brevifólius *H K*	short-leaved	☿	△	or	1½	d ja	Pk	C. G H	1802	O	s p.l Bot m 727. 992
711	hirsutus *H K*	hairy	☿	△	or	1½	ap jn	Pk	C G H	1795	O	s p l Bot mag 574
712	versicolor *H K*	various-colored	☿	△	or	1½	my jn	Br	C G H	1794.	O	s p l Bot. mag ∞ 1042
	β binervis B M	*two nerved*	☿	△	or	1½	my jn	Pk	C. G H.	1806	O	s p l Bot mag ∞ 1042
713	édulis *Ker*	eatable	☿	△	cul	1½	my jn	W	C G H.	1816.	O	s p l Bot reg. 169
714	hastátus *B M*	spade-spotted	☿	△	or	1	ap my	F	C G H	1816	O	s p.l Bot mag 1564
715	tristis *B M*	square-leaved	☿	△	or	1	my jn	Br Y	C G H	1745	O	s p l Bot. mag 272
	β concolor Sal	*self-colored*	☿	△	or	1	my jn	Y	C G H	1790	O	s p l Par lond. 8
716	trichonémifolius *δ m*	violet-scented	☿	△	or	1½	my jn	Y	C G H	1810	O	s p.l Bot mag 1483
717	grácilis *H K*	slender	☿	△	or	2	mr ap	F w	C G H	1800	O	s p l Bot mag 562
718	recúrvus *H K*	spotted-sheath	☿	△	or	2	ap my	Sl	C. G H.	1758	O	s p l Bot mag 578
719	cárneus *H K*	flesh-colored	☿	△	or	2	my jn	lb	C G H	1796.	O	s p l Bot mag 591
720	cuspidátus *H K*	tall	☿	△	or	1½	ap my	W Br	C G H	1795	O	s p l Bot mag 582
721	blándus *H K*	blush	☿	△	or	1½	jn	L F	C G H	1774	O	s p l Bot. mag 625
722	campanulátus *P S*	bell-flowered	☿	△	or	1½	my	L P	C G H	1794	O	s p l Bot rep 188
723	angústus *H K*	narrow-leaved	☿	△	or	2	my jn	L Y	C G H	1757	O	s p l Bot mag 602
724	involútus *Ker*	involute	☿	△	or	1½	my jn	Pk	C G H	1757	O	s p l Roche diss 2 t 3
725	undulátus *H K*	wave-flowered	☿	△	or	1	ap my	Pk	C G H	1760	O	s p l Bot. mag 538
726	floribúndus *H K*	large-flowered	☿	△	or	1	my jl	Cs	C G H	1788	O	s.p l Bot mag 610
727	Milléri *H K*	Miller's	☿	△	or	1½	ap my	V	C G H	1751	O	s p l Bot. mag 632
728	cardinális *H K*	superb	☿	△	or	2	jl au	D R	C G. H	1789	O	s p.l Bot. mag 135
729	byzantinus *H K*	Turkish	☿	△	or	2	jn jl	R	Turkey	1629	O	s p Bot mag 874
730	communis *H K*	common	☿	△	or	2	jn jl	R	S Europe	1596	O	s.p l Bot mag 86
731	ségetum *H K*	round-seeded	☿	△	or	2	jn jl	P	S Europe	1596	O	s p.l Bot. mag. 719
†106	ANOMATHE'CA *Ker*	ANOMATHECA					*Iridæ*	*Sp* 1				
732	juncea *H K*	cut-leaved	☿	△	or	¼	ap my	Li	C G H	1791	O	s.p.l Bot mag 606



History, Use, Propagation, Culture,

of a micacious hue, glittering in the sun, and not to be represented by art W iridifolia is a shewy border flower of a month's duration W mexicana is also very shewy, and has kidney-shaped bulbs

102 *Babiana* A name barbarously derived by Mr J B Ker from the name *babuner*, which the Dutch colonists at the Cape have given to the plant, because its roots are the favourite food of baboons. B ringens has dark-red bulbs

103. *Lapeyrousia* So named by Mr J B Ker, in honour of Lapeyrouse the celebrated and unfortunate French navigator

682 Stem upright many spiked, Leaves linear-lanceolate smooth edged with red
683 Leaves ensiform thickened at the edge, Spikelets several close together, Limb campanulate, Throat naked
684 Leaves ensiform very short, Limb spreading, inner segments widest
685 Flowers recurved, Tube the length of the spathe, Segments of limb acute

686 Flowers recurved, Tube longer than the spathe, Limb with obtuse segments
687 Flowers recurved, Tube the length of the spathe, Limb with acute segments
688 Flowers recurved, Throat nearly 4 times as long as the segments of the limb

689 Leaves villous, Flowers ringent
690 Leaves smooth, Flowers ringent
691 Tube filiform clavate three times as long as the irregular limb. Upper segment divaricating

692 Tube filiform twice as long as the regular limb, Segments obtuse alternate with a point
693 Segments longer than the throat marked with a darker linear longitudinal spot
694 Leaves stiffish subvillous plaited, Flowers distichous, Segments alternately curled
695 Segments length of the tube nearly equal, the alternate ones wavy the upper convolute at the end
696 Flowers funnel-shaped, regular, Segments scarcely longer than the tube, flat
697 Segments of flower thrice as long as the tube
698 Tube filiform the length of the regular campanulate limb alternate segments obtuse with a point
699 Limb much spreading, Segments rhomboidal spotted at the base

700 Flowers corymbose, Stamens much spreading
701 Flowers solitary

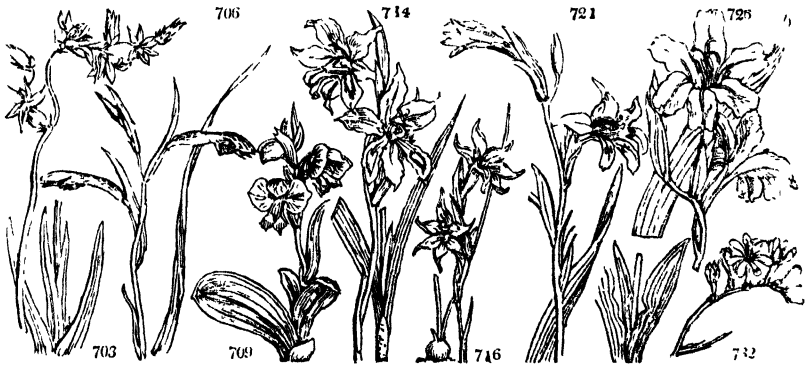
702 Tube very short, Segm nearly equal aristate, Scape paniculed, Leaves linear rather shorter than the scape
703 Many spiked, Scape weak, Spikes capil flexuose, Leaves sword-shaped smooth dist shorter than scape

704 Leaves linear ensiform, Upper segment of flower very long, lower very small
705 Leaves linear ensiform with 3 ribs on each side, Throat of the flower cylindrical, longer than segm of limb
706 Leaves 4-cornered 4-furrowed, Upper segment of flower very long, lower very small subulate
707 Upper segm of flower spat divar incurv lat rhomb-shaped ovate spread lower spat acute hanging down
708 Upper segm of fl obov recurved, lateral rhomb-shaped ovate spread lower spat acuminate hanging down
709 Upper segm of fl vaulted, lat rhomb-shaped ovate spread lower hanging down spat obtuse with a point
710 Sterile bulb with a single linear pubescent leaf, Flowering bulb leafless, Flowers subringent
711 Leaves linear-ensiform pubescent, Flowers nearly regular
712 Leaves linear-ensiform 3-ribbed on each side, Segments of flower longer than the throat

713 Leaves very long linear glaucous nerves prominent on both sides, Segments of flower cordate
714 Tube of the campan fl shorter than the spatha, Segments ovate obtuse the 3 lower with a hastate spot
715 Leaves 4-cornered 4-furrowed, Segments of flower nearly equal

716 Leaves 3 slender upright 4-cornered, Spike 2-3 fld 1-sided, Fl funnel-shaped nearly equal somewhat nodd.
717 Leaves linear the edge on each side ribbed, middle nerve nearly obsolete
718 Leaves linear with a rib on each side in the middle, Sheaths radical spotted
719 Tube linger than spathe, Up seg wider than rest, convol and recurv at end, lowest very narrow hang down
720 Tube twice as long as the segments of the limb which are acuminate wavy and reflexed
721 Tube shorter than the spatha, Limb campan subringent upper segm concave, the lower narr spotted
722 Leaves lanceolate smooth, Scape about 3-flowered longer than the leaves, Flower nearly campanulate
723 Leaves linear with a rib on each side in the middle, Tube longer than the spatha, the lower segments with a stalked 3-angular spot
724 Flowers ringent remote in two rows, Tube shorter than spatha, Segm lanc the lat rolled inwards at edge
725 Flowers erect funnel-shaped, Segments wavy, three lower nearly half as short as the others
726 Flowers erect turbinate campanulate, Segments equal in length, upper widest
727 Flowers erect campanulate, Segments equal in length upper narrower than in the lateral ones
728 Spikes several one-sided, three lower segments marked with a white lanceolate spot
729 Spike 2-rowed, Upper seg covered by lateral ones, the 3 lower marked by a white edged linear lanc spot
730 Spike 1-sided, Upper seg covered by lat ones, 3 lower marked by a white lin-lanc spot, lowest very large
731 Spike 1-sided, Upper segm. divaricating, 3 lower nearly equal, marked with a white edged lin lanc spot

732 Leaves broad lanceolate rather wavy



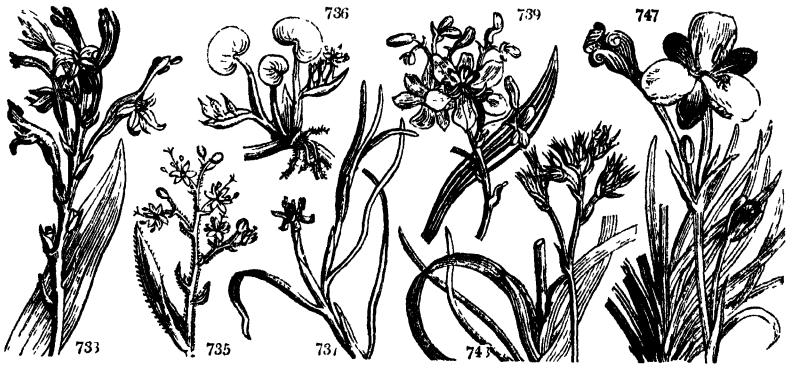
and Miscellaneous Particulars

104 *Melasphærula* From μελας, black, and σφαιρα, a globule In allusion to the colour and figure of the bulblets figured by Jacquin in his representation of the plant

105 *Gladiolus* From the Latin *gladius*, a sword, in allusion to the shape of the leaves G communis is a showy border flower, of which there are several varieties in general cultivation G cardinalis is a splendid plant, with scarlet flowers spotted with white

106 *Anomatheca* From two Greek words (ανευ and θηκη) signifying a singular capsule The capsule of the genus is remarkable for being, as it were, frosted

†107 ANTHOLY'ZA *Ker*	ANTHOLYZA			*Iridæ. Sp* 1—4								
733 æthiópica *H K.*	flag-leaved	☿ △ or	3	my jn	O	C G H		1759.	O	s.p.l	Bot. mag. 561
β vittigera	*ribband*	☿ △ or	2	ja f	O	C. G. H		...	O	s.p.l	Bot. mag. 1172
108 XIPHI'DIUM. *W*	XIPHIDIUM			*Hæmodoraceæ. Sp* 2.								
734 álbum *W*	white	☤ ▽ or	1½	...	W	W Indies		1787	R	s.p		
735 cæruleum *W.*	blue	☤ ▽ or	1½	...	B	Guiana		1793.	R	s.p	Aub. gui 1 t. 11	
*109 LEPTAN'THUS. *Mich*	LEPTANTHUS.			*Fluviales Sp.* 2—3								
§736 reniformis *M*	kidney-leaved	☤ △	½	jn jl	G	N Amer		1812.	D	aq	Fl. per 1. t. 71	
737 gramineus Vahl	grassy	☤ △	1	jn au	Y	N. Amer		1823.	D	aq	Hook. ex. fl. t 94	
110 WACHENDOR'FIA. *Ker.*	WACHENDORFIA.			*Hæmodoraceæ Sp* 5—6								
738 thyrsiflóra *W.*	tall-flowered	☤ △ or	2	my jn	Y	C G H.		1759.	D	r.m	Bot. mag 1060	
739 paniculáta *W*	panicled	☤ △ or	2	f	Y	C G H.		1700.	D	r m	Bot mag. 616	
740 graminea *W.*	grass-leaved	☤ △ or	1	jn	Y	C G H		...	D	r m		
741 hirsúta *W.*	hairy	☤ △ or	1½	jn	V	C G. H.		1687	D	r m	Bot mag 614	
742 brevifólia *H K*	short-leaved	☤ △ or	1	mr ap	P	C G H		1795	D	r m	Bot mag 1166	
111 HÆMODO'RUM *Sm*	HÆMODORUM			*Hæmodoraceæ Sp* 1—6								
743 planifólium *B P*	plain-leaved	☤ △ or	1½	jl n	O	N S. W.		1810	S	s p	Bot mag. 1610	
112 ARISTE'A. *Ker*	ARISTEA			*Iridea Sp* 5								
744 cyánea *H K*	woolly-headed	☤ △ or	½	ap jn	B	C G H		1759	S	s p	Bot. mag 458	
745 capitáta *H K.*	tallest	☤ △ or	3	jl au	B	C G H		1790	C	s p	Bot mag 605	
746 spiralis *H K*	spiral-flowered	☤ △ or	1	ap my	P Bl	C G H		1795	C	s p	Bot mag 520	
747 melaleuca *H K*	three-colored	☤ △ or	1	my jn	P Bl	C G H		1786	C	s p	Bot mag 1277	
748 pusilla *B M*	flat-stemmed	☤ △ or	¼	jn jl	B	C G H		1806	C	s p	Bot mag 1231	
*113. DILA'TRIS. *Ker*	DILATRIS			*Hæmodoraceæ Sp* 3—4								
749 corymbósa *W*	broad-petalled	☤ △ or	1	my	P	C G H		1790	S	s p	Ex bot 1 t 16	
750 viscósa *W*	clammy	☤ △ or	⅝	...	B	C G H		1795	S	s p	Lam ill t 34	
§751 Heritieri *Pers*	dyers	☤ △ dy	1¼	jl au	Pk	N Amer		1812	S	s p	Mich am 4	
†*114 BRODIÆ'A *Sm*	BRODIÆA			*Irideæ. Sp* 1—4								
§752 ixioides *Sims*	Ixia-like	☿ △ or	1	o	Li	Chili		1822	O	s p	Bot mag 2382	
†115 I'RIS *Ker*	IRIS			*Irideæ Sp* 63—92								
753 susiána *W*	Chalcedonian	☤ △ or	2	mr ap	St	Levant		1596.	R	s l	Bot mag 91	
754 florentina *W*	Florentine	☤ △ or	2	my jn	W	S. Europe		1596	R	p l	Bot mag 671	
755 germánica *W*	German	☤ △ or	3	my jn	B	Germany		1573	R	co	Bot. mag 670	
756 pállida *W*	pale Turkey	☤ △ or	1¾	my jn	L v	Turkey		1596	R	co	Bot mag 685	
757 flavescens *Red*	yellowish	☤ △ or	2	my jn	Y	. . . .		1818	R	co	Red lil 375	
758 orientális *W*	red-leaved	☤ △ or	1	my jn	L.R	China		1790.	R	co	Bot mag 1604	
759 sambucina *W*	elder-scented	☤ △ or	4	jn	L R	S Europe		1658	R	co	Bot. mag 187	
760 lúrida *W*	dingy	☤ △ or	2	ap	Br	S Europe		1758	R	co	Bot.mag 669 996	
761 squálens *W*	brown-flowered	☤ △ or	2	jn	St	S Europe		1768	R	co	Bot mag. 787	
762 variegáta *W*	variegated	☤ △ or	2	my jn	St	Hungary		1597	R	s l	Bot mag 16	
763 neglécta *Horn*	neglected	☤ △ or	2	my jn	P Bl	.....		..	R	co	Bot. mag 2455	
764 Swértii *Lam aphylla* B M	Swert's	☤ △ or	1½	ap my	W	.....		1819	R	co	Bot mag 870	
765 biflóra *W.*	two-flowered	☤ △ or	½	ap my	P	S Europe		1596	R	co		
766 sub-biflóra *H K*	double-bearing	☤ △ or	½	ap my	V	Portugal		1596	R	p l	Bot mag 1130	
767 cristáta *W*	crested	☤ △ or	¼	my	St	N Amer		1756	R	p l	Bot mag 412	
768 chinénsis *W*	Chinese	☤ △ or	½	my jn	P R	China		1792	R	co	Bot mag 373	
769 arenária *W en*	sand	☤ △ or	½	jn	Br	Hungary		1802	R	co	Bot reg 549	
770 lutéscens *W*	pale-yellow	☤ △ or	½	ap my	Y	Germany		1748	R	p l	Red lil t 263	
771 flavissima *W*	bright-yellow	☤ △ or	½	my jn	Y	Siberia		1814	R	co	Jac ic 3 t 220	
772 púmila *H K*	dwarf	☤ △ or	¼	ap my	P	Austria		1596	R	p l	Bot. mag 6 1209	
773 dichotoma *W*	forked	☤ △ or	¼	au	L P	Dauria		1784	R	p l	Bot reg 246	
774 hungárica *W en*	Hungarian	☤ △ or	1	my	V	Hungary		1815	R	co	Wetk. h 3 t 226	
775 ibérica *St*	reflexed	☤ △ or	½	ap my	Br	Iberia		1821	R	co		
776 pseud-acorus *W*	yellow-water	☤ △ or	3	jn	Y	Britain	mor pl	R	p l	Eng bot 578		
777 fœtidissima *W.*	Gladwyn	☤ △ or	1½	jn	Ld	Britain	sha pl	R	p l	Eng bot 596		
778 versicolor *W*	various-colored	☤ △ or	1	my jn	St	N Amer		1732	D	s l	Bot mag 21	



History, Use, Propagation, Culture,

107. ***Antholyza*** From ἀνθος, a flower, and λυσσα, rage A metaphorical name The flower has some resemblance to the mouth of an animal, which by the aid of a little imagination, may be supposed ready to bite

108. ***Xiphidium*** A name of a similar import with Gladiolus, being derived from ξιφος, a sword, in allusion to its stiff and sword-shaped leaves

109. ***Leptanthus*** Λεπτος, slender, and ανθος, a flower The tube of the flower is long and slender These are aquatic floating plants of little beauty

110. ***Wachendorfia.*** In memory of F. J. Wachendorf, a Dutchman, and professor of botany at Utrecht

111. ***Hæmodorum*** Αιμα, blood, and δωρον, a gift, that is to say, a plant which produces a red flower

733 Leaves ensiform nerved, Upper segment longest stretched forward, the others recurved.

734 Leaves smooth, Petals linear-lanceolate
735 Leaves hairy, Petals ovate

736 Leaves roundish reniform, Spathes oblong acuminate many-flowered
737 Leaves all linear

738 Scape nearly simple, Panicle contracted, Leaves ensiform 5-nerved perennial plaited smooth
739 Scape many spiked, Panicle spreading, Leaves sword-shaped 3-nerved annual plaited smooth
740 Scape many-spiked, Panicle spreading, Leaves sword-shaped channelled smooth
741 Scape many spiked, Panicle spreading, Leaves linear sword-shaped 3-nerved plaited villous
742 Leaves elliptic sword-shaped hairy

743 Corymbs compound, Branches spreading, Leaves flat

744 Flowers headed, Spathes many-parted torn
745 Heads of flowers alternate, Spathes entire
746 Flowers alternate, Segments of flower equal
747 Flowers alternate, three of the segments less than the rest
748 Scape about 1-flowered, Leaves linear-lanceolate a little falcate

749 Petals ovate oblong, Corymb level-topped hairy
750 Petals linear, Corymb level-topped villous viscid
751 Leaves ensiform, Scape villous above, Flowers spiked one-sided

752 Leaflets of the crown subulate

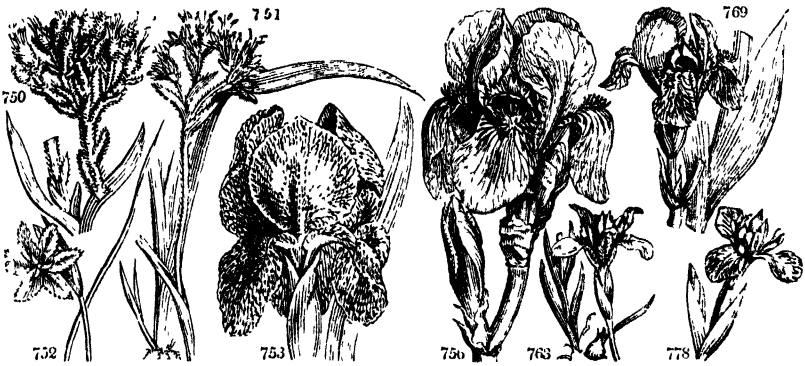
1 *Flowers bearded*

753 Stem 1-flowered longer than the leaves, Smaller petals deflexed
754 Stem 2-flowered longer than the leaves, Flowers sessile
755 Stem many-flowered longer than the leaves, lower flowers stalked, Spathes colored
756 Stem many-flowered longer than the leaves, Flowers sessile, Spathes white
757 Leaves lanc rather plaited, halt as short again as the branching stem, Spathes leafy, Tube length of germen
758 Stem about 2-flowered the length of the leaves, Germens 3-cornered
759 Stem many-flowered longer than the leaves, Petals emarginate the outer flat
760 Stem many-flow longer than the leaves, Outer petals revolute, inner nearly upright, wavy and inflexed
761 Stem many-flowered longer than the leaves, Deflexed petals folded back upright emarginate
762 Stem many-flowered as long as the leaves, Deflexed petals emarginate, erect oblong
763 Stem many-flowered longer than the leaves, Erect petals entire, deflexed rather emarginate
764 Leaves shorter than the 3-flowered stem, Larger petals undulate reflexed, smaller emarginate

765 Scape round about 3-flowered longer than the leaves, Deflexed petals narrower than the erect ones
766 Scape about 1-fl scarcely shorter than ensiform leaves, Tube of corolla about equal to the 6-streaked germen
767 Stem compressed about 1-fl the length of leaves, Petals about equal, Beard crested, Germens 3-cornered
768 Scape compressed many-flowered, Stigmas jagged
769 Scape 2-flowered shorter than the ensiform leaves, Upper flower abortive
770 Scape very short about 1-flowered, Spathe erect the length of the tube
771 Scape 2-flowered longer than the leaves, Spathes the length of the tube
772 Scape very short 1-flowered, Spathes shorter than the tube, Reflexed petals narrower than the erect ones
773 Nearly stemless, Scape panicled round, Branches 2-4-flowered
774 Leaves ensiform smooth somewhat falcate nearly equal to the many-flowered scape, Spathes inflated
775 Leaves ensiform falcate smooth, Scape 1-flowered, Petals obovate

2 *Flowers beardless*

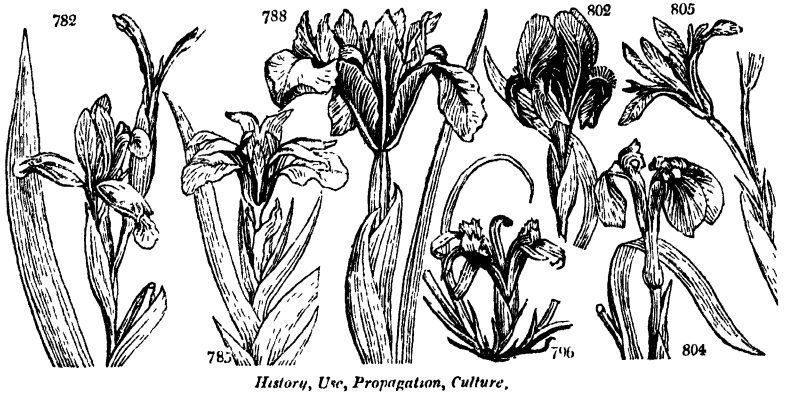
776 Leaves flat, Inner petals less than the stigma
777 Stem one-angled many-flowered longer than the leaves
778 Stem round flexuose equal to the leaves, Germens nearly 3-cornered



and Miscellaneous Particulars

112 *Aristea* From *arista*, a point or beard The leaves are bearded.
113 *Dilatris* A name not satisfactorily explained
114 *Brodiæa* Named in honor of Mr Brodie, of Brodie House, a Scotch gentleman, who paid great attention to the botany, especially Cryptogamia, of his own country
115 *Iris* The name given by Theophrastus, Dioscorides, and Pliny, from the variety of its colors According to Plutarch, the word iris signified, in the ancient Egyptian tongue, *eye* the eye of heaven This beautiful genus abounds in Europe, but is rare in America. Some are bulbous, but the greater part tuberous rooted, of easy culture, and propagation by seed or division of the root The roots of I florentina, ger-

779 cúprea *Ph*	copper-colored	♃	△	or	2	jn jl	O	N. Amer	1812	R	p l	Bot. mag 1496
780 virginica *W*	Virginian	♃	△	or	1	jn jl	B	N. Amer.	1768	R	s l	Bot. mag 703
781 spúria *W*	spurious	♃	△	or	1½	jl	Sl	Siberia	1759	R	co	Bot mag 875
782 ochroleúca *W*	sulphur-colored	♃	△	or	4	jl	L y	Levant	1757	R	co	Bot mag 1515
stenogyna B Mag												
783 Guldenstádtia *W en*	Guldenstadt's	♃	△	or	4	ap my	Y	Siberia	1757	R	co	Bot mag t 61
784 halóphila *W*	long-leaved	♃	△	or	3	jl s	B	Siberia	1780	R	co	Bot mag 1131
785 aláta *Lam*	long-tubed	♃	△	or	½	jn	B	Algiers	1801.	O	co	Desf atl 1 t 6
786 xiphium *W*	small-bulbous	♂	△	or	1½	jn	B y	Spain	1596	O	co	Bot. mag 686
787 xiphioides *W*	great-bulbous	♂	△	or	1½	jn	B y	Spain	1571	O	co	Bot mag 687
788 lusitánica *H K*	Portuguese	♂	△	or	2	ap	B	Portugal	1796	O	co	Bot mag 679
789 tenuifólia *W*	slender-leaved	♂	△	or	2	my	L B	Dauria	1796	D	co	Pall it. 3 t e f 2
790 pérsica *W*	Persian	♂	△	or	½	mr	B y	Persia	1629	O	co	Bot. mag 1
791 vérna *W*	spring	♃	△	or	1	ap my	P	Virginia	1748	D	co	Pl alm t 196 f 6
792 ventricósa *W*	bellied	♃	△	or	1	jn	P B	Dauria	1800	D	co	Pall it 3 t b f 1
793 sibírica *W*	Siberian	♃	△	or	2	my jn	L B	Siberia	1596	R	co	Bot mag 1163
794 prismática *Ph*	New-Jersey	♃	△	or	1	my jn	P	N Amer	1812	R	p l	Bot mag 1504
795 graminea *W*	grass-leaved	♃	△	or	½	jn	St	Austria	1597	R	co	Bot mag 681
796 húmilis *Bieb*	low	♃	△	or	1	ap my	B	Caucasus	1812	R	co	Bot. mag 1123
797 ruthénica *Ker*	pigmy	♃	△	or	¼	my	B	Siberia	1804	D	co	Bot mag 1393
798 tuberósa *W*	snake'-head	♃	△	or	¼	mr ap	G B	Levant	1597	O	s p	Bot mag 531
799 reticuláta *Ad*	netted	♃	△	or	½	mr ap	B	Iberia	1821	R	co	Bot Cab 1829
800 spathuláta	spathulate-flow	♃	△	or	1	jl au	P B	Germany	1759	R	co	Bot mag 58
801 caucásica *Huffm*	Caucasian	♃	△	or	½	mr	Y	Caucasus	1821	R	co	
802 furcáta *Bieb*	forked	♃	△	or	½	mr	B	Tauria	1822	R	co	Bot mag 2361
803 triflóra *W*	three-flowered	♃	△	or	1	jn jl	B	Italy	1821	R	co	
804 brachycúspis *B M*	short-petalled	♃	△	or	1½	jn jl	P	Siberia	1819.	R	co	Bot mag 2326
805 Pallásii *B M*	Pallas's	♃	△	or	2	jn jl	B	Tartary	1820	R	co	Bot mag 2331
*116 MORÆA *Ker*	MORÆA					*Iridæ*	*Sp* 2—26					
§806 flexuósa *H K*	flexuose	♂	⧋	or	1	ap my	Y	C G H	1803	D	s p	Bot. mag 695
§807 collina *H K*	equal-flowered	♂	⧋	or	2	my	P	C G H	1768	D	s p	Bot mag 1033
β minuta B R	*spot-flowered*	♂	⧋	or	2	my jn	P	C G H	1790	D	s p	Bot mag 1247
§808 pavónia *H K*	Peacock	♂	⧋	or	1	my jn	R B	C G H	1802	D	s p	Bot mag 702
§809 tripétala *H K*	three-petalled	♂	⧋	or	1	ap my	V	C G H	1790	D	s p	Bot mag 1276
810 angústa *B M*	narrow-leaved	♂	⧋	or	¾	my jn	Fu	C G H.	1776	D	s p	Bot mag 696
§811 tricuspis *H K*	trident-petilled	♂	⧋	or	1	jn	G	C G H	1807	D	s p	Bot mag 1047
§812 ténuis *H K*	brown-flowered	♂	⧋	or	1	my jn	P	C G H	1802	D	s p	Bot mag 703
§813 unguiculáta *H K*	long-clawed	♂	⧋	or	1	my jn	Va	C G H	1802	D	s p	Bot mag 703
814 édulis *H K*	long-leaved	♂	⧋	cul	4	my jn	La	C G H	1792	D	s p	B mag 613 1238
815 longiflóra *H K*	long-flowered	♂	⧋	or	½	my jn	Y	C G H.	1801	D	s p	Bot mag 712
§816 spicáta *B M*	spiked	♂	⧋	or	1½	my jn	Y	C G H	1785	D	s p	Bot mag 1283
817 tristis *H K*	dull-colored	♂	⧋	or	1	my jn	Br	C. G H	1768	D	s p	Bot mag 577
818 crispa *H K*	short-spathed	♂	⧋	or	½	my jn	B	C G H	1812	D	s p	Bot mag 1284
819 bituminósa *H K*	clammy	♂	⧋	or	1	ap my	Y	C G H	1787	D	s p	Bot mag 1045
820 viscária *H K*	bird-limed	♂	⧋	or	1	jn	Li	C G H	1800	D	s p	Bot mag 587
821 ramósa *H K*	branching	♂	⧋	or	3	my jn	Y	C G H	1789	D	s p	Bot mag 771
§822 villósa *H K*	villous	♂	⧋	or	1	ap my	P	C G H	1789	D	s p	Bot mag 571
823 ciliáta *H K*	fringed-leaved	♂	⧋	or	¼	ap jn	P	C G H	1587	D	s p	Bot mag 1061
β barbigera Sal	*bearded*	♂	⧋	or	¼	ap my	Y	C G H	...	D	s p	Bot mag 1012
824 sisyrinchium *H K*	Spanish-nut	♂	△	cul	½	my jn	B	S Europe	1597	D	s p	Bot. mag 1407
825 papilionácea *H K*	butterfly	♂	⧋	or	½	my jn	Va	C. G H	1795	D	s p	Bot mag 750
§826 spathácea *W*	sheathed	♂	⧋	or	¼	jl	Y	C G H	1798	D	s p	Thunb diss t 1
827 iridioides *H K*	sword-leaved	♂	⧋	or	½	my jn	W	C G H	1758	D	s p	Bot mag 693
§828 lúrida *B R*	lurid	♂	⧋	or	½	jn	Cr	C G H	1817	D	s p	Bot reg 312
†*117 MARÍCA *Ker*	MARICA					*Iridæ*	*Sp* 14					
829 Northiána *H K*	broad-stemmed	♃	⧋	or	4	ap au	Y B	Brazil	1780	D	s p	Bot. mag 654



History, Use, Propagation, Culture.

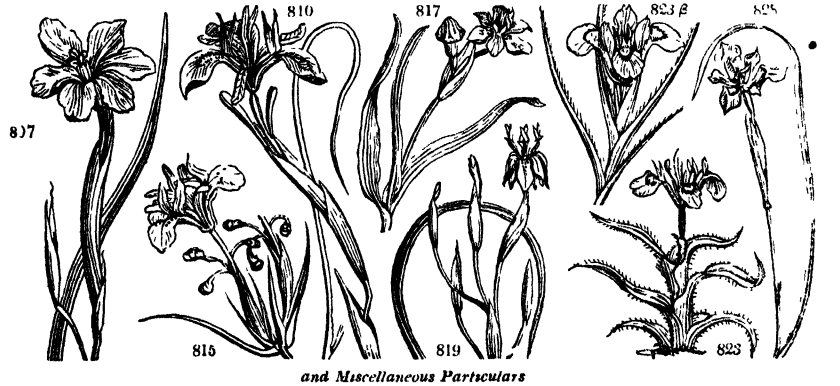
manica, and pseud-acorus are used in medicine, those of the first are remarkable for communicating an odor like that of violets, and are the orrice-root (iris root of the shops The root of I pseud-acorus, in powder, used as snuff, produces a great heat in the mouth and nose, and occasions discharge from the nostrils it is astringent, and used instead of galls in making ink or dying black The fresh juice of the root is one of the most powerful cathartics, and in that way has cured inveterate dropsies I germanica possesses similar qualities, and the root of either species suspended in wine or beer, keeps the latter from growing stale, and communicates a pleasant taste and smell to the former The leaves and roots of I fœtidissima are steeped in beer by the country people in some places as a purge I susiana flowers well in a warm border and loamy soil I fimbriata is rather tender, it requires a rich light soil, and to make it flower freely, it must be planted in a large pot, and have the suckers removed from the roots as soon as they appear I orientalis requires a similar treatment, and with the two preceding species requires the protection of a green-house to make it flower in perfection. Of I xiphioides there are numerous varieties procured from seeds, which are treated much in the same way as those of crocus This species, and I tuberosa are very ornamental, they thrive best in a light

779 Stem round flexuose as long as leaves, Petals all emarginate obovate, the inner shortest, Capsules very large
780 Stem 2-edged many-flowered longer than the leaves
781 Leaves linear, Scape round, Germens 6-cornered, Stigmas acute, Petals rounded
782 Leaves linear, Scape about 3-flowered round, Germens hexagonal, Petals ovate longer than their claw

783 Leaves ensiform, Scape nearly round, Germens hexagonal, Petals erect oblong
784 Radical leaves very long, Stem higher than the leaves, Germens hexagonal
785 Stemless, leaves channelled, Three erect petals very small, Tube very long
786 Leaves channelled subulate, Stem 2-flowered, Petals nearly as narrow as stigmas, Germen round
787 Leaves channelled subulate, Stem 2-flowered, Petals much wider than stigmas, Germen acutely angular
788 Leaves channelled, Scape 2-flowered, Inner petals emarginate
789 Stemless, Leaves filiform very long, Scape very short 2-flowered, Tube of the corolla filiform
790 Leaves linear subul. channelled longer than the very short 1-flow scape, Inner petals very short spreading
791 Leaves flat, Scape 1-flowered shorter than the leaves, Petals nearly equal
792 A little caulescent, Stem about 2-flowered shorter than the leaves, Spathes ventricose, Germens 3-angular
793 Stem about 3-flowered fistulous longer than the leaves, Germens 3-angular
794 Stem solid round as long as the leaves, Leaves very narrow long, Capsules long pointed at each end
795 Stem about 2-flowered 2-edged shorter than the leaves, Germens hexangular
796 Leaves linear-ensiform very much longer than the 2-flowered very short scape, Petals acuminate
797 Leaves linear longer than the 1-flowered scape, Alternate petals smaller
798 Leaves 4-cornered
799 Scape 1-flowered shorter than the 4-cornered leaves, Tube filiform, Root bulbous
800 Outer petals spatulate, Stem branched at the base shorter than the leaves
801 Leaves lanceolate falcate edged, Stem about 2-flowered
802 Leaves ensiform shorter than the 3-flowered 2-forked scape, Germen 3-angular 3-cornered
803 Leaves linear acute length of the 3-fl scape, Spathes withered with a long point, Flowers close together
804 Leaves linear-lanceolate very long, Inner petals very short, Stigmas spirally revolute
805 Leaves ensiform doubled together striated incurved at end, Ovaries very long cylindrical, Stigmas keeled serrated at end

806 Segments of the flower nearly equal oblong spreading, Filaments united at base
807 Segments nearly equal obovate very spreading, Filaments united in a cylinder

808 Segments spotted and dotted at base, The three inner half as short as the others and much narrower erect
809 Inner segments linear, sometimes absent
810 Leaf filiform erect with 1-flowered scape smooth, Spathes obtuse
811 Outer segments very spreading bearded, Inner small 3-toothed at the end the middle tooth the longest
812 Outer segm deflexed bearded, Inner very small 3-toothed at end the middle tooth longest and involute
813 Outer segments beardless, Inner very small 3-toothed at the end
814 Lower leaf longest of all, All the segments of the flower very spreading the alternate ones small
815 Tube filiform very long All the segments reflexed
816 Beardless, Flower uniform nearly equal, Stigmas petal shaped
817 Leaves very smooth, Stem branches and peduncles villous
818 Leaves about the length of the scape, All the segments of the flower spreading, the alternate ones smaller
819 Lower leaf spirally twisted, Stem smooth, Branches viscid
820 Leaves straightish, Stem and branches viscid
821 Stem panicled much branching, Segments nearly equal deflexed
822 Bearded, Leaves on the inside villous in lines, Stem pubescent, Invol. very smooth, Alternate segments of flower very small 3-toothed
823 Leaves ciliated, Inner segments erect
824 Tube filiform very long, Segments alternate erect
825 Leaves pubescent, all the segments spreading
826 Leaves slender dependent, Flowers terminal in close heads
827 Leaves perennial equitant, Segments of flower spreading alternate ones much the largest
828 One-flowered a little bearded, Leaves about 3 linear, Stem simple, Outer segments of flowers rounded: inner very narrow entire
829 Scape winged sword-shaped, Common spathe 2-leaved, partial 2-flowered, Flower stalks simple



and Miscellaneous Particulars

sandy soil and eastern exposure; the bulbs are taken up every other year, but must not be kept longer out of ground than a month I persica is highly odoriferous, it is propagated by separating the bulbs, or from seeds, but by the latter mode no new varieties have hitherto been obtained I susiana and persica bear forcing well supplies of them, and of I xiphioides are annually imported from Holland In a deep and loose soil the roots of the tuberous and bulbous species of this genus are apt to run down when they cease to flower, and getting gradually weaker and weaker, are at last lost. To prevent this, Miller advises to form a stratum of rubbish about a foot and a half under the surface

116. *Morœa* So named by Miller, in honor of Robert Moore, of Shrewsbury, a distinguished botanist, of whom there exists a memoir in the Philosophical Transactions M pavonia is one of the most elegant species of the genus. The bulbs of M edulis are eaten at the Cape of Good Hope, both by men and monkeys, and those of M. sisyrinchium are eaten in Spain Sweet recommends, as the best soil for these plants, "a mixture of sandy loam."

117. *Marica.* A name perhaps obtained from μαραινω, to become flaccid, in allusion to the nature of the

830	**martinicénsis** *H. K.*	Martinico	♀	⊠	or	2	jn	Y	Martinico 1782	D a.p	Bot. mag. 416
§831	**gladiúta** *B Reg*	Cape	♀	△	or	2	jn jl	Y	C G. H. 1816	D s p	Bot. reg. 229
832	**paludósa** *H K*	marsh	♂	⊠	or	1	jl au	W	Guiana 1792	Sk s p	Bot. mag 646
§833	**californica** *B M*	yellow	♂	△	or	1	my s	Y	California 1796	Sk s.p	Bot. mag 983
§834	**palmifólia** *W.* *M plicáta* B M	palm-leaved	♂	⊠	or	2	f mr	W	Brazil 1779	Sk s p	Bot. mag 655
§835	**striáta** *B M.*	streaked	☿	△	or	2	ap s	Y	Mexico 1788.	Sk s p	Bot. mag 701
§836	**ánceps** *W*	two-edged	☿	△	or	1	jn jl	B	N Amer 1693.	D co	Bot. mag 464
§837	**micrántha** *Cav*	small-flowered	♀	△	or	1	jn jl	Y	S Amer 1[illegible]	D co	Cv diss t 191. f 2
§838	**Bermudiána** *W*	Iris-leaved	♀	△	or	1	jn jl	B	Bermudas 17.2	D co	Bot mag 94
§839	**convolúta** *W*	convolute	♀	△	or	½	my jn	Y	S Amer 1816.	D co	Red lil t 47
§840	**tenuifólia** *Red*	slender-leaved	♀	△	or	½	my jn	Y	S Amer 1816.	D co	Bot mag 2313
841	**cærúlea** *Ker*	blue	♀	△	or	2	my jn	B	Brazils 1818	D co	Bot reg 713
842	**semi-apérta** *Lodd*	half-open	♀	△	or	1½	my jn	Y	Brazils 1820	D co	Bot. cab 685

118 **PARDAN'THUS** *Ker* PARDANTHUS — *Irideæ* *Sp* 1

843	**chinénsis** *H. K.*	Chinese	♀	△	or	2	jn jl	O	China 1759.	R p.l	Bot. mag 171

*119 **SCHŒ'NUS** *Vahl* BOG-RUSH — *Cyperaceæ.* *Sp* 7—79.

844	**mucronátus** *W*	clustered	⁂	△	w	1	ap my	Ap	S Europe 1781.	D co	Fl græc. 1. t. 48
845	**nígricans** *W.*	black	⁂	△	w	1	jl	Ap	Britain sp bo	D co	Eng bot. 1121
846	**rúfus** *E B*	brown	⁂	△	w	½	jl	Ap	Scotland sc bog	D co	Eng bot. 1010
847	**monoícus** *E B*	monœcious	⁂	△	w	1	jl au	Ap	England bogs	D co	Eng bot 1410
§848	**ferrugíneus** *Schr*	rusty	⁂	△	w	½	ap my	Ap	Europe 1781	D co	Sch gm.1 t 1.f 4
849	**compréssus** *Sm*	compressed	⁂	△	w	1	ap my	Ap	Britain bogs	D co	Eng bot. 791
850	**stellátus** *W*	star-headed	⁂	△	pr	¾	s d	Ap	W Indies 1822.	D co	Slo jam t.78 f. 1

120 **RHYNCHOSPORA** *Va* RHYNCHOSPORA — *Cyperaceæ* *Sp* 3—26.

851	**álba** *H K*	white-headed	⁂	△	w	1	au	Ap	Britain bogs	D co	Eng. bot 985
852	**fúsca** *H K.*	brown-headed	⁂	△	w	1	au	Ap	Britain bogs	D co	Eng. bot. 1575
853	**comáta** *Lk*	leafy-headed	⁂	⊠	cu	1½		Ap	Brazil 1820.	D co	

121 **FIMBRIS'TYLIS** *Vahl* FIMBRISTYLIS — *Cyperaceæ* *Sp* 1—65

854	**dichótoma** *V*	dichotomous	⁂	◯	w	1	jn jl	Ap	E. Indies 1819.	D co	Rottb gr t.13.f.1

*192 **ISOLE'PIS** *R Br* ISOLEPIS — *Cyperaceæ* *Sp* 3—46.

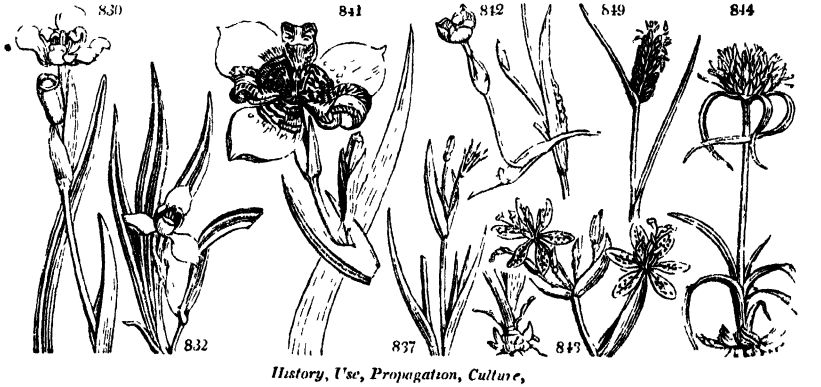
855	**flúitans** *R Br*	floating	⁂	△	w	flt	jl au	Ap	Britain dit	D co	Eng bot. 216
856	**setácea** *R Br*	bristle-like	⁂	○	w	½	jl au	Ap	Britain bogs	S co	Eng bot. 1693
857	**Holoschœ'nus** *Sm*	cluster-headed	⁂	△	w	3	jl	Ap	England sea sh	Sk co	Eng bot. 1612
	β románus W	*Roman*	⁂	△	w	3	jl	Ap	Austria ...	Sk co	Jacq aust 5 448
	γ australis L.	*southern*	⁂	△	w	3	jl	Ap	S Europe ...	Sk co	Plk pht. t 40 f.5

123 **SCIR'PUS** *R Br* CLUB-RUSH — *Cyperaceæ* *Sp* 11—96.

858	**multicaúlis** *E B*	many-stalked	⁂	△	w	½	jl	Ap	Britain tur bo	Sk co	Eng. bot 1187
859	**cæspitósus** *W*	scaly-stalked	⁂	△	w	⅛	jl	Ap	Britain tur he	Sk co	Eng bot 1029
860	**pauciflórus** *E B*	chocolate-head	⁂	△	w	½	au	Ap	Britain bgs m.	Sk co	Eng bot. 1122
861	**lacústris** *W*	tall	⁂	△	cc	6	jl au	Ap	Britain rivers	Sk co	Eng bot 666
862	**glaúcus** *E B*	glaucous	⁂	△	w	2	jl au	Ap	England sal m	Sk co	Eng bot 2321
863	**triqueter** *W*	triangular	⁂	△	w	3	au	Ap	England mar	Sk co	Eng bot 1694
864	**mucronátus** *W*	sharp-pointed	⁂	△	w	2	au	Ap	Eur Asia	Sk co	
865	**carinátus** *E B*	blunt-edged	⁂	△	w	3	jl au	Ap	England riv ba	Sk co	Eng bot 1983
866	**marítimus** *W*	salt-marsh	⁂	△	w	2	jl s	Ap	Britain sal m	Sk co	Eng bot 542
867	**Lúzulæ** *W*	clustered	⁂	⊠	w	1½	jl s	Ap	E. Indies 1776	Sk co	P m 27. t 417 f 3
868	**sylváticus** *W*	wood	⁂	△	w	1½	jl s	Ap	Britain m s p	Sk co	Eng bot 919

124 **ELEO'CHARIS** *R Br* SPIKE-RUSH — *Cyperaceæ* *Sp* 3—24

869	**palústris** *R Br*	marsh	⁂	△	w	¼	jl	Ap	Britain mar	Sk co	Eng bot. 131
870	**aciculáris** *R Br*	needle	⁂	△	w	¼	jl	Ap	Britain mar	Sk co	Eng. bot. 749
871	**ováta** *W*	ovate	⁂	△	w	⅛	jn jl	Ap	Germany 1818	Sk co	



History, Use, Propagation, Culture,

flowers M northiana has beautiful and transient flowers, like the rest of the species, all of which grow freely in a rich light soil, and are readily increased by parting the roots or from seeds

118 *Pardanthus* Named by Mr J.B Ker, from παρδος, a leopard, and ανθος, a flower, on account of the spotted flower

119 *Schœnus* From χοινος or σχοινος, a cord, in Greek From plants of this kind the first cordage is supposed to have been made All the plants from this genus to Mariscus, No 130, are sedgy plants of similar habit, of value in an œconomical point of view, but not cultivated for ornamental purposes

120 *Rhynchospora*, (ῥυγχος, a snout or rostrum, and σπορα, a seed) The seeds are beaked

121 *Fimbristylis.* So named by Vahl The word is constructed from the Latin *fimbria*, a fringe, and *stylus*, the style.

122. *Isolepis* From ισος, equal, and λεπις, a scale, on account of the relative form of the scales which constitute the inflorescence.

830 Beardless, leaves linear, Petals with glandular spots, Ovaries 3-cornered
831 Flower-stalks lateral nearly equal to the one-leaved involucrum
832 Leaves linear-lanceolate, Scape round shorter than the plaited leaves
833 Leaves linear-ensate flat, Scape simple leaf-like winged, Flowers opened out, Fil. united at base
834 Scape 2-edged, Flowers in spikes, Leaves sword-shaped nerved-plaited

835 Scape 2-edged leafy, Flowers in spikes, Petals roundish ovate acute, Leaves linear sword-shaped
836 Scape 2-edged simple nearly leafless, Spathe about 4-flowered unequal longer than the flowers, Pet muc.
837 Scape 2-edged branchy leafy, Spathe about 3-flow unequal, Pet linear acuminate, Leaves grassy channelled
838 Scape 2-edged branched leafy, Spathe about 4-flow shorter than the flowers, Pet. muc. Leaves sword-shaped
839 Scape 2-edged branched leafy, Spathe 3-flowered shorter that the flower, Leaves sword-shaped
840 Scape 2-edged ascending leafy, Spathe 3-flowered, Caps. hairy, Leaves capillary
841 Stigmas united petal shaped, Scape many-flowered erect, Spathe not viviparous
842 Leaves linear-lanc. nerved a little wavy at back, Fl.-stalks nearly as long as spathe, Flowers campanul.

843 Flowers spotted with orange

844 Culm round naked, Spikelets bundled in a roundish head, Involucr 3, 6-leaved very long reflexed
845 Culm naked round, Spikelets in headed bundles, Invol. 2-leaved longer than the valves, Setæ none
846 Culm round leafy, Leaves channelled, Spike compound 2-ranked longer than the bractea
847 Culm round naked, Spike compound, Flower monœcious, Leaves channelled rough
848 Culm round, Spikelets 2-3, Outer valve of involucrum as long as spikelets, Setæ several
849 Spike distichous, Spikelets many-flowered, Involucre 1-leaved, Culm roundish
850 Involucres very long white. (Dichromena, *Vahl.*)

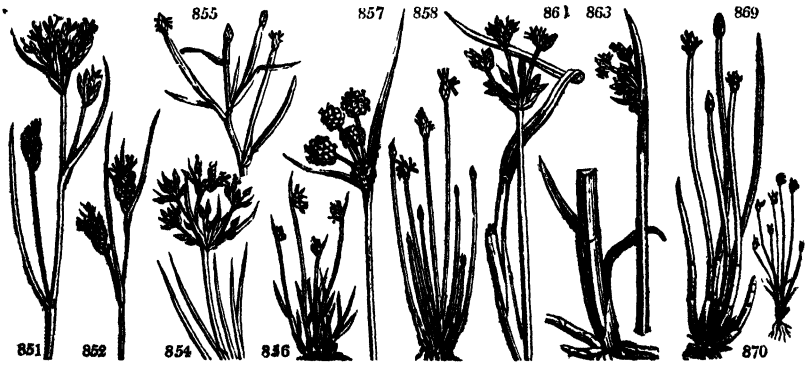
851 Culm leafy 3-angular, Leaves linear keeled, Root creeping
852 Culm 3-angular, Leaves bristly channelled, Root creeping
853 Leaves flat glaucous with hairy sheaths, Invol. longer than the contracted panicle, Spikelets oblong, Scales oblong carinate mucronate

854 Spikes ovate oblong, Involucre about 3-leaved decompound longer than the umbel

855 Culms branched leafy flaccid, Spikelets few-flowered, Floating
856 Culm bristle-shaped, Spikelets lateral sessile
857 Culm round naked, Heads terminal globose clustered, Leaves channelled

858 Stem round sheathing at the base, Spike ovate terminal, Glumes obtuse equal, Root fibrous
859 Stigmas 3, Spike enclosed in a 2-leaved involucrum, Lower glumes very large as big as the spike, Culm round, Sheaths bearded
860 Glumes unequal obt ovate, one larger but shorter than the 2-valved spike, Culm round, Sheaths not bearded
861 Culm round, Inner sheaths ending in a short leaf, Cyme terminal decompound with 2-4-leaved involucrum Spikelets ovate smooth
862 Top of the 3-angular stem straight, Upper sheaths leafy, Panic lateral under the end, Spikel sess. & stalked
863 Culm straight naked pointed, Lateral spikes sessile or stalked, Stigma bifid
864 Top of the 3-cornered culm bent down at end, Sheaths leafless, Spikel. lateral sess. clustered naked, Stigmas 3
865 Culm naked, upwards 3-cornered, Panicle cymose terminal, Bract. pungent, Stigma bifid
866 Panicle globose terminal, Glumes mucronate torn bifid
867 Spikes roundish headed, Heads umbelled globose proliferous, Invol many-leaved, Culm 3-angular
868 Culm 3-cornered leafy, Cyme term. supra-decompound surrounded with a many-leaved invol. Gl mucronate

869 Spike ovel naked, Scales lanceol acute, Culms roundish, Sheaths leafless beardless lanceol. acute, Stigmas 2
870 Spike ovate naked, Two lower scales scarcely larger than the rest, Culms 4-cornered setaceous
871 Spike ovate naked, Scales oblong obtuse, Stigmas 2, Culms sub-compressed, Sheaths leafless, Root fibrous

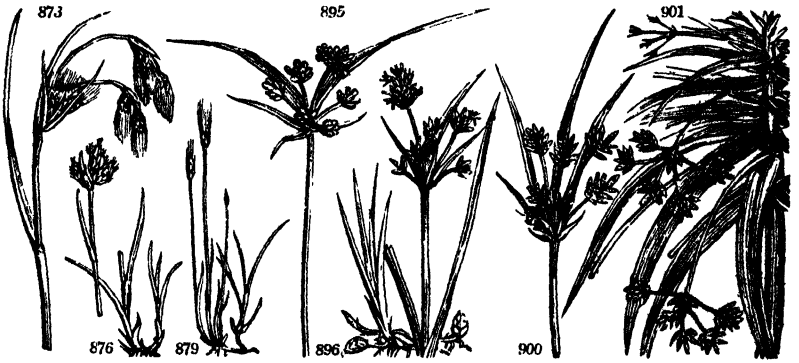


and Miscellaneous Particulars.

123. *Scirpus.* From *cirs*, a Celtic word for rushes, which is, in the singular, *cors*, whence the Latin *chorda*. S. cæspitosus is the principal food of cattle and sheep in the Highlands of Scotland in March and till the end of May. S. lacustris, the bull-rush, is used to bottom chairs. cut at one year old, it makes the finest bottoms, at two years, a coarser sort; still older, and mixed with the leaves of Iris pseud.-acorus, it makes the coarsest bottoms. Cottages are sometimes thatched, and pack-saddles stuffed with it, and in severe seasons cattle will eat it. Of S. maritimus there are several varieties, natives of the salt marshes of Europe, Barbary, and Siberia, greedily eaten by cattle; and the roots, which are large, Withering says, have been ground and used instead of flour in times of scarcity. The Pi-tsi or water-chestnut of the Chinese, is a species of this genus (Scirpus tuberosus). It has not yet been introduced to our gardens. In China it is cultivated in tanks, the bottoms of which are manured and exposed for a time to dry in the sun. The tubers are eaten either boiled or raw, and are esteemed both as food and medicine.

124. *Eleocharis.* From *Elos*, a march, and *charro*, to delight.

125. ERIO'PHORUM. *P. S.*	COTTON-GRASS.				*Cyperaceæ.*		*Sp.* 6—7.						
872 vaginátum *W.*	Hare's-tail		△	pr	½	mr.ap	Ap	Britain	moors.	D	co	Eng. bot. 873.
873 polystáchion *W.*	broad-leaved		△	pr	1	jn jl	Ap	Britain	bogs.	D	co	Eng. bot. 563
874 angustifólium *W.*	narrow-leaved		△	pr	½	ap	Ap	Britain	bogs.	D	co	Eng. bot. 564
875 virginicum *W.*	Virginian		△	pr	1	my.au	Ap	N. Amer.	1802.	D	co	Pk. alm. t. 299. f. 4
876 grácile *P S*	slender		△	pr	1	jl.au	Ap	Scotland	sc. mo.	D	co	Eng bot. 2402
877 capitátum *E B*	round-headed		△	pr	¼	au.s	Ap	Scotland	sc. mo.	D	co	Eng. bot. 2387
126. TRICHO'PHORUM. *P S*	TRICHOPHORUM				*Cyperaceæ.*		*Sp* 2.						
878 cyperinum *P. S.*	cyperine		△	cu	6	my.s	Ap	N. Amer	1802.	D	co	Plk.mt. t. 419. f. 3
879 alpinum *P. S*	Alpine		△	cu	½	jl	Ap	Scotland	bogs.	D	co	Eng. bot. 311
127 CYPE'RUS. *W.*	CYPERUS.				*Cyperaceæ.*		*Sp.* 22—250.						
880 dúbius *W*	bulbous-rooted			cu	½	jl	Ap	E. Indies	1802.	S	co	Rot. gr. 20. t. 4. f. 5
881 tenéllus *Vahl.*	slender			cu	¼	my.jn	Ap	. C. G H.	1819.	S	co	Pk. al. t. 300 f. 4. 5
882 conglomerátus *Rotb.*	many-flowered			cu	1	my s	Ap	Arabia	1820.	D	co	Rot. gr. t. 15. f. 7.
883 pannónicus *W.*	dwarf			cu	1	jl.au	Ap	Hungary	1781.	Sk	co	Host. gr. 3. t. 80
884 Lúzulæ *W.*	compact-flower			cu	2	my s	Ap	W Indies	...	Sk	co	Rott. gr. t. 13. f. 3
885 distans *Vahl.*	distant			cu	2	jl au	Ap	W. Indies	1820.	D	co	Jacq. ic. t. 299
886 viscósus *W.*	clammy			cu	2	my.au	Ap	Jamaica	1781.	Sk	co	Jac. ic. 2. t. 295
887 fastigiátus *W.*	lofty			cu	1	my au	Ap	E. Indies	1800.	Sk	co	Rt. gm. 32. t. 7. f. 2
888 erubes'cens *Lk.*	pink			cu	·1	my jn	Ap	.....	1820.	D	co	
889 paniculátus *Vahl*	panicled			cu	1	my jl	Ap	E. Indies	1804.	D	co	
890 glomerátus *W. en.*	round-headed			cu	2	my au	Ap	Italy	1804.	S	co	
891 élegans *W.*	elegant			cu	1½	my s	Ap	Jamaica	1801.	S	co	Slo. ja. 1. t 75. f 1
892 flavéscens *W.*	yellow			cu	1	jn s	Ap	Germany	1776	S	co	Host. gra. 3 t. 72
893 fúscus *W*	brown			cu	1½	jl.s	Ap	Europe	1777	S	co	Host. gra. 3 t. 73
894 strigósus *W*	bristle-spiked			cu	1½	jl.s	Ap	W. Indies	1786.	Sk	co	Rt. g. 40. t. 11. f 2
895 vegétus *W.*	smooth		△	cu	1½	my.s	Ap	America	1790.	Sk	co	Jac vind. 3. t. 12
896 esculéntus *W.*	Rush-nut		△	cul	1	jl	Ap	S. Europe	1597.	Sk	co	Host. grm. 3. t 75
897 lóngus *W*	sweet		△	cu	3	jl	Ap	England	mar.	Sk	co	Eng. bot. 1309
898 l'ria *W.*	tall			cu	1½	jl	Ap	E. Indies	1802.	Sk	co	Rheede. 12. t. 56
899 alopecuroides *P S*	fox-tail			cu	2	my.au	Ap	C. G H.	1804.	Sk	co	Rott. g. 38 t 8. f 2
900 bádius *P S*	brown			cu	2½	jl	Ap	Algiers	1800.	Sk	co	Desf. at 1. t. 7. f. 2
901 alternifólius *W*	alternate-leav'd			cu	2	f.mr	Ap	Madagasc	1781.	Sk	co	Jac. ic 2. t. 298
128 PAPY'RUS. *Lk*	PAPYRUS.				*Cyperaceæ.*		*Sp* 1—3						
902 antiquórum *Lk*	ancient			or	10	jl s	Ap	Egypt	1803	D	co	Mic. gen. 44. t. 18
129. KYLLIN'GA *W*	KYLLINGA.				*Cyperaceæ*		*Sp* 4—12.						
903 monocéphala *W*	one-headed			w	¼	jn jl	Ap	India	1793.	Sk	co	Rott gr. t. 4. f. 4
904 polycéphala *Lk*	many-headed			w	1	jl au	Ap	Brazil	1820	D	co	
905 uncináta *Lk*	hooked			w	¼	jl au	Ap	Brazil	1820	D	co	
906 triceps *W.*	three-headed			w	¼	a.n	Ap	India	1776.	Sk	co	Rott. gr t. 4 f. 6
130. MARIS'CUS. *Vahl*	MARISCUS.				*Cyperaceæ*		*Sp.* 4—28						
907 umbellátus *W en*	umbelled			cu	1½	jn au	Ap	E. Indies	1789.	Sk	co	Rott. gr. t 4 f. 2
908 elátus *W. en.*	tall			cu	3	jn au	Ap	E. Indies	1805	Sk	co	Jac. ic. 2. t. 300
909 confléxus *Lk.*	contracted			cu	1½	jl	Ap	Brazil	1819	D	co	
910 aggregatus *W.*	aggregated			cu	1	jn jl	Ap	.....	1822	D	co	
131. REMIRE'A *Aub*	REMIREA				*Gramineæ.*		*Sp* 1—2						
911 maritima *Aub.*	sea		△	cu	½	jl au	Ap	Florida	1822.	D	co	Aub. gui. t. 16



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125 *Eriophorum.* From ἔριον, wool, and φέρω, to bear Its seeds are covered with silky tufts of a wool-like substance. For the same reason it is called in English cotton-grass.

126 *Trichophorum* From θριξ τριχος, hair, and φέρω, to bear Its inflorescence resembles a bunch of hair. This genus and Eriophorum grow in peat bogs, and have their seeds clothed at the base with a white or brown silky down or cotton-like substance, from which specimens of cloth have been made, paper, and wicks for candles; and in Sweden, pillows stuffed Of these genera, and of the Cyperaceæ in general, it has been observed by Villars, that being mostly natives of bogs, marshes, and watery places, they have a tendency to raise and dry such spots. The roots and base of the stems rot and become peat, and thus are useful as firing or manure.

127. *Cyperus* The roots of some species of this genus have eatable roots, and are considered aphrodisiacal in a high degree. It is, therefore, probable that the word derived its origin from Cypris, a name of Venus. This is a genus of sub-aquatic or marsh sedgy plants, more injurious than useful, and of little or no beauty. The root of C. longus is agreeably aromatic, warm, and bitter: those of C esculentus (*souchet comestible*, Fr) produce round tubercles about the size of peas, which are eaten in some places in France and Spain; and when boiled, taste something like chestnuts.

128. *Papyrus.* A word of obscure origin P. antiquorum yields the substance used as paper by the ancient Egyptians In Syria it is called *babeer*, and hence, probably, the words papyrus and paper. The flower-stalk rises about ten feet from a long horizontal thick root, the lower part clothed with long hollow sword-shaped leaves

872 Spike solitary, Culm very smooth, Sheaths inflated
873 Spikes several, Culms 3-cornered, Leaves broadish keeled
874 Spikes several, Culms 3-cornered, Leaves very narrow setaceous
875 Spikes several, Culms round leafy, Spikes sessile clustered shorter than the involucrum
876 Spikes several, Culms 3-cornered, Leaves nearly filiform 3-cornered, Peduncles rough, Flowers erect
877 Spike solitary, Culms round spongy soft, Sheaths not inflated

878 Umbel compound, Culm branched
879 Spike solitary, Culms simple 3-cornered roughish

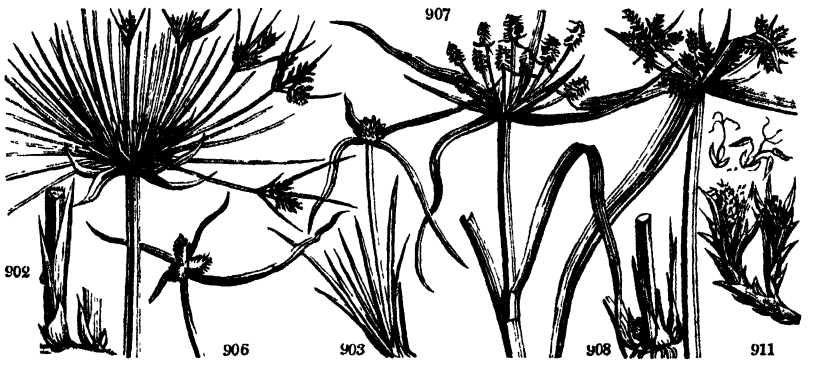
880 Head globose, Spikelets oblong convex about 8-flowered, Involucr 4-leaved, Leaves channelled lax
881 Spikelets solitary and in pairs sessile, Involucr. 1-leaved, Culm setaceous
882 Spikelets ovate much clustered, Culm rather 3-cornered, Leaves channelled
883 Stem 3-cornered leafless ascending or decumbent, Spikelets about 5 oblong obtuse very shortly stalked
884 Heads simple and clustered ovate, Spikelets oblong, Involucr. very long
885 Spikes distichous, Spikelets spreading filiform, Florets distant, Umbel upright
886 Spikelets aggregate ovate rather squarrose in heads, Involucr longer than umbel, Lvs. and involucr rough
887 Umbels many rayed compound, Spikes elongate, Spikelets linear-lanceolate, Involucr 4-leaved long
888 Lvs. linear shorter than the 3-cornered culm, Involucr. 3-leaved, outer leaf very long, Spikel. lanc. Scales obtuse
889 Spikelets linear-lanceolate, Umbels corymbose fascicled, Involucr about 6-leaved
890 Culm 3-cornered naked, Umbel 3-leaved supra-decompound, Spikes clustered rounded, Spikelets subulate
891 Spikelets about 3 linear, Valves obcordate mucronate distinct spreading, Umbel loose
892 Spikelets linear-lanc alternate clustered, Glumes obtuse, Involucr 3-leaved longer than the trifid umbel
893 Spikelets linear-lanc alternate very close, Valves acute, Involucr about 3 or 5-leaved very long, Umbel 3-5-fid.
894 Spikes oblong loose, Spikelets subulate alternate capitate, Involucr very long spreading, Rays of umbel altern.
895 Spikelets lanceolate roundish headed compact, Valves ovate 1-nerved, Involucr longer than the umbel
896 Spikelets lin.-lanc distant acute, Rays of the umbel about 7 terminal shorter than the 3-5-leaved involucrum
897 Spikes corymb Spikel. lin.-lanc. flattened, Involucr. and rays of umbel very long corymbose with leafy stem
898 Spikes corymbose, Spikelets linear, Valves remote obtuse obovate spreading in fruit, Umbels loose
899 Spikes nearly sessile imbricated round, Spikelets ovate oblong spreading
900 Spikelets in corymbose fascicles, Spikelets linear-lanceolate dense, Involucr. 3-leaved, Leaves very rough
901 Umb. 6-7-rayed compound, Heads many-spiked, Spikel. lin. many-flowered, Involucr 3-leaved reflexed rough

902 Stem tall terminated by a reflexed involucrum of many very long narrow leaves

903 Head globose sessile solitary, Involucr very long
904 Umbel rather contracted, Involucr. very long, Spikelets clustered, Valves ovate carinate acute
905 Head 1 or 3 sessile round, Involucr many leaved long, Valves carinate hooked
906 Heads about 3 sessile clustered, Spikelets very dense rather imbricated

907 Umbel compound, Spikes cylindrical imbricated backwards, Involucres many-leaved
908 Umbel compound, Spike cylindrical, Spikelets very spreading, Bractes longer than the spikelets
909 Leaves shorter than the 3-cornered culm rough at edge, Umb contracted, Involucr many-leaved, Spikel subreflexed, Scales keeled striated
910 Spikes cylindrical sessile, Spikelets oblong, Bract setaceous longer than spikelets, Involucr. many-leaved

911 Common peduncle shorter than the spikes



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of a brown color. The ancients made their paper from the pellicle found between the flesh and bark of the thick part of the stalk, ribbons of which were united till they formed the size required, and then pressed and dried in the sun. The top of the stalk, with the umbel of flowers, adorned the temples, and crowned the statues of the gods. Antigonus used the stalks for ropes and cables to his fleets, before the use of spartum (*Lygeum spartum*, still used on the coast of Provence for small vessels, and also in Spain) was known. Pliny says, the whole plant was used for making boats, and Bruce says, they have no other boat in Abyssinia. That traveller found it growing in the rapid course of the river Jordan, and he there remarked that it constantly opposed one of the angles of its stem to the current, as if to elude the violence of the waves. Perhaps, if the observation were applied to similar plants in our own rivers, the same result would be obtained. The root was chewed for its juice, which is also practised in Abyssinia with various species of cyperus, and with those of maize. The papyrus is indigenous in Calabria as well as in Ethiopia and Egypt, in stagnant water, but only in the calashes or swamps of the Nile, and never in the stream as has been supposed. To thrive in our stoves, it requires to be placed in a cistern of water with rich mud at the bottom. Plants so treated, at White Knights, near Reading, have attained a large size, and flower freely.

129. *Kyllinga.* In memory of P. Kylling, a Danish botanist, who died in 1696.

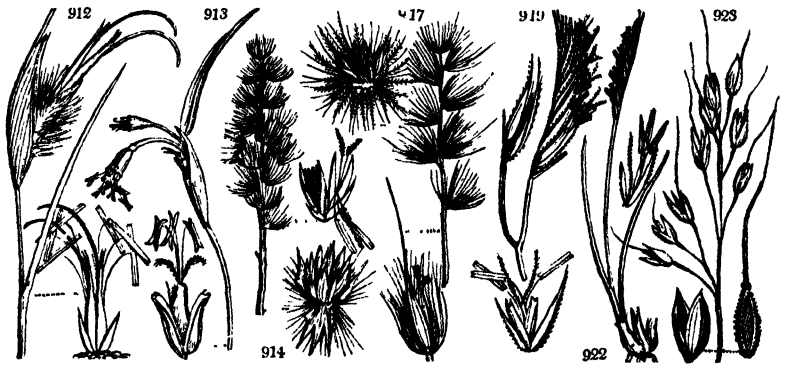
130. *Mariscus.* A word derived from the Celtic *mar*, a marsh, in allusion to the situations in which it is found.

131. *Remirea.* The Guiana name of the plant.

132. LYGE'UM. *W.*	LYGEUM.				*Gramineæ*	*Sp* 1.							
912 Spártum *W.*	rush-leaved		△	ec	1½ my.jn	Ap	Spain	1776.	D	co	Clus. hist. 2. f. 2
133. CORNUCO'PIÆ *L.*	CORNUCOPIÆ.				*Gramineæ.*	*Sp.* 1							
913 cucullátum *W*	hooded		○	cu	½ au	Ap	Levant	1788.	S	co	Fl. græc. 1. t. 51
*134. CEN'CHRUS. *P S.*	CENCHRUS.				*Gramineæ*	*Sp* 3—21.							
§914 lappáceus *W*	Bur		○	cu	1 jl	Ap	India	1773.	S	co	Beauv. t.14. f.7
915 echinátus *W*	rough-spiked		▨	cu	2 au d	Ap	W Indies 1691		S	co	C ic 5. p 39.t.462
916 tribuloides	spinous		○	cu	1 my au	Ap	N Amer	1818	S	co	C. ic. 5. t. 461
135. PENNISE'TUM. *Rich.*	PENNISETUM				*Gramineæ.*	*Sp* 1—8							
917 cenchroides *Rich*	ciliated		◎	cu	1½ my au	Ap	C G H.	1777.	S	co	
136. SPARTI'NA. *W*	SPARTINA.				*Gramineæ*	*Sp.* 4—8							
918 stricta *W*	upright		△	cu	1 au	Ap	Britain	sal m	D	co	Eng. bot. 380
919 cynosuroides *Rich*	Dog's-tail		△	cu	3 au.s	Ap	N Amer.	1781.	D	co	L.fil.fa.1 p 17.t.9
920 polystáchya *Ph*	many-spiked		△	cu	6 au.s	Ap	N Amer	1781	D	co	
921 júncea *Ph*	spreading		△	cu	1½ jl.au	Ap	N. Amer.	1781.	D	co	
137 NAR'DUS. *W*	MAT-GRASS.				*Gramineæ*	*Sp* 1—2							
922 stricta *W*	upright		△	cu	1 jn jl	Ap	Britain	moi. h	D	m.s	Eng. bot. 290
138. ORYZOP'SIS. *Mich*	ORYZOPSIS.				*Gramineæ.*	*Sp.* 1.							
923 asperifólia *M.*	rough-leaved		△	cu	3 jl.au	Ap	N. Amer.	1822	D	co	Mic. am. I t. 9.

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139 PAS'PALUM *W*	PASPALUM				*Gramineæ*	*Sp* 5—82.					
924 scrobiculátum *W*	punctured		△	cu	1½ jl s	Ap	E Indies	1778.	S	co	H n h 13 t.89 f 3
925 paniculátum *W*	panicled		▨	cu	3 jl s	Ap	Jamaica	1782.	S	co	Sl hist.1 t.72 f 2
926 stoloníferum *W*	purple		△	cu	2 jl s	Ap	Peru	1794.	S	co	Jacq ic. 2. t 302
927 distichum *W*	two-spiked		▨	cu	1½ jl	Ap	Jamaica	1776.	S	co	Sw.obs.35 t.2 f 1
928 serotínum *Fl*	decumbent		○	cu	1½ jl au	Ap	N Amer.	1804.	S	co	
140 AXO'NOPUS *P de B*	AXONOPUS.				*Gramineæ.*	*Sp* 1—4					
929 cimicinus *P de B*	spotted		○	cu	1 jl s	Ap	India	1788	S	co	
*141 MI'LIUM *W.*	MILLET-GRASS.				*Gramineæ*	*Sp* 5—14.					
930 effúsum *W*	common		△	w	3 jn jl	Ap	Britain	m s. p.	S	m.s	Eng bot. 1106
§931 paradóxum *W*	black-seeded		○	cu	3 jn jl	Ap	France	1771	S	co	Host. gr 3 t. 23
§932 multiflórum *W en*	many-flowered		△	cu	1½ jn jl	Ap	S. Europe	1778	S	co	Host gr 3 t. 45
§933 cæruléscens *Desf.*	blueish		△	cu	1½ jn.jl	Ap	Barbary	1819	S	co	Desf atl. 1. t. 12
934 frutéscens *Lk*	shrubby		△	cu	1 ...	Ap	Crimea	1822	S	co	
*142 KNAP'PIA *E B*	KNAPPIA				*Gramineæ*	*Sp* 1					
935 agrostidea *E B*	small		○	cu	½ mr ap	Ap	Wales	san pl	S	s	Eng bot. 1127
*143 DIGITA'RIA *P S*	FINGER-GRASS				*Gramineæ*	*Sp* 5—25					
936 sanguinális *P S*	slender-spiked		○	ag	2 au	Ap	Britain	fields	S	co	Eng bot 849
937 villósa *P S*	villous		○	w	1½ jl s	Ap	N Amer.	1781	S	co	
938 ægyptiaca *W en.*	Egyptian		○	w	1½ jl	Ap	Egypt	1794	S	co	Jac obs 3 t 70
939 ciliáris *P S*	ciliated		○	w	1½ jl au	Ap	China	1804	S	co	Host. gr 4. t. 15
940 marginàta *Lk*	divaricate		○	w	½ jl	Ap	Brazil	1822	S	co	
144 PAN'ICUM *B P*	PANIC-GRASS				*Gramineæ*	*Sp* 18—185					
941 colónum *W*	purple		○	ag	½ jl au	Ap	E Indies	1699	S	co	Ehr pic t. 3 f 3
942 brizoides *W*	Briza-like		▨	cu	1 jn jl	Ap	E Indies	1801	S	co	Pl alm. t.191 f.1
943 fasciculátum *W*	fascicled		○	cu	2 jn jl	Ap	Jamaica	1801	S	co	
944 proliferum *Lam*	prolíferous		△	cu	⅔ jn au	Ap	N Amer	1820	S	co	



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132 *Lygeum.* From λυγοω, to bend, in allusion to its flexibility This plant is used in Spain, Provence, and other places for making ropes, baskets, nets, and for filling their paillasses or lower mattrasses. Ropes were made of it by the Romans *Esparto* (spartum) is the Spanish appellation of this and other grasses used for similar purposes.

133. *Cornucopiæ* The spike inclosed in the involucrum peculiar to the genus, resembles the "Horn of Plenty." The leaves and flower of C cucullatum, Sir J. E Smith observes, are perhaps of all grasses the most singular and uncommon It is a native of the vales about Smyrna, whence it was sent to England by Sherard, and is preserved in the Chelsea garden and at Kew

134. *Cenchrus* Κεγχρος is the Greek name of the millet; by which, it is probable, that Setaria italica was intended. C. echinatus is the most common grass in the pastures of Jamaica, and is looked on as a wholesome and pleasant food for horses and cattle

135. *Pennisetum.* From *penna*, a pen, and *seta*, a bristle; a feathery bristle, referring to the nature of the involucrum.

136. *Spartina.* A word altered from spartum, the specific appellation of Lygeum; the plants being similar to the latter in habit The origin of the word spartum has not been satisfactorily explained. The Spaniards call this, and similar tough grasses, useful to them in making ropes, esparto

137. *Nardus* The term νεῖρος was applied by the Greeks to a substance possessing a peculiar per-

912 The only species

913 The only species

914 Branches of the panicle simple, Palæ hispid backwards, Glumes 3-valved 2-flowered (*Centotheca.* Desv.)
915 Spikelets approximated, Involucres 10-parted villous
916 Spike with alternate spikelets, Involucres entire spiny

917 Culm jointed, Invol. altern. twice as long as flowers, one of the setæ bristle-chaffy longer than the others

918 Spikes term. about 2, Spikelets one-sided loosely imbricated Palæ longer than glume, Leaves involute
919 Spikes altern. remote, Rachis ang. wavy, Glumes twice as long as palæ, Leaves very long glaucous flat
920 Leaves broad flat, Spikes many turned all ways linear, Keels aculeate
921 Leaves distichous shortish bristly convol. Spikes few remote spreading, Glumes acuminate, Keels rough

922 Spike bristly straight one-sided

923 The only species

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924 Spikes few altern. Rachis flat straight as long as spikel Glumes roundish obtuse smooth, Upper lvs naked
925 Spikes very num. Rachis 3-sided smooth twice as narr as spikel Glumes roundish obv blunt pub 3-nerv
926 Spikes numerous scattered, Rachis undulated broader than spikelets, Glumes oblong corrugated, Leaves lanceolate rough at edge
927 Spikes 2 close together, Rachis flat narrower than spikelets, Glumes ovate obtuse polished length of palæ
928 Spikes 5 close together, Rachis flat rather broader than spikelets, Glumes elliptic lanc acute pubescent

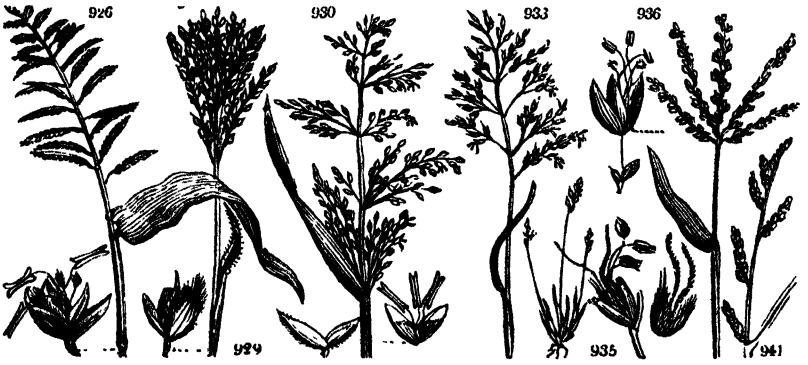
929 Panicles umbelled, Racemes about 4, One glume fringed

930 Panicles diffuse, Florets beardless ovate dispersed
931 Pan spreading lax few-flowered, Flowers bearded, Each glume at least 3-nerved (*Piptatherum.* P de B.)
932 Panicles spreading many-flowered, Flowers bearded, Outer glume 3-5-nerved
933 Flowers panicled bearded, Beard shorter than glume
934 Stem shrubby at base, Panicle whorled, Lower rays sterile

935 The only species. The least of grasses

936 Spikes digitate erect spreading 4, Leaves and sheaths pilose, Florets oblong pubescent at edge
937 Spikes many setaceous, Leaves and sheaths very hairy
938 Spikes digitate erect 7, Leaves and sheaths hairy, Florets oblong acute smooth
939 Spikes digitate erect spreading 8, Leaves and sheaths hairy, Florets lanceolate ciliated
940 Stem decumbent, Sheaths hairy at end, Spikes divaricate, Palæ fringed at end

941 Spikes alternate one-sided beardless ovate rough, Rachis roundish
942 Spikes alternate sessile one-sided, Glumes two much shorter than palæ retuse, The third as long as they
943 Spikes panicled alternate erect in bunches, Spikelets one-sided roundish
944 Very smooth, Panicles oblong erect, Glumes striated largish, Stem branching



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lume. It is difficult to assign a reason for the name having been applied to this insignificant genus of grasses.

138 *Oryzopsis* Oryza, rice, and ὄψις, appearance. The plant resembles rice.

139. *Paspalum* One of the Greek names for millet, πασπαλος.

140. *Axonopus.* From ἄξων, axis, and πους, a foot, because the chief difference between this genus and Paspalum consists in the spikes being separately placed, as it were, upon little stalks or feet.

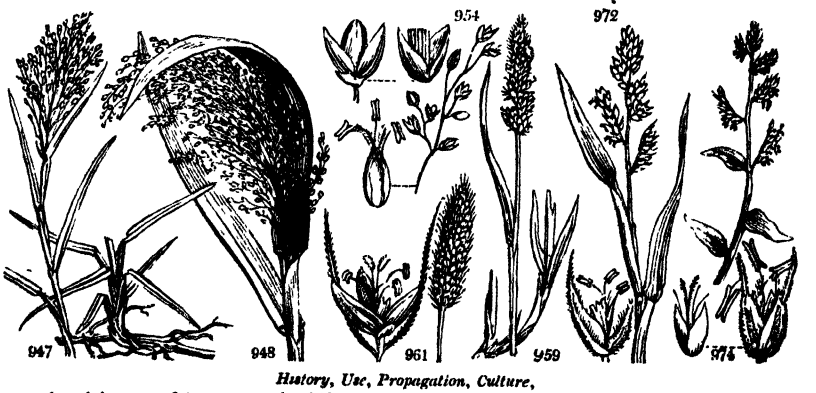
141 *Milium.* Derived by some from *mille*, a thousand, on account of its numerous grains; by others, from *mil*, the Celtic for a pebble, in reference to the hard shining nature of the grains. M. effusum is admired for the elegance of its panicle. M. paradoxum resembles the Arundo.

142. *Knappia.* Named after Mr. Knapp, an author of an illustrated work upon British grasses, &c much esteemed. A minute plant, resembling an agrostis

143. *Digitaria.* From *digitus*, a finger, on account of the singular manner in which the heads are divided, or, as the botanists express it, fingered. D. sanguinalis has its specific name, not from the color as might be supposed, but from an idle trick which the boys in some parts of Germany have of pricking one another's nostrils with its spikelets till they bleed. It abounds by the road sides in Poland and Lithuania, where its seeds are collected and boiled whole like rice, with milk, and highly esteemed

144. *Panicum.* Pliny says, so called, from its flowers being in a panicle; but others derive the name from

945 hispidulum *W.*	hispid	○	w	2	jl au	Ap	E Indies	1804.	S	co		
946 colorátum *W.*	coloured	○	w	2	jl.s	Ap	Egypt	1771.	S	co	Jac. ic. 1. t. 58	
947 répens *W.*	slender	○	w	1	jl.s	Ap	S. Europe	1777.	S	co	Fl græc. 1. t. 61	
948 miliáceum *W.*	millet	○	ag	1½	jl s	Ap	E. Indies	1596.	S	co	Host. gr. 2. t. 20	
949 muricátum *W.*	prickly	○	cu	1½	jl.s	Ap	E. Indies	1805.	S	co		
950 capillâre *W.*	hair-panicled	○	w	2	jn au	Ap	America	1758.	S	co	Host. gr. 4. t. 16	
951 latifólium *W.*	broad-leaved	△	w	5	au.s	Ap	N. Amer	1765.	S	co	Mor. h. 8. t. 5. f. 4	
952 clandestinum *W.*	hidden-flower'd	△	w	1½	jl	Ap	N Amer.	1802.	S	co		
953 arboréscens *W.*	tree	▯	w	50	mr ap	Ap	E. Indies	1776.	S	co		
954 virgátum *W.*	long-panicled	△	w	1	au s	Ap	N. Amer	1781.	S	co		
955 pátens *P S*	spreading	▯	w	1	jl au	Ap	India	1804	S	co		
956 brevifólium *W.*	short-leaved	○	w	1½	jl au	Ap	E. Indies	1800.	S	co	Pl. al 176. t. 169	
957 divaricátum *W.*	straddling	▯	w	5	jl au	Ap	Jamaica	1800	S	co	Jac.schœn.1.t.25	
958 palmifólium	Palm-leaved	▯	w	6	jl au	Ap	E Indies	1804.	S	co		
145. SETA'RIA. *P de B*	Setaria				*Gramineæ.*		*Sp.* 11—24					
959 verticillâta *P de B.*	rough	○	w	1½	jl au	Ap	England mol fl.		S	co	Eng bot. 874	
960 glaúca *P. de B.*	glaucous	○	w	1½	jl.au	Ap	S Europe	1771	S	co	Host. gr. 2. t. 16	
961 viridis *P de B*	green	○	w	1½	jl au	Ap	England san fl		S	co	Eng. bot. 875	
962 itálica *P de B*	Italian	○	ec	1½	jl au	Ap		1816.	S	co		
963 setósa *P de B*	setose	○	w	2½	jl au	Ap	W. Indies	1804	S	co		
964 sericea *P de B*	silky	○	w	1½	my s	Ap	W Indies	1780.	S	co		
965 germánica *P de B*	German	○	ag	1½	jl	Ap	S. Europe	1548	S	co	Host. gr 2. t. 15	
966 geniculáta *Horn.*	knee-jointed	○	w	1½	jl au	Ap	.....	1805	S	co		
967 púmila *Lk.*	dwarf	○	w	1	jl au	Ap	.....	1819.	S	co		
968 macrochæ'ta *Lk*	long-spiked	○	w	2	jl au	Ap	.....	1819.	S	co		
969 áspera *Lk.*	rough	△	w	2	jl au	Ap	C. G H	1820.	S	co		
146. ECHINOCHLO'A. *P de B*	Prickly-grass.				*Gramineæ.*		*Sp* 3—15.					
970 stagnina *P. de B*	pond	○	w	3	jl au	Ap	E Indies	1802.	S	co	Host. gr 3. t. 51	
971 crus córvi *P de B*	crow's-foot	○	w	1	jl au	Ap	E Indies	1781.	S	co		
972 crus gálli *P de B* *Pánicum* E. B	loose	○	w	1½	jl.au	Ap	Britain	mol fl.	S	co	Eng bot. 876	
147 ORTHOPO'GON *B P*	Orthopogon				*Gramineæ*		*Sp* 2—6					
973 hirtéllus *B P*	hairy	▯	ag	1	jn jl	Ap	W Indies	1795.	S	co		
974 undulatifolius *R. & S*	wavy-leaved	○	w	1	jn jl	Ap	S Europe	1795	S	co	Host. gr. 3. t. 52	
148 PENICIL'LARIA *P de B*	Penicillaria				*Gramineæ*		*Sp* 2					
975 ciliáta *W*	fox-tail	○	w	2	jl s	Ap	Jamaica	1748	S	co	Pl al t 92. f. 5	
976 spicáta *W*	Bull-rush	○	w	2	jn jl	Ap	India	1592	S	co	Pl al t. 32. f. 4	
149 LAPPA'GO *W.*	Lappago				*Gramineæ*		*Sp* 1.					
977 racemósa *W*	branching	○	cu	1½	jl au	Ap	S Europe	1771	S	co	Host gr. 1. t. 36	
150 STI'PA *W*	Feather-grass.				*Gramineæ.*		*Sp* 6—37					
978 pennáta *W*	common	△	or	2	jl au	Ap	Britain	al roc.	D	s l	Eng bot. 1356	
979 húmilis *Cav*	low	○	cu	½	jl.au	Ap	S. Amer	1802	S	co	C ic 5. t. 466. f. 1	
980 júncea *W*	rush-leaved	△	cu	3	jl	Ap	France	1772	D	co	Fl græc 1 t. 85	
981 sibírica *P S.*	Siberian	△	cu	3	jl au	Ap	Siberia	1777.	D	co	Gmel sib.1. t 22	
982 capillâta *W*	capillary	△	cu	2	jl au	Ap	Europe	1815	D	co	Host. gr 3. t. 5	
983 tenacissima *W*	tough	△	cu	2½	jl au	Ap	Spain	1817.	D	co	Desf atl. 1. t. 30	
151 MUHLENBER'GIA *Schr*	Muhlenbergia				*Gramineæ*		*Sp.* 1					
984 diffúsa *Schr*	spreading	△	w	¼	my jn	Ap	N Amer	1816.	S	co	Schr. gram. t. 51	
152 CHÆTU'RUS *Lk.*	Chæturus.				*Gramineæ*		*Sp.* 1—2.					
985 fasciculátus *Lk*	bundled	○	w	¼	jl s	Ap	Spain	1816.	S	co		
153 LAGU'RUS *W*	Hare's-tail-grass.				*Gramineæ*		*Sp* 1.					
986 ovátus *W*	oval-spiked	○	cu	1	jn	Ap	Guernsey	bor fl.	S	co	Eng bot. 1384	



History, Use, Propagation, Culture,

panus, bread, because of its uses as such. Of P. miliaceum there are two varieties, the brown and yellow. They are sometimes sown in this country for feeding poultry, and for having the husk taken off, to be used as rice; but the ample supplies received from the shores of the Mediterranean, render the culture of the plant unnecessary P. arborescens, is said, by Linnæus, to contend for height with the loftiest trees in the East Indies, though the culm is scarcely thicker than a goose quill. This culm resembles that of Commelina, and shoots up through the branches of trees in woods and jungles.

145. *Setaria.* From *seta*, a bristle, on account of the bristles of the involucrum. S. italica is frequently called millet, and its seeds are used for the same purposes. S. germanica is cultivated in Hungary as food for horses, for which it is preferred before all other grasses. The seeds may be used as millet. Sparrows are remarkably fond of the seeds of S. viridis; and, according to Curtis, this and the two preceding genera, when cultivated in gardens, require to be protected from them from the time they come into flower.

146. *Echinochloa.* From ἐχῖνος, a hedge-hog, and χλόη, a grass, on account of the prickly appearance of the heads of flowers. E. crus-galli is a coarse grass which grows thick and close, and stands dry weather better than most others.

945 Spikes 2-3 together erect, Glumes hispid with two beards
946 Panicles spreading, Stamens and pistils coloured, Stem branching
947 Panicles twiggy, Leaves divaricating
948 Panicles lax nodding, Spikelets beardless, Leaves lanceolate pilose, Sheaths hirsute, Valves mucronate
949 Panicles spreading, Flowers solitary muricated, Stem rooting ascending
950 Panicles capillary erect spreading, Pedunc. straight, Glumes acuminate smooth, Sheaths very hairy
951 Panicles with simple lateral racemes, Leaves ovate lanceolate hairy at the neck.
952 Panicles few axillary, Stem dichotomous, Sheaths dotted
953 Panicle much branched, Leaves ovate oblong acuminate, Shrubby
954 Panicles branched diffuse, Glumes acuminate smooth gaping, Leaves reedy
955 Panicles oblong flexuose capillary spreading, Glumes two-flowered, Leaves linear-lanc. Stem creeping
956 Panicled, Sheaths of the leaves ciliated lengthwise
957 Pan. short beardless, Stem much branched divaricating, Flower-stalks 2-flow. one shorter than the other
958 Panicles simple upright, Spikelets appressed, Leaves oblong lined plaited, Sheaths pubescent

959 Pan. spiked whorl. Invol. 1-fl. with hairs in bundles toothed hispid, teeth reversed, Herm. paleæ smoothish
960 Raceme spiked cylind. Invol. 2-fl. with hairs in bundles, hispid above, Herm. paleæ wavy crosswise
961 Pan spiked cylind. Invol. 2-fl. with hairs in bundles, hispid above, Herm paleæ smoothish, Sheaths downy
962 Spike comp. interrupted at base nodding, Spikelets heaped, Invol. setaceous much longer than flower
963 Spike comp Spikelets panicled in bundles, Bristles mixed with the florets very long, Pedunc. smoothish
964 Spike round, Involucres setaceous villous 1-flowered as long as florets, Leaves flat
965 Spike compound contracted, Spikelets heaped, Invol setaceous longer than the flowers, Rachis hairy
966 Spike elongated cylind. Invol. 2-fl. bristly, Herm. paleæ smoothish, Stem ascending, Sheaths smooth
967 Stem branched, Sheaths pubescent, Spike dense short, Setæ none, Paleæ smooth
968 Spike compound erect, Clusters remote, the lowest sessile, Setæ 8 times as big as florets
969 Sheaths very rough, Spike simple with naked setæ longer than florets

970 Spikes one-sided alternate, Glumes 2-fl bearded hispid
971 Spikes alternate one-sided, Spikelets subdivided, Glumes bearded hispid, Rachis triangular
972 Spikes alternate and in pairs, Spikelets subdivided, Glumes bearded hispid, Rachis 5-angular

973 Spike compound, Spikelets appressed alternate, Glumes torn, All the valves bearded outer largest
974 Bundles about ten, Rachis very hairy, Glumes bearded smooth a little fringed, Leaves ovate acum wavy

975 Joints of the stem smooth, Involucres ciliated
976 Joints of the stem villous, Involucres rough

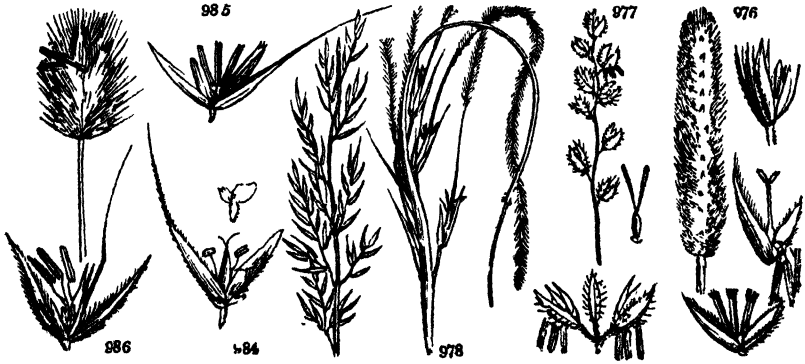
977 The only species

978 Beard feathered
979 Flowers panicled spiked nearly included in the sheaths, Beard feathered
980 Beard naked straight, Glumes longer than the seed, Leaves smooth inside
981 Panicled, Beards naked twice as long as glumes, Seeds woolly
982 Beard naked rough twisted in various directions
983 Beard hairy at base, Panicle spiked, Leaves filiform

984 Panicles branched compressed, Leaves linear smooth, Stem diffuse

985 The only species. A plant looking like a Polypogon

986 The only species



and Miscellaneous Particulars.

147. *Orthopogon.* Ὀρθός, straight, and πώγων, a beard, because the beards of the flower are straight, and not jointed. This plant is cultivated in the low and marshy lands of Jamaica as fodder.
148. *Penicillaria.* From *penicillus*, a pencil, in allusion to the soft hairy appearance of the spikes.
149. *Lappago.* The flowers are rough, with little prickles like Lappa or Burdock.
150. *Stipa.* From στυπη, silky or feathery material. S. pennata has beautifully feathered beards which distinguish it from all other grasses. Gerarde says, they were worn in his time by "saundry ladies instead of feathers." S. tenacissima is used in Spain for the same purposes as Lygeum spartum, and like it, is called Esparto. It is supposed by some to be the plant so called by the ancients.
151. *Muhlenbergia.* Named in honor of Dr. Muhlenberg, an eminent North American botanist. A North American genus of grasses.
152. *Chaeturus.* From χαιτη, a head of hair, and ουρα, a tail. So named by Link, from the silky appearance of the panicles.
153. *Lagurus*; λαγος, a hare, and ουρα, a tail; hare's-tail, which its heads resemble.

154. POLYPO'GON. *W. en.* POLYPOGON. *Gramineæ.* *Sp.* 1—8

987	monspeliénsis *Desf*	panic-grass-like	△	w	1	jl.au	Ap	Britain	ways.	S	co	Eng. bot. 1704

155. GASTRI'DIUM. *P. de B.* GASTRIDIUM. *Gramineæ.* *Sp.* 2.

988	lendigerum *Milium* E. B.	yellow	○	ag	½	jl.au	Ap	Britain	san. fl.	S	co	Eng. bot. 1107
989	múticum *Spr.*	bearded	○	w	1m	jl au	Ap	Sicily	1819.	S	co	

*156. AGROSTIS. *W.* BENT-GRASS. *Gramineæ.* *Sp.* 10—110.

990	Spica-vénti *W*	silky	○	w	4	jn.jl	Ap	England	san. fl.	S	s.l	Eng. bot. 951
991	retrofrácta *W. en.*	broad-leaved	△	w	2	jl.au	Ap	N. Holl.	1806	S	s.l	
992	littorális *E. B*	sea-side	△	w	1	au	Ap	England	sal m.	S	l	Eng. bot. 1261
993	vulgáris *E. B.*	fine	△	w	1½	jl.au	Ap	Britain	me pa.	S	l	Eng. bot. 1671
994	hispida *W*	hispid	△	w	1	jl au	Ap	Europe	1805.	S	co	Lers. hrb. t.4. f 3
995	stolonífera *W.*	Fiorin	△	ag	1	jl	Ap	Britain	moi m	C	h.l	Eng. bot. 1532
996	álba *W.*	marsh	△	w	1½	jl	Ap	Britain	mar.	S	m s	Eng. bot. 1189
997	verticillàta *W.*	whorl-flowered	○	w	1	jn jl	Ap	S. Europe	1800	S	co	
998	sylvática *L*	wood	△	w	½	jn jl	Ap	Britain	woods	S	m.s	Lers. hrb. t.4. f 3
§999	calamagróstis *W.*	reedy	△	w	2	jl	Ap	Britain	dit.	S	co	

*157. TRICHO'DIUM. *Mi.* TRICHODIUM. *Gramineæ* *Sp* 5—16.

1000	decúmbens *Ms.*	decumbent	△	ag	2	jn jl	Ap	N. Amer	1786	S	co	Fras. mo. cu. ic.
1001	canínum *W. en.*	brown	△	w	1½	jl.au	Ap	Britain	pas.	S	co	Eng. bot. 1856
1002	rupéstre *Schr.*	rock	△	w	1	jl	Ap	S. Europe	1815	S	co	Schr.ger.1 t.3.f.5
1003	setáceum *R. & S.*	bristly	△	w	1	jl au	Ap	Britain	dr he	S	co	Eng bot. 1188
1004	laxiflórum *Mich.*	loose-flowered	○	w	2	jl.au	Ap	N Amer.	1818.	S	co	Mich. am. 1. t. 8

158. TRIS'TEGIS. *Nees.* TRISTEGIS. *Gramineæ.* *Sp.* 1

1005	glutinósa *Nees*	clammy	△	cu	½	jn.jl	Ap	.....	1822.	S	co	Hor. ber. t. 7

159. SPORO'BOLUS. *B P* SPOROBOLUS. *Gramineæ.* *Sp* 2—10.

1006	indicus *B. P*	Indian	○	cu	2	au o	Ap	India	1773	S	co	Slo jam.1 t.73 f.1
1007	tenacissimus *W*	tough	⊠	cu	½	au s	Ap	E. Indies	1801.	S	co	Jacq ic. rar. t 16

160 AIROP'SIS *Desv* AIROPSIS. *Gramineæ.* *Sp* 1—6

§1008	involucráta *Cav*	involucred	○	w	1	jn	Ap	Spain	1820	S	co	Cav. ic. t. 44. f. 1

*161 CIN'NA *P de B.* CINNA *Gramineæ* *Sp* 2

§1009	mexicána *W.*	Mexican	△	w	1	jn.s	Ap	America	1780	S	l p	
1010	arundinácea *L*	reedy	⅄	w	3	jn s	Ap	Canada	1799.	S	m.s	Schrb.gram. t.49

*162 PSAM'MA. *P de B.* MAT-GRASS. *Gramineæ* *Sp* 1—2.

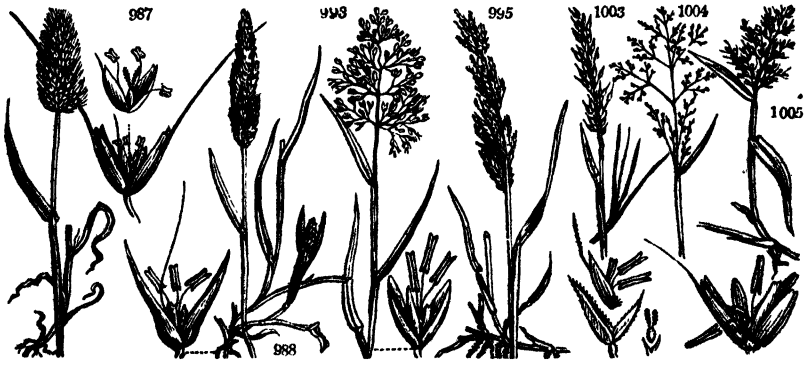
1011	arenárium *Arundo* E. B.	sea	△	w	2	jn jl	Ap	Britain	sea co.	S	s	Eng. bot. 520

163 CRYP'SIS. *W.* CRYPSIS. *Gramineæ* *Sp* 2—8

1012	aculeáta *W*	prickly	○	w	¼	au	Ap	S Europe	1783.	S	co	Host. gra 1. t 31
1013	schœnoides *Lam*	rush-like	○	w	½	au	Ap	S. Europe	1783.	S	co	Host. gra 1. t. 30

164. ALOPECU'RUS. *W* FOX-TAIL-GRASS *Gramineæ.* *Sp* 8—21.

1014	bulbósus *W*	bulbous	△	w	1	jl	Ap	England	sal. m.	S	m.s	Eng bot. 1249
1015	praténsis *W*	meadow	△	ag	2	my	Ap	Britain	mea.	S	h l	Eng. bot. 759
1016	alpínus *E B*	Alpine	△	w	½	my.jn	Ap	Scotland	sc mo.	S	s.l	Eng. bot. 1126
1017	agréstis *W*	slender	○	w	1½	jl.au	Ap	Britain	ro. sid	S	s l	Eng bot. 848



History, Use, Propagation, Culture,

154. *Polypogon.* Named by M. Desfontaines from πολυ, much, and πωγων, beard, in allusion to its bearded heads.

155 *Gastridium* From γαστριδιον, a little swelling: the glumes are ventricose at the base. A very small grass, formerly referred to Milium.

156. *Agrostis* Derived from ἀγρος, a field. Agrostis was the name given by the Greeks to all grasses. Of this genus the most remarkable species is the A stolonifera or florin, so much recommended by Dr. Richardson; but respecting which the opinion of practical men is still unsettled, and, on the whole, rather unfavorable than otherwise. It seems to suit the climate and soil of Ireland, and to be more productive and nutritive there than any where else. In the account of the Woburn experiments on grasses, it is observed of florin, that it appears to possess "merits well worthy of attention, though, perhaps, not so great as has been supposed, if the natural place of its growth and habits be impartially taken into the account." It is called squitch, quick, &c. like the common couch-grass, from the length of time it retains its vital power Like other plants, which propagate themselves abundantly by extension of their parts, it rarely bears seeds, and is therefore propagated by cuttings of the stems laid along drills an inch deep, and slightly covered with soil. A vulgaris, which in dry arable land is called the black quitch, is the most common and earliest of the bents, but inferior to several in produce, and the quantity of nutritive matter it affords. The bents are generally rejected by the agriculturist on account of their lateness of flowering; but this circumstance, as Sinclair observes (*Davy's Agr Chem.* App. LXXV.) does not always imply a proportional lateness of foliage A. vulgaris is in leaf by the middle of April. A. stolonifera is two weeks later, and A. nivea, and repens, three weeks later. In the south of France and Italy, the poor people collect the stolons of different species of agrostis by the roadsides and hedges, and expose them for sale in the market places in small bundles, as food for horses.

997 Panicle contracted, somewhat spiked, Glumes somewhat pubescent with a smooth edge

998 Panicle spiked ventricose at base, Glumes acuminate shining, Flowers bearded

999 Flowers beardless

990 Panicle whorled spreading, Beard very long below the end of the outer palea (*Apera* P. de B.)
991 Panicle much spreading, Beard bent inwards, Palea hairy, Culm ascending branched at the base
992 Glumes linear-lanc. bearded, Palea naked, Beard nearly term. straight, Culm decumbent (*Vilfa* P de B)
993 Branches of pan. smoothish, Branchlets at the time of flow. divar Ligula very short trunc. (*Vilfa* P de B.)
994 Branches of pan. hispid, Fl. purple, Branchlets much spreading rather lax, Ligula oblong (*Vilfa* P. de B)
995 Pan. contracted, Culm branched creeping, Flowers clustered, Glumes equal lanc. pubesc (*Vilfa* P. de B.)
996 Branches of pan. hispid, Fl. white, Branchl. much spreading rather lax, Ligula oblong (*Vilfa* P de B.)
997 Whorls of the pan. approxim. closely covered all over with flowers, Florets beardless (*Vilfa* P de B.)
998 Panicle contracted beardless, Glumes equal, Flowers viviparous (*Vilfa* P de B)
999 Beard term. curved, Hairs longer than palea, Panicle diffused, Glumes acumin. (*Achnatherum* P. de B)

1000 Pan. very branching, Branches trichot. much sprdg hispid, Glumes acute, Palea beardless, Stem decumb.
1001 Branches of panicle di-trichotomous roughish, Glumes acute, Leaves of stem wider than those of root
1002 Branches of panicle nearly 3-chotomous roughish, Glumes acuminate, Palea with two short beards at end
1003 Glumes lanceolate, Palea with a jointed beard at their base, Radical leaves setaceous
1004 Culms erect, Leaves narrow short, Sheaths roughish, Panicle very capillary and loose

1005 A little agrostis-like plant. The only species

1006 Panicle contracted beardless, Racemes lateral erect alternate
1007 Pan. elong. contr. nearly spiked, Florets beardless, Glumes uneq twice as short as palea which are uneq

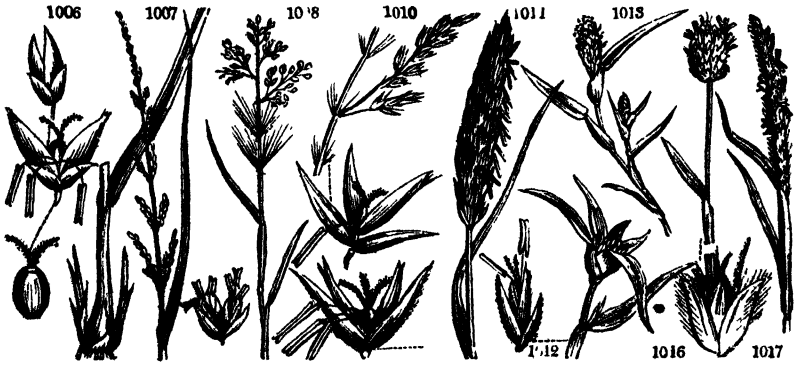
1008 Panicle spreading, with a setaceous involucre, Florets beardless

1009 Panicle contracted beardless, Flowers acuminate often monandrous, Leaves flat rough
1010 Panicle much branched oblong close, Branches erect, Palea beardletted, Ligula torn

1011 Panicle spiked, Glumes acute, Hairs 3 times as short as palea, Leaves involute

1012 Stems branched compressed, Panicle spiked hemispherical surrounded by a leafy involucre, Diandrous
1013 Stems branched compressed, Panicle spiked oblong sheathed at base, Triandrous

1014 Stem erect, Spike very simple attenuated, Glumes distinct villous, Root bulbous
1015 Stem erect smooth, Pan. subspiked cylindrical obtuse thick, Glumes fringed connate below the middle
1016 Stem erect smooth, Spike ovate, Glumes villous bearded nearly as long as the beard of the palea
1017 Stem generally erect roughish upwards, Panicle spiked cylind. acute, Glumes connate below the middle



and Miscellaneous Particulars.

157. *Trichodium.* Named from θριξ τριχος, hair, on account of its capillary inflorescence. T. decumbens is the famous Agrostis cornucopiæ of Fraser, respecting which so much was said some years ago; but which upon trial did not prove so valuable an agricultural grass as it was represented to be

158. *Tristegis* From τρεις, three, and στεγη, a covering, on account of the three glumes or valves of the calyx.

159. *Sporobolus.* From σπορος, a seed, and βαλλω, to cast forth. Its grains are loose, and easily fall out of their husks.

160. *Atropis.* A word formed by M. Desvaux, from Aira, and ωψ, like. The genus resembles Aira in appearance.

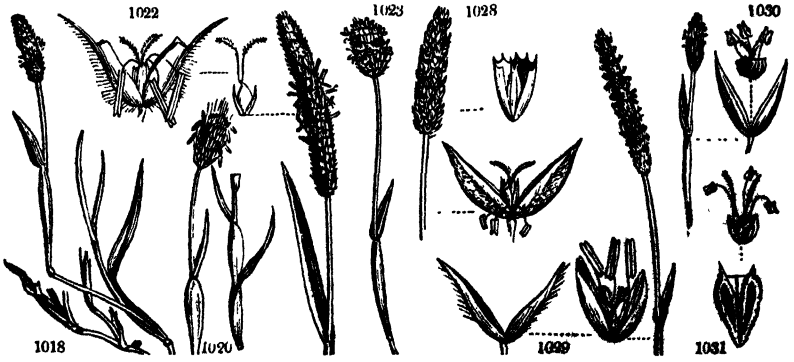
161. *Cinna.* An ancient name used by Dioscorides, who ascribes heating and stimulating qualities to this grass when eaten by cattle, whence the name (from κινω, to heat). Linnæus applied it to this genus of American grasses.

162. *Psamma.* From ψαμμος, sand, in which this grass grows in vast abundance on the sea-coasts of Europe. P. arenarium has a strong creeping perennial root with many tubers at the joints, the size of a pea. It is planted and encouraged on the coast of Norfolk to aid in fixing the sand against the action of the wind and tides, which it effects in a surprising manner. The marrum, as it is called, is considered of so much importance that there are severe laws to prohibit its being destroyed. Mats are made of it, and it is used as thatch.

163. *Crypsis.* From κρυπτω, to conceal, the heads of flowers being at one time concealed in the sheaths of the leaves.

164. *Alopecurus.* Αλωπηξ, a fox, and ουρα, a tail: fox-tail. A. pratensis is one of the best of meadow-grasses, possessing the three great requisites of quantity, quality, and earliness, in a superior degree to any other It is

1018 geniculátus *W.*	floating		△	w	1	my.au	Ap	Britain	mea.	S	m.s	Eng. bot. 1250
1019 fúlvus *E. B.*	orange-spiked		△	w	1	jn	Ap	England	ponds.	S	m.s	Eng. bot. 1467
1020 utriculátus *Pers.*	bladdered		○	w	1	jl.au	Ap	Italy	1777.	S	co	Host. gram. 3. t.7
1021 nigricans *Horn.*	blackish		△	w	4	jn.jl	Ap	Europe	1815.	S	co	Jac. col. gra. t.13
165. PHLE'UM. *W.*	CAT'S-TAIL-GRASS.					*Gramineæ.*		*Sp.* 5—8.				
1022 pratense *W.*	common		△	ag	2	jl	Ap	Britain	ma. pa.	S	m.s	Eng. bot. 1076
1023 alpinum *W.*	Alpine		△	w	1	jl	Ap	Scotland	sc. alp.	S	h.l	Eng. bot. 519
1024 nodósum *W.*	knotted		△	w	1½	jl.s	Ap	Britain	Wales.	S	co	Flor. dan. t. 380
1025 felínum *Sm.*	smooth-spiked		○	w	1	jl	Ap	Greece	1819.	S	co	
1026 Michélii *W. en.*	slender-spiked		△	w	1	jn.jl	Ap	Scotland	al. roc.	S	co	Eng. bot. 2265
166. ACHNODON'TON. *P. de B.*	ACHNODONTON.					*Gramineæ.*		*Sp.* 2.				
1027 Bellárdi *P. de B.*	bulbous		△	w	½	jn.jl	Ap	Spain	1798.	S	co	
1028 ténue *R. & S.*	slender		○	w	1	jn.jl	Ap	Mesopota.	1804.	S	co	Barr. ic. t.14. f.1
*167. CHILOCHLO'A. *P. de B*	CHILOCHLOA.					*Gramineæ.*		*Sp* 3—6.				
• 1029 Bœhméri *Schr.* *Phleum* E B	Phalaris-like		○	w	1½	jl.s	Ap	England	plains.	S	co	Eng. bot. 459
1030 arenária *Schr.* *Phalaris* E. B.	sea		○	w	½	jl.au	Ap	England	sea co.	S	co	Eng. bot. 222
1031 áspera *Schr.* *Phleum paniculatum* E. B.	rough		○	w	1	jl.au	Ap	England	hos.	S	co	Eng. bot. 1077
*168. PHA'LARIS. *W. en.*	CANARY-GRASS.					*Gramineæ.*		*Sp.* 8—23.				
§1032 arundinácea *P. S.*	reed-like		△	w	4	jl	Ap	Britain	dit.	S	co	Eng. bot. 402
1033 canariénsis *W*	common		○	ag	2	jn.au	Ap	Britain	unc. pl.	S	r.m	Eng. bot. 1310
1034 aquática *W.*	water		○	w	1½	jn.jl	Ap	Egypt	1778.	S	co	Host. gra. 2. t. 39
1035 capénsis *W*	cape		○	w	1	jn.jl	Ap	C. G. H.	1804.	S	co	
1036 cæruléscens *Desf*	blue		○	w	1	jn.jl	Ap	Spain	1818.	S	a.l	Buxb cent. 4. t. 53
1037 paradóxa *W*	bristle-spiked		○	w	½	jn.jl	Ap	Levant	1687.	S	co	Host. gra. 2. t. 40
1038 seminútra *R. & S.*	half-barren		△	w	2	jn.jl	Ap	Hungary	1815.	S	co	
1039 bulbósa *W*	bulbous		△	w	1	jn.jl	Ap	Spain	1798.	S	co	Cav. ic. 1. t. 64
169. CORYNE'PHORUS. *P. de B.*	CLUB-GRASS					*Gramineæ*		*Sp.* 1—2.				
1040 canéscens *P de B* *Aira* E. B	grey		△	w	½	jl.au	Ap	England	san.sh.	S	a.l	Eng. bot. 1190
*170 AI'RA. *W.*	HAIR-GRASS.					*Gramineæ.*		*Sp* 8—25.				
§1041 aquática *W*	water		△	w	1½	my.jn	Ap	Britain	pools.	S	m.s	Eng. bot. 1557
§1042 cæspitósa *W*	turfy		△	w	3	au	Ap	Britain	m.&p.	S	m.s	Eng. bot. 1453
§1043 lævigáta *L. T.*	smooth-sheath		△	w	1	jn.jl	Ap	Scotland	sc. alp.	S	s	Eng. bot. 2102
§1044 truncáta *W*	Pennsylvanian		△	w	1	jn.jl	Ap	N Amer.	1819	S	s	Act. petr. 11. t.7
§1045 média *Gouan*	intermediate		△	w	1	jn jl	Ap	S. Europe	1820	S	s	
1046 pulchélla *W*	pretty		○	w	½	jn	Ap	Spain	1820	S	s	
1047 flexuósa *W.*	waved		△	w	1	jl au	Ap	Britain	hea.	S	a.l	Eng. bot. 1519
1048 caryophýllea *W.*	silver		○	w	¼	jl	Ap	Britain	sa.pas.	S	a.l	Eng. bot. 812
*171 AVE'NA. *P. S.*	OAT-GRASS.					*Gramineæ*		*Sp* 9—34				
1049 brévis *W*	short		○	w	3	jn jl	Ap	Germany	1804.	S	co	Host. gra. 3. t.42
1050 orientális *W*	Tartarian		○	ag	3	jn.jl	Ap	.....	1798.	S	co	Host. gra. 3. t.44



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often fit for the scythe by the middle of May; it flowers twice a-year, and gives more bulk and weight of hay than any other grass. At Woburn the produce was nearly three-fourths greater from a clayey loam than from a sandy soil, and the grass from the latter was of comparatively less value in the proportion of four to six. What is almost peculiar to this grass, Poa pratensis and Anthoxanthum odoratum, the value of the grass of the latter math considerably exceeds that of the crop at the time of first flowering. A. geniculatus, and most of the other species of this genus (A. agrestis excepted) are valuable grasses both for hay and pasture.

165. *Phleum.* We have no information as to what the φλεως of the Greeks was. The name being unoccupied has been applied by Lannæus to this plant. Some think the plant of the ancients was our Typha. P. pratense, the timothy-grass (so named from Timothy Hanson, who brought it from New York and Carolina about 1780), varies much in size according to soil and situation, and the root becomes bulbous in very dry grounds. Opinions are different as to its merits. Dr Walker (*Rural Econ. Hebrides*, ii 27.) thinks it may be introduced into the Highlands with good effect. W. Salisbury says, it is coarse and late. At Woburn, its "comparative merits were considered very great. It produces abundance of fine foliage early in spring, which, as it flowers late, may be cropped till an advanced period of the season without injury to the crop of hay." Unlike the Alopecurus pratensis, the value of the grass as hay when the seed is ripe is to that when it is in flower as 10 to 23. P. nodosum has gibbous joints, which might have been expected to be sugary like those of Florin, which, however, is not the case, as Sir H. Davy found them to be less nutritive than those of P. pratense, in the proportion of 8 to 28.

166. *Achnodonton.* From αχνη, a chaff or husk, and οδους, a tooth, in allusion to the toothed palea or inner valves of the flower.

167. *Chilochloa.* A genus formed by M. de Beauvois, to contain certain grasses referable to both Phalaris and Phleum, as formerly constituted. The name is derived from χειλος, fodder, and χλοη, grass; but none of the species are remarkable for their qualities as grasses useful in husbandry.

1018 Stem ascending knee-jointed, Panicle spiked cylindrical obtuse, Glumes connate at base obtuse
1019 Stem ascending knee-jointed, Spike compound cylindrical, Glumes obtuse fringed, Anthers orange col.
1020 Stem ascend. Raceme spiked ov. Glumes with a hairy keel beyond the mid. dilated, Upper sheath inflated
1021 Stem erect, Pan. spiked cylind. atten at base, Glumes vill. fringed, Beards of paleæ twice as long as glumes

1022 Raceme spiked cylindrical, Glumes truncate mucronate with a fringed keel, Beard shorter than glume
1023 Raceme spiked ovate oblong, Glumes truncate mucronate with a fringed keel, Beard as long as glume
1024 Like P. pratense, but stems lower, Raceme shorter, Root knotty. A mere variety
1025 Spike ovate, Beard longer than glume divaricate angular rough, Root fibrous
1026 Panicle hairy spiked cylindrical, Glumes lanceolate acuminate with a fringed keel

1027 Glumes keeled smooth membranous at edge
1028 Outer glume a little prickly at the back

1029 Panicle spiked cylindrical smooth, Glumes lanceolate mucronate obtuse roughish

1030 Panicle spiked oblong ovate, Glumes lanceolate acute with a fringed keel, Stems ascending

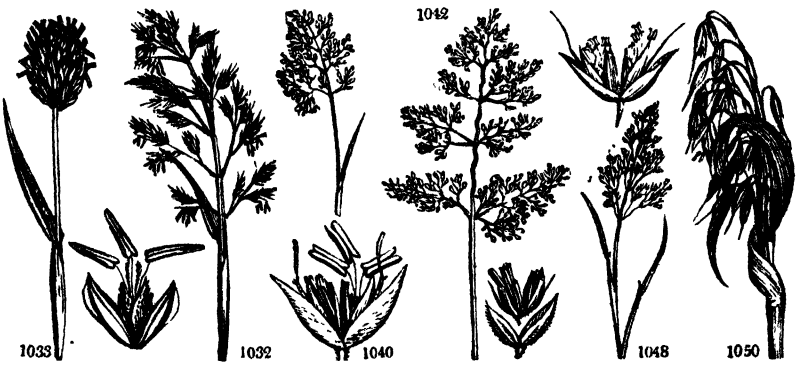
1031 Panicle spiked cylindrical, Glumes wedge-shaped mucronate rough

1032 Panicle spreading heaped, Outer paleæ penciliform, inner shining
1033 Panicle spiked ovate, Glumes navicular entire at the end, Outer paleæ 2
1034 Panicle spiked oblong ovate, Glumes navicular toothed at end, Outer palea 1
1035 Panicle spiked oblong, Glumes navicular nearly entire, Outer palea 1, Stem knee-jointed
1036 Stem naked upwards, Spike slender lax, Glumes keeled acute
1037 Pan. spiked cylindrical, Intermediate floret hermaphrodite acuminate, the rest imperfect bitten off
1038 Panicle diffuse, Glumes acute shorter than florets, One floret hermaphrodite, one neuter
1039 Panicle beardless cylindrical spiked, Paleæ 2 smooth, Root bulbous

1040 Pan spreading afterwards contracted, Florets less than glume, Beard clavate less than glume

1041 Pan diffuse, Glumes obtuse, Florets longer than glumes (*Catabrosa* P de B)
1042 Panicle diffuse, Florets as long as glumes, Beard straight short, Leaves flat (*Deschampsia* P. de B.)
1043 Pan contr Glumes bearded villous at base, Rachis smooth very short, Leaves flat (*Deschampsia* P. de B)
1044 Beardless, Panicle lanceolate lax erect, One floret stalked the other sessile, Leaves pubescent
1045 Leaves bristly, Stem naked, Panicle lax, Florets hairy at base, Beard nearly terminal shorter
1046 Pan. divar Branches trichot. Flor 3-fl larger than glumes, Beard jointed longer than glumes, Leaves set.
1047 Bearded, Pan spreading trichot. Peduncle wavy, Florets scarcely longer than glume, Leaves setaceous
1048 Bearded, Pan trichot. divar. Florets less than glume, Beard dorsal jointed longer than glume

1049 Pan one-sided, Spikelets short 2-flowered, Florets as long as glume obtuse 2-toothed at end, Root fibrous
1050 Pan 1-sided contracted, Spikelets 2-fl less than glumes, One floret beardless, Root fibrous



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168. *Phalaris.* An ancient name said to have arisen out of φαλος, brilliant, because the plant had shining grains. P. canariensis is cultivated for the seeds, which are given to singing birds, and more especially the canary. It requires a loamy soil, well manured, clean, and in good tilth. The grain is sown in February, in drills, six inches apart, and the plants are thinned to two inches distance in the rows. The growth of canary grass is slower than that of the common weeds, with which it is in consequence liable to be overrun, if they are not kept under by hoeing and hand-weeding. The culture of this grass is chiefly carried on in the isle of Thanet, where the chaff is esteemed as a horse food; but the straw being short, it produces little fodder or manure.

169 *Corynephorus.* From κορυνη, a club, and φερω, to bear. The beard is jointed, and the last articulation is club-shaped.

170. *Aira*, is the name applied by the Greeks to the Lolium of the Romans, our Lolium temulentum. It signifies "something deadly," in allusion to the dangerous effects of that plant; but the name has no reference to any species of the genus to which it has been applied by Linnæus. A. aquatica is relished by cattle, and water-fowl are fond of the young shoots and seeds. It is introduced in decoys, by throwing plants in the water with a weight tied to them. A. cæspitosa is common in marsh-meadows, and occasions those excrescences called tussocks or hassocks which interrupt the progress of the scythe. Though cows eat the grass, horses will not. The stiff erect stalks frequently bear viviparous flowers.

171. *Avena.* A name of obscure origin. De Théis thinks it has been derived from the Celtic word *aten*, which comes from *etan*, to eat; and whence our common word nit, oat, has been obtained. A. sativa is the common cultivated oat, and A. nuda and tartarica are also sometimes cultivated. Of the first species there are numerous varieties, some more permanent, as the white and black; others temporary, as the potatoe oat, Angus oat, &c. No botanist has been able to ascertain satisfactorily the native place of this or any other of our cultivated grains. A. fatua is accounted a distinct species, but some think the naked, tartarian, common,

1051 **sativa** *W.*	common	♃	○	ag	3	jn.jl	Ap	.....	...	S	r.m Host. gra. 2. t. 59
1052 **núda** *W.*	naked	♃	○	ag	2	jn jl	Ap	.....	...	S	r.m Host. gra. 3. t. 43
1053 **fátua** *W.*	wild	♃	○	w	4	au	Ap	Britain	cor. fi.	S	co Host gra. 2. t. 58
1054 **stérilis** *W.*	Animal-oat	♃	○	cu	4	jl.au	Ap	Barbary	1640.	S	co Host gra. 2. t. 57
1055 **praténsis** *W.*	meadow	♃	△	ag	1	jn jl	Ap	Britain	me. pa.	S	h.l Eng. bot. 1904
1056 **præcox** *P. de B.* *Aira* E B	early	♃	○	w	½	my jn	Ap	Britain	hea.	S	co Eng. bot. 1296
1057 **hirsúta** *Roth.*	hirsute	♃	○	w	3	jn.s	Ap	Barbary	1798.	S	co

172. TRISE'TUM. *P. S.* Trisetum. *Gramineæ* *Sp.* 8—30

1058 **striátum** *P. S*	striated	♃	○	w	1½	jl.au	Ap	S Europe	1804.	S	co Lrs. herb. t.9. f.3
1059 **Lóflingiánum** *W*	Læfling's	♃	○	w	1	jn.jl	Ap	Spain	1770.	S	co Cav. ic.1 t.45. f.1
1060 **flavéscens** *R & S* *Avéna* E B.	yellowish	♃	△	w	1½	jn.jl	Ap	Britain	...	S	co Eng. bot. 952
1061 **pensylvanic.** *P de B*	Pennsylvanian	♃	○	w	6	jl	Ap	N. Amer	1785	S	co
1062 **pubéscens** *R. & S.* *Avena* E B.	downy	♃	△	w	1½	jl.au	Ap	Britain	ch. pa.	D	s.l Eng. bot. 1640
1063 **planiculme** *Avena* E. B.	flat-stalked	♃	△	w	1½	jn s	Ap	Britain	sc.alp.	D	co Eng. bot. 2141
1064 **distichophýllum** *Sc*	fan-leaved	♃	△	w	1½	jn s	Ap	Switzerl.	1796.	D	co Host. gra 2. t 53
1065 **airoides** *P de B*	Aira-like	♃	○	w	½	jn jl	Ap	Switzerl.	1800.	S	co Host. gra. 2. t.45

173 DANTHO'NIA *P. de B* Danthonia *Gramineæ* *Sp.* 1—15.

1066 **strigósa** *P de B.* *Avena* E. B.	meagre	♃	○	w	3	jn jl	Ap	Britain	hed.	S	co Eng. bot. 1266

174. GAUDI'NIA *P. de B* Gaudinia. *Gramineæ.* *Sp.* 1.

1067 **frágilis** *P de B.*	brittle	♃	△	w	1½	jn au	Ap	Spain	1778.	D	co Host. gra. 2. t. 54

*175 ARUN'DO *With.* Reed. *Gramineæ.* *Sp.* 5—33

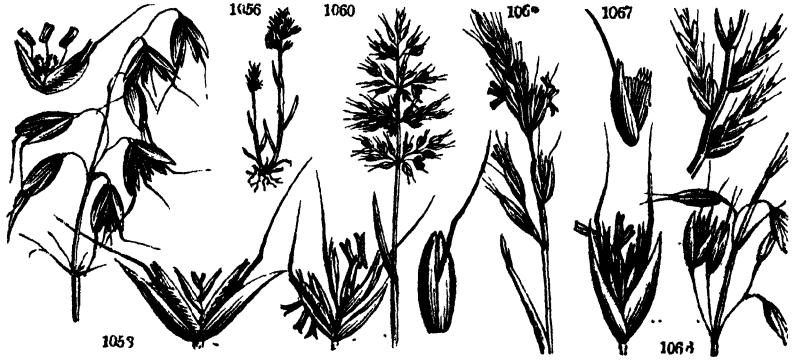
§1068 **epigéjos** *W*	wood	♃	△	w	2	jl	Ap	Britain	mol.w	S	m s Eng. bot. 403
§1069 **stricta** *E B*	upright	♃	△	w	1½	jl.au	Ap	Scotland	sc. ma.	S	m.s Eng bot 2160
§1070 **sylvática** *Schr*	wild	♃	△	w	3	jl.au	Ap	Germany	1813	S	m.s Host gra. 4 t.49
1071 **Dónax** *W.*	cultivated	♃	△	ec	10	jl au	Ap	S. Europe	1648.	S	co Host gra 4 t.38
β versicolor	*striped*	♃	△	or	3	jl au	Ap	S. Europe	1648.	S	co Mor h.3 t.8. f.9
1072 **phragmites** *W*	common	♃	△	ec	6	jl s	Ap	Britain	dit.	S	m s Eng bot. 401

*176. CHRYSU'RUS *P S* Chrysurus. *Gramineæ* *Sp* 2—4

1073 **aúreus** *P de B*	golden-spiked	♃	○	w	½	jl	Ap	Levant	1770	S	co Host gra 3. t. 4
1074 **echinátus** *P de B.*	rough	♃	○	w	2	au	Ap	England	san fi	S	s l Eng bot. 1333

177 SESLE'RIA *P. de B* Sesleria *Gramineæ* *Sp* 4—11

1075 **elongáta** *Host*	long-spiked	♃	△	w	1½	jn.jl	Ap	Germany	1805.	S	co Host. gra 2. t 97
1076 **cærúlea** *Schr* *Cynosurus* E. B	blue	♃	△	w	1	my jn	Ap	Britain	fields.	S	co Eng. bot. 1613
1077 **tenélla** *Host*	weak	♃	△	pr	½	ap my	Ap	Switzerl.	1819.	S	co Host. gra.2.t.100
1078 **sphærocéphala** *Ard*	round-headed	♃	△	pr	¼	ap my	Ap	Switzerl.	1819	S	co Host gra. 2. t.99



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and wild oat originally the same. The wild oat is remarkable for the length of time the grain will lie in the soil, and retain its vegetative powers, its awns are sometimes used as hygrometers, and its seeds as artificial flies in fishing Where it abounds naturally it is an inveterate weed.

The oat, in an agricultural point of view, is a grain only calculated for cold climates In Italy and France, and even in the southern counties of England, the ears are small and husky, and afford little meal; the panicle is open, and the foot-stalks of the ears small, and in July and August the heat dries them up, and obstructs the progress of the sap to the grain On the other hand, this naked airy panicle is better for drying after rains and dews than the close spikes of wheat and barley, which, while they serve to guard the ears from the extremes of heat in warm climates, are apt to rot or become mouldy (covered with fungi) in cold moist countries or seasons. The grain of the oat, though chiefly used as food for horses, is also more or less a bread corn in every country where it is generally cultivated. Fourteen pounds of grain yield eight pounds of meal; in some places, as Yorkshire and Aberdeenshire, this meal is ground nearly as fine as flour; in others, as at Edinburgh, it is made of a coarser quality The kernel freed from the husk, and entire, is used for gruels, and forms an article of commerce with Embden, Bremen, and some towns where the grains are grown to a large size on the variety known as the Friesland oat. The fine powder which is produced by the operation of husking the corn, or making grist, forms a jelly, the sowens of the Scotch, and furmerty of the Irish, an agreeable and wholesome food. Water-gruel from a coarse oatmeal, is esteemed a cooling laxative drink.

A. nuda, the naked, or hill-oat, or peel-corn, when ripe drops the grains from the husks. It was generally cultivated in Worlige's time "in the north of England, Scotland, and Wales, because the kernel threshes clean out of the husk, and need not be carried to the mill to be made into meal or grist." It was made into meal by the lower classes, by drying on the hearth, and bruising in a stone mortar, as still practised in the Highlands of Scotland, in Lapland, Ceylon, China, and in every country under certain circumstances of civilization. In the low country of Scotland, the quern mills, as they were called, now no longer in use, may be seen neglected or dilapidated, by the doors or about the gardens of cottages and villages, where they were formerly in use.

Avena sterilis is sometimes grown as an object of curiosity, under the name of the animal oat, on account of its singular hygrometrical properties. After the seeds have fallen off, the strong beard is so sensible of alter-

1051 Pan. equal, Spikelets 2-fl. Florets smaller than glumes at the base naked 1-bearded, Root fibrous
1052 Pan equal, Spikelets 3-fl. longer than glumes, Florets naked at base, Root fibrous
1053 Pan. equal, Spikelets 3-fl. Florets less than glumes, hairy at base, all bearded, Root fibrous [fibrous
1054 Pan. 1-sid. Spikel. 5-fl. Florets less than glumes lower bearded and hairy upper beardless and smooth, Root
1055 Rac. simp. Spikel. 5-fl. Flor long than glms Lvs. rough in tufts very narrow and complicated, Root fibrous
1056 Pan. sub-spiked, Florets nearly equal to the glume, Beard jointed longer than glume, Leaves setaceous

1057 Pan. spread. Glumes 3-fl. Florets linear 2-bearded at end very hairy below the middle, Beard dorsal-jointed

1058 Pan. equal, Spikelets about 3-fl. Florets longer than the glume the lower with a beard under the end
1059 Pan. contracted 1-sided, Spikelets 2-fl Outer glume bifid 2-bearded, Dorsal beard reflexed
1060 Pan lax, Outer glume bifid, Spikelets 3-fl. Ligula truncate obsolete, Lower sheaths pubesc. Root creeping

1061 Pan. slender, Glumes 2-fl Seeds villous, Beard twice as long as glume
1062 Pan sub-spik. equal, Spikelets about 3-fl. Florets longer than cal. hairy at base, Lvs pubesc. Root creeping

1063 Pan. erect nearly simp. Glumes about 5-fl. Recept bearded at end, Leaves serrulate naked, Sheaths rough

1064 Pan. equal, Spikel. 3-fl. Flor as long as glume, Lvs distichous smth. Mouth of sheaths hairy, Root creeping
1065 Panicle nearly spiked, Beard at length reflexed longer than glume

1066 Panicle one-sided, Spikelets 3-flowered, Florets 3-bearded as long as glume, Root fibrous

1067 Spike jointed brittle 3 or 4 inches long, Leaves flat slightly hairy

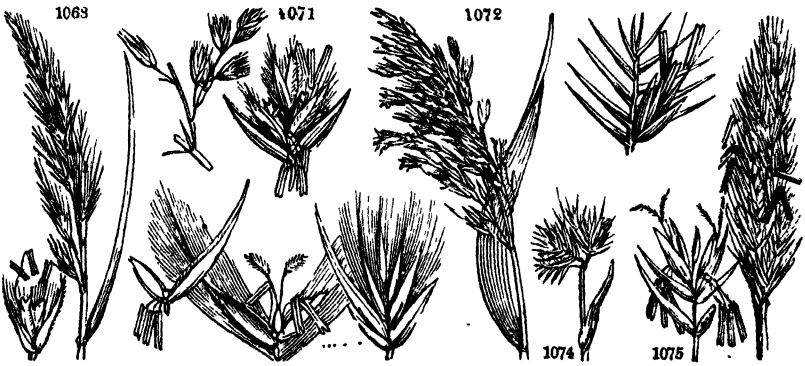
1068 Pan upright sprdg. Glumes acum Dorsal beard straight shorter than the hairs which are as long as glume
1069 Pan upright spreading, Glumes acute, Dorsal beard straight as long as palea which is longer than hairs
1070 Panicle spreading, Glumes acute, Hairs very short, Dorsal beard jointed longer than glume
1071 Glumes about 3-5-flowered, Florets as long as the glume, Stem woody at base (*Donax* P de B)

1072 Glumes 5-flowered, Florets very little longer than glumes

1073 Stems erect, Sheaths very smooth, Ligulas large elongated, Panicle close many-flowered
1074 Pan contr. ovate, Spikelets bearded, Leaves lanceolate, Bractes pinnate scarious with very long beards

1075 Raceme spiked cylindrical, Spikelets 3-flowered, Outer palea 3-5-bearded, Root stoloniferous
1076 Raceme spiked subovate oblong, Bractes entire, Spikelets 2-3-flow. Outer palea 3-5-bearded, Leaves flat

1077 Raceme spiked ovate nearly naked, Spikelets 2-flowered, Bractes toothletted, Outer palea 5-bearded
1078 Raceme in a round head, Outer palea with one beard, Leaves fine keeled



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ation in the atmosphere as to keep them in an apparently spontaneous motion, when they resemble some grotesque insect crawling on the ground.

172 *Trisetum.* (Three bristles), on account of the three beards or awns of the flower Trisetum pubescens, according to the Woburn experiments (VII.), possesses several good qualities, which recommend it to particular notice. It is hardy, early, and more productive than many others which affect similar soils and situations. It appears well calculated for permanent pasture on rich light soils. Trisetum flavescens is also a useful grass; but the most valuable as a grass is the Avena elatior, *L.* the Holcus avenaceus of Eng. Bot., which will be noticed hereafter in its proper place (In Polygamia monœcia, under *Arrhenatherum*)

173. *Danthonia.* A genus containing some incongruous species of Avena, and named after M. Danthoine, a French botanist.

174 *Gaudinia.* Named in honor of M. Gaudin, a Swiss botanist, who paid great attention to the study of grasses, and who published an Agrostographia Helvetica in 1811, still a work of reputation.

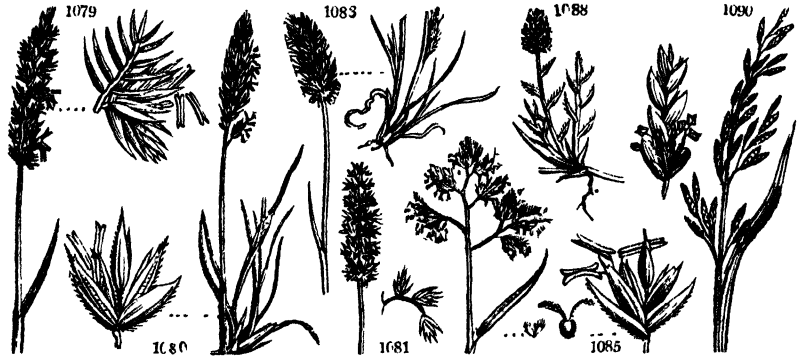
175. *Arundo.* An ancient name of doubtful origin, perhaps, as a recent author conjectures, from *aru*, the Celtic word for water. Phragmites is derived from φραγμος, a hedge or separation A. donax, *Canne*, Fr, *Rohr*, Ger., and *Canni di Giardini*, Ital. is common in the south of France and Italy, where it is cultivated as fence-wood, for supporting the vine, for fishing-rods, and a great variety of purposes. In Spain and Portugal it forms an article of commerce, and supplies materials for the looms, fishing-rods, &c. of this country. The striped-leaved variety (gardener's garters) used formerly to be a common inhabitant of gardens.

A. phragmites, *Roseau de Marais*, Fr. *Gemeine Rohr*, Ger.; and *Canna palustre*, Ital. is used for thatching, for protecting embankments or sea-dykes, for ceilings to cottages, verandahs, and rustic buildings, to lay across the frame of wood work as the foundation for plaister floors, and for screens and hot-bed covers in kitchen gardens. The panicles will dye wool green; and the roots, it is said, are good in liver complaints, like those of Triticum repens.

176. *Chrysurus.* From χρυσος, gold, and ὀυρὰ, a tail; the compact heads of flowers are of a bright yellow color.

177. *Scleria.* A genus named by Scopoli, after Leonard Sesler, a physician and botanist, who contributed to

178 CYNOSU'RUS. *P S*	Dog's-tail-grass.					*Gramineæ.*		*Sp.* 1—8.					
1079 cristátus *W*	crested	⅄	△	ag	2	au	Ap	Britain	pas.	S	s.l	Eng. bot. 316
179. KŒLE'RIA *P. S*	Kœleria.					*Gramineæ.*		*Sp.* 5—13.					
1080 cristáta *P S*	crested		△	w	1	jn.au	Ap	Britain	pas.	S	co	Eng bot. 648
1081 tuberósa *P S.*	tuberous		△	w	1	jl.au	Ap	Europe	1802.	S	co	Lam. ill. t.45. f 4
1082 pubéscens *P. de B*	pubescent		◯	w	1	jn.jl	Ap	S. Europe	1800.	S	co	Ger prov. t. 1
1083 phleoides *P. S*	cat's-tail		○	w	1	jl.au	Ap	Portugal	1802.	S	co	Desf atl. 1 t. 23
1084 hispida *D C.*	hispid		○	w	½	jl.au	Ap	Mediterr.	1819.	S	co	Savi. pis. t. 1. f. 5
180 DACTYLIS *W en.*	Cock's-foot-grass.					*Gramineæ*		*Sp* 5—19					
1085 glomeráta *W*	rough		△	ag	2	jn jl	Ap	Britain	mea.	S	h.l	Eng. bot. 335
1086 hispánica *W en.*	Spanish		△	w	2	jn jl	Ap	Spain	1814.	S	co	
1087 glaúca *Rth*	glaucous		△	w	2	jn.jl	Ap	Saxony	1800.	S	co	
1088 répens *Desf.*	creeping		△	w	½	jn jl	Ap	Barbary	1821	S	co	Desf. atl. 1. t. 15
1089 pátens *H K.*	spreading		△	w	2	au.s	Ap	N. Amer.	1781.	S	co	
181 GLYCE'RIA *R. Br*	Glyceria.					*Gramineæ*		*Sp* 1.					
1090 flúitans *B P*	floating		△	w	1½	my.au	Ap	Britain	ponds.	S	m.s	Eng bot. 1520
*182. FESTU'CA *W.*	Fescue-grass.					*Gramineæ.*		*Sp.* 27—66					
§1091 tenélla *Ph*	slender		○	w	½	jl.au	Ap	N Amer.	1804.	S	co	
1092 ovina *W*	sheep's		△	ag	½	jn	Ap	Britain	dr pa	S	s l	Eng. bot. 585
1093 vivípara *E B*	viviparous		△	ag	½	jl	Ap	Britain	sc. mo	S	s l	Eng. bot 1355
1094 rúbra *W.*	creeping		△	w	1	jl	Ap	Britain	me pa	S	h l	Eng bot 2056
1095 duriúscula *W*	hard		△	ag	1	jn	Ap	Britain	me pa.	S	s.l	Eng bot 470
1096 amethýstina *W*	blue		△	w	1½	jn jl	Ap	S. Europe	1804.	S	co	Host. gra. 2. t 89
1097 cæ'sia *E B*	grey		△	w	1	jn jl	Ap	England	bar he	S	co	Eng bot 1917
1098 dumetórum *W*	bushy		△	w	1	jn jl	Ap	Europe	...	S	co	Fl dan t. 700
§1099 calamária *E B*	reed-like		△	w	3	jl au	Ap	Scotland	m wo	S	m s	Eng bot. 1005
1100 triflóra *E B*	three-flowered		△	w	2	jl.au	Ap	Britain	woods.	S	m.s	Eng bot 1373
§1101 spadícea *W*	brown		○	w	2	ap my	Ap	Italy	1775	S	co	Host. gra 3. t 20
§1102 praténsis *E B*	meadow		△	ag	1½	jn.jl	Ap	Britain	me. pa.	S	h l	Eng. bot. 1592
1103 vaginàta *W en.*	sheathed		△	w	1½	jn jl	Ap	Hungary	1804	S	co	
1104 mexicána *Donn*	Mexican		○	w	1½	jl	Ap	Mexico	1805.	S	co	
1105 pubéscens *W en.*	downy		△	w	1	jn jl	Ap	Hungary	1822.	S	co	
1106 flavéscens *Brtl.*	yellowish		△	w	½	jn jl	Ap	Savoy	1804.	S	co	
1107 pannónica *Wulf*	Hungarian		△	w	1	jn jl	Ap	Hungary	1804.	S	co	Host. gra. 4. t. 62
§1108 decídua *E. B*	deciduous		△	w	2	jn.jl	Ap	England	m wo	S	m s	Eng bot. 2268
§1109 elátior *W*	tall		△	ag	½	jn jl	Ap	Britain	m. me.	S	m.s	Eng bot. 1593
1110 diándra *Ph*	diandrous		△	w	2	jn jl	Ap	N Amer	1810	S	co	Mich amer t.10
§1111 loliácea *W*	spiked		△	ag	3	jn jl	Ap	England	moi p	S	m s	Eng bot. 1281
1112 grandiflora *Ph.*	large-flowered		△	w	3	jn jl	Ap	N Amer.	1812.	S	co	
1113 rúbens *P S*	Spanish		○	w	1	jn	Ap	S Europe	1776.	S	co	Fl græc. t 83
1114 glaúca *P S*	glaucous		△	ag	1	jn jl	Ap	S Europe	...	S	co	Lam ill t.t.46 f.3
1115 ciliáta *P S*	ciliated		△	w	½	jl au	Ap	Portugal	1802	S	co	Host gra 4 t.65
1116 nútans *Ph*	nodding		△	w	3	jn jl	Ap	N Amer	1805	S	co	Host gra. 4 61
1117 heterophýlla *P S*	various-leaved		△	w	3	jn jl	Ap	France	1812	S	co	Vaill par t.19.f 6



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Vitaliano Donati's Natural History of the Adriatic sea, published in 1750. The species were formerly part of Cynosurus.

178 *Cynosurus* Κυων κυνος, a dog, and ουρα, a tail: dog's-tail

179. *Kœleria* Named after M Kohler, a professor of natural history at Mayence, and author of some works upon grasses A pretty genus of grasses, with elegant silky heads.

180 *Dactylis.* (Δακτυλος, a finger finger grass) The divisions of its heads may be fancied to resemble the fingers, and the large cluster at the bottom the thumb of an animal D glomerata is a coarse grass of early and rapid growth, and considered valuable as a pasture grass on light soils from the quantity of herbage it affords It comes in from the time turnips are over, till the meadows are fit for grazing, but old and dry, or made into hay, neither horses nor cattle are fond of it. To reap the full benefit of this grass, it must be kept closely cropt. It has been of late strongly recommended by Mr Coke of Holkham

181. *Glyceria* (From γλυκυς, sweet, in allusion to the herbage) This is the Festuca fluitans of L.: it is found in stagnant water, and its long narrow leaves float on the surface Horses, cattle, and swine are fond of this grass, which produces abundance of seeds, which are eaten greedily by geese, ducks, and fish, especially the trout (*Salmo fario*). These seeds are very nourishing, and are collected in some parts of Germany and Poland, under the name of manna seeds, and used in soups and gruels. The plant will not thrive unless on land that is constantly under water.

182. *Festuca.* In Celtic, the word *fest* signifies pasture, food. We may be satisfied with this explanation in want of a better This genus affords some valuable hay and pasture grasses. F. ovina has a fine short sweet foliage, well adapted to the masticating organs of sheep, and for producing delicate mutton: it is totally unfit for hay, and according to Sir H Davy's experiments, it does not possess the nutritive powers generally ascribed to it. It is an excellent grass for lawns, requiring little mowing, and forming so thick a turf as to suffer few intruding plants. It should be sown about the middle of August, on ground nicely prepared, open, and not too light or dry. The same remarks will apply to F rubra and amethystina.

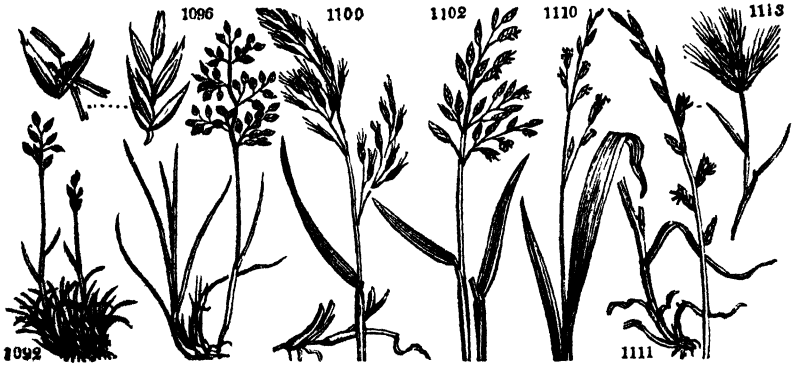
1079 Raceme spiked linear, Spikelets beardless, Bractes pinnatifid, Leaves linear

1080 Pan. spike-shaped at the base interrupted and smoothish, Spikelets 3-4-flow. nearly beardless very acute
1081 Pan. closely spiked, Spikel. 2-3-fl. scum. beardless, Glumes fringed at back, Lower leaves conv setaceous
1082 Pan. spiked oval cylind. Spikelets 2-flowered villous at back acumin. Outer glume bearded under the end
1083 Panicle spiked cylind. Spikel. 2-5-8-flowered, Outer glume rough outside, with a soft beard under the end
1084 Panicle spiked ovate cylind. Spikelets 3-4-flowered, Outer glume hairy with a stiff beard under the end

1085 Panicle one-sided heaped, Leaves keeled
1086 Panicle one-sided headed spiked, Spikelets 3-flowered, Leaves keeled glaucous
1087 Panicle equal before and after flowering contr spiked, Spikelets 4-fl. beardless, Glumes with a rough keel
1088 Stem creeping, Branches in bundles, Leaves villous subulate stiff, Flowers in spiked one-sided heads
1089 Spikes scattered one-sided few, Flowers closely imbricated, Leaves much spreading, Stem decumbent

1090 The only species is a floating creeping plant very common in ponds

1091 Panicle simple one-sided, Spikelets about 9-flow. bearded, Leaves setaceous, Culm upwards 4-cornered
1092 Panicle contracted, Spikelets ovate 4-flowered, Paleæ roundish, Leaves very narrow rough
1093 Panicle one-sided contracted, Florets compressed beardless pubescent, Leaves setaceous smooth
1094 Pan. one-sided erect spreading, Florets roundish longer than beard, Leaves pubes. above, Root creeping
1095 Panicle erect spreading, Florets longer than beard, Root fibrous
1096 Pan. sprdg. Spikel. obl. nearly beardl Outer valve of glume and paleæ ciliated, Lvs setac. rigid, Lig 2-eared
1097 Glaucous, Pan. 1-sided contracted, Florets cylind. bearded, Stem square, Leaves compound channelled
1098 Panicle spike-shaped pubescent, Leaves filiform
1099 Panicle one-sided erect branching contracted, Florets oblong angular beardless, Leaves ensiform striated
1100 Panicle spreading, Spikelets 3-flowered with long beards
1101 Panicle erect, Spikelets ovate 4-5-flowered, Glumes acum. beardless, Leaves setaceous smooth pungent
1102 Panicle spreading branched, Spikelets linear beardless many-flowered, Leaves linear, Root fibrous
1103 Pan. sprdg one-sided, Spikel. about 6-fl. Florets blunt beardless, Leaves lin conv glauc Stem round erect
1104 Panicle spike-shaped, Spikelets slender 11-flowered bearded, Sheaths rough
1105 Culm ascending angular, Leaves rolled together smooth, Pan nodding close, Spikelets 9-10-flow pilose
1106 Pan. erect contracted, Spikelets 4-5-fl very smooth, Paleæ margined membranous, Leaves setaceous
1107 Pan. one-sided oblong, Spikel. 7-fl. bearded, Outer glume and paleæ fringed, Leaves setac. Root fibrous
1108 Panicle one-sided erect branching, Florets ternate oblong angular beardless, Leaves linear striated
1109 Pan. spreading much branched, Spikelets ovate lanc somewhat bearded 4-5-fl. Leaves linear lanceolate
1110 Pan close, Branches simple scattered, Spikelets linear 5-fl. Flowers acum. 2-androus, Stem very rough
1111 Raceme spiked elongated, Spikelets remote beardless afterwards spreading, Root fibrous
1112 Panicle simple erect, Spikelets very few about 7-flowered, Florets acute distant
1113 Panicle fascicled, Spikelets subsessile villous, Beard erect
1114 Panicle one-sided spike-shaped, Spikelets 5-fl. smooth somewhat bearded, Leaves glaucous rigid subulate
1115 Culm ascending, Leaves subconvolute, Spike racemose, One glume very small, Outer paleæ fringed
1116 Panicle one-sided erect nodding at the end, Spikelets 5-flowered obtuse beardless
1117 Panicle loose spreading nodding, Radical leaves very slender and long, Root creeping



and Miscellaneous Particulars

F. durinscula, is a good grass either for hay or permanent pasture · hares are remarkably fond of it its produce in the spring is not very great, but the quality is fine, and the quantity is considerable at the time of flowering. F. calamaria is subject to the disease in the grain called clavus, in which the seed swells to three times the usual size, and the kernel is wanting.

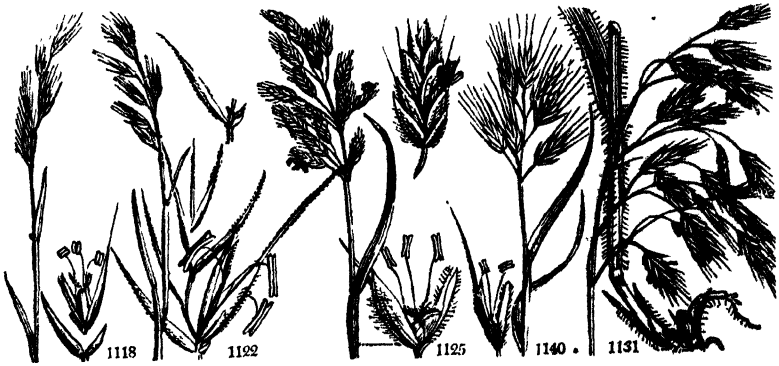
F. pratensis is one of the six grasses (Anthoxanthum odoratum, Alopecurus pratensis, Poa pratensis and trivialis, Cynosurus cristatus, and the F. pratensis) which Curtis recommends before all others for laying down meadows or pastures, on soil either moist or moderately dry. According to the Woburn experiments, the value of this grass cut at the time the seed is ripe, is to that of the grass cut at the time of flowering as 6 to 18, one proof, among many others, of the advantage of cutting almost all grasses when in flower rather than later. W. Salisbury says, "if land intended for meadow could be laid down with one bushel of F. pratensis, one of Alopecurus pratensis, three pounds of Anthoxanthum, a little Bromus mollis, with white clover, the farmer will seek no farther."

F. elatior differs little from F. pratensis, but in being larger in every respect. According to the Woburn experiments (xi.) "the produce is nearly that of the former, and the nutritive powers superior in the proportion of 8 to 6."

F. loliacea greatly resembles the rye-grass in habit and place of growth: "it has excellencies which make it greatly superior to that grass, for the purposes either of hay or of permanent pasture. It improves in proportion to its age, which is directly the reverse of rye-grass." (*Wob. exp.* xxxiii.)

F. glauca, cut at the time of flowering, exceeds in value the same grass cut when the seeds are ripe in the proportion of 6 to 12, a strong proof of the value of the leaves and culm in grasses intended for the scythe, and the loss, as we have before observed, of leaving them for the sake of the seed when they become dry and wiry. After this grass, and indeed most others, are in flower, "the root leaves neither increase in number nor in size, but a total suspension of increase appears in every part of the plant, the roots and seed-vessels excepted." (*Wob exper.* xii.)

*183. MYGALU'RUS. *Lk.*	MOUSE-TAIL.					*Gramineæ.*	*Sp 5.*						
1118 caudátus *Lk.*	wall		○	w	½	jn	Ap	Britain	way s.	S	co	Eng. bot. 1412
Festuca Myurus E. B.													
1119 bromoides *Lk.*	barren		○	w	½	my.jn	Ap	Britain	walls.	S	co	Eng. bot. 1411
Festuca E. B.													
1120 stipoides *Lk*	fine-leaved		○	w	1	jn.jl	Ap	Majorca	1793.	S	co	Barr. ic. t. 76. f.1
1121 delicátulus *Lk.*	delicate		○	w	½	jn.jl	Ap	Spain	1817.	S	co	
1122 uniglúmis *Lk.*	single-husked		○	w	½	jn	Ap	Britain	sea co.	S	co	Eng. bot. 1430
Festuca E. B													
*184. BRO'MUS *W*	BROME-GRASS.					*Gramineæ.*	*Sp* 19—66.						
1123 secalínus *W.*	smooth-rye		○	w	2	jn.au	Ap	England	cor. fi.	S	co	Eng. bot. 1171
1124 multiflórus *W en*	downy-rye		○	w	2	jn.au	Ap	Britain	...	S	co	Eng. bot. 1884
1125 móllis *W.*	soft		○	w	2	jn au	Ap	Britain	walls.	S	co	Eng. bot. 1078
1126 lanceolátus *W.*	spear-leaved		○	w	3	jn au	Ap	Crimea	1798.	S	co	
1127 squarrósus *W*	corn		△	w	3	jn au	Ap	England	cor. fi.	S	co	Eng bot. 1885
1128 Alopecúrus *W.*	Fox-tail		○	w	2	jn au	Ap	Barbary	1799	S	co	Desf. atl. 1. t. 25
1129 púrgans *W*	purging		△	w	1½	jn.au	Ap	Canada	1793.	S	co	
1130 inérmis *W.*	awnless		△	w	2	jn.au	Ap	Germany	1794.	S	co	Host gra. 1. t. 9
1131 ásper *W*	hairy wood		○	w	4	jn au	Ap	England	m. s. p.	S	co	Eng. bot. 1172
1132 praténsis *E B*	meadow		△	w	2	jn au	Ap	England	cor. fi.	S	co	Eng. bot. 920
1133 stérilis *W.*	barren		○	w	2	jn au	Ap	Britain	rub	S	co	Eng. bot. 1030
1134 arvénsis *E B*	field		△	w	3	jn au	Ap	Britain	cor. fi	S	co	Eng. bot. 1984
1135 eréctus *E B.*	upright		△	w	3	jn au	Ap	England	ch pa.	S	co	Eng bot. 471
1136 tectórum *W*	nodding		○	w	1	jn au	Ap	Europe	1776.	S	co	Host. gra. 1. t.15
1137 altissimus *Ph*	tallest		△	w	8	jn au	Ap	N. Amer.	1812.	S	co	
1138 racemósus *W*	smooth		○	w	2	jn au	Ap	England	me. pa.	S	h.l	Eng bot. 1079
1139 máximus *Roth*	great		○	w	3	jn.au	Ap	Morocco	1804.	S	h.l	Desf. atl. 1. t 26
1140 madriténsis *W*	wall		○	w	1½	jn au	Ap	Britain	walls	S	h.l	Eng. bot. 1006
1141 gigantéus *Schr*	giant		△	w	3	jl au	Ap	Britain	mea.	D	co	Eng. bot. 1890
Festuca E. B													
*185 BRACHYPO'DIUM. *P de B*	BRACHY'PODIUM					*Gramineæ*	*Sp* 9—25.						
1142 ciliátum *W*	ciliated		△	w	2	jn au	Ap	Canada	1802.	S	co	
1143 sylváticum *R. & S*	wood		△	w	2	jn.au	Ap	Britain	hed.	S	co	Eng. bot. 729
Bromus E. B													
1144 pinnátum *P de B*	spiked heath		△	w	3	jn.au	Ap	Britain	hea.	S	co	Eng. bot. 730
Bromus E. B													
1145 distáchyon *R. & S*	two-spiked		△	w	1	jn.au	Ap	S. Europe	1772.	S	co	Host. gra. 1. t.20
1146 tenéllum *W*	slender		○	w	½	jl au	Ap	S. Europe	1781.	S	co	Vi. fragm. t.26. f.1
1147 loliáceum *R & S.*	Darnel-like		○	w	1	jn jl	Ap	Britain	sea co.	S	co	Eng bot. 221
Triticum E. B													
1148 umioloides *Lk*	Umiola-like		○	w	½	jl au	Ap	Italy	1758.	S	co	Jacq. ic. 2. t. 303
1149 obtusifólium *Lk*	blunt-leaved		△	w	1½	jl au	Ap	Spain	1818.	S	co	
1150 unilaterále *R & S*	one-sided		○	w	½	jn jl	Ap	S Europe	1800.	S	co	
186 UNI'OLA *W.*	SEA-SIDE-OAT					*Gramineæ.*	*Sp* 4—7.						
1151 latifólia *Ph*	broad-leaved		△	w	4	jn.jl	Ap	N Amer.	1809	S	co	
1152 paniculáta *Ph*	panicled		△	w	4	jn jl	Ap	N. Amer.	1793.	S	co	Cates. car 1. t.32
1153 spicáta *W.*	spiked		△	w	½	jl	Ap	N Amer.	1790.	S	co	
1154 distichophýlla *R & S*	two-ranked		△	w	½	jn jl	Ap	N. Holl.	1789.	S	co	Lab. N. Holl. t.24
187 TRICUS'PIS. *P de B*	TRICUSPIS.					*Gramineæ*	*Sp.* 1—3						
1155 quinquéfida *P de B*	five-cleft		△	ag	2	jn jl	Ap	N. Amer.	1820.	S	r m	Jac. gr. ecl. t. 16
188 DIPLACH'NE *P. de B*	DIPLACHNE.					*Gramineæ*	*Sp.* 1—2						
1156 fasciculáris *P de B*	bundled		○	w	2	jl.au	Ap	N Amer	1823.	S	co	



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183. *Mygalurus.* Named by Link, from μυγαλη, a mouse, and ὐρα, a tail.. An alteration of the previous specific name of one of the species, Festuca myurus, L. A natural genus, better distinguished by natural than by artificial characters.

184. *Bromus* Βρωμος is the name given by the Greeks to a sort of wild oat. Most of the species of this genus are of a coarse quality, and being strictly annuals are of little value as pasture, and as hay produce no after math. Sir H Davy found that the nutritive powers of the straws and leaves of most of the species were greatest when the plant is coming into flower; because, like all other plants strictly annual, or which do not shoot up again from the root the same season, when left till the seed is ripe, the leaves and straws become dried up. B. secalinus is often found among rye and wheat crops, the seeds when ground among the flour are said to impart a bitter taste to bread, and to have similar narcotic qualities as Lolium temulentum. In Scania, the panicles are used to dye green, and there, as formerly in Britain, rye was supposed to degenerate into this grass. The seeds of B. mollis are said to bring on giddiness in the human species and quadrupeds, and to be fatal to poultry. B. asper is the tallest of British grasses; it has had many names, but is distinguished from all

1118 Panicle one-sided nodding elongated, Florets rough at end, Leaves setaceous keeled very short

1119 Panicle one-sided erect, Florets rough at the end, Leaves setaceous shorter than their sheath

1120 Panicle nearly erect, Flower-stalks ensiform dilated
1121 Panicle one-sided spiked lanceolate, Spikelets spreading 5-flowered, Leaves linear setaceous
1122 Panicle one-sided erect nearly simple, Florets subulate compressed, One glume very short

1123 Panicle in seed nodding at end, Spikelets ovate oblong compressed naked, Florets at last distinct, Beard wavy shorter than glume, Leaves nearly smooth
1124 Pan. nodding at end, Spikelets lanc. compr naked, Beard straight longer than glume, Leaves villous
1125 Pan erect contr. Spikelets oblong ovate roundish pubes. Outer palea bifid, Beard straight, Leaves soft
1126 Pan nearly erect, Spikelet lanc. somew. compr. Flor closely imbr smooth, Beard straight afterwards sprdg.
1127 Pan lax nodd. at end, Spikel. lanc somewhat compr Florets closely imbr. Beard at length very much sprdg.
1128 Panicle close erect, Spikelets oblong pubescent 12-15-flow. nearly sessile, Beards below spirally twisted
1129 Pan. nodd. Spikelets lanc slender, Florets bearded hairy, Beards straight, Leaves smooth, Sheaths hairy
1130 Pan. erect, Spikes lin slenderish naked, Florets imbr nearly beardless, Leaves smoothish, Root creeping
1131 Pan nodd. one-sided, Spikel. lin. lanc. compr pubesc Beard straight shorter than glume, Leaves vill. rough
1132 Panicle spreading branching, Spikelets ovate turgid 10-flowered, Florets elliptical 3-nerved on each side
1133 Pan. spreading nodding at end, Spikelets rough lin lanc Beard straight longer than glume, Leaves pubesc.
1134 Pan. at length nodding, Spikelets lanc compr naked, Beards straight as long as glume, Leaves villous
1135 Pan erect, Spikel. lin lanc compr Florets imbr Beard shorter than glume, Leaves tufted very narrow cil.
1136 Pan. nodding at end, Spikelets compressed and leaves pubescent, Beard straight about length of glume
1137 Pan. nodd Spikelets oblong 6-fl pubesc Outer glume with a short beard, Leaves sheaths and stem smooth
1138 Pan. erect, Spik. obl ov compr nak. Flor imbr. Outer pal undiv Beard straight as long as glume, Lvs. pub.
1139 Leaves villous, Panicle spreading erect, Beards long straight, Rachis pubescent
1140 Pan. erect, Spikel rough lin lanc Flor. diandr Beards straight about length of glume, Lvs nearly smooth
1141 Pan. nodding at end one-sided, Spikel. lanc. compr naked, Florets imbr. Beard flexuose longer than glume

1142 Panicle loose capillary pendulous, Spikelets 6-fl compr. Outer palea with a short beard villous at edge
1143 Raceme spiked distich simple somew. nodd. Spikel. rem. erect, Upper beards longer than glume, Root fibr.

1144 Spike sim. distich. erect, Spikel. altern pub. bearded, Beard shorter than its valve, Lvs. pub. Root creeping

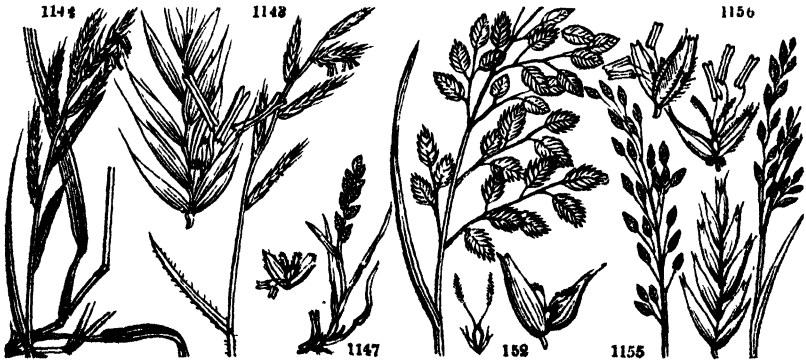
1145 Spikes in pairs terminal oblong, Florets lanceolate distichous bearded, Culm 2-knotted smooth equal
1146 Spikelets many-flowered 5-9-flowered beardless, Glumes and palæ obtuse, Leaves setaceous
1147 Glume many-fl. Spike simple compressed, Spikelets ovate unilateral, Glumes 3-nerved, Florets beardless

1148 Spike distichous compressed, Spikelets lanceolate oblong sessile
1149 Stem branching creeping rough, Leaves convol. obtuse rigid smooth, Alternate spikel. bearded smooth
1150 Glumes one-sided alternate beardless

1151 Panicle lax, Spikelets ovate with long stalks, Glumes 3-valved, Florets 1-androus, Keel pubescent
1152 Panicle long, Spikelets subsessile, Glume many-valved, Florets 3-androus, Keel smooth, Leaves convol.
1153 Nearly spiked, Leaves involute rigid
1154 Raceme spiked branching erect, Spikelets 5-9-flowered beardless smooth, Leaves involute subulate

1155 Panicle large, Stem firm, Spikelets lanceolate 6-8-flowered, Leaves and stem smooth

1156 Panicle erect contracted oblong, Branches chiefly simple numerous setaceous, Spikelets appressed oblong slender 8-10-flowered, Leaves very long smooth



and Miscellaneous Particulars.

others by the hairyness of its stalks. It is found in copsewood in clayey moist soils. Bromus giganteus partly resembles it.

185. *Brachypodium.* From βραχυς, short, and ποδ, a foot, in allusion to the short stalks of the spikelets. An artificial genus, made up of various species of Bromus, Festuca, and Triticum of former writers.

186. *Uniola.* Named by Linnæus, on account of the union of the glumes. A fine N. American genus, resembling a gigantic Bromus or Festuca. It is chiefly found upon the sands of the sea-coast.

187. *Tricuspis* A word signifying three points, in allusion to the structure of its flower This grass is called *Red-top* in the southern states of N America. Pursh says, "a most excellent grass. I have seen mountain meadows in Pennsylvania where they mow this grass twice a-year, producing most excellent crops each time without manure or any other trouble than the mowing, lasting for the space of sixteen years without the least decline in the crops, the soil at the same time being a very indifferent one"

188. *Diplachne.* Διπλοος, divided, αχυη, chaff. The outer palea is divided at the end, and bearded between the divisions.

189. CERATOCHLO'A. *P de B.* Horn-grass. *Gramineæ* *Sp.* 1—2
1157 unciloides *P. de B.* large-spiked ✱ ○ w 1½ jl Ap N. Amer. 1788. S co Hort. ber. 1, t. 3

190. SCHIS'MUS. *P de B.* Schismus. *Gramineæ.* *Sp* 1.
1158 marginátus *P de B.* margined ✱ ○ w ½ jn jl Ap Spain 1781. S co Lam. ill. t.46. f.1

191. TRIO'DIA. *R Br.* Triodia. *Gramineæ* *Sp.* 1—10.
1159 decúmbens *R Br.* decumbent ✱ △ w 1 jl au Ap Britain ... S co Eng. bot. 792

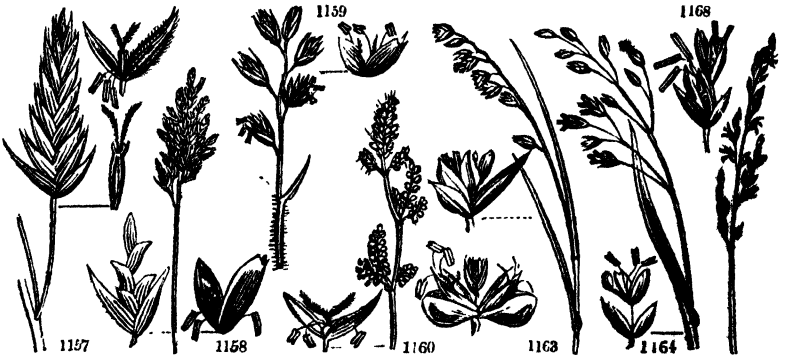
192. BECKMAN'NIA. *Host* Beckmannia *Gramineæ.* *Sp.* 1
1160 erucæfórmis *W en* linear-spiked ✱ ○ w 2 jl Ap Europe 1773. S co Host. gra 3. t. 6

193 ME'LICA. *W* Melic-grass. *Gramineæ.* *Sp* 7—24.
1161 ciliáta *W.* ciliated ✱ △ or 3 jl Ap Europe 1771. S s.l Host gra. 2. t. 12
1162 Bauhíni *W en* Italian ✱ △ w 2 jn jl Ap Italy 1806 S co Host. gra 4. t.23
1163 nútans *W.* mountain ✱ △ or 1½ jn jl Ap Britain moun S s l Eng. bot 1059
1164 umbróa *W.* wood ✱ △ w 1½ my jn Ap Britain groves S m.s Eng. bot. 1058
1165 pyramidális *P S.* pyramidal ✱ △ w 3 jn jl Ap Barbary 1804 S co Barr. ic. t. 96. f.1
1166 glábra *Ph.* smooth ✱ △ w 3 jn jl Ap N Amer 1812 S co Mor h 3. t.7. f.51
1167 altissima *W* tallest ✱ △ or 4 jl au Ap Siberia 1770. S co Host. gra. 2. t. 9

194 MOLI'NIA *P de B.* Molinia *Gramineæ* *Sp* 1.
1168 cærúlea *P de B.* purple ✱ △ w 1 au Ap Britain bogs. S p.m Eng. bot. 750
Melica E. B.

195 BRI'ZA *W.* Quaking-grass. *Gramineæ.* *Sp.* 4—9
1169 minor *W* small ✱ ○ or ½ jl au Ap England cor fi. S co Eng. bot. 1316
1170 virens *W* green ✱ ○ or 1½ jl au Ap Spain 1800 S co Hay.trm t.25 f.6
1171 média *W* common ✱ △ or 1½ my jn Ap Britain pas S co Eng bot 340
1172 máxima *W.* greatest ✱ ○ or 1½ jn jl Ap S. Europe 1633 S co Host gra. 2. t.30

*196. PO'A *W.* Meadow-grass *Gramineæ* *Sp* 34—142
§1173 aquática *W.* water ✱ △ w 6 jl Ap Britain dit S m s Eng bot. 1315
1174 alpina *W* Alpine ✱ △ w ½ jn jl Ap Scotland sc alp S s l Eng. bot. 1003
1175 flexuósa *E B* zigzag ✱ △ w ½ jn jl Ap Scotland sc alp S h.l Eng bot 1193
1176 láxa *W* loose-spiked ✱ △ w ½ jn jl Ap Germany 1800 S co Host. gra. 3 f 1
1177 cæ'sia *E B* sea-green ✱ △ w ½ jn jl Ap Scotland sc.mo S s l Eng bot. 1719
1178 vivípara *W en* viviparous ✱ △ w ½ jn jl Ap Switzerl 1800 S co Fl. dan. t. 807
1179 triviális *W* common ✱ △ ag 2 jn au Ap Britain me pa S h l Eng. bot. 1072
1180 praténsis *W* smooth-stalked ✱ △ ag 1½ my jn Ap Britain me pa S s l Eng. bot 1073
β angustifolia W. *narrow-leaved* ✱ △ ag 2 jn au Ap Germany ... S co Leers, t. 6. f 3
1181 humilis *E B.* short-blueish ✱ △ w ½ my jn Ap Britain me pa S s l Eng bot. 1004
1182 ánnua *W* annual ✱ ○ w ½ mr o Ap Britain pas S h l Eng bot. 1141
1183 badénsis *W* turfy ✱ △ w ½ jl Ap Baden 1800 S co Host. gra. 2. t.66
1184 sudética *W* broad-leaved ✱ △ w 3 jl au Ap Germany 1802 S co Host. gra 3. t 13
1185 cenisia *W en* soft ✱ △ w ½ jl au Ap Mt. Cenis 1791 S co Host gra. 3. t.16
1186 fláva *W.* pale-yellow ✱ △ w 1½ jl au Ap N Amer 1804 S co
1187 serotina *W en.* late-flowering ✱ △ w 2 jl s Ap Germany 1800 S co Lers. her t.6. f.4
1188 festucæfórmis *W en.* Festuca-like ✱ △ ag 2 jl s Ap Dalmatia 1800 S co Host. gra 3. t 17
1189 abyssínica *W* smooth-upright ✱ ○ w 1½ au o Ap Abyssinia 1775 S co Jac. ic. 1. t. 17
1190 capilláris *W* hair-paniced ✱ ○ w 1½ o n Ap N Amer. 1781 S co Mor h 3 t.6. f 33
1191 Molinéri *Balb.* dwarf-glaucous ✱ △ w 1 jn jl Ap Italy 1807 S co Bal. mis. t. 5. f 1



History, Use, Propagation, Culture,

189. *Ceratochloa.* The seed having three little horns, the name has been contrived in reference to that circumstance: κερας, a horn, and χλοη, grass

190. *Schismus.* From σχισμη, a cleft. The outer palea is emarginate or cleft.

191. *Triodia.* Τρεις, three, οδους, teeth, on account of the three teeth of the palea.

192. *Beckmannia* In honor of M. Beckmann, the celebrated author of the History of Inventions, and of a Lexicon Botanicum, published in 1801, besides other works.

193 *Melica.* A name applied in Italy to the Holcus sorghum, *L*, the pith of which is like *mel*, honey. M ciliata and nutans are curious grasses, deserving a place in botanic parterres

194 *Molinia* In honor of Giovanni Ignatio Molina, who wrote an account of the plants of Chili, published in 1782. Of M. cærulea, the fishermen of the isle of Sky make ropes for their nets, which they find will bear the water well without rotting None of the species are cultivated.

195. *Briza.* From βριθω, to balance, the spikelets being continually in a state of balance or suspension in the air. This is an ornamental or curious genus, of little value in agriculture The perennial species indicate a poor soil, and are bitter in taste. B. maxima is sometimes sown as a border annual

196. *Poa.* Ποη is the Greek name of herb This genus affords several valuable pasture, and some good hay grasses. P. aquatica is one of the tallest of British grasses, with a powerful creeping root, a native of most parts of Europe, and very common in the fens of Cambridgeshire and Lincolnshire, where it not only affords rich pasturage in summer, but forms the chief winter's fodder. It is sometimes cut thrice in one season. It grows not only in very moist ground, but in deep water, and with cat's tail, burr-reed, &c. soon fills up ditches, and occasions them to require frequent cleansing In this respect it is a formidable plant even in slow rivers. In the Isle of Ely they cleanse these by an instrument called a bear, which is an iron roller with a number of pieces of iron like small spades fixed in it, this is drawn up and down the river by horses walking along the bank,

1157 Panicle nodding spreading, Spikelets compressed 6-8-flowered, Sheaths of leaves bearded at end

1158 Panicle contracted, Spikelets linear, Glume longer than florets, Leaves bearded at base

1159 Panicle nearly simple contracted few-flowered, Spikelets oblong ovate 3-4-flow. Glume as long as florets

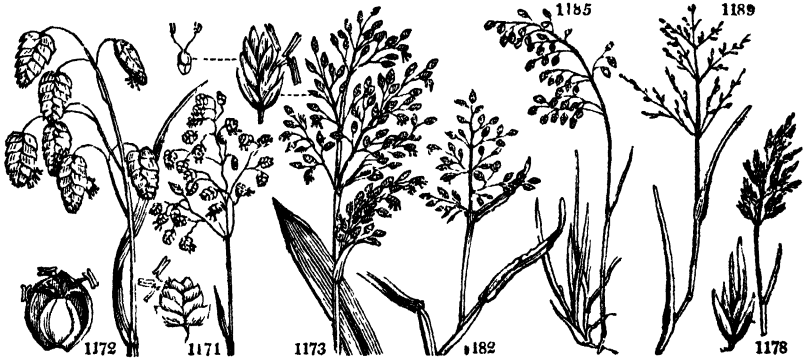
1160 The only species

1161 Outer palea of lower floret fringed, Panicle subspicate equal, Spikelets erect at length spreading
1162 Branches of panicle erect or spreading, Spikelets 3-flowered, Outer glume of lower floret hairy at edge
1163 Ligula nearly none, Panicle almost simple, Spikelets nodding beardless, Glumes obtuse
1164 Palea beardless, Panicle branching one-sided, Spikelets ovate erect 2-flowered one imperfect
1165 Ligula half-linear, Panicle branching, Spikelets nodding smooth, Glumes acute
1166 Panicle lax few-flowered, Branchlets simple, Flowers obtuse naked, Stem erect smooth
1167 Palea smooth, Panicle spiked branching, Spikelets 3-flowered third flower imperfect

1168 A small purplish grass common on moors with a very narrow smooth spikelike panicle

1169 Panicle erect, Spikelet 3-angular 5-7-flowered, Glume larger than florets
1170 Spikelets ovate, Glume equal to florets, Upper leaf involute
1171 Panicle erect, Spikelets finally cordate, about 7-flowered, Glume less than florets
1172 Panicle nodding at end, Spikelets oblong cordate 13-17-flowered

1173 Pan. equal erect diffuse much branched, Spikel lin 5-9-fl Florets obtuse smooth 7-nerved, Root creeping
1174 Panicle diffuse, Spikelets ovate 5-fl Ligule of the stem-leaves lanceolate acute, of the rest obtuse
1175 Panicle zigzag, Spikelets 3-flowered, Glumes ovate villous at base, Ligules lanceolate
1176 Panicle contracted erect or nodding, Leaves and stems lax, Ligule oblong
1177 Panicle diffuse, Spikelets ovate 5-flowered, Glumes lanceolate rather silky loose, Ligules very short
1178 Panicle equal diffuse, Spikelets ovate 2-4-flowered at length viviparous
1179 Pan equal diffuse, Spik obl ov about 3-fl Flor vill at base 5-nerved, Stem and sheaths roughish, Lig obl
1180 Panicle diffuse, Root creeping, Upper leaves much shorter than their sheaths, Ligule short truncated
β Panicle divaricating, Radical leaves very narrow and long
1181 Panicle diffuse, Spikelets ovate about 3-flowered, Glumes acute villous at base, Ligule very short obtuse
1182 Panicle one-sided divaricating, Spikelets oblong ovate 5-7-flowered, Stem subcompressed
1183 Panicle spreading, Spikelets ovate compressed acute, Outer palea pubescent at back
1184 Panicle equal diffuse, Spikel ovate lanc 3-fl Flor few, Sheaths loose 2-edged, Ligule short, Root creep.
1185 Panicle diffuse nodding, Spikelets oblong 5-7 fl Florets villous at base, Ligule short
1186 Panicle diffuse, Spikelets ovate oblong shining
1187 Panicle equal diffuse narrowed one-sided spreading when in seed, Root nodose
1188 Pan. equal sprdg Spikel lanc 9-fl Flor vill at base obtuse 5-nerved, Lvs rough, Ligule obl. Root creep
1189 Pan equal capill lax erect sprdg Spikel 4-5-fl smooth lin lanc Lvs smooth convol. at end, Stem procumb.
1190 Panicle lax much spreading capillary, Leaves hairy, Stem much branching
1191 Panicle contracted, Spikelets 7-9-fl cordate lanceolate shining, Glumes green lax



and Miscellaneous Particulars

and tears up the plants by the roots, which float, and are carried down the stream. (*Curtis.*) W Salisbury says, "it is highly ornamental, and might be introduced into ponds for the same purposes as Arundo phragmites, or planted with Festuca elatior, Poa sudetica, and Phalaris arundinacea in pits and water-holding excavations, where it would be useful as fodder, and form excellent shelter for game" (*Bot Comp.* ii. 11.)

P. alpina, in common with many alpine grasses which live almost constantly in a moist vapour, is frequently viviparous. Linnæus says, it is the rudiment of the germen which grows and forms the young plant; Sir J. E. Smith, that the glumes change into leaves, and at length the fructification into a bud.

P trivialis Curtis considers one of our best meadow and pasture grasses, especially for moist soils and sheltered situations, on dry exposed situations it is not productive, and, as Sinclair observes, dies off in the space of four or five years. Contrary to what is the case in almost all other grasses, the hay of this species is of most value cut when the seed is ripe. It and P. annua are almost the only grasses that will thrive in grass plats in towns and small confined situations.

P. angustifolia is a valuable grass for permanent pasture, being of rapid and early growth; but the stalks and leaves being subject to the rust, it is obviously unfit for hay. P. pratensis assumes a beautiful verdure very early in spring, but as it sends up flower-stalks only once in a season, it is less adapted for hay than for early and permanent pasture. Cultivated by itself, it becomes so much matted by its creeping roots as to be unproductive, unless on water meadows, for which it is one of the best of grasses. P. annua is a diminutive plant, the most common in all temperate climates, and perhaps in the world. P. sudetica is a tall aquatic. P glauca is ornamental from its glaucous hue. P maritima Sir H Davy found to be one of the best grasses for producing latter-math. P. fertilis (P serotina) ranks as one of the most valuable of grasses. According to the Woburn experiments it produces the greatest abundance of early foliage next to P angustifolia. It prefers a clayey soil, and flowers late.

1192 stérilis *M. B.*	barren	△	w	1	jn.jl	Ap	Tauria	1821.	S	co		
1193 angustáta *R. Br.*	narrow-spiked	△	w	½	ja.f	Ap	Melv. Isld.	1823.	S	co		
1194 ténax *Lk.*	tough	△	w	2	jl.au	Ap	.....	1817.	S	co		
§1195 maritima *W.*	sea	△	w	1	jn.jl	Ap	Britain	sal. m.	S	m.s	Eng. bot. 1140	
1196 compréssa *W.*	flat-stalked	○	w	1	jn.au	Ap	Britain	walls.	S	s.l	Eng. bot. 365	
1197 glaúca *E.B.*	glaucous	△	w		jn.au	Ap	Britain	moun.	S	s.l	Eng. bot. 1720	
1198 nemorális *W.*	wood	△	w	2	jn	Ap	Britain	woods.	S	h.l	Eng. bot. 1265	
1199 amboinénsis *W.*	upright	△	w	1	jn.jl	Ap	E. Indies	1800.	S	co	Rumph. 6. t.7. f.3	
1200 bulbósa *W.*	bulbous	△	w	1	jl	Ap	England	pas.	S	h.l	Eng. bot. 1071	
§1201 distans *W.*	distant	△	w	1½	jl.au	Ap	Britain	pas.	*S	h l	Eng. bot. 986	
1202 retroflexa *E. B.*	reflexed	△	w	1	jl.au	Ap	Britain	pas.	S	co	Eng. bot. 1532	
1203 aegyptiaca *W. en.*	Egyptian	○	w	1½	jl.au	Ap	Egypt	1812.	S	co		
1204 peruviána *W.*	Peruvian	○	w	½	jl.au	Ap	Peru	1802.	S	co	Jac. ic. 1. t. 18	
1205 nervata *W.*	nerved	△	w	1½	jl.au	Ap	N Amer.	1812.	S	co		
1206 digitáta *R. Br.*	fingered	○	w	1½	jl.au	Ap	N. S. W.	1800.	S	co		

197. ERAGROSTIS. *P. de B.* Love-grass. *Gramineæ* *Sp* 3—10.

1207 pilósa *P. de B.*	pilose	○	w	1½	jl.au	Ap	Italy	1804.	S	co	Host. gra. 2. t.68	
1208 tenélla *P de B.*	small	▯	w	1	jl.au	Ap	E. Indies	1781.	S	co	Bur. zey. t.47. f.3	
1209 purpurascens *Spr.*	purple	○	w	1½	jl.au	Ap	.....	1817.	S	co		

198. MEGASTACHYA. *P de B* Megastachya. *Gramineæ.* *Sp.* 5—29.

1210 Eragróstis *P. de B.*	Love-grass	○	or	2	jl	Ap	Italy	1699	S	co	Host. gra. 2. t. 69	
1211 amábilis *P de B.*	purple	○	or	1	jl	Ap	E. Indies	1802.	S	co	Lam. ill. t.45. f.2	
1212 rigida *P de B.* *Poa* E B	hard	○	w	½	jn.jl	Ap	England	san. pl.	S	s.l	Eng bot. 1371	
1213 elongáta *P de B.*	long-panicled	▽	w	2	jl.au	Ap	E. Indies	1812	S	s.l	Jac. ecl. gra. t. 3	
1214 ciliáris *P. de B.*	ciliated	○	w	1½	jl.au	Ap	Jamaica	1776.	S	s.l	Jacq ic. 2. t. 304	

199. SCLEROCHLOA. *P. de B* Hard-grass. *Gramineæ* *Sp* 3.

1215 divaricáta *P de B*	divaricate	○	w	½	jl.au	Ap	S. Europe	1802	S	co	Gou. ill 4 t.2. f 1	
1216 procúmbens *P. de B* *Poa* E. B.	procumbent	○	w	½	jl.au	Ap	Britain	sea co.	S	h s	Eng bot. 532	
1217 dúra *P de B.*	coarse	○	w	½	jn.jl	Ap	Europe	1822.	S	co	Host. gra. 2. t.73	

200 ELEUSINE. *R Br.* Eleusine. *Gramineæ.* *Sp* 2—4.

1218 coracána *P S.*	thick-spiked	○	w	4	jl.s	Ap	India	1714.	S	co	Schrb.gra 2 t 35	
1219 índica *P. S.*	Indian	○	w	2	jl s	Ap	India	1714.	S	co	Rheede 12. t. 69	

201. DACTYLOCTENIUM. *P. de B.* Dactyloctenium *Gramineæ.* *Sp.* 1—2.

1220 ægyptiacum *P. de B*	creeping	○	w	1½	jl s	Ap	Egypt	1770.	S	co		

202. LEPTOCHLOA. *P. de B.* Leptochloa. *Gramineæ.* *Sp.* 4—5.

1221 virgáta *P. de B.*	slender-spiked	▽	w	3	jl.au	Ap	W. Indies	1727.	S	co	Sloane. 1. t.70. f.2	
1222 tenérrima *R. & S.*	very-slender	○	w	1½	jn	Ap	China	1820	S	co		
1223 domingénsis *Lk.*	close-spiked	△	w	3	jn	Ap	W. Indies	1820.	S	co	Jacq. ic t. 22	
1224 filiformis *P de B.* *Poa chinénsis*	Chinese	○	w	2	jl.au	Ap	China	1820.	S	co	Jacq. ecl. gra. t.4	

203 CYNODON *P. S.* Cynodon. *Gramineæ.* *Sp* 2—10

1225 Dáctylon *P S*	creeping	△	w	1	jl	Ap	England	...	S	co	Eng. bot. 850	
1226 lineáris *W. en.*	linear-leaved	▽	w	½	jl.au	Ap	E. Indies	1796.	S	co		

*204. DINEBRA. *P. de B* Dinebra. *Gramineæ.* *Sp* 2—5.

1227 arábica *Jacq.*	reflexed	○	w	½	jn.jl	Ap	E. Indies	1804	S	co	Jac.frag t.121 f.1	
§1228 Lima *P. de B.*	imbricated	○	w	½	jl.au	Ap	Spain	1776.	S	co	Cav. ic. 1. t. 91	

205 ECHINARIA. *Desv* Echinaria. *Gramineæ.* *Sp* 1.

1229 capitáta *Desv*	headed	○	w	½	my au	Ap	S. Europe	1771.	S	co	Host. gra. 3. t. 8	

*206. TRITICUM. *W.* Wheat. *Gramineæ.* *Sp* 16—28.

1230 estívum *W.*	summer	○	ag	4	jn jl	Ap	Baschkiros	...	S	r.m	Host gra. 3. t.26	
1231 hybérnum *W.*	Lammas	○	ag	4	jn jl	Ap	.....	...	S	r.m	Host. gra. 3. t.20	



History, Use, Propagation, Culture,

P. abyssinica is grown as a bread-corn in Abyssinia, and furnishes the *teff* bread, that made from wheat being used only by the superior ranks The dough is allowed to turn sour, and by generating carbonic acid gas, answers instead of yeast; it is then baked into circular cakes, which are white, spongy, of a hot disagreeable sourish taste, but light of digestion The same bread, well toasted, and infused in water for some days, furnishes the *bouza* or common beer of the country, like the quas (*sour*, Rus) of Russia.

197. *Eragrostis.* An elegant appellation derived from ἠρος and ἀγρωστις, Love-grass The pretty dancing spikelets are the delight of children, and remembered by men long after many of their other innocent pleasures have ceased to retain their charm. The plants resemble the Briza or quaking-grass.

198. *Megastachya.* From μεγας, large, and στάχυς, a spike, on account of the large panicles of the genus.

199. *Sclerochloa.* Hard-grass (σκληρος, rigid, and χλοη, grass). A genus of hard worthless grasses.

200. *Eleusine.* Eleusis was one of the appellations of Ceres, the goddess of grasses E. coracana, according to Thunberg, is cultivated in Japan for its edible seeds.

1192 Pan. attenuated, Branches very short, Spikel. 3-fl. acute smooth, Leaves short, of the stem distich. sprdg.
1193 Pan. simple contracted linear lanceolate, Spikelets 4-5-fl. Lower glume shortest, Palee eroded at end
1194 Lvs. flat striat rough, Lig short, Branches of pan. quite sim. Spik. obl with distant flor Pal. acute smooth
1195 Pan. branching contr. Spikelets about 5-flow. Spikel. obtuse slenderish obsoletely 5-nerved, Root creeping
1196 Pan one-sided diffuse, Spikel. obl. ovate 5-7-fl. Florets villous at base, Stem oblique compr. Root creeping
1197 Pan attenuate erect, Spikelets ovate 3-flowered, Palee retuse villous at base, Stipule very short
1198 Ligules nearly none, Leaves plaited at base broader and longer than sheath, Panicle elong. Palee nerved
1199 Panicle contracted one-sided, Stem round
1200 Panicle equal diffuse, Spikelets ovate 4-5-fl. Florets villous at base, Stem and bundles of leaves bulbous
1201 Pan. equal at length divar. Branches in seed bent down, Spikel. linear about 5-fl Florets smooth obtuse
1202 Same as Poa distans
1203 Pan. equal diffuse, Spikel lin. 9-15-fl. Florets smooth, Ligule trunc. ciliated, Stem much branched ascend.
1204 Pan spiked, Spikel. 5-fl. ovate, Flor. smooth acute, Inner palee cil. at back, Stem procumb. and lvs. hairy
1205 Pan equal diffuse, Spikelets ovate 5-fl. Florets smooth 7-nerved obtuse, Stem furr. ang. Root somew. creep.
1206 Spikes fingered numerous, Spikelets imbricated 7-flow. Outer glume obtuse 3-nerved rather silky at base

1207 Pan. equal, in fl. contr. in seed diffuse, Low. bran. at base and rami. hairy, Sp. lin. 7-9-fl. Flor. sharpish smth.
1208 Panicle oblong capillary whorled, Florets 6-flowered very minute nodding
1209 Panicle erect, Flower-stalks stiff, Leaves smooth about the mouth of the sheaths

1210 Panicle equal spreading, Lower branches at base and ramifications hairy, Spikelets 15-25-flowered
1211 Panicle spreading, Spikelets 18-flowered linear
1212 Pan distichous one-sided contr hard, Spikelets linear acute 5-11-fl. Florets smooth obsoletely 5-nerved

1213 Pan elong. Branc. sprdg. distant abbrev. Spik. lin. 7-11-fl. close press. Flor. smooth acute 3-nerv. Lvs. glauc.
1214 Panicle closely spiked, Spikelets ovate oblong 6-10-flowered, Florets smooth acute, Inner palee fringed

1215 Panicle divaricating, Flower-stalks thickened, Spikelets 4-flowered, Leaves filiform
1216 Panicle lanceolate contracted one-sided rough, Rachis round, Florets obtuse nerved

1217 Panicle one-sided broad contracted stiff, Spikelets lanceolate obtuse 3-5-flowered

1218 Spikes about 7 digitate at length incurv. Rachis membranac. Stem compr. erect, Leaves close together
1219 Spikes digitate erect 5-9 on a linear rachis, Stem compressed declining branching at bottom

1220 Spikes fingered 4-5 obtuse much spreading mucronate, Stem ascending, Leaves opposite

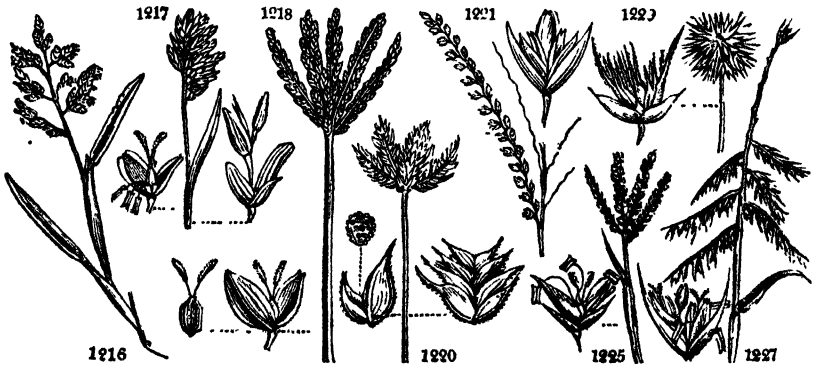
1221 Panicle with simple branches, Flowers sessile 6-flowered, the last sterile, lower bearded
1222 Spike alternate very slender, Spikel. distich. beardless, Leaves rather hairy, Sheaths compressed smooth
1223 Pan. branched fringed, Branches simple, Spikelets 5-fl. subsess Florets all bearded (*Rhabdochloa* P)
1224 Panicle much branched contracted, Branches simple filiform, Spikelets alternate 2-4-flowered beardless

1225 Stolones creeping, Glume much spreading rough, Leaves fringed at edge
1226 All over hoary, Spikes digitate 4, Glume erect, Leaves naked rough at edge

1227 Spikes altern. 1-sided panicled, Glumes equal, Spik. 2-fl. Flor. stalked beardl. herm. Stems prost. Lvs. flat
1228 Spike one-sided simple, Spikelets many-flowered

1229 The only species

1230 Spike paral. compr. bearded, Glumes gibbous bearded trunc. at base contr with a nerve runn. thinner upw
1231 Spike par. compr nearly beardl Glumes gibb. trunc. mucron. at base contr with a nerve runn. thinner upw.



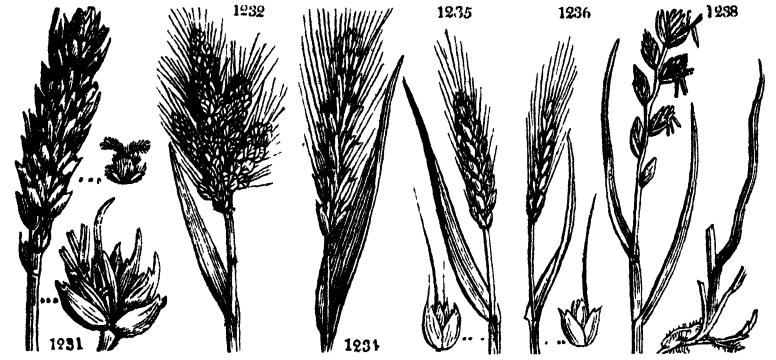
and Miscellaneous Particulars.

201. *Dactyloctenium.* The spikes are digitate, or disposed like one's fingers (δακτυλος, a finger).
202. *Leptochloa* From λεπτος, slender, and χλοη, grass, on account of its heads.
203. *Cynodon* Κυων, κυνος, a dog, and οδους, a tooth, wherefore we know not. Cynodon linearis, the Agrostis linearis of König., is the famous *durva* grass of the Hindoos, for which, see Lambert in the Linn. trans. vii. No 22.
204. *Dinebra.* Its Arabic name.
205. *Echinaria*; εχινος, a hedge-hog: the prickly round heads may be fancied to resemble little hedge-hogs.
206. *Triticum.* According to Varro, was so named from its grain being originally worn down (*tritum*) in making it eatable. This is by far the most important genus of the Gramineæ, as including the wheats, the flour of which is universally allowed to make the best bread in the world. For what is man upon rice or potatoes?

1232 compósitum *W.*	Egyptian	○	ag	3	jn jl	Ap	Egypt	1799.	S	r.m	Mor. h. 3. t. 1 f 7
1233 túrgidum *W.*	turgid	○	ag	3	jn.jl	Ap	.....	...	S	r.m	Host gra. 3. t. 28
1234 polónicum *W.*	Polish	○	ag	4	jn jl	Ap	.....	1692.	S	r.m	Host. gra. 3. t. 31
1235 Spélta *W*	Spelt	○	ag	3	jn.jl	Ap	.....	...	S	r m	Host. gra. 3. t. 30
1236 monocóccum *W*	one grained	○	ag	3	jn.jl	Ap	.....	1648	S	r.m	Host. gra. 3. t. 32
1237 squarrósum *Roth.*	Porcupine	○	w	1	jn.jl	Ap	Egypt	1800	S	co	Host. gra. 3 t 32
§1238 júnceum *W*	rushy	△	w	1½	jn jl	Ap	England sea. sh.		S	co	Eng bot 814
§1239 répens *W*	Couch-grass	△	w	2	jl au	Ap	Britain	rub	S	m s	Eng bot 909
§1240 caninum *E. B*	bearded	△	w	½	jl.au	Ap	Britain	ch. wo.	S	s.l	Eng bot 1372
1241 rígidum *W ex*	rigid	△	w	1	jn jl	Ap	Germany	1805	S	co	Host. gra 2 t.22
§1242 cristátum *Schr.*	crested	△	w	1	jl au	Ap	Britain	hed	S	co	Eng bot 2267
1243 Zéa *Host*	maize-like	○	ag	4	jn.jl	Ap	Austria	1815	S	r.m	Host gra. 3. t 29
1244 villósum *P de B.*	villous	○	w	3	jn jl	Ap	S. Europe	1790	S	co	Fl. græc. 1 t. 97
§1245 elongátum *Host*	long-spiked	△	w	5	jn jl	Ap	Germany	1805	S	co	Host. gra. 2. t.23

207 LOLIUM *W* Darnel. *Gramineæ* *Sp* 4—10

1246 perénne *W*	Rye-grass	△	ag	3	my jn	Ap	Britain	me pa	S	co	Eng. bot. 315
1247 ténue *W*	slender	△	w	3	jl.au	Ap	S. Europe	1590	S	co	
1248 temuléntum *W*	bearded	○	p	4	jl au	Ap	Britain	cor. fi	S	co	Eng. bot. 1124
1249 arvénse *E. B.*	beardless	○	ag	4	jl	Ap	England	cor. fi.	S	co	Eng. bot. 1125



History, Use, Propagation, Culture,

T. æstivum, and the five following sorts, are most probably variations of the same species It is certain that winter-wheat sown in spring will ripen the following summer, though the produce of succeeding generations of spring-sown wheat is found to ripen better. White, red, awned, and beardless wheat change and run into each other on different soils and in different climates, and even the Egyptian wheat is known to change in this country to the single-spiked common plant. There is a sort of summer-wheat apparently a distinct species from those which have been mentioned, the agricultural treatment of which, as well as the general appearance, is similar to that of barley The straw is short and soft, the ears awned, small, and easily threshed, and the grain may be sown in May and reaped in August or September It is very subject to the black disease, and though it has been tried in a number of places has never come into general cultivation A variety from India, called "hill-wheat," and another from the Cape of Good Hope, have also been tried with no better results. But the hill-wheat, and, we believe, the hill-barley, also, of the northern provinces of India has been cultivated with success in Germany, under the direction of the Archduke John of Austria. T monococcum grown in Switzerland, is of similar appearance.

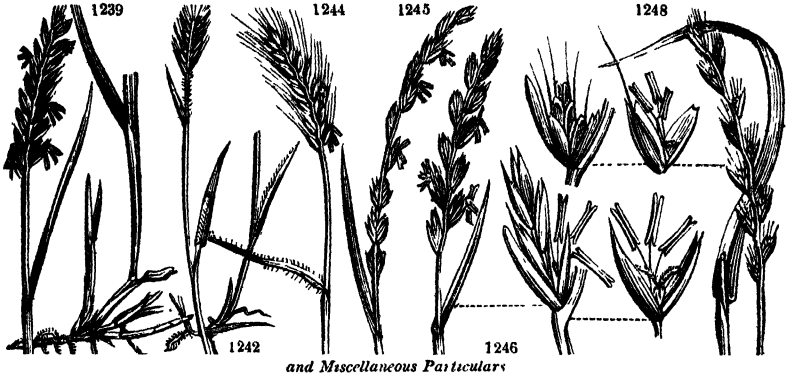
T. spelta appears a distinct species, and more hardy than common wheat, it has a stout straw almost solid, with strong spikes and chaff adhering firmly to the grain The grain is light, yields but little flour, and makes but indifferent bread. It is grown in Switzerland in elevated situations, where common wheat would not ripen also in Bavaria and other parts of Germany It is sown in spring, and ripens in July and August

Of the common wheat there are many varieties, but the most permanent are the red and white grained, and the spring-wheat, which is generally red. The Hertfordshire reds and whites, woolly eared, awned, and nearly fifty other names are merely sub-varieties of the red and white Wheat answers best when treated as a biennial, though it does not remain above one year in the ground Provided the soil be well prepared and dry, and the grain sown in time, the plants do not suffer from the greatest cold of our climate, or even that of Russia. In the latter country, and in the northern counties of Britain, the fields are covered with snow, which retaining a temperature of from 30 to 32 degrees, the plants are found to vegetate and establish their roots firmly in the soil The snow is not thawed off till the weather is decidedly warm in spring, when the plants make rapid progress, apparently more so than in warmer climates Wheat, like all culmiferous plants, may be said to have two distinct sets of roots, the seminal or tap-root, and the coronal or surface-root, the former proceeding from the embryo, and the latter from the first joint of the stem. The former seem intended to nourish the plant while young, to fix it to the soil, and to penetrate into the sub-soil for water, the latter to search along the surface among the lighter materials of the soil for nutritive particles There is in the Banksian museum, a stalk of wheat of ordinary length with a tap-root six feet long, which had penetrated into a sub-soil of limestone brash, and was taken up in digging a drain. It grew on the estate of J Fane, Esq at Wormley in Oxfordshire, in 1818. M. Sageret, a scientific French agriculturist, found that when wheat or any of the other grains were etiolated immediately after germination, by growing too rapidly or being sown too thick, the first joint from which the coronal or surface roots proceed is raised above the ground, and in consequence either throws out no roots at all, or so few as to nourish it imperfectly, in which cases it either dies before it comes into flower, or before the grains are matured. This accurate statement of what takes place, is well calculated to show the bad effects of sowing winter-wheats too early, or spring-corn too late, and grasses in general too thick. Animal substances, and especially bones and urine, are the best manures for wheat, as containing much gluten, a substance found in a greater proportion in that grain than any other Next to animal manures lime is important, as tending to the same effect by chemical combinations Wheat is almost every where cultivated, both in the temperate and torrid zone, to the 45th degree of north latitude, and the height of 200 feet above the level of the sea in southern latitudes

The insects and diseases which attack wheat are various. The grubs of chaffers and beetles, as well as the wire-worm (the larva of different species of Tipula), attack the roots, the wheat-fly (Tipula tritici) the ears; the smut or black the grains; and the mildew, rust, or blight, different names for the same disease, the whole plant. The mildew Sir J Banks determined to be produced by the growth of a minute fungus on the straws and chaff of the plant, and Dr Cartwright (*Phil Mag* Oct 1820) ascertained it might be destroyed by watering with salt and water The smut converts the farinaceous part of the grain into a black powder, and is supposed to be prevented or lessened by steeping the grain previously to sowing in any strong saline mixture. It

1232 Spike compound at the base, Spikelets 5-flowered ventricose imbricated, Terminal floret beardless neuter
1233 Spikelets 4-flowered ventricose pubescent imbricated bearded, Terminal floret barren, Glumes obtuse
1234 Spikelets 4-flowered ventricose roughish, Two middle florets sterile, Palæ unequal outer fringed
1235 Spikelets 3-flowered ventricose roughish, Intermediate floret barren, Glumes ovate
1236 Spikel. 2-fl. ventr imbr. bearded, Barren floret with a short, fertile with a very long beard, Glumes 3-toothed
1237 Spike distich Spikelets 4-flowered approxim Two middle florets sterile, Glumes lin. lanc Stem ascending
1238 Glumes 9-nerved obtuse 4-5-flowered, Florets beardless, Rachis smooth, Root creeping
1239 Root creeping white jointed proliferous
1240 Glumes shortly bearded 3-nerved 5-flowered, Florets bearded, Root fibrous
1241 Spike interrupted, Rachis hispid, Leaves rolled in at edge, Root creeping
1242 Glumes 4-flowered bearded, Spikes lanceolate imbricated, Stems pubescent
1243 Spikelets 4-flowered remote, Two joints of the hairy rachis longer than the spikelet
1244 Spikelets 3-flowered, Ribs of glumes fringed in tufts, Leaves downy
1245 Spikelets lanceolate 8-flowered beardless, Glumes truncate naked, Leaves nerved

1246 Spike beardless, Spikelets longer than glume
1247 Culm slender, Leaves narrow, Spikelets 3-4-flowered
1248 Spike bearded, Spikelets less than glume, Culm rough upwards
1249 Spike nearly beardless, Spikelets as long as calyx



and Miscellaneous Particulars

is not easy, however, to cure diseases in the vegetable kingdom, and therefore the grand objects of the cultivator ought to be to procure healthy seed, and apply judicious culture

The uses of wheat are well known The grain yields a greater proportion of flour than every other, for, while 14lbs of barley yield 12lbs of flour, and of oats 8lbs, the same quantity of wheat yields 13lbs It is also more nutritive, 1000 parts of barley yielding 920, of oats 743, and wheat 955 soluble parts Of these, the gluten of wheat is 90, of barley 60, and of oats 87 (*Davy Ag Chem* 158) Gluten is so essential an ingredient in bread that the pannary fermentation cannot go on without it, and hence the inferiority of that article in wet seasons, when wheat is blighted or ill ripened, and the advantage of having a stock of old grain, or of grain from the south of Europe, especially of the Mediterranean isles and coasts

Wheat starch is made from wheat, by steeping it, and afterwards beating it in hempen bags. The mucilage being thus mixed with the water produces the acetous fermentation, and the weak acid thus formed, renders the mucilage white After settling, the precipitate is repeatedly washed, and then put in square cakes In drying, the cakes separate into flakes as found in the shops Starch is soluble in hot water, but not in cold, and hence, ground down, it makes an excellent hair powder Its constituents are carbon 43 55, oxygen 49 68, hydrogen 6 77 = 100.

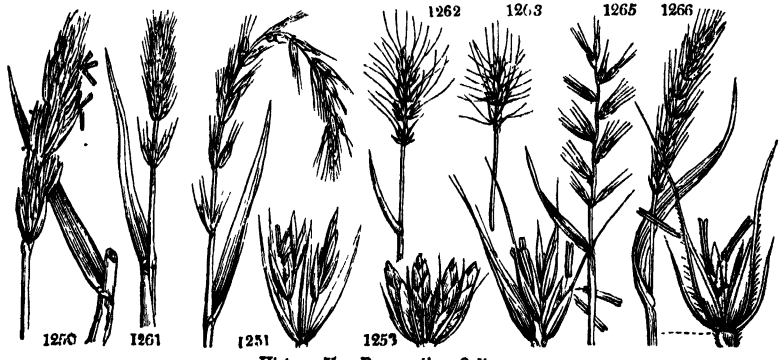
The straw of wheat, from dry chalky lands, is manufactured into hats, for which purpose the middle part of the tube above the last joint is taken, and being cut into lengths of 8 or 10 inches, these pieces being split are used to form the plait The operation of plaiting is performed by females and children, who plait it into ribbons of from one to two inches broad, and these are afterwards sown together on blocks or moulds, beginning at the crown, in various shapes according to fancy or fashion The best straw is produced on the chalky soil about Dunstable, where plaiting is a common occupation Other grasses afford culms which have also been used and manufactured into much finer and expensive work that those of wheat or rye. Leghorn hats are made from the straw of a bearded variety of wheat not unlike rye It is grown on poor sandy soils on the banks of the Arno, between Leghorn and Florence, expressly for this manufacture. It does not grow above 18 inches in length, is pulled green, and bleached like flax on the gravelly bed of the river The straws are not split as in England, which renders the plait tougher and more durable. The value of wheat-straw for thatching, litter, and other purposes, need not be mentioned

T. junceum grows in loose sand on the sea-coast, and by its tough creeping roots and numerous fibres cooperates with Carex arenaria, Elymus arenarius, and Festuca rubra, in keeping them stationary, accumulating more, and eventually rendering drifting sands fit for agricultural purposes.

T. repens, couch, white couch, twitch, dog-grass, quickens, &c is common in most parts of Europe, and even in Siberia It is one of the worst weeds in arable lands and gardens, and in the former is only to be destroyed by fallowing or fallow crops, or laying down to grass, and the latter by hand-picking or very deep trenching The roots are sweet and nourishing, and are greedily eaten by horses and cattle. Sir H Davy found them to contain nearly three times the nourishment of the stalks and leaves.

207. *Lolium* Loloa is the Celtic name of this grass L. perenne is the *fausse ivraie* (see L. temulentum) of the French, from which our term ray-grass is derived, the *Dawcrende Loich*, Ger., and *Loglio vivace*, Ital This appears to be the first grass which was taken into cultivation in Europe, but when is uncertain Gerarde, Parkinson, Plattes, and even Blythe in Cromwell's time, take no notice of it. It is first mentioned by Dr. Plott in 1677. "They have lately sown," he says "ray-grass, Gramen loliaceum, to improve cold sour clayey weeping ground unfit for saint-foin." It was first sown in the Chiltern parts of Oxfordshire, and afterwards by one Eustace at Islip in the same county There are two varieties of this grass, the perennial, which is of shorter growth than the other, and on sound dry soils will last four or five years, and on rich soils longer; and the annual, or rather biennial, which is tall and larger in all its parts than the perennial, and after producing one bulky crop dies at the root, or, at least, sends up no latter math After all that has been affirmed of other grasses, none appear so well adapted as the annual rye-grass for producing a bulky crop of hay, with or without red clover, or better adapted than the perennial variety for sowing down with white clover, to afford three or more years pasture in the rotations of what is called convertible husbandry, or the alternate corn and grass culture Cock's-foot grass and woolly grass (Holcus) may afford a greater bulk on poor soils, but are far inferior to the ray-grass in regard to nutritive qualities Sir H Davy found the value which

208. ELYMUS. *W.*	LYME-GRASS.					*Graminеæ.*	*Sp* 16—24.					
1250 arenárius *W.*	upright-sea	♃	△	ag	4	ap jn	Ap	Britain	sea co.	S	s	Eng. bot. 1672
1251 geniculátus *E. B.*	pendulous		△	w	4	jl	Ap	England	sea sh.	S	s	Eng. bot. 1586
1252 sabulósus *W. ex.*	glaucous		△	w	4	jn jl	Ap	Siberia	1806.	S	co	
1253 gigantéus *W.*	gigantic		△	or	5	jl au	Ap	Mexico	1790.	S	co	
1254 sibíricus *W.*	Siberian		△	w	6	jn jl	Ap	Siberia	1758	S	co	Sch.gra.2.t.21.f.1
1255 téner *W.*	tender		△	w	2	jn jl	Ap	Siberia	1801	S	co	
1256 philadélphicus *W*	Philadelphian		△	w	4	jl au	Ap	N. Amer.	1790.	S	co	
1257 canadénsis *W*	Canadian		△	w	4	jl.au	Ap	N Amer.	1699.	S	co	Mor. h.3. t.2. f 10
1258 virginicus *W.*	Virginian		△	w	2½	jn.jl	Ap	Virginia	1781	S	co	
1259 striátus *W*	striated		△	w	2	jn jl	Ap	N Amer	1790	S	co	
1260 villósus *Ph*	villous		△	w	2	jn jl	Ap	N Amer	1802.	S	co	
1261 europæ'us *W.*	wood		△	w	2	jn jl	Ap	England	woods.	S	s l	Eng. bot. 1317
1262 crinítus *Sch*	long-awned		○	w	1	jn jl	Ap	Smyrna	1806.	S	co	Schr gr. t 24 f.3
1263 Cáput-Medúsæ *W*	Portuguese		○	w	1	jn jl	Ap	Portugal	1784	S	co	Schr gr t.24 f 2
1264 júnceus *Fisch*	rush		△	w	2	jn jl	Ap	Siberia	1806	S	co	Mem. msq 1.p 45
1265 hýstrix *L.*	Porcupine		△	w	2	jn jl	Ap	Crimea	1770	S	co	Jacq. ic. 2. t. 305
209 SECA'LE. *W.*	RYE					*Graminеæ.*	*Sp* 2.					
1266 ceréale *W.*	common		○	ag	3	jn jl	Ap	Crimea	...	S	s l	Host. gra 2 t. 48
1267 orientále *W.*	hairy-spiked		◌	ag	3	jn.jl	Ap	Levant	1807	S	co	N ac.ber 2.t 4 f 3
*210 HOR'DEUM *W*	BARLEY.					*Graminеæ*	*Sp* 9—12.					
1268 vulgáre *W*	spring		○	ag	3	jl	Ap	Sicily	...	S	r.m	Host. gra. 3 t.34
1269 hexástichon *W.*	winter		○	ag	3	jl	Ap	.....	...	S	r m	Host. gra. 3 t 35
1270 distichon *W*	common		○	ag	3	jl	Ap	Tartary	...	S	r m	Host gra. 3. t.36
1271 Zeócriton *W*	battledore		○	ag	2	au	Ap	.....	...	S	r m	Host gra 3 t.37
1272 bulbósum *W*	bulbous		△	w	3	jl	Ap	Italy	1770.	S	co	Fl græc. 1 t 98
1273 murinum *W*	wall		○	w	1½	ap.au	Ap	Britain	sal m	S	s l	Eng bot 1971
1274 pratense *Roth*	meadow		△	w	2	jn	Ap	Britain	m me	S	h l	Eng. bot 409
1275 maritimum *W*	sea		○	w	1	jn jl	Ap	Britain	sal m	S	m s	Eng. bot. 1205
1276 jubátum *H K.*	long-bearded		◌	w	1	jl au	Ap	N Amer	1782.	S	co	
211 MICROCHLO'A *R Br*	MICROCHLOA					*Graminеæ*	*Sp* 1					
1277 setácea *R Br*	setaceous		○	w	½	jl	Ap	E. Indies	1806	S	co	Rox cor. t 132
212. OPHIU'RUS. *P de B*	HARD-GRASS.					*Graminеæ*	*Sp* 3—4					
1278 incurvátus *P de B*	sea		○	w	⅔	jl	Ap	Britain	sea co	S	m s	Eng bot. 760
1279 filiformis *P de B*	filiform		△	w	½	jl	Ap	Portugal	1800	S	co	Barr. ic t.117 f 1
§1280 pannónicus *P. de B*	two-flowered		○	w	½	jl	Ap	Hungary	1804.	S	co	Host. gra. 1 t.24
213 MONER'MA *P de B*	MONERMA					*Graminеæ.*	*Sp* 2—3					
1281 monándrum *P.de B*	monandrous		○	w	½	jl	Ap	Spain	1804	S	co	Cav ic t. 39. f. 1
1282 subulátum *P de B.*	subulate		○	w	1	jl	Ap	S Europe	1806	S	s l	Barr ic t 5



History, Use, Propagation, Culture,

this grass cut at the time it is coming into flower bears to that when the seed is ripe, to be as 10 to 11. Pacey's perennial ray-grass, a variety raised in Staffordshire, has long been in repute, and there has lately been a new variety raised in Bedfordshire, known as the Russel ray-grass

208. *Elymus* Linnæus derives the name from ὑλέω, to cover, because the leaves of his Elymus maritimus are formed into a coarse sort of fabric The Elymus of the ancients was evidently a sort of corn E. arenarius is a strong rough glaucous plant common on sandy shores, and like Calamagrostis arenaria and others, which have been mentioned (genus Lygeum, Stipa, Arundo), prevents, by its matted roots, the shifting of loose sand thrown up by the tides In analyzing the soluble matter afforded by this grass, Sir H. Davy found it to contain more than one-third of its weight of sugar. It is not, however, eaten by any of our domestic animals.

209. *Secale* An ancient name, supposed to have been derived from *seco*, to cut, which word is said to have been formed from the Celtic *segu*, a sickle This grain, of which there is probably only one species, affords a grain next in value to the wheat for making bread, and is generally used for this purpose, alone or mixed with wheat, throughout Germany and the north of Europe It is hardier and earlier than wheat. Like it, it will ripen if sown in spring, but better if treated like a winter-wheat. In Britain it is little sown Its grain yields 792-1000 parts of soluble matter, of which 645 are mucilage, 190 gluten, and 38 sugar.

210 *Hordeum.* Bodæus à Stapel derives this word from *hordus*, heavy, because bread made with barley is very heavy *Bara* is the Celtic for bread, whence the English words barn and barley; as beer is a slight alteration of the appellation of barley in that tongue, *Bere* *Hexastichon* (ἑξ, six, στιξ στιχος, row) signifies grain growing in six rows, *distichon*, in two rows *Zeocriton* is derived from ζεα, which is supposed to have been Spelt, and κριθη, barley that is to say, barley resembling spelt wheat. The four first species, or, more probably, sub-species, are cultivated as barleys H vulgare or two rowed barley, is that in general cultivation, and of this the rath-ripe and Thanet are preferred as varieties H hexastichon is the bear or bigg chiefly cultivated in the north of Scotland, and in Denmark and Sweden H distichon has thin husks, and is preferred for malting. H zeocriton or sprat barley has short broad ears, long awns, and short coarse straw, and is not much cultivated. The native country of barley is unknown It was cultivated by the Romans as a horse-corn, and also for the army, and the gladiators were called Hordiarii from their feeding on this grain In the south of Europe they have sometimes two crops in one season, one sown in autumn and cut in May, and another

1250 Spike erect close, Spikel. 3-fl pubesc. Lower and upper in pairs middle in 3s rather shorter than fring. glume
1251 Spike loose erect, Spikel. 3-fl. pubesc lower remote shorter than the smooth glumes, Leaves involute rigid
1252 Spike erect close, Spikel. 4-fl. from middle to base pubesc. shorter than smooth glume, Leaves involute rigid
1253 Spike erect close, Spikel. 6-7-fl. pub in 6s upper in 3s or pairs shorter than smooth glumes, Lvs. invol. rigid
1254 Spike pendulous close, Spikelets 2 together longer than the glumes
1255 Spike pendulous, Spikelets 3-flowered bearded in pairs, Leaves flat
1256 Spike pendulous spreading, Spikelets 6-flowered bearded in threes, Leaves flat
1257 Spike nodding spreading, Spikelets 6-flowered bearded the lower in threes upper in pairs, Leaves flat
1258 Spike erect, Spikelets 3-fl. bearded smooth in pairs, Glumes lanceol nerved as long as spikelets, Leaves flat
1259 Sp. erect, Spt. 2-fl beard hispid in pairs, Gls lin nerv beard. as long as spikel. Lvs flat and sheaths smooth
1260 Spike erect, Spikel 3-fl villous bearded in threes, Glumes bearded longer than spikel Leaves flat
1261 Spike erect, Spikel. in 3s 1-2-fl. bearded rough, Glms. linear subul. bearded as long as spikel Sheaths hairy, [Leaves flat
1262 Spikelets 1-fl. rough, Involucres erect
1263 Spikelets 2-fl Involucres setaceous spreading
1264 Lvs. short involute curved, Spike erect rough, Spikel. in 3s 2-fl longer than the bearded very narrow invol
1265 Spike erect, Spikelets spreading, Involucr none [Outer glume with a short beard

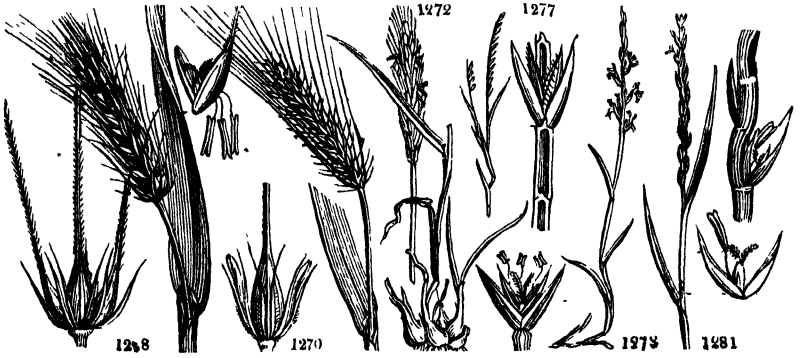
1266 Glumes and beard rough, Paleæ smooth toothed at the end
1267 Stem procumbent at base, Uppermost leafsheath tumid, Glumes and paleæ subulate bearded

1268 All florets hermaphrodite bearded, Seeds in 4 rows, Stems erect
1269 All florets hermaphrodite bearded, Seeds in 6 rows
1270 Lateral florets male beardless hermaphrodite in 2 rows bearded
1271 Lateral florets male beardless hermaphrodite in 2 rows, Spike short, Seeds angular spreading
1272 All florets fertile in threes bearded, Involucres setaceous ciliated at base
1273 Intermediate glumes linear lanceolate ciliated outer setaceous rough
1274 Lateral florets male with a short beard, All the glumes setaceous rough
1275 All the glumes rough, Inner glume of the lateral florets semi-lanceolate the rest setaceous
1276 Beards and involucres setaceous very long

1277 The only species

1278 Spike slender subulate incurved
1279 Spike subulate somewhat compressed erect, Leaves channelled
1280 Spike subulate erect, Leaves flat

1281 Spike subulate erect, Glume minute, Florets bearded
1282 Spike subulate erect, Glume ensiform acuminate appressed



and Miscellaneous Particulars

sown in spring and cut in autumn In Lapland two months, and in England nine weeks elapse between the sowing and cutting of this grain

Malt is the chief purpose for which barley is cultivated in Britain, but it is also made into flour, and pot and pearl barley In order to understand the process of malting, it may be necessary to observe, that the cotyledons of a seed before a young plant is produced, are changed by the heat and moisture of the earth into sugar and mucilage Malting is only an artificial mode of effecting this object, by steeping the grain in water, and fermenting it in heaps, and then arresting its progress towards forming a plant by kiln drying, in order to take advantage of the sugar in distillation for spirit, or fermentation for beer The chemical constituents of mucilage and sugar are very nearly alike in the process of malting a part of the mucilage or starch is converted into sugar, so that the total quantity of sugar, and consequently the source of spirit, is increased.

Of pot-barley there are two sorts, pearl and Scotch, both produced by grinding off the husk, and the former variety by carrying the operation so far as to produce roundness in the kernel It is used in soups, gruels, and medicinal drinks

Barley-flour is ground like flour, and forms a light pudding or pottage, which, spread out in thin cakes and slightly toasted, forms a breakfast bread much esteemed in some parts of Scotland It is brought to table hot from the baking plate, and eaten with butter and honey, or cream and sugar.

H. murinum, squirrel-tail-grass, is common by way-sides, and its awns or heads are so injurious to the gums of horses in the isle of Thanet, that one of the greatest recommendations of an inn is having "hay without any mixture of squirrel-grass"

H pratense resembles rye, and to this, Professor Martyn observes, the name of rye-grass belongs, and not to Lolium perenne, which is ray (from *ivraye*, Fr) grass.

211. *Microchloa* From *μικρος*, small, *χλοη*, grass, on account of its size.

212. *Ophiurus*. A name constructed by Gærtner from *ὀφις*, a snake, and *ὐρα*, a tail, from a fancied resemblance in the spikes of the genus to the tail of a viper This is the genus Rottbollia of English botanists. but no true species of that genus have yet been cultivated in this country

213 *Monerma* From *μονος*, one, and *ἐρμα*, support, there is only one glume, which by its rigidity acts as a support to the flower.

214. PERO'TIS. *H K.* Perotis.
1283 latifólia *W.* spiked ⚘ ▯ cu 2 au s Ap *Gramineæ* *Sp* 1—2. E. Indies 1777. S a.p Rheede. 12. t. 62

215 SAC'CHARUM *W.* Sugar-cane
1284 officinárum *W.* common ⚘ ▱ clt 12 ... Ap *Gramineæ* *Sp* 1—14. India 1597. Sk r.m Sloan. jam. 1. t. 66

216. IMPERA'TA *Cyr* Imperata
1285 arundinácea *Cyr* reedy ⚘ △ cc 2½ jl au Ap *Gramineæ* *Sp* 1—5 S Europe 1817 S co Cyrill. ic. 2. t. 11

217 LEER'SIA *R Br* Leersia
1286 oryzoides *W* rough ⚘ △ w 2 jl au Ap *Gramineæ* *Sp* 2 Levant 1793. S co Host. gra. 1. t. 35
1287 virginica *W.* Virginian ⚘ △ w 1½ jl au Ap N Amer. 1770. S co Jac. ic 2. t. 305

218. DIARRHE'NA. *Mich* Diarrhena
1288 americána *M* American ⚘ △ w 2 jn jl Ap *Gramineæ* *Sp* 1. N Amer 1810 S co Mich. am. t. 10

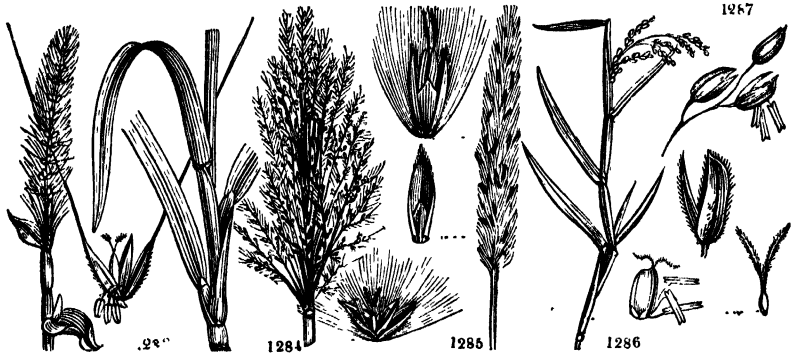
219. ARUNDINA'RIA *Mich* Cane-brake.
1289 macrospérma *Mich* long-seeded ⚘ △ or 10 jn Ap *Gramineæ* *Sp* 1—2 N Amer. 1808. S co

TRIGYNIA.

*220 HOLO'STEUM *W* Holosteum
1290 umbellátum *W* umbelliferous ○ pr ½ jl au Pk *Caryophyllcæ* *Sp* 2—5 England old wa. S co Eng. bot 27
§1291 cordátum *W* cordate ▯ pr ½ jn W Jamaica 1814. S co Lam ill. t. 51. f 2

221 POLYCAR'PON *W* Ali seed
1292 tetraphýllum *W* four-leaved ○ w ½ jl W *Caryophyllcæ* *Sp* 1—3. England sand pl S co Eng bot 1031

222 LECHE'A *W* Lechea
1293 major *W.* greater ⚘ △ w 3 jl au W *Caryophyllcæ* *Sp* 2. Canada 1780 D co Lam ill 1 t 52 f 2
1294 minor *W* lesser ⚘ △ w ½ jl au W Canada 1802 D co Lam ill t 52 f 1



History, Use, Propagation, Culture,

214 *Perotis* From περος, deficient, some parts of the flower being absent.

215 *Saccharum* From its Arabic name *soukar*, from which the Greeks formed σακχαρ, and modern European nations sugar *Sucre*, Fr *Sucker*, Ger, &c This grass or reed, though unknown to the ancients, has become of immense importance in modern times There are many varieties or species both wild and cultivated, natives of the banks of rivers and meadows in both the Indies, China, Africa, the South Sea islands, and South America It is cultivated in a zone extending from 35 to 40 degrees on each side of the equator Where it was first cultivated is unknown, in all probability, in India, for the Venetians imported it from thence by the Red Sea prior to 1148 It is supposed to have been introduced into the islands of Sicily, Crete, Rhodes, and Cyprus by the Saracens, as abundance of sugar was made in these islands previously to the discovery of the West Indies in 1492 by the Spaniards, and the East Indies and Brazil by the Portuguese in 1497 and 1500. It was cultivated afterwards in Spain, in Valentia, Granada, and Murcia by the Moors, and sugar is still made in these provinces (*Townsend and Jacob*) In the 15th century the cane was introduced to the Canary islands by the Spaniards, and to Madeira by the Portuguese, and thence to the West India islands and the Brazils The Dutch began to make sugar in the island of St Thomas, under the line, in 1610, and the English in Barbadoes in 1643, and in Jamaica in 1644 The culture of the cane has since become general in warm climates, and the use of sugar being universal, it forms one of the first articles of commerce throughout the world Sugar is described by Pliny and Galen as a sweet salt, and from the former it appears to have been used only in medicine. Actuarius, a physician, who wrote in the 10th century, or later, was the first to substitute sugar for honey in medicinal compositions It was called Indian salt, and a small piece was recommended to be kept in the mouth to moisten it in fevers Different medical men have written for and against the use of sugar, as they have against tea, coffee, wine, and all with similar success The enjoyment derived from these articles to all mankind who enjoy them, is too great to be left off in deference to the opinions of a few. Dr. Mosely is the greatest advocate for sugar For the last two centuries it has been an ingredient in the popular diet of Europe It was in use in England in 1466, but chiefly in feasts and as a medicine, till it was brought from the Brazils about 1580 to Portugal, and imported from thence The quantity consumed in Britain has always kept increasing, the consumption of England alone in 1790 amounted to 166,573,344lbs., which, taking the population at eight millions, gives each individual at an average about 20lbs a-year

The cane, as a stove plant, is of easy culture in soft moist soil with a good heat, it grows seven or eight feet high, but it never flowers It was grown in abundance in the stoves of the Paris gardens, and a small sugar loaf was made from the canes, and presented to the Empress Josephine. In the botanic gardens of Toulon and Naples it stands the winter in the open air

The cane in the West Indies is propagated by cuttings from the root end, planted in hills or trenches in spring or autumn, something in the manner of hops The cuttings root at the joints under ground, and from those above send up shoots, which in eight, twelve, or fourteen months are from six to ten feet long, and fit to cut down for the mill. A plantation lasts from six to ten years. Sugar mills are merely iron rollers placed vertically or horizontally, between which the canes are passed and repassed The juice thus squeezed out, is collected and boiled with quick-lime, which being an alkali, imbibes the superfluous acid, which would otherwise impede crystallization · impurities are skimmed off, and the boiling is continued till a thick syrup is pro-

1283 Culm simple, Leaves very smooth, Joints smooth

1284 Flowers panicled, Leaves flat

1285 Pan. spiked cylindrical, Leaves convolute, Joints smooth, Flowers generally diandrous

1286 Pan diffuse sheathed, Florets 3-androus spreading, Keel of the glumes fringed
1287 Pan diffuse, Branches horizontally spreading, Florets 3-androus, Keel of the glumes fringed

1228 The only species

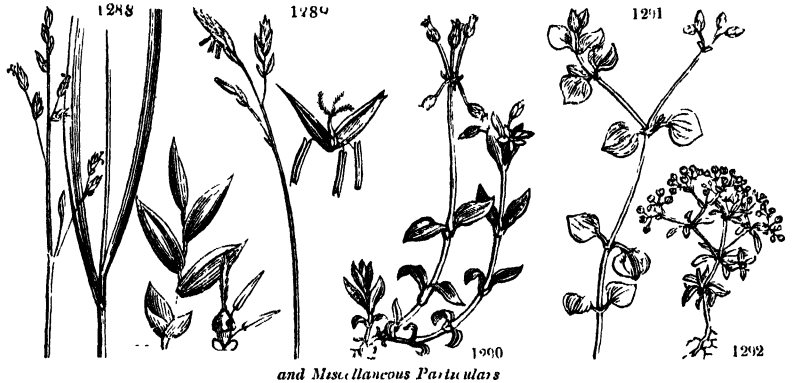
1289 Smooth, Leaves linear-lanceolate distichous, Flowers panicled

TRIGYNIA.

1290 Leaves elliptical glaucous smooth, Flowers umbelled, Common peduncle viscid
1291 Leaves cordate

1292 Stem branched 4-leaved prostrate

1293 Leaves ovate lanceolate, Flowers lateral scattered
1294 Leaves linear-lanceolate, Flowers panicled



and Miscellaneous Particulars

duced, when the whole is cooled and granulated in shallow vessels It is now the raw or Muscovado sugar of commerce A further purification is effected by dissolving it in water, boiling, skimming, adding lime, and clarifying from the oily or mucilaginous parts, by adding blood or eggs, which incorporate with them and form a scum When boiled to a proper consistency it is put into unglazed earthen vessels of a conical shape, with a hole at the apex, but placed in an inverted position, and the base, after the sugar is poured in, covered with clay When thus drained of its impurities, it is taken out of the mould, wrapped in paper, and dried or baked in a close oven It is now the loaf sugar of the shops, and according to the number of operations it undergoes, is called single or double refined The operation of refining is seldom or never performed by the growers, but in Europe, at least, generally forms a separate branch in the mother country of the colony

Sugar candy, *Shukur* and *khand*, Indian names for sugar in general, is formed by dissolving loaf sugar in water over a fire, boiling it to a syrup, and then evaporating it to crystallize in a cool place This is the only sugar esteemed in the east

Barley sugar is a syrup from the refuse of sugar candy, hardened in cylindrical moulds

Rum is distilled from the fermented juice of sugar and water

Sugar as a chemical compound is described as a neutral salt, consisting of the acetic acid, united to a small quantity of oil and charcoal, carbonated hydrogen, and carbonic acid gas Besides its use in medicine, dietetics, and distillation, it is employed to preserve animal and vegetable substances from putrefaction, and to communicate a gloss to ink, varnishes, and pigments When very cheap, it has been successfully employed to fatten cattle Most plants contain sugar, and it has been extracted in considerable quantities from the beet, parsnip, maple, birch, grape, &c, but the cane is preferred as affording it in greater abundance

216 *Imperata* The derivation or application of the idea not explained The plants resemble in their *noble* port and waving silky heads the plumes of a cap of state

217 *Lecrsia* Named after J D Leers, an author of the Flora Herbornensis, the first edition of which, in 1789, is very valuable on account of its rarity but its merits have been extolled much beyond reality by Sir James Smith One species, L. lenticularis, which has not yet been introduced to this country, has the power of catching flies by the singular structure of its corolla, which resembles the leaves of Dionæa muscipula

218 *Diarrhena* A word signifying diandrous, *δις*, two, *ἀνήρ*, male

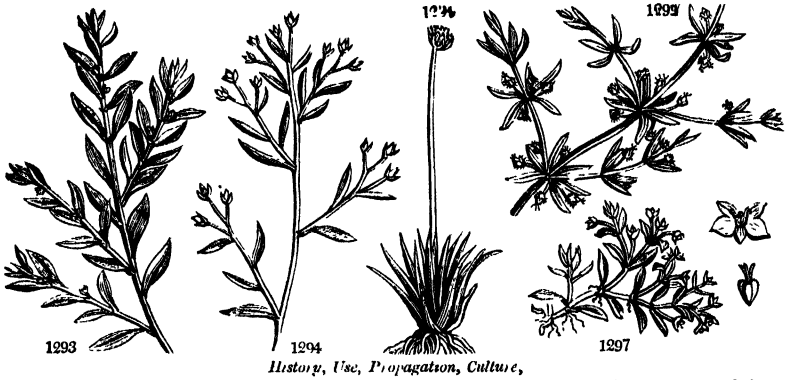
219 *Arundinaria.* An alteration of the word Arundo, to which genus this may be compared with reference to its large size

220 *Holosteum* A name derived from *ὁλος*, all, and *οστ ον*, bone, all-bone, and applied by antiphrasis to this plant, which is no-bone, being very soft and delicate The plant is very common in many parts of Britain, by road sides, where protected by hedges; it flowers early in the season, and keeps flowering for a long time. In coppice woods on loamy soils it grows with the greatest luxuriance, and, along with the yellow primrose, and the purple wild hyacinth, forms a most ornamental clothing to the earth in the end of April and beginning of May.

221. *Polycarpon.* From *πολυς*, many, *καρπος*, fruit, all-seed, one of the names applied by the ancients to the Polygonum aviculare, and sufficiently applicable to this plant.

232. *Lechea.* In memory of G Lechea, a Swede, professor of natural history at Abo, and author of observations on rare plants, died in 1764 The genus consists of small N American plants of no beauty

*223. ERIOCAU'LON. *W*	PIPEWORT				*Eriocauleæ.*	*Sp.* 2—34.								
1295 septánguláre *E. B*	jointed	♁	△	cu	½	s	W	Scotland	boga.	D	m.s	Eng. bot. 773		
1296 austrále *R B.*	australasian	♁	⧋	cu	1½	jn	W	N. Holl.	1890.	D	m.s			
224 MON'TIA. *W*	CHICKWEED.				*Portulaceæ*	*Sp.* 2.								
1297 fontána *W.*	water	♁	○	w	¼	ap my	W	Britain springs.		S	aq	Eng. bot. 1206		
1298 rivuláris *Gmel.*	brook	♁	○	w	½	jn jl	W	Labrador	1823.	D	m s			
225. MOLLU'GO *W.*	MOLLUGO.				*Caryophylleæ.*	*Sp* 2—7.								
1299 verticillàta *W*	whorled		○	w	½	jn au	Ap	Virginia	1748.	S	co	Ehret. pict. t. 6		
1300 triphýlla *Lk.*	three-leaved		⊡	w	½	jl	Ap	Brazil	1821.	D	m.s			
226. MINUAR'TIA. *W.*	MINUARTIA.				*Caryophylleæ.*	*Sp* 3.								
1301 dichótoma *W*	forked		○	w	½	jn,jl	Ap	Spain	1771.	S	co	Ac.st.1758,t.1 f 2		
1302 campéstris *W.*	field		○	w	1in	jn jl	Ap	Spain	1806	S	co	Ac.st.1758,t.1.f.3		
1303 montána *W.*	mountain		○	w	½	jn,jl	Ap	Spain	1806.	S	co	Lœf.it.rar t.1.f.4		
227. QUE'RIA *W*	QUERIA				*Caryophylleæ*	*Sp* 1—2								
1304 hispánica *W*	Spanish		○	w	1in	my s	Ap	Spain	1800.	S	co	Quer.fl 6.t.15.f.2		
228. KŒNI'GIA *W*	KŒNIGIA				*Polygoneæ*	*Sp* 1								
1305 islándica *W.*	Iceland		○	cu	½	ap	Ap	Iceland	1773	S	co	Lam Ill. t 51		



History, Use, Propagation, Culture,

223 *Eriocaulon* Ἔριον, wool, and καυλος, a stem, in allusion to the velvety stem of some species. Only one kind, E. septangulare, has been found in Britain The species are all very curious, and deserving of more attention than they have received at the hands of cultivators

224 *Montia* In honor of Joseph de Monti, professor of botany and natural history at Bologna in the beginning of the 18th century The plants are small inconspicuous weeds

225. *Mollugo* The Roman name of what is supposed to be our Galium mollugo, which the present plant resembles in its whorled leaves and inconspicuous appearance

CLASS IV. — TETRANDRIA. 4 STAMENS.

THIS class is neither so large nor so important as the last. It is composed chiefly of ornamental or curious plants, mostly shrubs, of which the Proteaceæ hold the first rank Among the few plants used in the arts which it contains, may be mentioned the madder (Rubia), Fuller's thistle (Dipsacus), the holly (Ilex), one of the best evergreen hedge plants, and some foreign timbers and dyes, as the sandal-wood and chayroot.

The Proteaceæ, of which the first section of the class partly consists, are natives chiefly of the Cape of Good Hope and New South Wales, and there is this singular circumstance connected with their geographical distribution, that those two continents do not possess any one genus in common; a singular fact, and of the more difficult solution, as the genera of the order are strictly natural They have been described by Mr. Brown, in a long and learned memoir, in the Transactions of the Linnean Society, vol x, where much information respecting them may be found It has been impossible to state the natural height or color of flower of many of the New Holland kinds, as Mr Brown says nothing upon these two points, and he is the only author who has seen the plants in their native country, where alone many of them have flowered. In the conservatory they are mostly shrubs of from four to seven feet in height.

The principal part of the fourth section of Monogynia consists of the Stellatæ or Crossworts, which are common weeds all over Europe

Many of the genera in the sixth section, such as Ixora, Pavetta, Catesbæa, are beautiful ornaments of the conservatory The wood of Curtisia in the seventh section furnishes the Caffres with materials for the shafts of their hassagays.

With the exception of Proteaceæ, the class is made up of a miscellaneous assemblage of species, with few characters in common. The genera have not been combined in any other than a purely artificial manner, and among them are to be found plants belonging to almost all the natural orders of Dicotyledonous plants of the older French botanists. Pothos, Potamogeton, and Ruppia are among the rare instances of a quaternary division of the flower in Monocotyledonous plants

Order 1 MONOGYNIA.  4 Stamens. 1 Style.

1. *Flowers incomplete, (no corolla), inferior.*

229. *Petrophila.* **Cal. 4-cleft, all deciduous Style persistent at base Stigma spindle-shaped, narrowed at end. Scales beneath the ovary none Cone ovate Nut lenticular, comose at one end.**

1295 Stem 7-angled, Leaves acuminate cellular, Male fl. monopetalous tetrandrous
1296 Stem 7-angled, Leaves flat hairy much shorter than the stem, Scales of the head powdery

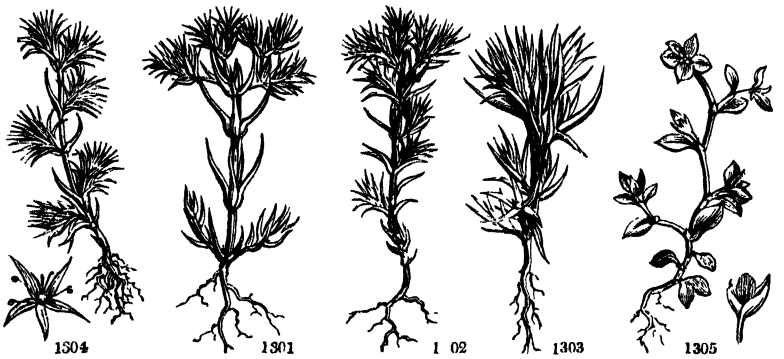
1297 Stem erect divaricating, Leaves connate-sessile oblong ovate
1298 Stem weak dichotomous, Leaves opp sessile obtuse lanceolate fleshy

1299 Leaves whorled wedge-shaped acute, Stem divided decumbent, Pedunc. 1-flowered
1300 Stem erect, Leaves whorled three larger than the rest, Pan. terminal and lateral

1301 Leaves filiform dilated at base, Branches terminal capitate corymbose, Flowers axillary
1302 Leaves capillary, Flowers terminal stalked alternate longer than bracteæ
1303 Leaves capillary, Corymbs leafy axillary stalked, Flowers shorter than bracteæ

1304 Leaves opposite filiform, Flowers terminal heaped, Bracteæ squarrose

1305 The only species



and Miscellaneous Particulars

226. *Menuartia* In memory of John Minuart, a Spanish botanist, and correspondent of Linnæus. He published some Opuscula in 1739.

227 *Quersa.* In memory of Joseph Quer, a Spanish botanist, who published a *Flor Espagnol* in 1762, in six volumes, quarto.

228 *Kœnigia* In honor of Emanuel Kœnig, professor of botany at Bale, and called the modern Avicenna, he died in 1731. He published several works now forgotten The plant is a curious inconspicuous annual, occasionally seen in botanic gardens

230 *Isopogon* Cal 4-cleft, with a slender tube, persistent for a long time Style wholly deciduous Stigma spindle-shaped or cylindrical. Scales beneath the ovary none Nut sessile, ventricose, comose on all sides

231 *Protea* Cal bipartible, unequal, with the stamen-bearing divisions of the broader lip cohering. Style subulate Stigma narrowly cylindrical Nut bearded on all sides, with the remains of the persistent style Common receptacle with short persistent scales Involucrum imbricated, persistent.

232 *Leucospermum.* Cal irregular, labiate, with three of the segments (rarely all) cohering at the base, the stamen-bearing divisions distinct. Style filiform, deciduous Stigma thickened, smooth, sometimes unequal-sided. Nut ventricose, sessile, smooth Head indefinitely many-flowered Involucrum many-leaved, imbricated

233. *Mimetes.* Cal. 4-parted, equal, with distinct divisions Style filiform, deciduous. Stigma cylindrical, slender. Nut ventricose, sessile, smooth Common receptacle flat, with narrow deciduous scales. Involucrum indefinitely many-leaved, imbricated.

234 *Serrurra.* Cal. 4-cleft, nearly equal, with distinct claws Stigma vertical, smooth. Scales 4, hypogynous. Nut shortly stalked, ventricose Head indefinitely many-flowered, with persistent imbricated scales.

235 *Nivenia* Cal. 4-cleft, equal, wholly deciduous Stigma clavate, vertical Nut ventricose, shining, sessile, entire at the base Involucrum 4-leaved in a simple series, 4-flowered, when in fruit indurated. Receptacle flat, without scales.

236 *Sorocephalus.* Cal 4-cleft, equal, wholly deciduous Stigma vertical, clavate. Nut ventricose on a very short stalk, or emarginate at base Involucrum 3-6-leaved in a simple series, definitely few-flowered or 1-flowered, in fruit not altered. Recept. without scales

237. *Spatalla.* Cal. 4-cleft, wholly deciduous, the inner segment usually largest. Stigma oblique, dilated. Nut ventricose on a short stalk Involucrum 2-4-leaved in a simple series, 1-flowered, or definitely many flowered. Recept. without scales.

238. *Persoonia.* Cal. 4-leaved, regular, the segments having the stamens in their middle, recurved at end, and deciduous. Stamens exserted. Glands 4, hypogynous. Ovary stalked, 1-celled, 1-2-seeded. Stigma obtuse. Drupe berried, with a 1-2-celled nut.

239. *Grevillea* Cal irregular, with the segments 1-sided, bearing the stamens in their hollow ends Anthers immersed. Gland 1, hypogynous, halved. Ovary 2-seeded. Stigma oblique, depressed (sometimes nearly vertical and conical). Follicle 1-celled, 2-seeded, with a cell in the middle Seeds edged, or with a very short wing at the end.

240. *Hakea* Cal 4-leaved, irregular, with the segments on one side. Stamens immersed in the concave ends of the calyx. Gland 1, hypogynous, halved. Ovary stalked, 2-seeded. Stigma nearly oblique, with a conical point from a dilated base. Follicle 1-celled, woody, with a cell out of the centre, falsely 2-valved. Seed with a wing at the end longer than the nut.

241 *Stenocarpus* Cal. irregular, segments distinct, at one side Stamens immersed in the concave ends of the cal Gland 1, hypogynous, half-annular. Ovary stalked, many-seeded Style deciduous Stigma oblique, orbicular, flattened. Follicle linear. Seeds winged at base

242. *Lambertia.* Cal. tubular, 4-cleft, the segments spirally revolute Stamens inserted in the segments.

Scales 4, hypogynous, distinct or united in a sheath. Ovary 2-seeded. Stigma subulate. Follicle 1-celled, coriaceous Seeds emarginate Involucrum 1-7-flowered, imbricated, deciduous. Receptacle flat, without chaff.

243. *Xylomelum.* Cal. 4-leaved, regular, the segments revolute at the end. Stam inserted above the middle of the segments Glands 4, hypogynous Ovary 2-seeded Style deciduous Stigma vertical, clavate, obtuse. Follicle thick, woody, 1-celled, the cell out of the centre. Seeds winged at end.

244 *Telopea* Cal. irregular, on one side irregularly divided, on the other 4-toothed Stam immersed in the concave ends of the calyx Gland none Ovary stalked, many-seeded. Stigma oblique, orbicular, dilated. Follicle cylindrical. Seeds winged at end Involucrum none

245 *Lomatia* Calyx irregular, with distinct 1-sided segments Stamens immersed in the concave ends of the calyx. Glands 3, hypogynous on one side Ovary stalked, many-seeded Style persistent Stigma oblique, dilated, roundish, flat Follicle oval. Seeds winged at ends

246 *Rhopala* Cal 4-leaved, regular, segments recurved at end. Stamens inserted above the middle of the segments Scales 4, hypogynous, distinct or connate Ovary 2-seeded. Style persistent. Stigma vertical, clavate Follicle 1-celled, woody Seeds winged at both ends.

247 *Banksia* Cal 4-parted Stamens immersed in the concave ends of the segments Scales 4, hypogynous. Ovary 2-celled, with 1-seeded cells Follicle 2-celled, woody. Dissepiment loose, bifid.

248 *Dryandra* Cal. 4-parted or 4-cleft. Stamens immersed in the concave ends of the segments. Scales 4, hypogynous Ovary 2-celled, with 1-seeded cells Follicle 2-celled, woody, with a loose bifid dissepiment. Common receptacle flat

249 *Struthiola* Cal tubular, having 8 glands at the mouth. Berry without juice, 1-seeded

250 *Operularia* Common calyx 1-leaved, campanulate, 3-6-flowered, 6-9-toothed, proper none. Seeds solitary, immersed in a closing receptacle, which is operuliform, deciduous

251 *Cryptospermum* Common calyx 6-leaved leaflets spreading, unequal, proper, 3-leaved from the chaff of the receptacle Recept globose, chaffy Capsules 1-celled, united into a sub-globose receptacle, opening lengthwise in the middle

252 *Pothos* Spathe 1-leaved. Spadix cylindrical, simple, covered with flowers. Cal. 4-leaved. Stamens next the ovary Berry 2-seeded

253 *Rivina* Cal 4-leaved, persistent Berry 1-seeded, with a lentiform rough seed

254 *Camphorosma* Calyx urceolate, with two opposite and alternate teeth very small Caps. 1-seeded. Stamens exserted.

255 *Alchemilla* Cal 8-cleft, the alternate segments smallest Style from the base of the ovary. Seed 1, naked, covered with the calyx

256 *Sanguisorba* Cal coloured, 4-lobed, with 2 scales at the base Caps 4-cornered, enclosed in the calyx, 1-2-celled

257 *Dorstenia* Common receptacle 1-leaved, fleshy, dilated, spreading, orbicular, or angular, in which the solitary seeds nestle.

2 *Flowers incomplete, superior*

258 *Isnarda* Cal campanulate, adhering to the ovary, 4-cleft Caps 4-celled, surrounded by the calyx, 4-cornered, many-seeded

259 *Elæagnus* Cal 4-8-cleft, campanulate on the outside rugose, inside colored, deciduous Filaments very short between the segments of the calyx Style short. Drupe ovate, with an oblong 1-seeded nut.

3 *Flowers monopetalous, 1-seeded or dicoccous, inferior*

260 *Globularia* Common calyx imbricated proper tubular, 5-toothed Cor with the upper lip 2-, the lower 3-parted Seed 1, enclosed in the calyx Recept chaffy

261. *Houstonia* Cal 5-toothed. Cor tubular Caps 2-celled, 2-valved, 2-seeded

4 *Flowers monopetalous, 1-seeded or dicoccous, superior*

DIPSACEÆ.

* 262. *Dipsacus* Common calyx many-leaved, proper superior. Cor tubular, 4-cleft. Seed 1, crowned by the calyx Recept conical, chaffy Pappus cross-shaped, entire

263 *Cephalaria* Common calyx sub-globose, with scales more or less scarious, proper double, pappus-shaped, variously split Receptacle chaffy

264 *Scabiosa* Common calyx many-leaved, proper double pappus-shaped, variously split. Receptacle chaffy

265 *Knautia* Common cal many-leaved, cylindrical, oblong, simple, 5-flowered, proper simple, superior Corolla irregular Seed 1, crowned by the calyx. Receptacle naked.

STELLATÆ.

266 *Galium* Cal an obsolete superior edge Cor rotate Seeds 2, globose

267 *Rubia* Cal an obsolete superior edge Cor rotate, sub-campanulate Berries 2, 1-seeded Stam 4-5

268. *Asperula.* Cal an obsolete edge, 4-toothed Cor. monopetalous, funnel-form. Seeds 2, globose, not crowned by the calyx

269 *Sherardia* Cal a 4-toothed edge Cor monopetalous, funnel-form Seeds 2, 3-toothed, crowned by the persistent calyx

270 *Spermacoce* Cal a 4-toothed edge Cor monopetalous, funnel-form Caps 2-celled, not divisible in two, with 2 cells, 2-toothed. Seeds with their edge rolled together over their side

271 *Crucianella* Cal. 2-3-leaved. Cor monopetalous, funnel-form, with a filiform tube and an unguiculate limb. Seeds 2, linear

5 *Flowers monopetalous, many-seeded, inferior.*

272. *Callicarpa* Calyx 4-toothed. Corolla tubular, campanulate, 4-cleft Stamens exserted Berry 4-seeded.

273 *Witheringia* Cor sub-campanulate, with a tube having 4 projections Cal. very small, obsoletely 4-toothed. Pericarp 2-celled, berried Anthers conniving, opening laterally

274 *Egsphila* Cal. 4-toothed Cor 4-cleft Style semi-bifid, filiform Berry 2-celled. Cells 2-seeded

275 *Cephalanthus* Common cal. none, proper, as well as corolla, 4-toothed, tubular funnel-form. Receptacle globose Caps 2-4-celled, not splitting Seeds solitary by abortion, oblong

276. *Scoparia* Cal 4-parted, equal. Cor 4-parted, rotate, with a hairy throat, regular Stamens equal. Stigma obtuse. Capsule nearly round, 2-celled, 2-valved, with a dissepiment from the inflexed margins of the valves.

277 *Centunculus* Cal 4-cleft. Cor 4-cleft, tubular, with a spreading limb Stamens short. Caps. 2-celled, cut round, many-seeded.

278 *Plantago.* Cal. 4-cleft. Cor quadrifid, with a reflexed limb Stamens very long. Caps. 2-celled, cut round.

279 *Buddlea* Calyx and corolla 4-cleft Stamens from the incisures Caps 2-furrowed, 2-celled, many-seeded.

280. *Exacum.* Cal 4-leaved Cor somewhat bell-shaped, 4-cleft, with a globose tube. Caps. compressed, 2-furrowed, 2-celled, many-seeded, splitting at the end

281. *Sebæa.* Cal 4-5-parted, the sepals keeled or winged Cor 4-5-cleft, withering Stamens exserted,

the anthers bursting lengthwise after flowering with a recurved callus at the end. Stigmas 2. Caps. with the valves inflexed at the edge, inserted in a central placenta, which finally becomes loose

282 *Frasera.* Cal. deeply 4-parted, spreading Cor much larger than the calyx, very deeply 4-parted, spreading, the segments oval, bearded with a gland in the middle Stamens shorter than corolla, with anthers 2-divided at the base. Stigmas 2, thick, glandular. Caps. oval, much compressed, 1-celled, 2-valved at the edge Seeds 8-12, elliptical, with a membranous edge

283. *Penæa.* Cal. 2-leaved deciduous. Cor. campanulate. Style quadrangular. Stigma 4-lobed. Caps 4-cornered, 4-valved, 8-seeded.

284 *Blæria.* Calyx 4-parted. Corolla 4-cleft, somewhat campanulate. Seeds inserted into a receptacle Caps. 4-celled, many-seeded, opening at the angles.

6. *Flowers monopetalous, 2 or many-seeded, superior.*

285 *Chomelia* Cal. 4-parted, tubular, with unequal segments. Cor. hypocrateriform, 4-parted Drupe oval, inferior, with a 2-celled, 2-seeded nut. Stigmas 2, thickish.

286. *Adina.* Cal. 4-5-cleft, with an occasional toothlet between the divisions Corolla infundibular Filaments inserted into the mouth of corolla. Stigma turbinate Seeds 2-3 in each cell. Flowers in heads.

287. *Bouvardia.* Cal. 4-leaved, with some teeth between Corolla tubular Anthers included. Caps 2-partible, many-seeded Seeds edged

288. *Ixora.* Cal. 4-parted. Cor monopetalous, funnel-shaped, long Stamens above the throat Berry 4-seeded

289 *Catesbæa* Cal. 4-toothed, very small. Cor. funnel-shaped, very long Stamens within the throat. Stigma simple. Berry 2-celled, many-seeded.

290 *Pavetta* Cal. 4-toothed. Cor monopetalous, funnel-form Stigma thickened, incurved. Berry 1-2-seeded, 1-celled

291. *Ernodea.* Cal. 4-parted. Cor hypocrateriform Style simple Berry 2-celled Seeds 2, solitary

292 *Siderodendrum.* Cal. small, 4-toothed Cor hypocrateriform, 4-cleft, with an incurved tube Stigmas 2, revolute Berry 2-coccous, 2-celled, dry, with a contrary dissepiment Seeds 2, solitary

293 *Coccocypsilum.* Cal. 4-parted. Cor funnel-shaped. Berry inflated, 2-celled, many-seeded. Style half 2-cleft.

294 *Mitchella.* Cal. 2, on one ovary, 4-parted Cor funnel-shaped, hairy within Stigmas 4. Berry bifid, 4-seeded

295 *Oldenlandia* Cal. 5-toothed, persistent Cor of 5 petals inserted into the calyx

296. *Manettia* Cal. 8-leaved. Cor quadrifid, tubular. Caps. 2-valved, 1-celled. Seeds imbricated, orbiculate, with a central point.

7 *Flowers polypetalous, inferior*

297. *Epimedium.* Cal. 4-leaved, caducous, opposite the petals. Nectaries 4, cup-shaped, incumbent upon the petals Pod 1-celled, 2-valved, many-seeded

298 *Ptelea* Cal 4-parted. Pet. coriaceous Stigmas 2 Samara roundish with a 1-seeded centre, or 2-celled, 2-seeded

299 *Monetsa.* Cal 4-cleft, urceolate. Pet 4, revolute, linear. Berry 2-celled, with 2-seeded cells, one of which is usually abortive

300 *Curtisia.* Cal 4-parted. Petals 4, obtuse Drupe roundish succulent. Nut 4-5-celled

301. *Hartogia* Cal 4-5-cleft Petals 4, spreading Drupe not juicy, ovate Nut rather fleshy, 2-seeded.

302. *Ammannia* Cal 1-leaved, campanulate, plaited, 8-toothed. Pet. 4, inserted in the calyx, or very often none Caps 2-4-celled, many-seeded

303 *Fagara* Cal. 4-5-cleft. Corolla of 4-5 petals, which are shorter than the stamens. Cal. 2-valved, 1-2-celled, 1-seeded, simple or compound Stam 4-5-8

304 *Zieria.* Cal 4-cleft. Cor of 4 petals Stam 4, smooth, with filaments inserted into a gland. Style simple. Stigma 4-lobed. Caps. 4, connivent. Seeds with an arillus.

8 *Flowers polypetalous, superior.*

305. *Cissus* Cal. 1-leaved, nearly entire Berry 1-seeded, rarely 3-4-seeded, surrounded by the calyx.

306. *Cornus* Involucre 4-leaved in some Cal 4-toothed Pet 4 Drupe with a 2-celled nut.

307 *Santalum.* Cal. ½-superior, campanulate, 4-cleft. Pet. 4, squamiform. Berry 1-seeded. Embryo inverse, albuminous

308 *Trapa* Cal 4-parted. Nut with 2 opposite spines proceeding from the leaves of the calyx, 1-celled, 1-seeded.

309. *Ludwigia.* Cal 4-parted, superior, with long persistent sepals. Cor 4-petals or O. Caps. 4-cornered, 4-celled, crowned, inferior, many-seeded.

Order 2. DIGYNIA.  4 Stamens. 2 Styles.

310. *Cuscuta.* Cor. 4-fid, ovate Cal. 4-fid. Caps 2-celled, cut round

311 *Bufonia.* Cal. 4-leaved. Pet 4, shorter than calyx. Caps 1-celled, 2-valved, 2-seeded.

312. *Hamamelis.* Involucr. 3-leaved Sepals 4 Petals 4, linear, very long Nut 2-horned, 2 celled.

313. *Hypecoum.* Cal. 2-4-leaved. Pet. 4, the two exterior widest. Fruit a silique.

Order 3. TETRAGYNIA  4 Stamens. 4 Styles.

314. *Mygindia.* Cal. 4-toothed, very small, persistent. Pet. 4, rounded, flat, spreading. Stamens shorter than corolla. Style short. Stigmas 2-4 Drupe globose, 1-celled, with a 1-seeded nut.

315. *Ilex.* Cal 4-5-toothed. Cal rotate, 4-cleft. Style O. Berry 4-seeded.

316. *Coldenia.* Cor. 1-petalous Cal 4-leaved Seeds 2, 2-celled.

317. *Potamogeton.* Sepals 4. Pet O Style O Seeds 4, sessile.

318. *Ruppia.* Cal and Cor. O Seeds 4-stalked

319 *Sagina.* Sepals 4 Pet 4. Caps. 4-celled, 4-valved, many-seeded.

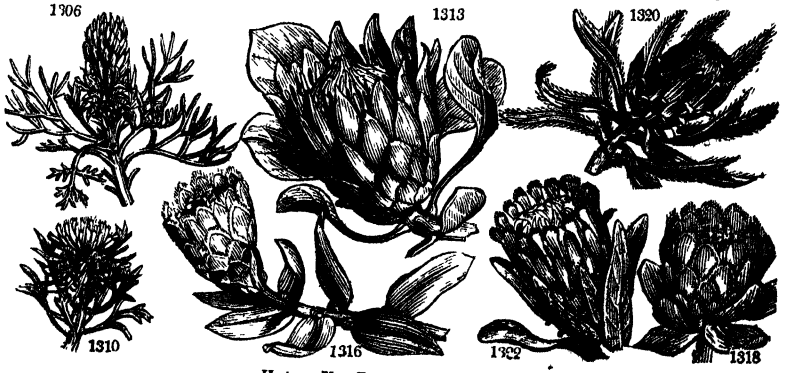
320. *Tillæa.* Cal. 3-5-parted. Pet 3-5, equal. Caps. 3-5, 2 or many-seeded, opening inwards Nectary none.

321 *Radiola.* Cal. many-cut. Pet. 4. Caps superior, 4-8-valved, 8-celled, globose Seeds solitary.

MONOGYNIA.

229. PETRO'PHILA. *R. Br.* Petrophila. *Proteaceæ* *Sp* 2—10.

1306	pulchélla *R. Br.*	Fennel-leaved		or	5	jl.au	W	N S. W.	1790.	S	s.p	Bot mag. 796
1307	diversifólia *R Br*	various-leaved		or	5	...	...	N. Holl.	1803.	S	s.p	
†230	ISOPO'GON. *R. Br.* Isopogon. *Proteaceæ.* *Sp* 5—13.											
1308	anéthifólius *R. Br*	Dill-leaved		or	5	mr jn	Pa	N. Holl.	1796.	S	s.p	Cav. ic. 6. t. 549
1309	formósus *R. Br*	handsome		or	4	mr jn	Pa	N. Holl.	1805.	S	s.p	
1310	anemonifólius *R Br.*	Anemone-leav		or	5	jl au	Y	N Holl.	1791.	S	s p	Bot. mag 697
1311	trílobus *R. Br.*	three-lobed		or	4	my.jn	Pa	N. Holl.	1803	S	s.p	
1312	attenuátus *R Br*	attenuate		or	4	,...	Pa	N. Holl.	1822.	S	s	
231.	PRO'TEA. *R. Br.* Protea. *Proteaceæ.* *Sp.* 36—55.											
1313	cynaroides *R. Br.*	Artichoke-flrd.		or	1½	mr.n	Pu	C. G. H.	1774.	C	s.l	Bot. mag. 770
1314	latifólia *Kn. Pr.*	ray-flowered		or	7	jl.s	Pu	C. G H.	1806.	S	s.l	Bot. mag. 1717
1315	compácta *R. Br*	compact		or	6	...	...	C. G. H.	1810.	C	s.l p	
1316	longifióra *R Br*	milk-colored		or	7	ja mr	Pa	C. G H.	1795.	C	s.l.p	Ex. bot. 2. t. 81
1317	speciósa *R Br*	splendid		or	2	mr.jn	Pu	C. G H.	1786.	S	s.l	Bot. mag 1183
1318	obtúsa *Kn Pr.*	obtuse		or	10		Re	C. G H.	1786.	C	s.l.p	Bot. rep. 110
1319	formósa *R Br*	crown-flowered		or	6	my jn	Re	C G. H.	1789.	S	p l	Bot mag. 1713
1320	melaleúca *R Br.*	black-fringed		or	6	mr jl	D pu	C G. H.	1786.	C	s.l.p	Bot. rep. 103
1321	Lepidocárpon *R Br.*	crested		or	6	mr jl	D,pu	C G. H.	1806.	S	s.l	Bot rep 301. 8
1322	nerniólia *R Br.*	Oleander-leav'd		or	6	f ap	W	C. G H.	1806.	C	s.l.p	Bot. reg. 208
1323	pulchélla *R. Br.*	wave-leaved		or		mr au	Re	C. G. H.	1795.	L	s.l	Bot. reg. 20
1324	pátens *R Br.*	spreading		or	2	mr jn	W pu	C G. H.	1789.	C	s.l	Bot. rep. 543
1325	magnifica *Kn. Pr.*	magnificent		or	6	mr jn	W	C. G H	1789.	S	s.l	Bot. rep. 438
1326	longifólia *R Br*	long-leaved		or	2	mr au	Pu	C G. H.	1798.	S	s.l	Bot. reg 47
1327	umbonális *Kn Pr*	embossed		or	7	mr au	W bk	C G. H.	1798.	C	s.l.p	Bot. rep. 144
1328	ligulæfólia *Kn Pr*	strap-leaved		or	7	mr au	Pu	C G H	1798	C	s.l	Bot. rep. 133
1329	mellifera *R Br*	honey-bearing		or	6	my d	Pa.Y	C. G. H.	1774.	S	s.l	Bot mag. 346
1330	grandifióra *R Br.*	great-flowered		or	8	my jn	W	C G H.	1787.	S	p l	Bot reg 569
1331	Scólymus *R Br*	small-flowered		or	3	my jn	Pu	C G H.	1780.	C	s.l	Bot. mag 698
1332	mucronifólia *R Br.*	dagger-leaved		or		jl d	W	C G H	1803.	C	s l	Bot. mag 933
1333	mcómpta *R Br*	bearded		or	3	ap.my	W	C G. H.	1822.	C	s.l p	
1334	nána *R Br*	dwarf		or	2	ap jl	Pk	C. G H	1787.	C	s l p	Ex. bot. 1. t. 44
1335	péndula *R Br*	pendulous		or	2	mr jn	...	C. G H.	1806	C	l p	
1336	ténax *R Br*	tough		or	2	f my	Y	C G H.	1801	C	l.p	Par lond. 70
1337	canaliculáta *R Br*	channel-leaved		or	3	f d	Pk	C G H.	1800	S	s l	Bot. rep 437
1338	acúminata *B M*	sharp-pointed		or	3	mr jn	Pu	C G H.	1809.	C	s.l	Bot. mag 1694
1339	acaulis *R Br*	short-stalked		or	1½	my s	Pu	C G H	1802.	S	s l	Bot. mag. 2065
	β glaucophýlla Kn P	*glaucous-leaved*		or	1½		G					Par. lond. 11
1340	lævis *R Br*	smooth-leaved		or	½	...	G	C G H.	1806.	C	l p	Bot mag 2439
1341	scábra *R Br*	rough-leaved		or	½	...	Br	C G. H.	1809.	C	l.p	
1342	répens *R Br*	creeping		or	½	...		C. G H	1800.	C	s.l	Weinm. t. 897. a
1343	túrbuniflóra *R Br*	turfy		or	½	ap my	Pk	C. G H.	1803.	C	l.p	Par. lond. 108
1344	Scolopéndrium *R Br*	Hart's-tongue		or	½	...	...	C G. H.	1802.	S	s l	
1345	cordáta *R Br*	heart-leaved		or	1½	mr my	Pu	C G H.	1790.	S	s l	Bot rep 289
1346	amplexicaúlis *R Br*	stem-clasping		or	1½	ja.mr	Pu	C. G H.	1802.	S	p l	Par lond. 67
1347	húmilis *R Br*	low-flowering		or	1	jn au	Br	C. G H.	1802.	S	s l	Bot. rep 532
1348	acerósa *R Br*	Pine-leaved		or	3	mr my	Pk	C G H	1803.	C	s l	Bot. rep. 577
232	LEUCOSPER'MUM *R Br* Leucospermum *Proteaceæ* *Sp* 12—18											
1349	lineáre *R Br*	linear-leaved		or	4	au s	Y	C G H	1774.	C	s l	Th prot. n 35 t.4
1350	tóttum *R Br*	smooth-bracted		or	3	jn au	Y	C G H.	1774	S	p l	
1351	médium *R Br*	oval-leaved		or	3	my jn	O	C G H	1794	C	l p	Bot rep 17



History, Use, Propagation, Culture.

229. *Petrophila.* From πετρος and φιλεω, to love rocks, in allusion to the places in which it is found growing in a wild state Stiff shrubs, with smooth leaves of various kinds Heads of flowers ovate or oblong, terminal or axillary. Ripened cuttings root in sand under a hand-glass.

230. *Isopogon.* This genus consists of stiff shrubs, with smooth, flat or filiform, divided or entire leaves. Heads terminal or rarely axillary Flowers sometimes closely imbricated in a globose cone, sometimes clustered in a common flat receptacle which is somewhat involucrated, they thrive best in a soil composed of one-third loam, a third of peat, and a third of sand The pots must be well drained, and ripened wood may be chosen for cuttings which will root in sand and a little earth under a hand-glass They must be uncovered frequently, and the glass wiped, as they are liable to damp off if kept too close (*Sweet*)

231. *Protea.* A mythological name of Proteus the son of Ocean and Thetis, who assumed various forms upon various occasions, to whom this genus, once equally variable in its forms, has been likened. It, as Sweet observes, thrives best in a soil composed of "light turfy loam, mixed with rather more than one-third of fine sand, the pots must be well drained with broken potsherds to prevent them from getting soddened with too much water, the roots are also very fond of running amongst the small bits of sheards. Care must be taken not

MONOGYNIA.

1306 Leaves trifid bipinnate, Segments erect, Flowers silky their segments tomentose at end
1307 Leaves bi-tri-pinnatifid plain, Segments mucronate, Flowers bearded, Cones axillary stalked

1308 Leaves pinnatifid and bipinnatifid filiform furrowed above, Segment erect, Branches smooth
1309 Leaves bipinnatifid somewhat triternate filif. chan. above, Segments divaricating, Branchlets tomentose
1310 Leaves trifid pinnatifid or bipinnatifid, Leaves linear flat spreading erect smooth beneath
1311 Leaves wedge-shaped flat 3-lobed attenuated at base stalked lobes entire, Branchlets tomentose
1312 Leaves elongate oblong mucronate attenuate at base, Branches and involucres smooth

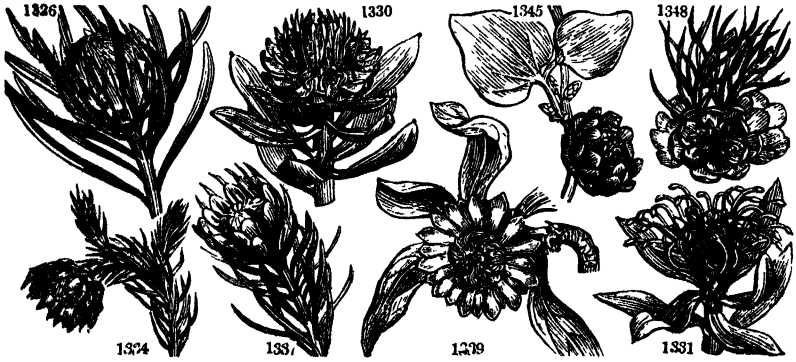
Flowers terminal.

1313 Leaves roundish stalked, Invol. silky, Inner bractes acute beardless, Style pubescent below the middle
1314 Leaves broad ovate ½ cordate sessile, Invol. silky toment. Inner bractes narr dilated at end and bearded
1315 Leaves ovate oblong cordate edged the callus of the end prominent, Invol silky fringed beardless
1316 Leaves ov. obl sessile subcord. or simple, Branches toment. Invol silky, Inner bracte elong fringed silky
1317 Leaves ov. obl. narr. at base with branches smooth, All the bracteæ sim inn dilat. at end and beard. in mid.
1318 Leaves glaucous obov. the adult smooth, Bractes red the upper lyrate spatul. fimbr obt. Petals obtuse
1319 Leaves narr. oblong veiny oblique simple at base, the edges and branches downy, Involucre ciliated
1320 Leaves linear ligulate edged ciliated, Branches hairy, Invol. long turbinate, Bract. fringed with white
1321 Leaves linear ligulate edged roughish shining with the branches smooth, Inner bract. of invol spatulate
1322 Leaves linear ligulate smooth opaque at base outside with the branches downy, Invol. fringed with black
1323 Leaves linear ligulate edged shining roughish, Branches little downy, Invol. fringed with black
1324 Leaves narrow oblong rather wavy attenuated at base, Invol. hemisph inner bearded with black and purple
1325 Leaves broad long elliptical edged the old ones pubescent wavy, Bractes pale yellow, the upper fringed
1326 Leaves elong. lin atten at base, Inv turb Bractes smooth acute beardl Beards of cal longer than segm
1327 Leaves long ligulate, Head broad convex embossed in middle, Upper bractes spatul the length of flower
1328 Leaves long ligulate, Head broad not convex, Upper bractes spatulate longer than flowers
1329 Leaves lanc. ligul. attenu. at base, Inv turb. Bractes smooth beardl viscid, Beards of flow. woolly white
1330 Leaves obl. sessile and branches smooth, Invol hemispherical beardl naked, Fl toment. Style smooth
1331 Leaves lin. lanceolate acute submucr attenuated at base, Invol. hemispherical, Bractes smooth obtuse
1332 Leaves lanc lm. mucr. pungent with an obtuse base, Bractes lanc mucr smooth, Stem erect many-flow.
1333 Leaves ligulate oblong the upper and the branches hairy, Inner bracteæ with a round and bearded end
1334 Leaves subulate mucronate, Invol nodding hemispherical, Bract. smooth obtuse
1335 Leaves linear lanceolate mucronate, Flower-bearing branches recurved, Bract obtuse at length smooth
1336 Leaves lin lanc. flat attenuated at base roughish at edge, Branches decumbent, Invol hemisph
1337 Leaves linear veinless smooth concave above, Branches smooth decumbent, Invol. obtuse
1338 Leaves lin lanc acute flat veiny above, Bractes obtuse pubesc and conc. at end, Branches wavy colored
1339 Stems short with depressed branches, Leaves obov. obl edged veiny attenuat at base, Invol hemispher.
β Leaves more glaucous and narrow
1340 Stems dwarf decumb Leaves elong lin smooth veinless recurved at edge, Invol hemispherical
1341 Stems dwarf, Leaves elong lin scrabrous obsoletely veiny recurv. at edge, Invol turbinate hemispher.
1342 Stems decumb. dwarf, Leaves elong lin roughish revol. at edge, Invol turb Bractes obtuse tomentose
1343 Stems dwarf, Leaves elongate lanc edged subundulate smooth, Invol turb Bractes tomentose obtuse
1344 Stems dwarf, Leaves elongate lanc edged smooth, Invol. turbinate, Bractes lanceolate acuminate

Flowers lateral.

1345 Leaves cordate roughish nerved, Bractes smooth
1346 Leaves cordate ovate, Stem clasping divaricate recurved at the end, Bractes pubescent
1347 Leaves linear acute, Receptacle conical, Paleæ acute
1348 Leaves subulate, Receptacle convex, Paleæ obtuse

1349 Style longer than the hairy flower, Stigma gibbous on one side, Invol downy, Leaves linear entire
1350 Style a quarter longer than the hairy flow Stigma gibb on one side, Leaves lin. obl veiny ent obt at base
1351 Style nearly twice as long as hairy flow Stigma gibb. on one side, Leaves lin. obl. entire or 2 or 3-toothed



and Miscellaneous Particulars.

to let them droop for want of water, as the young roots are of a very fleshy substance, and soon suffer by too much drought, as well as by too much wet, so that they seldom recover if suffered to flag much, they also like to be placed where they may have a free circulation of air, as they cannot bear to be crowded like some more rigid-growing plants. Ripened cuttings taken off at a joint, and pared quite smooth, will strike root if planted thinly in pots of sand placed under a hand-glass, but not plunged the glasses must be often taken off to give them air, as they are very liable to get the damp amongst them, which soon spreads if not cleaned off, and destroys them; water them regularly whenever they want it, but not over the leaves, and let them get a little dry before the glasses are placed over them again. Some of the kinds root very soon, others are a long time before they root. The quickest rooting kinds I have met with are P cordata, cynaroides, amplexicaulis, grandiflora, acerosa, nana, and acaulis. P. mellifera also roots very quickly sometimes. The same treatment will agree with several other genera belonging to this family, as Leucospermum, Spatalla, Sorocephalus, Leucadendron, and Aulax. (See *Bot. Mag* No. 1717. *Bot. Cult.* 244.) There are several kinds in cultivation, and published in Knight's Proteæ, which have not been retained here, because, as they are not acknowledged by Mr R. Brown, it is probable that they are not distinct from some which are here enumerated."

1352 formósum *Kn. Pr*	handsome	or	4	my au	Pk	C G H.	1784	S	p.l	Bot..rep. 469
1353 ellípticum *R. Br.*	elliptic	or	4	my au	Y	C. G. H	1803	C	l.p	
1354 conocárpum *R Br*	many-toothed	or	3	...	Y	C. G. H	1774.	S	s l	Pl. pht. t. 200. f.2
1355 grandiflórum *R. Br.*	great-flowered	or	4	my.jl	Y	C. G. H.	1800	S	p.l	Par. lond. 116
1356 púberum *R. Br.*	downy-leaved	or	2	my au	Y	C G H	1774.	C	s l	
1357 tomentósum *Kn Pr.*	cottony	or	2	au s	Y	C. G. H	1789.	S	p.l	
1358 párile *Kn Pr.*	matched	or	2	au s	Y	C. G. H.	1789.	C	l p	
1359 cándicans *B R.*	Rose-scented	or	2	au.s	Y	C. G H.	1790.	S	p.l	Bot rep 294
1360 Hypophýllum *R.Br*	trifid-leaved	or	1½	...	Y	C. G H.	1787.	S	p.l	Pl. am. t.440.f.3

233. MIME'TES. *R Br.* Mimetes. *Proteaceæ* *Sp* 6—13

1361 hirta *R Br.*	hairy	or	3½	jn au	R	C G H.	1774.	C	s l	W. ph.4.t.899.f.a
1362 palústris *Kn. Pr.*	marsh	or		jn au	Pu	C G H	1802	C	l.p	B lgd 2.p.194.c.t
1363 cuculláta *R Br.*	three-toothed	or	2	...	Pu	C. G H	1789	S	s l	P.al 212.t.304.f.6
1364 divaricáta *R Br*	divaricate	or	1½	jn s	W	C. G H	1795	C*	s.l	
1365 vaccinifólia *Sweet*	Vaccinium-lvd.	or	3	...		C. G H	1800	C	l.p	
1366 purpúrea *R Br*	Heath-leaved	or	2	n d	Pu	C G. H	1789	C	s.l	

234. SERRU'RIA. *R Br* Serruria *Proteaceæ* *Sp* 20—46

1367 abrótanifólia *Kn P.*	Southernw.-lvd	or	4	jn au	Pk	C G. H	1803	C	l p	Bot. rep. 522
1368 millefólia *Kn. P.*	thousand-leav'd	or	4	jn au	Pu	C G H	1803.	C	l s.p	Bot. rep. 357
1369 artemisiæfólia *Kn. P*	wormwood-lvd	or	5	jn au	Pu	C G H	1789	C	l p	Bot. rep. 264
1370 pinnáta *R Br*	slend.-creeping	or	1	jn au	Pk	C G. H.	1803.	S	p.l	Bot. rep. 512
1371 arenária *R Br.*	sand	or	1	jn au	Pu	C G H	1803	C	s p	
1372 cyanoides *R Br*	trifid-leaved	or	1½	jn au	Pu	C G H	1803	S	p l	Pl am. t.345.f 6
1373 pedunculáta *R. Br*	woolly-headed	or	7	jn au	Pu	C G H	1789	C	p l s	Bot. rep 264
1374 Nivéni *R Br.*	decumbent	or	½	jn au	Pu	C G H	1800	C	s p l	Bot. rep. 349
1375 ciliáta *R Br*	ciliated	or	2	jn au	Pu	C G H	1803.	C	s l	
1376 phylicoides *R Br*	Phylica-flower	or	3	jn au	Pu	C. G H	1788	S	p.l	Bot rep. 507. f. 4
1377 a'mula *R Br*	grey-branched	or	3	jn au	Pu	C G H	1803	C	l p	
1378 párilis *Kn P*	matched	or	2	jn au	Pk	C. G H	1803	C	p l	Bot. rep. 507
1379 odoráta *Sweet*	sweet-scented	or	2	jn au	Pk	C G H	1803	C	p l	Bot. rep 545
1380 emargináta *Sweet*	emarginated	or	2	jn au	Pk	C. G H	1800	C	p l	Bot. rep 536
Serrúria arenária *Kn Pyot*										
1381 glomeráta *R Br.*	many-headed	or	3	jn au	Pu	C G H	1789	S	p l	Bur. afr t 99. f.2
1382 decípiens *R Br.*	deceptive	or	4	jn au	Pu	C G H	1806	C	l p	
1383 Roxbúrghi *R Br*	Roxburgh's	or	3	jn au	W	C. G H	1806	C	l p	
1384 Burmánni *R Br*	Burmann's	or	2½	jn au	Pu	C G H	1786	C	l p	Bur afr. t. 99 f. 1
1385 triternáta *R Br*	silvery-flower'd	or	7	jn au	W	C G H	1802	S	p l	Bot. rep. 447
1386 elongáta *R Br*	long-stalked	or	1½	jn au	Pu	C G H	1800	C	l p	

235 NIVE'NIA *R Br.* Nivenia *Proteaceæ* *Sp* 5—12

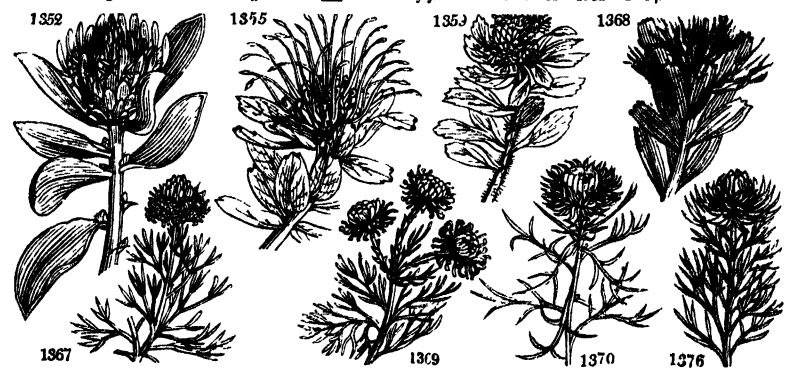
1387 Scéptrum *R Br*	sceptre-like	or	2	my jn	W	C G. H.	1790	S	p.l	
1388 spathuláta *R Br.*	maiden-hair-lv	or	2½	jl au	Pu	C G H	1790	C	s l	Thu dis.n 58. t.5
1389 spicáta *R Br*	spiked	or	2½	jn au	Pu	C G H	1786	S	p l	
1390 crithmifólia *R Br.*	Samphire-leav.	or	2½	jn au	Pa pu	C G H.	1797	S	p.l	Bot rep. 243
1391 média *R Br.*	middle	or	6	jn au	W	C. G H.	1803.	C	s p	Bot rep 234

236 SOROCE'PHALUS. *R Br* Sorocephalus *Proteaceæ* *Sp* 6—10

1392 imbérbis *R Br*	smooth	or	3	jn au	Pu	C G H	1806.	C	s p	
1393 diversifólius *R Br*	various-leaved	or	4	...	Pu	C G H	1803	C	l p	
1394 spatálloides *R Br*	club-bearing	or	3	jn au	Pu	C G H	1803.	C	s p	
1395 tenuifólius *R Br*	slender-leaved	or	3	jn au	Pu	C G H	1802	C	l p	
1396 lanátus *R Br*	woolly	or	2	jn s	Pu	C G H	1790	C	l p	Thu dis n.30 t.3
1397 imbricátus *R Br*	imbricated	or	3	ap jl	Pu	C G H	1794	S	p l	Bot rep 517

†237 SPATAL'LA *R. Br* Spatalla. *Proteaceæ* *Sp* 4—16

1398 prolifera *R Br*	proliferous	or	1½	jn au	Pu	C. G H	1800	C	s l	Thunb dis 27 t.4
1399 ramulósa *R Br*	cluster-flowered	or	3	au s	Pu	C G H	1787.	C	l p	
1400 incúrva *R Br*	incurved-leav'd	or	2½	my jn	Pu	C G H	1789	S	s l	
1401 Thunbérgii *R Br*	Thunberg's	or	3	my jn		C G H	1806	C	l p	



History, Use, Propagation, Culture,

232. *Leucospermum.* From λευκος, white, and σπερμα, seed, in allusion to the color of the seeds. The genus is chiefly composed of low shrubs, which are usually downy or hairy Leaves entire, or with callous teeth at the end. Heads terminal. Flowers yellow The culture as for Protea

233. *Mimetes* Named by Mr. Salisbury from μιμητης, a mimic, because it resembles various other genera. The soil for this genus is two-thirds of light loam, and one third of sand. In other respects, the treatment is the same as for Isopogon

234. *Serruria.* Named by Burmannus after Professor Joseph Serrurier, a foreign botanist, of whom little is known. The species flower freely, and make handsome bushy shrubs The soil best adapted to them is one-third light loam, a third of peat, and a third of sand, with well drained pots "They also require an airy situation, as they are so crowded with leaves that the branches are liable to damp and canker if any wet settles

1352 Leaves elliptical edged, Bractes spreading · upper spatulate minutely fringed, Petals downy
1353 Style nearly twice as long as hairy flower, Stigma conical ovate gibb on one side, Leaves obl 3-4-toothed
1354 Style longer than the very villous flower, Stigma equal-sided conical, Leaves oval 3-9-toothed
1355 Style longer than very vill. fl. Stig equal-sided obl. Lvs obl. lanc. 3-toothed and entire, Branches very hairy
1356 Style longer than hairy fl Stigma equal-sided ovate, Lvs. lanc. and ellipt. entire short pub Branches hairy
1357 Leaves linear channelled veinless, Branches and bracteæ tomentose, Segments of flower bearded
1358 Leaves linear flat, Branches hairy, Bracteæ smoothish ciliated
1359 Leaves linear wedge-shaped flat veiny 3-5-toothed, Branches hairy, Bractes and segments of flow. toment
1360 Leaves linear 3-toothed, Bractes rounded tomentose twice as short as tube of flower

1361 Involucr equal-sided colored acuminate half exserted 8-10-flowered, Leaves acute entire
1362 Leaves oval lanceolate pubescent, Stigma short prominent at base
1363 Invol unequal-sided, Leaves lin oblong 3-toothed smooth the floral dilated beneath with recurved edges
1364 Stem procumbent, Leaves oval obtuse pubescent, Style smooth, Heads terminal
1365 Leaves narrow obovate almost smooth, Upper bractes longer than flowers very acuminate
1366 Stem procumbent, Branches ascending, Leaves linear subulate channelled, Segments of flower smooth

Heads simple

1367 Leaves from below the middle bipinnatifid hairy, Head sessile higher than leaves, Bractes hairy outside
1368 Leaves from base bipinnat. hairy, Ped as long as head or longer, Bractes hairy at end outside, Stig trunc
1369 Leaves from the base 3-pinnatifid pubescent, Ped 1-3 long smoothish, Bractes recurved scarcely toment.
1370 Heads terminal and axillary stalked clustered, Leaves pinnatifid and trifid more than an inch long
1371 Heads terminal longer than the stalk, Leaves pinnatifid and trifid less than an inch long, Stem pubesc
1372 Heads ter longer than stalk, Lvs sprdg upper less an inch long nearly bipin lower shorter trifid, Stem erect
1373 Heads terminal stalked, Leaves bi-tripinnatifid with the erect stem hairy
1374 Heads term sessile, Leaves bi-pin about an inch long upper longer than heads with the branches smooth
1375 Heads ter longer than stalks, Brac subul smooth hairy at edge, Lvs sub-bipinnate and branches smooth
1376 Heads ter and axil stalks branch-like squarrose, Outer bractes subul inner lanc Lvs an inch and half long
1377 Bractes a little shorter than the terminal head, Outer lanc fringed inner less villous, Leaves bipinnatifid
1378 Stem pubesc Leaves from below middle all bipinnatifid, Heads 1-3 shorter than ped Bracts reflex ciliat.
1379 Leaves bipinnatifid filiform pointed hairy, Flowers terminal sweet-scented
1380 Leaves from below the middle bipinnatifid pubescent, Heads 1-3 longer than leaves, Bractes silky at base

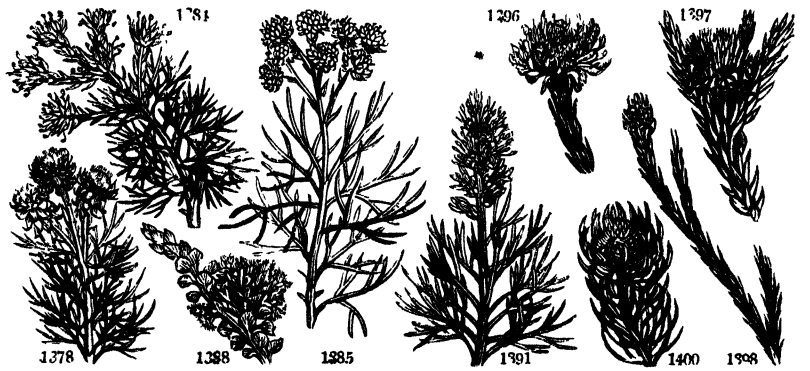
Heads compound

1381 Stem erect, Lvs. smth. bipin. more than an inch long, Partial heads many-fl outer brac. smth · inner silky
1382 Stem erect, Branches pub Lvs bipin an inch and more long, Partial heads few-fl All the bractes very vill
1383 Stem erect, Leaves triternate bundled less than ½ inch long common and partial heads few-flow sessile
1384 Heads corymbose 10-flow. Leaves bipinnatifid setaceous scarcely 2 inches long, Flowers silky clustered
1385 Corymbs compound, Leaves triternate ½ inch long and stem very smooth, Bractes and partial stalks silky
1386 Corymbs simple or compound, Leaves bi-tripinnat. common flower-stalk long, partial and bractes smooth

1387 Leaves obovate or lanceolate flattish simple at edge, Flower silky with appressed hairs
1388 Leaves broader than long hooded edged, Leaves of invol obt. Flower bearded style smooth, Stig clavate
1389 Stalks umbelled ½ as long as the cylindrical spike, Bractes ovate, Style 2-3ds hairy, Leaves smooth
1390 Stalks umbelled about as long as cylind spikes, Leaves obtuse divar smooth, Styles vill as far as middle
1391 Spikes cylindrical 4 times as long as their stalk, Leaves of involucrum ovate acute beardless at end

1392 Involucr 3-flowered, Segments of flower and points of bracteæ smooth, Spike naked
1393 Leaves spatulate lanceolate smooth beneath, the lower bipinnatifid, Flower bearded, Stigma cylindrical
1394 Involucr 3-flowered stalked, Segments of flower bearded, Spike naked
1395 Lvs filif less than ½ inch long, Heads few-fl Seg of fl feathery except the inner one, Spike with an invol.
1396 Leaves 3-cornered filiform more than ½ an inch long furrowed above, All the segments of flower feathery
1397 Leaves lanceolate scabrous beneath, Claws of flower glandular hairy, Stigma clavate

1398 Involucr 4-leaved, Leaflets withered at end, Spike conical headed, Flowers sessile
1399 Involucr. 2-leaved the wider leaf trifid, Spike sessile imbricated, Leaves with a sharp point
1400 Spikes racemose stalked, Bractes shorter than the 4-flowered downy involucrum, Leaves incurved
1401 Spike sessile, Bractes and invol ovate lanc vill Leaves longer than flow acute chann and branches hairy



and Miscellaneous Particulars

amongst them. Ripened cuttings taken off at a joint and planted thinly in a pot of sand, will root without difficulty under a hand-glass. but the glass must be taken off occasionally to give them air, and dry their leaves" (*Bot. Cult.* 254.)

235 *Niverna* Named by Salisbury, in compliment to Mr. James Niven, an intelligent collector, who discovered many new plants in South Africa while in the service of Mr Hibbert. Culture as for Serruria.

236. *Sorocephalus* From σωρος, a heap, and κεφαλη, a head, on account of the heads of flowers being in clusters

237 *Spatalla* A word formed by Mr Salisbury, with more wit than decency, from σπαταω, lascivio, on account of its ample stigma. Culture as for Leucospermum.

†238. PERSOO'NIA. *R. Br.* PERSOONIA. *Proteaceæ.* *Sp.* 6—22.

1402	hirsúta *R Br.*	hairy	▬	or	4	my.jl	Y	N. S. W.	1800.	C	l p Bot. cab. 327
1403	linearis *R Br*	linear-leaved	▬	or	5	jl.au	Y	N. S W.	1794	L	s p Bot. mag. 760
1404	lanceoláta *R. Br.*	spear-leaved	▬	or	4	jn.jl	Y	N S W.	1791.	L	s.p Bot. rep. 74
1405	salicína *R Br.*	willow-leaved	▬	or	7	jn jl	Pk	N S W.	1795	C	l.p Cav ic. 4. t. 389
1406	latifólia *Andr.*	broad-leaved	▬	or	4	jn jl	Y	N. S. W.	1795	L	s p Bot. rep. 280
1407	pinifolia *R. Br.*	pine-leaved	▬	or	4	jn.jl	Y	N S W	1822.	L	s.p

†239. GREVI'LLEA. *R Br* GREVILLEA *Proteaceæ.* *Sp.* 13—38.

1408	sericea *R Br.*	silky	▬	or	6	ap.s	Pk	N S. W	1790	S	s p Bot. mag 862
1409	punicea *R Br*	purple	▬	or	...	...	Pu	N S W.	1822	C	l p Sm. N H. t 9 f 5
1410	juniperina *R Br*	juniper-like	▬	or	4	...	Pk	N S. W	1822	C	l.p Bot cab 1003
1411	linearis *R Br*	linear-leaved	▬	or	6	ap.s	W	N S W	1790	S	s p Bot. rep 272
1412	ripária *R Br.*	river-side	▬	or	4	ap s	Pk	N S. W	1791.	C	l.p
1413	arenária *R Br*	sand	▬	or	5	ap s	Pk	N S W	1803	C	l p
1414	acuminata *R. Br*	acute-leaved	▬	or	4	ap s	...	N. S W	1805	S	s.p
1415	stylósa *Kn P.*	long-styled	▬	or		ap s	Pk	N. S W	1809	C	s l
1416	mucrónuláta *R. Br.*	Podalyria-leav	▬	or	4	ap s	Pk	N S W	1809	C	l.p
1417	cinérea *R. Br.*	cinereous	▬	or	...	...	...	N. S W.	1822	C	l.p Bot cab 857
1418	buxifólia *R Br.*	Box-leaved	▬	or	6	f s	Pk	N S. W.	1790.	S	s p Bot. rep. 218
1419	collina *Kn P*	hill	▬	or		mr jl	Pk	N S W	1802.	C	l p
1420	aspleniifólia *R Br*	Asplenium-lvd	▬	or	5	mr jl	Pk	N. S. W	1806	C	l p

240. HA'KEA *R Br.* HAKEA *Proteaceæ* *Sp.* 20—40.

1421	pugiónifórmis *R Br*	dagger-fruited	▬	or	6	my jn	W	N S W.	1796	S	s p Bot. cab 353
1422	párilis *Kn P*	matched	▬	or		my jn	W	V. Di L.	1796	C	l p
1423	obliqua *R. Br.*	oblique-flower	▬	or	6	...	W	N Holl	1803.	C	s p Bot cab 1682
1424	gibbósa *R Br*	gibbous-fruited	▬	or	7	my jn	W	N S W	1790	C	s p Cav ic 6 t 534
1425	aciculáris *R Br*	needle-leaved	▬	or	3	my jn	W	N S W	1790	C	s p Vent mal 111
1426	suavéolens *R Br*	sweet-smelling	▬	or	4	ja n	W	N Holl	1803	C	s p
1427	microcárpa *R Br*	small-fruited	▬	or	4	my jn	W	V Di L.	1819	C	s p Bot reg 475
1428	flórida *R Br*	many-flowered	▬	or	5	my jn	W	N Holl	1803	C	s p Bot. mag 2579
1429	ilicifólia *R Br*	Holly-leaved	▬	or	4	jl s	W	N Holl	1803	C	s p
1430	nítida *R. Br*	glossy	▬	or	5	jn jl	W	N Holl	1803	C	s p Bot. mag. 2946
1431	amplexicaúlis *R Br*	stem-clasping	▬	or	2	...	W	N. Holl.	1803	C	s p
1432	prostráta *R Br*	trailing	▬	or	1½	...	W	N. Holl	1803	C	s p
1433	ceratophýlla *R Br*	horn-leaved	▬	or	4	my.jn	Br	N Holl	1803	C	s p
1434	acanthophýlla *Lk*	prickly-leaved	▬	or	3	...	...	N S W	1821	C	s p
1435	undulata *R Br.*	wave-leaved	▬	or	3	...	...	N Holl	1803	L	s p
1436	óleifólia *R. Br*	olive-leaved	▬	or	5	jn jl	W	N Holl	1794	S	s p
1437	saligna *R Br*	willow-leaved	▬	or	7	mr jl	W	N Holl	1791.	C	s p Bot. rep 215
1438	cinérea *R Br*	hoary-leaved	▬	or	5	jn jl	W	N Holl	1803	S	s p
1439	dáctyloides *R Br*	nerved-leaved	▬	or	7	jn au	W	N S W	1790	C	s p Cav. ic 6. t 535
1440	elliptica *R Br.*	oval-leaved	▬	or	4	jn au	W	N Holl	1794	C	s p

241 STENOCAR'PUS. *R Br* STENOCARPUS. *Proteaceæ* *Sp* 1—2

1441	salignus *R Br*	fragrant	▬	or	5	jn jl	G	N Holl.	1819	C	s l Bot reg 441

242 LAMBER'TIA *R Br* LAMBERTIA *Proteaceæ* *Sp* 1—2

1442	formósa *R Br*	handsome	▬	or	4	jn au	Re	N S W	1788.	C	s.p Bot rep 69

243 XYLOME'LUM *R Br* XYLOMELUM. *Proteaceæ* *Sp* 1

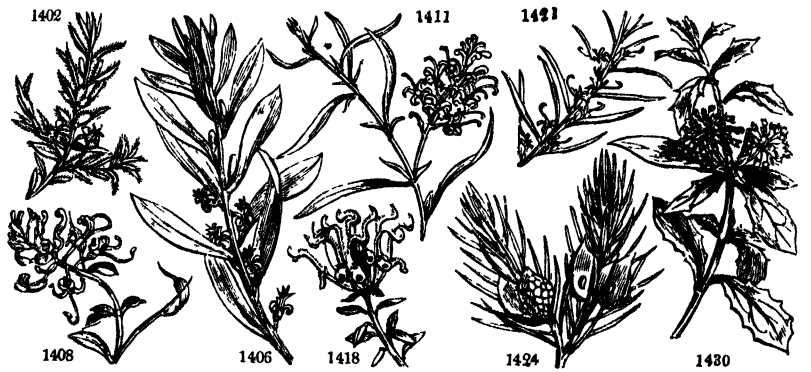
1443	pyriformе *R Br.*	pear-fruited	♀	or	14	...	...	N S W	1789.	S	s p Cav ic. 6. t. 536

244 TELOPE'A *R Br* WARRATAH *Proteaceæ.* *Sp* 1—2

1444	spéciosissima *R Br*	splendid	♀	or	10	my.jl	S	N. S W	1789	C	s p Bot mag 1198

245 LOMA'TIA *R Br* LOMATIA *Proteaceæ* *Sp* 2—8

1445	silaifólia *R Br*	cut-leaved	▬	or	2	jn au	O	N S W	1792	C	s p Bot mag. 1272
1446	longifólia *R Br*	long-leaved	▬	or	2	jn	G	N S. W	1816	C	l p Bot reg 442



History, Use, Propagation, Culture,

238 *Persoonia* So named by Sir J E Smith, in honor of C H Persoon, the celebrated author of Synopsis Plantarum and other esteemed works: he is still living, and about to publish a new edition of his most useful Synopsis.

239. *Grevillea.* So named by Mr. R. Brown, after the Right Honorable Charles Francis Greville, a great promoter of natural history He was one of the vice-presidents of the Royal Society Some species ripen abundance of seeds, all of them thrive in an equal mixture of sandy loam and peat, and strike roots freely in sand under a hand-glass

240. *Hakea.* Named by Schreber after Baron Hake, a patron of the botanic garden at Hanover This genus thrives in equal parts of loam, peat, and sand well drained, and cuttings root readily in sand under a hand-glass.

1402 Leaves linear hairy scabrous recurved at edge, Flowers axillary, Ovary one-sided silky
1403 Leaves oblong linear mucronate rather villous, Flowers axillary solitary
1404 Leaves lanceolate or elliptical mucronate glabrous smooth, Peduncle axillary 1-flowered, Flower silky
1405 Leaves lanceolate oblong unequal-sided, Flowers smooth, Stem arborescent, Bark scarious in layers
1406 Leaves obovate acute smooth on both sides without ribs thick, Flowers axillary remote on long stalks
1407 Leaves filiform lax, Spike leafy elongated pyramidal, Floral leaves abbreviated

Style smooth, Follicle ribless.

1408 Leaves ellipt. or obl obt. mucr. broken back at the edges, Flower branches erect, Racemes abbrev. recurv
1409 Leaves elliptical oblong attenuate at base broken back at edges, Flower bearing branches recurved
1410 Leaves subulate fascicled divaricating broken back at the edge, Branches villous rounded
1411 Leaves linear lanceolate acute mucr. broken back at edges, Rac. abbreviate erect, Style very smooth at end
1412 Lvs. elong. linear broken back at edges smooth, Inner beard of flower very dense, Stalks longer than ovary

Style hairy Follicle ribbed

1413 Leaves oblong obtuse mucronate, Racemes recurved few-flowered, Pistils tomentose
1414 Leaves lanc. sub-acum mucr above dotted scabrous beneath cinereous, Branc pubes. Rac. few-fl recurved
1415 Leaves lanceol hairy beneath, Style very long compressed hairy at back [or horizontal
1416 Leaves obovate obt. mucr. above scabrous and shining beneath rather silky, Hairs of flowers appressed
1417 Leaves elliptical and obovate mucronate above roughish beneath cinereous

Pistil woolly Follicle ribless [as recurved appendage

1418 Leaves elliptical above dotted scabrous beneath cinereous with close tomentum, Stig orbic scarcely as long
1419 Leaves elliptic lanceolate little revolute at edge, Flowers scarcely higher than leaves

Raceme thyrsoid. Leaves pinnatifid. (True Grevilleæ, Br.)

1420 Leaves elongate linear pinnatifid cut or entire beneath tomentose, Racemes 3 times as short as the leaf

Leaves filiform.

1421 Leaves smooth, Flowers silky or hairy, Caps. lanceolate acuminate straight crested on both sides
1422 Leaves smooth with bloom not channelled, Petals woolly
1423 Leaves terete, Branches toment Gland attached to oblique end of stalk, Flow. silky, Caps gibbous nodose
1424 Lvs. ben. with an obsol. furr. at base and branc. s -pub Branchl. and fl-stks hairy, Caps gibb with cav. inside
1425 Leaves smooth beneath below the middle with an obsolete furrow the length of fruit, Caps. gibbous rugose
1426 Leaves furrowed above pinnatifid occasionally undivided, Flowers racemose smooth, Caps. gibbous
1427 Lvs. of upper branches filif. of lower flat, Perianths very smooth, Caps. with 2 spurs umbelled much shorter

Leaves flat, toothed, or entire [than leaf

1428 Leaves narrow-lanceol. prickly toothed minutely dotted a little rough at the edge, Caps 2-spurred convex
1429 Leaves oval opaque sinuate-toothed prickly stalked, Caps. 2-spurred ovate gibbous compressed at end
1430 Lvs. lanc. or obl. attenu at base with a few prickly teeth or entire shining veiny with branches very smooth
1431 Lvs. sinu tooth. shining veiny stem-clasp with a dilated cord base, Stem prost Bran smooth, Caps spurl.
1432 Lvs. angul. tooth. dil at end and cuneate at base cord stem clasp Stem prost. Branc pubes Caps spurless
1433 Leaves pinnatifid and bipinnatifid linear, Capsules spurless
1434 Leaves pinnatifid the anterior segments 1 inch long the posterior 1½ inch and more
1435 Leaves obovate 3-nerved reticulated wavy prickly toothed, Caps. spurless ventricose
1436 Leaves lanc entire and nerved obsoletely veined prickly at end upper pubesc. Caps term 2-spurred gibbous
1437 Lvs. elongate-lanc. entire 1-nerv acute withered at end with bran very smooth, Caps keeled on both sides
1438 Lvs. lin.-lanc. elongate entire 3-nerv. obsoletely veined rough wither at end, Bran downy, Caps lanceol
1439 Leaves entire 3-nerved veiny obovate-oblong or linear lanceolate reversed, Branches angular, Bark warted
1440 Leaves entire 5-nerved reticulated elliptical or oval pointless, Stalks and flowers smooth, Bark shining

1441 Leaves elongate lanceolate 3-nerved at base

1442 Involucres 7-flowered, Leaves linear-lanceolate cuspidate

1443 The only species

1444 Leaves wedge-shaped oblong toothed veiny smooth

1445 Leaves bipinnatifid very smooth, Segments wedge-shaped or lanceolate cut
1446 Leaves linear lanceolate elongate smooth remotely serrate



and Miscellaneous Particulars.

241. *Stenocarpus.* A handsome genus. The name is derived from στενος, narrow, and καρπος, fruit.

242. *Lambertia.* In honor of A B Lambert, Esq F R.S., vice-president of the Linnæan Society, and possessor of a rich Herbarium. This handsome plant thrives well in loam and peat not over watered. Cuttings must be taken off at a joint before they begin to push, and planted thinly in sand under a glass, and guarded from damp

243 *Xylomelum* A name derived by Sir J E. Smith from the remarkable fruit of the plant which resembles a wooden apple, ξυλον, wood, and μηλον, an apple.

244. *Telopea.* From τηλωπος, seen at a distance, in allusion to the brilliant crimson blossoms which decorate the plant, and make it a conspicuous object in its own country, as well as in our conservatories.

245. *Lomatia.* From λωμα, an edge, on account of the winged edge of the seeds.

246 RHOPA'LA. *R Br* Rhopala — *Proteaceæ.* *Sp* 2.

1447 dentáta *R Br* tooth-leaved — or 10 my.au G — S Amer. 1802 C l.p
1448 sessilifólia *R Br* sessile-leaved — or 10 ... G — Guiana 1803 C l p Rudg. gui. l. t.51

247 BANK'SIA. *R Br* Banksia — *Proteaceæ.* *Sp* 26—35.

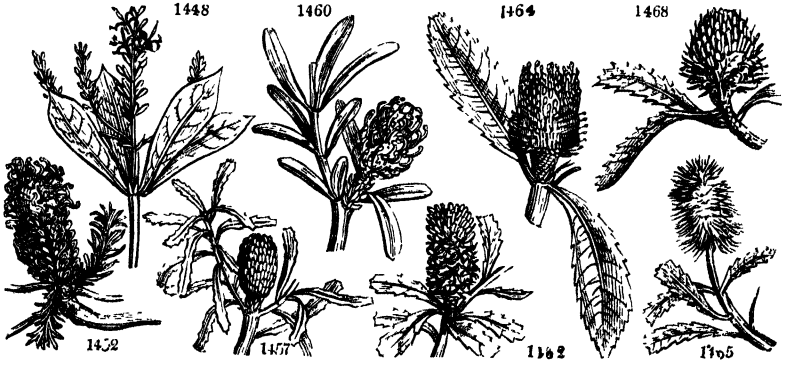
1449 pulchélla *R Br* small-flowered — or 6 ... Y — N Holl. 1805 C l p
1450 sphærocárpa *R Br* round-fruited — or 6 ... Y — N. Holl. 1803 C s l
1451 nútans *R Br* nodding-flower — or 4 jn s Y — N Holl 1803 C s l
1452 ericifólia *R Br* Heath-leaved — or 6 ja d Y — N S. W. 1788 C s p Bot. mag 738
1453 spinulósa *R Br.* spiny — or 6 my d Y — N S W. 1788 C s p Bot rep. 457
1454 collina *R. Br.* hill — or 6 ... Y — N. S W. 1800 C s l
1455 occidentális *R. Br.* west-coast — or 4 ... ... — N Holl. 1803. C l p
1456 littorális *R Br* sea-side — or 8 ... O — N Holl 1803 C s p
1457 margináta *R Br* various-leaved — or 6 my au Y — N S W 1804 G s.p Bot. mag 1947
1458 australis *R Br* southern — or 6 ... G — N S W 1822 C s p Bot reg 787
1459 intégrifólia *R Br.* entire-leaved — or 12 ... Y — N S W. 1788 C l p Cv ic 6 t 545,546
1460 verticillata *R Br* verticillate — or 12 jl o Y — N Holl 1794 C s p Hook. ex fl 96
1461 coccínea *R Br* scarlet-flowered — or 6 ... S — N Holl. 1803 C l p
1462 paludósa *R Br* marshy — or 5 ja ap Y — N S W 1805. L s p Bot cab 392
1463 oblongifólia *R Br* oblong-leaved — or 15 my au Y — N S W 1788 C l p Bot cab 241
1464 latifólia *R Br* broad-leaved — or 30 my au G — N S W 1802 S s p Bot mag 2406
1465 marcéscens *R Br* short-leaved — or 6 ja d Pu — N Holl 1794 C s p Bot rep 258
1466 insulária *R Br* Island — or 6 ... ... — N S. W 1822 C s p
1467 attenuáta *R Br* smooth-flower. — or 6 .. ... — N Holl 1794 L s p
1468 serráta *R Br* saw-leaved — or 20 jl s Y — N S W 1788 S s p Bot. rep 82
1469 æ'mula *R Br* deeply-sawed — or 6 jl.s G — N S W. 1788 C l p Bot rep 638
1470 quercifólia *R Br* oak-leaved — or 5 ... ... — N Holl 1805 C l p
1471 dentáta *R Br* toothed — or 4 . .. — N S W 1822 C s p
1472 speciósa *R Br* long-leaved — or 5 my au ... — N Holl 1805 C l s p
1473 grándis *R Br* great-flowered — or 4 ... ... — N Holl. 1794 S s p
1474 répens *R Br* creeping — or 2 ... Y — N Holl 1803 C l s p Voy de lab 1 t 23

248 DRYAN'DRA *R Br.* Dryandra — *Proteaceæ* *Sp* 9—13

1475 floribúnda *R Br* many-flowered — or 3 ja d Y — N Holl 1803 S s p Bot mag 1581
1476 cuneáta *R Br* wedge-leaved — or 3 t n Y — N Holl 1803 C l p
1477 armáta *R Br* acute-leaved — or 3 ja d Y — N Holl 1803 C l p
1478 formósa *R Br* splendid — or 4 ja d Y — N Holl 1803 C l p Lin. tran 10 t 3
1479 plumósa *R Br* feathered — or 3 . Y — N Holl. 1803 C l p
1480 obtúsa *R Br* obtuse-leaved — or 1 ... Y — N Holl. 1803 C l p
1481 nívea *R. Br* white-leaved — or 1 jl s Y — N Holl 1803 C l p Voy de lab 1 t 24
1482 longifólia *R Br* long-leaved — or 2 ja d Y — N Holl 1805 S s p Bot mag 1582
1483 tenuifólia *R Br* fine-leaved — or 2 mr my Y — N Holl 1805 S s p

249 STRUTHI'OLA *W* Struthiola — *Thymelææ* *Sp* 9—18

1484 junperina *W* drooping — or 2 ap s W — C G H 1758 C l.p Bot mag 222
1485 erécta *W en* upright — or 1½ ap s W — C G H 1798 C s p Bot mag 2138
1486 ováta *W* oval-leaved — or 2 f jn W — C G H 1792 C s p Bot rep 119
1487 imbricáta *H K* tiled-leaved — or 2 ap au Y — C G H 1794 C s p Bot rep 113
1488 tomentósa *H K* downy-leaved — or 2 au s Y — C G H 1790 C s p Bot rep 334
1489 virgáta *H K* twiggy — or 2 ap au R — C G H 1779 C s p Bot rep 138
1490 ciliáta *Andr* ciliated — or 2 ap au W — C G H 1779 C s p Bot rep 140
1491 pubéscens *H K* downy — or 3 ap au R — C G H 1790 C s p Bot mag 1212
1492 incána *Lodd* hoary — or 2 au W — C G H 1817 C s p Bot cab 11



History, Use, Propagation, Culture,

246 *Rhopala.* The vernacular name of one of the species found in Guiana is Roupala. The species seldom flower, and are remarkable more for the beauty of their foliage than blossoms, which are disposed in long spikes, usually of a greenish color

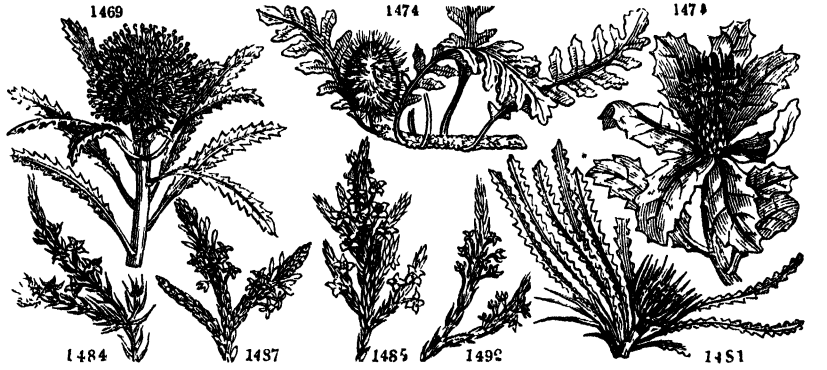
247 *Banksia* So named by Linnæus, in honor of Sir Joseph Banks, Bart, Pres R S., a distinguished promoter of the study of natural history, and of science in general he died in 1820 This is an elegant genus, and to be grown well requires a soil composed of equal parts of peat, loam, and sand. The pots must be well drained, and the following is the mode recommended by Sweet "Place a piece of potsherd about half way over the hole at the bottom of the pot, then lay another piece against it that it may be hollow, afterwards put some smaller pieces all round them, and some more, broken very small, on the top of these All plants belonging to the Proteaceæ should be drained in the same manner, as the roots are very fond of running amongst the broken potsherds, and there is not so much danger of their being overwatered, care must be taken not to let them flag for want of water, as they seldom recover if allowed to get very dry, they should also be placed in an airy part of the green-house when in doors, as nothing is more beneficial to them than a free circulation of air Cuttings are generally supposed to be difficult to root, but they will root readily if properly managed: let them be well ripened before they are taken off, then cut them off at a joint, and plant them in pots of sand without shortening any of the leaves, except on the part that is planted in the sand, where they should be taken off quite close, the less depth they are planted in the pots the better, if they only stand firm when the sand is well closed round them; then place them under hand-glasses in the propagating house, but not plunge them in

1447 Leaves alternate ovate lanceolate complicate toothed attenuated at both ends
1448 Leaves 4 together subsessile wedge-shaped oblong entire

1449 Leaves acerose entire not pointed, Claws of flower woolly, Segments smooth, Stigma a depressed head
1450 Leaves acerose entire mucronate, Flower all hairy, Stigma subulate, Cones globose
1451 Leaves acerose entire mucronate, Flower heads nodding, Flowers silky
1452 Leaves acerose emarginate 2-toothed entire, Flower heads long, Flowers silky, Stigma capitate
1453 Leaves acerose 3-toothed at end, the middle tooth longest prickly or entire at the edge, Stigma subulate
1454 Leaves linear prickly toothed; the terminal tooth shortest
1455 Leaves linear beyond the middle prickly toothed beneath veinless, Stem shrubby, Branches smooth
1456 Leaves long lin prickly toothed atten at base veinless beneath, Stem arborescent, Branchlets tomentose
1457 Leaves linear truncate mucronate entire or toothed, veins beneath inconspicuous, Ends of branches hairy
1458 Leaves linear truncate mucronate recurved at edge entire beneath netted, Ends of branches tomentose
1459 Leaves whorled oblong lanc entire mucronulate with conspicuous netted veins beneath, Stem arboreous
1460 Leaves whorled lingulate oblong obtuse unarmed beneath veinless white, Stem arborcous
1461 Leaves altern wedge-shaped obovate or obl toothed truncated ribbed reticulated at the base transverse
1462 Leaves somewhat whorled wedge-shaped obl subtrunc attenuated at base beyond middle toothed serrate
1463 Leaves scattered narr. obl trunc toothed serr beneath ribbed and veiny, Footstalks and branchl. toment.
1464 Leaves obovate oblong prickly serrate acute at base beneath ribbed reticulated cinereous
1465 Leaves wedge-shaped flat scattered truncate beyond the middle toothed serrate at the base acutish
1466 Leaves linear or wedge-shaped oblong rounded mucronulate scattered or whorled beneath netted
1467 Leaves elongate lin trunc at the base attenuate beyond the middle serrated beneath ribbed retic toment
1468 Leaves broad linear elongate truncated serrate beneath reticulated smoothish at the base attenuated
1469 Lvs broad lin clong truncated deeply serrate beneath reticulated smoothish, Stig bearded not furrowed
1470 Leaves oblong wedge-shaped subtruncate smooth cut serrate mucronate, Segments of flower awned
1471 Leaves wedge-shaped oblong truncate sinuate toothed undulated acute at base beneath ribbed veiny snowy
1472 Leaves linear pinnatifid, Lobes triangular half ovate mucronate beneath snowy obsoletely nerved
1473 Leaves pinnatifid, Lobes triangular ovate acute flat beneath nerved smoothish, Flowers smooth
1474 Leaves pinnatifid, Lobes sinuate or toothed, Stem prostrate

1475 Leaves wedge-shaped cut serrate, Bractes of involucre striated outer smoothish
1476 Leaves wedge-shaped sinuate toothed prickly stalked, Bractes all smooth silky
1477 Lvs. pinnatifid, Lobes triang flat divaricating straight prickly pointed the term longer than those next it
1478 Lvs. elongate linear pinnatifid, Lobes triangular pointless flat snow-white beneath, Involucres tomentose
1479 Leaves elongate lin pinnatifid, Lobes an equal-sided triangle mucron recurved at edge beneath snow-white
1480 Leaves lin pinnatifid longer than decumbent tomentose stem, Lobes triangular obtuse snow-white beneath
1481 Leaves lin pinnatifid as long as smooth stem, Lobes triang acute mucr beneath white with recurved edge
1482 Lvs. lin pinnatifid very long acute beneath ashy at base attenuated and entire, Lobes triang ascend decur.
1483 Leaves linear elongate pinnatifid sub-truncate white beneath, Lobes triangular decurrent divaricating

1484 Leaves linear acute spreading, Flowers naked, Anthers included
1485 Leaves linear and 4-cornered branches smooth
1486 Leaves ovate and branches rugose smooth
1487 Leaves ovate furrowed quadrifarious ciliated at edge, Glands of flower 4
1488 Leaves ovate tomentose, Glands of flower 12
1489 Leaves lanceolate ciliated, Bractes the length of germen
1490 Leaves lanceolate mucronate ciliate concave incurved at end
1491 Leaves linear ciliated, Bractes longer than germen
1492 Leaves all over hoary



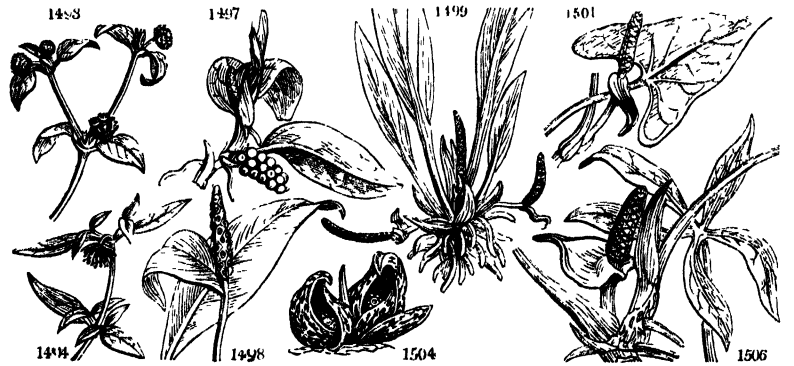
and Miscellaneous Particulars

heat; the glasses must be frequently taken off to give them air and dry them, or they are apt to damp off, when they are rooted, the sooner they are potted off in little pots the better, as the sand is liable to canker their roots if left too long in it, when potted off, they should be placed in a close frame, but not on heat, as a bottom heat will destroy their roots, when they must be hardened to the air by degrees Plants raised in this way have better roots, grow faster, and flower sooner than plants raised from seeds In raising them from seeds they should be sown in the same kind of soil as the plants are grown in, and placed in the green-house; or if it is in summer they will come up sooner if placed out in the open air, they will soon make their appearance, when they should be potted off in small pots, for if left in the seed-pots too long they are apt to die, and are more difficult to move with safety" (*Bot Cult* 147)

248 *Dryandra.* Was named by Mr R. Brown after the famous Jonas Dryander, whose catalogue of the Banksian library would alone be a monument of talent and industry, if his high botanical acquirements had been unknown This genus is allied in character and habits to Banksia. It thrives best in very sandy loam and peat in well drained pots Cuttings made from ripened wood taken off at a joint before they begin to push, planted in sand without shortening any of the leaves, and covered with a glass, will root without difficulty The pots should not be plunged, and as soon as the cuttings are rooted they must be potted off, as the sand is apt to injure their roots Place them afterwards in a close frame or under hand-glasses till they strike root afresh, and then harden them by degrees (*Sweet*)

249 *Struthiola.* From στρουθος, a sparrow: the pointed seed vessels have some resemblance to the beak of a

250 OPERCULA'RIA	*W.* OPERCULARIA.					*Valerianeæ*	*Sp* 1—12							
1493 áspera *W.*	rough-seeded	⚸	△	w	1	jn jl	W	N S W.	1790.	S	s.p	An. mu 4 t.70 f.1
251. CRYPTOSPER'MUM.	*P S.* CRYPTOSPERMUM					*Valerianeæ*	*Sp.* 1.							
1494 Youngii *P S.*	chaffy	♃	⊔	w	4	jl.au	Pk	N S W.	1793	C	co	Linn.trans.3. t 5		
*252. PO'THOS. *W*	POTHOS.					*Aroideæ.*	*Sp* 12—28.							
1495 acaúlis *W*	stemless	⚸	△	cu	1	ap jl	Ap	W Indies	1790	Sk	s p	Jac am 240 t.153		
1496 lanceolàta *W.*	lance-leaved	⚸	△	cu	1½	ap jl	Ap	Barbadoes	1790	Sk	s p	Plum am.47.t 62		
1497 violácea *W*	blue-fruited	⚸	△	cu	2	ap jn	Ap	Jamaica	1793.	Sk	s.l	Hook. ex fl 55		
1498 cannæfólia *H. K.*	sweet-scented	⚸	△	cu	3	ap my	Ap	W Indies	1789.	Sk	s.p	Bot mag 603		
1499 crassinérvis *W.*	thick-nerved	⚸	△	cu	2½	...	Ap	S Amer	1796	Sk	s p	Jac ic. 3. t 609		
1500 cordàta *W.*	heart-leaved	⚸	△	cu	3	ap	Ap	America	1770	Sk	s.p	Plum. ic. 26 t 38		
1501 sagittáta *B M*	arrow-leaved	⚸	△	cu	3	au	Ap	W Indies	1800	Sk	p.l	Bot mag 1584		
1502 macrophýlla *W.*	large-leaved	⚸	△	cu	3	my jn	Ap	W Indies	1794	Sk	s p	Jac. ic. 3. t. 610		
1503 obtusifólia *H K*	blunt-leaved	⚸	△	cu	2	my jn	Ap	Barbadoes	1790	Sk	p l			
*1504 fœ'tida *H K*	Scunkweed	⚸	△	cu	1	mr ap	Ap	N Amer	1735	Sk	p l	Bot. mag 836		
1505 palmáta *W.*	palmated	⚸	△	cu	3	jn jl	Ap	S Amer.	1803.	Sk	p l	Plum am 49 t.64		
1506 pentaphýlla *W*	five-leaved	⚸	△	cu	2	o n	Ap	Cayenne	1803	Sk	p l	Bot. mag. 1375		
253 RIVI'NA *W*	RIVINA.					*Chenopodeæ*	*Sp* 5—7							
1507 húmilis *W*	downy	♃	□	or	2	ja o	W	W Indies	1699	S	r m	Bot mag 1781		
β canes'cens W.	*hoary*	♃	□	or	2	my au	W	W Indies	1804	C	l p			
1508 purpurascens *W. en*	purple	♃	□	or	2	my au	Pk	W Indies	1815	C	l p			
1509 læ'vis *W*	smooth	♃	□	or	2	f s	Pk	W Indies	1733	S	r.m	Bot mag. 2333		
1510 brasiliénsis *W*	wave-leaved	♃	□	or	2	jn jl	G	Brazil	1790	C	l p			
1511 octándra *W*	climbing	♃	□	or	20	my jn	W	W Indies	1752	C	p l	B. jm 149 t 23 f 2		
254 CAMPHOROS'MA	*W* CAMPHOROSMA					*Chenopodeæ*	*Sp* 1—5							
1512 monspelíaca *W*	hairy	♃	⊔	cu	1½	au s	Ap	S Europe	1640	C	p.l	Schk. han 1 t 26		
*255. ALCHEMIL'LA	*W* LADIES-MANTLE					*Sanguisorbeæ*	*Sp* 7—14							
1513 vulgáris *W en*	common	⚸	△	or	1	jn au	G	Britain	me pa	D	co	Eng bot 597		
1514 montána *W en*	mountain	⚸	△	or	1	jn au	G	Britain	moun	D	co	Mill. ic t 18		
1515 pubéscens *W en*	pubescent	⚸	△	or	½	jn au	G	Caucasus	1813	D	co	Hort ber 2 t 79		
1516 sericea *W en*	silky	⚸	△	or	½	jn au	G	Caucasus	1813	D	co			
1517 alpina *W*	silvery	⚸	△	or	½	jl	G	Britain	rocks	D	co	Eng bot 244		
1518 pentaphýlla *W*	five-leaved	⚸	△	or	½	jl	W	Switzerl	1784	D	co	Bocc. mus 1 t 1		
1519 A'phanes *W*	Parsley-piert	⚸	○	w	½	ap jn	G	Britain	...	D	co	Eng. bot. 1011		
256. SANGUISOR'BA	*W* GREAT-BURNET					*Sanguisorbeæ*	*Sp* 5							
1520 officinális *W*	officinal	⚸	△	ag	2	jn au	Pk	Britain	me pa	S	co	Eng bot. 1312		
β aurucláta	*eared*	⚸	△	or	2	jn au	Pk	Italy	...			Bocc mus 19 t 9		
1521 cárnea *Fisch*	flesh-colored	⚸	△	or	2	jn au	R	.....	1823	D	co	Schr. mon. t. 69		
1522 tenuifólia *Fisch*	fine-leaved	⚸	△	or	2	jn au	Pk	... ..	1820	D	co			
1523 média *W*	short-spiked	⚸	△	or	2	jl s	R	Canada	1785	D	co	Zan h 181. t 138		
1524 canadénsis *W*	Canadian	⚸	△	or	3	jl s	W	Canada	1633	D	co	Cor can t 174		
257 DORSTE'NIA *W*	DORSTENIA.					*Urticeæ*	*Sp* 4—14							
1525 brasiliénsis *W*	Brazilian	⚸	△	cu	½	ap au	G	S Amer	1792	R	s l			
1526 Houstóni *W*	Houston's	⚸	△	cu	½	jn jl	G	S Amer	1747	R	s l	Bot. mag 2017		
1527 Contrajerva *W*	Contrajerva-rt	⚸	△	m	½	my au	G	S Amer	1748	Sk	p l	Jac ic 3 t 614		
1528 arifolia *Lam*	arum-leaved	⚸	△	cu	½	my jl	G	Brazil	1822	R	s l	Bot mag 2476		



History, Use, Propagation, Culture,

sparrow or other small bird The species are all slender, hardy, green-house plants, of pretty appearance, and easy cultivation

250 *Operculária.* From *operculum*, a lid, in allusion to the manner in which the calyx is closed Plants of no beauty

251 *Cryptospermum* From κρυπτω, to conceal, and σπερμα, seed. The seeds, or rather seed-vessels, are hidden in the involucrum Weeds of some tropical countries

252 *Pothos* From *potha*, the native name of this plant in Ceylon Most of the species are sub-parasitic, and found climbing, like ivy, on the trunks of trees in the West Indies and America. In our stoves most of the species will thrive planted in old bark and moss, and plunged in heat P palmata has leaves upwards of three feet long, with a foot-stalk nearly four feet long, palmate, as thick as strong parchment, smooth, with a midrib of a deep green above, and the fructification on spikes more than a foot in length. The species are cultivated for the sake of their foliage, which is always of an agreeable green color, and not liable to discoloration by damp or other accidents of a hot-house

253 *Rivina.* In memory of A Q. Rivinus, a native of Saxony, born in 1652, and died in 1722 He was for a long time professor of botany and medicine at Leipsig, and left behind him some valuable botanical works; and among them a very ingenious attempt at a classification of plants by the corolla, from which some modern botanists have profited more than they have acknowledged The name, as Linnæus observes, with his usual neatness, has been given to a shrub always covered with leaves and fruits, in allusion to the merit of the works of Rivinus. R. octandra, the Hoop-withy of Jamaica, and *tsanc à baril* of Martinique, has a very long tough flexile stalk an inch or more in diameter, and sometimes made into hoops in the West Indies. The berries con-

1493 Leaves opposite ovate rough, Flowers capitate, Heads stalked axiliary

1494 Stem erect 4-cornered and leaves lanceolate entire smooth

1495 Leaves lanceolate entire nerveless
1496 Leaves lanceolate 3-nerved veiny entire, Scape 3-cornered at the end
1497 Leaves ovate lanceolate entire nerved dotted
1498 Leaves obovate lanceolate pointed at both ends ribbed, Spathe oblong acuminate flat stalked
1499 Leaves obl. attenuated at both ends veiny entire, Middle rib convex on both sides with 3 keels at its base
1500 Leaves cordate lobed imbricated, Spathe flat, Scape rounded
1501 Leaves cordate acute, Lobes spreading, Spathe reflexed as long as the erect spadix
1502 Leaves cordate lobes divaricating, Spadix much shorter than the spatha
1503 Leaves cordate very obtuse
1504 Leaves cordate acute, Spadix subglobose
1505 Leaves palmated, Lobes 9 or 10 lanceolate obtuse
1506 Leaves digitate quinate ovate acuminate

1507 Leaves pubescent

1508 Leaves ovate smooth ciliated, Petioles pubescent
1509 Leaves ovate acuminate smooth flat, Stem round
1510 Leaves ovate wavy rugose, Stem furrowed
1511 Flowers octandrous and dodecandrous

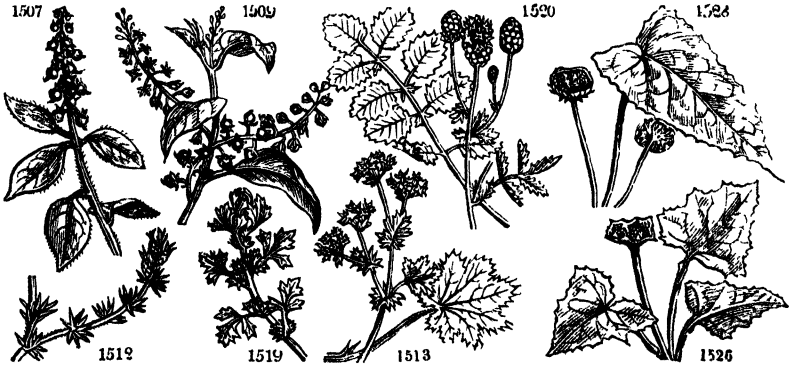
1512 Tufted tomentose hoary, Stems ascending simple

1513 Leaves reniform plaited serrated, Stem and petiole smoothish, Flowers dichotomous corymbose
1514 Leaves reniform 9-lobed beneath with the stem and petioles silky, Flowers fastigiate clustered sessile
1515 Leaves reniform 7-lobed toothed silky beneath, Corymbs terminal
1516 Leaves digitate in sevens lanceolate acute, from the middle to the end deeply serrated silky beneath
1517 Leaves digitate in fives or sevens lanceolate cuneate obtuse serrated or toothed at the end silky beneath
1518 Leaves three together, Leaflets ciliated multifid smooth
1519 Leaves three parted, Segments trifid pubescent, Flowers clustered monandrous

1520 Spike ovate, Stamens shorter than the cor Cal. and leaves smooth, Leaflets ovate subcordate

1521 Leaflets cordate lanceolate crenate toothed quite smooth, Stamens shorter than corolla
1522 Leaflets subsessile ovate-lanceolate finely serrated, Spikes cylindrical, Stamens longer than corolla
1523 Spikes cylindrical, Stamens longer than corolla, Cal somewhat ciliated
1524 Spikes cylindrical very long, Stamens much longer than corolla

1525 Leaves cordate oval obtuse crenulate, Receptacles orbicular
1526 Leaves cordate angular acute, Receptacles quadrangular
1527 Leaves cordate or pinnatifid palmate serrated, Receptacles quadrangular
1528 Leaves cordate sagittate undulated toothed large, Receptacles oval



and Miscellaneous Particulars

stitute the principal part of the food of the American thrush or nightingale, they contain a very oily seed, and after the bird has swallowed many of them he frequently flies to the next bird-pepper bush (Capsicum), and picks a few pods: instinct directing him to what is necessary to promote the digestion of that oleaginous heavy food.

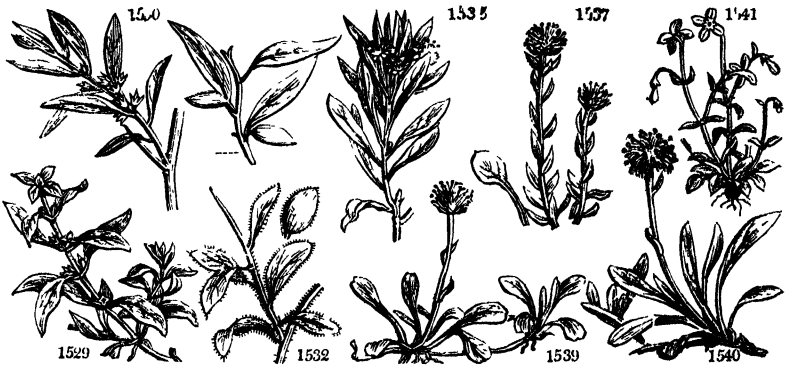
254 *Camphorosma* Barbarously named from two words, the one Latin (*camphora*), and the other Greek (*οσμη*), signifying a smell of camphor. The plant abounds with a volatile oily salt, and is warm and stimulating, but its appearance has nothing to recommend it.

255 *Alchemilla.* Named, as Linnæus asserts, from its supposed alchymical purposes, but, as others maintain, from its Arabic appellation *álkémelych* (*J de Souza*, p. 52) A. vulgaris is eaten readily by horses, sheep, and goats, and is considered a good herbage-plant where it abounds in upland pastures A alpina is an elegant species, common on many of the Highland mountains, and supposed by Lightfoot and others to aid considerably in giving the peculiarly excellent flavor to Highland mutton A aphanes is a worthless weed.

256. *Sanguisorba* From *sanguis*, blood, and *sorbere*, to absorb The plant has passed for an excellent vulnerary This genus greatly resembles Poterium (*Monœcia Polyan*), and Professor Martyn observes, that it is certainly a defect in the Linnæan system that two genera so similar in habit should be placed so far apart. It must be considered, however, that the object of the Linnæan system was less to bring plants together according to all their relative qualities, than to associate them according to one quality, which might serve as an index by which to ascertain their names.

257 *Dorstenia.* In memory of Theodore Dorsten, a German, author of a work entitled Botanicon, printed in 1740. Its flowers, says Linnæus, are like the works of Dorsten, they have little to recommend them. The roots are imported under the name of Contrayerva roots, and used both in medicine and dyeing.

258. ISNA'RDA. *W*	ISNARDA.					*Onagrariæ*	*Sp.* 1—6.					
1529 palústris *W.*	marsh	⚭	○	w	1	jl	G	Eur., &c.	1776.	S	co	Schk. han. 1. t. 25
259. ELÆAG'NUS. *W*	OLEASTER.					*Elæagneæ*	*Sp.* 5—10					
1530 angustifólia *W.*	narrow-leaved	⚘		or	15	jl	Ap	S. Europe	1633	C	co	Pall. ross. 1. t. 4
1531 argéntea *Ph.*	silvery	⚘		or	10	jl au	Ap	N. Amer.	1813.	C	co	
1532 orientális *W.*	oriental	⚘	□	or	10	jl.au	Ap	Levant	1748.	L	p.l	Pall. ross. 1. t. 5
1533 latifólia *W.*	broad-leaved	⚘	□	or	3	jl.au	Ap	E. Indies	1712.	L	p l	Bm. zeyl. t.39.f.2
1534 acumináta *Lk*	acuminated	⚘	□	or	3	...	Ap	.....	...	C	co	
260. GLOBULA'RIA *W.*	GLOBULARIA.					*Globulariæ.*	*Sp* 6—13.					
1535 longifólia *W*	long-leaved	⚘	□	pr	3	jl.au	W	Madeira	1775.	L	p.l	Bot. reg. 685
1536 A'lypum *W.*	three-toothed	⚘	□	pr	2	au.s	Pa	S Europe	1640.	L	p.l	Garid. aix. t. 42
1537 vulgáris *W.*	common	⚘	△	pr	½	my jn	B	Europe	1640	C	p.l	Bot. mag. 2256
1538 spinósa *W*	prickly-leaved	⚘	□	pr	½	my jn	B	Spain	1640.	C	p	
1539 cordifólia *W*	wedge-leaved	⚘	△	pr	½	jn jl	B	Germany	1633.	C	l.p	Jac. aus. 3. t. 245
1540 nudicaúlis *W.*	naked-stalked	⚘	△	pr	½	jn jl	B	Germany	1629.	C	p.l	Jac. aus 3. t. 230
†261. HOUSTO'NIA. *W*	HOUSTONIA					*Rubiaceæ*	*Sp* 2—15					
1541 cærúlea *W*	blue-flowered	⚘	△	pr	½	my au	I. B	N Amer	1785	D	s.p	Bot. mag. 370
1542 purpúrea *W*	purple-flower'd	⚘	△	pr	1	my au	Pu	N Amer.	1800	D	co	Bot cab. 1621
262 DIPSA'CUS. *W*	TEASEL.					*Dipsaceæ*	*Sp* 6—10					
1543 fullónum *W*	clothier's	⚘	○	ag	6	jl	Pu	Britain	hedg.	S	l	Eng. bot. 2080
1544 sylvéstris *W*	wild	⚘	○	w	4	jl	Pu	Britain	m hed.	S	m.s	Eng. bot. 1032
1545 lacinatus *W*	cut-leaved	⚘	○	w	4	jl au	Pu	Germany	1683.	S	m.s	Jac. aus. 5. t. 403
1546 Gmelini *Bieb*	intermediate	⚘	○		3	jl.au	B	Caucasus	1820.	S	m.s	
1547 inérmis *Wall.*	unarmed	⚘	△		4	...	W	Nepal	1823	S	m.s	
1548 pilósus *W*	small	⚘	○		4	au	W	Britain	mo i pl	S	m s	Eng. bot. 877
*263 CEPHALA'RIA	*Schr* CEPHALARIA					*Dipsaceæ.*	*Sp* 1—30.					
§1549 alpina *W*	Alpine	⚘	△	or	3	jn jl	L Y	Switzerl.	1570.	D	co	Be.eys.æs t.8 f.1
§1550 albéscens *W en*	whitish	⚘	△	or	2	jn jl	W	Siberia	1804.	D	co	
§1551 rígida *W*	stiff-leaved	⚘	□	or	2	jl	W	C G H.	1781.	S	p l	Com. hort. 2. t. 93
§1552 attenuáta *W*	narrow-leaved	⚘	□	or	1	jl s	W	C G H.	1774	S	l p	
§1553 transylvánica *W*	Transylvanian		○	or	2	jl	La	Transylv	1699.	S	co	Jac vind 2 t.111
§1554 syriaca *W*	Syrian		○	or	3	jl	W	Syria	1633	S	co	Mor.h 3 t.14 f 14
§1555 leucántha *W.*	white-flowered	⚘	△	or	2	s o	W	France	1739.	D	co	Ger ema 721 f 8
§1556 tatárica *W*	Tartarian	⚘	○	or	6	jn au	L Y	Russia	1759.	S	co	Act.ups 1744 t 1
§1557 uralénsis *W*	Uralian		○	or	5	jl au	Y	Siberia	1789	S	co	Co gott 1782 t 4
§1558 lævigáta *W & K*	smooth	⚘	△	or	1½	jl au	Str	Hungary	1805	D	co	Wl & Kit 3 t 230
β cornuláta	*horned*	⚘	△	or	2	jl au	Str	Hungary	1801.	D	co	W et Kit. t. 13
§1559 cretácea *Bieb*	chalky	⚘	△	or	4	jl au	Str	Caucasus	1818	D	co	
§1560 Vaillantii *Schott*	Vaillant's		○	or	1½	jl au	B	Aleppo	1822	D	co	
§1561 pappósa *W*	downy-headed		○	or	1	jl	W	S Europe	1739	S	co	
*264. SCABIO'SA *W*	SCABIOUS					*Dipsaceæ*	*Sp* 33—103					
1562 dichótoma *W en*	forked	⚘	○	or	1	jn au	Pk	Sicily	1804	S	co	Bocc mus t 120
§1563 Succisa *W*	Devil's-bit	⚘	△	or	1	au o	V	Britain	pas.	D	co	Eng bot 878
1564 integrifólia *W*	red-flowered		○	or	1½	jn au	R	France	1748	S	co	
1565 arvénsis *W*	field	⚘	△	or	2	jl.o	Pu	Britain	cor fi	S	co	Eng bot 659
1566 sylvática *W*	broad-leaved	⚘	△	or	3	jl	Pu	Austria	1633	D	co	Jac aus 4. t 362
1567 longifólia *P S*	long-leaved	⚘	△	or	1½	jl au	La	Hungary	1802	D	co	W et Kit t 5
1568 ciliáta *Spr*	ciliated	⚘	△	or	2	jl au	W	Germany	1802.	D	co	



History, Use, Propagation, Culture,

258 *Isnarda* Antoine Tristan Danti d'Isnard was a French botanist, professor at the Jardin du Roi, and member of the Academy of Sciences, to which he communicated many memoirs upon plants from 1716 to 1724 An obscure marsh plant.

259 *Elæagnus* From ἐλαία, an olive the tree having a striking resemblance to the olive tree E. angustifolia is a low tree with elegant silvery leaves and a brown bark, but not of long duration. All the hardy species are commonly propagated by layers, but according to Sweet and Haynes, "cuttings will strike if taken off at a joint in ripened wood, and planted in a sheltered situation early in autumn" The green-house and stove species strike in sand under a bell-glass

260. *Globularia* From the flowers being packed in *globose* heads The species called Alypum has been so named from α, privative, and λυπη, pain, used by way of antiphrasis, according to Dalechamp, because it is a dangerous purgative Bauhin even calls it Frutex terribilis, but Clusius says, it was used by the Spanish quacks of his day as a cure for venereal diseases. It is however doubtful whether the Alypon of the old botanists is the same with the plant so called by the moderns Cuttings of the shrubby green-house species, taken off before they begin to make new shoots, root freely in loam and peat under a bell-glass, and in moderate bottom heat. The hardy and herbaceous kinds may be propagated from seeds, or divided like daisies Miller says, they prefer a shady situation and a moist loamy soil, but Sweet recommends a light sandy soil. The leaves of most of the species dry black.

261. *Houstonia* Named after Dr Wm Houston, the friend and correspondent of Miller: he died in 1733. The plants are small, elegant in their habits, and very fit for pots or rockwork.

1529 Leaves stalked ovate acute

1530 Leaves lanceolate
1531 Leaves oblong acute at each end silvery, Flowers solitary nodding
1532 Leaves oblong ovate opaque
1533 Leaves ovate
1534 Leaves ovate acuminate wavy

1535 Stem shrubby, Leaves lanceolate linear entire, Flowers axillary subsessile solitary
1536 Stem shrubby, Leaves lanceolate 3-toothed and entire, Heads terminal
1537 Stem herbaceous, Radical leaves about 3-toothed much longer than the stalk, Cauline lanceolate
1538 Radical leaves crenate acuminate, Cauline entire mucronate
1539 Radical leaves wedge-shaped retuse toothed at end the intermediate tooth very small
1540 Stem naked, Leaves entire lanceolate

1541 Leaves radical ovate, Stem compound, First peduncles 2-flowered
1542 Leaves ovate lanceolate, Corymbs terminal

1543 Corona obsolete, Head cylindrical, Bractes recurved, Leaves connate entire subcoriaceous
1544 Corona obsolete, Head cylind. Bractes straight, Involucre weak longer than head, Lvs conn entire or jagged
1545 Leaves of involucre linear-lanceolate rigid about as long as the head, Leaves usually sinuately jagged
1546 Corona membranaceous, Head ovate, Involucre weak deflexed
1547 Leaves oblong serrate villous stalked sublobate, Cauline connate, Heads globular villous
1548 Corona obsolete, Head globose, Involucre deflexed not quite so long as bracteæ

Corollas 4-cleft

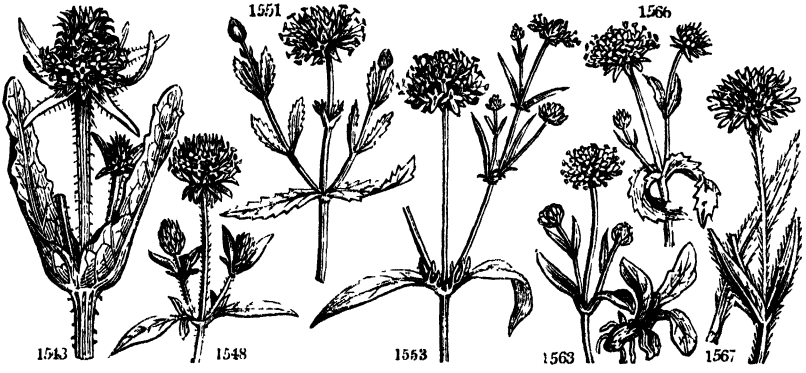
1549 Corona with 8 nearly eq awned teeth, Anth strip. with green at time of open Br acum pub. Corol radiant
1550 Corolla equal, Cal imbr. Radical leaves pinnated, Leafl lanc cut toothed ciliat Caul tern and sim. lin
1551 Corollas 4-fid unequal, Scales of calyx obtuse, Leaves oblong serrated scabrous
1552 Corollas equal, Scales of calyx oblong obtuse, Leaves linear smooth entire trifid and at base pinnatifid
1553 Corona with 8 equal short teeth, Bractes awned, Awns purplish black
1554 Corona with 8 teeth of which 4 are awned and the other 4 very short, Br awned, Awns rufous, Corol equal
1555 Coroll sub-equal, Scales of calyx ovate, Leaves pinnatifid
1556 Corona with 8 awned nearly equal teeth, Anth str with green at time of op Br acum pub Corol radiant
1557 Coroll radiant, Radical leaves simple, Cauline decurrent pinnated, Paleæ arid reflexed at end
1558 Corona with 4-8 obsolete teeth, Bractes awnless yellowish white the outer obtuse the inner acuminate
β Teeth of the corona distorted
1559 Coroll radiant, Calyx imbricated, Leaves coriaceous smooth lanceolate entire the upper lyrate
1560 Coroll equal, Calyx and paleæ awned, Stem simple smoothish, Leaves lanceolate almost smooth

Corollas 5-cleft

1561 Coroll unequal, Stem herbaceous erect, Leaves pinnatifid, Seeds bearded and feathery pappose

Corollas 4-fid

1562 Coroll nearly equal, Stem dichotomous, Leaves oblong cauline entire subsessile radical toothed stalked
1563 Cor equal, Stem simple, Branches approximated, Leaves lanc ovate pubescent, Caul lin nearly entire
1564 Cor radiant, Leaves undivided, Radical ovate serrated, Cauline lanceolate
1565 Coroll radiant, Leaves entire pinnatifid and cut, Stem hispid
1566 Coroll radiant, Leaves all undivided ovate oblong serrated, Stem hispid
1567 Coroll radiant, Leaves oblong lanceolate entire, Stem below smooth above pilose
1568 Coroll sub-radiant, Stem and leaves ovate hispid the lower leaves stalked entire auric or pinn Calyx ci



and Miscellaneous Particulars

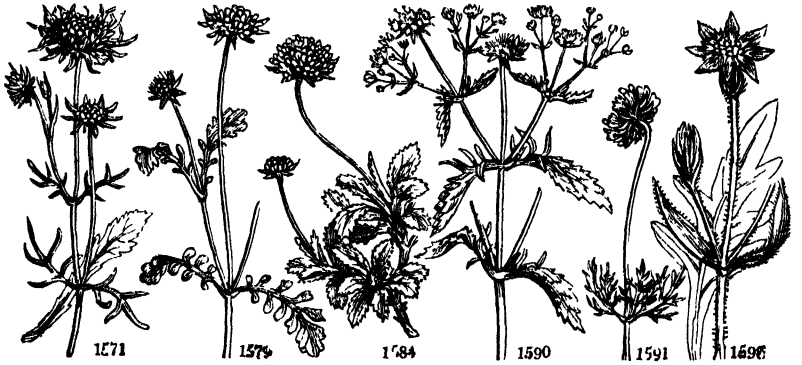
262 *Dipsacus* From διψαω, to thirst At the axillæ of the leaves is usually a quantity of limpid water, which may be acceptable to people who are thirsty This water once had reputation as a cosmetic *Chardon à Foulon*, Fr *Kardendestel*, Ger , and *Dissaco*, Ital D fullonum is cultivated in the west of England for raising the nap upon woollen cloths, by means of the crooked awns or chaffs upon the heads, which in the wild Teasel are not hooked For this purpose they are fixed round the circumference of a large broad wheel, which is made to turn round, and the cloth is held against them The seeds are sown in March, on well prepared strong clayey loam, broad-cast, and at the rate of one peck to the acre They are hoed, like turnips, to a foot distance, and the second year, in August, the heads are fit to cut. They are sold by the bundle or *stave*, twenty-five in each, and the ordinary produce is 160 staves per acre In Essex, carraway is often sown along with teasel, and the second year after the latter is pulled, the former is mown or reaped. (*Young's Annals*, vol xxi p 53)

D pilosus is the handsomest species, the seeds are eaten by small birds, and the flowers frequented by moths in great numbers

263 *Cephalaria* From κεφαλη, a head, in reference to the manner in which the flowers grow A mere artificial division of the genus Scabiosa, from which it differs in no natural characters whatever

264 *Scabiosa* From *scabies*, leprosy The sudorific qualities of this plant are said to be useful in cutaneous diseases. This is a vigorous-growing coarse-looking genus S succisa is one of the few examples of radix præmorsa or bitten-off root, an appearance, as Keith states, owing to the point or top of the seminal root

§1569 **canéscens** *P. S.*	hoary	△	or	1	jl.au	Li	Hungary	1802.	D	co	W.&K.hun. t.53
§1570 **gramúntia** *W.*	cut-leaved	△	or	1	jl au	L.B	S Europe	1597.	D	p.l	Ger herb.582 f 2
§1571 **columbária** *W.*	fine-leaved	△	or	1	jl.au	Pu	Britain	dr. pa.	S	co	Eng bot. 1311
§1572 **grandiflóra** *P S.*	great-flowered	○	or	3	jn.s	W	Barbary	1804.	S	co	Sco dl. ins.3. t.14
§1573 **lúcida** *P. S.*	shining	△	or	2	jn s	B	Dauphiny	1800.	D	co	
§1574 **sícula** *W*	Sicilian	○	or	1	au	Pk	Sicily	1783.	S	co	Jac vind. 1. t. 15
§1575 **rutæfólia** *P S.*	Rue-leaved	△	or	1	jn au		Sicily	1804	D	co	Bocc sic. t 52
§1576 **maritima** *W*	sea	○	or	2	jl	Pu	Italy	1683.	D	co	Mor h 6.t.15 f.29
§1577 **Webbiána** *B R.*	Webb's	△	or	½	jl	W	Mnt. Ida	1818	D	co	Bot. reg. 717
§1578 **holosericea** *Bert.*	silky	△	or	1	jn jl	B	Pyrenees	1818	D	co	
§1579 **stellâta** *W.*	starry	○	or	1½	jl.au	B	Spain	1596.	S	co	Clu. hist.2 p.1.ic
§1580 **prolifera** *W*	prolific	○	or	1	jl au	Y	Egypt	1683.	S	co	Her parad.t 125
§1581 **atropurpúrea** *W.*	sweet	○	or	4	jl s	Br	... ..	1629	S	co	Bot mag 247
§1582 **argéntea** *W.*	silvery	△	or	2	jn o	W	Levant	1711.	D	co	Ann mus 11.t.24
§1583 **urceolâta** *P. S.*	jagged	△	or	3	jl.au	Y	Barbary	1804	S	co	Moris 6. t.13.f.24
§1584 **africána** *W.*	African	□	or	6	jl o	W	Africa	1690.	S	p l	Herm. par t.219
§1585 **nitens** *R. & S.*	Masson's	△	or	...	jn au	...	Azores	1779.	D	co	
Scabiósa lucida H. K											
§1586 **crética** *W*	Cretan	□	or	1	jn o	Pu	Crete	1596	S	p l	Mor h 3.t 15.f.31
§1587 **graminifólia** *W.*	grass-leaved	△	or	1	jn	B	Switzerl	1683	D	p l	Bot reg 835
§1588 **caucásea** *B. M*	Caucasian	△	or	1	jl au	B	Caucasus	1803.	D	p l	Bot. mag. 886
§1589 **lyrâta** *W.*	lyrate-leaved	○	or	1	jl au	Pu	Turkey	1799.	S	s l	
§1590 **palæstina** *W.*	Palestine	○	or	1	jl.au	Ct	Palestine	1771.	S	s l	Jac vind. 1. t. 96
§1591 **isetênsis** *W*	Siberian	○	or	1	jl.au	W	Siberia	1801.	S	s l	Gmel sib 2. t.88
§1592 **ucránica** *W.*	Ukraine	△	or	1	s	L.Y	Ukraine	1795	C	s l	Gmel sib 2 t 87
§1593 **ochroleúca** *W en*	pale-flowered	△	or	1	jl au	Y	Germany	1597	D	s l	Jac aust 5 t 439
§1594 **banática** *P. S.*	Hungarian	△	or	3	jl au	Pk	Hungary	1800.	D	co	W &Kit.10. t.12
265 KNAUTIA. *W.*	KNAUTIA.				*Dipsaceæ*	*Sp.* 2—6					
1595 **orientâlis** *W.*	red-flowered	○	or	1	jn s	R	Levant	1713	S	co	Schk han 1 t.22
1596 **propóntica** *W*	purple-flower'd	○	or	2	jn.au	Pu	Levant	1768	S	co	Till pis.153. t 48
266. GA'LIUM *W*	BED-STRAW				*Rubiaceæ*	*Sp* 26—160					
1597 **rubioides** *W*	Madder-leaved	△	w	1	jl	W	S Europe	1775	D	co	Buxb.cent 2.t 29
1598 **palústre** *W*	marsh	△	w	2	jl au	W	S Europe	m.me.	D	m s	Eng bot 1857
1599 **Witheringii** *E B*	rough	△	w	½	jn.jl	W	England	hea.	D	s.p	Eng bot 2206
1600 **austriacum** *W*	Austrian	△	w	1	jn jl	W	Europe	1804	D	co	Jac. aust. t. 80
1601 **Boccóni** *W*	Boccone's	△	w	1	my jn	Pk	Europe	1801	D	co	Boc. m.145 t 101
1602 **erèctum** *E B*	upright	△	w	1½	jn jl	W	Britain	m pas	D	m.s	Eng bot. 2067
1603 **pusillum** *W*	least	△	w	½	jl au	W	England	moun	D	s l	Eng bot 74
1604 **vérum** *W*	Cheese-rennet	△	w	1½	jl au	Y	Britain	bu pl	D	m s	Eng. bot 660
1605 **Mollúgo** *W*	great-hedge	△	w	2	jl au	W	Britain	hedg.	D	co	Eng. bot. 1673
1606 **sylvâticum** *W*	wood	△	w	3	jl au	W	S Europe	1658	D	co	Flor. dan t 609
1607 **linifólium** *W*	Flax-leaved	△	w	1½	jn jl	W	S. Europe	1759	D	co	Barrel. ic 583
1608 **rígidum** *W*	rigid	△	w	1	jn jl	W	.....	1778.	D	co	
1609 **aristâtum** *W*	awned	△	w	¾	jn jl	W	Italy	1699.	D	co	Boc mus 83. t.75
1610 **tyrolénse** *W en*	Tyrolese	△	w	1	jl	W	Tyrol	1801	D	co	
1611 **glaúcum** *W*	glaucous	△	w	2	jn.s	W	S Europe	1710	D	co	Jac aust. 1 t. 81
1612 **purpúreum** *W*	purple	△	or	1	jn jl	Pu	Switzerl	1731	D	co	
1613 **rúbrum** *W*	red	△	or	1	jn jl	Pu	Italy	1597.	D	co	Ger herb 967 f 3
1614 **spúrium** *E B*	spurious	○	w	1½	jn jl	G	Britain	cor fi	S	co	Eng bot 1871
1615 **uliginósum** *W*	marsh	△	w	½	jl au	W	Britain	mar	D	m s	Eng bot 1972
1616 **ánglicum** *E B*	wall	△	w	½	jl.au	Y	England	Wales	D	s l	Eng bot. 384
1617 **saxatile** *W*	smooth-heath	△	w	½	ap s	W	Britain	hea	D	s p	Eng bot 815
1618 **tricórne** *Sm*	three-horned	○	w	½	jn jl	W	Britain	hea	S	co	Eng bot 1641



History, Use, Propagation, Culture.

dying off, in consequence of which horizontal roots naturally protrude themselves. Why it should rot off is not known, but is vulgarly accounted for by ascribing it to a bite from the devil. The same appearance is found in Plantago, Trifolium, and some other plants with subfusiform roots. A decoction of S succisa is an empirical specific for the gonorrhœa.

S. atropurpurea is the handsomest species, and is cultivated as a border annual and biennial It has been so long in cultivation that its native country is unknown Linnæus and Miller consider it as a native of India; Professor Martyn of the south of Europe.

265. *Knautia.* So named by Linnæus in honor of Christopher Knaut, physician at Halle in Saxony: born in 1636; died in 1694. Another Knaut (Christian) published a system of plants in 1706, which has nothing to recommend it.

266. *Galium.* Derived from γαλα, milk; because one sort is used for the purpose of curding milk. This is a very natural genus; the roots of most of the sorts dye red, and the herb, like madder, colors the bones of animals that feed on it. The stems of all the species are four-cornered, and the leaves in whorls; the flowers ge-

Corollas 5-fid.

1569 Hoary, Coroll. radiant, Stem many-flowered, Radical leaves ovate lanceolate entire, Cauline pinnatifid
1570 Calyx very short, Cauline leaves bipinnate filiform
1571 Coroll. radiant, Radical leaves ovate or lyrate pubescent crenate, Cauline pinnate setaceous
1572 Coroll radiant, Radical leaves oblong crenated, Caul. pinnatifid · the pinnæ linear lanceolate spreading
1573 Coroll radiant, Leaves smooth, Radical ovate oblong serrate or lyrate, Caul. pinnate · the segm. lin cut
1574 Coroll equal shorter than calyx, Leaves lyrate pinnatifid hairy, Stem branched divaricating
1575 Leaves pinnate · the upper linear, Calyces 1-leaved 5-cleft
1576 Coroll. radiant shorter than calyx, Leaves pinnated the upper linear entire
1577 Silky, Lower lvs. stalked roundish or cuneate rugose cren upper pinnat. Florets uniform longer than invol
1578 Hoary very soft, Radical leaves obl crenated upper caul pinnatifid with ovate or lanc crenated segm
1579 Coroll radiant, Lvs cut, Recept. of fruit roundish, Outer limb of calyx broad membran Stem branched
1580 Coroll. radiant, Flowers subsessile, Stem dichotomous, Leaves oblong lanceolate nearly entire pubescent
1581 Coroll. radiant, Leaves cut, Receptacles of the flower subulate
1582 Coroll. radiant, Leaves pinnatifid, Segments linear, Peduncles very long, Stem rounded
1583 Calyx multifid urceolate, Coroll radiant, Leaves fleshy pinnatifid with linear stiff pinnæ
1584 Coroll. equal, Stem shrubby, Leaves simple erect
1585 Coroll. radiant, Leaves undivided elliptical serrated shining stalked

1586 Coroll. radiant, Leaves lanceolate nearly entire, Stem shrubby
1587 Coroll. radiant, Leaves linear lanceolate entire, Stem herbaceous 1-flowered
1588 Coroll. radiant, Radical leaves lanceolate stalked entire, Cauline pinnated, Stem 1-flowered
1589 Coroll. radiant, Segments entire, Lower leaves oblong coarsely serrated upper pinnatifid at base
1590 Coroll. radiant, all the segments trifid, Leaves undivided subserrate the upper pinnatifid at base
1591 Coroll. radiant longer than calyx, Leaves bipinnate longer than stem
1592 Coroll. radiant, Radical leaves pinnatifid, Cauline linear fringed at base
1593 Coroll. radiant, Radical leaves bipinnate with linear leaflets, Cauline pinnate with perfoliate stalks
1594 Coroll. radiant, Radical leaves lyrate, Cauline sub-bipinnate, Calyxes as long as disk

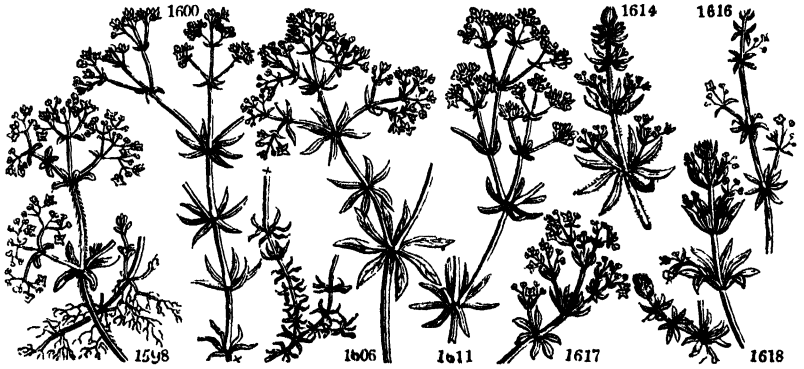
1595 Leaves cut, Cor. 5 longer than calyx
1596 Upper leaves lanceolate entire, Cor. 10 as long as calyx

Fruit smooth.

1597 Leaves 4 ovate lanceolate 3-nerved beneath scabrous, Stem erect simple
1598 Leaves 4 obovate unequal obtuse, Stems diffuse
1599 Leaves 5 reflexed lanceolate awned ciliated, Stem erect simple scabrous
1600 Leaves linear smooth mucronate, Stems 4-cornered diffuse
1601 Leaves 6 linear mucron roughish, Peduncles trichot Stems prostrate diffuse 4 angular winged branched
1602 Leaves 8 lanceolate prickly serrate forwards, Panicles trichotomous, Stems smoothish flaccid
1603 Leaves 8 hispid lanceolate linear acuminate subumbricate, Peduncles twice dichotomous
1604 Leaves 8 linear furrowed with stem smooth to the touch, Branches flexible, the flow-bearing ones short
1605 Leaves 8 elliptical lanceolate obtuse mucronate at the edge rough horizontally spreading, Stem flaccid
1606 Leaves 8 smooth lanc. scabrous beneath, Floral in pairs, Panicle term Ped capill Stem rounded smooth
1607 Leaves 8 linear lanceolate very smooth, Peduncles panicled capillary, Stem rounded
1608 Leaves whorled linear above scabrous, Panicle divaricating, Stem erect rounded pilose roughish
1609 Leaves 8 lanceolate smooth mucronate, Panicle capillary, Petals awned, Stem 4-cornered weak
1610 Leaves 8-6 obovate lanc. mucr rough at edge, Peduncles 3-flow Petals awned, Stem 4-cornered smooth
1611 Leaves whorled linear, Peduncles dichotomous flower-bearing from the top of the stem which is smooth
1612 Leaves whorled linear setaceous, Peduncles capillary longer than the leaves
1613 Leaves whorled linear spreading, Peduncles very short
1614 Leaves 6 lanceolate keeled rough aculeate backwards joints simple
1615 Leaves 6 or 8 lanceolate prickly serrate backwards mucronate stiff, Cor. larger than fruit
1616 Leaves 6 linear lanceolate mucronate thin, edges and the stem scabrous, Peduncles bifid, Fruit granular

Fruit rough or hispid

1617 Leaves 4-6 oblong with short point rough at edge, Panicles close, Stem weak short smooth
1618 Leaves 8 lanc at edge and stem aculeate backwards. Peduncles axillary 3-fl Fruit granular nodding

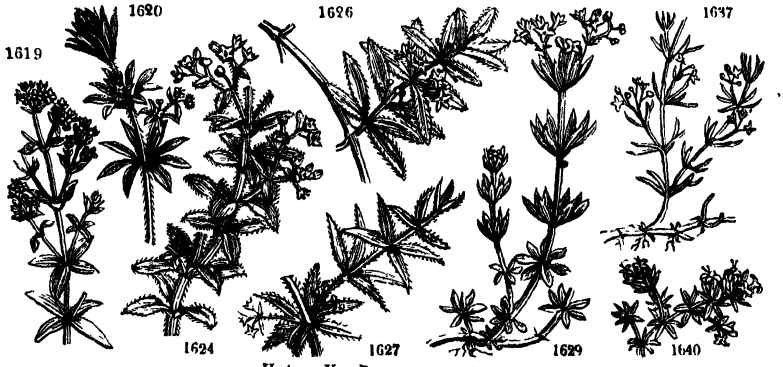


and Miscellaneous Particulars.

nerally axillary, but sometimes panicled. G. verum, *petit Muguet*, Fr. is called bed-straw, from the verb to strew, strow, or straw, being one among a variety of odoriferous herbs which were formerly used to strew beds with. The bruised plant is sometimes put in milk intended for cheese to give it a flavor and color. Boiled in alum-water, the flowering stems dye a good yellow color, and the roots a red equal to madder They were once cultivated like that plant, at the recommendation of the Committee of Council for Trade, and yielded 12¾ cwt. of dried roots per acre. G mollugo, of which there are several varieties, and G. sylvaticum and boreale have similar qualities, though in a less degree.

G. aparine, (from *ἁπτω*, to lay hold of), has the fruit set with hooked bristles which adhere to whatever they come in contact with, whence it was called by the Greeks *Philanthropos* (man-lover), and by us cleavers, catch-weed, *scratch-weed*, &c ; and from being a favorite food or medicine with geese, goose-grass, &c Linnæus informs us, that they use the stalks in Sweden as a filtre to strain their milk through Dioscorides relates, that the shepherds made the same use of it in his time, and certainly it is no bad thing to take hairs from milk, where a sieve is not at hand. It is reckoned to purify the blood, and for that purpose the tops are

1619 boreäle *W.*	cross-leaved	✱	△	w	1½	jl	W	Britain	moun.	D	co	Eng bot. 10
1620 Aparine *W.*	Cleavers	⅄	○	w	3	my.au	W	Britain	hedg.	S	co	Eng. bot. 816
1621 pilósum *W*	hairy	⅄	△	w	1	jn.jl	W	N. Amer	1778.	D	co	
1622 græ'cum *W.*	Candian	⅄	△	cu	½	jn.jl	Pu	Candia	1798.	D	co	Alp.ex.167. t.166
267. RU'BIA *W.*	MADDER.				*Rubiaceæ*		*Sp.* 6—17.					
1623 tinctórum *W*	dyer's	✱	△	ag	4	jn	Y	S. Europe	1596.	D	s l	Lam. ill. t.60 f.1
1624 peregrina *W.*	wild	✱	△	w	2	jl	Y	England	bu pl.	D	co	Eng. bot. 851
1625 lúcida *W.*	shining	⅄	□	w	2	jl	Y	Majorca	1762.	C	l p	Fl græc t 142
1626 fruticósa *W*	prickly-leaved	⅄	□	w	4	s	Y	Canaries	1779	C	p l	Jac. ic l. t. 25
1627 angustifólia *W*	narrow-leaved	⅄	□	w	2	jl.au	Y	Minorca	1772	C	l p	Lam ill. t 60 f.2
1628 cordifólia *W.*	heart-leaved	✱	△	cu	½	jl	W	Siberia	1783.	D	p l	Pall. it. 3. t. 2. f.1
268 ASPE'RULA *W.*	WOODROOF.				*Rubiaceæ*		*Sp* 14—30					
1629 odoráta *W.*	sweet-scented	⅄	△	or	½	my.jn	W	Britain	woods	D	s l	Eng. bot 755
1630 arvénsis *W*	field		○	w	½	jl	Li	Europe	1596	S	co	Lob ic. t 801. f.2
1631 hirta *P S.*	hairy	⅄	△	pr	½	jn jl	Pu	Pyrenees	1817	D	co	
1632 hirsúta *Desf*	hirsute	⅄	△	pr	½	my jn	W	Portugal	1819.	D	co	
1633 taurina *W.*	broad-leaved	⅄	△	pr	1	ap jn	W	Italy	1739	D	s l	Moris.s.9.t.21.f.1
1634 crassifólia *W*	thick-leaved	⅄	△	pr	½	jn	W	Levant	1775	D	s l	
1635 aristáta *L*	awned	⅄	△	pr	1	jl au	Y	S. Europe	1823	D	co	
1636 scábra *Lk*	rough	⅄	△	pr	1	jn jl	W	Italy	1824.	D	co	
1637 tinctória *W*	narrow-leaved	⅄	△	pr	½	jn jl	Pk	Europe	1764	D	s l	Tab. ic t.733. f.1
1638 cynánchica *W*	small	⅄	△	pr	½	jl	F	England	ch hill.	D	s l	Eng. bot. 33
1639 supina *Bieb*	supine	⅄	△	pr	½	jn	Pk	Caucasus	1821.	D	co	
1640 arcadiénsis *B M*	Arcadian	⅄	△	pr		my		Arcadia	1819.	D	co	Bot mag. 2146
1641 lævigáta *W*	shining	⅄	△	pr	1	jn	W	S Europe	1775.	D	s l	Mor. his t 21. f 4
1642 montána *W. en.*	mountain	⅄	△	pr	1	jn jl	Pk	Hungary	1801	D	co	
269 SHERAR'DIA *W*	FIELD-MADDER				*Rubiaceæ*		*Sp* 2					
1643 arvénsis *W*	little		○	w	¼	ap s	B	Britain	cor fi.	S	co	Eng bot 891
1644 murálls *W.*	wall		○	w	½	jn au	Y	Italy	1805.	S	co	Allion t 77. f 1
*270 SPERMACO'CE *W*	BUTTON-WEED.				*Rubiaceæ*		*Sp* 13—65					
1645 tenúior *W.*	slender		○	w	2	jn au	Pk	W Indies	1732	S	co	Sch hand 1 t 22
1646 latifólia *W.*	broad-leaved	⅄	▣	w	2	jl	W	Guiana	1803	S	s l	Aublet t 19 f 1
1647 strigósa *B M.*	Cross-wort		▣	w	1	jl au	W	W Indies	1760	S	s l	Bot mag 1558
1648 radicans *W*	rooting	⅄	⍓	w	½	jl	W	Guiana	1803.	S	s l	Aublet I t 20 f 4
§1649 verticillàta *W*	whorl-flowered	⅄	□	w	2	jn au	W	Africa	1732	S	s p	Du el t 277 f 358
1650 hispida *W.*	bristly		▣	w	1½	au s	V	E. Indies	1781	S	s l	Mur co got. 3 t 6
1651 rúbra *Jacq*	red	⅄	▣	w	1	jn au	Pu	.....	1804	S	s l	Jac.schœn. t.256
§1652 stricta *L*	upright		▣	w	½	jn jl	W	E Indies	1820.	S	s l	
1653 stylósa *Lk*	long-styled		▣	w	1	my jn	W	Manilla	1819	S	s l	
1654 cornifólia *Fisch.*	dogwood-leav'd		▣	w	1	my jn	R	Brazil	1819	S	s l	
1655 Fischéri *Lk*	Fischer's		▣	w	1	my jn	W	Jamaica	1821	S	s l	
1656 suffruticósa *Jacq.*	suffruticose	⅄	□	w	½	jn au	F	.....	1824	C	s l	Jac.schœn t 322
1657 mucronáta *Nees*	mucronate	⅄	⍓	w	2	jn jl	W	Jamaica	1822.	D	s l	
†271 CRUCIANEL'LA	*W* CROSS-WORT.				*Rubiaceæ*		*Sp* 9—16					
1658 angustifólia *W*	narrow-leaved		○	cu	½	jn jl	Y	France	1658	S	co	Ex bot 2. t 109
1659 latifólia *W*	broad-leaved		○	cu	½	jn jl	G	France	1633	S	co	Barr ic t 520



History, Use, Propagation, Culture,

an ingredient in spring-broth The expressed juice of the herb, taken to the amount of four ounces or a quarter of a pint night and morning, during several weeks, is very efficacious in removing many of those cutaneous eruptions, which are called, though improperly, scorbutic The seeds have been substituted for coffee The roots, like those of most of the species, will dye red, and, eaten by birds, tinge their bones of that color It is a very troublesome weed, particularly in young hedges, but being an annual is easily eradicated

G tuberosum is cultivated in China for the roots, which are eaten boiled, either whole or in meal, and Loureiro says, are esteemed salubrious It has not yet been introduced

267. *Rubia.* From *ruber*, red R tinctorum has an annual stalk, which trails or climbs, supporting itself in the latter case by its leaves and prickles Its root is composed of many long thick succulent shoots nearly half an inch in diameter, striking deep into the ground, and growing to the length of three or four feet. From them is procured a well-known red and scarlet dye used by clothiers and callico-printers, and employed to a great extent, though chiefly from foreign roots England was formerly supplied with this article exclusively from Holland, and as in times of political derangement the price was greatly increased, its dearness induced some patriotic individuals, who had recently set on foot the Society of Arts, to attempt its culture in England. Miller paid great attention to the subject about 1758, publishing separately, as well as in his Dictionary, the Dutch practice as observed by him while in Holland A Young, in his "Annals," details several trials; the result of which, and especially those of J Arbuthnot in 1765, proves, that it could be grown here to as great perfection as in Holland, but not sold at so low a price Its culture was not therefore encouraged, and we are now supplied from Holland, France, Italy, and Turkey, and the cochineal is very generally in use as a substitute. Like others of the natural order of Rubiaceæ, madder tinges with a florid red color the milk, urine, and bones of the animals that feed on the plant. The hardest part of the bones receives the color first, which gradually extends through the whole substance, but if the plant be alternately given and inter-

1619 Leaves 4 lanceolate 3-nerved smooth, Stem erect, Fruit hispid
1620 Leaves 8 lanc. keels and edge scab. acul. backw Stem flaccid, Joints vill. Fruit covered with hooked hairs
1621 Leaves 4 subovate pilose nerveless, Fruit hairy
1622 Hairy leaves about 6 linear lanceolate, Stems woody

1623 Leaves 6 lanceolate smooth above: their edge and keel beneath scabrous, Stem herbaceous aculeate
1624 Leaves 4 perennial lanceolate above shining smooth their edge and rib beneath scabrous
1625 Leaves perennial 6 elliptical shining, Stem smooth
1626 Leaves perennial elliptical at the edge and keel very prickly, Stem rough shrubby
1627 Leaves perennial linear above scabrous
1628 Leaves perennial 4 cordate oblong stalked 3-nerved above and at the edges scabrous

1629 Leaves 8 lanceolate, Corymbs terminal stalked, Seeds echinate
1630 Lower leaves 4 obovate, upper 5-6-8, Flowers terminal sessile aggregated, Involucres ciliated
1631 Leaves hairy acute 6 longer than the joint, Flowers terminal aggregate sessile longer than involucrum
1632 Leaves 6 linear acute toothletted . the lower hirsute, Flowers aggregate terminal
1633 Leaves 4 ovate lanceolate 3-nerved, Flowers fascicled terminal
1634 Leaves 4 together oblong . the lateral revolute obtuse pubescent
1635 Leaves linear fleshy: the lower 4, Flowers 3 awned
1636 Cauline leaves 4 linear the lower elliptical the upper in pairs all rough awned, Cor rough
1637 Leaves linear the lower 6 3-nerved, the middle 4, the upper opposite, Stem flaccid, Cor smooth 3-fid
1638 Lower leaves 4 lanceolate upper linear very unequal in pairs, Stem erect, Fruit smooth tubercled
1639 Leaves 4 linear the lower imbricate, Stem much branched at base procumbent, Flowers 4-fid
1640 Hispid, Leaves 6 oblong-ovate acute revolute at edge, Stems decumbent
1641 Leaves 4 elliptical obsoletely nerved smooth glabrous at edge, Fruit scabrous
1642 Leaves linear the lower 6, middle 4, upper opposite, Stem flaccid, Cor 4-fid scabrous outside

1643 Lower leaves 8 and 4, Flowers terminal, Stem and branches scabrous, Involucres naked
1644 Leaves 6 linear. floral in pairs opposite, Branches simple, Flowers two, Fruit hispid subsessile

1645 Smooth, Leaves lanceolate, Stamens included, Flowers whorled, Seeds hairy
1646 Smooth, Leaves ovate, Stamens exserted, Flowers whorled ciliated
1647 Leaves and bractes oblong ovate hispid, Stalks stem-clasping, Flowers capitate, Stamens exserted
1648 Smooth, Leaves subsessile lanceolate acute, Flowers whorled small, Stem procumbent rooting
1649 Smooth, Leaves lanceolate, Whorls globose
1650 Hispid, Leaves obovate oblique, Flowers axillary in pairs
1651 Hairy, Leaves ovate the upper four together, Heads terminal
1652 Leaves linear-lanceolate lined
1653 Stem decum. rounded smooth, Lvs obl lanc atten at base, Stipules setose, Fl. whorled, Style exserted
1654 Stem erect slightly downy, Leaves stalked oblong acute rough and pubescent at edge, Stamens exserted
1655 Stem erect 4-cornered hairy, Leaves acute entire lined pubescent with very short hairs, Flowers termina.
1656 Stem ascending very smooth 4-cornered, Leaves stalked ovate acuminate thin, Flowers whorled
1657 Resembles Sp verticillata, but the leaves are shorter and obtuse with a point, at the edge and back rough

1658 Erect, Leaves 6 linear, Flowers spiked
1659 Procumbent, Leaves 4 lanceolate, Flowers spiked



and Miscellaneous Particulars

mitted, the bones are found to be colored in concentric circles In medicine, madder was formerly used in complaints of the kidnies

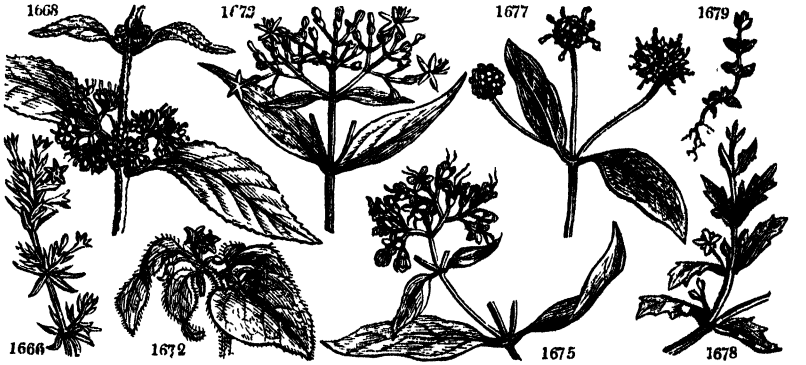
To cultivate the madder, choose a deep sandy loam, and prepare it by trenching or very deep ploughing Plant cuttings of the roots in rows, eighteen inches by one foot in the row, in March, and the third year they may be taken up in September The roots are next kiln-dried, and afterwards threshed to clean them from earth and dust. They are then dried a second time, and immediately afterwards pounded or stamped in a mill. It is cultivated extensively in Zealand, and especially in the isle of Schowen · round Avignon and in Lombardy it is grown on narrow ridges, and irrigated by directing water along the furrows.

268. *Asperula* From *asper*, rough The species *cynanchica* is so called from κυναγχη, to choak, it being a specific in cases of squinancy. The English name of this genus is supposed to be a corruption of the word *woodrowel*, the whorls of leaves, according to Turner, representing certain kinds of "rowelles of sporres." All the species, excepting arvensis and cynanchica, will thrive in the shade and drip of trees in a moist soil A. odorata has a pleasant scent like Anthoxanthum: it imparts a grateful flavor to wine, an agreeable perfume to clothes, and preserves them from insects. It is eaten by cattle and horses, and from containing an acid principle, with much fixed alkaline salt, has been thought useful in obstructions of the liver and biliary ducts The roots of A. tinctoria are used in Gothland to dye wool a red color.

269. *Sherardia*. So named in honor of the famous Sherard, of whose noble garden at Eltham Dillenius's Hortus Elthamensis is a living monument, and whose herbarium is still one of the few things which recommend Oxford to the notice of a botanist. This is a little insignificant weed, by no means worthy to be consecrated to the memory of so celebrated a man.

270. *Spermacoce*. From σπερμα, seed, and ακη, point. The seeds have two remarkable points. The rubbish of the tropics.

1660 **ægyptíaca** *W.*	Egyptian		○		½	jn.jl	Y	Egypt	1800.	S	co	
1661 **pátula** *W.*	spreading		○		½	jn.jl	Y	Spain	1798.	S	co	
1662 **pubéscens** *W.*	pubescent	♐	△		1	jl au	Pu	Candia	1799.	C	l.p	
1663 **ciliáta** *W.*	ciliated		○		½	jl.au	Y	Levant	1805.	S	co	
1664 **maritima** *W.*	sea	♎	▭		1	jl.au	Y	France	1640.	C	l.p	
1665 **monspeliaca** *W.*	Montpelier		○		½	jl.au	Y	France	1791.	S	l.s.p	
1666 **molluginoídes** *W.en.*	Mollugo-like	♐	△		1	jl au	G	Caucasus	1800.	D	co	Bux.cn.2.t.30.f.1
272. CALLICAR'PA. *W.* Callicarpa.					*Verbenaceæ. Sp* 5—22.							
1667 **americána** *W.*	American	♃	▭	or	6	jn jl	R	N Amer.	1724.	C	s.p	Cat. car. 2. t. 47
1668 **cána** *W*	hoary	♃	▭	or	3	...	Pu	E. Indies	1799.	C	s.p	Bot mag. 2107
1669 **lanáta** *W*	woolly	♃	▭	or	4	jn jl	Pu	E. Indies	1788.	C	l.p	
1670 **macrophýlla** *W.*	long-leaved	♃	▭	or	6	...	Pk	India	1808.	C	s.p	Vah.symb.3.t.53
1671 **ferruginea** *W.*	rusty	♃	▭	or	2	jn.jl	B	Jamaica	1794.	C	l.p	
273. WITHERIN'GIA *W* Witheringia					*Solanaceæ Sp* 1—12							
1672 **solanácea** *W.*	yellow-flower'd	♐	⍓		1	my.s	Y	S. Amer.	1742.	D	l.p	L'Her.ser 33. t.1
274. ÆGI'PHILA *W* Ægiphila.					*Verbenaceæ Sp* 4—12.							
1673 **martinicénsis** *W.*	Martinique	♃	▭	or	6	n	W	W Indies	1780.	S	p.l	Jac. obs. 2. t. 27
1674 **fœ'tida** *W.*	fœtid	♃	▭	or	2	jn.jl	Li	W Indies	1800.	C	l.p	
1675 **diffúsa** *Andr.*	diffuse	♃	▭	or	2	jl.au	Y	W Indies	1804.	C	l.p	Bot. rep. 578 f. 1
1676 **obováta** *Andr.*	oval-leaved	♃	▭	or	2	jl au	Y	W Indies	1804.	C	l.p	Bot. rep. 578. f. 2
275. CEPHALAN'THUS. *W.* Button-wood					*Rubiaceæ Sp* 1—10.							
1677 **occidentális** *W.*	American	♃		or	7	au	W	N Amer.	1735.	S	s.l	Schm. arb.1. t.45
276. SCOPA'RIA. *W.* Scoparia.					*Scrophularinæ. Sp* 1							
1678 **dúlcis** *W.*	sweet		⍓	cu	3	jn s	W	Jamaica	1730.	S	s.l	Herm. par t.241
277 CENTUN'CULUS. *W* Bastard-pimpernel.					*Primulaceæ Sp.* 1—4.							
1679 **minimus** *W.*	least		○	cu	½	jn jl	F	Britain	moi. h.	S	p.l	Eng. bot. 531
278. PLANTA'GO. *W.* Plantain.					*Plantagineæ Sp.* 42—115.							
1680 **major** *W*	greater	♆	△	w	1	my jn	W	Britain	me. pa.	D	co	Eng bot. 1558
1681 **crispa** *Jacq.*	thick-leaved	♆	△	w	½	jn jl	W	S. Europe	1793.	D	s.l	Jc co sup 34 t 16
1682 **asiática** *W*	broad-leaved	♆	△	w	1	jl	W	Siberia	1787.	D	s.l	Gmel sib.4. t.37?
1683 **máxima** *W.*	hollow-leaved	♆	△	w	2	jl au	G	Siberia	1763.	D	co	Jac ic. 1 t. 26
1684 **média** *W*	hoary	♆	△	w	1½	my jl	G	Britain	me. pa.	D	co	Eng bot. 1559
1685 **virginica** *W.*	Virginian		○	w	½	jn s	G	N Amer.	1688.	S	co	Mor.h.3. t.15. f 8
1686 **altíssima** *W.*	tall	♆	△	w	3	jn jl	G	Italy	1774	S	co	Jac. obs. 4. t. 83
1687 **lanceoláta** *W*	Rib-grass	♆	△	ag	½	my jl	G	Britain	me. pa.	S	co	Eng. bot. 507
1688 **capénsis** *W*	Cape	♎	▭	w	1	my au	G	C G H.	1788.	C	co	
1689 **Lagópus** *W.*	round-headed	♆	△	w	1	jn.jl	G	Spain	1683.	S	co	W. ph.4.t.890.f.2
1690 **túmida** *Lk*	swelling		○	w	1	jn jl	G	Chili	1819.	S	co	
1691 **mexicána** *Lk.*	Mexican	♆	△	w	1	jn jl	G	Mexico	1820.	D	co	
1692 **kamtchática** *Lk*	Kamtchatka	♆	△	w	½	jn jl	G	Kamtsch.	1819.	D	co	
1693 **tenuiflóra** *W & K*	slender-flower		○	w	½	jn jl	G	Hungary	1802.	S	s l	Pl. rar. hn 1 t.39
1694 **sálsa** *Pall*	grassy	♆	△	w	½	jl s	G	Siberia	1804.	D	s l	
1695 **lusitánica** *W.*	Portuguese	♆	△	w	½	jl au	W	Spain	1781.	D	s l	Bar. ic 119 t.745
1696 **álbicans** *W*	woolly	♆	△	w	½	jn s	G	S Europe	1776.	D	s.l	Cav. ic. 2. t. 124?
1697 **patagónica** *W*	Patagonian		○	w	½	jn s	Y	Patagonia	1793	S	s l	Jac. ic. 2 t 306
1698 **hirsúta** *W*	hairy	♐	⍓	w	1	jn jl	G	C G. H	1801.	S	s l	Jac.schœ.3 t.258
1699 **villósa** *P. S*	villous		○	w	½	jn jl	G	Germany	1804.	S	s.l	
1700 **Wulfénı** *W en.*	Wulfen's	♆	△	w	½	jn jl	G	Germany	1802.	D	co	
1701 **alpina** *W*	Alpine	♆	△	w	½	jn jl	W	Austria	1774.	D	s l	Jac.vind 2 t.125
1702 **Bellárdi** *W*	Bellardi's		○	w	½	jn jl	G	S. Europe	1797.	S	co	Al ped.1.t.85.f 3
1703 **crética** *W*	Cretan		○	w	½	jn jl	G	Candia	1711.	S	co	



History, Use, Propagation, Culture,

271. *Crucianella* A diminutive of *crux*, a cross, some of the roots having their leaves in whorls of four These are small herbaceous plants of little beauty, natives of the south of France, and rarely seen in this country except in botanic gardens

272. *Callicarpa* From καλος, beautiful, and καρπος, fruit Its berries are of a bright purple color.

273. *Witheringia* In honor of Dr W. Withering, the author of a classification of English plants, which has been one of the most popular of our English botanical works, and deservedly so, although it has now yielded to others of a more modern character.

274 *Ægiphila.* From αιξ αιγος, a goat, and φιλος, friend, beloved by goats In Martinique the plant is called *Bois de Cabri.*

275. *Cephalanthus.* From κεφαλη, a head, and ανθος, a flower, because the flowers grow in heads. This is a low evergreen shrub, with large light green leaves, and the flowers in spherical heads, about the size of a musket bullet. It has a good effect on lawns in scattered groups, or in the front ranks of shrubberies. Sweet says, "soil that has some peat in it suits them best," and that they are readily propagated by layers, or ripened cuttings under a hand-glass. Miller, in whose time the art of striking cuttings was not nearly so well understood as at present, recommends a moist light soil, and propagating from seeds.

1660 Leaves 4 sublinear, Flowers spiked 5-cleft
1661 Diffuse, Leaves 6 revolute at edge, Bract. linear subulate roughish, Flowers scattered
1662 Erect, Leaves 6 linear pubescent, Heads stalked axillary and terminal
1663 Diffuse, Leaves 4 or 2 lin. keeled, Bract ciliated loosely spiked, Seeds oval covered with obtuse tubercles
1664 Procumbent suffruticose, Leaves 4 mucronate, Flowers opposite 5-cleft
1665 Procumbent, Leaves acute, of the stem in 4s ovate, of the branches 6 linear, Flowers spiked
1666 Erect, Leaves whorled 8-12 linear lanc. scab. Fascic. of flowers stalked term. and axillary, Cor. 5-cleft

1667 Lvs. ovate acum uneq. obtusely toothed at base wedge-shaped atten. entire beneath and branches toment.
1668 Leaves ovate toothletted running down the petiole beneath hoary villous, Panic dichotomous
1669 Leaves ovate rounded at base entire somewhat toothletted rugose above beneath with the branches woolly
1670 Leaves ovate lanc serrulate reticul. hoary beneath, Corymbs axillary dichotomous longer than petioles
1671 Leaves broad lanceolate serrate roughish beneath, Cymes terminal and axillary

1672 Stem hairy herbaceous angular, Leaves ovate lanceolate pilose, Stalks 1-flowered umbelled axillary

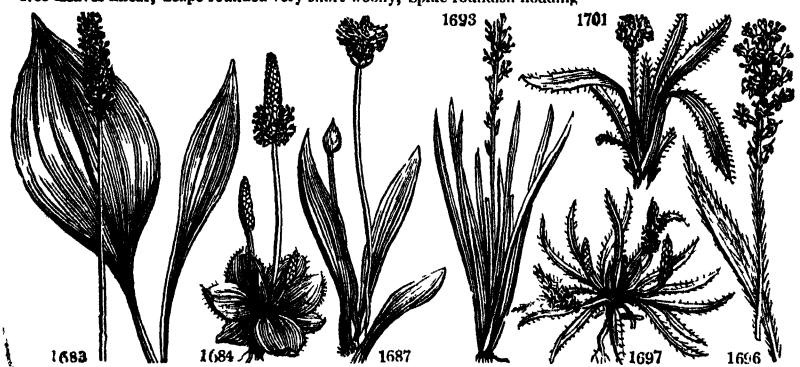
1673 Leaves ovate lanceolate acuminate smooth, Branches diffuse, Panic. terminal and axillary, Cal smooth
1674 Leaves ovate lanceolate beneath and the stalks hairy, Peduncles axillary solitary
1675 Leaves ovate lanceolate with a long point smooth on both sides, Pan diffuse axillary and terminal
1676 Leaves obovate acuminate smooth on both sides, Pan. axillary and terminal, Stalks and calyxes less pub.

1677 Leaves opposite and ternate oblong oval acuminate

1678 Leaves 3 together, Flowers stalked

1679 Leaves alternate ovate, Flowers sessile

1680 Lvs. ovate smoothish generally shorter than footst. Scape rounded, Spike cyl. slender, Caps many-seeded
1681 Leaves obovate shining undulated fleshy sessile, Scape compressed below, Flowers imbric remote at base
1682 Leaves ovate smooth somewhat toothed, Scape angular, Spike with distinct flowers
1683 Leaves ovate subdenticulate 9-nerved pubescent, Spike cylindrical imbricated, Scape rounded
1684 Leaves ovate pubescent longer than the footstalk, Scape rounded, Spike short cylindrical, Filam lilac
1685 Leaves lanceolate ovate pubescent toothletted, Spikes cylindrical pubescent, Scape angular
1686 Leaves lanceolate 5-nerved toothed smooth, Spike oblong cylindrical, Scape angular
1687 Leaves lanceolate acuminated both ways, Spike short ovate cylind. Scape angular, Caps. 2-seeded
1688 Leaves elliptical, Spike with distinct flowers
1689 Leaves lanceolate somewhat toothed, Spike ovate hairy, Scape rounded
1690 Leaves linear lanceolate toothletted silky, Scapes ascending with appressed hairs, Caps tumid
1691 Leaves lanceolate linear entire, Hairs scattered, Scapes erect rounded, Spike cylindrical dense
1692 Leaves oblong toothed 5-nerved hairy, Scapes ascending angular hairy, Spike cylindrical dense
1693 Leaves linear nearly entire obtuse fleshy, Scape rounded, Spike erect, Flowers distant
1694 Leaves linear convex beneath a little toothed smooth, Scape rounded hirsute, Spike cylindrical smooth
1695 Leaves broad lanceolate 3-nerved a little toothed pilose, Scape angular, Spike oblong hairy
1696 Leaves lanceolate oblique villous, Spike cylindrical erect, Scape rounded
1697 Leaves lanc. lin. somew. chan. ent woolly, Scape rounded hirsute, Spike cyl Stam. not longer than flower
1698 Leaves linear ciliated, Spike cylindrical, Stem hirsute
1699 Subcaulescent, Lvs. lin lanc obsol 3-nerv toothl. hoary, Spike roundish, Br winged keeled shorter than fl
1700 Leaves linear attenuated both ways flat 3-nerved, Scape rounded
1701 Leaves lin. atten remotely toothed, Scape rounded hairy, Spike obl acute, Br ovate membranous at edge
1702 Leaves linear lanceolate hairy longer than the rounded hairy scape, Spike ovate erect, Bractes lanceolate
1703 Leaves linear, Scape rounded very short woolly, Spike roundish nodding



and Miscellaneous Particulars.

276 *Scoparia.* From *scopa*, a broom In the Antilles brooms are made of the twigs This plant is treated as a tender annual, and after being raised in the hot-house or hot-bed, is potted off, and kept in the greenhouse, or planted out in the flower borders.

277. *Centunculus.* A name given by the Romans to a small plant found in cultivated lands The present is a little mean weed of no use or beauty

278. *Plantago.* A name of which no satisfactory explanation has been given. Of the species, Psyllium is derived from ψυλλος, a flea, in allusion to the appearance of its little seeds Lagopus, from λαγος, a hare, and πους, foot; its velvety or silky spike resembling the foot of such an animal. Coronopus, from κορωνη, a crow, and πους, foot; its deeply-cut leaf having been compared to a bird's foot Cynops, signifying dog's-eye, is the name of a plant of Pliny, and one of his plantains This is a genus of little beauty, and no great utility. Like all other plants known to our botanical forefathers, they were said to have their medical virtues, but that is nothing, or at least but little guide to their absolute use in the arts P lanceolata (rib-grass) has been employed in agriculture as a herbage plant, but to which it appears to have no great claim Where it abounds naturally, it is a certain indication of a dry soil Haller attributes the richness of the milk in the alpine dairies to this plant and Alchemilla vulgaris, but Linnæus says cows refuse it. This every shepherd knows to be the case as far as

1704 **maritima** *W.*	sea	☿	△	w	½	jl	G	Britain sea co.	S	co	Eng. bot. 175
1705 **graminea** *P. S.*	grass-leaved	☿	△	w	½	jn jl	G	France 1804.	D	co	Dod. pempt. 108
1706 **recurvata** *W.*	recurved-leav'd	☿	◯	w	½	jn jl	G	S. Europe 1799.	S	s.l	M.co.go.1780. t 6
1707 **subulata** *W.*	awl-leaved	☿	△	w	½	jl	W	S. Europe 1596.	D	s l	Lob. ic. 439
1708 **macrorhiza** *W.*	large-rooted	☿	△	w	½	jl au	Br	Morocco 1798.	D	s l	Mor h.3. t.17. f 2
1709 **Serraria** *W.*	saw-leaved	☿	△	w	1	jn jl	G	Barbary 1640	D	s l	Col.ecphr. t. 259
1710 **Corónopus** *W.*	Star of the earth		◯	clt	½	ap s	G	Britain sea sh	S	s.l	Eng. bot. 892
1711 **Læffingii** *W.*	narrow-leaved		◯	w	½	jl.au	G	Spain ...	S	co	Jac. vind.2. t.126
1712 **Cornuti** *W*	rough-leaved	☿	△	w	2	jl.au	G	 1801	S	co	
1713 **amplexicaulis** *W.*	stem-clasping		◯	w	½	jn jl	G	Spain 1797	S	co	Cav. ic 2 t. 125
1714 **Psyllium** *W.*	Fleawort		◯	w	½	jl au	G	S Europe 1562	S	co	Mor.h 3 t.17. f.4
1715 **arenaria** *P S.*	sand		◯	w	½	my.au	G	Hungary 1804.	S	co	W. & Kit. t. 51
1716 **squarrosa** *W.*	leafy-spiked		◯	w	2	au s	G	Egypt 1787	S	co	Jac. ic. 1. t. 28
1717 **indica** *W*	Indian		◯	w	½	jl au	G	India 1780	S	co	
1718 **stricta** *P S*	upright		◯	w	1	jl au	G	Morocco 1804	S	co	Sch mar.1.ic.145
1719 **pumila** *W.*	dwarf		◯	w	½	jl au	G	S Europe 1790	S	s l	M.co go.1778.t.5
1720 **Cynops** *W.*	shrubby	♃		w	½	my.au	G	S. Europe 1596	C	s.l	W.ph 4 t.837.f.a
1721 **afra** *W.*	Barbary	☿	◯	w	1	jn	G	Sicily 1640.	S	s.l	Mor h.3. t.17. f.4

279. **BUD'DLEA.** *W.* BUDDLEA. *Scrophularinæ* *Sp* 4—26.

1722 **globosa** *W.*	round-headed	♣		or	15	my jn	Or	Chili 1774.	C	co	Bot. mag. 174
1723 **Neem'da** *Buch*	Indian	♣	□	or	15		W	Nepal 1824	C	l.p	
1724 **salvifolia** *W*	Sage-leaved	♣	□	or	3	au s	C	C. G H. 1760.	C	s l	Jac schœn 1.t.98
1725 **saligna** *W. en*	Willow-leaved	♣	□	or		au s	W	C G H. 1816	C	l.p	Jac schœn.1 t.29

280. **EX'ACUM** *W.* EXACUM *Gentianeæ.* *Sp* 3—18.

1726 **viscosum** *Sm*	clammy	☿	◯	or	2	jn jl	Y	Canaries 1781	S	p.l	Smit ic fas 3.t.18
1727 **spicatum** *Vahl*	spiked	☿	☒	or	2	...	...	S. Amer 1823	S	m p	Aub gui. 1. t 27
1728 **filiformis** *W*	least		◯	cu	½	jn jl	Y	Britain sa ma.	S	⚷	Eng bot. 235

281 SEBÆ'A *R Br* SEBÆA. *Gentianeæ.* *Sp* 1—4

1729 **cordata** *R Br*	heart-leaved		◯	or	½	jl au	Y	C. G. H. 1815.	S	co	Bur afr t.74. f 5

282 FRASE'RA *Walt* FRASERA *Gentianeæ.* *Sp* 1.

1730 **caroliniensis** *P S.*	Carolina	☿	◯	or	4	jl au	G	Carolina 1795.	S	co	Bart. m bot. t.35

283 PENÆ'A *W* PENÆA *Epacrideæ? Sp* 2—14

1731 **mucronata** *W.*	heart-leaved	♣	□	or	2	jn jl	R	C G. H 1787	S	p l	Vent mal 87
1732 **squamosa** *W*	scaly	♣	□	or	1	jn jl	R	C G H. 1787	S	p l	Bot. reg. 106

284 BLÆ'RIA. *W* BLÆRIA. *Ericeæ* *Sp* 5—13

1733 **ericoides** *W.*	heath-leaved	♣	□	or	2	au o	Pu	C G H 1774	C	s p	P gz 471 t 2 f 10
1734 **articulata** *W.*	jointed	♣	□	or	2	my jn	Pk	C G H 1795	C	s p	Lam ill t. 78
1735 **purpurea** *W*	purple-flowered	♣	□	or	2	my jn	Pu	C G H 1791.	C	s.p	
1736 **muscosa** *W*	Moss-leaved	♣	□	or	1	jn au		C G H 1774.	C	l p	
1737 **ciliaris** *W*	ciliated	♣	□	or	2	jn au	W	C. G H. 1795	C	s p	Wend.col.2. t.49

285 CHOME'LIA. *W.* CHOMELIA. *Rubiaceæ* *Sp* 1—2

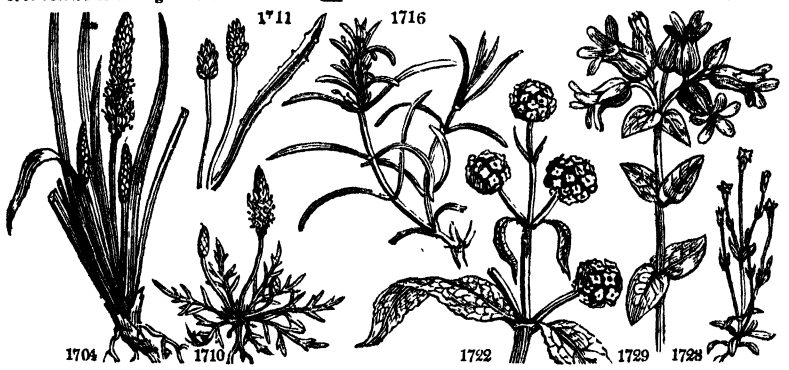
1738 **spinosa** *W*	spiny	♣	□	or	12	...	W	W Indies 1793.	C	p.l	Jac amer 18 t.13

286 ADI'NA *Sal.* ADINA *Rubiaceæ* *Sp* 1

1739 **globiflora** *Sal.*	globe-flowered	♣	□	or	2	jl au	W	China 1804.	C	s l.p	Par. lon 115

287. BOUVAR'DIA. *H K.* BOUVARDIA *Rubiaceæ* *Sp* 2

1740 **triphylla** *H. K*	three-leaved	♣	□	or	2	ap n	S	Mexico 1794.	C	s p	Par lon. 88
1741 **versicolor** *B Reg*	various-colored	♣	□	or	2	jl s	R	S. Amer 1814	C	l p	Bot reg. 1[illegible]



History, Use, Propagation, Culture,

respects the flower-stalks Zappa of Milan, and A Young, speak in high terms of it, but the general feeling and practice of scientific agriculturists is against it, and it is now seldom sown.

P. major is a native of most parts of Europe and of Japan, and always by way-sides, whence its name of way-bread or way-bred The seeds afford food to linnets, finches, and other small birds, and the leaves are a common application to wounds and cutaneous sores An American negro once received a reward from an assembly of South Carolina for a cure for the bite of the rattle-snake, and in the receipt, it is said by Woodville (*Med. Bot*), plantain was a principal ingredient. There are several varieties of this species to be met with in rich pastures and in botanic gardens, such as the rose P, in which the flower appears changed into a tuft of leaves expanded like a rose, and the besom P, in which the spike-leaves are imbricate and pyramidal

P. maritima varies in size and situation more than most plants Its leaves are sometimes scarcely an inch, and at other times more than a foot in length; and the number of flowers in the spike varies extremely Like Statice armeria and Sambucus nigra, it is found on the summits of the highest mountains, in the clefts of rocks, on the sea-shore, in salt marshes, and muddy banks

P. coronopus is a singular-growing plant, with recumbent stems pressing closely on the ground. The leaves have a very peculiar flavor, and are rather disagreeable, but were formerly used in salads. P psyllium is sometimes imported from the south of France in a dried state for the druggists.

279. *Buddlea.* In honor of Adam Buddle, a name well known to the English botanist as authority for many rare British plants. B globosa is a very handsome shrub, and though rather tender, flowers freely in warm situations, or against a wall, with protection in very severe winters. Its leaves are long, narrow, pointed,

1704 Leaves semicylindrical entire woolly at base, Scape rounded
1705 Leaves lin. flat somew toothed smooth at base, Spike cyl Scape rounded hairy scarcely longer than leaves
1706 Leaves linear channelled recurved naked
1707 Leaves linear channelled entire beneath with rigid ciliæ hairy at base, Scape rounded pubescent
1708 Leaves spatulate cut-toothed, Teeth imbricated mucronated, Scape rounded hairy
1709 Leaves lanceolate 5-nerved toothed serrate, Scape rounded
1710 Leaves linear pinnate toothed, Scape rounded
1711 Leaves linear sub-toothed, Scape rounded, Head ovate, Bractes keeled membranous
1712 Leaves ovate entire fleshy rough woolly at base, Capsules 4-seeded
1713 Stem erect simple short, Leaves lanceolate fleshy entire stem-clasping hairy, Heads oblong leafless
1714 Stem branched herbaceous, Leaves somewhat toothed recurved, Heads leafless
1715 Hoary, Stem erect branched herbaceous, Leaves nearly entire, Heads leafy and sepals ovate
1716 Herbaceous, Stem branched diffuse decumbent, Leaves linear entire, Heads squarrose
1717 Stem branched herbaceous, Leaves linear entire reflexed, Heads leafy
1718 Stem branched herbaceous erect, Leaves linear channelled entire, Heads leafless
1719 Stem branched herbaceous weak, Leaves subulate entire, Heads leafy
1720 Stem branched suffruticose, Leaves entire filiform straight, Heads somewhat leafy
1721 Stem branched shrubby, Leaves lanceolate toothed, Heads leafless

1722 Leaves lanceolate acuminate crenulate beneath hoary, Heads globose stalked
1723 Leaves lanceolate subserrate hoary underneath, Spikes terminal lengthening with flowers threefold
1724 Leaves lanceolate cordate crenate rugose beneath tomentose, Flowers panicled
1725 Leaves linear lanceolate entire revolute at edge tomentose beneath, Corymbs terminal

1726 Leaves oblong nerved stem-clasping, Bractes cordate perfoliate longer than calyx
1727 Flowers spiked whorled and ternary, Leaves ovate lanceolate, Stem nearly simple
1728 Limb spreading, Stem filiform branched, Radical leaves roundish, Cauline subulate

1729 Flowers 5-cleft, Sepals cordate striated membranous keeled, Stem dichotomous, Leaves cordate

1730 A singular plant found in morasses in North America, and resembling Swertia

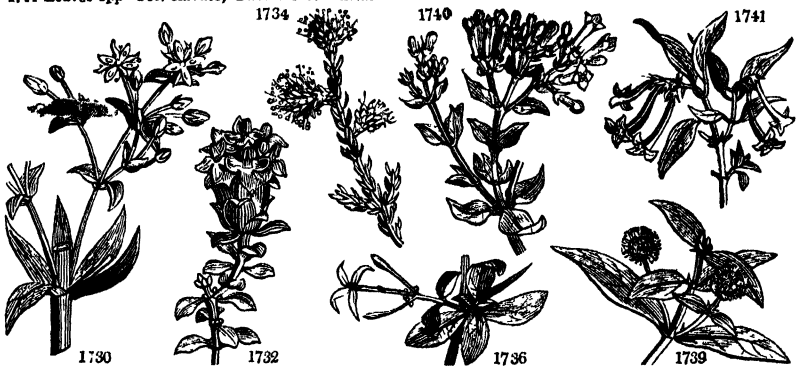
1731 Flowers terminal, Leaves cordate acuminate smooth
1732 Leaves rhomboidal wedge-shaped fleshy smooth, Flowers terminal

1733 Anthers exserted awnless, Cal 4-leaved, Bract. 3 length of cal Leaves 4 oblong acerose hairy imbricated
1734 Anthers exserted awnless, Leaves 4 ovate smooth, Flower-heads cernuous
1735 Anthers included awnless, Leaves 4 ovate subciliated, Flowers umbelled, Stem flexuose erect
1736 Anthers subexserted awnless, Cal 1-leaved pilose, Cor. campanulate pilose above, Flowers axillary
1737 Leaves 4 smooth, Calyx lacerated ciliated

1738 Leaves ovate acuminate entire, Peduncles axillary

1739 The only species

1740 Leaves ternate lanceolate, Stamens included
1741 Leaves opp Cor. clavate, Tube smooth inside



and Miscellaneous Particulars

rugose, of the color of the common sage, and the flowers are very fragrant. It is commonly propagated by layers, but cuttings of the young wood of all the species root freely in common earth under a hand-glass. Buddlea Neemda is one of the most beautiful plants of India

280. *Exacum* The ancient name of a plant nearly related to Centaurium; said to have been derived from ἐξ and ἄγω, to conduct out, on account of its properties of expelling poison taken into the stomach.

281 *Sebæa.* A genus nearly related to the last, named after the famous Albert Seba, whose museum was once one of the wonders of Europe.

282. *Frazera.* After Mr John Frazer, an indefatigable collector of plants in North America.

283 *Penæa* In honor of P. Pena, who published Adversaria Botanica, 1570, in conjunction with Lobel. A handsome genus, readily propagated by cuttings in sand under a hand-glass. Many of the finest species remain to be introduced from the Cape of Good Hope.

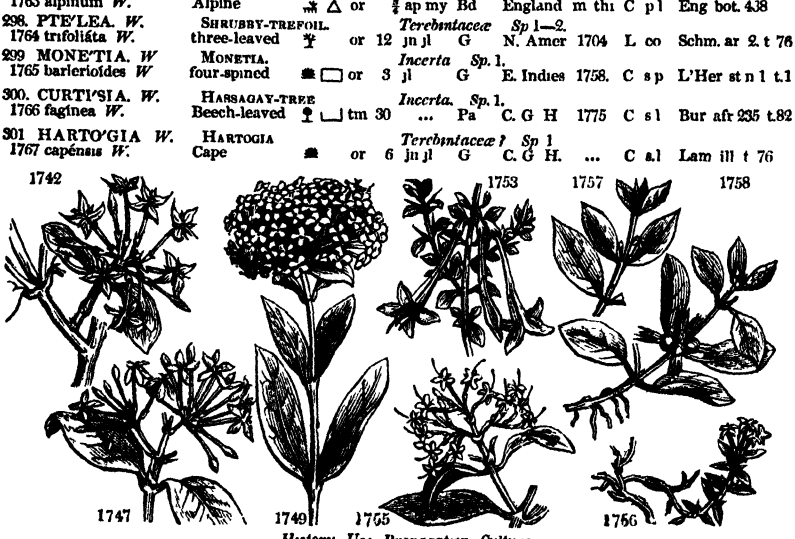
284. *Blæria* In honor of Patrick Blair, who practised physic at Boston in Lincolnshire, and was one of the fellows of the Royal Society He published Botanical Essays in 1778. The species resemble some kinds of heaths, and require the same treatment.

285 *Chomelia* Named after Pierre Jean Baptiste Chomel, a French botanist, physician to Louis XV., he died in 1740. Culture as for Siderodendrum.

286 *Adina.* From ἀδινός, clustered, its flowers being in heads A small Chinese plant, with flowers looking like those of a Cephalanthus. It is probably not different from Cephalanthus

287 *Bouvardia* Named after Dr. Charles Bouvard, formerly a superintendent of the Jardin du Roi at

288. IXO'RA. *W.*	Ixora.				*Rubiaceæ.*	*Sp.* 11—16.							
1742 grandiflóra *B. R.*	sessile-leaved	☘	□	or	4	au	Or	E Indies	1814.	C	l.p	Bot. reg 154	
1743 Bandhúca *Roxb.*	Bandhooka	☘	□	or	3	jl	F	E. Indies	1815.	C	p.l	Bot. reg. 513	
1744 coccínea *W.*	scarlet	☘	□	or	4	jl.au	S	China	...	C	p.l	Rhed. mal.2 t.12	
1745 barbáta *Roxb.*	bearded	☘	□	or	12	jn.jl	W	E. Indies	1823.	C	p.l	Bot. mag. 2505	
1746 parviflóra *W.*	small-flowered	☘	□	or	20	au o	W	E. Indies	1800.	C	p.l	Va.sy.3.p 11.t.52	
1747 rósea *Wall.*	highland	☘	□	or	4	jl	F	Bengal	1819	C	p.l	Bot. reg 540	
1748 álba *W*	white	☘	□	or	4	jn	W	E. Indies	1768.	C	p l		
1749 stricta *Roxb.*	upright	☘	□	or	3	jl au	S	Moluccas	1690.	C	p.l	Bot. mag. 169	
1750 blánda *B. Reg*	charming	☘	□	or	4	au		E. Indies	...	C	p l	Bot reg 100	
1751 cuneifólia *Roxb.*	wedge-shaped	☘	□	or	3	jn.jl	S	E. Indies	1822.	C	p l	Bot. reg 648	
1752 crocáta *B R*	orange	☘	□	or	3	au s	O	E. Indies	1822	C	p.l	Bot. reg 782	
289. CATESBÆ'A. *W.*	Lily-thorn.				*Rubiaceæ*	*Sp.* 2—3							
1753 spinósa *W*	spiny	♀	□	or	12	my s	Y	1 Provid.	1726.	C	s p	Bot. mag 131	
1754 parviflóra *P. S.*	small-flowered	☘	□	or	1	...	W	Jamaica	1810.	C	l.p	Sl.his.2. t.207. f.1	
290. PAVETTA. *W*	Pavetta.				*Rubiaceæ*	*Sp* 1—13							
1755 indica *W*	Indian	☘	□	or	4	au.o	W	E. Indies	1791	C	p l	Bot reg 198	
291. ERNO'DEA. *Sux*	Ernodea.				*Rubiaceæ.*	*Sp.* 1—3.							
1756 montána *Sm.*	mountain	☘		or	½	jn jl	R	Sicily	1820.	D	rk	Fl græc. t 143	
292. SIDERODEN'DRUM *W*	Iron-tree				*Rubiaceæ*	*Sp* 1							
1757 triflórum *W.*	three-flowered	♀	□	tm	20	...	Pk	W Indies	1793	C	p l	Jacq am.t 175 f 9	
293. COCCOCYP'SILUM. *W*	Coccocypsilum.				*Rubiaceæ*	*Sp* 1—5							
1758 répens *W.*	creeping	☘	⍁	w	½	my	Pu	W Indies	1793.	D	s p	Bro. jam. t.6. f.1	
294 MITCHEL'LA. *W*	Mitchella.				*Rubiaceæ*	*Sp* 1							
1759 répens *W.*	creeping	☘		or	½	jn	W	N Amer	1761	L	s p	Cat. car. 1. t. 20	
†*295 OLDENLAN'DIA	*W* Indian Madder.				*Rubiaceæ*	*Sp* 2—3							
§1760 umbellâta *W.*	common	☘	⍁	w	½	jl au	W	E Indies	1792	R	s p	Roxb cor 1 t.3	
§1761 corymbósa *W*	Hyssop-leaved		○	w	½	jn o	W	Jamaica	1739	S	s l	Eh pic t.2 f 1 t 4	
†296. MANETTIA. *W*	Manettia.				*Rubiaceæ*	*Sp* 1—8.							
1762 coccínea *W*	pink	♀	□	or	20	my jl	Pk	Guiana	1806.	C	l p	Bot. reg. 693	
†297 EPIME'DIUM. *W*	Barren-wort				*Berberideæ*	*Sp.* 1							
1763 alpinum *W.*	Alpine	⁂	△	or	¾	ap my	Bd	England	m thi	C	p l	Eng bot. 438	
298. PTE'LEA. *W.*	Shrubby-trefoil.				*Terebintaceæ*	*Sp* 1—2.							
1764 trifoliáta *W.*	three-leaved	☘		or	12	jn jl	G	N. Amer	1704	L	co	Schm. ar 2. t 76	
299 MONE'TIA. *W*	Monetia.				*Incerta*	*Sp.* 1.							
1765 barlerioides *W*	four-spined	☘	□	or	3	jl	G	E. Indies	1758.	C	s p	L'Her st n 1 t.1	
300. CURTI'SIA. *W.*	Harsagay-tree				*Incerta.*	*Sp.* 1.							
1766 faginea *W.*	Beech-leaved	♀	⌴	tm	30	...	Pa	C. G H	1775	C	s l	Bur afr 235 t.82	
301 HARTO'GIA *W.*	Hartogia				*Terebintaceæ ? Sp* 1								
1767 capénsis *W.*	Cape	☘		or	6	jn jl	G	C. G H.	...	C	a.l	Lam ill t 76	



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Paris. B triphylla is a beautiful, and not very tender plant, which flowers great part of the year, var β has smooth shining leaves, and flowers of a deeper scarlet than the other B versicolor requires the warmest part of the green-house, and the cuttings require bottom heat, with the same soil as the plants

288 *Ixora.* A name of doubtful origin. Iswara is the name of an Indian divinity According to Sweet, the species of this beautiful genus "require to be kept in a moist heat to thrive well, but not plunged in tan, as that is almost certain to injure their roots A mixture of sandy loam and peat is the best soil for them. Care must be taken to keep them clean and free from insects, or they will not thrive Cuttings root very freely in sand under a hand-glass.

289. *Catesbæa.* So named by Gronovius, in honor of Mark Catesby, author of the natural history of Carolina, &c. who discovered the first species of this genus It is very ornamental C. spinosa has flowers about six inches long, in the form of a Roman trumpet, and succeeded by fruit the size of a pullet's egg; the skin smooth and yellow, and the pulp like that of a ripe apple, with an agreeable taste It does not flower very freely, but strikes root readily in sand under a bell-glass, and in moist heat.

290. *Pavetta.* The name of the plant in Malabar A small genus nearly related to Ixora, with flowers usually white, as those of Ixora are red.

291. *Ernodea* From ἔρνυδης, branching, in allusion to the habit of the plant

292. *Siderodendrum.* From σίδηρος, iron, and δένδρον, a tree Wood, compared for hardness to iron This tree may be noticed on account of an anomaly which occurs in the corolla, which is often changed, perhaps by some insect, into an oblong bag, half an inch in length, fleshy, and hollow within, and ending in a point at top like a fruit. Cuttings of ripened wood root in sand under a hand-glass.

293. *Coccocypsilum.* From κόκκος, fruit, and κύψελη, a vase, its berry being surmounted by a corona resembling a little cup. Cuttings root freely in sand under a bell-glass

294. *Mitchella.* Named after John Mitchell, an Englishman, who travelled in Virginia, and left some papers upon North American plants behind him. This is one of those plants which Humboldt (*De Distrib. Plant*) calls

1742

1743 Shrubby spreading, Lvs. oval stem-clasping, Corymbs crowded, Segm. of cor. ovate obt. Berries crowned
1744 Leaves elliptical acute cordate at base sessile, Umbels terminal aggregate, Segm. of cor. ovate acute
1745 Corol. long bearded at mouth, Lvs. opp obl. entire smooth shining, Floral lvs. round cord. sess. Pan. open
1746 Leaves subsessile oblong smooth, Panicles ovate oblong decussated, Pet. oval, Style hairy
1747 Leaves obl. acute with a contr. emarg base pubesc. beneath subsessile, Corymbs large, Pet. cuneate acute
1748 Leaves sessile broad lanceolate, Corymbs decompound dense, Pet. obovate reflexed
1749 Shrubby straight, Lvs. subsess. obl. Corymbs dense, Pet. round spreading, Anthers round bristle-pointed
1750 Leaves ovate-lanceolate, Cyme trichotomous contracted
1751 Leaves wedge-shaped lanceolate acuminate, Corymbs terminal, Sepals conical
1752 Leaves coriaceous oval lanc. Cymes decompound close, Petals wedge-shaped obovate, Anthers sessile

1753 Tube of corolla very long, Berries oval
1754 Tube of corolla 4-cornered short, Berries roundish

1755 Leaves smooth entire, Panic. fastigiate axillary and terminal, Style twice as long as corol. Stigma entire

1756 Leaves in 4s oblong obtuse smooth, Stem shrubby

1757 The only species. Branches 4-cornered, Leaves 5-6 inches long elliptic lanceolate

1758 Stem herbaceous creeping, Leaves ovate, Flowers clustered axillary sessile

1759 A little creeping plant with flat round leaves and little scarlet berries

1760 Umbels naked lateral alternate, Leaves linear
1761 Pedunc. many-flowered, Leaves linear lanceolate

1762 Leaves ovate acuminate, Racemes many-flowered, Stem twining shrubby

1763 The only species

1764 Leaves on long stalks ternate, Fruit with two wings

1765 A small prickly shrub, Leaves opposite ovate acute entire The only species

1766 The only species Leaves ovate oblong acute serrated opposite

1767 Leaves opposite elliptical obtuse emarginate serrated



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social, being always found in quantities Barton says, it is the plant most extensively spread in North America, covering the surface from the 28th to the 69th degree of north latitude.

295 *Oldenlandia* In honor of H B Oldenland, a Dutch naturalist, who travelled in Africa, where he died about the end of the 17th century O umbellata, the chay-root, grows on light sandy ground near the sea, and is much cultivated on the coast of Coromandel for dyeing red, purple, brown, and orange, and to paint the red figures on chintz The coloring matter resides in the bark, which gives it out to water The Malabar physicians say that the roots cure poisonous bites, colds, and cutaneous disorders, and warm the constitution.

296. *Manettia.* In honor of Xavier Manetti, an Italian, and professor of botany at Florence. Some of the species are rather pretty, but they are seldom seen in collections

297. *Epsmedium.* A name of Dioscorides, applied to this little elegant alpine plant, without any assignable reason.

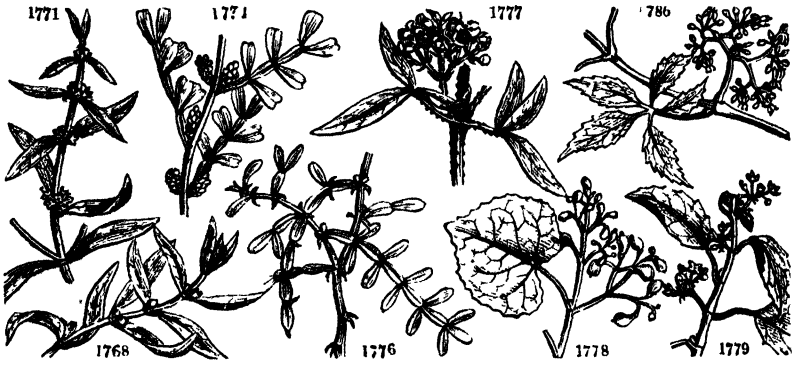
298 *Ptelea.* The Greek name of the elm. It is derived from πτελεα, to fly, in allusion to the winged seed-vessels. A hardy shrub of North America, not unlike a laburnum in foliage, but with small green flowers.

299 *Monetia.* So named by L'Heritier, in honor of the Chevalier Jean Baptiste Monet de la Marck, a celebrated French botanist, now dead, who, unfortunately for botany, many years ago diverted his attention from that science to conchology Cuttings root in sand under a bell-glass, and in bottom heat.

300. *Curtisia.* Named in honor of W. Curtis, lecturer on botany, author of the Botanical Magazine and other works, he died in 1799 This is one of the largest trees of Africa, from which the Hottentots and Caffres make the shafts of their javelins. It has fine broad leaves, but small flowers, which, however, have not yet appeared in this country

301. *Hartogia* Named after John Hartog, a Dutchman, who travelled in Southern Africa and Ceylon The plant called by this name in the gardens is probably only a variety of the common laurel, and nearly as hardy as it. The flowers grow in axillary racemes like bunches of currants.

302. AMMAN'NIA. *W.*	AMMANNIA.					*Salicariæ*	*Sp* 6—20.							•
1768 latifólia *W.*	broad-leaved	▢	w	1	jl au	W	W. Indies	1733.	S	a.l	Slo jam 1. t.7 f 4
1769 débilis *W.*	cluster-flowered	○	w	1	jl.au	Pu	E. Indies	1778	S	a l	
1770 cáspica *Ledeb*	Caspian	○	w	½	jl au	Ap	Astracan	1821	S	a.l	
1771 baccífera *L.*	berry-bearing	▢	w	½	jn jl	Ap	India	1820	S	a.l	Lam. ill. t 77 f 5
1772 ramósior *W.*	branching	○	w	2	jl au	Pu	Virginia	1759.	S	a l	Bocc. mus. t. 104
1773 sanguinolénta *W.*	bloody	○	w	½	jl.au	R	Jamaica	1803.	S	a.l	
303. FAGA'RA. *W.*	FAGARA					*Terebintaceæ*	*Sp* 3—18				
1774 Pteróta *W*	Lentiscus-leav.	▢	tm	20	au s	G	Jamaica	1768.	C	p l	Bro ja.146.t.5.f 1
1775 Piperita *W.*	ash-leaved	▢	or	10	s	W	Japan	1773.	L	p.l	Kæmpfr t. 893
1776 tragódes *W*	prickly-leaved	▢	or	5	...	W	W. Indies	1759.	C	l.p	Jac. am 21 t. 14
304. ZIE'RIA. *Sm*	ZIERIA.					*Rubiaceæ*	*Sp* 1				
1777 Smithii *Sm.*	Smith's	⌴	or	2	ap.jl	W	N S. W	1808	C	s.p	Bot. mag. 1395
305 CIS'SUS. *W.*	CISSUS.					*Sarmentaceæ*	*Sp* 13—50				
1778 vitiginea *W*	vine-leaved	▢	or	20	...	G	India	1772	C	p l	Pl m 27 t.337 f 2
1779 antárctica *Vent*	Kanguru-vine	▢	or	20	jn au	G	N. S W	1790	C	s l	Bot. mag 2488
1780 heterophýlla *Lk*	various-leaved	▢	or	10	...	G	.....	1822	D	co	
1781 glandulósa *Horn.*	glandular	▢	or	10	...	G	... ..	1819	D	co	
1782 sicyoides *W.*	naked-leaved	▢	or	10	...	G	Jamaica	1768	C	s p	Jac amer 22 t 15
1783 quadranguláris *W.*	square-stalked	▢	or	30	...	G	E. Indies	1790	C	p l	Forsk ic t. 2
1784 capénsis *W*	Cape	▢	or	30	...	G	C G H	1792	C	s p	
1785 cæsia *R B*	Sier Leo grape	▢	or	15	...	...	S Leone	1822	D	co	
1786 5-fólia *B M*	five-leaved	▢	or	12	jl au	G	Brazil	1822	D	co	Bot mag 2443
1787 ácida *W*	acid	▢	or	6	...	G	Jamaica	1692	C	p l	Jac schœn 1 t 33
1788 trifoliáta *W*	three-leaved	▢	or	6	..	G	Jamaica	1739	C	p l	Slo ja 1 t.145 f.2
1789 pentaphýlla *W*	five-leaved	▢	or	6	ap s	G	Japan	1790	C	s p	
1790 quináta *H K.*	wedge-leaved	▢	or	10	jl	G	C G H	1790	C	s p	
306 COR'NUS. *W*	DOGWOOD					*Caprifoliæ*	*Sp* 11—14				
1791 suécica *W*	dwarf	△	or	¼	ap	Pu	Britain	sc alp	R	s p	Eng bot 310
1792 canadénsis *W*	Canadian	△	or	½	jn au	Pu	Canada	1774	R	s p	Bot mag 889
1793 flórida *W*	great-flowered		or	15	ap my	W	N Amer	1731	L	co	Bot mag 526
1794 mascula *W*	Cornel-cherry		or	15	f ap	Y	Austria	1596	L	co	Schm arb 2 t 63
1795 sanguínea *W.*	common		or	8	jn jl	W	Britain	woods	L	co	Eng bot. 249
1796 álba *W*	white-berried		or	10	jn s	W	Siberia	1741	L	co	Sch arb 2. t. 65
β rosúsca	*Rusuan*		or	8	jn s	W	Siberia	...	L	co	
1797 sericea *W*	blue-berried		or	5	au	W	N Amer	1683.	L	co	Sch arb 2 t 64
1798 circináta *W*	Pensylvanian		or	6	jl au	W	N Amer	1784	L	co	Sch arb 2 t 69
1799 stricta *W*	upright		or	10	jn jl	W	N Amer	1758	L	co	Sch arb 2 t 67
1800 paniculáta *W*	panicled		or	6	jn jl	W	N Amer	1758	L	co	Sch arb 2 t 68
1801 alternifólia *W*	alternate-leav'd		or	15	s	W	N Amer	1760	L	co	Sch arb 2 t 70
307 SAN'TALUM *W*	SANDAL-WOOD					*Santalaceæ*	*Sp* 2—6				
1802 álbum *W*	true	△	tm	10	...	Pu	E. Indies	1804	C	p l	Rum amb 2 t 11
1803 myrtifólium *Roxb*	myrtle-leaved	△	or	4	...	R	E. Indies	1804	C	p l	Roxb cor 1 t 2



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302 *Ammannia* Named in honor of John Ammann, a native of Siberia, who was a physician and professor of botany at St. Petersburg He published a work upon the plants of Finland, and some papers in the Transactions of the Academy at St Petersburg None of the species have any beauty They may be treated like balsams and other tende. annuals

303 *Fagara* The name of an aromatic plant mentioned by Avicenna The foliage of the present plant has a strong smell of turpentine Cuttings root readily in sand under a hand-glass

304 *Zieria.* So called by Sir J. E. Smith, in honor of his friend Mr Zier, of whom nothing more is known than that he was "a learned and industrious botanist" The species is a pretty greenhouse plant.

305. *Cissus.* The Greek name of the ivy The Latin name *hedera* having been retained for the real plant; the Greek word was given to this genus, which climbs like the ivy The species greatly resemble Vitis in generic character None of them are ornamental, with the exception of C quinquefolia, justly admired for its quinquefid leaves, and the different tints of yellow, red, and purple which these take in autumn It grows rapidly in any soil, and is well adapted for covering naked walls, decorating old unsightly elevations of houses, ruins, cottages, bowers, &c All the species root freely by cuttings in any soil

306 *Cornus* From *cornu*, a horn the wood being thought to be as hard and durable as horn. Its value as a material for warlike instruments has been celebrated by Virgil—*Bona bello cornus* The larger species of this genus are very ornamental and hardy shrubs, not only from their flower and berries of different colors, but by their green, red, purple, or striped barks, which have a fine effect in winter, especially among evergreens. C florida blossoms early, but does not bear berries in this country C mascula, the Cormer of old authors, blossoms still earlier, and bears handsome fruit, which were formerly made into tarts and *rob de cornus* the wood is very hard; and Evelyn says, made into wedges, it will last like iron. C sanguinea, alba, and sericea,

1768 Leaves stem-clasping, Stem square, Branches erect
1769 Leaves lanceolate attenuated at base, Stem branched, Flowers fascicled axillary, Caps. 2-locular
1770 Leaves sessile lanceolate attenuated at base, Flowers axillary clustered, Sepals rigid acute
1771 Leaves somewhat stalked, Caps. larger than calyx colored
1772 Leaves half stem-clasping, Stem square, Branches much spreading
1773 Leaves half stem-clasping linear lanceolate cordate at base, Pedunc. very short many-flowered

1774 Leaves pinnated, Leaflets obovate emarginated, Common footstalk margined jointed unarmed
1775 Leaves pinnated, Leaflets oblong unequal at base crenate
1776 Leaves pinnated, Leaflets wedge-shaped emarginate, Common stalk winged jointed prickly beneath

1777 The only species. It may be known by the stamens being inserted into large glands

1778 Leaves cordate roundish 3-5 lobed angular repand beneath ferruginous
1779 Leaves ovate loosely serrated smoothish, Nerves glandular at base, Petioles and branches pubescent
1780 Branches rounded subpubesc. Petioles with a pubesc. line, Lower lvs simple, middle tern. upper quinate
1781 Leaves ovate serrate toothed, Pedicels and cal hispid glandular
1782 Leaves ovate cordate smooth thickish bristly serrated, Serratures appressed, Branches rounded
1783 Leaves cordate ovate serrated fleshy, Stem 4-cornered winged
1784 Leaves 5 angular toothed beneath ferruginous, Flowers headed
1785 Leaves cordate serrated, Branches very glaucous
1786 Leaves in fives, Leaflets narrowed each way acuminate stalked, Branches rounded knotted smooth
1787 Leaves ternate obovate wedge-shaped fleshy smooth toothed at end entire at base
1788 Leaves ternate rounded hairy toothed, Branches with membranous angles
1789 Leaves quinate, Leaflets undivided ovate serrated
1790 Leaves quinate, Leaflets obovate wedge-shaped serrated above

1 *Flowers in umbels with an involucrum.*

1791 Herbaceous, Branches binate, Umbel axillary stalked, Nerves of leaves distinct
1792 Herbaceous, Branches none, Upper leaves whorled stalked veiny
1793 A tree, Involucr very large colored, Leaflets obcordate
1794 A tree, Umbels as long as involucrum

2 *Flowers in naked cymes.*

1795 Branches upright, Leaves ovate whole-colored, Cymes depressed flat
1796 Branches recurved, Branchl smooth, Leaves broad ovate acute pubesc. hoary beneath, Cymes depressed

1797 Branches sprdg Branchl. woolly, Lvs ovate acum beneath ferrugin Cymes depr woolly, Nuts compr.
1798 Branches warted, Leaves orbicular beneath hoary, Cymes depressed
1799 Branches upright, Leaves ovate whole-colored naked, Cymes panicled
1800 Branches erect, Leaves ovate acuminate smooth hoary beneath, Cyme panicled
1801 Leaves alternate, Stem dichotomously forked

1802 Leaves oblong
1803 Leaves lanceolate



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have fine red twigs, the wood of the first is equal to that of the cornel for hardness, and makes excellent mill cogs, bobbins for lace, toothpicks, and butchers' skewers An oil may be extracted from the berries, by boiling and pressing C sericea from its large leaves, whitish underneath, and its terminating branches of white flowers, is valuable for the shrubbery or lawn All the species may be propagated by seeds, layers, suckers, or cuttings, the second is the most common mode

C sanguinea is very common in woods, and after a smothered combustion, affords a charcoal esteemed the best for entering into the composition of gunpowder. It grows in the shade and drip of other trees, and is therefore a valuable plant for thickening strips of plantations which have become naked below

C succica is called by the Highlanders Lus-a-chrasis, or plant of gluttony, from its berries, which are eaten by the children, being supposed to create an appetite This plant is difficult to preserve in gardens: a bed of peat in a shady situation, and kept moist, is the most suitable for it, or it may be planted in small pots of peat, and treated as an alpine

307 *Santalum* From its Persian name *Sundul-sufed* It is a low tree in habits, leaves and inflorescence a good deal resembling the privet It produces the white and yellow sandal wood of the materia medica, formerly thought to be the produce of different trees. But in India, as in a certain degree in every other country, most trees when large and old, become colored towards the centre, and when the sandal tree becomes large, its centre acquires a yellow color, and great fragrance and hardness, while the exterior part of the same tree that covers the colored part is less firm, white, and without fragrance. It is only the yellow part that is in use, being in universal esteem for its fragrance According to Wathen (*Voy to China*, 1812, p. 116.), it sells so high that the tree is seldom allowed to grow more than a foot in diameter It is manufactured into musical instruments, small cabinets, escrutoires, boxes, and similar articles, as no insect can exist, or iron rust (as it is

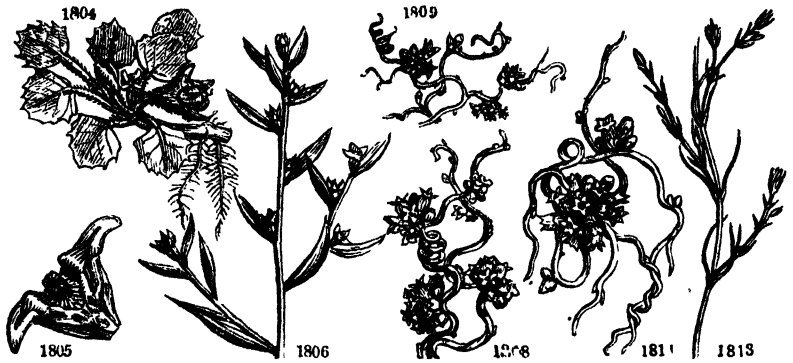
308. TRA'PA *W.*	Water-caltrops				*Hydrocharideæ. Sp.* 2—3.								
1804 *nátans W*	European	♃	○	cit	jn au	W.P	Europe	1781.	S	co	Bot. reg. 88		
1805 *bicórnis W*	Chinese	♃	◭	cit	...	W	China	1790.	S	co	Gært.sem.2. t.95		
309. LUDWI'GIA. *W.*	Ludwigia				*Onagrariæ Sp.* 2—16.								
1806 *alternifólia W.*	large-capsuled		○	w	1	jn.jl	Y	Virginia	1752.	S	co	Lam. ill. 1. t. 77	
1807 *hirsúta Pk*	hairy	♃	△	w	1	jn.au	Y	N. Amer.	1812.	D	p.l		

DIGYNIA.

310. CUS'CUTA. *W.*	Dodder				*Convolvulaceæ Sp* 5—10								
1808 *europæ'a W.*	common	☌	△	cu	jl	W	Britain	hea	D	par	Eng. bot. 378		
1809 *Epithymum W*	lesser	☌	△	cu	jl	W	Britain	hea	D	par	Eng. bot. 55		
1810 *chinénsis*	Chinese	☌	△	cu	au.s	W	China	1803.	D	par			
1811 *chilénsis B M*	Chili	☌	△	cu	ja.d	W	Chili	1821	D	par	Bot. reg. 603		
1812 *verrucósa Sweet*	Nepal	☌	△	cu	ap.o	W	Nepal	1821	D	par	Scot. fl. gard. 6.		
311. BUFO'NIA *W.*	Buponia				*Caryophylleæ. Sp* 1—2								
1813 *tenuifólia W*	slender-leaved	♃	△	w	½ jn	W	England	sea co.	S	co	Eng bot. 1313		
312. HAMAME'LIS. *W.*	Witch-hazel.				*Berberideæ Sp* 1—2								
1814 *virginica W*	Virginian	♆		or 10	n. m	W	N Amer.	1736.	L	p.l	Duh arb.1. t.114		
313. HYPE'COUM *W.*	Hypecoum				*Papaveraceæ Sp* 3—6.								
1815 *procumbens W*	procumbent	☌	○	or 1	jn.jl	Y	S. Europe	1596.	S	co	Schk hân 1. t.27		
1816 *péndulum W.*	pendulous	☌	○	or	½ jn jl	Y	S. France	1640	S	co	Par. thea 372. f.2		
1817 *erèctum W.*	erect	♃	○	or	½ my jn	Y	Siberia	1759	S	co	Am. ruth. 58. t.9		

TETRAGYNIA.

314 MYGIN'DA. *W*	Myginda.				*Rhamni Sp* 3—6.								
1818 Uragóga *W*	saw-leaved	♣	□	or 4	au s	Pu	S Amer	1790	L	p.l	Jac amer.24 t 16		
1819 Rhácoma *W.*	blunt-leaved	♣	□	or 4	...	...	Jamaica	1798	L	p.l	Jac. ic. 2 t. 311		
1820 lat.fólia *W.*	broad-leaved	♣	□	or 4	ap my	...	W Indies	1795	C	s.p	Fl.peruv. t.84.f b		
315. I'LEX *W.*	Holly				*Rhamni. Sp* 12—29								
1821 Aquifólium *W*	common	♀		tm 20	ap jn	W	Britain	hedg	S	co	Eng. bot. 496		
β heterophýlla	*various-leaved*	♀		or 20	ap jn	W	Britain	...	G	co			
γ crassifólia	*thick-leaved*	♀		or 20	ap jn	W	Britain	...	G	co			
δ recúrva	*slender*	♀		or 20	ap jn	W	Britain	...	G	co			
ε féror	*hedgehog*	♣		or 12	ap jn	W	Britain	...	G	co			



History, Use, Propagation, Culture,

said) within its influence It is of the dust of this wood that the Bramins form the pigment which they use in giving the tilac or frontal mark to the God Vishnoo and the oil used in their ceremonies is obtained from the shavings, or at least scented by them. Cuttings root readily in a pot of sand under a bell-glass.

The true sandal wood is the Santalum album, found chiefly on the coast of Malabar, and in the Indian Archipelago

Santalum myrtifolium, which has been confounded with it, is the kind which grows upon the Circar mountains, the wood of which is of little value An amusing specimen of German critical puzzling upon this subject may be seen in Messrs Römer and Schultes, Species Plantarum, vol. iii p 328

306. *Trapa.* Abridged from *calcitrapa*, the Latin name of a dangerous instrument called caltrops, furnished with four spines, which was formerly used in war to impede the progress of cavalry The fruit of this plant is hard, and has four spines also T natans is a curious aquatic, with long brown and green roots and floating leaves, with petioles inflated into a tumour, as in the marine algæ The seed is larger than the kernel of the filbert, with two cotyledons, one large, and the other very small, and not increasing in size during the germination. Hence, Gærtner considers this plant like the Nelumbium, as in a sort of middle state between the monocotyledoneæ and dicotyledoneæ. The nuts are farinaceous, and are esteemed nourishing and pectoral. The skin with the spines being removed, there is a white sweet kernel within, somewhat like a chestnut. They are sold in the market at Venice under the name of Jesuits' nuts. They are also much eaten in Switzerland and the south of France Some of the canals at Versailles are covered with the plant; and Neill informs us (*Hort Tour*), that the nuts are sometimes served up like chestnuts Pliny says that the Thracians made them into bread; and Thunberg states that they (the seed of Trapa bicornis) are commonly put into broth in Japan. In this country the plant is generally kept in a cistern in the stove, and so treated, was fruited by A. B. Lambert, Esq. in 1815, and specimens of the fruit sent to the Horticultural Society

T. bicornis is cultivated by the Chinese in marshes, and the nuts used as food.

309. *Ludwigia.* So named by Linnæus, in honor of C G Ludwig, professor of botany at Leipsic, in the middle of the last century. He left behind him several works which are now almost forgotten. The species are of no beauty.

310. *Cuscuta.* This is a genus of parasitical plants, which fasten themselves to, and draw their nourishment from others. The seed does not split into lobes, but opens and puts forth a little spiral body, which is the em-

1804 Nuts 4 horned, Spines spreading
1805 Nuts 2 horned

1806 Erect branched smooth, Leaves altern. lanc. hoary beneath, Caps. large crowned with the col. lvs. of cal
1807 Leaves alternate lanceolate, Flowers axillary solitary subsessile, Stem rounded diffuse.

DIGYNIA.

1808 Flowers sessile, Orifice of cor. naked, Stigma acute
1809 Flowers sessile, Stamens with a scale at their base, Stigma acute
1810 A species of which no account has yet been published. Shoots short white
1811 Flowers 5-cleft, Segments oblate rounded, Anthers sessile, Stigmas pileate
1812 All over warted, Color dull brown, Shoots very long

1813 Stem branched at end, Branches erect, Calyx scariose at edge

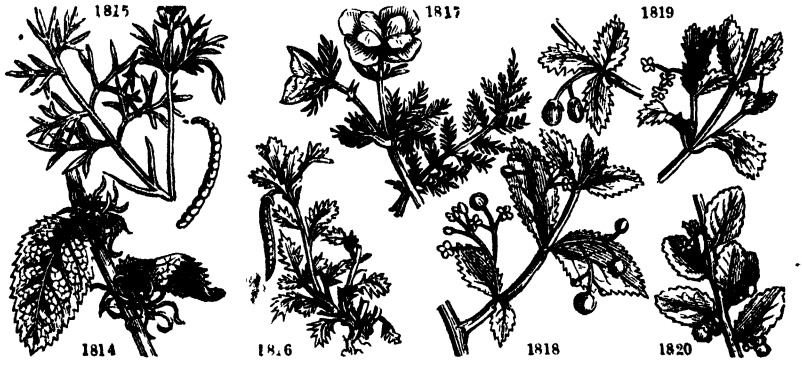
1814 Leaves obovate acutely toothed cordate with a small sinus

1815 Pods jointed compressed arcuate, Pet 3-lobed the outside smooth at the back
1816 Pods knotty rounded pendulous, Petals smooth the 2 outer ovate oblong pendulous 2 inner 3-parted
1817 Pods not jointed erect compressed, Pet smooth outer wedge-shaped about 3-lobed inner trifid the later al lobes 2-lobed the middle one small

TETRAGYNIA.

1818 Leaves ovate and subcordate acuminate subserrated pubescent
1819 Leaves lanceolate ovate obtuse crenated, Flowers monogynous, Style quadrifid
1820 Leaves elliptical crenated subcoriaceous, Stigmas 2-4 sessile

1821 Leaves ovate acute spiny shining waved, Flowers axillary umbelled



and Miscellaneous Particulars.

bryo. The stalk twines about some other plant, contrary to the sun's apparent motion, or from right to left, sending out from the inner surface a number of little vesicles which attach themselves to the bark of the supporting plant By degrees, the longitudinal vessels of the stalk shoot from their extremities, and insinuate themselves so intimately with it, that it is easier to break than to disengage them. Plants raised from seed soon die when they have no plant to which they can attach themselves They adhere to the ground by the original root, and draw a part of their nutriment from thence at first, but the original root withers away as soon as the young stem has fixed itself to any other plant

C. europæa may be sown in peat soil by the sides of other plants, in a wild state it is commonly found in hedges, and on hops, brambles, woody nightshade, fern, thistles, hemp, as also on flax, nettles, clover, grass, &c.

C. epithymum will thrive well on any small shrub when once it has got hold. According to Sweet, "it will flower freely, and be very handsome."

C chinensis may be treated like C. europæa

311. *Bufonia.* So named after the celebrated Count de Buffon. It is slender, like the botanical acquirements of that illustrious naturalist.

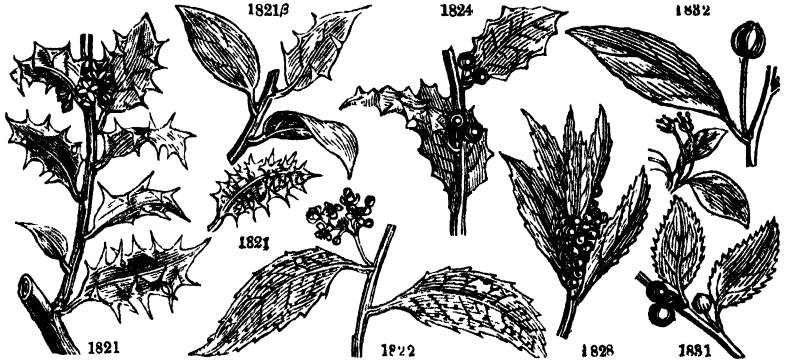
312. *Hamamelis.* From ἁμα, with, and μηλον, an apple, from the fruit and flowers being on the tree at the same time This is a low tree or shrub, in general appearance resembling the hazel, but it has fine yellow blossoms, which appear in profusion in October or November, and sometimes last till spring. The fruit, which is a small nut, seldom ripens in England.

313. *Hypecoum.* From ὑπηχεω, to rattle, on account of the noise the seeds make in the pods. It is not impossible that Hypecoum procumbens is the Hypecoon of Pliny: the wild cumin of Gerarde. The juice of all the species is yellow, like that of celandine, and is said to have the same effect as opium.

314. *Mygindia.* So named by Jacquin, in honor of Counsellor Mygind of Vienna, a botanical amateur and patron A tree resembling some kind of Ilex.

315. *Ilex.* A word upon which much ingenuity and learning have been tortured in vain. De Théis derives it from *ec*, or *ac*, a point, in Celtic; but that explanation applies better to the specific name Aquifolium. I. Aquifolium is one of our most beautiful shrubs or low trees, displaying either character, according to situation, age, and application of art. It is found in most parts of Europe, and in North America, Japan, Cochin-

	ξ flava	*yellow-berried*		or	15	ap jn	W	Britain	...	G	co		
	η álbo-marginâta	*silver-edged*		or	12	ap jn	W	Britain	...	G	co		
	Ş aûreo-marginâta	*gold-edged*		or	12	ap jn	W	Britain	...	G	co		
	ι medio-picta	*painted*		or	10	ap jn	W	Britain	...	G	co		
1822	chinénsis *B M*	Chinese		or	10	jl	W	China	1814.	G	s.l	Bot. mag. 2043	
1823	laxiflóra *Ph.*	loose-flowered		or	20	ap.jn	W	Carolina	1811.	G	s.p	Lam. ill. t. 89	
1824	opáca *W*	Carolina		or	10	my jn	W	Carolina	1744.	G	p.l	Meerb. ic 2. t. 5	
1825	crócea *W*	African		tm	30	...	...	C G H	1794	G	s p		
1826	Perádo *W*	thick-leaved		or	10	ap my	Pk	Madeira	1760.	G	s.l	Meerb. ic. 2. t. 6	
1827	Primoides *W*	deciduous		or	2	jl	W	N Amer.	1760.	G	s.p		
1828	Cassine *Ph*	br.lv.-Dahoon		or	12	au	W	Carolina	1726.	G	s.l	Cat. car. 1. t. 31	
1829	Dahóon *Ph*	Dahoon		or	6	my jn	W	Carolina	1726.	G	s.l		
1830	augustifólia *W en.*	Myrtle-leaved		or	6	may jn	W	Carolina	1806.	G	s.l		
1831	vomitória *W*	South Sea Tea		or	10	...	...	Florida	1700	G	p l	Cat car. 2. t. 57	
1832	canadénsis *Ph*	Canadian		or	3	ap my	W	N Amer	1802	G	s.l	Mich. am. 2 t.49	
316	COLDE'NIA *W*	COLDENIA				*Boragineæ*		*Sp* 1—2					
1833	procúmbens *W*	trailing		or	2	jl au	W	E Indies	1699.	S	co	Lam. ill t 89	
317	POTAMOGE'TON *W*	POND-WEED				*Alismaceæ*		*Sp* 13—44.					
1834	nátans *W*	broad-leaved		cu		au	G	Britain	riv	D	co	Eng bot. 1822	
1835	fluitans *W*	long-leaved		cu		jl au	R	Britain	dit	D	co	Eng. bot. 1286	
1836	heterophýllum *W.*	various-leaved		cu		jl au	G	Britain	dit	D	co	Eng bot. 1285	
1837	pertoliátum *W*	perfoliate		cu		jl au	P	Britain	riv.	D	co	Eng. bot. 168	
1838	den'sum *W*	close-leaved		cu		my jl	G	Britain	dit.	D	co	Eng. bot. 397	
1839	lúcens *W*	shining		cu		jn jl	G	Britain	dit	D	co	Eng bot. 376	
1840	crispum *W*	curled		cu		jn jl	R	Britain	rivul	D	co	Eng bot. 1012	
1841	compréssum *W*	flat-stalked		cu		jn jl	G	Britain	rivul.	D	co	Eng bot 418	
1842	pectinátum *W*	fennel-leaved		cu		jn jl	Ol	Britain	dit	D	co	Eng bot 323	
1843	lanceolátum *E B*	spear-leaved		cu		jl au	Ol	England	w lak.	D	co	Eng. bot. 1985	
1844	gramíneum *W*	grass-leaved		cu		jl au	G	Britain	lit.	D	co	Eng bot 2253	
1845	pusillum *W*	small		cu		jl au	G	Britain	lit.	D	co	Eng bot. 215	
1846	setáceum *W*	bristle-leaved		cu		jl au	G	Britain	...	D	co		
318	RU'PPIA *W*	RUPPIA				*Fluvales*		*Sp* 1.					
1847	maritima *W*	sea		cu		jl	G	Britain	s w. d.	S	s.l	Eng bot. 136	
319	SAGI'NA *W*	PEARLWORT				*Caryophyllcæ*		*Sp* 5—7					
1848	procumbens *W*	procumbent	w		½	my s	W	Britain	rub.	S	s.l	Eng. bot. 8	
1849	cerastoides *W*	tetrandrous	w		½	jn jl	W	Britain	sea sh	S	co	Eng. bot. 16	



History, Use, Propagation, Culture,

China, &c. In Britain, it is found congregated in natural woods and forests Some of the finest in England, are in Medwood forest, in Staffordshire, and in Scotland, in the woods of Dumbartonshire, about Luss and Lochlomond. Professor Martyn's father first discovered the difference of sexes in the holly, some being male, others female, and others hermaphrodite It is a tree of great longevity, and will grow in any soil not very wet, but best in a dry deep loam, such is the soil of Medwood forest By culture alone, a hundred varieties and subvarieties have been produced, differing in the variegation, margin, and size of the leaves, and in the color of the fruit These make gay and elegant shrubs for lawns and small groups; and form an important feature in the general shrubbery The common green prickly leaved holly makes the best of all hedges, whether we regard its qualities for defence, shelter, duration, or beauty It has one fault, it is very slow of growth unless carefully cultivated, and for this reason hawthorn is preferred It was a very general custom about the end of the 17th century to divide gardens by hedges of this tree, and to keep them exactly shorn Evelyn's impenetrable holly hedge at Deptford has been much celebrated It was 400 feet long, 9 feet high, and 5 feet broad. Gibson, (*Archæologia Brit &c*) who mentions Evelyn's hedge, made a tour of the principal gardens near London, and states, as next in grandeur, that of Sir M. Decker at Richmond · of neither does there exist a single plant The largest holly hedge in Scotland is at Tynningham near Dunbar, planted by a former Earl of Haddington, author of a Treatise on Fruit Trees It has for many years past been left uncut, and now presents a noble phalanx of deep shining green leaves, and numerous spiry tops with spikes of coral berries.

In cultivating the holly, the kernel or stone of the berries is divested of its skin and glutinous pulp, by mixing with sand in heaps in the open garden, and turning over frequently The berries being gathered in November, may be rotted in this way till the October following, and then sown in beds, and covered three quarters of an inch with fine mould, or they may remain on the trees till spring, then gathered and mashed in a tub of water to separate the pulp, after which they may be sown In general, the stones do not vegetate till the second year from the gathering, some will occasionally germinate the first year, and a number not till the third. In transplanting and pruning the holly, the months of October and April are to be chosen: the oftener young plants are removed before planted in the final site the better, as it has naturally but few roots, and those chiefly ramose and descending Miller recommends cutting holly hedges with a knife, as clipping renders them unsightly. The variegated and other curious sorts are generally propagated by budding and grafting on the common green Evelyn says he raised some of the variegated sorts by sowing the seeds, and Miller always found the hedgehog variety continue the same when so propagated. Some raise them by layers, and Sweet says all of them "will root freely by cuttings taken off at a joint in ripened wood, and planted in sand under a hand-glass in a shady situation"

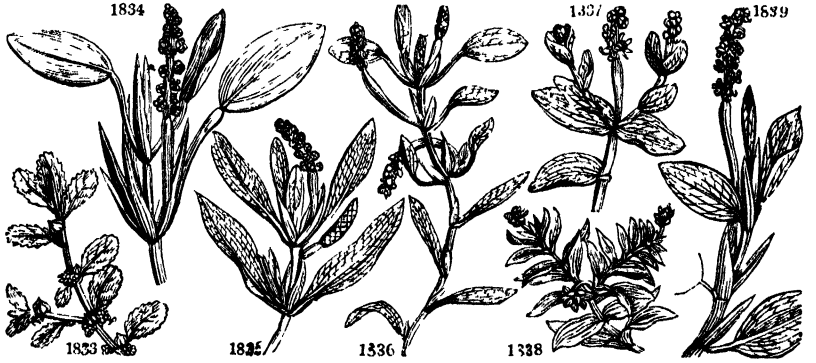
1822 Leaves ovate oblong edge with little cartilaginous scarcely pungent teeth, Corymbs pedunc. dichotomous
1823 Leaves ovate sinuate-toothed slightly spiny, Stipules subulate, Pedunc lax divided
1824 Leaves ovate acute spiny smooth flat, Flowers scattered at the base of the older branches
1825 Leaves oblong serrated, Serratures prickly-ciliated
1826 Leaves ovate with a point unarmed nearly entire
1827 Leaves elliptic-lanceolate acute deciduous serrated, Serratures unarmed
1828 Leaves alternate distant evergreen lanceolate attenuated both ways serrated at the end
1829 Leaves lanceolate elliptical nearly entire reflexed at the edge, Rib villous beneath
1830 Leaves alternate distant evergreen linear lanceolate shining serrated at end, Rib smooth beneath
1831 Leaves alternate distant oblong obtuse crenated serrated, Serratures not prickly
1832 Leaves oblong acuminate subserrated at the end, Pedunc long axillary 1-flowered

1833 Leaves wedge-shaped stalked shorter on one side coarsely sawed and plaited

1834 Leaves all elliptical stalked floating, Lower petioles submersed leafless
1835 Leaves floating on long stalks lanceolate ovate narrowed at both ends
1836 Upper leaves stalked elliptical narrowed at both ends the lower close together sessile linear
1837 Leaves cordate stem-clasping all immersed
1838 Leaves ovate acuminate opposite close, Stem dichotomous, Spike 4-flowered
1839 Leaves ovate-lanceolate flat narrowed into the stalks, Spike many-flowered contracted
1840 Leaves lanceolate alternate wavy serrated
1841 Leaves linear obtuse, Stem compressed
1842 Leaves setaceous parallel close together in two rows
1843 Leaves lanceolate membranous flat entire, Spike ovate dense few-flowered
1844 Leaves linear lanceolate alternate sessile broader than their stipule
1845 Leaves linear opposite and alternate narrower than their stipule spreading at base Stem rounded
1846 Leaves lanceolate opposite acuminated

1847 The only species

1848 Branches procumbent smooth, Petals very short
1849 Stem diffuse dichotomous, Leaves spatulate and obovate recurved, Fruit-stalks reflexed



and Miscellaneous Particulars

I cassine and vomitoria have bitter leaves, of which the N American Indians make a tea, which is almost their only physic At a certain time of the year they come down in droves from a distance of some hundred miles, to the coast, for the leaves of this tree, which is not known to grow at any considerable distance from the sea They make a fire on the ground, and putting a great kettle of water on it, they throw in a large quantity of these leaves, and setting themselves round the fire, from a bowl that holds about a pint they begin drinking large draughts, which in a very short time occasion them to vomit easily and freely thus they continue drinking and vomiting for the space of two or three days, until they have sufficiently cleansed themselves, and then every one taking a bundle of the tree to carry away with him, they all retire to their habitations

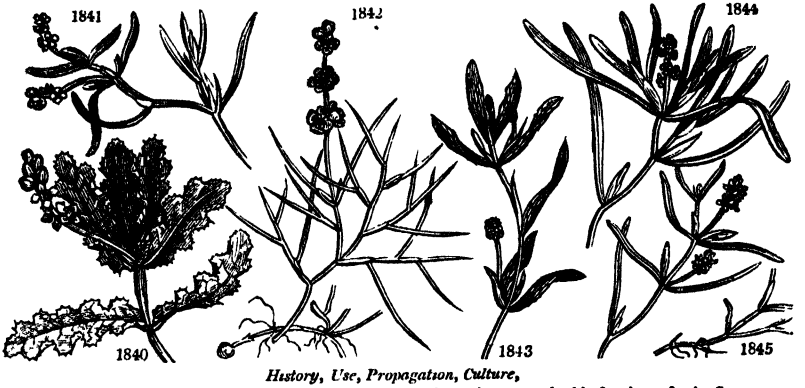
316 *Coldenia* So named by Linnæus, in honor of Cadwallader Colden, an English naturalist, who published in 1742, an account of the plants of New York

317 *Potamogeton* From ποταμος, a river, and γειτον, near Most of the species grow wholly immersed in water, but like most aquatics, flower above its surface It should seem, Professor Martyn observes, that the respiration of such truly-aquatic vegetables must be as different from those which inhale atmospheric air, as the breathing of fishes is from that of beasts and birds Accordingly, they are, as Haller remarks, of a different texture, pellucid, like oiled paper, very vascular, harsh, and ribbed, but often very brittle, and their surface, like that of aquatic animals, destitute of hair or down of any kind The leaves of aquatic plants afford shade and spawning places to fish, and habitations for aquatic insects and worms for their nourishment. The roots of P natans are a favorite food of the swan, and that bird is in consequence erroneously considered as keeping ponds and lakes clear of all aquatics Ducks eat the seeds and leaves of P crispum Haller informs us, that in the Swiss lakes P serratum grows from ten to twenty fathoms long, forming, as it were, immense woods in the midst of these immense reservoirs. Most of the species may be considered as ornamental in a botanic garden, when kept within bounds or in pots They are readily propagated by seeds or by dividing their long roots, and for the most part, grow best on a clayey bottom

318 *Ruppia* Named after Henry Bernard Ruppi, a German. He published in 1718, a Flora Jenensis It is remarked by Dr Goodenough, that the flower-stalk of this plant is spiral, like that of Valisneria, and relaxes or contracts itself according to the depth of the water The truth is, the flower and leaf-stalks of all aquatics have a power of accommodating themselves to the depth of the water, so as just to emerge above its surface, but the singularity in Ruppia and Valisneria appears to be the employment of a flower-stem for that purpose (See *Valisneria*)

319. *Sagina.* This plant, says Linnæus, is so called for its qualities In Latin, *sagina* expresses something

1850 apétala *W.*	small-flowered	○	w	½	my.jn	W	Britain	rub.	S	co	Eng. bot. 881
1851 marítima *E B.*	sea-side	○	w	½	my.au	W	Ireland	sc. alp.	S	co	Eng. bot. 2195
1852 erécta *Sm.*	glaucous	○	w	½	ap.my	W	Britain	...	S	co	Eng. bot. 609
320. TILLÆ'A. *W.*	TILLÆA.				*Sempervivæ*		*Sp* 1—4.				
1853 muscósa *W*	mossy	○	cu	½	jn.o	Pl	England	sa. he.	S	co	Eng bot. 116
321. RADI'OLA. *Sm.*	RADIOLA.				*Caryophylleæ*		*Sp* 1.				
1854 millegrána *Sm*	all-seed	○	w	½	jl au	W	Britain	san pl	S	co	Eng. bot. 893



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nourishing The species are very common in dry pastures, where they are valuable for sheep-food. S. procumbens is a small but troublesome weed in shaded garden-walks and paved courts, and with S apetala, seeds the whole summer Curtis remarks, that the latter species ripens its seeds more rapidly than almost any other plant.



Class V. — PENTANDRIA. *5* Stamens.

One of the most extensive of the Linnæan classes, and containing about a fifth part of all phænogamous plants It includes the whole of the Boragineæ or Asperifoliæ, Asclepiadeæ, Apocyneæ, and Umbelliferæ, nearly all Primulaceæ, and portions of a great variety of other natural orders, among which many are ornamental, and others valuable on account of their relation to medicine and the arts.

The Boragineæ are, in many instances, ornamental plants, a few, such as Anchusa tinctoria are applied to economical purposes, but the principal part are weeds of northern latitudes. They have been recently described and re-arranged in a scientific manner by M. Lehmann, whose Monographia Asperifoliarum should have a place in every botanical library

The curious genus Stapelia is a part of the Asclepiadeæ, which order was in so unsettled and confused a state as to be a reproach to the science until it was remodelled by Mr Brown, who first determined the just limits of its genera. The Apocyneæ contain, among some poisonous plants, such as Echites venenata, the Oleander remarkable for the beauty of its flowers, and the Cream fruit and Picimmons of Sierra Leone, which are said to be excellent fruit-trees

Umbelliferous plants contain numerous species, some of which, like the Cicuta virosa, Conium maculatum, &c. are dangerous poisons, and others which are useful to mankind either as luxuries or necessaries. The seeds of caraway, coriander, &c are commonly used by the confectioner, of dill and anise by the distiller, the blanched stems of celery and sweet fennel, and the roots and leaves of many others are among the best of British vegetables. The gum galbanum of the shops is said to be the produce of a plant of this tribe Great difficulty exists in ascertaining upon what principles the genera should be divided Linnæus, contrary to his usual practice, attempted to derive the characters from the absence or presence of the involucrum; Hoffman, Link, and Sprengel from peculiarities in the fruit, or, as it is familiarly called, in the seeds The characters of Sprengel, who has, as it were, grown old in the study of Umbelliferæ, are certainly deserving of attention, but botanists are much divided in opinion upon their merits, and, it is to be feared, that notwithstanding the labours of the learned men who have directed their study particularly to the consideration of the order, little real progress has been made in its final arrangement. In this work the arrangement of Sir James Smith has been adopted, as being the most simple of all that has been published, and the most easy of application.

The plants belonging to Primulaceæ are beautiful border-flowers, or pretty alpine plants In the same artificial section with these, are found the elegant families of Convolvulus and Ipomæa, one or several species of which produce the jalap of the shops; the various kinds of Epacris, which in New Holland rival the heaths of Southern Africa, and the splendid genus Azalea.

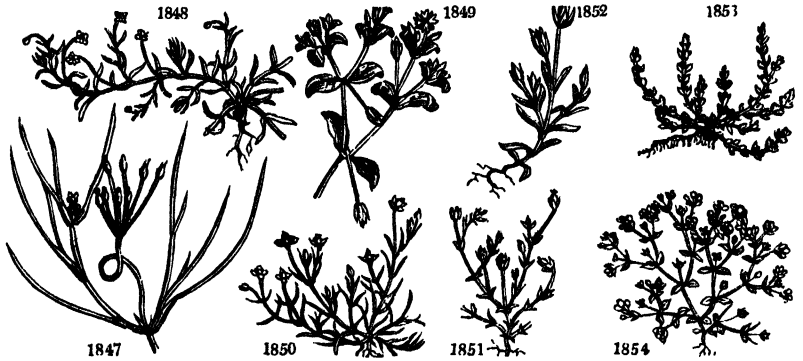
Other sections include the teak wood of the East Indies, the Sapodilla plum, and the Star apple, fine fruits of the West Indies, solanum, well digested by Dunal, the Jesuit's bark (Cinchona), of which no species has yet been brought alive to Europe, the coffee tree, and many others.

Pentandria Digynia contains little beyond the Asclepiadeæ and Umbelliferæ, already mentioned. The Sumach, Gueldar Rose, and Elder are contained in Trigynia, in Tetragynia the paradoxical and curious Parnassia; in Pentagynia, Crassula, Linum, and Statice, all ornamental genera, and a few obscure weeds make up the last order, Polygynia.

1850 Stem erect pubescent, Flowers alternate apetalous
1851 Stems erect divaricating smooth, Leaves obtuse blunt, Petals obsolete
1852 Stem erect about 1-flowered, Sepals acute, Petals entire

1853 Procumbent, Flowers trifid

1854 The only species



and Miscellaneous Particulars

320 *Tillæa* From Mich. Ang Tilli, an Italian, born in 1653, died in 1740 He was a foreign member of the Royal Society of London, and published a Catalogus Horti Pisani, in one volume, folio
321 *Radiola* A diminution of *radius* A little insignificant weed, formerly referred to the same genus with common flax.

Order 1. MONOGYNIA  5 Stamens. 1 Style.

1. *Flowers monopetalous, inferior. Seed* 1, *naked.*

322 *Mirabilis* Nut below the corolla, which is funnel-shaped. Stigma globose, a little warted.
323. *Abroma* Cor funnel-shaped, with cordate segments, above the germen contracted, at the orifice inflated Stigma simple
324. *Plumbago.* Seed 1 Stamens inserted into the valves. Corolla funnel-shaped. Stigma 5-cleft.

2 *Flowers monopetalous, inferior. Seeds* 2 *or more, naked.*

325 *Heliotropium.* Cal 5-parted Cor hypocrateriform, orifice without teeth, limb 5-cleft, sinuses plaited, simple, or toothed. Stamens included Stigma peltate Nuts 4, cohering without a common receptacle
326. *Myosotis* Cal 5-parted. Cor hypocrateriform, closed with scales Limb 5-parted, obtuse. Stamens included. Anthers peltate. Stigma capitate. Nuts 4, distinct, perforated at the base
327 *Echinospermum* Cal. cor. and other parts as in Myosotis. Nuts united to a central column, prickly, compressed, closed at the base.
328. *Mattia* Cal 5-parted, spreading Cor tubular, funnel-shaped at the orifice with 5 scales as long as the tube Anthers sagittate, conniving, exserted Style longer than stamens. Stigma simple Seeds winged.
329. *Tlarsidium* Cor hypocrateriform, with an angular tube, the orifice contracted with 5 rays Style very short. Stigma capitate. Nuts 4, 2-celled, mitre-formed, cohering, closed at base No common receptacle
330. *Lithospermum* Cal 5-parted, persistent Cor. funnel-shaped, with a half 5-cleft obtuse limb, and an open orifice. Anthers included. Stigma obtuse, bifid. Seeds 4, hard, smooth, closed at the base.
331. *Batschia.* Cal. deeply 5-parted. Cor. hypocrateriform, with a hairy ring at the base inside, an open orifice, and rounded segments Stigma emarginate. Seeds hard, shining
332. *Onosma* Cal 5-parted, erect. Cor campanulate, funnel-shaped, with a ventricose tubular 5-toothed limb, and an open orifice. Anthers sagittate, connected at base by their lobes. Stigma obtuse. Seeds ovate, shining, stony, closed at base
333. *Anchusa.* Cal. 5-cleft, persistent. Cor funnel-shaped, with a half 5-cleft spreading limb, orifice closed with 5 prominent scales. Anthers included Stigma emarginate Seeds gibbous, with a sculptured surface
334. *Symphytum.* Cal 5-parted, acute. Cor cylindrical, campanulate, with a short tube and a tubular inflated limb, orifice with 5 subulate rays conniving into a cone. Stigma simple Seeds gibbous, not pierced at base.
335. *Onosmodium.* Cal deeply 5-parted. Cor oblong, campanulate, with a ventricose hair 5-cleft limb, the edges of which are inflated, orifice open Anthers sagittate, included.
336. *Cynoglossum.* Cal. 5-parted. Cor short, funnel-shaped, with a 5-parted obtuse limb; orifice closed by scales. Stamens included. Stigma capitate Nuts depressed, attached to a central column
337. *Omphalodes.* Cal. deeply 5-parted. Cor. rotate, shorter than the tube of the calyx, with 5 short scales crossing over the anthers, which are inserted into the base of the tube. Style short. Stigma thick. Seeds urceolate, toothed at the edge
338. *Pulmonaria.* Cal. prismatic, 5-cornered, 5-toothed. Cor. funnel-shaped, with a cylindrical tube, open orifice, and obtuse 5-lobed limb. Stigma obtuse. Seeds 4, obtuse, rounded.
339. *Cerinthe* Cor tubular, ventricose. Nuts 2, each 2-celled, open at the base.
340. *Borago.* Cal. 5-parted. Cor. rotate, with acute segments, orifice crowned Filaments conniving Seeds rounded, closed at base, rugose, inserted lengthways into an excavated receptacle.

341. *Trichodesma* Cor rotate, with a naked orifice and subulate segments. Stamens exserted. Anthers villous at back. Nuts half immersed in the 4-winged column

342. *Asperugo* Cal 5-parted, irregular Cor funnel-shaped, with a short tube, orifice closed by convex scales. Stigma obtuse Seeds oblong, compressed, not perforated

343. *Nonea.* Cal. at length inflated Cor funnel-form, with a 5-cleft short limb, and straight naked tube. Stamens included. Orifice nearly open Seeds 4, with parallel streaks

344. *Lycopsis* Cor funnel-shaped, 5-lobed, with a covered tube and obtuse limb Scales at the orifice Stigma emarginate. Nuts hollowed at base

345. *Echium* Cal 5-parted, subulate Cor campanulate with unequal obtuse segments, the 2 upper the longest, orifice open. Filaments unequal, declinate Stigma obtuse Seeds roundish, warted, not open at base

346. *Tournefortia.* Berry 2-celled, cells 2-seeded, perforated at end. Cor hypocrateriform or rotate, naked at the orifice.

347. *Nolana* Cal turbinate Cor campanulate, plaited Nuts 5, 2 or 4-celled

3. *Flowers monopetalous, inferior Seeds in a capsule or dry drupe (Vesta, which has a berry, is an exception, but is placed here on account of its relation to other genera)*

348 *Aretia* Caps 1-celled Corolla hypocrateriform, contracted at the orifice Stigma globose
349 *Androsace* Caps 1-celled Corolla hypocrateriform, contracted at the orifice Stigma globose.
350. *Primula* Caps 1-celled Corolla funnel-shaped, pervious at the orifice Stigma globose
351 *Cortusa* Caps 1-celled, oblong Corolla rotate Stigma somewhat capitate
352 *Soldanella* Caps 1-celled Corolla torn Stigma simple
353. *Dodecatheon* Caps 1-celled, oblong Corolla reflexed Stigma obtuse
354 *Cyclamen* Caps 1-celled, pulpy within Corolla reflexed Stigma acute
355 *Hottonia* Caps 1-celled Corolla with the tube below the stamens Stigma globose.
356 *Lysimachia* Caps 1-celled, 10-valved Corolla rotate Stigma obtuse
357 *Anagallis* Caps 1-celled, cut round Corolla rotate Stigma capitate
358 *Diapensia* Caps 3-celled Corolla hypocrateriform Cal 8-leaved
359 *Pyxidanthera* Cal deeply 5-parted Cor campanulate, much shorter than the tube of calyx, segments 5, spatulate Anthers with an appendage at their base Style thick Stigmas 3
360. *Coris* Caps 1-celled, 5-valved Corolla irregular Stigma capitate
361 *Galax* Caps 1-celled, 2-valved Corolla hypocrateriform Stigma roundish
362 *Menyanthes* Caps 1-celled Corolla villous spreading Stigma bifid Cal 5-parted
363 *Villarsia* Caps many-seeded, 2-valved. Cor rotate, limb spreading, 5-parted, flat, bearded or scaly at the base Glands 5, hypogynous
364 *Chironia* Caps ovate, seeds numerous small Cal 5-parted erect Cor equal, with a 5 parted limb of ovate equal segments Filaments from mouth of tube Anthers, after bursting, spiral Style declinate
365 *Eustoma* Cal deeply 5-cleft Tube of cor funnel-shaped, contracted Filam short, regular, inserted about the middle of the tube Stigma large, deeply 2-lobed Seeds scurfy
366. *Erythræa* Caps linear Cal 5-cleft Cor funnel-shaped, with a short limb withering Anthers, after bursting, spiral. Stigmas 2
367 *Sabbatia* Cor with an urceolate tube, and limb 5-12-parted Stigmas 2-parted, with spiral divisions Anthers at length revolute
368 *Loganea.* Caps 2-parted. Cor subcampanulate, with a villous throat, and 5-parted limb. Stigma clavate
369 *Phlox* Caps 3-celled Corolla hypocrateriform, with a curved tube Stigma trifid
370 *Polemonium* Caps 3-celled Corolla 5-parted Stamens placed on the valves
371 *Vesta* Berry Cor funnel-shaped, 5-parted, with a hairy throat Stamens exserted Stigma nearly entire
372 *Hydrophyllum* Caps 1-celled, 2-valved Corolla with 5 nectaries Stigma bifid
373 *Phacelia* Caps 2-valved, 4-seeded Cal persistent Cor campanulate, 5-cleft, with 5 furrows inside the base Stam exserted Style short Stigmas 2, long
374 *Ramondia* Caps 2-valved, valves bent in at edge, septiferous Cor rotate, rather unequal. Stamens approximated, perforated at end Stigma round
375 *Verbascum* Caps 2-celled Corolla rotate Stigma obtuse Stamens declinate.
376 *Datura* Caps 2-celled, 4-valved Corolla funnel-shaped Calyx deciduous
377 *Brugmansia* Caps unarmed Cal bursting at side, persistent Cor funnel-shaped Anthers glued together Stigma or line running down each side of style
378 *Lasianthus* Caps 2-celled, many-seeded Corolla funnel-shaped, ventricose Style persistent
379 *Spigelia* Caps 2-celled, double Corolla funnel-shaped Stigma simple
380 *Nicandra* Berry without juice, 3-5-celled, covered by the calyx, which is inflated Cor campanulate. Stamens incurved, distant
381 *Hyoscyamus* Caps 2-celled, with a lid Corolla funnel-shaped Stigma capitate
382 *Nicotiana* Caps 2-celled Corolla funnel-shaped Stigma emarginate
383 *Ipomœa* Caps 3-celled Corolla funnel-shaped Stigma capitate
384 *Convolvulus* Caps 2-celled, 2-seeded Cor campanulate Stigma 2-cleft
385 *Argyreia* Berry rounded, juiceless, 4-celled Cal colored, persistent, the outer sepals largest Cor 5-parted, with a short thick tube surrounding the nectary Stamens in the mouth of tube thickened, at base hairy Anthers sagittate
386 *Nemophila* Ovary 1 celled, with 2 parietal placentas, each bearing 2 distant ovules Capsule 1-celled, with fleshy placentas fixed to a longitudinal dorsal axis, otherwise loose, bearing the seeds on their inner surface
387 *Calystegia* Ovary half 2-celled, 4-seeded Cal 5-parted, inclosed in two leafy bractes Cor campanulate, 5-plaited Stamens nearly equal, shorter than the limb Stigmas 2, obtuse
388 *Cobœa* Caps obovate, 3-5-celled, 3-5-valved Seeds imbricated, edged Cal 5-cleft, campanulate, 5-cornered, winged Cor campanulate, with 5 blunt lobes Stamens declinate, filaments spiral
389 *Cantua* Caps 3-celled, 3 valved Seeds winged Corolla tunnel-shaped Stigma trifid
390 *Hoitzia* Caps of Cantua Seeds not edged Cal double, inner 1-leaved, tubular, outer of 4-8 leaves. Cor funnel-shaped, 4-5 times as long as calyx, a little incurved. Stamens inserted into base of tube
391 *Retzia* Caps 2-celled Corolla cylindrical, villous on the outside Stigma bifid
392. *Lubinia* Caps many-seeded, mucronate, when pressed of 2-4 valves. Cal 5-parted Cor. hypocrateriform, with a flat 5-parted equal limb Filaments attached to middle of tube Stigma obtuse
393 *Epacris* Caps with placentas attached to a central column Cal colored, with many bracteæ Cor. tubular, with a beardless limb Stamens on the petals Scales 5, hypogynous
394 *Styphelia* Drupe juiceless, with a solid bony putamen Cal 5-parted, with many bracteæ. Cor. in a long tube, having within 5 bundles of hairs, and bearded reflexed segments Filaments exserted
395 *Lissanthe* Drupe berried, with a bony solid putamen Cal with 2 bracteæ or more. Cor infundibuliform, not bearded Ovarium 5 celled
396. *Astroloma* Drupe juiceless, with a solid bony putamen Cal with 4 or more bracteæ. Cor ventricose, twice as long as calyx, with 5 bundles of hairs inside, and a short spreading bearded limb Filaments linear included.
397. *Sprengelia* Caps with placentas attached to a central column Cal. colored Cor 5-parted, rotate, beardless. Stamens hypogynous Anthers connate or not No hypogynous scales
398. *Andersonia.* Caps of Sprengelia. Cal colored, with 2 or more leafy bracteæ Cor. the length of the

calyx, the segments of the limb bearded at the base. Stamens hypogynous. Scales 5, hypogynous, sometimes connate.

399 *Lysimema.* Caps of Sprengelia. Cal colored, with many bracteæ Cor hypocrateriform, with a tube sometimes 5-partible, with beardless segments bent to the right Stamens hypogynous Scales 5, hypogynous.

400 *Monotoca.* Drupe berried. Cal. with 2 bracteæ Cor funnel-shaped, with the limb and throat beardless. Ovary 1-seeded.

401. *Leucopogon.* Drupe berried or juiceless, sometimes crustaceous Cal with 2 bracteæ. Cor funnel-shaped, with a spreading limb bearded lengthwise Filaments included. Ovary 2-5-celled

402. *Stenanthera.* Drupe juiceless, with a solid bony putamen Cal with many bracteæ Cor. tubular, longer than the calyx, ventricose, with a short spreading half-bearded limb. Filaments included, fleshy, broader than the anthers.

403. *Azalea.* Caps. 5-celled. Corolla campanulate Stigma obtuse

404. *Chamæledon.* Caps. 2-celled, opening at the end. Cal 5-parted, equal Cor campanulate, 5-cleft, unequal. Stamens inserted into the base of cor. equal, straight, included. Anthers opening lengthwise Style straight.

405. *Brexia* Cal. short, with 5 rounded lobes Petals ovate, spreading, rounded Filam dilated at base Bristles shorter than the stamens, about the ovarium

406 *Ophiorhiza* Caps. 2-celled, 2-parted. Corolla funnel-shaped, villous at mouth, with acute segments Stigma bifid.

407. *Allamanda.* Caps. 1-celled, lens-shaped, 2-valved, the valves being boat-shaped Seeds imbricated.

408 *Theophrasta* Caps 1-celled, very large Corolla campanulate Stigma acute

409 *Clavija* Caps 1-celled, very large. Corolla rotate, with 5 prominences in the centre. Filaments 5, united into a tube at the base of the corolla.

4. Flowers monopetalous, inferior Seeds in a follicle

410 *Vinca* Cal 5-cleft. Cor hypocrateriform, plaited at the orifice, with flat segments, truncate at the end Filaments at the end dilated into concave scales Glands 2 at base of ovary

411. *Nerium* Cor hypocrateriform, crowned at the mouth with little lacerated appendages, segments of cor twisted. Filaments inserted into middle of tube Anthers sagittate, adhering to the stigma by the middle Little teeth at the base of the calyx outside the corolla

412 *Wrightia* Cor. hypocrateriform Mouth crowned by 10 divided scales Stam exserted Filaments inserted into throat. Anthers sagittate, adhering to the stigma by the middle Scales 5-10, inserted into base of calyx outside of corolla, some hypogynous

413 *Echites* Cor hypocrateriform, with segments of the limb unequal-sided Ovaries 2 Style 1, filiform Follicles slender

414 *Ichnocarpus* Cor hypocrateriform, with segments of limb halved Ovaries 2 Style 1, filiform Stigma ovate, acuminate. Filaments 5, hypogynous, alternate with the stamens

415 *Plumeria* Cor funnel-shaped, with a flat limb, and ovate-oblong oblique segments Filaments from the middle of tube Anthers conniving Styles scarcely any

416 *Strophanthus* Cor. funnel-shaped, with segments caudate, mouth crowned with 10 entire scales Stam inserted into middle of tube. Anthers sagittate, aristate, or mucronate Style filiform, dilated at end. Stigma cylindrical

417. *Cameraria* Cal very small. Cor funnel-shaped or hypocrateriform, with a long tube inflated at both ends, and a flat limb, with 5 lanceolate oblique segments Filaments in the middle of tube Ovaries, with appendages at their sides Styles scarcely any

418 *Tabernæmontana* Cor hypocrateriform. Stamens included Anthers sagittate Ovaries 2 Style filiform Stigma dilated at base, bifid. Seeds immersed in pulp

419. *Amsonia* Cor funnel-shaped, closed at the orifice, with a 5-lobed limb Stigma capitate, surrounded by a membranous angle. Seeds obliquely truncate, naked.

5. Flowers monopetalous, inferior Seeds in a drupe or berry

420 *Cerbera* Cal persistent, 5-parted Cor funnel-shaped, with a clavate tube and 5-cornered throat, with 5 scales, segments of limb oblique obtuse. Stigma fringed, bifid Drupe bony, 2-celled, 4-valved. Seeds 1 2, covered with a fleshy skin

421. *Tectona.* Cal. campanulate, with 5-6 lobes Cor funnel-shaped, the length of calyx, with a short tube, and 5-6-parted crenulate limb Stamens under the throat of corolla. Drupe globose in the inflated calyx, 3-4-celled

422 *Caldasia* Cal tubular Cor tubular, 2-lipped, with emarginate segments Filaments declinate Drupe 3-angular, 3-valved, 3-seeded.

423 *Bumelia* Cal 5-parted, very small Cor campanulate, 5-cleft, or hypocrateriform, with teeth between the divisions of limb Nectary a 5-leaved crown, adhering to the tube of the corolla Drupe ovate or globose

424 *Chrysophyllum.* Cal 5-parted, small Cor campanulate, short Filaments on the tube connivent Style very short Stigma obtuse, 5-cleft Berry 10-celled, with solitary shining seeds

425 *Sideroxylon* Cal. 5-toothed. Cor 5-cleft Scales of nectary five Stigma simple Berry 5-seeded

426. *Jacquinia.* Cal 5-leaved Cor with a campanulate ventricose tube, and 10-cleft limb Stamens hypogynous. Anthers hastate • Stigma capitate Berry roundish, 1-celled, 1-seeded

427. *Achras* Cal. 5-6-parted. Cor ovate, 5-6-cleft, with as many scales on the throat. Berry or apple teated, 1-celled Seeds solitary, with a marginal hilum, and a claw at the end

428. *Cordia* Cal tubular, 4-5-toothed Cor funnel-shaped, 4-5-cleft Style dichotomous Stigmas 4 Drupe covered by the calyx, 1-4-celled Cotyledons plaited.

429. *Varronia.* Cal tubular, 5-toothed Cor tubular, with a 5-cleft, spreading, plaited limb Style dichotomous. Stigmas 4 Drupe 4-celled, 4-seeded

430. *Ehretia* Cal. deeply 5-cleft Cor funnel-shaped, with a naked throat. Stamens exserted Style semibifid. Berry 2-celled, 2-seeded.

431. *Bourreria* Cal. campanulate, half 5-cleft, very small Cor longer than calyx, with a plaited limb Stam. as long as cor Stigma obtuse edged Berry roundish, 1-celled, with 4 convex seeds

432. *Ellisia* Cal 8-parted Cor funnel-shaped Stam inserted in base of corolla. Stigma simple or bifid Berry dry, scrotiform, 2-valved, 2-celled, in an enlarged stellate calyx Seeds globose, black, dotted.

433. *Sersalisia* Cal 5-parted. Cor 5-cleft Stamens 5, sterile, scale-like, with as many alternate fertile ones. Ovary 5-celled. Stigma undivided. Berry 1 5 seeded Seeds with a crustaceous skin, and longitudinal hilum.

434. *Mangifila.* Cal. very small, 5-parted Cor. rotate, 5-parted. Scales of nectary none Drupe or berry 1-celled, 1-seeded.

435. *Ardisia* Cal. 5-parted. Cor hypocrateriform, with a reflexed limb. Anthers large, erect. Stigma simple Drupe fleshy, superior, 1-seeded.

436 *Arduina* Cor funnel-shaped, curved Stigma bifid Berry 2-celled. Seeds solitary, oblong.

437 *Strychnos.* Cor tubular, 5-cleft Berry 1-celled, with a woody coat A Contorta

438. *Carissa* Cal. short. Cor. tubular Stamens included Berry 2-celled. Cells 1-2 or many-seeded A Contorta.

439. *Pæderia* Cal 5-toothed. Cor. infundibuliform, 5-lobed, hairy within Style bipartite Berry brittle, shining, 2-seeded

440. *Gelsemium* Cal. 5-toothed. Cor. infundibuliform Limb spreading, 5-lobed, nearly equal Caps. compressed, flat, 2-partible, 2-celled. Seeds flat, attached to the margins of the valves

441. *Rauwolfia.* Cor. tubular, globose at base Berry succulent, 2-seeded. A Contorta.

442. *Vallesia.* Cal. very small, 5-fid. Cor hypocrateriform, or infundibuliform, with a long slender tube, an inflated throat, and a flat limb with 5 lanceolate spreading segments. Stamens inserted in the throat. Drupes 2, 1-celled, 1-seeded. Nut fibrose, striated.

443. *Bæobotrys.* Cor tubular, 5-cleft. Calyx double, superior: outer 2-leaved, lower campanulate, 5-toothed. Berry 1-celled, many-seeded.

444 *Solandra.* Cal. bursting Cor. clavate, funnel-shaped, very large. Berry 4-celled, many-seeded.

445. *Centrum.* Cal. funnel-shaped. Segments acute, edged. Stamens with or without a tooth. Anthers 4-cornered. Berry 1-2-celled. Seeds few, angular.

446. *Atropa.* Cor. campanulate Stamens distant. Berry globose, 2-celled, sitting on the calyx.

447 *Mandragora.* Cal. turbinate. Cor campanulate. Filaments dilated at base. Ovary with 2 glands. Berry fleshy, solid. Seeds reniform

448. *Physalis* Cor campanulate, rotate. Stamens conniving. Berry within the inflated calyx, 2-celled.

449. *Saracha.* Cor rotate, campanulate. Berry 1-celled. Receptacle fleshy.

450 *Lycium.* Cor tubular, with a closed orifice Filaments bearded. Berry 2-celled, many-seeded.

451. *Solanum.* Cal persistent. Cor rotate or campanulate, 5-lobed, plaited. Anthers in some degree united, opening by a double pore at the end Berry 2-celled, many-seeded.

452. *Nycterium.* Cal 4-5-cleft. Cor. rotate, unequal. Anthers declinate, conniving, the lowest longest. Berry 2-celled, many-seeded

453. *Capsicum* Cor rotate Berry without juice.

454 *Lecа* Cor monopetalous Nectary 1-leaved, placed on the tube of the corolla, 5-cleft, erect. Berry 5-seeded, inferior.

6. *Flowers monopetalous, superior Seeds in a capsule.*

455. *Spermadictyon.* Caps inferior, 1-celled, 5-valved. Seeds 5, with a netted coat. Cor. funnel-shaped. Stigma 5-cleft.

456. *Dentella.* Cal 5-parted, superior Cor. funnel-shaped, with 3-toothed divisions. Caps. 2-celled, many-seeded.

457 *Macrocnemum* Cal. campanulate, cup-shaped. Cor campanulate or funnel-shaped. Caps. 2-celled. Seeds imbricated.

458. *Exostemma.* Cal campanulate, 5-toothed. Cor funnel-shaped Limb 5-parted, usually hairy. Caps. oblong, rounded, 2-celled, 2-partible Seeds numerous, with a membranous edge.

459 *Burchellia.* Heads of flowers in an involucrum Cor clavate, funnel-shaped, with a 5-cleft short limb and a beardless orifice. Segments before expansion twisted together Stamens inserted above the middle of the tube. Anthers subsessile, included. Stigma clavate. Berry crowned by the deeply 5-cleft calyx, 2-celled, many-seeded.

460 *Rondeletia.* Cor funnel-shaped Tube ventricose at top Segments rounded, flattish. Caps. round, crowned, 2-celled. Seeds several or solitary

461 *Coutarea.* Cal 6-leaved Cor. large, funnel-shaped, 6-cleft, with an incurved ventricose tube Filaments inserted at base of tube. Caps. 2-celled, 2-valved, many-seeded Seeds with a membranous edge.

462. *Portlandia.* Cal 5-leaved Cor clavate, funnel-shaped. Segments spreading, deflexed. Caps. 5-cornered, retuse, crowned, 2-celled, 2-valved. Valves doubled, 2-cleft, many-seeded.

463 *Campanula* Cor campanulate, closed at bottom with staminiferous valves. Stigma 3-5-cleft. Caps. inferior, opening by lateral pores

464 *Lobelia* Cor with the tube split on one side, the limb 2-lipped, 5-parted. Stigma 2-lobed, sometimes entire. Caps. 2-3-celled, 2-valved at end

465 *Phyteuma* Cor at first rounded conical, afterwards 5-parted with linear weak segments. Stigma 2 or 3-cleft. Caps. 2-3-celled, inferior

466 *Trachelium* Cor funnel-shaped. Style long Stigma globose Caps 3-celled, inferior.

467 *Roella* Cor funnel-shaped, closed at bottom with staminiferous valves. Stigma 2-fid. Caps. nearly 2-celled, cylindrical, inferior.

468 *Goodenia* Cor. labiate, 5-cleft, waved, longitudinally split, pushing forth the stamens. Anthers linear. Stigma urceolate, ciliated. Caps 1-2-celled, 2-valved, many-seeded. Seeds imbricated.

469 *Euthales.* Cal tubular, 5-cleft, equal Cor split at the end, with a 2-lipped limb Anthers distinct. Style undivided. Stigma 2-lipped. Caps 4-valved, 2-celled at base

470 *Dampiera* Cor 2-lipped Tube split on one side Segments of upper lip with an auricle upon the inner edge Anthers cohering Covering of stigma naked

471 *Samolus* Cor hypocrateriform, 5-cleft, with scales between the divisions Stamens inserted into the tube Caps. 1-celled, 5-toothed, many-seeded.

472. *Velleia* Cal 3-5-leaved, unequal. Tube split at end with a 2-lipped limb. Anthers distinct. Style undivided. A gland between the two front stamens

7 *Flowers monopetalous, superior Seeds in a drupe or berry.*

473 *Scævola* Cor 1-petalous, with the tube divided lengthwise Limb 5-cleft, lateral. Drupe inferior, 1-seeded. Nect. 2-celled.

474 *Caprifolium.* Cal. 4-5-toothed or entire Tube of cor long, with a 5-cleft, regular, or 2-lipped limb. Stamens length of cor Stigma globose Berry distinct, 3-celled, many-seeded.

475 *Lonicera* Ca 5 toothed. Cor tubular, 5-cleft, irregular Berry inferior, 2-3-4-celled, many-seeded.

476. *Symphoria* Cal 4-toothed. Cor trifid, nearly equal Berry crowned, 4-celled, 4-seeded, 2 cells sometimes abortive

477 *Diervilla* Cal oblong, 5-cleft. Cor. twice as long, funnel-shaped, 5-cleft, spreading Caps oblong, 4-celled, many-seeded

478 *Triosteum* Cal 5-cleft. Cor scarcely longer, tubular, 5 lobed. Berry 3-celled, 3-seeded, inferior.

479 *Coffea* Cal increasing, 5-toothed, teeth deciduous. Cor hypocrateriform. Stamens above the tube Anthers sagittate Berry 2-seeded Seeds with an arillus, on one side convex, on the other flat

480 *Chiococca* Cor funnel-shaped, equal Berry compressed, double, 2-seeded. Seeds oblong, compressed.

481 *Serissa* Cor funnel-shaped, fringed at the throat, with segments of the limb 3-lobed. Berry 2-seeded.

482. *Canthium* Cal 5-cleft Cor 5-cleft, spreading Style elevated. Stigma capitate. Berry coated, 2-celled, 2-seeded Seeds on one side convex, on the other flat, with a longitudinal furrow. Prickly.

483 *Psychotria.* Cal 5-toothed, crowning Cor funnel-shaped. Berry globose or oval. Seeds 2, furrowed, bony.

484. *Hamelia* Cor 5-cleft Berry 5-celled, many-seeded. Racemes divided Flowers 1-sided.

485. *Posoqueria* Cal turbinate Cor hypocrateriform, with a long cylindrical curved tube which is dilated at end, with long narrow reflexed segments Stamens exserted

486. *Vanguera* Cor. campanulate, globose, with a hairy throat. Stigma of 2 lips. Berry apple-shaped, 4-5-celled, 4-5-seeded.

487. *Gardenia.* Segments of the cal. vertical or oblique Cor at first twisted, funnel-shaped, 5-9-cleft, with a tube usually long Style elevated Stigma 2-lobed Berry 2-celled, many-seeded. Seeds in a double row

488. *Genipa.* Cal. tubular or turbinate, entire Cor hypocrateriform, with a large 5-parted limb. Anthers sessile in the throat, exserted Stigma clavate, entire, or simple Berry large, fleshy, truncated at the end, 2-celled, many-seeded.

489. *Oxyanthus* Cal contracted at top Cor funnel-shaped, with a very long rounded tube, and a 5-parted limb, with very acute lobes. Anthers exserted.

490. *Randia.* Cal. 5-parted, with linear-lanceolate, twisted sepals Cor hypocrateriform, tube not much longer than calyx. Stigma 2-lobed, with oblong unequal lobes Berry half 2-celled, with an incomplete partition; crowned with the tubular calyx. Seeds many.

491. *Hedyosmia.* Cor. funnel-shaped. Stigmas 2, thickish. Berry oblong, 2-celled, many-seeded. Seeds in 4 rows. Stamens in the inside of the tube.
492. *Pinckneya.* Sepals unequal, one or two of them foliaceous. Cor. a long tube. Filaments in the base of the tube. Caps 2-valved, valves bearing the divisions in the middle
493. *Erithalis.* Cal. urceolate. Cor 5-parted, with recurved segments Berry 10-celled, 10-seeded.
494. *Webera.* Cor. funnel-shaped, spreading. Stamens included. Stigma clavate. Berry rounded, two-celled.
495. *Plocama.* Cal. 5-toothed. Cor. campanulate, 5-cleft. Berry 3-celled, with 1-seeded cells.
496. *Morinda.* Flowers collected in a globe above a spherical receptacle. Cal. 5-toothed. Cor. funnel-shaped, 5-cleft, spreading. Berries aggregate, on account of their mutual compression angular.
497 *Cephaelis.* Flowers headed in an involucrum Cal. 5-toothed. Cor tubular Stigma 2-parted. Berry 2-seeded. Receptacle chaffy. Involucrum 1-5-leaved.
498. *Sarcocephalus.* Flowers in a naked head, 5-parted. Stigma clavate. Fruit united into a great fleshy tessellated berry.

8. *Flowers polypetalous, inferior Seeds in a drupe, berry, or berried capsule.*

499. *Hirtella* Pet. 5. Filam. very long, persistent, spiral Berry 1-seeded Style lateral.
500. *Triphasia.* Flowers with their parts ternary. Stamens distinct. Anthers sagittate. Berry 3-celled 3-seeded.
501 *Vitis* Petals cohering at the end like a calyptra, withering Berry 5-seeded
502. *Ampelopsis* Cal entire. Petals cohering at the end, withering. Stigma capitate. Ovary immersed in the disk, 2-4-seeded
503. *Rhamnus* Cal campanulate, 4-5-cleft. Cor. scales protecting the stamens, inserted into the calyx. Stigmas 1-2-5-cleft. Berry 3-4-seeded
504. *Œnoplia* Cal. urceolate, 5-cleft. Petals 5. No fleshy discus. Drupe juicy, 2-celled, one cell being usually abortive, 1-seeded.
505 *Paliurus* The flowers of Zizyphus Styles 3. Drupe dry, 3-celled, surrounded by a membranous orbicular wing
506. *Zizyphus.* Cal spreading, 5-cleft Petals 5 Discus fleshy, orbicular, surrounding the ovary. Styles 2. Drupe with a 1 or 2-seeded nut. Flowers axillary
507 *Celastrus* Cor 5 petals, spreading Caps 3, angular, 3-celled. Seeds with an arillus
508. *Senacia.* Cal. very small, 5-toothed. Cor. 5 petals Caps spherical, stalked, 2-valved, 4-seeded. Seeds angular, naked.
509. *Euonymus.* Pet. 5. Caps 5-cornered, 3-celled, 3-valved, colored Seeds with an arillus
510 *Ceanothus* Pet 5, bagged, vaulted Berry dry, 3-celled, 3-seeded.
511 *Staavia.* Flowers aggregate. Stamens inserted into the calyx. Styles 2, united. Berry 5-seeded, coated. Receptacle chaffy, villous.
512. *Pomaderris* Cal turbinate. Petals arched, scale-like, sometimes none. Style 3-cornered. Stigmas 3, capitate. Caps of 3 papery divisions
513. *Mangifera* Pet 5 Drupe reniform
514. *Schrebera* Drupe dry, with a 2-celled nut Nectary an elevated edge
515. *Billardiera.* Petals 5, alternate with the sepals. Nectary O Stigma simple Berry many-seeded
516. *Elæodendrum* Sepals 5-10, with round concave scales Cor 5-parted Segments ovate, lanceolate, concave. Nect linear, subulate, petal-like Drupe dry, with a 2 or 3-celled nut Putamen thick, hard, furrowed.

9 *Flower polypetalous, inferior. Seeds in a capsule*

517 *Diosma.* Cal 5-parted. Petals and stamens inserted in the calyx Nect of 5 plaits. Ovary crowned. Caps. 5-valved. Each end with an elastic arillus
518. *Adenandra.* Cal. 5-parted. Pet and stamens inserted in the calyx. Stamens 10, of which every other one is sterile Anthers with a gland at end.
519. *Baryosma.* Cal. 5-leaved. Petals 10, unequal, inserted in the receptacle Nect. a 5-lobed gland inserted on the receptacle
520. *Agathosma.* Cal. 5-parted. Petals 10, unequal, inserted in the calyx Nect 5-lobed, inserted in calyx.
521. *Nauclea* Cal. about 5-toothed. Cor funnel-shaped. Caps. 3-cornered, 2-celled, many-seeded. Flowers in a globose head upon a common pilose receptacle
522. *Pittosporum.* Cal. deciduous Petals 5, conniving in a tube Caps 2-5-celled, 2-5-valved. Seeds pulpy
523. *Lasiopetalum.* Cal 5-leaved. Petals minute, gland-like. Filaments 5, separate Anthers opening by two pores inwards. Stipules none
524 *Thomasia* Cal persistent, veiny Pet. 5, very small or O. Filam united at base. Anthers opening laterally. Stipules leafy
525. *Syringia* Cal. withering Pet O Filam. 10, every other one barren. Anthers opening at their back. Stipules small, deciduous
526 *Buttneria.* Pet. 5 Nect. 5-leaved Filaments inserted into the end of the nectary. Caps. of 5 divisions, muricated.
527. *Ayenia* Cal. 5-parted Pet 5, connected at end into a star, with their claws slender, bent into the form of a crown Glands 5, stamen-shaped. Nectary cup-shaped. Caps depressed, 5-furrowed, 5-celled, 5-valved. Valves bifid.
528. *Calodendrum.* Cal. 5-parted, short. Petals lanceolate, stalked. Stam. 5, sterile, petal-shaped. Caps. 5-angular, 5-celled, 5-valved, with 2-seeded cells.
529. *Toddalia* Cal 5-cleft Petals 5 Stigma capitate Caps berried, 5-celled. Cells 2-seeded
530. *Bursaria.* Cal. inferior, 5-toothed. Pet. 5, linear Stigma simple Caps. cordate, compressed, 2-partible, 2-seeded. Seeds reniform
531. *Cedrela.* Cal. withering Cor of 5 petals, funnel-shaped, at base united ½ with the receptacle. Caps. woody, 5-celled, 5-valved. Seeds with a membranous wing
532 *Hovenia.* Cal 5-parted. Pet. 5, convolute. Stigma 3-fid Caps. 3-celled, 3-valved. Cells 1-seeded.
533. *Brunia.* Flowers aggregate. Cal. superior, 5-parted. Filaments inserted into the claws of the petals. Stigma 2-fid. Caps. small, 2-celled.
534. *Brossæa.* Cal. fleshy, superior Cor. conical, truncated. Caps. 5-furrowed, 5-celled, covered by the persistent calyx, with 5-fissures.
535. *Itea.* Cal. 5-cleft, campanulate. Pet. 5, linear, reflexed, inserted into calyx. Stigma capitate, 2-lobed. Caps. 2-celled, 2-valved, with the valves bent inwards.
536. *Cyrilla.* Cal. very small, turbinate, 5-parted, superior. Pet. 5, stellate, stiffish. Styles 2-fid. Berry dry, 2-celled. Seeds solitary, attached by a little cord.
537. *Claytonia.* Cal 2-valved Pet. 5 Stigma 3-fid. Caps. 3-valved, 1-celled, 3-seeded.
538 *Impatiens.* Cal. 2-leaved. Pet. 5, irregular, with one cucullate. Anthers at first subconnate. Caps. superior, 5-valved.
539. *Sauvagesia.* Pet. 5, fringed. Sepals 5. Nectary 5-leaved, alternate with the petals. Caps. 3-celled, 3-furrowed, 3-valved, with the edges bent inwards.
540. *Viola* Sepals 5 Petals 5, irregular, connate behind. Anthers adhering at the end by a membrane, or distinct. Caps 3-valved, 1-seeded.
541. *Ionidium.* Sepals 5, produced at their base. Cor. 2-lipped, without a spur. Anthers usually distinct. Stigma simple. Caps 1-celled, 3-valved.

10. *Flowers polypetalous, superior.*

542. *Phyllica.* Cal. 5-parted, turbinate. Pet. O. Scales 5, protecting the stamens. Caps. 3-coccous, inferior.

543. *Plectronia.* Cal turbinate, 5-toothed, persistent, closed by 5 villous scales. Pet. 5, inserted in the throat of calyx. Berry 2-celled, 2-seeded.

544. *Conocarpus.* Pet. 5 or O Seeds naked, solitary. Flowers in heads.

545. *Cyphia.* Cal. 5-cleft, turbinate. Petals linear, dilated at base, connivent, spreading at end. Filaments hairy, cohering. Anthers distinct. Stigma cernuous, hollow, gibbous.

546. *Lightfootia.* Sepals 5. Petals thin, bottom closed by stamen-bearing valves. Stigma 3-5-cleft. Caps. 3-5-celled, 3-5-valved, ½-superior

547 *Jasione.* Flowers in heads Common involucrum 10-leaved. Petals 5, erect. Anthers oblong, coherent at base. Stigma bifid.

548 *Lagoecia.* Umbel simple Common involucre about 8-leaved, partial 4-leaved, finely pinnated. Cal 5-cleft, with many-cut fine segments. Petals 2-fid. Seeds crowned by the calyx

549 *Hedera.* Petals 5, oblong Berry 5-seeded, surrounded by the calyx

550. *Ribes.* Petals 5, and stamens inserted into the calyx. Style 2-fid. Berry many-seeded, inferior.

551. *Gronovia.* Petals 5, and stamens inserted into the campanulate calyx. Berry dry, 1-seeded, inferior.

11. *Flowers incomplete, inferior*

552. *Achyranthes.* Sepals 5 Scales 5, connate at the base into a tube, at the end fringed and alternate with the stamens Stigma 2-fid. Seed solitary, crowned by the conniving sepals

553. *Philoxerus* Sepals 5, irregular Stamens 5, united at the base into a little cup shorter than the ovary. Anthers 1-celled. Style 1 Utricle 1-seeded, without valves

554. *Desmochaeta* Sepals 5 Stamens 5, united at base with a very small cup with neither teeth nor chaff between Stigma capitate. Utricle 1-seeded.

555. *Illecebrum* Sepals 5, vaulted at the end Pet O Stigma simple or bifid Caps. 5-valved, 1-seeded.

556. *Alternanthera.* Sepals 5 Stamens 5, united into a little cup, with or without intermediate teeth, one or more of the stamens usually abortive Anthers 1-celled Stigma capitate

557. *Paronychia.* Cal nearly 5-parted, colored inside Scales or petals 5, linear Style 2-fid. Stigmas 2. Caps. 1-celled, 5-valved.

558. *Chenolea* Cal. globose, fleshy, concave. Cor O Filam inserted into the base of calyx Stigmas 2, spreading Caps. round, depressed, 1-celled, 1-seeded

559. *Anychia.* Cal. connivent, with oblong segments, bagged at the end Pet. O Filam. distinct, with no setæ between Stigmas 2, oblong Caps an utricle, not opening Seed 1, reniform

560 *Ærua* Sepals 5, with 2-3-bracteæ, oblong, on the outside white, hairy, inside smooth. Stamens 10, alternately barren, inserted into a little cup at the base. Style larger, filiform. Stigma bifid

561 *Lestibudesia* Sepals 5 Stamens 5, united into a little cup without teeth Anthers 2-celled. Ovary many-seeded Style short or none Stigmas 3-4, filiform, recurved Caps opening transversely

562 *Rhagodia* Flowers polygamous Perianth 5-parted Stamens 5 or fewer Style bifid. Grain depressed, fleshy, surrounded by the perianth

563 *Deerengia* Perianth 5-parted. Stamens united at base into a small cup Anthers 2-celled. Style 3-parted Berry many-seeded

564 *Tranthema* Sepals oblong, colored inside Stamens 5-10-12, with capillary filaments Ovary half-superior Style 1 or 2, filiform Stigmas simple Caps oblong, truncate, cut round

565 *Celosia* Sepals 5, like a 5-petalous corolla Stam. united at base by a plaited nectary. Caps horizontally opening Style 2-3-cleft

566 *Gomphrena* Sepals 5, colored: outer 3 conniving, keeled. Pet 5, rude, villous. Nect. cylindrical, 5-toothed. Caps. cut round, 1-seeded Style half-bifid

567 *Mollia.* Sepals 5 Pet. 5, emarginate Style simple Caps 3-cornered, 1-celled, 3-valved, many-seeded

568 *Glaux* Cal 1-leaved, colored, 5-lobed. Cor O Caps 1-celled, 5 valved, 5-seeded, surrounded by a calyx.

12 *Flowers incomplete, superior*

569 *Thesium* Cal. 1-leaved, into which the stamens are inserted. Nect inferior, 1-seeded, surrounded by the persistent calyx.

570 *Helsonia* Spathes universal and partial Cal. O Cor 3 petals, superior Nect. 2-leaved. Stigma 1. Caps 3-celled, with 1-seeded cells

571 *Strelitzia.* Spathes universal and partial. Cal. O Cor superior, 3 petals, the larger segments hastate. Nect. 3-leaved, surrounding the stamens Stigmas 3 Caps. 3-celled. Cells many-seeded.

Order 2. DIGYNIA  5 Stamens 2 Styles.

1. *Flowers monopetalous, inferior. Fruit a follicle or capsule.* (Asclepiadeæ.)

572. *Apocynum* Cor campanulate. Filaments 5, alternate with the stamens. Style none Stigma broad Follicles long, linear

573 *Melodinus* Cal campanulate, 5-toothed. Cor. hypocrateriform Limb spreading, with falcate, crenulate segments Corona 5-cleft, with short, stellate, torn divisions. Stigmas 2 Fruit a fleshy globose, 2-celled, many-seeded berry

574 *Periploca* Anthers bearded at back Pollen-masses solitary, made up of 4 confluent ones. Stigma blunt. Follicles cylindrical, divaricating, smooth Seed comose

575 *Cryptostegia* Cor funnel-shaped. Tube with two included bifid scales, alternate with the divisions of the limb. Stamens included, inserted in the base of the tube Filaments distinct. Anthers cohering with the stigma by their base Glands 5, spatulate Pollen granular, simple.

576. *Hemidesmus* Cor with 5 blunt scales under the sinuses. Anthers free from the stigma, simple at end Stigma blunt Follicles cylindrical, much spreading, smooth. Seeds comose.

577. *Secamone.* Corona 5-leaved. Pollen-masses 20, smooth, erect, fixed by fours to the point of each corpuscle of the stigma. Stigma contracted at end

578. *Microloma.* Tube of cor inflated, angular, shorter than the limb Scales inserted into the middle of the tube below the sinuses Anthers terminated by a membrane, sagittate. Pollen-masses compressed, pendulous. Stigma with a little point.

579. *Sarcostemma* Cor rotate Pollen-masses pendulous. Stigma blunt. Seeds comose.

580. *Dæmia* Cor rotate, with a short tube Outer corona 10-parted, short. Pollen-masses pendulous, compressed. Stigma blunt. Seeds comose

581 *Cynanchum.* Cor. rotate, 5-parted. Pollen-masses inflated. Stigma with a little point. Follicles smooth.

582. *Oxystelma* Cor spreading, rotate, with a short tube. Columna exserted. Crown 5-leaved, with compressed, acute, undivided leaflets. Pollen-masses compressed, pendulous, fixed by a narrow end. Stigma blunt. Follicles smooth. Seeds comose

583. *Gymnema.* Cor. 5-cleft. Scales or little teeth of the orifice 5, inserted in the sinuses. Crown none. Masses of pollen erect, fixed by the base Follicle slender, smooth.

584. *Calotropis* Cor. with an angular tube: the angles saccate inside. Crown with carinate leaflets, united lengthwise to the tube of the filaments. Pollen-masses pendulous, fixed by the narrow end. Stigma blunt.
585. *Dischidia* Cor. urceolate, 5-cleft. Corona with subulate, spreading, recurved segments. Pollen-masses erect, fixed by the base. Stigma blunt. Follicles smooth. Seeds comose.
586 *Xysmalobium* Cor. 5-cleft, spreading Corona 10-parted in a single row: the 5 divisions next to the anthers fleshy, round, simple within, the 5 others small. Pollen-masses pendulous, with lax connecting processes Stigma blunt.
587 *Gomphocarpus* Corona 5-leaved, the segments simple within. Pollen-masses compressed, pendulous, fixed by a fine end. Stigma depressed, blunt. Follicles ventricose, covered with innocuous spines. Seeds comose.
588. *Asclepias* Corona 5-leaved, with a process on the inside Pollen-masses fixed by a fine end. Stigma depressed, blunt.
589. *Gonolobus* Cor rotate, 5-parted. Corona shield-shaped Anthers opening across, terminated by a membrane. Stigma flat, depressed.
590 *Pergularia* Cor hypocrateriform, with an urceolate tube. Pollen-masses erect, fixed by their base. Stigma blunt Follicles ventricose, smooth Seeds comose
591. *Marsdenia* Cor urceolate, 5-cleft, sometimes rotate. Pollen-masses erect, fixed by the base. Follicles smooth Seeds comose
592 *Hoya* Cor 5-cleft. Pollen-masses fixed by the base, conniving, compressed. Stigma depressed, with an obtuse wart Follicles smooth Seeds comose
593. *Ceropegia.* Outer corona short, 5-lobed, inner 5-leaved, with ligular undivided leaflets Pollen-masses fixed by their base with simple edges. Stigma blunt. Follicles cylindrical, smooth Seeds comose
594 *Stapelia* Cor rotate, 5-cleft, fleshy Column of fructification exserted. Pollen-masses fixed by the base Stigma blunt. Follicles cylindrical, smooth Seeds comose
595 *Puranthus* Cor fleshy Outer corona none Pollen-masses fixed by the base, with one edge cartilaginous, pellucid. Stigma blunt.
596. *Huernia* Accessory segments of cor tooth-like Leaflets of the inner corona from a gibbous base subulate, undivided, alternate with the outer segments Pollen-masses fixed by the base, with one edge cartilaginous, pellucid. Stigma blunt. Follicles cylindrical, smooth Seeds comose.
597 *Brachystelma.* Cor campanulate, with angular recesses Column included. Crown 1-leaved, 5-cleft, with the lobes opposite the anthers, simple at back Anthers without a membrane at the end. Pollen-masses erect, inserted by the base
598 *Caralluma* Cor rotate, deeply 5-cleft. Cal of fructification exserted. Pollen-masses erect, fixed by the base with simple edges Stigma blunt Follicles slender, smooth Seeds comose

2 *Flowers monopetalous, inferior Fruit a capsule*

599 *Swertia* Caps of 1 cell Cor wheel-shaped, with 2 nectariferous pores at the base of each segment.
600 *Gentiana* Caps of 1 cell. Cor tubular at the base, destitute of nectariferous pores
601 *Hydrolea* Caps 2-valved, 2-celled Cor rotate, campanulate Stamens inserted in the tube
602 *Falkia* Cal inflated, 5-parted, 5-angular Cor campanulate, emarginate, crenate Styles spreading. Stigma globose, woolly Seeds 4, globose, with an arillus in the bottom of the calyx
603 *Dichondra* Cal. 5-parted, with spatulate segments Cor short, campanulate, 5-parted. Stigma peltate, capitate Caps compressed, 2-celled, 2-seeded Seeds round.

3. *Flowers pentapetalous, inferior*

604. *Velezia.* Cal slender, 5-toothed. Cor of 5 small petals Caps 1-celled, at the end 4-valved. Seeds many, attached to a filiform central receptacle
605 *Bumalda* Cal 5-parted Petals 5 Styles villous Caps. 2-celled, with 2 bractes
606 *Heuchera* Petals 5 Caps 2-celled, with 2 bractes
607 *Cussonia* Invol. O Cal. 1-leaved, truncated, crenated. Pet 5, oblong, acute Fruit twin, 2-celled, crowned by the calyx and styles.
608 *Anabasis.* Cal. 3-leaved Pet 5 Berry 1-seeded, surrounded by the calyx.
609 *Salsola* Caps closed, imbricated in the fleshy calyx Seed with a spiral embryo
610 *Kochia* Cal 1-leaved, campanulate, in the fruit expanding into a leafy rim resembling 5 petals Cor. O. Stigmas 2-3, long Caps 1-celled, 1-2-seeded Seed incurved.
611 *Chenopodium* Seed lenticular, truncated, superior.
612 *Beta* Seed kidney-shaped, imbedded in the fleshy calyx.
613. *Bosea* Cal 5-leaved. Cor O Berry 1-seeded
614 *Herniaria* Caps closed, membranous, invested with the calyx Stam. with 5 imperfect filaments.
615 *Ulmus* Caps. closed, membranous, compressed, bordered, superior
616 *Planera* Cal. membranous, subcampanulate, 4-5-cleft. Cor O Stigmas 2, oblong, glandular, spreading Caps. globose, membranous, 1-celled, not opening, either smooth or scaly, not winged, 1-seeded. Stamens 4-6. Polygamous

4. *Flowers pentapetalous, superior.*

617. *Phyllis.* Cal. 2-leaved. Pet. 5 Stigmas hispid. Seeds 2, oblong, fixed to a filiform axis

5 *Flowers pentapetalous, superior Seeds* 2. (UMBELLIFERÆ.)

A. *Fruit of a single or double globe*

618 *Coriandrum* Fruit a single or double globe, smooth, without ribs Cal. broad, unequal. Petals radiant. Floral recept. none

B *Fruit beaked*

619. *Scandix* Beak much longer than the seeds, fruit somewhat bristly. Cal. none. Pet unequal, undivided. Floral recept. 5-lobed, colored
620 *Anthriscus* Beak shorter than the seeds, even. Fr rough, with scattered prominent bristles. Cal none Petals equal, inversely heart-shaped. Fl. recept. slightly bordered
621 *Chærophyllum* Beak shorter than the seeds, angular Fr smooth, without ribs. Cal. none. Pet. inversely heart-shaped, rather unequal. Fl. recept. wavy

C. *Fruit solid, prickly, without a beak.*

622. *Eryngium* Fr. ovate, clothed with straight bristles Cal. pointed. Pet. oblong, equal, inflexed, undivided. Fl. aggregate Common recept. scaly.
623 *Sanicula* Fr ovate, clothed with hooked bristles. Cal. acute. Pet. lanceolate inflexed, nearly equal. Fl separated, dissimilar
624. *Echinophora* Fr ovate, imbedded in the enlarged armed receptacle. Seed solitary Cal. spinous. Pet. inversely heart-shaped, unequal Fl. separated.
625 *Daucus* Fr. elliptic oblong, compressed transversely Seeds with four rows of flat prickles, and rough intermediate ribs Cal obsolete. Pet. inversely heart-shaped, unequal. Fl. separated.
626 *Caucalis* Fr elliptic oblong, compressed transversely. Seed with 4 rows of ascending, awl-shaped, hooked prickles, the interstices prickly or rough. Cal. grooved, acute, unequal. Pet. inversely heart-shaped, unequal. Fl. imperfect, separated
627. *Torilis.* Fr. ovate, slightly compressed laterally. Seeds villous, rough, with scattered prominent,

ascending, rigid prickles. Cal. short, broad, acute, nearly equal Pet. inversely heart-shaped, nearly equal. Fl. united.

628. *Odoeria.* Leaflets of the involucres 3-parted Umbels fascicled, as long as the involucres. Petals split to the base. Fr ovate, hispid, with three streaks

629. *Ledeburia.* Involucres 0. Fr ovate, with spreading bristles. Bases of styles 2, conical, connate at base. Styles persistent.

630. *Myrrhis.* Fr deeply furrowed Cal. none. Pet. inversely heart-shaped, rather unequal. Fl. recept. none Flowers imperfectly separated.

631. *Bunium.* Fr slightly ribbed. Cal small, acute, unequal. Pet. inversely heart-shaped, equal. Fl. recept. none. Flowers imperfectly separated

D *Fruit solid, nearly round, unarmed, without wings.*

632. *Œnanthe* Fr ribbed, somewhat spongy. Cal large, lanceolate, acute, spreading, unequal Pet. inversely heart-shaped, very unequal Fl. recept dilated, depressed Fl separated.

633. *Crithmum* Fr ribbed, coriaceous Cal small, broad, acute, incurved. Pet. elliptical, acute, incurved, equal Fl. recept. none Fl. united, all perfect.

634 *Athamanta* Fr ribbed, ovate, hairy Styles short Cal lanceolate, acute, incurved. Pet. inversely heart-shaped, broadly-pointed, equal. Fl recept. none Fl imperfectly separated

635 *Pimpinella* Fr ovate, ribbed, with convex interstices. Styles capillary, as long as fruit. Cal. none Pet. inversely heart-shaped, nearly equal Fl. recept none Fl either united or dicecious.

636. *Phellandrium.* Flowers fertile. Fruit crowned Fruit ovate, smooth, crowned by the calyx and styles. Involucres partial, not universal

637 *Dondia.* Umbels capitate Involucre 6-leaved, longer than umbel. Petals entire Fruit ovate, solid, with 4 ribs, and convex intervals

638 *Trachyspermum* Leaves of involucre pinnatifid Fruit striated, with 5 muricated ribs Rudiments of calyx 5 Fl. receptacle conical Style withering

639 *Ammi.* Involucre pinnate or pinnatifid. Fruit oblong, with 5 obtuse ribs, and convex intervals

640 *Bubon.* Involucres 0 Fruit ovate, solid, hispid, or villous, with 5 ribs, and broadish bands of the intervals and raphe.

641. *Cuminum* Involucres 5-leaved. Fruit ovate, prismatic, smoothish, bladdery, with 7 ribs, and bearded intervals

642. *Seseli.* Common involucre 0, partial 5-leaved, sometimes 1-leaved. Fruit ovate, solid, with 5 acute ribs, and furrowed, striated intervals.

643 *Thapsia* Fruit narrow, but little compressed, scarcely ribbed, with 2 dorsal and marginal wings

644. *Actinotus* Umbel capitate Involucre woolly, very large Cor 0 Cal 5 sepals Male flowers mixed with hermaphrodite Fruit ovate, villous, with 5 stripes, crowned by the calyx

645 *Trinia* Flowers dicecious Involucre few-leaved Pet ovate, lanceolate Seeds roundish, with 5 ribs, with the intervals once-banded

E. *Fruit solid, unarmed, without wings, compressed laterally, the diameter of its juncture being at least twice as narrow as the opposite diameter*

646 *Sium* Fr ovate or orbicular, ribbed, furrowed Cal small, acute, unequal, or obsolete. Pet. inversely heart-shaped or obovate, equal. Styles cylindrical, shorter than the petals Fl receptacle none Fl. uniform, united.

647 *Sison* Fr ovate or nearly orbicular, ribbed Cal obsolete or blunt Pet elliptical or inversely heart shaped, with an involute point, equal Styles very short and thick Fl. recept. none Fl uniform, united

648 *Cicuta* Fr nearly orbicular, heart-shaped at the base, with 6 double ribs Cal broad, acute, rather unequal Pet. ovate or slightly heart-shaped, nearly equal. Style scarcely tumid at the base Fl. recept. depressed, withering Fl. uniform, nearly regular, united.

649 *Conium* Fr ovate, with 10 acute ribs, wavy in an unripe state Cal obsolete Pet inversely heart-shaped, slightly unequal Styles a little tumid at the base Fl. recept dilated, depressed, wavy, permanent Fl slightly irregular, united

650 *Smyrnium* Fr broader than long, concave at each side, with 6 acute dorsal ribs, interstices convex Cal very small, acute Pet. equal, lanceolate, incurved or inversely heart-shaped. Styles tumid and depressed at the base Fl recept. none Fl nearly regular, partly barren or abortive

651 *Apium* Fr roundish, ovate, with 6 acute dorsal ribs, interstices flat Pet. roundish, with an inflexed point, very nearly equal Styles greatly swelled at the base Fl recept. thin, orbicular, wavy Fl nearly regular, united

652. *Ægopodium* Fr elliptic-oblong, with equidistant ribs, interstices flattish Cal none Pet. inversely heart-shaped, broad, a little unequal. Style ovate at the base Fl. recept none Fl united, all perfect, slightly radiate

653 *Meum* Fr elliptic, oblong, with equidistant ribs, interstices flattish Cal none Pet obovate, with an inflexed point, equal. Styles tumid at the base, short, recurved Fl. recept none. Fl united, all perfect, regular

654 *Anethum.* Invol none Pet. involute, yellow Seeds compressed, with 3 ribs, intervals once-banded.

655 *Carum* Fr elliptic, oblong, with equidistant ribs, interstices convex Cal minute, acute, often obsolete Pet inversely heart-shaped, unequal Styles tumid at the base, subsequently elongated, widely spreading Fl recept angular, thin, wavy, permanent Fl separated, irregular

656 *Cnidium* Fr ovate, acute, with equidistant sharp ribs, interstices deep, concave; juncture contracted Cal none Pet equal, obovate or inversely heart-shaped. Styles hemispherical at the base; subsequently elongated, spreading, cylindrical Fl. recept. annular, thin, undulated, erect, afterwards depressed Flower imperfectly separated, nearly regular

657 *Bupleurum* Fr ovate-oblong, obtuse, with prominent, acute, abrupt ribs, interstices flat; juncture contracted Cal. none Pet equal, broadish, wedge-shaped, very short, involute Styles very short, not extending beyond the circumference of their broad tumid bases Fl recept none Fl all perfect and regular

658 *Hydrocotyle.* Fl nearly orbicular, rather broader than long, angular, much compressed, juncture very narrow. Cal none Pet equal, ovate, spreading, undivided Styles cylindrical, shorter than the stamens, tumid at the base Fl recept none Fl all perfect and regular.

659 *Spananthe* Umbel simple, with few rays Involucre few-leaved. Fruit ovate, solid, smooth, with the juncture and sides contracted, and 5 ribs at the back

660 *Ulospermum* Involucre few-leaved Germen oblong. Ribs of fruit membranous, wavy, curled. Calyx scarcely any. Fl. receptacle flattened. Styles withering

F. *Fruit solid, unarmed, compressed transversely, the diameter of the juncture being much greater than the opposite diameter.*

661 *Æthusa* Seeds ovate, convex, with 5 tumid, rounded, acutely keeled ribs; interstices deep, acute, angular; border none Cal pointed, very minute Pet inversely heart-shaped, rather angular. Fl. recept. none Fl all perfect, slightly radiant.

662 *Imperatoria.* Seeds obicular, with a notch at each end, a little convex, with 3 prominent dorsal ribs, and a dilated, flat, even border Cal. none Pet. inversely heart-shaped, very slightly irregular. Fl. recept none. Fl all perfect, scarcely radiant

663. *Selinum* Scales elliptical, slightly convex, with 3 acute dorsal ribs, and a dilated, flat, even border. Cal. minute, pointed, spreading Pet. inversely heart-shaped, involute, equal. Fl. recept obsolete Fl. perfect, regular, a few occasionally abortive.

664. *Angelica.* Seeds elliptic-oblong, convex, with 3 dorsal wings, and a narrow, flat, even border Cal. none. Pet. lanceolate, flattish, undivided, contracted at each end, equal. Fl. recept. thin, wavy, narrow, permanent. Fl. all perfect,

665. *Ligusticum.* Seeds oblong convex, with 3 dorsal and 2 marginal equa. wings. Cal. small, pointed, erect, broad at the base. Pet. elliptical, flattish, undivided, contracted at each end, equal. Fl. recept. none Fl. all perfect, regular.

666. *Hasselquistia.* Involucres various. Flowers radiant Fruit compressed at edge, flat, roundish. Bark turgid in the circumference with 5 obtuse ribs. Fruit in the middle of the umbel deformed, navicular, torn at edge, with 3 stripes at back.

667 *Artedia* Fruit oblong, compressed, with the marginal wings sinuated, 5 dorsal ribs, and scaly juncture Flowers radiant. Involucres pinnatifid.

668 *Ferula.* Fruit compressed, flat, thickened at edge, with 3 obtuse dorsal ribs, and banded intervals and juncture. Flowers polygamous Involucres various.

669. *Laserpitium.* Fruit oval, somewhat compressed, with the 3 principal ribs acute, the secondary winged. Involucres many-leaved.

G. *Fruit thin and almost flat, compressed transversely, without dorsal wings*

670. *Peucedanum.* Seeds broadly elliptical, with a notch at each end, a little convex, with 3 slightly prominent ribs, interstices striated, border narrow, flat, even, smooth, and entire Cal. pointed, ascending Pet. inversely heart-shaped, all very nearly equal Fl recept none Flowers regular, imperfectly separated.

671 *Pastinaca* Seeds elliptic-obovate, with a slight notch at the summit, very nearly flat, with 3 dorsal ribs and 2 marginal ones, border narrow, flat, thin, even, smooth, and entire Cal. very minute, obsolete Pet. broadly lanceolate, involute, equal. Fl. recept. broad, orbicular, wavy, rather thin, concealing the calyx Fl regular, uniform, perfect.

672 *Heracleum.* Seeds inversely heart-shaped, with a notch at the summit, very nearly flat, with 3 slender dorsal ribs, 2 distant marginal ones, and 4 intermediate, colored, depressed, abrupt lines from the top, border narrow, slightly tumid, smooth, even, and entire. Cal. of 5 small, acute, evanescent teeth. Pet. inversely heart-shaped, radiant Fl. recept. wavy, crenate, obtuse Fl separated

673 *Tordylium* Seeds orbicular, nearly flat, roughish, without ribs, border tumid, wrinkled or crenate, naked or bristly Cal. of 5 awl-shaped unequal teeth. Pet inversely heart-shaped, radiant, variously unequal and irregular Fl recept. none. Fl. separated

674 *Astrantia* Umbels fascicled. Involucres as long as umbels. Fruit oblong, surrounded by furrowed, wrinkled, little bladders

675 *Zosima* Both involucres many-leaved. Petals obcordate, with the little segment involute, acute Fruit compressed, villous, thickened at edge, at the back with 4 bands, which are joined and conniving.

H *Fruit with a coarse, corky, or spongy bark*

676. *Rumia* Partial involucre, 3-8-leaved. Cal. 5-toothed Petals ovate, incurved, with a short crenulate segment. Seeds ovate, fleshy, rugose, scaly

677 *Cachrys.* No involucre Cal. O. Petals ovate, lanceolate, acute Seed obovate, oblong, rounded, smooth, fungous.

678 *Hippomarathrum* Fruit with scaly, rough ribs, covered with a thick bark.

Order 3. TRIGYNIA.  5 Stamens 3 Styles.

1. *Flowers superior.*

679. *Viburnum* Cor 5-cleft. Berry with 1 seed
680. *Sambucus* Cor. 5-cleft. Berry with 3 seeds

2 *Flowers inferior.*

681 *Rhus* Cal 5-parted Petals 5. Berry 1-seeded
682 *Cassine.* Cal. 5-parted. Petals 6. Berry 3-seeded.
683. *Spathelia.* Cal. 5-leaved Petals 5 Caps 3-angular, 3-celled. Seeds solitary.
684. *Staphylea.* Petals 5 Caps 2 or 3, inflated
685. *Tamarix* Pet. 5 Caps of 3 valves Seeds numerous, feathered
686. *Turnera.* Cal 5-cleft, infundibuliform, the outer 2-leaved. Petals 5, inserted in the calyx Stigmas many-cleft. Caps 1-celled, 3-valved
687. *Drypis* Cal. 5-toothed. Petals 5 Caps cut round, 1-seeded.
688. *Alsine* Cal. 5-leaved. Pet. 5 equal. Caps superior, 1-celled, 3-valved, many-seeded Receptacle central, free.
689. *Telephium.* Cal 5-leaved. Petals 5, inserted in the receptacle Caps 1-celled, 3-valved.
690 *Corrigiola.* Pet 5 Seed 1, naked, triangular
691 *Pharnaceum.* Cal. 5-leaved. Cor O. Caps 3-celled, many-seeded.
692 *Portulacaria* Cal. 2-leaved. Petals 5 Seed 1, winged, 3-cornered.
693. *Basella.* Cal. O. Cor 7-cleft; at length berried, with the two opposite segments larger than the rest.

Order 4. TETRAGYNIA.  5 Stamens. 4 Styles.

694. *Parnassia* Nectaries fringed with bristles bearing globes Caps of 4 valves.
695. *Evolvulus.* Cal. 5-leaved Cor rotate, campanulate, with emarginate lobes. Styles 2, deeply bifid. Stigma simple Caps 2-celled, 4-valved, 4-seeded Seeds 2.

Order 5 PENTAGYNIA  5 Stamens. 5 Styles

1 *Flowers superior.*

696 *Aralia.* Involucre very small Umbels globose. Cal very small, 5-toothed. Petals 5, ovate, oblong, spreading, or reflexed. Stigmas nearly round, 5-10 Berry roundish, crowned, 5-seeded. Seeds hard, oblong
697 *Actinophyllum.* Cal. an entire rim. Cor calyptrate, jumping off Stam. 5-6-8-9. Styles 4-7 Berry with 7 angles and 7 cells. Seeds solitary, bony. Flowers clustered.

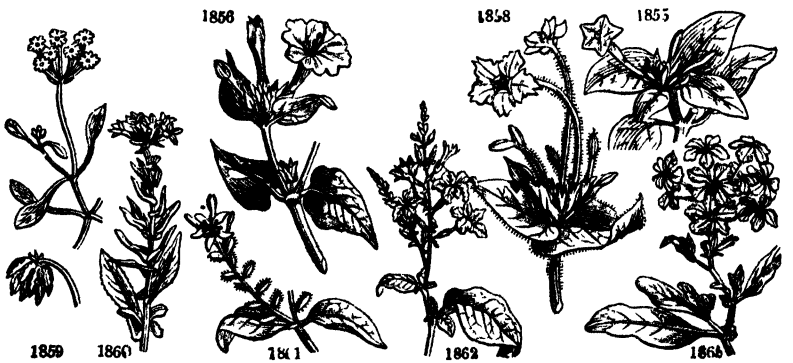
2. *Flowers inferior.*

698. *Rochea.* Cal. 5-parted Cor. funnel-shaped, 5-cleft. Scales 5, at base of ovary Caps. 5.
699. *Crassula.* Cal 5-leaved. Pet. 5 Scales 5, nectariferous at base of ovary Caps. 5.
700. *Giesekia* Cal. 5-leaved. Cor O Caps 5, close together, roundish, 1-seeded.
701. *Linum.* Pet. 5 Capsule of 10 cells.
702 *Drosera.* Pet. 5 Caps of 3 valves, with many seeds.

703. *Commersonia.* Cal. 1-leaved, bearing the cor Petals 5. Nectary 5-parted. Caps 5-celled, echinate.
704. *Rulingia.* Petals 5, with a cucullate base. Sterile stamens 5, undivided. Ovary 5-celled. Caps. with double septa.
705. *Armeria.* Cal. 2-leaved, entire, plaited, scarious. Petals 5. Seed 1, superior. Flowers in heads, with a common many-leaved involucrum.
706. *Statice.* Cal. 2-leaved, entire, plaited, scarious. Petals 5. Seeds 1, superior. Flowers scattered in a panicled or spiked scape.

MONOGYNIA.

322 MIRA'BILIS *W.*	MARVEL OF PERU				*Nyctagineæ.*			*Sp* 4—5.					
1855 dichótoma *W.*	forked	✱	⊔	or	2	jl au	Y	Mexico	1640	R	co	Mart. cent 1. t.1
1856 Jalápa *W*	common	✱	⊔	or	2	jn s	R	W. Indies	1596.	R	r.m	Bot. mag. 371
β flâva	*yellow-flowered*	✱	⊔	or	2	jn.s	Y	W. Indies	1596.	R	r m	
γ álba	*white-flowered*	✱	⊔	or	2	jn.s	W	W. Indies	1596.	R	r m	
δ rubro-álba	*red and white*	✱	⊔	or	2	jn s	R.w	W Indies	1596.	R	r m	
ε rubro-flâva	*red and yellow*	✱	⊔	or	2	jn s	R.y	W Indies	1596.	R	r m	
1857 hýbrida *W en.*	close-flowered	✱	⊔	or	2	jn s	R	.....	1813.	R	r m	
1858 longiflóra *W*	long-flowered	✱	⊔	or	2	jn s	W	Mexico	1759.	R	r m	Ex. bot. 1. t. 28
323 ABRO'NIA *Juss*	ABRONIA				*Nyctagineæ.*			*Sp* 1				
1859 umbellâta *J*	umbelled	☾	△	el	½	ap my	R	California	1823.	D	a.p	Hook. ex. fl. 194
324 PLUMBA'GO *W*	LEADWORT				*Plumbagineæ*			*Sp* 7—11.				
1860 europæ'a *W*	European	☾	△	or	3	s o	B	S. Europe	1596.	C	p l	Bot mag. 2139
1861 zeylánica *W*	cingalese	♃	□	or	2	ap s	W	E Indies	1731	Sk	a.p	Rhed. mal. 10. t.8
1862 rósea *W*	Rose-colored	♃	□	or	1½	mr jl	R	E. Indies	1777	Sk	r m	Bot mag. 230
1863 scándens *W*	climbing	♃	□	or	3	jl.au	W	W Indies	1699.	Sk	s p	Slo.im 1 t.133.f.1
1864 tristis *H K*	dark-flowered	♃	□	or	1½	my jn	Br	C G H	1792	C	l.p	
1865 capénsis *W*	Cape	♃	□	or	1½	n	B	C G H.	1818	C	l p	Bot. reg 417
1866 lapathifólia *W*	Dock-leaved	☾	△	or	1½	jn jl	W	Iberia	1822.	Sk	a.p	
325 HELIOTRO'PIUM	TURNSOLE.				*Boragineæ.*			*Sp* 10—77.				
1867 peruviánum *W*	Peruvian	♃	□	or	2	my s	La	Peru	1757.	C	r m	Bot mag 141
1868 corymbósum *B M.*	large-flowered	♃	□	or	4	my s	Li	Peru	1808.	C	r.m	Bot. mag 1609
1869 parviflórum *W*	small-flowered	☾	◇	w	1	jl s	W	W Indies	1732	C	s l	Dil el. t.146.f 175
1870 europæ'um *W*	European		○	or	¼	jn o	W	S Europe	1562	C	s l	Jac. aust.3 t.207
1871 oblongifólium *Lk*	oblong-leaved		○	or	¼	jn o	W	S. Europe	1824.	S	s l	
1872 chenopodioides *W en*	Goose-foot		◇	or	1	jn jl	W	S. Amer.	1823	S	l.p	
1873 curassávicum *W.*	glaucous	☾	◇	or	¼	jn jl	W	W. Indies	1731.	C	a.l	Mr s.11 t.31. f 12
1874 húmile *Lam.*	dwarf	♃	□	or	1	my jn	W	S Amer	1752.	C	s l	Plum ic 227 f 2
1875 índicum *W*	Indian		◇	or	1	jn au	B	W Indies	1713	S	a p	Plk phyt 245 f 4
1876 supínum *W.*	trailing	☽	○	or	½	jn jl	W	S. Europe	1640	S	co	Goua m.17.c.tab
326. MYOSO'TIS *B P*	SCORPION-GRASS.				*Boragineæ.*			*Sp* 10—29				
1877 scorpioides *W.*	marsh	☽	△	w	2	ap au	B y	Britain	mea.	D	co	Eng. bot. 1973
1878 arvénsis *W.*	field		○	w	1	ap.au	B	Britain	dry fi.	S	co	Eng bot 480
1879 nána *W*	dwarf	☽	△	cu	¼	jl	B	Europe	...	D	co	Hac pl. al t 2 f 6
1880 obtúsa *W en*	obtuse-calyxed	☽	△	w	2	jn jl	B	Hungary	1815	D	co	Pl.rar hu 1 t 100
1881 rupícola *E B*	rock	✱	△	or		jn jl	B	Scotland	al roc.	D	co	Eng bot. 2559
1882 stricta *Lk*	upright		○	cu	1	jn jl	B	Germany	1822.	S	co	
1883 sylvática *Ehr*	wood	☽	△	cu	2	jn jl	B	Europe	1823	D	co	Fl. dan. 583



History, Use, Propagation, Culture.

322. *Mirabilis,* is a Latin word, signifying something wonderful or admirable, and applied with some reason to this, the most fragrant of flowers Clusius called it Admirabilis We from the same cause call it Marvel of Peru. The French botanists still call the genus by Van Royen's name, Nyctago; derived from νυξ, night, and ἀγω, to act, on account of the flowers expanding at night. M dichotoma is called the four-o'clock flower in the West Indies, from the flowers opening regularly at that time of the afternoon M jalapa is a very ornamental plant in warm borders. When cultivated, it sports into many agreeable varieties. It flowers best when treated as a tender annual, and then planted out, but if sown at once in the open air, it will flower late in the season in favorable summers Its large tuberous roots, if taken up and preserved during winter like those of Dahlia, or even covered well with litter in the open garden, will flower perennially. The powder of these roots washed, scraped, and dried, is one of the substances which form the jalap of druggists.
323. *Abronia.* Derived from ἁβρος, delicate. The little plant produces flowers surrounded by an involucrum of a charming rose color.
324. *Plumbago.* Pliny says this plant was so called from *plumbum,* because it possessed the power of curing a disorder in the eyes called by that name, which appears to have been the same as what we call cataract. There

Order 6. POLYGYNIA.  5 Stamens. Many styles.

707. *Myosurus.* Pet. 5, with tubular honey-bearing claws. Seeds naked. Cal. spurred at the base.
708. *Ceratocephalus* Cal 5-leaved, persistent. Petals 5, with a honey pore at base covered by a scale. Seeds several, naked, attached to a bearded receptacle
709. *Xanthorhiza* Cal. 0 Petals 5. Nectaries 5, stalked Caps. 5, 1-seeded
710. *Sibbaldia.* Cal. 10-cleft. Petals 5, inserted in the calyx. Styles from the side of the ovary Seeds 5

MONOGYNIA.

1855 Flowers sessile erect axillary solitary
1856 Flowers clustered stalked, Leaves smooth

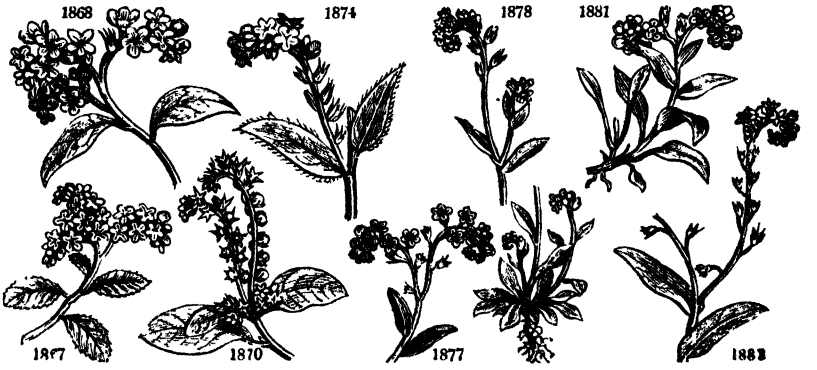
1857 Flowers clustered somewhat stalked, Tube of cor. 4 times as long as limb, Leaves cordate smooth
1858 Flowers clustered sessile, Leaves pubescent

1859 The only species, resembling Primula farinosa. Very beautiful

1860 Leaves stem-clasping lanceolate rough, Stem erect
1861 Leaves stalked ovate smooth, Stem filiform
1862 Leaves stalked ovate smooth somewhat toothed, Stem with swollen joints
1863 Leaves stalked ovate smooth, Stem flexuose climbing
1864 Leaves obovate retuse smooth
1865 Leaves stalked oblong entire glaucous beneath, Stem erect
1866 Leaves stem-clasping lanceolate smooth, Stem divaricating

1867 Leaves lanceolate ovate, Stem shrubby, Spikes numerous aggregate corymbose
1868 Leaves oblong lanceolate, Stem shrubby, Spikes terminal aggregate corymbose, Sepals long subulate
1869 Leaves ovate rugose scabrous opposite and alternate, Spikes in pairs
1870 Leaves ovate entire tomentose rugose, Spikes in pairs
1871 Leaves stalked oblong obtuse entire rough with scattered hairs
1872 Leaves lanceolate glaucous smooth obsoletely veined opposite and alternate, Spikes in pairs
1873 Leaves linear lanceolate glaucous smooth opposite and alternate, Spikes in pairs or compound
1874 Leaves ovate lanceolate villous, Spikes solitary lateral stalked
1875 Leaves cordate ovate subserrate rugose, Spikes terminal simple solitary, Stem herbaceous
1876 Leaves ovate entire tomentose plaited, Spikes solitary and in pairs

1877 Cal 5 toothed smoothish, Teeth nearly equal obtuse as long as the tube of cor Leaves lanceolate obtuse smooth, Limb of cor more than twice as long as cal
1878 Stem hairy, Calyx with dense spreading hairs hooked at the end
1879 Seeds smoothish sawed at edge, Stem simple few-flowered and oblong, Leaves villous
1880 Stem nearly sim. with lanc nearly acute somew. repand lvs. hispid, Sp. in pairs somew corym Cal. very obt.
1881 Seeds naked, Radical leaves stalked, Racemes without bracteæ, Hairs of calyx spreading
1882 Stem diffuse, Branches and flower-stalks much shorter than cal Leaves oblong ovate obtuse upright
1883 Cal spreading 5-parted, Segments unequal acute, Hairs long downy



and Miscellaneous Particulars

is also a modern reason for the application of the name to this genus. P. europæa is called toothwort, and *dentelaire*, Fr., from its curing the tooth-ach, for which purpose the bruised root is chewed, when it excites by its causticity a healthy salivation, but stains the teeth of a lead color. The species are all pretty, easily cultivated, and almost always in flower.

325 *Heliotropium.* From ἥλιος, the sun, and τρεπω, to turn. Both Pliny and Dioscorides assert that the flowers are always turned towards the sun It was called *Verrucaria* by the Latins, because the juice of the leaves mixed with salt was said to be excellent in removing warts, *verrucæ* H peruvianum and europæum are popular plants, with the smell of new hay. the former is rather tender; but both keep flowering during most of the summer months. Curtis recommends keeping H. peruvianum in a stove during winter.

326. *Myosotis* So named from μυς, a rat, and ὠτις, ὠτος, an ear. Its oval velvety leaves are like the ear of a rat or mouse. M scorpioides, Forget-me-not, has its specific name from the racemes of flowers, which, when young, bend in at the top like a scorpion's tail. It is a well known sentimental flower, will grow any where, and varies more than most plants with situation. On dry walls and rubbish, it is dwarfish, rough, and hairy, not rising when in flower more than two or three inches; in muddy ditches it is smooth all over, of a shining light

1884 suavéolens *Poir.*	sweet-scented	☿	△	or	½	jn jl	B	Hungary	1823.	D	co	
1885 sparsiflóra *Mik.*	scattered		○	or	1	my.jn	B	S. France	1822.	S	co	
1886 pedunculáris *Trev.*	stalked		○	or	1½	my jn	B	Astracan	1824.	S	co	

327. ECHINOSPER'MUM *Sw* ECHINOSPERMUM *Boragineæ. Sp* 4—16.

1887 virginiánum *P. S.*	Virginian	☿	○	or	2	jn.jl	W	Virginia	1699.	S	co	M. h. s.11. t.30.f.9
1888 Lappula *P.S.*	common		○	or	1	ap.au	B	Europe	1656.	S	co	Fl. dan. 692
1889 squarrósum *P S.*	squarrose		○	or	2	ap au	B	Siberia	1802.	S	co	
1890 barbátum *Lehm.*	bearded		○	or	1½	jn jl	B	Tauria	1823.	S	co	

328. MAT'TIA. *Sch.* MATTIA. *Boragineæ. Sp* 2—4.

1891 umbellàta *Sch*	umbelled	☿	△	or	1	my jn	R	Hungary	1822.	D	s l	Pl rár hun. t.148
1892 lanáta *Sch*	woolly	☿	⧋	or	2	jn	Pk	Levant	1800.	D	s.l	Ann.mus.10.t.37

329. TIARI'DIUM *Lehm* TIARIDIUM *Boragineæ Sp.* 1—3

1893 indicum *Lehm.*	Indian		⧋	or	1	jn.jl	B	W. Indies	1820	S	s.l	Plk. phyt.245.f.4

330. LITHOSPER'MUM. *W* GROMWELL. *Boragineæ. Sp* 10—35.

1894 officinále *W.*	officinal	☿	△	cu	2	my au	Y	Britain	ch hil.	D	co	Eng. bot. 134
1895 arvénse *W*	corn		○	w	2	my jn	W	Britain	cor fl.	S	co	Eng bot. 123
1896 ápulum *W*	small		○	cu	½	jn jl	Y	S. Europe	1768	S	co	Col. ecph I. t.185
1897 purp.-cæróleum *W*	creeping	⁂	△	or	1	my	Pu	England	ch so	D	co	Eng bot. 117
1898 fruticósum *W*	shrubby	♄		or	2	my jn	B	S. Europe	1683	C	co	Barr. ic 1168
1899 dístichum *P S*	two-rowed		⧋	or	1½	my jn	W	Cuba	1806.	D	co	
1900 tenuiflórum *W*	slender-flower'd		○	or	½	my jn	B	Egypt	1796	S	co	Jac ic. 2. t. 313
1901 dispérmum *W*	two-seeded		○	or	½	jn jl	B	Spain	1799	S	co	Linn. dec. 1 t. 7
1902 orientále *W*	yellow	☿	△	or	2	jn jl	Y	Levant	1713.	D	co	Bot. mag 515
1903 canéscens *Lehm*	hoary	☿	△	or	1	jn jl	Y	N Amer	1823.	D	co	Mich. am. t 14

331 BAT'SCHIA *Mnch* BATSCHIA. *Boragineæ. Sp* 2—4

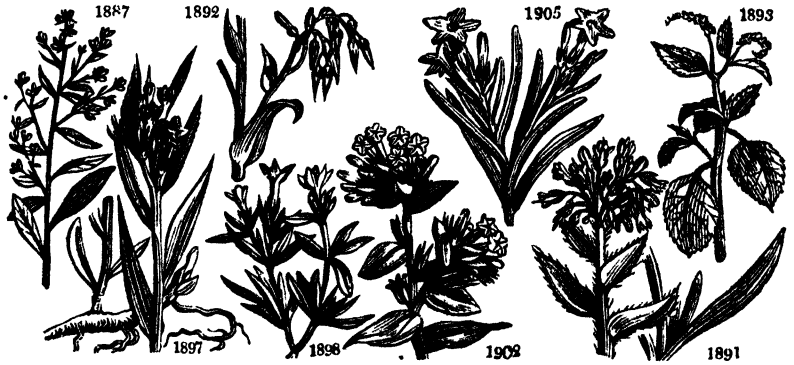
1904 Gmelini *Ph*	Gmelin's	☿	△	or	½	my jl	Y	Carolina	1812.	D	co	
1905 longiflóra *Ph*	long-flowered	☿	△	or	½	my jl	Y	Missouri	1812	D	co	

†332 ONOS'MA *W* ONOSMA *Boragineæ Sp* 7—23

1906 simplicissimum *W*	linear-leaved	☿	△	or	1	ap jn	Y	Siberia	1768	D	s.l	Bot. mag 2248
1907 taúricum *H K.*	golden-flowered	☿	△	or	½	ap jn	Y	Caucasus	1801	D	s l	Bot. mag 889
1908 orientále *W*	oriental	☿	⧋	or	½	my jn	Y	Levant	1752	D	s l	
1909 echioides *W*	hairy	☿	△	or	1	mr jn	W	S Europe	1683.	D	s l	Jac aust. 3 t.295
1910 sericeum *W.*	silky-leaved	☿	△	or	½	jn jl	Y	Levant	1752	D	co	Lehm ic asp t 10
1911 arenárium *W K.*	sand	☿	△	or	1	ap jn	Y	Hungary	1804	D	s l	W et K hu.t.279
1912 trinérvium *Lehm*	three-nerved	☿	⧋	or	1	...	Y	S. Amer	1824	C	s l	Lehm. ic.asp t 9

333 ANCHU'SA *W* BUGLOSS. *Boragineæ Sp* 11—50

1913 paniculáta *W*	panicled	☿	○	or	2	my jn	B	Madeira	1777	C	p.l	Fl græc. 163
1914 capénsis *W*	Cape	☿	⧋	or	½	jl	B	C G H.	1800	S	p l	Bot. rep. 336
1915 officinális *W*	common	☿	△	or	2	jn o	Pu	Britain	sea co	D	co	Eng bot. 662
1916 ochroleúca *Bieb*	pale-flowered	☿	△	or	2	jl.au	Pa.Y	M Caucas	1810	D	co	Bot. mag 1608
β itálica W	*Italian*	☿	○	or	4	jn o	R Pu	S. Europe	1597	S	co	Bot. reg 483
1917 angustifólia *W*	narrow-leaved	☿	△	or	2	my jn	Pu	S Europe	1640	D	co	Bot. mag 1897
1918 Barrelieri *Dec*	Barrelier's	☿	△	or	2	my jn	B	S Europe	1820	D	co	Bot mag. 2349
1919 rupéstris *R Br*	rock	☿	△	or	½	jl	B	Siberia	1802	D	co	P l 3.a.71 t. E.f 3
1920 undulàta *W.*	waved-leaved	☿	△	or	2	jn au	B	Spain	1752	D	co	Bot. mag. 2119
1921 tinctória *W*	dyer's	☿	△	or	1½	jn o	Pu	Montpel.	1596	D	co	Bot rep. 576
1922 sempervirens *W*	evergreen	☿	△	or	1½	my jn	B	Britain	rub	D	co	Eng bot 45
1923 Milléri *W ex*	pink	☿	△	or	1½	my jn	Pk	Levant	1713	D	co	



History, Use, Propagation, Culture,

green, and two or three feet high In common soils, as in a garden or loamy corn-field, it assumes an intermediate character Linnæus considers the plant as deadly to sheep In gardens it does well in pots in the shade, or treated as a bog-plant, than which few better deserve the name of pretty

327. *Echinospermum* Named by Lehmann from ἐχῖνος, a hedgehog, and σπέρμα, seed, the seeds being very prickly, by which character, and their being compressed, not depressed, and the bracteæ of the inflorescence, the genus is principally distinguished from Myosotis and Cynoglossum.

328 *Mattia.* A genus divided by Professor Schultes from Cynoglossum, with which it agrees in general character. Named after some unknown botanist.

329. *Tiaridium.* From τιάρα, an episcopal head-dress, and εἶδος, similar; on account of the resemblance between its seeds and a mitre. Three species have been described, of which one is the H. indicum of Linn., a plant of no beauty or merit.

330. *Lithospermum.* From λίθος, a stone, and σπέρμα, seed, the seeds being hard and shining, like little pebbles. L. officinale has stony, brittle, egg-shaped nuts, exquisitely polished, grey or yellowish; and being considered like a stone, were for that reason used as a cure for the disease so named. The bark of L. arvense abounds with a deep red dye, which stains paper, linen, &c and is easily communicated to oily substances, like the alkanet root, and hence is called bastard alkanet. The country girls in the north of Sweden stain their faces with the root on days of festivity.

1884 Stem nearly simple hispid, Leaves lanc acute hairy ciliated at base, Cal very spreading
1885 Stem branched diffuse, Lvs. lanc. acute hispid, Racemes simple elongated, Flow very remote, Cal. acute
1886 Stem branched, Leaves obovate obtuse mucr Fl.-stalks in fruit much spreading thickened under calyx

1887 Seeds all over prickly, Leaves ovate oblong, Racemes divaricating
1888 Seeds with a double row of marg prickles, Lvs. lanc with incumb hairs, Limb of cor. camp longer than cal
1889 Seeds with a single row of marginal prickles, Leaves obl obtuse with spreading hairs, Cal as long as cor
1890 Seeds with a doub. row of very short mar. prickl. Lvs lanc. with incum. hairs, Cor twice as long as cal. with a flat limb

1891 Stam. as long as cor. Segments of cor obtuse, Racemes terminal umbelled, Leaves hoary
1892 Cal. woolly, Limb of cor acute deeply 5-cleft, Racemes cernuous

1893 Stem herbaceous erect hairy, Leaves ovate cordate acute hairy, Tube of cor twice as long as calyx

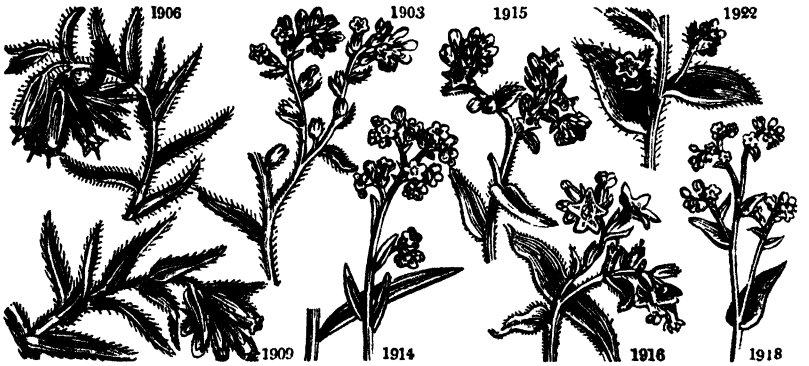
1894 Seeds smooth, Cor. scarcely longer than calyx, Leaves lanceolate acute veiny
1895 Leaves lanceolate linear strigose, Cal the length of cor. spreading in fruit
1896 Leaves linear lanceolate acute, Spikes terminal 1-sided, Bractes lanceolate, Seeds muricated
1897 Seeds smooth, Cor. much longer than cal. Leaves lanceolate acute at each end, Stem herbaceous
1898 Leaves linear hispid revolute at edge, Stamens as long as corolla
1899 Seeds smooth, Cor. twice as long as cal Lvs. obl lanc. acute, Spikes leafy distichous term. and axillary
1900 Leaves linear lanceolate strigose, Cal as long as tube of cor. in fruit conniving
1901 Seeds smooth, Cal spreading incurved, Leaves linear
1902 Flower branches lateral, Bractes cordate stem-clasping
1903 Stem nearly simple villous, Leaves oblong obtuse hoary, Tube of cor. twice as long as calyx

1904 Hairy, Floral leaves ovate, Cal long lanceolate
1905 Silky, Leaves linear, Cal. long linear, Corolla crenate, Tube long

1906 Hirsute, Hairs prost. scattered, Fl.-stems simp aggregate, Lvs lin acute, Anthers shorter than filaments
1907 Flowers ventricose, Fruit erect, Leaves lanceolate hispid, Hairs stellulate
1908 Flowers cylindrical acute, Fruit pendulous, Leaves linear hairy
1909 Hispid, Hairs erect scattered, Stem branched, Leaves lanceolate, Anthers as long as filaments
1910 Silky, Hairs prostrate very minute, Stems branched, Leaves spatulate, Anthers as long as filaments
1911 Flowers clavate cylindrical, Leaves oblique the lower lanceolate obtuse, Fruit erect, Seeds smooth
1912 Stem simple leafy, Leaves linear lanceolate very long acute 3-nerved above hispid beneath closely hairy

1913 Leaves lanceolate strigose entire, Panic. dichotomous divar. Flower stalked, Cal 5-parted subulate
1914 Leaves lanceolate callous villous, Racemes trichotomous
1915 Leaves lanceolate strigose, Spikes 1-sided imbricated, Cal as long as tube of corolla
1916 Leaves linear-lanceolate coarsely dotted hispid, Calyx in fruit camp. nodding

1917 Racemes nearly naked in pairs
1918 Leaves oblong entire narrowed at both ends with the simple stem hispid, Peduncles trifid
1919 Leaves linear lanceolate villous, Racemes alternate
1920 Strigose, Leaves linear toothed, Stalks less than bracteæ, Cal. in fruit inflated
1921 Leaves oblong, Bractes longer than the 5-parted calyx, Valves of corol. shorter than stamens
1922 Leaves ovate strigose, Racemes somewhat capitate in pairs leafy, 2-leaved at base, Cal. 5-cleft
1923 Leaves obl. toothed hispid the lower stalked the upper sessile, Flowers single lateral, Stems diffuse



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331. *Batschia.* Named in honor of John George Batsch, a German professor of botany in the university of Jena, in the latter part of the last century. His works upon Fungi are still quoted. The three species known are natives of North America, and are very pretty plants

332. *Onosma.* An ancient name, the origin of which, from ὄνος, an ass, and ὀσμη, smell, as being a plant with flowers grateful in their smell to asses, is not very certain What was intended by Pliny and Dioscorides as Onosma has not been satisfactorily ascertained It was undoubtedly a plant of this family This genus in its wild state is found chiefly on rocks; and, like most temporary rock-plants, is not easily preserved otherwise than on dry walls, heaps of rubbish, or artificial rock-work The species are pretty, and all have yellow flowers.

333. *Anchusa.* Derived from ἀγχουσα, paint. In early times, the root of A tinctoria was used for staining the features when more delicate colors were unknown. The English name Bugloss has been formed from βους, an ox, and γλωσσα, a tongue, in allusion to the long rough leaves. A. officinalis is nearly allied in qualities to Borago. The tube of the corolla is melliferous, and very attractive to bees; the leaves are juicy, and the roots mucilaginous, and used in China for promoting the eruption of the small-pox A tinctoria is cultivated in the south of France for the roots, which communicate a fine deep red to oils, wax, and all unctuous substances, as well as to spirits of wine. It is used chiefly by the apothecaries for coloring plaisters, lip-salves, &c. and by vintners for staining the corks of their port wine bottles, or for coloring and flavoring the spurious compounds sold as port wine.

334. SYM'PHYTUM. *W* CONFREY. *Boragineæ. Sp* 6—10.

1924	officinále *W.*	common	△	or	4	my.jl	W	Britain	wet. pl.	D	co	Eng. bot. 817
	β patens Sibth	*spreading*	△	or	4	my jl	Pk	Britain	wet. pl.	D	co	
	γ bohémicum Sch.	*red-flowered*	△	or	3	my jl	R	Bohemia	...	D	co	
1925	tuberósum *W*	tuberous	△	or	4	my o	Y	Scotland	m.s.pl.	D	co	Eng. bot. 1502
1926	orientále *W en*	eastern	△	or	3	my.jl	W	Turkey	1752.	D	co	Bot. mag. 1912
1927	tauricum *W en.*	blistered	△	or	3	my jl	W	Tauria	1806.	D	co	Bot. mag. 1787
1928	aspérrimum *H K.*	roughest	△	or	4	my s	R.B	Caucasus	1799.	D	co	Bot. mag. 929
1929	cordátum *W.*	heart-leaved	△	or	2	my.jl	Y	Transylv.	1813.	D	s l	Pl. rar. hung. t.7

335. ONOSMO'DIUM *Mich* ONOSMODIUM. *Boragineæ Sp* 2—3.

1930	hispidum *M*	Virginian	△	or	1	jn	Y	N Amer.	1759.	D	s.l	M.h.3.s.11.t.28f.3
1931	mólle *M*	soft	△	or	½	jn au	W	N. Amer.	1812.	D	s.l	Mich. amer. t.15

336. CYNOGLOS'SUM *W* HOUND'S-TONGUE. *Boragineæ. Sp.* 8—40.

1932	officinále *W*	common	◯	or	2	jn jl	P.B	Britain	rub.	S	co	Eng. bot. 921
1933	sylváticum *E B*	green-leaved	◯		3	jn.jl	B	Britain	sha. la.	S	co	Eng. bot. 1642
1934	pictum *W*	Madeira	◯	or	2	au	L.B	Madeira	1658.			Bot. mag. 2134
1935	amplexicaúle *Ph*	stem-clasping	△		2	my jl	B	N. Amer.	1812.	D	p.l	
1936	cheirifólium *W.*	silvery-leaved	◯	or	1	jn jl	B	Levant	1596.	S	co	
1937	apenninum *W en.*	Apennine	◯		6	ap jl	R	Italy	1731.	D	co	Col. ecph. l. t. 70
1938	hirsútum *W*	hirsute	○		1	jl.au	L.B	C. G H.	1806.	S	co	Jac. Schön. t.469
1939	glomerátum *Fraz*	clustered	△			...		N. Amer.	1812.	D	co	

337. OMPHALO'DES *Lehm* VENUS' NAVEL-WORT. *Boragineæ Sp.* 3—10.

1940	vérna *Lehm*	blue	△	el	¼	mr ap	B	S. Europe	1633.	D	co	Bot. mag. 7
1941	linifólia *Lehm.*	common	○	or	1	jn.au	W	Portugal	1648.	S	co	
1942	nítida *Lehm.*	shining	△	or	3	ap.jn	W	Portugal	1812.	D	co	H.&L.fl.p.1. t.23

338. PULMONA'RIA *W* LUNGWORT *Boragineæ. Sp* 10—19

1943	angustifólia *W*	narrow-leaved	△	or	¼	ap my	V	Britain	woods	D	p l	Eng. bot. 1628
1944	officinális *W*	common	△	or	1	my	Pk	England	woods.	D	p.l	Eng bot. 118
1945	davúrica *Fisch.*	Daurian	△	or	1	my	Li	Dauria	1812	D	s.l	Bot mag 1743
1946	paniculáta *W*	panicled	△	or	1½	my jn	L.B	Hud Bay	1778.	D	p l	Bot. mag. 2680
1947	lanceoláta *Ph*	spear-leaved	△	or	1	my jn	Pu	Louisiana	1813.	D	s.l	
1948	virginica *W*	Virginian	△	or	1½	mr my	B	N. Amer	1699.	D	p.l	Bot. mag 160
1949	sibírica *W*	Siberian	△	or	3	jn jl	Pu	N Amer	1801	D	s l	G sib 4 n.15,t 39
1950	maritima *E B*	sea	△	or	¼	jn jl	B	Britain	sea sh.	D	s p	Eng bot. 368
1951	móllis *Wulf*	soft	△	or	¼	ap my	B	N Amer.	1805	D	co	Bot. mag 2422
1952	azúrea *Bess*	sky-blue	△	or	1½	ap jn	B	Poland	1823.	D	co	

339. CERIN'THE. *W* HONEYWORT. *Boragineæ Sp* 4—6.

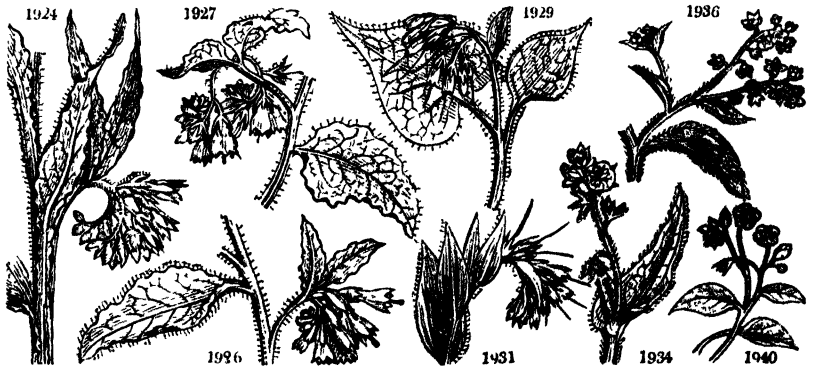
1953	májor *W*	great	○	or	3	jl au	Y P	S. France	1596.	S	co	Bot mag 333
1954	áspera *W*	rough	○	or	2	jl au	Y P	S. France	1633.	S	co	Fl græc. t. 170
1955	minor *W*	small	○	or	1½	jn o	Y	Austria	1570.	S	co	Jac. aus. 2. t. 124
1956	maculáta *W*	spotted	◯	or	2	jn o	Y B	S. France	1804.	S	co	

340. BORA'GO *W* BORAGE. *Boragineæ Sp* 4—7.

1957	officinális *W*	common	○	cul	3	jn s	B	England	rub.	S	co	Eng. bot. 36
1958	orientális *W*	oriental	△	or	2	mr my	B	Turkey	1752.	D	co	Bot. reg 288
1959	laxiflóra *B M*	bell-flowered	◯	or	1	my au	B	Corsica	1813.	C	s l	Bot. mag 1798
1960	crassifólia *Vent*	thick-leaved	△	or	2	jn jl	Pk	Persia	1822.	C	s.l	Vent. cels. 100

341. TRICHODES'MA *R Br* TRICHODESMA *Boragineæ Sp.* 3—4

1961	Indicum *R Br*	Indian	○		1	jn o	B	E. Indies	1759.	S	co	Pl al 30. t 76 f 3
1962	africánum *R Br*	African	○		1	jl au	B	C G H	1759	S	co	Is ac p 1718 t.11
1963	zeylánicum *R Br*	Ceylon	◯		1½	jl au	W	E. Indies	1799	S	co	Jac ic 2 t. 314



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334 *Symphytum* Named from συμφυω, a union or junction, the plant having for a long time passed for a famous vulnerary The French name for the plant, *Consoude*, has the same meaning; but that of the English term Comfrey is obscure S. officinale abounds in mucilage, and may be substituted for Althæa officinalis. All the species are large, coarse, but showy shrubbery plants, flowering for two or three months together, and S asperrimum the whole season

335 *Onosmodium* From *Onosma* and ειδος, similar to Onosma; from which it is not very different either in habit or characters.

336. *Cynoglossum* From κυων κυνος, a dog, and γλωσσα, a tongue Its long soft leaves have been compared to the tongue of a dog C officinale smells like mice, was considered anti-scrophulous, and is disliked by cattle.

337. *Omphalodes* From ομφαλος, a navel, and ειδος, resemblance; the round seeds, which are depressed in the centre, may be compared to a little navel, for the same cause it is called Navelwort in English. O. linifolia is a common border annual. O verna is a beautiful little plant with blue flowers, like the Forget-me-not, peeping from among the snow in every cottager's garden in the early spring.

338. *Pulmonaria.* Derives its name, some say, from the speckled appearance of the leaves resembling diseased lungs; but others think that its name has arisen from the plant having been used with success in pulmonary complaints; whence also, perhaps, the English name Lungwort It must not, however, be inferred from

1924 Leaves ovate lanceolate decurrent

1925 Leaves ovate oblong narrowed at base the lower stalked, Segments of flower very short obtuse
1926 Leaves ovate obl narr at base hairy the lower stalked the flor opp sess. Cal. spread Segm. of fl. acute
1927 Leaves cordate ovate hairy stalked the floral opp sess Segments of flower obtuse, Stem branched
1928 Lvs cord ovate or lanc acumin. stalked very rough, Stem muric with reversed bristles, Lamb of fl. camp
1929 Leaves cordate ovate acuminate hairy, floral sessile nearly opposite, Stem simple

1930 Hispid, Leaves oval lanceolate acute papillose, Segments of cor. very acute
1931 Hoary, Leaves oblong about 3-nerved, Segments of cor oval

1932 Leaves broad lanceolate wavy hoary on each side sessile close together, Seeds warted
1933 Leaves spatulate lanceolate shining nearly naked scabrous beneath
1934 Leaves lanceolate tomentose the upper obovate lanceolate cordate stem-clasping, Sepals ovate
1935 Very hairy, Leaves oval the upper stem-clasping, Corymb. terminal leafless on a long stalk
1936 Leaves villous, Cal. hairy, Stamens longer than corolla
1937 Stamens longer than corolla, Cal. villous, Radical leaves ovate stalked very large
1938 Leaves lanceolate villous, Seeds with hooked prickles
1939 Leaves spatulate obtuse, Flowers heaped

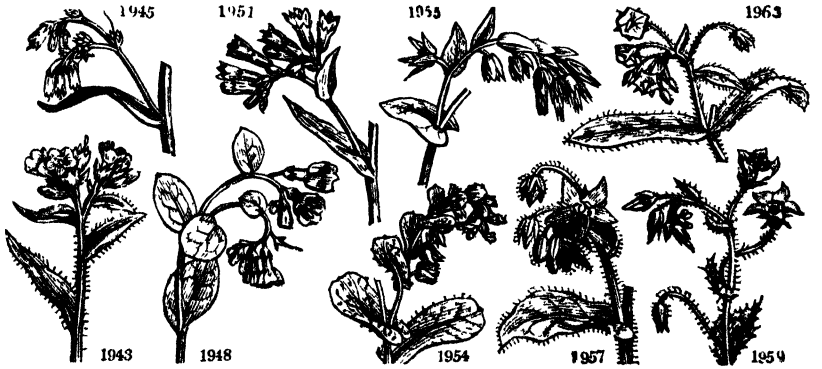
1940 Radical leaves ovate cordate, Cauline ovate stalked, Shoots creeping
1941 Leaves linear lanceolate smooth roughish with little teeth at the edge, Seeds urceolate rugose
1942 Leaves obl. lanc. nerved smooth and shining above pubesc. beneath the lower on long stalks the upper sess.

1943 Cal. length of the tube of the cor Leaves oblong lanceolate the radical sessile cauline stalked
1944 Cal. length of the tube of the cor Radical leaves ovate cordate scabrous cauline ovate sessile
1945 Cal. short 5-parted hispid, Radical lvs ovate cordate stalked, cauline half stem-clasping, Flowers panicled
1946 Cal short 5-parted hispid, Leaves ovate oblong acuminate hairy
1947 Smooth erect, Radical leaves on long stalks lanceolate, cauline linear oblong, Flowers panicled, Cal. short
1948 Cal much shorter than tube of cor which is longer than limb, Radical leaves ovate elliptical cauline ob-
1949 Cal. short, Rad leaves cordate [ovate lanceolate obtuse
1950 Smooth, Leaves ovate glaucous fleshy, Stem branching procumbent
1951 Leaves ovate lanceolate acuminate downy decurrent radical stalked, Cal longer than tube
1952 Leaves hispid radical obl lanc. acuminate narr. into the stalk, Cauline decurrent, Cor campanulate

1953 Cor obtuse spreading ventricose campanulate at end, Stamens shorter than corolla, Leaves smooth
1954 Cor obtuse spreading cylindrical, Stamens as long as cor Leaves rough
1955 Leaves stem-clasping entire, Cor acute closed whole colored, Segm of cal unequal
1956 Leaves stem-clasping entire, Cor acute closed with a red band in middle, Seg of cal uneq Stems many

1957 Leaves ovate the lower stalked all alternate, Cal. spreading, Pedunc terminal many-flowered
1958 Leaves cordate stalked, Pedunc many-flowered, Stamens exserted villous
1959 Leaves alternate oblong sessile, Pedunc axillary 1-flowered, Cor campanulate nodding
1960 Glaucous, Stem smooth, Leaves decurrent rough above, Segments of cor lin. lanc spreading unequal

1961 Leaves of stem and branches lanc half stem-clasping, Pedunc 1-flowered, Sepals auriculated at base
1962 Leaves opposite stalked ovate, Pedunc many-flowered, Sepals ovate acute erect
1963 Sepals not auriculated. Nuts smooth without an edge, Leaves sessile attenuated at the base



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English names of this sort having been applied to plants, either that lungwort was ever used in this country for the lungs, or liverwort for the liver The truth is, that the old herbalists, or translators of the classical writers upon natural history, made English names after their Latin denominations, without enquiring whether such continued to be applicable or not, and their less informed successors had no difficulty in finding those virtues in the plants which were indicated by the names of the translators. P. virginica, sibirica, and maritima are elegant plants, greatly resembling each other, and considered by some as most probably only varieties. They are among the most elegant ornaments of the flower-garden in dry springs; but they require some care in keeping, unless in a soil almost entirely of sand.

339. *Cerinthe.* From κηρος, wax, and ανθος, flower, because there is great attraction for bees in the flowers. The French word *melinet* and the English honeywort have been formed in the same sense. C. major is a shewy border annual, much frequented by bees. In Italy and Sicily it is very common, and a biennial.

340. *Borago,* is said by Apuleius to be an alteration of *corago,* and to have been named on account of its cordial qualities. Pliny says that wine, with this infused in it, cheers the spirits. B. officinalis was formerly in great repute as a cordial. According to Withering, the young leaves may be used as a salad or as a pot-herb, and the flowers form an ingredient in cool tankards.

341. *Trichodesma.* From θριξ τριχος, hair, and δεσμος, a bond, the stamens being united by interwoven hairs;

342. ASPERU'GO. *W.*	GERMAN-MADWORT.					*Boragineæ.*	*Sp* 1.							
1964 procúmbens *W.*	procumbent	♃	○	w	3	ap.my	B	Britain	rub.	S	co	Eng. bot. 661		
†343. NO'NEA. *Mönch*	NONEA.					*Boragineæ.*	*Sp.* 6—8.							
1965 púlla *Dec*	dark-flowered	♃	△	cu	½	jn.jl	Dk	Germany	1648.	D	s.l	Jac. aust 2. t.188		
1966 lútea *Dec.*	yellow		○	cu	2	jn.jl	Y	Crimea	1805.	S	s.l	Nocca tr. 3		
1967 rósea *Lk.*	rose-colored		○	cu	2	jn jl	Pk	Crimea	1823	S	s.l			
1968 nígricans *Dec.*	black-flowered		○	cu	3	my.jn	Dk	Barbary	1822.	S	s.l	Zanon. hist. t.33		
1969 violácea *Dec.*	violet		○	cu	2	jn.jl	Pu	S. Europe	1686.	S	co	Mor h.3.t.26.f.11		
1970 ciliáta *W.*	ciliated		○	cu	1	jn jl	Pu	Levant	1804.	S	co			
344. LYCOPSIS. *W*	WILD-BUGLOSS.					*Boragineæ.*	*Sp.* 3—12.							
1971 variegáta *W*	variegated		○	cu	1	jn.jl	B	Candia	1683.	S	co	Mo s.11 t.26 f.10		
1972 arvénsis *W.*	small		○	w	1	my.au	B	Britain	cor. fl.	S	co	Eng bot. 938		
1973 orientális *W.*	oriental		○	cu	1½	jn.jl	B	Levant	1796.	S	co	Bux cent.5. t.30		
345. E'CHIUM. *W.*	VIPER'S-BUGLOSS.					*Boragineæ.*	*Sp* 24—80.							
1974 fruticósum *W.*	shrubby	♃		or	3	my.jn	Pk	C. G. H	1759	C	p.l	Bot. reg 86		
1975 cándicans *W*	hoary-tree	♃		or	3	my.jn	Pu	Madeira	1777.	S	p l	Bot. reg 43		
1976 grandiflórum *H K*	great-flowered	♃		or	3	jn jl	Pk	Madeira	1787	S	p l	Bot. reg 124		
1977 ferocissimum *B R.*	prickly-stalked	♃		or	6	jn jl	B	Madeira	1794.	C	s l	Bot. rep. 39		
1978 gigantéum *W.*	gigantic	♃		or	10	jl.n	W	Canaries	1779.	C	p l	Vent. mal. 71		
1979 strictum *W*	upright			or	3	my.d	B	Canaries	1779.	C	s l	Jac schœn.1.t.35		
1980 argen'teum *W.*	silvery	♃		or	3	jn jl	B	C G H.	1789.	S	p l	Bot. rep. 154		
1981 lævigátum *W*	smooth-stalked	♃		or	1	jn jl	B	C. G H.	1774.	C	s l	Lehm. ic asp.t.3		
1982 gláucum *W*	sea-green	♃		or	1	my jn	W	C G H.	1791	C	s l	Bot. rep 165		
1983 fastuósum *H K.*	noble	♃		or	4	ap au	Pu	Canaries	1779.	C	s l	Jac. ecl. 41		
1984 nervósum *H K.*	sinewy	♃		or	4	jn.au	Pu	Madeira	1777.	S	p l			
1985 spicátum *W.*	spiked-dwarf	♀		or	¼	mr my	W	C G H	1793.	C	s.l	Lehm. ic. asp t.1		
1986 glaucophýllum *Jacq*	glaucous	♃		or	2	jl	B	C. G. H.	1792.	C	s.l	Jacq ic. 2. t. 312		
1987 plantagineum *W.*	Plantain-leaved		○	or	1	jl o	V	Italy	1776.	C	s.l	Barr ic. t. 1026		
1988 itálicum *W.*	white	☿		or	4	jl	W	Jersey	...	S	s.l	Eng bot 2081		
1989 rúbrum *W.*	red	☿		or	4	jl au	R	Hungary	1791.		co	Jac aus 5 t. ap.3		
1990 vulgáre *W.*	common	☿		or	2	jl au	R	Britain	sto fl.	S	l p	Eng bot. 181		
1991 violáceum *W.*	violet-flowered		○	or	3	jl au	B	Austria	1658	S	co			
1992 maritimum *W.*	sea		○	or	¼	jl au	B	Italy	1815.	S	co	Boc mus. 2. t.78		
1993 pyrenáicum *W en.*	Pyrenean	☿		or	1	jl au	W	Pyrenees	1815.	S	co			
1994 créticum *W.*	Cretan		○	or	1	jl s	V	Levant	1683	S	s l	Bot. mag. 1934		
1995 orientále *W*	oriental		○	or	3	jl.au	Pa. B	Levant	1780.	S	co	Trew pl.rar.1.t.1		
1996 lusitánicum *W*	Portugal		○	or	3	jl au	W	S. Europe	1731	S	co			
1997 parviflórum *H K.*	small-flowered		○	or	2	jl.au	W	Barbary	1798.	S	co			
†*346. TOURNEFOR'TIA *R Br*	TOURNEFORTIA					*Boragineæ*	*Sp* 8—36.							
1998 Messerschmídia *R.Br.*	shrubby			or	6	jn o	G	Canaries	1779.	C	a.l	Bot. reg 464		
1999 Argúzia *R & S.*	herbaceous	♀	△	or	½	jn o	W	Siberia	1780.	C	s l			
2000 fœtidíssima *W.*	Tobacco-leaved			or	9	s	Pk	Jamaica	1739	C	p l	Plu ic.226. t.230		
2001 cymósa *W*	broad-leaved			or	9	jl	Pk	Jamaica	1777	C	p l	Jac. ic. 1. t. 31		
2002 bicolor *W.*	two-colored			or	6	...	G	Jamaica	1812	C	p l			
2003 suffruticósa *W*	hoary-leaved			or	4	...	W	Jamaica	1759.	C	p l	Slo jm.2 t.162.f 4		
§2004 volubilis *W*	climbing			or	12	jl.au	G	Jamaica	1752.	C	p l	Slo.jm.1 t.143 f 2		
§2005 laurifólia *Vent.*	laurel-leaved			or	12	jn jl	Y	Porto Rico	1819.	C	p l	Vent. chx t. 2		
†347 NOLA'NA *W.*	NOLANA.					*Boragineæ.*	*Sp* 1—7							
2006 prostráta *W.*	trailing	♃	○	or	½	jl s	B	Peru	1761.	C	p.l	Bot. mag. 731		
†348. ARE'TIA *W*	ARETIA.					*Primulaceæ*	*Sp* 3—9							
2007 helvética *W.*	imbricated	♀	△	or	½	my jn	W	Switzerl	1775	D	a p	Schk. han 1. t 32		
2008 alpina *W*	linear-leaved	♀	△	or	½	my jn	Pk	Switzerl.	1775	D	a p	Bot cab. 297		
2009 Vitaliána *W*	Grass-leaved	♀	△	or	½	my jn	Y	Pyrenees	1787	D	a p	Par lond. 107		



History, Use, Propagation, Culture,

the principal feature in the generic character. This has been separated from Borago by modern botanists, it is a plant of no beauty

342. *Asperugo.* So called from its asperity The only species is a procumbent annual with small blue flowers, found all over Europe, from Lapland to the Mediterranean

343. *Nonea.* A name contrived by Mönch, in his Methodus Plantarum, to distinguish the dark flowered species of Lycopsis. The genus was long neglected, but has recently been adopted by both Decandolle and Lehmann.

344. *Lycopsis.* From λυκος, a wolf, and οψ, the eye. Ingenious people have found a similarity between the small blue flowers of this plant and the eye of a wolf. All the species are weed-like plants.

345. *Echium,* is an ancient name applied to some plant of this family, and derived from εχις, a viper, from the resemblance between its seeds and the head of a viper The spotted stem, which may be likened to a snake's skin, affords a reason for the application of the name. All the species are beautiful in their flowers, but rough and unpleasant in their foliage. The common E. vulgare of our downs is perhaps the handsomest of European plants.

1964 The only species. Stem climbing very rough, Flowers small axillary

1965 Leaves entire, Stem erect, Cal. of fruit inflated pendulous
1966 Leaves obl lanc. strigose floral cordate longer than the cal. Cal acute, in fruit inflated pendulous
1967 Cal. 5-cleft, in fruit inflated pendulous, Leaves obl. hispid floral cordate longer than cal. Stems procumb
1968 Stem procumbent, Leaves entire, Cal. of fruit pendulous, Cor. shorter than calyx
1969 Leaves lanceolate, Stem prostrate, Cal. of fruit inflated nodding 10-angular, Cor. longer than calyx
1970 Leaves lanceolate denticulated hispid ciliated, Cal. of fruit inflated pendulous

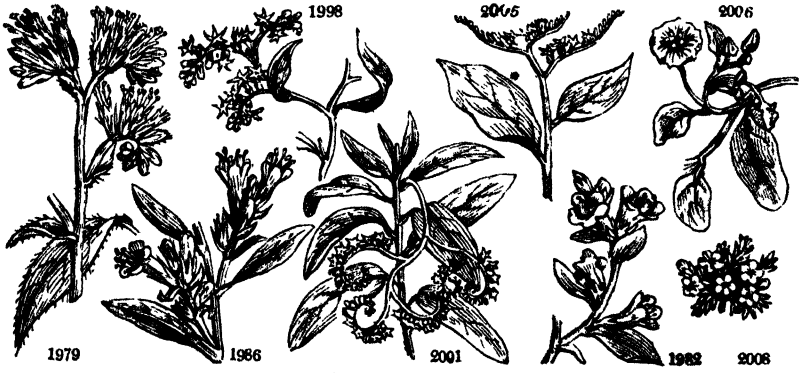
1971 Leaves repand toothed callous, Stem decumbent, Corollas nodding
1972 Leaves lanceolate hispid, Cal. always erect
1973 Leaves ovate entire scabrous, Cal. erect

1974 Pubescent, Fl. in loose corymb. Pan at end of branches, Tube closed by a 5-lobed fringe, Stam. included
1975 Stem shrubby, Leaves lanc. nervose and branches hairy, Sepals oblong and lanceolate acute, Styles hairy
1976 Stem smooth, Leaves lanceolate rough above, Flowers cymose equal, Tube of flower very long
1977 Stem shrubby, Branches and leaves prickly, Flowers in spikes, Corollas nearly equal
1978 Stem shrubby, Leaves lanc atten at base hairy, Hairs very short, Bract. and cal. strigose, Stam. exserted
1979 Stem shrubby upright branched, Leaves oblong lanc hairy, Cor campanulate small, Stamens exserted
1980 Stem and lanceolate acute leaves silky, Spike terminal nearly simple leafy
1981 Stem smooth, Leaves lanceolate smooth ciliated prickly, Cor. equal
1982 Stem smooth, Leaves lanceolate smooth scabrous at edge
1983 Stem branched, Leaves lanceolate nerved and branches silky, Styles hairy, Racemes cylindrical
1984 Leaves lanceolate nerved and branches silky, Styles hairy, Racemes ovate
1985 Stem villous, Leaves sword-shaped elliptical villous, Spike compound linear oblong
1986 Stem shrubby, Branc and cal smooth, Lvs lanc. glauc. veinl. smooth above with a few coarse hairs at back
1987 Leaves radical ovate lined stalked [towards the end
1988 Stem herbaceous hairy, Leaves linear lanc strigose hairy lower nerved, Cor equal, Stamens exserted
1989 Stem erect hispid, Leaves linear lanceolate hispid, Spike compound terminal, Cor nearly equal
1990 Stem warted hispid, Cauline leaves lanceolate hispid, Flowers spiked lateral
1991 Cor as long as stamens, Tube shorter than calyx
1992 Leaves spatulate lanceolate villous, Stam shorter than corolla
1993 Stem herb erect panic hisp dotted, Lvs lin lanc strigose, Flowers remote, Stamens ½ as long again as cor
1994 Stem herb echinate, Lvs obl. lanceol hispid little narrowed at base, Stam as long as cor Cal. of fr distant
1995 Stem branched, Cauline leaves ovate, Flowers solitary lateral
1996 Stem nearly simple, Lvs lanc rather silky, the radical very long on stalks, Spikes axillary bent backwards
1997 Stamens shorter than cor. Cal. as long as limb, Leaves lanceolate strigose

1998 Stem shrubby, Leaves stalked, Flowers hypocrateriform
1999 Stem herbaceous, Leaves sessile, Flowers funnel-form
2000 Leaves ovate-lanceolate hairy, Peduncles branched, Spikes pendulous
2001 Leaves ovate entire naked, Spikes in cymes
2002 Leaves ovate acuminate smooth above rugose, Spike cymose erect recurved
2003 Leaves nearly lanceolate hoary, Stem half shrubby
2004 Leaves ovate acuminate nearly smooth, Leafstalks hairy, Stem climbing, Cal. 5-parted
2005 Stem climbing, Leaves ovate oblong acute repand smooth, Berry with 4 projections bipartible

2006 Leaves ovate oblong, Cal pyramidal, Sepals triangular sagittate

2007 Stems rounded, Leaves imbricated, Flowers sessile
2008 Villous, Scapes 1-flowered
2009 Stem branching, Leaves smooth above, Pedunc short, Petals conniving



and Miscellaneous Particulars.

346 *Tournefortia* So named by Linnæus, after Joseph Pitton de Tournefort, author of an elegant arrangement of plants under the title of *Institutiones rei Herbariæ*, and the father of the French school of botany. The system of Jussieu is founded upon that of Tournefort, or is rather an adaptation of the principles of that botanist to the actual state of the science. The species are by no means handsome either in flowers or foliage, and in some cases the latter is even fetid.

347 *Nolana* Is a diminution of *nola*, signifying a bell in low Latin. The name has been applied to this plant on account of its bell-shaped corolla. The species are hardy annuals, of beautiful appearance when in flower. They may be sown in the spring in the open border, where they will grow without protection

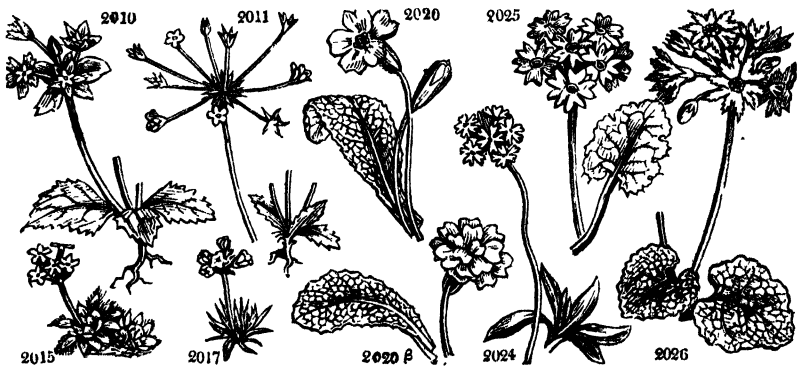
348 *Aretia* In honor of Benoit Aretio, a Swiss, professor in the university of Berne. He died in 1574. He published a work upon alpine plants, and his name has been applied to a charming alpine genus, said by some, with little reason, not to be distinct from Primula. The species are very delicate, and require good air and skilful cultivation to succeed well. They are peculiarly suitable for rock-work or growing in pots, well drained, and filled with turfy loam and peat.

†349. ANDROSA'CE. *W.* ANDROSACE. *Primulaceæ.* *Sp.* 10—35

2010 **máxima** *W.*	oval-leaved	○	or	△	½	mr.jn	W	Austria	1597.	S	p.l	Jac. aus. 4. t. 331
2011 **elongáta** *W*	cluster-flowered	○	or	△	½	ap my	W	Austria	1776.	S	p.l	Jac aus 4. t. 330
2012 **septentrionális** *W.*	tooth-leaved	○	or	△	½	ap my	W	Russia	1755.	S	p.l	Bot. mag. 2021
2013 **villósa** *W.*	villous	⅓	or	△	½	jn jl	Pk	Pyrenees	1790.	D	s p	Bot mag 743
2014 **lactifióra** *Fisch.*	Buckshorn-lvd.	⅓	or	ⓞ	½	jn.s	W	Siberia	1806.	D	s p	Bot. mag 2022
2015 **Chamæjásme** *W.*	Grass-leaved	⅓	or	△	½	jn au	Pk	Austria	1768.	D	s.p	Bot. cab. 232
2016 **lácteа** *W*	white-flowered	⅓	or	△	½	jn au	W	Austria	1752.	D	s.p	Bot. mag. 868
2017 **cárnea** *W*	awl-leaved	⅓	or	△	½	jl.au	F	Switzerl.	1768.	D	s p	Bot. cab. 40
2018 **obtusifólia** *W*	blunt-leaved		○	or	½	ap.jn	Pk	Italy	1817.	S	a.p	All. ped.1.t46.f.1
2019 **nána** *Horn.*	dwarf		○	or	½	ap my	W	Denmark	1803.	S	p.l	

†350 PRI'MULA. *W.* PRIMROSE *Primulaceæ.* *Sp.* 23—55.

2020 **vulgáris** *E. B*	common	⅓	△	or	½	mr my	Y	Britain	woods	D	s.l*	Eng. bot. 4
β plena-cárnea B. M.	*flesh-col -double*	⅓	△	or	½	mr my	Pk	Britain	...	D	s.l	Bot. mag. 229
γ plena-álba	*double-white*	⅓	△	or	½	mr.my	W	Britain	...	D	s l	
δ plena-sulphúrea	*doub.-brimstone*	⅓	△	or	½	mr my	Y	Britain	...	D	s.l	
ε plena-rúbra	*double-red*	⅓	△	or	½	mr my	R	Britain	...	D	s l	
ζ plena-cúprea	*double-copper*	⅓	△	or	½	mr my	O	Britain	...	D	s l	
η plena-atropurpúrea	*doub -dark-purp*	⅓	△	or	½	mr my	Pu	Britain	...	D	s.l	
θ plena-violácea	*double-lilac*	⅓	△	or	½	mr my	Li	Britain	...	D	s.l	
2021 **elátior** *W*	Oxlip	⅓	△	or	1	mr my	Y	Britain	woods	D	s.l	Eng bot. 518
2022 **véris** *W*	Cowslip	⅓	△	or	½	my jn	Y	Britain	m. pa.	D	s l	Eng bot 5
2023 **farinósa** *W*	Bird's-eye	⅓	△	or	½	jn jl	R	Britain	m. pa.	D	p l	Eng. bot. 6
2024 **davúrica** *Fisch.*	Siber bird s-eye	⅓	△	or		my jn		Siberia	1806.	D	p l	Bot mag. 1219
2025 **cortusoides** *W.*	Cortusa-leaved	⅓	△	or	1	my jl	R	Siberia	1794	D	p l	Bot mag. 399
2026 **dentifióra** *Andr.*	tooth-flowered	⅓	△	or	1	my jl	R	Siberia	1806.	D	p l	Bot. rep 405
2027 **longifólia** *H K.*	long-leaved	⅓	△	or	½	ap my	R	Levant	1790	D	p l	Bot. mag. 392
2028 **villósa** *W.*	villous-leaved	⅓	△	or	½	ap my	Pu	Switzerl	1768	D	p l	Bot. mag 14
β flore-albo	*white-flowered*	⅓	△	or	½	ap my	W	Switzerl	1768.	D	p l	Bot mag 1161
2029 **nivális** *W.*	snowy	⅓	△	or	½	ap my	Pu	Dauria	1790	D	s l	Pal. it. t. G * f. 2
2030 **margináta** *W*	silver-edged	⅓	△	or	½	mr ap	Pk	Switzerl.	1777.	D	s l	Bot mag 191
2031 **Auricula** *W*	Auricula	⅓	△	or	½	ap my	Y	Switzerl.	1596	D	h l	Jac aus 5. t 415
2032 **Palinúri** *W en.*	flat-flowered	⅓	△	or	½	ap my	Y	Naples	1816	D	h l	Sweet fl. gard 8
2033 **integrifólia** *W*	entire-leaved	⅓	△	or	½	jn jl	Pk	Pyrenees	1792.	D	p l	Bot. mag 942
2034 **finmárchica** *W*	Norwegian	⅓	△	or	½	my jn	V	Norway	1798.	D	p l	Flor dan 188
2035 **minima** *L*	least	⅓	△	or	½	ap	Pu	S. Europe	1819	D	s l	Bot. reg 581
2036 **sinénsis** *Lindl*	Chinese	⅓	◪	or	1	ja.d	Pk	China	1820	S	s l	Lind coll. t. 7
2037 **stricta** *Horn*	upright	⅓	△	or	½	ap my	Pk	Denmark	1822	D	s l	Fl dan. t 1385
2038 **scótica** *Hook*	Scotch	⅓	△	or	½	jn jl	R	Scotland	al.hea.	D	s l	Bot cab 652
2039 **Pallásii** *Lehm.*	Pallas's	⅓	△	or	½	...	Y	Altai	1823	D	s l	Lehm mon t. 3
2040 **pusilla** *Hook*	little	⅓	△	or	½	jn	Pu	N Amer	1822	D	s l	Hook. ex fl 68
2041 **viscósa** *W*	clammy	⅓	△	or	½	ap	P	Piedmont	1792	D	p l	All ped 1 t.5 f 1
2042 **decóra** *B. M*	comely	⅓	△	or	½	ap	P	.....	1800	D	p.l	Bot. mag. 1922



History, Use, Propagation, Culture,

349 *Androsace* From *ανηρ ανδρος*, a man, and *σακος*, a buckler, the large round hollowed leaf of the common Androsace has been compared to the buckler of the ancients The Androsace of Pliny and others must have been something very different. These are elegant mountaineers which may be treated in all respects as Aretia.

350 *Primula*, is derived from *primus*, the first, — to flower, the delicate blossoms of many of the species appearing when all nature is otherwise inert. This genus consists of beautiful dwarf alpine plants, valuable in horticulture, on account of their flowering early in spring, and being prolific in variation

P. vulgaris is a native of most parts of Europe in woods and hedges on a moist clayey soil It is generally found with brimstone-colored flowers, and single, but in some places, though rarely, it is found of a white, and again, of a purple hue, and occasionally double The leaves and roots, which smell of anise, when dried, ground, and used as snuff, act as a sternutatory, and, taken internally, as an emetic The varieties and subvarieties of this plant are very numerous Some consider P veris and elatior as sprung from it, and only more permanent varieties. The Hon W Herbert says, he raised from the seed of one umbel of a highly-manured red cowslip, a primrose, a cowslip, and oxlips, of the usual and other colors; a black polyanthus, a hose-in-hose cowslip, and a natural primrose bearing its flower on a polyanthus stalk; and from the seed of the hose-in-hose cowslip he raised a hose-in-hose primrose (*Hort Trans* iv 19.) But this requires confirmation, as the circumstance was never before recorded. For distinction's sake we shall consider them as species or subspecies

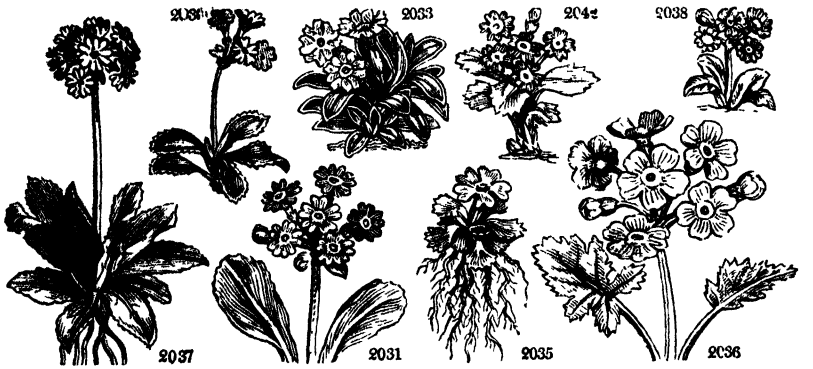
The varieties of P. vulgaris are arranged by florists in two classes, the first contains all those whose flowers are on separate pedicels, rising from the root upon a common stem, so short as not to be seen without separating the leaves of the plant, and are called primroses. The second class includes all those whose flowers are in umbels on a scape or flower-stalk rising from three to six inches or more, and are called polyanthuses Of the primroses there are about a dozen beautiful varieties in cultivation; and of the polyanthus an astonishing number, readily added to by propagation from seed. The names of the varieties, with the exception of the double sorts riven above, are entirely arbitrary. The rules for judging of the beauty or merits of a variety are also wholly artificial, and founded on an imaginary form far removed from ordinary nature These rules or canons are

2010 All villous, Leaves ovate oblong and sepals toothed, Involucres very large, Flowers very small
2011 Much branched rough, Branches spreading, Leaves obl. somew. toothed, Sepals lanc. ent. Fl. very small
2012 Roughish erect, Lvs. lanc. tooth atten at base, Prop. ped. elong. upright, Cor. longer than cal Pet. ov. ent.
2013 Leaves lanceolate entire villous, Umb. few-flowered, Cor longer than the ovate campanulate calyx
2014 Smooth, Lvs. lanc. lin. tooth at end, Ped. sprdg. elon. Cor. longer than cal. pet. obcord. (*A coronopif* B M.)
2015 Pubescent, Leaves lanc. nearly entire ciliated, Umb few-flowered, Cor. longer than the turb. calyx
2016 Caulesc. smooth, Lvs. lin. shining ent. cil. at end, Umb. few-fl. Stalks elong. Cor longer than turb. calyx
2017 Caulesc. pubesc. Lvs. scattered lin. subulate ciliat. Umb. few-fl. Stalks short, Cor longer than turb calyx
2018 Leaves elliptical lanceolate smooth, Scapes umbellate
2019 Lvs. ov. lanc. from middle to end acutely toothed, Scape lvs. and stalks rather long than involucre. Cor shorter than angular cal. (*A. Bocconi* of Gardens.)

2020 Leaves obovate oblong toothed rugose villous beneath, Umb. radical, Flower-stalks as long as lvs. Cor. flat

2021 Leaves toothed rugose hairy on both sides, Umbel many-flowered with outer flowers nodding, Cor flat
2022 Lvs. toothed rugose hairy beneath, Umb many-flowered, Flowers all nodding, Cal. angular, Cor. concave
2023 Lvs. cuneate lanc. rug. cren. tooth. powdery, Umb many-fl Ped spread Tube gland at end, Limb flat the
2024 Leaves sessile lanc spatul. entire smooth on both sides, Outer fl. nodding [length of tube
2025 Lvs. cordate stalked doubly crenate smooth beneath hairy at the veins, Stalks villous, Umb many-fl. erect
2026 Leaves cordate crenate-lobed very rugose, Corolla acutely toothed
2027 Leaves oblong spatulate toothed green on each side, Leaves of involucre auricled at base
2028 Leaves obl. oval serrulate villous pale green, Scape 2-3-fl erect rounded, Cal globose, Tube of cor villous

2029 Leaves lanc flat finely toothed smooth, Umb. many-fl erect, Leaves of invol connate at base
2030 Leaves smooth on each side crenate powdery at edge, Cal very short (*P crenata*, Lehm.)
2031 Leaves obov. ent. or serr. fleshy, Scape central as long as lvs Umb erect, Inv with short lvs Cal. powdery
2032 Leaves spatulate serrated smooth, Scape lateral, Umbel nodding, Involucre with large leaves
2033 Leaves elliptical nearly entire thickish cartilaginous at edge, Umb 2-3-fl erect, Cal tubular obtuse
2034 Leaves ovate entire stalked smooth, Umb erect 3-fl Cal campanulate, Cor cyathiform
2035 Leaves wedge-shaped shining many-toothed at end, Scape about 1-fl Petals half bifid like a Y
2036 Leaves stalked ovate cordate rugose, Umbel proliferous, Cal inflated
2037 Lvs. lan obov tooth. stlk. beneath nearly nak Um few-fl erect, Lvs of inv lan Pet obov short. than tube
2038 Resembles P. farinosa. Distinguished by its flat corolla, and more robust habit
2039 Leaves obovate oblong close toothed smooth somewhat wavy, Umb pubesc Cal ovate gaping, Cor flat
2040 Leaves obovate spatulate beneath and scape mealy, Segments obcordate toothed
2041 Leaves obovate tongue-shaped entire vill. viscid, Umb many-fl erect, Leaves of inv ovate short membr
2042 Leaves flat coarsely serrated acute, Cal viscid, Pedicels longer than scape



and Miscellaneous Particulars

agreed on by the general consent of florists, they were first brought forward by the Dutch, and are now to be found in the treatises on florists' flowers of all countries. one of the best in this country is Maddocks's Florist's Directory.

The culture of P. veris as a border flower is abundantly simple, as it will grow any where, but best in a situation shaded from the mid-day sun, and in a loamy soil, but its culture as a florists' flower, the crossing to procure new varieties, and all the various cares of the florist involve details much too tedious for this work, if they were to be given at such length as to be of real use We refer to Maddocks, Emerton, and Hogg, and to the Encyclopedia of Gardening.

P. elatior is found in the same situations as the primrose, but is much less common than either it or P veris, It has little or no smell. Sir J E Smith considers it as probably a hybrid between the cowslip and primrose. There are two or three varieties of oxlip, but they are not considered as florists' flowers.

P. veris smells more strongly of anise than the primrose Its leaves have been used as a pot-herb, and in salads, and are recommended for feeding silk-worms The flowers make a pleasant wine, flavored like muscadel, but considered somniferous. Liquors and syrups are sometimes tinctured with the leaves. Having been less cultivated than the primrose, there are but few varieties of this plant in gardens. They may be raised from seed, however, to any extent, as Messrs. Gibbs, of the Brompton nursery, and others, have lately proved.

P auricula is a well known favorite of the florist. It is a native of the alpine regions of Italy, Switzerland, and Germany, and found also about Astracan. The most common colors in its wild state are yellow and red, sometimes purple, and occasionally variegated or mealy The cultivated are innumerable, and many of them of exquisite beauty and fragrance. The leaves in different varieties differ almost as much as the flowers, a circumstance which does not take place to the same extent in the variations of P vulgaris or veris. Near most of the manufacturing towns of England, and many in Scotland, the culture of this flower forms a favorite amusement of weavers and mechanics. Lancashire has been long famous for its auriculas it is no uncommon thing there for a working man who earns, perhaps, from 18s. to 30s per week, to give two guineas for a new variety of auricula, with a view to crossing it with some other, and raising seedlings of new properties.

351. CORTU'SA. *W.*	Bear's-ear Sanicle.				*Primulaceæ*		*Sp.* 1.						
2043 Matthioli *W.*	common	☿	△	or	½	ap.jn	R	Austria	1596.	D	s.l	Bot. mag. 967	
352. SOLDANEI'LA. *W.*	Soldanella				*Primulaceæ.*		*Sp* 2—3.						
2044 alpina *W. en.*	Alpine	♇	△	or	½	ap	Pu	Switzerl.	1656.	D	p.l	Bot. mag. 49	
2045 montana *W en. S. Clusii* B M	mountain	♇	△	or	½	ap	Pu	Bohemia	1816.	D	p.l	Bot. mag. 2163	
†353 DODECA'THEON	American Cowslip				*Primulaceæ.*		*Sp* 1						
2046 Méadia *W*	Mead's	☿	△	or	1	ap.jn	L.Pu	Virginia	1744.	D	p.l	Bot. mag. 12	
†354 CY'CLAMEN *W*	Cyclamen				*Primulaceæ.*		*Sp* 5						
2047 cóum *W*	round-leaved	♃	△	or	½	ja.ap	L.R	S. Europe	1596.	S	s.p	Bot. mag. 4	
2048 europæ'um *W.*	common	♃	△	or	½	au	L.R	Britain	banks	S	s.p	Eng. bot. 548	
2049 péraicum *W*	Persian	♃	□	or	½	f ap	R.w	Cyprus	1731.	S	p.l	Bot. mag. 44	
2050 héder.cfólium *W.*	Ivy-leaved	♃	△	or	½	ap	W	Austria	1596.	S	p.l	Bot. mag. 1001	
2051 ver'num *Mill.*	spring	♃	△	or	½	mr	Pu	.....	...	S	s.l	Sweet fl gard. 9	
355. HOTTO'NIA *W*	Water-violet				*Primulaceæ.*		*Sp.* 1—2.						
2052 palústris *W*	marsh	♒	△	or	1	jl au	F	England	dit.	S	aq	Eng. bot 364	
356 LYSIMA'CHIA *W*	Loose-strife				*Primulaceæ.*		*Sp.* 16—29						
2053 vulgáris *W*	common	♃	△	or	3	jl s	Y	Britain	wat.sh.	D	co	Eng bot 761	
2054 Ephémerum *W*	Willow-leaved	♃	△	or	2	jl s	W	Spain	1730.	D	p l	Bot mag 2346	
2055 angustifólia *Mich.*	narrow-leaved	♃	△	or	1½	jl s	Y	N Amer.	1803	D	p.l		
2056 dúbia *W.*	purple-flowered	♃	◯	or	1½	jl.s	Pu	Levant	1759.	D	p.l	M co go. 1782. t.1	
2057 stricta *W*	upright	♃	△	or	1½	jl.au	Y	N Amer.	1781	D	p l	Bot mag 104	
2058 thyrsifióra *W*	tufted	♃	△	or	1	my jl	Y	England bog. pl		D	co	Eng. bot 176	
2059 capitáta *Ph*	headed	♃	△	or	1	my jl	Y	N Amer	1813.	D	co		
2060 punctáta *W*	dotted	♃	△	or	1½	jl.au	Y	Holland	1658.	D	co	Jac. aus 4 t 366	
2061 verticillâta *Pall*	whorled	♃	△	or	1	jl au	Y	Crimea	1820.	D	co	Bot. mag 2295	
2062 quadrifólia *Ph*	four-leaved	♃	△	or	2	jl au	Y	N Amer	1794.	D	p.l	Lm.ill.1 t 101 f 2	
2063 ciliáta *Ph*	ciliated	♃	△	or	2	jl au	Y	N Amer	1732.	D	m.s	Walth hort.t.12	
2064 longifolia *Ph.*	four-flowered	♃	△	or	2	jl au	Y	N Amer.	1798	D	p l	Bot. mag. 660	
2065 hýbrida *Ph*	hybrid	♃	△	or	1½	jl au	Y	N Amer.	1806	D	co		
2066 Linum-stellátum *W*	small	♃	◯	or	½	jn	G	Italy	1658.	S	s.l	Mag b. mo t.162	
2067 némorum *W.*	wood	♃	△	or	½	my jl	Y	Britain	m.s pl.	D	m.s	Eng. bot. 527	
2068 Nummulária *W*	Moneywort	☘	△	or	½	jn.jl	Y	Britain	m.me	D	m.s	Eng bot. 526	
†357 ANAGAL'LIS. *W.*	Pimpernel.				*Primulaceæ.*		*Sp* 4—12.						
2069 arvénsis *W*	common	☽	◯	w	½	jn s	S	Britain	cor. fi.	S	co	Eng bot. 529	
2070 cærúlea *E B*	blue	☽	◯	w	½	jn s	B	Britain	cor fi.	S	co	Eng. bot 1823	
2071 fruticósa *H K.*	large-flowered	☿	◯	or	3	my jl	Ve	Morocco	1803.	L	p.l	Bot. mag 831	
2072 latifólia *W.*	broad-leaved	☿	◯	or	1	my jl	Pu	Spain	1759	L	p l	Meerb. ic. 1. t.22	



History, Use, Propagation, Culture,

As to the soil proper for auriculas and polyanthuses, much has been written, and some highly artificial compositions of bullock's blood, sugar-baker's scum, night-soil, fuller's earth, &c recommended. Many of the most successful growers, however, use nothing more than a loam from an old pasture or hedge-row, kept and turned over occasionally during a year, and then mixed with hot-bed dung rotten to a mould, or with leaf-mould, and some sand to keep it open The soil and manure must be well mellowed by time before using, and not mixed till it is wanted, as that is said to generate worms. (See *Encyc of Gard.* art. *Primula*)

P auricula, helvetica, nivalis, and viscosa, are considered by Herbert as only varieties of one original, for he says he raised a powdered auricula and a P helvetica from P nivalis, and a P helvetica from P viscosa. (*Hort. Trans.* IV 20) These, and the other species of this genus, are well adapted for being kept in pots of loam and leaf-mould, or loam and peat well drained, and in frosty or wet weather during winter, protected by a frame to imitate their natural covering of snow in alpine regions Sweet says, "they require to be shifted and parted frequently, for if left too long without these being done, they will dwindle away and die." The best time for parting and shifting is after they have done flowering

P scotica, a pretty plant, resembling P farinosa, has lately been discovered in Scotland by Dr. Hooker, professor of botany at Glasgow

351 *Cortusa.* So named by Mathiolus, in honor of his friend J A. Cortusus, who first noticed it. This is a handsome little alpine, requiring a similar treatment to the Swiss Primulæ

352. *Soldanella.* The diminutive of *solidus*, a shilling The round leaves of these plants are very like pieces of money They are among the least and most beautiful of alpine plants, and remarkable for the manner in which their corolla is cut or lacerated. Culture as in the Swiss Primulæ.

353. *Dodecatheon* A name of the Romans, signifying 12 gods or divinities, applied with apparent inaptitude by Linnæus to a plant, native of a world the Romans did not know, and resembling in no particular that of their writers. It was originally named Meadia by Mark Catesby, in honor of Dr. Mead, but the name was continued only as a specific appellation by Linnæus It is very ornamental when in flower; afterwards the leaves die away, and the root only remains till next season It is not easily kept; but thrives better in a bed of light loamy soil, in a shady and rather moist situation, than in pots.

354. *Cyclamen* Derived from κυκλος, a circle, on account of the numerous coils of the fruit-stalks. This genus consists of humble plants with very beautiful flowers In the north of Italy wild swine feed on its

2043 The only species

2044 Cor funnel-shaped spreading out beyond the middle, Calyx erect, Style shorter than corolla
2045 Cor. cylindrical bell-shaped not cut so far as the middle, Cal. spreading, Style longer than corolla

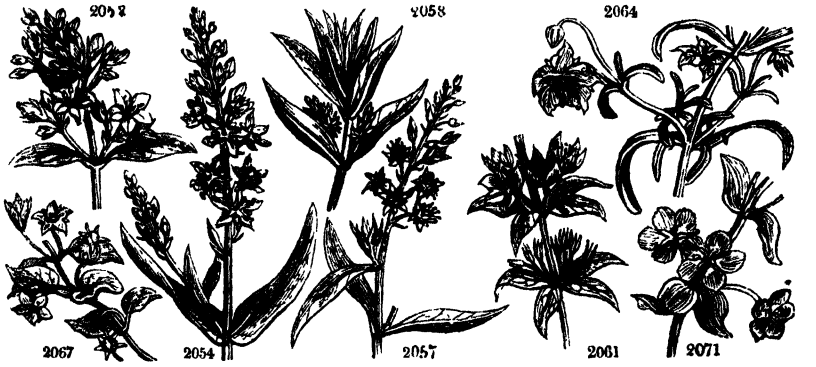
2046 The only species. Leaves radical flat on the ground, Scape bearing at top an umbel of drooping flowers

2047 Leaves orbicular cordate entire, Segments of cor ovate
2048 Leaves orbicular cordate crenate or toothed, Segm of cor lanceolate
2049 Leaves oblong ovate cordate or reniform-cordate crenated, Segm. of cor oblong obtuse
2050 Leaves cordate oblong acuminate angular toothed, Segm. of cor oblong lanceolate rather acute
2051 Leaves cordate crenulate emarginate, with the base overlapping, Flower short, Style exserted

2052 Flowers vertical stalked, Leaves under water all finely cut

2053 Racemes terminal compound, Leaves opposite 3-4 together oblong lanceolate
2054 Racemes terminal, Petals obovate spreading, Leaves linear lanceolate sessile
2055 Smooth branching, Leaves opp or whorled long linear spotted, Raceme terminating a short scape
2056 Racemes terminal, Petals conniving, Stam shorter than corolla, Leaves lanceolate stalked
2057 Racemes terminal, Petals lanceolate spreading, Leaves lanceolate sessile
2058 Racemes axillary stalked ovate compact, Leaves opp lanceolate
2059 Smooth, Stem simple spotted, Leaves opp sess lanc acute spott Flowers in close heads
2060 Leaves 3-4 together ovate lanc stalked pub beneath, Ped axill whorled, Pet ovate fringed with glands
2061 Leaves whorled obl lanc stalked, Pet ovate acute glandular, Stem pubescent
2062 Leaves subsessile 4-5 together oval acuminate dotted, Peduncles four, 1-flowered, Petals oval entire
2063 Pub Lvs opp on long stalks cord ovate, Fl -stalks axill in pairs, Fl cernuous, Petals rounded crenulate
2064 Smooth much branched, Leaves linear very long, Segments of cor serrulate
2065 Smooth, Leaves opp on long stalks lanc Petioles ciliated, Fl cernuous, Cor shorter than cal Pet cren.
2066 Leaves lanc sessile, Peduncles axillary opp Stem much branched smooth, Cal longer than corolla
2067 Leaves ovate acute, Flowers solitary, Stem procumbent, Stamens smooth
2068 Leaves opposite roundish cordate, Pedunc axillary 1-flow Stem smooth creeping, Stamens glandular

2069 Stem procumbent, Leaves 3-nerved ovate lanceolate petals dilated at end crenate with glands
2070 Leaves 5-nerved ovate lanceolate, Stem erect a little winged, Petals toothed at end
2071 Leaves lanceolate about 3 together sessile, Stem shrubby at base rounded, Branches diffuse angular
2072 Leaves cordate stem-clasping, Stem brachiate erect



and Miscellaneous Particulars

bulbs, which are round, flattened, and solid, and as large as pigeons' eggs When the flowers fade the pedicels twist up like a screw, inclosing the germen in the centre, and, lying close to the ground among the leaves, remain in that position till the seeds ripen The plant is peculiarly adapted for pots, and for chamber decoration in spring C hederæfolium is very scarce, and agreeably fragrant C persicum is tender; the others are quite hardy

355 *Hottonia* In honor of Peter Hotton, a professor in the university of Leyden, born in 1648, died in 1709. He wrote several academical dissertations, and published remarks upon medicinal plants, valuable in their day. *Plume d'eau*, Fr. *Wasserviole*, Ger, and *Myriofillo aquatica*, Ital This singular aquatic has roots consisting of white capillary fibres, which strike deep into the mud. The leaves grow in tufts under the water, and only the upper part of the flowering stem rises above it, producing a showy spike of white and blue flowers. It affords refuge to the fresh-water periwinkle (*Turbo Littoreus*), and other small shellfish. The seeds being sown in a pond when ripe, the plants will rise in the water the spring following.

356. *Lysimachia* From λυσις μαχη, of which the English name Loose-strife is a translation; it has been given to this plant from the quality absurdly ascribed to it by the ancients, of quieting restive oxen when put upon their yokes Linnæus says it was named after king Lysimachus of Sicily, who first used it, which account is nearly the same as that of Pliny Most of the species are bog or fen plants, of the easiest culture. L. nummularia is ornamental on moist rock-work or hanging from a pot in a northern exposure Though one of the hardiest natives, it seldom produces ripe seeds, like most plants which multiply themselves much by the roots or stem. The flowers of L. thyrsiflora come out in lateral bunches from the axils towards the top of the stem, which Linnæus notices as a singular circumstance in an upright plant. L. stricta, after flowering, throws out bulbs from the axils of the leaves, which, if allowed to lie on a moist surface, will produce young plants the following spring L. dubia requires to be treated like a tender annual.

357. *Anagallis* From αναγελαω, to laugh; the name expressing the medicinal qualities of the plant, which, by removing obstructions of the liver, removed a cause of low spirits and despondency, so at least say Pliny and Dioscorides. A. arvensis is a beautiful trailing weed, and one of the Floræ horologicæ, opening its flowers regularly about eight minutes past seven o'clock in our latitude, and closing about three minutes past two o'clock. It also serves as an hygrometer, for if rain fall, or there be much moisture in the atmosphere, the flowers either do not open, or close up again. Small birds are very fond of the seeds. A monelli is a very

2073 Monélli *W.* blue-Italian ♃ △ or 1 my s B Italy 1648. L p.l Bot. mag. 319
2074 linifólia *W.* Flax-leaved ♃ ◯ or 1 jn.jl B Portugal 1796. C s l Bot. mag. 2389
2075 tenélla *W.* bog ♃ △ or ½ au s Pk Britain bog. pl. D l.p Eng. bot. 530

358 DIAPEN'SIA. *W* Diapensia. *Ericeæ. Sp.* 1.
2076 lappónica *W* obtuse-leaved ♇ △ or ½ f mr W Lapland 1801. D s.l Bot. mag 1108

359. PYXIDANTHE'RA. *Mi* Pyxidanthera. *Ericeæ Sp* 1.
2077 barbuláta *Mi.* bearded ♃ or ½ jl W Carolina 1806. D l.p Mich. amer. t.17

360. CO'RIS. *W.* Coris. *Primulaceæ. Sp* 1.
2078 monspelénsis *W.* Montpelier ♃ ◯ or ½ jn jl Li S. Europe 1640 S s.p Bot. mag 2131

361 GA'LAX. *W.* Galax. *Saxifrageæ. Sp* 1.
2079 aphýlla *W.* heart-leaved ♃ △ or ½ jn.jl W N. Amer. 1786. D s.p Bot. mag 754

362. MENYAN'THES. *W.* Buck-bean *Gentianeæ Sp* 1—2.
2080 trifoliáta *W.* common ♃ △ or 1 jl W Britain moi pl C p Eng. bot. 495

363. VILLAR'SIA *R. Br* Villarsia *Gentianeæ. Sp.* 6—12.
2081 nymphoides *W* fringed ♃ △ or 1 jn jl Y England rivers. S p l Eng bot 217
2082 lacunósa *V.* smooth-flower ♃ △ or 1 jn jl W N. Amer 1812 S p l Vent choix 9
2083 sarmentósa *B M* running ♃ △ or 1 jn jl Y N Holl 1806 S p l Bot mag 1328
2084 índica *W.* Indian ♃ ◬ or 1 my au W C G H 1792 S p l Bot mag 658
2085 parnassifólia *R Br* tall ♃ △ or 2 jn o Y N S W 1805. S p l Bot. mag 1029
2086 ováta *V.* oval-leaved ♃ △ or 1 my.jl O C. G H. 1786 S p l Bot. mag 1909

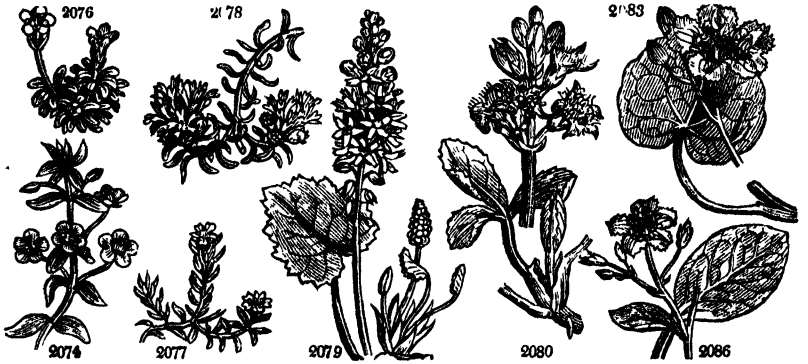
364. CHIRO'NIA *L* Chironia. *Gentianeæ. Sp* 7—14
2087 jasminoides *Thunb* Jasmine-leaved ♃ ▭ or 2 ap jl Pu C, G. H 1812 C p l Bot reg. 197
2088 lychnoides *Thunb* Lychnis-flower ♃ ▭ or 2 ... Pu C G H. 1816 C p l
2089 linoides *W.* Flax-leaved ♃ ▭ or 2 jl.s R C G H 1787 C s p Bot mag. 511
2090 baccifera *W* berry-bearing ♃ ▭ or 2 jn.jl Y C. G H 1759 S s p Bot mag 233
2091 angustifólia *H K.* narrow-leaved ♃ ▭ or 1 jn au R C G H 1800 C s p Bot. mag 818
2092 frutéscens *W* shrubby ♃ ▭ or 1½ jn s R C G H 1756. C s p Bot. mag. 57
2093 decussáta *H K* cross-leaved ♃ ▭ or 1½ jn s R C G H. 1789 C s p Bot. mag 707

365 EUSTOMA *P L* Eustoma *Gentianeæ Sp.* 1.
2094 silenifólium *P L* silene-leaved ○ or 1 jl W I Provid. 1804. S s l Par lond. 241

366. ERYTHRÆA *P S.* Erythræa *Gentianeæ. Sp* 5—29.
2095 Centaúrium *P S.* common ○ or ½ jl au Pk Britain heaths. S s l Eng bot. 417
2096 pulchella *E B* dwarf-branched ○ or ½ au s Pk England sea co S s l Eng bot. 458
2097 littorális *E B* dwarf-simple ○ or ½ jn jl Pk Britain sea co S s l Eng bot 2305
2098 maritima *P. S* procumbent ♃ △ or ½ jl au Y S Europe 1777 S s l Cav.ic 3.t.290 f 1
2099 conférta *Pers* clustered ♇ △ or ½ jl.au Pk Spain 1821 S s l

367. SABBA'TIA. *P. L.* Sabbatia *Gentianeæ Sp* 4—6
2100 grácilis *Ph* slender ♃ ◯ or 1 jl Pu N Amer ... C co Par lond 32
2101 calycósa *Ph* dichotomous ♃ ◯ or 1 jn au Pk N Amer 1812 C co Bot. mag 1600
2102 chloroides *Ph* chlora-like ♃ ◯ or ½ jl au Pk N Amer 1817 S co
2103 paniculáta *Ph* panicled ♃ △ or 1½ my jn W N. Amer 1817 C co

368. LOGA'NIA *R. Br.* Logania *Gentianeæ Sp* 2—11
2104 latifólia *R. Br* broad-leaved ♃ ▭ or 3 ... W N Holl 1816 C l p Lb nov ho l t.51
2105 floribúnda *R Br* many-flowered ♃ ▭ or 2 ap my W N. S W. 1737. C l p Bot. rep. 520
Euosma albiflora B Rep.



History, Use, Propagation, Culture,

beautiful small plant, and, with A latifolia and linifolia, require the protection of a frame during winter. A. tenella is a delicate bog-plant, but not a very certain tenant of the genus It is probably botanically distinct.

358. *Diapensia* An ancient Greek name of the Sanicle, and signifying a plant which removes pain; the Sanicle being a vulnerary. Linnæus applied the name to this plant, which is neither a Sanicle nor a vulnerary, but a pretty alpine species, requiring the same cultivation as similar things, and retaining its deep green leaves through the severest winters

359 *Pyxidanthera* From πυξὶς, a box, and ἀνθηρὰ, an anther, the anthers bursting across like a little box. A small plant resembling Azalea procumbens, with heath-like leaves and minute white flowers It is found on the White-Mountains of New Hampshire, and in Pine-barrens in other parts of North America, but is very rare in cultivation.

360 *Coris* A name of Dioscorides, for which even the etymological ingenuity of a Linnæus or a De Théis have been unable to provide a meaning It was given to a plant analogous to Hypericum, and resembling the heath. Tournefort applied the name to this plant, whose fine leaves, and purple or pink flowers, clothe, like the heath, the places where it grows wild

361 *Galax* From γαλὰ, milk, in allusion to its milk-white spikes of flowers. This is a neat little plant, and thrives best in a moist situation; where alone it flowers freely

362. *Menyanthes.* From μὴν, a month, and ἄνθος, flower, in allusion to the power which the plant is supposed to possess of exciting menstruation *Buck-bean or Bog-bean*, Eng., *Bachsbohne*, Ger. An infusion of the leaves is bitter, and is frequently recommended in dropsy and rheumatism. In Sweden the plant is used

2073 Leaves linear lanceolate opp. or whorled, Stems ascending
2074 Leaves sessile opposite 3-4 together lanceolate 3-nerved, Sepals linear acute, Cor. twice as big as calyx
2075 Leaves ovate acute, Stem creeping, Stigma acute

2076 The only species Plant growing in dense tufts

2077 A small plant resembling Azalea procumbens

2078 The only species

2079 The only species Roots deep red. Flowers in long slender spikes

2080 Leaves ternate

2081 Leaves cordate orbicular floating, Flowers umbelled, Corollas fringed
2082 Leaves reniform subpeltate beneath full of holes floating, Petioles flower-bearing, Corollas smooth
2083 Runners creeping, Leaves cordate roundish repand dotted beneath, Panic opp the leaves, Seeds smooth
2084 Leaves cordate roundish nerved floating, Petioles flower-bearing, Corolla hairy within
2085 Leaves radical cordate roundish spreading toothed, Stem long naked, Flowers panicled
2086 Leaves ovate erect, Flowers in panicled racemes fringed

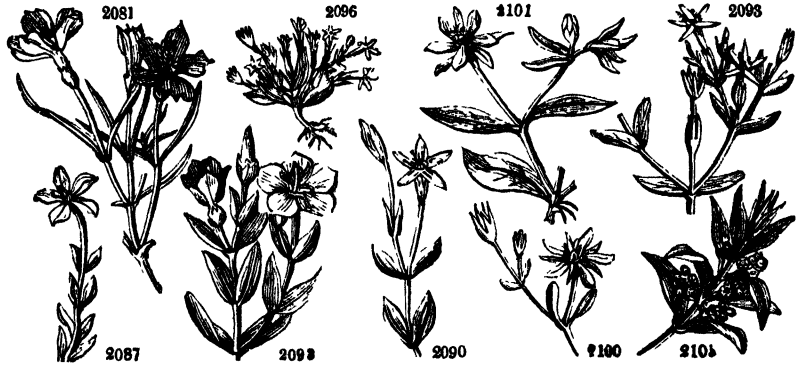
2087 Leaves lanceolate smooth, Stem herbaceous 4-cornered cernuous
2088 Stem simple, Leaves linear-lanceolate
2089 Herbaceous, Leaves linear erect, Branches fastigiate, Peduncles elongated
2090 Leaves linear-lanceolate smooth spreading, Stem much branched shrubby, Fruit a berry
2091 Leaves linear spreading, Cal ovate closed, Cor clammy, Segm cuneate pointed
2092 Shrubby, Leaves lanceolate subtomentose, Calyxes campanulate
2093 Shrubby subtomentose, Leaves close together decussate oblong obtuse, Cal. globose 5-parted

2094 The only species

2095 Stem herbaceous dichotomously panicled, Leaves ovate lanceolate, Cal shorter than tube
2096 Flowers stalked, Segments of cal shorter than tube, Style simple, Leaves ovate
2097 Stem nearly simple dwarf, Flowers clustered sessile, Cal as long as tube of cor Leaves lin lanc
2098 Herbaceous, Leaves oblong-lanceolate, Stem dichotomous corymbose rounded, Flowers stalked digynous
2099 Dwarf upright much branched, Lvs oval obtuse, Fl sessile fasc clustered, Cal ½ as long as tube of cor

2100 Weak, Branches lax elongated 1-flowered, Leaves linear ellipt Pet obovate, Stem angular
2101 Erect leafy, Leaves oblong, Flowers solitary about 7-parted, Cal leafy longer than cor
2102 Weak, Leaves lanc erect, Branches few 1-flowered, Flowers 7-13-parted, Sepals linear shorter than cor
2103 Erect, Leaves lanc. linear, Pan many-flowered brachiate, Cal subulate three as short as cor

2104 Leaves obovate acute at each end, Flowers corymbose, Branches smooth, Stem erect
2105 Leaves lanceolate attenuate at each end smooth, Stipules lateral setaceous. Racemes axillary compound



and Miscellaneous Particulars

as a substitute for hops, two ounces of the leaves being substituted for a pound of hops The powdered roots are sometimes eaten in Lapland The only species cultivated is the wild plant of our rivulets.

363 *Villarsia* A genus divided from the last, and named after Villars, a French botanist of repute, who wrote the Flora of Dauphiny, in 1786, a work used even at the present day This is an aquatic genus of easy culture, and increased by seeds or dividing at the root. V nymphoides is one of the most elegant of British water-plants.

364 *Chironia* Named after Chiron, one of the fathers of medicine, botany, and surgery He is mythologically represented to have been the son of Saturn, or of Time and Experience. Many plants, the virtues of which he is believed to have first discovered, have borne his name The genus, however, to which it is now applied, is probably not one of those It consists of pretty plants of short duration, generally with pink flowers The species are not long-lived plants, and therefore require to be frequently raised from cuttings. Peat mould suits them best, and a little loam mixed with it; and young cuttings planted in the same kind of soil, under hand-glasses, strike root readily

365 *Eustoma* From *ευ*, well, and *στομα*, mouth or orifice, in allusion to the colored aperture of the tube of the flower. A pretty little plant rarely seen in gardens. It resembles a Sabbatia.

366. *Erythræa.* From *ερυθρος*, red, in allusion to the color of the flowers This is a pretty genus of herbaceous and annual flowers, but impatient of cultivation, and therefore rarely seen in gardens.

367 *Sabbatia* Named after Liberatus Sabbati an Italian botanist, author of many works on botany In 1772 he published the first volume of the Hortus Romanus, a fine work, in folio, of which the seventh and last volume appeared in 1784 A pretty N American genus of plants resembling Chironia

368. *Logania* Named by Mr Brown, after a Mr James Logan, said to have been the author of some experi-

†369. PHLOX. *W.*	Lychnidea.				*Polemoniaceæ. Sp.* 18—24.								
2106 paniculáta *W*	panicled	♃	△	or	3	au.s	Pk	N. Amer.	1732.	D	p.l	Mill.ic.2. t.205.f.2
β alba	*white*	♃	△	or	3	au.s	W	N. Amer.	1813.	D	p.l	
2107 undulāta *W.*	waved-leaved	♃	△	or	3	jl.au	R	N. Amer.	1759.	D	p.l	
2108 acuminâta *Ph.*	Lyons's	♃	△	or	4	my.au	Pu	N. Amer.	1812.	D	p.l	Bot. mag. 1880
2109 suavéolens *W.*	white-flowered	♃	△	or	2	jl.au	W	N. Amer.	1766.	D	p.l	
2110 maculāta *W*	spot-stalked	♃	△	or	4	jl.au	R	N. Amer	1740.	D	p.l	Jac. vind.2. t.127
2111 pyramidâlis *H. K.*	pyramidal	♃	△	or	4	jn.au	F	N. Amer.	1800.	D	p.l	Bot. cab. 342
2112 pilósa *W.*	hairy-leaved	♃	△	or	1	my jn	Pk	N. Amer.	1759.	D	p.l	Bot. mag. 1307
2113 amœ'na *B. M.*	Fraser's-hairy	♃	△	or	½	jn jl	Pk	N. Amer.	1809.	D	p.l	Bot. mag. 1308
2114 Carolina *W.*	rough-stemmed	♃	△	or	1	jl.s	D.Pu	Carolina	1728.	D	p.l	Bot. mag. 1344
2115 trifióra *Mi.*	pubescent	♃	△	or	1	jl.s	Pu	Carolina	...	D	p.l	Sweet fl. gard. 29
2116 suffruticósa *Vent.*	shining-leaved	♃	△	or	1½	jl s	D.Pu	N. Amer.	1790.	D	p.l	Bot. reg. 68
2117 glabérrima *W*	smooth	♃	△	or	3	jn.au	R	N. Amer.	1725	D	p.l	D. elt. t.166.f.202
2118 divaricáta *W.*	early-flowering	♃	△	or	1	ap.jn	L.B	N. Amer.	1746.	D	p.l	Bot. mag. 163
2119 stolonífera *H. K.*	creeping	♃	△	or	½	jn s	R	N Amer.	1800	D	p.l	Bot. mag. 563
2120 ovâta *W.*	ovate-leaved	♃	△	or	1½	my.jl	Pu	N Amer.	1759.	D	p.l	Bot. mag 528
2121 subulâta *W.*	awl-leaved	♃	△	or	½	ap jn	F	N. Amer	1786.	D	p.l	Bot. mag. 411
2122 setácea *W.*	fine-leaved	♃	△	or	½	ap my	F	N. Amer	1786.	D	p.l	Bot. mag. 415
β nivâlis	*snow-white*	♃	△	or	½	ap.my	W	N. Amer	1820.	D	p.l	Bot. cab. 780
2123 cárnea *B. M.*	flesh-colored	♃	△	or	1	au s	Pk	N. Amer	1816.	D	p.l	Bot. mag. 2155
†370. POLEMO'NIUM. *W*	Greek-valerian				*Polemoniaceæ. Sp* 3—12.								
2124 réptans *W.*	creeping	♃	△	or	½	ap.my	L.B	N. Amer.	1758.	D	co	Mill. ic 2. t. 209
2125 cærúleum *W.*	blue-flowered	♃	△	or	2	jn	B	Britain	bu. pl.	D	co	Eng. bot. 14
β álbum	*white-flowered*	♃	△	or	2	jn	W	.....	...	D	co	
γ maculâtum	*spotted-flowered*	♃	△	or	2	jn	St	.....	...	D	co	
2126 mexicánum *Cav.*	Mexican	♃	△	or	1	ap.my	B	Mexico	1817.	D	co	Bot. reg. 460
371 VES'TIA. *W en*	Vestia.				*Polemoniaceæ. Sp.* 1.								
2127 lycioides *W en.*	Box-thorn-like	♃	▭	or	3	jn	Y	Chili	1815.	C	s p	Bot. reg. 299
372. HYDROPHYL'LUM *W*	Water-leaf				*Boraginœ Sp* 3—6.								
2128 appendiculâtum *Ph.*	appendaged	♃	△	cu	½	my jn	P B	N. Amer	1813.	D	p l	
2129 virginicum *W.*	Virginian	♃	△	cul	½	my jn	W	N. Amer	1739	D	m s	Bot. reg. 331
2130 canadénse *W.*	Canadian	♃	△	cu	½	my jn	W	Canada	1759.	D	m.s	Bot. reg. 242
†373. PHACE'LIA. *Mich.*	Phacelia.				*Boragineæ. Sp* 1—4								
2131 bipinnatifida *Mich.*	bipinnatifid	♃	△	cul	2	jn.jl	B	N Amer.	1824.	D	co	Mich. am.1. t. 16
374. RAMON'DA. *P S*	Ramonda.				*Solaneæ Sp.* 1.								
2132 pyrenáica *W en.*	Borage-leaved	♃	△	or	½	my	Pu	Pyrenees	1731.	D	s l	Bot mag. 236
Verbáscum Mycónı Linn.													
375. VERBAS'CUM. *W.*	Mullein				*Solaneæ. Sp* 31—70								
2133 thápsus *W.*	Shepherd's-club	♃	◯	or	6	jl au	Y	Britain	ro sid	S	co	Eng bot. 549
2134 thapsiförme *Schr.*	bastard	♃	◯	or	2	jl au	L Y	Europe	...	S	co	
2135 phlomoides *W.*	woolly	♃	◯	or	3	jn jl	Y	Italy	1730.	S	co	Mœnch.n 170.t 4
2136 sinuátum *W*	scollop-leaved	♃	◯	or	2	jl au	Y	S. Europe	1570	S	co	Fl. græc. t. 227
2137 bipinnatifidum *B. M.*	cut-leaved	♃	◯	or	2	jl au	Y	Tauria	1813	S	p l	Bot. mag 1777
2138 austrâle *Schr.*	southern	♃	◯	or	4	jl au	Y	S. Europe	1815.	S	co	Schr mon. t. 2
2139 condensátum *Schr.*	close-flowered	♃	◯	or	4	jl au	Y	Austria	1820.	S	co	Schr. mon t. 3
2140 niveum *Ten.*	snow-white	♃	◯	or	3	jl au	P Y	Naples	1823	S	co	Ten neap t. 22
2141 cuspidâtum *Schr*	pointed	♃	◯	or	4	my jn	Y	Vienna	1817.	S	co	Schr mon. t.1 f.1
2142 macránthum *Hgg*	large-flowered	♃	◯	or	3	jn jl	Y	Portugal	1820.	S	co	Fl. port. t. 27



History, Use, Propagation, Culture,

ments upon the generation of plants. Small bushes or herbaceous plants with opposite entire leaves, and terminal or axillary bunches of white flowers. Eleven species, natives of New Holland, are described. Ripened cuttings may be struck in sand under a hand-glass

369. *Phlox.* From φλαξ, flame. The plant so named by the ancients is supposed to have been an Agrostemma. The genus now so called is a native of North America only, and is one of the handsomest in cultivation It consists of most elegant border flowers, valuable for blossoming late in the season, and for their lively colors of red, white, and purple, while the majority of plants that flower in autumn have yellow, and generally syngenesious blossoms. Most of the species delight in a rich moist soil, or loam and leaf mould or peat. The dwarf species are admirably adapted for pots, or a select rock-work · they require some protection in severe winters.

370. *Polemonium.* From πολεμος, war. Pliny relates, that the plant which he called by this name received its appellation from having been the cause of a war between two kings, who could not agree which of them first discovered its virtues. It was also called Chilodynamia (from χιλιοι, a thousand, and δυναμις, power), on account of its extraordinary merit. The plant which possessed all these good qualities is now forgotten. Its name has descended to a flower which ornaments the garden, but which preserves nothing of the virtue of its progenitor, beyond a slight vulnerary quality. P cærulcum is a border flower of long standing, and of the easiest culture.

371. *Vestia.* Named by Willdenow, in his Enumeratio Plantarum, in honor of his friend Dr. Vest of Clagen-

2106 Leaves lanc. flat rough at edge, Stem smooth, Corymbs panicled, Segments of cor rounded

2107 Leaves obl. lanc. somewhat wavy rough at edge, Stem smooth, Corymbs panicled, Segm. of cor blunt
2108 Erect pubescent, Leaves ovate acum beneath pubescent decussate, Cor panic Segm. of Cor. rounded
2109 Erect, Stem smooth not spotted, Leaves ovate lanc. quite smooth, Racemc panic. Teeth of cal. erect
2110 Erect, Stem rough spotted, Leaves obl. lanc. smooth rough at edge, Pan. obl close, Teeth of cal. recurved
2111 Leaves cordate ovate acute smooth, Flowers densely pyramidal, Teeth of cal. upright, Stem spotted
2112 Hairy, Stem erect, Leaves linear-lanceolate, Sepals subulate, Tube of cor. curved pubescent
2113 Hairy, Stems assurgent, Leaves ovate lanceolate, Sepals subulate, Tube of cor smooth straight
2114 Leaves lanceolate sessile smooth thick, Stem erect rough, Flowers whorled terminal
2115 Stems erect subpubescent, Leaves lanc. smooth, Branches of corymb 3-flowered, Teeth of cal linear
2116 Leaves lanc shining on both sides acute nearly without veins, Stem smooth trifid above shrubby at base
2117 Tufted assurgent smooth, Leaves linear lanceol. smooth, Corymb term fastigiate, Teeth of cal. mucron.
2118 Dwarf diffuse pubescent, Leaves ovate lanc. chiefly alternate, Branches few-fl lax, Cal. subul. Pet. cord.
2119 Stoloniferous pubescent, Fertile stems erect simple few-leaved, Leaves oval, Corymb few-flowered
2120 Leaves ovate, Flowers solitary
2121 Dwarf tufted pubescent, Leaves fascicled subulate pungent ciliated, Pedicels few terminal
2122 Leaves ciliated lowest setaceous upper lin. lanc. Branches 3-5-fl. at end, Cal. spreading hairy, Pet. retuse

2123 Stem erect rounded, Leaves lanc smooth half stem-clasp Cal. edged, Tube of cor. twice as long as limb

2124 Pinnæ 7, Flowers terminal nodding
2125 Leaves pinnate, Flowers erect, Cal. longer than tube of corolla

2126 Pinnæ many the terminal 3-lobed, Flowers nodding, Cal. viscid

2127 The only species

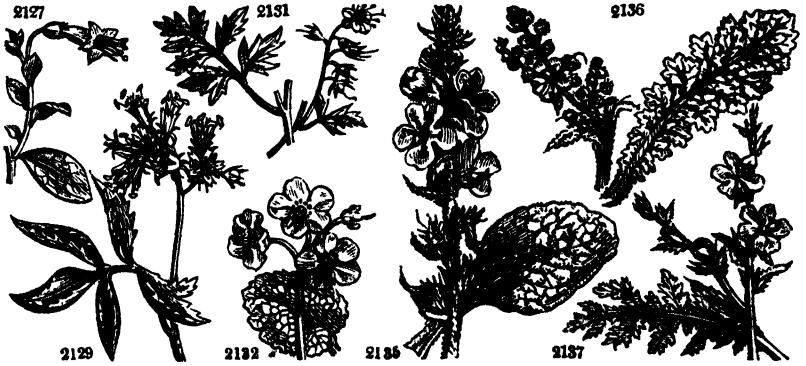
2128 Very hairy, Radical leaves subpinnatifid, cauline lobed angular, Sinus of calyx with reflexed appendages
2129 Leaves pinnate or pinnatifid, Segm. ovate lanceol. cut serrate, Fascicles of flowers clustered
2130 Smoothish, Leaves lobed angular, Fascicles of flowers close together

2131 Erect, Leaves pinnatifid, Segments cut lobed, Racemes generally bifid

2132 A stemless plant with hoary leaves and short scapes of purple flowers The only species

Leaves decurrent

2133 Lvs. cren toment. upper acute, Raceme spiked dense, Cor rotate with obl obt. segm. Anth. nearly equal
2134 Lvs. cren toment upper acumin Raceme spiked dense, Cor rotate with obov round segm. 2 of anth obl.
2135 Lvs. cren tom. radic. ell. stlkd. Caul. obl. ac upper brd ov cusp slightly decur Fasc. remotish, Two an obl.
2136 Leaves toment. radical and lower cauline sinuated upper crenate slightly decurr Spikes pan. Fl clustered
2137 Leaves bipinnatifid [Fasc of rac remote, Two anth obl.
2138 Leaves crenate tom. Radic. obl lanc narr. to stalk, Caul. obl. acute decurr upper broad ov cusp ½ decur
2139 Leaves tom. radic. ellipt. narr. at base uneq. doubly crenate, Caul. obl. acute simply crenate upper round. ovate cusp slightly decurr Racemes dense, Two anthers oblong
2140 Leaves ½ decurrent crenate snow-white, Raceme spiked dense, Anthers equal
2141 Leaves crenulate tomentose the upper cuspidate, Fascicles of raceme remote, Two anthers oblong
2142 Leaves cren. tom. rad. ellipt. obl. narr. at base caul. obl. acute ½ decurr. Fasc. of rac rem. Two anth. obl.



and Miscellaneous Particulars.

furth. A native of Chili, with pale-green smooth leaves, and pale yellow flowers. It is very nearly related to Lycium.

372. *Hydrophyllum.* From ὕδωρ, water, and φύλλον, a leaf. This plant grows in the marshes of North America, and in the spirng time has a small quantity of water in the cavity of each leaf. The species are two only, both humble plants, with neat foliage, which protects the small white flowers. H. virginicum is used as a salad, under the name of Shawanese salad in North America.

373. *Phacelia.* From φακελος, a bundle, the flowers being disposed in fascicled spikes.

374. *Ramonda.* Named after M. L. Ramond, a French botanist, who discovered many new plants in France A very pretty dwarf plant, kept in a frame with other alpine plants. Formerly a species of Verbascum, (V. myconi.)

375. *Verbascum.* An alteration of *barbascum*, on account of the beard (barba) with which all the leaves and stems are closely covered. The species are all very fine looking plants, well calculated for shrubberies, among other tall plants. They have been well illustrated by M. Schrader in a learned Monograph. V thapsus has been so called from its native place, the Isle of Thapsos. V. blattaria is said to have the power of driving away the blatta or cockroach. V. pulverulentum is one of the most magnificent of native herbaceous plants, sending up a stem a yard high, covered with many hundreds of gold colored flowers. Correa observes of this golden rod, that in still weather two or three blows with a stick will bring down all the corollas. The nap of

2143 ovalifólium *H. K.*	oval-leaved	☿ △	or	1	jl.s	O	Caucasus	1804.	D	p l	Bot. mag. 1037
2144 Boerhaáviі *W.*	annual	☿ ○	or	2	jl au	Y.Pu	S. Europe	1731.	S	co	Mill. ic. 2. t. 273
2145 elongátum *W en.*	long-stalked	☿ ○	or	5	jl.au	Y	.....	1813.	S	co	
2146 pyramidátum *W en*	pyramidal	☿ ○	or	3	jl.au	Y	Caucasus	1804.	S	co	Sweet fl. gard. 31
2147 hæmorrhoidále *W.*	Madéira	☿ ▯	or	2	jn au	W pu	Madeira	1777.	S	co	
2148 floccósum *P S.*	wool-bearing	☿ ○	or	3	jn.jl	Y	Hungary	1805.	S	co	Pl rar hung. t 79
2149 Lychnítis *W*	white	☿ ○	or	3	jn.au	C	Britain ro sid	S	co	Eng bot. 58	
2150 pulveruléntum *E.B*	powdered	☿ ○	or	3	jn au	Y	England bor fl.	S	co	Eng bot. 487	
2151 ferrugíneum *W.*	rusty	☿ △	or	3	my au	Br	S Europe	1683	D	p.l	Bot. rep 162
2152 cúpreum *B M.*	copper-colored	☿ △	or	3	my au	Br	Caucasus	1798.	D	p l	Bot mag 1226
2153 nígrum *W*	black-rooted	☿ △	or	2	my au	Y	England ch. so.	D	p l	Eng. bot. 59	
2154 phœníceum *W.*	purple-flowered	☿ △	or	3	my au	Pu	S Europe	1596.	D	p l	Bot mag 885
2155 vírgátum *E B.*	slender	☿ ○	or	5	au	Y	Britain	gra pl.	S	co	Eng bot 550
2156 Blattária *W*	moth	☿ ○	or	4	jl.au	Y	Britain	gra pl.	S	co	Eng bot 393
2157 glábrum *W en*	smooth	☿ ○	or	2	jl au	Y	.....	1805.	S	co	
2158 repándum *W en.*	waved	☿ ○	or	3	jl au	Y	.....	1813.	S	co	
2159 pinnatífidum *W*	pinnatifid	☿ ⧻	or	1	my	Y	Archipel.	1788.	S	p l	
2160 Osbéckii *W*	Osbeck's	☿ ○	or	1	jl au	G	Spain	1752	S	p l	Tourn. it 2. t. 83
2161 orientále *M B*	eastern	☿ △	or	2	jn jl	Y	Caucasus	1821.	S	co	
2162 spectábile *M B*	shewy	☿ ○	or	2	jn jl	Y Pu	Tauria	1820	S	co	Bot reg 558
2163 spinósum *L*	spiny	☿ ⌐	or	1	my jn	Pu	Crete	1824.	S	co	Alp exot t. 36

376. DATU'RA *W.* Thorn-apple. *Solaneæ Sp* 7—10.

2164 férox *W*	Chinese	○	or	3	jl s	W	China	1731.	S	s l	Zano h 212 t 162
2165 Stramónium *W.*	common	○	clt	3	jl s	W	England rub	S	s l	Eng bot 1288	
2166 Tátula *W*	blue	○	or	3	jl s	B	N Amer	1629	S	s.l	Meerb ic 2 t 13
2167 fastuósa *W*	purple	○	or	3	jl s	Pu	Egypt	1629	S	r m	Kno the 1 t.S.11
2168 Métel *W*	downy	○	or	2	jn s	W	Asia	1596	S	r m	Bot mag 1440
2169 læ'vis *W*	smooth-fruited	○	or	2	jn s	W	Africa	1780	S	r m	Jac vind 3 t. 82
2170 ceratocaúlon *Ort*	horn-stalked	○	or	2	jl s	W	S Amer.	1805.	S	r m	Jac sch 3 t. 339

†377 BRUGMAN'SIA *P S* Brugmansia *Solaneæ Sp* 2—3

2171 suavéolens *W en*	smooth-stalked	♀ ▭	or	15	au s	W	Peru	1733	C	l.p	
2172 arbórea *W en.*	downy-stalked	♀ ▭	or	10	au s	W	Peru	1813	C	l.p	Fl peruv 2. t 128

†378 LISIAN'THUS *W* Lisianthus. *Gentianeæ. Sp* 4—29.

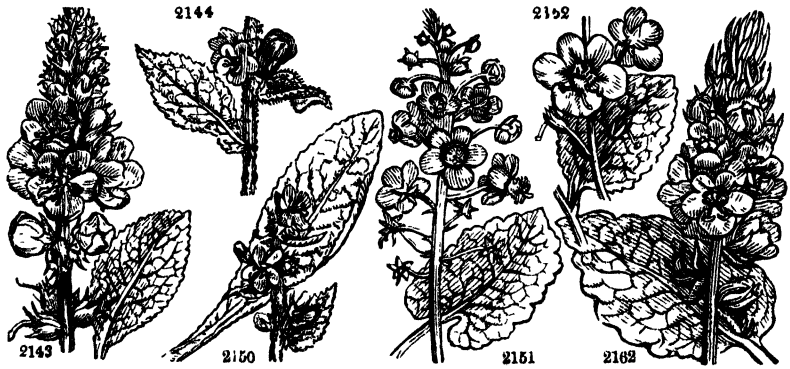
2173 longifólius *W*	long-leaved	♀ ▭	or	1½	jn jl	Y	Jamaica	1793.	C	l p	Brow jam t.9 f 1
2174 glaucifólius *Jac.*	glaucous-leaved	♀ ▭	or	2	jn jl	Pu	.....	...	C	l p	Jac ic rar 1 t 33
2175 exsértus *W.*	oval-leaved	♀ ▭	or	12	...	Y	W Indies	1793	C	l p	
2176 cordifólius *W.*	heart-leaved	♀ ▭	or	2	...	Y	Jamaica	1816	C	l.p	Br jam. t. 9 f 2

379 SPIGE'LIA *W.* Worm-grass. *Gentianeæ Sp* 2—4.

2177 Anthélmia *W*	annual	▣	w	1½	jl	G u	W Indies	1759	S	s l	Bot mag. 2359
2178 marilándica *W.*	perennial	☿ △	or	1	jl au	S	N Amer.	1694	D	l p	Bot. mag 80

380. NICAN'DRA *J.* Nicandra *Solaneæ Sp* 1—2

2179 physalódes *P S.*	blue-flowered	○	or	2	jl s	Pu	Peru	1759	D	s l	Bot mag 2458



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this species, of V. lychnitis, and of several others, may be used as tinder, and to make wicks for lamps, whence the name Lychnitis applied to one of the species, from λυχνος, a lamp Several mules have been produced between the species of this genus, and it has been questioned whether those accounted species are not productions of this kind

376. *Datura* An alteration of the Arabic name *tâtôrah*, Forskahl About Goa and Canara, it is called Daturo, Rumphius *Stramonium* is an abbreviation of the Greek word στρυχνομανικον, or mad-apple, on account of the dangerous effects of the fruit of that species *Metel* or *Methel*, is an Arabic name employed by Serapion, ch 375, and expresses the narcotic effect of the plant *Tatula* is altered from Datula, a name given to the Datura by the Turks and Persians D stramonium is an instance of a South American plant, naturalized within a comparatively short time, the seeds having been introduced from Constantinople in Gerarde's time, and by him "dispersed through this land" Kalm says, that this plant and a species of Phytolacca are the worst weeds in America Professor Martyn observes, that "in the earth brought with plants from various parts of that extensive country, we are sure to have the thorn-apple come up" At night, the leaves next the flowers rise up and enclose them The whole plant smells strongly of bean meal Every part of the plant is poisonous, bringing on delirium, tremors, &c but under proper regulations it is a useful medicine in asthma, &c

D fastuosa has a fine polished purple stalk, varied with dots or lines; the leaves are large, the flowers of a beautiful purple outside, and a satiny white within, some are single, others semidouble They have an agreeable odor at first, but if long smelt to become less agreeable, and are narcotic D ceratocaulon is a fine species; its seed will sometimes remain in the ground several years before it will vegetate

377 *Brugmansia* So named by Persoon, in honor of Professor S J Brugmans, author of some botanical works, and especially of a dissertation "De Plantis Inutilibus, et Venenatis," published at Groningen, in 1783.

B. arborea is one of the greatest ornaments of the gardens of Chili. The flowers which come out at the

Leaves sessile.

2143 Stem erect simple, Leaves oval sessile tooth-crenate smooth above, Flowers spiked
2144 Leaves sublyrate, Flowers sessile
2145 Leaves ½ decurrent tomentose on both sides, Stem branched, Three filaments hairy in the middle
2146 Leaves nearly naked lower oblong attenuated at base upper cord acum. sess. Racemes panic. Stam beard.
2147 Leaves ovate oblong at base atten toment obsoletely cren. Racemes spiked elongate, Fl. without bractes
2148 Leaves ovate sessile beneath closely woolly, Stem branched, Filaments bearded
2149 Leaves wedge-shaped oblong naked above, Stem angular panicled
2150 Leaves ovate oblong subserrate powdery on both sides, Stem rounded panicled, Hairs of stamens white
2151 Leaves subvillous rugose cauline subsessile equally crenate, Radical oblong cordate doubly crenate
2152 Stems virgate simple, Leaves cordate ovate rugose crenate woolly beneath, Pedunc. with 1 bract. solitary
2153 Leaves oblong cordate stalked wavy crenate subpubescent
2154 Leaves naked radical uneq toothed, Caul lanc. toothed wedge-shaped at base, Stem naked, Rac. elong.
2155 Leaves oblong lanc toothed sessile radical sublyrate pubescent, Stem branched, Flowers aggreg. sessile
2156 Leaves stem-clasping oblong smooth doubly serrated, Peduncles 1-flowered solitary
2157 Leaves naked lower obl stalked upper obl lanc Stem simple pub Raceme term Stalks altern very short
2158 Leaves naked radical sinuated cauline oblong cordate stem-clasping coarsely toothed, Pedunc. alternate
2159 Leaves tomentose radical bipinnatifid cauline pinnatifid, Flowers clustered sessile
2160 Leaves cut naked, Stem leafy, Calyxes woolly, Pedunc. 2-flowered
2161 Leaves ovate oblong beneath hoary the lower narrowed at base upper subcordate, Racemes lax panicled
2162 Leaves cordate acuminate, Spike lax downy, Two lower stamens declinate smooth
2163 Stem leafy prickly shrubby

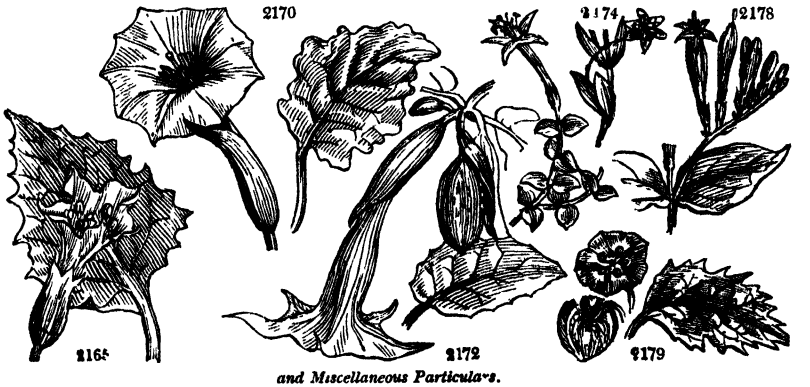
2164 The upper spines very large converging at the top of the pericarp
2165 Leaves ovate smooth angular toothed, Pericarp prickly
2166 Leaves ovate subcordate smooth angular toothed, Stem spotted, Pericarp prickly
2167 Leaves ovate angular, Pericarps tuberculated nodding
2168 Leaves cordate nearly entire pubescent, Pericarps prickly globose nodding
2169 Leaves ovate angular toothed smooth, Stem hollow herbaceous, Pericarps smooth erect
2170 Leaves ovate lanceolate wavy beneath hoary, Stems dichotomous cornute, Pericarps obovate pendulous

2171 Leaves oblong entire smooth, Calyxes 5-toothed
2172 Leaves oblong entire powdery, Stalks and branches pubescent, Cal. spathaceous acummate

2173 Leaves lanceolate acute pubescent, Stem rounded
2174 Leaves ellipt lanceolate obtuse smooth, Stem rounded, Peduncles long 1-flowered
2175 Leaves ovate lanc pedunc. trichotomous, Genitals very long
2176 Leaves cordate

2177 Stem herbaceous the upper leaves 4 together
2178 Stem simple, All the leaves opposite sessile lanceolate oval

2179 Leaves sinuated, Calyxes closed acute-angled



and Miscellaneous Particulars.

divisions of the branches, have a loose tubular calyx nearly four inches long, which, opening like a spathe, a corolla is protruded, with a narrow trumpet-shaped tube, which spreads wide at the brim, where it is divided into five angles, which terminate in very long points they are white within, pale yellow outside, and one tree will perfume the air of a large garden It flowers freely in the bark-stove, in a moist heat.

378 *Lisianthus* From λυσις, dissolution, and ανθος, a flower, a name given to the plant on account of the medical virtues possessed by it of dissolving humours It is a powerful cathartic. The species are very handsome stove plants Cuttings root readily in sand under a bell-glass

379 *Spigelia.* So named by Linnæus, in honor of Adrian Spigelius, born at Brussels in 1578, professor of anatomy and surgery at Padua, author of Isagoge in rem Herbariam, died in 1625

S. anthelmia is so named from its peculiar efficacy in destroying worms, for which it has been long in use among the negroes in the West Indies Dr. Browne, after a number of successful experiments, says it operates in so extraordinary a manner, that no other simple can be of equal efficacy in any other disease, as this is in those which proceed from these insects. (*Hist. of Jamaica*) The same plant procures sleep almost as certainly, and in an equal degree with opium.

S. marilandica is used as a vermifuge in North America, and according to Dr Garden, (*Letters to Dr Hope,*) with very powerful effects. The annual plant may be treated like other tender annuals, but S. marilandica is rather difficult to preserve, according to Sweet, "it requires to be grown in a pot, that it may be protected from severe frosts, or too much wet: it will sometimes survive the winters when planted in the open ground in a bed of peat: the best soil for it is an equal mixture of loam and peat, and young cuttings, planted under a hand-glass, root readily" (*Bot. Cult.* 424.)

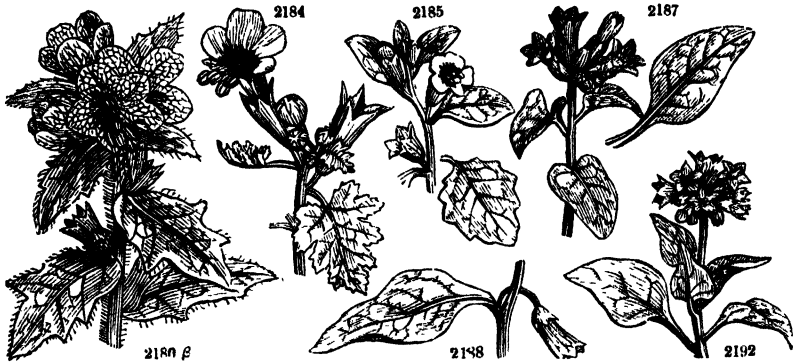
380. *Nicandra* Nicander was a Greek physician, who lived about a century and half before Christ. The genus was formed by Adanson, it consists of the Atropa physaloides of Linnæus. The Indians of Peru make use of the berries of this plant to bring away gravel, and to relieve persons who have a stoppage of urine

†*381. HYOSCY'AMUS. *W.* Henbane. *Solanæ.* *Sp* 13—14.

2180 niger *W.*	common	☿	○	p	1	jn.jl	St	Britain	rub.	S	s l	Eng. bot. 591
β annuus	*annual*		○	p	1	jn jl	St	Europe	1818.	S	s.l	Bot. mag 2394
2181 álbus *W.*	white		○	w	2	jl au	Pa. W	S. Europe	1570.	S	co	Blackw. t. 111
2182 reticulátus *W.*	Egyptian		○	w	1	jl.au	R	Egypt	1640.	S	co	Com hort. 77 t 22
2183 Senecriónis *W en*	yellow-flowered	☿	△	w	1½	mr o	Y	Egypt	1812.	C	s l	
2184 aúreus *W*	golden	☿	△	w	1	mr o	Y	Levant	1640.	S	r m	Bot. mag 87
2185 canariénsis *Ker.*	various-leaved	♃	⌴	cu	1½	ja.d	Y	Canaries	1816.	D	s l	Bot. reg. 180
2186 pusillus *W*	dwarf		○	w	½	jl	Y	Persia	1691.	D	s.l	Plk. alm t 37 f 5
§2187 physaloídes *W.*	purple-flowered	☽	△	w	1	mr ap	Pu	Siberia	1777.	D	p l	Bot. mag 852
2188 Scopólia *W.*	Nightsh.-leav'd	☿	△	w	1	ap my	D Pu	Carolina	1780.	D	p l	Bot. mag. 1126
2189 agréstis *Kit.*	field		○	w	1	ap my	Y.Vy	Hungary	1820.	S	p l	Sweet fl. gard. 27
2190 pállidus *W. & K.*	pale		○	w	1	ap my	Y	Hungary	1815.	S	p l	
2191 múticus *L*	blunt-calyxed	☿	○	w	1	mr.ap	Y Pu	Egypt	1822.	S	p.l	
2192 orientális *Beeb*	eastern	☿	△	or	1½	ap	Pu	Iberia	1821.	D	s l	Bot. mag. 2414

†382. NICOTIA'NA. *W.* Tobacco *Solanæ* *Sp* 14—26

2193 Tabácum *W.*	Virginian		○	clt	4	jl au	Pk	America	1570.	S	r m	Blackw. t. 146
2194 macrophýlla *W. en.*	large-leaved		○	or	6	jl au	Pk	America	...	S	r m	
2195 fruticósa *W*	shrubby	♃	⌴	or	3	jl au	Pk	China	1699.	C	r m	
2196 undulàta *R Br.*	sweet-scented	☾	△	clt	2	my s	W	N. S W	1800.	D	r m	Bot mag 673
2197 rústica *W*	common-green		○	clt	3	jl s	G	America	1570.	S	co	Blackw. t. 437
2198 paniculáta *W*	panicled		○	or	3	jl s	G	Peru	1752	S	r m	Flor per. 2 t. 129
2199 glutinósa *W*	clammy		○	or	4	jl s	S	Peru	1759	S	r m	Bot rep 484
2200 plumbáginifólia *W en*	curled-leaved	☿	△	or	2	my.jn	W	America	1816.	D	r m	Jacq fragm t 84
2201 pusilla *W*	Primrose-leav'd	☿	◫	or	3	au	W	Vera Cruz	1733	S	r m	Mil ic 2 t. 185 f 2
2202 quadrivàlvis *Ph*	four-valved		○	or	2	jl au	W	N Amer	1811	S	r m	Bot. mag 1778
2203 nána *Lindl*	Rocky-mount		◫	cu	¼	jn	W	N Amer.	1823.	S	co	Bot reg 833
2204 Langsdorffii *W en.*	Langsdorff's		○	or	5	au	G	Chili	1819	S	co	Bot. mag 2221
2205 cerinthoides *Lehm*	Honeywort		○	or	2	au	G	.....	1821	S	co	Lehm nic t 2
2206 repánda *W.*	Havannah		○	clt	2	jn jl	W	Havannah	1823	S	co	Bot mag 2484



History, Use, Propagation, Culture,

381 *Hyoscyamus.* From *ὑς ὑος*, a pig, and *κυαμος*, a bean, the fruit has been thought to resemble a bean, and, although dangerous to other animals, is said to be eaten by pigs with safety H. niger is a well-known fœtid weed, which follows civilized man, growing on rubbish of old houses, dunghills, &c It has a strong peculiar odor, greatly affecting the heads of some persons, and the whole plant is reputed poisonous Sir J E. Smith and Professor Martyn say they have often eaten the seeds without suffering inconvenience Lightfoot, on the contrary, says, a few of them have been known to deprive a man of his reason and limbs A species of bug (Cimex) and of beetle (Chrysomela) take their specific names from feeding on the plant; but no quadruped is known to eat it, unless the goat and sheep, and that very rarely and sparingly As a medicine, henbane is of immemorial use, and is still continued in the Pharmacopœias It is given with or without opium in coughs, epilepsy, convulsions, &c Country people sometimes smoke the leaves for the toothach.

382. *Nicotiana* So named from John Nicot of Nismes, in Languedoc, ambassador from the king of France to Portugal, who procured the seeds from a Dutchman who had received them from Florida The first plant was said to have been presented to Catherine de Medicis, whence the French name *Herbe à la Reine* The name tobacco, which has superseded all others, is the appellation of a district of Mexico *Petum* or *Petume*, Bras, *Tabac*, Fr, *Taback*, Ger, and *Tabac*, Ital The species grown as tobacco are the N tabacum and rustica; the former greatly preferred. The popular narcotic which it furnishes is probably in more extensive use than any other, and its only rival is the betel of the east. According to Linnæus, tobacco was known in Europe from 1560. It was brought to England from Tobago in the West Indies, or Tobasco in Mexico, (and hence the name,) by Ralph Lane, in 1586, but only the herb for smoking. Afterwards, according to Hakluyt, seeds were introduced from the same quarter Sir Walter Raleigh first introduced smoking; in the house in which he lived at Islington are his arms on a shield, with a tobacco plant on the top. Smoking has consequently been common in Europe for upwards of two centuries. It is a powerful narcotic, and also a strong stimulant with respect to the whole system, but especially to the stomach and intestines, to which, in small doses, it proves emetic and purgative The smoke thrown up the anus acts as a glyster an infusion of the leaves forms a powerful lotion for obstinate ulcers the oil applied to a wound, is said by Redi to be as fatal as the poison of a viper. The decotion, powder, and smoke of tobacco, are used in gardening to destroy insects, and in agriculture for the same purpose, and to cure cutaneous eruptions in domestic animals.

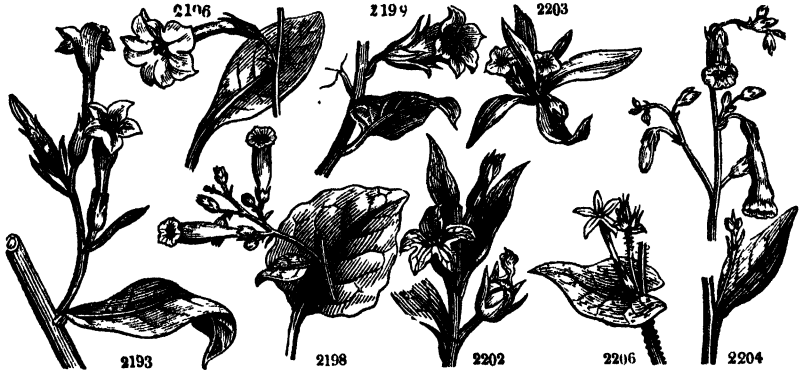
Tobacco, as used by man, says Du Tour, (*Nouveau Cours d'Agriculture*, &c) gives pleasure to the savage and the philosopher, to the inhabitant of the burning desert and frozen zone In short, its use either in powder, to chew, or to smoke, is universal, and for no other reason than a sort of convulsive motion (sneezing) produced by the first, and a degree of intoxication by the two last modes of usage. A hundred volumes, he adds, have been written against it, of which a German has preserved the titles. Among these books is that of James Stuart, king of England, who violently opposed it The Grand Duke of Moscow forbade its entrance into his territory under pain of the knout for the first offence, and death for the next. The emperor of the Turks, king of Persia, and Pope Urban VIII issued similar prohibitions, all of which were as ridiculous as those which attended the introduction of coffee or Jesuit's bark. At present, all the sovereigns of Europe, and most of those of other parts of the world derive a considerable part of their revenue from tobacco.

Tobacco is cultivated in Europe as far north as Sweden, and is also grown in China, Japan, and other eastern

2180 Radic. leaves sinuated pinnatifid upper stem-clasping, Flowers nearly sess. Cor. netted

2181 Leaves stalked the lowest rounded entire the rest cordate ovate sinuate toothed, Fl. axill. sess. or stalked
2182 Cauline leaves stalked cordate sinuate acute, Flowers entire inflated
2183 Leaves stalked 3-lobed cut-toothed, Flowers stalked, Segm. of cor. equal flat
2184 Leaves stalked ovate acute angular toothed, Flowers stalked, Three upper segm. of cor. wavy
2185 Lower leaves cordate ovate angular obtuse, floral ovate entire
2186 Leaves stalked oblong lanc. toothed, Flowers stalked, Calyx teeth mucronate
2187 Leaves stalked ovate cordate entire, Flowers stalked axillary solitary terminal in umbels, Cal inflated
2188 Leaves stalked ovate obl. entire, Flowers axillary stalked nodding, Cor camp. trunc (*Scopolina*, Schul.)
2189 Stem simple pubescent, Leaves sessile ½ decurrent sinuate toothed smoothish, Flowers sessile
2190 Leaves stem-clasping angular, radical angular toothed, Flowers sessile 1-colored
2191 Leaves stalked ovate acute angular, Cal. pointless, Bractes undivided
2192 Leaves deltoid ovate repand, Cal. of fruit tumid, Stamens exserted

2193 Leaves sessile obl. lanc. acumin. the lower decurr Mouth of cor inflated, Segm. acuminate
2194 Leaves stem-clasping ovate acute auricled at base, Mouth of cor. inflated, Segm. short acuminate
2195 Stem shrubby simple, Lvs stalked lanc obliquely acuminate, Coroll inflated at mouth, Segm. acumin.
2196 Stem nearly sim. Lvs. somew stlkd ov lanc wavy, Tube of cor cyl. much longer than cal Seg uneq round
2197 Stem rounded, Leaves stalked ovate entire, Tube of cor cylind. longer than cal Segment rounded obtuse
2198 Stem nearly sim. Lvs stlkd ov subcord. entire, Tube of cor clav. very sm. much longer than cal Seg obt.
2199 Leaves stalked cordate entire, Fl. racemose 1-sided, Cal. 2-lipp upper lip longest, Cor ringent, Segm. acute
2200 Leaves sessile lower obovate spatulate obtuse upper ½ stem-clasping wavy, Tube of cor very long clavate
2201 Stem dichot. Lvs. sess. radic obl oval Cal very short, Tube of cor cyl. thrice as long as cal Segm. acute
2202 Stem herbac. branching, Lvs stalked obl. Tube of cor. twice as long as cal Segm. obt. Caps 4-valv round
2203 Leaves lanceolate hairy, radical longer than the solitary flowers, Petals obtuse
2204 Lower leaves ovate obtuse stalked upper sessile decurrent, Tube of cor clavate long, Limb obtuse
2205 Stem branc at base, Lvs stlkd. all cord ent. Tube of cor. clav pub much long than cal Seg. very sh acute
2206 Leaves stem-clasping cord. spat roundish repand, Tube of cor. slender very long, Segm ovate acute plic.



and Miscellaneous Particulars.

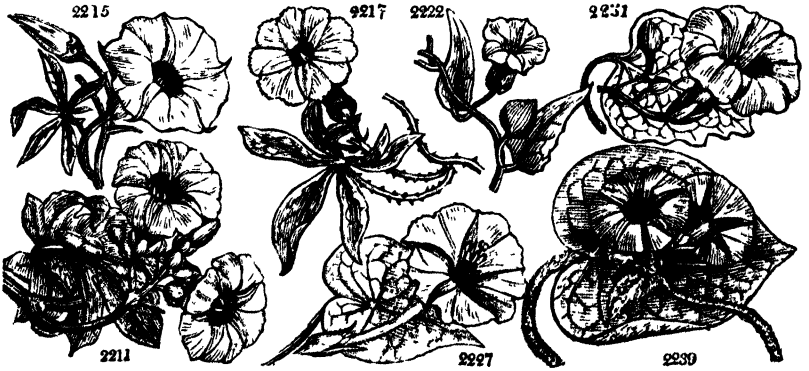
and hot countries. The sort preferred is the N tabacum, which is an elegant plant, grown also in gardens as a border flower. N rustica, *fausse tabac*, Fr, *Bauern taback*, Ger, and *Tabacca cimarosa*, Span, is also frequently cultivated, especially in Europe, it being considered hardier than the Virginian sort Parkinson says, he has known Sir Walter Raleigh, when prisoner in the Tower, prefer it to make good tobacco, "which he knew so rightly to cure" Tobacco has been successfully cultivated and cured in this country, but its growth is prohibited to encourage our commerce with America It is now only grown for curiosity as a border flower, or by gardeners for the destruction of insects In Germany and other northern countries, most families who have gardens grow enough of N rustica for their own use; but as they do not know how to cure it, it is not much valued, and is never made into chewing tobacco or snuff.

In the culture of Tobacco in America, the plants are raised on beds early in spring, and when they have acquired four leaves, they are planted in the fields in well prepared earth, about three feet distance every way. Every morning and evening the plants require to be looked over, in order to destroy a worm which sometimes invades the bud. When four or five inches high they are moulded up. As soon as they have eight or nine leaves, and are ready to put forth a stalk, the top is nipped off, in order to make the leaves longer and thicker, by directing all the energies of the plant to them. After this, the buds which sprout from the joints of the leaves are all plucked, and not a day is suffered to pass without examining the leaves, to destroy a large caterpillar, which is sometimes very destructive to them When they are fit for cutting, which is known by the brittleness of the leaves, they are cut with a knife close to the ground, and, after lying some time, are carried to the drying shed, where the plants are hung up by pairs upon lines, having a space between, that they may not touch one another. In this state they remain to sweat and dry When perfectly dry, the leaves are stript from the stalks and made into small bundles tied with one of the leaves. These bundles are laid in heaps, and covered with blankets. Care is taken not to over-heat them, for which reason the heaps are laid open to the air from time to time, and spread abroad This operation is repeated till no more heat is perceived in the heaps, and the tobacco is then stowed in casks for exportation. (*Long Jam.* iii. 719.)

In the manufacture of tobacco, the leaves are first cleansed of any earth, dirt, or decayed parts, next, they are gently moistened with salt and water, or water in which salt along with other ingredients has been dissolved, according to the taste of the fabricator. This liquor is called tobacco sauce. The next operation is to remove the midrib of the leaf, then the leaves are mixed together, in order to render the quality of whatever may be the final application equal: next, they are cut into pieces with a fixed knife, and crisped or curled before a fire; the succeeding operation is to spin them into cords, or twist them into rolls by winding them with a kind of mill round a stick. These operations are all performed by the grower, and in this state (rolls) the article is sent from America to other countries, where the tobacconists cut it into chaff-like shreds for smoking, by a machine like a straw-cutter; form it into small cords for chewing, or dry and grind it for snuff. In manufacturing snuff, various matters are added for giving it an agreeable scent, and hence the numerous varieties of snuffs The three principal sorts are called Rappees, Scotch or Spanish, and Thirds. The first is only granulated, the second is reduced to a very fine powder, and the third is the siftings of the second sort. The best Havannah segars are made from the leaves of N repanda. The Indians of the Rocky Mountains of N. America prepare their tobacco from N. quadrivalvis and N. nana.

†*383. IPOMÆ'A. *R Br.* Ipomœa. *Convolvulaceæ. Sp. 52—170.*

2207	quamóclit *W.*	wing-leaved	or	6	jl s	D R	E. Indies	1629.	S	r.m	Bot. mag 244
2208	dissécta *Pk.*	cut-leaved	or	10	jn s	S	Georgia	1813.	C	s.p	Will.phy 1. t. 2. f. 3
2209	carolína *Pk.*	Carolina	or	10	jl au	Pu	Carolina	1732.	C	r m	Dill. elt. t 84. f. 98
2210	tuberósa *W*	tuberous-rooted	or	10	...	Pa Y	W Indies	1731.	C	s.p	Bot. reg. 768
2211	paniculáta *B Reg*	panicled	m	20	jn s	Pk	E. Indies	1799.	C	s.p	Bot. reg. 62
2212	pentaphýlla *Jac.*	five-leaved	or	20	au s	W	W Indies	1730.	S	s.p	Jac. ic 2 t. 319
2213	umbellàta *L*	umbel-flowered	or	20	jn jl	S	W Indies	1739	R	r.m	Plu am. 88. t. 102
2214	tuberculáta *B Reg*	tubercled	or	10	au s	Pu	E. Indies	1815.	C	l.p	Bot. reg 86
2215	péndula *R Br.*	pendulous	or	10	my o	Pk	N S W.	1808	R	l.p	Bot. rep 613
2216	Pes-tigridis *W.*	palmated	or	6	au	R	E. Indies	1732	C	s.p	Dill.el.t.318.f.411
2217	platénsis *Ker.*	Plata	or	10	jn s	V	S Amer.	1817.	S	r.m	Bot. reg 333
2218	chrysèides *Ker.*	Mr Herbert's	or	4	jn s	Y	China	1817.	S	r m	Bot. reg 270
2219	cærúlea *Ker.*	pale-blue	or	9	jn s	L.B	E. Indies	1818.	S	r.m	Bot. reg 276
2220	setósa *Ker*	bristly	or	9	au	Pu	Brazil	1817.	S	r.m	Bot. reg. 335
2221	scábra *Gm.*	rough	or	10	s	W	S Amer.	1804.	S	r m	
2222	Turpéthum *Br.*	square-stalked	or	5	jl s	W	Ceylon	1759.	S	r m	Bot. mag. 2093
2223	lutéola *W en.*	crimson-scarlet	or	10	jn s	S	Carolina	1759	S	r.m	Bot. mag 221
2224	coccínea *W. en.*	bright-scarlet	or	10	jn s	D R	W. Indies	1713	S	r.m	Bot. rep. 499
2225	lacunósa *W*	starry	or	10	jl au	W	N Amer.	1640	C	r m	Dill elt t 87 f.102
2226	gossypifólia *W*	splendid	or	15	jn s	Pu	.....	...	C	s p	Bot. reg 75
	β insignis B R.										
2227	Bona-nox *W*	prickly	or	10	jl au	W	W Indies	1773.	S	s l	Bot. mag. 752
2228	sanguínea *Vahl*	blood-flowered	or	10	f n	D R	W Indies	1812	C	s l	Bot reg 9
2229	mutábilis *R Reg*	changeable	or	10	my s	Pu	S Amer	1812.	C	p l	Bot. reg 39
2230	cándicans *B M*	hoary	or	15	jn au	W	N Amer.	1776	R	p l	Bot. mag 1603
2231	Jálapa *Ph*	Jalap	m	10	au s	Li	America	1733	C	r m	Bot mag 1572
	β rosea	*rose-colored*	m	10	au s	R			C	r m	Bot reg 621
2232	hepaticæfólia *W.*	Hepatica-leav'd	or	10	au s	Pu	E Indies	1759	S	co	Bu in 50 t 20 f 2
2233	solanifólia *W*	Nightshade-lvd.	or	8	jl au	Pk	America	1759	C	s p	Plum ic t.94 f 1
2234	campanuláta *W*	bell-flowered	or	8	au s	Pu w	E. Indies	1800	S	s l	Rhd mal 11 t 56
2235	violácea *W*	purple-flowered	or	8	au.s	Pu	S Amer	1732	S	s l	Plum ic t 93. f 1
2236	cárnea *W*	flesh-colored	or	10	au s	F	S Amer.	1799	S	s l	Jac. am 26. t. 18
2237	repánda *W*	scolloped	or	10	au	S	W Indies	1793	C	s p	Par lond 81
2238	sibírica *P S*	Siberian	or	8	jl au	F	Siberia	1779	S	co	Pa.it 3 p 723 t K
2239	speciósa *P S*	broad-leaved	or	8	jl au	Pu	E Indies	1778.	C	p l	Bot mag 2446
2240	purpúrea *P S*	great-purple	or	10	jn s	D.Pu	America	1620	S	co	Bot. mag 113
	β incarnáta	*flesh-colored*	or	10	jn s	F	America	1620	S	co	
	γ vária	*striped*	or	10	jn s	St	America	1629	S	co	Bot mag. 1682
2241	discolor *Jac.*	spotted	or	20	jn s	B w	.....	...	S	co	Bot. mag. 1005
2242	triloba *W*	three-lobed	or	10	jn jl	V	W Indies	1752	S	s l	
2243	hederifólia *W*	Ivy-leaved	or	10	jl	V	S. Amer	1773	S	s l	Pl ic 82. t 93 f 2
2244	Nil *P S*	blue	or	10	jl.s	L B	America	1597	S	s p	Bot. mag 188
2245	hederácea *B Reg*	five-lobed	or	10	jl s	B	N Amer.	1729	S	s p	Bot. reg 85
2246	cuspidáta *P S*	sharp-pointed	or	10	jn jl	L Pu	S Amer	1732	S	s p	Fl.per 2 t 119 f a
2247	tamnifólia *W*	Tamnus-leaved	or	10	jl	B	Carolina	1732.	S	co	D elt t 318 f 410
2248	grandiflóra *B Rep*	great-flowered	or	8	s	W	E. Indies	1802	S	s l	Bot. rep 403
2249	muricáta *Jac*	rough-stalked	or	8	jl au	Pu	E Indies	1777	S	co	Jac schœ 3 t. 323
2250	obscúra *B Reg*	hairy	or	8	jn au	W	E Indies	1732.	S	s p	Bot. reg 239
2251	sagittifólia *Ker.*	Catesby's	or	3	jn s	Pu	Carolina	1819	S	co	Bot reg 437
2252	médium *W*	arrow-headed	or	6	jl au	Pa	E. Indies	1778	S	co	
2253	denticuláta *R Br*	denticulate	or	6	jl au	Y	E. Indies	1778	S	co	Bot reg 317
2254	glaucifólia *W*	glaucous-leaved	or	6	my jl	Pk	Mexico	1792	R	s p	Dil elt.t 87 f 101
2255	angustifólia *Jac*	narrow-leaved	or	6	jl au	Pk	India	1800	S	s.l	Jac. ic. rar t.317
2256	tridentata *P S*	trifid	or	10	jl au	Y	E. Indies	1778.	C	s p	Rhd mal 11 t.65
2257	maritima *R Br*	thick-leaved	or	10	jn jl	Pu	E. Indies	1770	S	s p	Bot reg 319
2258	brasiliénsis *L.*	Brazilian	or	10	jn jl	Pu	S Amer	1726.	R	s p	Plu am 89 t.104



History, Use, Propagation, Culture.

383 *Ipomœa* From ἰψ *ips*, a bindweed, or something analogous, and ὅμοιος *omoios*, similar. This genus is nearly allied to Convolvulus and Calystegia It consists chiefly of twining stove plants, free flowerers, and of the easiest culture I tuberosa is a plant of great beauty and fragrance. In Jamaica it is evergreen, thickly covered with leaves and large flowers, and much used to shade arbors Browne says it may be carried over an arbor of 300 feet in length Every part of the plant abounds with milk, and is purgative. Long thinks Scammony might be made from its tubers, and Loureiro affirms them to be edible.

§ 1. *Leaves pennate, digitate, or palmate.*

2207 Leaves pinnate pinnæ filiform, Peduncle a little longer than leaf 1-flowered
2208 Leaves palmate, Segments narrow pinnatifid toothed, Peduncle about 2-flowered
2209 Leaves digitate, Leaflets stalked, Peduncle 1-flowered
2210 Leaves palmate, Lobes 7 lanceolate acute entire, Peduncle 3-flowered
2211 Smooth, Leaves palmate, Lobes 7 oblong lanceolate entire, Cymes dichotomous, Cal. equal obtuse, Caps erect
2212 Leaves digitate in 5s hairy entire, Seeds smooth
2213 Leaves digitate in 7, Peduncles umbelled very short
2214 Leaves digitate or nearly pedate 7-parted smooth, Stalks warted rough, Peduncle 1-flowered
2215 Leaves palmate pedate, Lobes ciliate mucronate at end, Peduncle 1-flowered
2216 Leaves palmate, Flowers aggregate
2217 Branches peduncles and petioles tubercled, Leaves palmate, Lobes 7 narrow oblong with a short point

§ 2. *Leaves cordate, angular, or lobed.*

2218 Leaves obl cordate rarely obsoletely 3-lobed, Peduncle 1-fl. shorter than leaf, Calyx very smooth
2219 Leaves cordate 3-lobed villous, Peduncle 2-3-fl. Edge of cor nearly entire, Stigmas 3-lobed
2220 Branches petioles peduncles and calyxes bristly, Leaves naked cordate 3-lobed, Lobes tooth sinuated
2221 Stem twining, Leaves cordate 3-lobed, Peduncle longer than petiole, Fruit nodding
2222 Leaves cordate angular, Stem membranous square, Peduncles many-flowered
2223 Leaves cordate acuminate angular, Peduncle first dichotomous afterwards branching
2224 Downy, Lvs cord. acum at base angular, Peduncle 5-flowered, Cal warted bearded, Limb. of cor. entire
2225 Smooth, Lvs cord below obscurely repand or ang Peduncle short 1-fl Cal hairy ciliated, Cor small short
2226 Leaves cordate at the end 5-lobed smooth, Peduncle many-flowered corymbose

2227 Very smooth, Leaves cordate entire or angular, Peduncle 1-3-fl. Cal aristate, Cor undiv Tube very long
2228 Peduncle upwards cymose trichotomous longer than the 5-lobed cordate or hastate leaves
2229 Leaves cordate entire or 3-lobed acuminate above pubescent beneath villous, Flowers numerous in cymes
2230 Smooth, Leaves cordate acuminate entire, Peduncles many-flowered without bracteæ
2231 Stem warted, Leaves cord. ovate rugose villous beneath entire or lobed, Peduncle 1 many-fl Seed woolly

2232 Leaves 3-lobed, Flowers aggregate

§ 3 *Leaves cordate entire.*

2233 Leaves cordate acute entire, Peduncle 1-flowered solitary as long as leaves
2234 Leaves cordate, Peduncle many-fl. Outer calyx orbicular, Cor campanulate lobed
2235 Leaves cordate entire, Flowers close together, Cor undivided
2236 Leaves roundish cordate smooth, Peduncle many-flowered, Cor edged
2237 Leaves cordate oblong repand acuminate, Peduncles branched cymose
2238 Leaves cordate acuminate smooth, Peduncles 2-flowered
2239 Leaves cordate ovate acute above hairy, beneath silky, Peduncle longer than the stalks in umbels
2240 Leaves cordate undivided, Fruit cernuous, Stalks thick, Leaves cordate entire, Ped. many-fl Cal hispid

2241 Stem very tall, Leaves orbicular rounded, Flowers spotted with eyes
2242 Leaves 3-lobed cordate, Peduncles 3-flowered
2243 Leaves 3-lobed cordate, Peduncles many-flowered racemose
2244 Leaves cordate 3-lobed, Flowers half 5-cleft, Peduncles shorter than the petioles
2245 Hairy, Leaves cordate 3-lobed, lateral lobes acuminate intermediate acute, Peduncle 1-fl Cal hairy
2246 Leaves cordate 3-lobed, Lobes cuspidate, Peduncles 1-fl Sepals linear very hairy at base
2247 Leaves cordate acuminate hairy, Flowers aggregate
2248 Leaves cordate ovate obtuse entire, Peduncle about 2-fl Cal coriaceous, Stem and petioles pubescent
2249 Leaves cordate roundish with a long point smooth, Peduncle thick 3-fl and cal smooth, Stem muricated
2250 Leaves cordate acuminate, Peduncle filiform 1-fl and cal smooth, Stem very hairy

§ 4 *Leaves sagittate or hastate*

2251 Very smooth, Leaves oblong sagittate with a very deep sinus, Auricles acuminate, Peduncle 1-flowered
2252 Leaves linear hastate pointed, Auricles toothed, Flowers solitary, Cal sagittate
2253 Smooth, Leaves hastate lanceol or linear acute, Lobes toothed, Peduncle 1-fl Sepals oblong lanceolate
2254 Leaves sagittate truncate behind, Peduncles 2-flowered
2255 Leaves linear hastate obtuse mucronate smooth, Auricles nearly entire, Peduncles 1-flowered

§ 5 *Leaves oblong, entire, or lobed*

2256 Leaves oblong 3-pointed dilated at base toothed, Peduncle 1-fl thick 4-cornered

§ 6 *Leaves rounded*

2257 Creeping smooth, Lvs roundish emarginate or 2-lobed thickish at base beneath with 2 glands, Cal obt.
2258 Leaves emarginate with 2 glands at base, Peduncles 3-flowered



and Miscellaneous Particulars.

I. bona-nox, like most of the species of this genus and Convolvulus, varies much in the leaves, which it produces cordate, lobed, or panduriform.

I. nil is a highly beautiful plant, with the corollas of a clear blue color, whence its name of Anil or Nil (Indigo)

I quamoclit is a most beautiful tender annual. Its name has been formed from κυαμος, a bean, and κλιτος dwarf, because it resembles the kidney-bean in its climbing stem, but is less tall

I jalapa is found wild near Mexico, at Xalapa, whence probably the name of the drug which its root affords It is said to have been first brought to Europe in 1610. Its virtue as a purge resides chiefly in the resin

†384. CONVOLVULUS. *W* BIND-WEED.						*Convolvulaceæ. Sp.* 34—185.							
2259 arvénsis *W*	small	△	w	1½	jn s	F	Britain	cor. fl.	R	co	Eng. bot. 312		
2260 scammónia *W*	scammony	△	m	2	jl.au	W.pu	Levant	1596.	R	s.l	Mill. ic. 1. t. 102		
2261 erubéscens *B M*	Maiden-blush	◎	or	6	jl s	Pk	N S. W.	1803	C	r.m	Bot. mag 1067		
2262 japónicus *Vahl.*	Japanese	△	or	6	jl.au	Pu	China	1817.	D	co	Bot. reg. 322		
2263 pannifólius *H. K.*	cloth-leaved	□	or	15	jn s	B	.....	1805.	R	s l	Bot. reg 222		
2264 Batátas *W*	tuberous	⊠	clt	12	...	W pu	India	1597.	R	r.m	Rhed. mal. 7. t. 50		
2265 bicolor *Vahl.*	involucrated	◎	or	6	jn.au	W pu	Isl. France	1818.			Bot. mag. 2205		
2266 pandurátus *W.*	Virginian	△	or	12	jn s	W pu	N Amer.	1732.	R	p l	Bot. mag. 1939		
2267 althæoides *W*	Althæa-leaved	△	or	1	jn s	Pk	Levant	1597	R	s l	Bot mag. 359		
2268 bryoniæfólius *B M.*	Bryony-leaved	□	or	1½	jl.au	Pk	China	1802.	R	s.l	Bot mag 943		
2269 macrocárpus *W.*	long-fruited	◎	or	10	jl.au	Pu	S Amer.	1752	S	co	Plum ic.t.91. f 1		
2270 gláber *W.*	smooth	□	or	12	my jn	W	Cayenne	1806.	C	p.l	Aub. gui. t. 53		
2271 pentánthus *B. M.*	five-flowered	□	or	6	jl s	L.B	E. Indies	1808	C	s l	Bot. mag 2151		
2272 canariénsis *W.*	Canary	□	or	20	my s	Pu	Canaries	1690	R	s l	Bot. mag 1228		
2273 farinósus *W*	mealy-stalked	△	or	6	my.jn	Pk	Madeira	1777.	R	s l	Par lond 45		
2274 ciliátus *W en.*	hairy	○	or	6	jl s	Pk	.....	1816	S	co			
2275 máximus *W*	great-Ceylon	⊠	or	20	jl	Pk	Ceylon	1799	R	r m	Rhd. mal 11 t 53		
2276 Hermánniæ *W*	Peruvian	△	or	5	au s	W	Peru	1799.	R	r m	Jac. ic 2. t. 315		
2277 siculus *W*	small-flowered	○	or	1	jn au	L.B	S. Europe	1640.	S	co	Bot reg 445		
2278 elongátus *W. en*	long-peduncled	○	or	1	jl.au	W	Canaries	1815.	S	co	Bot. reg. 498		
2279 Imperáti *Vahl.*	Imperati's	△	or	1	...	Y	Naples	1824	D	co	Cyrill fasc 1 t 5		
2280 réptans *W*	creeping	□	or	1	...	Pu	E. Indies	1806.	R	p.l	Rum. 5. t 155 f.1		
2281 hirtus *W.*	hairy-stalked	◎	or	3	jn au	B	E. Indies	1804.	S	s.l			
2282 suffruticósus *H K*	shrubby	□	or	1	jl	Pk	Madeira	1768	R	r.m	Bot. reg 133		
2283 pentapetaloides *W*	Majorca	○	or	½	jn	L B	Majorca	1789.	S	co	Jac col 4.t.22 f 2		
2284 lineátus *W*	dwarf	△	or	½	jn	Pu	S. Europe	1714.	R	s.l	Tri.ob 91 t 91 f 2		
2285 saxátilis *W*	rock	△	or	½	jn	W	S. Europe	1796.	R	s.l	Bo mus 138 t 96		
2286 Cneórum *W.*	silvery-leaved	□	or	3	my s	Pk	Levant	1640	C	p l	Bot. mag. 459		
2287 lineáris *W*	narrow-leaved	□	or	1½	my s	Pk	.....	1770	C	l p	Bot mag 289		
2288 cantábrica *W*	Flax-leaved	△	or	1	my.s	F	S. Europe	1680	R	s.l	Jac. aus. 3 t.296		
2289 Dorycnium *W*	silky-leaved		or	1½	jn jl	Pk	Levant	1806.	C	s.l			
2290 scopárius *W.*	Broom	□	or	2	au s	W	Canaries	1733	C	s l	Vent. choix 24		
2291 floridus *W.*	many-flowered	□	or	1½	au s	Pk	Canaries	1779	C	p l	Jac. ic 1 t 34		
2292 tricolor *W.*	three-colored	○	or	3	jl.au	St	S. Europe	1629	S	co	Bot. mag 27		
385 ARGYREIA *Lour*	SILVER-WEED					*Convolvulaceæ Sp* 1—4							
2293 cuneáta *Ker.*	wedge-leaved	□	or	2	au s	Pu	E. Indies	1822.	C	s.l	Bot. reg. 661		
†386 NEMOPHILA.	NEMOPHILA					*Boragineæ Sp.* 1							
2294 phacelioides	shady		cu	1	jl au	B	N Amer	1822.	S	co	Bot. mag. 2373		
387 CALYSTEGIA. *R Br*	BEARBIND					*Convolvulaceæ Sp* 3—7							
2295 sépium *R Br*	great-hedge	△	or	6	jn s	W	Britain	m.hed.	R	s l	Eng. bot 313		
β incarnáta	*red-flowered*	△	or	6	jn s	R	N Amer	...	R	co	Bot. mag 7.32		
2296 sylvéstris *W en*	wood	△	or	18	jn s	W	Hungary	1815	R	co			
2297 spithamæ'a *Ph*	small-upright	△	or	1	jl	W	N Amer	1796.	R	co	Hook ex fl 97		
2298 Soldanélla *R Br*	sea	△	or	1	jn jl	F	Britain	sea sh.	R	s l	Eng bot 314		



History, Use, Propagation, Culture,

384. *Convolvulus* From *convolvere*, to entwine This is an extensive genus of some beauty, and the C. batatas is of known utility as an edible root. The stems in the greater number of species are herbaceous and twining, a few are shrubby, and one or two very low herbs.

C. arvensis has white jointed worm-like roots, very difficult to eradicate in gardens or corn-fields: it is considered as a certain indication of a dry soil.

C. scammonia, named in Arabia *Scamunâ* (*Forsk Golius*), affords the gummy resin of that name from the roots, which are three or four feet long, from nine to twelve inches in circumference, and contain a milky juice. The top of the root being bared of earth, it is cut through in a sloping direction, and a shell or cup placed close to the section for the juice to run into. This juice hardened is the true scammony, chiefly used as a stimulating cathartic.

C. turpethum is derived from *turbid*, its name in Arabia (*Golius*)

C. batatas, (Batatas is Malay according to Rumphius, Mexican according to Nieremberg) akirrets of Peru, or Spanish potatoes, is a native of both Indies and China. It came first to Spain from the West Indies, from thence it was imported here annually, and sold as a delicacy. It is the potatoe of Shakspeare and contemporary writers, the Solanum tuberosum being then scarcely known in Europe. The batatas is cultivated in all the tro-

§ 1. *Climbing; leaves sagittate or hastate.*

2259 Leaves sagittate acute at each end, Peduncles about 1-flowered
2260 Leaves sagittate truncate behind, Peduncles rounded 3-flowered
2261 Leaves cordate sagittate behind sinuate repand, Pedunc axillary solitary about 2-flowered
2262 Leaves lanceolate hastate acute, Auricles 1-toothed behind, Stem simple, Peduncles 1-flowered

§ 2. *Climbing, leaves cordate hastate*

2263 Leaves cordate hastate hirsute, Pedunc. about 3-flowered, Bract linear remote from calyx
2264 Leaves cordate hastate angular lobed 5-nerved smoothish, Ped long, Fl fasc. Sepals lanceol. acuminate

§ 3. *Climbing; leaves cordate lobed*

2265 Leaves cordate villous at the base angular lobed, Peduncles 1-flowered, Outer sepals bract-like
2266 Pubescent, Leaves broad cordate entire or lobed fiddle-shaped, Pedunc. long, Flowers fascicled

§ 4. *Climbing, leaves quinate or palmate.*

2267 Leaves cordate sinuate silky lobes repand, Pedunc 2-flowered
2268 Leaves 7-lobed palmate hispid middle lobe sinuated drawn out, Pedunc axill. solitary very long jointed
2269 Leaves palmate pedate 5-parted, Pedunc. 1-flowered
2270 Very smooth, Leaves digitate quinate, Leaflets stalked acuminate entire, Pedunc. branched divaricating

§ 5. *Climbing, leaves cordate or subcordate.*

2271 Leaves oblong cordate acuminate subrepand smooth, Pedunc. umbelled 5-flowered, Flowers sessile
2272 Leaves cordate pubescent, Stem perennial villous, Pedunc many-flowered
2273 Leaves cordate acuminate repand, Pedunc 3-flowered, Stem mealy
2274 Leaves cordate ovate acuminate ciliated, Heads stalked very hairy with an involucrum
2275 Leaves cordate ovate acuminate entire smooth, Stem and leaf-stalks smooth
2276 Tomentose, Leaves cordate oblong obtuse subrepand, Pedunc. longer than stalk, Limb acute

§ 6. *Prostrate, leaves cordate.*

2277 Leaves cord ovate upper acute, Ped 1-fl. shorter than leaves, Bractes obl lanc longer than ciliated cal
2278 Leaves cordate ovate cusp Ped. 2-fl. longer than leaves, Bractes lin subul shorter than parted peduncle

§ 7. *Prostrate, leaves cordate lobed or hastate*

2279 Leaves panduriform or entire emarginate cordate at base, Peduncles 1-flowered, Stem creeping
2280 Leaves hastate lanceolate, Auricles rounded, Stem creeping, Peduncles 1-flowered
2281 Leaves cordate and somewhat hastate villous, Stem and leaf-stalks hairy, Peduncles many-flowered

§ 8 *Prostrate, leaves ovate or oblong and linear*

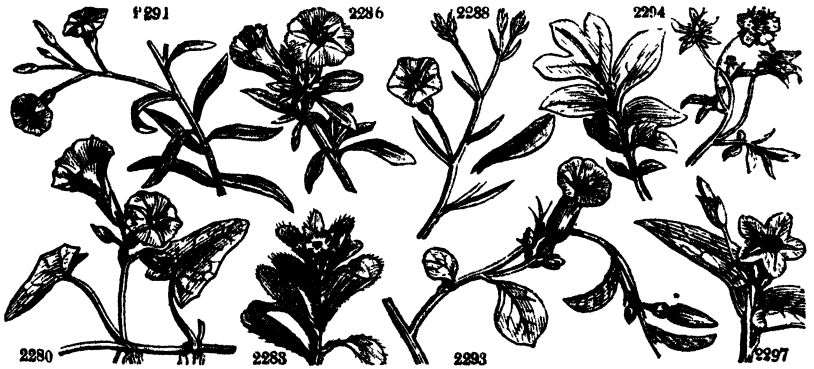
2282 Leaves linear lanceolate, Stem ascending villous, Peduncles axillary 1-flowered 3 times as long as leaf
2283 Leaves lanceolate obtuse naked lined, Branches declinate, Flowers silky ½ 5-cleft
2284 Leaves lanceolate silky lined stalked, Peduncles 2-fl. Cal. silky leafy
2285 Very hairy, Leaves linear, Flowers capitate, Calyxes acuminate
2286 Leaves lanceolate tomentose, Flowers capitate, Calyxes hairy, Stem nearly erect
2287 Stems erect shrubby, Leaves linear acute silky, Flowers terminal umbelled panicled, Cal hairy
2288 Leaves linear lanc. acute, Stem branched nearly erect, Cal. hairy, Pedunc 2-flowered
2289 Leaves nearly linear silky, Stem panicled, Cal naked obtuse
2290 Leaves linear hairy, Peduncles about 3-flowered, Cal silky ovate acute, Branches twiggy
2291 Prostrate hoary, Leaves linear lanceolate smooth, Thyrse terminal pyramidal compound
2292 Leaves lanceolate ovate smooth, Stem declinate, Flowers solitary

2293 Leaves wedge-shaped emarginate beneath silky, Peduncles 2-flowered

2294 The only species

2295 Leaves sagittate very acute, behind obtuse or trunc. entire, Bract ac longer than cal twice as short as cor

2296 Leaves cordate, Lobes angular truncated, Pedunc rounded 1-fl. Bract. ovate obt. inflated, Sepals obtuse
2297 Leaves cordate pubescent, Stem erect, Peduncles 1-flowered
2298 Leaves reniform, Peduncles 1-flowered, the angles winged



and Miscellaneous Particulars.

pical climates much in the same manner as our potatoe, but with more room for its trailing stalks. Not only the tubers, but the young leaves and tender shoots are boiled and eaten; and, as is the case with all plants long in cultivation, there are several varieties.

C. tricolor is a well known border-annual, commonly called C minor, with reference to another border-flower, Ipomœa purpurea, which gardeners and seedsmen commonly call C. major.

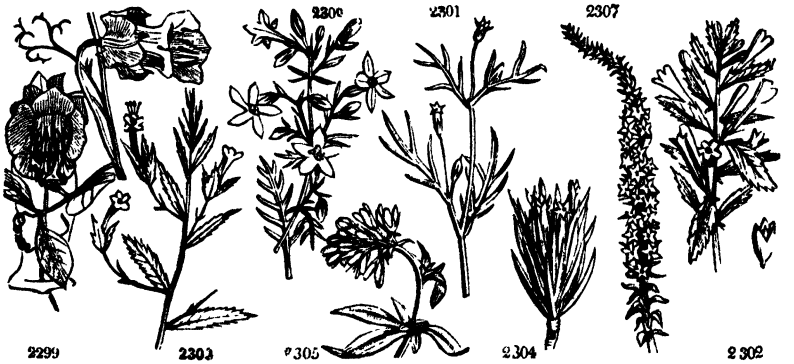
C reptans, is a common potherb in the East Indies and in China.

385. *Argyreia.* From αργυρος, silver, in allusion to the silvery texture of the leaves of the plant. A beautiful genus nearly related to Convolvulus.

386. *Nemophila.* From νεμος, a grove, and φιλεω, to love; the species growing in shady woods. A small hardy N. American plant, with bright blue flowers and divided leaves.

387. *Calystegia.* From καλος, pretty, and στεγη, a covering, in allusion to the two bracteæ in which the calyx is inclosed. A very artificial genus, distinguished from Convolvulus and Ipomœa, only by the presence of bracteæ, and by its capsule being one-celled. C. sepium, the Convolvulus sepium of Willdenow, has medical properties similar to Scammony, for which Withering thinks it may serve as a substitute. Swine, it is said, eat the roots in large quantities, and yet are not purged by them. C. soldanella is an acrid purge.

†388. COBÆ'A *Cav.*	COBÆA.				*Cobæaceæ. Sp.* 1.									
2299 scándens *Cav.*	climbing		or	20	my o	Pu	Mexico	1792	S	p l	Bot. mag. 871			
389. CAN'TUA *W.*	CANTUA.				*Polemoniaceæ Sp* 2—16.									
2300 coronopifólia *W*	scarlet		or	3	au s	S	Carolina	1726.	C	l p	Ex. bot. 1. t 13			
2301 inconspícua *H K.*	small-blue		or	2	s n	B	America	1793.	S	co	Ex. bot. 1. t. 14			
†390 HOITZIA. *Cav.*	HOITZIA				*Polemoniaceæ Sp* 2—5.									
2302 coccínea *Cav.*	scarlet		or	3	...	S	Mexico	1824.	C	r m	Cav. ic. 6. t. 365			
2303 cærúlea *Cav.*	blue		or	1	...	Pa B	Mexico	1824.	C	r.m	Cav. ic. 6. t. 366			
391 RETZIA. *Th.*	RETZIA.				*Convolvulaceæ. Sp* 1									
2304 spicáta *Th*	spiked		cu	4	my.jn	Br	C G H.	...	C	l p	Lam. ill. t. 103			
392. LUBI'NIA *Comm.*	LUBINIA				*Primulaceæ. Sp* 1—8.									
2305 atropurpúrea *Lk*	dark-purple		cu	2	...	Pu	C G. H.	1820.	C	l.p	H. ber. 27			
†393 EPA'CRIS *R. Br*	EPACRIS				*Epacrideæ Sp* 6—18.									
2306 purpurascens *R Br.*	rigid		or	3	ja mr	Pu	N. S. W	1803.	C	s p	Bot. mag. 844			
2307 pulchélla *R Br*	sweet-scented		or	4	ap jn	Pk	N. S. W	1804	C	s p	Bot. mag 1170			
2308 grandiflóra *R Br*	crimson		or	3	ja jn	S	N S. W.	1803.	C	s p	Bot mag 982			
2309 obtusifólia *R. Br*	blunt-leaved		or	3	ap jn	W	N. S W	1804	C	s p	Ex bot. 1. t. 40			
2310 exsérta *R Br*	exserted		or	2	ap jn	W	V. Dı L	1812	C	l p				
2311 microphýlla *R Br*	small-leaved		or	2	...	...	N. S W.	1822	C	l.p				
†394 STYPHE'LIA *R Br*	STYPHELIA				*Epacrideæ. Sp* 4—8.									
2312 longifólia *R Br*	long-leaved		or	3	ap jn	G	N S W	1807	C	l p	Bot reg. 24			
2313 viridiflóra *R Br.*	green-flowered		or	4	ap jn	G	N S W	1791	C	s p	Bot. rep 312			
2314 trifióra *R Br.*	three-flowered		or	6	my au	Pk	N S W.	1796	C	s p	Bot mag 1297			
2315 tubiflóra *R Br*	crimson		or	6	my au	C	N S. W.	1802.	S	s p	Smith n. hol t.14			
395 LISSAN'THE. *R Br*	LISSANTHE				*Epacrideæ Sp* 1—6									
2316 daphnoides *R Br*	Daphne-leaved		or	3	jn jl	W	N Holl	1818.	C	s p	Bot cab. 466			
396. ASTROLO'MA *R Br*	ASTROLOMA				*Epacrideæ. Sp* 1—6.									
2317 humifúsum *R Br*	Juniper-leaved		or	2	my o	S	N. S. W.	1807.	C	s.p	Bot. mag. 1439			
397 SPRENGE'LIA. *R Br*	SPRENGELIA				*Epacrideæ. Sp.* 1—2.									
2318 incarnáta *R Br*	flesh-colored		or	2	ap jn	F	N S. W	1793.	C	s p	Bot. mag. 1719			
398 ANDERSO'NIA *R Br*	ANDERSONIA				*Epacrideæ Sp* 1—6									
2319 sprengelioides *R Br*	Sprengelia-like		or	2	mr jl	Pk	N Holl	1803	C	s.p	Bot. mag. 1645			
†399 LYSINE'MA *R Br*	LYSINEMA.				*Epacrideæ Sp* 2—5									
2320 púngens *R Br*	pungent		or	2	f ap	W	N S. W.	1804.	C	l p	Bot. mag. 844			
β rúbrum	red		or		f ap	R	N S. W.	1804.	C	l p	Bot mag 1199			
2321 attenuátum *Lk*	narrow-flower'd		or	2	f ap	Pk	N S W	1812.	C	l p	Bot. cab. 38			
†400 MONO'TOCA *R Br*	MONOTOCA				*Epacrideæ Sp* 2—5									
2322 elliptica *R Br.*	elliptic		or	8	my au	W	N. S. W.	1802.	C	l p				
2323 lineáta *R Br*	lined		or	6	my au	W	V. Dı L.	1804	C	s p	L.nov holl.1 t.61			



History, Use. Propagation, Culture,

388. *Cobæa.* In honor of Barnadez Cobo, a Spanish Jesuit, who wrote upon subjects of natural history about the middle of the 17th century The name arose with Cavanilles This is the most rapid growing greenhouse climber known, having been found to grow 200 feet in length in one summer in a conservatory. It will thrive almost equally well in the open air during summer, but is destroyed by frost, and its shoots are only of annual, or at most of biennial duration It strikes in sand in moist heat, but it generally ripens seeds, which, sown early in spring, and forwarded in a stove, will flower in the greenhouse or open air the same season.

389. *Cantua* From *Cantu*, the native name of the genus among the Peruvians Pretty greenhouse plants, rarely seen in gardens

390 *Hoitzia* Hoitzit is the name of this plant in Mexico A handsome plant with brilliant scarlet flowers. It is occasionally raised from Mexican seed, but is very rare in collections

391 *Retzia* Named after John Retzius, professor of botany at Lund, in Sweden. His Observationes Botanicæ is a work of reputation A small upright shrub with whorled lanceolate leaves, and clustered brown flowers, almost hidden among the leaves

392. *Lubinia* A genus dedicated by Commerson to M de Saint Lubin, a French officer who travelled in the East Indies A small plant with ascending stem and fleshy smooth leaves, of little merit

393 *Epacris.* Named by Forster from ἐπί, upon, and ἄκρος, the top of a thing, because in New Zealand the species grow on the top of the mountains A most ornamental genus, which Sweet observes, thrives "best in a sandy peat soil, the rougher and more turfy the soil is, the better the plants will thrive · these should always be shifted in fresh pots before they are turned out of doors in spring, as their roots are so very fine, and are generally matted round the pots, so that the hot sun coming against the pots destroys them, and they look brown all through the summer, and are very difficult to recover. Young cuttings planted in pots of sand under bell-glasses in autumn or winter, or early in spring, will strike root readily, but they will not strike so readily in summer · when rooted, they should be potted singly in small pots, and set in a close frame, and must be hardened to the air by degrees." (*Bot Cult* 189.)

394. *Styphelia.* A name derived from στυφός, dense, in allusion to the compact habit of the genus. Erect

2299 The only species

2300 Lobes of leaves linear entire oblong, Flowers panicled terminal, Cor tubular twice as long as cal.
2301 Plant smaller than the last, Leaves very narrow, Cor. short blue

2302 Stem half shrubby, Leaves sessile ovate acute pubescent
2303 Stem half shrubby, Leaves subsessile linear toothed spinous

2304 Leaves in fours linear sessile erect, Flowers clustered hidden among the leaves

2305 Leaves fleshy dark-green glabrous obovate, Stem ascending

2306 Sepals acuminate as long as tube of cor Leaves cucullate subsess with a recurved end longer than base
2307 Sepals acum as long as tube of cor Lvs conc their base longer than spreading point, Spike flow at base
2308 Cor cylindrical 4 times as long as cal. Flowers pendulous, Leaves acuminate flat
2309 Flowers nodding, Leaves lanceolate erect imbricated with a callous obtuse end, Stamens included
2310 Leaves lanceolate acute erect above flat beneath convex, Cal. obtuse as long as tube, Stamens exserted
2311 Sepals obtuse as long as tube of cor Leaves cucullate acute spreading, Spike flowering at end

2312 Leaves long lanceolate attenuated at end, above concave smooth at edge, Branches pubescent
2313 Leaves obovate oblong obtuse mucronate flat smooth above roughish at edge, Flowers spreading
2314 Leaves oblong lanceolate flat glaucous smooth, Branches smooth, Flowers corymbose, Ped 1-3-flowered
2315 Leaves linear obovate mucronate rough above revolute at edge, Flowers nodding

2316 Leaves ellipt. lanceolate concave with a short callous point, Segm of cor smooth

2317 Prostrate much branched, Leaves lanceolate linear convex above ciliated at edge

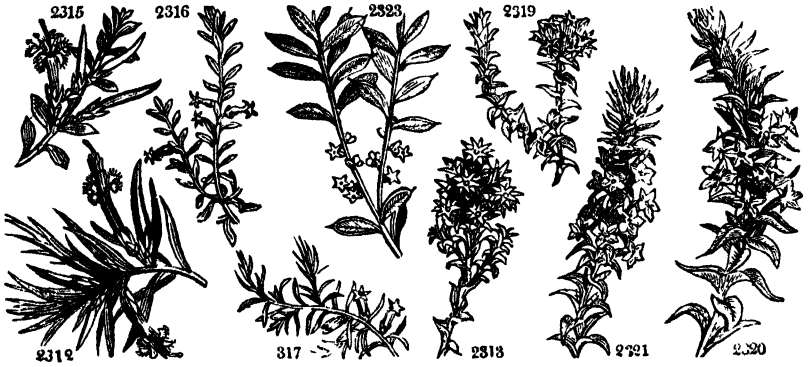
2318 Anthers connate bearded, Cal. colored, Leaves long acuminate

2319 Leaves spreading with a flat point

2320 Cor. monopetalous, Tube entire as long as cal. Leaves ovate acuminate spreading

2321 Leaves sessile cordate acuminate pungent recurved, Cal. imbric as long as narrow tube of cor

2322 Spikes erect subterminal aggregate or axillary solitary, Leaves ellipt oblong 4 times broader than long
2323 Spikes axillary few-flowered nodding stalked, Leaves oblong acute flat mucronate



and Miscellaneous Particulars

branched shrubs, natives of New Holland, with scattered mucronate leaves, and axillary, nodding, very showy flowers. Culture as for Andersonia.

395. *Lissanthe* A New Holland genus of shrubs with small white flowers, the segments of which are smooth, not bearded as in Leucopogon, to which the genus is next. From this difference its name has been contrived; λισσος, smooth, and ανθος, a flower.

396. *Astroloma.* From αστηρ, a star, and λῶμα, a fringe, in allusion to the stellate disposition of the little bundles of hairs at the bottom of the tube A genus of neat little bushes, with axillary erect flowers Culture as for Andersonia.

397. *Sprengelia* So called in honor of Curt Sprengel, professor at Halle, in Saxony, a learned man and respectable botanist. His Historia Rei Herbariæ is a monument of industry and information. This is a handsome half-hardy genus, delighting in a shady aspect, sandy peat soil, and dry bottom. They must be watered sparingly when not growing freely Cuttings root in sand under a bell-glass

398 *Andersonia* Named by Mr Browne, first, after William Anderson, a navy surgeon, who died in Cook's last voyage, secondly, after Dr Anderson, formerly director of the botanical garden, St Vincents, and lastly, after William Anderson, the curator of the apothecaries' garden, Chelsea. According to Sweet, this genus "grows freely in a sandy peat soil with the pots well drained, and care should be taken not to over-water it, as they are very liable to get sodden, when they seldom recover The very young tops put in for cuttings, under a bell-glass in sand, will root readily When first potted off, they should be put singly in small thumb-pots, and kept close in a frame for a few days, and hardened to the air by degrees" (*Bot Cult* 1 53.)

399. *Lysinema* Perhaps derived from λυσις, a separation or solution, and νημα, a stamen, but the application of the name is not obvious Shrubs with the habit of Epacris. They prefer rough turfy soil, and cuttings root readily in sand under a bell-glass

400. *Monotoca* From μονος, one, and τοκος, birth, because only one ovulum is borne by the ovarium, a remarkable circumstance in the natural order of the genus. The species are little shrubs, with axillary or terminal spikes of white flowers They require well drained pots, and their cuttings must be taken off when very young, and planted in sand under a bell-glass.

401. LEUCOPO'GON. *R Br.* Leucopogon. *Epacrideæ. Sp* 4—48.

2324 lanceolátus *R Br.*	small-flowered	or	12	my.au	W	N. S W.	1790.	C	s.p	Bot rep. 287		
2325 ericoides *R. Br*	Heath-leaved	or	6	...	Pk	N S. W.	1815.	C	l.p	Cav.ic.4.t.347 f 1		
2326 amplexicaúlis *R Br*	stem-clasping	or	3	...	W	N S. W.	1815.	C	l p	Linn. trans 8.t 8		
2327 juniperinus *R Br*	Juniper-leaved	or	3	ap jn	W	N. S. W.	1804.	C	l.p	Bot. cab 447		

402. STENANTHE'RA. *R Br* Stenanthera. *Epacrideæ. Sp.* 1.

2328 pinifólia *R Br*	Pine-leaved	or	6	mv jl	S	N. S. W.	1811.	C	s p	Bot. reg. 218

†403. AZA'LEA. *W.* Azalea *Rhodoraceæ. Sp* 10—14.

2329 indica *W*	Indian	or	4	mr my	S	China	1808.	C	p.l	Bot. mag. 1480
β *purpúrea plena*	*double-purple*	or	4	mr my	Pu	China	1819	C	p l	
γ *variegáta*	*variegated*	or	4	mr my	St	China	1824.	C	p l	
δ *álba*	*pure-white*	or	4	mr my	W	China	1819	C	p.l	Bot. reg. 811
ε *aurantiaca*	*orange*	or	4	mr my	O	China	1822.	C	p.l	Bot. cab. 1255
2330 pónt*i*ca *W.*	yellow	or	6	my.jn	Y	Turkey	1793.	L	s p	Bot. mag. 438
β *glaúca*	*glaucous*	or	6	my.jn	Y	.....	...	L	s p	Bot. mag. 2383
γ *albiflóra*	*white-flowered*	or	6	my jn	W	.....	...	L	s p	
2331 calendulácea *Ph*	orange	or	4	my jn	O	N Amer.	1806.	L	s.p	Bot mag 1721
β *flammea*	*flame-colored*	or	4	my jn	R	N Amer	1812.	L	s p	Bot. reg 145
2332 canéscens *Ph*	downy	or	3	my jn	Pk	N Amer	1812	L	s p	
2333 nudiflóra *W.*	naked-flowered	or	3	my jn	Pk	N Amer	1734.	L	s p	
α *coccínea*	*small-scarlet*	or	4	my jn	S	N Amer	1734.	L	s p	Bot. mag 180
β *speciósa*	*large-scarlet*	or	4	my jn	S	N Amer	1734	L	s.p	Bot. cab. 624
γ *aurántia*	*orange*	or	3	my jn	O	N Amer	1734	L	s p	
δ *cuprea*	*copper-colored*	or	3	my jn	Ful	N Amer.	1734.	L	s p	
ε *rútilans*	*deep-red*	or	4	my jn	D R	N Amer	1734	L	s p	
ζ *cárnea*	*pale-red*	or	3	my jn	L R	N Amer	1734.	L	s p	Bot. reg 120
η *álba*	*early-white*	or	3	my jn	W	N Amer	1734	L	s p	
ϑ *papilionácea*	*variegated*	or	4	my jn	St	N Amer	1734.	L	s p	
ι *partita*	*five-parted*	or	4	my jn	W	N. Amer	1734	L	s p	
κ *semipléna*	*semi-double*	or	4	my jn	W	N Amer	1734.	L	s p	
λ *flore pleno*	*double-flowered*	or	4	my jn	W	N Amer	1734.	L	s.p	
2334 bícolor *Ph*	two-colored	or	4	my jn	St	N Amer	1734	L	s p	Trew ehret t 48
2335 viscósa *Ph*	viscid	or	2	jl au	W	N Amer	1734	L	s p	Meerb ic 2. t 9
α *odoráta*	*common-white*	or	3	jl au	W	N Amer	1734	L	s p	
β *vittáta*	*striped-flowered*	or	3	jl au	St	N Amer	1734	C	l.p	
γ *fissa*	*narrow-petaled*	or	3	jl au	Pk	N Amer	1734.	L	s p	
2336 nítida *Ph.*	shining-leaved	or	4	jl au	Pk	N Amer	1812	C	l p	
2337 glaúca *Ph*	dwarf-glaucous	or	2	jn	W	N Amer	1734.	L	s p	Bot. reg 414
2338 híspida *Ph*	tall-glaucous	or	15	jn	Pk	N Amer	1734.	L	s p	Dend brit. 6

404 CHAMÆLE'DON *Lk.* Chamæledon. *Rhodoraceæ Sp* 1

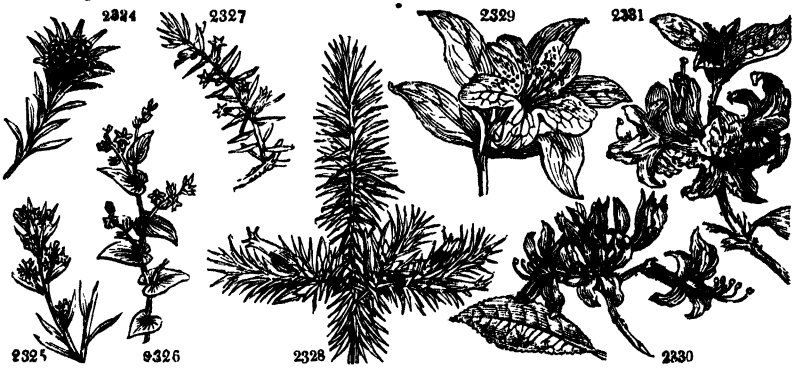
2339 procúmbens *Lk*	trailing	or	½	ap my	Pk	Britain	sc. mo.	L	s.p	Eng bot. 865

405 BREX'IA *Nor* Brexia ..... *Sp* 1—3.

2340 madagascariénsis *P s.*	Madagascar	or	30	jn	G	Mauritius	1812.	C	s p	Bot reg. 730

406 OPHIORHI'ZA *L* Snake-root *Rubiaceæ Sp* 1

2341 Múngos *L*	common	or	3	my d	W	E. Indies	1820.	C	s.p	



History, Use, Propagation, Culture,

401 *Leucopogon* From λευκος, white, and πωγων, a beard, because the segments of the white flowers are bearded A very extensive genus of small shrubs, with spiked axillary or terminal flowers. Culture as for Andersonia

402 *Stenanthera* From στενος, narrow, and ανθηρα, an anther, the anther being in this genus not so broad as its filament. A bush with pine-like leaves, and erect large scarlet blossoms. Culture as in Andersonia.

403. *Azalea.* From αζαλεος, dry, arid, either in allusion to the places where the plant grows, or to the brittle dry nature of its wood. This is a very ornamental genus, from its abundance of flowers of almost all colors, and the fragrant smell of most of the species A indica is the most delicate, but flowers well in a moist heat in rough peat well drained According to Sweet, "it thrives best in a sandy peat, and the pots to be well drained with small pieces of potsherd it should be set in an airy part of the greenhouse in winter, and great care must be taken not to over-water it In summer it should be exposed to the open air, but not in a very sunny situation Young cuttings taken off close to the plant, and planted in pots of sand, will root readily, if plunged in heat under a bell-glass." (*Bot. Cult* 144) T Blake keeps his plants "in peat and leaf-mould, always in the greenhouse till they are in a flowering state, and then he removes them to the hothouse, the sudden heat causing the blossom to open the better" (*Hort Trans* iv 133) J. Nairn uses the most fibrous part of peat-earth and sand; he places them in a considerable heat, and always in the shade, and when the plants exhibit blossom buds in March, he then raises the temperature from 50° to 60°. This species strikes by cuttings of the young wood, taken off close to that which is ripened, planted in pots of sand, and plunged under a bell-glass.

The hardy Azaleas are best grown in compartments or groups by themselves, or with other American or European plants requiring a moist peat soil, and rather shady situation. Where peat is not to be had, the

2324 Spikes nodding aggregate, Ovaries 2-celled, Drupes oval, Leaves lanceolate flat 3-nerved
2325 Spikes axillary close together 3-4-flowered, Leaves obl lin. moderately spreading mucronate
2326 Spikes axillary and terminal spreading stalked longer than the leaves, Leaves cordate stem clasping
2327 Flowers subsessile solitary or 2 together, Leaves divaricating lanceolate linear bristly pointed

2328 The only species Leaves like those of a fir very close together

2329 Flowers nearly solitary, Calyx hairy

2330 Leaves oblong narrowed at the end shining ciliated smooth, Corymb terminal, Tube of cor glandular

2331 Nearly naked flowered, Leaves oblong pubescent on both sides, Flowers large not viscid, Cal. teeth obl

2332 Leaves beneath thinly downy nerve not bristly, Flowers rose-colored not viscid, Cal very minute
2333 Leaves oblong narrowed at the base ciliated smooth, Corymb terminal, Cor hairy outside, Stam. exsert.

2334 Naked flowered, Leaves oblong slightly pubescent on both sides, Flowers small not viscid, One segment of corolla linear 4 times as long as the others
2335 Branches hispid, Leaves same color on both sides with the nerve hispid, Cal teeth very short round

2336 Branches smooth, Leaves small oblanceolate mucronate coriaceous with a hispid nerve, Flowers viscid
2337 Branches hispid, Leaves acute smooth on both sides glauc beneath with a hispid nerve, Fl. very viscid
2338 Branches upright very hispid, Leaves long lanceolate hispid above, Flowers very viscid

2339 The only species

2340 Leaves long narrow entire with a brown edge

2341 The only species



and Miscellaneous Particulars

next best soil is a soft black sandy loam with leaf-mould, or mould from any decayed vegetable matter unmixed with animal remains, as the mould of decayed thatch, or the sweepings of stack-yards, wood-piles, &c Seeds are obtained from many of the sorts, and should be sown in pans or shallow wide pots thinly covered, placed in a shady situation, and kept moderately moist When fit to transplant, they should be pricked into other pots, and placed under a glass, and shaded till they have struck roots afresh They may then be hardened by degrees, and, when their roots fill the pots, planted out in beds, or where they are finally to remain. Most of the hardy Azaleas are well adapted for growing in pots, and for forcing early in spring The deciduous sorts flower better than those which are subevergreens.

By intercrossing with Azalea and Rhododendron, some new and curious varieties or hybrid species have been produced, especially in Colvill's nursery, under the direction of Mr Sweet · and from some thousands of seedlings which have not yet flowered, many more are expected. (See *Encyc. of Gard.* part II. b. i. ch viii. sect. 7. The juice in the bottom of the flower of A pontica is poisonous, and communicates its bad properties to the unwholesome honey of Pontus Several fine varieties of the Azalea indica have lately been brought to this country; but many of the best varieties are still among the desiderata of English cultivators.

404. *Chamædedon.* From χαμαι, dwarf, and λιδον, a kind of cistus This has been formed from the well known Azalea procumbens of Linnæus, one of the most interesting of our northern plants.

405. *Brexia.* So named by Noronha, perhaps from βρεξις, rain, in allusion to the protection afforded by the fine large leaves of the genus against rain. Fine stove plants with firm, spiny, or entire leaves, and axillary green flowers In the garden they are commonly called Theophrastas.

406 *Ophiorhiza.* From οφις, a snake, and ριζα, a root, from the use which is made of the roots in the East Indies for curing the bites of dangerous snakes. Mungos is an Indian name. A pretty stove plant, whose white flowers are well relieved by the dark red back ground of the calyxes and pedicels.

407. ALLAMAN'DA *W* ALLAMANDA *Apocyneæ. Sp* 1
2342 cathártica *W* willow-leaved ♣ ▢ or 12 jn jl Y Guiana 1785. C r m **Bot. mag. 336**

408. THEOPHRASTA *L.* THEOPHRASTA. *Myrsineæ Sp* 1.
2343 Jussiæ'i *Lindl* prickly ♣ ▢ or 3 ... W Hispanio 1818 S r.m **Lind. coll. 78**

409 CLAVIJA *Fl per* CLAVIJA. *Myrsineæ. Sp* 1—4.
2344 macrophýlla *Fl per.* long-leaved ♀ ▢ or 30 ... W S. Amer. 1816. C r.m

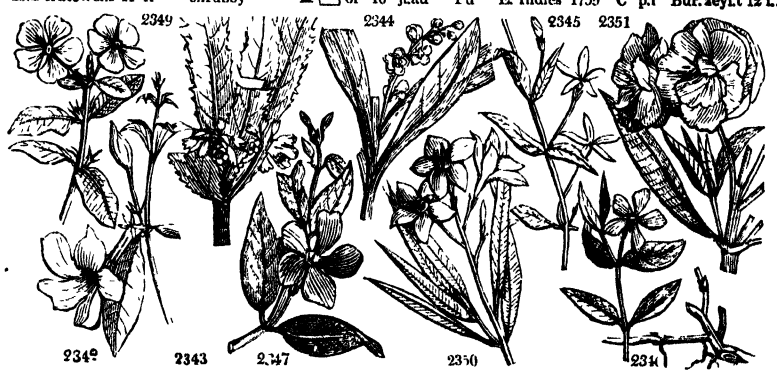
410 VIN'CA *W* PERIWINKLE *Apocyneæ Sp* 5—6
2345 herbácea *W en* herbaceous ♃ or 1½ jn jl Pu Hungary 1816. D s l **Bot. mag. 2002**
2346 minor *W* lesser ♃ or 4 mr.s V Britain bu. pl S co **Eng. bot. 91**
β *argenteo variegáta* *silver-striped* ♃ or 4 mr s V Britain ... S co
γ *aureo variegata* *gold-striped* ♃ or 4 mr s V Britain ... S co
δ *flore pleno* *double* ♃ or 4 mr s V Britain ... S co
2347 májor *W* greater ♃ or 6 mr s B England groves S co **Eng. bot. 514**
β *variegáta* *variegated* ♃ or 6 mr s B .... S co
2348 parviflóra *W.* small-flowered ▢ or ½ au B E Indies 1778 S s l **M co got. t 2. f 1**
2349 rósea *W.* Madagascar ♃ ▢ or 1 mr o R.w E Indies 1756 C r m **Bot. mag 248**
β *alba* *white-flowered* ♃ ▢ or 1 mr o W E. Indies ... C r m
γ *ocellàta* *red-eyed* ♃ ▢ or 1 mr o St E. Indies ... C r m

411 NE'RIUM *R Br* OLEANDER *Apocyneæ Sp* 2—5
2350 oleánder *W* common ♣ ▢ or 8 jn o R S Europe 1596 L r m **Lam ill t 174**
β *álbum* *white-flowered* ♣ ▢ or 8 jn o W S Europe ... L r m **Bot cab. 700**
γ *splèndens* *double-hybrid* ♣ ▢ or 7 jn o R ..... 1814 L r m
δ *variegátum* *variegated* ♣ ▢ or 8 jn o St ..... . L r m **Bot cab 666**
2351 odórum *W* sweet-scented ♣ ▢ or 6 jn au Pa R E. Indies 1683 C r m **Rheed mal.9.t.2**
β *cárneum* *flesh-colored* ♣ ▢ or 6 jn au Pk E Indies 1683 C r m
γ *plénum* *double-flowered* ♣ ▢ or 5 jn au Pa R E. Indies 1683 C r m **Bot. reg 74**

412 WRIGHT'IA *R Br* WRIGHTIA *Apocyneæ Sp* 3—5
2352 antidysentérica *R br* oval-leaved ♀ ▢ or 10 ... W E Indies 1778 C r m **Rhed mal 1 t.47**
2353 zevlánica *R Br* spear-leaved ♃ ▢ or 10 ... W E. Indies ... C r m **Bur zeyl.t.12 f.2**
2354 tinctória *R Br* dyer's ♀ ▢ or 15 ... W E. Indies 1812 L l p **Bot. reg 933**

†*413 ECHI'TES. *R Br* ECHITES *Apocyneæ Sp* 10—60
2355 biflóra *W* twin-flowered ♃ ▢ or 20 jl W W Indies 1793 C p l **Jac amer.30 t.21**
2356 suberécta *W* Savanna-flower ♃ ▢ or 10 jn au Y Jamaica 1759 C p l **Bot mag 1064**
2357 torósa *W* chimbing ♃ ▢ or 10 jn au Y Jamaica 1778 C p l **Jac amer.33. t.27**
2358 umbellàta *W* umbelled ♃ ▢ or 15 jl W Jamaica 1733 C p l **Jac amer 30 t.22**
2359 diffórmis *Ph* deformed ♃ ▢ or 8 jl P Y Carolina 1806 C p l
2360 bispinósa *W* twin-spined ♃ ▢ cul 1 jl n Pk C G H 1795 C p l
2361 caryophyllàta *Roxb* clove-leaved ♃ ▢ or 6 o Pa Y E. Indies 1812 C p l **Bot. mag 1919**
2362 grandiflora *Rth* large-flowered ♃ ▢ or 8 ... Pk E Indies 1823 C p l
2363 antidysentérica *Rth* Medicinal ♃ ▢ m 6 .. Pk E Indies 1821 C p l
2364 sanguinolénta *Tuss* red-veined ♃ ▢ or 20 jn au Y W Indies 1821 C p l **Bot. mag. 2473**

414 ICHNOCAR'PUS *R Br* ICHNOCARPUS *Apocyneæ Sp* 1—2
2365 frutéscens *H K* shrubby ♣ ▢ or 10 jl au Pu E. Indies 1759 C p.l **Bur. zeyl.t 12 f.1**



History, Use, Propagation, Culture,

407 *Allamanda* In memory of Dr Frederick Allamand, a professor of natural history in the university of Leyden, who went to Guiana about 1769, and to Russia about 1776, and sent descriptions, figures, and specimens of plants to Linnæus It is a milky shrub, of cathartic qualities, flowers freely, and strikes with ease in a moist heat

408. *Theophrasta* Theophrastus was born at Eresus in Lesbos, 310 years before Christ, and died at the age of 83 Linnæus has justly termed him the prince of botanists The genus which has been selected to commemorate his name, is a curious prickly-leaved, low plant, native of St Domingo, where it is called by the negroes wild cocoa. In the collections of this country it is rare, and no means has yet been discovered of propagating it, except by seeds

409. *Clavija* Named in honor of Joseph Clavijo Faxardo, a Spanish naturalist, who translated into his own language the works of Buffon. A fine genus of plants, exceedingly rare both in gardens and herbaria.

410 *Vmca.* From *vincuum*, a bond, in allusion to its twining shoots The origin of its English name is, however, quite unknown The Anglo-Saxons called it *perunce*; the English, *periwinkle*; the French, *pervenche* This is a genus of well-known little shrubs, valued for their early and long continued flowering, and the hardy species as being evergreens which thrive under the shade and drip of trees V minor and major, like other plants which run much at the root, very rarely produce seeds. V rosea is continually in flower, and is easily propagated by cuttings under a hand-glass.

411. *Nerium* From *νερος*, damp, the plant growing upon the borders of rivulets, in the southern parts of Europe. This is a genus of beautiful evergreen shrubs of easy culture and propagation, and free flowerers great part of the year N tinctorium affords a blue equal to that of indigo, and it is thought by Dr. Roxburgh might be cultivated for that purpose.

N. oleander is very common in the Levant, and especially in the Isle of Candia, and in Sicily, Magna Græcia,

2342 The only species Leaves 4 together subsessile ovate oblong, Flowers in villous fascicles

2343 A small prickly-leaved bush without branches and with terminal clusters

2344 Leaves very long lanceolate retuse toothed spinous

2345 Stems herbaceous prostrate, Leaves oblong lanceolate smooth, Flowers stalked, Cal ciliated
2346 Stems procumbent, Leaves ellipt lanc. smooth at edge, Flowers stalked, Teeth of cal lanceolate

2347 Stems nearly erect, Leaves ovate ciliated, Flowers stalked, Teeth of calyx setaceous elongated

2348 Stem herbaceous erect square, Leaves lanceolate, Flowers twin or solitary stalked
2349 Stem erect, Flowers twin sessile, Leaves ovate oblong, Stalks 2-toothed at the base

2350 Leaves lin lanc 3 together ribbed beneath, Sepals squarrose, Nect. flat 3-toothed

2351 Leaves linear lanc. 3 together, Corona filamentose, Anthers at end feathery

2352 Leaves ovate oblong shortly acuminate smooth, Corymbs terminal, Tube of cor 6 times as long as calyx
2353 Leaves obl lanceol subacuminate smooth, Corymbs terminal, Tube of cor 4 or 5 times as long as calyx
2354 Leaves ellipt lanc and ovate acum. smooth, Branches and corymbs divar Tube of cor twice as long as cal

2355 Stems sarmentose, Leaves oblong, Pedunc 2-flowered
2356 Pedunc many-flowered, Cor cylindrical hairy outside, Leaves ovate mucronate pubescent beneath
2357 Pedunc racemose, Leaves lanceolate acuminate, Follicles torulose very long
2358 Pedunc umbelled, Leaves ovate obtuse mucronate
2359 Leaves oval lanceolate acute at base the lowest linear, Flowers in fascicled corymbs
2360 Prickles two extra-foliaceous, Leaves lanceolate smooth, Flowers terminal in threes
2361 Panicle terminal, Cal spreading as long as corolla, Leaves ovate mucronate
2362 Stem erect rounded, Leaves oval acuminate smooth, Flowers terminal in threes
2363 Stem erect angular, Leaves ovate lanceolate obsoletely crenate, Corymbs axillary dichotomous
2364 Leaves ovate lanceolate entire strongly marked with crimson veins

2365 Stem erect shrubby, Leaves lanceolate oval, Cor acute, Throat villous



and Miscellaneous Particulars.

&c by rivers and torrents. the leaves are acrid and poisonous. Young cuttings planted under a hand-glass, and placed on a little heat, root freely.

N. odorum and its varieties, though treated as a greenhouse plant, requires a stove to make it flower freely

412. *Wrightia.* Named after Dr William Wright, a Scotch physician, who resided some years in the West Indies at the end of the last century, and the author of one or two botanical tracts W. antidysenterica is reputed to be a specific in the dysentery The wood is well adapted for the turner, and to make cabinets and other elegant furniture. It is very white, and of a fine grain like ivory, only much lighter It mixes admirably with ebony

W zeylanica is an elegant branched shrub, with whitish yellow flowers and an agreeable odor Both species may be treated like Nerium.

413. *Echites.* A name employed by Pliny as the designation of a kind of Clematis, it is derived from ἔχις, a viper, on account of the twisting nature of its shoots This is a genus of plants somewhat angular in habit, with opposite, veined, shining leaves, and flowers in peduncles void of scent. They all flower freely, and root readily under a hand-glass in sand

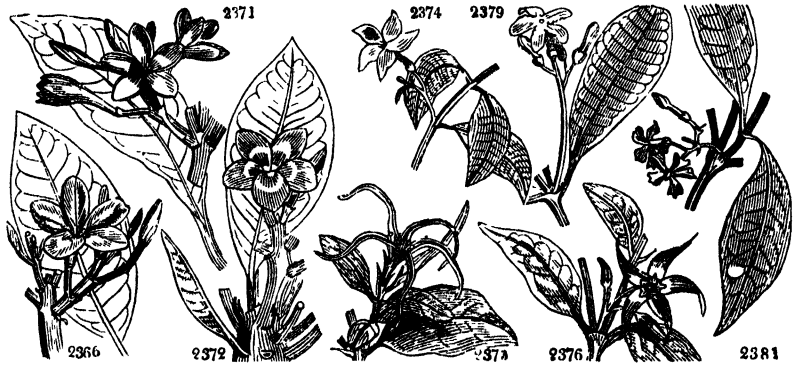
E. biflora supports itself partly by stems, and partly by twining on trees, hence frequently acquiring the air of a tree. It grows in salt marshes

E suberecta climbs. when it grows in savannahs it does not rise above three feet, and sometimes not more than one foot high

E. sanguinolenta is remarkable for the beauty of its foliage, the veins of which are stained with crimson

414. *Ichnocarpus.* From *ichnos*, a vestige, and *carpos*, fruit Climbing shrubs of Sierra Leone and the East Indies, with long branches covered with smooth entire leaves, and white sweet-scented flowers Cuttings root freely in sand under a hand glass

†415 PLUMIE'RIA. *W.*	PLUMIERIA.				*Apocyneæ*		*Sp.* 7—14.					
2366 rúbra *W.*	red	♀	▭	or	15	jl.au	R	Jamaica	1690.	C	r.m	Bot. mag 279
2367 acumináta *H. K.*	acuminated	♀	▭	or	20	jn.s	R.Y	E. Indies	1790.	C	r.m	Bot reg. 114
2368 álba *W*	white	♀	▭	or	15	jl.au	W	Jamaica	1733.	C	r.m	Jac. am t 174.f.2
2369 obtúsa *W.*	blunt-leaved	♀	▭	or	10	jl au	W	W. Indies	1733.	C	r.m	Cat. car. 1. t. 93
2370 pudica *Jac*	wax-flowered	♚	▭	or	5	jl.au	Y	S. Amer.	...	C	r.m	
2371 bicolor *Fl. per.*	two-colored	♀	▭	or	15	jl o	W.Y	S. Amer.	1815.	C	r.m	Bot. reg. 480
2372 tricolor *Fl. per*	three-colored	☤	▭	or	15	jl o	Va	W. Indies	1815.	C	r.m	Bot. reg. 510
416. STROPHAN'THUS. *Dec*	STROPHANTHUS.				*Apocyneæ.*		*Sp* 1—5.					
2373 dichótomus *Dec.*	yellow	♚	▭	or	3	f mr	Y	China	1818.	C	r.m	Bot. reg. 409
417 CAMERA'RIA. *W.*	BASTARD-MANCHINEEL.				*Apocyneæ*		*Sp* 4—6.					
2374 latifólia *W*	broad-leaved	♀	▭	or	30	au	W	Havannah	1733.	C	r m	Bot. rep. 261
2375 Tamaquárina *Aub.*	yellow-flowered	♚	▭	or	4	o n	Y	Cayenne	1793	C	r m	Aub. gui.1 t 102
2376 dúbia *B M*	doubtful	♚	▭	or	6	my au	Or	E. Indies	1813	C	r m	Bot cab 406
2377 angustifólia *W.*	narrow-leaved	♚	▭	or	8	s	W	S. Amer	1752	C	r m	Plum. ic. t.72. f 2
†418 TABER'NÆMONTA'NA. *W*	TABERNÆMONTANA				*Apocyneæ*		*Sp* 4—34					
2378 citrifólia *W*	Citron-leaved	♀	▭	or	15	...	Y	Jamaica	1734.	C	r m	Plum.ic t 948 f.2
2379 laurifólia *W*	Laurel-leaved	♀	▭	or	13	my	Y	W Indies	1768	C	r m	Bot reg 716
2380 coronária *H K*	Rose-bay-like	♚	▭	or	4	my s	W	E. Indies	1770	C	r m	Bot mag 1865
2381 amygdalifólia *Jacq*	almond-leaved	♚	▭	or	6	my s	W	S. Amer.	1780	C	r.m	Bot reg 338
419 AMSO'NIA *Mich.*	AMSONIA				*Apocyneæ*		*Sp* 3—4					
2382 latifólia *Ph*	broad-leaved	☓	△	or	2	my jn	B	N Amer	1759.	D	co	Bot. reg 151
2383 salicifólia *Ph*	Willow-leaved	☓	△	or	2	my jn	B	N Amer	1812	D	co	Bot mag. 1873
2384 angustifólia *Ph*	hairy-stalked	☓	△	or	2	my jn	B	N Amer	1774.	D	co	Vent. choix. 29
420. CER'BERA. *W.*	CERBERA				*Apocyneæ*		*Sp* 6—10					
2385 Ahoúai *W*	oval-leaved	♀	▭	or	20	jn jl	Y	Brazil	1739	C	r m	Bot mag 737
2386 Mánghas *W.*	spear-leaved	♀	▭	or	20	s	W	India	1759	C	r m	Bot rep 655
2387 maculáta *W.*	waved-leaved	♚	▭	or	4	jn jl	W	Bourbon	1782	C	r m	Bot. rep 130
2388 ováta *Cav*	oval-leaved	♚	▭	or	3	...	Y	N Spain	...	C	r m	Cav ic 3 t. 270
2389 Thevétia *W*	linear-leaved	♀	▭	or	12	jn jl	Y	S Amer	1735	C	r m	Bot. mag 2309
2390 fruticósa *Roxb*	shrubby	♚	▭	or	4	my	R	Pegu	1819	C	r m	Bot reg 391
421 TEC'TONA *W*	TEAK-WOOD.				*Verbenaceæ*		*Sp* 1					
2391 grándis *W*	great	☤	▭	tm	100	...	W	E Indies	1777.	S	l p	Roxb. cor. 1. t. 6
422 CALDA'SIA *W en*	CALDASIA				*Verbenaceæ*		*Sp* 1					
2392 heterophýlla *W en*	various-leaved		◫	or	2	my d	B	N Spain	1813.	S	r m	Bot reg. 92
423 BUME'LIA *W*	BUMELIA				*Sapoteæ*		*Sp* 8—26.					
2393 lycioides *Ph*	Boxthorn-leav	♚		or	10	au	W	N Amer.	1758	L	s.l	Duha. arb.2. t 68
2394 ténax *W*	silvery-leaved	☤		tm	20	jl au	W	Carolina	1765	C	p.l	Jac. obs 3. t. 54



History, Use, Propagation, Culture

415 *Plumieria* So named by Tournefort, in honor of Charles Plumier of Marseilles, a Franciscan friar, who travelled into South America He is distinguished for the accuracy of his observations, and for the fidelity of his drawings, which are the only representations of many of the most curious plants of the West Indies and South America His drawings of flowers have seldom, even in these days of pictorial excellence, been equalled He was the author of Plantæ Americanæ, 1693, and other excellent works This is a fine flowering genus. "It succeeds best in a light loamy soil, and requires but little water Large cuttings taken off and laid to dry for a considerable time, may be stuck in the tan in a moderate heat, or planted in pots, and they will root freely; they must not be covered with a glass, or it will rot them To have the plants flower well, they should be kept very dry when not in a growing state, which will throw them into bloom." (*Bot Cult* 95)

416 *Strophanthus* From στρεφω, to turn or twist, and ανθος, a flower; in allusion to the manner in which the segments of the corolla are twisted together before expansion. A most beautiful genus of tropical shrubs, with bright yellow flowers more or less spotted with red They require the same treatment as Echites.

417. *Camerária.* So named by Plumier, from Joachim Camerarius, a physician and botanist of Nuremberg, who was born in 1534, and died in 1598 He published an edition of Matthiolus, in Latin and German, with new figures, and many observations, but the most celebrated man of the name was Ralph James Camerarius, a German botanist, who published in 1719, a tract, in which the first principles of the arrangement of plants by their seeds were propounded This is a fine flowering genus, of easy culture, and cuttings root freely under a hand-glass in a pot of sand

418 *Tabernæmontana* So named by Plumier, in memory of James Theodore, surnamed Tabernæmontanus, from Berg-Zabern, the place where he was born He published "Krauterbuch," and figures of plants in 1589-90, was physician to the Elector Palatine, and died in 1590 This is a genus of easy culture but little beauty. All the species root in sand under a hand glass

419. *Amsonia* So named by Clayton in his Flora Virginiana, referred to Tabernæmontana by Linnæus, now separated again These are pretty plants, which grow in any soil; and may be propagated by cuttings under a hand-glass, or dividing at the root.

420. *Cerbera.* A poetical name formed in allusion to the mythological dog Cerberus, whose bite was poisonous, as is the juice of this genus. Ahoual and Manghas are vernacular names of the countries where the spe-

2366 Leaves ovate oblong flat, Leaf stalks with two glands
2367 Leaves scattered lanceolate acute, Flowers corymbose terminal
2368 Leaves lanceolate revolute, Peduncles tuberous above
2369 Leaves lanceolate stalked obtuse
2370 Flowers always with the limb closed very sweet-scented
2371 Leaves oblong acuminate flat at edge, Cor white and yellow
2372 Leaves oblong acute, margins flat veiny, Cor. tube red, throat yellow, limb white

2373 Branches dichotomous, Leaves mucronate-acuminate, Cor. infundibuliform

2374 Leaves rounded ovate acuminate at the base transversely striated, Flowers terminal corymbose
2375 Leaves ovate oblong netted, Umbel stalked few-flowered, Flowers large yellow sweet (*C. lutea.*)
2376 Leaves ovate lanceolate wavy, Corona 10-cleft: alternate segm. shorter obtuse
2377 Leaves linear

2378 Leaves ovate, Flowers lateral in clustered umbels
2379 Leaves ovate, Peduncles few-flowered, Stamens included
2380 Leaves lanceolate ovate, Branches divaricating
2381 Leaves oval lanceolate, Stamens longer than tube of corolla

2382 Stem smoothish, Leaves oval lanceolate the upper acuminate beneath a little hairy
2383 Stem smooth, Leaves linear lanceolate acute at each end quite smooth
2384 Leaves narrow lanceolate close erect pubescent, Stem obviously pubescent

2385 Leaves ovate acute
2386 Leaves lanceolate, Nerves transverse
2387 Leaves lanceolate attenuate at each end veiny spotted, Cymes axillary branched
2388 Leaves ovate scattered subsessile, Flowers terminal about 5
2389 Leaves linear very long, Flowers subsolitary axillary, Fruit roundish
2390 Dichotomous, Leaves broad lanceolate, Corymbs terminal, Drupes obliquely cup-shaped gaping

2391 Leaves obovate scabrous very large whitish beneath

2392 The only species A pretty stove annual

2393 Prickly, Leaves lanceolate obtuse acute at base attenuate smooth
2394 Leaves obovate lanceolate beneath silky, Peduncles axillary clustered



and Miscellaneous Particulars.

cies so called are found. Thevetia is named after Andrew Thevet, a French monk, who travelled in Brasil about 1530 C Ahouai has thick succulent leaves about three inches long, and near two broad, of a lucid green, smooth, and very full of a milky juice, as is every part of the shrub The flowers are in loose bunches at the ends of the branches, and are succeeded by nuts, the kernels of which are a most deadly poison. The wood stinks abominably, and is not used even by the Indians for fuel. They put small stones into the empty nuts, string them, and fasten them about their legs when they dance.

C Manghas is a milky tree with broad lanceolate leaves a foot in length, flowers in terminal racemes, and the drupe ovate, the size of a goose's egg, inclosing two seeds resembling two large chestnuts, poisonous and emetic

C. Thevetia is an elegant shrub or small tree, with acuminate leaves, and large, specious, nodding, yellow, sweet-smelling flowers The fruit is a green drupe, containing a nut with a single kernel in it. Cuttings of all the species strike very readily in sand under a hand-glass.

421 *Tectona.* Altered by Linnæus from *Tekka*, its name in Malabar. This is a timber-tree of immense size and great durability, and is justly called the oak of the east. The trunk is erect, and the bark ash-colored, the leaves are obovate, downy underneath, and on young trees from 12 to 24 inches long, and from 8 to 16 broad. The flowers are in panicles, small, white, and fragrant. The seeds are lens-shaped in 4-celled drupes The tree abounds in the vast forests of Java and Ceylon, Malabar, Coromandel, &c, and especially in the empires of Birman and Pegu The wood has, by long experience, been found to be the most useful in Asia. It is easily worked, and at the same time both strong and durable It is considered superior to all others for ship-building. Calcutta and Madras draw all their supplies of wood for ship-building from the teak forests of Ava and Pegu Some of the finest vessels that have ever arrived in the Thames have been of teak tree, built in Bengal. The tree was introduced to the British possessions by Lord Cornwallis, and is now planted with a view to timber in the mountainous parts of Bengal. In our stoves it thrives in loam and peat, and ripened cuttings root freely in sand under a hand-glass

422 *Caldasia* A pretty stove herbaceous plant, with handsome small blue flowers. It was named by Willdenow, after the MSS. of Baron Humboldt, in honor of Joseph Caldas, a meritorious Spanish botanist, residing at Popayan in South America. It may be propagated by cuttings.

423. *Bumelia.* A name given by the Greeks to our common ash. Swartz applied the name to this West Indian

2395 salicifólia *W.*	Willow-leaved	♀	▭	tm	20	...	W	S Amer	1758.	C	p l	Cat. car. 2 t 75
2396 nígra *W*	black	♀	▭	tm	30	...	W	W. Indies	1806.	C	r.m	
2397 lanuginósa *Ph*	woolly-leaved	♣		or	6	...	W	Carolina	1806	C	r m	
2398 reclináta *Ph.*	reclinate	♣		or	3	jn	W	Carolina	1806.	C	r m	Vent. choix. 22
2399 serráta *Ph*	serrated	♣		fr	12	...	W	Missouri	1812.	C	r m	
2400 rotundifólia *Swz*	round-leaved	♣	▭	or	12	...	W	Jamaica	1823.	C	r m	

†424 CHRYSOPHYL'LUM *W* STAR-APPLE — *Sapotæ Sp* 4—14

2401 Camito *W*	common	♀	▭	fr	50	my.jn	W	W Indies	1737.	C	r.m	Jc am 51 t.37 f.1
2402 argénteum *W.*	narrow-leaved	♀	▭	fr	20	...	W	Martiniq	1758	C	r m	Jc am 53 t.38.f 1
2403 monopyrénum *Swz*	one-seeded	♀	▭	fr	30	...	Br	W Indies	1812	C	r m	Burm. amer t 69
2404 glábrum *Jacq*	smooth	♀	▭	fr	15	...	W	Martiniq	1823.	C	r.m	Jacq am t.38 f 2

425 SIDERO'XYLON *W* IRON WOOD — *Sapoteæ Sp* 1—8

2405 mérme *W.*	smooth	♣	▭	or	5	jl	W	C G. H.	1692.	L	p.l	Lm ill 2.t.120.f.1

426 JACQUINI A *W* JACQUINIA — *Sapoteæ Sp* 3—8

2406 armillàris *W*	obtuse-leaved	♣	▭	or	6	jn jl	W	W Indies	1768	C	p l	Jac amer 53 t 39
2407 aurantiaca *H K*	orange-flower'd	♣	▭	or	4	ap s	O	Sandw I	1796	C	p l	Bot mag 1639
2408 ruscifólia *W*	prickly	♣	▭	or	3	...	W	S Amer	1729.	C	p l	D elt. t 129. f 149

*427 A'CHRAS. *W* SAPOTA — *Sapoteæ Sp* 3—4

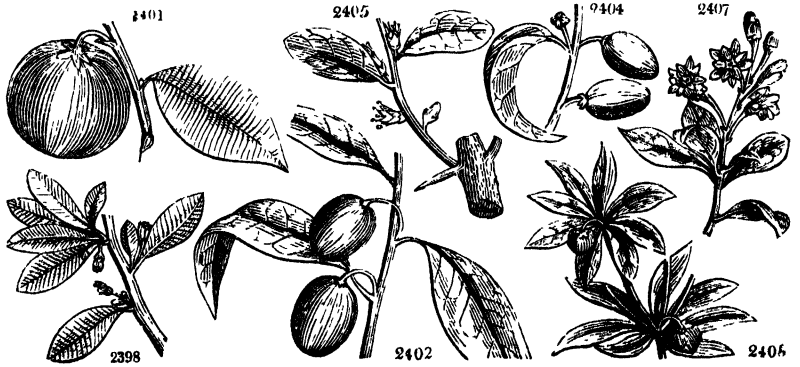
2409 mammósa *W.*	Mammee	♀	▭	fr	40	...	W	S Amer	1739.	C	r m	Jac am.t.182 f 19
2410 Sapota *W*	common	♀	▭	fr	30	...	W	S Amer	1731.	C	r m	Jac am 57 t 41
2411 Zapotilla	Nasceberry-tree	♀	▭	fr	10	...	W	S. Amer	1731	C	l.p	Jac am.57 t 41 b

†*428. COR'DIA *W* CORDIA — *Cordaceæ Sp* 9—60

2412 Myxa *W*	smooth-leaved	♀	▭	or	30	...	W	E. Indies	1640	C	p l	Rhed.mal 4. t 37
2413 monoica *Roxb*	Birch-leaved	♀	▭	or	15	mr ap	W	E Indies	1799	C	p l	Roxb cor 1 t.58
2414 Sebestena *W*	rough-leaved	♀	▨	or	15	jn au	O	W Indies	1728	C	p l	Bot mag 794
2415 Geraschánthus *W*	Spanish-elm	♀	▭	tm	30	my	Pk	W Indies	1789.	C	p l	Bro jam t 29 f 3
2416 macrophylla *W*	broad-leaved	♀	▭	tm	60	...	W	W Indies	1752	C	p l	Sl jam 2 t 221 f 1
2417 Collocóca *W*	long-leaved	♀	▭	tm	30	...	G	Jamaica	1759	C	p l	Sl jam.2 t 203 f 2
2418 nodósa *Lam*	hairy	♣	▭	or	6	jn jl	W	Guiana	1803	C	p l	Aub. guia.1. t.86
2419 elliptica *Sw*	elliptic	♀	▭	tm	50	...	W	W. Indies	1804.	C	s l	
§2420 Patagónula *W*	spear-leaved	♀	▭	tm	20	jn au	W	S. Amer	1732	C	p l	Lam. ill t 96

429 VARRONIA *W* VARRONIA — *Corduceæ Sp.* 4—30

2421 lineáta *W*	round-spiked	♣	▭	or	4	...	W	W Indies	1793	C	s l	Bro jam t 13 f 2
2422 mirabiloides *W*	jointed	♀	▭	or	12	s	W	Hispaniola	1798	C	s l	Jacq am 41. t.33



History, Use, Propagation, Culture,

genus These are plants with good foliage, but no beauty of blossom Some of the species are robust enough to bear our winters in the open air, but they are rather tender, and require to be placed in a sheltered situation or against a warm wall, and covered with mats during winter Cuttings root in sand under a hand-glass The stove species are low West Indian trees, and known there under the name of Bully tree They thrive well in loamy soil, or loam and peat, and cuttings will root, but, according to Sweet, "not freely, in sand under a hand-glass," being well ripened before they are taken off.

424 *Chrysophyllum* From χρυσος, gold, and φυλλον, a leaf, all the species having their leaves covered on the under surface with dense shining hairs of a bright yellow or white color C cainito has large elegant leaves, ferruginous underneath, it forms a tree of considerable size, with slender flexible branches The leaves and fruit, like the Achras, to which the tree is very nearly allied, are full of milk, which the fruit retains even in the most perfect state This milk is rough and astringent before the fruit ripens, but when it grows to full perfection, it becomes sweet and gelatinous, with an agreeable clamminess Being mixed with a small quantity of orange juice, it binds the body extremely The tree is of general and easy culture in Jamaica, and is here grown chiefly for its foliage Sweet says, ripened shoots of all the species taken off and planted in sand, will root under a hand-glass with a strong moist heat

425 *Siderozylon* From σιδηρος, iron, and ξυλον, wood, in allusion to the hardness of the wood. The specific name melanophleum (μελας φλοιος) means black-bark The wood of this tree is very close and hard, and so heavy as to sink in water It grows well in loam and peat, and cuttings somewhat ripened may be struck in sand under a hand-glass

426. *Jacquinia* So named by Linnæus, in honor of James Nic. Jos de Jacquin, professor of botany at Vienna, born at Leyden, in 1727, author of many splendid works A noble genus, well devoted to perpetuating the memory of one of the first of botanists The name of one of the species armillaris, (from *armilla*, a garland,) has been applied in consequence of the shoots being used by women in America as garlands. This beautiful genus requires some care in propagation, but is of easy culture in the bark-stove, in loam and peat, and with a moist heat. "Cuttings," Sweet observes, "will strike root with ease in sand, under a hand-glass, in heat."

427. *Achras* The Greek name of the wild pear The root of the word has been thought to have been found in *ac*, the Celtic for a point, in allusion to the many stout spines with which the tree is covered. The word Sapota, applied to one of the species, is derived from its Mexican name Cochit-zapotl This is a genus of fruit-bearing timber-trees, chiefly natives of the West Indies A mammosa, or American marmalade, grows in America to the height of 35 or 40 feet, having a straight trunk covered with an ash-colored bark The branches form a regular head, the leaves a foot in length, and near three inches broad in the middle The flowers are

2395 Leaves lanceolate ovate acuminate, Peduncles clustered axillary and lateral
2396 Leaves terminal oblong lanceolate smooth wavy at edge, Branches lax
2397 Spiny, Branches spreading pubescent, Leaves oval lanceolate smooth above beneath woolly
2398 Spiny bushy loosely reclinate, Sterile branches divaricate divided, Leaves small obovate smooth
2399 Unarmed, Leaves evergreen oblong lanceolate acute at each end prickly serrate, Berries large
2400 Leaves rounded edged veiny coriaceous smooth on both sides

2401 Leaves ovate with parallel veins beneath tomentose shining
2402 Leaves falcate ovate beneath downy shining
2403 Leaves oblong acuminate beneath downy gold color, Fruit ovate 1-seeded
2404 Leaves ovate oblong smooth on both sides, Fruit elliptical smooth

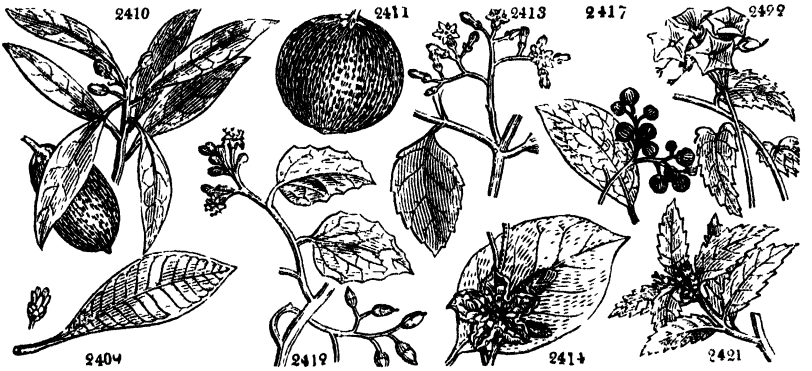
2405 Leaves oblong ovate obtuse, Flowers lateral and axillary

2406 Leaves wedge-shaped, Branches at the ramifications nodose whorled
2407 Leaves obovate lanceolate acuminate pungent
2408 Leaves lanceolate acuminate

2409 Flowers solitary, Leaves cuneiform lanceolate
2410 Flowers solitary, Leaves lanceolate ovate
2411 Brachiate diffuse, Fruit rounded with the mucro of the hilum shorter

2412 Leaves ovate smooth above, Corymbs lateral, Calyxes 10-striated
2413 Leaves roundish ovate toothed veiny scabrous, Corymbs axillary monœcious
2414 Leaves ovate subcrenate subrepand rough, Cal cylindrical shorter than the tube
2415 Leaves lanceolate ovate rough, Panicle terminal, Cal tomentose 10-striated
2416 Leaves ovate villous a foot and half long
2417 Leaves oblong ovate entire, Flowers corymbose, Cal. downy inside
2418 Leaves in 3s ovate oblong acuminate, Branches nodose hispid, Cal bearded
2419 Leaves oblong attenuated at the end entire coriaceous, Racemes comp diffuse
2420 Leaves oblong lanceolate smooth on each side the upper serrate, Branches pilose

2421 Leaves lanceolate linear acuminate hoary beneath, Pedunc lateral axillary naked
2422 Leaves ovate on long stalks, Stalk above the base bent inwards and jointed, Cor hypocrateriform



and Miscellaneous Particulars

cream-colored, and are succeeded by large oval or top-shaped fruit, covered with a brownish skin, under which is a thick pulp of a russet-color, very luscious, called natural marmalade, from its likeness to marmalade of quinces It is commonly planted in gardens for the fruit in Jamaica, Barbadoes, Cuba, and most of the West India islands In this country it has been hitherto grown only as a part of botanic collections, but some attempts have been lately made to cultivate it as a stove fruit, and we have no doubt they will be attended with success "Cuttings root readily in a pot of sand plunged in heat, under a common hand-glass The cuttings should be taken off as near the stem of the plant as possible, not being so apt to rot as when cut off in the middle of the shoot. No leaves should be taken off or shortened above the sand" (*Sweet*)

A sapota is a large, tall, straight tree, without knots or branches, for twenty feet or more The head spreads into many small branches, the bark is dark-grey and full of cracks, the fruit is bigger than a quince, round, and covered with a thick grey rind, yellow when ripe The flesh is as yellow as a carrot, with two stones the size of almonds, of a rich smell and taste The variety called the Naseberry has fruit as big as a bergamot pear, and similarly shaped When it is green or first gathered, the juice is white and clammy, and will stick like glue, then the fruit is hard, but when it has been gathered two or three days, it grows soft and juicy, and then the juice is clear as spring-water and very sweet, in the midst of the fruit are two or three black stones or seeds, about the bigness of a pompion seed. It is esteemed an excellent fruit in the West Indies. In our stoves it is propagated like the mammee tree.

428 *Cordia*. So named by Plumier after E. Cordus, a German botanist of the 16th century Valerius Cordus, his son, was born in 1515, and died in 1544. He left a History of Plants, and was the author of some Observations upon Dioscorides. Sebestena, the name of a species, is *sebestân* in Persian Myxa is derived from μυξα, a viscidity, on account of its viscid mucous juice, which is used for glue in the east. Geraschanthus, from γεραινω, to grow old, and ανθος, a flower, is in allusion to the long duration of the flowers, collococca, (κολλα, glue, and κοκκος, glutinous fruit) in allusion to the fruit This is not a delicate genus, but flowers freely The timber of C myxa is tough and solid, and used in the east for procuring fire by friction The leaves bruised with those of Datura metel are applied to the forehead in the headach, children eat the fruit, from which also a glue is prepared. C sebestena is very ornamental, on account of its large, tubular, scarlet flowers, the most beautiful and agreeable, says Browne, of any I have seen in America A small piece of the wood put on a pan of lighted coals, will perfume a whole house From the juice of the leaves, with that of a species of fig, is prepared the fine red color with which they dye their clothes in Otaheite. Poultry in the West Indies feed on the berries of C collococca, which is there called the clammy cherry, or Turkey berry-tree All the species grow readily in loam and peat, and cuttings strike in sand, under a glass, in heat.

429. *Varronia*. Named after Marcus Terentius Varro, a most learned Roman, born 116 years before Christ,

2423 martinicénsis *W*	Martinique		or	6	au s	W	Martinico	1795	C	s.l	Jacq. am.41. t.32
2424 angustifólia *W.*	narrow-leaved		or	15	...	W	S. Cruz	1808.	C	s.l	
430. EHRE'TIA. *W*	EHRETIA				*Cordiaceæ.*	*Sp* 2—20.					
2425 tinifólia *W*	Tinus-leaved		tm	30	jn jl	W	Jamaica	1734.	C	p.l	Trew. ehr.4. t.25
2426 áspera *Roxb.*	rough-leaved		or	10	...	W	E. Indies	1795.	C	p.l	Roxb. cor. 1. t.55
431 BOURRE'RIA *Gært*	BOURRERIA				*Cordiaceæ*	*Sp* 2.					
2427 succulénta *Jac.*	fleshy-fruited		tm	45	...	W	W Indies	1758.	C	s.l	Ja obs 2.p.2. t.26
2428 exsúcca *Jac.*	dry-fruited		or	15	...	W	W Indies	1804.	C	s.l	Jac.am.t.173.f 17
432. ELLI'SIA. *W.*	ELLISIA				*Hydrophylleæ.*	*Sp.* 1—2.					
2429 Nycteléa *W.*	cut-leaved		cu	2	jl.au	W	Virginia	1755.	S	co	Eh.n.cu.2. t.7.f.1
433. SERSALI'SIA. *R Br.*	SERSALISIA.				*Sapoteæ*	*Sp* 1—2.					
2430 sericea *R Br*	silky-leaved		or	6	...	W	N Holl.	1772.	C	p l	
434. MANGLILLA *Juss*	MANGLILLA.				*Sapoteæ*	*Sp* 1—11					
2431 milleriána *Pers*	Miller's		tm	30	jn jl	W	C G. H.	...	C	co	Bot. mag 1858
†435 ARDI'SIA. *W.*	ARDISIA				*Myrsineæ*	*Sp* 13—28					
2432 acumináta *W.*	acuminated		or	7	jl au		Guiana	1803	C	p l	Bot. mag 1678
2433 solanácea *Roxb.*	Nightsh.-like		or	10	jn s	R	E. Indies	1798	S	p l	Bot mag 1677
2434 crenuláta *P S.*	crenulated		or	10	jn.s	R	W. Indies	1809	S	p l	Vent. choix. t. 5
2435 laterifióra *W*	side-flowering		or	6	...	W	W Indies	1793	S	p l	
2436 littorális *B R*	sea-side		or	4	jl au	R	E. Indies	1809.	C	p l	Bot rep 630
2437 élegans *And*	elegant		or	10	jl au	R	E. Indies	1809	S	p l	Bot. rep 49
2438 coloráta *Lk*	red-flowered		or	10	jl.au	R	E. Indies	1816	C	s.l	Bot. cab. 465
2439 excélsa *W*	Laurel-leaved		or	30	jl au	Pk	Madeira	1784	C	s l	Gært.sem 1 t 77
2440 paniculáta *Roxb*	panicled		or	12	jl au	R	E. Indies	1818	C	s l	Bot. reg. 638
2441 pyramidális *Rth*	pyramidal		tm	25	jl au	R	SantaCruz	1818	C	s l	Bot. cab 448
2442 lentiginósa *Ker*	dusty		or	6	ja d	W	China	1814	C	s l	Bot. reg 533
2443 punctáta *Lindl*	dotted		or	10	jn au	W	China	1823.	C	s.l	Bot. reg 827
2444 coriácea *Swz*	coriaceous		or	7	...	S	Antilles	1824.	C	s l	
436. ARDUI'NA *W*	ARDUINA				*Apocyneæ*	*Sp* 1					
2445 bispinósa *W*	two-spined		cu	2	mr au	W	C G H	1760	C	p l	Bot. cab. 387
437 STRYCHI'NOS *W*	STRYCHNOS.				*Apocyneæ*	*Sp* 2—9					
2446 Nux-vómica *W*	Poison-nut		p	15	...	G w	E. Indies	1778	S	p l	Roxb cor. 1 t. 4
2447 potatórum *W*	Clearing-nut		m	15	...	W	E. Indies	1794.	S	p.l	Roxb. cor 1. t. 5
438 CARIS'SA *W*	CARISSA.				*Apocyneæ*	*Sp* 2—10					
2448 Carándas *W*	Jasmine-flow		fr	15	jl	W	E. Indies	1790	C	s p	Bot. cab 663
2449 spinárum *W*	spiny		tm	20	au d	W	E Indies	1809.	C	s p	Bot. cab 162
439 PÆDE'RIA *W*	PÆDERIA				*Rubiaceæ*	*Sp* 1—3.					
2450 fœ'tida *W*	stinking		or	6	.	Pu	China	1806	C	l p	Icon Kæmpf 9



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and lived a hundred years The work he left upon the agriculture of his time is invaluable. In French a species is called *Monjoli*, (my beauty) on account of its beauty

430 *Ehretia* So named by Linnæus in honor of D G Ehret, a famous French botanist and draughtsman He made all the drawings for Patrick Browne's History of Jamaica, and a large collection of his drawings is now extant in the Banksian collection Large trees of the Tropics, with handsome foliage and white flowers, which are not often produced in Europe

431 *Bourreria* A genus divided from Ehretia, with which it nearly agrees It was named after one Bourer, an apothecary at Nuremberg

432 *Ellisia* Joseph Ellis was an English naturalist, fellow of the London Royal Society, and correspondent of Linnæus He published, besides his Natural History of Corallines, many papers in the Transactions of the Royal Society

433 *Sersalisia* Named after John Baptiste Sersalis, a Neapolitan clergyman, much praised by Fabius Columna Culture the same as for Sideroxylon

434 *Manglilla* This genus is called in Dombry's Manuscript Papers, from which M. de Jussieu obtained his knowledge of it, Manglille de Perou The original species was a Peruvian shrub, with alternate leaves and bunches of numerous axillary flowers

435 *Ardisia* A name derived from ἀεδὶς, a point, on account of the acute segments of the corolla. An ornamental genus of plants, much valued by collectors for the beauty of their foliage, flowers, and berries. They are of easy culture cuttings strike root freely in a pot of sand, plunged in a moist heat, under a hand-glass

436 *Arduina.* In honor of Pietro Arduini, curator of the economical garden of Padua. A genus scarcely distinct from Carissa. It is a pretty little plant not unlike the box, easily propagated by cuttings under a bell-glass in sand.

437 *Strychnos.* A name given by the Greeks to the Solanum The root of the name has been found in the verb στρωω, to strew, to throw down, the property of the original and modern plants being narcotic S. nux-vomica is a middling sized tree with a crooked trunk and smooth ash-colored bark the leaves round, shining, smooth,

2423 Leaves broad ovate serrate rugose, Spikes terminal, Flowers clustered, Cal large inflated
2424 Leaves linear toothed obtuse revolute at edge rough above tomentose beneath, Spikes linear oblong

2425 Leaves oblong ovate entire smooth, Flowers panicled
2426 Leaves ovate roughish, Flowers corymbose spiked 1-sided

2427 Leaves ovate entire smooth, Flowers corymbose, Cal. smooth
2428 Leaves ovate very smooth reflexed at edge, Berry juiceless 4-cornered

2429 The only species, resembling a Hydrophyllum

2430 Leaves ovate obtuse downy beneath, Cor. villous outside, Barren filaments lanceolate

2431 Leaves oblong acute at each end, Flowers solitary lateral

2432 Panicles axillary and terminal, Leaves oblong acuminate narrowed at base
2432 Corymbs axillary 3-parted, Leaves oblong narrowed towards each end
2434 Panicles terminal, Leaves lanceolate ovate repand crenate acuminate attenuated at base
2435 Racemes lateral axillary compound, Leaves oblong acuminate entire
2436 Corymbs axillary simple, Leaves entire ovate elliptical coriaceous
2437 Leaves oblong entire coriaceous shining, Pan terminal, Sepals rounded, Cor thrice as long as cal
2438 Leaves oblong entire coriaceous shining, Pan terminal, Sepals round, Cor twice as long as calyx
2439 Racemes axillary simple, Leaves obovate at the edge cartilaginous serrated
2440 Leaves wedge-shaped oblong nearly sessile entire smooth reflexed, Panicles decompound
2441 Raceme terminal pyramidal, Pedunc altern umbelliferous, Leaves oblong obtuse smooth entire
2442 Leaves lanc crenate, Corymbs compound, Flowers spotted
2443 Leaves lanceolate coriaceous sinuate narrowed towards the base, Cor campan dotted. Lobes obtuse
2444 Flowers panicled, Leaves oblong entire veinless coriaceous

2445 Leaves cordate ovate mucronate subsessile, Spines bifid at end

2446 Unarmed, Leaves ovate stalked, Cymes subterminal
2447 Leaves opp ovate acute 5-nerved veiny, Cymes axillary

2448 Leaves ovate mucronate netted veiny, Segm of cor lanceolate
2449 Leaves ovate acute veiny, Segments of cor oblong

2450 Leaves cordate lanceolate, panicles short opp few-flowered, Bractes very small



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entire; and the berry the size of a pretty large apple The wood is hard, durable, and very bitter. The seeds, which form the officinal nux-vomica, are employed in the distillation of country spirits, to render them more intoxicating The pulp of the fruit seems perfectly innocent, being eaten greedily by many sorts of birds The seed consists chiefly of a gummy matter with a little resin, the latter intensely bitter. It is reckoned amongst the most powerful poisons of the narcotic kind. It proves fatal to dogs in a very short time, and to most other quadruped vermin, and even some birds, as crows and ducks From dissections both of the human subject and of dogs that have been poisoned by it, no injury appears done to the stomach or intestines, which proves that it acts upon the nervous system, and destroys life by the virulence of its narcotic influence

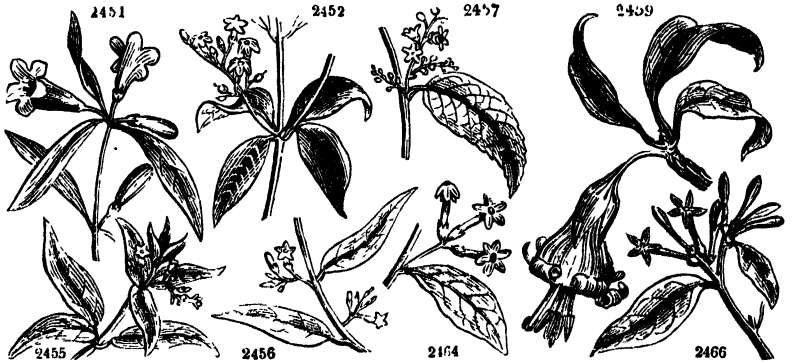
S. potatorum is a larger tree than the other The pulp of the fruit when ripe is eaten by the natives: the ripe seeds are dried and sold in every market of the East Indies to clear muddy water. A precious quality in countries where the water is rarely of a good quality Hence the English name of clearing-nuts. The natives never drink clear well-water, if they can get pond or river water, which is always more or less impure. One of the seeds is rubbed very hard for a minute or two round the inside of the vessel containing the water, which is generally an unglazed earthen one, and the water left to settle, in a very short time the impurities fall to the bottom, leaving the water clear, and perfectly wholesome These nuts are constantly carried about by the more provident part of our officers and soldiers in time of war, to enable them to purify their water, they are easier to be had than alum, and are probably less hurtful to the constitution

438 *Carissa* A word of no known meaning. Carandas is a slight alteration of Caraunda, the Bengalese name of the tree. C. Carandas is a small tree, with dichotomous branches, and entire, glossy, ovate leaves, flowers like those of Jasminum grandiflorum, and berries black when ripe, eatable, and of a sweet acid flavor. Currant-jelly is made of them in the East Indies.

C spinarum is a dioecous plant with horizontal branches, coriaceous glossy leaves, and terminal peduncles of five or six small flowers Neither of the species require much water, and the pots should be well drained to prevent their getting sodden Cuttings strike root freely under a bell-glass in sand plunged in heat.

439 *Pæderia.* From *pædor*, stink, in allusion to the fœtid smell of the flowers. A climbing smooth shrub, with opposite stalked entire leaves, and dull purple flowers.

440. GELSE'MIUM. *J.*	GELSEMIUM.				*Apocyneæ.*	*Sp.* 1.						
2451 sempervirens *H K.*	evergreen		or	6	jn.jl	Y	N. Amer.	1640.	C	s.p	Cat. car. 1. t. 58	
441 RAUWOL'FIA *W.*	RAUWOLFIA				*Apocyneæ*	*Sp* 4—12.						
2452 nitida *W*	shining		cu	12	jn.s	W	S Amer	1752.	C	s.p	Bot. cab. 339	
2453 canéscens *W*	hoary		cu	7	...	Pk	Jamaica	1739.	C	l.p	Plum ic.t.236.f.2	
2454 tomentósa *W*	downy		cu	3	ap o	W	W Indies	1823.	C	l p		
2455 ternifólia *Kunth*	three-leaved		cu	3	my	W	W. Indies	1823.	C	l p	Bot. mag. 2440	
442. VALLE'SIA *Fl per*	VALLESIA				.....	*Sp* 1—2						
2456 glábra *Lk.*	smooth		or	3	my jn	W	N Spain	1822	C	r.m	Cav. ic. 3. t. 297	
***443. BŒOBO'TRYS.** *Vahl.*	BŒOBOTRYS.				*Rhamneæ.*	*Sp* 1						
§2457 indica *Roxb.*	Indian		or	3	n	W	E. Indies	1817.	C	co	Bot. mag. 2092	
†444 SOLAN'DRA. *W.*	SOLANDRA.				*Solaneæ.*	*Sp.* 2—3						
2458 grandiflóra *W*	great-flowered		or	15	mr	Pa.Y	Jamaica	1781	C	r m	Jac.schœn.1 t.45	
2459 viridiflóra *B M*	green		or	3	my.jl	G	S Amer	1815.	C	r m	Bot. mag. 1948	
445. CES'TRUM *W*	CESTRUM				*Solaneæ*	*Sp* 19—50						
2460 laurifólium *W*	Laurel-leaved		p	7	my au	W	W. Indies	1691	C	p.l	Smith spic. 2. t 2	
2461 macrophýllum *Vent*	large-leaved		p	7	my au	W	W Indies	1812.	C	p.l	Vent. choix 18	
2462 fœtidissimum *W en*	stinking		p	10	my.au	Y	E. Indies	..	C	p l	Jac.schœ 3 t 339	
2463 noctúrnum *W*	night-smelling		p	7	n	W	E Indies	1732.	C	p l	Di.elt t 153 f 185	
2464 Párqui *W*	Willow-leaved		p	7	jn jl	Pa Y	Chili	1787	C	p l	Bot. mag. 1770	
2465 auriculátum *W*	ear-leaved		p	12	jn jl	G	Peru	1774.	C	p l	L'Her s n.1.t.35	
2466 vespertinum *W*	cluster-flower'd		p	12	my jl	G	W Indies	1759	C	p.l	Jac schœ.3 t.328	
2467 fastigiátum *Jacq.*	Honeysuckle		p	4	n	W	W Indies	...	C	p l	Bot. mag 1729	
2468 diúrnum *W.*	day-smelling		p	10	n	W	W Indies	1732.	C	p l	Di.elt t 154.f.186	
2469 venenátum *W*	poisonous		p	7	f.ap	W	C G H	1787.	S	p l		
2470 salicifólium *Jacq*	sallow-leaved		p	5	ap jn	G w	Caraccas	...	C	l.p	Jac schœ 3. t 326	
2471 tomentósum *W*	downy		p	6	jn.jl	Y	S Amer	1790.	C	p l		
2472 hirsútum *Jacq*	hairy		p	8	jn jl	G	.....	1818	C	p l	Jac schœ 3. t 324	
2473 pendulinum *Jacq*	pendulous		p	6	jn jl	G w	Caraccas	1824	C	p l	Jac. schœ.3.t.327	
2474 odontospérmum *Jac*	tooth-seeded		p	6	jl au	W	W Indies	1793	C	p l		
2475 tinctórium *Jacq*	dyer's		dy	4	ap jn	W	Caraccas	1823	C	p l	Jac sch 3. t 332	
2476 undulátum *Fl per*	wavy		p	15	...	Y	Peru	1822.	C	p l	Fl per 2 t 155	
2477 cauliflórum *Jacq*	stem-flowering		p	4	my jn	W	.....	1821	C	p l	Jacq sch. 3. t.325	
2478 citrifólium *Retz.*	lemon-leaved		p	6	jn jl	Y	.....	1820	C	p l		
446 A'TROPA. *W*	ATROPA				*Solaneæ*	*Sp* 4—14						
2479 Belladónna *W*	Deadly-Nights		p	5	jn jl	V	Britain	rub	R	co	Eng bot. 592	
2480 frutéscens *W*	shrubby		p	5	ja mr	Y	Spain	1737	C	s l	Cav ic. 2 t. 102	
2481 aristáta *Poir*	bearded		p	5	...	Y	Canaries	1779	C	s l		
2482 arboréscens *L*	tree		p	15	jn au	W	Jamaica	1733	C	s l	Plum ic 46. f 1	
447 MANDRAGO'RA *W en.*	MANDRAKE				*Solaneæ*	*Sp* 1						
2483 officinális *W. en*	officinal		p	3	mr ap	W	Levant	1548	R	co	Bull. herb t 145	



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440 *Gelsemium* One of the ancient names of the jasmine A beautiful climbing evergreen shrub, rather too delicate to bear the cold of our winters, but with a little protection it produces in abundance its charming yellow flowers of delicious fragrance

441 *Rauwolfia* So named by Plumier, in honor of Leonhard Rauwolf, physican at Augsburg, who travelled through Palestine and other countries of the east, in 1755.5 His travels were translated into English, under the revision of Mr Ray, and with additions by him The species abound in a milky juice, which is considered more or less of a deleterious nature They produce berries about the size and color of those of the privet. Cuttings root in sand under a hand-glass

442 *Vallesia* In honor of Fr Vallesio, principal physician to Philip II, king of Spain. He wrote upon the plants of holy writ. Small Peruvian shrubs

443 *Bœobotrys* From βαιος, small, and βοτρυς, a bunch, the flowers growing in little bunches. An elegant shrub with white flowers, produced freely from the axillæ of the leaves

444. *Solandra* In honor of the celebrated and excellent Daniel Solander, whose botanical merits will never be forgotten in this country He accompanied Sir Joseph Banks in his voyage with Captain Cook, and the information affbrded by his manuscript notes made at that time has not yet been exhausted. The species are very beautiful, and remarkable for the extraordinary size of their flowers Sweet observes, "if allowed plenty of room and moisture, they grow very rapidly, but produce no flowers The best way is to plant them in a loamy soil, and allow them to grow fast at first, till they have made a great many shoots, then keep them very dry till their leaves drop off, and they will produce plenty of flowers. Cuttings taken off and stuck in a pot of mould, will root without any further care The best way to have plants flower young, is to take the cuttings from the flowering shoots" (*Bot Cult* 107)

445 *Cestrum.* A name given by the Greeks to the Betony, but having no relation whatever to the plant which bears the name now *Cestreau*, Fr. This is a genus of easy cultivation, but of little beauty. The flowers are all white, and in some cases sweet-scented, the fruit of all poisonous

446 *Atropa* A mythological name Atropos was one of the Fates, and it was her especial duty to cut the thread of human life. The fruit of this genus is well adapted to fulfilling her office. A belladonna (fine lady) has

2451 Scandent quite smooth, Leaves lanceolate, Flowers axillary subsolitary

2452 Leaves 3 or 4 together lanceolate acuminate shining, Flowers terminal
2453 Leaves 4 together oblong ovate acuminate pubescent, Flowers terminal and axillary
2454 Leaves 4 together oblong narrowed both ways tomentose, Flowers terminal and axillary
2455 Leaves 3 together oblong acuminate smooth, Flowers between the petioles corymbose

2456 Leaves lanceolate cymbiform incurved at end

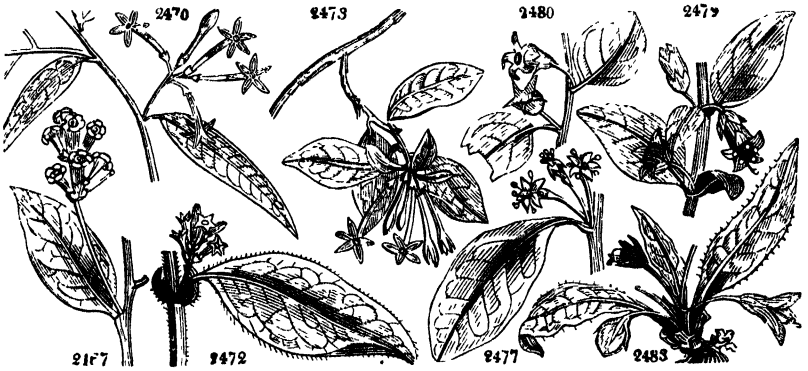
2457 Leaves oblong ovate acuminate coarsely serrated

2458 Leaves smoothish stalked, Anthers of the same shape
2459 Flowers stalked, Segm. of flower long acuminate revolute

2460 Filaments toothed or naked, Leaves elliptical coriaceous shining, Flowers fascicled stalked
2461 Filam. toothed, Leaves ovate oblong acuminate smooth, Flowers fascicled sessile
2462 Filam naked, Segm of cor emarginate, Flowers racemose, Leaves ovate and lanceolate
2463 Filam. toothed, Peduncles racemose as long as leaves
2464 Filam toothed or naked, Flower-bearing stem panicled, Stipules linear
2465 Filam naked, Stipules amplexicaule lunate, Leaves ovate, Flowers panicled terminal
2466 Filam naked shorter than throat of cor Flowers aggreg sessile terminal and lateral, Leaves elliptical
2467 Filam naked, Pedunc elong as long as leaves spiked at end, Leaves oblong, Stip elliptical
2468 Filam naked, Segm of cor rounded reflexed, Leaves lanceolate
2469 Leaves lanceolate oblong coriaceous, Flowers sessile
2470 Filam toothed, Flowers racemose, Leaves linear lanceolate
2471 Flowers clustered sessile terminal, Branches leaves and calyxes downy
2472 Filam toothletted, Spikes axillary longer than leafstalks, Leaves obl. pub. on both sides, Stip falcate
2473 Filam. naked the length of the tube of the corolla, Flowers aggreg sessile terminal, Leaves elliptical
2474 Filam naked, Leaves lanceolate, Racemes short axillary and terminal, Cor revolute
2475 Filam naked, Leaves lanc ovate, Racemes axillary and terminal, Flowers pedicellate, Cor. acum. reflex
2476 Filam toothed, Leaves ovate acute wavy, Pedunc axillary and terminal few flowered
2477 Filam naked exserted, Flowers stalked clustered, Cor campanulate, Leaves elliptical
2478 Leaves large ovate acute entire shining naked on both sides coriaceous nerved, Petioles black shining

2479 Stem herbaceous, Leaves ovate entire
2480 Stem shrubby, Peduncles clustered, Leaves cordate ovate obtuse
2481 Stem shrubby, Leaves oblong entire smooth, Branches downy, Sepals aristate
2482 Stem shrubby, Peduncles clustered, Cor revolute, Leaves oblong

2483 The only species



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its specific name, according to some, from its being used as a wash among the ladies, to take off pimples or other excrescences from the skin, or, according to others, from its quality of representing phantasms of beautiful women to the disturbed imagination The inspissated juice of the berries is used in the form of extract for anointing the eyelids in some opthalmic complaints. Its effect in dilating the pupil is quite remarkable It has branching stems with the root leaves often a foot long and five inches broad, and the whole plant is more or less tinged with purple The flowers are void of scent, the berries are larger than cherries, at first green, but when ripe of a beautiful shining black color, full of purple juice, with roundish dotted channelled seeds The whole plant, and especially the berries, is poisonous Buchanan relates the destruction of the army of Sweno the Dane, when he invaded Scotland, by the berries of this plant, which were mixed with the drink which the Scots, according to truce, were to supply the Danes with The Danes became inebriated, and the faithless Scots fell on them in their sleep Dr Milne (*Indigenous Botany*) remarks, that nature has been more parsimonious in her warnings with respect to this plant, than to others of the same natural family Neither the smell nor the taste is offensive, and if the color of the flowers proves in some degree a repellant, that of the fruit, on the other hand, is in an equal degree, at least, attractive and inviting

447 *Mandragora* From *μανδρα*, something relating to cattle, and *αγαυης*, hurtful · dangerous to cattle It is a venomous plant, and was an important engine in the days of medical charlatanry, from the roots being supposed to bear a resemblance to the human form In old herbals the figures display the male mandrake with a long beard, and the female with a prolix head of hair. Miller says, "mountebanks carry about fictitious images, shaped from roots of bryony and other plants, cut into form or forced to grow through moulds of earthenware, as mandrake roots" Happily such mountebanks have ceased to exist in Britain On the continent they are still common, and Box tells us (in 1810), that by means of a few cuts with a knife, they add the image of the exterior organs of generation, male or female, to mandrake roots, and then sell them to ensure boys or girls to pregnant women, procure happy births, &c We have ourselves seen them exposed by mountebanks in sea-port towns of France For an ingeniously indelicate figure of a mandrake root, see the Flora Græca, the plates for which have been all selected by Sir James Smith The plant is of easy culture, but is the better for the protection of a frame or shelter of a south wall during winter.

448. PHY'SALIS. *W.* WINTER CHERRY. *Solanæ. Sp.* 18—37.

2484 somnífera *W.*	clustered	w	2	jl au	G.Y	Mexico	1796.	C	co	Cav. ic. 2. t. 103
2485 flexuósa *W.*	flexuose	w	2	jl au	G Y	E. Indies	1759.	C	co	Rhed. mal. 4. t 55
2486 curassávica *W.*	Curaçao	w	1½	jn.s	St.Y	S. Amer.	1699.	D	co	Plu.alm.t.111 f.5
2487 viscósa *W*	clammy	w	2	jl	St.Y	America	1732.	D	co	Jac. vind.2. t.136
2488 pensylvánica *W.*	Pensylvanian	w	1	jl.s	Y	N Amer	1726.	D	p.l	
2489 Alkekéngi *W.*	common	or	1	jl.s	W	S Europe	1548.	D	s.l	
2490 peruviána *W.*	eatable	fr	1½	ap o	W	S. Amer	1772	S	s l	Bot. mag 1068
2491 pubéscens *W.*	downy	w	2	jl.au	Y	America	1640.	S	s l	Feuill. it. 3 t. 1
2492 angulàta *W*	angular-branch	w	2	jn s	W	India	1732	S	s.l	D elt.13 t 12.f.12
2493 chenopodiifólia *W*	Goose-foot-lvd.	w	2	jl au	Y	Peru	1798	S	s l	
2494 barbadénsis *W*	Barbadoes	w	2	jl au	Pa Y	W Indies	1798.	S	s.l	Jac ic. 1. t 39
2495 minima *W.*	small	w	1½	jl au	Pa. Y	E. Indies	1759.	S	s l	Rhed ma. 10. t 71
2496 pruinósa *W.*	hairy-annual	w	1	jl au	Pa Y	America	1726.	S	s l	Dill.elt. 10. t. 9. f. 9
2497 prostráta *W*	trailing	w	1	jl au	L.B	Peru	1782	S	s p	Bot. rep. 75
2498 tuberósa *W. E*	tuberous	w	2	jl au	W	.....	1815.	D	s p	
2499 parviflóra *W E.*	small-flowered	w	1½	jl au	Y	.....	1820	S	s.p	
2500 dúbia *Lk*	doubtful	w	2	jl au	Y	Brazil	1821	S	s p	
2501 fœtidissima *Lag*	stinking	w	2	jl au	Y	N Spain	1820.	S	s.p	

449. SA'RACHA *Fl per* SARACHA. *Solanæ. Sp* 2.

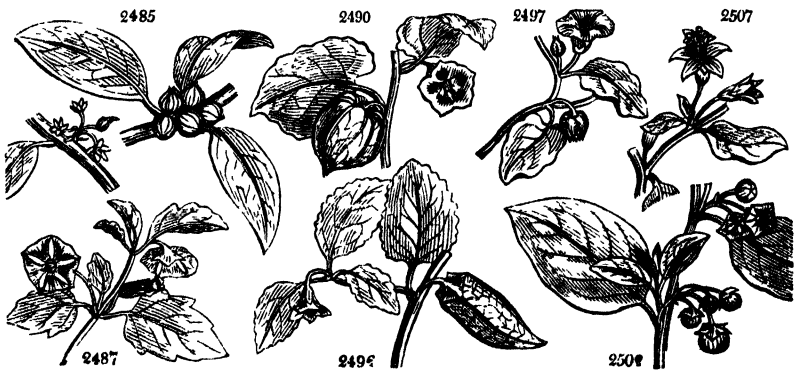
2502 procúmbens *F. p*	procumbent	or	3	n jl	Pa.Y	Peru	1822	D	co	Fl. per 2 t 180
2503 umbellàta *Jacq*	umbelled	or	4	jn jl	Pa Y	Peru	1822.	D	co	

450. LY'CIUM *W.* BOX-THORN *Solanæ Sp* 12—28.

2504 áfrum *W*	African	or	10	jn jl	V	C G H	1712	C	p l	Bot. reg. 354
2505 rígidum *W*	rigid	or	4	ap my	V	C G H	1795	C	p l	Tre ehr t 24 f 1
2506 ruthénicum *W.*	Russian	or	6	...	Pk	Siberia	1804	C	p l	M co go 1779. t.2
2507 bárbarum *P S*	Willow-leaved	or	12	my.au	V	Barbary	1696	R	co	Dend. brit. 9
2508 turbinátum *P S*	top-shaped	or	12	my au	V	China	1709	C	co	Du ed n 119 t 31
2509 europæ'um *P S*	European	or	12	my au	Pk	S. Europe	1730	C	co	Mic.gen.t.105 f 1
2510 lanceolátum *Poir.*	spear-leaved	or	12	my au	Pk	S Europe	...	C	co	Duh ed n t 32
2511 chinénse *Mill*	Chinese	or	6	my.au	Pu	China	....	C	co	Dend. brit. 8
2512 hórridum *W*	succulent-lvd	or	3	jl au	W	C G H	1791.	C	p l	
2513 boerhaaviæfólium *W*	glaucous-leaved	or	6	ap my	P Pu	Peru	1780	C	p l	L'Hc s n 45 t.23
2514 carolinánum *Ph.*	Carolina	or	4	jl s	B	Carolina	1806	C	p l	
2515 trewiánum *Duh*	Trew's	or	15	my au	Pu	China	1818	C	co	Duh. ed. n. t. 30

†*451 SOLA'NUM *W* NIGHTSHADE *Solaneæ Sp* 79—360

§2516 peruviánum *L*	Peruvian	w	2	my.jn	Y	Peru	1823	D	co	Feuill 3 t. 25
§2517 lycopérsicum *W*	Love-apple	clt	3	jl s	G	S. Amer	1596.	S	r m	R.am 5 t 154 f 1
§2518 cerasiférme *Dun*	Cherry	clt	3	jl.s	G	... ..	1800	S	r m	Jac vind 1 t. 11
§2519 Humbóldti *W*	Humboldt's	clt	2	jl s	Y	S Amer	1822	S	co	W hort ber t 27
§2520 pyriférme *Dun*	Pear-shaped	clt	2	jl s	Y	... ..	1823	S	co	Dun sol. t 26
2521 tuberósum *W*	Potatoe	ag	2	jn au	W	Peru	1597	R	r m	Bau prod 89 t 89
β *Commersoni* Poir	Wild-Potatoe	cul	2	my o	W	S Amer	1822	R	co	Hort trans
2522 Seafortiánum *And.*	Seaforth's	or	20	jl s	Pk	Barbadoes	1804	C	l.p	Bot rep 504
2523 betáceum *P S*	Beet-leaved	or	4	jn jl	Pk	S Amer	1803	C	l p	Bot rep 511
2524 muricátum *W*	warted	or	3	jl au	V	Peru	1785.	C	l p	Feu per 772 t 15
2525 lacinátum *W*	cut-leaved	or	3	jl au	V	N Holl	1772	S	s p	Bot mag 349
2526 quercifólium *W.*	Oak-leaved	or	2	jn jl	V	Peru	1787.	C	r m	Feu per 772 t 15
2527 radicans *W*	rooting	or	3	jl au	Pu	Peru	1771	D	s p	Lin fil de.1. t.10



History, Use, Propagation, Culture.

448 *Physalis* From φυσις, a bladder The fruit is enclosed in an inflated calyx. The berries of P. alkekengi are acidulous and slightly bitter, they were esteemed detergent and aperient by the ancients. In Spain, Germany, and Switzerland, they are eaten as a common fruit. Phy peruviana produces a pleasant fruit for tarts, and is in some countries, and even English gardens, cultivated for that purpose

449 *Saracha* A plant resembling Atropa, or Physalis, to which it is too nearly related It was named by the authors of the Flora Peruviana after Isidore Saracha, a Spanish botanist

450 *Lycium* So called because the original species was a native of Lycia, a country of Asia Minor Some of the Cape species of this genus have elegant flowers and merit cultivation, and L. barbarum is valuable for covering naked walls, arbors, &c It grows four or six feet in a season, flowers freely, and is readily propagated by cuttings at any season of the year L. europæum is used for hedges in Tuscany, being armed with small thorns. Clusius says they eat the small shoots in Spain with oil and vinegar L. ruthenicum is an ornamental shrub from its very white bark. The greenhouse species root readily in sand under a hand-glass.

451 *Solanum* By some ingenious commentators this word has been derived from *solari*, to comfort. The derivation may be possible, but the application is not evident This extensive genus, which belongs to the Luridæ of Linnæus's system of natural orders, does not contain many handsome plants, but it includes, besides the Tomato and egg plant, celebrated in cookery, the potatoe, whose tubers, as a human food, if equalled, are not surpassed by those of any other plant. Some of the species are singular on account of their leaves and

2484 Stem shrubby rounded, Branches upright, Flowers clustered
2485 Stem shrubby, Branches flexuose, Flowers clustered
2486 Stem shrubby, Leaves ovate tomentose
2487 Leaves in pairs repand obtuse subtomentose, Stem herbaceous panicled above
2488 Leaves ovate subrepand obtuse nearly naked, Flowers in pairs, Stem herbaceous
2489 Leaves in pairs entire acute, Stem herbaceous branching below
2490 Pubescent, Leaves cordate entire
2491 Pubescent, Stem angular, Leaves in pairs cordate nearly entire soft, Teeth of cal. acuminate
2492 Much branched, Branches angular smooth, Leaves ovate toothed
2493 Pubescent, Stem erect ½ shrubby, Leaves subcordate toothed angular, Petioles decurrent
2494 Much branched, Leaves ovate cordate pub Flowers pendulous, Calyx in fruit ovate acuminate angular
2495 Much branched, stalk of fruit much longer than the villous leaf
2496 Much branched, Leaves villous, Peduncles erect
2497 Much branched, Stem procumbent rounded hairy. Leaves rather fleshy
2498 Pubescent, Leaves ovate angular, Stem herbaceous, Berries viscid, Root tuberous
2499 Hairy, Leaves cordate acute toothed, Pedunc at length reflexed, Cal with segm twice as short as cor
2500 Leaves oval unequal acute toothed smoothish, Flowers solitary, Calyx powdered, Cor tomentose
2501 Leaves in pairs toothed repand tomentose-viscid oval, Stem herbaceous panicled above

2502 Leaves in pairs unequal ovate smooth, Flowers in umbels
2503 Stem erect hairy, Umbels axillary stalked cernuous, Flowers plaited

2504 Branches diffuse spiny, Leaves linear fleshy attenuated at base fascicled, Pedunc longer than cal.
2505 Branches upright spiny, Leaves linear fascicled, Pedunc. shorter than calyx, Stam as long as tube of cor
2506 Branches droop. spiny, Lvs. lin. lanc atten. at base fast Ped longer than cal. Stam as long as limb of cor
2507 Branches drooping, Buds spiny, Cal trifid, Stam as long as limb of cor.
2508 Branches drooping spiny rounded, Leaves sessile lanceolate acuminate, Cal trifid, Berry turbinate
2509 Branches lax spiny, Leaves oblong lanc. obtuse obliquely bent, Stam. shorter than limb of cor
2510 Branches erect flexuose at end recurved rounded much spreading spiny, Leaves subsessile lanc acute
2511 Stem and branc droop striated rarely spiny, Lvs stalked ov. obt Cal. 5-toothed, Style longer than stam.
2512 Spiny, Leaves obovate fleshy smooth, Peduncles very short
2513 Spiny, Leaves ovate entire acute glaucous, Flowers panicled
2514 Unarmed, Leaves narrow spatulate oblong, Flowers 4-cleft tetrandrous
2515 Erect spiny, Branc. dif. angular, Lvs. stalked lanc. acute, Cal 2 or 3-fid, Style scarcely longer than stam.

§ 1 *Lycopersicon* (*Love Apples*) *Anthers conical, joined at end. Berry many-celled*
2516 Villous hoary, Leaves stipulaceous unequally pinnatifid, Segm obtuse, Pedunc and pedicel bracteated
2517 Hairy, Leaves unequally pinnatifid, Segments cut glaucous beneath, Berries torulose furrowed smooth
2518 Hairy, Lvs unequally pinnat. Segm cut glauc beneath, Sepals as long as cor Berries round rather hairy
2519 Hairy, Lvs unequally pinnat Segm cut glauc beneath, Pedunc with bract Sepals twice as long as cor
2520 Hairy, Lvs unequally pinnatifid, Segm cut glaucous beneath, Pedunc without bract. Berries obconical

§ 2 *Unarmed Leaves pinnate, pinnatifid, or entire*
2521 Root tuberous, Stem herbac Segm of lvs unequal, the altern ones minute, Pedicels stalked, cor. 5-ang.
β Root tuberous, Stem herbaceous, Leaves pinnate sublyrate pilose, Pedic jointed, Cor 5-cleft
2522 Leaves pinnate waved, upper simple lanc Racemes in panicled cymes sometimes longer than petioles
2523 Leaves cordate ovate oblong hairy on each side waved at edge, Racemes pendulous as long as petioles
2524 Stem halt shrubby rooting ascending runners muricated, Lvs obl lanc pubescent simple, Racemes 2-fid
2525 Smooth, Leaves pinnatifid segments linear lanceolate terminal elongated, Racemes lateral corymbose
2526 Stem angular wavy rough, Leaves pinnatifid, Racemes cymose
2527 Stem rounded prostrate rooting, Lvs deeply pinnat Sinuses obtuse, Racemes cymose as long as petioles



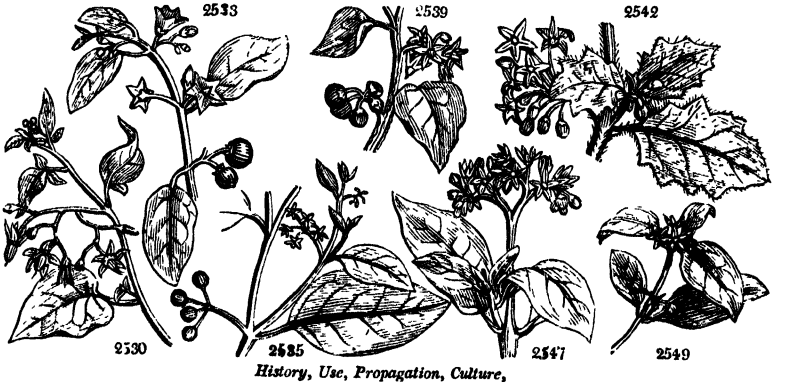
and Miscellaneous Particulars

spines, and others retain their fruit in our stoves during winter, which may be a recommendation to some to admit them in collections

S. dulcamara has roots which smell like the potatoe; being chewed, a sensation of bitterness is first felt, and then of sweetness, whence the specific name The berries excite vomiting and purging, and the twigs and leaves have been used in rheumatic and scorbutic cases with good effect

S. tuberosum, *Pomme de Terre*, Fr., *Kartoffel*, Ger, *Pomo de Terra*, Ital, *Potades*, Span, &c. is supposed to be a native of South America, and to be found in a wild state in elevated places in the tropical regions, and in the more temperate districts of the western coasts of that country Some tubers, said to be of the wild potatoe, have been received from these parts by the Horticultural Society, and cultivated by them, their produce differs very little, if at all, from that of the common cultivated sort, they are small, roundish, and pink and white colored. (*Hort Trans.* 5. 257.) It appears probable that the potatoe was first brought into Europe from the mountainous parts of South America in the neighbourhood of Quito, where they were called *papas*, to Spain, early in the 16th century From Spain, where they were called *battatas*, they found their way to Italy, and there received the same name as the truffle, *taratoufli*. From Italy they went to Vienna, through the governor of Mons in Hainault, who sent some to Clusius in 1598 To England the potatoe found its way from North America, being brought from Virginia by the colonists sent out by Sir Walter Raleigh in 1584, and who returned in July 1586; and, "probably," says Sir Joseph Banks. "brought with them the potatoe." Gerarde,

2528	corymbósum *W*	corymbed	or	2	jl.au	V	Peru	1786.	D	co	Jac. ic. 1. t. 40
2529	oligánthum *Lk.*	few-flowered	or	3	...	W	.....	1824.	C	co	
2530	Dulcamára *W.*	Bitter-sweet	p	3	jn jl	V	Britain	hed.	C	s.l	Eng. bot. 565
2531	macrocárpon *W.*	large-fruited	or	1	my.s	B	Peru	1759	C	s.p	Mill. ic. 2. t. 294
2532	æthiópicum *W*	Ethiopian	or	1½	jl.s	W	Ethiopia	1597.	C	l p	Jac vind. 1. t. 12
2533	Zuccagnianum *Dun*	scabrous	or	1½	jn jl	W	.....	1823.	S	co	Dun sol. t. 11
2534	Pseudo-cápsicum *W.*	Winter-cherry	or	4	jn s	W	Madeira	1596.	S	r m	Sabb rom. t. 59
2535	nodiflórum *Jacq*	thick-jointed	w	10	jn jl	W	I France	1822.	S	co	Jacq ic. 2. t. 326
2536	guinceénse *W en*	large-berried	p	4	jn s	G	Guinea	...	S	s l	Di.elt.t.274 f 354
2537	melanocérasum *W en.*	small-berried	p	2	jn.s	W	Virginia	...	S	s l	Di elt.t 275.f.356
2538	suffruticósum *W en.*	fringed-leaved	or	4	my s	W	Barbary	1804.	C	l.p	
2539	nigrum *W*	black-berried	p	3	jn s	W	Britain	rub.	S	s.l	Eng. bot. 566
2540	mumátum *Bern.*	red-berried	w	4	jn jl	W	S. Europe	1823.	S	co	
2541	húmile *Bern*	green-berried	w	1	jn jl	W	S. Europe	1823.	S	co	
2542	villósum *W en*	orange-berried	w	5	jn s	W	Barbadoes	...	S	s l	Di elt.t.274 f.353
2543	pátulum *W*	spreading	or	4	jn s	V	India	...	S	s l	Di elt.t 275.f 355
2544	crispum *Fl per.*	Natre	or	18	jn jl	W	Chili	1824	C	co	Fl per. 2. t. 158
2545	bombénse *Jacq*	Bomba	or	12	jn jl	W	Mexico	1822	C	co	
2546	Cervantésii *Lag*	Cervantes's	or	4	my jn	W	Mexico	1818.	C	co	
2547	verbascifólium *W*	Mullein-leaved	or	7	jn jl	W	W. Indies	1749	S	p.l	Jac. vind. 1 t.13
2548	auriculátum *W*	ear-leaved	or	4	...	V	Madagasc	1773	S	p l	Scop insub.3. t 8
2549	diphyllum *W*	two-leaved	or	3	jn.jl	W	W Indies	1699	C	s.l	Jac. ic 2. t 322
2550	havanénse *W*	Havannah	or	5	jl au	B	W Indies	1793.	C	co	Jac amer.49.t.35
2551	lycioides *W*	spiny	or	4	my jn	Pa B	Peru	1791.	C	s p	Jac ic. 1. t. 46
2552	uniflórum *Lag*	one-flowered	or	3	my.jn	B	N. Spain	1820	D	co	
2553	stellátum *Jacq*	stellate	or	6	jn.jl	B	.....	1822.	C	co	Jac ic. 2. t. 325
2554	elæagnifólium *Cav*	Oleaster-leaved	or	6	jn jl	B	Chili	1823	C	co	Cav ic. 3 t. 243
2555	racemósum *W*	wave-leaved	or	4	jl au	W	W Indies	1781	C	co	Jac amer 50 t 36
2556	igneum *W*	red-spined	or	3	mr n	W	S. Amer	1714	C	s p	Jac. vind 1 t 14
2557	subarmátum *W*	half-armed	or	6	my jn	W	.....	1820	C	co	
2558	bahaménse *W*	Bahama	or	6	jn jl	V	Bahama	1732	S	p l	Di elt.t 271.f 350
2559	tomentósum *W*	woolly	or	2	jn jl	B	C G H	1662	C	p l	Bocc sic 8 t. 5
2560	lanceæfólium *Jacq*	lance-leaved	or	10	jl au	W	W Indies	...	C	co	Jacq ic 2 t. 239
2561	bonariénse *W*	Buenos Ayres	or	10	jn s	W	B Ayres	1727	C	s l	D e 364 t272f351
2562	subinérme *W*	spear-leaved	or	7	jl au	B	W Indies	1752	C	l p	Jac amer t 40 f 3
2563	lanceolátum *Cav*	lanceolate	or	7	jn jl	Pa B	Mexico	...	C	s l	Bot mag 2173
2564	gigantéum *W*	tall	or	15	jn jl	V	C G H.	1792.	C	s p	Bot. mag. 1921



History, Use, Propagation, Culture,

in his Herbal, published in 1597, gives a figure of the potatoe, under the name of Potatoe of Virginia, whence he says he received the roots, and this appellation it appears to have retained, in order to distinguish it from the battatas or sweet potatoe (Convolvulus battatas) till the year 1640, if not longer "The sweet potatoe," Sir Joseph Banks observes, "was used in England as a delicacy long before the introduction of our potatoes, it was imported in considerable quantities from Spain and the Canaries, and was supposed to possess the power of restoring decayed vigor The kissing comfits of Falstaff, and other confections of similar imaginary qualities, with which our ancestors were duped, were principally made of these and of eringo roots" Gough says the potatoe was first planted by Sir Walter Raleigh on his estate of Youghall near Cork, and that they were soon after carried into Lancashire Gerrarde and Parkinson, however, mention them as delicacies for the confectioner, and not as common food. Even so late as Bradley's time they are spoken of as inferior to skirrets and radishes

The use of potatoes, however, became more and more known after the middle of the 18th century, and has greatly increased in all parts of Britain within the last thirty years. It is also very general in Holland, and many parts of France and Germany, and is increasing rapidly in Russia In Spain, and the East and West Indies they are not much cultivated, owing to the heat of the climate, but in all the temperate parts of North America, Australasia, and South America they are grown by the colonists. In China they are cultivated, but not extensively, owing to the slow progress which every thing new makes in that country Indeed, no root hitherto discovered is so well adapted for universal use as the tubers of the potatoe, for, having no peculiarity of taste, and consisting chiefly of starch, their farina is nearly the same as that of grain Hence, with the flower of potatoes, puddings, and such preparations as do not call the gluten of wheat-flower into action, may be made equal to those of millet or rice, and excellent bread with a moderate proportion of good wheat-flour Potatoe starch, independently of its use in the laundry, and as a hair powder, is considered an equally delicate food as sago or arrow-root. As starch and sugar are so nearly the same, that the former is easily converted into the latter, the potatoe yields a spirit equal to that of malt by distillation, and a wine or beer by the fermentative process.

The varieties of the potatoe are very numerous, differing in earliness, lateness, form, size, color, and quality. The names for these are quite arbitrary or local In general, every district has its peculiar or favorite varieties. Some of these degenerate, and others improve when removed from one district to another New varieties

§ 3 *Unarmed. Leaves lobed, sinuate, angular, toothed, or entire*

2528 Leaves ovate lanceolate entire or lobed, Racemes cymose opp to the leaves, Cor 5-parted
2529 Leaves lanceolate sinuate tomentose bright-green, Pedunc few-flowered, Sepals ovate acute
2530 Stem wavy, Leaves ovate cordate upper lanceolate, Corymbs opposite the leaves
2531 Stem smooth, Leaves cuneate at the base sinuate smooth, Peduncles few-flowered short
2532 Leaves ovate repand angular smooth, Peduncles 1-flowered cernuous, Berries torulose
2533 Leaves ovate angular repand smooth unequal at base, Pedunc. 1-flowered cernuous, Berries round
2534 Leaves oblong lanceolate subrepand, Peduncles 1-flowered outside the leaves
2535 Branches rounded, and leaves smooth ovate entire, Flowers umbelled
2536 Branches smooth angular toothed, Leaves ovate smooth entire, Flowers numerous umbelled
2537 Stem and branches angular toothed, Leaves subovate sinuate angular, Flowers umbelled
2538 Leaves ovate toothed angular ciliated, Umbels extrafoliaceous stalked
2539 Stem angular, Leaves ovate toothed naked, Flowers in umbels
2540 Branches strigose pubescent angular winged, Wings toothed, Leaves ov rep smooth, Flowers in umbels
2541 Branches angular toothed pubescent, Leaves ovate repand upper entire, Flowers in umbels
2542 Stem rounded villous, Leaves ovate angular toothed villous hoary, Flowers in umbels

§ 4. *Unarmed Leaves quite entire*

2543 Stem shrubby, Branches powdery, Leaves oblong lanceolate powdery on both sides, Racemes spreading
2544 Leaves ovate and subcordate waved curled acuminate, Flowers corymbose
2545 Leaves oval pointed at each end smooth, Racemes cymose
2546 Stem erect, Leaves ovate lanceolate attenuated at each end pubescent, Racemes 2 and 3-chotomous
2547 Leaves ov obl acuminate entire downy, Surface discol Axils leafless, Corymbs terminal dichotomous
2548 Leaves ovate oblong acuminate woolly axillary, Leaflets semicircular, Corymbs di-trichotomous
2549 Lvs in pairs one obl narrow towards each end obt other smaller obov ellipt. Cymes stalk opp the lvs
2550 Leaves ovate lanceolate acute shining smooth, Peduncles 1-flowered, Berries oval
2551 Branches spiny, Leaves elliptical, Peduncles filiform 1-flowered
2552 Stalks axillary 1-flowered, Cal 10-cleft, Leaves mostly in pairs subsessile elliptical
2553 Stem climbing flexuose, Lvs ovate lanc smooth acuminate, Pedunc in pairs, Cal unequally toothed

§ 5 *Prickly Leaves entire or sinuate-angular*

2554 Leaves discolored the lower sinuate prickly upper entire unarmed, Pedunc few-flowered
2555 Stem unarmed, Leaves lanceolate repand undulated acute
2556 Leaves lanceolate acuminate revolute on both sides at the base
2557 Stem prickly, Leaves lanceolate pubescent beneath entire edge revolute at base
2558 Leaves lanceolate repand obtuse reflexed at edge
2559 Stem prickly, Prickles acerose, Leaves cordate unarmed repand wavy, the young ones purple
2560 Leaves lanceolate oblong attenuate at each end roughish beneath prickly, Raceme short unarmed
2561 Stem nearly unarmed, Leaves ovate oblong sinuate repand rough, Corymb extrafoliaceous stalked
2562 Stem nearly unarmed, Leaves lanceolate ellipt entire above smooth beneath tomentose, Cymes mealy
2563 Stem downy, Leaves lanceolate long entire hoary beneath, Racemes terminal, Sepals subulate
2564 Stem with downy prickles, Leaves lanceolate acute unarmed above smooth beneath hoary



and Miscellaneous Particulars

are readily procured by sowing the seeds, which, with care, will produce tubers the third year, and a full crop the fourth As few of the early sorts produce blossoms, to procure seeds from them deprive the plant of its tubers as they appear, and keep the runners from which they proceed above ground, by not earthing up the plant, and blossoms and seeds will soon be produced This Mr Knight completely proved, and the rationale is developed in the Philosophical Transactions for 1806 It appears that the same sap gives existence both to the tuber and blossom, and that whenever a plant of the potatoe affords either seeds or blossoms, a diminution of the crop of tubers, or an increased expenditure of the richness of the soil, must necessarily take place This led Mr Knight to attempt the practice adopted by the Dutch florists with their bulbous flowers, viz to pinch off the flowers to strengthen the bulbs This, in the potatoe, Mr. Knight thinks may add an ounce in weight to the tubers of each plant, or considerably above a ton per acre The practice is now general among scientific cultivators even in field culture

The curl is a well known disease of potatoes, which frequently disappoints the cultivator of a crop, or renders that produced of little value A great variety of opinions exist as to this disease without enumerating these, we may state, as the general result of experiments by different persons, that the curl arises in most, or at least in many cases, from using over ripe tubers as seed stock, or from the employment of seed stock which has been injured or improperly kept during the winter, that is, kept exposed to the light and air instead of being covered with earth, or sand, or straw, so as to preserve their juices The experiments of various farmers and gardeners, as recorded in the Farmer's Magazine and Caledonian Hort Mem, lead to the above conclusions

The culture of the potatoe, both in the field and garden, is universally known It may be forced in pots or on dung or tan beds, and, for this purpose, using sets from tubers that have been retarded a year in an ice-house or cold place, is found a great advantage Thus, in planting in December 1823, use tubers of crop 1822. These, from the long period of repose which they have had, will be found highly excitable by heat, and of much more rapid growth than sets of the preceding crop As matter of curiosity, boxes containing alternate layers of light earth and potatoes of the last season but one may be placed in any dry covered place, free from frost, in November, and they will produce a brood of young tubers in contact with the old ones on the December following, without either leaves, roots, or runners. (*Hort. Trans* i 225)

Potatoes are best preserved by burying in pits in dry ground, so deep as to be under the influence of surface temperature, or so enveloped with thatch as to produce the same effect At a certain depth, they will keep

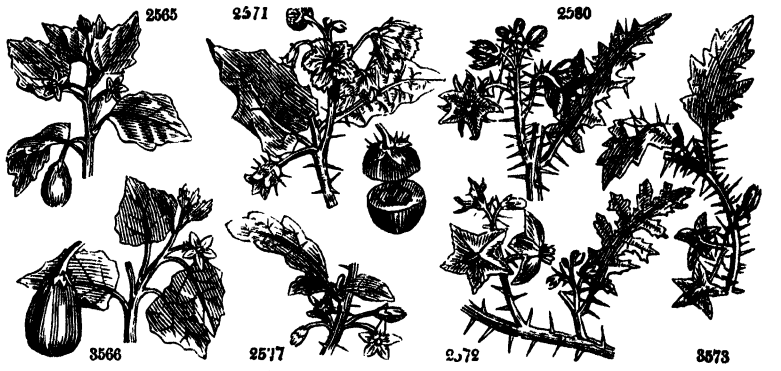
2565 **Melongéna** *W.*	Egg-plant	cul	2	jn.jl	B	Africa, &c	1597.	C	l.p	Pluk.phy.266.f.2
2566 **insánum** *P S.*	Mad-apple	or	2	au.s	B	E. Indies	1815.	S	l.p	Plu.alm.t.266.f.3
2567 **ovígerum** *Dun.*	oval-egg-plant	or	2	jn jl	B	Arabia	1597.	S	co	
2568 **sodómeum** *W.*	black-spined	or	3	jn.jl	V	Africa	1686.	C	r.m	Her. lugd. t. 575
2569 **índicum** *W.*	Indian	or	6	jl	Pu	India	1732.	S	p l	Dl.elt.t.270.f.349
2570 **coágulans** *W.*	scollop-leaved	or	3	jl	W	Arabia Fe.	1802.	C	a.p	Jac. sch6.4. t.469
2571 **margináture** *W.*	white-edged	or	4	jn.s	Pu	Africa	1775	C	s p	Bot. mag. 1928
2572 **campechiénse** *W.*	purple-spined	w	2	jl	V	America	1732.	C	s p	Dl.elt.t.268.f.347
2573 **aculeatissimum** *Jac.*	most-prickly	or	3	ap jl	Pa.B	S. Amer.	1816.	C	co	Jacq. ic. 1 t. 41
2574 **mammósum** *W*	nipple	or	4	jl au	Pa.B	W. Indies	1699.	S	s p	Plu.alm.t 226.f.1
2575 **stramónifólium** *W*	broad-leaved	or	6	jn s	Pu	W. Indies	1778.	C	s p	Jac. ic. 1 t. 44
2576 **férox** *W*	Malabar	w	2	au s	Pu	E. Indies	1795.	C	l p	
2577 **Milléri** *W.*	Miller's	or	3	jl.au	W	C G. H.	1762.	C	s.l	Jac. ic. 2 t 330
2578 **trilobátum** *W.*	three-lobed	or	12	au	V	India	1759.	C	s p	Bu in.57 t.92.f 2
2579 **carolinénse** *W*	Carolina	w	2	jl s	Pa B	Carolina	1732.	S	p.l	Jac. ic. 2 t. 331
2580 **Pyracántha** *Sm*	orange-thorned	or	4	au s	Pu	Madagasc	1789	C	r.m	Ex. bot 2 t. 64
2581 **virginiánum** *W*	Virginian	w	1½	my au	V	Virginia	1662.	S	a.p	Dl elt t 267 f 346
2582 **Jacquini** *W*	Jacquin's	w	2	s n	Pu	E. Indies	1804.	S	s.p	Jac. ic. 2. t. 332
2583 **Balbisii** *Dun*	decurrent	or	4	ap s	W	S. Amer.	1816.	C	co	Bot. reg. 140
2584 **téctum** *P S*	covered	or	3	ap s	Y	Mexico	1824.	C	co	Cav. ic. 4. t. 309

452. NYCTE'RIUM *Vent* Nycterium. *Solanex Sp.* 4—7

2585 **cordifólium** *Vent.*	heart-leaved	or	2	ap my	Pu	Can Isl.	1779.	C	co	Vent. malm 85
2586 **amazonium**	purple	or	3	jn.au	Pu	Mexico	1800	C	co	Bot. reg 71
2587 **lobátum** *Nutt*	yellow	or	2	jl au	Y	Louisiana	1813.	S	co	Pursh. am 2. t.7
2588 **fontanesiánum** *Dun.*	Desfontaines'	or	2	jl.s	Y	Brazil	1813.	S	co	Bot. reg. 177

453. CAP'SICUM *W.* Capsicum *Solanex Sp* 18—24

2589 **ánnuum** *W.*	common	cul	1	jn jl	W	India	1548.	S	r m	Knor th 2. t c 6
2590 **sphæ'ricum** *W en.*	globular-fruited	cul	2	ap jl	W	.....	1807.	C	r.m	
2591 **baccátum** *W*	Bird-pepper	cul	3	jn s	W	.....	1731.	C	r.m	Sl ja. l. t. 146.f 2
2592 **sinénse** *W*	oval-fruited	cul	2	jn s	W	China	1807	C	r.m	Jac. vind 3 t 67
2593 **grossum** *W*	large	cul	½	jl	W	India	1759.	S	r m	B. ey a. l.t.11 f 1
2594 **frutéscens** *W*	shrubby	cul	1	jn s	Pa.Y	India	1656	C	r m	Ru. amb 5 t. 88
2595 **bicolor** *Jacq*	dark-fruited	cul	4	jn s	Pu	W. Indies	1804.	C	r.m	Bot. mag 1835
2596 **cerasiférme** *W*	Cherry-pepper	cul	1	jn s	Pa Y	W Indies	1739.	S	r m	
2597 **péndulum** *W en*	pendulous	cul	2	ap jl	W	.....	1804.	C	r m	
2598 **lóngum** *Dec*	long-fruited	cul	1	jn jl	W	India	1548.	S	r m	
2599 **cordiférme** *Mill*	heart-fruited	cul	1	jn jl	W	India	...	S	r.m	
2600 **tetragónum** *Mill*	quince-fruited	cul	1	jn jl	W	India	...	S	r m	
2601 **angulósum** *Mill*	angular-fruited	cul	1	jn jl	W	India	...	S	r m	
2602 **conoides** *Mill*	conical	cul	2	ap jl	W	India	1750	C	r m	
2603 **pyramidále** *Mill*	pyramidal	cul	2	ap jl	W	Egypt	1750.	C	r m	
2604 **microcárpum** *Dec.*	small-fruited	cul	2	ap jl	W	.....	1820.	C	r m	
2605 **cerasiflórum** *Lk*	cherry-flowered	cul	2	jn s	W	.....	1823.	C	r m	
2606 **micránthum** *Lk*	small-flowered	cul	3	my jn	W	Brazil	1824	C	r.m	



History, Use, Propagation, Culture,

for years without vegetation Where there is an ice-house, they may, when taken out of the pits, be kept in small quantities in it till wanted for use

S. lycopersicum (From λυκος, a wolf, and *persica*, a peach, in poetical allusion to the beautiful appearance and deceitful value of the fruit) *Tomate*, Fr, and *Pomo d'oro*, Ital, is cultivated extensively about Naples and Rome for the use of the berry in sauces, stewing, and soups. It is one of the most common articles used in Italian cookery, and makes an excellent sauce for fish, meat, and general purposes Its use for sauce in this country is greatly on the increase, and it is cultivated to considerable extent near London, against walls and artificial banks, being raised on a hot-bed, and transplanted like other tender annuals.

S. nigrum, a very common plant on dunghills, is narcotic and poisonous like S. dulcamara and Atropa belladonna. A Spanish cure for the consumption is burying up to the chin in garden earth, and afterwards rubbing the body over with an ointment made from the leaves of this plant.

S. æthiopicum is cultivated in China for the fruit, which is served at the tables of mandarins like our cherries.

S. melongena, (M from *bydendjân*, its Arabic name, according to Forskahl) is cultivated both in Europe and the East and West Indies for its fruit, which is used boiled, stewed in sauces, &c like that of the love-apple. The plant is more tender, and in this country requires to be matured under glass, like the balsam and other tender annuals S. muricatum resembles it in habit, and may be cultivated for the same purpose

452. *Nycterium.* From νυξ νυκτος, night. A small tribe of plants cut off from their ancient genus Solanum. N amazonium is quite a beautiful shrub, growing well in pots in a moderate stove.

453. *Capsicum.* From κάπτω, *mordeo*, to bite, on account of the biting heat of the seed and pericarp. *Poivre d'Inde ou de Guinée*, Fr. The fruit of C baccatum, commonly called bird pepper, is gathered when

§ 6. *Prickly Leaves sinuate, angular and lobed*

2565 Stem prickly, Leaves ovate subsinuate downy prickly, Flowers many-parted, Seeds naked
2566 Stem prickly, Leaves ovate tomentose, Pedunc. pendulous thick, Cal. prickly
2567 Stem nearly unarmed, Leaves ovate subrepand tomentose unarmed, Berries ovate oblong, Seeds pulpy
2568 Stem diffuse, Prickles straight dilated at base, Lvs obl sinuate pinnatifid, Pedunc. 2-fid, Berries globose
2569 Stem prickly, Leaves oblong tomentose sinuate angular, Segm. sinuate toothed, Sepals reflexed
2570 Leaves ovate oblong sinuate repand downy white beneath, middle nerve beneath with smooth prickles
2571 Leaves subcordate sinuate lobed beneath hoary above white at edges, Berries 3-celled globose
2572 Stem very prickly hairy, Lvs. cord. obl. lob. Lobes tooth Fertile cal. very prickly, Berries cher -shaped
2573 Stem very prickly, Lvs cordate lob Lobes acute toothed villous and prickly on both sides, Berries round
2574 Stem vil with scat. prickl. Lvs subcord. lob. prickly on both sides very vil Ber like the teat of an animal
2575 Stem prickly, Lvs cordate sinuate acutely lob vil. and prickly on both sides, Pedunc. and cal unarmed
2576 Stem prickly, Lvs cord. angular toment. with the racemes and calyxes prickly, Ber hairy cov. by calyx
2577 Stem prickly, Leaves smoothish lobed obtuse prickly, Peduncles in pairs
2578 Stem prickly, Leaves 3-lobed obtuse smooth, Flowers racemose violet
2579 Stem prickly, Leaves ovate oblong tomentose sinuate angular acuminate, Racemes simple ax
2780 Stem prickly, Leaves oblong acute sinuate pinnatifid downy, Prickles straight scarlet
2581 Stem erect prickly, Lvs pinnat. sinuated prickly on both sides, Segm sinuated obtuse, Racemes prickly
2582 Stem decumbent diffuse prickly, Leaves sinuate pinnatifid prickly on both sides smooth, Calyxes prickly

§ 7 *Prickly Leaves pinnatifid or bipinnatifid, Berries covered by the enlarged and prickly calyx*

2583 Stem villous prickly, Lvs. pinnatifid, Segm. acute sinuate toothed, Racemes cymose lateral and terminal
2584 Stem shrubby rounded prickly, Leaves bipinnatifid prickly on both sides villous

2585 Leaves cordate entire, Racemes divided, Cal unarmed
2586 Leaves elliptical sinuate tomentose, Flowers several large terminal
2587 Stem and leaves prickly, Leaves ovate pinnatifid hairy on both sides
2588 Stem woody prickly hairy, Leaves deeply pinnatifid, Anthers small

2589 Fruit oblong pendulous and erect their stalks smooth, Stem herbaceous
2590 Fruit globose pendulous, Stalks smooth, Stem shrubby
2591 Fruit globose ovate erect in pairs, Stalks smooth, Stem shrubby
2592 Fruit ovate pendulous in pairs, Stalks pubescent, Stem shrubby
2593 Fruit oblong ovate subcompressed erect, Stalks smooth, Stem herbaceous
2594 Fruit oblong obtuse, Stalks smooth, Stem erect
2595 Fruit oblong mucronate, Stalks smooth, Stem shrubby
2596 Fruit globose, Stalks smooth, Stem shrubby
2597 Fruit oblong, Stalks pubescent, Stem shrubby
2598 Fruit oblong acuminate incurved, Stalks smooth, Stem herbaceous
2599 Fruit heart-shaped, Stem herbaceous
2600 Fruit very large angular obtuse, Stem herbaceous
2601 Fruit heart-shaped angular, Stem herbaceous
2602 Fruit ovate conical erect, Stem half shrubby
2603 Leaves linear lanceolate, Fruit pyramidal erect yellow, Stem shrubby
2604 Fruit ovate erect, Footstalks and leaves pubescent, Teeth of the calyx 5 subulate spreading
2605 Young stalks ciliated, Berries erect globose
2606 Leaves ovate acuminate, Stalks ciliated, Cal. obtuse



and Miscellaneous Particulars

ripe, dried in the sun, pounded and mixed with salt it is then kept stopt in bottles, and is commonly known by the name of Cayenne-pepper A mixture of sliced cucumbers, shallots or onions cut very small, a little lime juice and Madeira wine, with a few pods of bird pepper, well mashed and mixed with the liquor, seldom fails to provoke the most languid appetite in the West Indies. It is there called Man-dram. Gathered fresh from the plant, the pods of all the species are liberally used both in the East and West Indies, to assist digestion and correct flatulencies

C frutescens and minimum, the latter by many considered only a variety of the former, low shrubs with an oval red berry more sharp and biting than any of the others, furnish the Cayenne pepper of the shops. The ripe pods are dried in the sun, and then in an oven after bread is baked, in an earthen or stone pot, with flour between the strata of pods When quite dry they are cleaned from the flour, and beaten or ground to fine powder To every ounce of this, a pound of wheat flour is added, and it is made into small cakes with leaven, these are baked, cut into small pieces, baked again that they may be as dry and hard as biscuit, and then are beaten into powder and sifted It is then fit for use as a pepper, or for being packed up, in a compressed state, and so as to exclude air, for exportation

C annuum, *Piment*, Fr, *Spanischer Pfeffer*, Ger, *Peperone*, Ital., is cultivated for its fruit, which is used in a green state for pickling, and ripe for mixing with other ingredients, as Tomatos, &c. to form sauces. They are also dried and ground, and used like Cayenne pepper. The seed is sown in the end of March or beginning of April on a moderate hot-bed, and covered a quarter of an inch. When the plants are two or three inches in growth, some are transplanted into a new slight hot-bed to forward them for final planting, or in default of such a hot-bed, they are placed in a bed of light rich earth, from twelve to eighteen inches apart, where they are finally to remain in the end of May, and protected during night by mats They will flower in July, and

454. LEE'A. *W.*	Lɛea.				*Melaceæ*	*Sp.* 4—6.							
2607 sambucina *W.*	Elder-leaved	♣	▢	cu	10	...	W	E. Indies	1790.	C	l p	Cav. dis. 7 t. 218	
2608 æquáta *W.*	shrubby	♣	▢	cu	10	...	G	E. Indies	1777.	C	l p		
2609 crispa *L.*	curled	♣	▢	cu	3	o	W	C. G H.	1767.	C	l p	Bot. rep. 355	
2610 macrophýlla *Roxb*	long-leaved	♣	▢	cu	4	o	G	E. Indies	1806.	C	l p		
†455 SPERMADICTYON *Roxb*	Spermadictyon				*Rubiaceæ.*	*Sp.* 1—2							
2611 suavéolens *Roxb*	sweet-scented	♣	▢	or	4	o	W	E. Indies	1818.	C	l.p	Bot. reg. 348	
456. DENTEL'LA *W.*	Dentella				*Rubiaceæ.*	*Sp.* 1.							
2612 répens *W*	creeping	♣	▢	or	½	jl	W	N. Holl.	1802.	S	co	Lam. ill. t. 118	
457. MACROCNE'MUM *W*	Macrocnemum				*Rubiaceæ*	*Sp* 2—6							
2613 jamaicénse *W.*	Jamaica	♀	▢	or	14	...	W	Jamaica	1806	C	p.l	Sw. obs.68 t 3 f 1	
2614 strictum *Roxb*	upright	♣	▢	or	10	...	W	E. Indies	1804	C	p l		
458 EXOSTEM'MA. *Rich.*	Exostemma				*Rubiaceæ*	*Sp* 2—12							
2615 caribæ'um *W*	caribæan	♀	▢	or	20	jn s	W	W Indies	1780.	C	l p	Bot rep 481	
2616 floribúndum *W*	many-flowered	♀	▢	tm	40	...	W	W Indies	1794.	C	l p	Lamb cin. 27. t 7	
459 BURCHELL'IA *R. Br.*	Burchellia				*Rubiaceæ*	*Sp* 1.							
2617 bubalina *R Br.*	Cape	♣	⌴	or	3	my jn	S	C G H.	1818.	C	r m	Bot. mag 2339	
†460 RONDELE'TIA *W*	Rondeletia.				*Rubiaceæ*	*Sp* 3—18							
2618 americána *W*	American	♣	▢	or	10	au	W	W Indies	1752	C	s p	Plu. ic. t. 242. f 1	
2619 lævigáta *H K.*	smooth-leaved	♣	▢	or	12	jl au	W	W Indies	1790	C	s.p		
2620 hírta *H K.*	hairy	♣	▢	or	10	jn au	Pk	Jamaica	1776.	C	s.p	Bot. cab. 350	
461. COUTAREA *Aub*	Coutarea.				*Rubiaceæ*	*Sp* 1							
2621 speciósa *Aub*	laurel-leaved	♣	▢	or	12	...	Pu	Guiana	1803	C	s p	Aub. gui. t. 122	
Portlandia hexandra W													
†462. PORTLAN'DIA *W*	Portlandia				*Rubiaceæ*	*Sp* 2							
2622 grandiflóra *W*	great-flowered	♣	▢	or	12	jn au	W	Jamaica	1775	C	s p	Bot. mag. 286	
2623 coccinea *P S*	scarlet	♣	▢	or	3	...	S	Jamaica	1812	C	s p		
*463. CAMPA'NULA *W.*	Bell-Flower.				*Campanulaceæ*	*Sp* 75—240.							
2624 cenisia *W*	ciliated	♃	△	or	¼	jn jl	B	Switzerl	1775	R	co	All. ped. 1. t. 6 f 2	
2625 microphýlla *Kit.*	small-leaved	♃	△	or	½	jn jl	B	Hungary	1820	R	co		
2626 Bellárdi *All*	Bellardi's	♃	△	or	½	jn jl	B	Italy	1813	R	co	All ped 1 t. 85 f 5	
2627 púlla *W*	russet	♃	△	or	½	jn jl	B	Austria	1779	R	co	Bot cab 554	
2628 Zoysii *W.*	blunt-leaved	♃	△	or	½	jn au	D B	Carniola	1813	D	co	Jac ic 2 t 334	
2629 carpática *W*	Carpathian	♃	△	or	½	jn au	B	Carp Alps	1774.	D	p l	Bot. mag 117	
2630 rotundifólia *E B*	round-leaved	♃	△	or	½	jn au	B	Britain	hea.	D	p l	Eng bot. 866	
2631 pusilla *Hanke.*	diminutive	♃	△	or	½	jn jl	Pa.B	Switzerl	1821.	R	co	Bauh. pr 34 t 34	
2632 púmila *B M*	dwarf	♃	△	or	½	jn au	B	Switzerl.	...	D	p l	Bot. mag 512	
2633 pubéscens *W*	pubescent	♃	△	or	1	jn au	B	Bohemia	1813	D	co		
2634 grácilis *R. Br*	slender	♃	◯	or	1	ap au	B	N S W	1794	R	co	Bot mag 691	
2635 Scheuchzéri *Vill.*	Scheuchzer's	♃	△	or	¾	jn au	B	Europe	1813.	D	co	Bot cab 485	
2636 pátula *W*	spreading	♃	◯	or	1	jl au	V	Britain	past	S	p l	Eng bot. 42	
2637 Rapúnculus *W*	Rampion	♃	◯	cul	3	jl au	Pu	Britain	hed b.	S	r m	Eng bot 283	
2638 persicifólia *W*	Peach-leaved	♃	△	or	3	jl s	B	Europe	1596	D	p l	Fl dan 1087	
β máxima	*large-peach-lvd*	♃	△	or	3	jl s	B	Europe	1596	D	p l	Bot mag 397	
2639 pyramidális *W*	pyramidal	♃	△	or	4	jl s	Pa B	Carniola	1596	D	p l		
2640 obliqua *W en.*	oblique	♃	◯	or	3	jn jl	B	.....	1813.	D	p l	Jac sch 3 t. 336	
2641 americána *W*	American	♃	◯	or	1	jl	B	Pensylv	1763.	C	s l		



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produce plenty of pods from August till the end of September They may be also raised under hand-glasses, and in very warm situations treated as common annuals. C. cerasiforme is sometimes cultivated for the same purposes as the common capsicum

454 Leea. Named after the first James Lee, of the Hammersmith Nursery, an excellent cultivator and most worthy man. The plants have little more beauty than a hemlock. Cuttings root easily under a hand-glass in heat.

455. Spermadictyon. From σπερμα, seed, and δικτυον, a net, on account of the manner in which the seeds cover the placenta A pretty stove plant with sweet white flowers

456. Dentella. A diminution of *dens*, a tooth, the divisions of the corolla having each three little teeth.

457. Macrocnemum From μακρος, long, and νημα, a stamen.

458. Exostemma From ἐξ, out, and στημμα, a crown, in allusion to the protrusion of the stamens; one of the characters on account of which the genus has been separated from Cinchona.

The genus Cinchona, which was so named after the Countess of Cinchon, who being cured by the use of this plant, first brought it into notice, is very nearly related to this, and is a most important genus, as furnishing the Peruvian or Jesuit's bark The bark is taken from various species; but that which produces the best is said to be C officinalis, a native of Peru, and not yet introduced to this country The Jesuit's bark tree of Jamaica is the Exostemma caribæum, but land there is too valuable for its culture Our species are not very common in collections, being of slow growth, and not very easily propagated. Sweet

2607 Stem furrowed angular smooth, Leaves nearly bipinnate
2608 Stem rounded pubescent, Leaves pinnated
2609 Stem angular fringed, Leaves pinnated
2610 Stem angular, Stalks smooth, Leaves broad ovate serrated

2611 Leaves opposite ellipt. Flowers terminal in umbels

2612 Stem creeping much branched smooth, Leaves stalked opposite oval flat entire

2613 Corymbs axillary long naked
2614 Leaves elliptical acute opposite, Flowers whorled sessile

2615 Peduncles axillary and terminal 1-flowered, Leaves ovate lanceolate
2616 Flowers terminal panicled smooth, Caps. terminal smooth, Leaves elliptical acuminate smooth

2617 The only species A fine plant with tubular red flowers like a honeysuckle

2618 Leaves sessile, Panicle dichotomous
2619 Leaves stalked elliptical acute smooth
2620 Leaves oblong acuminate hairy rigid nerved beneath, Stalks axillary erect

2621 The only species. An hexandrous plant

2622 Flowers pentandrous, Leaves lanceolate elliptical
2623 Flowers pentandrous, Leaves ovate coriaceous

§ 1 *Leaves smooth.*

2624 Stems 1-flowered, Leaves ovate smooth subciliated
2625 Lower leaves obovate wedge-shaped crenate, Upper linear entire, Stem simple 1-flowered
2626 Stem 1-flowered naked, Leaves stalked elliptical lanceolate deeply toothed
2627 Little stems 1-flowered, Radical and cauline leaves ovate subcrenate, Cal cernuous
2628 Stems about 3-fl Lvs entire, the rad ov on long stalks, the cauline obl ov sessile obtuse, Fls nodding
2629 Lvs. all cordate serrate stalked smooth, Branches filiform 1-flow Cal reflex glutinous, Cor spreading
2630 Smooth, Radical leaves oblong and kidney-shaped serrate cauline linear entire
2631 Smooth, Leaves all serrate radical cordate ovate firm shining, cauline linear alternate remote
2632 Radical leaves ovate crenate with flattened stalks, Flowers racemose 1-sided cernuous
2633 Stem hairy decumb angular, Lvs stalk ser. smooth, rad. cordate, lower cauline ovate, Cor short large
2634 Stem filiform angular striated, Branches about 1-flowered, Leaves lanceolate or linear, Flowers 5-cleft
2635 Pubescent, Lvs rather hairy rad. obov rounded serrated, cauline clustered lin entire, Sepals setaceous
2636 Leaves upright · radical lanceolate-oval, Panicle spreading
2637 Leaves wavy · radical lanceolate-oval, Panicle contracted
2638 Stem angular, Lvs stiff obsoletely crenate serrate rad. obl obovate; cauline lanc lin Flow large

2639 Lvs smooth ov. cord. cartilaginous-serrated, the caul lanc Stem upright elong branch Lower ped. 3-fl
2640 Lvs. obl lanc point. at each end serr with veins hairy beneath, Stem erect, Rac term. Seg of cor obliq.
2641 Lvs cord. and lanc serr lower stalks ciliated, Fls axill sessile, Cor 5-parted flat, Style longer than cor



and Miscellaneous Particulars

advises cuttings to be "taken off when ripe, planted in a pot of sand, plunged in moist heat, and covered with a bell-glass"

459 *Burchellia* Named by Mr Robert Brown, after William Burchell, a traveller in the southern part of Africa, from whom we have two volumes of travels, and the promise of other works hereafter The species is a beautiful dwarf shrub with scarlet flowers in terminal clusters.

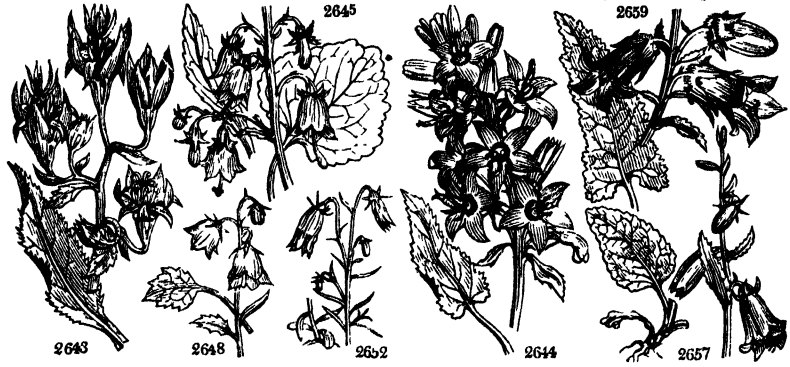
460 *Rondeletia* Plumier established this genus in memory of William Rondelet, a scientific physician, whose attention was chiefly occupied by fishes and algæ He was born in 1507, and died in 1566. Rabelais ridicules him under the name of Rondibilis He is said to have given a disgusting proof of his fondness for anatomy by dissecting his own son

461 *Coutarea.* So named by Aublet from its vernacular name in Guiana, *Coutari.* A most beautiful plant, requiring the utmost heat of the stove, but very rare in gardens, if it indeed exists in cultivation at all now.

462. *Portlandia.* In honor of the Duchess of Portland, once a famous patroness of botany. Splendid plants of the natural order Rubiaceæ Portlandia grandiflora is common and easily grown. P. coccinea is perhaps not in the country, although stated to have been introduced in 1775

463 *Campanula* A diminution of *campana*, a bell; on account of the form of the corolla, which resembles a little bell Rapunculus is a diminution of *rapa*, a radish, in allusion to the nature of its root. Speculum is so called because the corolla in its form resembles a little round and elegant mirror (speculum), whence in

2642 nitida *W*	smooth-leaved	△	or	½ jl	W	N. Amer.	1731.	D	p l	Dod. me 4 · 111
2643 aúrea *W.*	golden-flowered	⌴	or	3 jl.s	Y	Madeira	1777	S	s.p	Bot. reg 57
2644 versicolor *H. K.*	various-colored	△	or	4 jl s	St	Greece	1788	D	s.l	Bot. rep. 356
2645 lilifólia *W.*	Lily-leaved	△	or	2 my s	Pa.B	Siberia	1784	D	p l	Bot. reg 236
2646 stylósa *Lam.*	long-styled	△	or	1½ my.jn	Pa.B	Siberia	1820.	R	co	Gmel. sib. 3. t 47
2647 grandiflóra *W.*	great-flowered	△	or	1 jn au	B	Siberia	1782.	D	p l	Bot. mag 252
2648 rhomboídea *W*	Germander-lvd.	△	or	2 jl	Pa.B	Switzerl	1775	D	p l	Bot. cab 603
2649 verticillata *W*	whorled	△	or	2 jn	L.B	Siberia	1783	D	s.l	Pal. it. 3. t G. f.1
2650 marsupiflóra *Fisch*	cernuous	△	or	1½ jn jl	Pa.B	.....	1818.	R	co	
2651 Lobelioides *W.*	small-flowered	○	or	1 jl.au	W P	Madeira	1777	S	s.l	
2652 excisa *Schl.*	bitten	△	or	½ my.jn	B	Switzerl.	1820.	R	co	Bot. cab 561
2653 latifólia *W.*	giant	△	or	4 jl	Pu	Britain s m. p.		S	p l	Eng bot. 302
2654 eriocárpa *Bieb*	woolly-fruited	△	or	2 jn jl	B	Caucasus	1823.	R	co	
2655 urticifólia *W*	Nettle-leaved	△	or	3 au	Pu	Germany	1800	D	co	
2656 Trachélium *W*	Throatwort	△	or	4 jn au	V	Britain woods.		D	p l	Eng. bot. 12
2657 Rapunculoides *W*	creeping	△	or	3 jn jl	B	England woods		D	p l	Eng. bot 1369
2658 macrostáchya *Panz*	large-spiked	◯	or	1½ jn jl	B	Hungary	1814	S	co	
2659 sarmática *B Reg*	Betony-leaved	△	or	2 jn au	Pa.B	Siberia	1803	D	co	Bot. reg 237
2660 bononiénsis *W*	panicled	△	or	2 au s	B	Italy	1773	D	co	M h 2 s 5 t 4 f 8
2661 ruthénica *W en.*	Russian	△	or	2 jn au	B	Caucasus	1815	D	co	Bot. mag. 2653
2662 glomeráta *W*	clustered	△	or	2 my s	V	Britain ch pl		D	p l	Eng bot. 90
2663 speciosa *Horn*	showy	◯	or	2 my jn	Pu	Siberia	1824	R	co	
2664 Cervicária *W.*	wave-leaved	◯	or	3 jl	L P	Germany	1768	S	s p	Bot cab 452
2665 collina *B M*	Sage-leaved	△	or	1 jl au	B	Caucasus	1803	D	p.l	Bot mag 927
2666 azúrea *B M*	azure	△	or	1½ jn jl	L B	Switzerl	1778	D	p l	Bot mag 551
2667 lactiflóra *Bieb*	milk-colored	△	or	2 jl s	W	Siberia	1814	C	s p	Bot reg. 241
2668 aggregáta *W en.*	crowded-flower	△	or	2 jl s	Pa B	Bavaria	1817	C	s p	Bot. cab 505
2669 thyrsoídea *W.*	long spiked	◯	or	2 jn au	B	Switzerl	1785	S	s p	Bot mag. 1290
2670 peregrina *W.*	rough-leaved	◯	or	2 jn au	B	C G H	1794	S	p l	Bot mag 1257
2671 cérnua *Th*	nodd.-flowered	◯	or	½ jn au	W	C G H	1804	S	p l	
2672 capénsis *W.*	Cape	◯	or	1 jn au	B	C G H	1803	S	s p	Bot. mag 782
2673 barbáta *W.*	bearded	△	or	1½ jn jl	L B	Italy	1752	R	p l	Bot mag. 1258
2674 punctáta *W.*	dotted-flowered	△	or	1 my jn	W	Siberia	1813	D	co	Bot mag 1723
2675 Médium *W*	Canterb.-bells	◯	or	4 jn s	B	Germany	1597	S	co	Knor th 1.t.G 2
2676 longifólia *La Peyr*	long-leaved	△	or	4 jn s	D B	Pyrenees	1820	R	co	La peyr pyr t 6
2677 spicáta *W.*	spiked	◯	or	1 jl	L B	Switzerl	1786	S	s p	All p 1 t. 46. f 2
2678 alpina *W*	alpine	△	or	1½ jl	B	Switzerl.	1779	D	p l	Bot. mag 957
2679 móllis *W*	soft	△	or	1 my au	Pu	Sicily	1788	C	s l	Bot mag 404
2680 saxátilis *W*	rock	△	or	1 my au	B	Candia	1768	D	p l	Barr ic.79 t 813
2681 alliariæfólia *W*	Alliaria-leaved	△	or	1 jl s	B	Caucasus	1803	C	p l	Bot. mag 912
2682 lamifólia *Bieb*	Nettle-leaved	△	or	3 jn jl	Pa Y	Iberia	1823.	R	co	Buxb cen 5 t 18
2683 sibírica *W.*	Siberian	◯	or	1 jl s	B	Siberia	1783	C	s p	Bot mag 659
2684 divérgens *W en*	spreading	◯	or	1½ jn jl	B	Hungary	1814	S	s l	Sweet fl g 256
2685 linguláta *W en*	tongue-leaved	△	or	1 jl au	V	Hungary	1804	D	co	Pl rar hun. t 64
2686 caucásica *Bieb*	Caucasian	△	or	½ jl au	V	Caucasus	1804	D	co	
2687 laciniáta *W*	jagged-leaved	△	or	2 my au	S B	Greece	1788	D	p l	Bot rep 385
2688 coronáta *B Reg*	crowned	△	or	2 jl	B	Siberia	1815	D	s l	Bot. reg 149
2689 cichorácea *Sibt. capitáta* B M	headed	△	or	2 jn jl	B	Greece	1768	D	co	Bot. mag 811
2690 lanuginósa *W en*	woolly-leaved	◯	or	2 my au	B	.....	1814	S	s l	
2691 Erinus *W en*	forked	○	or	½ jl au	Pa B	S.Europe	1768	S	s l	M h s 5 t.3 f 25
2692 hederácea *W*	Ivy-leaved	△	or	½ my jn	B	England m s p		D	co	Eng bot. 73



History, Use, Propagation, Culture,

English it is called Venus' looking-glass Ancient mirrors were always round, on which account the astrological sign of Venus was ♀, or a figure of the antique mirror and its handle This is a shewy genus, some of the species are beautiful, and all of them of easy culture in the borders of the flower garden or shrubbery One or two species are used in dietetics, and probably the roots of the whole might be eaten. Almost all the species have long thick white roots, which abound in an acrid milky juice

C rapunculus is much cultivated in France and Italy, and sometimes in Britain, for the roots, which are boiled tender and eaten hot with sauce, or cold with vinegar and pepper It is sown in Spring on deep light soil in drills, and will be ready for use by the autumn of the same year. C persicifolia and Rapunculoides may also be cultivated for the same purpose

C. pyramidalis was a very fashionable plant thirty years ago, and is still cultivated, but has given way to Lobelia splendens and fulgens It is still in demand in Holland as an ornament to halls, staircases, and for being placed before fire-places in the summer season, for which purpose it is planted in large pots, and trained in the fan manner, so as to cover a large surface In the shade it will continue in flower for two or three

2642 Leaves oblong crenulate rigid sessile, Flowers erect flat
2643 Caps. 5-celled, Leaves elliptical serrate smooth, Flowers panicled 5 parted, Stems shrubby fleshy
2644 Leaves cordate serrate smooth, Thyrse terminal, Sepals subulate, Corolla rotate spreading
2645 Leaves lanceolate cauline acutely serrated, Flowers panicled nodding
2646 Leaves stalked subcordate acutely serrated, Flowers small nodding, Style exserted
2647 Leaves ternate oblong finely serrated, Stem 1-flowered, Flower spreading
2648 Leaves rhomboidal serrated, Spike one-sided, Cal toothed
2649 Leaves about 6 lanceolate toothed, Flowers whorled [very long
2650 Stem erect, Lvs altern opp. and ternate lin. lanc entire, Pan pyram Flowers cernu glob. trunc Style
2651 Stem branched upright twiggy, Lvs. lin lanc toothed, Pedunc. filiform long, Cor funnel-shaped 3-4-cleft
2652 Smooth, Stem 1-fl Lower lvs. obl. cauline lin. subsetaceous, Cor. cernuous with the bott. of seg cut out

§ 2 *Leaves rough.*

2653 Stem rounded striated smooth, Lvs ovate lanc doubly serrated, Pedunc axillary 1-fl erect, Cal smooth
2654 Stem furrowed pubescent, Leaves ovate-lanceolate doubly serrate, Pedunc axillary solitary, Cal woolly
2655 Stem angular hispid, Lvs. ov lanc coarsely serrated, Pedunc axillary 1-flowered cernuous, Cal hispid
2656 Stem angular, Leaves stalked, Cal ciliated, Peduncles trifid
2657 Leaves cordate-lanceolate, Stem branched, Flowers one-sided scattered nodding, Cal reflexed
2658 Leaves oblong unequally toothed rough beneath, Stem panicled, Bractes and calyx ciliated
2659 Leaves downy. lower cord lanc stalked, Flower nodding, Germens woolly
2660 Leaves ovate lanceolate beneath scabrous sessile, Stem panicled [very long
2661 Stem rounded and lvs. beneath tomentose, Lower lvs cordate lanc stalked, upper sessile, Raceme term.
2662 Stem angular simple smooth, Leaves scabrous oblong lanceolate cordate sessile, Head clustered
2663 Stem angular subsimple hispid, Rad lvs ovate cordate stalked cauline cordate sessile, Flowers clustered
2664 Hispid, Flowers sessile, Head terminal, Leaves lanceolate linear wavy
2665 Stem simp few-fl Lvs hairy, lower cord lanc. stalked, upper obl sessile, Flowers nodding, Cal hispid
2666 Leaves ovate-oblong sessile serrated, Stem simple angular, Flowers panicled
2667 Leaves lanc twin serr and branched stem hispid, Flowers panicled, Calyxes hispid, Seg dilated serrated
2668 Stem angular smooth, Caul leaves sessile equally toothed wavy lanceolate, Floral cordate, Cor tubular
2669 Hispid, Raceme ovate oblong terminal, Stem quite simple, Leaves linear lanceolate
2670 Leaves ovate rugose, Leafstalks with a dilated and serrated edge, Stem simple hispid, Flowers spreading
2671 Leaves oblong waved hairy, Flowers terminal cernuous, Cal smooth
2672 Leaves lanceolate toothed hispid, Pedunc. very long 1-flowered with strigose capsules

§ 3 *Capsules covered by the reflexed recesses of the calyx* Medium

2673 Stem simple erect pubescent, Lvs lanc. crenate, Racemes simple with nodd flowers, Cor bearded inside
2674 Hairy, Radical leaves stalked ovate acute serrate, Flowers cernuous dotted inside villous
2675 Stem undivided erect hispid. Leaves lanceolate obtusely serrated sessile 3-nerved at base, Flowers erect
2676 Hispid, Caps 5-celled, Branches pyramidal, Peduncles axillary, Flowers erect solitary
2677 Hispid, Spike lax, Flowers alternate, Leaves linear entire
2678 Stem simple, Pedunc axillary 1-flowered 2-leaved
2679 Caps 5-celled covered stalked, Stem prostrate, Leaves very soft nearly round
2680 Caps 5-keeled covered, Flowers alternate nodding, Leaves obovate crenate
2681 Radical leaves reniform coarsely doubly serrate cauline ovate toothed sessile
2682 Leaves reniform cordate doubly crenate stalked tomentose beneath, Flowers one-sided reflexed
2683 Stem panicled pubescent, Leaves lanceolate obtuse wavy
2684 Stem simple diverging pubes Lvs lanc obtusely serrated sessile veiny, Pedunc axill 3-fl and terminal
2685 Hispid, Stem simple, Flowers capitate terminal, Leaves lanceolate obtuse crenate
2686 Lvs obovate wavy rough, Stem creeping, Branches erect few-flow Segm of the hispid cal nearly equal
2687 Caps stalked, Leaves serrated, radical lyrate, cauline lanceolate nearly wedge shaped
2688 Radical leaves stalked cord. doubly serr Raceme few-flowered lax
2689 Caps. covered, Leaves oblong wavy hispid, radical sinuated, Flowers clustered sessile terminal

2690 Leaves woolly · radical lyrate, cauline rounded ovate serrate, Flowers cernuous

§ 4 *Corolla in some degree unequal, Stigma nearly simple, Capsule opening at the end*

2691 Stem dichotomous, Leaves sessile, the upper opp 3-toothed
2692 Leaves cordate 5-lobed stalked smooth, Stem lax



and Miscellaneous Particulars.

months The art of producing a very large plant is to begin with pots of a small size, and shift frequently during two years, till at last the plant occupies a pot of a foot or more in diameter. Rich light soil should be used, but no animal manures or recent dung, as these are found very injurious. Cuttings of the roots flower the second, and seedlings the third year. C carpatica and grandiflora may be treated in a similar manner.

C. lilifolia has a singular anomaly in the leaves, which before the panicle is produced come out in a kind of rose on the summit of the stem, but are, through its prolongation, afterwards dispersed. The flowers vary much both in size and color, and the roots are eaten in China both raw and boiled.

C glomerata is a handsome rock or pot plant; it requires a dry lean soil, otherwise, as in most plants, the flowers lose the intensity of their color in that which is very rich.

C. hederacea is a very small plant, with the leaves so much resembling those of Veronica hederifolia, that Linnæus suspected it to be a hybrid.

C medium is a very ornamental border flower of the easiest culture, and with varieties, double and single,

§2693	*fruticosa W.*	shrubby	or	1	au	B	C. G. H.	1787.	S	p.l	
§2694	*Prismatocárpus W.*	shining	or	½	my.au	B	C. G H	1787.	S	a.l	L'Her. s.an.2 t.3
§2695	*Spéculum W.*	Venus'Look.-gl.	or	1	my.au	Pu	S. Europe	1596.	S	a.l	Bot. mag. 102
	β alba	*white*	or	1	my au	W					
§2696	*hybrida W.*	corn	or	1	my au	Pu	England	cha. fl	S	a.l	Eng. bot. 375
§2697	*pentagónia W.*	five-angled	or	1	my.au	B P	Turkey	1686.	S	a.l	Bot. reg 56
§2698	*perfoliáta P. S.*	perfoliate	or	1	my.au	Pu	N. Amer.	1680.	S	a.l	M.h.2.s.5.t.2.f.23
†*464.	*LOBE'LIA. W.*	Lobelia			*Campanulaceæ. Sp* 46—170.						
2699	*simplex W.*	simple-stalked	or	½	my.au	B	C G. H.	1794.	C	l.p	
2700	*linearis W.*	linear-leaved	or	½	...	B	C. G H.	1791.	C	l.p	
2701	*pinifólia W.*	Pine-leaved	or	1½	my au	V	C G H.	1752.	S	a.p	Bot. rep. 273
2702	*unidentáta H. K.*	single-toothed	or	½	my.au	V	C G H.	1794.	R	l.p	Bot. mag 1484
2703	*Dortmánna W*	water	or	1½	jl au	B	Britain	lakes.	R	l.p	Eng bot. 140
2704	*salicifólia*	willow-leaved	p	6	jn.au	S	Chili	1794.	R	s.p	Bot. mag. 1325
	Típa H. K. *gigantéa* B. M										
2705	*Kálmii L*	Kalm's	or	1	jl au	B	Carolina	1820.	S	co	Bot. mag 2238
2706	*racemósa B M.*	racemose	or	5	jl au	G	W Indies	1818	C	co	Bot. mag. 2137
2707	*bellidifólia W*	Daisy-leaved	or	½	my au	B	C. G H	1790.	C	s.p	
2708	*triquetra W*	triangular	or	1	my au	B	C. G H.	1774.	C	s p	
2709	*longiflóra W*	long-flowered	or	1	my.au	W	Jamaica	1752	S	s.p	Jac. vind. 1. t. 27
2710	*secúnda W.*	side-flowering	or	½	my au	W	C G H	1790.	S	a.p	
2711	*goodenioides H K.*	Goodenia-like	or	1½	jn au	Pa B	N Amer	1799	D	s.l	Will. hor. ber.30
2712	*assur'gens W*	purple	or	3	jn o	S	W. Indies	1787.	C	s p	Bot. rep. 553
2713	*fúlgens W en*	fulgent	or	3	my s	S	Mexico	1809	C	a.p	Bot. rep. 659
2714	*verbascifólia Sm.*	Mullein-leaved	or	6	my jn	R	Nepal	1822.	D	r.m	
2715	*cardinális W.*	Cardinal-flower	or	3	my.s	S	Virginia	1629.	C	s.p	Bot. mag. 330
2716	*spléndens W en*	splendid	or	3	my s	S	Mexico	1814.	C	s p	Bot. reg. 60
2717	*débilis W*	feeble	or	1	jl au	B	C G H.	1774	S	s p	
2718	*aláta R. Br*	winged-stalked	or	1½	my.au	B	N S W.	1804.	S	a.p	La no.hol. 1.t.72
2719	*siphilítica W*	blue-cardinal	or	2	au o	L.B	Virginia	1665.	C	a.p	Bot. reg. 537
2720	*surinaménsis W*	shrubby	or	2	ja jl	O	W. Indies	1786.	C	a.p	Bot mag. 225
	β rubra	*red*	or	2	ja.jl	R	W Indies	1890	C	s.p	Bot. cab 749
2721	*grácilis R. Br*	slender	or	1	jl.o	D B	N. S. W.	1801.	S	s p	Bot. mag. 741
2722	*purpurascens R Br*	purplish	or	1	jn au	B	N S. W	1809.	D	s p	
2723	*inflata W*	bladder-podded	cul	1½	jl.au	Pa B	N. Amer.	1759	S	a.p	Li ac.up.1741 t.1
2724	*cliffortiána W*	purple-flowered	or	1½	jl au	Pk	N Amer.	1733.	S	a.p	Li. h. cl. 426 t.26
2725	*micrántha Hook*	small-flowered	cu	½	jl.au	B	Nepal	1822.	S	s p	Hook. ex fl. 44
2726	*úrens W*	acrid	cul	1½	jn jl	B	England	hea.	S	a.l	Eng bot. 953
2727	*amœ'na Mich*	beautiful-blue	or	S	jn au	B	N Amer.	1812	D	s l	Ann. mus 18 t 1
2728	*minúta W*	small	cul	1in	jn s	W	C G. H.	1772.	R	s p	Bot. mag. 2077
2729	*Laurentia W*	Italian	or	½	jl	B	Italy	1778.	S	s p	Mich. ge. 18.t.14
2730	*tenélla Biv*	slender	or	½	my jl	P.v	Sicily	1821.	D	co	
2731	*campanuloides Th.*	chinese	or	½	my au	W	China	1820.	I	co	Bot. reg 733
2732	*Erinus W*	ascending	or	½	jn s	B	C G H.	1752.	S	s p	Bot. mag. 901
2733	*ernoides W.*	trailing	or	½	jn au	B	C. G. H	1759	R	s p	Her. lugd. t. 109
2734	*bicolor H K*	spotted	or	½	jn au	Pa. B	C. G. H.	1795	C	s p	Bot. mag. 514
2735	*ilicifólia B M.*	Holly-leaved	or	½	my s	Pk	C. G H	1815.	D	s p	Bot. mag. 1896
2736	*pubéscens W.*	downy-leaved	or	½	jn au	B	C. G. H.	1780	R	s p	Jac sch 2 t. 178
2737	*lútea W.*	yellow	or	½	jn jl	Y	C G H.	1774.	S	s.p	Bot. mag 1319
2738	*hirsúta W.*	hairy	or	½	my.s	B	C. G. H.	1759.	C	s p	Bot. rep. 444



History, Use, Propagation, Culture,

of blue, red, purple, and white flowers Like other biennials, it may either be sown where it is to remain any time after midsummer, or sown in beds in spring for transplantation

C speculum and hybrida are annual border flowers of considerable beauty.

464. *Lobelia.* In honor of M. Lobel, author of various works, and particularly of that called Icones Plantarum; he was born at Lisle in 1538, became physician and botanist to James I, and died in London in 1616 This genus furnishes some of our most splendid herbaceous plants, as L. cardinalis, fulgens, and splendens. The predominant color of the corollas is red.

L. Dortmanna (from Dortmann, an apothecary, who first sent it to Clusius), is a beautiful aquatic with leaves reflected into an elegant curve at the end, and the flowers in loose spikes

L. longiflora, which grows by most places and rivulets in the West Indies, is a very poisonous plant. Taken internally it brings on an invincible purging. If the plant be handled, and the hand be unawares applied to the eyes or lips, it brings on an inflammation In the Spanish West Indies it is called *Reventacaballos*, because horses are reported to burst with eating it.

L. fulgens, splendens, and cardinalis, are the three grand ornaments of the genus. They are readily multiplied by cuttings or slips, or by seeds when they ripen, and grow well in light rich soil The culture of L. cardinalis is given at length by Justice, who designates it "a flower of most handsome appearance, and which should not be wanting in curious gardens, on account of the rich color of its flowers" The culture of L.

§ 5 *Capsules prismatical.* Prismatocarpus

2693 Caps. columnar 5-celled, Stem shrubby, Leaves linear subulate, Peduncles very long, Panicles terminal
2694 Caps. linear 2-celled, Leaves lanceolate coarsely serrated smooth, Stem decumbent
2695 Stem very much branched diffuse, Leaves oblong crenate, Flowers solitary

2696 Stem branched at base upright, Leaves oblong crenate, Cal aggregated longer than corolla
2697 Branching diffuse, Lower leaves oblong obtuse, Upper lanceolate, Flower solitary, Cor longer than calyx
2698 Stem simple, Leaves cordate toothed stem-clasping, Flowers sessile clustered

2699 Leaves linear villous, Stem erect
2700 Leaves linear smooth, Stem erect
2701 Shrubby, Leaves linear erect close together
2702 Leaves linear one toothed on each side
2703 Leaves linear 2-celled, Scape simple naked racemose
2704 Leaves lanceolate, Raceme spiked

2705 Stem erect, Leaves lin. lanc obtuse alternate entire, Raceme terminal
2706 Stem half shrubby erect, Leaves lanc ovate serrate toothed, Rac term Pedic. as long as flowers
2707 Leaves ovate toothed hairy, Stem simple
2708 Leaves lanceolate pinnatifid toothed, Raceme terminal
2709 Leaves lanceolate toothed, Peduncles very short lateral, Tube of cor filiform very long
2710 Smooth, Lower leaves oblong toothed, upper lanceolate entire, Peduncles racemose 1-sided
2711 Erect simple slightly pubescent, Lvs obl obt. almost entire, the lower spatulate, Spike naked small flow
2712 Leaves broad lanceolate serrate below toothed decurrent, Racemes compound terminal
2713 Leaves narrow lanceolate toothed revolute at edge and stem pubescent, Raceme terminal
2714 A tall plant with rugose coarse leaves, and a long spike of fine red flowers
2715 Leaves oblong lanceolate cartilaginous-toothed and erect stem smooth, Raceme terminal 1-sided leafy
2716 Leaves narrow lanceolate toothletted flat at edge and stem quite smooth, Raceme terminal
2717 Leaves lanceolate serrated smooth, Peduncles lateral longer than the leaf
2718 Flowers axillary, Stem winged, Radical leaves ovate lanceolate with glandular reflexed teeth
2719 Lvs. ovate-obl. acute at each end unequally serrated, Flowers axillary solitary, Recesses of calyx reflexed
2720 Lvs. obl. acuminate serrated smooth, Pedunc axill 1-fl Sepals linear lanc. spreading, Anthers bearded

2721 Leaves ovate cut, Stem divided, Racemes terminal naked, Upper lip of cor. bearded
2722 Smooth, Stem ascending 4-cornered, Leaves ovate-lanceolate cut serrate twice as short as leafstalk
2723 Stem hairy, Lvs toothed serrate, the lower ov obl the upper ovate, Pedunc. axillary 1-fl Caps. inflated
2724 Stem erect, Leaves cordate obsoletely toothed stalked, Corymb terminal
2725 Smooth erect, Stem 3-cornered, Leaves ovate round repand, Pedunc longer than leaves
2726 Stem erect, Lower leaves obovate toothletted, upper lanceolate serrate, Raceme terminal 1-sided
2727 Quite smooth, Lvs. broad lanc serr. Spike many-flowered 1-sided, Sepals entire, Lower petals ov acute
2728 Radical leaves ovate, Scapes capillary
2729 Stem prostrate, Leaves lanceolate oval-crenate, Stem branched, Peduncles solitary 1-flowered very long
2730 Radical leaves spatulate repand, Cauline setaceous, Stems simple 1-flowered erect
2731 Leaves somewhat stalked lanceolate oblong toothed, Stems decumbent, Peduncles elongated
2732 Stem spreading, Lvs toothed, lower elliptic stalked, upper sess narrow lanc. Pedunc. longer than leaves
2733 Stems prostrate filiform, Leaves stalked oblong toothed
2734 Stems spreading, Lower leaves oblong toothed pubescent subsessile, Upper lip of cor reflexed
2735 Leaves ovate lanceolate deeply toothed, Peduncles axillary 2 or 3 times as long as leaves
2736 Stems angular prostrate and leaves lanceolate toothed hairy, Peduncles axillary 1-flowered
2737 Stems procumbent, Leaves lanceolate serrated, Flowers sessile spiked
2738 Shrubby hairy prostrate Leaves ovate toothed, Flowers lateral with very long stalks 2 or 3-flowered



and Miscellaneous Particulars

fulgens is given by J B Van Mons, and W. Hedges, in the Hort Trans Both confess that very little art is required. Hedges, to procure strong flower stalks, keeps the plants in pots, shifts very frequently from a smaller to a larger size, places them first in cucumber frames, and when they begin to flower in a stove. The pots in which they are allowed to flower are nine inches in diameter, and, in order to supply abundant moisture, pans are placed under the pots constantly filled with water. The soil used is equal parts of loam and leaf-mould, with a third of the whole of sand They begin to flower in July, and continue flowering through the autumn One plant so treated produced a flower-stalk which measured six inches in circumference at the base; the height of the centre spike of flowers was five feet and a half, the shoots from the bottom and sides of the main stem were in number seventeen, and rising four and a half feet

L. splendens and cardinalis may either be treated as above, or as a tender border, or as frame plants. Van Mons observes, that L. cardinalis perishes in sandy soil, but becomes strong and multiplies in loam, while, at the same time, it produces the most brilliant colors in the former The same thing may doubtless be predicted of the other species, it being a well known law of nature as to living beings, that their energies are concentrated in proportion to the obstacles thrown in the way of their expansion.

L. syphilitica has its specific name from its supposed efficacy in the cure of syphilis, among the North American Indians. Sir William Johnston purchased the secret from them, but Woodville says, its virtues have not been confirmed by any instances of European practice.

2739 variifólia *B. M.*	various-leaved	☿	△	or	1	jn jl	Y	C. G. H	1812.	C	s.p	Bot. mag. 1692
2740 corónopifólia *W.*	Buck's-horn	☿	△	or	½	jl.au	B	C. G. H.	1752.	S	s p	Bot. mag. 644
2741 crenáta *W*	notched-leaved	☿	△	or	½	ap my	B	C. G. H.	1794.	C	s.p	
§2742 spéculum *B M*	Looking-glass		◯	or	½	jl.au	Pu	C G. H.	1812.	S	s p	Bot. mag. 1499
2743 pedunculáta *B M.*	long-stalked	☿	△	or	1	o n	B	C G. H.	1819	D	co	Bot. mag. 2251
2744 decúmbens *B. M.*	decumbent	☿	△	or	¼	o.n	B	C. G. H.	1820	D	co	Bot. mag 2277
2745 pyramidália *B. M.*	pyramidal	☿	△	or	4	s	Pu	Nepal	1822.	D	co	Bot. mag. 2367

*465 PHYTEU'MA. *W* Rampion. *Campanulaceæ. Sp* 16—35.

2746 pauciflórum *L.*	few-flowered	♃	△	pr	½	my jn	B	Switzerl.	1823.	D	p.l	
2747 Scheuchzéri *W.*	Scheuchzer's	♃	△	pr	½	my.jn	B	Switzerl.	1813.		co	Bot mag 1797
2748 scorzonerifólium *Vill*	scorzonera-lvd.	♃	△	pr	1	jl au	B	Alps	1819.	D	p l	Bot. mag 2271
2749 Michélii *All*	Michéli's	♃	△	pr	½	jn jl	B	Switzerl.	1822.	D	p.l	All ped.1. t.7 f.5
2750 hemisphæ'ricum *W*	linear-leaved	♃	△	pr	1	jl	B	Switzerl	1752		p.l	Jac. ic. 2 333
2751 comósum *Wulf.*	tufted		◯	pr	½	jn jl	B	Austria	1752.	S	s.l	Jac. au.5 t ap 50
2752 orbiculáre *W.*	round-headed	♃	△	pr	1	jn au	V	England ch pa.		D	p.l	Eng bot. 142
2753 cordátum *B M*	heart-leaved	♃	△	pr	½	jl.au	B	Hungary	1804.		co	Bot. mag. 1466
2754 betonicifólium *Vill*	Betony-leaved	♃	△	pr	2	jn jl	Pa B	S. Europe	1818	D	p l	Vill del 2 12. 3
2755 spicátum *W.*	spiked	♃	△	pr	2	jn au	B	Europe	1597	D	p l	Bot. mag. 2347
2756 ovátum *W.*	oval-spiked	♃	△	pr	2	jn au	D V	Europe	1814.	D	p l	
2757 virgátum *W*	twiggy		◯	pr	1	my jn	B	Lebanon	1820	D	p l	Bot. cab 667
2758 campanuloídeum *Hk*	Campanula-fl.	♃	△	pr	1	jn au	B	Caucasus	1804.	D	p l	Bot. mag 1015
2759 canéscens *W en.*	hoary	♃	△	pr	2	jn au	Li	Hungary	1804.	D	p l	Pl. rar hu t 14
§ 2760 pinnátum *W*	winged-leaved	☿	△	pr	2	jn au	B	Candia	1640	D	p l	Vent. cels 52
2761 stríctum *B M.*	upright	♃	△	pr	2	jn jl	B	S Europe	1819	D	p l	Bot. mag 2145

466. TRACHE'LIUM *W* Throatwort. *Campanulaceæ Sp* 2—4

2762 cæróleum *W.*	blue		◯	or	2	jl s	B	Italy	1640.	S	r.m	Bot. reg. 72
2763 diffúsum *W.*	spreading	☿	△	cul	½	jl s	B	C G H	1787.	S	r m	

†467 ROEL'LA. *W.* Roella. *Campanulaceæ Sp* 4—8

2764 ciliáta *W.*	ciliated	♃	⌴	or	1	jn s	Pu	C G H	1774	S	s p	Bot. mag 378
2765 squarrósa *W*	trailing	♃	△	or	½	jl	B	C G H.	1787	S	s p	
2766 decúrrens *W*	decurrent		◯	or	1	jl.s	B	C G H	1787	S	l p	L'He se an 4 t.6
2767 muscósa *W.*	Moss-like		◯	cu	½	jl s	B	C. G H.	1802.	S		

468 GOODE'NIA. *R Br.* Goodenia *Goodenoviæ. Sp* 2—33

2768 ováta *R Br.*	oval-leaved	♃	⌴	or	2	jn o	Y	N S. W.	1793	S	s p	Bot rep 68
2769 grandiflóra *R Br*	large-flowered	♃	⌴	or	4	jn au	Y	N S W	1803.	S	s p	Bot mag 890

469 EU'THALES. *R Br* Euthales. *Goodenoviæ Sp* 1

2770 trinérvis *R Br.*	three-nerved	☿	△	or	1	my s	P Y	N Holl	1803.	C	l p	Bot. mag 1197

†470 DAMPIE'RA *R Br* Dampiera *Goodenoviæ. Sp* 1—13.

2771 stricta *R. Br*	upright	☿	△	or	1	jn.au	B	N S. W.	1814.	C	l p	Ann. mus. 18 t 2

471 SAMO'LUS. *W* Brook-weed *Primulaceæ? Sp* 2—8.

2772 Valerándi *R Br.*	common	♃	△	pr	½	jn au	W	Britain	mar	D	co	Eng bot. 703
2773 littorális *R Br.*	sea-side	☿	△	pr	½	jl s	W	N S. W	1806	D	s l	Bot cab 435

472 VELLE'IA *Sm.* Velleia *Goodenoviæ. Sp* 1—6

2774 lyráta *R Br.*	lyrate	☿	△	or	½	ap	Y	N Holl.	1819.	D	s p	Bot. reg 551

473 SCÆ'VOLA *R Br* Scævola *Goodenoviæ. Sp* 4—25

2775 Lobélia *H K*	Purslane-lvd	♃	⌴	or	2	...	W	W Indies	1724.	C	l p	Plu ic t. 165 f 1
2776 crassifólia *R Br*	thick-leaved	♃	⌴	or	3	au s	W	N Holl	1805	C	s p	La. no hol 1 t.79
2777 microcárpa *R Br.*	small-fruited	☿	△	or	1½	my s	P V	N S W	1790	D	s p	Bot. mag 287
2778 suavéolens *R. Br*	sweet-scented	☿	△	or	2	au.s	B	N S. W	1793	D	s p	Bot. rep 22



History, Use, Propagation, Culture,

465. *Phyteuma* Φυτευμα, was the name of a plant much used among the ancients for aphrodisiacal purposes. No qualities of such a kind have been ascribed to the modern plant. This is a handsome genus, and with Roella is well adapted for rock-work or pots. The roots of P. spicatum are edible, and used in Switzerland like those of the rampion.

466. *Trachelium.* From τραχυς, rough, which its leaf is in a high degree. A pretty little favorite of the flower border, easily cultivated and preserved.

467. *Roella* Named after G Roelle, professor of anatomy at Amsterdam. He procured this plant for Clifford. A pretty little leafy bush, with beautiful flowers of blue and white

468. *Goodenia.* So named by Sir J E. Smith, in honor of his friend Dr. Goodenough, Bishop of Carlisle, and a lover of natural history. Herbs or small shrubs, with alternate leaves, and terminal or axillary flowers which are generally yellow, sometimes blue.

469. *Euthales.* From ευ, well, and θαλλω, to push or sprout. Very like the last in all external characters.

2739 Stems erect, Leaves linear entire and toothed, Flowers solitary terminal
2740 Leaves lanceolate toothed, Peduncles very long
2741 Leaves lanceolate crenate smooth, Stem twining
2742 Stem prostrate, Ped. axillary solitary 1-flow. very long, Cor. hypocrateriform
2743 Leaves stalked recurved pinnatifid, Pedunc elong lat solitary 2-flowered
2744 Leaves obovate toothed shorter than the axillary solitary peduncles
2745 Leaves lanc. serrulate with long points, Racemes leafy panicled, Cal. as long as cor.

§ 1. *Flowers in heads.*

2746 Head leafy, Leaves all lanceolate
2747 Head rather leafy shorter than the linear bractes, Leaves lanceolate toothed
2748 Spike elongated cylindrical, Lower flowers remote, Leaves lanceolate crenated, Upper linear
2749 Head roundish, Bractes oblong lanceolate, Leaves linear rigid nearly entire
2750 Head roundish, Bractes ovate, Leaves linear nearly entire scarcely shorter than stem
2751 Head terminal sessile, Leaves toothed: radical cordate
2752 Head roundish longer than bractes, Radical leaves ovate cordate bluntly serrated, Cauline lin. lanceolate
2753 Bractes cordate acum shorter than the roundish head Rad lvs obl cord crenate, Caul ½ stem-clasping
2754 Spike oblong, Leaves simply crenate · radical lanceolate cordate, cauline lanceolate
2755 Spike oblong lengthened, Styles downy trifid, Radical leaves cordate doubly toothed
2756 Spike ovate, Styles hairy longer than the flower bifid, Radical leaves cordate doubly toothed

§ 2. *Flowers axillary scattered.*

2757 Branches twiggy, Lvs lanc acute at each end uneq toothed roughish, Flowers deeply divided in pairs
2758 Lvs. ovate acute sessile serrated rough, Stem angular quite simple, FL racemose sessile, lower clustered
2759 Leaves sessile, Lower obovate crenate-serrate, Upper lanceolate entire, Flowers racemose
2760 Leaves pinnate, Flowers very large in cymes
2761 Rad. leaves lin. spatulate entire, Flowers ½-whorled in 3-flowered alternate parcels

2762 Branches erect, Leaves ovate serrated flat
2763 Much branched diffuse, Branches divaricating recurved, Leaves subulate

2764 Leaves linear ciliated upright, Flowers sessile
2765 Diffuse, Leaves ovate recurved toothed, Flowers terminal aggregate
2766 Leaves lanceolate ciliated entire decurrent, Flowers solitary terminal
2767 Leaves ovate toothed reflexed smooth, Flowers terminal solitary

2768 Erect smooth, Leaves ovate acute toothed serrated, Axillæ bearded, Sepals subulate filiform
2769 Erect pubescent, Branches angular, Lower leaves lyrate, Upper obovate acute

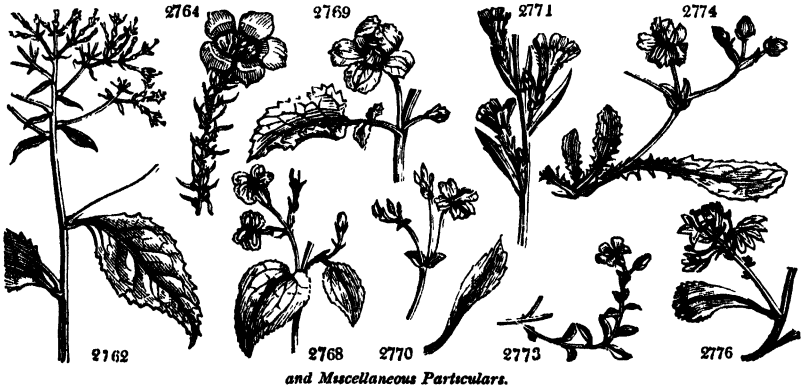
2770 A small herbaceous plant with large entire radical leaves

2771 Leaves lanceolate entire or toothed fleshy smooth, Cor. hairy outside

2772 Stems diffuse branching, Racemes axillary and terminal
2773 Stem rounded branched leafy, Radical leaves spatulate cauline lanceolate

2774 Smooth, Bractes of the dichotomies distinct, Leaves lyrate or toothed-cut at base

2775 Leaves obovate smooth entire
2776 Spikes terminal and axillary, Leaves fleshy obovate toothed
2777 Leaves alternate obovate toothed smooth, Fruit very small
2778 Leaves entire obovate thick rough, Drupe berried (*Goodenia calendulacea.*)



and Miscellaneous Particulars.

470. *Dampiera.* Named by Mr. Robert Brown, in honor of Captain William Dampier, a famous voyager, whose knowledge and attention, in matters connected with botany, are attested by the remains of the collections made during his voyages, and now preserved in the Sherardian Herbarium at Oxford

471. *Samolus* Derived from two Celtic words, *san*, salutary, and *mos*, pig; a plant which is salutary to pigs. Pliny says, it was considered among the Gauls as a specific in all maladies of swine. The plant was collected with mystic ceremonies S. Valerandi was named after Dourez Valerand, a botanist of the 16th century, mentioned by Bauhin Small marsh plants with white flowers.

472. *Velleia.* Named by Sir James Smith, after Major Velley, a gentleman who paid much attention to marine algæ The genus resembles Goodenia in appearance.

473. *Scævola.* So named from *scæva*, the Latin word to express the left hand, the flower having the appearance of being defective of one half of its corolla. An extensive New Holland genus resembling Goodenia.

†474 CAPRIFO'LIUM. *R. S.* HONEY-SUCKLE — *Caprifoliaceæ* *Sp.* 11

2779	ítálicum *R S.*	white-Italian	or	10	my jn	P Y	England woods.	C	co	Eng. bot. 799
	β rúbrum	*red-Italian*	or	10	my jn	R	S. Europe ...	C	co	Schm. arb. t. 106
2780	etrúscum *R. S.*	Roman	or	15	my jn	O	Italy	C	co	
2781	dioícum *R S*	small-flowered	or	6	jn jl	Pu	N Amer. 1766.	C	co	Bot. reg. 138
2782	sempervírens *R. S.*	trumpet	or	15	my au	S	N Amer 1656.	C	s p	Bot. mag. 781
	β minus	*small-trumpet*	or	15	my au	S	Carolina 1656	C	s p	Bot. mag 1753
2783	grátum *R S.*	evergreen	or	20	jn au	R	N. Amer. 1730.	C	s.l	H an.15.n 10 t 8
2784	flávum *B M.*	bright-yellow	or	10	my jn	Y·	Carolina 1810.	C	s.l	Bot mag 1318
2785	pubéscens *Hook*	hairy-yellow	or	20	my.jn	Y	Canada 1822.	C	co	Hook. ex fl. 27
2786	implexum *R S*	Minorca	or	8	jn s	R.Y	Minorca 1772.	C	s.l	Bot. mag 640
2787	Periclýmenum *R S*	Woodbine	or	20	my jl	Y	Britain hedg.	C	co	Eng. bot. 800
	β serotínum	*late-red*	or	20	my jl	Y.R	....	C	co	Schm. arb. t. 108
	γ belgícum	*Dutch*	or	20	my jl	Y R	....	C	co	Ho. an.15.n.5.t.6
	δ quercifólium	*Oak-leaved*	or	20	my jl	Y R	....	C	co	
2788	japónicum *R S*	Japanese	or	15	jl s	O	China 1806.	C	p.l	Bot. reg. 70
2789	flexuosum *Ker.*	flexuose	or	15	jl s	O	China 1806.	C	p.l	Bot. reg 712

475. LONI'CERA *R S* LONICERA — *Caprifoliaceæ* *Sp.* 8—19

2790	Xylósteum *W*	Fly	or	8	jn jl	Y	England woods.	C	co	Eng bot. 916
2791	pyrenáica *W.*	Pyrenean	or	4	my	W	Pyrenees 1739	C	co	Magn hort. 209
2792	alpígena *W*	red-berried	or	6	ap my	Y	Switzerl. 1596.	C	s l	Schm. arb. t. 112
2793	cærúlea *W*	blue-berried	or	4	mr ap	Y	Switzerl 1629.	C	co	Bot. mag 1965
2794	nigra *L*	black	or	4	mr	Pa Y	Switzerl. 1597	C	co	Schm arb. 110
2795	tatárica *L*	Tartarian	or	10	ap my	Pk	Russia 1752.	C	co	Bot. reg. 31
	β rúbra	*red*	or	10	ap.my	R	Russia 1752.	C	co	
2796	ciliáta *Psh*	ciliated	or	4	ap my	W R	N Amer 1824	C	co	
	β alba	*white-berried*	or	4	ap my	W.R	N Amer 1824	C	co	
2797	ibérica *Bieb*	Iberian	or	6	ap my	O	Iberia 1824.	C	co	

476 SYMPHO'RIA *Ph* ST PETER'S WORT — *Caprifoliaceæ.* *Sp* 3

2798	glomeráta *Ph*	common	or	4	au s	Pk	N Amer 1730	C	s l	Schm arb t. 115
2799	racemósa *Ph*	Snow-berry	or	4	jl s	Pk	N Amer 1817.	C	s l	Bot. mag 2211
2800	punícea *Sims*	crimson	or	4	jl s	R	N. Amer 1815.	C	s l	Bot. mag 2469

477 DIERVI'LLA *J* DIERVILLA — *Caprifoliaceæ.* *Sp* 1

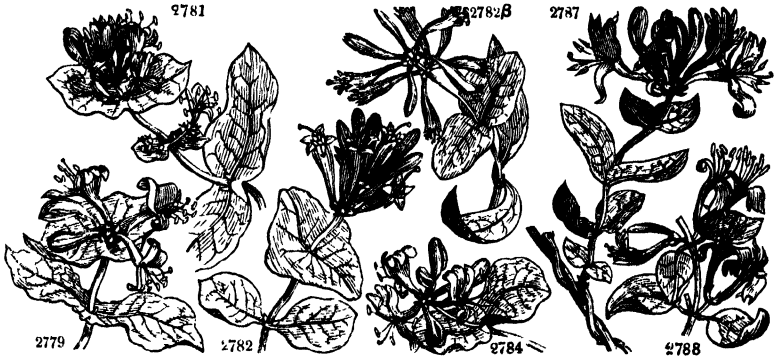
2801	húmilis *P S*	yellow flowered	or	3	jn jl	Y	N. Amer. 1739	C	s l	Bot. mag 1796

†478 TRIOS'TEUM *W* FEVERWORT — *Caprifoliaceæ* *Sp* 2—3

2802	perfoliátum *W*	perfoliate	m	2	jn jl	D R	N Amer. 1730.	D	p.l	Schk ha. 1. t. 41
2803	angustifólium *W*	narrow-leaved	cu	1	jn jl	Y	Virginia 1699	D	p l	Plu al. t. 104 f.2

*479 COFFE'A *W.* COFFEE-TREE — *Rubiaceæ* *Sp* 2—28

2804	arábica *W*	Arabian	clt	20	au n	W	Yemen	1696	S	r m	Bot. mag 1303
§2805	occidentális *W*	western	or	6	...	W	W Indies	1793	C	l p	Jac amer t 47



History, Use, Propagation, Culture,

474 *Caprifolium* A poetical name; signifying goat-leaf, that is to say, a leaf which climbs like a goat. *Chevrefeuille*, Fr, *Geisblatt* or *Baumlilie*, Ger, and *Caprefoglio*, Ital This is a beautiful genus of flowering odoriferous mostly twining shrubs, valuable in the flower garden, shrubbery, and against walls, arbors, or trunks of trees Like most British twiners, the honeysuckle follows the sun Like other twiners, it bears pruning well, for, as Professor Martyn observes, "those plants which in a state of nature cannot ascend without the assistance of others, are often liable to lose large branches, they have therefore a proportionate vigor of growth to restore accidental damages" Against a wall, the climbing kinds are very liable to attacks from aphides, and the caterpillar of Phalœna tortrix, and the sphinges, or hawkmoths, according to Withering, extract the honey from the very bottom of the tubular flowers with their long tongues

In raising the honeysuckle from seeds, they should be sown the autumn after they are ripe, otherwise they will not come up the first year. Cuttings are sometimes apt to rot, owing to water lodging in their tubular stems above the last joint To obviate this inconvenience, some make the cuttings of double the usual length, and insert both ends in the ground, leaving the part above ground in the form of a semicircle Commonly, however, such cuttings root only at one end, or if at both, but very weakly at what was the top end

475 *Lonicera* Named after Adam Lonicer, a German, who was born in 1528, and died in 1586 There was another Lonicer, John, who wrote commentaries upon Dioscorides A section of what was formerly called Lonicera, comprising the species with a shrubby upright stem, neither climbing nor prostrate plants. All hardy and easily increased by layers or cuttings

476 *Symphoria*, is a syncope of *symphoricarpos*, from συν, together, φερω, to bear, and καρπος, fruit, a plant which bears its fruit together in clusters A small genus of low branching shrubs, formerly constituting part of Lonicera.

477 *Diervilla.* Dierville, a French surgeon, travelled in Acadia, whence he sent this plant to his friend Tournefort, who named it after him A pretty low shrub, with yellow flowers appearing in the spring

478. *Trioseteum.* From τρεις, three, and οστον, bone, three bones, on account of its three hard seeds The roots of this genus and of Diervilla are used indiscriminately in N America for Ipecacuana. (*Viola Ipec.*)

479 *Caffea.* An alteration of the Arabic name *qahouh*, which is the name for the liquor of coffee; the grain is called *boun.* *Cahwa*, Pers., *Cahvey*, Turk., and *Eleave*, Egypt

2779 Flowers whorled terminal, Leaves deciduous, the upper perfoliate

2780 Heads term generally 3 together, Lvs decid. pubes opp. upper perfo smooth, lower with stalks only conn
2781 Whorls in heads with bracteæ, Lvs deciduous glaucous beneath, Upper perfoliate, C or gibbous at base
2782 Spikes nearly naked terminal, Lvs oblong evergreen, the upper perfoliate, Tube of cor ventricose above

2783 Flowers whorled terminal, Leaves evergreen obovate glaucous beneath, Upper perfoliate
2784 Whorls in heads, Cor ringent, Segm obl obt Lvs deciduous ovate glaucous beneath, Upper perfoliate
2785 Whorls terminal capitate glandular, Leaves pubescent the upper connate perfoliate
2786 Flowers capitate terminal, Leaves evergreen all distinct
2787 Flowers capitate terminal, Leaves deciduous all distinct

2788 Flowers in pairs terminal sessile, Leaves evergreen all distinct
2789 Flowers sessile with distinct berries, Leaves ovate entire smooth, Stem wavy

2790 Pedunc 2-flowered longer than flowers, Leaves entire ovate-elliptical pubescent
2791 Pedunc 2-flowered, Leaves obovate lanceolate smooth glaucous beneath
2792 Berries united, Leaves oval-lanceolate
2793 Berries globose united, Styles undivided
2794 Leaves elliptical entire
2795 Leaves cordate obtuse

2796 Leaves ovate and cordate ciliated, Cor with an evident spur

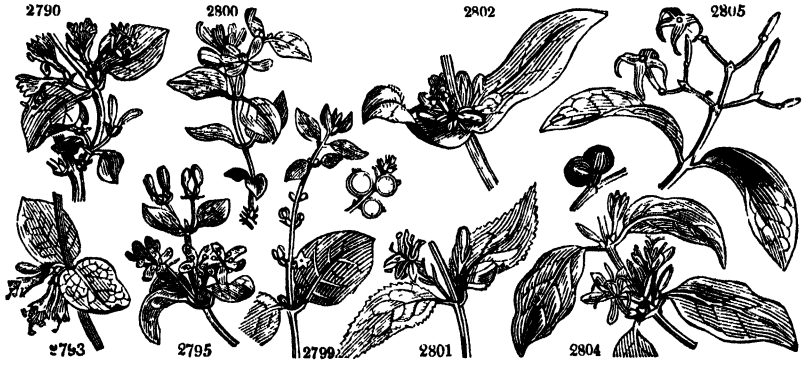
2797 Pedunc. 2-flowered shorter than flowers, Berries twin, Leaves cordate roundish tomentose

2798 Flowers axillary capitate clustered
2799 Raceme terminal, Cor bearded inside
2800 Leaves cordate ovate, Berries distinct, Pedunc. axillary 2-flowered shorter than leaf

2801 The only species. Racemes terminal, Leaves serrated

2802 Leaves oval acuminate, Leaves abruptly narrowed at base, Axillæ 1-many-flowered
2803 Stem hispid, Leaves oval-lanceolate somewhat connate, Axillæ 1-flowered

2804 Leaves oblong ovate acuminate, Peduncles axillary aggregate, Cor 5-cleft
2805 Leaves oblong lanceolate acuminate, Panicle few-flowered trifid terminal, Cor 4-cleft



and Miscellaneous Particulars.

C arabica is an erect, conical-shaped, low tree, with a light brown bark, and opposite, oblong, wavy, shining, light green leaves, flowers in clusters at the base of the leaves, white, of a grateful odor, but of short duration, berries green, red when fully grown, and black when ripe A decoction of this berry forms the well known beverage which is said to have been drank in Ethiopia from time immemorial. It was introduced into Arabia from Persia about the middle of the 15th century, and proceeded by Mecca, Medina, and Grand Cairo, Damascus, and Aleppo to Constantinople, where two coffee-houses were opened in 1554 It is thought to have been introduced to Venice soon after 1615 · it was known at Marseilles in 1644, and Thevenot, a French traveller, brought it to Paris in 1657 Till 1660, it was drank by such only as had been accustomed to it in the Levant About the end of the 17th century a coffee-house was opened at Paris, by one Pascal, an Armenian, who, not succeeding, came to London, where coffee had been previously introduced by Daniel Edwards, a Turkey merchant, who brought home with him a Greek servant, Pasqua Roffee, who understood the roasting and making of coffee, and afterwards set up a coffee-shed, which he was enabled in time to turn to a house in the churchyard of St Michael's, Cornhill, In 1688 Ray affirms that London might rival Grand Cairo in the number of its coffee-houses

The coffee-tree was first introduced to Europe through the Dutch, who procured some berries at Mocha to be sown at Batavia, which being done in the year 1690, Governor Witsen presented a plant to the botanic garden of Amsterdam, where it bore fruit and produced many young plants From these the East Indies and most of the gardens of Europe have been furnished Coffee was afterwards cultivated by the Dutch in Surinam in 1718, and by the French in Cayenne and the Mauritius soon afterwards. It was next grown in Martinique, and so spread to the neighbouring islands and to Jamaica in 1730, or earlier The plants are raised from seeds, then transplanted into nursery lines Plantations are made chiefly on hills and the skirts of mountains, and, if possible, where the soil is moist and shaded. The trees are planted from five to ten feet apart, according to the goodness of the soil and situation They produce fruit the next year after planting, and the produce of a good tree is from 1½ to 2 lbs of berries. The berries are gathered when they begin to fall, and in this state their pulpy bark begins to shrivel They are further dried under sheds, and there passed between wooden rollers to separate the husk from the kernel; and afterwards sifted, winnowed, and put into casks for sale In Arabia the plant and berries are much smaller than in the West Indies, and the flavor in

480 CHIOCOC'CA *W* Snow-berry
2806 racemósa *W.* cluster-flower'd ♣ ☐ or 6 f W Jamaica 1729. C p l Hook. ex. fl 93

481. SERIS'SA *W.* Serissa
2807 fœ'tida *W.* Japanese ♣ ⌴ ☐ or 2 my s W Japan 1787. L r m Bot. mag. 361
β flore-pleno *double-flowered* ♣ ⌴ ☐ my s Japan 1787. L r m

482 CAN'THIUM *Pers.* Canthium.
2808 chinénse *Pers* spiny ♣ ⌴ ☐ or 3 jl s China 1804 C r.m Thun G. t 2 f 4
2809 dumetórum *Roxb* thicket ♣ ☐ or 3 jl s E Indies 1777. C r m Roxb. cor t. 136

*483. PSYCHO'TRIA. *W.* Psychotria
2810 asiática *W* Indian ♣ ☐ or 4 ... W W Indies 1806. C l.p Lam ill. t. 161
2811 citrifólia *W.* Citron-leaved ♣ ☐ or 4 ... W W Indies 1793 C r m
2812 parasítica *W.* parasitic 𝒻 ☐ cu ½ my au W W Indies 1802 C l.p
2813 brachiáta *W* cross-branched ♣ ☐ or 7 ... W Y W Indies 1793 C l p
§ 2814 herbácea *W.* herbaceous ♣ or ½ ap jn W Jamaica 1793. C l p Jac. amer. t. 46
2815 pubéscens *W* pubescent ♣ or 6 ... Y G Jamaica 1812 C l p
2816 undáta *Jacq* wavy ♣ ☐ or 3 my jn W Bahamas 1823 C l.p Jac. sch. 3 t. 260
2817 elliptica *B R* elliptical ♣ ☐ or 3 my jn G Brazils 1821. C l p Bot. reg 607

484. HAMEL'LIA. *W* Hamellia
2818 pátens *W* spreading ♣ ☐ or 5 jl au S Hispaniola 1752 C p l Ex. bot 1. t 24
2819 sphærocárpa *P S.* round-fruited ♣ ☐ or 10 jl au O Mexico 1811 C p l Fl per 2 t. 221
2820 ventricósa *Swz* large-flowered ♣ ☐ or 8 s n Y W Indies 1778 C p l Bot. mag. 1894
2821 chrysántha *Swz* yellow ♣ ☐ or 8 o d Y Jamaica 1822 C p l Jacq ic 2. t. 335

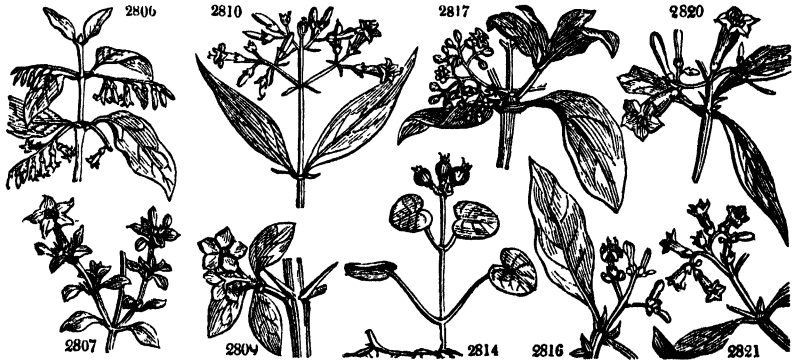
485 POSOQUE'RIA *Aub* Posoqueria
2822 longiflóra *Aub* long-flowered ♣ ☐ or 6 ... W Guiana 1822. C p.l Aubl. gui. t. 51

486. VANGUIE'RA *W* Vanguiera
2823 édulis *W* eatable ♣ ☐ fr 15 .. G India 1809 C p l Lam. ill. t. 159
2824 spinósa *Hort* prickly ♣ ☐ cu 4 jn jl G Madagas 1816. C p l

487 GARDE'NIA *P S* Gardenia
2825 radicans *W* rooting ♣ ⌴ ☐ or 1 mr jn W China 1804 C r m Bot reg 73
2826 flórida *W* Cape Jasmine ♣ ☐ or 5 jl o P Y China 1754 C l p Bot reg 449
β flore pleno *double* ♣ ☐ or 5 jl o P Y China 1754 C l p Ehret pict t. 15
2827 Thunbérgia *W* starry ♣ ⌴ ☐ or 6 ja mr W C G H 1773 C l p Bot mag 1004
2828 latifólia *W* broad-leaved ♣ ☐ or 7 ... W E. Indies 1787. C r.m Rox cor 2 t 134
2829 Rothmánnia *W* spotted-flower ♣ ⌴ ☐ or 10 jl P Y C G H 1774 L l p Th ac st 1776 t 2
2830 uliginósa *W.* marsh ♣ ☐ or 3 jl s W E. Indies 1802 C l p Roxb.cor 2 t.135
2831 armáta *Sw* armed ♣ ☐ or 10 ... W W Indies 1813 C l p
2832 micrántha *W* small-flowered ♣ ☐ or 4 ... W China 1806 C r m Th g n 8 t.1 f 1
2833 amœ'na *B M.* crimson-tipped ♣ ☐ or 4 jn au P k China .. C r m Bot mag 1904
2834 hexándra *W* hexandrous ♣ ☐ or 6 jl s W S Amer 1803 C r m
2835 campanuláta *Roxb* bell-flowered ♣ ☐ or . .. E. Indies 1815 C r m
2836 angustifólia *Lodd.* narrow-leaved ♣ ☐ or 3 jl W ..... 1823 C r.m Bot cab 512

488 GENIPA *P S* Genip-tree
2837 americána *P S.* American ♀ ☐ tm 70 .. P Y S Amer 1779 C l p Pl. ic. 127 t. 136
2838 Merianæ *P S* hairy ♀ ☐ tr 10 ... W Cayenne 1800 C l p

489 OXYAN'THUS *Dec* Oxyanthus.
2839 speciósus *H K* tube-flowered ♣ ☐ or 3 jl W S Leone 1789 C p l Lind coll. 13



History, Use, Propagation, Culture,

consequence greater, bulk being, in these richer soils and more humid climates, obtained at the expence of flavor In our stoves the coffee-tree is raised from the berry, which must be sown soon after being gathered, otherwise if kept six weeks it loses its vital powers. Cuttings of ripened wood root in sand under a glass in moist heat transplanted, and furnished with plenty of water and pot room, they flower and fruit abundantly.

460 *Chiococca* Snowberry, (χιον, snow, and κοκκος, berry) Its berries are of a bright whiteness

481. *Serissa* A name of Commerson's, the meaning of which is not known. The genus is remarkable for the trifid segments of corolla.

482. *Canthium* From *canti*, the Malabar name of the plant. Spiny rigid plants with small opposite leaves, and solitary, sessile, usually fragrant, white flowers

483 *Psychotria.* From ψυχη, life, in allusion to the powerful medicinal effects of one of the species, P. emetica, or, as others say, from ψυχοτριφον, an ancient name for an herb loving shade The genus consists of a great number of stove plants, nearly all bearing white flowers Some of them are very beautiful on account of their foliage one species, P parasitica, is parasitical upon trees in the West Indies.

484. *Hamellia* In honor of the celebrated Henry Louis Du Hamel Du Monceau, born in 1700, died in 1782, author of numerous works on vegetable physiology The genus consists of handsome shrubs of the West Indies, with tubular yellow or orange-colored flowers

485 *Posoqueria* The Galibis in French Guiana call this plant *aymara-posoqueri.* A fine shrub, with white flowers more than a foot long, and an eatable yellow berry as big as a hen's egg

2806 Leaves ovate acuminate, Racemes subdivided axillary 1-sided nodding

2807 Leaves opposite ovate lanceolate, Stipules spiny, Flowers axillary sessile

2808 Spiny, Flowers sessile hairy
2809 Spiny, Leaves ovate wedge-shaped obtuse, Sepals leafy, Berries crowned

2810 Stipules emarginate, Leaves lanceolate ovate
2811 Stipules ovate persistent, Leaves elliptical acuminate subcoriaceous, Berries ribbed
2812 Stipules stem-clasping retuse, Leaves ovate acuminate succulent veinless, Cymes stalked as long as leaves
2813 Stipules ovate oblong bifid, Raceme terminal compound, Flowers clustered sessile
2814 Stem herbaceous creeping, Leaves cordate stalked
2815 Stipules 2-toothed, Leaves lanceolate ovate acuminate pubescent, Panicles cymose spreading
2816 Stipules connate entire deciduous, Leaves oblong ribbed wavy acuminate
2817 Leaves ellipt. narrowed each way, Panicles term erect lax brachiate shorter than the leaves

2818 Racemes terminal colored, Leaves 3 together villous pubescent
2819 Branches rounded, Leaves ternate oblong hairy on both sides, Flowers corymbose
2820 Racemes terminal and axillary, Cor campanulate ventricose, Leaves ternate
2821 Racemes terminal, Leaves oblong wedge-shaped acuminate smooth, Flowers stalked

2822 Stipules and leaves oblong-acuminate, Corymbs terminal about 6-flowered, Tube of cor much curved

2823 Stem unarmed, Leaves large ovate stalked
2824 Stem spiny, Leaves small nearly sessile

2825 Leaves lanceolate, Cor hypocrateriform, Cal angular, Stem rooting
2826 Leaves elliptical, Cor hypocrateriform, Sepals subulate lanceolate vertical

2827 Leaves elliptical, Cor hypocrateriform, Calyx bursting at side, Sepals dilated at end
2828 Leaves obovate roundish, Cor hypocrateriform, Sepals subulate bluntly keeled
2829 Leaves oblong, Stipules subulate Sepals subulate rounded, Tube smooth dilated short
2830 Branches scarred with two spines at the end, Leaves oblong ovate obtuse, mouth of cor villous
2831 Terminal spines of the branches 4, Sepals linear wedge-shaped, Flowers clustered
2832 Leaves elliptical acute at each end longer than the spines, Flowers sessile smooth
2833 Spines axillary straight shorter than the oval smooth leaf, Flowers terminal solitary
2834 Unarmed, Lvs ovate pubescent beneath, Fls usually hexandrous, Cor hairy on each side, Tube short
2835 A fine species, of which no detailed character has yet been given
2836 Very like G florida, from which it chiefly differs in being smaller with narrower leaves

2837 Leaves oblong lanceolate, Peduncles axillary many-flowered, Tube short
2838 All over hairs, Leaves oblong-obovate, Flowers clustered on the summit, Fruit rounded flat

2839 The only species, with very long white flowers



and Miscellaneous Particulars.

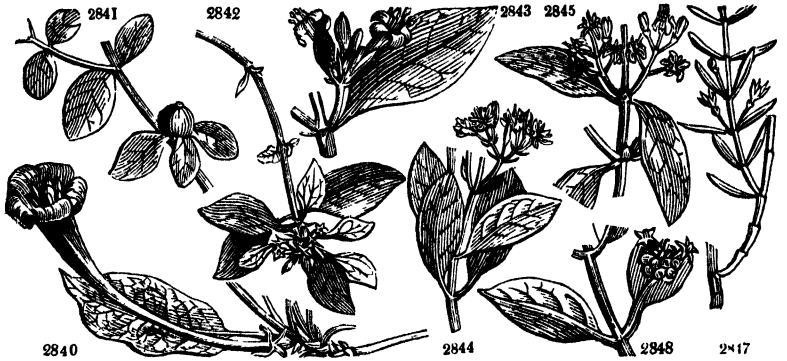
486 *Vanguera* An abbreviation of the Madagascar name of one species, *Voa-vanguer* A fine looking bush, with broad, green, entire leaves. It is said to bear a fine fruit as big as an orange

487 *Gardenia* So named by Ellis, in honor of his friend and correspondent A Garden, M D of Charleston, in Carolina, who sent home many new species of plants. This is a beautiful genus, and most of the species are highly odoriferous, and free flowerers. G florida, on the first approach, smells like the flower of the orange, but on being more closely smelled to, like Narcissus According to Thunberg, there are hedges of it in Japan, and the Japanese are very fond of it near their houses, and in the walks of their gardens The fruit and seeds are used there to dye yellow G Rothmannia smells most during night it bears an ovate, fleshy, angular berry, black when ripe, and about the size of a small pear Almost all the species are spiny in their wild state, but lose their spines at an advanced age, or under high culture and keeping In the stove they require a moist heat to make them flower freely, as do the cuttings to make them strike. According to Sweet, the best way to flower the greenhouse species is to set them in a close frame on a little bottom heat, but not to plunge the pots

488 *Genipa.* A name contrived by Plumier from the name, *Genepapo*, it bears in Guiana and Brazil G americana is an exceedingly rare plant in collections. It bears an excellent fruit, in much request in Dutch Guiana, where it is called Marmalade-box

489 *Oxyanthus* From ὀξυς, acute, and ἀνθος, a flower, on account of the acute segments of the corolla A genus divided from Gardenia, from which it is readily distinguished by the long tube of the flower.

490. RAN'DIA. *P S*	RANDIA			*Rubiaceæ*	*Sp* 2—10							
2840 longiflóra *P L.*	long-flowered	♃	▢ or	4 au s	W	E. Indies	1796.	C	l p	Par lond 93		
2841 latifólia *P. S.*	round-leaved	♀	▢ or	12 my jn	W	W. Indies	1733	C	l p	Br ja. 143. t.8.f.1		
†491. MUSSÆN'DA *W*	MUSSÆNDA.			*Rubiaceæ.*	*Sp.* 1—18							
2842 pubéscens *H K*	pubescent	♃	▭ or	3 my.s	Y	China	1805.	C	p l	Bot. mag 2099		
492 PINCKNE'YA *Mi*	PINCKNEYA			*Rubiaceæ.*	*Sp.* 1							
2843 púbens *Mi.*	downy	♀	▭ tm	20 jn.jl		Georgia	1786.	L	p l	Mich. amer t.13		
493. ERI'THALIS *W*	ERITHALIS.			*Rubiaceæ*	*Sp.* 1—½							
2844 fruticósa *W*	shrubby	♀	▢ fr	15 jl au	W	Jamaica	1793.	C	p l	Br. jam t 17.f 3		
494 WEBE'RA *W*	WEBERA			*Rubiaceæ.*	*Sp* 2—4.							
2845 corymbósa *W.*	corymbose	♃	▢ or	6 ...	W	E Indies	1759.	C	l p	Rh mal. 2. t. 23		
2846 cymósa *W*	cymose	♀	▢ or	20 ...	W	E Indies	1811.	C	l p			
495 PLO'CAMA. *W*	PLOCAMA.			*Rubiaceæ*	*Sp* 1—3							
2847 péndula *W*	pendulous	♃	▭ or	2 ...	W	Canaries	1779.	C	l p			
†496. MORIN'DA *W.*	MORINDA			*Rubiaceæ*	*Sp* 3—8							
2848 umbellàta *W*	umbelled	♃	▢ or	6 ...	W	E Indies	1809	C	l p			
2849 citrifólia *W*	broad-leaved	♃	▭ or	8 ...	W	E Indies	1793.	C	l p	Rhe mal 1 t.52		
2850 Róyoc *W*	Laurel-leaved	♃	▭ or	10 jl o	W	W Indies	1793	C	r m	Jac vind 1. t.16		
497 CEPHAE'LIS *W*	CEPHAELIS			*Rubiaceæ*	*Sp* 3—24							
2851 eláta *W*	tall	♃	▢ or	15 ...	Pu	Jamaica	1793	C	l.p			
2852 pedunculata *P L*	long-peduncled	♃	▢ or	2 f	W	S Leone	...	C	l p	Par lond. 99		
2853 calycina *Lindl*	calycine	♃	▢ or	4 ap my	W	Brazil	1816.	C	l p	Lind coll 21		
498 SARCOCE'PHALUS *Afz*	GUINEA-PEACH			*Rubiaceæ.*	*Sp* 1							
2854 esculéntus *Afz*	common	♃	▢ fr	15 ...	Pk	S Leone	1822	C	p l	Hor trans 5 t 18		
499 HIRTEL'LA *W*	HIRTELLA			*Rosaceæ*	*Sp* 1—13							
2855 americána *W*	American	♀	▢ tm	25 ...	V	W Indies	1782	C	l p	Aub gui. 1 t 98		
500 TRIPHA'SIA *Lour*	TRIPHASIA			*Aurantiaceæ*	*Sp* 1							
2856 Aurantiola *Lour*	three leaved	♃	▭ fr	2 jn jl	W	China	1798.	C	r m	Bot rep. 143		
Lamónia trifoliàta	W											
501 VI'TIS *P S*	VINE			*Viniferæ*	*Sp* 9—24							
2857 vinífera *W*	common Grape	♃	fr	30 jn jl	G	Various	...	C	r m	Jac ic 1. t 50		
2858 índica *W*	Indian	♃	▢ or	20 ...	G	Indies	1692	C	s l	Rhed mal 7. t.6		
2859 Labrúsca *W*	downy-leaved	♃	fr	10 ...	G	N Amer.	1656	L	s p	Jac schœn. 426		
β bícolor álbis	*Bland's Grape*	♃	fr	10	G	N. Amer	1805	L	s p			
2860 vulpína *W*	Fox-grape	♃	or	20 ...	G	N Amer	1656.	C	s p	Jac schœn 425		



History, Use, Propagation, Culture,

490 *Randia* So named in honor of Isaac Rand, F R S, who published the first catalogue of the Apothecaries' Garden at Chelsea.

491. *Mussænda* A name by which Burmann designates a plant of this genus *V fl Zeyl* t 76 The species are all of singular beauty, and especially distinguished by the large colored segment of the calyx, which is either white or purple, and very remarkable

492 *Pinckneya* So named by Michaux, after some American gentleman of the name of Pinckney, who is now forgotten The genus is nearly the same as Mussænda It thrives best, according to Sweet, when turned out against a south wall, and protected by a mat in frosty weather.

493 *Erithalis* A name given by Pliny to a plant remarkable for the verdure of its foliage, ἐρί, a particle signifying augmentation, and θαλλω, to be green It is now applied to a pretty genus of South American plants

494 *Webera.* In honor of G Henry Weber, a German botanist, who published Flora Gottingensis, in 1778, and other works of merit He is chiefly known for the attention he bestowed upon muscology. Small plants with bunches of white flowers

495 *Plocama.* From πλοκαμος interwined hair, on account of its pendulous twisted branches. A little bush with the habit of some kind of Galium The flowers are very small, and not much longer than the calyx.

496 *Morinda. Morus indica,* Indian mulberry, so named by Vaillant, from the shape and color of its fruit. The bark of the roots of this genus is used in the E Indies to dye yellow.

497. *Cephaelis* From κεφαλη, a head, on account of the flowers being united in heads, remarkable for the large, often colored, involucrum in which they are enveloped Species are very rare in collections, and require a high temperature

498. *Sarcocephalus.* From σαρξ flesh, and κεφαλη, a head, in allusion to the large fleshy fruit of the genus. This is like a pine-apple without its crown, of a dull uniform color, and consisting of a solid fleshy mass containing many minute seeds The flavor is said to be excellent. A plant now common in gardens near London, but it has not yet fruited.

499. *Hirtella.* Derived from *hirtus,* hairy Its branches are covered with fine hair Some of these are tall trees of the tropics, usually supporting themselves upon other plants Flowers, which are generally blue or purple, are rarely seen in this country. Cuttings root in sand under a hand-glass.

2840 Leaves ovate stalked, Spines curved, Flowers in terminal umbelled cymes
2841 Spines of the branches terminal in pairs, Leaves ovate roundish, Cor. hypocrateriform

2842 Branches and leaves pubescent, Tube of corolla much longer than calyx

2843 A large tree with downy long leaves dividing but little into branches

2844 Leaves obovate, Cymes compound stalked terminal

2845 Leaves oblong acute, Corymb terminal
2846 Leaves ovate acuminate, Cymes many-flowered axillary-stalked

2847 A small shrub with the appearance of Galium

2848 Erect, Leaves lanceolate ovate, Flowers clustered
2849 Leaves ovate acuminate smooth on both sides, Flowers solitary
2850 A long trailing plant with ovate entire smooth leaves

2851 Heads globose terminal, Peduncles elongated, Involucre 2 leaved, Leaves smooth
2852 Leaves coriaceous lanceolate smooth, Heads on very long stalks
2853 Heads not in an involucrum so long as the flowers, Leaves lanceolate wavy

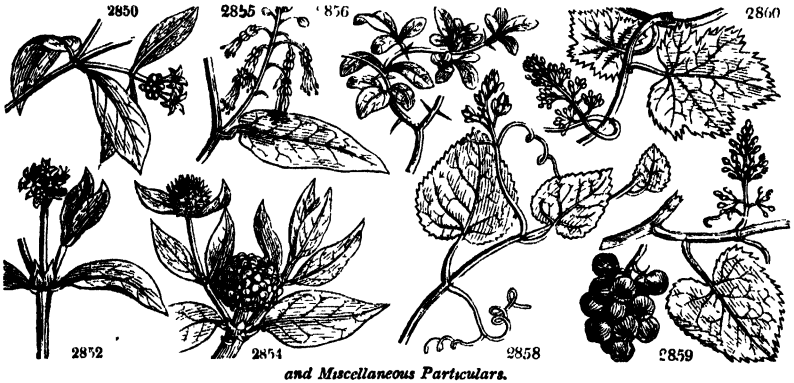
2854 The only species

2855 Racemes simple axillary solitary, Common peduncle villous, Leaves oblong, acuminated

2856 Leaves 3-leaved

2857 Leaves sinuated naked
2858 Leaves cordate toothed villous beneath, Tendrils bearing the fruit
2859 Leaves cordate angular 3-lobed toothed, beneath downy clear white

2860 Leaves cordate 3-lobed coarsely toothed smooth, Teeth unequal with long-pointed divisions



and Miscellaneous Particulars.

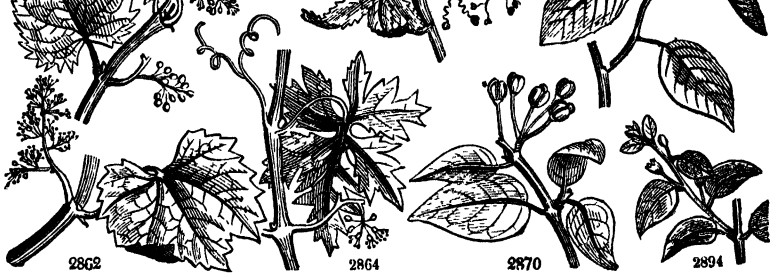
500. *Triphasia.* A name of Loureiro, derived from τριφασιος, triple, on account of the triple divisions of its flowers, and ternary disposition of its leaves It is the *Limonia trifoliata* of gardens, a common bush, sometimes covered over with the little orange berries, which have an agreeable orange-like taste.

501. *Vitis* From the Celtic *gwyd*, a tree or shrub The *G* being suppressed in the pronunciation, according to the usage of Celtic nations, the Latins have made of it *vitis*, the Spaniards *vid*, the French *vigne*, and the English *vine*. The term *muscat*, applied to particular kinds of grape, is not derived from the perfumed or musky flavor of those varieties, but from the berries attracting flies, *muscæ*, for which reason the Latins called the kind *vitis apiaria*.

V vinifera is universally known for its fruit, and for producing the first liquor in the world; a liquor which, notwithstanding all that is said of its dangerous qualities, is yet eagerly drank by all who can procure it, and preferred before all others by those who are unlimited in their means and choice The grape vine is among fruits what wheat is among the cereal grasses, or the potatoe among the farinaceous roots, and, like them, in every country where it will grow, it is cultivated with pre-eminent care. In Britain, its culture is now confined to the garden as a dessert fruit; though formerly grown in many places for the wine-press. Besides the V vinifera, the V labrusca (from *busca*, the Hebrew for grape) and laciniosa are all cultivated, and both are now so intermingled with the first species by hybrid products, that for all practical purposes they may be considered as only varieties.

The varieties of the grape in countries where it is grown for the wine-press, are almost as numerous as the vineyards; for as these for the most part differ in soil, aspect, elevation, or otherwise, and as the vine is greatly the child of local circumstances, its habits soon become adapted to those in which it is placed. When it is considered that a vineyard once planted will last two or three centuries, it will readily be conceived that the nature of a variety may be totally changed during only a part of that time The varieties most in esteem for wine making, are small berries, and bunches with an austere taste. The Burgundy, as modified by different soils and situations, may be considered the most general vineyard grape of France, from Champagne or Marne to Marseilles and Bourdeaux. The best wine in Italy and Spain is also made from grapes of this description, but in both countries many of the larger berried sorts are grown as being more productive of liquor The sweet vines, as the Malmsey, Madeira, Constantia, Tokay, &c. are made from sweet-berried grapes allowed to remain on the plants till over ripe. That wine is the strongest, and has most flavor, in which both the skins and stones are bruised and fermented. The same thing is the case in making cider; but in both processes bruising the stones or kernels is often neglected.

2861 cordifólia *Ph.*	Winter-grape	♃	or	10	...	G	N. Amer	1806.	C	s p	Jac schœn 427
2862 ripária *Ph.*	sweet-scented	♃	or	20	my jn	G	N Amer.	1806.	C	s.p	Bot. mag 2429
2863 rotundifólia *Ph.*	Bull-grape	♃	or	20	...	G	N. Amer.	1806	C	s p	
2864 laciniósa *W.*	Parsley-leaved	♃	fr	20	jn jl	G	.....	1648.	C	s p	Schm. ic. 34 t. 8
2865 cæ'sia *Sab*	Sierra-Leone	♃	or	10	...	G	·S. Leone	1822.	C	s.p	
502. AMPELOP'SIS. *Mich*	AMPELOPSIS.				*Vinifcræ.*	*Sp* 4—6					
2866 cordáta *Mich*	heart-leaved	♃	or	20	ap my	P G	N Amer.	1803	C	co	
2867 bipinnáta *Mich.*	Pepper-vine	♃	or	15	jl au	P G	N Amer	1700	C	co	Act. bon 3. t. 24
2868 quinquefólia *Mich.*	Virgin-creeper	♃	or	60	jn jl	P G	N. Amer	1629	C	co	Corn. can t. 100
2869 hirsúta *Donn.*	hairy	♃	or	60	ap my	P G	N Amer	1806.	C	co	
*503. RHAM'NUS *W.*	BUCK-THORN				*Rhamni*	*Sp* 24—70					
§2870 colubrina *L*	Bahama red wd	♆	tm	20	jn	G	Bahamas	1762	L	co	Jac. vind. 3. t. 50
§2871 elliptica *H K.*	oval-leaved	♠	or	5	au	G	Jamaica	1758.	L	co	Brow jam t. 29
2872 erythroxylon *Pall*	Red-wood	♠	or	6	jl au	Y G	Siberia	1823	L	co	Pall. ross t. 63
2873 longifólia *Desf*	long-leaved	♠	or	6	...	G	. ....	1823	L	co	
2874 cathártica *W*	purging	♠	or	15	my jn	G	England hed		L	co	Eng bot 1629
2875 infectória *W*	yellow-berried	♠	or	6	jn jl	G	S Europe	1683	L	co	Ard me 78 t 14
2876 lycioides *W*	Boxthorn-like	♠	or	6	s d	G	Spain	1752	L	co	Cav. ic. 2 t. 182
2877 oleoides *W*	Olive-leaved	♠	or	4	jn jl	G	Spain	1752.	L	co	
2878 crenuláta *W*	Teneriffe	♠	or	8	mr	G	Teneriffe	1778	L	p l	
2879 saxátilis *W*	rock	♠	or	1	my jn	G	Europe	1752	C	co	Jac aust 1 t. 53
2880 Theézans *W*	Tea	♠	or	3	my jn	G	China	....	C	p l	
2881 tetragóna *W*	square-branch	♠	or	6	..	G	C G H	1816.	C	p l	
2882 lanceoláta *Ph*	spear-leaved	♠	or	12	...	G	N Amer	1812	C	p s	
2883 alpina *W*	Alpine	♠	or	3	my jn	G	Switzerl	1752	1	co	Hall his 1 t. 40
2884 púmila *W*	dwarf	♠	or	1	jl	G	Carniola	1752	L	co	Jac coll 2 t. 11
2885 Frángula *W.*	berry-bearing	♠	or	12	ap my	W	Britain	woods	S	co	Eng bot 250
2886 latifólia *W*	broad-leaved	♠	or	4	jl	G	Azores	1778	L	co	Dend. brit 11
2887 glandulósa *W.*	Madeira	♠	or	15	jn jl	G	Canaries	1785	C	p l	Vent malm 34
2888 prinoides *W*	Winter-ber -lv	♠	or	15	au s	W	C G H	1778	C	p l	L'Her sert t 9
§2889 mystacina *W*	wiry	♠	or	13	n	W G	Africa	1775	S	p l	
2890 alnifólia *W*	Alder-leaved	♠	or	4	my	G	N Amer	1778	L	co	
2891 hýbrida *P S*	hybrid	♠	or	12	my jn	G	. .	..	L	co	L'Her sert t 5
2892 Alatérnus *W en*	bd -lvd -Alater	♠	or	40	ap jn	G	S Europe	1629	L	co	Duh. arb. 3 t 14
2893 Clusii *W*	narrow-leaved	♠	or	30	ap jn	G	S Europe	1629.	L	co	
*504 ŒNOP'LIA *Mich*	ŒNOPLIA				*Rhamni*	*Sp* 2					
§2894 lineáta *W*	lined	♃	or	8	...	G	China	1804.	C	l p	Osb it t 7
§2895 volubilis *W*	twining	♃	or	15	jn jl	G	Carolina	1714	S	s p	Jac ic 2 t. 336



History, Use, Propagation, Culture,

The varieties of dessert grapes on the continent are few the best they have, as the Muscats and Frontignacs, have been obtained from this country The Chasselas or frame grape (our Muscadine), is almost the only eating grape known in the Paris fruit market In Britain, we have not only the best varieties, but we grow the fruit to a larger size and of a higher flavor than is done any where else in the world This is owing to the perfection of our artificial climates, and the great attention paid to soil and subsoil, and other points of culture.

The vine is universally propagated by cuttings, either a foot or more long, with a portion of two year old wood, or short with only one bud, or one bud and half a joint, &c Varieties without end are raised from seed, and it is thought that by propagating from the seeds of successive generations some sorts may ultimately be procured better adapted for ripening their fruit in the open air than now known A seedling vine carefully treated will show blossoms in its fourth or fifth year, say that it produces a fair specimen of its fruit in the sixth year, then a new generation may be obtained every sixth year.

The vine will thrive in any dry soil, or in any soil with a dry subsoil, but it produces the best flavored fruit among granitic and calcareous fragments, and loamy soil in thin strata, with little manure, and when the vine is old and the berry and bunch small on the contrary, the most luxuriant crops, large bunches and berries, in a good depth of friable loam, dry below and richly manured with the strongest of animal manures.

There are three methods of pruning the vine in hot-houses, the fruit tree method, in which the plant is spread out in the fan manner, and treated like a common fruit tree, the long or young wood method, in which all the wood above a year old is cut out down to the stool or stock; and the spurring-in method, in which the fruit is produced from young wood grown annually from the sides of a main shoot or shoots of old wood. The two last methods are the best

Vitis vulpina, the foxgrape, (so called from the foxy flavor of its berries) is cultivated much in North America, of which country it is a native Many improved varieties have been raised by the American gardeners, and have been sent to Europe under the name of the Bland, the Isabella, the Oswego Tokay, &c. &c , but they are all tainted with the bad taste peculiar to the species, and can be in no estimation when even an early July grape is to be procured

502. Ampelopsis From ἀμπελος, a vine, and ὄψις, resemblance The genus resembles the vine in habit, leaves, and flowers; is commonly employed for covering old walls, for which the rapidity of its growth renders it very suitable

503. Rhamnus. From the Celtic *ram*, signifying branching From this word the Greeks have gained ῥαμνος, the Latins *ramus*, and the French *rame*, or in old French *reim*, for which reason the arms of the

2861 Leaves cordate acuminate nearly equally toothed smooth on both sides, Racemes loosely many-fruited
2862 Leaves unequally cut toothed shortly trifid, Stalk nerves and edge pubescent
2863 Leaves shining on both sides reniform cordate equally toothed, Flowers in many little heads
2864 Leaves quinate, Leaflets many-cleft
2865 Shoots very cæsious, Leaves cordate angular

2866 Leaves cordate acute toothed 3-lobed, Nerves villous beneath, Racemes twin bifid
2867 Leaves bipinnate smooth, Leaflets cut-lobed, Racemes stalked twin bifid
2868 Leaves palmate 3-5-leaved smooth on both sides, Leaflets stalked oblong acuminate
2869 Leaves palmate 3-5-leaved on each side pubescent, Leaflets ovate acuminate coarsely toothed

2870 Flowers monogynous hermaphrodite erect, Caps 3-coccous, Stalks rusty tomentose
2871 Flowers hermaphrodite trigynous axillary in umbels, Leaves elliptical acute entire villous beneath
2872 Spines terminal, Leaves linear-lanceolate serrate acute
2873 Unarmed, Leaves lanc. acute at each end serrated with hairs at the axillæ, Flowers axillary clustered
2874 Spines terminal, Flowers 4-cleft dicœcious, Leaves ovate, Stem erect, Berry 4-seeded
2875 Spines terminal, Flowers 4-cleft dicœcious, Stems procumbent
2876 Spines terminal, Leaves linear entire obtuse
2877 Spines terminal, Leaves oblong entire
2878 Branches spiny, Flowers 4-cleft or trifid dicœcious, Leaves oblong obtuse evergreen
2879 Spines terminal, Flowers 4-cleft hermaphrodite
2880 Spines terminal, Leaves ovate serrulate, Branches divaricating
2881 Leaves ovate entire smooth sessile, Branches square
2882 Unarmed, Leaves lanceolate serrulate acute at each end pubescent beneath
2883 Flowers dicœcious, Leaves ovate-lanceolate glandular crenulate
2884 Creeping, Flowers hermaphrodite, Leaves stalked ovate crenate
2885 Flowers monogynous hermaphrodite, Leaves entire smooth, Berry 2-seeded
2886 Flowers monogynous hermaphrodite, Cal. villous, Leaves elliptical entire acuminate rounded at base
2887 Flowers hermaphrodite racemose, Leaves ovate bluntly serrated smooth at the base glandular
2888 Flowers polygamous, Style triple, Leaves ovate serrated
2889 Flowers hermaphrodite, Stigma triple, Leaves cordate, Branches with tendrils
2890 Flowers hermaphrodite, Leaves oval acuminate serrated veiny beneath
2891 Flowers hermaphrodite, Leaves oblong acuminate scarcely perennial
2892 Flowers dicœcious, Stigma triple, Leaves evergreen elliptical serrated acute at the base obtuse
2893 Flowers dicœcious, Stigma triple, Leaves evergreen lanceolate acute at each end mucronate toothed

2894 Leaves ovate ribbed veiny repand, Flower-stalks one flowered, Stem erect
2895 Dicœcious unarmed, Stem twining, Leaves ovate mucronate repand subcrenate striated



and Miscellaneous Particulars

town of Rheims are two branches intertwined R. catharticus was formerly used in medicine, and is still employed in color-making, and sometimes in dying The juice of the unripe berries has the color of saffron, and is used for staining maps or paper They are sold under the name of French berries, as those of R. Clusii are, under the name of Avignon berries The juice of the French berries when ripe, and mixed with alum, is the sap green of the painters, but if the berries be gathered late in the autumn, the juice is purple The bark affords a beautiful yellow dye The inner bark, like that of elder, is said to be a strong cathartic, and to excite vomiting The berries operate briskly by stool, but occasion thirst and griping. It is said by Woodville that the flesh of birds which feed on them is purgative.

R. lycioides furnishes the wood of which the Monguls make their images, on account of its hardness and orange red color

R saxatilis greatly resembles R catharticus. The berries are used to dye the Maroquin or Morocco leather yellow

R. theezans has leaves like the common tea, which are used as such by the poor of China, and called Tia. (*Osbeck.*)

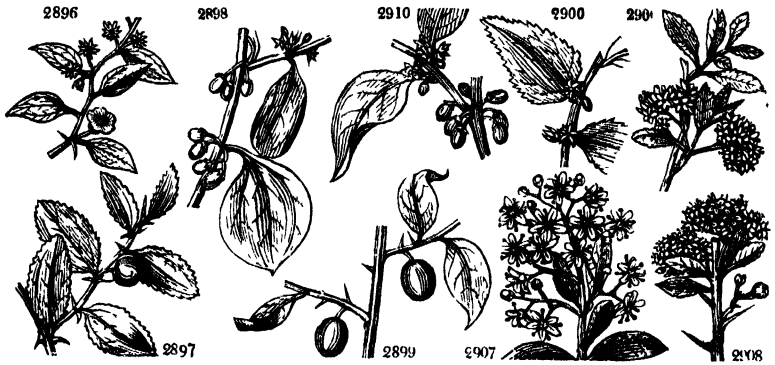
R. frangula has dark purple berries, which are purgative, like those of the common buckthorn. Gathered before they are ripe they dye wool green and yellow, when ripe, blue-gray, blue, and green The bark dyes yellow, and with preparations of iron, black From a quarter to half an ounce of the inner bark boiled in small beer, is a sharp purge In dropsies or constipations of the bowels in cattle, it is a very certain purgative. The flowers are particularly grateful to bees Goats devour the leaves voraciously, and sheep will eat them. Charcoal prepared from the wood is used by the makers of gunpowder. The berries of this species, and also of the cornus, are said to be brought to market and sold for those of the buckthorn; but they are easily distinguished, the true buckthorn having four seeds, this two, and the cornus one.

R. hybridus is the offspring of R. alpinus and alaternus, first procured by L'Heritier about 1778.

R. alaternus is an ornamental evergreen, with mellifluous blossoms, much frequented by bees. It is sometimes confounded with the Phillyrea, but they may be easily distinguished by the position of their leaves, which are alternate in these, but placed opposite by pairs in that. It is a rapid growing shrub, and useful for thickening screens, clothing walls, &c.

504. *Œnopia.* From *ανοινλυξ*, vinous. Its little fruit, full of juice, resembles the berry of a grape. The Rhamnus volubilis and lineatus belong to this genus, and are beautiful little climbing plants, but rather impatient of cold.

†505 PALIU'RUS *Gært*	CHRIST'S-THORN.				*Rhamni Sp* 1—4.								
2896 *australis Gært*	European		or	4	jn jl	P.G	S. Europe	1596	S	co	Lam. illus. t.210		
506 ZI'ZYPHUS. *W*	ZIZYPHUS.				*Rhamni Sp* 4—38								
2897 *Lótus W.*	Lote-tree		fr	4	...	P Y	Africa	1731.	S	pl	De ac.s 1788 t.21		
2898 *Napéca W.*	oblique-leaved		or	15	...	W	Ceylon	1816.	C	lp	Rum amb.2.t.37		
2899 *Jújuba W*	blunt-leaved		fr	6	ap my	P G	E Indies	1759	C	l.p	Rum amb 2.t 36		
2900 *vulgáris W.*	common		fr	6	au s	P.G	S Europe	1640.	C	l p	Pall ross. 2 t. 59		
507 CELAS'TRUS. *W.*	STAFF-TREE				*Rhamni Sp* 8—55								
2901 *lúcida W*	shining		or	2	ap s	W	C G H.	1722.	C	p l	Meerb. ic. 1. t.12		
2902 *bullàta W*	Virginian		or	20	jl	W	Virginia	1759.	L	s l	Plu alm t.28.f 5		
2903 *scándens W*	climbing		or	15	my jn	W	N Amer.	1736.	L	s l	Sch handb 1 t 47		
2904 *cassinoides W*	crenated		or	4	au s	W	Canaries	1779.	C	p l	L'Her.ser.6. t.10		
2905 *tetragóna P S*	four-sided		or	6	...	W	C G. H	1816	C	p l			
2906 *buxifólia W*	Box-leaved		or	4	my jn	W	C G H	1752.	C	p l	Bot. mag 2114		
2907 *pyracántha W*	Pyracantha-lvd		or	2	my jn	W	C G H	1742	C	p.l	Bot mag 1167		
2908 *cymósa B M*	cymose		or	3	jl	W	C G H	1815	C	p l	Bot mag. 2070		
508 SENA'CIA *Lam*	SENACIA				*Pittosporeæ. Sp* 2—4								
2909 *undulàta Lam*	wave-leaved		or	12	...	W	Bourbon	1785	C	l p			
2910 *octogóna Lam*	angular-leaved		or	6	o n	G	Peru	1786	C	l p	Fl. per S t 229		
†509 EUO'NYMUS *W*	SPINDLE-TREE				*Rhamni Sp* 7								
2911 *japónica W*	Japan		or	6	jn au	G	Japan	1804	C	p.l	Kæmpf ic t. 8		
2912 *europæ'a W*	European		or	15	my jl	G	Britain	hed	S	s l	Eng. bot 362		
β pumila	*dwarf*		or	4	my jl	G	.....	...	S	s l			
2913 *verrucósa W*	warted		or	6	my jn	G	Austria	1763.	L	p l	Schm arb. t 72		
2914 *latifólia W*	broad-leaved		or	10	jn jl	G	Austria	1730	L	s l	Bot. mag 2384		
2915 *atropurpúrea W*	purple		or	6	jn jl	Pu	N Amer	1756.	L	p l	Schm arb t 73		
2916 *americána W*	evergreen		or	6	jn jl	Pk	N. Amer	1683	L	s p	Schm arb t. 75		
2917 *angustifólia Ph*	narrow-leaved		or	6	jn jl	G	N Amer	1806.	L	p l			
†*510 CEANO'THUS *W*	CEANOTHUS				*Rhamni Sp.* 8—20								
2918 *americána W*	New Jersey Tea		or	2	jl o	W	N Amer	1713	S	p l	Bot mag 1479		
2919 *intermédia Ph*	intermediate		or	2	jn jl	W	N Amer	1812	C	l p	Pl alm t. 28. f. 6		
2920 *sanguínea Ph*	red-stalked		or	2	my jl	W	Missouri	1812	C	l p			
2921 *microphýlla Ph*	small-leaved		or	1½	jn jl	W	N Amer	1806	L	p l			
§2922 *asiática W*	Asiatic		or	12	jl au	Pa Y	Ceylon	1691	C	p l	Cav ic 5 t 440 f 1		
§2923 *africána W*	African		or	6	mr ap	W	C G H	1712	C	p l	Pl ph t. 126 f 1		
2924 *globulósa H K*	round-headed		or	6	ap my	Co	N Holl	1803	C	p l	Lab no h 1. t 85		
2925 *azúrea Desf*	blue		or	10	ap	Pa B	Mexico	1818.	C	p l	Bot. reg 291		
511 STA'VIA *W*	STAAVIA				*Rhamni? Sp* 2								
2926 *radiáta W*	rayed		or	2	my jn	W	C G H	1787	C	p l	Br cen 165 t 82		
2927 *glutinósa W*	clammy		or	3	ap my	Y	C G H	1793	C	p l	Wend coll. t 22		



History, Use, Propagation, Culture,

505 *Paliurus* Παλιουρος is the Greek name of a place. The city of Paliurus was situated on the coast of Africa over against Candia Paliurus australis is a handsome free flowering, but very prickly shrub it has broad roundish buckler-shaped seed-vessels, which have borders like the brims of a hat, the footstalks being fastened to the middle From this singular appearance of the fruit, like a head with a broad-brimmed hat on, the French call it *porte chapeau* This shrub is by many persons supposed to be that from which the crown of thorns which was put upon the head of Jesus Christ was composed, the truth of which is supported by many travellers of credit, who affirm that this is one of the most common shrubs in the country of Judea, and from the pliableness of its branches, which may easily be wrought into any figure, it may afford a probability Hasselquist, however, is of opinion, that it was a species of Rhamnus, called therefore by Lannæus R Spina Christi

506. *Zizyphus.* A name altered by the Greeks from *asafifa*, its name in the East. Vide *Shaw's Voyage*, 47. Suppl It is called *Zezoof* in Arabic, *Golus* Z Lotus, is the true Lotus of the Lotophagi. It is a prickly branching shrub, with alternate, small, blunt, three-nerved leaves, solitary flowers, and the fruit a spherical drupe, the size of a wild plum, sweet and harmless, inclosing a small, round, bony, two-celled nucleus; first green, but when ripe tinged with saffron-color It is found on the eastern as well as the western extremity of the African desert, and Major Rennel thinks he has seen it on the Ganges Dr Shaw found the fruit common in all the kingdoms which he visited he describes the fruit as small farinaceous berries, of a very common in Barbary, it was sold in the markets, cattle fed with it, and a liquor drawn from it. Mr. Park found it yellow color and delicious taste The natives, he says, convert them into a sort of bread, by exposing them some days to the sun, and afterwards pounding them gently in a wooden mortar, until the farinaceous part is separated from the stone This meal is then mixed with a little water, and formed into cakes, which, when dried in the sun, resemble in color and flavor the sweetest gingerbread. A gruel is next made from the meal which still adheres to the stones The Greeks supposed the people who ate the lotus to be confined to an extent of sea-coast on the north of Africa, including the gulphs of Syrtes. The plant grows readily in our greenhouses, and might be fruited if thought desirable It is propagated by ripened cuttings planted in sand under a hand-glass.

2896 Prickles stipulary twin, one straight one recurved, Leaves ovate crenulate smooth stalked

2897 Prickles twin, one recurved, Leaves ovate oblong obsoletely crenate
2898 Prickles in pairs recurved, Peduncorym Fls half digynous, Leaves ov. oblique smooth on both sides
2899 Prickles solitary recurved, Leaves rounded ovate obtuse downy beneath, Peduncles aggregate
2900 Prickles in pairs, one recurved, Leaves ovate retuse toothed smooth

2901 Leaves oval acute shining margined smooth, Flowers axillary
2902 Leaves ovate acute, Panicles terminal
2903 Leaves oblong acuminate serrated, Racemes terminal, Stem twining
2904 Leaves ovate acute at each end serrated evergreen, Flowers axillary
2905 Leaves ovate serrated, Branches square
2906 Spines axillary, the larger leafy, Leaves lanceolate obovate serrated obtuse, the younger acute
2907 Spines naked, Branches rounded acute
2908 Spines naked, Branches angular, Leaves obovate serrate toothed, Cymes axillary

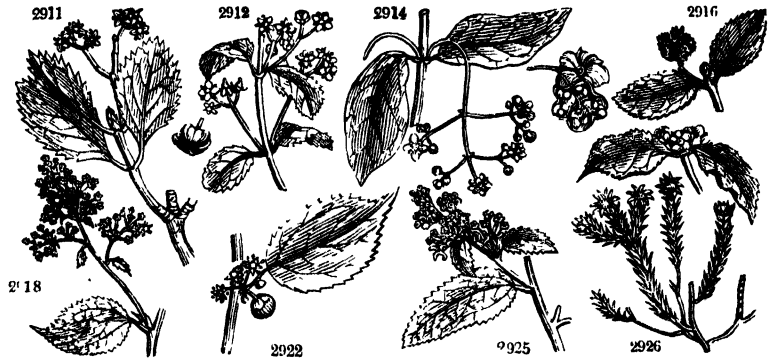
2909 Leaves lanceolate stalked wavy at edge, Cymes umbelled terminal, Caps. 2-celled 2-seeded
2910 Leaves elliptical angular nerveless evergreen, Caps 1-seeded

2911 Flowers 4-cleft, Leaves rounded ovate toothed
2912 Flower-stalks compressed 3-flowered, Flower usually tetrandrous, Leaves oblong-lanceolate smooth

2913 Flower-stalks filiform rounded, Leaves ovate acuminate smooth, Branches warted
2914 Flower-stalks filiform rounded many-fl Lvs ovate oblong acuminate, Branches smooth, Petals roundish
2915 Flower-stalks compressed many-flowered, Stigmas square truncated, Lvs obl acuminate pubes beneath
2916 Flower-stalks rounded 3-flowered, Fl pentan Lvs obl lanc smooth subsess acute serr Branches square
2917 Branches square, Leaves subsessile long linear elliptical subfalcate entire, Fruit warted

2918 Leaves ovate oblong acute subcordate serrate 3-nerved beneath soft with hairs, Corymbs contracted
2919 Leaves oblong acuminate mucronate serrulate 3-nerved, Corymbs loose
2920 Leaves obovate serrated pubescent beneath, Panicles on very short stalks, Branches deep red
2921 Decumbent smooth, Leaves very small in bundles oblong entire, Corymbs of the branches terminal
2922 Leaves ovate acuminate veiny, Cymes axillary
2923 Leaves lanceolate obtuse netted with veins, Panicle terminal
2924 Leaves obovate tomentose beneath, Heads of flowers in panicles
2925 Leaves oblong somewhat cordate serrate tomentose beneath, Racemes compound stalked

2926 Leaves lanceolate 3-cornered spreading, Ray of calyx shorter than the head
2927 Leaves linear lanceolate 3-cornered spreading, Ray of calyx longer than the head



and Miscellaneous Particulars

Z jujuba is a middle-sized tree, with ovate leaves, pale yellowish flowers, and red oval fruit, about the size of olives, inclosing a stone of the same shape They are sweet, and eaten in the East Indies and China.

Z vulgaris is a middle-sized branching tree, bearing a saffron-colored drupe shaped like an olive, but smaller. The plant grows wild in Calabria, and is cultivated in other parts of Italy, and in Spain. The fruit is eaten green or dried as a sweatmeat It is common in China, Japan, Syria, &c. and is said to have been first introduced into Italy from the latter country in the time of Augustus. All the species are readily increased by ripened cuttings planted under a hand-glass

507 *Celastrus* From κηλας, the latter season The ancients considered the holly, the Genista, and the Celastros, the trees which ripened their fruit latest. The Celastros of the ancients is thought to have been a kind of Euonymus, to which this genus is nearly allied It consists of shrubs or small trees, with alternate leaves, and numerous small flowers The plants are of easy culture, but of no great beauty

508. *Scnacia* A genus divided by M de Lamarck from *Celastrus*, and founded upon the Celastrus undulatus of L'Heritier

509. *Euonymus* From ευ, well, and ονομα, a name, well named The application of the name is, however, obscure to us Euonymus was also a Heathen divinity, according to Epimenides she was the mother of the Furies by Saturn *Fusain*, or *Bonnet de Prêtre*, Fr, *Spindelbaum*, Ger., and *Fusaggine*, Ital. The species form neat little trees of no great beauty or use E europea is called prick-wood, from the use of the wood formerly as skewers. E. americana best merits culture, and next, E. latifolia They are easily increased by seed or ripened cuttings.

510. *Ceanothus*. Κεανοθος is a name used by Theophrastus to designate a prickly plant, from κεω, to prick. This is a genus of North American plants, one species of which, C. americana, is very common in gardens. The leaves are dried in Carolina and used as tea, and the root to dye wool a Nankeen cinnamon color The species are of the easiest culture, but of very little beauty.

511 *Staavia* Named after Martin Staaf, a correspondent of Linnæus. Little Cape shrubs, with heads of flowers resembling those of some compound plant. Young cuttings in sand, and covered with a bell, soon strike root.

512. POMADER'RIS. *Lab* POMADERRIS.
2928 apétala *H. K.* apetalous ♂ ⊔ or 7 my jn Pa.Y N. Holl. 1803. C s p Lab. no h 1.t.87
2929 elliptica *H. K.* oval-leaved ♂ ⊔ or 10 my.jl Pa Y N. Holl. 1805. C s.p Bot. mag. 1510
2930 lanígera *B. M.* woolly ♂ ⊔ or 3 ap jn Pa.Y N. Holl. 1806. C s.p Bot. mag 1823
2931 phylicifólia *Lodd.* Phylica-leaved ♂ ⊔ or 2 ap jn Pa.Y N. Holl. 1819 C s.p Bot. cab. 120

513 MANGI'FERA. *W.* MANGO-TREE.
2932 indica *W* Indian ☿ ▢ fr 20 jn s R.G E. Indies 1690. S r.m Bot. rep. 425

514. SCHRE'BERA. *Retz.* SCHREBERA
2933 álbens *Retz.* whitish ♂ ▢ or 6 ... G Ceylon 1824. C p.l N. ac. h. 2 t.4 f 1

†515. BILLARDIE'RA. *Sm* APPLE-BERRY
2934 scándens *W.* climbing ♂ ⊔ or 12 jn.au G N S. W. 1790. S s p Bot. mag. 801
2935 mutábilis *H. K.* changeable ♂ ⊔ or 8 jn s Pu N S. W. 1795. S s.p Bot. mag. 1313
2936 longiflóra *Lab* blue-berried ♂ ⊔ or 20 jn s G V. Di L. 1810. S s p Bot. mag. 1507
2937 fusiformis *Lab* spindle-fruited ♂ ⊔ or 8 jn au B V. Di L. 1823. S s p Lab. n. h. 1 t. 90

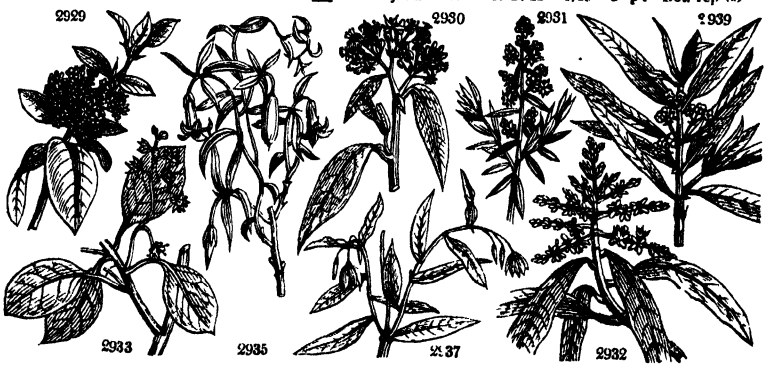
*516 ELÆODEN'DRUM. *W.* OLIVE-WOOD
§2938 A'rgam *W* spiny ☿ ⊔ or 15 jl G Y Morocco 1711. C l.p Com hor. 1. t. 83
2939 orientále *W* oriental ☿ ▢ or 12 ... W Mauritius 1771 C p l Jac. ic 1 t. 48
2940 austrále *H K.* thick-leaved ♂ ⊔ or 3 jn.au W N S W. 1796. C a.l Vent. malm. 117

*517 DIOS'MA. *W en.* DIOSMA
2941 oppositifólia *W.* opposite-leaved ♂ ⊔ or 3 mr jl W C. G H 1752. C p l Com rar. 1. t 1
2942 linearis *W.* linear-leaved ♂ ⊔ or 1 mr jl W C G H 1800. C p l
2943 hirsúta *W.* hairy-leaved ♂ ⊔ or 4 mr.jl Pk C. G H 1731. C p l Com. rar. 3. t 3
2944 pectináta *W en* pectinated ♂ ⊔ or 1 ap jn W C. G H 1812. C l p We co pl. 1 t. 8
2945 ericoides *W* Heath-leaved ♂ ⊔ or 2 mr jl W C. G H 1756 C p l Bot. mag 2332
2946 cupressina *W* Cypress-leaved ♂ ⊔ or 1½ jn jl Pk C G H 1790. C p l Pl al t. 279 f 2
2947 tenuifólia *W en* slender-leaved ♂ ⊔ or 2 ap jn W C G. H ... C p l
2948 succulénta *W en.* succulent-lvd. ♂ ⊔ or 2 ap jn W C G H. .. C p l We co pl 1 t 1
§2949 capitáta *W* pale-purple ♂ ⊔ or 2 my jn Pu C G H 1790 C p l Bot. cab. 860

†518 ADENAN'DRA *W en* ADENANDRA
2950 unifióra *W en* one-flowered ♂ ⊔ or 1 ap jl Pk C G H. 1775. C p l Bot. mag 273
2951 umbellata *W en* umbel-flowered ♂ ⊔ or 2 ap jl Pk C. G H 1789 C p l Bot mag 1271
2952 frágrans *B M* red-flowered ♂ ⊔ or 3 my jl Pk C. G H. 1812. C p l Bot. mag 1519
2953 álba *Th* white-flowered ♂ ⊔ or 2 mr jl W C G H. 1800 C p l
2954 marginata *Th* margined ♂ ⊔ or 2 mr jl Pk C. G H 1806 C p.l Pl. al t. 411. f.

519 BARYOS'MA *W en.* BARYOSMA
2955 serratifólia *W* saw-leaved ♂ ⊔ or 3 mr jn Pk C G H. 1789. C p l Bot. mag 456
2956 latifólia *W* broad-leaved ♂ ⊔ or 2 jl au W C. G. H 1789 C p l Bot. rep 33

Rhamni. Sp. 4.
Terebintaceæ. Sp 1—3
Celastrinæ. Sp 1.
Pittosporeæ. Sp 4.
Rhamni Sp. 3—6
Diosmeæ Sp 9—36.
Diosmeæ Sp 5—8
Diosmeæ Sp 2—3



History, Use, Propagation, Culture,

512. *Pomaderris* From πῶμα, a lid, and δέρρις, a skin, on account of the membranous lid with which the cells of the capsule are covered New Holland shrubs, with the habit of Ceanothus, from which they are distinguishable only by their fruit. Cuttings root freely in sand under a hand-glass.

513. *Mangifera* From *Manga* or *Manghos*, the vernacular name of the fruit, and *fero*, to bear. This is a large spreading tree, bearing a fruit in great estimation in the East. The wood is brittle, brown, and used only for indifferent works The leaves are seven or eight inches long, and two or more broad, lanceolate, entire, of a shining green, and sweet resinous smell. The flowers are produced in loose bunches at the ends of the branches The fruit is a berried drupe, large, flattened like a lens, kidney-shaped, the flesh soft and pulpy, like a damascene plum, the shell almost kidney-shaped, of a leathery crustaceous substance, and one-celled. This fruit, when fully ripe, is yellow and reddish, replete with a fine agreeable juice, some are full of fibres, and the juice runs out of these on cutting, or with a little handling, but those which have few or no fibres are much the finest, they cut like an apple, but are more juicy, and some are as big as a large man's fist. It is esteemed a very wholesome fruit, and, except very fine pine-apples, is preferable to any fruit in India, gentlemen there eat little other fruit in the hot months, but if no wine be drank with it, the Mango is apt to throw out troublesome boils, at least with new comers, which are, however, conducive to health. In Europe we have only the unripe fruit brought over in pickle.

Loureiro remarks, that there are many varieties, differing chiefly in the figure, size, color, and taste of the fruit, as apples and pears do in Europe Retzius, on the contrary, affirms, that there are certainly several distinct species; the number of stamens in some being double, the racemes in others compound, the fruit kidney-shaped, globular, fleshy, almost juiceless, &c

According to Sweet, "the Mango ripens fruit in this country, when the plants are of a good size. Sandy loam, or a mixture of loam and peat, is most suitable to it, and the pots should be well drained, as the plants are apt to get sodden with too much water Fresh seeds from the West Indies vegetate freely. The plant may also be increased from cuttings, which root best in sand under a hand-glass" (*Bot Cult.* 77.)

Knight, Hallet, and some other horticulturists are at present cultivating this tree with a view to its fruit. Knight recommends for such trees, training the shoots downwards, and at no great distance from the glass. There are trees in the garden of Earl Powis which must bear very soon.

514. *Schrebera.* Named after John Chr. Daniel Schreber, a German botanist, chiefly known by an edition of

2928 Leaves ovate-oblong doubly-serrated tomentose beneath, Flowers apetalous in racemes
2929 Leaves oval tomentose beneath, Heads of flowers in umbels panicled
2930 Cymes panicled terminal, Leaves ovate lanceolate entire coriaceous rusty beneath
2931 Leaves linear, Flowers in axillary clusters as long as leaves

2932 Leaves lanceolate wavy, Panicles terminal many-flowered, Stamen 1

2933 The only species

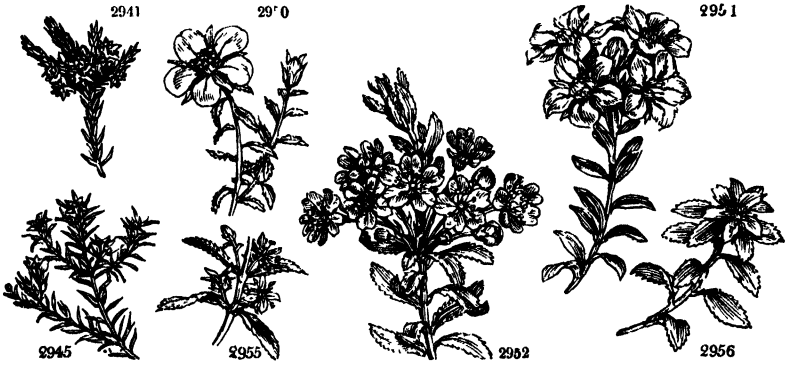
2934 Peduncles solitary 1-flowered, Leaves somewhat hairy
2935 Leaves lanceolate linear, Peduncles solitary 1-flowered smooth, Fruit smooth
2936 Leaves smooth, Cor. cylindrical, Peduncles solitary 1-fl. Petals very long rolled inwards at edge
2937 Panicles few-flowered, Leaves somewhat hairy, Anthers connivent

2938 Branches spiny, Leaves ovate obtuse
2939 Leaves lanceolate acute with red veins
2940 Leaves elliptical coriaceous toothletted, Petals and stamens four

2941 Leaves 3-cornered obtuse ciliated, Flowers terminal
2942 Leaves linear obtuse smooth spreading, Flowers terminal solitary
2943 Leaves linear carinate mucronate villous, Peduncles 1-flowered terminal corymbose
2944 Leaves 3-cornered acute dotted ciliated
2945 Leaves 3-cornered obtuse smooth, Flowers terminal solitary
2946 Leaves oblong lanceolate carinate appressed rough at edge, Flower terminal nearly solitary
2947 Leaves linear carinate mucronate ciliated upright, Peduncles 1-2 flowered corymbose terminal
2948 Leaves linear carinate acute thickish fringed upright, Flowers terminal subsessile solitary or 4 together
2949 Leaves 3-cornered villous-hispid imbricated, Flowers in spiked heads

2950 Leaves lanceolate smooth, Flowers terminal solitary, Calyxes fringed
2951 Leaves oblong smooth ciliated, Flowers terminal in umbels, Calyxes smooth
2952 Leaves ovate oblong glandular scattered, Peduncle glutinous aggregate terminal twice as long as leaves
2953 Leaves linear carinate mucronate at the edge cartilaginous and rough, Flowers axillary and solitary
2954 Leaves cordate, Lower ovate, Upper lanceolate, Umbels terminal

2955 Leaves linear lanceolate serrulate
2956 Leaves ovate crenate pubescent, Peduncles lateral 1-flowered, Branches downy



and Miscellaneous Particulars.

Linnæus's Genera Plantarum, which he published in 1789, in which he unadvisedly altered all the names of Aublet, without ever having seen the plants.

515 *Billardiera* Named in honor of Jacques Julien Labillardière, a French botanist, who visited Syria, and afterwards New Holland, in D'Entrecasteaux's expedition His reputation as a botanist was almost annihilated by the Prodromus Novæ Hollandiæ of Brown The species of this genus are desirable as climbers for a conservatory, especially B longiflora, which is a fast grower and an abundant flowerer, and when in fruit, its fine blue berries make a handsome appearance They thrive well in an equal portion of loam and peat, and cuttings root readily in sand under a bell-glass they may also be raised from seeds, which are produced in abundance (*Bot Cult* 149)

516 *Elæodendrum* From ελαια, an olive, and δενδρον, a tree, a tree resembling an olive E argam furnishes an oil by expression from the fruit as in the common olive: it is used at table by the Moors, and in various works by Europeans. The tree is rather tender, and requires protection during winter

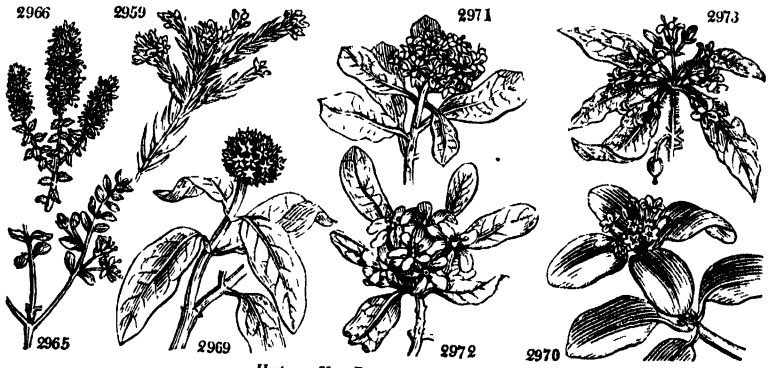
E. australe, and the stove species, "grow freely in a mixture of loam and peat, and ripened cuttings will soon root in sand under a hand-glass" (*Sweet*)

517 *Diosma.* From διος, divine, and οσμη, smell; that is to say, a smell divine among the Hottentots, who rub their greasy bodies with the powdered leaves of all the species, which they call *Bucku.* To Europeans the smell is unpleasant. This is a genus of handsome shrubs, bearing a general resemblance to heaths, but with larger leaves. The flowers are in corymbs at the ends of the branches D. ericoides, and other species, are the kinds chiefly used by the Hottentots to scent the ointments with which they anoint their skin. Young cuttings root freely in sand under a bell-glass

518. *Adenandra* From αδην, a gland, and ανηρ ανδρος, a male; or, in composition of botanical names, a stamen, on account of the appendage of the stamens This is a very natural genus, easily recognized by its glandular anthers. Sweet "found it succeed best in sandy peat, but some prefer mixing a little sandy loam with it. The young tender tops strike best, made into cuttings, and planted in a pot of sand under a bell-glass: it does not require to be plunged in heat." (*Bot. Cult.* 127.)

519 *Baryosma.* From βαρυς, strong, and οσμη, smell, in allusion to its fetid leaves. Plants with the habit of Diosma. Cuttings root readily, taken off in ripened wood, and planted in sand under a bell-glass.

520. AGATHOS'MA *W en*	Agathosma.				*Diosmeæ*	*Sp.* 12.						
2957 hispidum *W*	rough-leaved	ħ	or	1	jn au	V	C. G. H	1786.	C	p.l		
2958 ciliátum *W.*	ciliated	ħ	or	2	ap my	W	C. G H	1774	C	p.l	Bot. cab 210	
2959 villósum *W*	shaggy	ħ	or	1½	jn au	V	C. G H	1786	C	p l	We. co. pl. 1 t. 2	
2960 imbricátum *W*	imbricated	ħ	or	3	ap jn	Pk	C G H	1774.	C	p l	We. co pl 1. t. 9	
2961 acuminátum *W en*	acuminate	ħ	or	5	ap jn	V	C. G H.	1812.	C	p l	We co. pl 1 t.28	
2962 cerefólium *Ven*	Chervil-scented	ħ	or	2	ap jn	W	C G. H	1790.	C	p l	Vent malm 93	
2963 pubéscens *W. en.*	pubescent	ħ	or	1	my au	W	C G H.	1796.	C	p.l	We c.p 1 t 13,14	
2964 crenátum *W.*	crenated	ħ	or	2	ja mr	W	C G H.	1774.	C	p.l	Bot cab 404	
2965 ovátum *W*	oval-leaved	ħ	or	2	f s	W	C. G H	1790	C	p l	Bot mag 1616	
2966 pulchéllum *W.*	blunt-leaved	ħ	or	3	f s	Pu	C G. H.	1787.	C	p.l	Bot. mag 1357	
2967 rúbrum *W*	red	ħ	or	2	f my	R	C G. H.	1752.	C	p.l	Bot. rep. 451	
2968 tetragónum *W*	square-branch	ħ	or	1	jl.au	W	C G H.	1789.	C	p.l		
521. NAU'CLEA *W*	Nauclea.				*Rubiaceæ*	*Sp* 1—12						
2969 orientális *W*	oriental	♀	or	30	...	Y	E. Indies	1800	L	r.m	Rhe mal 3 t 33	
522. PITTOS'PORUM. *W*	Pittosporum				*Pittosporeæ.*	*Sp* 6—11						
2970 coriáceum *W*	thick-leaved	ħ	or	10	my	B	Madeira	1787	L	p l	Bot. rep 151	
2971 viridiflórum *B M*	green-flowered	ħ	or	6	my jn	G	C G H	1806	C	p l	Bot mag 1684	
2972 Tobíra *H K*	glossy-leaved	ħ	or	6	mr au	W	China	1804	C	p l	Bot mag 1396	
2973 undulátum *H K.*	wave-leaved	ħ	or	3	f jn	W Y	N S W.	1789	C	s p	Bot reg 16	
2974 revolútum *H K*	downy-leaved	ħ	or	6	f ap	Y	N S W.	1795	G	s p	Bot reg 186	
2975 ferrugíneum *H K*	rusty-leaved	ħ	or	6	f my	Y	Guinea	1787	G	s p	Bot mag 2075	
523 LASIOPE'TALUM *Smith*	Lasiopetalum				*Büttneriaceæ*	*Sp* 2						
2976 parviflórum *L T*	small-flowered	ħ	or	3	ap jl	Br	N Holl	1810	C	l p	L. t v 10 t.19 f 2	
2977 ferrugíneum *B R*	rusty	ħ	or	4	ap jl	Y	N Holl.	1791	C	s p	Bot mag 1766	
524 THOMA'SIA. *Gay*	Thomasia				*Büttneriaceæ*	*Sp* 3						
2978 purpúrea *Gay*	purple	ħ	or	3	ap jl	Pu	N Holl	1803	C	s p	Bot mag 1755	
2979 solanácea *Gay*	Solanum-like	ħ	or	3	ap jl	Pu	N Holl	1803	C	s p	Bot. mag 1486	
2980 quercifólia *Gay*	oak-leaved	ħ	or	3	ap jl	Br	N Holl.	1803.	C	s p	Bot mag 1485	
525 SERIN'GIA *Gay*	Seringia				*Büttneriaceæ*	*Sp* 1						
2981 platyphý'lla *Gay*	Nettle-tree-lvd	ħ	or	12	ap jl	W	N Holl	1802	C	s p	Mem mu vol 7	
526 BUTTNERIA *W*	Buttneria				*Büttneriaceæ*	*Sp* 2—14						
2982 scábra *W.*	rough-leaved	ħ	cu	6	jl	Pu	W Indies	1793	C	p l	Ca d. 5 t 148 f 1	
2983 microphýlla *W*	small-leaved	ħ	cu	5	...	W pu S	Amer	1816	C	l p	Ca d 5 t 148 f 2	
527 AYE'NIA *W*	Ayenia				*Malvaceæ*	*Sp* 2—4						
2984 pusilla *W*	small	♃	cu	1	jl s	Pu	Jamaica	1756	C	r m	Mill ic. 79. t. 118	
2985 lævigáta *P S*	smooth	ħ	cu	2	..	S	Jamaica	...	C	r m		
528 CALODEN'DRUM *W.*	Calodendrum				*Rutaceæ*	*Sp* 1						
2986 capénse *W.*	Cape	♀	or	40	...	Pk	C G H	1789	C	l.p	H na h 4. t. 22	
†529 TODDA'LIA *Lam*	Toddalia				*Terebintaceæ*	*Sp* 1—5						
2987 asiática *Lam*	prickly	ħ	or	6	...	W	E Indies	1790	C	s p	Lam ill. t 139	
Scopolia aculeata Sm												
530 BURSA'RIA *Cav*	Bursaria				*Pittosporeæ*	*Sp* 1						
2988 spinósa *Cav*	thorny	ħ	or	10	au d	W	N S W	1793	C	s p	Bot mag 1767	
531. CEDRE'LA *W*	Bastard-cedar.				*Cedreleæ*	*Sp* 2						
2989 odoráta *W*	Barbadoes	♀	tm	50	...	Pk	W Indies	1739	C	l p	Br ja. 158 t. 10 f 1	
2990 Toona *Roth.*	E Indian	♀	tm	50	...	Pk	E. Indies	1823	C	l p		



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520. *Agathosma.* From αγαθος, good, and οσμη, smell, to be understood as Diosma. This genus resembles that, and requires the same culture. The Hottentots use the leaves of A pulchella dried and powdered, under the name of *Bucku*, to mix with the grease with which they anoint themselves It gives them so rank an odor, that Thunberg says, he sometimes could not bear the smell of the men who drove his waggon

521. *Nauclea.* A noble genus of Rubiaceous plants, bearing their flowers in round heads The meaning of the name is nowhere explained. One species, N Gambir, is said to yield the gamboge gum of the shops

522. *Pittosporum* From πιττα, resin, and σπορος, a seed. The capsule is resinous These are handsome shrubs, with good foliage and pretty flowers P tobira, a native of Japan, is nearly hardy. Ripened cuttings root freely in sand under a hand-glass, or one species may be grafted on another

523 *Lasiopetalum* From λασιος, woolly, and πεταλον, a petal; in allusion to the flowers. Ripened cuttings planted in sand under a hand-glass will root freely

524. *Thomasia.* Named by M. Gay, after M Thomas, an industrious collector of Swiss plants. Divided lately from Lasiopetalum.

525. *Seringia.* Also named by M Gay, in honor of M. Seringe, an ingenious Swiss botanist, author of Melanges de Botanique, and other useful works Divided from Lasiopetalum, with which it agrees in habit and appearance.

526. *Büttneria.* David Sigismond Augustus Büttner, was a professor of botany at Gottingen, who published,

2957 Leaves 3-cornered blunt villous hispid spreading, Umbels terminal
2958 Leaves lanceolate carinated ciliated, Umbels terminal
2959 Lvs. aggregate linear lanceolate channelled glandular villous imbricated, Heads of branches terminal
2960 Leaves aggregate ovate acuminate imbricated dotted fringed, Heads of branches terminal umbelled
2961 Leaves alternate aggregate subcordate acuminate pubesc. dotted, Flowers in terminal umbelled branches
2962 Leaves imbricate spreading lanceolate ciliated, Heads terminal, Five stamens sterile
2963 Leaves aggregate oval obtuse glandular ciliated spreading, Heads of branches terminal
2964 Leaves ovate crenate dotted beneath, Flowers axillary solitary
2965 Leaves opposite smooth ovate entire revolute at edge beneath rusty with dots
2966 Leaves ovate glandular-crenate smooth, Flowers axillary in pairs
2967 Leaves 3-cornered mucronate smooth below dotted in two rows, Segments of calyx smooth
2968 Leaves ovate carinate ciliated imbricated 4 ways, Flowers terminal solitary

2969 Leaves oblong acute, Peduncles equal, Stamens the length of corolla

2970 Leaves obovate obtuse smooth coriaceous, Capsules 2-valved
2971 Leaves obovate blunt shining netted beneath, Panicle globose terminal
2972 Leaves obovate obtuse smooth coriaceous, Capsules 3-valved
2973 Leaves oval lanceolate narrowed at each end and stalks smooth, Peduncles of the branches terminal
2974 Leaves elliptical obtuse pubescent beneath revolute at the edge
2975 Leaves elliptical acuminate smooth, Leafstalks rusty with down

2976 Sepals smooth inside
2977 Sepals hoary on both sides

2978 Leaves linear elliptical entire, Stipules leafy, Petals 5, Stamens
2979 Petals 5, Stamens 10
2980 Leaves 3-lobed beneath hispid downy, Petals 0

2981 Leaves ovate lanceolate coarsely toothed

2982 Leaves lanceolate toothed hastate at base, Rachis stem and leafstalks angular prickly
2983 Leaves elliptical entire emarginate, Prickles stipulary, Branches wavy smooth

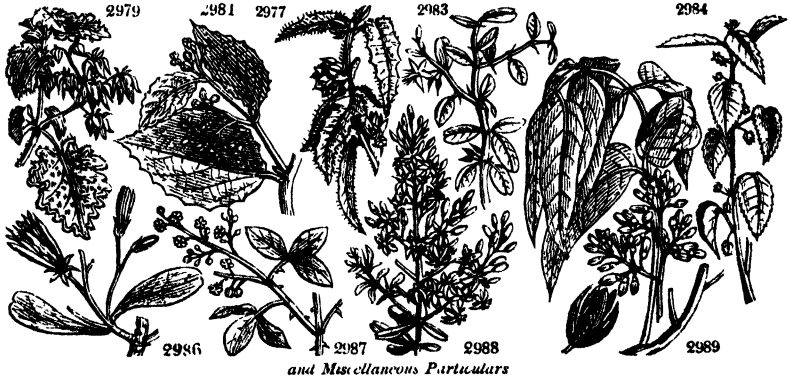
2984 Leaves cordate smooth
2985 Leaves ovate entire smooth, Ovary stalked, Nectary 10 cleft rayed

2986 Leaves ovate obtuse entire with parallel veins, Flowers terminal panicled

2987 Stem branches and leaves prickly, Leaflets ovate lanceolate subserrated

2988 Stem spiny, Leaves emarginate, Flowers racemose

2989 Cal. and cor naked
2990 Cal and cor fringed



and Miscellaneous Particulars

in 1750, a catalogue of the plants in the garden of an amateur named Cunon. Ripened cuttings planted in sand under a hand-glass will root freely.

527 *Ayensa.* In honor of the Duke D'Ayen, of the house of Noailles. He was a great patron of botany. Cuttings root freely in sand in a moist heat.

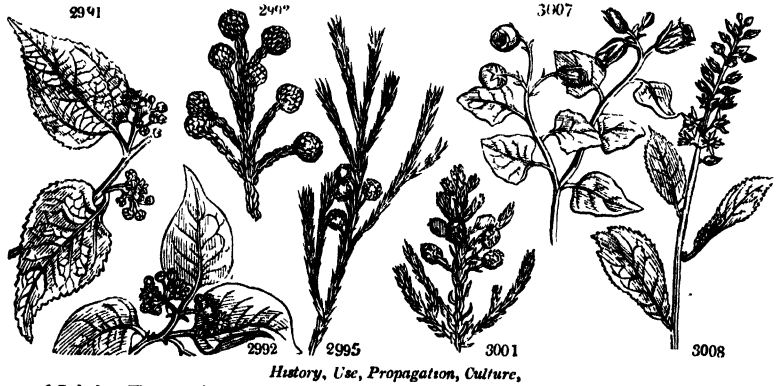
528 *Calodendrum.* From καλος, fine, and δενδρον, a tree. Fine indeed, with its beautiful foliage and splendid flowers. This is a Cape genus, and is generally supposed to be one of the finest trees known there, its fruit bears great resemblance to a chestnut, but seldom arrives here perfect. It grows freely in an equal mixture of loam and peat; and ripened cuttings root readily in pots of sand under a hand-glass. (*Bot Cult* 159.)

529. *Toddalia.* Kaka Toddali is the Malabar name of the shrub. Cuttings root readily in sand under a bell-glass

530 *Bursaria* From *bursa*, a pouch; the capsules resemble those of Thlaspi Bursa Pastoris so much, that Labillardiere fancied he had found a cruciferous tree when he discovered the plant in New Holland. "This is a pretty plant. It is very desirable for a greenhouse or conservatory, being an abundant flowerer, and very showy when covered all over with its elegant little white flowers, an equal mixture of sandy loam and peat is the best soil for it; and young cuttings are not difficult to root in sand under a bell-glass." (*Bot. Cult* 155.)

531 *Cedrela.* From *cedrus*, the cedar-tree The wood of plants of this genus is one of the kinds of cedar of commerce. All that comes from New Holland in the form of packing cases, is supposed to be the wood of a spe-

532. HOVENIA. *Th.*	HOVENIA.				*Rhamni. Sp.* 2							
2991 dúlcis *Don.*	sweet	♆	▭	fr	8	jl.au	W	Japan	1812.	C	p.l	
2992 acerba *Lindl.*	sour	♆	▭	or	8	jl au	W	Nepal	...	C	p l	Bot. reg. 501
*533. BRU'NIA. *W.*	BRUNIA				*Rhamni Sp* 14—24.							
2993 nodiflóra *W*	imbricated		▭	or	6	jl.au	W	C. G H	1786.	C	p.l	Bre. cent.22 t.10
§2994 paleácea *W.*	chaffy		▭	or	2	jn au	W	C G H.	1791.	C	p.l	Wendl. coll t.21
§2995 lanuginósa *W*	woolly		▭	or	3	jn au	W	C G H.	1774.	C	p.l	Bot. cab. 572
2996 verticillata *W.*	whorled		▭	or	3	jn au	W	C. G H	1794	C	p l	
2997 deústa *Th.*	black-tipped		▭	or	1	jn au	W	C G H	1804	C	p l	
§2998 microphýlla *Th*	small-leaved		▭	or	1	jn au	W	C G H	1804.	C	p l	
2999 láxa *Th*	spiked		▭	or	2	jn au	W	C G H	1805	C	p l	
3000 alopecuroides *Th*	Fox-tail		▭	or	1	...	W	C G H.	1816	C	p l	
§3001 abrotanoides *W*	Thyme-leaved		▭	or	1½	my.jl	W	C G H.	1787	C	p l	Bot cab. 355
3002 supérba *Donn*	superb		▭	or	4	my jl	W	C G H	1791	C	p.l	
3003 fragarioides *W*	Strawberry-like		▭	or	1	my jl	W	C G H	1794	C	p l	
§3004 ciliáta *L*	ciliated		▭	or	1	my jl	W	C G H	1812	C	p.l	
3005 ericoides *Wendl*	heathy		▭	or	3	jl au	W	C G H	1804	C	p l	Wend coll.2 t.57
§3006 phylicoides *Th*	Phylica-like		▭	or	2	jn au	W	C G H	1805	C	p l	
534 BROSSÆ'A *L*	BROSSÆA				*Ericeæ. Sp* 1.							
3007 coccínea *L.*	scarlet		▭	or	4	...	S	S Amer	...	C	l p	Plum ic 64. f. 2
535 I'TEA. *L*	ITEA.				*Ericeæ Sp* 1							
3008 virgínica *W*	Virginian			or	6	jn au	W	N Amer	1744	L	s.p	Bot. mag 2409
536. CYRIL/LA *L*	CYRILLA				*Ericeæ Sp* 1							
3009 caroliniána *Ph*	Carolina		▭	or	6	jn au	W	Carolina	1765	C	l p	Bot mag 2456
537 CLAYTO'NIA *W*	CLAYTONIA				*Portulaceæ*		*Sp* 6—11					
3010 virgínica *Ph*	Virginian	♃	△	pr	½	mr my	St	N Amer	1748	D	s p	Bot mag 941
3011 caroliniána *H K*	spatula-leaved	♃	△	pr	½	mr my	Pk	N Amer	1789	D	s p	Par lond 71
3012 lanceoláta *Ph*	spear-leaved	♃	△	pr	½	mr my	W	N Amer	1812	D	p l	Pursh am 1 t 3
3013 sibírica *W.*	Siberian		○	pr	½	my au	R	Siberia	1768	S	p l	Bot mag 2243
3014 alsinoides *Ph*	Chickweed-like		○	cu	½	mr jn	W	Nootk Sd	1794	S	p.l	Bot. mag 1309
3015 perfoliáta *Donn*	small-flowered		○	cu	½	my au	W	N Amer	1794	S	s p	Bot mag. 1336
*538 IMPA'TIENS. *W*	BALSAM				*Balsamineæ*		*Sp.* 4—16.					
§3016 Balsámina *W*	garden		⊡	or	3	jl o	R	E Indies	1596	S	r m	Blackw t 583
§3017 coccínea *H. K*	glandular-leav		○	or	2	jn s	R	E Indies	1808	S	r m	Bot. mag 1256
3018 biflóra *Ph*	two-flowered		○	or	2	jn s	O	N Amer	...	S	r.m	Sweet fl g 43
3019 Nolitángere *W*	Touch-me-not		○	or	2	jn s	Y	England	w s pl	S	s p	Eng bot 937



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cies of Cedrela This tree shoots out many side branches towards the top, which are furnished with winged leaves, composed of 16 or 18 pair of leaflets, so that they are sometimes near three feet long The flowers are on a branching raceme, and the fruit a woody capsule about the size of a pigeon's egg The bark, leaves, and fruit have, when fresh, a smell like assafœtida, but the timber has a pleasant smell In the British West India islands the tree has the common name of cedar The trunk is so large as to be hollowed out into canoes and periaguas, for which purpose it is extremely well adapted, the wood being soft, it may be cut out with great facility, and being light, it will carry a great weight on the water There are canoes in the West Indies which have been formed out of these trunks forty feet long and six broad the wood is of a brown color, and has a fragrant odor, whence the title of cedar has been given to it. It is frequently cut into shingles for covering houses, and is found very durable, but as the worms are apt to eat this wood, it is not proper for building ships, though it is often used for that purpose, as also for sheathing of ships It is often used for wainscoting of rooms, and to make chests, because vermin do not so frequently breed in it, as in many other sorts of wood, this having a very bitter taste, which is communicated to whatever is put into the chests, especially when the wood is fresh, for which reason it is never made into casks, because spirituous liquors will dissolve part of the resin, and thereby acquire a very bitter taste Cuttings of Cedrela strike root under a hand-glass in sand.

532. *Hovenia* Named after David Hoven, a Dutch commissary in Japan, who gave facilities and encouragement to Thunberg while in that country A small tree, nearly hardy Its fruit is eaten in China and Japan, and is said to resemble a Bergamot pear in taste

533. *Brunia* So named after Cornelius Brun, a traveller into the Levant and Russia at the end of the last and beginning of the present century This, Sweet observes, "is a pretty Cape genus, its species are pretty bushy shrubs, with heath-like leaves, and are handsomest while young The flowers are not so showy as in many other genera, but some of them are very elegant A sandy peat soil suits them best, with a moderate supply of water, and young cuttings planted in sand under a bell-glass will strike root freely" (*Bot Cult* 153)

534. *Brossæa.* Gui de la Brosse was physician to Louis XIII, and in 1626 procured the establishment at Paris of the Jardin des Plantes, of which he was the first director A very doubtful plant It is said to be a shrub like a Cistus, with scarlet flowers half an inch long

535. *Itea.* From *Itea*, the Greek name of the willow The name Salix having been given to the modern willow, that of Itea has been applied to a plant resembling the willow in leaves and place of growth. This is a handsome plant which thrives well either in peat-soil or sandy loam, and is increased by layers

2991 Fruit sweet fleshy, Leaves glabrous a little shining
2992 Fruit austere, Leaves downy quite opaque

2993 Leaves 3-cornered incurved acute, Flowers terminal on the lateral branches
2994 Leaves 3-cornered brown at end, Chaff of the heads exserted colored
2995 Leaves half round erect-spreading withered at end at the base and branches hairy, Heads round lateral
2996 Leaves 3-cornered obtuse smooth, Heads terminal, Branches whorled clustered
2997 Leaves 3-cornered black at the end smooth, Heads terminal
2998 Leaves ovate 3-cornered fleshy smooth, Heads terminal, Branches divaricating
2999 Leaves 3-cornered and spiked, Flowers smooth
3000 Leaves 3-cornered acute smooth, Heads lateral globose smooth
3001 Leaves linear-lanceolate reflexed spreading their edge fringed at base, Heads terminal corymbose
3002 Leaves half rounded spreading incurved hairy at the end with a withered beard
3003 Leaves 3-cornered appressed ciliated at edge
3004 Leaves ovate acuminate ciliated A very doubtful species
3005 Leaves short acute 3-cornered at the end spreading fuscous and callous, Heads round at end of branches
3006 Leaves ovate convex imbricated, Heads terminal hairy

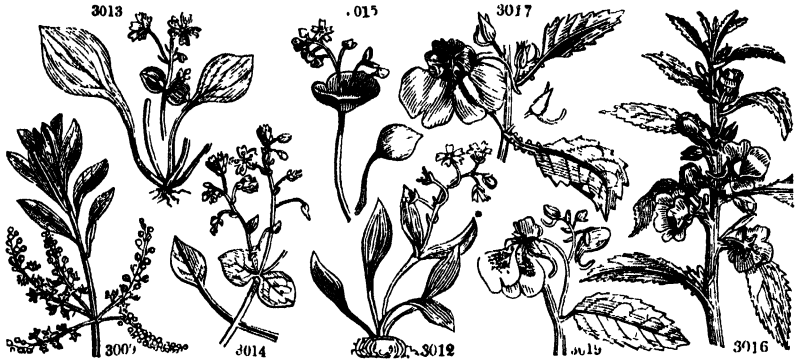
3007 A little shrub like a Cistus, with ovate stalked alternate pale-green leaves

3008 Leaves ovate acute serrated, Spikes pubescent

3009 Leaves wedge-lanceolate acute membranous nerved, Spikes slender

3010 Leaves very long linear, Petals entire
3011 Leaves short oval abruptly narrowed into the stalk
3012 Leaves lanceolate, Raceme solitary elongated, Root tuberous
3013 Leaves nerved . radical and cauline ovate, Raceme 1-sided, Petals bifid
3014 Radical leaves spatulate ovate · cauline ovate distinct, Root fibrous
3015 Radical leaves spatulate rhomb-shaped . cauline perfoliate

3016 Flower-stalks clustered, Leaves lanceolate : the upper alternate, Spur shorter than flower
3017 Leaves alternate oblong oval serrated, Leafstalks with many glands, Spur incurved as long as flower
3018 Flower-stalks generally 2-flowered, Leaves ovate serrated, Flowers orange-brown spotted inside
3019 Flower-stalks clustered, Leaves ovate, Points of stem tumid



and Miscellaneous Particulars.

536 *Cyrilla.* In honor of Dominico Cyrilli, professor of medicine at Naples, and a fellow of the Royal Society of London He published, in 1788, a work upon the rare plants of Naples, which is now one of the scarcest of botanical works. This is a pretty shrub Young cuttings will root under a bell-glass in sand, but not very freely

537 *Claytonia* In memory of Mr John Clayton, who collected plants chiefly in Virginia, and sent them to Gronovius, who published them in his Flora Virginica. C perfoliata is very hardy, and is not easily eradicated where once introduced. It grows on the poorest soil, vegetates early, and the whole of the herbage gathered and boiled makes a very tender spinage.

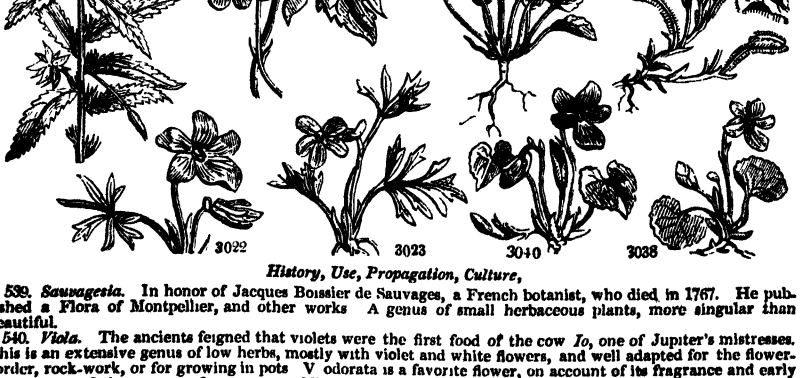
538 *Impatiens* A metaphorical name given to these plants on account of the elastic force with which their capsules burst, and scatter their seeds upon the slightest touch I. Balsamina is one of the most beautiful of popular annuals, forming a shewy cone of finely variegated carnation-like flowers. The prevailing colors of the petals are red and white, the former extending to every shade of orange, purple, scarlet, lilac, pink, and especially carnation or flesh color Those are esteemed the most beautiful varieties which have the flowers double, and striped in the manner of a flake or bizarre carnation but none of the varieties are permanent or can be continued by seeds, and the plant does not root readily by cuttings. The way to procure very large plants is to sow early in the season, as in March, to commence transplanting into 3-inch pots as soon as the plants have two proper leaves, and to shift every week or ten days into pots a size larger every time, till at last they are in pots of the largest or of a very large size, and in the richest light mould The plants should be kept all the time in a hot-bed or pit, plunged, and with abundance of room and air, and the heat of the melon or pine. Fairweather, by transplanting only three or four times from No 48 pots to those of eight inches diameter raised, produced balsams "four feet high, and fifteen feet in circumference, with strong thick stems, furnished with side branches from bottom to top, and these covered with large double flowers" (*Hort Trans* iii 406.)

The juice of the balsam, prepared with alum, is used by the Japanese to dye their nails red (*Thunberg*)

I Nolitangere, *Ne me touchez pas*, Fr , *Springsame*, Ger , and *Erba Impatienta*, Ital , is the only species found wild in Europe When the seeds are ripe, upon touching the capsules, they are thrown out with considerable force hence the names Impatiens and Nolitangere. In the day-time the leaves are expanded, but at night they hang pendent, contrary to what is observed in plants, which from a deficiency of moisture, or a too great perspiration from heat, commonly droop their leaves during the day. Only the goat is said to eat this plant.

I. biflora, the American Noli-me-tangere, resembles this plant, but is handsomer

539 SAUVAGE'SIA. *Jacq* SAUVAGESIA					*Violaceæ Sp.* 1—6						
3020 erécta *L*	erect	▯	cu	1	my jn	Pk	S Amer.	1820	S	co	Jacq.am. t.51. f.3
†*540. VI'OLA *W*	VIOLET.				*Violaceæ Sp* 50—120.						
3021 palmáta *W*	palmated	△	or	½	my jn	Pu	N. Amer	1752.	D	p l	Bot mag 535
3022 pedata *W.*	cut-leaved	△	or	½	my jn	B	N Amer	1759.	D	p l	Bot mag 89
3023 pinnáta *W*	winged-leaved	△	or	½	my jn	V	S Europe	1752.	D	p.l	Gm sib 4 t 49 f.4
3024 sagittáta *W*	arrow-leaved	△	or	½	jl	W B	N. Amer.	1775	D	p l	Bot cab 1471
3025 lanceoláta *W.*	spear-leaved	△	or	½	jn jl	W	N. Amer.	1759	D	p.l	Gm sib 4 t 49.f 2
3026 obliqua *W*	oblique-flower	△	or	½	my jn	Y.B	N Amer	1762.	D	p l	
3027 cuculláta *W*	hollow-leaved	△	or	½	my jl	B	N Amer	1772.	D	p l	Bot mag 1795
3028 sorória *Ph*	white-rooted	△	or	½	ap jn	B	N Amer.	1802	D	p l	Will.hort.ber.72
3029 papilionácea *Ph*	variegated	△	or	½	my.jn	B	N Amer	1800	D	p.l	
*3030 ambígua *W K*	doubtful	△	or	½	ap my	P.V	Hungary	1823	D	co	W.K.hung t 190
3031 uliginósa *Schr*	swamp	△	or	½	ap my	Pu	Carinthia	1823.	D	co	
3032 clandestina *Ph*	small-flowered	△	or	½	my	Br	Pensylv	1800	D	p l	
3033 blánda *Ph.*	white-flowered	△	or	½	my jl	W	N Amer	1802	D	p l	Will hort ber 24
3034 primulifólia *Ph.*	Primrose-leav	△	or	½	ap jn	P B	N Amer	1783	D	p l	
3035 hírta *W*	hairy	△	or	½	ap my	B	England	ch so.	D	p l	Eng bot 894
3036 collina *Bess*	hill	△	ft	½	mr my	B	Poland	1822	D	co	
3037 campéstris *Bieb*	field	△	or	½	ap my	Pu	Tauria	1824.	D	co	
3038 palústris *Sm*	marsh	△	or	½	my jn	B	Britain	mos b	D	p l	Eng bot. 444
3039 Schmidtiána *Sch*	Austrian	△	or	½	my jn	B	Austria	1821	D	co	
3040 odoráta *W*	sweet	△	ft	½	mr my	Pu	Britain	sha pl	D	p.l	Eng. bot. 619
α *purpúrea*	*purple-flowered*	△	ft	½	mr my	Pu	Britain	gard	D	p l	
β *álba*	*white-flowered*	△	ft	½	mr my	W	Britain	gard.	D	p.l	
γ *cærúlea*	*blue-flowered*	△	ft	½	mr my	B	Britain	gard	D	p l	
δ *purpúrea pléna*	*double-purple*	△	ft	½	mr my	Pu	Britain	gard	D	p l	
ε *álba pléna*	*double-white*	△	ft	½	mr my	W	Britain	gard	D	p l	
ζ *cærúlea pléna*	*double-blue*	△	ft	½	mr my	B	Britain	gard	D	p l	
η *pállida pléna*	*Neapolitan*	△	ft	½	mr my	Pa B	Britain	gard	D	p l	
3041 alpina *Jacq*	Alpine	△	or	½	my jn	D Pu	Austria	1823	D	co	Jac aust. t 242
3042 canina *W*	dog's	△	w	½	ap jn	B	Britain	hea	D	p l	Eng bot. 620
3043 sylvéstris *Kit*	wood	△	or	½	my jn	B	Hungary	1820	D	co	
3044 neglécta *Schm*	neglected	△	or	½	my jn	P B	Crimea	1821	D	co	
3045 glaúca *Bieb*	glaucous	△	or	½	my jn	P B	Poland	1822	D	co	
3046 láctea *E B*	cream-colored	△	or	½	my	Cr	England	moi h	D	p l	Eng bot 445
3047 montána *W*	mountain	△	or	1	my jn	L B	Al of Eur	1683	D	p.l	Bot. mag 1595
3048 Nuttállii *Ph*	Nuttall's	△	or	½	my jn	B	Missouri	1812	D	co	
3049 débilis *Mich*	weak	△	or	½	ap my	W	N Amer	1820	D	co	Bot. cab. 1378
3050 valdéria *W en*	fringed-leaved	△	or	½	my jn	P	Mt Cenis	1805	D	p l	Al. p 2 t 24 f.3
3051 cenísia *W*	Alpine	△	or	½	jn jl	B	Mt Cenis	1759	D	p l	Al p 2 t 22 f 6
3052 canadénsis *W*	Canadian	△	or	½	my jn	L B	N Amer	1783	D	p l	
3053 striáta *W*	streaked	△	or	½	jn jl	St	N Amer	1772	D	p l	
3054 pubéscens *W*	downy	△	or	½	jn jl	B	N Amer	1772	D	p l	Bot reg 390
§3055 cóncolor *L T*	green-flowered	△	or	1	jn jl	G	N Amer	1788	D	co	Linn tr 6. t 28
3056 mirábilis *W*	broad-leaved	△	or	½	jn au	L B	Germany	1732	D	p l	Flor dan 1045
3057 biflóra *W*	two-flowered	△	or	½	ap my	Y	Al of Eur	1752	D	p l	Bot mag 2089
3058 uniflóra *W*	Siberian	△	or	½	jn jl	Y	Siberia	1774	D	co	Gm. si 4 t 48 f 5
3059 arboréscens *W*	shrubby	▭	or	1½	ap my	P.B	Spain	1779	L	r m	Barr ic. 568
3060 tricolor *L*	Heart's-ease	○	or	½	ap s	Y Pu	Britain	co fi.	S	co	Eng bot 1287
3061 banática *Kit*	Banatian	○	or	½	ap s	Y Pu	Germany	1820.	S	co	
3062 arvénsis *Murr*	corn	○	or	½	ap s	Y	Britain	...	S	co	
3063 altáica *Pall*	Tartarian	△	or	½	mr jn	P Y	Siberia	1805	D	co	Bot reg 54
3064 rothomagénsis *P S*	Rouen	△	or	½	my au	B	France	1783	D	co	Bot mag 1498
3065 sudética *W en*	tooth-flowered		or	½	my au	Y	Germany	1805	D	co	
3066 lútea *E B*	yellow-flowered	△	or	½	my au	Y	Britain	m pas	D	p l	Eng bot 721
3067 grandiflóra *L*	great-flowered	△	or	½	my au	D B	Switzerl	...	D	p l	Ha. hel 566 t 17
3068 Zóysii *W*	crenated	△	or	½	jl s	Y	Carinthia	...	D	co	Jac co 4 t 11 f 1



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539. *Sauvagesia.* In honor of Jacques Boissier de Sauvages, a French botanist, who died in 1767. He published a Flora of Montpellier, and other works A genus of small herbaceous plants, more singular than beautiful.

540. *Viola.* The ancients feigned that violets were the first food of the cow *Io*, one of Jupiter's mistresses. This is an extensive genus of low herbs, mostly with violet and white flowers, and well adapted for the flower-border, rock-work, or for growing in pots V odorata is a favorite flower, on account of its fragrance and early appearance. It is a native of every part of Europe, in woods, amongst bushes, in hedges, and on warm banks.

3020 Stem simple, Leaves narrow lanceolate, Stipules very long

§ 1 *Stemless, Stipules membranous*
3021 Pubescent, Leaves palmated 5-lobed toothed and undivided
3022 Leaves pedate 7-parted
3023 Leaves many-cleft, Segments lobed
3024 Leaves obl acute cord. sagittate serr cut at base, Flowers inverted, Three lower petals bearded at base
3025 Smooth, Leaves shining lanceolate obsoletely toothed or crenulate, Flowers whitish [middle
3026 Smth Lvs cord ac cren serr flattish, Fls erect, Pet obliquely turned lateral longer bearded below the
3027 Smooth, Leaves cordate serrate smooth hooded at base, Petals obliquely turned lateral bearded
3028 Leaves cordate crenated pubesc beneath, Lower petal bearded at base, Flower-stalks shorter than leaves
3029 Lvs triang cord. ac cren somewhat hood Pet obov · 3 low beard below mid connv · 2 upper reflexed
3030 Leaves oblong cordate obtuse crenate naked at the base with unequal inflexed hooded lobes
3031 Stemless, Leaves cordate smooth, Peduncles bracted above the middle
3032 Smoothish, Lvs roundish obt. at base cord cren serrate, Runners flowering, Pet lin not longer than cal.
3033 Leaves cordate obtuse acutish flat smooth, Petals not bearded, Flower-stalks as long as leaves
3034 Leaves oblong subcordate, Stalks membranous
3035 Leaves cordate and stalks hispid with hairs, Cal obtuse
3036 Subhirsute, Runners none, Leaves cordate, Calyxes obtuse, Flowers sweet-scented
3037 Leaves cordate vertilinear at base pubescent, Runners none
3038 Leaves reniform smooth, Root creeping, Calyx obtuse
3039 Leaves cordate acuminate subcrenate smooth, Bractes close under the flower, Lower petal truncate
3040 Creeping runners and stalks smoothish, Cal obtuse

3041 Nearly stemless, Leaves roundish elliptical crenate stalked, Stipules lin. serrated, Spur as long as calyx

§ 2 *Caulescent, Stipules membranous*
3042 Old stem ascending, Leaves oblong cordate obt dotted, Stipules setaceous toothed, Cal lanceolate acute
3043 Stem square erect, Radical leaves cordate reniform, Flower-stalks longer than the leaves
3044 Stem erect angular, Lvs cord toothed crenat smooth, Stip tooth on one side, Bract above midd of stalk
3045 Stem spread compressed, Lower lvs cord ovate upper ovate-lanceol. crenul Stip toothed on each side
3046 Stem ascending rounded, Leaves ovate lanceolate, Stipules cut serrated
3047 Stem erect, Leaves cordate oblong, Stipules toothed on one side, Anthers free
3048 Pubescent, Stem simple erect, Leaves ovate obl acute, Petals lanc entire, Flower-stalks length of leaves
3049 Caulescent weak, Stipules membranous lanceolate slightly torn, Leaves shortly cordate toothed
3050 Stems erect and procumbent, Leaves oblong entire sinuated ciliated hispid, Stipules undiv Calyxes acute
3051 Stems filiform undiv. procumb. Leaves ovate stalked their edge at the base ciliated, Stipules undivided
3052 Smoothish, Leaves subcordate acuminate serrated, Flower-stalks length of leaves, Stipules short entire
3053 Leaves cordate acuminate serrated flattish, Stipules lanceolate serrated ciliated
3054 Villous pubescent, Stem erect leafy at top, Leaves broad cordate, Stipules oblong serrated at end
3055 Erect, Leaves broad lanceolate, Stipules linear lanc entire, Flower-stalks axillary in pairs very short
3056 Stem erect and leaf-stks 3-corner Rad fl with cor but sterile caul apet fertile, Lvs reniform cord. cren.
3057 Stem weak about 2-flowered, Leaves reniform serrate, Calyxes acute, Stipules entire
3058 Stem 1-flowered, Leaves cordate toothed
3059 Leaves linear lanc toothed, Stipules linear entire, Spur very obtuse much shorter than calyx

§ 3 *Stipules pinnatifid, Stigma cup-shaped.*
3060 Stem ang diffuse, Leaves oblong toothed crenate, Stipules lyrate pinnat Cor twice as long as smooth cal.
3061 Stem ang dec diffuse, Lower lvs cord upper ovate obl toothed cren Cor scarcely longer than smooth cal.
3062 Stem angular decumb diffuse, Leaves ovate oblong toothed crenate, Cor scarcely longer than hairy cal.
3063 Caulesc smooth, Leaves thickish ovate and oval cren Flowers inverted wavy, Petals rounded broad renif
3064 Stem angular diffuse and leaves oblong serrated hairy, Stipules lyrate pinnatifid, Cor twice as long as cal.
3065 Stem 3-cornered simple, Lvs obl toothed, Stipules palm many-cleft, Petals crenate, Spur as long as cal.
3066 Stem 3-cornered simple, Leaves ovate oblong crenated ciliated, Stipules palmate cut
3067 Stem 3-cornered simple, Leaves oblong, Stipules pinnatifid
3068 Stem very short erect, Leaves roundish crenate, Stipules entire, Flower-stalks 3-cornered

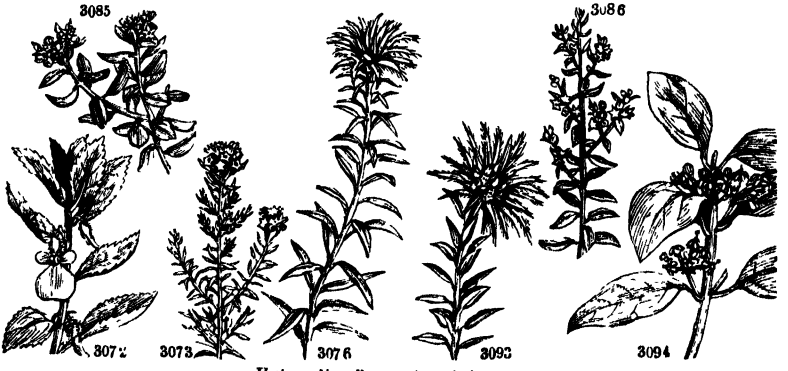


and Miscellaneous Particulars.

Desfontaines says it is frequent about Cassa and Tozzer, in Barbary, in the palm groves; the blue and white growing promiscuously and flowering in winter Hasselquist found it in Palestine, Thunberg in Japan, and Loureiro in China, near Canton. The double purple and the Neapolitan are the most esteemed varieties. the latter forces well, and where there is a stove or warm pit, may be had from Christmas to April, when others are in flower in the open air

In medicine, the flowers of violets act as a laxative, and the syrup is used by chemists to detect an acid or an alkali: for this purpose the V. odorata is cultivated to some extent at Stratford upon Avon. (*Withering*)

3070 **calcaráta** *W*	spurred	☽ △	or	½	mr.jn	L B	Switzerl.	1752.	D	p.l			
3070 **cornúta** *W.*	horned	☽ △	or	½	my jn	B	Pyrenees	1776.	D	p.l	Bot. mag 791		
†*541. IONI'DIUM. *Vent.*	IONIDIUM.					*Violaceæ* *Sp* 2—30							
3071 polygalæfólium *V.*	whorl-leaved	♃ ▭	or	1	ap au	G Y	S. Amer	1797.	C	l p	Vent. malm. 27		
§3072 Ipecacuanha *Vent.*	New Ipecac	♃ ▭	m	1½	jl	W	S Amer.	1822.	C	l.p	Bot. mag 2453		
*542 PHY'LICA *W.*	PHYLICA					*Rhamni* *Sp* 21—*							
3073 ericoides *W*	Heath-leaved	♃ ▭	or	3	ap s	W	C G. H.	1731.	C	p l	Bot. mag 224		
3074 parviflóra *W.*	small-flowered	♃ ▭	or	2	ap jl	W	C G. H.	1790.	C	p l			
3075 lanceoláta *W*	lance-leaved	♃ ▭	or	3	ap my	W	C. G H.	1790.	C	p l			
3076 capitáta *W en.*	headed	♃ ▭	or	1	my.au	W	C. G. H.	1800	C	p l	Bot reg. 711		
3077 pubéscens *W.*	downy	♃ ▭	or	2	f ap	W	C. G H.	1774	C	p l	Bot cab 695		
3078 eriophora *W*	pale-flowered	♃ ▭	or	3	n	W	C. G H	1774	C	p l	Pl am t 445. f 1		
3079 rosmarinifólia *P* ♀	Rosemary-lvd.	♃ ▭	or	3	...	W	C G H.	1815	C	p l	Bot cab. 849		
§3080 axillàris *P S.*	axillary-flower	♃ ▭	or	2	my jn	W	C G H	1812	C	p l			
3081 plumósa *W*	feathered	♃ ▭	or	2	mr my	W	C G H	1752.	C	p l	Bot cab 253		
3082 villósa *W.*	villous	♃ ▭	or	2	my	W	C G H	1790.	C	p l			
3083 stipulàris *W*	horned	♃ ▭	or	3	my s	W	C G H	1786.	C	p l	Bur afr t 43 f 2		
§3084 cordáta *W*	heart-leaved	♃ ▭	or	2	my jn	P Y	C G H.	1789	C	p l	Com rar 62 t 12		
§3085 buxifólia *W*	Box-leaved	♃ ▭	or	2	my s	W	C G H.	1759	C	p l	Bot. cab 848		
3086 spicáta *L*	spiked	♃ ▭	or	2	n d	W	C G H	1774.	C	p l	Bot. mag. 2704		
§3087 myrtifólia *P S*	Myrtle-leaved	♃ ▭	or	3	...	D Y	C G H.	1816	C	p l			
3088 callósa *W*	callous-leaved	♃ ▭	or	1	mr ap	W	C. G. H	1774	C	p l			
3089 imbricáta *W*	imbricated	♃ ▭	or	1	au n	W	C. G H.	1801.	C	p l			
3090 cylindrica *W en*	cylindrical	♃ ▭	or	2	ap au	W	C G H	....	C	p l	Wendl coll t.		
3091 racemósa *W*	cluster-flower	♃ ▭	or	5	my s	W	C G. H.	1790	C	p l			
3092 pinifólia *W*	Pine-leaved	♃ ▭	or	6	my	W	C G H	1789	C	p l			
3093 squarrósa *W*	squarrose	♃ ▭	or	2	au n	W	C G H	1800	C	p l	Bot. cab 36		
543 PLECTRO'NIA *W.*	PLECTRONIA					*Rhamni* *Sp* 1—2							
3094 corymbósa *P S*	corymbed	♀ ▭	or	20	...	W G	C G H	1816	C	p l	Burm afr. t 94		
544 CONOCAR'PUS *W*	BUTTON-TREE					*Combretaceæ* *Sp* 2—4							
3095 erécta *W*	upright	♀ ▭	tm	30	...	Pa Y	Jamaica	1752	C	p l	Cat car 2 t 33		
3096 procúmbens *W*	procumbent	♃ ▭	or	6	...	Pa Y	Cuba	1730	C	p l	Jac am t 52 f 2		
545 CY'PHIA *W*	CYPHIA.					*Campanulaceæ* *Sp* 3—8.							
3097 volúbilis *W*	twining	◯	or	1	...	P B	C G H	1795	D	l p			
3098 bulbósa *W*	bulbous	⁂ ◯	or	½	au s	P B	C G H	1791	D	l p	Bur afr t 38 f 1		
3099 Phyteuma	Rampion	⁂ △	or	½	f	Pk	C G H.	1822	D	l p	Bot reg 625		
546. LIGHTFOO'TIA	*L'Her* LIGHTFOOTIA					*Campanulaceæ* *Sp* 2							
3100 oxycoccoides *W*	lance-leaved	♃ ▭	or	½	jl	B w	C G H	1787	C	s l	Ex. bot 2. t 69		
3101 subulàta *W.*	awl-leaved	♃ ▭	or	¼	au	B	C G H.	1787	D	s l	L'He s an 4 t 5		
547. JASI'ONE *W*	SHEEP'S SCABIOUS					*Campanulaceæ* *Sp* 2—5							
3102 montàna *W*	mountain	○	pr	1	jn jl	B	Britain	sa pa.	S	co	Eng bot. 882		
3103 perénnis *W.*	perennial	♃ △	pr	1	jn jl	B	France	1787	D	co	Bot mag 2198		
548 LAGŒ'CIA *W*	CUMIN					*Umbelliferæ* *Sp* 1							
3104 cuminoides *W*	wild	○	cu	1	jn jl	G Y	Levant	1640	S	co	Lam ill t 142		
549 HE'DERA *W*	IVY					*Caprifoliaceæ* *Sp* 2—8							
3105 Hélix *W*	common	♃	or	40	o n	G	Britain	woods	L	co	Eng bot 1257		
β *poética*	*poet's*	♃	or	20	o n	G	.. ..	....	L	co			
γ *vegéta*	*Irish*	♃	or	50	o n	G	Madeira	...	L	co			
δ *arbórea*	*tree*	♃	or	8	o n	G	. . . .	....	L	co			
ε *chrysocárpa*	*yellow-berried*	♃	or	30	o n	G	Greece	1815	L	co			
3106 capitáta *Swz.*	capitate	♃ ▭	or	12	o n	G	W Indies	1823	C	p l	Jac am t 61		



History, Use, Propagation, Culture.

V hirta and canina bear a considerable resemblance to V odorata, but the first may be distinguished by its hairy petioles, and the last by its flowers being inodorous

V arborescens is readily propagated by young cuttings planted under a hand-glass.

541. Ionidium. From *ἰον*, a violet, and *εἶδος*, similar, on account of its resemblance to a violet, from which it is by some thought not to be generically distinct

542 Phylica, in Greek *φιλυκη*, and should therefore be written *Philyca* The plant of the ancients is not known. Some think it was the Holly P ericoides occupies large tracts of ground about Lisbon, in the same manner as heath occupies many lands in England Young cuttings of all the species root readily in sand under a bell-glass.

543. Plectronia From *πλεκτρον*, a spur The tree is furnished with stiff spines like the spurs of a cock.

544. Conocarpus From *κωνος*, a cone, and *καρπος*, a fruit its fruit resembles the cone of an alder. Tropical trees, with alternate entire leaves and small heads of yellowish flowers.

545. Cyphia. From *κυφος*, curved, on account of its curved stigma. Small Cape plants resembling Lobelia.

3069 Stem short, Spur subulate longer than petals, Leaves somewhat ovate, Stipules toothed
3070 Stem ascending 3-cornered, Leaves cordate crenate, Spur subulate longer than calyx, Upper petal acum.

3071 Stem ascending, Leaves opposite sessile and stipules lanceolate, Flowers nodding longer than leaves
3072 Leaves ovate obl. Pedunc. axillary solitary drooping, Lower lip very large emarginate

3073 Leaves linear lanceolate obtuse revolute at edge smooth, Branches umbelled, Heads round downy
3074 Leaves subulate acute rough somewhat hairy, Branches panicled many-flowered
3075 Leaves scattered linear lanceolate hoary beneath, Heads terminal hairy
3076 Leaves linear lanceolate villous, Bractes woolly, Heads terminal
3077 Leaves linear lanceolate acute spreading villous hoary beneath, Bractes colored villous very long
3078 Leaves linear hairy tomentose beneath revolute at edge, Heads terminal, Flowers downy
3079 Leaves linear flattish hoary beneath erect, Heads ovate downy
3080 Leaves linear lanceolate revolute at edge hoary beneath, Flowers axillary solitary racemose
3081 Leaves linear subulate very villous, Flowers terminal axillary, Cor. spreading
3082 Leaves linear upper villous, Flowers racemose
3083 Leaves linear revolute at edge rough hoary beneath, Stipules filiform colored, Bractes bifid naked
3084 Leaves cordate ovate spreading, Stem proliferous
3085 Leaves ovate scattered opposite and three together beneath netted veiny tomentose
3086 Leaves oblong cordate acuminate beneath hoary, Spikes cylindrical, Flowers length of bractes
3087 Leaves ovate mucronate smooth above and shining beneath hoary, Racemes leafy panicled
3088 Leaves oblong cordate acuminate hairy beneath white, Flowers in heads
3089 Leaves cordate ovate smooth, Flowers racemose
3090 Leaves linear lanc revolute at edge villous hairy beneath, Flowers cylind. Bractes as long as flowers
3091 Leaves ovate smooth, Flowers simple panicled racemose
3092 Leaves acerose flat on each side very smooth, Flowers panicled racemose
3093 Leaves linear ciliated arcuate spreading, Head terminal

3094 Branches square, Leaves opposite stalked lanceolate ovate entire smooth

3095 Erect, Leaves lanceolate
3096 Procumbent, Leaves obovate

3097 Leaves entire and toothed linear, Stem twining
3098 Leaves digitate, Leaflets pinnatifid, Stem erect
3099 Leaves oblong crenated ciliated, Scape erect

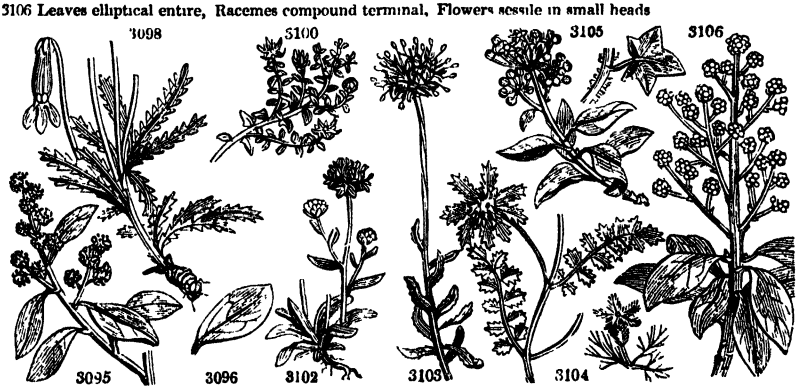
3100 Leaves and petals lanceolate
3101 Leaves subulate, Petals linear

3102 Leaves linear lanceolate narrow at the base hispid wavy curled
3103 Leaves linear smoothish flat obtuse

3104 The only species

3105 Leaves ovate 3-5-angular and 3-5-lobed floral ovate acuminate veiny, Umbels erect

3106 Leaves elliptical entire, Racemes compound terminal, Flowers sessile in small heads



and Miscellaneous Particulars.

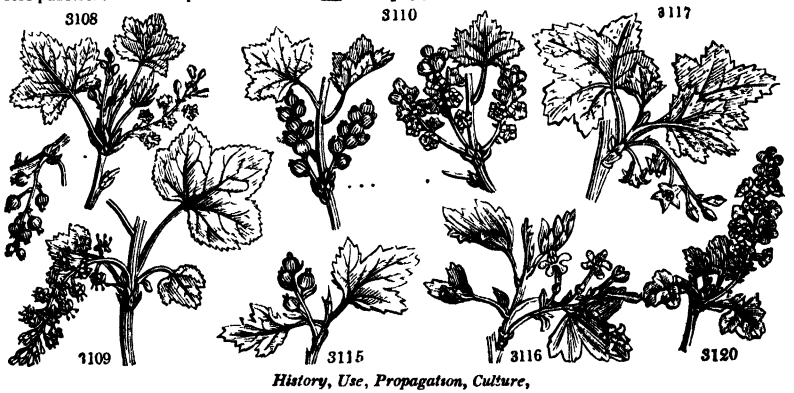
546 *Lightfootia* Named after the Rev John Lightfoot, an English clergyman, and author of the first Flora Scotica. The genus is very nearly related to Campanula, from which it is by some thought not different.

547 *Jasione* A name applied by Pliny to an eatable plant J. montana so resembles Scabiosa, as to be often mistaken for a plant of that genus. Linnæus gives a curious account of the process of fecundation in this plant, from which may be observed its affinity to Syngenesia, where it was first placed.

548 *Lagœcia.* From λαγως, a hare, and οικος, a residence The little seeds enveloped in the downy involucrum have been likened to young leverets in a hare's form. The seeds should be sown in autumn soon after they are ripe, otherwise, if this is deferred till spring, they commonly remain a year, and sometimes two or three years, before they grow.

549. *Hedera* A name for which many etymologies have been offered The best explanation is, that it has been derived from *hedra*, cord, in Celtic. *Lierre*, Fr. H. helix is a valuable ornamental evergreen for covering naked buildings or trees, for training into fanciful shapes, as of human figures, &c on skeletons of wire-work, or trained up a stake so as to form a standard. Flowering so late in the season, it is much resorted to by

†550. RIBES. *W.*	Currant					*Grossulaceæ.* *Sp* 25—49							
3107 rúbrum *W.*	red		fr	4	ap my	G	Britain riv ba.		C	r m	Eng. bot. 1289		
β album	*white*		fr	4	ap my	G	Britain ...		C	r m			
γ sylvestre	*wild*		or	4	ap my	G	Britain ...		C	r m			
3108 petræ'um *W*	rock		or	4	my	R	England moun		C	co	Eng bot. 705		
3109 multiflórum *Kit*	many-flowered		or	5	ap my	Gr	Hungary 1822		C	co	Bot mag 2368		
3110 spicátum *Sm*	acid		or	4	ap my	G	England m wo.		C	co	Eng. bot. 1290		
3111 trifidum *Mich*	trifid		or	4	ap my	Pu	Quebec 1823.		C	co			
3112 procúmbens *Pall*	trailing		fr	½	my jn	Pu	Dahuria 1804		L	m s	Pall ross 2. t. 65		
3113 rigens *Mich*	stiff		or	6	ap my	G	N Amer 1812		C	co			
3114 prostrátum *Ph*	glandulous		or	1½	ap my	Pu	N Amer 1777		L	s.l	L'Her st. 1 t. 2		
3115 alpínum *W*	Alpine		or	3	ap my	G	Britain woods		C	co	Eng bot. 704		
3116 aúreum *Ph*	golden		or	8	ap my	Y	Missouri 1812.		C	r m	Bot. reg. 125		
3117 nigrum *W*	black		fr	5	ap my	G	Britain m hed		C	r m	Eng. bot 1291		
3118 flóridum *W*	Pensylvanian		or	4	ap my	G	N Amer. 1729		C	co	Dil el.t.244.f 315		
3119 laxiflórum *Ph*	loose-flowered		or	4	ap my	Y G	N Amer 1812.		C	co			
3120 resinósum *Ph*	clammy		or	3	ap my	Y G	N Amer 1800		L	co	Bot. mag. 1583		
3121 hirtéllum *Ph*	hairy		or	3	ap my	Y G	N Amer 1812		L	s l			
3122 grácile *Ph*	slender		or	4	ap my	Y G	N Amer 1812.		L	s l			
3123 triflórum *Ph*	three-flowered		or	4	ap my	G R	N. Amer 1812.		L	r l	W. ho. be. 1. t.61		
3124 orientále *Decf*	eastern		or	4	my jn	G Y	Syria 1824.		C	co			
3125 diacántha *W*	two-spined		or	4	my jn	G Y	Siberia 1781.		L	r.l	Schm. arb t 97		
3126 reclinátum *W*	procumbent		or	2	ap my	P G	Germany 1683		L	co			
3127 Grossulária *W*	rough-Gooseb		fr	4	mr ap	G	England hed		C	r m	Eng. bot. 1292		
3128 Uva-crispa *W*	smth.-Gooseb		fr	4	mr ap	G	England hed		C	r m	Eng bot 2057		
3129 oxyacanthoides *W*	Hawthorn-lvd		or	3	ap my	W Y	N. Amer 1705		L	co	D el t 139 f 166		
3130 lacustre *Ph*	swamp		or	4	ap my	Y G	N Amer 1812		C	p.l			
3131 Cynósbati *W*	prickly-fruited		or	4	ap	G	Canada 1759.		C	s l	Schmidt arb 98		
551 GRONO'VIA *W*	Gronovia					*Cucurbitaceæ* *Sp* 1—2							
3132 scándens *W*	climbing		cu	6	jn jl	G Y	Jamaica 1731		C	p i	Jac. ic 2 t 338		
552 ACHYRANTHES *W*	Achyranthes					*Amaranthaceæ.* *Sp* 6—28							
3133 argéntea *W.*	upright		cu	1	my o	W	Sicily 1713		C	l s	Bocc sic 16 t 9		
3134 áspera *W*	rough		cu	3	my o	Pk	India 1751		C	l s	Mill ic 1 t 11 f 2		
3135 pórrigens *H K*	crimson-flower		cu	2	ap au	Pu	 1802		C	r m	Bot. mag 830		
3136 nívea *W*	white		cu	2	my jl	W	Canaries 1780		C	r m			
3137 fruticósa *Lam*	shrubby		cu	6	my jl	Pu	E. Indies 1820		C	r m			
3138 pubéscens *Roth*	pubescent		cu	1½	ap jl	Pk	 1821		C	r m			



History, Use, Propagation, Culture,

bees and flies, when little other food is to be had The berries increase during the winter, are full formed in February, and ripen in April, furnishing food for wild pigeons, blackbirds, thrushes, &c. in the spring Blackbirds, and several other birds, build their nests in the stumps of ivy tufts Sheep are fond of the leaves, especially during severe weather The ancients held ivy in great esteem, and Bacchus is represented crowned with it to prevent intoxication

H Helix vegeta, the giant or Irish ivy, perhaps a distinct species, is a native of the island of Madeira.

550 *Ribes* The name of an acid plant mentioned by the Arab physicians, and supposed to be the plant now called Rheum Ribes R grossularia is so called because its berries resemble little half-ripe figs,—*grossi*. This is a genus of well known shrubs, some of them much cultivated for their fruit R rubrum, the common red currant, is the *Groseilles en grappes*, or *Groseilles d'outre mer*, Fr., *Gemeine Johannisbeere*, Ger, and *Uvetta*, Ital The English name currant is evidently from the similitude of the fruit to that of the grape of Zante, which dried forms the corinths or currants of the shops The fruit has an agreeable sub-acid taste, and is generally relished both at the dessert and in pies and tarts Equal weights of fruit and pure sugar, put over the fire, yield a liquor which forms a most agreeable jelly, used as a sweetmeat to eat with hare, venison, and Welch mutton, to flavor punch, and as a medicine It is also much used for making wine, and is grown to a considerable extent for that purpose in Essex, Kent, and about Pershore in Worcestershire The principal varieties are the white, and pale or Champagne, but any number of varieties may be procured from sowing the seeds, from which, however, none superior to those in general use have been hitherto originated.

The culture of the red currant is known to every countryman It grows freely by cuttings of last year's wood, which should be of sufficient length to form a handsome plant, with a clean stem, ten inches high. It grows in any soil, but prospers best in one loamy and rich The best flavored fruit is produced from plants in an open free situation, but they will grow under the shade of walls or trees, and either as low bushes or trained against walls or espaliers. They bear chiefly from spurs, and therefore, in pruning, most of the young wood is cut to within two or three buds of that where it originated

R. nigrum, the black currant, is common in moist woods in Russia and Siberia, where a wine is made of the berries alone, or fermented with honey, and with or without spirits In Siberia they make a drink of the leaves: these tincture common spirits so as to resemble brandy, and a few of them dried and mixed with black tea, answer all the purposes of the green material Many persons dislike the very peculiar flavor of the berries

1. *Unarmed* CURRANTS.

3107 Leaves smooth pendulous, Flowers flattish, Petals obcordate, Leaves obtuse 5-lobed, Stem erect
β Berries yellow
γ Lobes of leaves shortish, Leaf-stalks, Flower-stalks, and Flowers pubescent [Stem erect
3108 Rac. rather hairy when in flow erect afterw pendul Brac. shorter than flow. Lvs acum. lob cut toothed,
3109 Racemes spiked pendulous, Petals oblong, Bractes shorter than flowers
3110 Spikes erect, Petals oblong, Bractes shorter than flower
3111 Leaves moderately lobed smoothish above pub beneath, Flowers small, Sepals trifid, Berries red hairy
3112 Racemes erect, Flowers flat, Leaves obtusely lobed, Stem procumb [fruit stiffly upr. Ber rough red
3113 Branc. upr Leaves smooth above beneath pub. nett Lob and teeth acute, Rac loosely many-fl always in
3114 Stems prost. Lvs. lobed smoothish younger pub Rac nearly erect, Petals deltoid, Bract min Berr hispid
3115 Racemes erect, Bractes as long as flowers or longer, Peduncles hairy with glands, Lvs shining beneath
3116 Very smooth, Lvs 3-lobed, Lobes spreading with a few teeth, Bract lin as long as fl -stalks, Berries smooth
3117 Lvs. dotted beneath, Racemes hairy loose, Flow campan Brac shorter than fl -stalks, Ped simple at base
3118 Leaves dotted on each side, Racemes pendulous, Flowers cylindrical, Bractes longer than germen
3119 Leaves cordate 5-lobed cut-toothed smooth, Stalks slender, Racemes loose erect the length of leaves
3120 Glandular hairy, Rac. erect, Lvs 5-lobed obtuse cren roundish, Bractes lingulate longer than fl -stalk

2 *Prickly* GOOSEBERRIES

3121 Spine one under the axillæ, Branches hispid, Lvs small ½-trifid lobes toothed, Berr solitary smooth red
3122 Spine under axillary very short, Lvs on slend stalks pub on both sides lobes acute cut and toothed, Ped.
3123 Prickles solitary, Peduncles 2 or 3-flowered, Berries polished [capillary
3124 Somewhat prickly, Leaves round cut-lobed hairy, Racemes short, Berries rough with hairs
3125 Prickles twin or solitary, Leaves wedge-shaped 3-parted and obsoletely 3-lobed toothed, Fl racemose erect
3126 Branches somewhat prickly reclinate, Bract. of the peduncle 3-leaved
3127 Leaf-stalks hairy, Peduncles 1-flowered, Bractes 2, Fruit hairy
3128 Peduncles 1-flowered, Bractes connate-tubular, Fruit smooth
3129 Branches prickly all over
3130 Spine sub-axillary compound, Stem hispid all over, Leaves lobed beyond middle, Berries racemose hispid
3131 Prickles sub-axillary, Berries prickly racemose dull brown

3132 Leaves like those of the vine stinging cirrhose

3133 Leaves roundish ovate acuminate, Calyxes reflexed pressed close to the spike
3134 Leaves obovate acute narrowed at base, Calyxes reflexed pressed close to the spike
3135 Leaves ovate lanceolate opposite, Spikes elliptical corymbose on long stalks, Stem shrubby
3136 Leaves whorled ovate downy, Corymbs compact dichotomous, Flowers with corollas
3137 Stem erect, Ovate leaves and calyxes smooth
3138 Stem erect rounded and elliptical oblong leaves pubescent, Spikes axillary and terminal stalked



and Miscellaneous Particulars

of the black currant, which are therefore not much used in the kitchen or dessert, and seldom in wine making. They make a jelly or jam in estimation as a gargle for inflammatory sore throats

The culture of the black currant is similar to that of the red, but as it is less apt to bear on spurs than on young wood, the shoots are not so much shortened in this as in the other It is singular that no varieties have been raised of this species, nor will it produce hybrids, as far at least as has been tried with the other cultivated sorts of Ribes

R Grossularia and R. uva crispa are the rough and smooth gooseberries, *Groseille*, Fr, *Johannisbeere*, Ger, and *Uvaspina*, Ital., in universal culture and estimation in Britain, but not much known or esteemed in any other country. The climate of France, Italy, and Spain is too warm, and the summers of many parts of the north of Europe too rapid for their attaining a good size. They are, however, more in vogue now in the latter countries than they have ever been before, but as the quality of the fruit soon degenerates when the plants are not kept in high cultivation, it can never become very popular in countries where the pear, vine, fig, and olive grow freely, and which being planted and once established in the soil, grow and bear for ages with very little care.

The varieties of the gooseberry are very numerous, and yearly increasing in Lancashire and other counties where the fruit is grown for prizes, by raising from the seed These new varieties, however, are valued more according to the size of the berry, than its flavor, or the prolificacy of the plant, so that few so originated are fit to be added to the list of table or kitchen fruit Twenty-five pennyweights is considered a great weight for a gooseberry, but some have been raised a few dwts heavier (See the *Manchester Gooseberry Book*, pub annually)

The gooseberry is generally propagated by cuttings, and trained as a dwarf bush, or sometimes on espalier rails. one variety, the green-gage, makes very neat half-standards, and bears better in that state than as a bush. They require a loamy soil, an open airy situation, and yearly attention to pruning, and refreshing their roots with manure and stirring the surface.

551. *Gronovia*. In honor of John Frederick Gronovius, a learned botanist at Leyden This is a trailing plant like the cucumber, with broad hairy leaves, which sting like the nettle Treated like the melon, it will produce ripe seeds, but is a plant of neither beauty nor use.

552 *Achyranthes* From ἄχυρον, chaff, and ἄνθος, a flower, in allusion to the chaffy nature of the floral envelopes This genus is of easy culture, but little beauty. All root freely by cuttings A porrigens is the only handsome species.

553. PHILOXE'RUS. *R. Br.* PHILOXERUS. *Amaranthaceæ. Sp.* 2—6.

3139	vermiculátus *R Br*	creeping	☿	△	cu	2	jl o	Pk	S. Amer.	...	C	r.m	Her. parad. t. 15
3140	brasiliénsis *R. Br.*	upright	♃	□	cu	3	jl o	W	Brazil	1790	C	r.m	Jac. ic. 2. t. 346

*554. DESMOCHÆ'TA *D. C.* DESMOCHÆTA *Amaranthaceæ Sp* 5—12.

3141	lappácea *J.*	Bur	♃	□	or	1	au.o	Pu	E. Indies	1759.	C	l p	Rhd. mal.10.t.59
3142	prostráta *D C*	prostrate	♃	□	or	2	jl.au	G.Pu	E Indies	1793	D	l.p	Rumph. 6. t. 11
3143	muricáta *D. C.*	prickly	♃	□	or	3	au n	G	India	1777.	C	l p	Rumph. 5. t. 83
§3144	alternifólia *D. C.*	alternate-leav'd		◫	or	2	jl au	P	E Indies	1789.	S	l.p	Plk.alm.t.260.f.1
§3145	pátula *R. S*	spreading	☿	△	or	3	au o	W	E. Indies	1823.	C	l.p	

555. ILLECE'BRUM *Juss* KNOT-GRASS. *Amaranthaceæ Sp.* 3—15

3146	verticillátum *W.*	whorled	☽	△	w	½	jl	W	England bog pl.		S	p l	Eng. bot. 895
3147	cymósum *Vill.*	cymose		○	w	½	jl	W	S. Europe	1820	S	p.l	Fl. græc. t. 245
3148	echinátum *Poir*	prickly		○	w	½	jl	G	Barbary	1821.	S	p.l	Bocc. sic. t 20.f.3

556 ALTERNANTHE'RA *R Br.* ALTERNANTHERA *Amaranthaceæ Sp* 5—25.

3149	Achyrantha *R Br.*	creeping	☿	△	cu	½	jn au	W	Buenos A	1732.	D	l.p	Dill elt.8. t.7 f7
3150	polygonoides *R. Br.*	Persicaria-leav.	☿	△	cu	1	jn au	W	America	1731.	C	r.m	Herm. par 17
3151	sessilis *R Br*	sessile-flowered	☿	◫	cu	½	jl o	Br	E. Indies	1778	S	r m	Rhd mal.10 t.11
3152	ficoides *R Br.*	fleshy-leaved	☿	△	cu	½	jn jl	G	S. Amer.	1821.	S	r m	Jacq.am t.60 f 4
3153	spinósa *Horn*	spiny		◫	cu	1	my jn	Y	.....	1823.	S	r m	

557 PARONY'CHIA. *Juss* PARONYCHIA *Amaranthaceæ. Sp* 4—18

3154	capitáta *Juss.*	capitate	☿	△	w	¾	jn au	W	Spain	1683.	D	p.l	Lobel. ic. 420 f 1
3155	nívea *D C.*	villous	☿	△	w	1	jn.au	W	Spain	1812.	D	a.l	
3156	alsinifólia *J*	Chickweed-lvd.		○	w	3	jn.au	W	Spain	...	D	a.l	Scop.del.ins. t.13
3157	hispánica *D. C.*	Spanish	☿	△	w	1	jn au	W	Spain	1683.	D	a l	

558 CHENO'LEA. *W* CHENOLEA. *Chenopodeæ. Sp.* 1.

3158	diffúsa *W.*	silky	♃		w	1	au s	G	. C G H	1758.	C	r.m	

559 ANY'CHIA *Mœh* ANYCHIA *Amaranthaceæ Sp.* 1—3

3159	dichótoma *Mœh*	forked	☿	○	w	¼	my au	G	N. Amer.	1806.	S	l.p	Ort. dec

560 *Æ'RUA. Juss.* ÆRUA. *Amaranthaceæ Sp* 2

3160	lanáta *J*	woolly		◫	cu	1	ap au	W	E. Indies	1691.	C	r.m	Mill. ic 1. t 11.f.1
3161	javánica *J*	spear-leaved	♃	□	cu	2	ap au	W	E. Indies	1768	C	r m	Bur. ind t 65 f.2

561 LESTIBUDE'SIA *R Br* LESTIBUDESIA. *Amaranthaceæ Sp* 3—5

3162	paniculáta *R Br.*	panicled	☿	◫	cu	3	jn s	P Y	Jamaica	1733.	C	r m	Slo jam 1 t 91.f 1
3163	trigyna *R. Br*	oval-leaved	☿	◫	cu	1½	au o	W	Senegal	1777.	C	r m	Jac vind. 3 t. 15
3164	virgáta *R Br*	wave-leaved	♃		cu	4	au o	G	.....	1815.	C	r m	Jac. ic. 2 t. 339

562 RHAGO'DIA. *R Br.* RHAGODIA *Chenopodeæ Sp* 2—7

3165	hastáta *R Br*	spear-leaved	♃		cu	1	jn jl	G	N. Holl	1823.	C	co	
3166	Billardiéri *R Br*	Labillardiere's	♃		cu	5	jn jl	G	N Holl.	1823.	C	co	Lab n holl.1 t.96

563. DEERIN'GIA *R Br* DEERINGIA *Amaranthaceæ. Sp.* 1

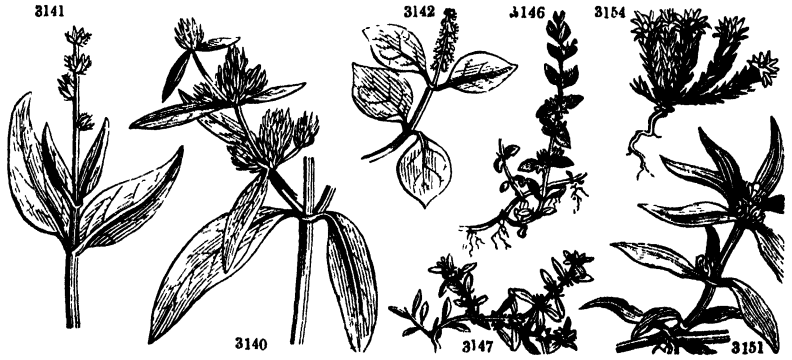
3167	celosioides *R Br*	Berry-bearing	☿	◫	cu	6	au o	W	E. Indies	1804.	S	a.l	Bot. mag. 2717

564 TRIAN'THEMA *L* TRIANTHEMA *Portulaceæ Sp* 1—6.

3168	monógyna *L*	monogynous		◫	w	1	my jn	P G	Jamaica	1820.	S	co	Her para.2.t.213

†565 CELO'SIA *R Br.* COCK'S-COMB *Amaranthaceæ Sp* 8—22

3169	argéntea *W.*	silvery-spiked		◫	or	1	jn s	L F	China	1714	S	r m	Mart. dec 1 t 7
3170	cristáta *W*	common		◫	or	2	jn s	D R	Asia	1570	S	r m	Lam ill t.168 f 1
3171	comósa *W*	tufted	☿	◫	or	1	jn s	Pk	E Indies	1802	S	r m	
3172	coccínea *W*	scarlet		◫	or	5	jn s	Pu	China	1597	S	r m	
3173	cérnua *B Rep.*	drooping		◫	or	3	jl au	Pu	E. Indies	1809	S	r.m	Bot rep 635
3174	castrénsis *W.*	branched		◫	or	2	jl s	Pu	E Indies	1739	S	r m	Bar rar t 1195
3175	Monsóniæ *W*	downy		◫	or	3	jl s	W	E Indies	1778.	S	r m	Pl al.11 t.334.f 4
3176	nodiflóra *W*	knotted		◫	or	2	jl s	Gr	E. Indies	1780	S	r m	Jac.vind. 1 t. 98



History, Use, Propagation, Culture,

553 Philoxerus From φιλος, a lover, and ξηρος, arid, a plant delighting in sandy soil. The species resemble Gomphrena or Achyranthes

554 Desmochæta From δεσμος, a bond, and χαιτα, a sheath, in allusion to the coherence of the flowers in their heads It was called Pupalia by Jussieu, from its Malabar appellation. Plants nearly related to Achyranthes, in which they were included by Linnæus

555 Illecebrum A name of Pliny, designating a kind of wild purslane. It is now applied to singular little weed-like plants, with white scarious stipules to their leaves

556. Alternanthera, that is to say, alternate anthers, those organs being by turns fertile and barren.

557. Paronychia. Something which cures whitlows, or maladies of the finger nails, called by the Greeks παρωνυχια. These are dwarf plants which grow in light soil, and are well adapted for pots or rock-work.

558 Chenolea From χην, a goose, and *olea*, an olive. The leaves are silvery, like those of the olive; the plant humble like the Goosefoot This plant is noticed for its silvery leaves: it is propagated by young cuttings planted under a hand-glass.

559. Anychia. A word with the same meaning as Paronychia (in No 557.), and a genus with similar habits.

3139 Stems creeping, Leaves rounded fleshy, Heads solitary terminal oblong
3140 Stem erect shrubby, Leaves ovate oblong acuminate, Heads round stalked leafless

3141 Stem ½-shrubby spreading smooth, Leaves opp ovate acum. roughish, Flowers with long purple bristles
3142 Stems shrubby prostrate, Leaves opposite ovate, Fascicles of flowers remote spreading at length reflexed
3143 Stem shrubby spreading, Leaves alternate ovate naked, Fasc. of flowers remote ovate, Bristles callous
3144 Stem erect, Leaves alternate ovate smooth, Racemes many, Fascicles ovate remote, Bristles callous
3145 Stem shrubby spreading pubescent, Flowers in round prickly spikes

3146 Stems filiform smooth, Leaves roundish, Calyxes 5-cornered bearded
3147 Stem branched erect, Leaves rounded smooth bearded, Flowers cymose, Bractes very short
3148 Stem branched prostrate, Flowers clustered axillary naked, Calyxes ventricose beneath hairy

3149 Heads sessile, Flowers smooth three times as long as utricle, Leaves ovate mucronate unequal
3150 Stems creeping hairy, Leaves broad lanceolate stalked, Heads round naked
3151 Heads subsessile, Calyx ovate acuminate nearly as short again as utricle, Leaves ovate lanceolate
3152 Stems creeping smooth, Leaves broad lanceolate stalked, Heads round pubescent
3153 Leaves ovate lanceolate deflexed, Flowers axillary clustered, Cal. spiny, Stem tomentose dichotomous

3154 Stems rising, Leaves carinate oblong ciliated at base, Flowers terminal mixed among the bractes
3155 Stems sub-erect much branched, Leaves spreading villous, Bractes very large concealing the flowers
3156 Stems diffuse, Leaves ovate, Flowers heaped, Bractes shining
3157 Flowers surrounded by shining bracteæ, Stems procumbent, Leaves smooth

3158 The only species

3159 Stem dichotomous, Leaves lanceolate of the stem opposite, of the branches altern Flowers sol axillary

3160 Stem herbaceous erect, Flowers lateral woolly, Leaves alternate ovate
3161 Leaves lanceolate downy, Spikes cylindrical numerous terminal

3162 Leaves ovate oblong, Stem rising panicled, Spikes alternate terminal remote
3163 Leaves ovate acuminate flat, Raceme loose, Bractes scarious, Pistil trifid
3164 Shrubby smooth, Cauline leaves spatulate, Stem leaves lanceolate, Flowers heaped spiked

3165 Half shrubby erect, Branches diffuse, Leaves nearly opp hastate entire smooth
3166 Shrubby erect, Branches unarmed, Leaves entire linear oblong and lanceolate flat beneath powdery

3167 Leaves cordate acuminate, Raceme spiked loose, Flowers trigynous

3168 Stems depressed jointed smooth, Leaves oval obtuse entire red at edge

3169 Leaves linear lanceolate, Stipules falcate, Peduncles angular, Spikes scarious ovate cylindrical
3170 Leaves ovate acuminate, Stipules falcate, Common peduncle striated, Spike oblong compressed
3171 Spikes cylindrical comose, Leaves lanceolate
3172 Leaves ovate upright without auricles, Stem furrowed, Spikes multiple crested
3173 Flowers panicled nodding, Leaves lanceolate, Stem ribbed
3174 Leaves lanceolate ovate lined very much acuminate, Spikes crested, Stipules falcate
3175 Leaves subulate whorled, Stem branched straggling, Spikes compact cylindrical
3176 Leaves wedge-shaped acutish, Spikes globose lateral



and Miscellaneous Particulars

560. *Ærua.* From its Arabic name *êroûâ.* Little weeds like Illecebrum

561 *Lestiboudesia.* Named by M du Petit Thouars, after Fr Jos. Lestiboudois, a Flemish botanist, author of a work called Botanographie Belgique, published in 1781. The species are readily increased either by seeds or cuttings.

562. *Rhagodia.* From ῥαγώδης, bearing berries. The fruit is a small berry, by which character the genus is chiefly distinguished from Chenopodium.

563. *Deeringia.* Named by Mr Brown, in memory of Dr Charles Deering, author of a Flora of Nottingham, and a skilful botanist of his day Weak shrubs, with terminal spikes of flowers, and a berried inflated pericarp.

564 *Trianthema.* From τρεις, three, and ανθος, flowers. The flowers are frequently placed in threes in the axillæ of the leaves Little tropical weeds

565. *Celosia.* From κηλιος, burnt, because the flowers of some species appear as it were singed. C cristata is a well known tender annual, of which there are many varieties, as in the balsam, and which, like that plant, will attain a large size and singular beauty by repeated shiftings Thunberg states that the flowers or crests are frequently a foot in length and breadth in Japan T A. Knight sent a flower to the Horticultural Society

566. GOMPHRE'NA. *R. Br*	GLOBE AMARANTH			*Amaranthaceæ*	*Sp* 4—25								
3177 globósa *W*	annual		or	1½	my o	P	W	India	1714	S	r m	Rhd.mal.10. t 37	
3178 perénnis *W*	perennial	♃	or	2	jl o	P	Y	S. Amer	1732	C	r m	Di.el.24.t 20.f.22	
3179 arboréscens *W*	tree	♄	or	3	jl o	W		S Amer	1802.	C	r m		
§3180 interrúpta *W*	trailing	♃	or	2	jl.au	Gr	W	Indies	1733	C	r m	Jac. ic 1. t. 51	
*567. MOL'LIA. *W.*	MOLLIA			*Amaranthaceæ*	*Sp* 2—3								
§3181 diffúsa *H K*	forked		w	½	jl au	W		Canaries	1779	S	l p	Will.hort ber.11	
§3182 aristáta *H K*	bearded	♄	w	½	jn jl	W		Canaries	1780	C	l p		
568 GLA'UX. *W.*	BLACK SALTWORT			*Salicariæ*	*Sp* 1.								
3183 maritima *W.*	sea	♃	cu	½	my jn	F		Britain	salt m	S	s l	Eng. bot. 13	
569. THE'SIUM. *W.*	BASTARD TOAD FLAX			*Santalaceæ*	*Sp* 5—33								
3184 linophýllum *W*	common		cu	½	jn jl	W		England	ch pa	D	p.l	Eng bot. 247	
3185 alpinum *Hayne*	Alpine		cu	½	jn jl	W		Germany	1814	D	p.l	Jac. aust 5 t.416	
3186 obtracteátum *Hayne*	obtuse-leaved		cu	½	jn jl	W		Germany	1814	D	p l	Sch bo ½ 1800 t 7	
§3187 umbellátum *W*	umbelled		cu	1	jn	G		N Amer	1782	D	p.l	Pl man.t.342.f 1	
3188 amplexicaúle *W*	heart-leaved	♃	cu	4	...	W		C G H	1787	C	s l		
†570 HELICO'NIA *W*	HELICONIA			*Musaceæ*	*Sp* 3—12								
3189 Bihai *W*	Plantain-leav'd	♂	or	12	jl au	O		W Indies	1786	S	s p	Sw ob 96. t 5 f 2	
3190 hóminis *W*	dwarf	♂	or	6	jl.au	S		Caracas	1798	D	s.p	Jac sch 1 t 48,49	
3191 Psittacórum *W*	Parrot-beaked	♂	or	8	au s	O		W Indies	1797	S	s p	Bot. rep. 124	
571 STRELITZIA *H K*	STRELITZIA			*Musaceæ*	*Sp* 8								
3192 augústa *H K*	august	♂	or	18	f my	W		C G H	1791	S	p l		
3193 reginæ *H K*	Canna-leaved	♂	or	8	ap my	Y		C G H.	1773	S	p l	Red lil 77, 78	
3194 ováta *H K*	ovate-leaved	♂	or	8	f ap	Y		C G H	1777	S	p l	Bot mag 119,120	
3195 farinósa *H K*	mealy-stalked	♂	or	5	f mr	Y		C G H	1795	S	p l		
3196 angustifólia *H K*	narrow-leaved	♂	or	6	my jn	Y		C G H	1778	S	p l		
3197 parvifólia *H K*	small-leaved	♂	or	6	my jl	Y		C G H	1796	S	p l	Bot reg 516	
3198 humilis *Lk*	dwarf	♂	or	6	my jn	Y		C G H	...	S	p l		
3199 júncea *Lk*	rush-leaved	♂	or	6	my jn	Y		C G H	...	S	p l		

DIGYNIA

572. APO'CYNUM *R Br*	DOG'S-BANE			*Apocyneæ*	*Sp* 4—8								
3200 androsæmifólium *W*	Tutsan leaved		or	2	jl s	Str		N Amer	1688	S	p l	Bot mag 280	
3201 cannabínum *W*	Hemp-like		or	3	jl s	W		N Amer	1699	S	co	Mor h 15 t 3 f 14	
3202 hypericifólium *W*	Hyperic.-lvd		or	2	jn jl	W		N Amer	1758	S	co	Jac vind 3 t 66	
3203 venétum *W*	Venetian		or	2	jn jl	W		Adriat Is	1690	S	co	Lobel ic. t. 372	
573 MELODI'NUS *Forst*	MELODINUS			*Apocyneæ*	*Sp* 2								
3204 scándens *W*	climbing	♃	or	15	jl au	W		N Caled	1775	C	s p	Lam ill t 179	
3205 monógynus *Roxb*	East Indian	♃	or	10	jl	W		E. Indies	1820	C	r m	Bot reg. 834	
574 PERIPLO'CA *R Br*	PERIPLOCA			*Asclepiadeæ*	*Sp* 2—13								
3206 græ'ca *W*	common	♄	or	10	jl au	Br		Syria	1597	R	s l	Bot reg 805	
3207 lævigáta *W*	smooth	♃	or	6	...	G	V	Canaries	1779	C	p l	Cav ic 3 t. 217	



History, Use, Propagation, Culture,

which measured eighteen inches in width, and seven inches in height from the top of the stalk, thick, full, and of the most intense purplish red. (*Hort Trans* iv 322) To produce this, the great object was to retard the protrusion of the flower-stalk Hence, a rich compost was employed, the plants put first into pots of four inches diameter, and then transplanted to others a foot in diameter, the object being not to compress the roots, as that has a tendency to accelerate the flowering of all vegetables The plants were placed close to the glass in a heat of from 70 to 100 degrees, all side branches removed, and pigeon-dung water used in watering Had the shiftings from pot to pot been more frequent, it appears probable the size might have been still greater

566 Gomphrena Gromphrena is a name applied by the ancients to a plant bearing red and green leaves on the same stem, probably our Amaranthus tricolor G globosa is a popular tender annual, valued for its heads of flowers, which, if gathered before they are too far advanced, will retain their beauty several years The other species propagate readily by cuttings under a glass

567. Mollia So called from its softness The species are small weeds.

568. Glaux From γλαυκιον, a name under which Dioscorides describes a maritime plant with glaucous leaves. This plant is maritime, and has glaucous leaves A pretty little plant, and well adapted for pots and rock work. It will grow at a considerable distance from the sea in sand kept moist

569 Thesium Athenæus says, on the authority of Timachides that this plant was called Θησιον, because it formed part of the garland presented by Theseus to Ariadne If this be so, the accent should be placed on the penultimate and not on the antepenultimate syllable It is, however, very certain that the Thesion of the ancients had no resemblance to that of the moderns, which is a genus of little obscure plants or weeds.

570. Heliconia A name given to this plant in an ingenious sense, as indicating its affinity with Musa. H Bihai is a large herbaceous plant, bearing considerable resemblance to Strelitzia It grows in rich well

3177 Stem erect hairy, Leaves oblong pubescent, Heads globose solitary 2-leaved, Keels of bracteæ winged
3178 Leaves lanceolate, Heads 2-leaved, Florets distinguished by a peculiar perianthium
3179 Hairy twining
3180 Stem ascending, Leaves oblong silky beneath, Spikes clustered panicled terminal interrupted

3181 Stem branched diffuse, Leaves spatulate whorled about 7, Calyxes with a membranous margin
3182 Stem branched diffuse, Leaves lanceolate silky bearded

3183 The only species

3184 Spike branched, Bractes 3, Leaves linear lanceolate with a very short tube to the calyx
3185 Stems prostrate simple, Raceme terminal leafy 1-sided, Flowers sessile surrounded by bracteæ
3186 Stem erect simple, Raceme leafy, Flowers stalked without smaller bracteæ
3187 Leaves obovate mucronate, Flowers racemose
3188 Leaves cordate stem-clasping, Racemes terminal

3189 Leaves at the base and end acute, Spadix erect radical, Spathes 2-ranked many-flowered
3190 Leaves narrowed at base at end acumin Spadix erect flexuose radical, Spathes 2-ranked many-flowered
3191 Leaves very smooth nerved rounded at base, Inflorescence very smooth, Spadix erect without bracteæ

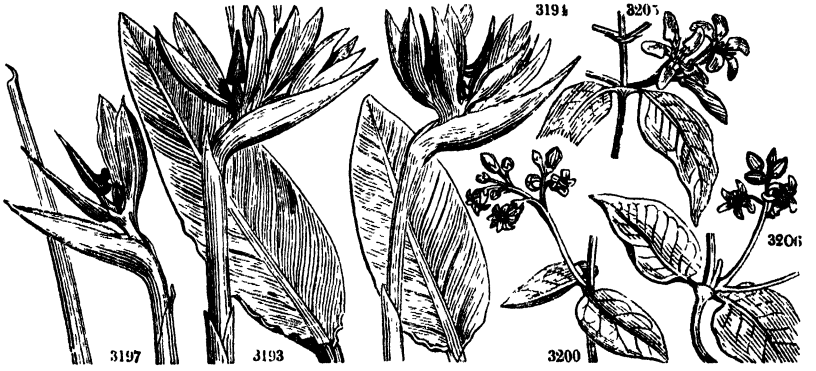
3192 Scape half as short as leaf-stalks which are hardly twice as long as the 6 feet leaf
3193 Scape scarcely longer than the leaf-stalks which are three times as long as the oval leaf
3194 Scape longer than leaf-stalk and leaves, Leaf-stalk twice as long as the ovate oblong leaf
3195 Scape a little longer than the leaf-stalks which are half as long again as the obl leaf unequal at the base
3196 Scape as long as leaf-stalk which is 7 times longer than the lanceolate leaf
3197 Scape the length of the leaf-stalk which is 20 times longer than the linear lanceolate leaf
3198 Scape as long as leaf-stalk which is twice as long as the ovate concave leaf
3199 Leaf-stalk very long with no leaf

DIGYNIA

3200 Stem upright herbaceous, Leaves ovate smooth on each side, Cymes terminal smooth
3201 Stem upright herbaceous, Leaves oblong tomentose beneath, Cymes lateral longer than the leaves
3202 Stem erect herbaceous, Leaves oblong cordate smooth, Cymes shorter than the leaves
3203 Stem erect herbaceous, Leaves elliptical lanceolate mucronate at the edge rough with little teeth

3204 Leaves oblong ovate thick at edge, Panicle downy
3205 Leaves oval lanceolate acuminate, Panicle smooth

3206 Flowers terminal hairy inside
3207 Flowers smooth, Segments obtuse, Cymes trichotomous, Leaves oblong lanceolate veiny smooth



and Miscellaneous Particulars

shaded gullies in moist woods The berries are small and succulent, and each contain three hard rugged seeds

H Pattacorum bears a great resemblance to Canna · it grows in the wet parts of woods, and on the highest mountains All the species require a strong heat to make them flower freely

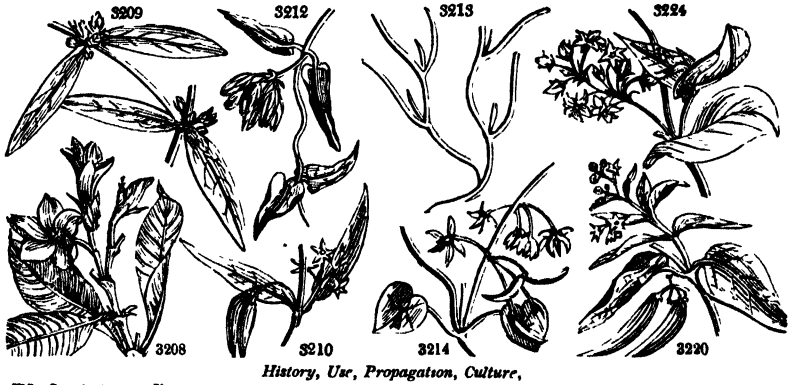
571 *Strelitzia* So named by Sir Joseph Banks, in honor of Charlotte, queen of George III, of the family of Mecklenburgh Strelitz, and said to have patronized botany This is a splendid genus, generally kept in the stove; but which, Sweet observes, "will thrive, and flower as well in the greenhouse or conservatory A light sandy loam is the best soil for the species, and they may be increased, but slowly, by suckers. By rubbing the pollen on the stigma, when the plants are in bloom, perfect seeds are readily obtained." (*Bot Cult* 111)

572 *Apocynum* From *απο*, away, and *κυων*, a dog, that is to say, a plant from which dogs must be driven Pliny says his Apocynum is mortal to them This is a genus of plants of little beauty, but of easy culture in any soil The first species is acrid and blisters the skin From the stalks of A. cannabinum the Indians of North America prepare a substitute for hemp, of which they make twine, bags, fishing-nets and lines, and linen for their own wear

573 *Melodinus.* So named by Forster, from *μηλον*, an apple, and *δινεω*, to turn round, this plant bearing a round fruit like an apple, and having a twining stem by which it climbs trees It is a very smooth shrub, with oblong-ovate leaves, and nearly allied to Rauwolfia Cuttings root readily in sand under a hand-glass This, and the succeeding genera, as far as No 592, are all Asclepiadeous plants, and require nearly similar management

574 *Periploca.* From *περιπλοκη*, intertwining, in allusion to the habit of the plants. P græca is a handsome climber, and grows freely in common garden soil, and is propagated by cuttings under a glass, or by layers.

575. CRYPTOSTE'GIA. *R. Br.* Cryptostegia.			*Asclepiadeæ.*	*Sp* 1.					
3208 grandiflóra *R Br.*	large-flowered	☘ ▭ or	6	jn.jl	Pk	India	1818.	C	r.m Bot. reg. 435
576. HEMIDES'MUS. *R Br.* Hemidesmus.			*Asclepiadeæ.*	*Sp* 1—2.					
3209 indicus *H. K.*	Indian	♿ ▭ or	6	...	G	Ceylon	1796.	C	l.p Bur.zeyl.t.83 f 1
577. SECAMO'NE. *R Br.* Secamone.			*Asclepiadeæ*	*Sp* 2—4					
3210 ægyptiaca *H. K.*	Egyptian	♿ ▬ cu	6	jl	W	Egypt	1752.	C	a.l Alp æg t. 134
3211 emética *R Br.*	narrow-leaved	♿ ▭ m	6	...	W	India	1816.	C	a.l.p Wil ph. 1. t.5 f 2
†578. MICROLO'MA. *R. Br* Microloma.			*Asclepiadeæ.*	*Sp* 1—2.					
3212 sagittátum *H. K.*	arrow-leaved	♿ ▬ cu	3	jl au	G P	C G H	1775.	C	s l Jac. sch 1. t. 38
†579. SARCOSTEM'MA. *R Br* Sarcostemma			*Asclepiadeæ.*	*Sp* 1—12					
3213 viminále *H K.*	twisting	♿ ▭ cu	6	jl	W	E. Indies	1731.	C	r m Alp æg t 190
580. DÆ'MIA *R Br.*	Dæmia		*Asclepiadeæ*	*Sp* 1—4					
3214 exténsa *H K.*	smooth-leaved	♿ ▭ or	3	jl au	W	E. Indies	1777	C	p.l Jac. ic. 1. t 54
581 CYNAN'CHUM *R Br.* Cynanchum.			*Asclepiadeæ.*	*Sp* 11—50					
3215 acútum *R Br.*	acute-leaved	⅄ △ or	3	jl	W	Spain	1596.	D	co Tre eh 44 t 82
3216 monspeliacum *R Br.*	Montpelier	⅄ △ or	3	au s	Pk	S. Europe	1596	D	co Jac ic 2 t. 340
3217 crassifólium *R Br*	obtuse-leaved	♿ ▬ or	3	...	G	C. G H	1816.	C	co
3218 pilósum *R Br*	hairy	♿ ▬ or	2	jn s	W	C G H	1726.	C	p l Bot. reg 111
3219 vincetóxicum *R Br*	officinal	⅄ △ or	2	my au	W	Europe	1596	D	s l Flor dan. 849
β lúteum	*yellow-flowered*	⅄ △ or	2	my au	Y	Europe	1596	D	s.l
3220 nigrum *R Br*	black	⅄ △ or	3	jn au	W	S Europe	1596.	D	s l Bot mag. 2390
3221 sibíricum *R Br*	Siberian	⅄ △ or	3	jl au	G	Siberia	1775	D	co Mur gott. 2 t. 7
3222 médium *R Br*	intermediate	⅄ △ or	3	my au	W	.....	...	D	co
3223 undátum *B. Rep.*	wave-leaved	♿ ▭ or	6	jl au	G	W Indies	1803	C	l p Bot. rep 410
3224 mucronátum *B Rep*	sharp-pointed	♿ ▭ or	6	jl au	G	Trinidad	1804.	C	l p Bot rep 515
3225 viridiflórum *B M*	green-flowered	♿ ▭ or	6	o d	G	E. Indies	1814	C	l p Bot mag 1929
582 OXYSTEL'MA *R Br* Oxystelma.			*Asclepiadeæ*	*Sp* 1—2					
3226 esculéntum *R Br*	esculent	♿ ▨ cu	4	...	Y	E. Indies	1816	D	s.l Rox. cor. 1 t 11
583 GYMNE'MA *R. Br* Gymnema			*Asclepiadeæ*	*Sp* 1—4.					
3227 sylvéstre *R Br*	netted-leaved	♿ ▭ or	8	...	Gr	Ceylon	1816.	C	l p Wil ph 1 t 5 f.3
584 CALO'TROPIS. *R Br* Calotropis.			*Asclepiadeæ*	*Sp* 2					
3228 procera *H K*	bell-flowered	♿ ▭ or	6	jl s	W P	Persia	1714	C	s l Bot rep 271
3229 gigantea *H K*	curled-flowered	♿ ▭ or	6	jl s	W P	E. Indies	1690	C	r m Bot reg 58
585 DISCHI'DIA *R Br* Dischidia.			*Asclepiadeæ.*	*Sp* 1—2					
3230 bengalénsis *Colcb*	Bengal	☘ ▭ or	½	...	W	India	1818.	C	s l Lin trans 12.t 15
586. XYSMALO'BIUM *R Br* Xysmalobium			*Asclepiadeæ*	*Sp* 1—2.					
3231 undulátum *H K.*	waved-leaved	☘ ▬ cu	1	jl	Gr	C G H	1783.	C	p l Comm rar t. 16
587 GOMPHOCAR'PUS *R Br.* Gomphocarpus.			*Asclepiadeæ*	*Sp* 3—4					
3232 arboréscens *H K*	broad-leaved	☘ ▬ or	5	d	W	C G H	1714	C	l p Jac sch 1 t 50
3233 crispus *H K*	curled-leaved	☘ ▬ or	1	jl	Y	C G H	1774.	C	p l Comm rar t. 17
3234 fruticósus *H K*	Willow-leaved	☘ ▬ or	5	jn s	W	C G H	1714.	C	p l Bot. mag. 1628
588 ASCLE'PIAS *R Br* Swallow-wort			*Asclepiadeæ*	*Sp* 15—65					
3235 syriaca *W*	Virginian	⅄ △ or	4	jl au	Pu	N Amer	1629	D	co Blackw t 521
3236 phytolaccoides *Ph*	Phytolacca-like	⅄ △ or	3	jl au	Pu	N. Amer	1812.	D	co
3237 amœ'na *W*	oval-leaved	⅄ △ or	3	jl au	Pu	N Amer	1732	D	p l Dil, el t. 27 f 30



History, Use, Propagation, Culture,

575 *Cryptostegia* From κρυπτος, concealed, and στεγη, a covering The name was suggested to Mr Brown by the circumstance of the enclosure of the corona within the tube of the corolla, and its not being exposed to view, as in the other neighbouring genera

576. *Hemidesmus* From ἡμισυς, half, and δεσμος, a bandage, in allusion to the incomplete coherence of the anthers with the stigma, by which the genus is principally distinguished from Periploca. Cuttings root readily in sand in heat.

577. *Secamone* The meaning of this word is very obscure None of the explanations which have been offered of it are even tolerable Culture as in Periploca.

578 *Microloma.* From μικρος, small, and λωμα, a fringe; but the application is unexplained by the author of the name. Small climbing shrubs, with opposite leaves and interpetiolar umbels

579. *Sarcostemma.* From σαρξ, flesh, and στεμμα, a crown, on account of the thick succulent nature of the coronal processes

580. *Dæmia.* Dæmia appears to be an Arabic name It has been applied by Forskâhl to a species of Asclepias referred hither A genus of twining plants

581 *Cynanchum.* From κυων, a dog, and αγχειν, to strangle A word having the same meaning and application as Apocynum. This is a genus of low shrubs and herbaceous plants, for the most part twining, and all of easy culture and propagation.

582. *Oxystelma.* From οξυς, sharp, and στελμα, a crown; the corona being very much pointed.

583. *Gymnema.* From γυμνος, naked, and νημα, a thread, or, in botanical language, stamen; in allusion to

3208 The only known species

3209 Spikes axillary imbricated, Leaves elliptical obtuse mucronate, Stem smooth

3210 Flowers hairy inside panicled, Leaves lanceolate elliptical
3211 Flowers smooth, Corymbs few-flowered axillary, Leaves linear lanceolate without veins

3212 Leaves sagittate pubescent, Limb of the corolla acute

3213 Stem twining perennial leafless

3214 Stem twining shrubby, Leaves cordate acute, Flowers hairy at edge

3215 Leaves oblong ovate cordate acute, Segments of cor oblong obtuse
3216 Leaves reniform contracted at end ½ lanceolate, Segm of cor lanceolate obtuse
3217 Leaves cordate ovate obtuse fleshy with a little point smooth, Crown 10-cleft as long as corolla
3218 Leaves ovate acute and calyxes hairy, Crown 10-cleft as long as corolla
3219 Stem erect, Flowers beardless, Partial stalks of umbel twice as long as common stalks, Crown 5-lobed

3220 Stem climbing upwards, Fl bearded, Partial stalks of simple umbel scarcely longer than common stalk
3221 Leaves lanceolate linear opposite and three together, Stem decumbent
3222 Stem twining upwards, Corollas beardless, Stalks of umbel divided, Corona 5-lobed
3223 Leaves oblong cordate acuminate wavy, Umbels axillary proliferous
3224 Stem hairy, Leaves heart-shaped mucronate, Umbels axillary proliferous
3225 Leaves cordate ovate acuminate, Umbels simple solitary, Partial flower-stalks longer than common one

3226 Cor. smooth rotate, Racemes axillary, Leaves linear lanceolate veiny

3227 Leaves rounded ovate netted pubescent beneath, Flowers in umbels

3228 Segments of cor spreading
3229 Segments of cor reflexed involute

3230 Leaves thick fleshy ovate

3231 Leaves sessile oblong lanceolate wavy smooth, Umbels lateral, Petals ciliated

3232 Leaves ovate oblong smooth obtuse with a point
3233 Leaves cordate lanceolate wavy hispid
3234 Leaves linear lanceolate smooth

3235 Leaves oval downy beneath, Stem simple, Umbels nodding
3236 Stem erect simple, Leaves broad ovate oblong acute smooth paler beneath, Umbels nodding
3237 Stem simple downy in two rows, Leaves subsessile oblong oval downy beneath



and Miscellaneous Particulars.

the peculiar structure of the stamens The milk of Gymnema lactiferum is used instead of the Vaccine ichor, and the leaves are employed in sauces in the room of cream

584 *Calotropis* From καλος, beautiful, and τρεπω, to turn, in allusion to the beauty of the flowers, which continually turn towards the sun This is a handsome free-flowering genus Young cuttings root freely in sand under a hand-glass, but not crowded, as, if the leaves are injured, they are very apt to damp and get mouldy

585. *Dischidia.* From δις, twice, and σχιζω, to split; but the application is unexplained. Little trailing plants with small opposite fleshy leaves.

586 *Xysmalobium* From ξυσμα, a fragment of a thing, and λοβος, a division, on account of the minute alternate divisions of the corona. The flowers of this genus are very large, those of X. grandiflorum are of the size and color of Fritillaria meleagris.

587. *Gomphocarpus.* From γομφος, a club, and καρπος, fruit. A genus resembling Asclepias in habit, but well distinguished by the inflated club-like fruit

588 *Asclepias.* The name of many ancient physicians It is the Greek name of the Æsculapius of the Latins. This is a genus of tall-growing herbaceous plants, which thrive best in peat or any very light soil They require a good deal of room to show their characters, and are readily propagated by seeds or dividing the roots. A. syriaca is very odoriferous, and in Canada, when in flower, charms the traveller, especially when passing through woods in the evening The French there eat the tender shoots in spring as we do asparagus. The natives make a sugar of the flowers, gathering them in the morning when they are covered with dew, and collect the cotton from the pods to fill their beds On account of the silkiness of this cotton, Parkinson calls the plant Virginian silk.

A. nivea has jointed fleshy roots, the juice of which is very effective in bringing away worms. The root

3238 **purpurascens** *W.*	purple	△	or	3	jl au	P G	N Amer	1732	D p l	Dil el. t. 28 f 31
3239 **variegata** *W*	variegated	△	or	4	jl au	W	N Amer	1597	D p l	Bot mag 1182
3240 **curassávica** *W*	Curassavian	△	or	3	jn.s	S	S Amer	1692.	S r m	Bot. reg. 81
β alba	*white*	△	or	3	jn s .	W	S Amer.	....	S r.m	
3241 **nivea** *W*	Almond-leaved	△	or	3	jl s	W	N Amer	1730.	D p l	Bot. mag 1181
3242 **parviflóra** *W*	small-flowered	△	or	3	jl o	W	N Amer	1774	C r m	Jacq ecl t 28
3243 **incarnáta** *W*	flesh-colored	△	or	2	jl au	Pu	N Amer	1710.	D p.l	Bot. reg. 250
3244 **púlchra** *W en*	hairy	△	or	2	jl au	Pu	N Amer	....	D p l	
3245 **decúmbens** *W*	decumbent	△	or	2	jl au	O	N Amer	1731	D p l	
3246 **verticillata** *W.*	whorl-leaved	△	or	3	jl au	W G	N Amer.	1759	D p l	Pl ma t 336 f 3
3247 **longifolia** *Ph*	long-leaved	△	or	2	jl au	P Pu	N Amer	1816.	D p l	
3248 **tuberósa** *W*	tuberous-rooted	△	or	2	jl s	O	N Amer	1690	D s l	Bot reg 76
3249 **Linária** *W*	Flax-leaved	△	or	2	....	W	Mexico	1802	D s l	Cav ic 1 t. 57

589. *GONO'LOBUS *R Br* Gonolobus — *Asclepiadeæ* *Sp* 6—

3250 **hirsútus** *Mich*	hairy	△	or	6	jn	P	N Amer	1806	C l p	Bot. cab 365
3251 **lævis** *Mich*	smooth	△	or	6	m	G	N Amer	1806	C l p	
3252 **suberósus** *H K*	Cork-barked	▭	or	6	jl s	G	America	1732	C p l	D el t 229 f 296
3253 **discolor** *B M*	Virginian	△	or	8	jl au	G	N Amer	1809	C p l	Bot mag 1273
3254 **crispiflórus** *H K*	curled-flower	▭	or	2	jl au	W G	S Amer.	1741	C s p	Pl ic t 216 f 1
3255 **diademátus** *Kth*	red-crowned	▭	or	12	s o	G	Mexico	1812	C s p	Bot reg 252

†590 PERGULA'RIA *R Br* Pergularia — *Asclepiadeæ* *Sp* 3—

3256 **odoratíssima** *H K*	large	▭	ft	15	jn jl	G	E Indies	1784	C r m	Bot rep 185
3257 **minor** *H K*	small	▭	ft	8	my au	Y G	E. Indies	1790	C r m	Bot mag 755
3258 **sanguinolénta** *Lind*	bloody	▭	cu	6	jl au	G Y	S Leone	1822	C r m	Bot mag 2532

591 MARSDE'NIA *R Br* Marsdenia — *Asclepiadeæ* *Sp* 2—

* 3259 **erécta** *R Br*	upright	▭	ft	2	jl au	W	Syria	1597	C s l	Jac vind 1 t 38
3260 **suaveólens** *R Br*	sweet-scented	▭	ft	3	jl au	W	N S W	1816	C s l	Bot reg 489

†592 HO'YA *R Br* Hoya — *Asclepiadeæ* *Sp* 5—

3261 **carnósa** *R Br*	fleshy-leaved	▭	or	10	jl au	Pk	Asia	1802	L r m	Bot mag 788
3262 **lanceoláta** *Hort*	lanceolate	▭	or	2	....	....	E Indies	1815	C r m	
3263 **crassifólia** *Haw*	thick-leaved	▭	or	10	....	..	China	1821	C r m	
3264 **Pottsii** *Hort*	cordate	▭	or	10	.	..	China	1824	C r m	Bot cab 1969
3265 **trinérvis** *Hort*	three-nerved	▭	or	10		.	China	1824	C r m	

593 CEROPE'GIA *Roxb* Ceropegia — *Asclepiadeæ* *Sp* 3—

3266 **dichótoma** *Haw*	dichotomous	▭	cu	1	jl s	Y	E Indies	1804	C s l	Roxb cor 1 t 10
3267 **júncea** *Roxb*	rushy	▭	cu	1	.	Y	E. Indies	1822	C s l	Bot reg 626
3268 **africána** *Hort*	African	▭	cu	6	..	Y	E. Indies	1823	C s l	Bot cab 906

*594 STAPE'LIA *R Br* Stapelia — *Asclepiadeæ* *Sp* 65—

3269 **grandiflora** *Mass*	great-flowered	▭	cu	1	s d	D Pu	C G H	1795	C s l	Mass stap t. 11
3270 **spectábilis** *Haw*	showy	▭	cu	1	n ja	D Pu	C G H	1802	C s l	Bot mag 585
grandiflóra B M										
3271 **ambígua** *W*	ambiguous	▭	cu	2	jn n	P Br	C G H	1795	C s l	Mass stap t. 12
3272 **sorória** *W en*	sister	▭	cu	1	jn au	D Pu	C G H	1797	C s l	Bot cab 94
3273 **pátula** *W en*	spreading	▭	cu	1	jn au	O	C G H	....	C s l	Jac stap e ic
3274 **reflexa** *Haw*	reflexed	▭	cu	½	jn au	G P	C G H	.	C s l	Bot mag 1890
3275 **lucida** *D C*	shining	▭	cu	1	jn au	P	C G H	1812	C s l	
3276 **Juvencula** *W en*	short-flowered	▭	cu	1	jn au	Br P	C G H	..	C s l	Jac stap e ic
3277 **Massónii** *Haw*	Masson's	▭	cu	2	..		C G H	..	C s l	
3278 **Astérias** *W*	Star-fish	▭	cu	¾	my n	P St	C G H	1795	C s l	Bot mag 530
3279 **stellaris** *Haw*	starry	▭	cu		..	....	C G H	..	C s l	Bot cab 1312
3280 **hirsúta** *W*	hairy	▭	cu	½	jn au	P	C G H	1710	C s l	Jac misc 1 t 3
β atra Jacq	*dark-flowered*									Bot reg 156
3281 **hamáta** *Jacq*	hooked	▭	cu	½	jl au	Bd.R	C G H	1820	C s l	Bot cab 242
3282 **comáta** *Jacq*	shaggy	▭	cu	1	s	Y Br	C G H	1819	C s l	
β multiflóra D C	*many-flowered*	▭	cu	1	s	V R	C G H	1817	C s l	
3283 **rúfa** *W*	rusty-brown	▭	cu	¼	m n	Br	C G H	1795	C s l	Bot cab 239
3284 **pulvináta** *W.*	cushioned	▭	cu	½	jn n	D V	C G H	1795	C s l	Bot. mag 1240



History, Use, Propagation, Culture,

dried and reduced to powder, is frequently used by the negroes as a vomit, and hence its name of wild or bastard Ipecacuanha.

A. **vincetoxicum** (tame-poison) is so named because it was formerly esteemed an alexipharmick, and it is called swallow-wort from the fancied resemblance of the follicles or seeds to a swallow flying

589. *Gonolobus* The derivation and meaning of this word have not been explained. The genus consists chiefly of climbers of little beauty but easy culture

590. *Pergularia* From *Pergula*, trellis-work, which the plants are very proper for covering This is a climbing genus, much valued for the fragrance of its flowers it grows well in loam and peat, and cuttings root freely in sand under a hand-glass

591 *Marsdenia* So named by Mr R Brown, after William Marsden, Esq. the author of the excellent

3238 Stem simple, Leaves ovate villous beneath, Umbels erect, Nect. resupinate
3239 Leaves ovate rugose naked, Stem simple, Umbels subsessile, Flower-stalks downy
3240 Leaves stalked lanceolate smooth shining, Stem simple, Umbels erect solitary lateral

3241 Leaves ovate-lanceolate smooth, Stem simple, Umbels erect lateral solitary
3242 Leaves lanceolate acuminate smooth narrowed at base, Stem half shrubby erect, Umbels lateral solitary
3243 Leaves lanceolate smooth, Stem divided upwards, Umbels erect in pairs
3244 Leaves lanceolate pubescent beneath, Stem divided upwards, Umbels erect in pairs
3245 Leaves villous, Stem decumbent
3246 Stem erect simple downy in lines, Leaves very narrow linear mostly whorled
3247 Stem decumbent and leaves very long linear pubescent, Appendages of crown without horns
3248 Stem erect hairy with spreading branches at end, Leaves scattered lanceolate hairy
3249 Leaves linear subulate channelled, Umbels stalked nodding. lateral many-flowered

3250 Runners and leafstalks very hairy, Lvs acum by degrees perceptibly hairy on both sides, Foll muricated
3251 Runners smoothish, Leaves conical cordate acute by degrees, Flowers and follicles smooth
3252 *Leaves cordate acuminate with the sinus open*
3253 Leaves cordate, Corymbs axillary, Common flower-stalk longer than the leafstalks Cor discolored
3254 Leaves oblong cordate with the sinus closed, Petals crisp at end
3255 Villous, Leaves oblong elliptical lanceolate cordate, Crown at bottom of tube

3256 Leaves cordate acuminate, Cal shorter than tube of cor.
3257 Leaves cordate obtuse with a point, Cal as long as tube of cor
3258 Leaves ovate lanc very smooth, Cymes shorter than leaves, Sap blood-colored

3259 Stem erect, Leaves cordate ovate acute, Cymes umbellate, Flowers not bearded
3260 Stem somewhat erect, Leaves oval-lanceolate smooth veinless, Tube inflated, Orifice bearded

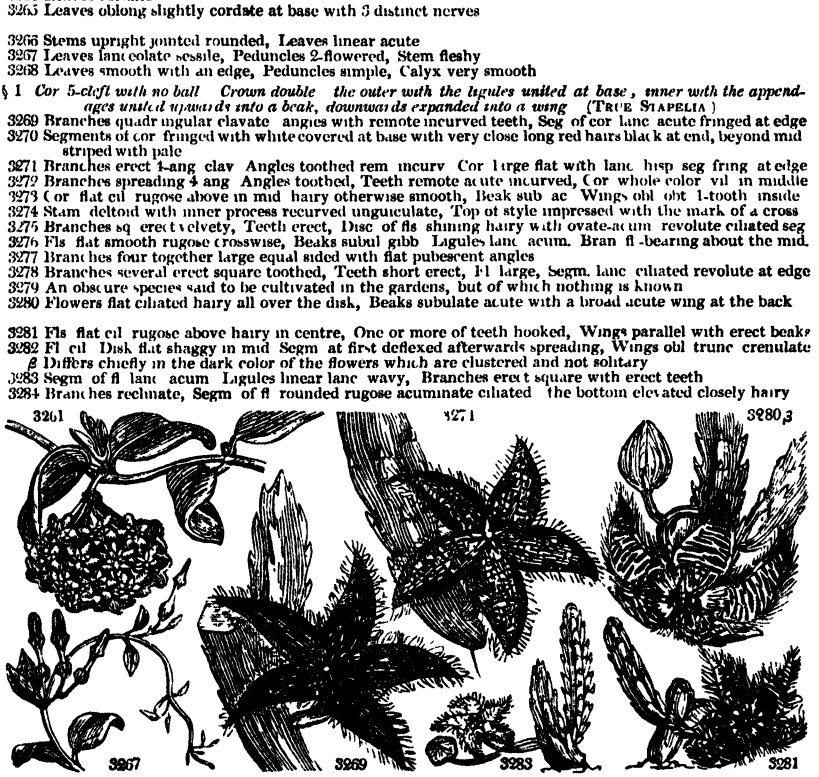
3261 Leaves ovate, Flowers bearded
3262 Leaves ovate-lanceolate acute small
3263 Leaves obovate obtuse very thick
3264 Leaves cordate
3265 Leaves oblong slightly cordate at base with 3 distinct nerves

3266 Stems upright jointed rounded, Leaves linear acute
3267 Leaves lanceolate sessile, Peduncles 2-flowered, Stem fleshy
3268 Leaves smooth with an edge, Peduncles simple, Calyx very smooth

§ 1 *Cor 5-cleft with no ball Crown double the outer with the ligules united at base, inner with the appendages united upwards into a beak, downwards expanded into a wing* (TRUE STAPELIA)

3269 Branches quadrangular elavate angles with remote incurved teeth, Seg of cor lanc acute fringed at edge
3270 Segments of cor fringed with white covered at base with very close long red hairs black at end, beyond mid striped with pale
3271 Branches erect 4-ang clav Angles toothed rem incurv Cor large flat with lanc hisp seg fring at edge
3272 Branches spreading 4 ang Angles toothed, Teeth remote acute incurved, Cor whole color vil in middle
3273 Cor flat cil rugose above in mid hairy otherwise smooth, Beak sub ac Wings obl obt 1-tooth inside
3274 Stam deltoid with inner process recurved unguiculate, Top of style impressed with the mark of a cross
3275 Branches sq erect velvety, Teeth erect, Disc of fls shining hairy with ovate-acum revolute ciliated seg
3276 Fls flat smooth rugose crosswise, Beaks subul gibb Lagules lanc acum. Bran fl-bearing about the mid.
3277 Branches four together large equal sided with flat pubescent angles
3278 Branches several erect square toothed, Teeth short erect, Fl large, Segm. lanc ciliated revolute at edge
3279 An obscure species said to be cultivated in the gardens, but of which nothing is known
3280 Flowers flat ciliated hairy all over the disk, Beaks subulate acute with a broad acute wing at the back

3281 Fls flat cil rugose above hairy in centre, One or more of teeth hooked, Wings parallel with erect beaks
3282 Fl cil Disk flat shaggy in mid Segm at first deflexed afterwards spreading, Wings obl trunc crenulate
β Differs chiefly in the dark color of the flowers which are clustered and not solitary
3283 Segm of fl lanc acum Ligules linear lanc wavy, Branches erect square with erect teeth
3284 Branches reclinate, Segm of fl rounded rugose acuminate ciliated the bottom elevated closely hairy



and Miscellaneous Particulars

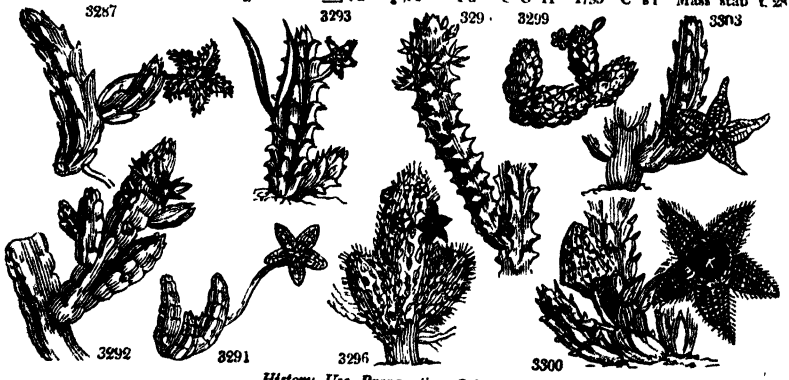
History of Sumatra, in which one species, used as Indigo in the island is figured. Little neat shrubs, with axillary bunches of small white sweet-scented flowers

592. *Hoya* Named after Mr Thomas Hoy, for many years gardener to the Duke of Northumberland He died about 1821 H carnosa is of easy culture, flowers freely, and is propagated by cuttings in a moist heat. Its flowers are very mellifluous, and it has been said that one or two plants, placed when in flower in a vinery of ripe grapes, will entice the wasps from eating the fruit

593. *Ceropegia* From κηρος, wax, and πηγη, a fountain, literally, a fountain of wax, poetically, a candelabre, on account of the umbels of bright yellow flowers. Curious naked plants with tumid fleshy stems. Same culture as Hoya.

594 *Stapelia* So named by Linnæus, in memory of Bodæus à Stapel, a physician of Amsterdam, com-

3285	fissiróstris *Jacq.*	split-beaked	♃	cu	2½	...	Y G	C. G H.	1823	C	s l	Jac. stap c ic.
3286	concinna *W*	spruce	♃	cu	½	jn au	Gr	C G H.	1795.	C	s l	Mass. stap t. 18
3287	glandulifióra *W.*	gland-flowered	♃	cu	½	au n	Br	C. G H.	1795	C	s l	Mass. stap t. 19
3288	glandulifera *Haw.*	hairy-glanded	♃	cu	½	au.n	Br	C G H.	...	C	s.l	
3289	acuminata *W*	acuminated	♃	cu	½	jl s	P St	C G. H	1795	C	s l	Mass. st. 15. t 17
3290	hispidula *Horn.*	hispid	♃	cu	½	jl au	Gr	C G H	1824	C	s l	
3291	apérta *W*	open-flowered	♃	cu	2	jl.au	Y.P	C. G H	1795	C	s l	Mass. stap t. 37
3292	ramósa *W.*	branched	♃	cu	1½	jn jl	D P	C G H	1795	C	s l	Mass. stap t 32
3293	árida *W.*	dry	♃	cu	½	au	Y	C G H	1795	C	s l	Mass stap t. 33
3294	incarnáta *W*	flesh-colored	♃	cu	1	ap au	F	C G H	1793	C	s l	Mass stap t. 34
3295	parviflóra *W*	small-flowered	♃	cu	1	jn au	Y Gr	C G H	1795.	C	s l	Mass stap. t. 35
3296	pilifera *W*	hairy-tubercled	♃	cu	1	jn au	D P	C G H.	1790	C	s l	Mass stap. t 23
3297	Gordoni *Mass*	Gordon's	♃	cu	1	...	Y Br	C G H.	1796	C	s l	Mass stap t 40
3298	mammillaris *W*	prickly	♃	cu	1	jn jl	Br	C G H	1774.	C	s l	Bur afr 27 t. 11
§3299	articuláta *W*	jointed	♃	cu	½	jl n	D P	C G H.	1774	C	s l	Mass stap t. 30
§3300	gemmiflóra *Mass*	gem-flowered	♃	cu	½	o n	D P	C G H	1795	C	s l	Mass stap. t. 15
§3301	stýgia *Haw*	Stygian	♃	cu	½	jl s	D P	C G H	1810	C	s l	
	β moschata Haw	*musky*	♃	cu	½	...	...	C G H.	...	C	s l	
§3302	hircósa *W en*	stinking	♃	cu	½	jn au	Br Pu	C G H	...	C	s l	Jac stap c. ic.
§3303	vétula *W.*	pur smooth -fl	♃	cu	½	my n	D Pu	C G H.	1793	C	s l	Mass stap t. 16
3304	Simsii *Haw* *vetula* B M	Sims's	♃	cu	½	my n	D Pu	C G H	1800	C	s l	Bot. mag. 1234
§3305	rugósa *W en*	wrinkled	♃	cu	½	my au	P St	C G H	1805	C	s l	Jac stap c ic.
3306	paniculáta *W en*	panicled	♃	cu	½	jn s	V	C. G H.	1805.	C	s l	
§3307	divaricáta *W*	straddling	♃	cu	½	jn n	D F	C. G H.	1793.	C	s.l	Bot. mag 1007
3308	púlchra *Haw*	beautiful Sulph	♃	cu	½	au s	Y St	C G H	1800	C	s l	Bot. mag 786
§3309	irrorata *W*	dewy	♃	cu	½	jl s	Y St	C G H	1795	C	s.l	Bot cab 127
§3310	verrucósa *W*	wart-flowered	♃	cu	½	au o	Y St	C G H	1795	C	s l	Mass stap t. 8
§3311	roriflua *W en*	dew-bearing	♃	cu	½	jl s	Y St	C G H.	1802	C	s l	Jac stap c ic
§3312	pulchella *W*	beautiful	♃	cu	½	my n	Y St	C G H	1795	C	s l	Mass stap t 36
§3313	lépida *W en.*	pretty	♃	cu	½	jl au	G St	C G H	...	C	s l	Jac stap c. ic
§3314	ciliáta *W*	ciliated	♃	cu	½	o d	G St	C G H	1795.	C	s l	Mass. stap. t. 1
§3315	revolúta *W.*	revolute-flower	♃	cu	1	jn s	Pu	C G H	1790	C	s l	Bot. mag 724
§3316	glaúca *W en*	glaucous	♃	cu	2	jn n	R Pu	C G H	1799	C	s l	Jac. stap c ic
§3317	prumósa *W*	frosted	♃	cu	1½	jn jl	D Br	C G H.	1795.	C	s l	Mass. stap t. 41
§3318	obliqua *W en*	oblique-flower	♃	cu	1	jn s	Pa V	C G H	1805	C	s l	
§3319	maculósa *Jacq*	spotted	♃	cu	1	jn s	Br v	C G H	1804	C	s l	
§3320	bisulca *Donn*	two-furrowed	♃	cu	1	jn s	Y St	C G H	1805	C	s l	Bot mag 1833
§3321	variegáta *Haw*	variegated	♃	cu	1	jn s	Y St	C G H	1727	C	s l	Jac stap t 3
§3322	Curtisii *Haw* *variegáta* B M	Curtis s	♃	cu	1	jn s	Y St	C G H	1690	C	s l	Bot. mag 26
§3323	planiflóra *W en*	plain-flowered	♃	cu	½	jl n	P s	C G H	1805	C	s l	Bot cab 191
§3324	marginata *W en*	red-edged	♃	cu	½	jn s	Y St	C G H	1805	C	s l	
§3325	conspurcáta *W en*	white-edged	♃	cu	½	jn o	Y St	C G H	1795	C	s l	Jac stap c ic
§3326	normalis *Jacq*	regular-spotted	♃	cu	½	jl au	Y St	C G H	1821	C	s l	Bot reg 755
§3327	orbiculáris *B Rep*	orbicular	♃	cu	½	jl n	Y St	C G H	1799	C	s l	Bot. cab 811
§3328	bufónia *W en*	toad	♃	cu	1	jn s	Y St	C G H	1806	C	s l	Bot mag 1676
§3329	anguina *Haw*	snake-speckled	♃	cu	½	jn jl	Y St	C G H	1812	C	s l	Bot cab 828
§3330	picta *H K*	painted	♃	cu	½	jn s	Y St	C G H	1799	C	s l	Bot mag 1169
§3331	geminata *W.*	twin-flowered	♃	cu	½	my n	P St	C G H	1795	C	s l	Bot. mag 1326
§3332	decóra *W*	neat	♃	cu	½	my n	Y St	C G H	1795	C	s l	Mass stap t. 26
§3333	reclináta *W*	reclining	♃	cu	½	jl s	Pu	C G H	1795	C	s l	Mass stap t. 28



History, Use, Propagation, Culture,

mentator on Theophrastus, 1644. This is a genus of singular plants, without leaves, diminutive, very succulent, and some of them with flowers large in proportion to the plant, curious, and often smelling very disagreeably. They are mostly natives of the deserts of Africa, and have been chiefly discovered by Masson,

3285 Flowers cuspidate rugose scabrous ciliated, Beaks half split
3286 Branches and branchlets upright square quite smooth, Angles toothed, Teeth erect, Flower flat hispid
3287 Branches many erect square, Angles toothed, Teeth erect acute, Cor. covered with clavate glands
3288 Cor very villous with white spatulate hairs, Ligules minute rhomboid-oblong entire
3289 Branches several suberect 4 cornered toothed, Flower flat smooth rugose, Segments caudate
3290 Pedunc. aggreg rad much longer than cor Segm acum hispid with clavate hairs, Beaks subul conniving
3291 Branches many divaricating square toothed, Flower flat with ovate obtuse rugose segments
3292 Branches many erect square toothed, Flowers clustered sessile, Segm. lanc acute folded back
3293 Branches many erect square with spreading acute teeth, Flowers solitary stalked, Segm. setaceous
3294 Branches erect square toothed, Teeth spreading acute, Flowers sessile, Segm. lanc flat
3295 Branches several square toothed recurved, Flower small, Segm narrow flat spreading fringed at edge
3296 Branches several rounded furrowed tubercled hairy, Flower solitary sessile
3297 Branches and branchlets rounded tubercled spiny, Flowers solitary large 10-cleft
3298 Cor smooth, Seg. lanc Fl stalks shorter than cor Branches flowering in mid. 6-sid with prickly tuber
3299 Joints of branches obl round nett. obscurely watted, Spines sm Cor wart above with triangular segm.
3300 Branches several erect sq with nearly upright acute teeth, Fl flat rough 5-cleft with ov lanc. ciliate seg.
3301 Cor. rugose dark with pink hairs, Branches thick short yellowish green

3302 Cor ciliated rough above dotted beneath, Ligules erect 3-parted · middle lanceol longer than sides
3303 Branches many erect square smooth, Cor flat smooth with lanceolate obtuse segments
3304 Teeth of branches rounded, Fls closed ventricose with 5-nerved ov. acum seg Beaks split open

3305 Ball spurious depressed 5 crenate in the circumference, Beaks and wings rounded obtuse, Tube of cor O.
3306 Cor 5-parted flat hairy warted across, Appendages obtuse obscurely toothed, Beaks subulate conniving

§ 2 *Cor. 5-cleft with no ball Ligules not connate at base spreading Appendages lengthened into incurved beaks, gibbous, but not winged at back* (GONOTHEMON *Haw.*)

3307 Branches several sq divaricat smooth tooth narr by deg Cor very smooth 5-cleft, Seg lanc spreading

§ 3. *Cor 5-cleft with a ball Ligules connate spreading Appendages lengthened into incurved beaks, not winged.* (PODANTHES *Haw*)

3308 Much branched weak, Flowers in pairs wrinkled minutely hairy at bottom
3309 Branches many suberect toothed, Teeth spreading acute crossing, Cor flat rugose, Segm lanc acute
3310 Branches many erect with acute crossing teeth, Cor flat wart elevated in the middle into a rough table
3311 Cor 5-cleft camp smooth dotted even at bottom, Segm of outer crown ob emarg Inner hooked 2-lobed
3312 Branches several reclinate with acute teeth, Fl clustered, Segm triangular acute with a round centre
3313 Rim obsolete, Beaks roun led obtuse, Wings conical subulate acute spreading, Ligules retuse
3314 Stem square with spreading teeth, Flower stalked, Segm ovate scaly ciliated

§ 4 *Cor 5-cleft reflexed with no ball Ligules connate at base Appendages lengthened into long beaks with short wings* (TROMOTRICHE *Haw*)

3315 Branches square erect with spreading teeth, Cor smooth, Segments ciliated acute revolute
3316 Segm of cor ovate acute fringed revolute, Beaks clavate, Branches square with rounded angles
3317 Branches square toothed, Teeth recurved, Segm of cor flat ovate hairy

§ 5 *Cor 5-cleft, with a large ball in the middle Ligules connate at base Appendages produced into long beaks, and subulate or filiform wings* (ORBEA *Haw*)

3318 Cor 5-cleft rugose smooth, Segm ovate-acumin bent obliquely, Marginal fringe clavate white and violet
3319 Ball solid, Beaks and wings rounded obtuse, Ligules trifid, Cor. flat beneath fringed at mouth
3320 Cor 5-cleft, Ligules oblong emarginate, Sepals broad ovate acuminate, Branches thick green not spotted
3321 Ball spurious, Beaks rounded obtuse, Wings subulate obtuse spreading, Ligules bifid acute
3322 Cor. sulphur colored with entire ligules

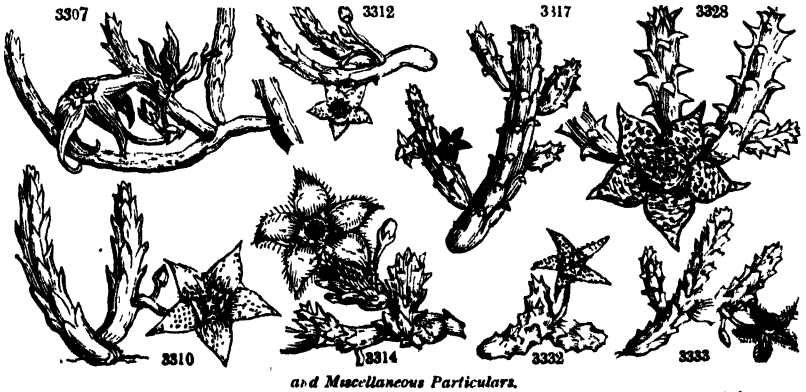
3323 Ball spurious, Beaks rounded obtuse, Wings subulate obtuse spreading, Ligules bifid, Cor flat beneath
3324 Ball 5 angular, Ligules 2-toothed obt Appendages diverging the inner clavate the outer subulate obtuse
3325 Cor fringed at edge with clavate hairs, Ball tumid, Appendages bifid diverging
3326 Cor rugose across flat dotted in a regular maner, Inner horns hooked obtuse, Ball round tumid
3327 Branches several erect spreading 4-cornered toothed, Ball closely dotted, Segm. rugose cordate striated
3328 Ball spurious, Beaks round. obt Wings filiform obt. spreading, Ligules bifid obt Cor flat with no tube
3329 Ball large, Ligules half divided, Speckles of flower wavy tortuous
3330 Branches simple 4-furrowed torulose, Seg ov acum. rugose, Ball elevated rugose depressed in middle

§ 6 *Cor 5-cleft flat with no ball. Ligules none Appendages produced into a short beak and a longer incumbent wing* (OBLSIA *Haw*)

3331 Cor 5-cleft strigose, Seg revolute at edge, Wings hooked incumbent on their beak, Shield 5-lobed fleshy
3332 Joints of stem obl rounded, Fls in pairs, Seg. of cor lanceolate acuminate rough above revolute at edge

§ 7 *Cor 5-cleft, with the segments folded back Ligules none Appendages or beaks simple, with no wings* (DUVALIA *Haw*)

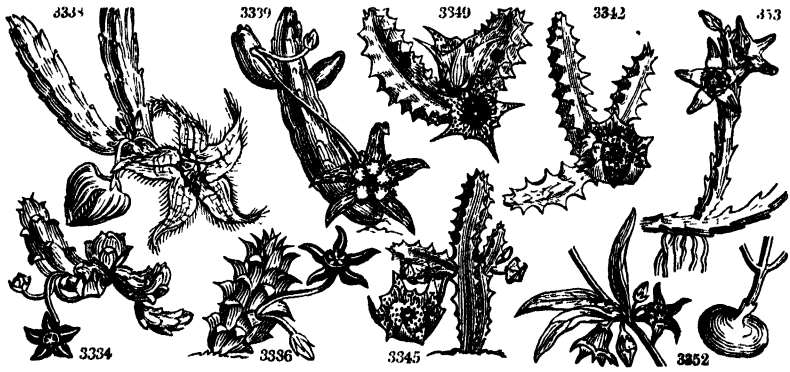
3333 Branches several 4-cornered reclinate with acute spreading teeth, Segm of flower folded back fringed



and Miscellaneous Particulars.

a collector for Kew gardens about the end of the last century, and who published a monograph of the genus. They have been divided into several genera by Haworth, who has not been followed by other writers Some of the species, as S. pilifera and articulata, are eaten by the Hottentots and by the Dutch settled at the Cape

3334 élegans *W*	elegant	♃	cu	¼	jl s	Pu	C. G. H.	1795.	C	s l	Bot. mag. 1184
3335 cæspitósa *W*	tufted	♃	cu	¼	my au	Pu	C G H.	1790.	C	s l	Mass. stap. t. 29
β hirtella W en	small hairy	♃	cu	¼	jl s	Pu	C G H.	....	C	s l	Jac. stap c ic.
3336 radiáta *H K*	starry	♃	cu	¼	jl s	Pu	C G H	1795.	C	s.l	Bot mag 619
3337 Jacquini *radiata* J S.	Jacquin's.	♃	cu	¼	jl s	Pu	C G H	1802	C	s l	Jac stap c ic.
3338 deflexa *J S*	deflexed	♃	cu	1	jn au	Y	C G. H.	1806	C	s l	Bot mag 1890
§3339 pedunculáta *W.*	long-peduncled	♃	cu	½	jn n	Br.P	C G H	1790	C	s l	Bot mag 793
3340 serrulata *W en*	sawed	♃	cu	¼	jn au	P	C G H	1805	C	s.l	Jac stap c. ic.
595. PIARA'NTHUS *R Br.* Piaranthus.					*Asclepiadeæ*		*Sp* 2—3				
3341 pállus *R Br*	many-flowered	♃	cu	¼	au s	D Pu	C G H	1774	C	s l	Bot mag 1648
3342 punctátus *R Br*	dotted	♃	cu	¼	jl n	D Pu	C G H	1795	C	s l	Mass. stap t 24
596 HUER'NIA *R Br* Huernia					*Asclepiadeæ*		*Sp* 9—11				
3343 reticuláta *Haw*	netted	♃	cu	¼	jl au	Pu St	C G H	1793	C	s l	Bot mag 1662
3344 campanuláta *Haw*	bell-shaped	♃	cu	¼	jl o	Y St	C G H	1795	C	s l	Bot mag 1227
3345 venústa *Haw*	handsome	♃	cu	¼	jn jl	Y St	C G H	1795	C	s l	Mass stap t. 3
3346 lentigmósa *Haw*	freckled	♃	cu	¼	jl n	Y St	C G H	1795	C	s l	Bot mag 506
3347 guttáta *Haw*	red-spotted	♃	cu	¼	au n	Y St	C G H	1795.	C	s l	Mass stap t. 4
3348 húmilis *Haw*	humble	♃	cu	¼	au n	Y St	C G H	1795	C	s l	Mass stap t. 5
3349 tubáta *W en*	tube-flowered	♃	cu	¼	au n	Y St	C G H	1805	C	s l	Bot cab 225
3350 barbáta *Haw*	bearded	♃	cu	¼	au n	W St	C G H	1795	C	s l	Mass stap. t. 7
β crispa Haw	*monstrous*	♃	cu	¼	..		C G H.		C	s l	
3351 clavigera *Haw*	clubbed	♃	cu	¼	jl n	Y St	C G H	1795	C	s l	Jac stap. c ic.
597 BRACHYSTEL'MA *R Br* Brachystelma					*Asclepiadeæ*		*Sp* 1				
3352 tuberósum *R Br*	tuberous	⚹	cu	1½	jn jl	Pu	C G H	1821	C	s l	Bot reg 722
598 CARALLU'MA *R Br* Caralluma					*Asclepiadeæ*		*Sp* 2				
3353 adscéndens *R Br*	ascending	♃	cu	2	jl	Y	E Indies	1804	C	s l	Roxb cor 1 t 30
3354 umbellata *R Br.*	umbelled	♃	cu	..	...	...	E Indies	1804	C	s l	
599 SWE'RTIA *W* Felwort					*Gentianeæ*		*Sp* 1—15				
3355 perénnis *W*	marsh	⚭	△ or	1	jl au	Pu	England al ma		D	m s	Eng bot. 1441
1600 GENTIA'NA *W* Gentian					*Gentianeæ*		*Sp* 28—110				
3356 lútea *W*	yellow	♃	△ or	4	jn jl	Y	Al of Eur	1596	D	p l	Mill ic t 149
3357 purpúrea *W*	purple	♃	△ or	3	jn jl	B	Al of Eur	1768	D	p l	Bot rep 117
3358 pannónica *W*	round-petalled	♃	△ or	1	jn jl	Pu	Al of Eur	..	D	p l	Jac aus 2 t 136
3359 punctáta *W*	spotted-flower'd	♃	△ or	3	jn jl	Y	Al of Eur	1775	D	p l	J aus 5 t app 28
3360 septémfida *Pall*	crested	♃	△ or	⅔	jn jl	L B	Persia	1804	D	p l	Bot mag 1529
3361 asclepiadéa *W*	Swallow-wort-l	♃	△ or	1	jl au	B	Austria	1620	D	p l	Bot mag 1078
3362 macrophýlla *W*	long-leaved	♃	△ or	1	jl au	D B	Siberia	1795	D	p l	Pall ross 2 t 96
3363 cruciáta *W*	Cross-wort	♃	△ or	1	jn jl	D B	Austria	1596	D	p l	Jac aus 4 t 372
3364 ochroleúca *Frol*	pale-flowered	♃	△ or	2	au s	P Y	N Amer	1803	D	p l	Bot mag 1551
3365 incarnáta *B M*	flesh-colored	♃	△ or	2	o	Pk	N Amer	1812	D	p l	Bot mag 1856
3366 Saponária *W*	barrel-flowered	♃	△ or	2	au s	B	N Amer	1776	D	p l	Bot mag 1039
3367 Catesbæ'i *H K*	Catesby's	♃	△ or	1½	jn jl	B	N Amer	1803	D	p l	Bot rep 418
3368 Pneumonánthe *W*	Calathian Violet	♃	△ or	½	au s	B	England moi h		D	p l	Eng bot 20
3369 caucásea *H K*	Caucasian	♃	◯ or	⅛	jl	V	Caucasus	1804	D	p l	Bot mag 1038
3370 adscéndens *W*	porcelain-flow	♃	△ or	⅓	jn jl	B	Siberia	1790	D	p l	B mag 705 & 723
3371 triflóra *Pall*	three-flowered	♃	△ or	½	jn jl	B	Siberia	1807	D	p l	Pall ross t 93 f 1
3372 álgida *Pall*	narrow-leaved	♃	△ or	½	jn jl	W	Siberia	1808	D	p l	Pall ross 2 t 95
3373 acaulis *W*	dwarf	♃	△ or	¼	mr my	B	Wales	walls	D	p l	Eng bot 1594
3374 vérna *W*	spring	♃	△ or	½	ap my	B	England	moun	D	p l	Eng bot 493
3375 bavarica *W*	Bavarian	♃	△ or	½	jl	B	Germany	1775	D	p l	Vill delph 2 t 10
3376 mvális *W*	small Alpine		◯ or	½	au	B	Scotland	sc alp	D	s l	Eng bot 896
3377 viscósa *H K*	clammy	♀	⌴ or		jn au	Y	Canary Isl	..	S	s l	Bot mag 2135



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pickled in vinegar, but in general they are without use According to Sweet, "the best soil for them is a sandy loam, mixed with old lime or brick rubbish, if planted in a richer soil, they will thrive better for a time, and produce larger flowers, but then they are very apt to rot off, particularly if they chance to get a little too much water a very little water serves them, except when in flower, when it may be given more freely They are readily increased by cuttings, which should be laid to dry in the stove, till they begin to shrivel, then planted in pots they will root immediately If planted as soon as taken off, when full of juice, they are likely to rot. (*Bot Cult* 169)

595. *Piaranthus* From πιαρος, fat, and ανθος, a flower, on account of the fleshy nature of the corolla. The species are only artificially distinguished from Stapelia

596. *Huernia.* Named after Justus Huernius, an obscure botanist. The species have the same appearance

3334 Branches several clustered oblong toothed, Segm of cor 3-angular hispid fringed at edge
3335 Branches clustered procumbent 4-cornered with spreading acute teeth, Seg of cor folded back fringed

3336 Branches clustered short with conical acute teeth, Segm. of cor distant folded back naked
3337 Cor with seg refl at edge and fringed with simple hairs, Bottom rounded elevated, Lig falcate hooked
3338 Cor rugose ciliat pubes in midd Seg revolute at edge all bent down, Beaks subul. Wings scarcely any

§ 8 *Cor. 5-cleft with no ball Ligules not connate at base, spreading Appendages elongated into a bifid rostrum, with globose fungous tips* (CARUNCULARIA. *Haw*)

3339 Branches several divar 4-corn. toothed, Ped very long, Seg of cor lanc rev at edge with fringed angles
3340 Branches oblong jointed, Peduncles twin, Cor revolute at edge with wings and lobes serrated at end

3341 Six-cornered erect with spreading prickles, Flower sessile clustered, Segm of cor lanceolate silky above
3342 Joints 4-cornered toothed, Flowers fascicled, Segm of cor lanceolate papillose

3343 Branches 5-cornered toothletted, Cor with 10 angles, Tube bearded inside and elevated into a ball
3344 Cor campanulate closed at bottom by clavate horizontal hairs, Ligules spreading truncate dark
3345 Branches 4 and 5-cornered, Young branches very much spreading, Cor 10 cleft, Tube smooth
3346 Cor 10-toothed, Alternate segments obsolete, Branches 5-cornered spreading with hooked tubercles
3347 Cor concave at bottom, Stems simple above glaucous, The teeth of the branches horizontal
3348 Branches several 4-5 angular spreading, Cor rounded 10-cleft, Segm alternately longer, Flowers solitary
3349 Branches simple very thick 4-5-cornered with very large teeth
3350 Branches several 4-5-cor clust nearly erect, Teeth of branches acute spreading, Cor campanul 10-cleft

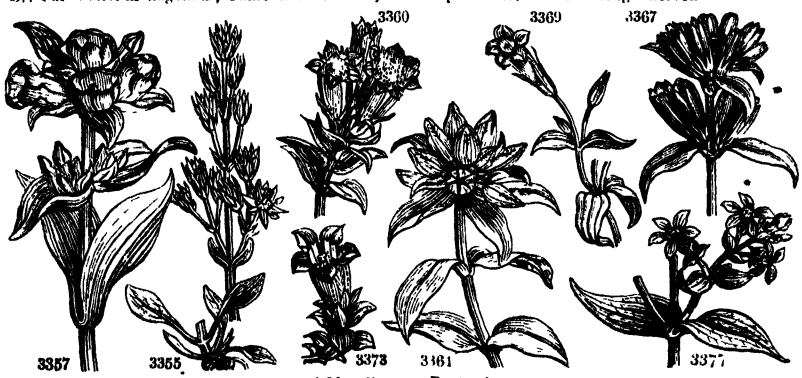
3351 Cor campanulate dotted inside, not dotted outside, Beaks gibbous, Shield low with 5 emarginate lobes

3352 The only species

3353 Branches distant 4-cornered long slender ascending, Flowers with segments tipped with purple
3354 Branches clustered 4-cornered short thick erect, Flowers in close terminal heads

3355 Cor 5-cleft, Peduncle 4-cornered, Stem undivided, Radical leaves oval

3356 Cor 5-cleft rotate whorled, Whorls cymose, Calyxes spathaceous, Leaves broad ovate
3357 Cor 5-cleft campanulate dotted in streaks whorled, Cal membr. nous spathaceous
3358 Cor. 6-cleft campanulate much dotted whorled, Cal coriaceous truncate
3359 Cor 6-cleft campanul much dotted whorled, Cal membr truncated, Lobes shorter than tube of cal uneq
3360 Cor hypocrateriform 5-7-cleft, Intermediate segments torn, Leaves cruciate 3-nerved
3361 Cor 5-cleft campanulate opp axillary subsessile, Leaves stem-clasping ovate-lanceolate
3362 Cor 4-5-cleft sessile whorled, Radical leaves as long as stem which is naked beneath
3363 Cor 4-cleft naked hypocrateriform whorled subsessile, Stem two edge narrowed at base
3364 Flowers terminal sessile, Cor 10-cleft ventricose acute, Alt segm shorter entire, Leaves lanceolate
3365 Flowers clustered terminal tub-shaped with an unequal lacerated mouth, Leaves oval
3366 Flowers in whorled heads sessile, Cor 10-cleft ventric closed, Alt segm fringed smaller, Lvs ovate lanc
3367 Flowers whorled ventricose 10-cleft, Segm alternately bifid and torn, Lvs remote oppos and ternate
3368 Cor 5-cleft campanulate acuminate terminal and axillary stalked, Leaves linear obtuse
3369 Cor 5-cleft hypocrat beard Seg ovate, Cal trunc with equ subul teeth, Lvs ov lanc as long as branches
3370 Cor campanulate 5-cleft toothed between the segments, Cal 3-toothed opening on one side, Lvs lanceolate
3371 Cor campanulate 5-cleft clustered sessile, Leaves linear floral alternate lengthened
3372 Cor campanulate 5-cleft terminal stalked 3 together, Segm acute, Leaves lanceolate 3-nerved
3373 Cor 5-cleft campanulate as long as the square stalk
3374 Cor 5-cleft funnel shaped, Leaves ovate acute radical spreading larger than the cauline
3375 Cor 5-cleft funnel-shaped, Leaves ovate obtuse radical clustered imbricated less than the cauline
3376 Cor 5 cleft funnel-shaped, Branches alternate 1-flowered, Cauline leaves lanceolate
3377 Cor 5-cleft monogynous, Panic trichotomous, Bractes perfoliate, Leaves oblong 3-nerved



and Miscellaneous Particulars

as Stapelia, require the same culture, and are natives of the barren blowing sands of the Cape of Good Hope

597 *Brachystelma.* From βραχυς, short, and στεμμα, a crown, in allusion to the shortness of the coronal processes in the flower of this plant

598. *Caralluma* The Indian name of this plant, which exactly resembles Stapelia in appearance

599 *Swertia* So named by Linnæus, in honor of Eman Sweert, a cultivator of bulbs and flowers in Holland, and author of Florilegium, 1612 *Pretty herbaceous plants, with blue flowers*

600 *Gentiana* From Gentius, King of Illyria, who, according to Pliny, first discovered the tonic virtues of plants of this genus "This is a very handsome genus of herbaceous plants: most of the species succeed well in a light rich soil, but a few require peat, and some must be grown in pots to be protected by frames in winter

3378 **intermedia** *B. M.*	clavate	☿ △	or	2	o	Pu	N. Amer.	1820.	D	p	l Bot. mag. 2303
3379 **gélida** *Bieb*	pale-flowered	☿ △	or	1	jn jl	P Y	Siberia	1807	D	p	l
3380 **Amarélla** *W*	autumnal	○	or	½	au	Pu	Britain	ch pa.	S	co	Eng. bot. 236
3381 **campéstris** *W.*	field	○	or	½	au	Pu	Britain	gra pa.	S	co	Eng. bot. 237
3382 **ciliáta** *W.*	fringed	☿ △	or	½	au s	L B	Germany	1759.	D	p	l Bot mag. 639
3383 **crinita** *Ph*	jagged	☿ ○	or	½	jn jl	L B	N Amer	1804.	S	p	l Bot. mag. 2031

601 **HYDRO'LEA.** *W.* HYDROLEA.

Convolvulaceæ *Sp* 1—6

3384 **spinósa** *W*	thorny	⚹ ⌴	or	1	jn jl	P B	S Amer	1791.	C	l	p Bot. reg. 566

602 **FALKIA** *L.* FALKIA.

Convolvulaceæ *Sp* 1.

3385 **répens** *W*	creeping	♃ △	or	½	my au	Pk	C. G H.	1774.	C	p	l Bot. rep. 257

603 **DICHON'DRA** *W.* DICHONDRA

Convolvulaceæ *Sp* 2—5.

3386 **répens** *R Br*	creeping	♃ △	cu	1½	jn au	W	N S W.	1803.	C	s	p Smith ined. 1. t. 8
3387 **sericea** *W*	silky	♃ △	cu	1½	jn au	W	Jamaica	1793.	C	s	p

604 **VELEZIA** *W* VELEZIA.

Caryophylleæ. *Sp* 1

3388 **rigida** *W*	rigid	○	cu	½	jl	W.P	Spain	1683	S	co	Barr rar. t 1018

605 **BUMAL'DA.** *Th* BUMALDA

Sp 1

3389 **trifólia** *Th*	three-leaved	⚹ ⌴	cu	2	jn s	...	Japan	1812	S	co	

606. **HEUCHE'RA** *W.* HEUCHERA.

Saxifrageæ. *Sp* 4—6

3390 **americána** *W*	viscid	☿ △	or	1	my jl	Pu	N Amer	1656.	D	s	l Plk. alm. t. 58. f. 3
3391 **pubéscens** *Ph*	pubescent	☿ △	or	1	my jl	Pk v	N. Amer	1812	D	l	p
3392 **villósa** *Ph*	villous	☿ △	or	½	my jl	Pk	N Amer	1812	D	l	p
3393 **cauléscens** *Ph*	caulescent	☿ △	or	1	my jl	W	N Amer	1812.	D	l	p

607 **CUSSO'NIA** *L* CUSSONIA

Araliaceæ *Sp* 2.

3394 **thyrsiflóra** *L*	thyrse-flower	⚹ ⌴	or	6	...	Gr	C G H	1795.	C	l	p Thun ups 3 t. 12
3395 **spicáta** *L*	spike-flowered	⚹ ⌴	or	6	...	Gr	C G H	1789	C	s	l Thun ups 3 t 13

608 **ANA'BASIS.** *W* ANABASIS.

Chenopodeæ *Sp* 1—9

3396 **tamariscifólia** *W*	Tamarisk-leav	♃ ⌴	w	2	jn jl	G	Spain	1752	C	l	p Cav ic. 3. t. 283

609 **SALSO'LA** *W.* SALTWORT

Chenopodeæ *Sp* 8—50

3397 **Kali** *W*	prickly	○	ec	1	jl au	F	Britain	sea sh	S	s	l Eng bot 634
3398 **rosácea** *W*	rose-colored	○	cu	½	jl au	Pk	Asia	1759	S	s	l Schk ban 1 t 57
3399 **Sóda** *W*	long fleshy-lvd.	○	ec	3	jl au	W	S Europe	1683	S	s	l Jac vind 1 t 68
3400 **sativa** *W*	cultivated	☿ △	ec	1	jl au	Pk	Spain	1783	D	s	l Cav ic 3 t 291
3401 **hirsuta** *W*	hairy	○	w	1	jl au	Gr	Denmark	1791	D	s	l Fl dan 187
3402 **lanifióra** *W*	woolly	○	cu	2	jn au	Y	Siberia	1797	D	s	l Pall. it 2 p 736 t P
3403 **vermiculáta** *W.*	small-leaved	○	w	1½	jl au	Gr	Siberia	1759	S	s	l Cav. ic 3 t. 287
3404 **muricáta** *W.*	Egyptian	○	w	1	jl au	Gr	Egypt	1773	S	s	l All taur 3 t 4 f 2

610 **KO'CHIA** *Roth* KOCHIA

Chenopodeæ *Sp* 9—11.

3405 **hyssópifólia** *R*	Hyssop-leaved	○	w	1½	jn au	G	Siberia	1801	S	co	P it. I p 491 t H
3406 **dentáta** *Ph*	tooth-leaved	○	w	2	jn au	G	N Amer	1803.	S	co	Wi ho ber 1 t 28
3407 **trigyna** *Lmk.*	slender-leaved	○	w	3	jl au	G	Spain	1804	S	s	l Cav ic 3 t. 289



History, Use, Propagation, Culture,

Some of them may be increased by dividing at the root, but most of them seed freely, the seeds should be sown as soon as ripe, they will then quickly vegetate, but if left till spring before they are sown, they will not come up till the second year (*Bot Cult* 371)

G lutea has a thick root of a yellowish brown color, and very bitter taste In Switzerland and Germany it occupies extensive tracts of ground untouched by any cattle It was formerly used as hops in brewing, and is at present the principal European bitter used in medicine The root of G purpurea is as thick as a man's arm and two feet long, it is extremely bitter, and used as a substitute for G lutea.

G acaulis and verna are two beautiful edging plants, and answer well in pots.

601 *Hydrolea* From ὕδωρ, water, and ἐλαία, oil. It is a water plant, and its leaves are viscous, as if they were smeared with old oil. A very pretty plant with bright blue flowers

602. *Falkia* Named after John Falk, a Swede, born in 1725, died in 1774 He was professor of botany in the apothecaries' garden at St Petersburg, and followed Pallas during a part of his journey in Siberia. Upon his return he committed suicide, perhaps the only instance upon record of suicide among naturalists

603 *Dichondra* From δίς, double, and χονδρος, grain, on account of the double nature of the capsule Little inconspicuous trailing plants, seldom seen or desired in collections.

604 *Velezia.* So named by Linnæus, in memory of Christoval Velezius, examiner, first physician, and demonstrator of botany in the college of apothecaries at Madrid. A small weed, native of the south of France, resembling a dried up Gentiana

605. *Bumalda.* Named after Ovide Montalban, better known under the name of Jean Antoine de Bumalda, born at Bologna, published in 1657 a Bibliotheca Botanica, and in 1668 a Dendrologia

606. *Heuchera.* In memory of Jean Henry de Heucher, archiater, and professor of medicine at Witteberg,

3378 Leaves obovate oblong 3-nerved, Flowers terminal clustered, Cor. ventricose not opening
3379 Cor. campanulate 5-cleft terminal and axillary clustered, Intermed segm torn, Leaves lanc 3-nerved
3380 Cor 5-cleft hypocrateriform bearded, Segm lanc acute, Leaves lanc Branches shorter than joints
3381 Cor. 4-cleft hypocrateriform obtuse, Orifice bearded, Two outer sepals very large
3382 Cor 4-cleft, Segm serrated finely cut in the middle, Leaves lanceolate and linear, Stem flexuose angular
3383 Cor 4-cleft, Segm finely cut, Leaves lanceolate acute, Stem erect rounded

3384 Leaves lanceolate, Flowers terminal corymbose, Capsules a little hairy

3385 A creeping plant with cordate obtuse stalked leaves

3386 Pubescent, Leaves reniform retuse and emarginate
3387 Leaves reniform emarginate pubescent beneath

3388 The only species

3389 A slender branched purple shrub

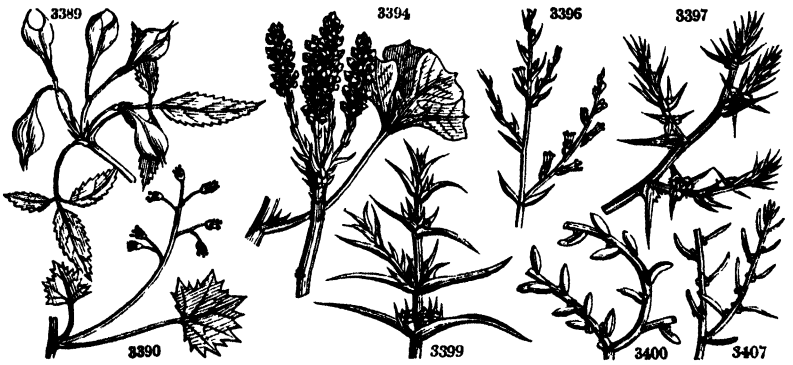
3390 Viscid, Scape and leaves roughish, Leaves rounded lobed toothed, Pet lanc Stam much exserted
3391 Powdery, Scape and lvs below smooth, Lvs acutely lobed toothed, Pet spatulate, Stam scarcely exserted
3392 Very villous, Leaves acutely lobed, Pet shorter than calyx, Stamens exserted
3393 Shrubby at base, Lvs. smooth above acutely lobed toothed, Cal short villous, Pet linear, Stam exserted

3394 Leaves digittate, Leaflets sessile wedge-shaped truncate 3-toothed, Flowers racemose
3395 Leaves digittate, Leaflets 7-3-parted wedge-shaped acuminated serrated at end, Flowers spiked

3396 Leaves subulate, Pericarps not juicy

3397 Spreading hairy, Leaves subulate mucronate, Calyxes solitary, Appendages opened out colored
3398 Leaves subulate mucronate, Calyxes opened out
3399 Smooth, Branches ascending, Lvs half round acute, Cal in fruit keeled across the middle membranous
3400 Herbaceous, Leaves rounded smooth, Flowers clustered
3401 Erect spreading hairy, Leaves oblong half round obtuse, Flowers twin axillary
3402 Leaves rounded pubescent, Flowers axillary, Anthers colored
3403 Pubescent, Branches panicled, Leaves filiform with an axillary tuft, Floral very short, Cal solitary
3404 Tomentose, Cal with 5 angles and 5 awns, Leaves lanceolate flat

3405 Pubescent, Leaves linear flat, Cal clustered woolly with a hooked dorsal spine
3406 Leaves broad lanceolate toothed, Cal. surrounded by a toothed crown, Seed round emarginate on one side
3407 Erect, Leaves filiform obtuse fleshy, Flowers axillary sessile 3 together, Style trifid



and Miscellaneous Particulars

author of Hortus Wittebergensis, 1711-13. Very neat North American plants, requiring the culture of alpine plants.

607 *Cussonia* In memory of Cusson, a celebrated botanist, who after laboring to complete the order of umbellate plants, had all his labor annihilated by his wife, who in his absence used the paper upon which his plants had been glued for household purposes. It is a genus of easy culture, and readily increased by cuttings planted in sand and placed under a hand-glass.

608 *Anabasis* One of the names given by the Greeks to the Equisetum. A small plant, quite similar to some species of Chenopodium

609 *Salsola* From *salsus*, salt. From these plants, which are chiefly maritime, is obtained the *kelp* of our shores This is a genus of plants producing the alkaline salts called barilla, soda, potash, and kelp. Most of them are herbaceous and annual, but some have shrubby stems.

S. kali, (*Qaly* or *álqaly*, Arabic. *Bochart,*) is found on the sandy shores of most parts of the world, and is very generally burned for soda for the glass manufacture.

S soda is cultivated in Languedoc and also in Spain for making barilla, but is reckoned inferior to S sativa, which grows on the Spanish shores of the Mediterranean, and affords all the best soda consumed in Europe It is called by us Spanish or Alicant soda In September, the crop is cut and laid in small heaps to dry These heaps are then collected and burned, forty or fifty of them in a hole, in the ground

Soda is in common use in the manufacture of glass and soap, with sulphuric acid, it forms Glauber's salts, with marine acid, common salt; with the salt of Homberg, borax, and with cream of tartar, Rochelle salt.

610. *Kochia.* A genus divided from Salsola by Roth, and named by him after his friend Koch, a German botanist.

3408 prostráta *Schrad.*	trailing	♃	⌊	w	2	jn au	G	S. Europe	1780.	C	s.l	Jac. aust.3 t.294
3409 arenária *Roth.*	sand		○	w	1	my jn	W o	Hungary	1822	S	s.l	
3410 sedoides *Schr*	stonecrop		○	cu	2	jn	G	Crimea	1821	S	s l	Pall ill. t 35
3411 erióphora *Schr*	woolly		○	w	½	jn jl	G	Spain	1823	S	s l	Schrad. hal t 3
3412 sericea *Schr*	silky	♃	⌊	cu	½	jl	G	C G H.	1824	C	s l	Schrad hal. t 2
3413 scopária *Schr.*	summer Cypress		○	or	3	jn s	G	Greece	1629	S	co	Schr. hal t.1. t 1
611 CHENOPO'DIUM	*W* Goose-foot					*Chenopodeæ*		*Sp* 34—72.				
3414 Bónus-Henricus *W*	Engl Mercury	☿	△	cu	1	my au	G	Britain	rub.	D	co	Eng bot. 1033
3415 úrbicum *W*	upright		○	w	1	au	G	Britain	dungh	S	co	Eng bot 717
3416 Atriplicis *W.*	purple		○	w	3	au s	S	China	1780.	S	co	Jac vind 3 t 80
3417 rúbrum *W*	red		○	w	2	au s	R	Britain	dungh	S	co	Eng bot 1721
3418 gumeénse *W*	Guinea		○	w	2	au s	G	Guinea	1790.	S	co	Jacaic rar 2 t 345
3419 murále *W*	nettle-leaved		○	w	1½	au s	G	Britain	rub	S	co	Eng. bot 1722
3420 Quinoa *W*	green Quinoa		○	cul	3	jl	G	Peru	1822	S	co	
β rubrum	*red Quinoa*		○	cul	3	jl	G	Peru	1822	S	co	Feuill per t 10
3421 rhombifólium *W en*	angular-leaved		○	w	1½	jl s	G	N Amer	1807	S	co	
3422 serotínum *L*	late		○	w	2	jl s	G	Spain	1821	S	co	
3423 ficifólium *H K*	Fig-leaved		○	w	2	au s	G	England	dungh	S	co	Eng bot 1724
3424 álbum *W*	white		○	w	1½	jl s	G	Britain	rub	S	co	Eng bot 1723
3425 hýbridum *W*	Maple-leaved		○	w	1½	au.s	G	Britain	rub	S	co	Eng bot 1919
3426 Bótrys *W*	cut-leaved		○	fr	1	jn s	G	S Europe	1548	S	co	Fl græc t 203
3427 botryoides *Sm*	many-clustered		○	w	1	jn au	R	Britain	sea sh.	S	co	Eng bot. 2247
3428 fœ'tidum *Schr*	fetid		○	w	4	jn au	G	.....	1823	S	co	
3429 multifidum *W*	Buenos Ayres	☿	△	w	2	jn o	G	Buenos A	1732	D	co	Dill elt t 66.f 77
3430 ambrosioides *W*	Mexican		○	fr	1½	jn o	G	Mexico	1640	S	co	Moris s.5 t 35 f 8
β suffruticósum	*half shrubby*											
3431 anthelmin'ticum *W*	American	♃	⌊	w	3	jl au	G	America	1732	C	co	Dill elt t 66 f 76
3432 grivéolens *W*	strong-smelling		○	w	4	jl au	G	Mexico	1823	S	co	
3433 glaúcum *W*	Oak-leaved		○	w	1½	jl au	G	England	rub	S	co	Eng bot 1454
3434 crassifólium *H Par*	thick-leaved		○	w	2	jl	G	.....	1809.	S	co	
3435 ólidum *Sm*	stinking		○	w	1	jl au	G	Britain	rub	S	co	Eng bot. 1034
3436 polyspérmum *W*	Allseed		○	w	1	jl au	G	Britain	rub	S	co	Eng bot 1480
3437 caudátum *W*	oval-leaved		○	w	2	jl au	G	Guinea	1806	S	co	Jac ic 2 t. 344
3438 laterále *W*	oblong-leaved		◫	w	1	au s	G	... ..	1781	S	co	
3439 lanceolátum *W en*	spear-leaved		○	w	2	jl	G	Pensylva.	1809	S	co	
3440 aristátum *B*	bearded		○	w	1	jn s	G	Virginia	1771	S	co	Gm.sib 3.t.15 f 1
3441 sépium *Mayer*	hedge		○	w	2	jn jl	G	Moravia	1823	S	co	
3442 acutifólium *L B*	acute-leaved		○	w	1	jl au	G	Britain	unc gr	S	co	Eng bot 1481
3443 marítimum *W*	Sea Blite		○	w	3	au	G	Britain	sal m	S	co	Eng bot 633
3444 fruticósum *W en*	shrubby	♃		sc	2	au s	G	England	sea sh	C	co	Eng bot. 685
Salsóla fruticósa L B												
3445 altissimum *W en*	grass-leaved		○	w	6	jl au	G	Italy	1775	S	co	Schr halop 1 f 3
3446 sálsum *R Br*	Saltwort		○	w	1	au s	G	Astracan	1782	S	co	Jac vind 3 t 80
3447 setigerum *D C*	bristly		○	w	2	jn jl	G	S Europe	1822	S	co	
612 BE'TA *W*	Beet					*Chenopodeæ*		*Sp* 5—7				
3448 vulgáris *W*	common	☿	◯	cul	4	au	G	S Europe	1548	S	r m	Schk han 1 t 56
3449 pátula *W*	spreading	☿	◫	w	1	au	G	Madeira	1778	C	r m	
3450 cícla *W*	white	☿	◑	cul	6	au	G	Portugal	1570	S	r m	
3451 trigyna *H K*	Hungarian	☿	◯	w	3	jl au	G	Hungary	1796	S	r m	P rar hun 1 t 35
3452 maritima *W*	sea	☿	◑	cul	1	au	G	Britain	sea co	S	s l	Eng bot 285
613 BO'SEA *W*	Golden Rod					*Chenopodeæ*		*Sp* 1—2				
3453 Yervamóra *W*	tree	❀	⌊	or	6		Ru	Canaries	1728	C	p l	Wal hor 24 t 10



History, Use, Propagation, Culture,

611 *Chenopodium* From χην, a goose, and πους, foot, many species having large angular leaves extremely similar to the webbed feet of a water-fowl This is a genus of succulent herbs, with their leaves for the most part covered with powdery granules, the whole plant of no beauty, but generally edible as a pot-herb

C Bonus Henricus is cultivated in some gardens as a perennial spinage, it being hardy and of early growth The leaves are sometimes applied to wounds, and for cleansing old ulcers

C album is the most common of the species, and used to be boiled and eaten as greens, but *C. maritimum* is preferred to all the species for this purpose The foreign species are of the easiest culture, and increased either by seeds or cuttings

C maritimum, where it abounds, is burned with Salsola kali and other marine plants, to produce soda

612 *Beta* From *bett*, red, in Celtic B vulgaris, *Betterave*, or beet-radish, Fr , *Rothe Rübe*, Ger , and *Barba Bretiola*, Ital , is a well known culinary root, used in salads either raw or boiled; forming a beautiful garnish, very much used as a pickle, preserved as a confiture, made a substitute for coffee, and yielding a

3408 Hoary, Leaves linear flat, Calyxes about 3 downy with opened obovate appendages
3409 Leaves linear somewhat fleshy pubescent, Flowers axillary about 3 together, Cal with blunt appendages
3410 Herbaceous very hairy, Leaves linear fleshy, Dorsal spine of cal straight
3411 All woolly, Leaves linear fleshy spreading, Cal in fruit stellate with 5 prickles hooked at end
3412 Branches diffuse, Leaves lanceolate silky, Calyxes not prickly
3413 Pubescent, Leaves linear lanceolate ciliated, Cal in pairs, Appendages very short acute

§ 1 *Leaves flat angular*

3414 Leaves triangular hastate entire, Spikes compound clustered leafless axillary and terminal
3415 Leaves triangular toothed, Racemes clustered very upright close to the stem very long and leafless
3416 Leaves rhomboid-ovate and lanceolate the lower sinuate toothed, Pan axillary branched, Stem erect
3417 Leaves cordate triangular rather obtuse toothed, Racemes erect compound leafy shorter than the stem
3418 Leaves ovate unequally toothed acute, Racemes branched naked and simple stem erect
3419 Lvs ov uneq tooth acute shining, Race corym naked shorter than the leaf, Stem branched spreading
3420 Lvs. triangular ovate obsoletely toothed the younger powdery, Racemes clustered shorter than leafstalk

3421 Leaves triangular acute repand toothed, Racemes axillary erect nearly leafless, Bractes minute inflexed
3422 Leaves deltoid sinuate toothed rugose smooth uniform, Racemes terminal
3423 Leaves hastate sinuate eroded entire behind, Upper oblong entire, Seeds dotted
3424 Leaves rhomboid ovate eroded entire behind, Upper oblong entire, Seeds smooth
3425 Leaves ovate-acuminate subcordate angular toothed, Racemes panicled naked terminal and axillary
3426 Leaves oblong sinuated, Racemes naked multifid, Upper bractes entire lanceolate
3427 Leaves ovate acute entire, Stem erect, Racemes cymose elongated nearly leafless
3428 Leaves oblong sinuated, Racemes naked many-cleft, Upper bractes 3-lobed at end
3429 Leaves pinnatifid, Segm linear the lower toothed, Clusters of flowers axillary sessile
3430 Leaves lanceolate remotely toothed, Racemes leafy simple

3431 Leaves ovate lanceolate sparingly toothed, Spikes simple slender long leafless, Flowers trigynous
3432 Leaves oblong sinuate-toothed wedge-shaped at base, Clusters of flowers axillary
3433 Leaves oblong repand glaucous beneath, Spikes clustered simple naked axillary and terminal
3434 Leaves thick rhomboid-angular somewhat sinuated entire behind, Racemes erect compound leafy

§ 2 *Leaves flat entire*

3435 Leaves rhomb-ovate, Flowers clustered axillary
3436 Leaves ovate, Stem decumbent, Cymes dichotomous leafless axillary
3437 Leaves ovate obtuse entire, Panicle terminal naked elongated, Stem simple erect
3438 Cauline leaves lanceolate obtuse, Branch-leaves oblong, Peduncles lateral solitary 1-flowered
3439 Leaves ovate lanceolate acute entire, Racemes axillary compound naked, Stem divaricating
3440 Leaves lanceolate fleshy entire, Corymbs dichotomous aristate axillary
3441 Leaves ovate sinuate, Racemes leafy simple
3442 Leaves wavy half-round, Flowers axillary sessile

§ 3 *Leaves rounded*

3443 Stems diffuse, Leaves oblong & rounded, Flowers axillary clustered
3444 Erect shrubby, Leaves semicylindrical obtuse blunt

3445 Quite smooth, Branches panicled erect, Leaves filiform acutish, Flowers in threes stalked
3446 Herbaceous nearly erect, Leaves linear fleshy unarmed, Cal succulent transparent
3447 Leaves rounded thick smooth terminated by a straight long bristle

3448 Flowers clustered, Lower leaves ovate, Root fleshy
3449 Flowers clustered, All the leaves linear-lanceolate, Branches divaricating
3450 Leaves with very thick ribs, Flowers three together, Root scarcely any
3451 Racemes erect panicled leafless, Flowers trigynous twin and solitary, Lvs cordate acute unequal at base
3452 Flowers in pairs, Stem diffuse, The branches much interwoven, Root scarcely any

3453 Leaves alternate stalked ovate acute with the veins and nerves purple



and Miscellaneous Particulars

sugar equal to that of the cane There are several varieties, those most esteemed for salads are the small red and Castelnaudary, and for extracting sugar, the green-topped The seed is sown in March or April, on deep well comminuted soil When the plants show two or three proper leaves they are thinned out, so as that each plant may occupy or be allowed a square foot of surface By September or October the roots are fit for use, and may either be taken up as wanted, or taken up and buried in sand in the root-cellar

B Cicla, (Cicla is said by De Théis, to be a corruption of *sicula*, under which name it is spoken of by Catullus,) *Bette*, or *Poirée à cardes*, Fr ; *Mangold Kraut*, Ger , and *Buttola*, Ital , is employed in horticulture as a spinage plant, and for being used as chard or asparagus, and in foreign agriculture for the production of sugar. It is much grown in the south of Germany and Switzerland, where the lamina of the leaves is used as spinage or put in soups, and the midrib is boiled and eaten with melted butter or gravy as chard The culture is the same as for the red beet, but, as the leaves are larger, the space allowed each plant is proportionally increased.

B maritima is or may be used as a spinage plant or as greens.

613. *Bosea.* Ernest Gottlieb Bose, a German, published at Leipsig, in 1775, a work upon the secretions of

614. HERNIA'RIA. *W.* RUPTURE-WORT. *Amaranthaceæ Sp.* 6—11.

3454	glábra *W*	smooth	♃	△	w	½	jl	G	England	sa. gr.	S	co	Eng bot 206
3455	hirsûta *W*	hairy	♃	△	w	½	jl au	G	England	sa gr.	S	co	Eng bot 2379
3456	fruticósa *L.*	shrubby	♄		w	½	my au	G	Spain	1814.	C	l p	Lob ic. 85
3457	polygonoides *Cav*	Knot-grass	♃	⌴	w	½	my au	G	S. Europe	1752	C	l p	Cav. ic. 2 t. 131
3458	incána *Berb.*	hoary	♃	△	w	½	jl.au	G	S. Europe	1822.	C	l.p	Pl. alm. t 53 f 3
3459	alpina *Vill*	alpine	♃	△	w	½	my au	G	S. Europe	1822.	C	l.p	Lob ic t 85. f 1

†615 UL'MUS *L.* ELM-TREE *Ulmaceæ Sp* 13

3460	campéstris *L*	comm English	♂		tm	80	ap my	Br	Britain	hed.	L	co	Eng bot. 1886
3461	suberósa *Monch*	cork-barked	♂		tm	40	ap my	Br	Britain	hed	L	co	Eng bot. 2161
3462	fruticósa *W.*	shrubby	♂		or	8	ap my	Br	Europe	...	G	co	
3463	glábra *E B*	smooth	♂		tm	60	ap my	Br	Britain	hed.	L	co	Eng bot. 2248
3464	montána *E B.*	Wych	♂		tm	40	ap my	Br	Britain	hed.	S	co	Eng bot 1887
3465	americána *Ph.*	white Amer	♂		tm	40	ap my	Br	N Amer	1752.	G	co	
3466	aláta *Mich*	winged	♂		tm	30	ap my	Br	N Amer	1820	G	co	Mich. arb 3. t. 5
3467	álba *Kit*	white Hungar.	♂		tm	30	ap my	Br	Hungary	1824	G	co	
3468	húmilis *Amm*	low	♂		or	6	ap my	Br	Siberia	...	G	co	
3469	crispa *W*	curled	♂		or	20	ap my	Br	N Amer	...	G	co	
3470	fúlva *Ph*	slippery	♂		tm	60	ap my	Br	N. Amer.	...	G	co	Mich. arb. 3 t. 6
	U pendula W.												
3471	púmila *Pall.*	dwarf	♂		or	2	ap my	Br	Siberia	1771.	L	p l	Pall ross 1 t 48
3472	chinénsis *P S*	China	♂	⌴	or	3	...	...	China	...	C	l p	

616 PLANE'RA *Mich* PLANERA *Ulmaceæ. Sp* 2.

3473	Richardi *Mich*	Hornbeam-lvd.	♂		or	12	ap my	Br	N Amer	1760	G	co	Pall ross. 2 t 60
	Ulm nemoralis W												
3474	parvifólia	small-leaved	♂		or	12	my	Br	.....	1822	G	co	Jacq sch6 t. 262
	U parvifólia Jacq												

617 PHYL'LIS *W.* BASTARD HARE'S EAR *Rubiaceæ. Sp* 1.

3475	Nóbla *W*	Canary	♃		cu	3	jn jl	G	Canaries	1699	C	r.m	D el. t 299 f 386

*618 CORIAN'DRUM *W* CORIANDER. *Umbelliferæ Sp* 2—3

3476	sativum *W.*	common	○		clt	2	jn	W	England	fields	S	co	Eng bot. 67
§3477	testiculátum *W*	twin-fruited	○		w	2	jn jl	W	S Europe	1640	S	co	Pl. al t. 169. f 2

619 SCAN'DIX. *P S* SCANDIX *Umbelliferæ. Sp* 3—10

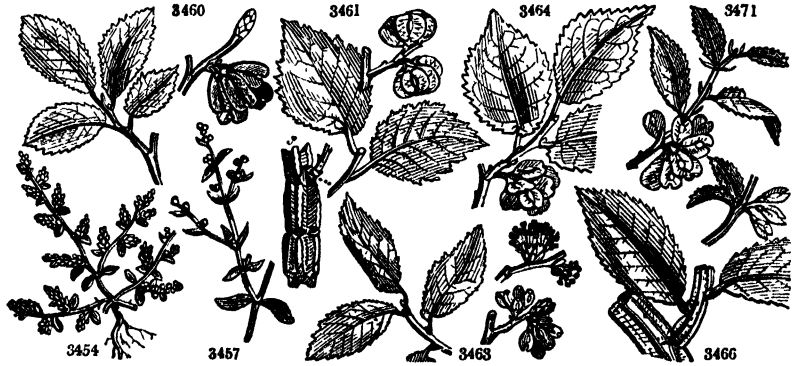
3478	péc ten *W*	Venus's Comb	○		w	½	jn jl	W	Britain	co fi	S	co	Eng bot 1397
3479	austrális *W*	radiated	○		w	1	my jn	W	S Europe	1713	S	co	Col ecph 1 t 90
3480	pinnatifida *Vent.*	cut-leaved	○		w	1½	my jn	W	Persia	1805	S	co	Vent. cels. 14

620 ANTHRIS'CUS. *P S* ROUGH CHERVIL. *Umbelliferæ. Sp* 2—9.

3481	vulgáris *P S*	common	○		w	1	my jn	W	Britain	he ba	S	co	Eng bot 818
3482	nodósa *P S*	Knotted	☽	△	w	1	my jn	W	Sicily	1656	D	co	Jac. vind 3. t. 25

*621 CHÆROPHYL'LUM *P S* CHERVIL *Umbelliferæ Sp* 11—8

3483	sylvéstre *W*	smooth	☽	△	w	3	my jn	W	Britain	hed.	D	co	Eng bot. 752
3484	sátivum *P S*	garden		○	cul	1½	my jn	W	England	he ba.	D	co	Eng bot 1268
	Sc cerefolium W												
3485	procúmbens *Ph*	procumbent	☽	○	w	1	jn jl	W	Virginia	1699	D	co	M s 9 t 11 f ult.



History, Use, Propagation, Culture

plants. Another Bose (Caspar) was a professor of botany at Leipsig, where he published, in 1728, a dissertation upon the motions of plants Ripened cuttings root freely in sand under a hand-glass, without heat.

614 *Herniaria* From *hernia*, a rupture, for which disorder it was formerly imagined to be a cure, but has long since been rejected even by the herbalists H fruticosa is well adapted for growing in pots or for rock-work, and is readily increased by seeds or cuttings, cuttings of the greenhouse species root freely under a hand-glass

615 *Ulmus.* From *Elm*, its name in Anglo-Saxon, Teutonic, Gothic, and nearly all the dialects of Celtic. This is a genus of hardy trees, most of them valued for their timber The species, like those of the genus Salix, are so nearly related as to be often confounded. Linnæus considered all the European elms as forming only one species The U campestris and glabra are those most generally cultivated in Europe U. campestris grows also in Palestine, and Dr Walker conjectures that it was originally brought from that country by the Crusaders. It is a tall elegant tree, but produces much less valuable timber than the U. glabra. U suberosa, often called the Dutch elm, is frequently grafted on the U glabra, as is also the U campestris in the Scotch nurseries.

616. *Planera.* In honor of John James Planer, a German botanist, who published in 1788 an Index Plantarum Agri Erfordiensis, in one volume 8vo A genus closely related to Ulmus, from which it is perhaps scarcely distinct.

617 *Phyllis.* From *φυλλον*, a leaf. the plant is remarkable for the beauty of its leaves. Phyllis, who was

3454 Smooth, Clusters many-flowered
3455 Hairy, Clusters few-flowered
3456 Leaves obovate acute hairy, Flowers clustered 4-cleft hispid, Stem shrubby
3457 Smooth, Stem erect dichotomous, Leaves ovate cuspidate, Flowers terminal and axillary
3458 Half shrubby, Leaves ovate oblong hoary, Calyxes hairy
3459 Clusters few-flowered hairy, Root thick woody

3460 Leaves doubly serrate unequal at base, Flowers subsessile clustered 5-andr Fruit smooth
3461 Lvs doubly serr nearly equal at base, Fl subsessile clustered 4-andr Fruit smooth, Bark corky winged
3462 The branches only corky not the stem, Stature little more than that of a man, otherwise like the last
3463 Leaves doubly serrated smooth unequal at base, Flowers nearly sessile 5-cleft, Fruit obovate naked
3464 Leaves doubly serrated unequal at base, Flowers 6-8-andr. stalked, Fruit fringed at edge [at edge
3465 Lvs nearly doubly serr uneq. at base, Axil of veins ben unit by a membr Fls 5-8-andr stalked, Fruit vil
3466 Br. with cork wing here and there on each side, Lvs obl ov by deg ac nrly eq at base, Fr. hairy closely frin
3467 Leaves doubly serrated unequal at base acuminated pubescent beneath
3468 Leaves equally serrated equal at base
3469 Leaves irregularly doubly serrated equal at base with a long point rough above beneath soft downy
3470 Lvs doubly ser uneq. at base, Axil. of veins bearded beneath, Fl. clust. 5-andr Fruit pubes not fringed

3471 Decumbent, Branches smooth, Leaves very small equal at base
3472 Leaves small coriaceous shining shortly serrated ovate oblique at base

3473 Leaves subsessile oblong-cordate subcrenately coarsely toothed emarginate at base, Caps short

3474 Leaves lanc equally serrate equal at base shining, Flowers stalked tetrandrous, Fruit smooth

3475 The only species Leaves lanceolate entire opp 4 inches long, Corymbs axillary

3476 Fruit globose
3477 Fruit twin

3478 Seeds with a very long beak, Leaflets many-cut
3479 Seeds subulate hispid, Flowers radiant, Cauline leaves smooth
3480 Stem scabrous, Leaves decompound smooth, Umbels fascicled with a single leaf

3481 Seeds ovate hispid, Cor of one shape, Stem smooth
3482 Seeds cylindrical hispid, Stem hispid, Joints tumid

3483 Stem striated with tumid joints
3484 Seeds shining ovate subulate, Umbels lateral sessile

3485 Stem hairy decumbent, Leaves bipinnatifid, Umbel simple few-flowered



and Miscellaneous Particulars

turned to a bare tree by the gods for having hung herself for love of the absent Demophoon, became a tree covered with verdure upon receiving in that form the embraces of her lover returned

618 *Coriandrum.* From κορις, a bug, in allusion to the smell of the leaves of the plant. C sativum has been long cultivated, chiefly in Essex, and is considered as naturalized The leaves are strongly scented; the seeds, which are slightly aromatic, are used to cover the taste of senna, and in spices as curry powder, and seasoning for black puddings: also, covered with sugar, as a sweetmeat, formerly they were steeped in wine or vinegar, and then dried, to render them milder

619. *Scandix* A name given by the Greeks to a plant used as an eatable, which appears to be that now called Scandix pecten It is derived from σκιω, to prick, on account of the sharp points of the seeds.

620 *Anthriscus.* The name of a plant resembling Scandix, described by Pliny A. vulgaris bears a near resemblance to the common chervil (Chærophyllum sativum), and being gathered as such, and put into soups, by the Dutch soldiers who were in England in 1745, some of them were poisoned by it

621 *Chærophyllum* An ancient Greek name of the Chervil, derived from χαιρω, to rejoice, and φυλλον, leaf, that is to say a plant whose leaves have an agreeable smell C. sylvestre has poisonous roots; though the leaves are occasionally used as a pot-herb, and are much liked by cows The stems and leaves dye a beautiful green, and the umbels a yellow the plant in a wild state is found only on fertile soils

C sativum is cultivated in gardens for the leaves, which are used in soups and salads. To have a successional supply, sow in February and August in shallow drills from six to nine inches apart.

3486 bulbósum *W.*	bulbous-rooted	♂	○	w	1½	jn jl	W	Europe	1726.	D	co	Jac. aust 1. t. 63
3487 témulum *W.*	rough	⅄	○	w	3	jl au	W	Britain	hed.	D	co	Eng. bot. 152?
3488 hirsútum *W*	hairy-leaved	⅄	△	w	1½	jn jl	W	Switzerl	1759	D	co	Jac au 2. t 148
3489 aromáticum *W.*	aromatic	⅄	△	or	3	jn au	W	Germany	1726.	D	co	Jac au 2 t 150
§3490 canadénse *Ph*	three-leaved	⅄	△	w	1½	jl au	W	N Amer.	1699.	D	co	Mor. h. s. 9 t. 11
Sison canadénse W												
§3491 Claytóni *Ph*	sweet-rooted	⅄	△	cu	2	jl au	W	N Amer	1806	D	co	Spr umb. t 3 f 6
3492 colorátum *W.*	yellow	⅄	△	cu	1	jl au	Y	Illyria	1806	D	co	Mor. s 9 t 10 f 6
3493 aúreum *W.*	golden	⅄	△	cu	1	jl au	Pk	Scotland	b. of fl.	D	co	Eng bot 2103

622. ERYN'GIUM *W.* Eryngo — *Umbelliferæ* *Sp* 16—55

3494 fœ'tidum *W.*	stinking	⅄	⊠	or	1	au.o	W	W Indies	1714	D	s l	Her lugd t 237
3495 aquáticum *W*	marsh	⅄	△	or	4	jl s	W	N Amer	1699.	D	s l	Bot reg 372
3496 virginiánum *Ph*	Virginian	⅄	△	or	2	jl s	G	N Amer	...	D	s l	Del eryng t. 19
3497 virgátum *Ph*	oval-leaved	⅄	△	or	1	jn jl	L B	N Amer	1810	D	s l	Del eryng t. 20
3498 planum *W*	flat-leaved	⅄	△	or	3	jl s	L B	Europe	1596	D	s l	Jac aus 4. t 391
3499 pusillum *W*	dwarf	⅄	△	or	½	jn au	G	Spain	1640	D	s l	Del eryng t. 16
3500 tricuspidátum *W*	trifid	⅄	○	or	2	s	G	Spain	1699	D	s l	Del eryng t 9
3501 corniculátum *B M*	horned	⅄	△	or	1	jn au	G	Portugal	1803	D	s l	Bot mag 1427
3502 maritimum *W*	sea-holly	⅄	△	ec	1½	jl o	B	Britain	sea sh	D	s l	Eng bot 718
3503 campéstre *W*	field	⅄	△	ec	2	jl au	B	Britain	pas	D	s l	Eng bot 57
3504 galioides *P S*	Galium-leaved	⅄	△	or	½	jl au	G	Portugal	1810	D	s l	
3505 amethystinum *W*	amethystine	⅄	△	or	3	jl au	L B	Styria	1648	D	s l	Mo s 7 t 35 f 2
3506 cærúleum *P S*	blue-flowered	⅄	△	or	2	jl au	B	Caspian	1816	D	s l	M s 7 t 37 f 13
3507 rígidum *P S*	stiff	⅄	△	or	½	jl au	B	France	1816	D	s l	Vill delph t 17
3508 alpinum *W*	Alpine	⅄	△	or	2	jl au	B	Switzerl	1597.	D	s l	Bot. mag 922
3509 Bourgáti *W*	cut-leaved	⅄	△	or	2	jn au	Pa B	S France	1731	D	s l	Gouan ill 7 t. 3

623 SANI'CULA *W* Sanicle — *Umbelliferæ* *Sp* 3—2

3510 europæ'a *W*	wood	⅄	△	w	1	jn jl	W	Britain	woods	D	s l	Eng bot 98
3511 canadénsis *W*	Canadian	⅄	△	w	2	jn jl	W	Canada	1800	D	s l	
3512 marilándica *W*	Maryland	⅄	△	w	1½	jn jl	W G	N Amer	1765	D	s l	Jac ic 2 t. 348

624 ECHINO'PHORA *W* Sea-Parsnep — *Umbelliferæ* *Sp* 2—3

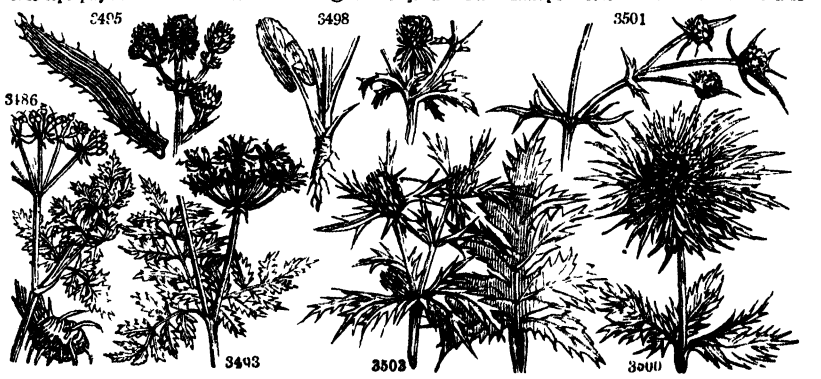
3513 spinósa *W*	prickly	⅄	△	w	½	jl	W	England	sea co	D	s	Eng bot 2413
3514 tenuifólia *W*	fine-leaved	⅄	△	w	1	jl au	W	Apulia	1731	D	s l	Mor s 9 t 1 f 2

*625 DAU'CUS. *W.* Carrot — *Umbelliferæ* *Sp* 8—17

3515 Caróta *W.*	wild	⅄	○	m	3	jn jl	W	Britain	b of fl	S	s l	Eng bot 1174
β hortensis	*Garden*	⅄	○	cul	3		W					
3516 maritimus *P S*	sea-side	⅄	○	w	1½	jn jl	W	Britain	Cornw	S	s l	Eng bot 2560
3517 mauritánicus *W*	fine-leaved	⅄	○	w	3	jn jl	W	Spain	1768	S	s l	Al pe 2 t 61 f 1
3518 lúcidus *W*	shining	⅄	○	w	2	jl au	W	S Europe	1807	S	s l	Mo 3 s 9 t 13 f 4
3519 crinitus *Desf*	whorl-leaved	⅄	△	w	2	jn jl	W	Barbary	1804	S	s l	Desf atl t 62
3520 Gingidium *W*	shining-leaved		○	w	2	jn jl	W	France	1722	S	s l	Mo s 9 t 13. f 10
3521 muricátus *W*	prickly-seeded		○	w	2	jn jl	Pk	Barbary	1683	S	s l	Mo s 9 t 14 f 4
3522 hispidus *P S*	hispid	⅄	○	w	1½	jn jl	Pk	Barbary	1804	S	s l	Desf atl. t. 63

*626 CAU'CALIS *W* Bur-Parsley — *Umbelliferæ.* *Sp* 7—27

§3523 grandiflóra *W*	great-flowered		○	w	1½	jl au	W	S Europe	1648	S	co	Jac. aus 1 t. 54
3524 daucoides *W*	small		○	w	1½	jn	R	England	ch fi	S	co	Eng bot 197
§3525 latifólia *H*	broad-leaved		○	w	3	jl au	R	England	ch fi	S	co	Eng bot. 198
3526 pámila *W*	dwarf		○	w	1½	jl au	Pk	S Europe	1640	S	co	Cav ic 2 t 101
3527 orientális *W*	oriental	⅄	○	w	4	jn jl	W	Levant	1699	S	co	Mo s 9 t 14 t 5
β pulchérrima W en	*beautiful*		○	w	2	jn jl	W	Caucasus	1816	S	co	Bux cen 3 t 33
§3528 platycárpos *Spr*	broad-seeded		○	w	½	jl au	W	S Europe	1800	S	co	Mo s 9 t. 14 f 2
3529 leptophýlla *W*	fine-leaved		○	w	1	jl au	Pk	Europe	1739	S	co	Sch han 1 t. 61



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622 *Eryngium* From the Greek verb ἐρεύγω, to belch Dioscorides positively declares that the plant is a specific for all complaints arising from flatulence These are singular plants, somewhat like thistles in general appearance they are generally of a bluish hue, prickly, and with large involucres, and dry coriaceous leaves E maritimum has long been in esteem as an aphrodisiac, the roots were formerly and are now, in some cases, kept in the shops candied, and formed in Shakspeare's time the kissing comfits of Falstaff The Arabs regard the plant as an excellent restorative, and English grooms often mix the dried plant with the corn they give to stallions in the covering season The virtue is said to reside chiefly in the roots · the tops, Linnæus says, are eaten like asparagus in Sweden

623 *Sanicula.* From *sanare*, to cure This a vulnerary, to which marvellous virtues were formerly ascribed S. europæa used to be considered a powerful vulnerary, but is now wholly rejected in medicine. Sir J Smith says it partakes of that virose acrimony which is found in most umbelliferous plants growing in a moist fat soil

624. *Echinophora* From ἐχῖνος, a hedgehog, and φέρω, to bear In allusion to the strong rigid spines of the

3486 Stem smooth with tumid joints, hairy at base
3487 Stem scabrous, joints tumid
3488 Stem equal, Leaflets cut acute, Fruit with two awns
3489 Stem equal, Leaflets cordate serrate entire, Fruit with two awns
3490 Leaves ternate smooth, Radical leaflets about 3-lobed, Cauline rhomb. ovate cut finely serrate

3491 Stem above smooth, Joints tumid, Leaves biternate pubescent, Styles persistent
3492 Stem equal, Leaves supra-decompound, Involucres colored
3493 Stem equal, Leaflets cut, Seeds furrowed colored awnless

3494 Radical leaves lanceolate serrate, floral many cut, Stem dichotomous
3495 Leaves gladiate serrate spiny, Flowers undivided, Stem simple
3496 Leaves linear-lanceolate ensiform very long, Leaflets reflexed and paleæ trifid, Heads panicled
3497 Leaves all ovate cordate on very short stalks toothed, Stem virgate colored upwards
3498 Radical leaves oval flat crenate, Heads stalked
3499 Radical leaves oblong cut, Stem dichotomous, Heads sessile
3500 Radical leaves cordate cauline palmate with the auricles reflexed, Paleæ tricuspidate
3501 Rad lvs obl lanc toothed spiny, Stem trichotomous, Lvs of involucre entire larger than the heads spiny
3502 Radical leaves roundish plaited spiny, Heads stalked, Paleæ 3-toothed
3503 Radical leaves stem-clasping pinnate lanceolate
3504 Leaves sessile digitate spiny very small, Stem slender and weak dichotomous, Heads sessile
3505 Radical leaves trifid at the base somewhat pinnate
3506 Rad lvs cordate obl. obt cren lobed, Branches col. Lvs of the involucrum very long stiff pungent entire
3507 Leaves palmate cut, Bractes stiff pinnatifid pungent, Stem thick
3508 Radical leaves cordate · cauline ternate cut, Involucres spiny pinnated ciliated
3509 Radical and cauline leaves alternate 3-parted twice trifid, Involucres subulate many-leaved spiny

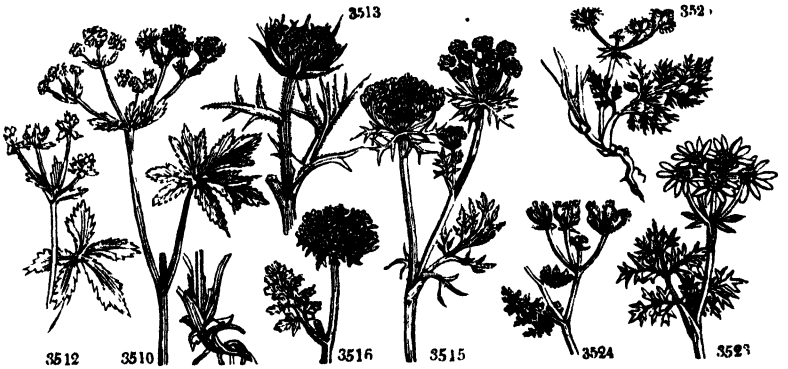
3510 Lower leaves palmate, Lobes trifid cut-serrate, Florets all sessile
3511 Leaves all compound subternate, Leaflets ovate attenuate at base mucronate serrate, Florets all sessile
3512 Leaves all digitate, Leaflets oblong cut-serrate, Male flowers numerous stalked

3513 Leaflets subulate prickly entire
3514 Leaflets cut unarmed

3515 Seeds hispid, Stalks nerved beneath

3516 Fruit hispid with compressed bristles, Leaflets dilated rounded fleshy hairy, Umbels in fruit convex
3517 Seeds hispid, Central floret sterile fleshy, Common receptacle hemispherical
3518 Leaves shining, Stem hairy, Leafstalks smooth, No sterile central floret
3519 Stem rough simple, Lvs bipinn Leaflets rather whorled many-cleft rigid, Bristles of fruit hairy purple
3520 Rays of the involucre flat, Segments recurved
3521 Fruit large very prickly
3522 Stem and lvs. bipin vil Leafl ovate lobed toothed, Involucres very broad, Prickles of fruit dilated at base

3523 Involucres each 5-leaved, One leaflet twice as large as the others
3524 Umbels trifid leafless, Umbellules 3-leaved 3-seeded
3525 Universal umbel trifid, partial 5-seeded, Leaves pinnated serrated
3526 Universal umbel about 5-cleft, partial 3-seeded, Leaves supra-decompound, and decumbent stem villous
3527 Umbels spreading, Partial leaflets supra-decompound cut with linear segments, Fruit woolly
β Fruit bristly
3528 Universal involucre about 3-leaved, Umbel trifid, Involucels 3-leaved
3529 Common involucre scarcely any, Umbel bifid. Involucres 5-leaved



and Miscellaneous Particulars

involucrum, and indeed of the whole plant. Very much like an Eryngium, once said to have been found in England

625 *D ucus* From δαιω, to make hot, on account of its effects in medicine D Carota (from *Kar*, red, in Celtic), is well known for its esculent root There are several varieties the largest, and that best adapted for field culture, is called the Altrincham, from a village of that name in Cheshire The early horn and orange are the best garden sorts The seeds do not retain their vegetative powers more than a year, for which reason the cautious cultivator ought to prove them before sowing The last week of March and first of April is the best season for sowing for a main crop On farms where a deep sandy loam occurs, few crops of the root kind afford a more valuable return In Norfolk and Suffolk they are a good deal in use as a field crop, and especially near Lowestoft in the latter county

626 *Caucalis* According to Linnæus, derived from καω, to trail along, on account of the low habit of the plants. It is supposed that Pliny's Caucalis was the same as the Caucalis grandiflora of the present day.

627 TORILIS. *Gærtn.* Torilis — *Umbelliferæ* *Sp.* 3—9.

3530 Anthriscus *W.*	upright	○	w	2½	jl au	R	Britain	hed.	S	co	Eng bot. 987
3531 infésta *H K.* *arvénsis* W.	spreading	○	w	1	jl.au	Y	Britain	co. fi	S	co	Eng bot 1314
3532 nodósa *W.*	knotted	○	w	1½	my jl	W	Britain	co fi	S	co	Eng bot. 199

628. OLIVE'RIA *Vent.* Oliveria — *Umbelliferæ* *Sp* 1

3533 decúmbens *Vent*	Thyme-scented	○	cu	1	my jl	Pu	Bagdad	1816.	S	co	Vent cels 21

629 LEDEBU'RIA *Lk.* Ledeburia — *Umbelliferæ* *Sp.* 1

3534 pimpinelloides *Lk.*	bristly	⚳	△	w	2	jn jl	W	.....	1823	S	co

630 MYR'RHIS *P S.* Myrrhis — *Umbelliferæ.* *Sp* 1—20

3535 odoráta *P S*	sweet-scented	⁂	△	ec	1½	my jn	W	Britain	m pas	D	co	Eng bot. 697

631. BU'NIUM *W* Earth-nut — *Umbelliferæ* *Sp* 2— .

3536 Bulbocástanum *W* *B Flexuosum* Sm	great	⁂	△	w	2	my.jn	W	Britain	past	D	co	Eng bot. 988
3537 rígens *Spr* *Conium rígens* W	fine-leaved	♃	⌴	w	1	jn jl	W	C. G H.	1787.	C	co	

632 ŒNAN'THE. *W* Water-dropwort — *Umbelliferæ* *Sp* 8—20.

3538 fistulósa *W*	common	⚳	△	p	2	jn au	F	Britain	dit.	D	m s	Eng bot 363
3539 crocáta *W*	Hemlock	⚳	△	p	2	jn au	W	Britain	dit	D	m s	Eng bot. 2313
3540 prolifera *W*	proliferous	⚳	△	w	1½	jn au	W	Italy	1739	S	co	Jac vind 3 t 62
3541 globulósa *W*	globe-headed	⚳	○	w	1½	jn au	W	Portugal	1710	D	co	Gouan ill 18 t 9
3542 apiifólia *Brot*	Parsley-leaved	⚳	△	w	2	jn au	W	Portugal	1806	D	co	Sabb rom t. 84
3543 peucedanifólia *W*	Sulphurwort	⚳	△	w	1½	jn au	Pk	England	dit.	D	aq	Eng bot 348
3544 pimpinelloides *W*	Burnet-Saxifr	⚳	△	w	½	jn au	W	England	sal m	D	m s	Eng bot 347
3545 inébrians *W*	various-leaved	⚳	△	p	1	au s	W	C G H.	1816	D	co	

633. CRITH MUM *W* Samphire — *Umbelliferæ.* *Sp* 2—4

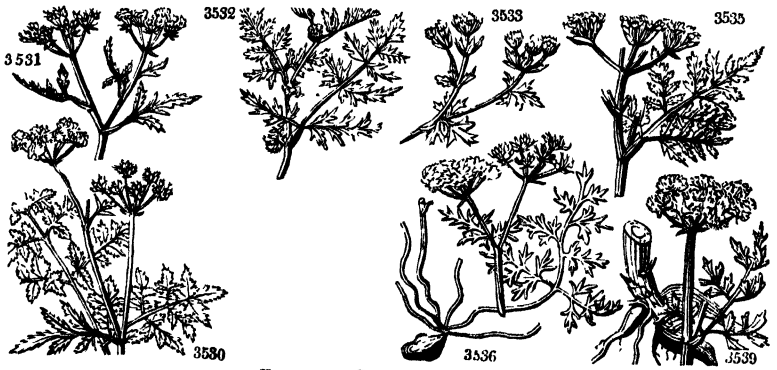
3546 maritimum *W.*	sea	⚳	△	cul	1	jl s	W	Britain	s cliffs	D	r m	Eng bot 819
3547 latifólium *W*	wedge-leaved	⚳	⌴	cu	1½	jl	Y	Canaries	1780	D	r m	

634 ATHAMAN'TA *W* Spignell — *Umbelliferæ* *Sp* 9—14

3548 Libanótis *W*	mountain	⚳	△	w	2	jn jl	W	England	ch pa	D	co	Eng bot. 138
3549 Cervária *W*	broad-leaved	⚳	△	w	4	jl.au	P Pu	Europe	1597	D	co	Jac aust 1 t 69
3550 sibirica *W*	Siberian	⚳	△	w	2	jl au	W	Siberia	1771	D	co	G sib 1 t 40 f 1, 2
3551 condensáta *W.*	close-headed	⚳	△	w	1	jl s	W	Siberia	1773	D	co	Gouan ill.83 t 20
3552 incána *W*	hoary	⚳	△	w	2	jl au	W	Siberia	1802	D	co	
3553 Oreoselinum *W.*	divaricated	⚳	△	w	2	jl au	W	Germany	1768	D	co	Jac aust 1 t. 68
3554 sicula *W*	Flixweed-leav	⚳	△	w	3	jn jl	W	Sicily	1686	D	co	Zano his 70. t.48
3555 Matthioli *W.*	fine-leaved	⚳	△	w	2	jn jl	W	Carniola	1802	D	co	Jac. ic rar 1. t 57
3556 cretensis *W*	Candy-carrot	⚳	△	w	1	jn jl	W	Austria	1596	D	co	Jac. aust 1 t 62
β annua W.	*annual*	⚳	○	w	1	jn jl	W	Candia	1731	D	co	

*635 PIMPINEL'LA. *W* Burnet-saxifrage. — *Umbelliferæ* *Sp* 7—9

3557 Saxífraga *W*	common	⚳	△	cu	1	jn au	W	Britain	dry pa	D	co	Eng bot. 407
3558 nigra *W*	black-rooted	⚳	△	w	1	jn au	W	Germany	1683	D	co	
3559 mágna *W*	great	⚳	△	w	2	jn au	W	England	woods	D	co	Eng bot 408
3560 dissecta *W*	cut-leaved	⚳	△	w	1½	jn au	W	France	...	D	co	Retz obs 3 t. 2
3561 peregrina *W*	nodding	⚳	△	w	2	jn au	W	Italy	1640	D	co	Jac vind 2 t 131
3562 Anisum *W*	Anise	⚳	○	ec	1	jn au	W	Egypt	1551	D	co	Woodville t 180
3563 dichótoma *W*	dichotomous	⚳	△	w	½	jn au	W	Spain	1798	D	co	



History, Use, Propagation, Culture,

627. *Torilis* A name contrived by Adanson and adopted by Gærtner, and other botanists It probably, like many of Adanson's words, has no meaning

628 *Oliveria* Named in honor of G A Olivier, a French botanist, who travelled in the East. He published a splendid work on insects, by which he is better known than by his botanical merits

629. *Ledebuna* So named by Professor Link, after M. Ledebure, the author of a Catalogus Horti Dorpatensis, published in 1819, in which work this plant stands as Tragium tauricum

630 *Myrrhis.* This plant has been long in cultivation Formerly the young leaves were put into salads, and the roots were boiled and eaten cold, or in tarts, and in a variety of sauces, or candied The seeds are put into soups in Germany, and in the north of England employed in polishing and perfuming oak floors and furniture.

631. *Bunium* From βωνος, a hill, because the plant grows in dry and elevated situations. *Terre Noix*, Fr, *Erdnuss*, Ger., *Castagno di terra*, Ital. The roots of B Bulbocastanum are or used to be dug up and eaten raw by the poorer classes They are farinaceous, sweet, and supposed to be very nourishing. Swine are very fond of them, and will soon become fat by feeding on them

632. *Œnanthe.* From οινη, a vine, and ανθος, a flower The Œnanthe, says Pliny, smells like the vine in flower, and it is from that that it takes its name. This genus, like most of the aquatic umbelliferæ, is chiefly poisonous. Œ. crocata is considered eminently so The juice of the root or an infusion of the leaves is very efficacious in cutaneous diseases in large doses it produces a fatal tetanus The herb is applied in poultices to those ulcers that form in the cleft of the hoof of kine.

3530 Involucres many-leaved, Seeds ovate, Styles reflexed, Leaves decompound, Outer leaflet lin. lanceolate
3531 Universal involucre scarcely any, Seeds ov Styles reflexed, Leaves decompound, Stem much branched

3532 Umbels simple subsessile, Leaves supra-decompound

3533 Leaves pinnate, Leaflets sessile 3-5-cleft, Segm 3-fid ciliated, Flowers fascicled villous

3534 Radical leaves pinnate, Pinnæ ovate serrated cut, The upper 3-pinnatifid with linear 3-forked segments

3535 Villous, Leaves ternate decompound, Leaves ovate lanceolate pinnatifid, Central fl. male

3536 Leaves uniform, Involucre many-leaved

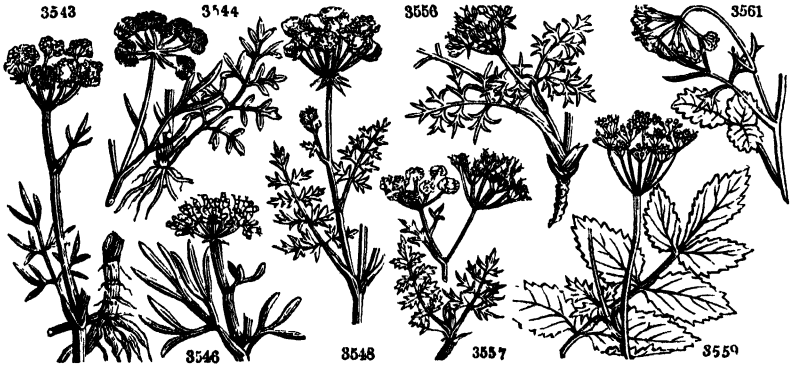
3537 Seeds somewhat muricated, Peduncles furrowed, Leaflets channelled obtuse

3538 Stoloniferous, Cauline leaves with filiform fistulous pinnæ
3539 All the leaves many cut obtuse nearly equal
3540 Outside stalks of the umbels longest branched male
3541 Leaves bipinnate, Fruit globose
3542 Leaves bi-tripinnate, the upper pinnate, Leaflets wedge-shaped cut serrate striated
3543 Cauline leaves pinnate, radical bipinnate, Leaflets linear
3544 Radical leaves caudate split cauline entire very long simple
3545 Lower pinnæ of the leaves ovate, upper linear, Stalks angular

3546 Leaflets lanceolate fleshy
3547 Leaflets wedge-shaped split (*Tenoria*, Spr.)

3548 Leaves bipinnate flat, Umbel hemispherical, Seeds hairy
3549 Leaves pinnate decussate cut angular, Seeds naked
3550 Leaves pinnate cut angular
3551 Leaves subpinnate, Leaflets imbricated downwards, Umbel lens-shaped
3552 Pubes hoary, Lvs supra-decompound, Leaflets wedge-shaped 4-toothed, Umbel with many rays globose
3553 Leaflets divaricating, Leaves thrice pinnate
3554 Lower leaves shining, First umbels subsessile, Seeds hairy
3555 Leaves capillary, Styles persistent erect, Seeds oblong hairy
3556 Leaflets linear flat hairy, Petals divided, Seeds oblong hairy
β Leaves many-parted, Segm linear rounded acuminated

3557 Stem furrowed smooth, Leaves pinnated smooth · radical roundish finely toothed, cauline linear
3558 Stem furrowed pubescent, Leaves pinnate pubescent radical cordate cut obtuse toothed, cauline linear
3559 Leaves all alike pinnate, Leaflets lobed, the odd one 3-lobed
3560 Leaves pinnate, Pinnæ many-parted, Segments falcate acute
3561 Radical leaves pinnate crenate, upper wedge-shaped cut, Umbels nodding
3562 Radical leaves trifid cut
3563 Peduncles opp the leaves, Flower leaves bifid or trifid, Leaf-stalks winged membranous



and Miscellaneous Particulars

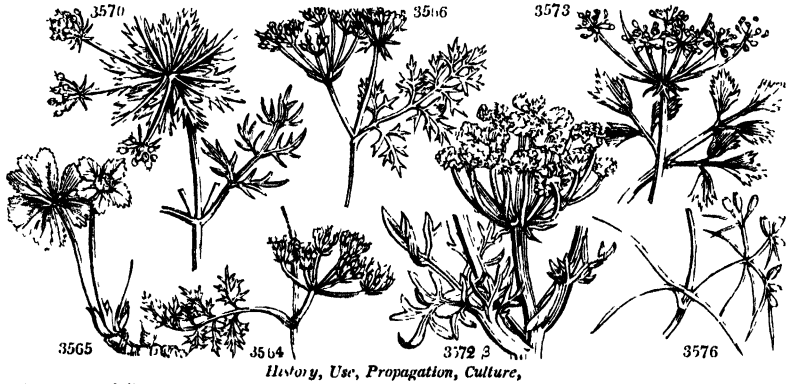
633 *Crithmum*. From κριθη, barley Its seed is very similar to a grain of barley. *Saint Pierre*, Fr., *Meerfenchel*, Ger, and *Finocchio marino*, Ital. The C maritimum is found on stone walls, as well as by the sea shore The inhabitants, where it abounds, not only use it as a pickle, but as an ingredient in salads, and as a pot-herb In the garden it may be grown on beds of sand and rubbish, or in pots. Braddick, an ingenious horticulturist, cultivated it at Thames Ditton, in a sheltered dry situation screened from the morning sun he protected it by litter during winter, and in spring sprinkled the soil with a little powdered barilla. "This I do," says he, "to furnish the plant with a supply of soda, since in its native place of growth it possesses the power of decomposing sea water, from which it takes the fossil alkali, and rejects the muriatic acid" With this treatment it flourished abundantly, producing an ample supply of leaves and shoots, which were cut twice in the season (*Hort Trans* ii 232)

634 *Athamanta* A plant found upon Mount Athamas in Thessaly, as some say; others, however, believe it to have been named after King Athamas, a king of Thebes, who first brought it into use.

635 *Pimpinella* According to Linnæus, this name has been altered from *bipennula*, twice pinnate, in allusion to the leaves P saxifraga differs surprisingly in size and foliage in different situations, insomuch that some make several species, as P. minor, major, and dissecta The root is acrid, and used as a masticatory in tooth-ache, also externally to take away freckles, and in gargles to dissolve viscid mucus

P. anisum (*ānyσον*, Arabic, *Golsus*) is cultivated in Malta and Spain, whence the seeds are annually imported into England for their use in medicine. They are aromatic and carminative, and yield an oil both by distillation and expression, which is much used in flatulencies, as are the seeds in substance The oil is also

636. PHELLAN'DRIUM *W.* WATER-HEMLOCK.						*Umbelliferæ.*	*Sp* 1					
3564 aquáticum *W.*	common	☿ ☉ p	3	jn jl	W	Britain	rivul	C	aq	Eng. bot 684		
637 DON'DIA *Spreng* DONDIA						*Umbelliferæ*	*Sp* 1.					
3565 Epipáctis *Spr.*	yellow	☿ △ pr	½	mr ap	Y	Alps	1823	D	p.l	Jacq aust 5. t.11		
638 TRACHYSPER'MUM *Lk* TRACHYSPERMUM						*Umbelliferæ*	*Sp* 1					
3566 copticum *Spr*	Egyptian	○ w	2	jn jl	W	Egypt	1773	D	co	Jac vind 2 t 196		
639. AM'MI *W*	AMMI					*Umbelliferæ*	*Sp* 4—8					
3567 Visnága *W*	Carrot-like	○ w	2	jn au	W	S. Europe	1596	S	co	Gæ de fr 1 t 107		
3568 május *W*	great	○ w	2	jn jl	W	S Europe	1551	D	co	Blackw t 447		
3569 glaucifólium *W*	glaucous leav'd	☿ △ w	1½	jn jl	W	France	1816	D	co			
3570 daucifólium *W.*	Carrot-leaved	☿ △ w	2	jl au	P Y	Pyrenees	1734	D	co	Scop carn t 10		
640 BU BON *W*	BUBON					*Umbelliferæ*	*Sp* 5—7					
3571 macedónicum *W*	Macedonian	☿ ☉ cu	2	jn au	P Y	Greece	1596	S	co	Blackw t. 382		
3572 rigidum *W*	stiff-leaved	☿ ☉ cu	3	jn au	Pk	Sicily	1710	S	co	Bocc mus 2 t.76		
β gummíferum Sm	*gummy*	☿ ☉ cu	3	jl s	Pk	Crimea	1804	S	co	Ex bot. 120		
3573 Gal'banum *W*	Lovage-leaved	♣ □ m	6	jl au	Y ɑ	C G H	1596	S	s l	Bot mag. 2489		
3574 lævigátum *W*	smooth	♣ □ cu	4	mr d	Y	C G H	1774	S	s l			
3575 gummíferum *W*	gum bearing	♣ □ ec	7	jl	P Y	C G H	17 1	S	s.l	Com. hort 2 t.58		
641 CU'MINUM *W*	CUMIN					*Umbelliferæ*	*Sp* 1					
3576 Cýminum *W*	common	○ clt		jn jl	W	Egypt	1594	S	co	Cav ic. 4 t. 360		
*642 SE'SELI *W*	MEADOW SAXIFRAGE					*Umbelliferæ*	*Sp* 10—14					
3577 pimpinelloides *W*	nodding-flow	☿ △ w	1	jl	W	S Europe	1796	D	co			
3578 leucospermum *H et K*	woolly-headed	☿ △ w	1½	jl	W	Hungary	1805	D	co	Pl rar hung 80		
3579 montánum *W*	mountain	☿ △ w	1	jn jl	W	Italy	1658	D	co	Jac vind 2. t 129		
3580 glaucum *W*	glaucous	☿ △ w	2	jl au	W	France	1759	D	co	Jac aust 1 t 144		
§3581 ammoides *W*	Milfoil-leaved	○ w	½	jn jl	W	S. Europe	1759	S	co	Jac vind 1 t 52		
3582 tortuósum *W*	crooked	☿ ☉ w	1	o	W	S Europe	1597	D	co	Bau h 3 2.16 f 2		
3583 divaricátum *Ph*	shining-leaved	☿ △ or	1	jn jl	Y	N Amer	1812	D	co	Bot. mag 1742		
3584 Hippomárathrum *W*	various-leaved	☿ △ w	2	jl	Pu	Austria	1656	D	co	Jac aust 2 t 143		
3585 grácile *W cn*	slender	☿ △ w	1½	jn jl	Y	Hungary	1805	D	co	P ra hun 2 t 117		
3586 elátum *W*	tall	☿ △ w	1½	jl au	W	Austria	1710	D	co	Gouan ill 16 t.8		
643 THAP'SIA *W*	DEADLY CARROT					*Umbelliferæ*	*Sp* 4—9					
3587 villósa *W*	villous	☿ △ p	2	jn jl	Y	S. Europe	0	D	s l	Moris s 9 t 18 f 3		
3588 fœ'tida *W*	stinking	☿ △ p	2	jl au	Y	Spain	1596	D	s l	Moris s 9 t 18 f 7		
3589 Asclépium *W*	oriental	☿ △ cu	2	jl au	Y	Levant	. .	D	s l	Moris s 9 t 18 f 9		
590 gargánica *W*	Garganian	☿ △ cu	2	jl au	L Y	Barbary	1683	D	s l	Gouan ill 18 t.10		
644 ACTINOTUS *Lab*	ACTINOTUS					*Umbelliferæ*	*Sp* 1					
3591 Helian'thi *Lab*	Sun-flower	☾ ⧻ cu	2	jn	W	N. Holl.	1821	D	s l	Bot reg 654		
645 TRI'NIA *Hoffm*	TRINIA					*Umbelliferæ*	*Sp* 2					
3592 Hoffman'ni *Bieb*	Hoffmann's	☿ △ w		my jn	W	England	rocks	D	co	Eng bot. 1209		
Pimpinella dubia E Bot												
3593 Hennin'gii *Bieb*	Henning's	☿ △ w		jn au	W	Hungary	1803			Pl rar hung t 27		
*646 SI'UM *W*	WATER-PARSNIP					*Umbelliferæ*	*Sp* 8—28					
3594 latifólium *W*	broad-leaved	☿ △ p	3	jl au	W	Britain	rivul	D	aq	Eng bot. 204		
3595 angustifólium *W*	narrow-leaved	☿ △ w	1	jl au	W	Britain	rivul	D	aq	Eng bot 139		
§3596 nodiflórum *W*	procumbent	☿ △ w	½	jl au	W	Britain	rivul	D	aq	Eng bot. 639		
3597 répens *W*	creeping	☿ △ w	½	jn	W	Britain	mou gr	D	m s	Eng bot 1431		
3598 Sisarum *W*	Skirret	☿ △ cul	1	jl au	W	China	1548	D	r m	Schk han 1 t 69		



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used by vermin-killers to scent poisonous baits, or to neutralize or obliterate other smells. Anise is sometimes sown in gardens for the leaves, to be used as a garnish, or for seasoning, like fennel

636 *Phellandrium* A name under which Pliny describes an umbelliferous plant, of similar nature to the one now so called In running streams the leaves of this plant become divided, like those of Ranunculus aquatilis in the same situation When the plant grows in an angle, out of the rapid course of the stream, it produces its flowers, but it flowers best on the muddy banks of ditches and ponds According to Linnæus it renders horses paralytic, the disease being brought on by a Coleopterous insect, the Curculio paraplecticus, which breeds in the stalks, and is cured by pigs' dung The seeds are sometimes used in agues

637 *Dondia* A curious little plant resembling Astrantia, and named from Dondie Duprée, a French botanist

638. *Trachyspermum* From τραχυς, rough, and σπερμα, seed; on account of the roughness of the seeds Nearly related to Ammi, with which it agrees in habit

639. *Ammi* From αμμος, sand, because it grows in sandy places Plants with a delicate habit, very finely cut leaves, and white flowers

640. *Bubon.* *Bubonion* is a name of Pliny's, now applied to this plant, as Pliny's was used in medicine, so is this, and there the resemblance ceases B macedonicum is put among clothes to scent them, in some parts of the East From B Galbanum (derivation obscure) the drug of that name is obtained, though it is not clear that it may not also be got from other species. It is collected from the spontaneous exudation of the

3564 Ramifications of leaves divaricating

3565 Leaves stalked digitate 3-lobed, Scape angular with only one umbel

3566 Leaves supra-decompound, Leaflets filiform, Umbels opp the leaves, Leaves of involucre unequal

3567 Universal umbel united at base
3568 Lower leaves pinnate lanceolate serrate, upper multifid linear
3569 Segments of all the leaves lanceolate
3570 Leaves supra-decompound, Leaflets 3-parted pinnatifid

3571 Leaves rhomb-ovate cut-toothed, Teeth acuminate, Umbels numerous, Seeds hairy
3572 Leaflets linear

3573 Leaflets ovate wedge-shaped acute finely serrate, Umbels few, Seeds smooth, Stem glaucous
3574 Leaflets lanceolate very obtusely and obscurely crenate, Seeds smooth
3575 Leaflets cut acuminate lower broadest, Seeds smooth

3576 The only species Lower leaves broad, Upper capillary

3577 Stem declinate, Umbels nodding
3578 Stem erect flexuose, Leaves decompound very fine, Umbels dense very downy
3579 Leaf-stalks branch-bearing membranous oblong entire, Cauline leaves very narrow
3580 Leaf-stalks branch-bearing membranous obl entire, Leaflets single and two together channelled smooth
3581 Radical leaves with imbricated leaflets
3582 Stem tall rigid, Leaflets linear fascicled
3583 Stem procumbent branched, Leaves bipinnatifid shining, Involucels halved
3584 Involucels connate one-leaved
3585 Stem ascending, Leaves triternate very fine, Umbel nodding with long rays
3586 Stem elongated with callous points, Leaves bipinnate, Pinnæ linear distant

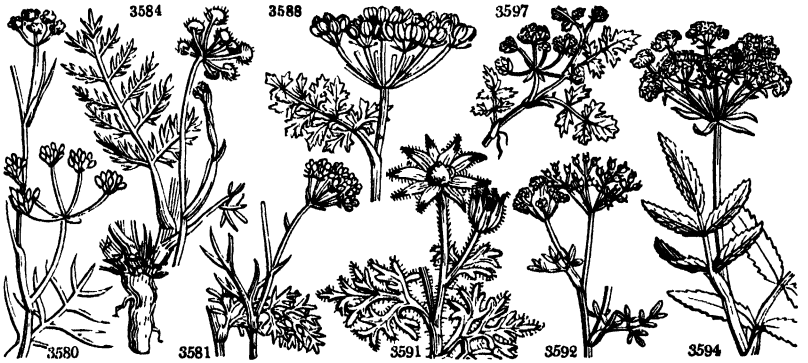
3587 Leaflets toothed villous united at base
3588 Leaflets many-cut narrowed at base
3589 Leaves digitate, Leaflets bipinnate finely many-cut
3590 Leaves bipinnate, Leaflets pinnatifid, Segm lanceolate

3591 Downy, Leaves decursively pinnated, Invol soft long with 10-18 rays

3592 Seeds rough with sharp ribs

3593 Seeds smooth with blunt ribs

3594 Leaves pinnate, Umbel terminal
3595 Leaves pinnate, Umbels axillary stalked, Common invol pinnatifid
3596 Leaves pinnate, Umbels axillary sessile
3597 Stem creeping, Leaflets roundish toothed angular
3598 Leaves pinnate floral ternate



and Miscellaneous Particulars

stem, or by an incision in the stalk a little above the root, from which it immediately flows, and soon becomes sufficiently concreted for gathering Medicinally considered, this gum-resin is said to hold a middle place between Asafœtida and Ammoniacum, but it is far less fœtid than the former

641 *Cuminum* From the Arabic name of the plant *qamoün.* (*Golius*) This is a dwarf fennel-looking plant, cultivated in the south of Europe and lesser Asia for its seeds, which are hot and aromatic, and used like those of Anise, Caraway, &c

642 *Seseli* Golius (p. 167) says, a plant related to this is called *Seycêlyous* in Arabic. There is also a Greek σεσελι

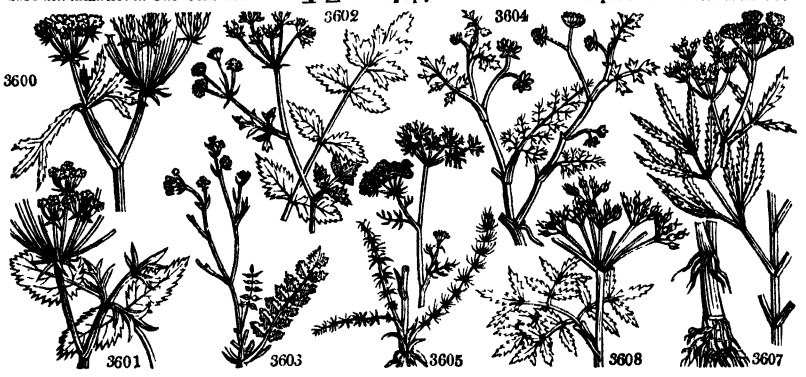
643 *Thapsia* The Thapsia, says Dioscorides, derives its name from the isle Thapsus, where it was first discovered. Plants resembling Smyrnium in habit

644 *Actinotus* From ακτιν, a ray, in allusion to the ray-like appearance of the involucrum Curious New Holland plants with the habit of Astrantia

645 *Trinia.* Named by Hoffmann after Dr Trinius, a celebrated Russian botanist, who has published some works upon grasses Plants resembling Pimpinella in appearance

646 *Sium* *Siw* signifies *water* in Celtic. This is a genus of aquatic plants S. nodiflorum bears a good deal of resemblance to the water-cress (Nasturtium officinale), and, unless when in flower, is not very easily distinguished from it by the inexperienced. It is commonly considered poisonous, though, according to Dr

§3599 rigidum *W*	Virginian	△	w	2	jl au	W	Virginia	1774	D	s p	Moris s 9. t.7 f.1
§3600 Falcária *W*	decurrent	△	p	2	jl.au	W	Europe	1726.	D	s p	Jac. aust 3 t 257
§3601 siculum *W*	Sicilian	△	w	1	jl.au	Y	Sicily	1686.	D	s p	Jac. vind.2. t.133
*647. SI'SON *W*	HONEWORT				*Umbelliferæ.*		*Sp* 5—16.				
3602 Amómum *W*	hedge	○	w	3	jl.au	W	Britain	hed	S	m s	Eng bot. 954
3603 ségetum *W*	corn	○	w	2	jl.au	W	England	ch fi	S	m.s	Eng bot. 228
§3604 inundátum *W*	water	○	w	1	my jn	W	Britain	dit	S	aq	Eng. bot 227
3605 verticillátum *W*	whorl-leaved	△	w	1	jl au	W	Britain	m. me	D	m s	Eng bot. 395
3606 sálsum *W.*	fine-leaved	△	w	1	jl.au	P Y	Siberia	1804	D	co	P a.p 1779t8.f1.3
648 CICU'TA *W*	COWBANE				*Umbelliferæ*		*Sp* 2—5				
3607 virósa *W*	long-leaved	△	m	3	jl	W	Britain	ditch.	D	m s	Eng bot 479
3608 maculáta *W*	spotted	△	p	1½	jl.au	W	N Amer	1759.	D	co	Pl. alm t. 76 f 1
*649. CO'NIUM *W*	HEMLOCK				*Umbelliferæ.*		*Sp* 2—3				
3609 maculátum *W*	common	○	m	5	jn jl	W	Britain	hed	S	co	Eng bot 1191
§3610 africánum *W*	Rue-leaved	○	w	3	jn.s	W	C. G H.	1759.	S	s l	Jac vin. 2 t. 194
*650 SMYR'NIUM *W*	ALEXANDERS.				*Umbelliferæ*		*Sp* 6—7				
3611 perfoliátum *W.*	perfoliate	△	cul	3	my	Y	Italy	1596	D	s l	Pl rar h. 1 t 23
3612 Olusátrum *W*	common	○	cul	4	my jn	G	Britain	sea co	S	s l	Eng. bot 230
3613 apiifólium *W.*	Smallage-lvd	△	cu	1	my jl	P Y	Candia	1731	D	s l	
3614 cordátum *Ph*	heart-leaved	△	or	1½	jn jl	D.Pu	N Amer	1597	D	s l	
Thápsia trifoliata W											
§3615 áureum *W*	golden	△	cu	1	my jn	Y	N Amer	1699	D	r m	
3616 integérrimum *W*	entire-leaved	△	w	1½	jn	Y	N Amer	1759	D	r m	
*651 A'PIUM *W*	PARSLEY				*Umbelliferæ*		*Sp* 2—5				
3617 Petroselinum *W*	garden	○	cul	3	jn jl	L Y	Sardinia	1548	S	r m	
3618 gravéolens *W*	Celery	○	cul	4	jn au	W	Britain	ditch	S	m s	Eng bot. 1210
652 ÆGOPO'DIUM *W*	GOUT-WEED				*Umbelliferæ*		*Sp* 1				
3619 Podagrária *W*	common	△	w	2	my jl	W	Britain	sh pl	D	m s	Eng bot 940
653 ME'UM *Jacq*	BAWD-MONEY				*Umbelliferæ*		*Sp* 3—7				
3620 Búnius *Jacq*	Coriander-lvd	○	w	1	jl	W	Pyrenees	1778	S	co	Jac vin 2 t. 198
3621 Mutellina *P. S*	alpine	△	or	1	jl au	Pu	Austria	1774	D	co	All pe. t 60 f 1
3622 athamánticum *Jac*	common	△	w	1½	ap jn	P Y	Britain	me pa.	D	m s	Jac. aust.4 t 303



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Withering, the juice, in doses of from two to four ounces, either alone or with milk, every morning, is an excellent alterative in cutaneous diseases

S sisarum (from *Dgizer*, its Arabic name, in which language it signifies *carrot*), *Chervis*, Fr, *Zuckerwürtzel* Ger, and *Sssaro*, Ital, is cultivated for its roots or tubers, which, boiled and eaten with butter, are sweet and agreeable A crop may either be raised from seed or offsets, if from the former, sow in March or the beginning of April, and when the plants come up, whether in rows or broadcast, thin them, so as nine or ten square inches may be allowed to each plant With the usual summer culture the roots will have attained their full size in September, and may be taken up as wanted for use In growing from offsets, allow about the same distance planting about the end of April, and giving the usual culture afterwards

647 *Sison* From the Celtic *sizun*, which signifies a running stream Many of the plants grow in such situations This genus is called Honewort, from its being used formerly to cure a swelling in the cheek called the Hone

648 *Cicuta* A word used by Virgil (*Ecl* 2 and 5), but of unknown meaning C virosa is poisonous to mankind and kine, but not to horses, sheep, or goats, the smell being weak in the spring, cows are apt to be killed by it, but afterwards the odour enables them to avoid it. C maculata is used in medicine like Conium maculatum

649 *Conium* Said by Linnæus to be derived from κονις, powder, dust, but the application of the term is not evident C maculatum is a well known poisonous plant, lately admitted into the Materia Medica. According to Linnæus, sheep eat the leaves, but horses, cows, and goats refuse them Ray informs us, that the thrush will feed upon the seeds, even when corn is to be had Curtis says hemlock is eaten by few or no insects The dried fistulous stalks of this and several other umbelliferous plants are called by the country people kecksies As a medicine, hemlock seems to act on the constitution in a great measure like opium

650. *Smyrnium* Σμυρνα, is a synonym of μυρρα, myrrh Its juice smells like myrrh, saith Pliny *Maceron*, Fr, *Smyrnerkraut*, Ger, and *Macerone*, Ital S perfoliatum and olusatrum are or may be cultivated as Asparaginous and salad plants, though they are now almost entirely supplanted by the celery, which they somewhat resemble in flavour The seeds are sown in March in rows two feet apart, and afterwards thinned out to six inches As the plants advance, they are earthed up like celery, and, like it, are ready for use during autumn and winter. Olusatrum is from *olus*, pot-herb, and *atrum*, black, from the dark colour of its foliage Our English name, Alexanders, is certainly a mere corruption of Olusatrum

651. *Apium* From *apon*, water, in Celtic, from the place where the plant grows A. Petroselinum, (*πετρα*, stone, and *selinum* — Stone Selinum) *Persil*, Fr, *Peterselie*, Ger, and *Petroselina*, Ital, is a well known seasoning herb, and it is also sown among pasture grasses as likely to counteract the liver rot in sheep There is a variety called the Hamburgh or large rooted parsley, which is cultivated for its roots, which, as well as the

3599 Leaves pinnate, Leaflets lanceolate nearly entire
3600 Leaves linear decurrent connate
3601 Radical leaves ternate; cauline bipinnate

3602 Leaves pinnate, Umbels erect
3603 Leaves pinnate, Umbels cernuous
3604 Creeping, Umbels bifid
3605 Leaflets whorled capillary
3606 Rad lvs compound, Leaflets whorled fascicled lanc Stem leafless, Umbellif branches dichotomous

3607 Umbels opp to the leaves, Leaf-stalks edged obtuse
3608 Serratures of leaves mucronate, Leaf-stalks membranous two-lobed at end

3609 Seeds unarmed, Stem branched shining spotted
3610 Seeds muricated, Petioles and peduncles smooth

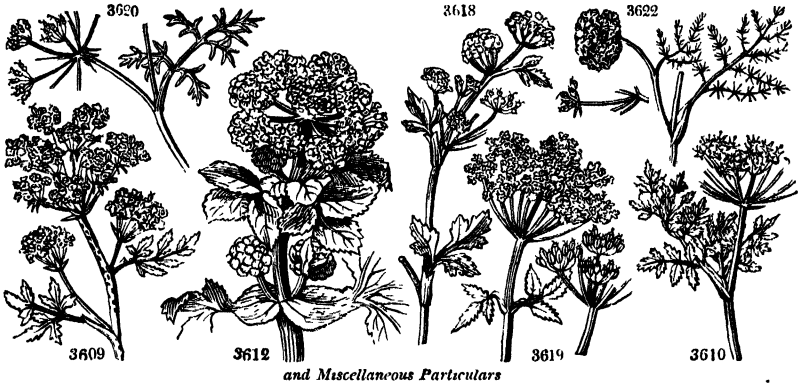
3611 Cauline leaves simple stem-clasping
3612 Cauline leaves ternate stalked serrate
3613 Cauline leaves wedge-shaped obtuse trifid toothed
3614 Radical leaves simple cordate crenate, cauline ternate serrate, Umbels terminal

3615 Leaves pinnate serrate, All the florets fertile
3616 Cauline leaves doubly ternate entire

3617 Cauline leaves linear with minute involucres
3618 Cauline leaves wedge-shaped

3619 Upper leaves ternate, Lower biternate sessile

3620 Stem diffuse branching, Radical leaves broad, cauline very narrow
3621 Stem simple, Sheaths of leafstalks dilated membranous, Leaflets multifid pinnatifid
3622 All the leaves very finely cut



and Miscellaneous Particulars

roots of the other varieties, communicate an agreeable flavor to soups and stews The curled thick-leaved variety is that most esteemed for soups and as a garnish it is sown in drills, and should be thinned out when it is so far advanced as to shew the finer curls of the leaves It is too commonly left to grow as it came up which makes it but a very inferior article for garnishes The Hamburgh sort should be thinned so as each plant may occupy ten or twelve square inches of surface

A graveolens is one of our most valuable salad plants, and is a remarkable instance of the effect of cultivation, being in its wild state, rank, coarse, and unfit to eat, and blanched in the garden, sweet, crisp, juicy, and of a most agreeable flavor The green leaves are used in soups, and in Italy and the Levant, where the plant is grown, but not blanched, this is its principal application Here both the leaves and seeds are used in soups and stews, and the blanched stalks in that way and also as a salad, either alone or in composition. One variety, the Celeriac, is grown entirely for the root or base of the leaves, which assumes a bulbous form, is solid and white, and used either in soups or as a salad

In order to produce excellent celery, a deep rich light soil is required, and especially a soil on a dry bottom The seed in the main crop is commonly sown in the beginning of April on a bed for transplantation, the plants so raised are commonly pricked out into other beds, and placed four or six inches asunder At eight or twelve inches height the plants so brought forward are transplanted into trenches for blanching These trenches are small open ditches of from six inches to a foot deep, and they are dug from two and a half to three feet apart from each other, in order to admit of earthing up the plants to the height of two feet or more above the natural surface The excavated earth is laid in the intervals, and some dung is dug into the bottom of the trenches. Along these the plants are inserted at four or five inches apart, and as they grow, the earth from the sides of the trenches and from the wide intervals between them is applied to the plants in small layers at a time, till at the end of the autumn the ditches have become banks two or three feet high The celery is now fit to use, and by earlier and later crops this salad is had in perfection from August or September till May following Celery is grown to great perfection in Lancashire, where blanched stalks have been dug up four feet six inches long, and weighing nine or more pounds, of the best quality A variety of modes of cultivating the celery are brought together in the Encyclopædia of Gardening, which well deserve the perusal of those who aim at growing this root in the best manner.

652. *Ægopodium* From αιξ αιγος, a goat, and πους, a foot. Each of the parts of the leaf is split so as to resemble the cloven foot of a goat The leaves of E. Podagraria smell like those of Angelica, and may be eaten in spring salads.

653 *Meum* From μειον, very small, in allusion to the extreme delicacy of the leaves, which are as fine as hairs.

654 **ANE'THUM.** *W.*	DILL.					*Umbelliferæ*		*Sp.* 4—5.						
3623 gravéolens *W.*	common	☿	☉	cul	3	jn jl	Y	Spain	1570	S	r m			
3624 ségetum *W*	Portugal		C	w	½	jn jl	Y	Portugal	1796.	S	co			
3625 Sówa *Roxb.*	Indian		○	m	...	jn jl	...	E. Indies	1810.	S	co			
3626 Fœniculum *W.*	Fennel	☿	△	cul	6	jl au	Y	England ch pl.		S	s.l	Eng. bot. 1208		
β dulce	*Finochio*	☿	△	cul	4	jl au	Y	Italy	...	S	s.l			
655. CA'RUM *W*	CARAWAY					*Umbelliferæ*		*Sp* 2						
3627 Cárui *W.*	common	☿	☉	clt	2	my jn	W	Britain	me pa.	S	s.l	Eng. bot. 1503		
3628 simplex *W*	simple-stalked	☿	☉	w	1	my jn	W	Siberia	1816.	S	s.l			
*656 CNIDIUM *Cuss*	CNIDIUM					*Umbelliferæ.*		*Sp* 5—6.						
3629 Monnièri *W*	annual		○	w	1½	jl au	W	S Europe	1771	S	co	Jac. vind. 1 t. 62		
§3630 Siláus *W*	meadow	☿	△	w	2	jn au	Y	England	mea	D	co	Eng. bot. 2142		
3631 alsáticum *W*	small-headed	☿	△	w	6	jn au	L Y	Austria	1774	D	co	Jac. aust 1 t. 70		
3632 aristátum *W*	bearded	☿	△	w	1½	jn jl	W	Pyrenees	1739	D	co			
3633 pyrenæ'um *W*	Pyrenean	☿	△	w	1	jn jl	W	Pyrenees	1731	D	co	Gou ill. 11. t. 5		
†*657 BUPLEU'RUM *W*	HARE'S-EAR.					*Umbelliferæ*		*Sp* 22—34						
3634 rotundifólium *W*	Thorough-wax		○	pr	2	jn jl	Y	England	co fi.	S	co	Eng bot 99		
3635 stellátum *W*	starry	☿	△	pr	1	my jl	G	Switzerl	1775	D	co	Ha h n.771 t 18		
3636 petræ'um *W*	rock	☿	△	pr	1½	my jl	G	Switzerl	1768.	D	co	Plu. ph. t 50 f. 5		
3637 graminifólium *W*	Grass-leaved	☿	△	pr	½	my jl	G	Switzerl	1768	D	co	Jac ic. 1 t. 56		
3638 angulósum *W*	angular-leaved	☿	△	pr	1½	my jl	G	Switzerl	1759	D	co			
3639 pyrenáicum *W*	Pyrenean	☿	△	pr	1	my jl	G	Pyrenees	1814	D	co	Go ill t. 4 f 1 2		
3640 longifólium *W*	long-leaved	☿	△	pr	3	my jl	G	Switzerl	1713	D	co	Cam hort t 38		
3641 falcátum *W*	twisted-stalked	☿	△	pr	½	my s	G	Germany	1739	D	s l	Jac aus 2. t 158		
3642 exaltátum *Buch*	tall	☿	△	pr	2	jl	G	Taurus	1807	D	s l			
3643 odontites *W*	narrow-leaved		○	pr	½	jn au	G	Italy	1749	S	co	Jac vind 3 t 91		
3644 semicompósitum *W*	dwarf		○	pr	½	jn au	G	Spain	1778	S	co	Gou ill t 7 f. 1		
3645 ranunculoides *W*	Crowfoot-like	☿	△	pr	½	jl au	G	Pyrenees	1790	D	l p	Park theat f 7		
3646 tenuissimum *W*	slender		○	pr	½	jl au	G	England	sea sh	S	s	Eng bot. 478		
3647 Gerárdi *W*	branching		○	pr	1	jl au	G	S Europe	1804	S	co	Jac aus 3 t 256		
3648 junceum *W*	linear-leaved		○	pr	1	jl au	G	S Europe	1722	S	co	Mor. ox. 9. 12 3		
3649 núdum *W*	naked-stalked	♃	△	pr	1½	o	G	C G H	1778	C	l p			
§3650 fruticósum *W*	shrubby			pr	3	jl au	G	S Europe	1596	C	co	Dend brit. 14		
§3651 coriáceum *W*	thick-leaved			pr	½	...	G	Gibraltar	1784	C	l s	Jac ic. 2 t 351		
§3652 fruticéscens *W*	Grass-lvd -shr			pr	1½	au s	G	Spain	1752	C	l s	Cav ic 2 t 106		
§3653 canéscens *P S*	hoary			pr	5	au s	G	Barbary	1800	C	l s	Desf atl 1 t. 57		
§3654 spinósum *W*	thorny			pr	1	au s	G	Spain	1752	C	l s	Go ill. 8 t 2 f 3		
§3655 difforme *W*	various-leaved			pr	1	au s	G	C. G H	1752	C	l s			
658 **HYDROCO'TYLE.** *W*	PENNYWORT					*Umbelliferæ*		*Sp* 8—54						
3656 vulgáris *W*	marsh	☿	△	w	¼	my jn	R	Britain	wa pl	D	c p	Eng bot 751		
3657 nitídula *Ruch*	shining	☿	△	w	¼	my	G	Java	1820	D	co	Hook ex fl 29		
3658 nepalénsis *Hook*	Nepal	☿	△	w	½	jl	G	Nepal	1820	D	co	Hook ex fl 30		
3659 americána *Ph*	tuberous	☿	△	w	½	my.au	R	N Amer	1790	D	p	Spr um t 2. f 3		
3660 umbelláta *Ph*	umbelled	☿	△	w	½	jl au	G	N. Amer	1795	D	p	Spreng um. t 1		
3661 asiática *W*	thick-leaved	☿	△	w	1	jl au	G	C G H	1690.	D	p	Rh mal. 10 t. 46		
3662 repánda *Ph*	Pilewort-leaved	☿	△	w	1	jn jl	G	N Amer	1806	D	p	Spr. um t 2 f 4		
3663 villósa *W*	hairy-leaved	☿	△	w	1	au	G	C G H	1795	D	p			
659 SPANAN'THE *Jac*	SPANANTHE					*Umbelliferæ*		*Sp* 1						
3664 paniculáta *Jacq*	panicled	☿	▣	w	2	jl au	W	Caracas	1795	D	s l	Jac ic 2. t 350		
660 ULOSPER'MUM *Lk*	BROAD-SEED					*Umbelliferæ*		*Sp* 1						
3665 dichótomum *Lk*	dichotomous		○	cu	1½	jn jl	W	Barbary	1800	S	co	Desf atl. 1 t. 66		
661 ÆTHU'SA *W*	FOOL'S-PARSLEY					*Umbelliferæ*		*Sp* 2—3						
3666 Cynápium *W*	common		○	p	2	jl s	W	Britain	co fi	S	co	Eng bot 1192		
3667 fátua *W*	fine-leaved	☿	△	p	2	jl s	W	.	1781	D	co			



History, Use, Propagation, Culture.

654 *Anethum.* From ἀνήω, to burn, the plant being very heating Large quantities of the seeds are yearly imported into this country from the south of France They are used in medicine as carminatives, and, as it is said, in the manufacture of the British gin No one has succeeded in growing the plant for a crop in this country

655 *Carum* A native of Caria, according to Pliny, b xix c 8 *Carvi*, Fr, *Kümmel*, Ger, and *Carvi*, Ital C Carvi is cultivated both in agriculture and horticulture in the former for its seeds, which are used to flavor cakes, to form sugar plums, to flavor spirits, and form a carminative distilled water In the culinary art the leaves are sometimes used as an ingredient in salads, or as a pot herb, like parsley; and the roots are said to be superior in flavor to those of the parsnip

656 *Cnidium* The ancient name of an herb, supposed to have been an Orach, and certainly having no affinity to the plants now called Cnidium

657. *Bupleurum* From βοῦς, an ox, and πλευρον, a rib How applied is not apparent These are plants remarkable among the Umbelliferous tribes for having simple leaves

3623 Fruit compressed
3624 Cauline leaves three, Fruit oval
3625 Leaves supra-decompound, Umbel with 5-15 rays, Fruit obl flat with three ribs at base
3626 Fruit ovate

3627 Stem branched, Sheaths of leaves ventricose, Common involucre O.
3628 Stem quite simple, Sheaths of leaves appressed, Common involucre many-leaved

3629 Umbels close, Comm. involucre reflexed, Seeds with 5 membranous ribs
3630 Leaves thrice pinnated, Pinnules distinct with a nerve lanceolate 3-lobed with an odd one
3631 Leaflets pinnatifid, Segm. trifid bluntish
3632 Leafstalks of the branches somewhat membranous loose entire, Lvs supra-decom Leaflets lanc awned
3633 Leaves doubly pinnate Leaflets cut acute, Involucels bristly longer than the umbel

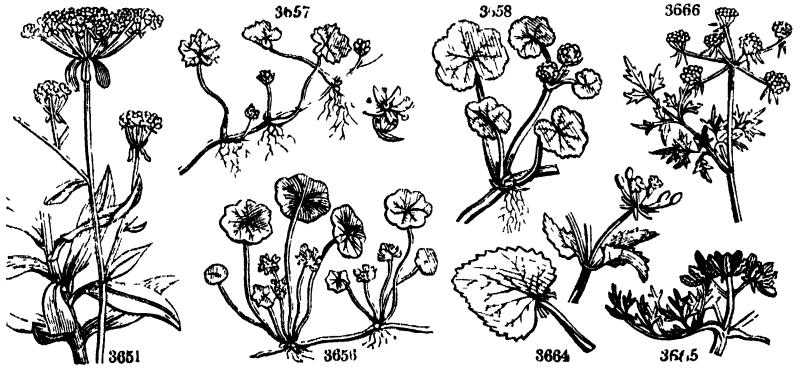
3634 Common involucres none, Leaves perfoliate
3635 Involucels joined together the universal three-leaved
3636 Involucels about 5-leaved joined together, universal 5-leaved, Caul leaves cord. lanc stem-clasping
3637 Involucels 7-leaved, universal about 3-leaved, Radical leaves linear, Scape one-leaved
3638 Involucels 5-leaved orbicular, universal 3-leaved ovate, Leaves cord lanc stem-clasping
3639 Involucels 5-leaved roundish emarginate con, universal 3-leav cut at base, Lvs lanc cordate stem-clasping
3640 Involucels 5-leaved ovate, universal about 5-leaved, Leaves stem-clasping
3641 Involucels 5-leaved acute, universal about 5-leaved, Leaves lanceolate, Stem flexuose
3642 Stem branched leafy, Lvs lin-lanc chan nerved, Involucels 4-leaved uneq very narrow shorter than umbel
3643 Involucels 5-leaved acute, universal 3-leaved, Central florets tallest, Branches divaricating
3644 Leaves lanceolate, Umbels terminal and axillary, Seeds rough
3645 Involucels 5-leaved lanceolate longer, universal 3-leaved, Leaves cauline lanceolate
3646 Umbels simple alternate 5-leaved about 3-flowered
3647 Stem erect branching, Lvs lin acum Involucels 5-leaved, Involucels 5-leaved lin subul longer than umbel
3648 Stem erect panicled, Leaves linear, Involucre 3-leaved as long as umbel, Involucels 5-leaved
3649 Stem branched leafless, Radical leaves decompound flat cut, Involucres and involucels lanceolate-oblong
3650 Leaves lanceolate obovate entire sessile
3651 Leaves lanceolate narrowed each way entire sessile
3652 Leaves linear, Involucre common and partial
3653 Lvs peren lanc. mucronate nerved, Flowering branches branched striated, Involucre subulate appressed
3654 Branches of panicle sessile naked spiny, Leaves linear
3655 Vernal leaves decompound flat cut, Summer leaves filiform angular trifid

3656 Leaves peltate, Umbels 5-flowered
3657 Leaves orbicular reniform 5-7-lobed, Flowers capitate sessile, Peduncle shorter than petiole
3658 Leaves orbicular reniform 7-lobed crenated, Flowers in numerous heads on short stalks
3659 Root tuberous, Leaves peltate roundish lobed unequally crenate, Clusters subsessile few-flowered
3660 Leaves crenate peltate emarginate at base, Umbels many-flowered and flowers stalked
3661 Leaves cordate reniform equal toothed crenate smooth, Umbels axillary sessile many-flowered
3662 Lvs rounded cordate repand toothed beneath and stalks hairy, Umbels capitate about 3-fl Fruit netted
3663 Stem decumbent and erect branches villous, Lvs ov cordate cuspidate 3-nerved, Umbels axillary sessile

3664 Stem erect smooth, Leaves triangular acuminate crenate bearded at base, Umbels axillary spreading

3665 The only species

3666 Leaves all of one shape
3667 Leaflets very fine whorled. Stem very leafy, Comm involucre many-leaved



and Miscellaneous Particulars.

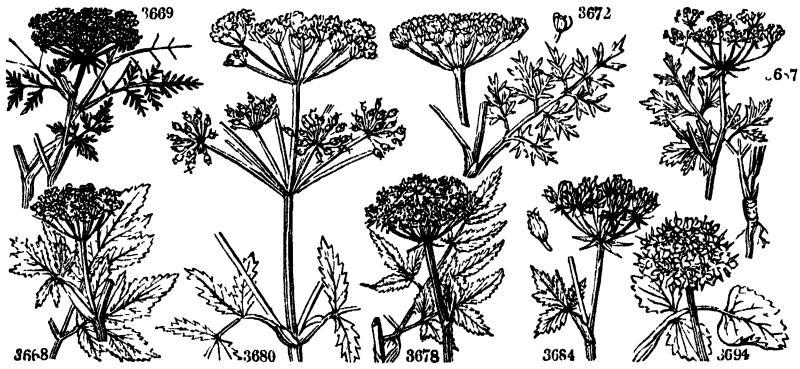
658 *Hydrocotyle* From ὑδωρ, water, and κοτυλη, vessel, its leaf is round and a little depressed in the centre, so as to hold a drop of water This is a genus of aquatics and marsh plants of no great beauty, their flowers being obscure and of dull colors H vulgaris, the *Wassernabel* of the Germans, has been supposed to communicate the liver rot to sheep This is a vulgar error, arising from the circumstance of the fluke or flounder insect (Fasciola hepatica) being found in marshes where this plant, and also the Drosera and Pinguicula, abound, as well as in sheep's livers It is a known fact, however, that sheep never feed on any of these plants

659 *Spananthe.* From σπανος, rare, and ανθος, a flower, in allusion to the small number of flowers in the umbel.

660. *Ulospermum* From ουλος, curled, and σπερμα, seed, on account of the membranous curled ribs of the seed A plant referred to Conium by Desfontaines, and to Cachrys by Sprengel, but very distinct from both

661 *Æthusa* From αιθω, to burn, on account of its dangerous acridity Æ Cynapium (κυνος απιον, dog-parsley) is a common weed in gardens, and sometimes mistaken for parsley, from which, however, it is easily

662. IMPERATO'RIA *W*	Masterwort.				*Umbellifer*æ.	*Sp* 1.							
3668 Ostrúthium *W*	common	△	cu	2	my jl	Pk	Scotland	m al.p.	D	co	Eng. bot. 1380		
*663. SELI'NUM *W*	Milk-Parsley				*Umbellifer*æ	*Sp* 8—15							
§3669 palústre *W*	marsh	△	w	4	jl au	W	Britain	mar	D	c l	Eng bot 229		
3670 montánum *W en*	mountain	△	w	4	jl au	W	Switzerl.	1816	D	co			
3671 austriacum *W.*	Austrian	△	w	2	jl au	W	Austria	1804	D	co	Jac. aus. 1 t 71		
3672 Carvifólia *W*	Caraway-leaved	△	w	2	jl au	W	Austria	1774.	D	co	Jac. aust. 1 t 16		
3673 Chabræ'i *W.*	fine leaved	△	w	1	jl au	W	Austria	1791.	D	co	Jac aust 1 t 72		
3674 Seguiéri *W.*	Fennel-leaved	△	w	4	jl au	W	Italy	1774	D	s l	Jac vind. 1. t 61		
3675 latifólium *Bieb*	broad-leaved	△	w	2	jl au	W	Caucasus	1816	D	s l			
§3676 decípiens *W*	shrubby	□	w	2	jn jl	W	Madeira	1785.	C	s.l	Sch se h 3.t.1 13		
*664 ANGE'LICA. *W*	Angelica.				*Umbellifer*æ	*Sp* 6—10							
§3677 Archangélica *W*	garden	○	cul	4	jn au	G	England	wa pl.	S	m s	Flor dan t. 206		
3678 sylvéstris *W*	wild	△	w	6	jn au	F	Britain	m wo	D	m s	Eng bot 1128		
3679 Razoúlii *W*	decurrent lvd	△	w	2	jn au	P Pu	Pyrenees	1816	D	co	Gou ill 13. t. 6		
3680 verticillátis *W*	whorled-flower	△	w	6	jl	G	Italy	1683	D	co	Jac vin 2 t 130		
§3681 atropurpúrea *W*	dark-purple	△	w	6	jl au	Pu	Canada	1759	D	co	Cor can t. 199		
3682 lúcida *W*	shining	○	w	2	jl au	P Y	Canada	1640	S	co	Jac vind 3 t 24		
665 LIGUS'TICUM *W*	Lovage				*Umbellifer*æ	*Sp* 10—20							
§3683 Levísticum *W*	common	△	cul	6	jn jl	P Y	Italy	1596	D	co	Blackw t. 275		
3684 scóticum *W*	Scotch	△	w	2	jn jl	W	Britain	sc sh	S	co	Eng bot 1207		
§3685 peloponénse *W*	Hemlock-lvd	△	w	4	my jl	P Y	Switzerl	1596	D	co	J au 5 t ap 13		
§3686 austriacum *W*	Austrian	△	w	2	jn au	W	Austria	1596	S	co	Jac aus 2 t 151		
§3687 cornubien'se *W*	Cornish	△	w	1½	jl.au	W	England	bu fl	S	co	Eng bot 683		
3688 pyrenáicum *W*	Pyrenean	△	w	3	jl au	W	Pyrenees	1804	S	co	Go il p 14 t 10		
3689 cándicans *W*	pale	△	w	2	jl au	P Y	..	1780	S	co			
3690 peregrínum *W*	Parsley-leaved	○	w	2	jn jl	L Y	Portugal	1633	S	co	Jac vin 3 t 18		
3691 balearícum *W*	Minorca	△	cu	1	jn jl	Y	Minorca	1804	D	co			
3692 longifólium *W*	long-leaved	△	w	3	jn jl	P Pu	Siberia	1804	D	co	M s 9 t 15 f 1		
666 HASSELQUIS'TIA *W*	Hasselquistia				*Umbellifer*æ	*Sp* 2							
3693 ægyptiaca *W*	Egyptian	○	w	1½	jl	W	Egypt	1768	S	co			
3694 cordáta *W*	heart-leaved	○	w	1½	jl	W	.....	1787	S	co	Jac vind 2 t 193		
667 ARTE'DIA *W*	Artedia				*Umbellifer*æ	*Sp* 1							
3695 squamáta *W*	Fennel-leaved	○	w	1½	jl	W	Levant	1740	S	co	Lam ill t. 193		
*668 FE'RULA *W*	Giant-Fennel				*Umbellifer*æ	*Sp* 7—26							
3696 communis *W*	common	△	or	10	jn jl	Y	S Europe	1597	D	s l	Moris s 9 t 15 f 3		
3697 sibírica *W*	Siberian	△	w	4	jn jl	Y	Siberia	1816	D	s.l	Pall it 2 app t N		
3698 glaúca *W*	glaucous	△	w	8	jn jl	P Y	Italy	1596	D	s l	Mor ox 9 151		
3699 tingitána *W*	Tangier	○	w	8	jn jl	Y	Barbary	1680	S	s l	Herm par t 165		
3700 orientális *W*	eastern	△	w	3	jl au	Y	Levant	1759	D	s p	Tourn it 3 t 239		
§3701 nodiflóra *W*	knotted	△	w	3	jn jl	Y	S Europe	1596.	D	s l	Jac aust 5 t ap 9		
3702 pérsica *W*	Assa-fœtida	△	m	2	jl au	Y	Persia	1782	D	s l	Bot. mag 2096		
*669 LASERPI'TIUM *W*	Laserwort				*Umbellifer*æ	*Sp* 14—17							
3703 latifólium *W*	broad-leaved	△	w	3	jn jl	W	Europe	1640	D	co	Jac aust 2 t 146		
§3704 trilobum *W*	three-lobed	△	w	3	my jl	W	Levant	1640	D	co			
3705 aquilegifólium *W*	Columbine-lvd	△	w	5	my jl	W	Austria	1796	D	co	Jac aust 2 t 147		
3706 gállicum *W*	French	△	w	3	jn jl	Y	S Europe	1683	D	co	Plu phy t 198 f 6		
3707 triquetrum *P S*	winged	△	w	3	jn jl	P Y	Constant	1816	D	co	Vent cels t 97		
3708 angustifólium *W*	narrow-leaved	△	w	2	jn jl	Pk	S Europe	1738	D	co	Moris s 9 t 19 f 9		
3709 pruténicum *W*	Prussian	△	w	3	jl au	W	Germany	1759	D	co	Jac aust 2 t 153		



History, Use, Propagation, Culture,

distinguished by being of a darker green, a different shape, flat, and not curled, and of a disagreeable smell When eaten in mistake for parsley it occasions vomiting, which may be stopped by a very large dose of brandy It is deleterious to geese

662. *Imperatoria* A metaphorical name given to this plant to express its many virtues. For the same reason the English call it Masterwort The root, which is very acrid, is sometimes used in toothache, and an infusion of it in wine instead of bark in quartan agues

663. *Selinum* From σιλινη, a name of the moon, in allusion to the crescent-like form of the seeds when cut across. The Greeks seem to have used the word *selinon*, with reference to the same plants as we call umbelliferous.

664. *Angelica* So called, in allusion to its agreeable smell and medicinal qualities A archangelica (from αγχυ, superior, an augmentative prefix), is sometimes cultivated in gardens for its leaf-stalks, to be blanched and eaten as celery, or candied with sugar It is considered stimulant and anti-pestilential

665 *Lagusticum.* This plant, says Dioscorides, grows in great abundance in Liguria, near Mount Appennine, from which circumstance it derives its name L levisticum and scoticum are sometimes used as potherbs or ingredients in salads, and are accounted emmenagogue The root is carminative, and an infusion of the leaves is used as a purgative to calves in the Isle of Sky

666. *Hasselquistia.* So named by Linnæus, in memory of his pupil, Frederick Hasselquist, M D, who

3668 The only species

3669 Stem striated, Root fusiform divided, Rays of umbel hispid
3670 Leaves 3-parted thrice sinuated A doubtful species, scarcely distinct from the next
3671 Stem furrowed, Common involucre many-leaved, Leaflets wedge-shaped cut
3672 Stem furrowed with acute angles, Comm involucre 0, Leaflets lanceolate cut at the end with a callous point
3673 Stem rounded striated, Comm involucre 0, Sheaths of leaves loose, Leaflets filiform linear
3674 Stem rounded striated, Comm involucre 0, Leaflets trifid linear mucronate
3675 Stem striated, Lvs pinnat subcor Leaflets ov -obl at base cartil serrate, Upper sheaths enlarged leafless
3676 Stem woody naked beneath, Lower leaves bipinnate, Pinnæ lanceolate entire and cut serrate

3677 Leaves doubly pinnate ovate lanc serrated with the odd leaflet lobed
3678 Leaflets equal ovate lanceolate serrated
3679 Leaflets lanceolate serrated decurrent
3680 Leaves very much divaricating, Leaflets ovate serrate, Stem with the pedunc\es whorled
3681 Outer pair of leaflets united together, terminal leaflet stalked
3682 Leaflets equal ovate cut serrate

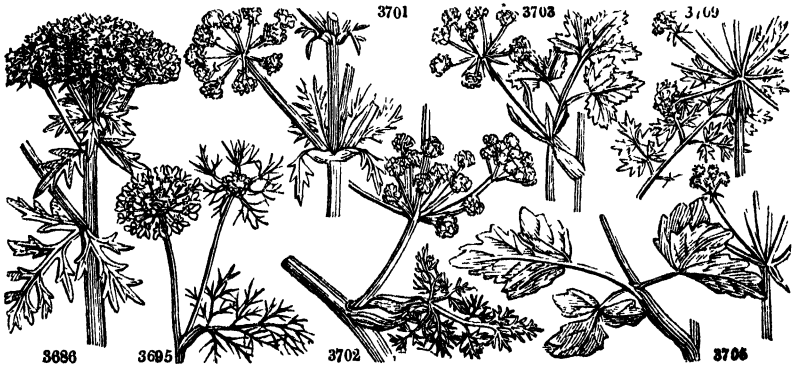
3683 Leaves multiple, Leaflets cut upwards
3684 Leaves biternate
3685 Leaves many times pinnate, Leaflets pinnately cut
3686 Leaves bipinnate, Leaflets confluent cut entire
3687 Leaves decompound cut cauline ternate lanceolate entire, Furrows of seed obsolete
3688 Lvs supra-decompound, Leaflets pinnatifid, Segm linear mucronate, Comm involucre scarcely any deciduous
3689 Lvs supra-decom. Leaflets wedge-shaped cut smooth, Comm involucre 2-leaved leafy, Ribs of seed mem smooth
3690 Involucre of the 1st umbel scarcely any of the lateral umbels membranous at base, Rays branched
3691 Leaves pinnate, Lower leaflets acute with a smaller one
3692 Leaves biternate, radical decompound, Leaflets lin lanc entire

3693 Leaves pinnate, Leaflets pinnatifid
3694 Leaves cordate

3695 Seeds scaly

3696 Leaflets linear very long simple
3697 Leaflets linear subulate rounded, Comm involucre 0
3698 Leaves supra-decompound, Leaflets lanc linear flat
3699 Leaves cut, Segm. 3-toothed unequal shining
3700 Pinnæ of leaves naked at base, Leaflets setaceous
3701 Leaflets with appendages, Umbels nearly sessile
3702 Leaves supra-decompound many cut acute decurrent, First umbel sessile

3703 Leaves obliquely cordate toothed, Teeth mucronate, Wings of seeds crisp
3704 Leaflets 3-lobed cut
3705 Leaves obtuse ovate at base lobed
3706 Leaflets wedge-shaped trifid, Segm oblong bluntish with a callous point at end
3707 Stem naked 3-cornered, Branches angular, Leaflets obl toothed crenate, Involucres many-leaved short
3708 Leaflets lanceolate obtuse mucronate entire sessile
3709 Leaves lanceolate entire the outer joined together



and Miscellaneous Particulars

travelled into the Holy Land, &c and died at Smyrna in 1752 Author of Travels in Palestine. A remarkable genus, supposed with some reason to be a monstrous alteration of a species of Tordylium

667 *Artedia* So named by Linnæus, in honor of Peter Artedi, a Swedish naturalist, one of the first who attempted to divide umbelliferous plants into genera His method was followed by Linnæus, and was, perhaps, not more defective than many of those which have been proposed in modern days He died in 1735

668 *Ferula.* From *ferire*, to strike The stalks were used as a rod for children, because they made more noise than harm F communis is one of the tallest of herbaceous plants The flower-stalk soon becomes dry after the seeds ripen, and then the Sicilians take out the pith and use it for tinder It is very abundant in Apulia, where it is eaten by buffaloes Gerarde says, it grew to the height of fifteen feet in his garden in Holborn The drug asafœtida is obtained from one or more species of this genus natives of Persia, and one species, the F. asafœtida, though introduced to our gardens in 1782, is now lost The drug is the inspissated juice of the root, which being bared of earth and cut across at the top, it oozes out, and when dry, is scraped off as opium is from the capsule of the poppy. The plant grows three feet high, with yellow flowers and hemlock-like leaves and habit

669. *Laserpitium.* The Latin name of the Silphion of the Greeks D'Herbelot says, that the natives of Africa called the plant *silphi* or *serpi*, whence the Latins formed *lac serpitium* and *Laserpitium.* (*Bibl. Or.* p. 493.

3710 silaifólium *W*	Sulphurw-lvd	☿	△	w	2	jn jl	P Y	Italy	1791.	D	co	Jac aus app t 44
3711 peucedanoides *W*	fine-leaved	☿	△	w	2	jn jl	Pk	Italy	...	D	co	Jac. ic. 2. t 350
3712 Síler *W*	mountain	☿	△	w	3	my jl	W	Austria	1640	D	co	Jac aust.2. t.145
3713 lúcidum *W.*	shining	☿	◯	cu	½	jl	P Pu	Switzerl.	1775	S	co	
3714 feruláceum *W*	Fennel-leaved	☿	△	w	1½	jn	W	Levant	1752.	D	co	Tourn.it.2. t 121
3715 pilósum *W en*	sulphur-colored	☿	◯	w	1	jn jl	P Y	.....	1759.	S	co	
3716 hirsútum *W*	hairy	☿	△	w	1	jn jl	P Y	Alps	1759	D	co	
670 PEUCE'DANUM *W*	SULPHURWORT					*Umbellifer æ*		*Sp.* 6—21				
3717 officinále *W*	officinal	☿	△	m	6	my jl	Y	England salt m		D	c l	Eng bot. 1767
3718 arenárium *P S*	sand	☿	△	w	5	jn jl	Y	Hungary	1816	D	c l	P rar hun 1. t 20
3719 itálicum *P S*	Italian	☿	△	w	8	my jl	Y	Italy	...	D	c l	Lob ic. 781
3720 alpéstre *W*	Alpine	☿	△	w	1½	jn jl	P Y	France	1739	D	c l	
3721 sibíricum *W*	Siberian	☿	△	w	3	jn jl	Y	Siberia	1804	D	c l	P rar hun.1 t 60
3722 aúreum *W.*	golden	☿	◯	cu	3	jn	Y	Canaries	1779	C	co	
*671. PASTINA'CA *W*	PARSNEP					*Umbellifer æ*		*Sp* 4—6				
3723 lúcida *W*	shining-leaved	☿	◯	w	1½	jn jl	Y	S. Europe	1771	S	s l	Jac vind 2 t 199
3724 sativa *W*	garden	☿	◯	cul	4	jl	Y	England ch pl		S	s l	Eng bot 556
3725 Opópanax *W*	rough	☿	△	cu	6	jn jl	Y	S Europe	1640	D	co	Gou il 19 t.13,14
3726 dissécta *Vent*	cut-leaved	☿	◯	w	1½	jn jl	W	Levant	1816	S	co	Vent. cels t 78
† 672 HERA'CLEUM *W*	COW-PARSNEP					*Umbellifer æ*		*Sp* 10—19				
3727 Sphondýlium *W*	common	☿	△	ec	4	my jn	W	Britain hed		D	co	Eng bot. 939
3728 flavéscens *W*	yellowish	☿	△	w	4	jn jl	W	Austria	1789	D	co	Jac aust 2 t 173
3729 angustifólium *W*	narrow-leaved	☿	△	w	4	my jn	W	Britain		D	co	Jac aust 2 t.174
3730 élegans *W*	rough-leaved	☿	△	w	3	my jn	W	Austria	1800	D	co	
3731 sibíricum *W*	Siberian	☿	△	w	2	my jn	G	Siberia	1768	D	co	Gmel sib 1 t 50
3732 Panáces *W*	Fig-leaved	☿	△	w	3	jl au	W	Siberia	1596	D	co	Lobel ic 701
3733 austríacum *W*	Austrian	☿	△	w	2	jn jl	W	Austria	1752	D	co	Jac aust 1 t 61
3734 alpínum *W*	Alpine	☿	△	w	1½	jn jl	W	Switzerl	1739	D	co	Barr ic 55
3735 pyrenáicum *Cusson*	Pyrenean	☿	△	w	3	jn jl	W	Pyrenees	1798	D	co	Hort. ber t. 53
3736 púmilum *W*	dwarf	☿	△	w	½	my jl	W	Dauphiny	1800	D	co	Vill delph 2 t 14
*673 TORDY'LIUM *W*	HARTWORT					*Umbellifer æ*		*Sp* 6—8				
3737 syríacum *W*	Syrian		○	w	¾	jl	W	Syria	1597	S	co	Jac vind 1 t 54
3738 officinále *W*	official		○	w	2½	jl	F	England corn fi		S	co	Eng bot 2440
3739 peregrínum *W*	oriental		○	w	2	jl	W	Levant	1596	S	co	Cam hor 37 t 11
3740 ápulum *W*	small		○	w	1½	jl	W	Italy	1759	S	co	Jac vind 1 t 53
3741 máximum *W*	great		○	w	2	jn jl	W	England corn fi		S	co	Eng. bot 1173
3742 sulfólium *W*	red-flowered		○	w	1½	jn jl	R	Carniola	1816.	S	co	Scop. car.194. t 8
674 ASTRAN'TIA. *W*	MASTERWORT					*Umbellifer æ*		*Sp* 4				
3743 máxima *B M*	Hellebore-lvd.	☿	△	pr	2	jn jl	Pk	Caucasus	1804	D	s p	Bot mag 1553
3744 májor *W*	great-black	☿	△	pr	2	my s	Str	Al of Eur	1596	D	p l	Ex bot 2 t 76
3745 minor *W*	small	☿	△	pr	½	my jn	Pk	Switzerl	1686.	D	p l	Bot cab 93
3746 carniólica *W*	Carniolan	☿	△	pr	1	my jn	Str	Carniola	1812.	D	p l	Jac aus app t 10
675 ZOSI'MIA *Hoffm*	ZOSIMIA					*Umbellifer æ*		*Sp* 1				
3747 absinthifolium *P. S*	Wormwood-lvd.		○	w	2	jl au	W	Persia	1816.	S	co	Vent. choix t 7
676 RU'MIA *Hoffm*	RUMIA					*Umbellifer æ*		*Sp* 2				
3748 tauríca *Hoffm*	Taurian	☿	△	cu	1	jl	W	Crimea	1819	D	co	
3749 capénsis *Lk.*	Cape		○	cu	1	s	W	C G H	1822	S	co	



History, Use, Propagation, Culture,

670 *Peucedanum* From πευκη, a pine-tree, and δανος, dwarf, a diminutive fir The plant was so called on account of its strong smell, which resembles resin

671 *Pastinaca* One of the names given by the Latins to the *Daucus* of the Greeks. It is derived from *pastus*, nourishment. P sativa is a well known culinary root, and grown also in agriculture for feeding cattle It was much in use during Catholic times to eat with salted fish In the north of Ireland a sort of beer is brewed from the roots mixed with hops, a very good wine is also made from them, and by distillation they yield an ardent spirit, similar to that afforded by the potatoe. The parsnep is much cultivated in Jersey and Guernsey, chiefly for feeding milch cows The variety preferred is called the Coquaine, the roots of which, Dr. Macculloch informs us (*Caled Hort Mem* 1 408), sometimes run four feet deep, and are rarely so small in circumference as six inches The time of sowing is February and March, in drills to admit of stirring the soil between the rows They should be thinned so as that each plant may have a surface of twelve or fourteen square inches, and, with the usual routine culture, the crop will be mature in October They may be taken up and housed like the carrot, or as wanted for use as they are not easily injured by frost, the latter mode is the best, where they are grown only for the table

P. opopanax (οπος, juice, παν, all, and ακος, cure. a cure for all complaints) produces from its stem, when it is cut, a gum resin which is a famous cure in the East for all sorts of maladies

672. *Heracleum.* Named after the hero Hercules, who, according to a modern French author, was not only a warrior but a great doctor and botanist. H. Sphondylium (from σφονδυλος, a vertebra, in allusion to the jointed stem), the *Heilkraut* of the Germans, is common in most parts of Europe The seeds smell somewhat

3710 Leaves pinnatifid, Segm lanceolate, Common involucre scarcely any, Stem smooth
3711 Leaflets linear-lanceolate veiny striated distinct
3712 Leaflets oval-lanceolate entire stalked
3713 Leaves supra-decompound linear-subulate smooth, Comm involucre pinnated
3714 Leaflets linear
3715 Hairy, Stem rounded simple, Lvs tern bipinnate, Leaflets alternate ovate pinnatifid cut wedge-shaped
3716 Leaves supra-decompound hairy, Leaflets many cut, Leaves of many-leaved involucre membranous at edge

3717 Leaves 5 times 3-parted filiform linear
3718 Leaves ternate decompound, Leaflets linear obtuse stiffish, Comm involucre scarcely any
3719 Leaves 3-parted filiform longer, Umbels deformed
3720 Leaflets linear branched
3721 Leaflets linear acute, First umbels sessile
3722 Leaves thrice pinnate, Cauline leaflets linear lanceolate · radical oblong many-cut

3723 Leaves simple cordate lobed shining acutely crenate
3724 Leaves simply pinnate
3725 Leaves pinnate, Leaflets with their front base cut out
3726 Stem rounded rough branched, Leaves bipinnatifid, Peduncles rigid villous

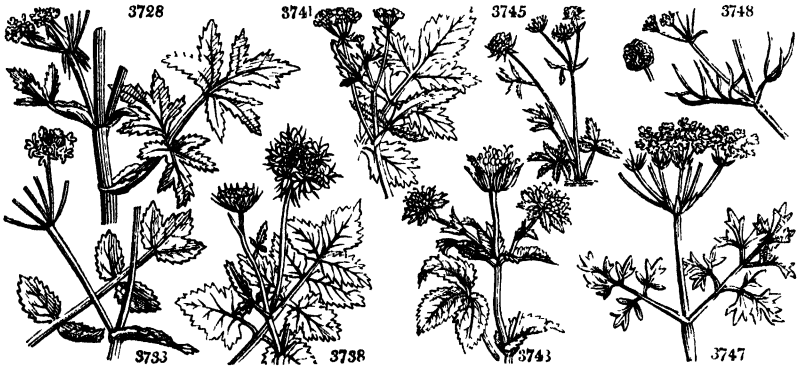
3727 Leaves pinnate, Leaflets 5 oblong pinnatifid acute toothed, Cor of one shape
3728 Leaves pinnate, Leaflets 5 oblong pinnatifid acuminate toothed rough at edge, Flowers radiant
3729 Leaves cruciate pinnate, Leaflets linear, Corollas floscculous
3730 Leaflets pinnatifid crosswise toothed
3731 Leaves pinnated, Leaflets 5 the intermediate sessile, Cor of one form
3732 Leaves pinnated, Leaflets 5 the intermediate sessile, Flowers radiant
3733 Leaves pinnated rugose on each side scabrous, Flowers somewhat radiant
3734 Leaves simple cordate obsoletely lobed serrated
3735 Leaves simple 3-leaved cordate toothed beneath pubescent
3736 Leaves simple and ternate many cut torn, Segments linear

3737 Involucres longer than the umbels
3738 Partial involucres the length of flowers, Leaflets ovate laciniate
3739 Seeds furrowed wrinkled plaited, Universal involucre 1-leaved trifid
3740 Umbellules remote, Leaves pinnated with roundish cut pinnæ
3741 Umbels clustered radiant, Leaflets lanceolate cut serrated
3742 Umbels clustered radiant, Leaflets angular toothed pubescent

3743 Radical lvs. palmate 3-lobed unequally twice serrated, cauline sessile lobed, Involucre longer than umbel
3744 Radical leaves 5-lobed, Lobes trifid acute toothed, Involucres bin lanceolate entire
3745 Radical leaves digitate, Leaflets about 7 lanceolate acute deeply toothed
3746 Radical leaves 5-lobed, Lobes oblong acutish trifid mucronate-toothed, Involucres entire

3747 Hoary, Leaves decompound, Leaflets wedge-shaped trifid, Flowers angular, Fruit villous

3748 Stem dichotomous knotty, Leaves decompound, Involucre short, Female flowers with a long ray
3749 Stems decumbent, Sheaths loose, Seeds smooth



and Miscellaneous Particulars.

like a bug Gmelin informs us, that the inhabitants of Kamtchatka, about the beginning of July, collect the footstalks of the radical leaves, and after peeling off the rind, which is very acrid, dry them separately in the sun, and then tying them in bundles, lay them up carefully in the shade in bags, in this state they are covered with a yellow saccharine efflorescence, tasting like liquorice, this being shaken off, is eaten as a great delicacy From the stalks thus prepared and fermented with bilberries the Russians distil an ardent spirit, which, Gmelin says, is more agreeable to the taste than spirits made from corn. A kind of ale is brewed from the leaves and seeds in Poland and Lithuania, and attempts have been made to extract sugar from this plant, but forty pounds of the dried stalks only yielded a quarter of a pound of powdery sugar. The young shoots may be eaten as asparagus Rabbits and swine are fond of the leaves, but not horses. H sibiricum is used in the same manner in the north of Siberia and Kamtchatka.

673 *Tordylium.* Bodæus à Stapel thinks that the derivation of the name is to be found in τορνος, a lathe, and ιλλω, to turn, because the seeds seem as if turned in a lathe But this seems to be a commentator's guess only

674 *Astrantia* From αστηρ, a star, and αντι, similar, so called with reference to the beautiful starlike dispositon of the involucrum of all the species, and of A. minor in particular

675 *Zosima* Named by Hoffmann, in honor of the three famous brothers Zosimades, the celebrated patrons of so many fine editions of the Greek classics. A remarkable plant, formerly referred to Heracleum, native of most of the eastern parts of the world

676 *Rumia.* Named by Hoffman after Rumia or Rumina, the goddess who presided over suckling, on

677. CA'CHRYS. *W* CACHRYS. *Umbelliferæ. Sp* 3—10

3750	Libanótis *W.*	smooth-seeded	♄ △	w	3	jl.au	Y	Sicily	1570.	D	co	Schk han 1 t.65
3751	Morisóni *W.*	Morison's	♃ △	cu	½	jl.au	Y	S Europe	1710.	D	co	Mor umb t.3.f.1
3752	panacifólia *W.*	Parsnep-leaved	♃ △	w	4	jl au	Y	Sicily	1752.	D	co	Boc. sic 1 t. 1

678. HIPPOMA'RATHRUM *Lk.* HIPPOMARATHRUM *Umbelliferæ. Sp.* 1.

3753	siculum *Lk*	hairy	♃ △	cu	3	jl.au	Y	Sicily	1640.	D	co	Bocc. sic t. 18

TRIGYNIA.

†679 VIBUR'NUM. *W* VIBURNUM *Caprifoliaceæ. Sp* 23—36.

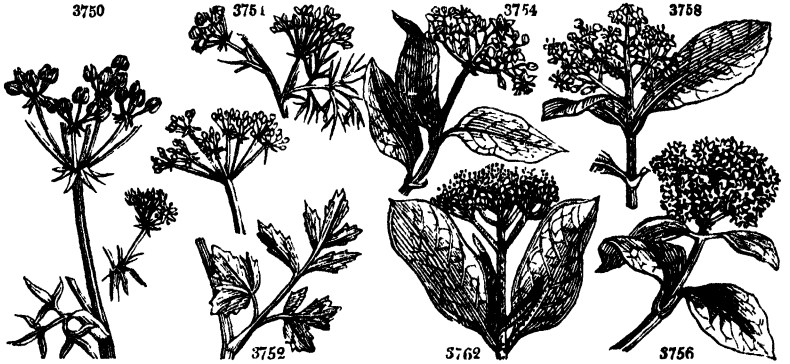
3754	Tinus *P. S*	co. Laurestine	or	4	mr d	W	S Europe	1596.	L	co	Bot. mag. 38
	α hirtum	*hairy*	or	4	mr d	W	S. Europe	...	L	co	
	β virgátum	*slender*	or	4	mr d	W	S. Europe	...	L	co	
	γ strictum	*upright*	or	4	mr d	W	S Europe	...	L	co	
3755	lúcidum *P S*	sh -lvd -Laurel	or	6	mr d	W	Spain	1596	L	co	Clus hist. 49
3756	rugósum *P S*	large-lvd -Laur	⌴ or	4	...	W	Canaries	1796	L	p.l	Bot mag. 2082
3757	prunifólium *W*	Plum-leaved	or	8	my jn	W	N Amer	1731	L	p l	Dend. brit 23
3758	odoratissimum *Ker*	sweet-scented	⌴ or		f	W	China	1818.	L		Bot reg 456
3759	squamátum *Muhl*	scaly	or	6	jl	W	N Amer	1822.	L	p l	Dend brit 24
3760	pyrifólium *Ph*	Pear-leaved	or	6	my jn	W	N Amer	.	L	p l	Dend brit. 22
3761	Lentágo *W*	tree	or	8	jl	W	N Amer	1761	L	p l	Dend. brit. 21
3762	núdum *W*	oval-leaved	or	8	my jn	Pa Y	N Amer	1752	L	p l	Bot. mag 2281
3763	daúricum *Pall*	Siberian	or	2	jn jl	W	Dahuria	1785	L	p l	Pall. ross 1 t 38
3764	obovátum *Walt*	obovate-leaved	or	2	my jn	W	N Amer	1812	L	p l	Bot cab. 1476
	β punicifólium	*narrow-leaved*	or	2	my jn	W	N Amer	1812	L	p l	
3765	cassinoides *W*	thick-leaved	or	3	jn jl	W	N Amer	1761	L	p l	Plu alm 381 3
3766	lævigátum *W*	Cassiober -bush	or	10	jl au	Pa B	N Amer	1724.	L	p l	Mil ic.1 t 83. f.1
3767	nítidum *W*	shining-l aved	or	2	my jn	W	N Amer	1758	L	p l	
3768	dentátum *Ph*	tooth-leaved	or	5	jn jl	W	N Amer	1736	L	p l	Dend brit. 25
3769	pubéscens *Ph*	downy tooth-lv	or	3	jn jl	W	N Amer	1736.	L	p l	
3770	lantanoides *Mich*	Lantana-like	or	5	my jn	W	N Amer	...	L	p l	Bot. cab 1570
3771	Lantána *W*	Wayfaring-tree	or	10	my jn	W	Britain	hed	L	p l	Eng. bot. 331
3772	mólle *Mich*	soft	or	6	jn jl	W	N. Amer	1812.	L	p l	
3773	acerifólium *W*	Maple-leaved	or	4	jn jl	W	N Amer	1736	L	co	Dend. brit. 118
3774	O'pulus *W*	Guelder Rose	or	10	my jn	W	Britain	moi w	L	p l	Eng bot 332
	β róseum	*Snowball-tree*	or	14	my.jn	W	.....	...	L	p l	
3775	Oxycóccos *Ph*	Cranberry-like	or	12	jl	W	N Amer	...	L	p l	Bot. cab. 1123
3776	édule *Ph*	eatable-fruited	or	12	jl	W	N Amer	1812.	L	p l	

680 SAMBU'CUS *W* ELDER *Caprifoliaceæ Sp.* 7—9

3777	E'bulus *W*	dwarf	cu	3	jn jl	P Pk	Britain	wa gr	D	co	Eng bot. 475
3778	chinénsis *Lindl*	Chinese	cu	4	s o	W	China	1823	D	co	
3779	nigra *W*	common	ec	15	my jl	W	Britain	hed	C	co	Eng. bot. 476
	β viridis	*green-fruited*	or	8	my jl	W			C	co	
3780	laciniáta *Lk*	Parsley-leaved	or	8	my jl	W	.. ...	...	C	co	Schm arb t. 144
3781	canadénsis *W*	Canadian	or	6	jn au	W	N Amer	1761	C	s l	Schmid. arb 142
3782	púbens *Mich*	pubescent	or	6	...	W	N Amer	1812	C	s l	
3783	racemósa *W*	red-berried	or	12	my jn	Gr y	S Europe	1596	C	co	Jac. ic. 1 t. 59

681 RHUS *W* SUMACH *Terebintaceæ Sp* 3—75

3784	Coriária *W*	Elm-leaved	ec	10	jl	G	S Europe	1596	L	co	Dend. brit. 136
3785	typhina *W*	Virginian	ec	20	jl au	G	N Amer	1629	S	co	Dend. brit 17,18
	β frutéscens	*dwarf*	cu	6	jl	G	- ...	..	S	co	



History, Use, Propagation, Culture,

which account all vascular substances, with firm outside but very cellular structure inside, were said to be Ruminosa The seeds of this genus are of that nature There was also a Dr Rumy, professor of agriculture in some Polish university

677 *Cachrys* One of the names given by the Romans to the Rosemary. According to Morison, the name was derived from *καιω*, to grow hot, on account of the carminative qualities of the plant The Cossacks of the Jaik chew the seeds of C odontalgica for pain in the teeth, and obtain relief by the copious salivation which follows their use This genus is well known by its corky large smooth seeds

678 *Hippomarathrum* From *ἱππος μαραθρον*, horse-fennel, on account of its size compared with that of common fennel.

679 *Viburnum* This name is derived, according to the account of Sebastian Vaillant, from the Latin word *viere*, to tie, on account of the pliability of the branches of some species. V tinus (*τινος*, small, dwarf, tiny) is one of the most ornamental of evergreen shrubs, with shining leaves and shewy white flowers, which appear during the winter months V. lucidum and strictum are taller and more tender than the common species, of which they are by many considered as only varieties

V. lantana (from *lento*, to tie) grows chiefly on calcareous soils it has pliant mealy twigs, and the bark affords a bird lime.

V. opulus, (alteration of *populus*) var roseum, is a most ornamental shrub, producing large white bunches of

3750 Leaves bipinnate, Pinnæ opposite linear rather pungent, Seeds furrowed smooth
3751 Leaves supra-decompound setaceous many-cut, Seeds even smooth
3752 Leaves pinnate and ternate, Leaflets oblong crenate

3753 Leaves bipinnate, Leaflets linear, Stem furrowed

TRIGYNIA.

3754 Leaves ovate oblong entire, Divisions of the veins and the young branches glandular hairy
α Leaves oval oblong beneath and at edge hairy
β Leaves lanceolate oblong at the edge and veins beneath hairy
γ Leaves ovate hairy on both sides stiff
3755 Leaves coriaceous ovate lanceolate shining entire
3756 Leaves broad ovate rugose hairy beneath, Common involucre 7-leaved
3757 Leaves obovate roundish and oval smooth finely serrated with edged stalks
3758 Evergreen smooth, Leaves coriaceous elliptical oblong distantly toothed
3759 Leaves oblong obtusely serrated, Stalks and peduncles with scaly pubescence
3760 Smooth, Leaves ovate nearly acute subserrate, Leaf-stalks smooth, Fruit ovate oblong, Cymes stalked
3761 Leaves broad ovate acuminate finely serrated, Stalks edged crisp
3762 Leaves obl narr at base rather blunt entire revolute at edge smooth above shining with netted veins
3763 Leaves ovate serrate dotted with hairs, Cymes dichotomous few-flowered
3764 Smooth, Leaves obovate crenate toothed or entire obtuse, Umbels sessile, Fruit roundish ovate

3765 Smooth, Leaves ovate lanceolate acute at each end crenate revolute at edge, Stalks keeled glandular
3766 Leaves obl lanc unequally and finely serrated at base wedge-shaped and entire, Branches compr square
3767 Leaves linear lanceolate shining above obsoletely serrated or entire, Branches square
3768 Leaves ovate tooth-serrated plaited
3769 Leaves oval acuminate tooth-serrated plaited pubescent
3770 Somewhat decumbent, Lvs rounded cord abruptly acumin toothed with the stalks and nerves powdery
3771 Leaves ovate oblong cordate serrate beneath rugose with veins downy
3772 Leaves roundish cord furrowed with plaits beneath downy with a very soft pubescence, Cymes radiant
3773 Leaves cord ovate generally 3-lobed loosely serrat stalks without glands at base with stipules and downy
3774 Leaves 3-lobed acuminate toothed, Stalks glandular smooth

3775 Leaves 3-lobed acute behind 3-nerved divaricating rarely toothed, Stalks glandular, Cymes radiant
3776 Leaves 3-lobed behind obtuse 3-nerved, Lobes very short tooth-serrated, Serrat acumin Cymes radiant

3777 Cymes 3-parted, Stipules leafy, Stem herbaceous, Leaves pubescent beneath
3778 Cymes with many abortive fleshy flowers, Stem herbaceous warted, Leaves quite smooth
3779 Cymes 5-parted, Stem arborescent

3780 Flowers umbelled, Leaves pinnatifid, Stem shrubby
3781 Cymes 5-parted, Leaves about twice pinnated, Stem shrubby
3782 Panicle ovate, Leaflets lanceolate acuminate unequal at base, Leaf-stalk hairy, Stem shrubby
3783 Panicle ovate, Leaflets oblong acuminate nearly equal at base, Stalks smooth, Stem arborescent

3784 Leaflets ovate oblong obtuse mucronate scabr above villous beneath, The last joints of stalk membranous
3785 Leaflets lanceolate acuminate finely serrated hairy beneath



and Miscellaneous Particulars

white flowers, resembling those of Hydrangea, and like them abortive With lilac, laburnum, and scarlet thorn it forms an elegant group

680 *Sambucus* A musical instrument called by the Latins *sambuca*, is supposed to have been made of the wood of this tree, on account of its hardness The tree was always famous for this quality, so that Pliny says it consists of nothing but skin and bones (*b* xvi c 30) S ebulus is supposed to prevent diseases in swine if used as litter. the root is violently cathartic, the leaves drive away mice, and the berries dye blue.

S nigra with its varieties, and S racemosa, are very shewy trees in shrubberies when in flower and fruit. S nigra is narcotic, purgative, and acrid, the flowers in decoction are diaphoretic and expectorant, used to flavor vinegar, and deleterious to turkeys The French put layers of them in heaps or casks of apples, to which they communicate a most agreeable odor The berries are poisonous to poultry, but make a powerful wine much in esteem among country people As the common elder will grow either exposed to the sea breeze or on high mountains, it is recommended as a nurse-plant in forming plantations To thrive and be productive as a fruit tree however, it requires a deep, rather moist, and rich soil

681 *Rhus.* Derived from the same root as Rosa, *rhudd*, in Celtic, signifying red, on account of the color of the fruit. *Pus*, in Greek Sumach, its English name, is an alteration of *summâq*, its name in Arabic (*Forsk*) In some of the species of this genus the flowers are hermaphrodite, in others, as R. elegans, pentaphyllum, and Toxicodendron, the male and female are on separate plants In R. toxicodendron, they

3786	javánica *W.*	Java	cu	10	jl s	W	Java	1799.	S	p.l	Dend. brit *15*
3787	glábra *W.*	smooth	or	8	jl.s	G	N Amer.	1726	L	p l	Di el. t.243 f 314
3788	élegans *W.*	scarlet	or	10	jl	G	N. Amer	1726.	S	p l	Dend. brit. 16
3789	viridiflóra *Ph.*	green-flowered	or	*15*	jl	G	N. Amer.	...	S	p.l	
3790	púmila *Ph.*	dwarf poisonous	p	1	jl	G	N. Amer	1806.	S	p l	
3791	Vérnix *W.*	Varnish	or	*15*	jl	G	N. Amer.	1713.	L	co	Dend. brit. 19
3792	succedánea *W.*	red Lac	ec	10	jn	G	China	1768	S	p.l	Kæm. am. t. 795
3793	Bucku-Améla *Wall.*	long-leaved	or	10	...	G	Nepal	1823	S	co	
3794	juglandifólia *Wall.*	Walnut-leaved	or	10	...	G	Nepal	1823	S	co	
3795	glaúca *Desf.*	glaucous	cu	2	jl	G	C. G H.	1821.	C	p l	
3796	oxyacántha *Schousb.*	hawthorn	or	6	...	G	Barbary	1823.	C	p l	
3797	oxyacanthoides *Dum*	prickly	or	6	...	G	Barbary	1824	C	p.l	
3798	Zízyphina *Ten.*	Parsley-leaved	cu	3	...	G	Sicily	1824	C	p l	
3799	semialáta *W.*	Service-leaved	cu	6	...		Macao	1780	L	p l	Mur co g 6. t 3
3800	copallina *W.*	Lentiscus-leav	ec	6	au s	G	N. Amer	1688	S	p l	Jac sch 3 t. 341
3801	Toxicodéndron *Ph*	Poison-Oak	p	3	jn jl	G	N Amer	1640.	S	co	Duh 2. t. 48
	α radicans L.	*common*	p	3	jn jl	G	N Amer	...	S	co	Bot mag 1806
	β véra	*true*	p	2	jn jl	G	N Amer	...	S	co	Duh nov n t.48
	γ microcárpa	*small-fruited*	p	2	jn jl	G	N Amer.	...	S	co	Dill elth f 375
3802	aromática *Ph.*	female sweet	or	8	my	G	N Amer	1759	L	p l	T. in an m.5.t.30
	β suavéolens W	*male sweet*	or	6	my	G	N Amer.	...	L	p l	
3803	pendulina *Jacq*	pendulous	cu	3	...	G	C. G H.	...	L	p.l	
3804	dentáta *W*	rough-stalked	cu	2	...	G	C. G H	1798	C	p l	
3805	cuneifólia *W.*	wedge-leaved	cu	2	...	G	C G H	1816	C	p.l	
3806	incísa *W*	cut-leaved	cu	2	...	G	C G H	1789	C	p l	
3807	tomentósa *W.*	woolly-leaved	cu	10	...	G	C. G H	1691	C	p l	Com. ho 1 t 92
3808	villósa *W*	hairy	cu	6	jl	G	C G. H	1714	C	p l	Pl al t 219 f 8
3809	pubéscens *W*	pubescent	cu	10	...	G	C G H	1800	C	p l	
3810	viminális *W*	Willow-leaved	cu	2	...	G	C G H	1774	C	p l	Jac sch 3 t. 344
3811	angustifólia *W*	narrow-leaved	cu	6	...	W	C G H	1714	C	p l	Pl al t 219 f 6
3812	rosmarinifólia *W*	Rosemary-leav	cu	4	...	G	C G H	1800	C	p l	Bur afr t 91 f 2
3813	pentaphýlla *Desf*	various-leaved	cu	4	...	G	Barbary	1816	C	p l	Desf. atl 1. t 77
3814	lævigáta *W.*	polished-leaved	cu	6	...	G	C. G H	1758.	C	p l	
3815	lúcida *W*	shining-leaved	cu	6	jl au	G	C G H	1697	C	p l	Bur afr t 91 f 1
	β minor	*small-shin -lved.*	cu	6	jl.au	G	C G H	1697	C	p l	Com ho 1 t 93
3816	Cótinus *W*	Venetian	or	6	jn jl	G	S Europe	1656.	L	co	Jac au 3. t. 210

682. CASSI'NE. *W.* Cassine — *Rhamni. Sp* 4—8.

3817	capénsis *W*	Cape Phillyrea	or	1	jl.au	W	C G H	1629	C	s l p	Bur afr t. 85
3818	Colpoon *W*	Colpoon-tree	or	6	...	W	C G H	1791	C	s l p	Bur afr t 86
3819	Maurocénia *W*	Hottentot Cher	or	5		W	C G H	1690	C	s l p	Di el t 121 f 147
3820	xylocárpa *Vent*	bony-seeded	or	3		Pa.Y	Antilles	1816	C	s l p	Vent Ch t. 23

683 SPATHE'LIA. *W* Spathelia — *Terebintaceæ Sp* 1

3821	simplex *W*	Sumach-leaved	tm	40	...	R	Jamaica	1778	S	s p	Bot reg 670

†684 STAPHYLE'A. *W.* Bladder-nut — *Rhamni Sp.* 2—4

3822	pinnáta *W*	five-leaved	or	6	ap jn	W	England	hed	L	co	Eng bot 1560
3823	trifólia *W*	three-leaved	or	6	my jn	W	N Amer	1640	S	co	Schm. arb. t 81



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are polygamous males, being mixed with the hermaphrodites The species from the Cape of Good Hope rarely flower in this country, and are chiefly cultivated for the sake of their foliage, which is neat and not susceptible of injury from bad management

R. Coriaria is used instead of oak bark for tanning leather, and it is said that that of Turkey is chiefly tanned with this plant The seeds are in common use at Aleppo at meals to provoke an appetite. Both leaves and seeds are used in medicine as astringent and styptic

R. javanica in China affords an oil by bruising the berries and boiling them in water · they use it as a varnish, but it does not keep its polish so well as the oil of R vernix.

R. glabra has berries which dye red, and the branches boiled with the berries afford a black ink-like tincture. This plant is like a weed in some parts of North America, where it overruns land left for a few years in pasture.

R vernix affords the true Japan varnish, which oozes out of the tree on its being wounded, and grows thick and black when exposed to the air It is so transparent, that when laid pure and unmixed upon boxes or furniture, every vein of the wood may be clearly seen With it the Japanese varnish over the posts of their doors and windows, their drawers, chests, boxes, scymitars, fans, tea-cups, soup-dishes, and most articles of household furniture made of wood. The milky juice of the plant stains linen a dark brown. The whole shrub is in a high degree poisonous; and the poison is communicated by touching or smelling any part of it In forty-eight hours inflammation appears on the skin, in large blotches, principally on the extremities, and on the glandular parts of the body · soon after small pustules rise in the inflamed parts, and fill with watery matter, attended with burning and itching In two or three days the eruptions suppurate; after which the inflammation subsides, and the ulcers heal in a short time. It operates, however, somewhat differently upon

3786 Leaflets ovate acuminate serrate beneath downy
3787 Leaflets lanceolate acuminate with close serratures smooth on both sides whitish beneath
3788 Leaflets lanceolate acuminate in the middle distantly serrated smooth on both sides, Flowers dioecious
3789 Smoothish, Leaflets lanceolate oblong serrated downy beneath, Racemes erect green
3790 Dwarf, Branches and leaf-stalks pubescent, Leaflets oval, Fruit very downy
3791 Leaflets entire annual opaque, Leaf-stalk entire equal
3792 Leaflets entire perennial shining, Leaf-stalk entire equal
3793 Leaves very large coarse rugose and downy
3794 Leaves pinnated in 9 pair rugose smooth above
3795 Leaflets obcordate, some of them very glaucous
3796 Stem shrubby unarmed, Leaves ternate hoary cuneate ovate, the middle one longest
3797 Prickly, Leaves ternate smooth, Leaflets narrow wedge-shaped at the end 3-lobed and entire
3798 Spiny, Leaflets wedge-shaped toothed beyond the middle, above shining with prominent nerves
3799 Leaflets unequally serrated, Outer petioles with membranous joints
3800 Leaflets entire, Leaf-stalk membranous jointed
3801 Stem rooting
α Leaves large entire or rarely toothed, Creeping
β Dwarf, Leaves variously sinuated downy about flowering time, Erect
γ Leaflets oblong oval with a long point, Fruit very small
3802 Leaflets sessile ovate rhomb-shaped cut serrate hairy

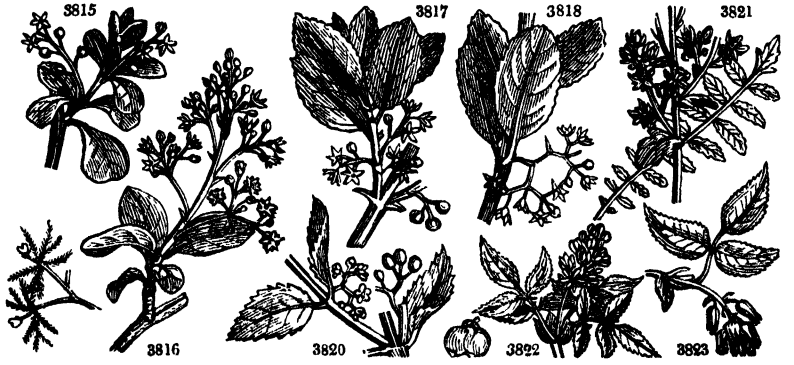
3803 Leaflets lanceolate entire sessile smooth on each side ciliated, Common stalk pubescent, Branches pend.
3804 Leaflets obovate mucronate toothed smooth, Stem scabrous
3805 Leaflets sessile wedge-shaped very smooth 7-toothed, Teeth mucronate
3806 Leaflets sessile wedge-shaped cut pinnatifid beneath downy and veiny
3807 Leaflets stalked rhomb-shaped angular downy beneath
3808 Leaflets obovate entire sessile hairy on both sides
3809 Leaflets obovate mucronate smooth, Branches villous
3810 Leaflets linear lanceolate entire smooth narrowed at base the intermediate one stalked
3811 Leaflets stalked linear lanceolate entire downy beneath
3812 Leaflets sessile linear revolute rusty beneath
3813 Prickly, Leaves fingered, Leaflets linear lanceolate at the end toothed or entire
3814 Leaflets oblong entire sessile acute on each side smooth, Panicle terminal long
3815 Leaflets obovate sessile very narrow at the base smooth on both sides, Corymbs axillary

3816 Leaves obovate

3817 Leaves stalked ovate retuse crenated, Panicle twice as short as leaf
3818 Leaves stalked ovate subserrate entire at base
3819 Leaves sessile entire obovate coriaceous
3820 Leaves stalked ovate subserrate, Peduncles dichotomous shorter than the leaves, Fruit ovate

3821 Leaves like the mountain ash, Flowers in long erect panicles from among the leaves

3822 Leaves pinnate
3823 Leaves ternate



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different constitutions, and some are incapable of being poisoned with it at all Persons of irritable habits are most liable to receive it.

Rhus aromatica and suaveolens, the male and female of one species, have been made into a distinct genus called *Schmaltzia*, by Desvaux and Turpinia, and afterwards *Lobadium*, by the ingenious M Rafinesque Schmaltz The expressed oil of the seed of this species, and also of R. succedanea, acquires the consistence of suet and serves for making candles.

R Toxicodendron is poisonous to some persons, like R. vernix, but in a less degree. Kalm relates, that of two sisters, one could manage the tree without being affected by its venom, whilst the other felt its exhalations as soon as she came within a yard of it, or even, when she stood to windward of it, at a greater distance; that it had not the least effect upon him, though he had made many experiments upon himself, and once the juice squirted into his eye, but that on another person's hand, which he had covered very thick with it, the skin, a few hours after, became as a piece of tanned leather, and peeled off afterwards in scales.

R. pumila is another dangerous species Lyons, the collector, suffered severely for several weeks, after only collecting the seeds

R cotinus is cultivated for tanning leather near Valcimara in the Apennines, where it is called Scotino.

682. *Cassine* An American name These are shrubs with handsome foliage, but generally inconspicuous white or green flowers. C Maurocenia has its specific name in honor of the Venetian senator F Mauroceni, who had a fine garden at Padua.

683 *Spatheia*. The upright habit and want of branches make this tree resemble a palm-tree, anciently called Ζραθη. A very handsome stove shrub, rarely flowering.

684. *Staphylea*. From σταφυλη, a bunch, in which form its fructification is disposed Handsome hardy

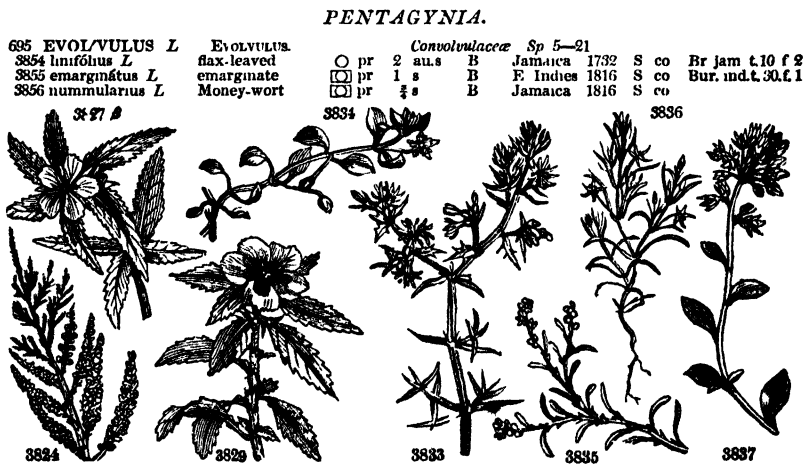
*685. TA'MARIX. *W.*	Tamarisk.					*Portulaceæ.*	*Sp.* 3—18						
3824 gállica *W.*	French	♃		or	12	my o	F	England	so. co.	C	s l	Eng. bot. 1318	
3825 articulâta *W.*	Indian	♀	□	or	30	...	Pk	E. Indies	...	C	l p	Vah. sym. 2. t. 32	
§3826 germánica *W.*	German	♃		or	8	jn s	Pk	Germany	1582.	C	m.s	Mil. ic. t. 262. f. 2	
686. TURNE'RA. *W.*	Turnera.					*Portulaceæ*	*Sp.* 6—23.						
3827 ulmifólia *W.*	Elm-leaved	♃	□	or	8	jn s	Y	Jamaica	1733	C	p.l	Hort. cliff. t. 10	
β angustifólia B. M.	*narrow-leaved*	♃	□	or	8	ap s	Pa.Y	Jamaica	1733.	C	s p	Bot. mag 281	
3828 élegans *Otto.*	elegant	♃	□	or	3	...	Pa Y	Brazil	1821.	C	s p		
3829 trionifióra *Sims.*	Ketmia	♿	△	or	2	ja.d	Pa.Y	Brazil	1812.	C	s p	Bot. mag. 2106	
3830 Pumiléa *W.*	Nettle-leaved		◎	cu	½	jl	Y	Jamaica	1796.	S	s l	Sl. ja. 1 t. 127. f 6	
3831 cistoides *W.*	Betony-leaved		○	cu	½	jn o	Y	America	1774.	S	s.l	Pl. ic. t. 150. f. 1	
3832 racemósa *W.*	clustered		◎	or	2	jl.au	Y	Siberia	1789.	S	s l	Jac. vind. 3. t. 94	
687. DRY'PIS *W.*	Drypis.					*Caryophylleæ*	*Sp* 1.						
3833 spinósa *W.*	prickly		○	cu	½	jn jl	P Pu	Italy	1775.	S	s.l	Bot. mag. 2216	
688. AL/SINE. *W.*	Chickweed					*Caryophylleæ*	*Sp.* 3—6.						
3834 média *W*	common		○	w	1	jl s	W	Britain	fields.	S	co	Eng. bot. 537	
3835 segetális *L.*	corn		○	w	1	jl s	W	France	1805.	S	co		
3836 mucronáta *L.*	bristly		○	w	1	jn jl	W	S Europe	1777	S	cc	Fl. græc. 293	
689. TELE'PHIUM. *W*	Orpine.					*Portulaceæ*	*Sp* 1—2.						
3837 Imperáti *W*	true	♃	△	w	1	jn au	W	S. Europe	1658	D	s.l	Lam. ill. t. 213	
690. CORRIGI'OLA *W*	Strapwort.					*Portulaceæ*	*Sp.* 2—3						
3838 littorális *W*	sand		○	cu	½	jl au	W	England	so co	S	s	Eng bot. 668	
3839 telephiifólia *Pourr*	Orpine-leaved	♃	△	cu	½	jl au	W	Spain	1822.	S	s		
691 PHARNA'CEUM. *W*	Pharnaceum					*Caryophylleæ*	*Sp* 5—22						
3840 Cervián*a W.*	umbelled		○	cu	1	jn	W	Russia	1771	S	co	Gm si 3. t 20 f 2	
3841 lineáre *W*	linear-leaved	⚘		cu	½	my jn	W	C G H	1795	C	s l	Bot. rep 326.329	
3842 Mollúgo *W*	Ladies' Bedstr	⚘	□	cu	½	jl au	W	E. Indies	1752.	C	s l	Bur ind t 5 t 4	
3843 incánum *W*	hoary	⚘		cu	1	my o	W	C G H	1782	C	s l	Bot. mag. 1883	
3844 dichótomum *W.*	forked		◎	cu	½	jl	W	C G H.	1783	C	s.l		
692 PORTULACA'RIA. *W*	Purslane-tree					*Portulaceæ.*	*Sp* 1						
3845 áfra *W*	African	⚘		cu	3	...	Pu	Africa	1732.	C	r m	Jac. col. 1. t. 22	
693 BASE'LLA. *W*	Malabar-Nightshade					*Chenopodeæ*	*Sp* 5						
3846 rúbra *W*	red	♃	◎	cul	8	jl s	Pk	E Indies	1731	S	r m		
3847 nigra *Lour.*	black	♃	◎	cul	3	jl s	W	China	1822.	S	r m		
3848 álba *W.*	white	♃	◎	cul	8	jl n	W	E. Indies	1688	S	r m	Plu al. t. 63. f. 1	
3849 lúcida *W*	shining	♃	◎	cul	6	jl n	W	E. Indies	1802.	S	r m		
3850 cordifólia *P. S.*	heart-leaved	♃	◎	cul	6	jl n	P Pu	E. Indies	1802.	S	r.m		

TETRAGYNIA.

694 PARNAS'SIA. *W.*	Grass of Parnassus.					*Hypericineæ*	*Sp.* 3—5.						
3851 palustris *W*	marsh	♃	△	pr	½	jl au	W	Britain	bogs	D	m s	Eng bot 82	
3852 carolinián*a Ph.*	Carolina	♃	△	pr	½	my jn	W	N Amer	1802	D	m s	Bot mag 1459	
3853 asarifólia *Ph*	Asarum-leaved	♃	△	pr	½	jl au	W	N Amer	1812	D	m s	Vent. mal. t. 39	

PENTAGYNIA.

695 EVOL/VULUS *L*	Evolvulus.					*Convolvulaceæ*	*Sp* 5—21						
3854 linifólius *L*	flax-leaved		○	pr	2	au.s	B	Jamaica	1732	S	co	Br jam t. 10 f 2	
3855 emarginátus *L*	emarginate		◎	pr	1	s	B	E Indies	1816	S	co	Bur. ind. t. 30. f. 1	
3856 nummularius *L*	Money-wort		◎	pr	½	s	B	Jamaica	1816	S	co		



History, Use, Propagation, Culture,

shrubs. S. pinnata has hard smooth nuts, which are strung for beads by the Catholics in some countries, while in others the kernels, though bitter, are eaten by the inhabitants.

685. *Tamarix* Tamarisci were people who inhabited the Spanish side of the Pyrenees, where one species grows abundantly on the banks of the Tanaris, now called the Tambra T. gallica, as it stands the sea breeze, is sometimes used as a hedge plant in such situations.

686. *Turnera.* So named by Plumier, in memory of William Turner, M D. Prebendary of York, &c. author of " A new Herball," London, 1551 died in 1568 All the species are of the easiest culture, but few of them of any beauty. They are chiefly weeds with yellow Cistus-like flowers.

687. *Drypis.* From δρυπτω, to tear. Its leaves are armed with stiff spines

688. *Alsine.* From αλσος, shady place, where alsine loves to grow. Little weeds of no beauty. *Morgeline,* Fr.

689. *Telephium.* Pliny says, Telephus was a king of Mysia, and had his wounds cured by Achilles with this plant. A little inconspicuous weed, with the appearance of a minute Euphorbia.

690. *Corrigiola.* A diminutive of *corrigia,* a thong, and applied to the plant we call Polygonum aviculare,

3824 Bractes shorter than flower-stalks, Spikes lateral panicled, Leaves lanceolate subulate stem-clasping
3825 Flowers sessile, Spikes lateral, Leaves very short sheathing, Branches with turbinate mucronate joints
3826 Spikes terminal solitary, Bractes longer than flower-stalks, Leaves linear lanceolate sessile

3827 Flowers sessile, Leaves oblong acute serrate pubescent with two glands at base

3828 Flowers sessile, Leaves ellipt cuneate obtusely serrated scabrous with two glands at base
3829 Bractes subulate, Leaves ovate acute at each end with two glands at the base
3830 Flowers sessile, Leaves without glands
3831 Peduncles axillary leafless, Leaves serrated at end
3832 Raceme terminal long, Leaves ovate unequally obtusely serrated

3833 A small glaucous plant with rigid prickly leaves

3834 Petals bipartible, Leaves ovate cordate
3835 Petals entire, Leaves subulate
3836 Petals entire short, Leaves bristly, Calyxes awned

3837 Leaves alternate

3838 Flowers stalked, Calyxes membranous at edge
3839 Stem diffuse procumbent, Leaves oblong ovate, Branches leafless

3840 Peduncles umbelled lateral as long as linear leaves
3841 Umbels unequal, Leaves linear distant
3842 Peduncles 1-flowered lateral, Flowers as long as leaves, Stem depressed
3843 Common peduncles very long, Leaves linear, Stipules hairy
3844 Peduncles axillary elongate dichotomous, Leaves whorled linear

3845 A fleshy shrub with many small opposite fleshy roundish leaves

3846 Leaves flat, Peduncles simple
3847 Leaves round ovate, Spikes lateral
3848 Leaves ovate wavy, Peduncles simple longer than the leaf
3849 Leaves cordate, Peduncles clustered branched
3850 Leaves cordate roundish, Peduncles simple shorter than the leaf

TETRAGYNIA.

3851 Radical leaves cordate acuminate, Nectaries many-parted
3852 Radical leaves nearly orbicular, Nectaries with 3 bristles
3853 Radical leaves reniform, Petals unguiculated, Nectaries 3-parted

PENTAGYNIA.

3854 Leaves linear lanceolate sessile, Peduncles 1-3-fl a little longer than the leaves
3855 Leaves reniform repand
3856 Leaves roundish, Stem creeping, Flowers nearly sessile



and Miscellaneous Particulars

in allusion to the long and slender shoots of that plant. The Corrigiola of modern times is related to the Polygonum.

691 *Pharnaceum* Named after Pharnaces, king of Pontus, who is said by Pliny to have been the first to use the plant. Pretty little herbaceous plants, with fine leaves, and elegant umbels of usually white flowers.

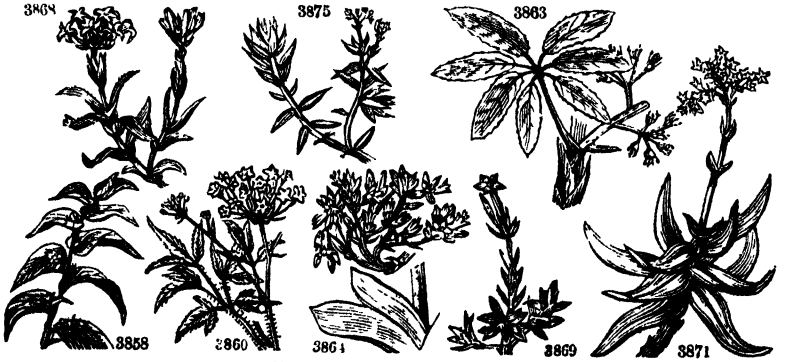
692. *Portulacaria*, that is to say, a Portulaca-like plant. The leaves of this plant resemble purslane, whence also the English name, as well as the Latin name.

693 *Basella.* A Malabar name. The species of this genus are used in China as spinage plants · they are also raised on a hotbed at Paris in spring, and transplanted into a warm border for the same purpose, and are said to furnish a summer spinage equal to that of the orache.

694 *Parnassia.* From Mount Parnassus, the abode of grace and beauty, where, on account of the elegance of its form, this plant is feigned to have first sprang up. P. palustris is one of the most elegant of marsh plants, well deserving a place in aquatic collections.

695 *Evolvulus.* Derived from *evolvo*, to turn, in the same sense as Convolvulus, which this genus entirely resembles in habit.

3857	alsinoides *L.*	Chickweed	pr	½	jn jl	B	E. Indies	1733.	S	co	Bur zeyl t 6.f.1	
3858	latifólius *Ker.*	broad-leaved	pr	2	jn jl	W	Brazil	1819.	D	co	Bot reg. 401	
696.	ARA'LIA. *W.*	ARALIA				*Araliaceæ*	*Sp.* 4—32.					
3859	spinósa *W.*	Angelica-tree	or	8		W	Virginia	1688.	R	p.l	Dend. brit. 46	
3860	hispida *Ph*	hispid	or	2	jn jl	W	N. Amer	1799.	R	p l	Bot mag. 1085	
3861	racemósa *Ph.*	berry-bearing	or	4	jn s	W	N Amer.	1658.	D	s p	Mor s. 1 t 2 f 9	
3862	nudicaúlis *Ph*	naked-stalked	or	4	jn jl	W	N. Amer	1731.	D	s p	Pl. al. t. 238. f. 5	
*697.	ACTINOPHYL'LUM *R. & P*	ACTINOPHYLLUM				*Araliaceæ.*	*Sp* 1—6.					
3863	digitatum *Wall.*	finger-leaved	or	10	...	G	E. Indies	1820.	C	s.l		
*698.	RO'CHEA. *Dec.*	ROCHEA.				*Crassulaceæ.*	*Sp* 7.					
3864	falcáta *P S*	sickle-leaved	or	2	jn s	R	C G. H	1785.	C	s l	Bot. mag 2035	
§3865	coccínea *P S*	scarlet	or	1	jn au	S	C G H.	1710	C	s.l	Bot mag. 995	
§3866	cymósa *Haw.*	cymose	or	½	au	R	C G H.	1800.	C	s l		
§3867	flava *Haw*	yellow	or	1	au s	Y	C G H	1802	C	s.l	Pl al t. 314 f 2	
§3868	odoratíssima *Haw.*	sweet-scented	or	1	jn jl	Pk	C G H	1793.	C	s l	Bot rep 26	
§3869	jasminea *Sms*	jasmine-like	or	½	ap my	W	C G H	1815.	C	s.l	Bot mag 2178	
§3870	versicolor *Burch*	changeable	or	2	mr s	R	C G H	1817.	C	s l	Bot reg. 320	
*699	CRAS'SULA *W*	CRASSULA				*Sempervivæ*	*Sp* 44—83					
3871	perfoliáta *L.*	perfoliate	or	3	jl au	W	C G H.	1725.	C	s.l	Plant. grass 13	
3872	ramósa *W*	branching	or	2	jl au	Pk	C G H	1774.	C	s l		
3873	tetragóna *W.*	square-leaved	or	2	au	W	C G H	1711.	C	s l	Plant grass 19	
§3874	móllis *W*	soft	or	1	au	W	C G H.	1774.	C	s l		
3875	acutifólia *P S*	acute-leaved	or	½	s n	W	Greece?	1795	C	s l	Plant grass t. 2	
§3876	nudicaúlis *W*	naked-stemmed	or	½	my s	G	C G. H	1732.	C	s l	Plant. grass 133	
3877	arboréscens *W*	tree	or	3	my jn	Pk	C G H	1739	C	s l	Bot. mag 384	
3878	obliqua *W*	oblique-leaved	or	4	ap my	R	C G H.	1759.	C	s l	Plant grass 79	
3879	láctea *W*	white	or	¾	s o	W	C G H	1774.	C	s.l	Bot mag 1771	
§3880	cultráta *W.*	sharp-leaved	or	1	jl au	W	C G H.	1732	C	s.l	Bot. mag 1940	
3881	ciliáta *W*	ciliated	or	½	jl au	Y	C G H	1732	C	s l	Plant grass 7	
§3882	undulâta *Haw*	wave-leaved	or	½	au n	W	C G H.	1797.	C	s l	Bot cab 584	
3883	scábra *W*	rough-leaved	or	½	jn jl	Pk	C G H	1730	C	s.l	Di el t 99 f 117	
§3884	biconvéxa *Haw*	double-convex	or	½	au	W	C G H	1800	C	s l		
§3885	obvallâta *W*	Houseleek-lvd	or	½	jl au	W	C G H.	1795	C	s l	Plant grass. 61	
3886	ramulifióra *Lk*	branch-flower	or	1	jn jl	W	C G H	1822	C	s l		
3887	corymbulosa *Lk*	corymbulose	or	1	jl au	W	C G H.	1822.	C	s l		
3888	columnáris *W*	columnar	or	½	...	W	C G H	1789	C	s l	Burm afr t. 9	
3889	imbricáta *W*	imbricated	or	1	jn jl	W	C. G H	1760	C	s l		
§3890	canéscens	grey	or	½	jl au	W	C G H	1800	C	s l		
	Globuléa canéscens	Haw										
3891	perfoliáta *P S*	threaded	or	1	s	Pk	C G H	1785	C	s l	Sc del ins 3 t.6	
3892	punctáta *W*	dotted	or	1	ap au	W	C G H	1759	C	s l		
3893	marginális *W*	margined	or	2	jl au	Pk	C G H	1774	C	s l		
3894	pellúcida *W*	pellucid	or	1	jn s	Pk	C G H	1732	C	s l	Di el. t 100 f 119	
3895	spathuláta *W*	notched-leaved	or	½	jl s	W	C G H	1774	C	s l	Plant. grass 49	
3896	cordáta *W*	heart-leaved	or	½	my au	Pk	C. G. H	1774	C	s l	Bot. cab 359	
§3897	tomentósa *W*	downy	or	1	ap my	W	C G H	1790	C	s l		
§3898	linguæfólia *Haw*	tongue-leaved	or	1	au	W	C G H	1803	C	s l		
3899	Cotylédonis *W*	Cotyledon-leav	or	1	...	W	C G. H	1800.	C	s l		
3900	orbiculáris *W*	starry	or	½	jl s	Pk	C. G H.	1731.	C	s l		
3901	retroflexa *W*	Orange-flower	pr	½	jn	Y	C G H	1788	C	s l		
3902	lineoláta *W*	channelled	pr	½	jn au	Y	C G H	1774.	C	s l	Bot mag 1765	
3903	centauroides *W*	Centaury-flow	pr	½	my jn	Pk	C G H	1774	S	s l	Herm lug t 553	
§3904	dichótoma *W*	forked	pr	½	jn jl	Y	C G H	1774	S	s l	Plant grass 67	
3905	glomeráta *W*	rough-clustered	pr	½	au o	W	C G. H	1774	S	s.l		



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696. *Aralia.* A name of unknown meaning, under which one species was sent to Fagon from Quebec, in 1764, by one Sarrazin, a French physician. *A. spinosa* is an ornamental low tree for lawns, on account of its Angelica-like leaves.

697. *Actinophyllum.* From *ακτιν*, a ray, and *φυλλον*, a leaf, because the leaflets are disposed as it were in rays round a centre. Fine Aralia-like plants, with beautiful foliage, but not with any attraction in the appearance of the flowers.

3857 Procumbent villous, Leaves oval subsessile, Capsules deflexed
3858 Very hairy, Leaves subsessile oblong cordate acuminate, Flowers sessile 3 together

3859 Arborescent, Stem and leaves prickly
3860 Stem suffruticose and leaf-stalks hispid, Leaves decompound
3861 Stem herbaceous smooth, Leaves decompound, Peduncles axillary branched umbelled
3862 Stemless, Leaves decompound, Scapes leafless

3863 Leaflets 5 very smooth shining elliptical entire

3864 Leaves opposite nearly connate oblong with an auricle on one side, falcate
3865 Leaves ovate oblong flat, edge with a cartilagin fringe, at the base connate sheathing, Flowers term. sessile
3866 Leaves linear with a cartilaginous fringed edge, Stem shrubby, Cyme terminal
3867 Leaves flat connate perfoliate smooth, Flowers in corymbose panicles
3868 Leaves linear flat fringed with cartilage connate sheathing at base, Flowers terminal sessile
3869 Stem decumbent, Leaves ovate cruciate, Head 2-flowered, Petals connate
3870 Erect, Leaves oblong lanceolate with cartilaginous teeth at base sheathing, Umbels double many-flow

§ 1 *Shrubby, Leaves subulate*

3871 Leaves lanceolate subulate sessile connate channelled convex beneath
3872 Leaves subulate above flat connate perfoliate smooth much spreading, Peduncle long, Flowers cymose
3873 Leaves subulate incurved obscurely 4-cornered spreading, Stem erect shrubby rooting
3874 Leaves ½ cylindrical acute gibbous beneath smooth nearly erect, Cymes terminal compound
3875 Leaves connate rounded subulate spreading, Cymes few-flowered on long stalks, Stem shrubby decumbent
3876 Leaves subulate radical, Stem naked

§ 2 *Shrubby, Leaves broad, smooth*

3877 Leaves roundish acute glaucous fleshy dotted, Cyme trichotomous
3878 Leaves opposite ovate oblique entire acute distinct somewhat cartilaginous at edge
3879 Leaves ovate attenuate at base connate entire dotted inside the edge, Cymes panicle-shaped
3880 Leaves opposite obovate cultrate oblique connate entire

§ 3 *Shrubby, Leaves broad, distant, ciliated.*

3881 Leaves opposite oval flattish distinct fringed, Corymbs terminal
3882 Leaves connate ovate expanded cartilaginous crenated, upper ovate elliptical wavy, Stem dichotomous
3883 Leaves opposite spreading connate rough fringed, Stem rough backwards
3884 Leaves linear obtuse sheathing convex on both sides, Flowers cymose, Stem decumbent
3885 Leaves obl con obtuse falcate with a cartilaginous fringed edge, Pan long, Peduncle opposite clustered
3886 Leaves obovate subconnate, Branches axillary few-flowered, Petals lanceolate reflexed
3887 Leaves lanceolate convex beneath, Corymbs small axillary, Petals lanceolate

§ 4 *Shrubby, Leaves broad, very closely imbricated*

3888 Leaves round imbricated, Fascicle round terminal
3889 Leaves ovate acute smooth imbricated in rows, Flowers axillary sessile
3890 Leaves radical decussately imbricated fringed lanceolate cultrate hoary

§ 5 *Shrubby, Leaves broad, very much perfoliate*

3891 Leaves connate perfoliate cordate dotted
3892 Leaves opposite ovate dotted fringed, Lower oblong
3893 Leaves cordate perfoliate acuminate flat spreading dotted within the edge
3894 Stem flaccid creeping, Leaves opposite

§ 6 *Shrubby, Leaves stalked*

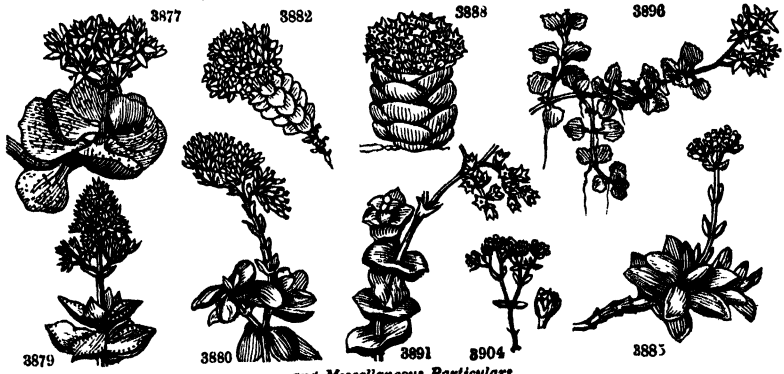
3895 Leaves stalked cordate roundish acute crenate, Corymbs panicle-shaped
3896 Leaves stalked cordate obtuse entire, Cymes panicle-shaped

§ 7 *Herbaceous*

3897 Villous, Leaves connate lanceolate fringed, Stem nearly naked terminal, Spike whorled
3898 Lower leaves distinct opposite tongue-shaped ciliated pubescent, Flowers whorled sessile close, Stem leafy
3899 Leaves connate oblong downy fringed, Stem rather naked, Flowers corymbose close
3900 Leaves oblong obtuse cartilaginous-fringed tufted, Scape panicled, Branches opposite cymose

§ 8 *Annual or biennial*

3901 Leaves connate oblong remote flat, Stem simple, Cyme compound, Flower stalks bent backwards
3902 Leaves cordate sessile, Peduncles terminal axillary approximate umbellate
3903 Stem dichotomous, Leaves sessile oblong ovate cordate flat, Peduncles axillary 1-flowered
3904 Stem dichotomous, Leaves sessile ovate oblong channelled recurved, Peduncles axillary 1-flowered
3905 Stem dichotomous rough, Leaves lanceolate, End flowers in bundles

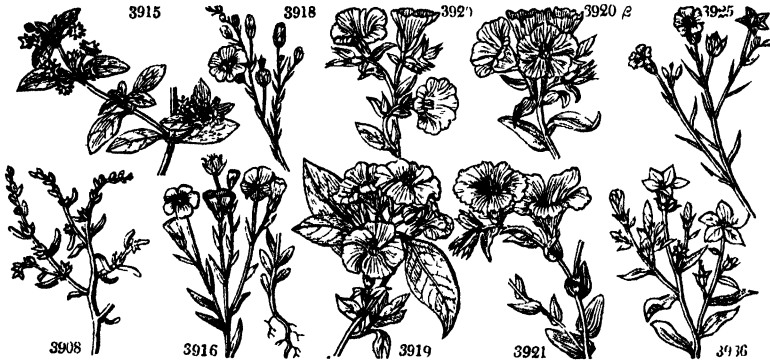


and Miscellaneous Particulars.

698. *Rochea.* Named after M. de la Roche, author of "Historia Eryngiorum," a work of reputation. This succulent genus thrives well in sandy loam, and requires but little water. "Young cuttings taken off and laid to dry a few days, and then potted, or stuck in the tan, will root directly." (*Sweet*)

699. *Crassula.* From *crassus*, thick, in allusion to the fleshy nature of the leaves and stems of all the species. These plants grow best in sandy loam and brick rubbish, with the pots well drained. "Cuttings root

3906 glábra *Haw.*	smooth-cluster		pr	½	jn o	W	C. G H.	1774.	S	s.l		
§3907 Aloídes *W*	Aloe-like	♀	pr	½	jn au	W	C G. H	1774.	S	s l		
§3908 capitélla *W.*	square-spiked	♀	pr	½	jl au	W	C. G H.	1774	S	s.l		Plant. grass. 55
3909 rúbens *W*	annual red		pr	½	my jn	Pk	Italy	1759	S	s.l		
3910 verticillàris *W.*	whorl-flowered		pr	½	jl	Pk	S. Europe	1788.	S	s.l		
3911 expánsa *W.*	awl-leaved		pr	½	jn jl	W	C. G H	1774.	S	s l		
3912 spársa *W*	alternate-lvd.	♀	pr	½	jn jl	W	C. G H	1774	S	s l		
3913 diffúsa *W.*	diffuse		pr	½	jn jl	Pk	C G H.	1774	S	s l		
3914 moschàta *W.*	musky		pr	½	my n	W	N. S. W.	1794	S	s l		
700. GISE'KIA *W.*	GISEKIA				*Portulaceæ*		*Sp.* 1—5.					
3915 pharnaceoides *W.*	trailing		cu	1	jn	P.Gr	E. Indies	1783.				Rox cor. 2. t 183
†701. LI'NUM *W.*	FLAX				*Caryophylleæ*		*Sp* 25—54					
3916 usitatissimum *W.*	common		ag	1½	jn jl	B	Britain	co fi.	S	co		Eng bot. 1357
3917 nervósum *W. & K.*	nerved		or	1½	jn jl	B	Hungary	1822	D	co		Wal. & kit t 105
3918 perénne *W*	perennial		or	3	jn au	B	England	ch so	D	co		Eng. bot 40
3919 trigynum *Sm.*	three-styled		or	2	ja o	Y	E Indies	1799.	C	p l		Bot mag 1100
3920 hirsútum *W*	hairy		or	1½	jl au	B	Austria	1759	D	co		Jac aust 1 t 31
β hypéricifólium Sims	*Mallow-flower*		or	1½	jn jl	Pu	Caucasus	1807	D	co		Bot mag 1048
3921 áscyrifólium *H K*	blue and white		or	1	jl au	W	Portugal	1800.	D	co		Bot. mag 1087
3922 narbonénse *W.*	Narbonne		or	2	my jl	B	S France	1759	D	co		Bot cab 190
3923 reflèxum *W*	reflex-leaved		or	1	jl	B	S Europe	1717.	D	co		
3924 tenuifólium *W.*	slender-leaved		or	1½	jn jl	Pk	Europe	1759	D	co		Jac aus 3 t 215
3925 angustifólium *H K.*	narrow-leaved		or	1	jl	Pu	England	sa pa.	D	co		Eng bot 381
3926 gállicum *W*	annual-yellow		or	1	jl au	Y	France	1777	S	co		Ger pr. t 15 f 1
3927 maritimum *W*	sea		or	2	jl au	Y	S Europe	1596	D	co		Jac vin. 2 t 154
3928 alpinum *W*	Alpine		or	½	jl au	B	Austria	1739	D	co		Sweet fl g 17
3929 austriacum *W*	Austrian		or	1	jn jl	B	Austria	1775	D	co		Bot mag 1086
3930 virginiánum *W*	Virginian		or	1	jl	Y	N Amer	1807	D	co		
3931 rigidum *Ph*	stiff-leaved		or	1	jl	P y	Missouri	1807	S	co		
3932 flávum *W*	yellow		or	½	jn au	Y	Austria	1793	C	p l		Bot mag 312
3933 campanulátum *W*	glaucous-leaved		or	½	jn au	Y	Europe	1795	C	p.l		Bot cab. 1254
β taúricum W en.	*Taurian*		or	½	jn au	Y	Tauria	1795	C	p l		
3934 strictum *W*	upright		or	1	my jl	Y	S Europe	1759	C	p l		
3935 suffruticósum *W*	Spanish		or	1	au	Pk	Spain	1759	C	p l		Cav ic 2 t 108
3936 arbóreum *W*	tree		or	2	my au	Y	Candia	1788.	C	p l		Bot mag 234
3937 africánum *W.*	African		or	1	jn jl	Y	C G H	1771.	S	p l		Bot mag 403
3938 nodiflórum *W*	knotted		w	½	jl au	W	Italy	1759	D	s l		Moris s 5 t 6 f 11
3939 cathárticum *W*	purging		w	½	jn au	W	Britam	dr pa	S	p l		Eng bot 382
3940 quadrifólium *W*	four leaved		or	2	my jn	Y	C G H	1787.	S	p l		Bot. mag 431
702 DRO'SERA *W*	SUN-DEW				*Droseraceæ*		*Sp* 4—32					
3941 rotundifolia *W*	round-leaved		pr	½	jl au	W	Britam	tur bo	S	p		Eng. bot 867
3942 longifólia *W*	long-leaved		pr	½	jl au	W	Britam	tur bo	S	p		Eng bot 868
3443 ánglica *H K*	great		pr	½	jl au	W	England	tur bo	S	p		Eng bot 869
3944 filiformis *Ph*	thready-leaved		pr	½	my jn	Pu	N Jersey	1811	S	p		
703 COMMERSO'NIA *W*	COMMERSONIA				*Buttneriaceæ*		*Sp* 2—3					
3945 platyphýlla *B M*	broad-leaved		or	3	jn jl	W	Moluccas	1806	C	l p		Bot mag 1813
3946 dasyphýlla *B Rep*	hairy leaved		or	4	ap my	W	N Holl	1808	C	l p		Bot rep 603



History, Use, Propagation, Culture,

easily if laid to dry a few days after cutting off; before they are planted, to dry up the wound, that they may not rot. They require no covering, but may be placed in any convenient situation" (*Sweet*)

700 *Gisekia* In honor of P D Giseke, a Danish botanist, who lived about the end of the last century A small weed-like plant, with the habit of Chenopodium

701 *Linum Lin*, in Celtic, signifies thread, whence λινον, in Greek, and *linum*, and its derivations, in Latin L usitatissimum, is a well known thread or clothing plant, which has been cultivated from the remotest antiquity for its cortical fibres, or boon, which, when separated from the woody matter or harl, as it is technically called by the growers, forms the lint and tow which is spun into yarn, and wove into linen cloth The seeds are sown on well comminuted loamy soil, which is in good heart, in April, broadcast during summer weeds are carefully removed, and when the plant is in full flower, or (if seed is desired) when the seed capsules are ripe, it is pulled up by the roots, the capsules torn off by a comb, and the stalks tied in bundles and carried to a pond or pool of stagnated water Into this water the bundles are thrown, and kept under the surface by being loaded with planks, stones, &c for ten days or a fortnight, till an appearance of decay or softness is indicated by the bark, they are then taken out and spread on the grass, or on the gravelly banks of a river for a fortnight, where the alternate dews and heats accelerate the progress of decay It is next taken up, and when quite dry tied into bundles and stacked till wanted by the flax-cleaner Some cultivators do not steep the flax in water, but only spread it on the surface of grass ground, which is called dew-retting, and has nearly the same effect as the other, but the more recent practice, not yet however very general, is neither to steep or dew-rot, but to dry, bind, and stack as in saving a crop of corn, and afterwards to separate the capsules and the fibre by machinery By this process the fibre is obtained of much greater

3906 Stem dichotomous pubescent, Leaves linear-lanceolate, End flowers in bundles
3907 Leaves ovate acute distinct ciliated, Stem simple downy, Raceme compound, Branches panicled
3908 Leaves oblong lanceolate acute connate ciliated, Stem smooth, Raceme elongated, Fl in bundles sessile
3909 Leaves fusiform depressed, Cyme 4-fid leafy, Flowers sessile, Stamens reflexed
3910 Leaves spreading, Flowers whorled awned
3911 Leaves half cylindrical subulate channelled above spreading, Peduncles axillary solitary 1-flowered
3912 Leaves alternate somewhat spatulate acute entire, Raceme compound
3913 Leaves oblong narrowed at base remotely crenate, Peduncles opposite the leaves and axillary solitary
3914 Stem procumbent, Leaves connate oblong acute, Peduncles axillary 1-flowered, Flowers tetrandrous

3915 Leaves elliptical lanceolate

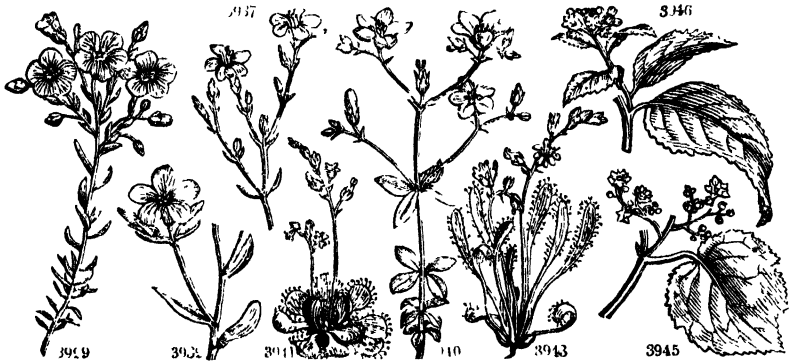
3916 Sepals ovate acute 3-nerved, Petals crenate, Leaves lanceolate, Stem nearly solitary
3917 Sepals and leaves lanceolate subulate 3-5 nerved smooth, Stems branched at end
3918 Sepals obovate obtuse about 5-nerved smooth, Stems numerous ascending
3919 Leaves elliptical acute nearly entire, Styles 3, Capsules 6-celled
3920 Sepals hairy acuminate sessile alternate, Leaves alternate, of the branches opposite

3921 Sepals hairy acuminate, Flowers spiked, Spikes revolute, Leaves cordate-ovate pubescent
3922 Sepals acuminate, Leaves lanceolate scattered upright rough acuminate, Stem rounded branched at base
3923 Sepals acuminate, Leaves ovate lanceolate acuminate reflexed smooth, Filaments connate
3924 Sepals acuminate, Leaves scattered setaceous rough backwards
3925 Sepals elliptical 3-nerved and capsules acuminate, Leaves linear lanceolate 3-nerved, Stems numerous
3926 Sepals subulate acute, Leaves linear lanceolate, Peduncles of panicle about 2-flowered, Flowers sessile
3927 Sepals ovate acute blunt, Leaves lanceolate lower opposite
3928 Sepals rounded obtuse, Leaves linear acutish, Stems declinate
3929 Sepals rounded obtuse, Leaves linear straight acute
3930 Sepals acute alternate, Capsules pointless, Stem panicled, Leaves lanceolate radical ovate
3931 Sepals ovate acuminate 3-nerved fringed, Leaves very stiff short, Petals oblong very narrow
3932 Sepals acuminate scabrous, Leaves with two glands at base, smooth at edge, Cor monopetalous
3933 Base of the leaves dotted with glands on both sides

3934 Sepals subulate, Leaves lanceolate upright mucronate rough at edge
3935 Leaves linear acute rough, Stems half shrubby
3936 Leaves wedge-shaped, Stems arborescent
3937 Leaves linear lanceolate, Flowers terminal stalked
3938 Flower leaves lanceolate, Flowers alternate sessile, Cal as long as leaves
3939 Leaves obovate lanceolate entire, Stem dichotomous upwards, Petals acute
3940 Leaves 4-together

3941 Leaves orbicular radical, Scape racemose erect
3942 Scapes radical ascending, Leaves oval, Stigmas emarginate
3943 Scapes radical erect, Leaves oblong lanceolate, Stigmas clavate
3944 Scapes radical branched, Leaves filiform very long

3945 Leaves cordate ovate acuminate unequally tooth-serrated, rough above downy beneath
3946 Leaves long cordate unequally serrate hairy on both sides



and Miscellaneous Particulars

strength; there is less loss of seed, less demand for labor at a busy season, and the refuse of the operation forms an excellent food for horses or cattle The machines for breaking and cleaning flax are worked by hand, and the best at present is considered that of Bundy The process of steeping and spreading flax has the further effect on the fibre of bleaching it when the machine is used, the bleaching progress is effected by steeping in soft soap Flax seed yields by expression a valuable oil, in powder it is much used in poultices, and the refuse, after pressing for oil, forms a cake fit to feed broken-winded horses, to fatten cattle, and for manure

L. perenne may be used for the same purpose as the other both species have been proposed by some gardeners to be adopted as border-flowers

702 *Drosera* From δεερος, dew, on account of the pellucid dew-like glands on the surface of the leaves, whence also our English name *sun-dew* The famous Italian liqueur is called *Rossoli*, on account of the usage of this plant in its composition D rotundifolia is an acrid caustic plant, by some supposed to occasion the rot in sheep. it curdles milk, removes warts and corns, and takes away freckles and sunburn distilled with wine it produces a very stimulating spirit, and it was formerly much used as a tincture spiced and sweetened The leaf hairs support globules of clear liquor even in the hottest weather, are very irritable, and close upon small insects that touch them, after which the leaf itself bends and holds the dead insect imprisoned.

703 *Commersonia* Named by Forster in memory of M Commerson, the French traveller and botanist, who accompanied Bougainville in his voyage round the world He stopped at the Isle of France, where he died in 1774, after having discovered an immense quantity of new plants C dasyphylla is a pretty flowering shrub, both species grow freely from cuttings in sand under a hand-glass.

704. RULINGIA. *R Br.* RULINGIA. *Buttneriaceæ. Sp* 1.

3947 pannósa *R. Br* cloth-leaved ♃ ⌊⌋ or 1 my W N Holl 1819. C l.p Bot. mag 2191

705 ARME'RIA. *W en.* THRIFT. *Plumbagineæ. Sp.* 11—90.

3948 vulgáris *W en* common ♿ △ or ½ jn.au R Europe ... D co Sch bot han t.87
3949 maritima *W en* sea-side ♿ △ or ½ my jl R Britain sea co. D s.l Eng. bot. 236
3950 alpina *W. en.* flat-stemmed ♿ △ or ½ my au Pu Carinthia ... D s l
3951 arenária *P S* sand ♿ △ or ½ my au Pk France ... D s.l
3952 littorális *W en* ciliated ♿ △ or 1 my au Pk S Europe ... D s.l
3953 alliácea *W* Garlic-leaved ♿ △ or 1 my jn W Spain 1798. D s l Cav. ic 2. t 109
3954 denticuláta *Bertolons* toothed ♿ △ or 1½ my jn F Naples 1816. D s.l
3955 plantaginea *W en* Plantain-leav'd ♿ △ or 1 my jn R S Europe 1816. D s.l
3956 scorzoneræfólia *w.en* large-headed ♿ △ or 1 my.jn S S Europe 1816. D s.l
3957 latifólia *W en* broad-leaved ♿ △ or 2 my jl L R Algarbia 1740. D p l Jac vind. 1 t. 42
3958 fasciculáta *W en.* bundled ♿ △ or 1 ap au Pu Portugal ... D s.l Vent cels t. 38

†706 STA'TICE *W en.* SEA-LAVENDER. *Plumbagineæ Sp* 32—70.

3959 graminifólia *W* Grass-leaved ♿ △ or 1 jn jl R Siberia 1780 D s l
3960 Limónium *W.* common ♿ △ or 1 my au B England mud.s. D s.l Eng bot. 102
3961 Gmelini *W* Gmelin's ♿ △ or* 1 jn au B Siberia 1796 D s l Gmel. sib 2. t 90
3962 scopária *W* Broom ♿ △ or 1 jn au B Siberia 1796. D s l
3963 latifólia *W* broad-leaved ♿ △ or 1 my jl B Siberia 1791 D p l
3964 oleifólia *W* Olive leaved ♿ △ or 1 my au R Italy 1688 D s l Scop ins. 1. t 10
3965 auriculæfólia *W* Auricula-leaved ♿ △ or ½ jl au R Barbary 1781 D s l
3966 emarginata *W en* emarginate ♿ △ or ¾ my jl B Gibraltar .. D s l
3967 cordáta *W* blunt-leaved ♿ △ or ¾ my jl B S Europe 1752. D s l Barr ic 805
3968 scábra *W* rough-branched ♿ △ or 1 my jl B C G H 1788. S r m
3969 virgáta *W en* twiggy ♿ △ or 1½ jn au B Spain ... D s l
3970 reticuláta *W en* matted ♿ △ or ½ jl au B England mud s. D s l Eng bot 328
3971 cáspia *W en* Caspian ♿ △ or 1 jl au P B Caspian Sea . . S s l Gm sib 2 t 89 f 2
3972 echioides *W* rough-leaved ♿ △ or 1 jl au P B S Europe 1752 D s l Fl græc 298
3973 spathuláta *Desf* spatula-leaved ♿ △ or 1 jn au Pu Barbary 1804 D s l Bot mag 1617
3974 speciósa *W* Plantain-leaved ♿ △ or 1 jl au W Russia 1776. D p l Bot mag 656
3975 conspicua *B M* showy ♿ △ or 1 jl au Pk Russia 1804 D s l Bot mag 1629
3976 tatárica *W* Tartarian ♿ △ or 1½ jn Pk Russia 1731 D p l Sweet fl. g 37
3977 flexuósa *W* zigzag ♿ △ or 1 jl au Pu Siberia 1791 S p l
3978 purpuráta *Thunb* purple ♿ ⌊⌋ or 6 jn jl Pu C G H 1800 S p l
3979 minúta *W* small ♿ △ or ½ jn jl R Mediterr 1658 S p l Plu al t 200 f 3
3980 pectináta *W* triangular-stlk ♿ ⌊⌋ or s o B Canaries 1780 S p l
3981 suffruticósa *W* narrow-leaved ♿ ⌊⌋ or ½ my s B Siberia 1779. C r m Gm s 2 t 88 f 2,3
3982 monopétala *W* Sicilian-shrubb ♿ ⌊⌋ or 3 jl au Pu Sicily 1731 C r m Boc. sic. t 16, 17
3983 feruláceа *W* Fennel-leaved ♿ △ or 1 my Y Siberia 1796 D s l Plu alm t 28 f 4
3984 sinuáta *W* scollop-leaved ♿ ⌊⌋ or 1 my s P Y Levant 1629 S r m Bot mag 71
3985 aláta *W en* winged ♿ ⌊⌋ or 1 jn au P Y .... . 1806 D s l
3986 mucronáta *W* curled ♿ ⌊⌋ or ½ jn au R Barbary 1784 C r m L'Her stirp t 13
3987 globulariifólia *Desf* tough-leaved ♿ ⌊⌋ or 1 my s W Sicily 1822 C r m Barr ic t 793
3988 incána *L* hoary ♿ △ or 1 jn au Pk Egypt 1823 D r m
3989 macrophýlla *Link* large-leaved ♿ ⌊⌋ or 2 my jn W Canaries 1824 C r m
3990 ægyptiaca *Delisle* Egyptian ♿ ⌊⌋ or 1½ my W Egypt 1823 D r m Bot mag 2363

POLYGYNIA.

707 MYOSU'RUS *W* MOUSE-TAIL *Ranunculaceæ Sp* 1.

3991 mínimus *W.* small ○ cu ¼ ap my Y Britain cor fl S co Eng bot. 435

708 CERATOCE'PHALUS *P S* CERATOCEPHALUS *Ranunculaceæ Sp* 1—2

3992 falcátus *P S* sickle-leaved ○ w ½ my Y S Europe 1739 S co Jac aust. t. 48



History, Use, Propagation, Culture,

704. *Rulingia* Named in honor of J P Ruling, author of an Essay on the Natural Orders A plant related to Commersonia

705. *Armeria* Derivation unexplained. This is a genus of handsome plants, for the most part well suited for rock-work, or growing in pots. A vulgaris is considered the most valuable edging plant next to the box

706. *Statice* From στατίζω, to stop This plant, says Pliny, stops diarrhœa This is a very ornamental

3947 The only species

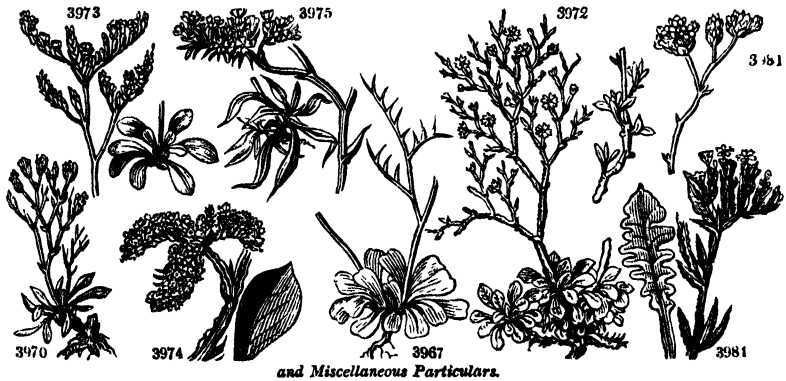
3948 Scape rounded smooth, Outer leaves of involucrum acute, Leaves linear flat obtuse
3949 Scape rounded pubescent, Leaves of involucr obtuse, Leaves linear flat obtuse ciliated at base
3950 Scape compressed smooth, Leaves of involucr. ellipt. rounded, Leaves lin. flat acute membr. at edge
3951 Scape long, Bractes 2 or 3 longer than head, Leaves linear stiff smooth
3952 Scape rounded smooth, Outer leaves of involucr lanceol. acute as long as head, Leaves lin. flat fringed
3953 Scape rushy, Leaves linear lanceolate acute flat narrowed downwards
3954 Quite smooth, Scape simple, Leaves linear flat, the first toothletted, Leaves of involucr ovate lanc acum
3955 Scape rounded roughish, Outer leaves of involucr obl ov acute inner obl. obtuse, Leaves lanc. flat 3-nerved
3956 Scape rounded smooth, Outer leaves of involucr elliptical mucronate, Leaves lanc flat acute 3-nerved
3957 Leaves long lanceolate entire smooth 3-nerved acute soft, Leaves of involucr acute edged
3958 Scape rounded smooth, Leaves of involucr elliptical obtuse, Leaves linear acute channelled

3959 Branches 3-cornered, Leaves linear channelled
3960 Scape panicled rounded, Leaves wavy at edge oblong smooth obtuse mucronate beneath
3961 Scape panicled pubescent, Leaves elliptical mucronate beneath and nearly smooth
3962 Scape panicled much branched and lvs ovate oblong obtuse somewhat wavy, beneath mucronate smooth
3963 Scape panicled much branched rough, Leaves pubescent, Hairs in starry bundles
3964 Scape panicled rounded, Lower branches sterile, Leaves oblong spatulate obtuse smooth nearly blunt
3965 Scape simple rounded, Spikes lateral and terminal 1-sided, Leaves spatulate acute
3966 Leaves spatulate emarginate, Scape erect panicled, Upper branches simple, Lower bifid, Flow 1-sided
3967 Scape panicled, Leaves spatulate retuse
3968 Leaves somewhat radical obovate-oblong obtuse, Branches rough
3969 Lvs lanc. wedge-shaped acute, Scape erect roughish branched panicled, Fl. 1-sided, Cal at edge membr
3970 Lvs. lanc cuneate obtuse, Scape decumbent branched panicled, Fl branches long, Bractes mem at edge
3971 Lvs spatul. ret Scape erect branched rough, Sterile branches pectinate, Fl very close, Brac transparent
3972 Rough with hoary dots, Scape panicled rounded jointed much branched divaricating, Leaves spatulate
3973 Radical leaves spatulate obtuse glaucous entire on long stalks, Scape rounded, Flowers racemose 1-sided
3974 Scape branched nearly round, Branches 2-edged winged, Fl imbricated, Lvs obov cuspidate mucronate
3975 Scape leafy, Branches 3-cor winged, Fl aggregate in interrupted spikes, Bractes acum longer than cal.
3976 Scape dichotomous, Leaves lanceolate mucronate, Flowers alternate distant
3977 Scape dichotomous corymbose, Spike-headed, Fl imbricated, Lvs lanc wedge-shaped mucronate 3-nerved
3978 Stem leafy, Leaves obovate wedge-shaped 3-nerved mucronate
3979 Stem shrubby leafy, Leaves clustered wedge-shaped smooth pointless, Scape few-flowered
3980 Stem and branches panicled 3-cornered, Leaves obovate stalked, Spikes 1-sided
3981 Stem shrubby naked above and branched, Heads sessile, Leaves lanceolate sheathing
3982 Stem shrubby leafy, Flowers solitary, Leaves lanceolate sheathing
3983 Stem shrubby branched, Branches imbricated, Paleæ with a bristle at end
3984 Stem herbaceous two-edged, Radical leaves lyrate, cauline linear
3985 Stem winged, Radical leaves sinuate, cauline lanceolate, Peduncles cuneate 3-winged
3986 Stem crisp, Leaves elliptical entire, Spikes 1-sided
3987 Scape panicled rounded, Branches clustered, Leaves obovate spatulate mucronate smooth, Cal acute
3988 Scape panicled, Leaves lanceolate 3-nerved wavy mucronate at end, Branches of panicle 3-cornered
3989 Leaves broad lanceolate glaucous mucronate, Scape winged, Flowers close corymbose
3990 Radical leaves alternately pinnatifid sinuated, Intermediate segments of cor linear

POLYGYNIA.

3991 Leaves quite entire

3992 Horns of the pericarp falcate ascending



and Miscellaneous Particulars.

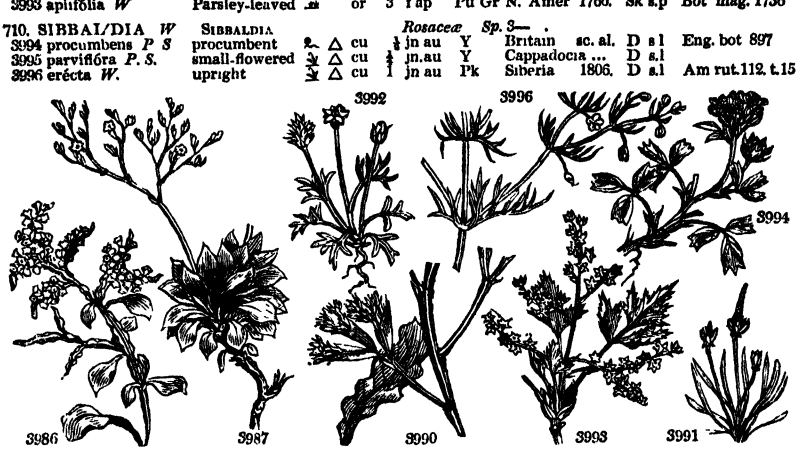
genus, the species are not common, and require a little care in cultivation. Statice speciosa and tatarica, are among the prettiest of hardy border flowers S limonium is an inhabitant of salt marshes in many parts of England, whence its name, from λειμων, a marsh

707. *Myosurus* From μυς μυος, a mouse, and ὐρα, a tail. Its seeds are situated upon a very long slender receptacle, which looks exactly like the tail of a mouse.

708. *Ceratocephalus* From κερας, a horn, and κεφαλη, a head, on account of the horn-like ends of the seeds in the heads of the capsules.

709 XANTHORHI'ZA *W* Yellow-root *Ranunculaceæ Sp* 1.
3993 aphifólia *W* Parsley-leaved ♣ or 3 f ap Pu Gr N. Amer 1766. Sk s.p Bot mag. 1736

710. SIBBAL/DIA *W* Sibbaldia *Rosaceæ Sp.* 3— .
3994 procumbens *P S* procumbent ♇ △ cu ½ jn au Y Britain sc. al. D s l Eng. bot 897
3995 parviflóra *P. S.* small-flowered ☿ △ cu ½ jn.au Y Cappadocia ... D s.l
3996 erécta *W.* upright ☿ △ cu 1 jn au Pk Siberia 1806. D s.l Am rut.112. t.15



History, Use, Propagation, Culture, and Miscellaneous Particulars

709 *Xanthorhiza* From ξανθος, yellow, and ῥιζα, a root, on account of the deep yellow color of the roots A small shrub, with much cut leaves, and branches of dull purplish brown small flowers

710 *Sibbaldia* So named by Linnæus, in memory of Sir Robert Sibbald, professor of physic at Edinburgh, author of Scotia Illustrata, &c 1684 Small alpine plants, with the aspect of Alchemilla

Class VI. — HEXANDRIA. 6 Stamens.

This class contains the most beautiful of the herbaceous plants of our gardens With a few exceptions, it is to a considerable degree a natural assemblage, comprehending a large proportion of those favorites of gardeners, the orders Amaryllideæ, Asphodeleæ, Bromeliaceæ, Liliaceæ, and Melanthaceæ The class also includes a few grasses and palms, some genera of Berberideæ, all Hypoxideæ, and many Juncеæ

The Amaryllideæ, or lilies of the hot-houses, consist of a number of beautiful species, the generic distribution of which is uncertain, and difficult to determine Much attention has been paid to the subject by Messrs Ker, Herbert, and others, by the former, perhaps, with the most success, a great deal still remains to be done. The limits of the genera are very obscure, and their extreme characters similar Among the Bromeliaceæ are found the delicious pine-apple, and the curious Tillandsias, some of which are called air-plants The asparagus and the officinal squill are included in Asphodeleæ To the same class are related the lily of the valley, the Solomon's seal, and many other curious little plants. The Phormium tenax, which produces the strong flax of New Zealand, the aloes, curious for their fantastic foliage, the fragrant tuberose, the plantains, so valuable as an important article of food in all the tropics, are all contained in this class Hither also, are referred the valuable rice, the curious bamboo, and the rush, some of the species of which are well known for their use in œconomical purposes, others as the most worthless weeds of our heaths

Hexandria Trigynia is chiefly made up of the natural order Melanthaceæ, among which the Colchicum and Trillium are found

Order 1 MONOGYNIA.  6 Stamens 1 Style

1 *Monocotyledons Perianth superior, colored*

A *Perianth with the orifice surmounted by a corona or nectary.*

711 *Narcissus* Sepals 6, equal. Cup funnel-shaped, of a single leaf Stamens inserted within the cup
712 *Pancratium* Flower funnel-shaped, with a long tube Sepals 6 Cup 12-cleft, membranous. Stamens inserted on the edge of the cup
713 *Eucrosia* Flower ringent nodding Crown formed by the dilated bases of the stamens. Stamens declinate, united into a tube, which is split on its upper side
714 *Eurycles* Flower funnel-shaped, regular Crown fleshy, short. Stamens inserted into the edge of the cup
715 *Chlidanthus.* Flower funnel-shaped, irregular Stamens erect, included, united by their dilated bases, the short filaments 2-toothed Anthers innate. Ovary 3-celled, many-seeded. Style filiform Stigma 3-lobed Capsule cartilaginous, 3-valved Seeds membranous
716 *Calostemma.* Flower funnel-shaped, with a 6-parted limb. Crown tubular, with a 12-toothed mouth, the alternate teeth anther-bearing. Ovary 1-celled, 2-3-seeded. Style filiform. Stigma obtuse. Berry 1-2-seeded
717. *Chrysiphiala.* Flower funnel-shaped, with a tube narrowed downwards thickened at the base, with a dilated 6-cleft limb. Crown 6-cleft. Stamens erect, upright. Stigma thickened, obsoletely trifid.

3993 Roots very yellow, Leaves compound

3994 Leaves ternate, Leaflets smooth above hairy beneath, Flowers corymbose, Petals as long as calyx
3995 Procumbent, Leaves ternate, Leaflets 3-toothed on each side rough with hairs, Flowers clustered
3996 Leaflets linear multifid, Plant erect

B *Perianth with the orifice naked.*

* *Stigma undivided*

718 *Lophiola.* Flower woolly, 6-parted, bearded inside Anthers erect. Filaments naked. Ovary nearly superior
719 *Argolasia* Flower woolly, longer than the filaments limb 6-parted, spreading Pericarp 3-celled
720. *Anigozanthus* Flower tubular, incurved. with a 6-parted irregular limb Stamens inserted into the mouth, ascending

* *Stigma 3-lobed* Guzmannia has Perianth inferior

721 *Musa* Spathe superior Cor of 2 petals. one of which is erect and 5-toothed, the other concave and honey-bearing Berry oblong, 3-cornered, many-seeded
722. *Urania* Cal O. Cor 3 petals Nect 2-leaved one of the leaves bifid. Caps 3-celled, many-seeded. Seeds in two rows with an arillus
723 *Bonapartea.* Calyx 2-leaved Petals 3 convolute Stamens inserted in the receptacle Anthers exserted Style 3-cornered Caps 3-celled, 3-valved Seeds numerous, terminated by a bristle
724. *Agave* Flower erect, tubular, or funnel-shaped Filaments longer than flower, erect Capsule triangular, many-seeded
725 *Furcræa* Flower campanulate, 6-parted Stamens inserted in a gland, thickened downwards, compressed, subulate at end Capsule 3-valved, 3-celled, many-seeded
726 *Bromelia* Cal 3-fid. Petals 3 A honey-bearing scale at base of petal Berry 3-celled.
727 *Guzmannia* Cal 3-parted, not superior, with convolute segments Petals 3, rolled together into a tube. Anthers united in a cylinder Caps 3-celled, 3-valved Seeds numerous, oblong, naked
728. *Pitcairnia.* Cal. 3-leaved, half inferior Petals 3 Stigmas 3, twisted together Caps. 3, opening inwards Seeds winged or terminated at each end in a long bristle
729 *Tillandsia* Cal. 3-fid, persistent, convolute Cor 3-fid, campanulate Caps 1-3-celled. Seeds comose
730 *Pontederia* Flower monosepalous, 6-cleft, 2-lipped Stamens inserted into the tube of flower at the top Caps 3-celled
731 *Hæmanthus.* Involucre many-leaved, many-flowered Flower 6-parted Berry 3-celled.
732 *Galanthus* Sepals 3, concave Cup formed of 3 small emarginate sepals Stigma simple
733 *Leucoum* Flower campanulate, 5-parted, with the ends of the sepals thickened. Stigma simple
734 *Strumaria* Sepals 6, spreading Style thickened below the middle, and cohering occasionally with the filaments Stigma trifid Capsule inferior, roundish, 3-celled
735 *Crinum* Flower funnel-form, half six-cleft, with a filiform tube, and a spreading recurved limb Sepals subulate, channelled Seeds fleshy
736 *Cyrtanthus* Flower incurved, tubular, clavate, 6-cleft segments ovate, oblong Filaments inserted into the tube, conniving at end.
737 *Brunsvigia.* Flower 6-parted. Capsule turbinate, 3-winged, nearly transparent, many-seeded
738 *Nerine.* Sepals 6, spreading, wavy Stamens declinate, unequal in direction or proportion Capsule few-seeded Seeds round like peas
739 *Amaryllis* Flower nodding, irregular, funnel-shaped, ringent. Filaments declinate, unequal in proportion or direction. Seeds flat, numerous
740. *Vallota* Flower vertical, regular Stamens regularly spreading Seeds numerous, flat.
741. *Griffinia* Flower 6-parted, ringent. Stamens declinate, with the upper one erect, and away from the rest Seeds few, round, fleshy.
742 *Sternbergia.* Flower vertical, regular, funnel-shaped, with an erect limb Stamens slightly declinate. Anthers versatile Seeds round like peas
743 *Zephyranthes* Flower vertical, nearly regular, funnel-shaped, with an erect limb Stamens nearly regular Anthers versatile. Seeds flat.
744. *Habranthus* Flower campanulate, nodding Stamens declinate, unequal, inserted into a fleshy rim of the base of the tube Stigma 3-lobed
745 *Doryanthes.* Flower 6-parted Filaments shorter than flower Anthers erect.
746. *Gethyllis.* Flower 6-parted, with a filiform very long tube. Spathe obliquely truncated Berry clavate, radical, 1-celled.
747 *Polyanthes.* Flower funnel-shaped, incurved Filaments inserted into the throat. Ovary at the bottom of tube
748 *Alstræmeria.* Sepals 6, campanulate or 2-lipped, the two lower half-tubular at the base Stamens declinate or erect. Stigmas 3, linear Caps roundish-oval, 3-6-angular, 3-valved, or pulpy within, and not opening
749 *Conanthera* Sepals 6, reflexed Anthers united in an acute cone Caps oblong, 3-celled, 3-valved. Seeds few, roundish
750 *Hypoxis* Spathe 2-valved Flower 6-parted, superior Caps long, narrow at the base Seeds roundish, naked.
751. *Curculigo* Sepals 6, flat. Spathe of one valve. Style very short. Stigmas 3, diverging. Caps. 1-celled, 4-seeded, spongy, beaked.

2. *Monocotyledons. Perianth inferior*

A *Perianth glumaceous, irregular.*

752. *Bambusa* Scales 3, covering the 5-flowered spikelets. Glume 2-valved Style bifid Seed 1
753. *Calamus* Sepals 6. Berry dry, 1-seeded, imbricated backwards
754. *Ehrharta.* Glume 2-valved, abbreviated, 1-flowered. Paleæ 4, in pairs, the outer compressed acinaciform, transversely wrinked

B. Perianth not coloured, regular Stems herbaceous. Aroideæ and Junceæ.

755. *Acorus* Spadix cylindrical, covered with florets Sepals 6, naked Style 0. Caps. 3-celled.
756. *Orontium* Spadix cylindrical, covered with florets Sepals 6, naked Style 0. Follicles 1-seeded.
757. *Tupistra.* Cor 1-petalous, 6-fid, nearly equal Anthers sessile in middle of sepals Style 3 cornered, thick Stigma clypeate, 3-lobed
758 *Tacca* Cal 6-parted Cor 6-petalous, inserted into the calyx, bearing the anthers Stigma stellate. Berry dry, hexangular, many-seeded
759 *Aspidistra* Cor 1-petalous, 6-fid, equal Anthers at bottom of tube. Style stipitate. Stigma clypeate.
760 *Juncus.* Sepals 6, persistent. Stigmas 3 Caps 1-celled, 3-valved Seeds very numerous
761. *Luzula.* Sepals 6 Stigmas 3. Caps 1-celled, 3-valved, 3-seeded Seeds fixed to a central receptacle.

C *Perianth not colored, regular. Frust, a drupa Stems arborescent* Palms

762. *Corypha* Cal 3-leaved Cor of 3-petals Berry 1-seeded Seed large, round, bony
763 *Licuala* Cal 3-parted Cor 3-parted Cup truncated, band-like Drupe 1-seeded.
764. *Thrinax.* Cal. 6-toothed. Cor 0 Stigma funnel-form, oblique Berry 1-seeded.

D *Perianth partly or wholly colored, regular*

765 *Tradescantia* Cal 3-leaved. Petals 3 Filaments with jointed hairs Caps 3-celled.
766. *Dichorizandra* Cal 3-leaved Petals 3 Two of the stamens separate from the rest. Caps. 3-celled.
767 *Agapanthus* Flower funnel-shaped, regular, six-parted Stamens declinate
768. *Blandfordia* Flower tubular, withering, with a 6-lobed mouth Stamens inserted on the tube. Anthers fixed to a base like an extinguisher Ovary stalked Stigma simple Capsule 3-partible Seeds in two rows, with a loose downy skin
769 *Hemerocallis* Flower campanulate, with a cylindrical tube Stamens declinate Stigma small, simple, villous
770 *Aloe* Flower tubular, with a 6-cleft spreading mouth, and honey at the bottom of the tube Filaments inserted into the receptacle Caps 3-celled, 3-valved, many-seeded. Seeds in two rows, with a membranous edge
771 *Lilium.* Sepals 6, campanulate, with a longitudinal honey-line, and generally reflexed. Valves of the capsule connected by a mesh of hairs
772 *Tulipa* Sepals 6, campanulate Style 0
773 *Fritillaria* Sepals 6, campanulate, with a honey-pore above the claws
774. *Dracæna* Flower 6-parted, erect Filaments thickest in the middle, or simple. Berry 3-celled, 1-seeded
775 *Phylloma* Flower 6-parted, tubular Sepals imbricated Stamens hypogynous, included. Style setaceous Stigma simple. Berry coriaceous, many-seeded.
776 *Aletris* Flower funnel-shaped, wrinkled. Stamens inserted into base of segments Capsule 3-celled, with many seeds
777 *Tritoma* Flower 6-toothed Stamens inserted into the receptacle, exserted, alternately longer Capsule 3-celled, many-seeded
778 *Veltheimia* Flower tubular, 6-toothed Stamens inserted in the tube Caps membranous, 3-winged, with 1-seeded cells
779 *Sansevera* Cor monosepalous, with a filiform tube, and a 6-parted revolute limb Stamens inserted into the limb Berry 1-seeded.
780 *Tulbaghia* Flower funnel-shaped, with a 6-cleft limb Crown of the throat 3-leaved, the leaves bifid as large as the segments
781 *Yucca* Flower campanulate, spreading Style 0 Caps 3-6-celled, with a hole at the end
782 *Erythronium* Sepals 6, campanulate Two little tubercles attached to the base of every other sepal
783 *Gloriosa* Sepals 6, wavy, reflexed Style oblique, trifid at end
784 *Bulbocodium* Sepals 6, funnel-shaped, with narrow claws bearing the stamens
785 *Uvularia* Sepals 6, erect A hollow at the base of the sepals Filaments very short. Flowers solitary, axillary Capsule compressed, 3-cornered Seeds with an arillus
786 *Streptopus* Sepals 6, campanulate Stigmas very short Berry globose, polished, papery Seeds naked
787 *Convallaria* Flower 6-cleft, campanulate Berry spotted, 3-celled
788 *Smilacina* Flower 6-parted, spreading Filaments diverging, fixed to the base of the segments. Berry globose, 3-celled Flowers terminal, panicled, or umbelled
789 *Polygonatum* Flower 6-cleft, cylindrical Filaments inserted into top of tube Berry globose, 3-celled, with 2-seeded cells Flowers axillary
790 *Ophiopogon* Flower half superior, persistent Anthers sessile Stigma simple Berry 1-seeded
791 *Eucomis* Flower 6-parted, persistent, spreading Filaments united at base into a circle Capsule 3-celled Seeds ovate Scape with a leafy crown
792 *Brodæa* Flower campanulate, 6-parted Filaments inserted into the throat. Ovary stalked Capsule 3-celled, with many-seeded cells
793 *Pelionanthes* Flower rotate, 6-parted, sepals vaulted at base Ovary 3-celled, with 2-seeded cells
794 *Aphyllanthes* Spathe glumaceous, imbricated Flower 6-parted, with a spreading limb Capsule 3-celled, 3-valved, many-seeded
795 *Sowerbæa* Sepals 6 Filaments 3, each bearing two anthers, with three sterile filaments between them.
796 *Allium.* Flower 6-parted, spreading. Spathe many-flowered Umbel clustered
797 *Albuca* Sepals 6 the inner conniving, the outer spreading, generally with a green stripe at their back Style 3-cornered Seeds flat.
798 *Xanthorrhœa* Sepals 6, persistent. Filaments flat, naked Caps 3-cornered Seeds two, compressed, edged
799. *Thysanotus* Flower 6-parted, spreading, persistent, with the inner segments fringed Stamens 6-declinate Filaments smooth Ovary with two seeded cells Seeds 2, one erect, one pendulous
800 *Ersospermum* Sepals 6, campanulate, persistent. Filaments dilated at base Caps. 3-celled. Seeds enveloped in wool
801 *Gagea* Stamens adhering to base of sepals Style clavate Caps. 3-celled, 3-valved, covered by the remains of flower. Seeds small, numerous, round
802 *Ornithogalum* Sepals 6, erect, persistent, spreading above the middle Filaments dilated at base, or subulate Caps roundish, angular, 3-celled. Seeds roundish, naked Flowers white or green.
803. *Scilla.* Sepals 6, spreading, deciduous Filaments filiform, attached to base of sepals. Flowers blue or pink
804. *Puschkinia* Flower 6-parted. Cup very short, 6-toothed, covering the throat Stamens within the cup
805. *Massonia.* Limb of flower 6-parted. Filaments attached to the neck of the tube. Capsule 3-celled 3-winged, many-seeded.

806. *Eremurus.* Sepals 6, after flowering, rolled together. Stamens naked, rolled together inside the flower, barren, much exserted. Style after fecundation reflexed.
807. *Bulbine.* Sepals 6, spreading. Filaments smooth. Caps. ovate. Seeds angular. Leaves flat Flowers generally white or purple.
808 *Asphodelus.* Flower 6-parted, spreading. Six valves covering the ovary.
809 *Anthericum.* Sepals 6, spreading. Filaments bearded. Caps ovate. Seeds angular Leaves succulent, fistular. Flowers yellow.
810 *Arthropodium* Sepals 6, spreading: the three inner wavy at the edge or fringed Filaments bearded Capsule nearly round.
811. *Chlorophytum* Flower 6-parted, spreading, equal, persistent Stamens 6. Filaments filiform, smooth Ovary with many-seeded cells Style filiform Stigma 1. Capsule deeply 3-lobed, with compressed veiny lobes, three-celled, 3-valved. Seeds few, compressed
812 *Cæsia* Flower 6-parted, spreading, equal, deciduous Stamens 6. Filaments beardless, narrowe at each end. Anthers inserted by an emarginate base Ovary 3-celled, with 2-seeded cells. Style filiform. Capsule lobed, or clavate at end Seeds ventricose.
813. *Narthecium.* Sepals 6, spreading, persistent. Filaments filiform, hairy. Caps prismatical. Seeds with an appendage at each end.
814 *Dianella* Sepals 6, spreading Filaments thickened at end Berry 3-celled, many-seeded.
815 *Eustrephus.* Flower 6-parted, the 3 inner sepals fringed Capsule berried, 3-celled, 3-valved, many-seeded.
816 *Asparagus.* Flower 6-parted erect, the 3 lower sepals reflexed at end Berry 3-celled, many-seeded
817. *Drimia.* Flower campanulate, 6-cleft, with revolute segments Stamens inserted into the sepals. Stigma capitate
818 *Uropetalon.* Flower six-cleft, with the alternate segments shortest Capsule membranous Seeds black, shining
819. *Hyacinthus* Flower erect, 6-cleft, with equal segments Stamens inserted in the middle of the flower. Cells of capsule 2-seeded.
820 *Zuccagnia* Sepals cylindrical the 3 outer longest, lanceolate, setaceous, reflexed The other characters of Hyacinthus
821. *Muscari.* Flowers ovate or cylindrical, very shortly divided The other characters of Hyacinthus
822. *Lachenalia* Sepals 6, obtuse, the 3 inner the longest. Stamens erect Capsule 3-winged Seeds globose
823 *Phormium* Sepals 6, the 3 inner the longest. Stamens ascending, exserted Capsule oblong, 3-cornered. Seeds compressed
824 *Cyanella* Sepals 6 the 3 lower hanging down Style and lowest stamen declinate Capsule roundish, 3-celled.

3 *Dicotyledons*

825 *Leontice.* Cal. 6-leaved, deciduous Petals 6 Six leaves inserted upon the claws of the corolla, spreading at end.
826 *Caulophyllum.* Cal. 6-leaved. Petals 6, opposite the calyx Cells of anther opening at edge
827 *Diphylleia* Cal 3-leaved, deciduous Petals 6, opposite the calyx Anthers opening with a membrane dividing from the base to the tip Berry 1-celled Seeds 2-3, roundish
828 *Prinos* Cal 6-cleft Cor monopetalous, rotate Berry 6-seeded
829 *Berberis* Cal. 5-leaved. Petals 6, with glands upon their claws Style 0 Stigma umbilicate. Berry 1 celled, 2-4-seeded
830 *Nandina* Cal many-leaved, imbricated Petals 6 Berry juiceless, 2-seeded
831 *Cossignia* Cal. 5-parted. Petals 4 or 5 Capsule 3-celled, opening at end with about 3-seeded cells. Flowers in panicled racemes
832 *Hillia* Cal. double, the lower 6-leaved, the upper superior, 2 or 4-leaved Cor 6-cleft, with a very long cylindrical tude Anthers sessile, in the throat of the corolla Seeds comose
833 *Richardia* Cal 6-parted, persistent, superior Cor funnel-form, 6-cleft Stigmas 3, capitate Fruit 3-partible Seeds 5, truncate
834 *Canarina.* Cal 6-leaved. Cor 6-cleft, campanulate Stigmas 6 Capsule inferior, 6-celled, many-seeded.
835 *Frankenia* Cal. 5-cleft, funnel-shaped Petals 5. Stigma 2-3-parted. Caps 1-celled, 3-valved
836 *Peplis* Cal. campanulate, with a 12-cleft mouth Petals 6 or 0, inserted in the calyx Caps 2-celled, many-seeded.

Order 2. DIGYNIA  6 Stamens. 2 Styles

837 *Oryza* Glumes 2, 1-flowered Paleæ 2, nearly equal, adhering to the seed
838 *Atraphaxis* Cal 2-leaved Petals 2, sinuated Stigmas capitate. Seed 1.

Order 3 TRIGYNIA  6 Stamens 3 Styles

1 *Monocotyledons*

839 *Flagellaria.* Sepals 5 Berry 3-1-seeded
840 *Scheuchzeria* Sepals 6 Anthers linear Stigmas sessile, lateral Capsules inflated, distinct, 2-seeded.
841 *Triglochin.* Sepals 6, the 3 outer in a different row from the inner Style 0. Capsule opening by the base.
842. *Lichtensteinia* Sepals 6, withering, persistent, wavy, spreading Stamens hypogynous, shorter than the sepals Capsule many-seeded, half 3-valved.
843 *Myrsiphyllum* Flower 6-parted, revolute Styles 3, contiguous, straight Ovary stalked. Berry 3-celled, with 2-seeded cells
844 *Tofieldia* Bracteæ 3 Sepals 6. Capsules 3, superior, united at the base, many-seeded
845. *Melanthium* Polygamous. Flower rotate, 6-parted, with 2 glands at the base of each segment. Filaments from the elongated claws of flower. Capsule 3-fid, 3-celled Seeds membranous
846 *Medeola* Flower 6-parted, revolute Berry 3-seeded.
847 *Xerophyllum* Flower 6-parted Stigmas 3, oblong, sessile. Caps 3-celled, with 2-seeded cells
848 *Wurmbea* Flower 6-parted, with an hexangular tube. Filaments inserted in the throat. Styles conniving Caps. oblong, 3-cornered. Seeds round.
849 *Androcymbium.* Sepals 6, unguiculate, cucullate Stamens inserted in the middle of sepals. Ovaries 3. Styles filiform.
850. *Trillium.* Cal. spreading, 3-leaved. Petals 3 Berry 3-celled.
851 *Colchicum.* A spatha. Flower 6-parted, with a tube proceeding directly from the root. Anthers incumbent Caps 3, connected, inflated.
852 *Helonias* Sepals 6. Styles 3, distinct. Capsule 3-celled, 3-horned, few-seeded.
853 *Nolinea* Flower 6-parted, spreading Style very short. Capsule 3-cornered, membranous, 3-celled, opening by bipartible dissepiments Seeds solitary, convex on one side.
854. *Aponogeton.* An amentum composed of scales. Neither calyx nor corolla. Capsules 4, 3-seeded. Stamens varying from 6 to 7 and 12

855. Sabal Spathes partial Filaments free, thickened at base Berry 1-3-seeded. Seed bony. Embryo lateral. A palm.

2. Dicotyledons

856. Rumex Calyx 3-leaved. Petals 3, conniving Seed 1, 3-cornered.
857. Oxyria. Calyx 2-leaved. Petals 2 Styles 2.

Order 4. POLYGYNIA. 6 Stamens. Many Styles.

858. Wendlandia Sepals 6. Petals 6, succulent Style reclinate Caps 6, 1-celled, many-seeded.
859 Damasonium Spathe 1-leaved, half-bifid, winged Flowers superior, 6-parted, with the 3 inner segments petaloid Stamens 6-12 Ovary with 6-8-parietal prominent placentas Style short. Stigmas 6-12
860 Actinocarpus Flower 6-parted the 3 outer sepals falling off late, the inner petaloid. Stamens 6. Ovaries 6-8, connate at base, 2-seeded Capsules connate at base, stellate above
861 Alisma Flower 6-parted the 3 outer sepals falling off late, like a calyx, the 3 inner petaloid. Stamens 6. Ovaries indefinite in number, 1-seeded. Capsules distinct, not opening.

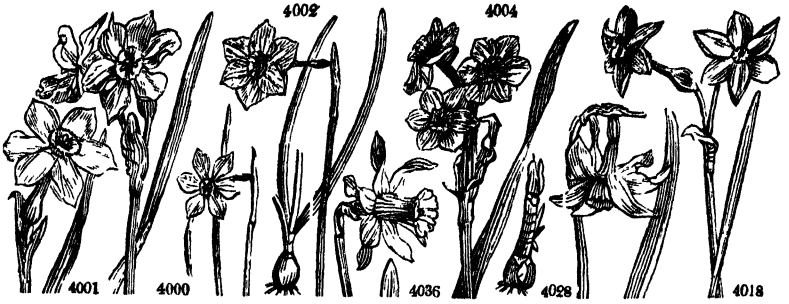
MONOGYNIA.

†*711	NARCISSUS *W*	NARCISSUS				*Amaryllidæ*	*Sp* 55—59					
3997	poéticus *Sal*	Poet's	☿	△	or	1 my	W	S Europe ...		O	co	Park. par 76
3998	reflúvus *Haw*	drooping-leav'd	☿	△	or	1 my	W	S Europe ...		O	co	
3999	patellâris *Sal*	spreading-flow	☿	△	or	1 my	W	England		O	co	Eng. bot 275
4000	angustifólius *H K*	narrow-leaved	☿	△	or	1 ap my	W	S Europe	1570	O	co	Bot mag 193
4001	biflórus *W*	two-flowered	☿	△	or	1 ap my	W	Britain mea		O	co	Eng bot 276
§ 4002	tenuior *H K*	slender	☿	△	or	1 my	L Y	....	1789	O	co	Bot mag 379
§ 4003	crenulátus *Haw*	Bazelman-min	☿	△	or	1 mr ap	W	Spain ...		O	co	
§ 4004	Trewiánus *B M.*	Bazelman-maj	☿	△	or	1½ mr ap	W Y	Spain ...		O	r m	Bot mag 940
§ 4005	floribúndus *Sal*	Grand-Monarq	☿	△	or	1½ mr ap	W Y	Spain ...		O	r m	
§ 4006	fistulósus *Haw*	hollow-stalked	☿	△	or	2 ap	W Y	....		O	r m	
§ 4007	cerínus *Haw*	waxen-cupped	☿	△	or	1 ap	W	. ...		O	r m	
§ 4008	Tazétta *W*	Polyanthus	☿	△	or	1 mr ap	W	Spain	1759	O	s l	Bot mag 925
§ 4009	Maclean *Lindl*	Mac Leay's	☿	△	or	½ ap my	W	Mediterr	1815	O	s l	
§ 4010	orientális *L*	oriental	☿	△	or	1 mr ap	W	Levant ...		O	co	Bot. mag, 948
§ 4011	papyráceus *B M*	paper	☿	△	or	1 mr ap	W	....		O	co	Bot mag 947
§ 4012	itálicus *B M*	Italian	☿	△	or	1 mr ap	P Y	S Europe ...		O	co	Bot mag 1188
§ 4013	teretícaúlis *L T*	round-stalked	☿	△	or	1½ mr ap	P Y	Spain ...		O	co	
§ 4014	compréssus *L T*	flat-stalked	☿	△	or	1 mr ap	L Y	Spain ...		O	co	
§ 4015	bifrons *B M*	Jonquil-scent	☿	△	or	1 mr ap	Y	S Europe ...		O	co	Bot mag 1186
§ 4016	primulinus *Haw*	Cowslip-cupped	☿	△	or	1 mr ap	Y	. ...		O	co	Bot mag. 1209
§ 4017	Jonquílla *W.*	Jonquil	☿	△	or	½ ap my	Y	Spain	1596	O	r m	Bot mag 15
	β flore-pléno	*double*	☿	△	or	1 ap my	Y	Spain	1596	O	r m	
§ 4018	grácilis *Lindl*	slender	☿	△	or	1½ ap my	Y	. . ..		O	co	Bot reg 816
§ 4019	viridiflórus *B M*	green-flowered	☿	△	or	½ au o	G	Barbary	1629	O	r m	Bot mag 1687
§ 4020	serotínus *W*	late-flowered	☿	△	or	½ au o	P Y	Barbary	1629	O	r m	Clu hist t 252
§ 4021	calathínus *L*	great Jonquil	☿	△	or	1 ap my	Y	S Europe	1629	O	r m	Bot mag 78
§ 4022	odórus *L*	sweet-scented	☿	△	or	1 ap my	Y	S Europe	1629	O	s l	Bot mag 934
§ 4023	nútans *H K*	nodding	☿	△	or	1 mr my	Y	S. Europe	1789	O	s l	Bot mag 945
4024	infundibularis *Sal*	funnel-flowered	☿	△	or	½ mr my	Y	....		O	s l	Park par 92
§ 4025	pulchéllus *B M*	neat	☿	△	or	½ mr my	Y	Spain ..		O	s l	Bot mag 1262
§ 4026	triándrus *B M.*	Rush-leaved	☿	△	or	⅔ ap my	W	Portugal	1629	O	s l	Bot mag 48
§ 4027	cápax *Sal*	capacious	☿	△	or	½ ap my	P Y	. . ..		O	s l	Red hl 177
§ 4028	montánus *B Reg*	mountain	☿	△	or	1 ap my	W	Portugal ..		O	s l	Bot reg 123
§ 4029	galánthifólius *Haw*	Snowdrop-leav	☿	△	or	⅔ my	W	....		O	s l	Park par 73
§ 4030	álbicans *Haw*	whitish	☿	△	or	½ mr ap	P Y	.....	1789	O	s l	Park par 140
§ 4031	Bulbocódium *W*	Hoop-petticoat	☿	△	or	½ mr ap	Y	Portugal	1629	O	s l	Bot mag. 88
4032	inflátus *Haw*	inflated	☿	△	or	½ mr ap	Y	....		O	s l	
§ 4033	lobulátus *Haw*	lobed	☿	△	or	½ ap my	Y	....		O	s l	
§ 4034	tenuifólius *L T*	slender-leaved	☿	△	or	⅔ ap my	W	. ...		O	s l	
§ 4035	incomparábilis *W*	Butter & Eggs	☿	△	or	1 ap my	Y	Portugal	1629	O	co	Bot mag 121
§ 4036	tortuósus *Haw*	twisted-petaled	☿	△	or	1½ ap	W	Spain	1629	O	co	Bot. mag 924
§ 4037	moschátus *L*	musk	☿	△	or	1 mr ap	W	Spain	1759.	O	co	Bot mag. 1300



History, Use, Propagation, Culture,

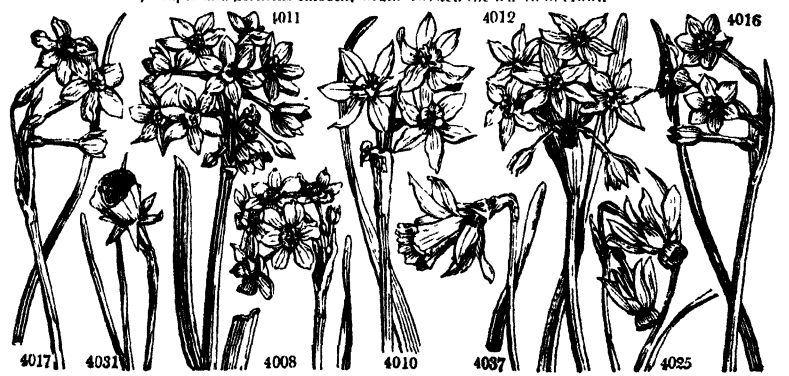
711. *Narcissus* From ναρκη, *stupor*, on account of the dangerous effects produced by the smell, even of the least perfumed kinds, upon the nerves For this reason Narcissus was consecrated to the Furies, who by means of it were accustomed to stupify those whom they wished to punish *Jonquilla*, a name applied to one



MONOGYNIA.

3997 Segm refl imbr. at base, Cup expanded flat, Three anthers shorter than the tube, Leaves erect narrow
3998 Lvs. ½ an inch broad glauc. at end rec. Seg imbr Cup plait with scarlet rim, Stig. as long as inner stamens
3999 Lvs. erect glauc. Seg imbric. with deflexed edges, Cup yel minutely plaited, Stig. as long as inner stamens
4000 Seg horizontal obo not imbric Cup saucer-shaped with very red edge, Lower anth half included in tube
4001 Scape kneed before flowering usually 2-3-flowered, Cup all yellow
4002 Very slender, Spathe 1-2-fl Seg white, Cup yellow cup-shaped 3 or 4 times as long as segm
4003 About 3-flowered, Seg reflexed white, Cup spreading plaited crenulate yellow
4004 Like N Tazetta, differing in the 3-lobate cup, and in the edges of the upper leaves not being turned up
4005 Flowers about 16, Seg round oval reflexed incurved white, Cup large straight yellow entire
4006 Segm white almost twice as long as the straight inflated nearly entire yellow cup
4007 2-3-fl Cup very large thick truncate entire waxen twice as short as white segm
4008 Spathe many-flowered, Cup camp truncate shorter than petals, Leaves flat
4009 Spathe 1-2-fl Scape compr 2-edged, Sepals spread imbricated a little longer than truncated entire cup
4010 About 10-fl Seg white round ov. thrice as long as pale yel spread irreg cut cup, Scape striat rounded
4011 Few-flowered, Seg stellate as long as tube, Cup cupulate crenate, Style within the crown
4012 Many-flowered, Cor bent back, Segm stellate, Cup spreading cupulate slightly trifid
4013 About 6-fl Seg round-ovate imbr white, Cup citron spreading entire or lobed, Scape rounded below
4014 Many-fl Pedunc nearly erect, Seg imbr 3 times as long as the erect eroded cup, Lvs remarkably broad
4015 Scape obtusely compressed smooth, Segm very yellow ovate imbr 3-4-times as long as cup
4016 Like the last, but the cup is more entire and the leaves broader
4017 Spathe 1-3-flowered, Seg reflexed spatulate, Cup much shorter than seg saucer-shaped spreading crenate

4018 12-18 inches high, Lvs linear subulate chann Scape rounded 1-2-fl Ovary inflated, Fl. sulphur-colored
4019 Leafless at flowering, Flowers green with acute segm
4020 Spathe 1-flowered, Cup 6-parted very short, Leaves subulate
4021 About 3-flow Cup obsoletely curled outside obtusely angular not twice as short as seg Scape 1½ ft high
4022 Segm of starry cor distinct at base, Cup even distinctly 6-lobed
4023 About 2-fl Seg refl pale yellow, twice as long as cup which is deeper col trun cylind. Style exserted
4024 A slight variety of N incomparabilis
4025 1-7-fl Leaves erect, Segm reflexed lanceolate longer than cup which is cyathiform 6-fid repand
4026 All white, Cup twice as short as segm which are reflexed
4027 A very obscure plant of which no description is anywhere given
4028 Cor. pendulous white with straight half-expanded segm Cup cyathiform with a crenulate mouth
4029 Segm twisted stellate, Cup cyathiform much plaited twice as short as segm
4030 Sulphur-colored or nearly white, Cup turgid entire as long as segm Style protruded, Leaves obtuse
4031 Flower yellow, Crown turgid truncate entire, Style included, Leaves erect before flowering
4032 Fl yel Crown inflated at the end contracted entire, Style exserted, Lvs always spreading on the ground
4033 Crown undulate lobed at end, Style included
4034 Crown deeply 6-lobed, Style very long, Leaves shining erect before flowering
4035 Segm sulphur, Crown campanulate yellow at the end spreading 6-lobed, Lobes imbricated
4036 Leaves flat and scape striated, Segm much twisted shorter than crown, Germ 6-furrowed
4037 Leaves twisted, Scapes and germens smooth, Segm twisted the length of crown



and Miscellaneous Particulars.

of the species, is a diminution of *juncus*, a rush, as *Tazzettas* of *taxus*, the Italian name for a cup This is a popular flower of great beauty, some species very fragrant, and all of them of the easiest culture. They also force well, either in pots of earth or on glasses of water Their forcing may be greatly accelerated by retard-

§4038	serrátus *Haw*	serrated	☿	△	or	½	mr.ap	P Y	S Europe ...	O	co
4039	spúrius *Haw.*	spurious	☿	△	or	1	ap	Y	England ...	O	co
§4040	Pseudo-Narcissus *L.*	Daffodil	☿	△	or	1	mr ap	P Y	England woods.	O	co Eng. bot. 17
§4041	tubiflórus *Sal.*	tube-flowered	☿	△	or	1	mr ap	W y	....	O	co
§4042	bicolor *B. M.*	two-colored	☿	△	or	1	ap my	W y	Spain 1629.	O	co Bot. mag 1187
§4043	Sabini *Lindl*	Sabine's	☿	△	or	1	ap my	Y	....	O	co Bot. reg. 762
4044	níveus *W en.*	snowy	☿	△	or	1	my	W	S Europe ...	O	co
§4045	obvallāris *Sal*	Sibthorp's	☿	△	or	1	mr ap	Y	Spain ...	O	co B m.1301 f. inf.
§4046	májor *B M.*	large	☿	△	or	1	mr ap	Y	Spain 1629	O	co Bot mag 51
§4047	propinquus *Sal.*	allied	☿	△	or	1	mr ap	Y	Spain 1629	O	co B m. 1301. f. su.
§4048	nóbilis *Haw.*	noble	☿	△	or	1	mr ap	Y	... .	O	co
4049	Ajax *Sal.*	great	☿	△	or	1	mr ap	Y	....	O	co
§4050	púmilus *Sal.*	low	☿	△	or	½	mr ap	Y	Spain ...	O	co Pass. hort 8
§4051	minor *W.*	small	☿	△	or	½	mr ap	Y	Spain 1629	O	s l Bot. mag 6

†*712. PANCRA'TIUM. *W* PANCRATIUM. *Amaryllideæ* *Sp* 24

4052	zeylánicum *W*	one-flowered	☿	⧄	or	1	jn jl	W	Ceylon 1752	Sk	r m Bot. reg 479
4053	verecúndum *K R*	Narcissus-leav	☿	⧄	or	1½	jn au	W	E Indies 1776	Sk	r m Bot reg 413
4054	maritimum *L.*	sea	☿	△	or	2	my jl	W	S Europe 1597	Sk	s p Bot reg 161
4055	carolinián um *K. R.*	Carolina	☿	⧋	or	2	jn jl	W	Carolina 1759	Sk	r m Cat. car 3 t 5
4056	canariénse *K R*	Canary	☿	⧋	or	1½	jn jl	W	Canaries 1815	Sk	r.m Bot reg 174
4057	illýricum *L*	Illyrian	☿	△	or	1½	my jn	W	S Europe 1615	Sk	s p Bot mag 718
§4058	Amáncaes *K R*	Narcissus-flow	☿	⧄	or	1½	jn jl	Y	Peru 1804	Sk	r m Bot reg 600
§4059	calathinum *K R.*	cup-flowered	☿	⧄	or	2	jn jl	W	Brazils ...	Sk	r m Bot reg 215
§4060	nútans *K R*	nodding	☿	⧄	or	2	jn jl	W	Brazils ...	Sk	r m Bot. mag 1561
4061	undulátum *K R*	wave-leaved	☿	⧄	or	1	jn jl	W	S Amer ...	Sk	r m
4062	littorále *L*	fan-leaved	☿	⧄	or	2	my au	W	S Amer 1758	Sk	r m Bot mag 1879
4063	Dryándri *K R*	tall	☿	⧄	or	2	my.au	W	... .	Sk	r m Bot mag 825
4064	angústum *K R.*	narrow-leaved	☿	⧄	or	1½	my au	W	....	Sk	r m Bot. reg 221
4065	rotátum *K R*	large-crowned	☿	⧄	or	1	jl s	W	Carolina 1803	Sk	r m Bot mag 1082
4066	mexicánum *K R*	Mexican	☿	⧄	or	1	au	W	Mexico 1732	Sk	r m Bot. cab 274
4067	guianénse *Ker.*	Guiana	☿	⧄	or	2	n	W	Guiana 1815	Sk	r m Bot reg 960
4068	pátens *Red*	spreading	☿	⧄	or	2	jl.au	W	W Indies 1822	Sk	r m Bot cab 558
4069	pedúle *Lodd*	long-flowered	☿	⧄	or	3	au	W	Brazil 1820	Sk	r m Bot cab 809
4070	frágrans *Rod.*	fragrant	☿	⧄	or	1	my au	W	W Indies 1819.	Sk	r m Bot. cab. 834
4071	bifórum *Roxb.*	two-flowered	☿	⧄	or	1	my au	W	E. Indies 1820	Sk	r m
4072	caribæ'um *L*	Caribean	☿	⧄	or	1½	my au	W	W Indies 1730	Sk	r m Bot. mag 826
4073	amæ'num *W*	handsome	☿	⧄	or	1	my au	W	Guiana 1790	Sk	r.m Bot. mag 1467
4074	ovátum *K R.*	oval-leaved	☿	⧄	or	1	my au	W	W. Indies ...	Sk	r m Bot. reg 43
4075	speciósum *L*	large	☿	⧄	or	1½	my au	W	W Indies 1759.	Sk	r m Bot mag 1453

713 EUCRO'SIA *B Reg* EUCROSIA *Amaryllideæ* *Sp* 1.

4076	bicolor *B Reg*	two-colored	☿	⧄	or	1	ap my	O	Cape Hor 1816	O	lt l Bot reg. 207

†714 EURYCLES. *Salisb* EURYCLES *Amaryllideæ* *Sp* 2—3

4077	amboinénsis *Sal*	heart-leaved	☿	⧄	or	2	my jn	W	Amboyna 1759	O	lt.l Bot. mag 1419
4078	australásica *Pancratium australasicum* Ker	Cunningham's	☿	⧄	or	1	my	W	N Holl 1821.	O	lt l Bot reg 715

715 CALOSTEMMA *R Br* CALOSTEMMA *Amaryllideæ* *Sp* 2—3

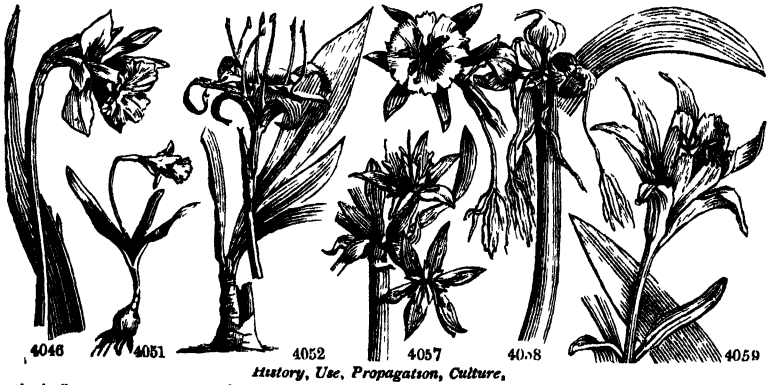
4079	lúteum *Ker.*	yellow	☿	⧄	or	1	n	Y	N Holl 1819	O	s.l Bot. reg. 421
4080	purpúreum *Ker*	purple	☿	⧄	or	1	n	Pu	N Holl. 1819	O	s.l Bot reg 422

716 CHLIDAN'THUS *Herb* CHLIDANTHUS *Amaryllideæ* *Sp* 1

4081	frágrans *Lindl*	fragrant	☿	⧋	or	1	my jn	Y	B Ayres 1820	O	lt l Lindl coll 54

†717 CHRYSIPHIALA *Ker* CHRYSIPHIALA *Amaryllideæ* *Sp* 2—3

4082	fláva *Ker*	yellow	☿	⧋	or	1	my	O	Peru 1821	O	lt l Bot. reg 778
4083	paucifióra *Lindl*	few-flowered	☿	⧋	or	½	my	O	Peru 1822	O	lt l Hook ex fl t 132



History, Use, Propagation, Culture,

ing the bulbs one season in an ice-house Many fine bulbs of this genus, are annually imported from Holland, and some from Naples, especially the italicus, which grows wild round that city in great beauty The genus has been injudiciously separated into several by Haworth, whom however no one has followed.

712. *Pancratium.* A name given by the Greeks to a kind of Scilla The word signifies all-force, from παν and κρατος, in allusion to its powerful effects in medicine. This is a free-flowering genus, several of the species are very handsome and fragrant, and are met with in most collections of stove plants A mixture of light loam and rich vegetable mould suits them best, and care must be taken not to give them much water, when they are not in a growing state They are to be increased by suckers, or from seeds, which often ripen freely. If any plant happen to lose its heart, if it be kept dry, it will throw out abundance of suckers, which is the readiest way of propagating it. (*Bot Cult* 89) P maritimum, illyricum, and carolinianum, are hardy; the other species are stove-plants. P. amancaes has yellow flowers, and is not less beautiful than rare.

4038 Scape striated compressed, Segm. flat · the outer ovate acuminate not so long as the serrated crown
4039 Scape smooth compressed, Crown very yellow deeply 6-cleft spreading, Segm ½ erect lanceolate
4040 Scape two-edged straight striated, Segm. sulphur, Crown yellow with serrate crenate orifice
4041 Segm. incurved horizontal a little twisted, Crown funnel-shaped ventricose at base very short
4042 Like the last, but the crown is yellow, the segm of flower yellowish
4043 Spathe 1-fl Scape 2-edged, Cup columnar plaited shorter than the sepals, Tube about as long as sepals
4044 Scape 2-edge nearly trian Spat. 1-2-fl Seg of cor lanc. acute, Crown plaited crenate thrice as long as limb
4045 Segm half as long as tube ovate, Crown funnel-form 6-cleft plaited upwards
4046 Leaves twisted very glaucous, Crown campanulate very large very open at orifice
4047 Segm. ½ erect twisted incurved spreading, Crown as long as segm deeply and irregularly cut
4048 Scape deeply striated, Seg much spread twisted ellipt. shorter than crown which has a very open orifice
4049 Scape deeply striated, Mouth of crown 6-cleft expanded deeply and irregularly crenate
4050 Pet. narrow obcuneate not imbricating at base, Crown 6-cleft at mouth spreading minutely rugose
4051 Spathe 1-flowered, Crown curled waved lobed, Scape 6 inches high

4052 One-flowered, Leaves lig lanc. Segments of limb longer than tube, Stamens incurved conniving
4053 Spathe 2-4-fl. Lvs lin acute, Limb of cor shorter than tube, Altern div of crown deeper, Stam. incurved
4054 Many-fl Lvs. sheath downw very glauc. with an obt point, Cr. much unit. to turb limb, Anth. bent inw
4055 Many-flowered, Leaves neither glaucous? nor sheathing downwards, Anthers incumbent
4056 Many-fl Lvs strap-shap somew glauc obt Tube twice as short as limb, Fil. not longer than teeth of cr.
4057 Many-fl Lvs strap-shap. ccs Scape 2-edged, Pet lanc conv longer than tube, Cr short with very deep div
4058 Many-fl Leaves bright-green, Tube as long as stellate nodding limb, Stamens short abruptly bent inwards
4059 1 or many-fl Spat. herb. Limb erect turb a little shorter than blunt. 3-cor tube, Cro not much shorter than
4060 Few-flowered, Leaves obt Spathe dry, Cor nodding, Anthers longer than filaments [limb
4061 Lvs stalked ellip shortly pointed, Scape compressed, Petals linear wavy, Racemes of crown 1-toothed
4062 Many-flowered, Leaves many lorate narrowed each way, Tube rounded twice as long as limb
4063 Leaves lanc lorate, Petals little shorter than tube, 5 times as long as crown
4064 Many-fl Lvs lorate with long points shin Petals spread longer than tube 3 times as short as nar crown
4065 Two or many-flowered, Leaves linear-lorate obtuse many, Crown turbinate rotate longer than filaments
4066 Two-flowered, Lvs few linear-lanceolate with long points, Crown rotate turbinate longer than filaments
4067 Many-flowered, Leaves oval-oblong stalked, Spathe 4-valved, Cup narrow 4 times as short as the limb
4068 Lvs broad-lin Flowers many sessile with linear straightish segments longer than tube, Crown obconical
4069 Leaves lanceolate dark-green, Flowers a foot long, Stamens short
4070 A slight variety of P amœnum, No. 4073
4071 One or 3-fl. Leaves linear cuneate, Tube as long as lin petals, Seg of crown eroded, Fil length of crown
4072 Many-fl Lvs many lin lanc Tube twice as short as limb, Cr twice as short as stam. with 1-tooth recesses
4073 Lvs. many oval-lanc 3 or 4 times as broad as stalk, Umbel sessile spreading, Tube shorter than limb
4074 Compactly many-fl Lvs oval stri nar each way, Tube round. nearly as long as limb, Teeth of crown entire
4075 Lvs many lanc elliptical with a point three times as broad as their stalk, Tube twice as short as limb

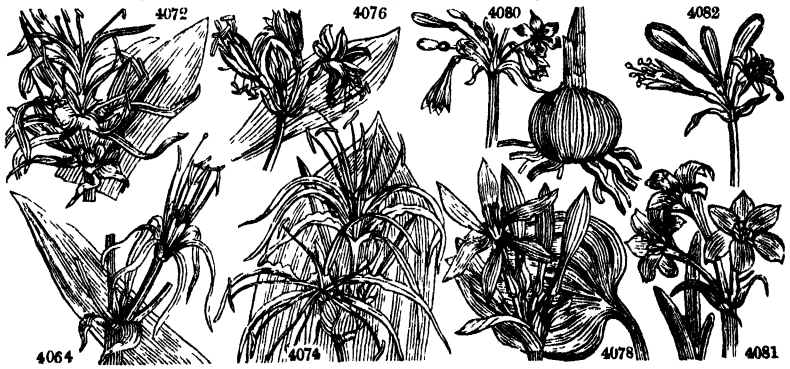
4076 The only species

4077 Leaves stalked cordate rounded with concentric distant nerves
4078 Like the last, but is smaller with a 6-parted crown

4079 Flowers yellow
4080 Flowers purple

4081 A small plant with bright yellow flowers appearing before the leaves

4082 Leaves linear ligulate, Flowers 6-7-cylindrical, with oblong obtuse segments
4083 Leaves oblong lanceolate stalked, Flowers 2 campanulate funnel-shaped



and Miscellaneous Particulars

713 *Eucrasia* From ευ, well, and κρασπεδον, a fringe, in allusion, we presume, to the beautiful fringe to the flower, formed by the cup of united stamens A pretty half-hardy bulbous plant, extremely rare.

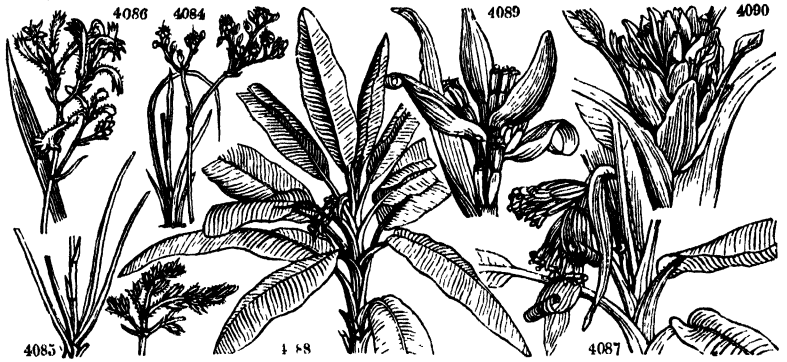
714 *Eurycles* From ευρυς, wide, and κλεισμα, a portion of a thing, in allusion to the broad divisions of the crown A genus formerly included in Pancratium, from which it is distinguished not only by its flowers, but by its broad leaves, which are like those of the Hemerocallis

715 *Calostemma* From καλος, beautiful, and στεμμα, a crown, in allusion to the beauty of the colored corona of the flower. Very pretty New Holland bulbs, requiring the cultivation of other greenhouse bulbs

716 *Chisdanthus.* From χλιδωσος, delicate, and ανθος, a flower, on account of the delicate color and texture of the beautiful yellow flowers. The plant requires a stove, and produces the scape before the leaves

717 *Chrysiphiala* So named by Mr Ker, in allusion to the golden cup-like flowers, χρυσος, gold, and φιαλη, a goblet Bulbous plants from the same country and with the same habits as the last.

718. LOPHI'OLA. *B M*	LOPHIOLA					*Hæmodoraceæ.*	*Sp* 1							
4084 aúrea *B M*	golden-flower	♀	△	or	1½	my jl	Y	N Amer.	1811	D	p l	Bot mag. 1596		
719 ARGOLA'SIA. *Juss.*	ARGOLASIA.					*Hæmodoraceæ.*	*Sp* 1							
4085 plumósa *W.*	woolly	♀	△	or	1½	...	W	C G H.	1787.	D	s l,p			
†720. ANIGOZAN'THOS *R Br*	ANIGOZANTHOS.					*Hæmodoraceæ*	*Sp* 1—2							
4086 flávida *R Br*	russet-green-fl	♀	⊔			my s		N Holl	1803.	R	s.p	Bot. mag 1151		
721 MU'SA. *W*	PLANTAIN-TREE					*Musaceæ*	*Sp* 4—5							
4087 paradisiaca *W*	common	♀	□	clt	20	o.d	Pk	India	1690.	Sk	s p	Tr. eh 3 t 18 20		
4088 sapiéntum *W.*	Banana-tree	♀	□	clt	20	mr o	Pk	W Indies	1729.	Sk	s p	Tr. eh 4 t 21 23		
4089 rosácea *W.*	rose-colored		□	or	20	f my	Pu	Mauritius	1805	Sk	s p	Bot reg. 706		
4090 coccínea *W.*	scarlet-flowered	♀	□	or	20	mr d	S	China	1792.	Sk	s p	Bot. mag. 1559		
722. URA'NIA. *W.*	URANIA					*Musaceæ*	*Sp* 1							
4091 speciósa *W*	Plantain-leaved	♀	□	or	20	...	R	Madagasc	...	Sk	p.l	Jac. sch. l. t. 93		
*723. BUONAPAR'TEA *F P*	BUONAPARTEA.					*Bromeliaceæ*	*Sp* 1—2							
4092 júncea *Fl p*	Rush-leaved	♀	□	or	1½	...	B	Peru	1800	C	s.l	Fl per 3. t. 262		
724. AGA'VE. *H K*	AGAVE					*Bromeliaceæ*	*Sp* 10							
4093 yuccæfólia *Haw*	Yucca-leaved	♀	□	or	6	...	Y w	.....	1819.	Sk	r m			
4094 americána *W*	common Amer	♀	□	or	20	au o	Y	S Amer	1640	Sk	r m	Bot rep 433		
4095 Milléri *Haw*	Miller's	♀	□	or	6	...	G	. ....	1768	Sk	r m			
4096 flácida *Haw*	flaccid	♀	□	or	6	..	G	S. Amer	1790	Sk	r m			
4097 lúrida *Jacq*	Vera Cruz	♀	□	or	8	jn jl	G	Vera Cruz	1731	Sk	s p	Bot mag 1522		
4098 angustifólia *Haw*	narrow leaved	♀	□	or	6	...	G	.....	1790	Sk	r m			
4099 Karátto *Mill*	Karatto	♀	⊠	ec	5	...	G	S Amer	1768	Sk	r m			
4100 vivípara *W*	viviparous	♀	⊠	or	15	au o	G	S Amer	1731	Sk	s p	Com præl t 15		
4101 virginica *W*	Virginian	♀	△	or	3	s	P G	N Amer	1765	Sk	r m	Bot mag 1157		
§4102 gemmiflóra *Ker*	pair-flowered	♀	△	or	10		B	America	1810	Sk	r m	Jo of Sc No 1 1		



History, Use, Propagation, Culture.

718 *Lophiola* From λοφια, a crest, on account of the little crest of the petals It is a very rare North American plant, and thrives best in pots set in saucers of water

719 *Argolasia* From αργος, white, and λασιος, wool, on account of its calyx, which is white and velvety on the outside. It requires the same culture as the last

720 *Anigozanthus* Named by Labillardiere, from ανιστχω, to raise up, and ανθος, a flower Its flowers are raised upon very long conspicuous scapes Curious New Holland plants, with yellow or green flowers

721 *Musa.* So named by Plumier, in memory of Antonius Musa, the brother of Euphorbus, and the the freedman of Augustus. Such is the sense in which Linnæus admits the word. But the Arabic name for the plant, *mauz*, is a much more likely derivation This splendid genus consists of species which have perennial, roundish, solid, watery bulbs, with biennial, and sometimes longer enduring stems The stems are straight, erect, varying from five to twenty-five feet in height, simple, thick, round, smooth, fungous, watery, and lamellated The leaves are oblong, entire, from three to ten feet in length, and under two feet in width The flowers are in large terminating racemes, without a calyx or perianthium, generally whitish the fertile flowers occupying the lower, and the barren the upper, part of the raceme The former are succeeded by oblong, angular, fleshy berries, sweet, eatable, and containing many black seeds They are natives of the old world, and for the most part cultivated there: none appear to be natives of America.

M paradisiaca rises with a soft herbaceous stalk fifteen or twenty feet high, with leaves often more than six feet long, and near two feet broad When the plant is full grown, the spike of flowers appears from the centre of the leaves, it is near four feet in length, and nods on one side The fruit which succeeds the fertile flowers on the lower part of the spike is eight or nine inches long, and above an inch in diameter, a little incurved, with three angles, at first green, but when ripe of a pale yellow color The skin is tough, and within is a soft pulp of a luscious sweet flavor The spikes of fruit are often so large as to weigh upwards of forty pounds Gerarde, and other old authors, name it Adam's apple, from a notion that it was the forbidden fruit of Eden, whilst others supposed it to be the grapes brought out of the promised land by the spies of Moses. It is certainly one of the most useful fruits in the world, and seems to have migrated with mankind into all the climates in which it can be cultivated The fruit is so much esteemed by all Europeans who settle in America, that the first thing they do in establishing a plantation is to begin with a Plantain walk, enlarging it as their family increases Some or other of the trees are bearing most part of the year, and their fruit is often the whole food on which a family subsists When used instead of bread, it is roasted or boiled when just full grown it is also eaten boiled with salt-meat or fish, and when ripe it is made into tarts, sliced and fried with butter, or dried and preserved as a sweetmeat A fermented liquor is made from them, and in some places a cloth from the fibres of the trunk, the leaves make excellent mats, or serve for stuffing mattrasses. Long (*Jam* 788) says, this fruit and the banana are among the greatest blessings bestowed by Providence upon the inhabitants of hot climates Three dozen plantains are sufficient to serve one man for a week instead of bread, and will support him much better

M. sapientum is by some considered a variety of the plantain, from which it differs in having its stalks marked with dark purple stripes and spots The fruit is shorter and rounder, with a softer pulp, of a more luscious taste An excellent marmalade, and a drink like the best Southnam cider, are made from it. There are many varieties both of the plantain and banana

M. rosacea and coccinea, are very ornamental plants, on account of the color of the flowers, but scarcely to be distinguished from M. paradisiaca. The culture of all the species is easy in lofty houses, with abundance

4084 The only species

4085 Leaves linear carinate smooth, Scape angular corymbose, Flowers woolly

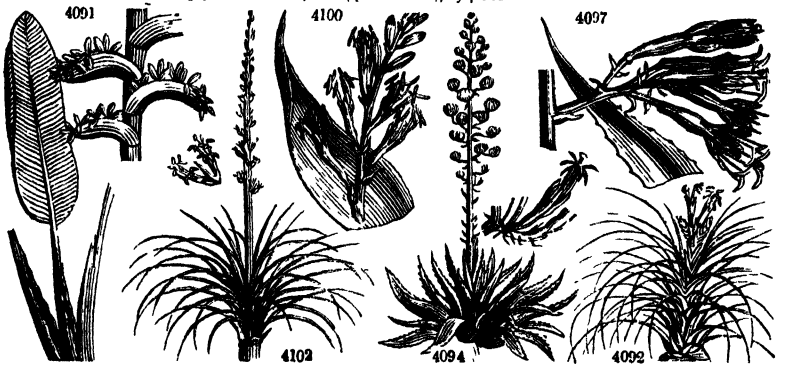
4086 Stem and leaves smooth, Down of branches deciduous, Anthers with a reflexed end

4087 Spadix nodding, Male flowers persistent
4088 Stem spotted, Spadix nodding, Male flowers deciduous
4089 Spadix nodding or erect, Male flowers deciduous, Spathes elliptical obtuse, Fruit oblong
4090 Spadix erect, Flowers capitate, Spathes clustered scarlet very large yellow at end

4091 A plant like a Banana

4092 Leaves multifarious cæspitose recurved very narrow and rigid

4093 Lvs lorate atten erect recurved glaucous above chan with marginal minute dense white serrulations
4094 Stemless, Lvs toothed spiny, Scape branched, Tube of cor contracted in middle, Stem longer than cor.
4095 Leaves toothed spiny, Scape quite simple
4096 Leaves narrow lanceolate flaccid recurved, Spines marginal minute
4097 A little stemmed, Leaves toothed spiny, Scape branched, Stam. longer than cylind. cor
4098 With a stem, Leaves narrow lanceolate glaucous tooth-serrated
4099 Leaves erect bright green with an entire brown edge
4100 Stemless, Leaves toothed, Scape branched, Tube of cor narrowed in middle, Stem as long as cor.
4101 Stemless, Leaves cartilaginous sawed, Scape simple
4102 Leaves threadly at edge, Flowers of spike approximating by pairs



and Miscellaneous Particulars

of room for the roots, and a rich loamy soil kept rather moist. A plant of the banana was planted in the pit of a stove about 1811 "It was then about six feet high, with a single stem In each succeeding year it has produced a bunch of fruit, and in 1819 two bunches, the first ripe in May, the other in August, having about four dozen of fruit on each bunch The plant is now sixteen feet high, and measures three feet round at the bottom" (*Hort Trans* iv 138)

722 *Urania* A name of one of the muses, unjustifiably applied to this genus by Schreber, in the room of that of Ravenala, which it bears in Madagascar To grow this plant luxuriantly, a strong heat and a good supply of water are required Fresh imported seeds will grow freely

723 *Buonapartea* So named by the authors of the Flora Peruviana, after Napoleon Bonaparte, emperor of the French. Fine plants like Bromelia, with long, narrow, recurved leaves, and spikes of simple blue flowers, which were never yet seen in this country

724 *Agave* Altered from αγαυος, admirable, which this genus may well be said to be, considering its appearance, its size, and the beauty of its flowers. In mythology, Agave is the name of one of the Nereids A americana is a popular succulent throughout Europe It grows wild or is acclimated in Sicily, the south of Spain, and Italy, and is much used in the latter country, planted in vases as an ornament to piers, parapets, and about houses About Milan and other towns in Lombardy, where it will not endure the winter, they use imitations of copper so well formed and painted, as to be readily mistaken for the original In France and Germany it is still very common, and in this country formerly used to be the regular companion of the orange, myrtle, and pomegranate, then our principal greenhouse plants. An idea used to prevail that the American Aloe only flowered once in a hundred years, but, independently of this unnatural application of time to the inflorescence, it has long been known to flower sooner or later, according to the culture bestowed on it. Many have flowered within these few years in this country, and if the plant had the same treatment as the pine-apple, it would probably flower nearly as often There is a variety with striped foliage, and sometimes the stripes are of different shades of white, yellow, and red, as in the queen pine-apple. There are hedges of the plant in Spain, Portugal, Sicily, Calabria, and the West Indies. According to Long, (*Jamaica*, iii 710) the leaves are useful as a succedaneum for soap. For this purpose, after being cut, they are passed between the rollers of a mill with their point foremost, and the juice being conducted into wide shallow receivers, through a coarse cloth or strainer, it is exposed to a hot sun, until the aqueous part being exhaled, it is reduced to a thick consistence It may then be made up into balls, with the help of ley ashes. It will lather with salt water as well as fresh This soap may also be prepared by pounding the leaves in a wooden mortar, and then expressing the juice, which may be brought to a consistence by the sun or by boiling One gallon of juice thus prepared, will yield about one pound of a soft extract. The juice, in both these ways, must be carefully strained, and the extract must never be combined with tallow or other unctuous materials The leaves are also used for scowering pewter, and other kitchen utensils, and floors The inward spongy substance of the decayed stalk is used for tinder The fibres of the leaves, separated by bruising and steeping in water, and afterwards beating them, make a strong thread for common uses. All the species greatly resemble each other, and it is doubted, whether, in the works of several travellers, different species of Agave Aloe, and even Bromelia, are not confounded in their descriptions of their uses. There is, for example, a variety of the Agave americana, called Karatas by Long, and there is a species of Bromelia of that designation, hedges of Karatas are frequently mentioned without noticing the generic name of the plant.

725. FURCRÆ'A *V.* Furcræa — *Bromeliaceæ. Sp* 5—7.

4103	gigantéa *Vent*	gigantic	♄	or	20	ja s	Gr	S. Amer	1690	Sk r m Bot. mag. 2250
4104	tuberósa *H K*	tuberous	♄	or	10	au s	Gr	S Amer	1739	Sk r m
4105	cubénsis *W*	Cuba	♄	or	6	...	Gr	S Amer.	1739	Sk r m J. am. t. 260. f. 25
4106	rígida *Mill.*	rigid	♄	or	6	...	...	S. Amer	1768	Sk r m
4107	austrális *Haw.*	entire-leaved	♄	or	...	...	...	N Holl	1811	Sk r m

*726 BROME'LIA *W.* Pine-apple — *Bromeliaceæ Sp* 16—29

§4108	Ananas *W*	common	♄	fr	4	ja d	P	S Amer	1690	Sk r m Bot. mag 1554
4109	semiserráta *W en.*	half-sawed-lvd	♄	or	3	ja d	Gr	S Amer.	...	Sk r m
§4110	lúcida *W en.*	King-Pine	♄	fr	4	ja.d	Pk	S. Amer.	...	Sk r m D el. 25 t 21 f 22
4111	Pinguin *W*	broad-leaved	♄	ec	3	mr.ap	R	W. Indies	1690	Sk r m Jac. am. pic t. 91
4112	sylvéstris *W*	wild	♄	or	3	jl	Cr	S. Amer.	1820	Sk r m Bot. mag. 2392
4113	fastuósa *Lindl*	noble	♄	or	4	au s	Pu	S Amer	1815	Sk s p Lindl coll 1.
4114	Karátas *W.*	upright-leaved	♄	or	2	...	Pk	W Indies	1739.	Sk r m Jac v. 1 t 31, 32
§4115	nudicaúlis *W*	naked-stalked	♄	or	2	f mr	Cr	R Janiero	...	Sk r m Bot reg 203
	pyramidalis B M									
4116	pállida *Ker*	pale	♄	or	1½	n	G Y	S Amer	1817	Sk s p Bot. reg 344
4117	chrysántha *Jacq.*	golden-flowered	♄	or	2	...	Y	Caracas	1819	Sk s p Jacq sch. 1 t. 55
4118	linguláta *W*	tongue-leaved	♄	or	1½	my jn	Y	S Amer	1759	Sk r m Plum ic t 64. f. 1
§4119	bracteáta *W*	red-bracted	♄	or	2	s o	Pk	Jamaica	1785	Sk r m Par lond 40
4120	Acánga *L*	recurved	♄	or	2	...	...	Brazil	1822	Sk s p Pis bras t 91
4121	exsúdans *Lodd*	sweating	♄	or	2	s o	Y	W Ind	1820	Sk r m Bot. cab 801
4122	húmilis *W*	dwart	♄	or	1	mr	Pk	.....	1789	Sk r m Jac ic 1 t 60
§4123	melanántha *Ker*	black-flowered	♄	or	1½	my	Bl	Trinidad	1824.	Sk r m Bot. reg 766

727 GUZMAN'NIA *Fl Per* Guzmannia — *Bromeliaceæ Sp* 1.

4124	tricolor *Fl Per*	three-colored	♄	or	1	my	G s	S Amer	1820	Sk r m Lindl. coll 8

†728 PITCAIR'NIA *W* Pitcairnia — *Bromeliaceæ Sp* 9—14

4125	bromeliæfólia *W*	scarlet	♄	or	2	jn	S	Jamaica	1781	Sk s p Bot mag 824
4126	angustifólia *W*	narrow-leaved	♄	or	2	ja d	S	Sant Cruz	1777	Sk s p Bot mag 1547
4127	integrifólia *B M*	entire-leaved	♄	or	2	au	R	W Indies	1800	Sk s.p Bot mag 1462
4128	latifólia *W*	broad-leaved	♄	or	2	au s	S	W Indies	1785	Sk s p Bot mag 856
4129	bracteáta *H K*	large bract-red	♄	or	2	ap my	R	W Indies	1799	Sk s p Red lil. 73, 74
4130	sulphúrea *B R*	yellow-flower'd	♄	or	2	jn au	Y	W Indies	1797	Sk s p Bot mag 1416
4131	furfurácea *W en.*	drooping-leav'd	♄	or	2	jn au	R	S Amer	1816	Sk r m
4132	coarctáta *R & P*	contracted	♄	or	2	my jn	Y	Chile	1822	Sk r m Feuill chil t 39
4133	stamínea *B M*	long-stamened	♄	or	2	ja	S	S Amer	1823	Sk r m Bot. mag 2411

†*729 TILLAN'DSIA *W* Tillandsia — *Bromeliaceæ Sp* 11—27

4134	utriculáta *W*	bladder	♄	or	2	...	P Y	S Amer	1793	Sk s.p
4135	serráta *W*	saw-leaved	♄	or	2	jn	Y	Jamaica	1793	Sk s p Pl. ic 63 t 75. f. 1



History, Use, Propagation, Culture,

725 *Furcræa* Named in honor of M Fourcroy, the famous French chemist A noble genus resembling the last

726 *Bromelia* So named by Linnæus, in memory of Olaus Bromel, a Swede, author of Lupulogia, and other works, 1694, &c *Ananas*, Fr, Ger, and Ital., and *Nanas* among the Peruvians, where it was originally found by Europeans This fruit may, without hesitation, be pronounced the first in the world, though it has not been known in Europe above two centuries, and has only been cultivated about a century as a fruit plant in Britain It passed from Brazil to the West, and thence to the East Indies, where it has long been successfully cultivated About the middle of the seventeenth century it was brought to Holland, by Mr La Court, a merchant, and cultivated at Driehoek, his seat, near Leyden; and from thence it was imported into this country, and first fruited by Sir Matthew Decker, at Richmond, about 1715, or earlier La Court began by growing his pines without bottom heat, as dry stove plants, but afterwards had recourse to low pits and tanner's bark Plans of his pits, and an account of his mode of culture, are published in his work, entitled, Aenmerkingen over Lusthoven, Plantagion, &c (See *Ency of Gard* p 1120, Anno 1737.) Sir M Decker, Bradley informs us, adopted pits, and soon after pine stoves, or larger and more commodious pits, were, by the year 1730, in most of the first English gardens, and some also in Scotland, where the pine-apple was first fruited by Justice, at Crichton, near Edinburgh, in 1732 The pine is now cultivated very generally in Britain, in several places in Ireland, and at most of the capital cities on the continent In one or two of the southern provinces of Spain, it is grown in sheltered situations in the open air

There are many varieties of the pine in the West Indies, procured by raising from seed in this country there are upwards of thirty sorts, but the queen, New Providence, and one or two others, are most esteemed. The plants are propagated by suckers, and by that singular production, proceeding from the summit of the fruit, called a crown from large suckers fruit is sometimes obtained in eighteen months, but, in general, a period of two or three years is required, and for the New Providence sometimes longer Loamy soil well enriched with rotten dung, and the pots sufficiently drained, with abundance of heat without sudden extremes, will ensure large and well flavored fruit (See *The various Modes of cultivating the Pine-Apple from its first Introduction to the Improvements of Mr Knight*, &c 8vo 1822)

Some of the other species of true Bromelia have crowns, and the fruit of most of them is eatable, though small. B. Pinguin has the fruit separately in clusters, and not in a cone or pine, as in the Ananas. It is very common in Jamaica, in most of the Savannahs, and on the rocky hills It is used there for fencing pas-

4103 Leaves entire, Scape branched
4104 Root tuberous, Leaves very long spiny at edge
4105 Cor hexapetalous, Leaves ciliate spiny
4106 Leaves linear lanceolate entire upwards, at the base serrate spiny
4107 An obscure plant described by Haworth only and supposed to be *Doryanthes excelsa*!!

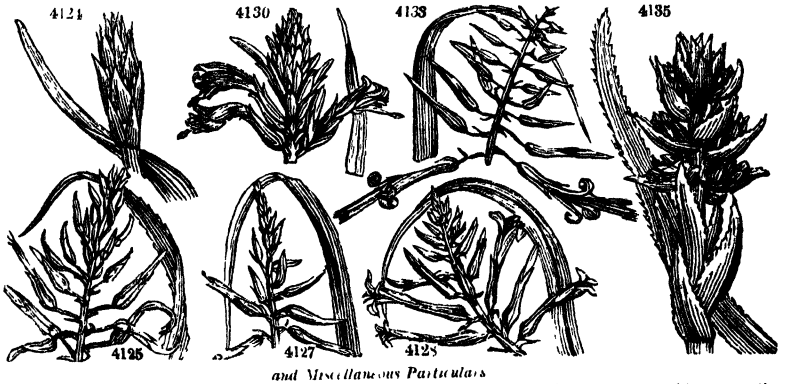
4108 Leaves fringed with spines mucronate, Spike comose
4109 Leaves at the end toothed spiny, Spike comose
4110 Leaves entire, Spike comose
4111 Leaves ciliated spiny mucronate, Raceme terminal
4112 Leaves ciliated spiny with a very long point, Raceme term. comp Flowers sessile shorter than bracteæ
4113 Leaves ciliated spiny with a very long point, Raceme rigid compound, Flow. in numerous lateral spikes
4114 Leaves erect, Flowers stemless sessile aggregate
4115 Radical leaves toothed spiny · cauline entire

4116 Panicle lax few-fl spreading, Peduncles 1-flowered, Upper spathes fertile as long as flower spreading
4117 Leaves serrate spiny, Bractes lanceolate toothed, Raceme compound shorter than leaves
4118 Leaves serrated spiny obtuse, Spikes alternate
4119 Leaves serrate spiny, Bractes ovate lanceolate, Scape elongated, Raceme compound
4120 Panicle diffuse, Leaves ciliate spiny mucronate recurved
4121 Raceme compound, Flowers heaped shorter than the long red entire bracteæ, Calyx acute
4122 Nearly stemless, Leaves aggregate sessile, Axillæ stoloniferous
4123 Leaves ligulate oblong very blue, Spike oval woolly with small sessile flowers

4124 Scape upright, Spike imbricated, The lower bracteæ green; the upper scarlet

4125 Leaves ciliate spiny, Peduncles and germens quite smooth
4126 Leaves ciliate spiny, Peduncles and germens downy
4127 Leaves narrow glaucous entire, Calyx villous
4128 Leaves entire somewhat spiny at base
4129 Leaves entire a little spiny at base, Bractes as long as peduncle and calyx
4130 Leaves entire white beneath, Raceme imbricated dense
4131 Leaves toothed spiny recurved, above shining smooth, beneath mealy
4132 Spike compound contracted, Leaves ensiform aculeate, Cor with a black spot at bottom
4133 Leaves linear lanc entire, Petals revolute, Stamens longer than cor

4134 Culm panicled
4135 Leaves upwards serrate spiny, Spike comose



and Miscellaneous Particulars

ture lands, on account of its prickly leaves These, stripped of their pulp, soaked in water, and beaten with a wooden mallet, yield a strong thread which is twisted into ropes and whips, and manufactured by the Spaniards into a good cloth The juice of the fruit in water makes a cooling draught in fevers, it is extremely diuretic, destroys worms, and makes a good vinegar

B Karatas, so called from its Brazilian name, *Karaguata-acanga*, generally grows at the root of some shady tree, in hilly and woody places in America and the Caribbee islands It is an elegant plant, producing numerous radical leaves, which are of a subulate-linear shape, sharp pointed and edged with spines The flowers are scentless, seated in the bosom or middle part of the plant, rose colored, with the calyx and germ downy The length of the leaves is six or seven feet. The fruits are oval, two or three hundred in number, and grow sessile in a heap or central group, surrounded by paleaceous expanded leaves or bractes; they contain a succulent whitish or yellowish flesh, under a coriaceous and yellowish bark When ripe, they are far from unpleasant, but when unripe they set the teeth on edge, and excoriate the mouth The economy of this plant in the preservation of its fruit to maturity is wonderful: being so protected by the spines of the surrounding leaves, as to be secure from all injuries

B humilis propagates itself by runners or shooting processes, which proceed from the axillæ of the lower leaves, and produce a young plant from their extremities.

Bromelia fastuosa is the most beautiful of the genus It has never flowered more than once in this country, when the figure in Mr. Lindley's Collectanea Botanica was obtained Bromelia sylvestris resembles this, but is less beautiful

727 *Guzmannia* Named after Anastatio Guzman, an industrious apothecary, and zealous collector of objects of natural history in South America. A beautiful evergreen herbaceous plant, with the foliage of Tillandsia, and a spike of bracteæ, the uppermost of which are richly colored with rose

728 *Pitcairnia* So named by Mons L'Heritier, in honor of William Pitcairn, M D an eminent physician of London, and a collector of foreign plants, particularly from the Alps. The species are remarkable for their long, narrow, green, prickly leaves, and for their uniform panicles of bright red. Pitcairnia staminea is very handsome. They require the same treatment as Bromelia.

729. *Tillandsia* So named by Linnæus, in memory of Elias Tillandsius, professor of physic at Abo, author

§4136 amœ'na *Lodd*	charming	♂ ◻	or	2	jn	V	W Indies	1819	Sk s p	Bot cab 76
4137 usneoides *W*	pendulous	♂ ◻	or	6	..	Pu	W Indies	1823	Sk p	Pl alm. t 2o f.5
§4138 lingulâta *W*	tongue-leaved	♂ ◻	or	2	jn,jl	Y	Jamaica	1776.	Sk s p	Jac. amer t 62
4139 flexuósa *W*	flexuose	♂ ◻	or	1	..	B	W Indies	1790	R s p	Jac. amer t. 63
β pállida	*pale*	♂ ◻	or	1	jn jl	Y	W Indies	1815	R s p	Bot reg. 749
4140 ânceps *Lodd*	two-edged	♂ ◻	or	¾	ap	B	W Indies	1820	R s.p	Bot cab. 771
4141 nûtans *W*	nodding	♂ ◻	or	2	au	B	Jamaica	1793	R s p	
4142 stricta *B M.*	stiff-leaved	♂ ◻	or	¾	n	B	Brazil	1810	R s p	Bot mag. 1529
4143 recurvâta *W*	recurve-leaved	♂ ◻	or	½	jl	Pu	Jamaica	1793	R s p	Sl ja l. t. 121. f 1
4144 xiphioides *B Reg*	Air-plant	♂ ◻	or	½	jl	W	Buen Ay	...	R s p	Bot. reg. 105

†730 PONTEDE'RIA *W* PONTEDERIA. *Commelineæ Sp 4—7*

4145 cordâta *Ph*	heart-leaved	≗ △	or	2	jn au	B	N Amer	1759	D l	Bot mag 1156
4146 angustifólia *Ph*	narrow-leaved	≗ △	or	2	jn au	B	N Amer	1806.	D l	
4147 dilatata *H K*	spreading	≗ ◻	or	2	my	B	E. Indies	1806	D l	Bot rep 490
4148 lanceoláta *Lodd*	lanceolate	≗ ◻	or	2	au	B	N Amer	1815.	D l	Bot. cab 613

731, HÆMANTHUS *W* BLOOD-FLOWER *Amaryllideæ. Sp 14—16*

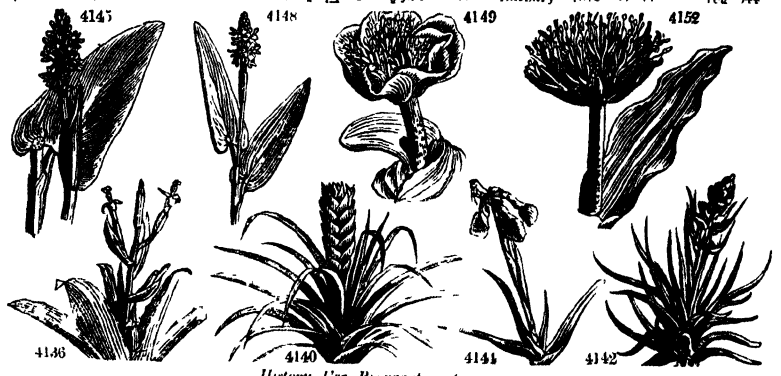
4149 coccineus *W*	salmon colored	☿ ◺	or	1	au o	R	C G H	1629	O r m	Bot mag 1075
4150 coarctâtus *W*	compressed	☿ ◺	or	1	f mr	Pk	C G H	1795	O r m	Bot. reg 181
4151 rotundifólius *B M*	round-leaved	☿ ◺	or	1	jn o	S	C G H.	1790	O s l p	Bot mag 1618
4152 puniceus *W*	wave-leaved	☿ ◺	or	1	my s	S	C G H	1722	O r m	Bot mag 1315
4153 multiflórus *W*	many-flowered	☿ ◺	or	1	my s	D R	S. Leone	1783	O r m	Bot mag 961
4154 tigrinus *W*	tiger-spotted	☿ ◺	or	1	f d	F	C G H	1790.	O r m	Bot mag 1705
4155 quadrivâlvis *W*	four-valved	☿ ◺	or	1	s o	F	C G H	1790	O r m	Bot mag 1523
4156 pubéscens *W*	pubescent	☿ ◺	or	1	au	W	C G H	1774	O r m	Bot cab 702
β albiflós W	*white-flowered*	☿ ◺	or	1	ap au	W	C G H	1791.	O r m	Bot mag. 1239
4157 maculâtus *Jacq*	spotted-leaved	☿ ◺	or		ap au	..	C G H	1790	O s l p	
4158 lanceæflórus *W*	spear-leaved	☿ ◺	or	1	s o	R	C G H	1794	O r m	Jac sch 1 t 60
4159 carinâtus *W*	keel-leaved	☿ ◺	or	¾	au s	Pk	C G H	1759	O r m	
4160 pumilio *W*	dwarf	☿ ◺	or		au s	Pk	C G H	1789	O s l p	Jac sch 1 t 61
4161 cárneus *Ker*	flesh-colored	☿ ◺	or	½	jn jl	Pk	C G H	1819	O s l p	Bot reg 509
4162 Hyalocárpus *Jacq*	china-fruited	☿ ◺	or	1	jl	R	C G H	1822	O s l p	Jacq sch t 409

732. GALAN'THUS *W* SNOWDROP *Amaryllideæ Sp 2*

4163 nivâlis *W*	common	☿ △	or	¼	ja mr	W	Britain	mea	O co	Eng bot 19
4164 plicâtus *Bieb*	plaited	☿ △	or	¼	ja ap	W	Crimea	1818	O co	Bot reg 545

†*733 LEUCO'JUM *W* SNOW-FLAKE *Amaryllideæ Sp 5*

4165 vérnum *W*	spring	☿ △	or	¼	ja mr	W	Germany	1596	O s l	Bot mag 46
4166 æstivum *W*	summer	☿ △	or	1½	ap my	W	England	m me	O s l	Eng bot 621
4167 pulchéllum *P L*	neat	☿ △	or	1½	ap my	W	.....	..	O s l	Par lond t 21
§4168 autumnâle *W*	autumnal	☿ △	or	¼	s	Pk	Portugal	1629	O s l	Bot mag 660
§4169 trichophéllum *P S*	narrow-leaved	☿ △	or	¼	ja f	W	Barbary	1812	O s l	Bot reg 544



History, Use, Propagation, Culture,

of Flora Abocnsis, 1673 Several species of this genus are parasitical, and others require the same treatment as PILLARMIA or BROMELIA

T. utriculata is a valuable plant in the woods of the West Indies, as containing a supply of water in dry seasons The seed being pappose, is carried about by the wind, and sticks readily on the bark of trees there, especially on decaying ones, it sends out small brown fibres which take hold of the bark, and weave and mat themselves among one another from this foundation rise several leaves on every side, like those of Aloes or Ananas, they are folded or inclosed one within another, each three feet and a half long, and three inches broad at the base, but ending in a point, having a very hollow or concave inward side, and a round or convex outward one, forming a bason or cistern, containing about a quart of water, which, in the rainy season falls upon the upper parts of the spreading leaves, and being conveyed down them by channels, lodges in the bottom as in a bottle, for the leaves, having swelled out at the base, bend inwards close to the stalk, thus hindering the evaporation of the water by the heat of the sun From the midst of the leaves rises a round, smooth, straight, green stalk, three or four feet high, having many branches, and when wounded yielding a clear white mucilaginous gum The flowers come out here and there on the branches The corolla is of a yellowish-white or herbaceous color, and the calyx is made up of three green viscid leaves with purple edges

Men, birds, and insects supply themselves with water from this plant Dampier says, he has many times, to his great relief, stuck his knife into the leaves just above the roots, and let out the water into his hat

T usneoides deserves, for its appearance and uses, to be shortly described. The stem is no bigger than a thread, the skin whitish, as if covered with hoar-frost, within tough and black like a horse hair. Many of these together stick on the branches of the ebony or other trees superficially by the mid-curled, or turning and winding one within another, and resembling an old man's beard, whence its common name in Jamaica The stems are branched, and the branches, which are two or three inches long, are set with roundish, white, frosted leaves The flowers come out at the end of the branches. This slender parasitical plant is found among the trees in many parts of Jamaica, but does not grow so commonly there, nor so luxuriantly, as it does in the more northern provinces of the main continent, where it is said to overrun whole forests. It is frequently imported from Jamaica to North America, for the use of the

4136 Leaves lanceolate channelled slightly prickly, outer acute inner retuse
4137 Filiform branched twisted rough
4138 Leaves lanceolate ligulate entire ventricose at base
4139 Leaves linear subulate entire imbricate, Spike lax

4140 Leaves narrow channelled recurved, Spike imbricated simple oval two-edged
4141 Spikes subdivided nodding, Flowers distinct ovate, Leaves ovate lanceolate membranous
4142 Leaves radical stiff frosted, Flowers imbricated in an ovate spike of whitish bractes
4143 Leaves subulate rough reclinate, Stems 1-flowered, Glumes 2-flowered
4144 Flower tubular trifid, Segments of the tripetaloid limb reflexed twice as short as tube, Lvs entire

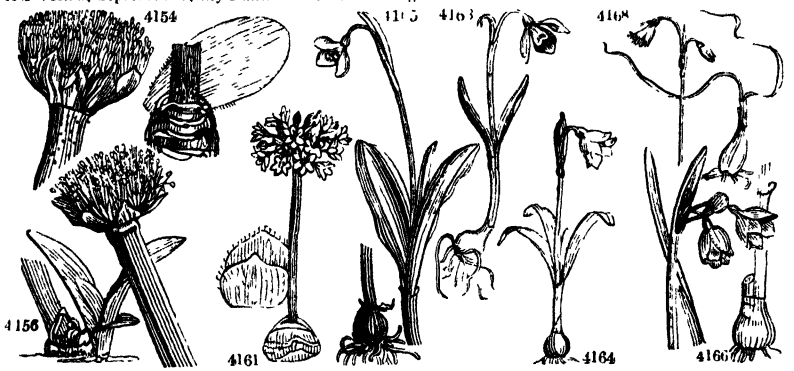
4145 Leaves cordate, Flowers spiked
4146 Leaves long-triangular narrowed by degrees, at the base truncate cordate, Petals lin lanc
4147 Leaves sagittate obtuse, Flowers in crowded umbels
4148 Leaves lanceolate elliptical cordate, Spike oblong

4149 Leaves linguiform flat smooth pressed on the ground 2-ranked, Umbel shorter than the spathe
4150 Leaves linguiform oblong flat smooth callous at end, Umbel contracted shorter than spathe, Limb erect
4151 Leaves rounded fringed with pink hairs, Umbel few-flowered, Leaves of spathe cordate blunt
4152 Leaves oblong elliptical acute retuse wavy, Umbel contracted, Limb and stamens erect
4153 Leaves ellipt lanceol acute concave erect, Umbel longer than spatha, Limb spreading, Stam ascending
4154 Leaves linguiform flat smooth fringed at edge depressed, Umbel contracted, Limb and stamens erect
4155 Leaves lanceolate ciliated villous above smooth beneath, Spathe campanulate 4-valved
4156 Leaves oblong lanceolate hairy all over, Umbel fastigiate rounded, Limb and stamens erect

4157 Leaves broad much spotted with brown
4158 Lvs ellipt atten at base depressed flat smooth ciliated at edge, Pedunc longer than spathe and flower
4159 Leaves linear carinated
4160 Leaves linear lanceolate erect smooth, Peduncles length of spathe and flowers, Limb spreading
4161 Leaves 2 round ovate acuminate and scape hairy backwards, Spathe reflexed withered, Stam included
4162 Leaves oblong obtuse smooth erect not spotted, Umbel rounded, Limb erect

4163 Leaves smooth
4164 Leaves plaited

4165 Spathe 1-flowered, Style clavate
4166 Spathe many-flowered, Style clavate
4167 A slight variety of the last
4168 Spathe many-flowered, Style filiform
4169 Vernal, Sepals entire, Style filiform with a blunt stigma



and Miscellaneous Particulars

saddlers and coachmakers, who commonly stuff their pannels, cushions, &c with it In Louisiana and the neighbouring settlements, this plant being very carefully gathered and stripped of the bark, is made into mattrasses, cushions, pannels, &c It is manufactured by tying the stalks in bunches, and sinking them in water, or burying them under ground in a moist place, until the bark rots · they are then taken up, boiled in water, and washed, until the fibres are quite cleared of the pulp These are not only used instead of horse-hair, but are so very like it, that a man cannot distinguish them, without a strict examination, and that even with a glass, unless he observes the branchings of it

The Bonana bird's nest is always made of the fibres of this plant, and is generally found hanging by a few threads from the tops of the most expanded branches of the most lofty trees, especially those that spread over ponds or rivers

In cultivating Tillandsia in our stoves, the parasitical species may either be hung up in baskets of moss, or fastened in moss to some plant, or to the stump of a tree set up on purpose if planted in pots, they require but little water, and a sandy loam, with bits of sticks and small pieces of potsherds mixed with it. (*Sweet.*) They are, however, extremely difficult to manage under any mode of treatment.

730 *Pontederia* So named in memory of Julius Pontedera, professor of botany at Padua, author of Tabulæ Botanicæ, 1718, &c This is a genus of aquatic, herbaceous, perennial plants, with fibrous roots sheathing stem-leaves, and blue flowers in spikes or umbels from the cloven sheath of the leaves A loamy soil in a cistern of water grows them well, and they are not without beauty

731 *Hæmanthus* From αἷμα, blood, and ἄνθος, a flower, in allusion to the brilliant red colors of the flowers An ornamental genus, which thrives best in sandy loam and a little peat, and placed in a dry stove or bulb-house near the glass. The species require no water when in a dormant state, as the bulbs then ripen, and afterwards flower freely. (*Sweet*)

732 *Galanthus* From γαλα, milk, and ἄνθος, a flower, on account of the milky whiteness of the blossoms It is rather singular, and also to be regretted, that no variations or hybrids have been produced from this early and pretty little flower.

733 *Leucojum.* From λευκος, white, and ἰον, a violet A genus resembling the last in habit, but differing in technical characters. The little autumn species is very pretty, but difficult to cultivate.

734. **STRUMA'RIA.** *Jac.* STRUMARIA — *Amaryllideæ* *Sp* 9—11.

4170	truncáta *W.*	truncated	☿	⧋	or	½	ap my	W	C G H.	1795.	O	s.l	Jac. ic. 2. t. 357
4171	rubélla *W*	pale-red	☿	⧋	or	½	my jn	Pk	C G H	1795.	O	s.l	Jac ic. 2. t. 358
4172	angustifólia *W.*	narrow-leaved	☿	⧋	or	½	ap my	Pk	C G H.	1795	O	s.l	Jac. ic 2 t. 359
4173	linguæfólia *W.*	tongue-leaved	☿	⧋	or	½	ap my	W	C G H	...	O	s.l	Jac. ic. 2 t 356
4174	filifólia *H K*	fine-leaved	☿	⧋	or	½	n	W	C G H	1774.	O	s.l	Bot. reg. 440
4175	spirális *H K.*	spiral	☿	⧋	or	½	ap au	Pk	C G H	1774	O	s.l	Bot mag 1383
4176	crispa *B M.*	curled-flower'd	☿	⧋	or	½	ap au	Pk	C G H	1790	O	s.l	Bot mag 1368
4177	stellária *Jacq*	starry	☿	⧋	or	½	o n	Pk	C. G H	1794	O	s.l	Jac sch 1. t 71
4178	gemmáta *B M.*	Jewel-flowered	☿	⧋	or	1	au	Pa Y	C G H	1812.	O	s.l	Bot. mag 1690

†735. **CRI'NUM** *W* CRINUM — *Amaryllideæ* *Sp* 26—28

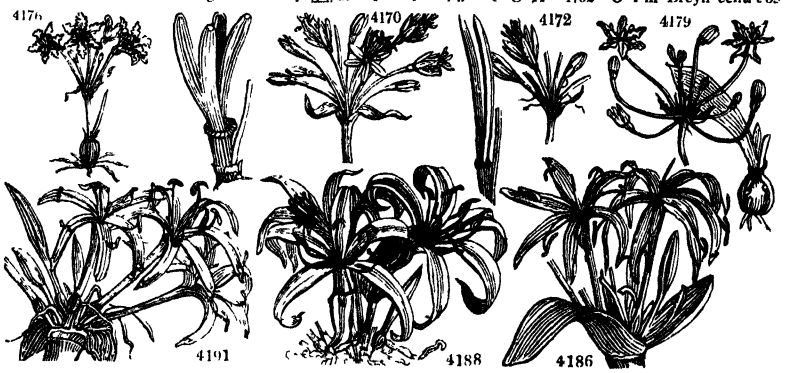
4179	americánum *W.*	American	☿	⧋	or	2	jl au	W	S Amer	1752	O	r.m	Bot. mag 1034
4180	erubéscens *W*	blush-colored	☿	⧋	or	2	jn.au	Pa w	W Indies	1789	O	r m	Bot. mag 1232
4181	Commelíni *Ker*	Commelin s	☿	⧋	or	2	jn au	W	S Amer	1798	O	r m	Jac. sch 2 t 202
4182	defixum *Ker.*	marsh	☿	⧋	or	2	au s	W	E Indies	1810	O	r m	Rhe m 11 t 38
4183	amœ'num *Roxb*	delightful	☿	⧋	or	2	...	W	E Indies	1810	O	r m	
4184	sumatránum *Ker*	Sumatra	☿	⧋	or	5	...	W	Sumatra	1810	O	r m	Bot reg 1049
4185	longifólium *Ker*	long-leaved	☿	⧋	or	3	...	W	Bengal	1810	O	r m	
4186	cruéntum *Ker*	red-flowered	☿	⧋	or	¼	jn au	R	E Indies	1810	O	r m	Bot reg 171
4187	asiáticum *W*	Poison-bulb	☿	⧋	p	3	jn au	W	China	1732	O	r m	Bot mag 1073
	C toxicarium Roxb												
4188	amábile *Donn*	beautiful	☿	⧋	or	5	jn au	Pk	E Indies	1810	O	r m	Bot mag 1605
4189	bracteátum *W*	bracteated	☿	⧋	or	2	jn au	W	Mauritius	1810	O	r m	Bot reg 179
4190	canaliculátum *Ker*	channelled-lvd	☿	⧋	or	4	...	W	...	1810	O	r m	
4191	pedunculátum *B R*	long-peduncled	☿	⧋	or	3	jn au	W	N S W.	1790	O	r m	Bot. reg. 52
4192	ensifólium *Roxb*	sword-leaved	☿	⧋	or	3	...	W	Pegu	1819	O	r m	
4193	loritifólium *Roxb*	strap-leaved	☿	⧋	or	5	...	W	Pegu	1819	O	r m	
4194	augústum *Roxb*	noble	☿	⧋	or	4	jn au	Pk	Mauritius	1818	O	r m	Bot reg 679
4195	brachyándrum *Roxb*	short-stamened	☿	⧋	or	5	jn au	W	N Holl	1819	O	r m	
4196	plicátum *Host*	plaited	☿	⧋	or	2	jn au	W	China	1818	O	r m	
4197	declinátum *Herb*	sloping	☿	⧋	or	2	my	W	Silhet	1818	O	r m	Bot. mag 2231
4198	submérsum *Herb*	lake	☿	⧋	or	1½	jl	Pk	Rio Janei	1820	O	r m	Bot mag 2463
4199	Careyánum *Herb*	Carey's	☿	⧋	or	2	jl	W	Mauritius	1821	O	r m	Bot mag 2466
4200	confértum *Herb*	crowded	☿	⧋	or	2	jn	W	N Holl	1822	O	r m	Bot mag 2522
4201	aquáticum *Burch*	water	☿	⧋	or	4	au s	Pk	C G H	1820	O	r m	Bot mag 2352
4202	arenárium *Herb*	sand	☿	⧋	or	2	my	W	N Holl	1822	O	r m	Bot. mag 2355
4203	mauritiánum *Herb*	African	☿	⧋	or	4	mr	Pk	Mauritius	1812	O	r m	Bot cab 650
4204	scábrum *Herb*	rough	☿	⧋	or	4	my	Pk	Azores	1810	O	r m	Bot cab 529

†‡736. **CYRTAN'THUS** *H K* CYRTANTHUS — *Amaryllideæ* *Sp* 7—8.

4205	angustifólius *W*	narrow-leaved	☿	⧋	or	1	my jn	O	C G H	1774	O	r m	Bot. mag 271
4206	collínus *B Reg*	hill	☿	⧋	or	¾	my au	Cr	C G H	1816	O	r m	Bot reg 162
4207	spirális *B Reg*	spiral-leaved	☿	⧋	or	1	my au	S	C G H	1790	O	r m	Bot reg 167
4208	obliquus *W*	oblique-leaved	☿	⧋	or	2	my au	Gr o	C G H	1774	O	r m	Bot mag 1138
§4209	umbellátus *Ker*	one-flowered	☿	⧋	or	½	my au	W a	C G H	1816	O	r m	Bot reg 168
4210	odórus *Ker*	sweet	☿	⧋	or	¾	my jl	Cr	C G H	1818.	O	r m	Bot reg 503
4211	pállidus *Sims*	pale	☿	⧋	or	1	my jl	Pk	C G H	1822	O	r m	Bot mag 2471

737 **BRUNSVI'GIA** *Host* BRUNSWIGIA — *Amaryllideæ* *Sp* 8

4212	Josephinæ *R L*	Josephine's	☿	⧋	or	1½	jn au	S	C G H	1814	O	r m	Red lil t 370 372
	γ minor B Reg	*smaller*	☿	⧋	or	1	jn au	S	C G H	1814	O	r m	Bot r 192, 193
4213	multiflóra *H K*	many-flowered	☿	⧋	or	1	jn au	R	C G H	1752	O	r m	Bot mag 1619
4214	margináta *H K*	red-margined	☿	⧋	or	1	s o	S	C G H	1795	O	r m	Jac sch 1 t 65
4215	Rádula *H K*	rasp-leaved	☿	⧋	or	½	ap au	R	C G H	1790	O	r m	Jac sch 1 t 68
4216	striata *H K*	striated	☿	⧋	or	½	s o	Pk	C G H	1795	O	r m	Jac sch 1 t 70
4217	falcáta *B M*	sickle-leaved	☿	⧋	or	¾	my jn	R	C G H	1774	O	r m	Bot mag 1443
4218	toxicária *Ker*	Poison-bulb	☿	⧋	p	1	s o	Pk	C G H	1774	O	r m	Bot reg 567
	β coranica Ker	*coi Poison-bulb*	☿	⧋	p	1	s o	Pk	C G H	1815	O	r m	Bot reg 139
4219	ciliáris *Ker*	fringed	☿	⧋	or	1	.	Pk	C G H	1752	O	r m	Breyn cent. t 39



History, Use, Propagation, Culture,

734 *Strumaria* From *struma*, a tubercle, a name given by Jacquin, on account of the swelling of the middle of the style Pretty little delicate plants, their culture as in Hæmanthus

735 *Crinum* Κρινον is Greek for a lily Its limits as a genus are defined by the hypocrateriform flower with linear reflexed segments Some unwise attempts have been made to destroy this distinction, by admitting into this genus plants with the characters of Amaryllis We, however, have adhered to the old, and, as we think, most intelligible, mode of understanding the genus This is a fine stately genus of the Amaryllideæ: several beautiful species have lately been introduced They grow best in rich loam, mixed with a little rotten dung, and potted in large pots they will flower abundantly They may be increased by suckers from the root, or by seed If the plant be shy in producing suckers, it may be cut down near to the root, and it will send out plenty (*Bot Cult* 46)

4170 Leaves linear ensiform rounded obtuse flat, Scape compressed, Stamens longer than cor
4171 Leaves linear obliquely bent, Petals flat
4172 Leaves linear flat, Germen with three glands
4173 Leaves linear ensiform rounded obtuse flat, Scape rounded, Stamens as long as cor.
4174 Leaves filiform, Petals acute
4175 Leaves filiform spiral, Petals acute colored outside
4176 Leaf filiform straight, Umb many-flowered, Petals wavy flat
4177 Sepals spreading alternately bearded beneath the ends
4178 Scape flexuose much longer than the lanceol. ciliated leaves, Pedunc. very long, Petals wavy channelled

4179 Leaves striated, Umbel sessile many-flowered, Tube furrowed about as long as limb
4180 Lvs lanc lor with cartil teeth, Umb subs many-fl Tube longer than limb, Stam little long than style
4181 Ends of sepals hooked inwards, Leaves linear channelled, Scape 4-fl
4182 Bulb with a very long tap-root, Leaves stiff erect with long points smooth at edge, Umb sess many-fl
4183 Bulb spherical, Leaves narrow with a nearly smooth edge, Umb few-fl sess Sep lin lanc as long as tube
4184 Bulb oval not with a neck, Lvs broad lin lanc straight with a white cartil toothed edge, Umb of fl sess.
4185 Bulb round, Leaves narrowed lax channelled hispid at edge, Umb sess many-fl Seg shorter than tube
4186 Bulb ovate with a neck, Leaves broad subulate roughish at edge, Spathe herbaceous
4187 Bulb cylind above ground, Lvs lanc smooth at edge longer than scape, Umb stalk Sep long lin reflexed

4188 Bulb very large with long red neck, Lvs broad glauc smth at edge, Umb many-fl Tube shorter than limb
4189 Bulb with long neck, Lvs obl lanc with obt point smooth wavy at edge, Umb many-fl with pale bractes
4190 Bulb cylindrical scarcely with a neck, Leaves lorate with a smooth edge, Umb on a very long stalk
4191 Bulb cylindrical like a leek, Scape central broad compressed, Umb many-fl. lax stalked
4192 Bulb ovate, Leaves scattered straight of one form
4193 Bulb cylindrical ovate, Leaves lorate very long, Umb many-fl stalked
4194 Bulb colum above ground, Lvs many lanc with smooth edge, Scape as long as lvs Umb stalk 20-30-fl
4195 Bulb columnar, Leaves many bluntly acuminate, Flowers sessile, Segments longer than tube
4196 Lake C asiaticum, but with leaves strong plaited backwards about their middle
4197 Bulb oblong, Leaves acute wavy smooth at edge, Flowers many stalked declinate
4198 Bulb oblong ovate red, Leaves rough at edge, Flowers spreading, Sepals lanceolate flat not revolute
4199 Bulb round, Lvs wavy rough at edge, Sepals obov flat, Flowers very large with a tinge of pink at back
4200 Bulb ovate, Leaves narrow channelled acute, Flowers upright crowded
4201 Bulb ovate, Leaves very long narrow green twisted, Flowers campanulate, Stamens spreading
4202 Bulb ovate, Leaves a little rough at edge, Umbel 5-flowered shortly stalked, Sepals lanc flat
4203 Leaves long narrow weak, Scape shorter than leaves, Umbel 5-6-flowered
4204 Leaves long narrow recurved rough at edge, Scape 2-edged, Umb 5-flowered, Sepals broad

4205 Leaves linear channelled, Flowers cernuous, Tube cylindrical
4206 Leaves 3 linear glaucous, Pedunc somewhat shorter than flower, Stamens included
4207 Many-flowered, Leaves 3 ligulate spiral obtuse glaucous
4208 Leaves lanceolate obtuse flat oblique, Cor pendulous obversely conical
4209 Leaf solitary linear glaucous, Limb as long as throat
4210 Flowers about 4 straightish nodding, Anthers included, Leaves linear not glaucous
4211 Leaves linear lanc keeled appearing after the flowers, Cor nodding, Limb as long as tube

4212 Lvs strap-shaped erect spreading glaucous, Scape twice as long as the rays of the many-flowered umbel

4213 Leaves linguiform lying on the ground smooth
4214 Leaves lingulate pressed on the ground with a cartilaginous edge
4215 Leaves elliptical pressed on the ground rough with little pustules
4216 Leaves elliptical ovate erect edged
4217 Leaves falcate with a muricated discolored cartilaginous edge
4218 Umbel hemispherical close, Leaves many erect oblique glaucous

4219 Leaves strongly fringed with white hairs



and Miscellaneous Particulars

736 *Cyrthanthus* From κυρτος, curved, and ανθος, a flower The tube of the flower is long and round. This is an elegant genus, and the species grow well in sandy loam mixed with a little peat They require plenty of water when in a growing state, but scarcely any when dormant, and they should be fresh potted just before they begin to grow, when they will flower freely They may be increased by offsets from the bulbs, or from seeds (*Bot Cult* 176)

737 *Brunsvigia* Named after the noble family of Brunswick This is a splendid genus, some of the bulbs grow to a great size, and require large pots to have them thrive and flower in perfection They require plenty of water when in a growing state, but must when dormant be kept so by wholly withholding water.

†738. NERI'NE *Herb* NERINE *Amaryllideæ* *Sp* 12

4220	curvifólia *W*	Fothergill's	♂	△	or	1	my s	P	C. G H	1777	O	r m Bot. mag. 725
4221	corúsca *B M*	glittering	♂	△	or	1	jl au	S	C G H	1809.	O	r m Bot. mag 1089
4222	sarniénsis *W*	Guernsey Lily	♂	△	or	1	s o	R	Japan	1659	O	r m Bot. mag. 294
4223	venústa *B M*	poppy-colored	♂	△	or	1	jn jl	S	C G H.	1806	O	r m Bot. mag 1090
4224	flexuósa *W*	Zigzag	♂	△	or	1	s o	Pk	C G H	1795.	O	r m Bot. reg 172
4225	húmilis *W*	small	♂	△	or	2	jn jl	R	C G H	1795	O	r m Bot. mag. 726
4226	undulàta *W*	waved-flowered	♂	△	or	½	my jn	Pk	C G. H	1767.	O	r m Bot mag. 369
4227	aúrea *W*	golden	♂	△	or	1	au s	Y	China	1777	O	r.m Bot mag. 409
4228	radiáta	Snowdrop-leav	♂	△	or	1½	jn jl	Pk	China	1758	O	r.m Bot. rep. 56
4229	rósea *Herb*	rose-colored	♂	△	or	½	jl	Pk	C G H	1818	O	r m Bot mag 2124
4230	latícóma *Ker*	broad-headed	♂	△	or	1	au	Pk	C G H	1818	O	r m Bot reg 497
4231	pulchélla *Herb*	pretty	♂	△	or	2	jl	Pk	C G H	1820	O	r m Bot. mag 2407

†*739 AMARYLLIS *W* AMARYLLIS *Amaryllideæ* *Sp* 33—39

4232	Pumílio *W*	dwarf	♂	△	or	½	n	Pk	C G H	1774	O	r m
4233	pudíca *Ker*	modest	♂	△	or	½	my jl	Pk	C G H	1795	O	r.m Ker's rev pl 8 f 8
4234	formosíssima *W*	Jacobea Lily	♂	△	or	¾	my au	D R	N Amer	1658	O	r m Bot. mag 47
4235	aúlica *Ker*	crowned	♂	△	or	1½	my au	G s	Brazil	...	O	r m Bot. reg 444
4236	psittácina *Ker*	parrot	♂	△	or	1½	my au	G s	Brazil	1816	O	r m Bot reg 199
4237	calyptráta *Ker*	green-flowered	♂	△	or	1½	my au	G	Brazil	1816	O	r.m Bot. reg 164
4238	equéstris *W*	Barbadoes lily	♂	△	or	1	jl o	S	W Indies	1710	O	r m Bot mag 305
	β májor	*larger*	♂	△	or	1½	jl o	S	W Indies	1710.	O	r m Bot reg. 234
4239	regínæ *W*	Mexican Lily	♂	△	or	2	my jn	S	America	1725	O	r m Bot. reg 453
4240	ádvena *B M*	streaked-flow	♂	△	or	¾	my jn	S	Chili	1807	O	r m Bot reg 1125 1
	β cerína Lindl	*pale*	♂	△	or	¾	my jn	P y	Chili	1821	O	r m Bot reg 1125 2
4241	solandræflóra *Lindl*	Solandra-flow	♂	△	or	1½	ap	P s	S Amer	1820	O	r m Lindl coll 11
4242	pulverulénta *Herb*	pointed	♂	△	or	1	ap my	R	Brazil	1819.	O	r.m Bot. reg 534
	acuminata Ker											
§4243	Cyrtanthoides *Sims*	Cyrtanthus-like	♂	△	or	¾	jn	Cr	Chili	1821	O	r m Bot mag 2399
§4244	ignea *Lindl*	fiery	♂	△	or	1	n	S	Chili	1824	O	r m Bot reg 809
4245	candida *Lindl*	white	♂	△	or	½	s	W	Peru	1822	O	r m Bot reg 724
4246	marinénsis *Ker*	Maranhão	♂	△	or	1	my jn	R	Maranhão	1821	O	r m Bot reg 719
4247	reticuláta *W.*	netted-veined	♂	△	or	1	ap my	Pu	Brazil	1777	O	r m Bot reg 657
	β striatifolia	*striped-leaved*	♂	△	or	1	ap my	Pu	Brazil	1815	O	r m
4248	australásica *Ker*	New Holland	♂	△	or	2	jl au	W	N Holl	1816	O	r m Bot reg 426
4249	insígnis *Ker*	noble	♂	△	or	3	jl au	Pk	E Indies	1819	O	r m Bot reg 579
	Crinum latifolium Roxb											
4250	moluccána	Molucca	♂	△	or	2	jl au	Pk	Moluccas	1819	O	r m Bot mag 2392
4251	crocáta *K R*	saffron-flower	♂	△	or	1	ap my	Ve	Brazil	1815	O	r m Bot reg 38
4252	rutila *K R*	fiery	♂	△	or	¾	ap my	S	Brazil	1815	O	r m Bot reg 23
4253	fúlgida *B Reg*	striped-tubed	♂	△	or	¾	ap my	Ve	Brazil	...	O	r m Bot. reg 226
4254	bláida *K R*	charming	♂	△	or	1½	my jn	Pk	C G H	1754	O	r m Bot mag 1450
4255	Belladónna *W*	Belladonna Lily	♂	△	or	2	jl s	F	W Indies	1712	O	p l Bot mag 733
	β pállida	pale-flowered	♂	△	or	2	jl s	F	C G H	..	O	p l Red lil 470
4256	vittáta *W*	superb	♂	△	or	1	ap my	St	...	1769	O	r m Bot mag 129
	β major Lindl	*large*	♂	△	or	2	my jl	St	C G H	1774	O	r m
4257	coránica *K R*	sickle-leaved	♂	△	or	2	jl au	P Pu	C G H	1816	O	r m Bot. reg 139
4258	longifólia *W*	long-leaved	♂	△	or	2	jl	Pk	C G H	1752	O	r m Bot. mag 661
	β Gowena	*Gowen's*	♂	△	or	2	jn jl	Pk	.. ..	...	O	r m
4259	revoluta *W*	revolute	♂	△	or	2	s	Pk	C G H	1774	O	r m Bot reg 623
4260	zeylánica *W*	Ceylon	♂	△	or	3	jl au	Pu	Ceylon	1771	O	r m Bot mag 1171
4261	ornáta *W*	Yucca-flowered	♂	△	or	2	jn jl	W pu	Guinea	1774	O	r m Bot mag 1253
4262	gigantèa *K R*	gigantic	♂	△	or	2	jl au	W	S Leone	1792	O	r m Bot mag 923
4263	latifólia *W*	broad-leaved	♂	△	or	3	jl s	W	E. Indies	1806	O	r m Rh mal 11 t 39
4264	tatárica *Pall*	Tartarian	♂	△	or	½	...	B	Siberia	1822		r m

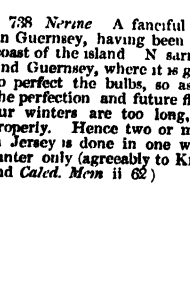
740 VALLO'TA *Herb* VALLOTA *Amaryllideæ* *Sp* 1

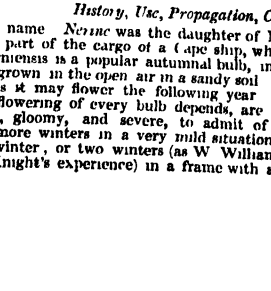
4265	purpúrea *Herb*	scarlet	♂	△	or	1½	my jn	S	C G H	1774	O	r m Bot reg 552
	β minor	*smaller*	♂	△	or	1	my jn	S	C G H	1774	O	r m Bot mag 1430

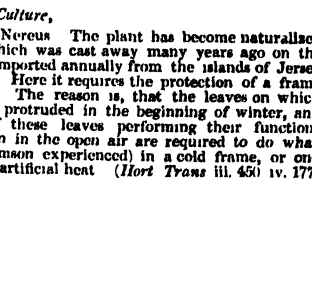

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History, Use, Propagation, Culture,

738 *Nerine* A fanciful name *Nerine* was the daughter of Nereus The plant has become naturalised in Guernsey, having been part of the cargo of a Cape ship, which was cast away many years ago on the coast of the island N sarniensis is a popular autumnal bulb, imported annually from the islands of Jersey and Guernsey, where it is grown in the open air in a sandy soil Here it requires the protection of a frame to perfect the bulbs, so as it may flower the following year The reason is, that the leaves on which the perfection and future flowering of every bulb depends, are protruded in the beginning of winter, and our winters are too long, gloomy, and severe, to admit of these leaves performing their functions properly. Hence two or more winters in a very mild situation in the open air are required to do what in Jersey is done in one winter, or two winters (as W Williamson experienced) in a cold frame, or one winter only (agreeably to Knight's experience) in a frame with artificial heat (*Hort Trans* iii. 450 iv. 177, and *Calcd. Mem* ii 62)

4220 Leaves narrow sub-involute glaucous falcate, Petals lin -lanc wavy, Stamens erect sub-exserted
4221 A mere variety of the foregoing, from which it differs in having crimson flowers
4222 Many-fl Leaves many narrow sub-involute not glaucous upright
4223 Like the last, but the flowers are scarlet and appear at the same time as leaves
4224 Lvs. very narrow obt min pustulate, Sepals recurved divaricating the one bearing the stamens remote
4225 Leaves few ligulate channelled, Sepals turned upwards oblique, Stam declinate shorter than cor
4226 Laxly many-fl Lvs few lin Cor recurved stel irregular, Sepals curled, the lowest placed under the stam
4227 Fl. stalked erect, Cor infundibulif clavate, Sepals linear lanceolate, Stamens straight, Leaves quite blue
4228 Five sepals, or all rising in a semicircular ray wavy, Stam deflexed twice as long as cor
4229 Leaves broad nerved lying on the ground, Sepals equally revolute, Stamens very long
4230 Leaves linear lorate, Scape flat smooth, Peduncles upright hispid 3-cornered twice as long as flower
4231 Leaves glaucous, Cor deformed pale streaked with red

4232 Flower sessile, Leaf one linear, Sepals longer than tube ovate obl reflexed acute, Stamens inclined
4233 One-flowered, Cor. regular erect turbinate conniving, One sepal pushed aside by the stamens
4234 Tube fringed, Cor nodding with a very ringent limb, Stam. included in the involute lower segments
4235 Tube crowned by a short entire green membrane
4236 Two-flowered half ringent, Membrane of the tube very short two-colored toothletted, Stamens included
4237 Mem of orifice entire, Limb half ringent nodding with outer seg incurved at end, the inner recurved
4238 Tube fringed, 2-3-fl Stalks shorter than the erect spatha, Tube horizontal, Limb curved upwards

4239 Tube fringed, 2-4-fl Lvs few lorate acum. with a keeled rib, Cor cernu deeply turbin Tube short thick
4240 Many-fl Tube fringed, Leaves 1 or more linear ligulate involute glaucous, Stalks as long as nodding cor

4241 Flowers about 2 with a very long tube and a nearly regular limb
4242 Leaves long strap-shaped with the scape very cœsious, Flowers 4 ringent with taper pointed segments

4243 Cor funnel-shaped campanulate drooping, Stamens straight exserted, Leaves green lorate obtuse
4244 Umbel 6-fl Sepals rolled into a cylindrical tube, Flower-stalks the length of flowers, Stigma simple
4245 Flower solitary erect, Sepals conniving, Stamens ascending, Anthers innate, Leaves linear fleshy
4246 Flower nodding ringent, Outer sepals broadest, Throat naked, Tube the length of the ovary
4247 Leaves several lorate-oblong narrow, towards the base, Flower cernuous cucull. tubular obliquely ringent

4248 Leaves linear very long and weak, Limb nodding 2-lipped, Flower-stalks many times longer than ovary
4249 Lvs numerous spreading flat with rough edge, Fl about 10 with nodd spreading obsoletely 2-lipped limb

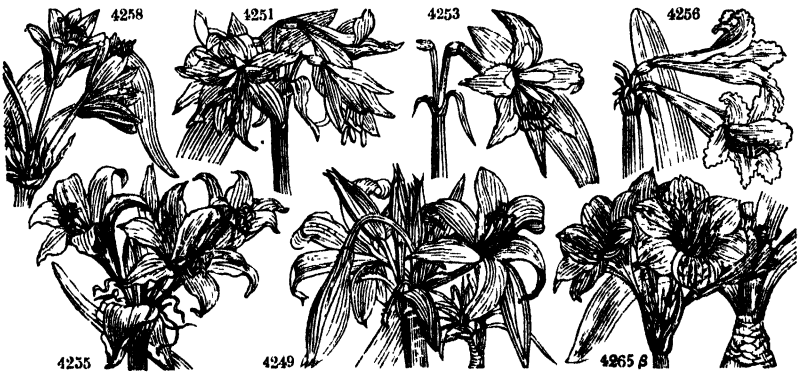
4250 Bulb spherical, Spathe bifid erect obtuse, Flowers sessile, Leaves with a long point wavy downwards
4251 Spathe withered scarcely as long as stalks, Cor cern uneq Tube as long as germen, Upper sepal remote
4252 About 2-fl Spathe arid refl Limb turbin bilabiate three upper sep conniv recurv lower narr remote
4253 Leaves obl lanc not glaucous, Flowers nodding with an oblique mouth, the upper one much reflexed
4254 Lvs many obl obtuse, Pedunc divaricating as long as fl Tube short turbin Limb recurved spreading
4255 With many fl on stalks, Lvs ligul Cor regular turbin. nodd Sepals recurv at end, Tube scarcely any

4256 Cor cucul campanulate, Outer sepals separate to the bottom, inner united half way by the interior ribs

4257 Lvs altern turn both ways fal Scape flat, Cor regul Tube twice as short as revol limb Stam erect spread
4258 Umb many-fl shortly stalked, Leaves attenuated glaucous, Tube about twice as long as limb

4259 Many-fl Leaves acuminate glaucous, Flowers erect recurved stalked cucullate, Limb spreading revolute
4260 Leaves many lorate lanceolate wavy thick in the middle, Limb cernuous as long as tube
4261 Lvs many lorate atten channelled rough at edge, Limb obsoletely 2-lipped shorter than tube nodding
4262 Leaves obl lanceolate narrowed both ways wavy rough at edge, Limb nodding shorter than tube
4263 Spathe many-fl Flowers stalked tubular at base, Leaves obl lanceolate
4264 Spathe 2-fl Cor. campan deeply 6-parted, Upper seg very narr, lower ob acum. Lvs lin. longer than scape

4265 The only species, *Amaryllis purpurea* of Willd



and Miscellaneous Particulars.

739 *Amaryllis* Name of a nymph celebrated by the poets, and especially by Virgil. Derived from αμαρυσσω, to be resplendent This is a superb genus. the greenhouse sorts thrive best in a rich loamy soil, and should have but little water given them after they have done flowering, so that the bulbs may harden, to produce more flowers the following season. Most of them are increased freely by offsets, and ripen plenty of seed A shell taken from the bulb, with a leaf on it, and planted in a pot of mould, will produce a bulb, as will almost any bulbous-rooted plant. (*Bot Cult* 131)

The *stove Amaryllises* grow best in light loam and rich soil, and the strong growing kinds require large pots to flower in perfection, they are increased by offsets and by seeds, which they bear plentifully, if care be taken to shake some pollen on the stigma at the proper period.

740. *Vallota* A name of unknown meaning. The only species of this genus is a beautiful Cape plant, with bright purple flowers, of which two varieties are known in gardens

741 GRIFFI'NIA *Ker* Griffinia

4266	hyacinthina *Ker.*	blue	♀	☐	or	1	jn s	B	S Amer. 1815	O r m Bot. reg 163
4267	parviflóra *Ker.*	small-flowered	♀	☐	or	½	jn s	Pa P	S Amer 1815.	O r m Bot. reg. 511

742 STERNBER'GIA *W.* Sternbergia

4268	colchiciflóra *W.& K*	Colchicum-fl.	♀	△	or	¼	au s	Y	Hungary 1816.	O r m W &Kit 2 t 157
4269	clusiana *Ker*	Ecluse's	♀	△	or	½	au s	P Y	Constant ...	O r m Clu hist 1 t 163
4270	lútea *Ker*	yellow	♀	△	or	½	au s	Y	S Europe 1596	O r m Bot mag 290
4271	chloroleúca *Ker.*	one-leaved	♀	△	or	½	my au	P Gr	....	O r m Ker. rev pl 8 f 2

†743 ZEPHYRAN'THES *Herb* Zephyranthes

4272	tubispátha *Herb.*	tube-sheathed	♀	☐	or	½	my jl	W	S Amer ...	O r m Bot mag 1586
4273	atamasco *Herb*	Atamasco-Lily	♀	△	or	½	my jn	W	N Amer 1620	O r m Bot. mag 239
4274	rósea *Lindl.*	rosy	♀	☐	or	½	my jn	R	Havann 1823	O r m Bot. reg 821

†744 HABRAN'THUS *Herb* Habranthus

4275	versicolor *Herb*	changeable	♀	△	ft	½	s	Pk	S. Amer. 1821	O r m Bot mag. 2485
4276	gracilifólius *Herb*	slender	♀	△	ft	½	ja	W	S Amer 1821	O r.m Bot. mag 2464

745 DORYAN'THES. *R Br* Doryanthes

4277	excélsa *R. Br.*	gigantic	♐	▭	or	20	jl au	Cr	N S W 1800	Sk s p Bot mag. 1685

746. GETHYL'LIS. *H K* Gethyllis

4278	spirális *W*	spiral-leaved	♀	△	or	¾	jn jl	W	C G H 1780	s.p Bot mag 1088
4279	ciliáris *W*	fringed	♀	△	or	½	jn jl	W	C G H 1788	s p Jac schœn 1 t 79
4280	villósa *W*	hairy	♀	△	or	¾	jn jl	W	C G H 1787	s p
4281	lanceoláta *W*	spear-leaved	♀	△	or	¾	jn	W	C G H 1790.	s.p

747 POLIAN'THES *L* Tuberose

4282	tuberósa *W*	common	⁂	△	or	3	au s	W	E. Indies 1629	O r m Bot reg. 63
	β flore pléno	*double*	⁂	△	or	3		W	. . ..	O r m
4283	gracilis *Lk*	slender	⁂	☐	or	3	au s	P Y	Brazil 1822	O r m

†748 ALSTRŒME'RIA *W* Alstrœmpria

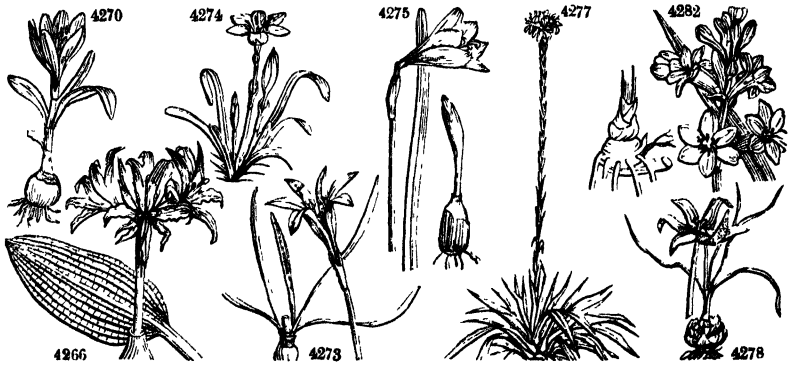
4284	Pelegrina *W*	spotted-flower	⁂	△	or	1	jn s	St	Peru 1753	S r m Bot. mag 139
4285	Ligtu *W*	striped-flower'd	⁂	☐	ft	¾	f mr	S	Peru 1776	R l s p Bot mag 125
4286	salsilla *W*	eatable-rooted	⁂	☐	clt	6	jn jl	G Cr	S Amer 1806	R l s p Bot mag 1613
4287	Flos Martini *Ker*	Flor de St Mar	⁂	☐	or	1½	jn	w p y	Chili 1822	S l s p Bot reg 731
4288	pulchella *Sims*	red-flowered	⁂	☐	or	3	jn	S	Chili 1822	S l s p Hook ex fl 64

†749 CONANTHE'RA *Fl per* Conanthera

§4289	campanuláta *Lindl*	bell-flowered	♀	▭	or	¾	mr	B	Chili 1823	R l s p Bot mag 2496

750 HYPOX'IS. *W* Hypoxis.

4290	erécta *W*	upright	♐	△	or	½	m jl	Y	N Amer 1752.	O p l Bot mag 710
4291	sobolifera *W*	creeping	♐	△	or	½	jn s	Y	C G H 1774	O p l Bot. mag 711
4292	villósa *W*	villous	♐	△	or	¾	jn s	Y	C G H 1774	O p l Jac ic. 2 t. 307
4293	decumbens *W*	decumbent	♐	☐	or	½	jn s	Y	Jamaica 1755	O p l Mill ic 1 t 39 f.2
4294	obliqua *W*	oblique-leaved	♐	△	or	½	jn jl	Y	C G H 1795	O p l Bot rep 195
4295	aquática *W*	water	♐	△	or		jn jl	Y	C G H 1787	O p l
4296	álba *W*	white	♐	△	or	½	jn	W	C G H 1806	O p l Jac coll 4 t.2 f.1
4297	obtúsa *B Reg*	obtuse	♐	△	or	½	jn	Y	C G H 1816	O p l Bot reg 159
4298	ovata *W*	smooth-leaved	♐	△	or	½	f my	Y	C G H 1806.	O s p Bot mag 1010
4299	stellata *W*	star-flowered	♐	△	or		ap jn	W B	C G H 1752	O s p Bot mag 662
	β elegans P S	*white star-flow*	♐	△	or		ap jn	W B	C G H 1752	O s p Bot mag. 1223



History, Use, Propagation, Culture,

741 *Griffinia* Named by Mr Ker, after William Griffin, Esq of South Lambeth, an amiable man, and most assiduous and successful collector of bulbous plants His collection is even now one of the finest in Europe. These species resemble Amaryllis, but have broad-stalked leaves, and blue flowers.

742 *Sternbergia* Named after Count Caspar Sternberg, a celebrated botanist and patron of botany. The species consist of the hardy plants formerly referred to Amaryllis, they are all hardy, and, with the exception of S lutea, very rare

743 *Zephyranthes* A fanciful name employed by Mr Herbert It seems to mean wind-flower These are pretty plants, with solitary white or pink flowers The species are so nearly hardy, as to survive in a warm border all but our severest winters

744 *Habranthus* From ἁβρος, delicate, and ανθος, a flower Small Chilian plants resembling the last in habit, and principally distinguished by their very unequal declinate stamens

745 *Doryanthes* So called by Correa de Serra, from δορυ, spear, and ανθος, a flower, on account of the long straight stem, surmounted by a head of crimson flowers. This is a fine plant from New South Wales. It grows freely in a mixture of sandy loam and peat, but does not flower till it gets large · a conservatory is the most proper place for it, as the flower-stem grows to a great height before the flowers expand It may be increased by suckers from the roots, but these are sparingly produced (*Bot Cult* 181)

746. *Gethyllis* From γηθω, to rejoice The flowers are much valued at the Cape of Good Hope for the delicious perfume of their flowers The species are very curious · but few have been introduced Their bulbs require the usual attention as to not watering them when in a dormant state; they are increased by offsets or seeds.

4266 Leaves with a flat stalk, The three lower sepals wavy, Scape with a prominent line along each side
4267 Leaves oval-lanceol. with a stalk two-edged crosswise, Umbel remarkably stalked, Sepals uniform

4268 Leaves linear obliquely twisted shining
4269 Leaves lorate flat very glaucous laxly spiral
4270 Leaves many-keeled, Flower sessile on a two-edged scape, Sepals oval-oblong obtuse
4271 About 2-flowered, Leaf linear, Tube very short, Sepals rounded at end

4272 Leaves few linear, Spathe 1-leaved sheathing erect bifid twice as short as stalk
4273 Leaves many ligulate, Spathe bifid longer than stalk, Sepals acuminate
4274 Leaves lying flat on the ground shorter than the one-flowered scape, Spathe bifid fleshy at end

4275 Leaves linear
4276 Leaves cylindrical

4277 The only species

4278 Leaves linear spiral smooth, Sepals ovate oblong
4279 Leaves linear spiral ciliated, Sepals ovate oblong
4280 Leaves linear filiform spiral villous, Sepals ovate oblong
4281 Leaves lanceolate flat, Sepals lanceolate

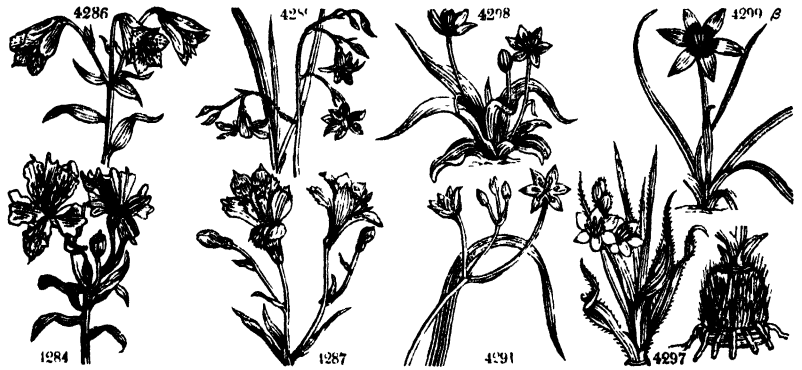
4282 Leaves linear lanceolate, Sepals oblong

4283 Leaves linear, Scape racemose, Sepals linear

4284 Stem erect, Cor spreading, Three outer sepals wedge-shaped 3-toothed, Leaves lin lanc sessile
4285 Stem erect, Leaves spatulate oblong, Pedunc longer than involucr Cor 2-labiate
4286 Stem twining, Cor cylindrical in branched umbels
4287 Stem erect, Leaves linear lanceolate, Flower-stalks twisted, Outer sepals obcordate mucronate
4288 Stem weak, Leaves spatulate ciliated, Umbel many-flowered, Peduncles 2-flowered

4289 Flower campanulate spreading

4290 Hairy, Scape 4-fl shorter than lin lanc leaves, Pedunc twice as short as leaves
4291 Like the last, but the leaves are shorter more villous and incurved, Petals more obtuse
4292 Villous, Scape 4-fl shorter than lin lanc lvs Pedunc shorter than flower, Fruit cylindrical
4293 Pilose, Scape 2-fl decumbent shorter than lin lanc leaves
4294 Scape 3-fl pilose as long as leaves, Pedunc thrice as long as fl Leaves lanc smooth obliquely bent
4295 Leaves linear, Scapes umbelliferous or 1-fl Height depending on depth of water
4296 Scape 1-flowered shorter than filiform rounded smooth leaves
4297 Leaves at the edge and keel hairy, Scape hispid many-flowered racemose, Sepals obtuse
4298 Leaves ovate-lanceolate entire smooth, Scapes 1-flowered
4299 Scape 1-flowered shorter than the lin lanc loose keeled smooth leaves



and Miscellaneous Particulars

747 *Polianthes* From πολυς, many, and ανθος, a flower, in allusion to the abundance of the blossoms. This is a very popular bulb, on account of its highly odoriferous flowers. It is imported annually from Italy and America, and flowers freely in pots of sandy loam and some rotten dung or leaf mould R. A Salisbury is of opinion that we might grow our own bulbs, by planting the offsets in such a situation as would obtain for them a "sufficient degree of heat in summer to bring their leaves out to their full magnitude, that of the roots following of course." "The theory," he adds, "which I would recommend any intelligent gardener to adopt in its general management is, to keep the roots growing as vigorously as possible from May to October, but in a state of complete rest and drought for the rest of the year" (*Hort. Trans* i. 53.)

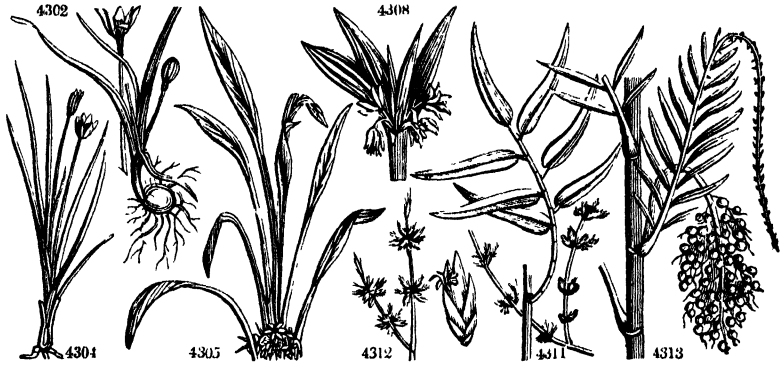
748 *Alstræmeria.* So named from Baron Claudius Alstræmer, of Sweden, who in his travels through Europe sent many plants to Linnæus The species are beautiful, and A Ligtu is as fragrant as mignionette. A Salsilla is cultivated in Peru and the West Indies for its roots, which are used like the tubers of the potatoe

A. Ligtu, Sweet observes, "is generally considered difficult to flower, but it will blossom well by letting the pots be dry for a considerable time till the shoots are all dried up, then give it a good watering, and put it in a moist heat, and it will flower abundantly. It may be increased by parting the roots or by seed." (*Bot Cult.* 15) The finest kinds have not yet been introduced to this country.

749. *Conanthera.* From κονος, a cone, and ανθηρα, an anther, their anthers being, which is singular among these plants, united into a cone. A pretty little Peruvian genus, of which two species are now known

750. *Hypoxis.* From ὑπο, beneath, and οξυς, pointed, in allusion to the sharp points of the inferior sepals. The species are plants with yellow flowers of little beauty, if we except H. stellata, which has a dark spot at the claws of its white petals. They increase fast by seeds or offsets.

4300 **stellipilis** *Ker*	starry-haired	♀	△	or	1	jl	Y	C G H	1821.	O	a p	Bot. reg 663
4301 **veratrifólia** *W*	plaited-leaved	♀	△	or	2	jn jl	Y	C. G H.	1788.	O	l p	Jac ic 2 t. 367
4302 **lineáris** *B Rcp.*	linear-leaved	♀	△	or		ap my	Y	C G H	1792.	O	l p	Bot rep 171
4303 **serráta** *W.*	saw-leaved	♀	△	or	1	jn jl	Y	C G H	1788.	O	l p	Bot mag 709
4304 **júncea** *W*	rushy	♀	△	or	½	jn jl	Y	Carolina	1787	O	l p	Smi. spic 15. t.16
751 CURCU'LIGO *H K*	Curculigo					*Hypoxideæ*		*Sp* 6—10				
4305 **sumatrána** *Roxb.*	Sumatra	♀		or	3	jl	Y	Sumatra	1818	O	l p	Bot cab 443
4306 **plicáta** *H. K*	plaited-leaved	♀	△	or	1½	jn jl	Y	C G H	1788	O	l p	Bot reg 345
4307 **orchioides** *W*	narrow-leaved	♀	△	or	½	jn jl	Y	E Indies	1800.	O	l p	Roxb. cor 1 t 15
4308 **brevifólia** *H K*	short-leaved	♀	△	or	½	my jl	Y	E. Indies	1804.	O	l p	Bot. mag 1076
4309 **latifólia** *H K*	broad-leaved	♀	△	or	1½	my au	Y	Poolo Pin.	1804.	O	l p	Bot. mag 2034
4310 **recurváta** *H K*	recurved-leav'd	♀	△	or	1	...	Y	Bengal	1805.	O	l p	Bot. reg. 770
752. BAMBU'SA. *W*	Bamboo Cane					*Gramineæ*		*Sp* 2—10				
4311 **arundinácea** *W*	common	♃		ec	40	...	Ap	India	1730	S	l	Roxb cor.1 t.79
4312 **verticillàta** *W*	whorl-flowered	♃		cu	20	...	Ap	India	1802.	S	l	Roxb cor.1 t 80
753 CA'LAMUS. *W*	Calamus.					*Palmæ*		*Sp* 2—10				
4313 **rudentum** *W*	common	♀		ec	50	...	Ap	E Indies	1812	S	s l	Rumph 5. t 53
4314 **Zalácca** *W*	Java	♀		cu	20	...	Ap	E. Indies	1812	S	s l	Rumph t 57 f.2
754 EHRHAR'TA *W*	Ehrharta					*Gramineæ*		*Sp* 1—8				
4315 **panicea** *W*	Panic-grass	⸙	△	cu	2	my jl	Ap	C G H	1790	S	co	Smith ined.1 t 9
755 A'CORUS *W*	Acorus.					*Aroideæ*		*Sp* 2—3				
4316 **cálamus** *W*	sweet-flag	♒	△	m	2	jn jl	Ap	Britain pools		D	m s	Eng bot 356
4317 **gramineus** *W*	grass-leaved	♀	△	cu	½	f	Ap	China	1786.	D	s p	Smi spic 15 t 17
*756 ORON'TIUM *W*	Orontium					*Aroideæ.*		*Sp* 2—4				
4318 **aquáticum** *W*	aquatic	♒	△	cu	¼	jn	Ap	N Amer	1775.	D	s p	Hook. ex fl 19
§4319 **japónicum** *W*	Japan	♒	△	ec	2	ja ap	Ap	Japan	1783	D	s p	Bot mag 898
757 TUPIS'TRA *B M*	Tupistra					*Aroideæ*		*Sp* 1				
4320 **squálida** *B M.*	Amboyna	♀		cu	2	ap	Ad	Amboyna	1810	R	l p	Bot reg 704
758 TAC'CA *W*	Tacca					*Aroideæ*		*Sp* 2				
4321 **pinnatifida** *W*	Salep	♀		ec	2	...	Pu	E. Indies	1793.	R	l p	Bot cab 692
4322 **integrifólia** *B M*	entire-leaved	♀		cu	2	my jl	Pu	E. Indies	1810	Sk	l p	Bot mag 1488



History, Use, Propagation, Culture.

751 *Curculigo* From *Curculio*, the weevil, one of the Coleopterous insects, the seed having a process resembling the rostrum or beak of that animal The species are of the easiest culture and increase, but of little beauty They in most respects resemble Hypoxis

752 *Bambusa* Latinized from the Indian name *Bambos* B arundinacea has a woody, hollow, round, straight culm, forty feet high and upwards, simple and shining, the internodes a foot in length and circumference, sheaths thick, hairy, rough, convolute, deciduous, branches alternate, slender, solid, spiny, reclining, springing out from the base to the very top, the lower ones being usually cut off Panicle of flowers diffused in spikes

It grows naturally almost every where within the tropical regions Over a great part of Asia it is very common, in China, Cochin-China, Tonquin, Cambodia, Japan, Ceylon, the peninsula of India, and the islands It has been long introduced into the West Indies, and is said to flourish likewise in South Carolina

There is, perhaps, scarcely any plant that serves for such a variety of domestic purposes In the East Indies great use is made of it in building, and the houses of the meaner people are almost entirely composed of it. Dr Patrick Brown mentions, that it was yet strong and perfect in some of the houses which had been built by the Spaniards in Jamaica above a hundred years before Bridges also are made of it, masts for their boats, boxes, cups, baskets, mats, and a great variety of other utensils and furniture, both domestic and rural Paper also is made from it, by bruising and steeping it in water, and thus forming it into a paste It is the common fence for gardens and fields, and is frequently used as pipes for conveying water The leaves are generally put round the chests of tea which are sent to Europe from China, as package, fastened together so as to form a kind of mat The tops of the tender shoots are frequently pickled in the West Indies.

In the cavities or tubular parts of the bamboo is found at certain seasons a concrete white substance, called Tabasheer or Tabachir, an article which the Arabian physicians hold in high estimation It is commonly found in what are called the female or large bamboos The bamboos which contain this concrete are found on shaking to contain a fluid, which, after some time, gradually lessens, and then they are opened in order to extract the Tabasheer The nature of this substance is very different from what might have been expected in the product of a vegetable Its indestructibility by fire, its total resistance to acid, its uniting by fusion with alkalies in certain proportions into a white opaque mass, into a transparent permanent glass, and it being again separable from these compounds entirely unchanged by acids, &c seem to afford the strongest reasons for considering it as very nearly identical with common siliceous earth. As to its medical virtues, though the drug be, as before observed, in much esteem with the orientalists, yet they are not such as to cause it to have any regard paid it in the modern practice of physic in Europe

The bamboos grow rapidly to a great height in our stoves in moist loamy soil, and they are readily increased by suckers

753. *Calamus.* From *καλαμος*, a reed, in Greek, *qalem*, in Arabic, *calam*, in Sclavonic; *calamus*, and *culmus*, in Latin This genus seems to form the connecting link between the palms and the gramineous plants, having the inflorescence of the former, and the habit of the latter It furnishes the rattan canes, of which

4300 Leaves radical numerous white beneath with stellate hairs, Umbel few-flowered
4301 Scape 1-fl shorter than the oblong elliptical smooth plaited leaves
4302 Leaves linear smooth channelled, Flower solitary green outside
4303 Scape 1-fl shorter than the linear ciliate serrate keeled leaves, Flowers out of flower reflexed
4304 Leaves channelled hairy entire, Scapes 1-fl.

4305 Leaves lanceolate on long stalks, Head sessile, Flowers shorter than bractes
4306 Leaves linear subulate, Flowers sessile
4307 Leaves linear subulate, Flowers stalked
4308 Leaves lanceolate, Tube of flower very long
4309 Leaves elliptical, Head sessile, Tube of flower scarcely longer than limb
4310 Leaves elliptical recurved, Head stalked cernuous, Tube of flower very short

4311 Panicle branched divaricating
4312 Spike terminal simple whorled

4313 Prickles of stem reflexed, Spadix divaricating straight
4314 Prickles spreading, Spadix radical

4315 Culm divided, Panicle branched, Flowers erect digynous

4316 Point of scape very long leafy
4317 Point of scape scarcely longer than spadix

4318 Leaves lanceolate-ovate
4319 Leaves ensiform

4320 The only species

4321 Leaves tripartite multifid
4322 Leaves ovate lanceolate entire stalked



and Miscellaneous Particulars

there are several species or varieties, all distinguished by a stem which is perennial, unbranched, long, round, solid, jointed, scandent when near trees, but without prickles or tendrils, extremely tough and pliable The different sorts grow on the banks of rivers in the East, like our reeds, and furnish valuable props for plants, cables, ropes, withs, wicker and wattled work, baskets, hoops for petticoats, walking-sticks, &c

C Zalacca, the Salzick, is cultivated for the fruit, which is about the size of a walnut, and covered with scales like those of a lizard, within the scales are two or three sweet yellow kernels. This tree is supposed to yield the dragon's blood

754. *Ehrharta* So named by Linnæus, in honor of Frederick Ehrhart, a native of Switzerland, a very diligent and acute observer These are very curious grasses, of which an account has been published in the Transactions of the Linnean Society

755 *Acorus*. From *α*, privative, and *κορη*, the pupil of the eye, maladies in which are supposed to be cured by the virtues of this plant. Acorus Calamus, Linnæus observes, is the only native aromatic plant of northern climates, the root powdered might supply the place of foreign spices. It has a strong aromatic smell, and a warm, pungent, bitterish taste The flavor is greatly improved by drying The roots are commonly imported from the Levant, but those of our own growth are full as good. The Turks candy them, and regard them as a preservative against contagion In many counties of England, in which the plant abounds, it was formerly used to strew the floors of houses instead of rushes, a purpose for which its fragrant leaves made it very suitable.

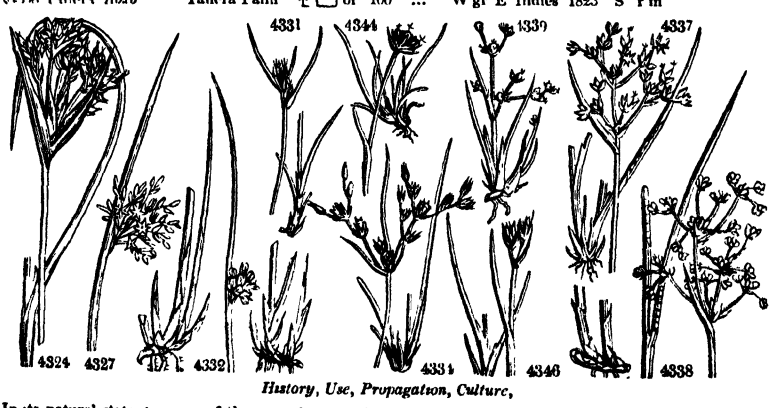
The aromatic principle is an essential oil, which can be obtained by distillation The root has been employed in medicine since the time of Hippocrates. By the moderns it is successfully used in intermittent fever even after bark has failed, and is certainly a very useful addition to Cinchona. It is also a useful adjunct to bitters, and stomachic infusions. Thomson says, (*Mat. Med.* 134.) it is too seldom prescribed. Though the plant is abundant in the fenny districts of England, yet what is used by the druggists is imported from the Levant. No cattle whatever eat the plant.

756 *Orontium*. The Greek name of a plant now unknown to us as such It is thought to have been so called from growing on the edge of the Orontes, a river of Asia Minor. O. japonicum has broad leaves like those of the lily of the valley, green on the upper side, and covered with very minute hairs, so that they look like a fine velvet. Cattle, hogs, and stags, are very fond of these leaves in the spring, and they come out among the earliest. Kalm states, that the Indians gather the seeds and eat them when dried like peas, boiling them repeatedly in water before they are fit for use, they also boil them in milk or butter, and use them instead of bread They call the plant *Tawkee*. It grows in marshes, near moist and low grounds, very plentifully in Virginia, Canada, and other provinces of North America.

757. *Tupistra* A diminutive of *τυπτω*, a mallet, on account of the peculiar form of the flower. An obscure plant, supposed to belong to the order Aroideæ It has long lanceolate broad leaves, and radical spikes of dingy purple flowers. It requires the heat of a bark-bed.

758. *Taccа*. The Malay name of the plant. T. pinnatifida has a red root, the size of a man's fist, roundish.

759. ASPIDISTRA. *Ker*	Aspidistra.					*Aroideæ*	*Sp* 1							
4323 lurida *Ker.*	dingy	☿	⍁	cu	1	jl	Pu	China	1822	Sk co	Bot reg 628			
760 JUN'CUS *L.*	Rush.					*Juncæ.*	*Sp* 23—39							
4324 acútus *W.*	great sharp sea	☿	△	ec	6	jl au	Ap	Britain	sea co.	S	s	Eng bot 1614		
4325 maritimus *P. S.*	lesser sharp sea	☿	△	ec	4	au	Ap	Britain	sal. m	S	s	Eng bot 1725		
4326 conglomerátus *W.*	common	☿	△	ec	2	jn.jl	Ap	Britain	mo.p.	S	m s	Eng bot 835		
4327 effúsus *W*	soft	☿	△	ec	3	my.au	Ap	Britain	mo p	S	m s	Eng. bot. 836		
4328 glaúcus *W.*	hard	☿	△	ec	2	jl	Ap	England	mo p	S	m s	Eng bot. 665		
4329 bálticus *W.*	coast	☿	△	cu	1½	jl	Ap	Europe	1820	S	s			
4330 árcticus *L.*	arctic	☿	△	cu	1	my	Ap	Norway	1822	S	m s	Flor Dan t 1004		
4331 filiformis *W*	least	☿	△	cu	½	au	Ap	Britain	tur bo	S	m s	Eng bot 1175		
4332 trifidus *W*	three-leaved	☿	△	cu	¼	jl	Ap	Scotland	sc alp	S	m s	Eng bot. 1482		
4333 squarrósus *W.*	Goose-corn	☿	△	w	¼	jn jl	Ap	Britain	sa.hea.	S	m s	Eng bot 933		
4334 grácilis *E B*	slender	☿	△	cu	½	jl au	Ap	Scotland	sc alp	S	m s	Eng bot. 2174		
4335 capitátus *W*	headed		○	cu	¼	jl.au	Ap	Europe	1823.	S	s			
4336 lamprocárpus *L T*	shining-fruited	☿	△	w	2	jn au	Ap	Britain	mo.p	S	m s	Eng bot 2143		
4337 acutiflórus *L T*	sharp-flowered	☿	△	w	2	jl.au	Ap	Britain	mo.p	S	m s	Eng bot 238		
4338 obtusiflórus *L T*	blunt-flowered	☿	△	w	1½	au	Ap	Britain	mar	S	m s	Eng bot 2144		
4339 uliginósus *H K*	little-bulbous	☿	△	w	1	jn.jl	Ap	England	tur he	S	m.s	Eng bot. 801		
4340 aristátus *Mich*	bearded	☿	△	cu	1	jl	Ap	N Amer.	1823	S	s			
4341 subverticillátus *W*	half-whorled	☿	△	cu	½	jl au	Ap	Europe	1821	S	m s	Fl dan. 817		
4342 bulbósus *W*	bulbous-rooted	☿	△	w	1	jl.au	Ap	Britain	...	S	m s	Eng bot 934		
4343 bufónius *W*	toad		○	w	¼	jl au	Ap	Britain	w s gr	S	m s	Eng bot 802		
4344 triglúmis *W*	three flowered	☿	△	cu	½	jl	Ap	Britain	bgs m	S	m s	Eng bot 899		
4345 biglúmis *W*	two-flowered	☿	△	cu	¼	au	Ap	Scotland	bgs m	S	m s	Eng bot 898		
4346 castáneus *H K*	black-spiked	☿	△	cu	1	jl	Ap	Scotland	sc alp	S	m s	Eng. bot. 900		
761 LU'ZULA *Dec*	Luzula					*Juncæ*	*Sp* 10—25							
4347 pilósa *W*	hairy	⩩	△	w	¼	mr my	Ap	Britain	groves	S	m s	Eng bot. 736		
4348 Forstéri *E B.*	Forster's	⩩	△	w	½	my jn	Ap	England	woods	S	m s	Eng bot 1203		
4349 máxima *W*	wood	⩩	△	w	2	my	Ap	Britain	woods	S	m s	Eng bot. 737		
4350 lútea *W*	yellow	⩩	△	cu	1	my jn	Ap	Switzerl	...	S	m s			
4351 álbida *W*	white-headed	⩩	△	cu	1	my jn	Ap	Switzerl	...	S	m s	Leer her t 13 f 6		
4352 nivea *W*	snowy	⩩	△	cu	1	my jn	Ap	Switzerl	1770	S	m.s	Sch gram t 7 f 7		
4353 campéstris *W*	field	⩩	△	w	¼	ap my	Ap	Britain	bar pa	S	m s	Eng bot. 672		
4354 congésta *W en.*	close-headed	⩩	△	w	½	jn	Ap	France	1805	S	m s	Hos gr.3 t.97 f 5		
4355 spicáta *W*	spiked	⩩	△	cu	¼	jl	Ap	Scotland	sc alp	S	m s	Eng bot. 1176		
4356 flavéscens *Lk.*	yellowish	⩩	△	cu	½	jl	Ap	Europe	1820.	S	m.s	Hos gram 3 t 94		
*762 CO'RYPHA. *W*	Fan-palm					*Palmæ*	*Sp* 2—10							
4357 umbraculifera *W*	great	🌴	▭	ec	100	...	Y	E Indies	1742	S	r m	Rheede 3 t 1 12		
4358 Taliéra *Roxb*	Taliera Palm	🌴	▭	or	100	...	W gr	E Indies	1823	S	r m			



History, Use, Propagation, Culture,

In its natural state it is one of the most bitter and acrid, but loses something of these qualities by culture. The raw root is rasped, and washed frequently in water, when a white meal falls to the bottom like starch, this is again washed twice or thrice, till no more acrimony can be perceived in the water. The meal is then dried in the sun The first infusions are thrown away carefully, being looked upon as noxious and even deadly. In Otaheite and the other Society isles, they make of this meal a tasteful, nourishing, gelatinous cake-like salep In Banda, where sago bread is not common, they use this as a succedaneum, and it is even preferable to the other They also apply it as a plaster to deep wounds The petioles and stalk boiled a long time lose their acrimony, and are rendered fit for food, as well as the roots, in China and Cochin-China.

759. *Aspidistra* From ασπις, a little round shield, on account of the form of the flower A plant with the same habit as Tupistra, but with solitary radical flowers half buried in the earth

760 *Juncus* From the Latin, *jungo*, to join . the first ropes were made of rushes The Junceæ and Cyperaceæ form intermediate links between the Gramineæ and the Liliaceæ, some of the latter, as Anthericum, bearing considerable resemblance to the Junceæ

J acutus and maritimus are planted on the sea-embankments of Holland, and also in some parts of our own coasts, and in America. The roots run deep into the sand, and form a matted body which holds it together In Holland, when the plants are fully grown and in flower, they are cut down down, dried, and bound up like corn The J. acutus, being very rough, is used for scouring copper and other vessels, and is one of the plants imported into this country for that purpose, under the name of the Dutch rush. The other species, and often both, are plaited into mats, baskets, chair-bottoms, ropes, &c.

J. conglomeratus and effusus are used when green for making little baskets and children's ornaments, and the pith of this and other species is used as wicks for watch-lights, and children's toys.

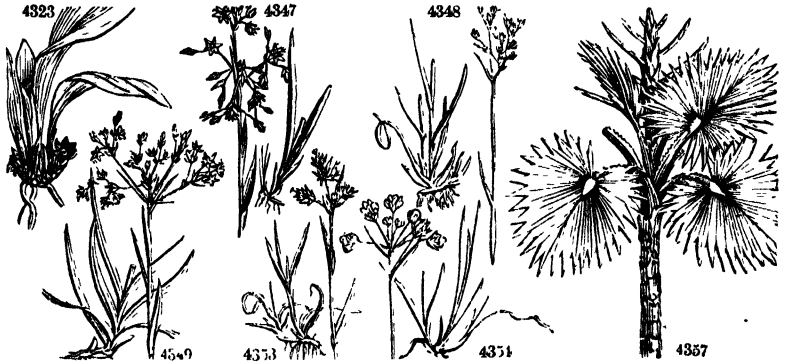
J. glaucus and conglomeratus are bad weeds in wet-bottomed clayey pastures The best way of removing them is to dig them out, and to prevent their growth, to lay the land dry by surface and under-drainage These species, and some others, are gathered green by the Dutch gardeners, and used when dry as tyes for fruit-trees. Sir J E. Smith says, " they both, probably, served for strewing floors in England, as mentioned by Shakspeare and Sir Thomas More, about the time of Edward IV , and later , till more refined manners wrought

4323 The only species

4324 Culm rounded mucronate, Panicle terminal, Invol 2-leaved spiny
4325 Panicle terminal proliferous, Involucre 2-leaved spiny, Caps. obl acute as long as sepals
4326 Culm upright, Pan. lateral globose, Caps retuse, Flowers triandrous
4327 Culm upright, Pan lateral decompound effuse, Caps clavate truncate at end
4328 Culm glaucous at the end bent inwards and rounded, Pan. lat. erect, Caps. oblong acute
4329 Culm pungent, Panicle effuse
4330 Culm erect, Umbel lateral, Pedunc many-fl. Flowers sessile
4331 Culm filiform nodding, Panicle lateral
4332 Leaves and flowers ternary terminal
4333 Leaves setaceous, Heads clustered leafless
4334 Leaves linear flat, Stem dichotomous racemose higher than leaves, Flowers solitary
4335 Culm filiform, Head terminal sessile solitary in an involucre
4336 Leaves jointed compressed, Culm not jointed, Panic erect, Caps colored shining
4337 Leaves jointed compressed, Culm not jointed, Panic compound dichotomous, Sepals acute
4338 Leaves and stem jointed round, Panic divaricating, Sepal obtuse as long as capsule
4339 Leaves bristly somewhat knotty, Heads 3-flowered proliferous, Culm bulbous rooting
4340 Bulbous, Culm leafy erect compressed, Flowers 3-androus and bracteæ bearded
4341 Culm procumbent, Leaves setaceous jointed, Corymb dichotomous divaricating, Head 5-fl sessile
4342 Leaves linear channelled, Culm leafy at base, Pan cymose, Caps. obtuse
4343 Leaves linear channelled, Culm dichotomous racemose, Flowers solitary
4344 Leaves flat, Head 3-flowered terminal erect leafless with bracteæ
4345 Leaves flat, Head 2-flowered terminal one-sided leafy at base
4346 Leaves flat stem-clasping, Head terminal double many-flowered leafy at base, Bractes acute

4347 Leaves pilose, Panic cymose divaricating, Flowers solitary, Caps obtuse
4348 Leaves pilose, Panic cymose erect, Flowers solitary, Caps pointed
4349 Leaves pilose taper-pointed, Panic cymose decompound, Flowers in bundles
4350 Leaves and sheaths smooth, Corymb comp close, Pedunc many-flowered, Sepals acute shining
4351 Leaves pilose, Corymb decomp spreading shorter than leaves, Sepals mucronate equal, Root fibrous
4352 Leaves pilose, Corymb comp contracted shorter than leaves, Sepals acute unequal, Root creeping
4353 Leaves pilose, Spikes terminal, Capsules obtuse
4354 Like the last, but the culm is panicled with ovate spikes
4355 Leaves flat, Spike racemose nodding compound at base, Capsules acute
4356 Like Luzula pilosa, but heads are yellower, Leaves broader, Flowers and capsules larger

4357 Fronds pinnate palmate with a thread between the segments, Spadix erect
4358 Seeds roundish dark-colored rugose the size of a nutmeg



and Miscellaneous Particulars

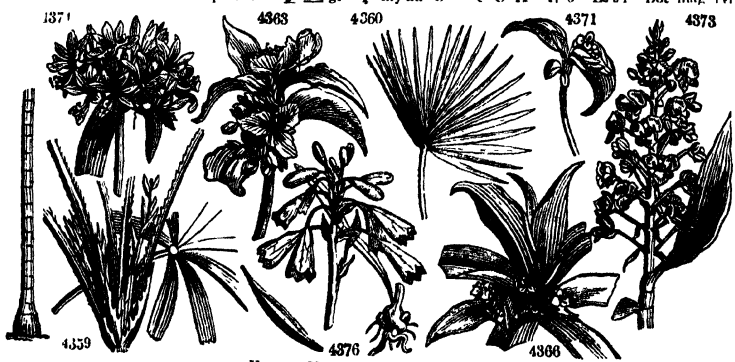
them into mats, and foreign commerce at length introduced carpets For the former purpose, indeed, as well as for chair-bottoms and hassocks, Scirpus lacustris has superseded their use. (*English Flora*, p. 162.)

761. *Luzula* These plants were called by the ancient botanists *Gramen Luzulæ*, whence this name has been contrived by Decandolle to distinguish the rushes with flat leaves, from those which have leaves resembling the stem.

762. *Corypha.* From κορυφη, the summit of any thing, a name applied by Linnæus to this noble genus of palms, the topmost leaves of which form immense fans twenty feet long and fifteen wide In Ceylon this palm is called Tallipot, and, according to Knox (*Hist of Ceylon.*), it grows as big and tall as a ship's mast, and very straight The leaves are of great use, one being so broad and large, that it will cover fifteen or twenty men Being dried it is very strong and limber, and though it be very broad when open, yet it will fold close like a fan, and then is no bigger than a man's arm The whole leaf spread is round, but is cut into triangular pieces for use these they lay upon their heads as they travel, with the narrow end foremost, to make their way through thickets Soldiers all carry them, not only to shade them from the sun, and to keep them dry in case of rain on their march, but to make their tents for them to lie under These leaves all grow on the top of the tree It bears no fruit until the last year of its life, and then yellow blossoms, most lovely to behold, but smelling very strongly, come out on the top, and spread abroad in great branches, these come to a fruit, round and very hard, as big as our largest cherries, in such abundance, that one tree will yield seed enough for a country, but not good to eat The flowers smell so strong, that they cut down the trees when they are near houses. The trunk within is a pith only, which they beat in a mortar to flour, and bake cakes of it, which taste much like white bread. The leaves also serve for covering their houses, and for writing on with an iron style Most of the books which are shown in Europe for the Egyptian papyrus, are made from the leaves of this palm In Malabar it is called Codda-pana. Rumphius, Loureiro, and Adanson mention several other species of this palm

The C taliera is a fine tree of prodigious use in the northern provinces of India for covering houses and for other useful purposes.

763. LICUA'LA *W*	Licuala.				*Palmæ. Sp.* 1—2.								
4359 spinósa *W.*	spiny	☤ □	ec	6	...	W gr	E. Indies	1802.	S	r.m	Rump amb. l. t 9		
764. THRI'NAX. *W.*	Thrinax.				*Palmæ. Sp* 1—3								
4360 parviflóra *W.*	small	☤ □	ec	15	...	W gr	Jamaica	1778.	S	r m			
†*765. TRADESCAN'TIA. *W.*	Spiderwort				*Commelineæ. Sp.* 12—29								
4361 virginica *W*	common	☿ △	or	1½	my o	B	N Amer	1629	D	p l	Bot. mag 105		
4362 rósea *Ph.*	rose-flowered	☿ △	or	1	my o	Pk	Carolina	1802	D	r.m	Bot cab 370		
4363 subáspera *B. M.*	Lyon's	☿ △	or		my o	Pu	N Amer.	1812	D	r m	Bot mag 1597		
4364 crassifólia *W.*	thick-leaved	☿ △	or	3	jl o	B	Mexico	1796	L	s p	Bot. mag 1598		
4365 erécta *W*	upright	○	or	2	jl au	B	Mexico	1794	S	r m	Bot. mag 1340		
4366 discolor *W.*	purple-leaved	☿ □	or	1	ap s	W	S. Amer	1783	Sk	s.p	Bot mag 1192		
4367 malabárica *W.*	Grass-leaved	☿ ⊠	or	1	jl au	Pu	E. Indies	1776	Sk	r m	Rheed ma 9 t.63		
4368 fuscáta *Lodd.*	rusty	☿ ⊠	or	½	s o	B	S Amer.	1820	L	r m	Bot reg 482		
4369 parviflóra *Fl per*	small-flowered	☿ ⊠	or	1	au s	B	Peru	1822	L	r m	Fl. per. t. 272		
4370 geniculáta *W*	knotted	☿ ⊠	or	1	jl au	B	W Indies	1783.	L	s p	Jac amer t. 64		
§4371 cristáta *W*	crested	☿ ⊡	or	1	jl s	B	Ceylon	1770.	D	r m	Bot mag 1435		
§4372 Zanónia *Red*	Gentian-leav'd	☿ ⊠	or	1½	jl.d	B	W Indies	1759	S	r.m	Red. hl. 192		
766 DICHORIZAN'DRA. *Vand*	Dichorizandra				*Commelineæ Sp* 1—4								
4373 thyrsiflóra *Vand*	thyrsoid	☿ ⊠	or	4	au	B	Brazil	1822	R	r m	Bot reg 682		
767 AGAPAN'THUS *W*	African Lily				*Hemerocallideæ Sp* 2—3								
4374 umbellátus *W*	large-flowered	☿ ⊿	or	3	ja.au	B	C G H.	1692	R	r m	Bot mag. 500		
β variegatus	*striped leaved*	☿ ⊿	or	2	ja.au	B	.....	...	R	r m			
4375 præ'cox *W en*	small-flowered	☿ ⊿	or	4	ja au	P B	C G H	...	R	r m	Bot. cab. 42		
768 BLANDFOR'DIA *R Br*	Blandfordia				*Hemerocallideæ Sp* 2—3								
4376 nóbilis *R. Br*	noble	☿ ⊿	or	2	jl au	Or	N S W	1803	S	s l p	Ex bot 1 t 4		
4377 grandiflóra *R Br*	large-flowered	☿ ⊿	or	2	jl au	Cr	N S W	1812	S	s l p	Lab no ho t 111		
†*769 HEMEROCAL'LIS. *W.*	Day Lily				*Hemerocallideæ Sp* 7—9								
4378 graminea *H K.*	narrow-leaved	☿ △	or	1	jn jl	L Y	Siberia	1759	R	s l	Bot mag 873		
4379 flava *H K*	yellow	☿ △	or	2	jn	Y	Siberia	1596	R	s l	Bot mag 19		
4380 disticha *Donn*	fan-like	☿ △	or	2	my jl	Or	China	1798	R	s l	Sweet fl gar 28		
4381 fúlva *W*	copper-colored	☿ △	or	½	jn au	Ful	Levant	1596	R	s l	Bot mag 64		
4382 Liliástrum *W en*	Savoy-Spiderw	☿ △	or	1½	my jn	W	Switzerl	1629	R	s l	Bot mag 318		
Antherícum Liliastrum L.													
§4383 Japónica *B M*	white-flowered	☿ △	or	1	au s	W	Japan	1790	R	p l	Bot mag 1433		
§4384 cærúlea *H K*	blue-flowered	☿ △	or	1½	my jl	B	Japan	1790	R	p l	Bot. mag 894		
*770 A'LOE. *W*	Aloe				*Hemerocallideæ Sp* 99—116								
§4385 atrovirens *Dec*	dark-green	♃	gr	1	my	G	C G H	1823	S	s l	Bot. mag 1361		
§4386 tortuósa *Haw*	twisted	♃	gr	1	my s	G	C G. H	1794	S	s l	Bot. mag 1337		
§4387 rígida *Dec*	rigid	♃	gr	1	my s	G	C G H	1795	C	s l	Plant. grass. 62		
§4388 áspera *Haw*	rough	♃	gr	1	jn	G	C G H	1795	C	s l			
§4389 viscósa *Haw*	clammy	♃	gr	1½	jn jl	G	C G H	1727	Sk	s l	Bot mag 814		
4390 albicans *Haw*	white-edged	♃	gr	1	jl	G	C G H	1795	Sk	s l	Bot mag 1452		
4391 cymbiformis *Haw.*	boat-leaved	☿ ⊿	gr	¾	my au	G	C G H	1795	Sk	s l	Bot mag 802		
4392 reticuláta *Haw*	netted	☿ ⊿	gr	¾	my au	G	C G H	1794	C	s l	Bot mag. 1314		
4393 recúrva *Haw*	recurve-leaved	☿ ⊠	gr	1	au	G	C G H	1795	C	s l	Bot mag 1353		
4394 retósa *W*	smooth cushion	☿ ⊿	gr	1	my jl	G	C G H	1720	Sk	s l	Bot mag 455		
4395 mirábilis *Haw*	rough cushion	☿ ⊿	gr	¾	my au	G	C G H	1795	Sk	s l	Bot mag 1154		
4396 translúcens *H K*	transparent	☿ □	gr	¾	my au	G	C G H	1795	Ls	s l	Bot mag 1417		



History, Use, Propagation, Culture,

763 *Licuala* The Macassar name of this plant in the Moluccas The fruit of this palm is a fleshy oval drupe, about the size of sweet-bay berries, it continues long green, but finally becomes brown or blackish the nut is oblong, hard, and striated. In the Isle of Celebes, and in Macassar, they make much use of the narrow leaves for tobacco pipes, and of the middle broad one for wrapping up fruit, &c. The wood, if the pith and hard rind may be so called, like that of most palms, is of little use.

764 *Thrinax* From θρινάξ, a fan The leaves of this little palm form a sort of fan Brown (*Hist of Jamaica*) says, that this tree covers whole fields in many parts of Jamaica; that it grows both in the rocky hills and low moist plains near the sea, but seems to thrive best in the former It shoots by a simple stalk, and rises generally from four or five, to ten or fourteen feet in height It is always furnished with leaves in form of a fan, sustained by slender compressed foot-stalks, and bears a great abundance of small berries, which serve to feed both the birds and beasts of the wood, when they are in season The trunk seldom exceeds four or five inches in diameter it is much used for piles in wharfs, and other buildings made in the sea; for it stands the water well, and is never touched by the worms. The foot-stalks of the leaves split and pared, serve to make baskets, bow-strings, ropes, &c where strength and toughness are required The leaves are called thatch, and are used as such, especially for out-houses, and stand the weather many years, but such coverings are apt to harbour rats and other vermin

765. *Tradescantia.* So named by Ruppius, in memory of John Tradescant, gardener to Charles I. He introduced the first species to Europe The museum of the Tradescants is celebrated as one of the earliest ever

4359 Frond palmate, Segments linear toothed truncate at end, Stem spiny

4360 Fronds flabelliform palmate plaited with stiff lanceolate segments, Stem compressed not prickly

4361 Erect, Leaves lanceolate smooth, Flowers umbelled clustered terminal
4362 Erect, Leaves grassy very long, Peduncles few-flowered, Cal smooth
4363 Erect smooth branched, Leaves long recurved ciliated, Pedunc. lat and term
4364 Leaves ovate at the edge and under woolly, Flowers umbelled clustered terminal
4365 Erect, Leaves ovate narrow at base smooth, Peduncle terminal naked bifid racemose
4366 Stemless smooth, Bractes equitant compressed, Leaves lanceolate colored beneath
4367 Erect smooth, Peduncles solitary very long
4368 Stemless with rusty hairs, Leaves elliptical acuminate radical
4369 Creeping, Leaves ovate oblong. under the flowers cordate, Pedunc. umbelled axillary
4370 Procumbent hairy
4371 Creeping smooth, Spathes 2-leaved imbricated
4372 Erect, Leaves broad lanceolate, Pedunc. lateral solitary many-flowered, Bractes double

4373 Leaves oval lanceolate whole-colored, Racemes thyrsoid many-flowered

4374 Peduncles length of corolla, Leaves linear

4375 Peduncles twice as long as corolla, Leaves linear

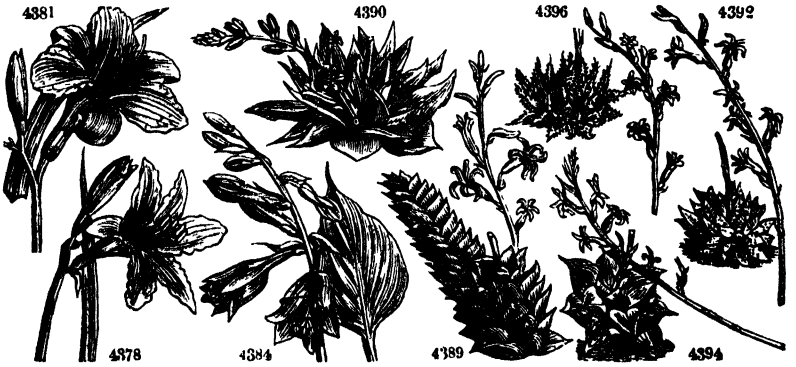
4376 Bractes twice as short as flower-stalks, Leaves very narrow
4377 Bractes as long as flower-stalks: the inner much the shortest

4378 Leaves linear keeled, Three inter petals wavy, Nerves of the petals undivided
4379 Leaves linear keeled, Petals flat acute, Nerves of the petals undivided
4380 Leaves linear keeled distichous, Sepals wavy acute spreading reflexed, Nerves branched
4381 Leaves linear keeled, Three inner petals obtuse wavy, Nerves of outer petals branched
4382 Leaves linear flat, Scape simple, Nerves of petals undivided

4383 Leaves cordate acuminate, Cor funnel-shaped
4384 Leaves ovate acuminate, Limb of cor campanulate

§ 1 *Flowers small Cor bilabiate* (APICRA *W*)

4385 Leaves spreading ovate 3 cornered, Edge and keel with short subulate teeth
4386 Leaves spirally trifarious spreading blackish, on the outside smooth, Stem much twisted
4387 Nearly stemless, Leaves multifarious green not spotted the upper horizontal rugose
4388 Leaves trifarious orbicular ovate acuminate green beneath very rough, Stem erect
4389 Leaves trifarious ovate acute very green not warted, Stems upright simple
4390 Leaves polished mucronate whitish, Edges and keel cartilaginous
4391 Leaves cymbiform obtuse glaucous very hollow above, Suckers numerous
4392 Leaves equilaterally triquetrous obtuse glaucous netted above concave
4393 Leaves subulate thick erect recurved concave above warted beneath, Edges obscurely pearly
4394 Leaves 6-farious at the end retuse deltoid pale-green lined above
4395 Leaves ciliate spiny 5-farious deltoid cuspidate at the edge and keel ciliate spiny, Obsoletely netted below
4396 Proliferous, Leaves multifarious lanceolate rounded elegantly ciliated, at end with obl. pellucid spots



and Miscellaneous Particulars.

formed in this country: it was left to Ashmole, from whom it came to the university of Oxford, bearing his name All the species are of the easiest culture, but few of them can be called beautiful. T virginica is usually admitted as a border-flower.

766 *Dichorizandra.* A name contrived by Mikan, from δις, two, χωρις, separately, and ανηρ, in botanical composition, a stamen, to express the separation of two anthers, upon which the character of the genus depends. Beautiful herbaceous stove plants, with the foliage of Commelina or Tradescantia.

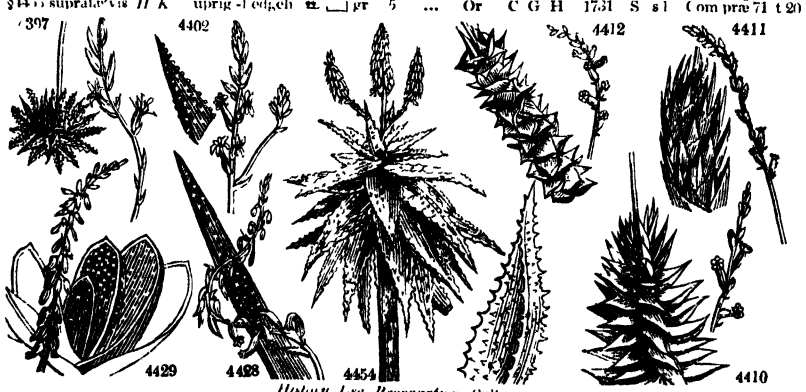
767. *Agapanthus* From αγαπαω, to love, and ανθος, a flower, lovely-flower. The blossoms are of a bright agreeable blue color, and the plant itself much prized. It is nearly hardy, and cultivated without any trouble, in large pots of common earth.

768 *Blandfordia* In compliment to George, Marquis of Blandford, son of the second Duke of Marlborough, a lover of plants, but not of honor. Beautiful New Holland liliaceous plants, very rarely seen in collections Their flowers resemble those of Cyrtanthus.

769 *Hemerocallis* From ημερα, the day, and καλος, beautiful: beautiful day-lily This is an ornamental genus of the easiest culture. The species are remarkable among border flowers for their fine orange, yellow, or blue flowers. The Hemerocallis cærulea has been considered a distinct genus by Mr. Salisbury, and called *Saussurea.*

770 *Aloe.* A word for which several derivations have been offered. That it has been obtained from the Arabic *álloeh*, seems most probable. The genus has been divided by Mr. A H. Haworth and others into

4397	púmila *Haw.*	small-cobweb	☿	△	gr	1	my	G	C G. H	1752.	Sk s.l	Bot. mag. 1361
4398	arachnoides *Haw.*	cobweb	☿	□	gr	1	au	G	C. G H.	1727.	Ls s l	Bot. mag 756
4399	rádula *Haw*	raspy-pearl	☿	△	gr	1½	au	G	C. G H.	1805.	Sk s.l	Jac schœn t. 35
4400	attenuáta *Haw.*	chalky-pearl	☿	△	gr	1	my.au	G	C. G. H.	1790.	Sk s.l	Bot. mag 1345
4401	minima *Haw.*	least-pearl	☿	△	gr	½	my s	G	C G H	1725	Sk s.l	
4402	minor *Haw*	lesser-pearl	☿	△	gr	1	my au	G	C. G. H	...	Sk s.l	Bot. mag 815
4403	margaritifera *H K.*	larger-pearl	☿	△	gr	1	my.s	G	C G H.	1739	Sk s.l	Brad.succ 3. t.21
§4404	Haw6rthii *Hort.*	largest-pearl	☿	△	gr	1	au	G	C C. H	1801	Sk s l	
§4405	bullulata *Jacq*	blistered	☿	△	gr	1½	my jn	G	C. G H.	...	Sk s.l	
§4406	pseudo-rigida *Salm.*	gumpowdered	☿	△	gr	½	ap my	G	C. G. H.	...	Sk s.l	
§4407	bicarináta *Haw.*	double-keeled	♃	□	gr	1	jn	G	C. G H.	1820.	S s.l	
§4408	spirális *Haw.*	great-spiral	♃	□	gr	1	au s	G	C. G H.	1790.	S s.l	
§4409	spirélla *Haw*	small-spiral	♃	□	gr	1½	au	G	C G H.	1808.	S s.l	
§4410	pentagóna *Haw*	five-sided	♃	□	gr	1½	jn jl	G	C G H	1731.	Sk s.l	Bot. mag 1338
	ß *torta*	*twisted*			gr	1						
§4411	imbricáta *Haw*	rough-flowered	♃	□	gr	1½	jn jl	G	C G H.	1731.	Sk s l	Bot mag. 1455
§4412	foliolósa *Haw*	small-leaved	♃	□	gr	1	jn au	G	C G H.	1795.	C s l	Bot. mag 1352
§4413	semiglabráta *Haw*	half-smoothed	♃	□	gr	¼	...	G	C G H.	1811	Sk s.l	
§4414	erécta *Haw*	erect-pearl	♃	□	gr	¼	...	G	C G H	1818.	Sk s l	Pl. grasses, 57
§4415	brévis *Haw*	short-pearl	♃	□	gr	¼	jn jl	G	C. G H	1810	Sk s l	Bot. mag 1360
§4416	fasciáta *Haw.*	barred-pearl	♃	□	gr	¼	...	G	C G H	1818	Sk s l	
4417	scábra *Haw*	rough	♃	□	gr	½	jn jl	G	C G H	1818	Sk s l	
§4418	papillósa *Salm*	papillose	♃	□	gr	1		G	C G H	1820	Sk s.l	
§4419	pseudo tortuósa *Sal*	twisted-triang	♃	□	gr	1	jl au	G	C G H	1818	Sk s.l	
§4420	concinna *Haw*	mat	♃	□	gr	¼	...	G	C G H.	1818	Sk s l	
§4421	cordifólia *Haw*	heart-leaved	♃	□	gr	¼		G	C G H	1817	Sk s l	
§4422	asperiúscula *Haw*	small-thick	♃	□	gr	¼	jn	G	C G H	1818	Sk s.l	
§4423	cúrta *Haw*	short-twisted	♃	□	gr	¼	...	G	C G H	1816	Sk s l	
§4424	tortélla *Haw*	little-twisted	♃	□	gr	½	jl	G	C G H.	1817	Sk s l	
§4425	nítida *Salm*	shining	♃	□	gr	1	jl	G	C G H		Sk s l	Bot. mag. 2304
§4426	setáta *Haw*	bristle-edged	♃	□	gr	½	jn	G	C G H	1818	Sk s l	
§427	obliqua *Haw*	broad-marbled	♃	□	gr	1½	jn au	R	C G H	1759	Ls s l	Bot mag 979
§428	maculáta *H K*	narr -marbled	♃	□	gr	3	jl au	R	C G H	1759	C s l	Bot mag 765
§429	nígricans *Haw*	dark-tongue	☿	△	gr	2	jn jl	R	C G H	1790	Ls s l	Bot. mag 838
§430	glábra *Haw*	smooth-keeled	☿	△	gr	3	jn jl	R	C G H	1796	Sk s l	
§431	carináta *W*	rough-keeled	☿	△	gr	2	jn jl	R	C. G H.	1731	Ls s l	Bot mag 1331
§432	lingua *W*	acute-tongue	☿	△	gr	3	mr n	R	C. G H	...	Ls s l	
§433	angulata *Haw*	retuse-tongue	☿	△	gr	2	mr n	R	C. G H	1791	Sk s l	
§434	acinaciféla *Haw*	longsw ord-lvd	♃	□	gr	3	mr s	Or	C G H	1819	Sk s l	Bot mag 2369
§435	brevifólia *Haw*	sht -lvd.-tongue	☿	△	gr	3	jl au	R	C G H	1809	Sk s.l	
§436	intermédia *Haw*	middle-tongue	☿	△	gr	2	mr n	R	C G H	1790.	Sk s l	
§437	verrucósa *W*	warted	☿	△	gr	2	mr n	R	C G H	1731	Sk s l	Bot. mag 837
§438	nítens *Haw*	shining	☿	△	gr	3	mr n	Or	C G H	1818	Sk s l	
§439	subcarináta *Salm*	obscure-keeled	☿	△	gr	2	jn jl	Or	C G H	1818	Sk s l	
§440	túrgida *Haw*	turgid-cushion	☿	△	gr	½	s	P Gr	C G H	1818	Sk s l	
4441	acuminata *Haw*	mid -hedgehog	☿	△	gr	3	mr my	Or	C G H	1795	Sk s l	Bot mag 757
4442	tuberculáta *Haw*	tubere -hedgeh	☿	△	gr	2	mr my	Or	C G H	1796	Sk s l	
444 3	húmilis *W*	dwarf-hedgeh	☿	△	gr	1	mr jn	Or	C G H	1731	Sk s l	Plant grass 39
4444	can'dicans *Haw*	marbled-white	☿	△	gr	1	jl	R	C G H	1796	Sk s l	
4445	virens *Haw*	apple-green	☿	△	gr	3	au s	Y	C G H	1790	Sk s l	Bot mag. 1355
4446	dichótoma *W.*	smooth-stem'd	♃	□	gr	8	...	R	C G H.	1780	Ls s.l	
§447	pseudo-africana *Sal*	narrow-tongue	☿	△	gr	6	mr n	Or	C G H	1731	Sk s l	Bot mag. 1322
§448	Prin'cipis *Haw*	the Prince's	☿	△	gr	5	mr.n	Y	C G H	1821	Sk s.l	
4449	echinata *Salm.*	great tubere	♃	□	gr	6	...	...	C G H	1821	Sk s l	
4450	vulgáris *H K*	yellow-flower'd	♃	□	m	12	my.au	Y	Levant	1596.	Sk s l	Plant grass 27
4451	purpurascens *Haw*	purple	♃	□	m	12	jl o	Pu	C G H	1789	C s l	Bot. mag 1474
4452	soccotrina *Haw*	soccotrine	♃	□	m	12	f ap	R	C G H	1731	C s l	Bot mag 472
4453	arborescens *H K*	tree	♃	□	m	12	mr n	R	C G H	1731	C s l	Bot mag 1306
§454	férox *H K*	great-hedgeh	♃	□	gr	6	ap my	Y	C G H	1759	C s l	Bot mag 1975
§455	supralaevis *H K*	uprig -l edgeh	♃	□	gr	5	...	Or	C G H	1731	S s l	Com prae 71 t 20



History, Use, Propagation, Culture,

many genera, but their opinion has not been adopted by men of science The species consist of odd looking **succulents**; some of them may be classed as trees, others as shrubs, but the greater number have more the habit and appearance of evergreen herbaceous plants One or two species are used in medicine or the arts

A. vulgaris purpurascens, soccotrina, and arborescens, which some consider as not specifically different

4397 Leaves very green, Spines marginal herbaceous, Tubercles numerous
4398 Leaves expanded lanceolate flat above, with the edges cartilaginous thick ciliated
4399 Leaves erect recurved subulate all over rough, Tubercles very minute numerous and pearly
4400 Leaves erect recurved subulate, Tubercles above large pearly below very minute
4401 Leaves spreading ovate acuminate with very numerous small warts
4402 Leaves long oblong acuminate with middle-sized pearly warts in rows
4403 Dichotomous, Leaves long ovate acuminate with great pearly warts, Capsules wrinkled across
4404 Stemless, Lvs. ovate acum cuspidate upw. 3-cor. keeled, Edges and keeled cren with coarse pearly warts
4405 Leaves rigid spirally 5-farious ovate acuminate sparingly warted with dark-green tubercles
4406 Leaves spirally trifarious recurved at end covered all over with minute dark-green warts
4407 Lvs. multifarious cordate very hard deep-green twice keeled, with dark-green raised warts on under side

§ 2. *Flowers small Cor regular.*

4408 Leaves very spiral 5-farious ovate acum smooth dark-green with some obscure spots beneath
4409 Leaves very spiral 5-farious lanc. acumin smooth pale-green with some obscure spots beneath
4410 Leaves 5-farious and spiral smooth green obsoletely spotted beneath

4411 Erect rounded, Cor rugose, Leaves multifarious erect polished not spotted
4412 Leaves multifarious very short and close together orbic ovate horizontal polished bright green
4413 Stemless dichotomous, Leaves dark-green erect ovate obl acum mucronate
4414 Leaves upright straight the old ones incurved ovate-obl. abruptly acuminate with small warts
4415 Soboliferous, Leaves spreading ovate acute with large warts
4416 Leaves erect lanc. acuminate above flat and smooth barred with large warts beneath
4417 Leaves semi-cylindrical 3-cornered thickened upwards very rough except at base
4418 Leaves attenuated erect with large white warts depressed in the centre
4419 Stem twisted, Leaves trifarious spiral imbricated spreading ovate acute smooth
4420 Leaves nearly trifarious densely imbricated spreading with an obtuse recurved point
4421 Leaves very rigid cordate stem-clasping thick dark-green above keeled and rough, Edge rough
4422 Leaves rigid rounded cordate closely inflexed dark-green edged a little rough above
4423 Leaves spirally trifarious blackish-green equilaterally triangular very rough
4424 Leaves close spirally trifarious blackish quite smooth outside, Stem much branched

§ 3 *Flowers curved* (GASTERIA *Haw*)

4425 Differs from A. acinacifolia only in having blunter points to the leaves
4426 Leaves lorate lanceolate with a long bristly point keeled above at the edge fringed with membr bristles
4427 Leaves spirally multifarious mottled narrow linguiform obtuse with a point
4428 Leaves tongue-shaped smooth pointed, Flowers racemose cernuous curved
4429 Differs from A lingua only in having broader and shorter leaves
4430 Smooth, Lvs multifarious acuminate spotted deeply keeled beneath with a cartilaginous edge and keel
4431 Stemless, Leaves acinaciform papillose
4432 Leaves distichous tongue-shaped acute spotted serrated with tubercles at edge
4433 Leaves distichous tongue-shaped retuse with a point obscurely spotted curved to one side
4434 Stemless, Leaves distichous acinaciform with cartilaginous prickly edges
4435 Leaves exactly distichous parabolically tongue-shaped short obtuse with edges smooth upwards
4436 Leaves bifarious ensiform bright-green
4437 Leaves ensiform acute papillose distichous
4438 Leaves spiral multifarious shining deeply keeled at the sides obscurely spotted, Edges cartilaginous
4439 Lvs bright-green multifarious spreading with white warts obtuse with a point, Edges densely cartilaginous
4440 Leaves oblong acute entire above towards the end swollen pellucid with darker markings

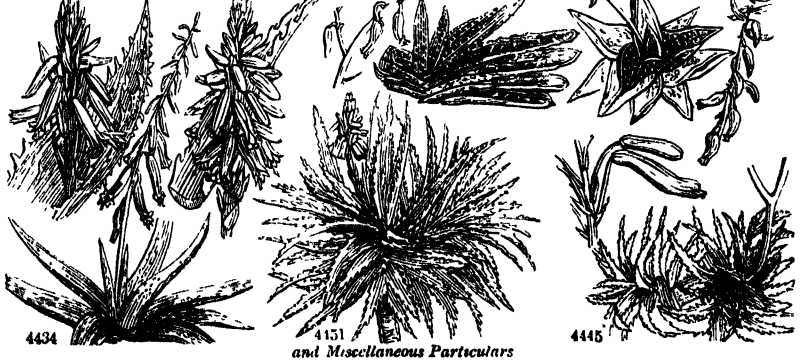
§ 4 *Flowers large* (ALOE)

* *Stemless*

4441 Leaves acuminate glaucous above flat smooth sparingly prickly beneath very rough
4442 Leaves acuminate above a little hollow very prickly all over
4443 Stemless, Leaves spiny ascending 3-cornered subulate
4444 Leaves distichous ensate lean smooth beneath white with warts running together
4445 Leaves oblong lanceolate green sparingly spotted, Edges with a few distant green spines
4446 Stem dichotomous, Leaves ensiform serrated, Stamens longer than cor
4447 Stem shrubby simple, Lvs revol recurved narrow ensiform glauc Warts prickly scatt. over both sides
4448 Leaves very green erect recurved, marginal and dorsal spines at the end red
4449 Leaves oblong lanceolate spiny toothed beneath white with warts, Petals unequal

** *With a stem*

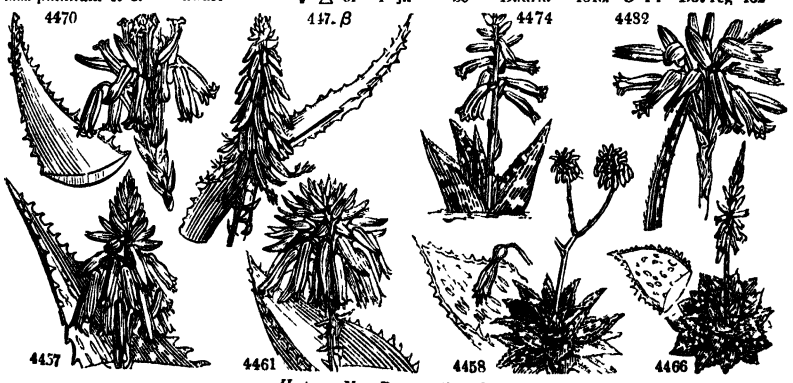
4450 Leaves spreading ascending spiny at edge, Pedunc branched, Branches with a double bract
4451 Leaves ensiform glaucous recurved at end, Marginal serratures white
4452 Leaves oblong ensiform somewhat spotted, Edges cernuous white with straight spines
4453 Leaves stem-clasping reflexed spiny at edge
4454 Leaves ovate ensiform glaucous deflexed covered over especially beneath with scattered spines
4455 Leaves oblong ensiform glaucous incurved above smooth beneath covered with scattered prickly warts



and Miscellaneous Particulars

are cultivated in Barbadoes and other West India islands, to obtain the hepatic aloes, which are brought to England and used chiefly for horses The aloes known by the name of Succotrine, is made chiefly from the species of that name, and A. spicata; being originally manufactured in the island of Zocotra or Socotora, in the straits of Babelmandel it retains the name: this drug is lighter colored, and not so coarse as the horse or

4456	flavispina *Haw*	yellow-spined	♄	gr	5	au	R	C G. H.	1790	C s l	
4457	picta *H. K.*	great-soap	♄	gr	4	au o	R	C G H	1727	C s l	Bot mag. 1323
4458	latifólia *Haw.*	broad-lvd -soap	♄	gr	6	jl au	S	C G H	1795	Sk s.l	Bot. mag 1346
4459	saponária *Haw*	common-soap	♄	gr	4	jl au	R	C G H	1727.	Sk s l	Bot. mag. 1460
4460	serrulâta *H K*	saw-leaved	♄	gr	7	jl au	R	C G. H	1789	C s l	
4461	mitraeformis *Dec*	common-mitre	♄	gr	6	au	R	C G H	1732.	C s.l	Bot mag 1270
4462	nóbilis *Haw*	great-mitre	♄	gr	5	au	R	C G H	1800	Sk s l	
4463	distans *Haw*	small-mitre	♄	gr	6	au	R	C G H.	1732	Sk s l	Bot mag. 1362
4464	albispina *Haw*	white-spined	♀	gr	7	..	S	C G H	1796	Ls s l	
4465	distans *H K*	short-leaved	♀	gr	2	jn.au	R	C G H	1731	C s l	Plant. grass 81
4466	deprêssa *H K*	flat-leaved	♀	gr	6	au	O	C. G H	1731.	Ls s l	Bot mag 1332
4467	suberécta *Haw*	lesser-hedgeh	♄	gr	5	mr.jn	S	C G H	1789	S s l	
4468	pumuláta *Jacq* *A striata* Haw	streaked	♄	gr	5	...	S	C. G H	1795	Sk s l	Jacq. fragm. t 62
4469	lineáta *H K*	lined	♄	gr	5	...	S	C G H	1789	Sk s p	
4470	glauca *H K*	glaucous	♄	gr	4	ja s	R	C G H	1731	Sk s.l	Bot. mag. 1278
4471	spicáta *W*	spike-flowered	♄	m	4	...	R	C G H	1795	Sk s p	
§4472	africána *H K* *β angústifolia*	African *narrow-leaved*	♄	gr	8	ja	R	C G H	1731	Sk s l	
§4473	plicátilis *W*	fan	♄	gr	7	ja	R	C G H	1819	Sk s l	Bot. mag 2517
4474	variegáta *W*	partridg -breast	♄	gr	8	jn jl	R	Africa	1723	C s l	Bot mag 45
4475	Commelini *Salm*	Commelin's	♄	gr	4	mr s	Pk	C G H	1720	Sk s l	Bot mag 513
4476	mácra *Haw*	lean	♄	gr	3	...	...	C G H	1819	Sk s.l	
4477	albocincta *Haw*	white-edged	♄	gr	3	jn	O	Mauritius	1817	Sk s l	
4478	sérra *Dec*	saw-leaved	♄	gr	4	jn	O	.....	1812	Sk s l	
4479	chinénsis *Hort*	Chinese	♄	gr	3	jl	O	C G H	1818	Sk s l	
4480	rufocincta *Haw*	roey-edged	♄	gr	3	...	Y	China	1821	Sk s l	
4481	cæ'sia *Salm*	cæsious	♄	gr	5	jn	O	E. Indies	1818	Sk s l	
4482	micracan'tha *B M*	small-spined	♄	gr	3	jl	O	C G H	1818	Sk s l	
4483	xanthacántha *Salm*	yellow-spined	♄	gr	3	jn	Pk	C G H	1819	Sk s l	Bot mag 2272
†771	LI'LIUM *W*	Lily				*Liliaceæ* *Sp* 20—24		C G H	1817	Sk s l	
4484	cándidum *W*	white	☿	or	3	jn jl	W	Levant	1596	O r m	Bot mag 278
4485	japónicum *W*	Japan	☿	or	2	jl au	W	China	1804	O r m	Bot mag 1691
4486	longiflórum *Thunb*	long-flowered	☿	or	2	my jn	W	China	1820	O r m	Bot reg 580
4487	caroliniánum *Psh* *autumnale* Lodd	Carolina	☿	or	2	jl au	O	N Amer	1819	O r m	Bot reg 580
4488	bulbíferum *W*	orange	☿	or	3	jn jl	O	Italy	1596	O p l	Bot mag 36
	β umbellátum	*umbel-fl orange*	☿	or	3	jn jl	O	Italy	1596	O p l	Bot mag 1618
4489	daúricum *Ker* *pensylvánicum* B M.	Daurian	☿	or	2	jn jl	L O	Dauria	1754	O p l	Bot mag 872
4490	con'color *H K*	self-colored	☿	or	2	jl	R	China	1806	O p l	Bot mag 1165
4491	Catesbæ'i *W*	Catesby's	☿	or	1	jl.au	O	Carolina	1787	O p l	Bot mag 259
4492	philadélphicum *W*	Philadelphian	☿	or	5	jl au	L O	N Amer	1757	O r l	Bot mag 519
	β andinum Ker	*Louisiana red*	☿	or	4	jl au	Sc	N Amer	1819	O r l	Bot reg 504
4493	canadénse *W*	Canadian	☿	or	4	jl au	L O	N Amer	1629	O p l	Bot mag 800
	β rúbrum	*red-flowered*	☿	or	4	jl au	O	N Amer	1629	O p l	Bot mag 858
4494	superbum *W*	superb	☿	or	6	jn au	L O	N Amer	1727	O p l	Bot mag 936
4495	Mártagon *W*	Turk's Cap	☿	or	3	jl au	Pu	Germany	1596	O c o	Bot mag 893
4496	crocéum *Bauh*	yellow	☿	or	3	jl au	Y	....	1596	O c o	Bot. cab 784
4497	spectábile *Link*	showy	☿	or	3	jl au	O	.	1596	O c o	
4498	chalcedónicum *W*	Scar -Martagon	☿	or	4	jl au	R	Levant	1596	O p l	Bot mag 30
4499	pyrenáicum *Willd*	Pyrenean	☿	or	2	jl au	D O	Pyrenees	1596	O p l	Red lil 145
4500	pompónium *W*	Scar -Pompone	☿	or	2	my jn	R	Siberia	1629	O r l	Bot mag 971
4501	monadélphum *B M*	monadelphous	☿	or	2	jn jl	Y	Caucasus	1800	O r l	Bot mag 1405
4502	tigrinum *H K*	tiger-spotted	☿	or	6	jl s	O	China	1804	O r l	Bot mag 1257
4503	púmilum *R L*	dwarf	☿	or	1	jn	Sc	Dauria	1816.	O r l	Bot reg 132



History, Use, Propagation, Culture,

hepatic aloes A spicata is cultivated extensively at the Cape of Good Hope, and a considerable part of what is sold as coming from Socotora is from that quarter All the medicinal aloes are grown on the poorest soil In preparing the drug, the leaves are cut off close to the stem, then cut in pieces, and the juice expressed, this is allowed to remain at rest for forty-eight hours, during which time a feculent matter is deposited, after which the supernatant liquor is poured off into flat dishes and evaporated in the sun At the Cape, in the month of July, the leaves are pulled, then cut into pieces, the juice expressed, and inspissated by means of heat

The month of March is the period for cutting the aloes in the island of Barbadoes The leaves are cut off close to the stem, and disposed in tubs, in such a manner that the juice runs out. After a sufficient quantity of it is collected, it is exposed to heat in copper boilers, and as it becomes more inspissated by a constant and regular fire, it is ladled from one boiler to another, and fresh juice added, until that in the last, which is called the *teache*, acquires the consistence of honey, when it is poured into calabashes, and hardens by age. It is

4456 Suckers from the root, Lvs. obl. acum. glauc. spread. cover. at side and back with very broad brown spines
4457 Caulescent, Leaves ensiform toothed mottled spreading
4458 Leaves ovate lanc pale-green with obl obsolete whitish barred spots, Spines rufous
4459 Leaves obl lanc dull green rather glaucous with obl. large transverse spots and rufous spines
4460 Leaves spotted, Edges and keel serrulate at end
4461 Leaves thick spiny at edge below spinulose appressed not dotted, Racemes in umbels
4462 Leaves erect broadly ovate acute, Spines marginal numerous white
4463 Leaves erect spreading remote ovate acute, Spines marg. few large yellow
4464 Leaves ovate acum green, Edge and keel very spiny, Spines long very white
4465 Leaves cæspitose very short glaucous 3-cornered at end, Angles with numerous white spines
4466 Distinguished from A serra by the spines not being united at base
4467 Leaves acuminate above flat smooth beneath warted
4468 Leaves glaucous streaked, Edges obsoletely toothletted

4469 Leaves green lined, Spines red
4470 Leaves very glaucous, Spines red
4471 Leaves lorate ensiform downward spotted with white, Marginal spines middle-sized red
4472 Leaves broad ensiform recurved smooth hard, Spines marginal and dorsal red at end

4473 Leaves tongue-shaped smooth distichous, Flowers racemose pendulous cylindrical
4474 Leaves trifarious painted channelled, Angles cartilaginous
4475 Leaves ovate oblong attenuate spreading glaucous, The edge and keel upwards with white spines
4476 Caudex leafy, Leaves lorate ensiform channelled spreading green serrulate
4477 Glaucous polished, Leaves oblong acuminate with a deep white entire cartilaginous edge
4478 Leaves tufted with the spines of the edge united at base, Scape toothed
4479 Leaves smooth pale-green straight erect-spreading soft
4480 Leaves lorate lanceolate acuminate green, Edge red with many white teeth
4481 Stem shrubby, Leaves long-lanceolate recurved at end glaucous smooth spotted with red spines
4482 Lvs narrow sword-shaped beneath spotted with white, Spots warty scatt Edge with minute white spines
4483 Caulescent, Lvs ovate acum glaucous spreading at the edge and back spiny, Spines very broad yellow

4484 Leaves lanc scattered narrowed at base, Cor campan smooth inside
4485 Leaves scattered lanc Cor cernuous campanulate
4486 Leaves scattered lanceolate, Cor tubular campan Stem smooth
4487 Leaves nerveless whorled cuneate-lanceolate, Flowers solitary with revolute spotted sepals

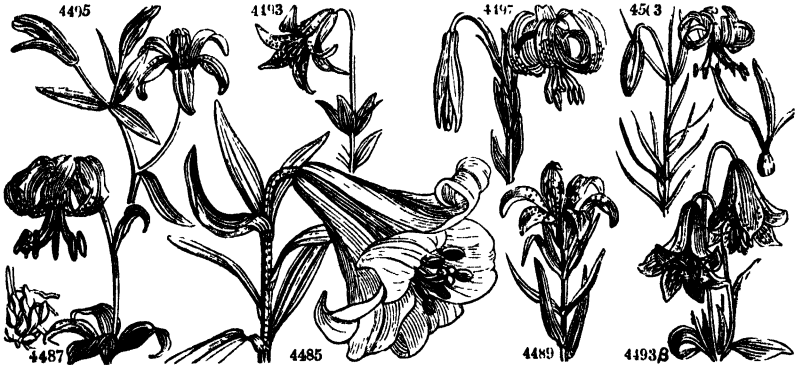
4488 Leaves scattered, Cor campan upright rough inside

4489 Leaves scattered lanc the upper whorled, Stem 1-flowered winged

4490 Leaves scatt lanc obl Cor erect revol camp within papillose without smooth
4491 Leaves scatt lin lanc Stem 1-flowered, Cor erect, Pet with long claws wavy at edge reflexed at end
4492 Leaves whorled, Flowers erect, Cor campan Petals clawed

4493 Leaves whorled linear, Flowers reflexed, Cor revolute campanulate

4494 Lower leaves whorled, upper scatt Flowers racemose reflexed, Cor revolute
4495 Leaves whorled ovate lanceolate, Flowers reflexed, Cor revolute
4496 Leaves ternate or scattered lin falc 3-nerved ciliated, Pedunc pubes Cor erect rough inside
4497 Leaves ternate or scattered linear 3-nerved ciliated, Pedunc tomentose, Flowers erect rough inside
4498 Leaves lin lanc scattered, Flowers reflexed, Cor revolute dotted inside
4499 Leaves scattered linear, Pedunc long, Flowers reflexed, Cor revolute papillose inside
4500 Leaves scattered lin subulate, Flowers reflexed, Cor revolute toothed and warted inside
4501 Like a Martagon, but the stamens are united in a tube
4502 Leaves scattered sessile 5-nerved, The upper cord ovate, Cor revolute papillose inside
4503 Leaves linear subulate scattered smooth, Flowers reflexed, Sepals revolute smooth inside



and Miscellaneous Particulars

brought home in these calabashes, or large gourd-shells, which contain from sixty to seventy pounds weight each (*Thomson's Mat. Med.* 141)

In the West Indies, the Cape, and most countries where the woody prickly species abound naturally, they are planted as hedges, and the fibres of the leaves, after being macerated for juice, manufactured into cordage or coarse cloth

A. picta, latifolia, and saponaria are so named from the spots of the leaves, which are of the color of soft soap

The curious species of aloes, inhabitants of the greenhouse, require but little water sandy loam, mixed with a little lime rubbish or gravel, suits them best, and they flower more abundantly by being exposed to the open air in summer They are increased by suckers, or leaves, stripped off the plants and laid on a pot of mould, or planted shallow in it, will produce young plants (*Bot Cult* 130)

771 *Lilium.* From the Celtic word *Li*, which signifies whiteness. The lily has always been considered the

†772. TU'LIPA. *W.*	Tulip.				*Liliaceæ*	*Sp* 9—11.							
4504 sylvéstris *W.*	wild	♂	△	or	1	ap my	Y	England	ch. pit.	O	s.l	Eng bot 63	
4505 túrcica *Roth*	nar.-waved-lvd	♂	△	or	2	ap my	St	.....	...	O	s l	Sw. fl. gar. t. 186	
4506 óculus sólis *R. L.*	Agen	♂	△	or	1	ap	R.B	Italy	1816.	O	s l	Bot. reg. 204	
4507 Gesneriána *W.*	common	♂	△	or	2	ap my	St	Levant	1577.	O	r m	Bot mag. 1135	
4508 suavéolens *W*	Van Thol	♂	△	or	½	mr.ap	R Y	S. Europe	1603.	O	r m	Bot mag. 839	
4509 clusiána *B. M.*	Clusius's	♂	△	or	1	jn	W pu	Sicily	1636.	O	r.m	Bot. mag. 1390	
4510 celsiána *P S*	Cels's	♂	△	or	1½	jn jl	Y	Levant	...	O	r.m	Bot. mag. 717	
4511 cornúta *R L.*	horned	♂	△	or	2	my	St	Levant	1816.	O	r.m	Bot reg 127	
4512 bifióra *L.*	two-flowered	♂	△	or	¼	ap	Y	Russia	1806.	O	r.m	Bot. reg. 535	
†773 FRITILLA'RIA *W*	Fritillary				*Liliaceæ*	*Sp* 12—19							
4513 Imperiális *W.*	Crown Imper	♂	△	or	4	mr ap		Persia	1596	O	co		
α rúbra	*red-flowered*	♂	△	or	4	mr.ap	R	Persia	1596.	O	co	Bot. mag 194	
β flâva	*yellow-flowered*	♂	△	or	4	mr ap	Y	Persia	1596	O	co	Bot. mag. 1215	
4514 pérsica *W*	Persian	♂	△	or	1½	ap my	Br	Persia	1596.	O	co	Bot mag 1537	
β nana Swert	*dwarf-Persian*	♂	△	or	½	ap my	Br	Persia	1596.	O	co	Bot mag 962	
4515 obliqua *B M*	oblique-leaved	♂	△	or	1	ap	Br P	Caucasus	...	O	co	Bot. mag. 857	
4516 tulipifólia *Bieb*	tulip-leaved	♂	△	or	1	my	Br P	Crimea	1822	O	co		
4517 verticillâta *W*	whorled	♂	△	or	1	a	Pu	Crimea	1823	O	co		
4518 pyrenáica *H K*	cluster-flowered	♂	△	or	1½	my jn	D P	.....	1605	O	co	Bot. mag 952	
4519 nigra *B M*	Pyrenean	♂	△	or	1	my	Y Pu	Pyrences	1596.	O	co	Bot mag 664	
4520 nervósa *W en*	nerved-leaved	♂	△	or	1½	my	D P	Caucasus	1826	O	co	Bot. mag. 853	
4521 lútea *Bieb*	yellow-flower	♂	⌴	or	1	ap my	Y	Caucasus	1812	O	co	Bot mag 1538	
4522 latifólia *W*	broad-leaved	♂	△	or	1	ap my	R	Caucasus	1604	O	co	Bot mag 853	
4523 Meleágris *W*	chequered	♂	△	or	1	mr my	Pu	Britain	mou p	O	co	Eng bot 622	
4524 lanceolâta *Ph*	spear-leaved	♂	△	or	¾	my		Kamschat	1759	O	co	Lin tr 10 t. 11	
Lilium kamchatcense W													
†774 DRACÆ'NA *W*	Dragon-Tree				*Asphodelcæ*	*Sp* 7—20							
4525 Dráco *W*	common	♀	□	or	10	...	W	E. Indies	1640	C	p l	Blackw t 358	
4526 ensifólia *W*	sword-leaved	♀	□	or	2	...	W	... ...	1800	C	p l		



History, Use, Propagation, Culture,

emblem of whiteness This is a splendid genus, all the species of which are considered border flowers of great beauty The more common sorts, species, and varieties, will thrive in any soil and situation, even under the shade of trees The Canadian, Pomponian, and Philadelphian martagons are somewhat tender, and require the protection of ashes or rotten bark in winter They are generally planted in borders, and need not be taken up oftener than every three or four years in September, and replanted six inches deep in the October following None of the species can be safely transplanted after they have pushed leaves, without weakening them so as to prevent their flowering for several years This remark, indeed, will apply to most bulbous rooted plants Mr Griffin, of South Lambeth, whose superior skill in the cultivation of bulbous plants is well known (*Hort Trans* iv 344), has been in the practice of keeping the lilium japonicum in pots, protected by a greenhouse or garden frame but he thinks they thrive best in the former He places the bulb in twenty-four sized pots, not lower than an inch from the surface of the mould, which is composed of about two-thirds peat and one-third loam, the bottom of the pot being covered to the depth of two inches, with broken pieces of tile and the rough siftings of peat The plants are kept entirely from frost, and are watered very little when in a dormant state, for they are then very impatient of wet in excess The pots kept in the greenhouse are placed at a distance from the flue to prevent the mould drying quickly (*Hort Trans* iv 554.) Mr S Brooks grows in a brick-pit, which he can cover with mats or glasses at pleasure, but he says, it "appears to be sufficiently hardy to endure our winters, as I have had a bed of them two years in the open ground without protection" (*Hort Trans* iv 552)

772 *Tulipa* Linnæus classed this among barbarous names In Persian it is called *thoolybân* (*De Souza*), whence undoubtedly its origin In old French it is called *tulipan* T Gesneriana (Gesner, a Zurich botanist), may be called the king of florists' flowers, having been a prime object of attention with this class of cultivators for nearly three centuries It appears to have been brought to Europe from Persia by way of Constantinople in 1559, and in a century afterwards to have become an object of considerable trade in the Netherlands, and a sort of mania among the growers, who bought and sold bulbs at prices amounting to 500*l.* sterling and upwards, in those days an immense sum The taste for tulips in England was at its greatest height about the end of the seventeenth and the beginning of the eighteenth century It afterwards declined, and gave way to a taste for rare plants from foreign countries The tulip, however, is still extensively cultivated in Holland, from which all Europe is supplied with bulbs, and also to a considerable extent in England, both in tradesmen's gardens and in those of the opulent It is, however, like the auricula, pink, &c more the poor man's flower than that of the botanists or country gentleman

The varieties of the tulip are endless, and their names arbitrary, like those of all florists' flowers One of the latest London catalogues (Mason's) enumerates six sorts of early blowing tulips, four perroquets or middle blowers, twenty-two double sorts, and upwards of 100 single late sorts; the last being the only sorts valued by florists as competition flowers These late sorts are classed by the Dutch as under.—

Prime baguets (*baguette*, Fr, a rod or wand), very tall, fine cups with white bottoms, well broken with fine brown, and all from the same breeder

Baguets Rigaut's (supposed from Rigaud, some eminent florist's name, or *rougeaude*, red face); not quite so tall, but with strong stems, and very large well-formed cups, with white bottoms, well broken with fine brown, and all from the same breeder

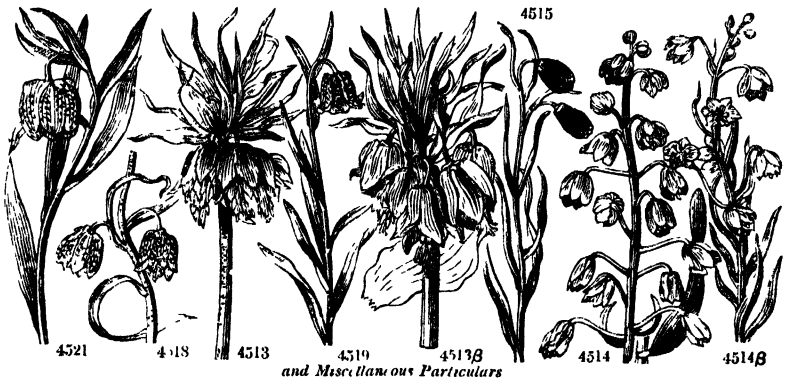
4504 Stem 1-fl smooth, Flower nodding, Petals acute bearded at end, Leaves lanceolate
4505 Flower erect, Petals lanceol acuminate, Leaves lanceolate linear
4506 Coat of bulb woolly inside, Leaves ciliated glaucous, Stem and flower smooth
4507 Stem 1-fl smooth, Flower erect, Petals obtuse smooth, Leaves ovate lanceolate
4508 Stem 1-fl pubescent, Flower erect, Petals obtuse smooth, Leaves ovate lanceolate
4509 Flower erect stellate with a dark eye, Leaves linear lanceolate
4510 Leaves lin. lanc convolute, Petals lanceolate greenish outside
4511 One-flowered, Flower from fusiform spreading, Sepals very long caudate
4512 Flowers erect flat, Stem 2-leaved 2-3-flowered, Leaves linear subulate

4513 Raceme comose naked below, Leaves entire

4514 Raceme naked, Leaves oblique

4515 Leaves glaucous numerous oblique, Cor. turbinate
4516 Leaves lanc alternate remote, Stem 1-flowered naked upwards, Angles of caps obtuse
4517 Leaves linear whorled opp and alternate when old cirrhose, Stem many-flowered, Capsule winged
4518 Lower leaves opp Inner flowers among the leaves
4519 Leaves scattered flat coriaceous glaucous, Cor campanulate revolute at end
4520 Leaves alternate linear nerved flat, Stem 1-flowered
4521 Leaves lin lanc alternate, the upper approximated shorter than the terminal solitary flower
4522 Leaves lanc approximated, the upper opp as long as the terminal solitary flower, Capsule obtuse angled
4523 Leaves alternate linear channelled, Stem one-flowered
4524 Leaves whorled, Flower erect, Cor campanulate, Petals sessile

4525 Leaves fleshy spiny at end
4526 Herbaceous caulescent, Leaves ensiform



and Miscellaneous Particulars

Incomparable Verports, very perfect cups, cherry and rose, and white bottoms, well broken with shining brown

Byblomens, or mixt flowers, the *flamands* of the French florists, with bottoms white, or nearly so, from different breeders, and broken with variety of colors

Bizarres (*bizarre*, Fr odd, irregular), ground yellow, from different breeders, and broken with variety of colors

What are called breeders are procured from seed, and consist of one plain color on a white or yellow bottom. These being cultivated on a dry and rather poor soil, become broken or variegated, and produce new varieties The time that elapses before they break, varies from one to twenty years or more, and sometimes this change never takes place, so that whoever thinks of raising new varieties of tulips from seed, must be possessed of an ample fund of patience and perseverance The early dwarf tulip, known among florists as the Van Thoil, is a distinct species, T. suaveolens

In raising tulips from seed, the florists pursue a mode in some respects the reverse of that practised with other plants Instead of saving the seed to be sown from the finest variegated tulips, they prefer unbroken flowers or breeders, selecting such of these as have tall strong stems, with large well-formed cups, clear in the bottom Plants raised from seed saved from the finer variegated sorts, form poor weak breeders of no value. The seed is sown on fine light soil, thinly covered, and protected and shaded by a frame At the end of the second year the bulbs are taken up and replanted three inches apart, and again at the end of the fourth year Some will bloom the fourth year, most the fifth, and all of them the seventh year Being now furnished with a set of breeders, all that the florist can do is to take up and replant till they break or shew variegation, which, as already observed, some will do in a year or two, and some not for a long period, or never. Some vary the soil to promote breaking, but in doing this there is often danger of weakening the strength of the flower

In cultivating choice tulips, an open airy situation, dry at bottom, is made choice of, there excavations are made commonly in the form of beds four feet broad, of any convenient length, and two and a half or three feet deep In the bottom a layer of well rotten hot-bed dung is laid and well trod in, and on this two or two and a half feet of rich fresh sandy loam. On this the roots are planted six inches apart, and covered four inches. The best season is the beginning of November In very severe winters, protection by mats or by a layer of decayed tanner's bark, may be requisite; but the tulip is very hardy, and almost the only protection it requires is shading and shielding from rain and winds during full bloom The bulbs should be taken up annually, as soon as the flowers are decayed, and kept in a dry airy situation till wanted for planting. (See *Maddocks*, *Hogg*, *Emerton*, &c)

T clusiana and T celsiana are both elegant little border bulbs, inferior indeed to their prototypes in splendour of coloring, but more elegant in their simplicity.

773. *Fritillaria* *Fritillus* signifies a dice-box, and is said to have been the origin of this name This is a genus with flowers shewy and angular in appearance. They require a deep loamy soil, and are readily increased by offsets or seeds They will grow in the shade of trees and shrubs, and do not require to be taken up above once in three years.

774 *Dracæna* From Δρακαινα, the female of δρακων, a dragon, because the inspissated juice becomes a red powder very like the eastern dragon's blood D. draco has the habit of a palm. The trunk is nearly

4527 **umbraculifera** *W*	umbel-flowered	♀	□	or	10	...	W	Mauritius	1788.	C	p l	Bot. cab 289
4528 **cérnua** *W*	drooping	♀	□	or	10	my	W	Mauritius	...	C	p l	Jac sch. 1. t. 96
4529 **férrea** *H K*	purple	♀	□	or	8	mr ap	W	China	1771.	R	p l	Bot. mag. 2053
4530 **frágrans** *H K*	sweet-scented	♀	□	or	6	f my	W	Africa	1768.	R	p.l	Bot. mag 1081
4531 **ováta** *B. M*	oval-like	¥	□	or	2	au s	Pk	S Leone	...	R	p l	Bot. mag. 1180

775. PHYLLO'MA *B M* PHYLLOMA. *Asphodeleæ* *Sp* 1

4532 **aloifólrum** *B M*	aloe-like	♀	□	or	10	ap	Or	Bourbon	1766.	R	p l	Bot. mag. 1585

776. ALE'TRIS *W.* ALETRIS *Hemerocallideæ* *Sp.* 2—3

4533 **farinósa** *W*	colic-root	¾	△	or	½	jn	W N	Amer	1768	R	s p	Bot mag 1418
4534 **aúrea** *Ph*	golden-tipped	¾	△	or	½	jl au	Y N	Amer	1811.	R	s p	Willd. ho ber. 8

777. TRITO'MA *B M* TRITOMA *Hemerocallideæ* *Sp* 3

4535 **Uvária** *H K*	great	¥	△	or	2	au s	O	C G H	1707	R	p l	Bot mag. 758
4536 **media** *H K*	lesser	¥	△	or	2	jn d	O	C G H.	1789	R	p l	Bot. mag 744
4537 **púmila** *H K*	least	¥	△	or	1	s n	O	C G H	1774.	R	p.l	Bot. mag 764

778 VELTHE'IMIA *H K* VELTHEIMIA *Hemerocallideæ.* *Sp* 2—4

4538 **viridifólia** *W*	green-leaved	¥	△	or	2	ap n	F W	C G H	1768	Sk	r m	Bot. mag 501
4539 **glaúca** *H*	glaucous	¥	△	or	2	ja ap	F G	C G H	1781	Sk	r m	Bot. mag. 1091

779 SANSEVIE'RA *W* SANSEVIERA *Hemerocallideæ* *Sp* 12—14.

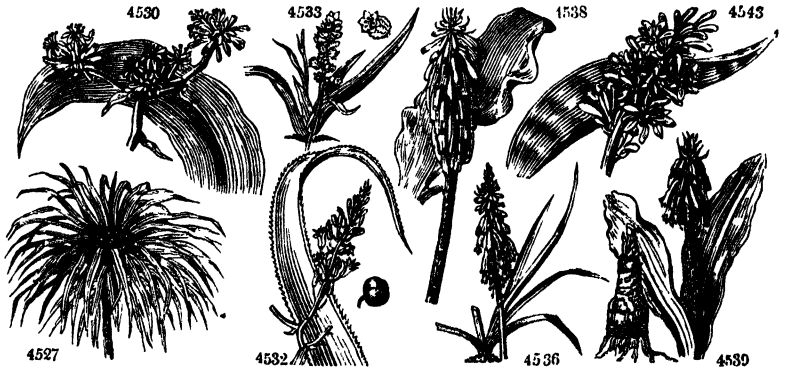
4540 **glaúca** *Haw*	sprdg.-glaucous	¥	⧄	cu	2	...	W G	.....	...	Sk	s l	
4541 **stenophýlla** *L K*	narrow-leaved	¥	⧄	cu	3	...	...	.....	1818	Sk	s l	
4542 **polyphýlla** *Haw*	upright-glauc	¥	⧄	cu	2	...	W G	.....	...	Sk	s l	
4543 **guineénsis** *W*	Guinea	¥	⧄	cu	2	jn n	G	Guinea	1690	Sk	s p	Bot mag 1179
4544 **læte-vírens** *Haw*	light-green	¥	⧄	cu	2	...	W.G	.....	..	Sk	s p	
4 45 **fulvocin'cta** *Haw*	fulvous-edged	¥	⧄	cu	1	...	...	Brazil	1818	Sk	s p	
4546 **spicáta** *Haw*	spiked	¥	⧄	cu	2	...	W G	E Indies	1790	Sk	s p	Cav ic 3 t 246
4547 **zeylánica** *W*	Ceylon	¥	⧄	cu	2	jn n	W G	Ceylon	1731	Sk	s p	Bot reg 160
4548 **lanuginósa** *W*	woolly	¥	⧄	cu	2	...	...	E. Indies	...	Sk	s p	Rheed 11 t 42
4549 **grandicuspis** *Haw*	large-pointed	¥	⧄	cu	3	...	W G	.....	...	Sk	s p	
4550 **púmila** *Haw*	dwarf	¥	⧄	cu	1	...	W G	C G H	1796		s p	
4551 **cárnea** *H K* *sesuliflóra* B M	flesh-colored	¥	△	or	½	mr jn	F	China	1792		l p	Bot rep 361

780 TULBA'GHIA *W* TULBAGHIA. *Hemerocallideæ* *Sp* 2—5

4552 **alliácea** *B*	Narcissus-lvd	♂	⧄	or	1	my jl	Br	C G H	1774		r m	Bot mag 806
4553 **cepácea** *W*	onion-scented	♂	⧄	or	½	ap	Br	C G H	1795		r m	

781 YUC'CA *W* ADAM'S NEEDLE. *Liliaceæ* *Sp* 12

4554 **gloriósa** *W*	superb	❀		or	4	jl au	W gr	America	1596	S	r l	Bot mag 1260
4555 **aloifólia** *W*	Aloe-leaved	❀	└	or	2	au s	W gr	S Amer	1696	R	r l	Bot mag 1700
4556 **tenuifólia** *Haw*	slender-leaved	❀		or	1	...	W gr	Malta	1817	R	r l	
4557 **draconis** *W*	drooping-lvd	❀	└	or	8	au s	W gr	S Amer	1732	R	r l	Dl el t 324 f 417
4558 **concáva** *Haw*	hollow-leaved	❀		or	1½	au	W gr	.....	1816.	R	r l	
4559 **obliqua** *Haw*	oblique-leaved	❀	□	or	4	...	W gr	... ..	1808	R	r l	
β *májor*	*large*	❀	□	or	4	...	W gr	... ..	1808	R	r l	
4560 **flaccida** *Haw*	flaccid	❀		or	2	. .	W gr	.....	1816	R	r l	
4561 **serrulata** *Haw*	rough-edged	❀	└	or	10	...	W gr	Carolina	1808	R	r l	
4562 **recur'va** *Haw*	recurve-lvd	❀		or	3	au	W gr	Georgia	1764	R	r l	Par lond 31
4563 **superba** *Haw*	superb	❀	└	or	10	au	W gr	... .	.	R	r l	Bot rep 475
4564 **glaucéscens** *Haw*	glaucous	❀		or	2	jl au	W gr	N Amer	1819	R	r l	Sw fl gard 53
4565 **filamentósa** *W*	thready	❀		or	2	s o	W gr	Virginia	1675	S	r l	Bot. mag 900



History, Use, Propagation, Culture,

equal in size, which is rarely more than eight or ten inches the whole length; the inner part very pithy, next to this a circle of strong fibres, and the outside soft, the same diameter the whole length, circular marks or rings are left the whole length where the leaves have fallen off The top sustains a large head of these, coming out singly all round it

775 *Phylloma* From φυλλον, a leaf, and λωμα, an edge, in reference to the broad red edge of the leaves. The plant resembles an aloe in foliage and flowers, and requires the same culture

776. *Aletris* From αλ ιας, meal, in allusion to the powdery dust with which the whole plant appears to be covered. Small North American plants, which may be cultivated with a little attention in rich leaf mould

777. *Tritoma* From τριτος, three, and τεμνω, to cut, in allusion to the three sharp edges of the ends of the leaves. (v *Ker, in Bot. Mag.* fol 744) The species of this genus thrive best in peat soil, but will do very well in any other light earth They are hardy enough to endure our mildest winters in the open air, and only require the protection of a frame in severe frosts There being also a genus of insects called Tritoma, Professor Link calls this genus Tritomanthe

778. *Veltheimia.* Frederick Augustus de Veltheim was a German botanical amateur, of whom nothing more is known. This genus resembles the last, and is of easy culture in any light loamy soil, and readily increased

4527 Leaves lanceolate narrowed each way, Corymb very short terminal many-flowered
4528 Leaves lanc. obliquely bent, Panicle hanging down divaricating
4529 Leaves lanceolate acute discolored
4530 Leaves lanceolate lax, Flowers very fragrant
4531 Head of flowers sessile in the centre of the ovate leaves

4532 Leaves tooth-spiny, Racemes axillary

4533 Flowers stalked oblong tubular, Cor in fruit smooth mealy, Leaves broad lanceolate mucronate
4534 Flowers sub-sessile campanulate, Cor in fruit rugose very rough, Leaves lanc ensiform acute

4535 Leaves with the keel and edge rough, Cor clavate cylindrical
4536 Leaves with keel and edge smooth, Cor clavate cylindrical
4537 Leaves with keel and edge rough, Cor globose at end

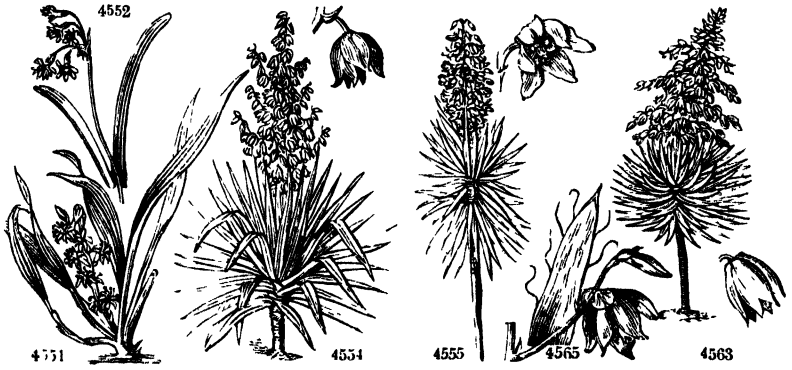
4538 Leaves lanc plaited wavy obtuse, Teeth of the limb rounded straight
4539 Leaves lanc. glaucous curled at edge mucronate at end, Limb spreading

4540 Leaves about 11 spreading flaccid broadly lanceol ensiform glaucous obscurely barred
4541 Leaves beneath convex lined channelled not barred
4542 Leaves about 19 sub-erect rigid brittle broad lanceolate ensiform glaucous obscurely barred
4543 Leaves lanc uniform, Style twice as long as stamens, Bractes thrice as short as tube of cor Flow sessile
4544 Leaves about three flaccid lanc. ensiform pale-green with scarcely any bars
4545 Leaves lanc revolute recurved dull green slightly edged with fulvous
4546 Leaves about eleven nearly erect rigid brittle lanc ensif with very obscure bars
4547 Leaves smooth oblong acute flat and lin lanceolate channelled, Style the length of stamens
4548 Leaves with woolly nerves lower oblong, rest lin Pedunc without bractee
4549 Leaves about 12 sub-erect lanc ensif much barred with a small bristle at end
4550 Leaves about 20 spreading lanc ensif much barred, with 4-6 strong lines beneath
4551 Leaves distichous lanceolate ensiform keeled, Flowers solitary sessile

4552 Nectary 1-leaved 6-toothed
4553 Nectary 3-leaved

4554 Leaves quite entire
4555 Leaves crenulate straight
4556 Leaves linear very narrow stiff closely curved back into a semicircle serrulate at edge
4557 Leaves crenate nodding
4558 Leaves erect incurved rough on both sides dull glaucous with strong white marginal threads
4559 Leaves lorate linear lanc obliquely bent glaucous, Suckers tuberous

4560 Leaves all very flaccid weakly recurved with very strong brownish threads
4561 Leaves in a close head very stiff green rough at edge
4562 Leaves recurved deflexed with a few threads
4563 Leaves a little plaited mucronate, Flowers very close together camp not opening curved outwards at end
4564 Leaves linear lanc narrow glaucous with fine white marginal threads
4565 Leaves erect recurved broadly channelled with very strong twisted brown marginal threads



and Miscellaneous Particulars

by offsets from the bulbs, or by pulling off the leaves close to the bulb, and then planting them in pots of mould, when, like most other bulbous rooted plants, they will produce bulbs at their base The species are quite hardy, although usually treated as greenhouse plants.

779. ***Sanseviera*** This is a succulent genus, of the easiest culture and propagation in sandy loam with little water. It is probable that nearly all the numerous kinds adopted here from the works of Mr A H. Haworth, are varieties of one common stock, which in the woods of Guinea sports into an infinite number of forms.

780. ***Tulbaghia*** This was named in honor of —— Tulbagh, a Dutch governor of the Cape of Good Hope, who patronized travelling naturalists Very pretty plants, less fragrant than beautiful, they are rarely seen in collections, but may be cultivated in very light sandy peat in a good greenhouse

781 ***Yucca.*** The inhabitants of St. Domingo call this plant *Yuca* The species are considered highly desirable from their palm, or oriental pine-apple, or aloe character, and as being evergreens. For this reason they make a striking contrast in gardens and shrubberies, with European shrubs They grow slowly, and do not flower freely They are well adapted for a conservatory, as even the reputed hardy species do not thrive generally in the open air

4566 rufo-cin'cta *Haw*	rufous-edged	●	or	1½	jl	W G	.....	1816.	Sk r m			
4567 stricta *Sims.*	Lyons's	●	or	1	jl	W G	Carolina	1817	Sk r m	Bot. mag. 2222		
4568 conspícua *Salm*	conspicuous	● ⌴	or	3	...	W G	.....	1816.	Sk r m			
4569 angustifólia *Ph*	narrow-leaved	●	or	2	jl.au	W.G	Missouri	1811	Sk r.l	Bot. mag. 2236		
4570 crenuláta *Haw.*	rough-edged	●	or	2	...	W G	.....	1818.	Sk s l			
4571 arcuáta *Haw.*	bowed	●	or	1		W G	... ..	1817.	Sk s.l			

†782. ERYTHRO'NIUM *W* DOG'S-TOOTH VIOLET *Liliaceæ Sp 2*

4572 Dens cánis *W.*	common	☿	△	or	¼	mr	Pu	Europe	1596	O p.l	Bot. mag. 5	
β albiflórum	*white-flowered*	☿	△	or	¼	mr	W					
4573 americánum *H K*	yellow-flowered	☿	△	or	¼	ap my	Y	N Amer	1665.	O p.l	Bot mag. 1113	

783 GLORIO'SA. *W.* GLORIOSA *Liliaceæ Sp 2—3*

4574 superba *W.*	superb	☿	⧄	or	6	jl au	Or	E Indies	1690	O s p	Bot. reg. 77	
4575 simplex *L.*	blue-flowered	☿	⧄	or	2	jl au	B	Senegal	1756.	O s.p		

784 BULBOCO'DIUM *W* BULBOCODIUM *Melanthaceæ Sp 1*

4576 vérnum *W.*	spring-flower	☿	△	or	¼	f mr	D Pu	Spain	1629	O s p	Bot. mag 153	

785. UVULA'RIA. *W* UVULARIA *Melanthaceæ Sp 6—9*

4577 perfoliáta *W*	perfoliate	⚹	△	or	½	my jn	Pa Y	N Amer	1710	Sk p l	Ex bot. 1 t 40	
4578 flava *Ph*	deep-yellow	⚹	△	or	½	my jn	Y	N Amer	...	Sk p.l	Ex. bot. l. t 50	
4579 lanceoláta *W*	spear-leaved	⚹	△	or	1	jn au	Y	N Amer	1710	Sk p l	Corn can. t 41	
4580 grandiflóra *H K.*	large-yellow	⚹	△	or	1	my jn	Y	N Amer	1802	Sk p l	Ex bot. 1 t 51	
4581 sessilifólia *W*	sessile-leaved	⚹	△	or	½	jn	L.Y	N Amer	1790	Sk p l	Ex bot 1 t 52	
4582 chinénsis *B M*	brown-flower'd	⚹	⧄	or	1	s n	Pk	China	1801.	Sk p l	Bot. mag. 916	

786. STREP'TOPUS. *M* STREPTOPUS. *Smilaceæ Sp. 3.*

4583 amplexifólius *R L*	heart-leaved	⚹	△	or	1	my	W	Hungary	1752	Sk lt s	Red. lil 259	
4584 róseus *Ph*	rose-colored	⚹	△	or	1½	jn jl	Pk	N Amer	1806	Sk lt s	Bot mag 1489	
§4585 lanuginósus *Ph.*	woolly	⚹	△	or	1½	jn jl	Y Gr	N Amer	1812	Sk lt s	Bot. mag. 1190	

787 CONVALLA'RIA. *Desf* LILY OF THE VALLEY. *Smilaceæ Sp 1*

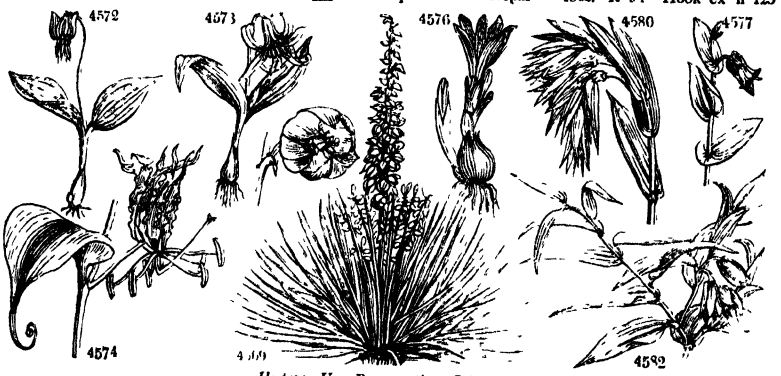
4586 majális *W.*	common	⚹	△	or	¼	my jn	W	Britain woods		R s l	Eng bot. 1035	
β rúbra	*red-flowered*	⚹	△	or	¼	my jn	F	Britain gard.		R s l		
γ flóre pléno	*double*	⚹	△	or	¼	my jn	W	Britain gard		R s l		

788 SMILACI'NA *Desf* SMILACINA *Smilaceæ Sp 6.*

4587 umbellata *Desf*	umbel-flower'd	⚹	△	or	¼	my jn		N Amer.	1778	R s l	Bot. mag 1155	
4588 borefilis *Desf*	oval-leaved	⚹	△	or	1	my jn	W	N Amer	1778	R s l	Bot mag 1403	
4589 bifólia *Desf*	least	⚹	△	or	¼	my jn	W	N Eur	1596	R s l	Bot. mag 510	
4590 trifólia *Desf*	three-leaved	⚹	△	or	¼	jn jl	W	N Amer	1812	R s l	Gmel. sib 1 t 6	
4591 stellata *Desf*	star-flowered	⚹	△	or	¼	my jn	W	N Amer	1633	R s l	Bot. mag 1043	
4592 racemósa *Desf*	cluster-flower'd	⚹	△	or	1	my jn	W	N Amer	1640	R s l	Bot. mag 899	

789. POLYGONA TUM *Desf* SOLOMON'S SEAL *Smilaceæ Sp 7—8*

4593 verticillátum *Desf*	whorl-leaved	⚹	△	or	1	my jn	W	Scotland woods		R s l	Eng bot. 128	
4594 canaliculátum *Ph*	channelled	⚹	△	or	1	jn	W	N Amer	1812	R s l		
4595 pubéscens *Ph*	pubescent	⚹	△	or	1	my jn	W	N Amer	1812.	R s l	Willd ber. 45	
4596 vulgáre *Desf*	angular	⚹	△	or	2	my jn	W G	England moun		R s l	Eng bot 280	
4597 multiflórum *Desf*	common	⚹	△	or	2	my jn	W	Britain woods		R s l	Eng bot 279	
4598 latifólium *Desf*	broad-leaved	⚹	△	or	1	my jn	W	Germany	1802	R s l	Jac aus 3 t 232	
4599 oppositifólium *Lodd*	opposite-leaved	⚹	⧄	or	1	ap	W	Nepal	1822.	R s l	Hook ex fl 125	



History, Use, Propagation, Culture,

782 *Erythrónium* From ἐρυθρός, red, in allusion to the color of the flower and leaves Beautiful little vernal bulbs, the favorites of gardeners, from the cottager's border to the nobleman's flower garden The E. americanum runs very much at the root, and will not flower unless confined and prevented wasting its vigour in long subterraneous surculi

783 *Gloriosa* So named on account of the glorious colors of its flowers, and the elegance of their form This is a splendid and curious genus, which requires considerable care in its treatment so as to make it flower freely The late John Sweet, of Bristol, has given the following directions, "When the stalks and foliage have decayed in the autumn, and left the root, like a well-ripened potatoe, in a dormant state, the pot in which it is, must be removed from the bark-bed (to a dry part of the house) at some distance from the fire · all the warmth at this time necessary being merely what is sufficient to keep the earth in the pot free from damp · and to prevent the waterings of the house, or other moisture, falling on the earth in the pot, it should be covered, by inverting upon it another pot of the same size, or if larger, it will hang over its edges, and more effectually exclude the wet. If the roots are small, two or three may be placed together in the same pot, whilst in their dormant state, but if they are thus shifted, the mould must be well shaken down in the pot, in order to prevent the access of air to them the old mould in which they grew must also be used; for fresh earth or sand would stimulate them to move too early About the second week in March, the roots must be replanted, putting one or two, according to their size, into pots measuring six inches over The best compost for them is fresh loam, mixed with an equal quantity of peat-mould, of good quality, the loam should be good, not over rich with dung, nor too heavy The roots are to be covered about two inches deep; and care must be taken not to break them, unless nature has shown where it is practicable to divide them easily. The pots, when filled, must be plunged into the bark-bed, where the heat should be equal to ninety-five degrees of Fahrenheit's scale. Water is to be given very sparingly at first, and though, as they grow,

4566 Leaves erect lin. lanc. flaccid glaucous green quite smooth with a slight red edge
4567 Stemless, Leaves linear very straight, Scape branched at base, Cor round campanulate
4568 Leaves few loosely headed long lanceolate, their edges rough
4569 Leaves erect rigid narrow ensiform glaucous with a broad white edge and a few threads
4570 Leaves a little recurved glaucous lin lanc. at the edge and keel rough, beneath glaucous
4571 Leaves lin lanceolate recurved almost into a circle deep green 7-8 lines broad roundish at edge

4572 Style filiform

4573 Style clavate 3-cornered

4574 Leaves cirrhiferous
4575 Leaves acuminate

4576 A small plant like a Crocus

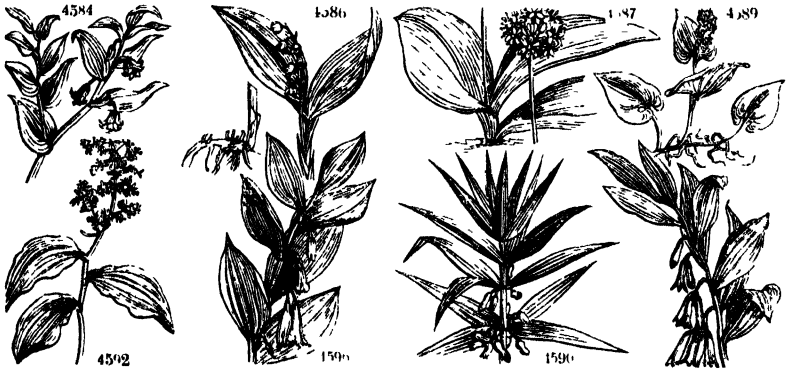
4577 Leaves perfoliate ovate
4578 Leaves perfoliate elliptic oblong obtuse, Cor narrowed at base scabrous within, Anthers cuspidate
4579 Leaves perfoliate ovate lanceolate acute
4580 Leaves perfoliate oblong acute, Petals smooth on both sides, Nect roundish
4581 Leaves sessile
4582 Leaves stalked

4583 Leaves stem-clasping and stem smooth
4584 Smooth shining, Leaves stem-clasping serrulate ciliated, Anthers short 2-horned
4585 Downy hoary, Leaves sessile cordate acuminate, Pedicels in pairs on a very short stalk

4586 Scape naked smooth, Leaves ovate

4587 Leaves ovate oblong obtuse ciliated, Scape leafless, Umbel capitate
4588 Leaves radical elliptical, Umbel terminal
4589 Leaves cordate, Flowers tetrandrous
4590 Leaves stem-clasping in threes, Raceme terminal simple
4591 Leaves alternate stem-clasping elliptical acute, Raceme terminal simple
4592 Leaves alternate sessile ovate acuminate, Panicle terminal naked

4593 Leaves whorled
4594 Stem furrowed, Leaves alternate amplexicaul oblong pubescent at edge, Pedunc axillary 2 fl
4595 Stem rounded furrowed, Leaves amplexicaul ovate downy beneath, Pedunc axill about 2-fl.
4596 Leaves alternate stem-clasping, Pedunc. axillary 1-fl
4597 Leaves alternate stem-clasping, Stem round, Pedunc axillary many-fl
4598 Leaves alternate stem-clasping acuminate, Stem angular, Pedunc axillary many-fl
4599 Stem round, Leaves opposite oblong acuminate shining, Pedunc umbell 3-5-flowered



and Miscellaneous Particulars.

they will require a more liberal supply, yet it is necessary at all times to be very moderate in giving it The heat must be well kept up, and as the roots extend, they must be supported Under such treatment as I have described, I have known one plant grow ten feet in the course of a season, and to have numerous blossom-stems upon it." It is readily increased by dividing the roots (*Hort Trans* iii 2, 3) The flowers are at first green, they afterwards assume those beautiful markings of yellow for which they are so much esteemed

784. ***Bulbocodium.*** From *βολβος*, a bulb, and *κωδιον*, wool; its bulb is enveloped in a rough and velvetty covering A beautiful little vernal flower resembling a small species of Colchicum.

785. ***Uvularia.*** A diminutive of *uva*, a bunch of grapes. A genus of little beauty and of easy culture,

786. ***Streptopus.*** From *στρεφω*, to turn, and *πους*, a foot, or, in botanical language, stalk. Its flower-stalks are constantly twisted. A plant like an Uvularia in habit.

787. ***Convallaria*** From *convallis*, a valley, in allusion to the places where it grows. (*Muguet*, Fr) C majalis is an elegant and delicate scented plant, which has long been a favorite of the florist, though, as it is not a native of hot countries, it is not likely to be the Lily of the Valley of Solomon Notwithstanding the fragrance of the flowers when green, yet when dried they have a narcotic odour, and if reduced to powder excite sneezing. An extract prepared from the flowers or from the roots partakes of the bitterness, as well as of the purgative properties, of aloes. A beautiful and durable green colour may be prepared from the leaves with lime The plant is very common in the woods about Woburn in Bedfordshire, and from thence the London markets are supplied with the flowers It forces freely, and few plants are more eligible for that operation

788. ***Smilacina*** A diminution of Smilax, another genus of plants, which see in its place These are very pretty little hardy American flowers, requiring some delicacy in their management.

789. ***Polygonatum.*** From *πολυς*, many, and *γονυ*, a knee; on account of the numerous articulations of its

790. OPHIOPO'GON. *Ker* SNAKE'S BEARD *Smilaceæ Sp 2—3*

4600	japónicus *Ker.*	Japan	♀	△	cu	1½	jn	L	Y	Japan	1784	D	s p	Bot. mag 1063
4601	spicátus *Ker.*	spiked	♀	△	cu	1	au s	V		China	1820	D	s p	Bot. reg 596

791. EUCO'MIS. *W.* EUCOMIS. *Asphodelcæ. Sp 7—9*

4602	nána *W*	dwarf	♀	△	or	¾	my	Br	C	G H	1774	O	r m	Bot mag 1495
4603	purpureocaúlis *H.K.*	purple-stalked	♀	△	or	2	mr ap	G B	C	G H	1794	O	r m	Bot. rep 369
4604	bifólia *W.*	two-leaved	♀	△	or	½	ap my	L G	C	G. H.	1792	O	r.m	Bot mag 840
4605	régia *W*	tongue-leaved	♀	△	or	2	mr ap	G	C	G H.	1702	O	r m	Di el t.92 f 109
4606	undulàta *W.*	waved-leaved	♀	△	or	2	mr ap	G	C	G H	1760	O	r m	Bot mag. 1083
4607	punctáta *W*	spotted	♀		or	2	jl	G B	C	G H.	1783.	O	r m	Bot mag 913
4608	striáta *H K*	streaked	♀	△	or	2	jn d	G	C	G H	1790	O	r.m	Bot mag 1539

*792. BRODLÆ'A *L T* BRODLIA *Hemerocallideæ? Sp 3*

4609	grandiflóra *L T*	large-flowered	☿	△	or	¾	jn	B		Georgia	1806.	O	p l	Par lond. t 98
4610	ixioides *Sims*	Ixia-like	☿		or	½	jl	B		Chili	1821.	O	p l	Bot mag 2382
4611	congésta *L T*	close-headed	☿	△	or	½	my	B		Georgia	1806.	O	p l	Lin tr. v. 10 t 1

793. PELIOSANTHES. *B R* PELIOSANTHES *Asparageæ Sp 2*

4612	húmilis *B M*	small	♀	⊠	cu	½	my jn	G		E Indies	1809	D	r l	Bot mag 1532
4613	Téta *B M*	green-flowered	♀	⊠	cu	1½	ap	G	Pu	E. Indies	1807	Sk	s p	Bot mag 1302

794. APHYLLAN'THES *W* LILY PINK. *Asphodelcæ Sp 1*

4614	monspeliénsis *W*	Rush-like	♀	△	pr	1	jn jl	R		France	1791	R	s p	Bot. mag 1132

†795 SOWERBÆ'A *L T* SOWERBÆA *Asphodelcæ. Sp 1*

4615	júncea *R Br*	Rush-leaved	♀	△	pr	1	my jl	Pk		N S W	1792	R	s p	Bot mag 1104

*796. AL'LIUM *W* GARLIC *Asphodelcæ. Sp 76—107*

4616	Ampeloprásum *W*	gt.-round-head	☿	△	cu	2	jl au	Pu		England sun hi		O	co	Eng. bot. 1657
4617	Pórrum *W*	Leek	☿	◯	cul	2	ap my	W		Switzerl	1562	S	r m	Blackw. t 421
4618	linearе *W*	linear-leaved	☿	△	pr	1	jn jl	W		Siberia	1752	O	co	Gmel sib 1 t 13
4619	suaveólens *W*	sweet-smelling	☿	△	pr	1	jn jl	W		Austria	1801	O	co	Jac ic 2 t 364
4620	Victoriális *W*	long-rooted	☿	△	pr	1½	my			Austria	1730	O	co	Bot. mag 1922
4621	subhirsútum *W*	hairy	☿	△	pr	1	my	W		S Europe	1596	O	co	Bot mag 774
4622	obliquum *W*	oblique-leaved	☿	△	pr	1½	jn jl	W		Siberia	1759	O	co	Bot mag 1408
4623	mágicum *W*	Homer's Moly	☿	△	pr	1	jn jl	G w		Austria	1596	O	co	Bot. mag 1148
4624	róseum *W*	Rose-colored	☿	△	pr	1	jn	Pa pu		France	1752	O	co	Bot. mag. 978
4625	defléxum *W*	deflexed	☿	△	pr	½	jn jl	Pa.pu		.....	1820	O	co	
4626	strictum *Schrad*	upright	☿	△	pr	1	jl	Pk		.....	1821	O	co	
4627	neapolitánum *Cyr*	Neapolitan	☿	△	pr	1	jl	W		Naples	1823	O	co	
4628	ciliátum *Cyr*	ciliated	☿	△	pr	¾	my	W		Naples	1820.	O	co	
4629	tatáricum *L*	Tartarian	☿	△	pr	½	jn jl	W		Siberia	1787	O	co	Bot mag 1142
4630	descéndens *W*	purple headed	☿	△	pr	1	jl	Pu		Switzerl	1766.	O	co	Bot mag 251
4631	flávum *W*	sulphur-colored	☿	△	pr	1	jn jl	Y		Austria	1759	O	co	Bot mag 1330
4632	pállens *W*	pale-flowered	☿	△	pr	2	jn jl	Pa. Y		S Europe	1779	O	co	Bot mag 1429
4633	paniculátum *L*	panicled	☿	△	pr	2	jn jl	Pu		S Europe	1780.	O	co	Bot mag 1432
4634	caucásicum *Bieb*	Caucasian	☿	△	pr	1	jn jl	Pk		Caucasus	...	O	co	Bot mag 973
4635	rotúndum *L*	round	☿	△	pr	1½	jl	Pu		S Europe	1820	O	co	
4636	globósum *Bieb*	globose	☿	△	pr	1	au s	Pu		Caucasus	1821	O	co	Gmel sib 1 t.10
4637	moschátum *L*	musky	☿	△	pr	½	au.s	W pu		S Europe	1823.	O	co	Wald & K.1 t 68
4638	guttátum *Fisch*	spotted	☿	△	pr	1½	jl	W		Odessa	1819	O	co	
4639	rupéstre *Bieb*	rock	☿	△	pr	1½	jn	Pu		Crimea	1824	O	co	
4640	pusillum *W en*	diminutive	☿	△	pr	¾	jn	Pk		Siberia	1821	O	co	
4641	spnæroceph alon *W*	small-headed	☿	△	pr	1½	jl	R		Europe	1759	O	co	Bot mag. 1764
4642	parviflórum *W*	small-flowered	☿	△	pr	1	jn jl	Pu		S Europe	1781	O	co	
4643	cárneum *W en.*	flesh-colored	☿	△	pr	1	jn jl	Pa pu		.....	1816.	O	co	
4644	arenárium *W*	sand	☿	△	pr	¾	jn	Pu		Britain	mou w	O	co	Eng bot 1358
4645	carinátum *W*	mountain	☿	△	pr	¾	my jn	Pu		England	rocks	O	co	Eng bot 1658
4646	controvérsum *W en*	barren	☿	△	pr	1	jn jl	Pu		... .	1816	O	co	



History, Use, Propagation, Culture,

stem The English name arises from the roots, which in P vulgare are full of knots, and a transverse section of them shews characters which dreamers have discovered to represent the impress of the famous seal of Solomon

790. *Ophiopogon* From *οφις*, a snake, and *πωγων*, a beard snake's-beard. This plant is best grown in pots, as it requires the protection of a frame during severe frosts

791. *Eucomis* From *ευ*, well, and *κομη*, hair, on account of the fine tuft of leaves, in botanical language called *coma*, by which the stem is surmounted Handsome herbaceous plants which are nearly hardy

792 *Brodiæa.* Named by Sir James Smith, after James Brodie, Esq of Brodie House, a gentleman to whom the botany of Scotland is indebted. Highly curious little plants with blue flowers

793. *Peliosanthes* From *πελιος*, livid, and *ανθος*, a flower, in allusion to the color of the flowers *Teta* is the native of the plant in India, and having been adopted by Dr Roxburgh, ought not to have been neglected in this country.

4600 Scape naked, Leaves linear thrice as long as scape
4601 Scape naked, Raceme spiked, Flowers aggregate

4602 Scape clavate, Leaves broad lanceolate acute
4603 Scape clavate, Leaves multifarious expanded
4604 Scape clavate, Leaves elliptical acute twin lying on the ground
4605 Scape cylindrical, Leaves tongue-shaped obtuse lying on the ground
4606 Scape cylindrical, Leaves ovate oblong wavy spreading, Crown as long as raceme
4607 Scape cylindrical, Leaves oblong lanceolate channelled spreading, Crown short, Racemes long
4608 Scape cylindrical, Leaves lanceolate spreading striped, Crown short, Raceme long

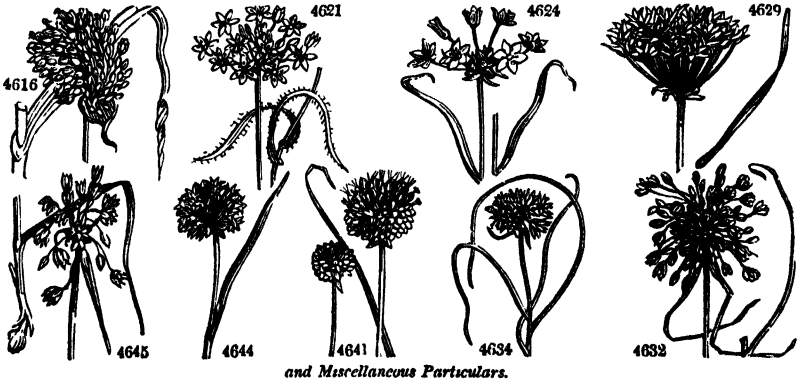
4609 Flowers large lax, Leaves of corona lanceolate undivided
4610 Leaves of the corona subulate
4611 Flowers clustered, Leaves of corona bifid

4612 Scape shorter than ovate-lanceolate leaves
4613 Scape branched longer than leaves

4614 The only species

4615 The only species

A. *Stem leafy Leaves not fistular*
Umbel not bulbiferous Leaves flat
4616 Umb. globose, Stam. 3 cusp Sepals with a rough keel
4617 Stam tricuspidate, Root tunicated
4618 Umb globose, Stam. tricuspidate twice as long as flower
4619 Umb capitate, Stam subulate twice as long as flower
4620 Umb capitate, Stam lanceolate longer than flower, Leaves elliptical
4621 Umb fastigiate, Stam subulate, Leaves linear ciliated
4622 Stam filiform thrice as long as flower, Leaves oblique
4623 Cauline leaves lanceolate, Umbel dense depressed, Stamens subulate shorter than flower
4624 Umb fastigiate, Sepals emarginate, Stamens very short simple
4625 Stam. 3-pointed as long as flower, Leaves very narrow, Scape declinate
4626 Very upright, Leaves channelled
4627 Umb loose few-flowered, Leaves smooth
4628 Very like Allium subhirsutum differing only in the smallness of the flowers, Sepals 3 lines long
Umbel not bulbiferous Leaves not flat
4629 Stamens simple, Umbel flat, Leaves half-rounded
4630 Outer peduncles shorter than the rest, Stamens 3-pointed
4631 Flowers pendulous, Sepals ovate, Stam longer than flower
4632 Flowers pendulous truncated, Stam simple as long as flower
4633 Pedunc capillary effuse, Stam simple, Spathe very long
4634 Stam simple twice as long as flower, Spathe as long as flower-stalks one valve shorter
4635 Umbel globose, Stam 3-pointed, Flowers lateral nodding, Leaves half-round
4636 Stamens simple twice as long as flower, Umbel globose, Spathe subulate very long
4637 Umbel fastigiate about 6-flowered, Sepals acute, Stamens simple, Leaves setaceous
4638 Umbel globose very dense, Spathes lanc as long as flow -stalks, Stam 3-pointed longer than fl Lvs ½ round
4639 Flower-stalks nearly equal, Sepals ovate conniving as long as simple stamens, Style longer than stamens
4640 Spathe ovate shorter than umbel, Stamens simple shorter than flower
4641 Leaves half-round, Stamens 3-pointed longer than flower
4642 Umbel globose, Stamens simple longer than flower, Spathe subulate
4643 Umbel sub-globose, Stamens 3-pointed shorter than flower
Umbel bulbiferous Leaves flat
4644 Sheaths of leaves rounded, Spathe blunt, Stamens 3-pointed
4645 Umbel spreading, Peduncles nodding, Stamens subulate, Spathes with very long points
4646 Flowers all male, Stamens 3-pointed, Spathe with a very long point



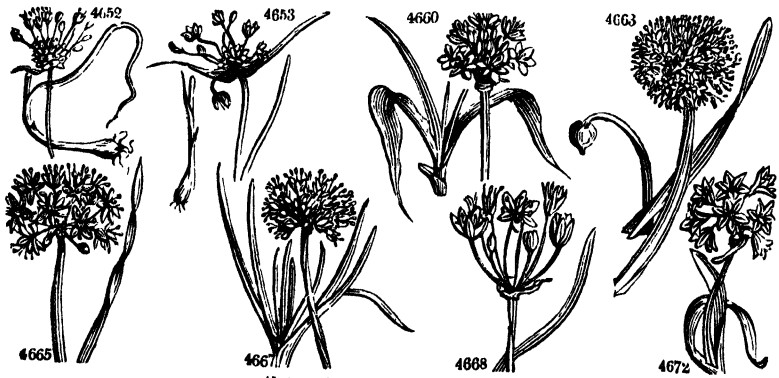
and Miscellaneous Particulars.

794. *Aphyllanthes* From *a*, privative, *φυλλον*, leaf, and *ανθος*, a flower, leafless flower. Its stems are naked, like a rush, and bear on their summit a little tuft of blue flowers.

795. *Sowerbæa.* So named in honor of the late James Sowerby, an excellent draughtsman and ingenious naturalist. The power he possessed of representing the general features of plants within the compass of a few inches, as in his English Botany, has never been possessed in the same degree by any other individual than the late Sydenham Edwards. His execution as an artist is fully attested by the superb plates of the Flora Londinensis, of his own Fungi, and indeed of almost every botanical work of merit which appeared during his life. His talents and his reputation are inherited by his sons. This plant requires plenty of water, and is easily increased by dividing the roots

796. *Allium.* From the Celtic *all*, which signifies hot or burning This is a genus of strongly scented bulbous plants, all of them edible, and some of them of the greatest antiquity as potherbs

4647	sativum *W*	cultivated	♂	△	cul	1½	jn jl	W	Sicily	1548.	O	r m	Moris.s 4.t 15 f 9
4648	Scorodoprásum *W.*	Rocambole	♂	△	cul	3	jl	L Pu	Denmark	1596	O	co	Moris.s 4 t. 14. f 1
4649	monspessulán *W en.*	Montpellier	♂	△	pr	1	jn	Pa pu	S. France	1822.	O	co	
4650	violáceum *W en.*	violet	♂	△	pr	1	jn	V	S. Europe	1823	O	co	
4651	fœ'tidum *W*	stinking	♂	△	pr	1	jl	D Pu	....		O	co	
4652	vineále *W.*	crow	♂	△	pr	1	jn	Pu	Britain mea		O	co	Eng. bot. 1374
4653	oleráceum *W.*	purple-striped	♂	△	pr	1	jl	Pa pu	England corn fi.		O	co	Eng. bot. 488
4654	odórum *L*	sweet-scented	♂	△	pr	1	jn	W	S. Europe	1820	O	co	Bot. mag 1142
4655	atropurpúreum *w &*	dark-purple	♂	△	pr	1	jl	D.Pu	Hungary	1821	O	co	Wald & K 1 t 17
4656	nigrum *L*	black	♂	△	pr	¾	jl au	W	Barbary	1818.	O	co	Fl græc. 323
4657	cáspium *Bieb*	Caspian	♂	△	pr	1	ap	W	Crimea	1822.	O	co	
	Amaryllis caspia L.												
4658	álbidum *Fisch*	whitish	♂	△	pr	¾	jn jl	W	Crimea	1820	O	co	
4659	saxátile *Bieb*	strong	♂	△	pr	1	jl au	W	Crimea	1823	O	co	
4660	Cowáni *Lindl*	Cowan's	♂	△	pr	¾	jn	W	Chili	1823	O	co	Bot. reg 758
4661	acutángulum *W en*	acute-angled	♂	△	pr	1	jn jl	W	.....	1816	O	co	
4662	spirále *W en*	spiral	♂	△	pr	¾	jn jl	W	Germany	1802	O	co	
4663	nútans *W*	nodding	♂	△	pr	1	jl au	R	Siberia	1785.	O	co	Bot. mag 1143
4664	ascalónicum *W*	Shallot	♂	△	cul	¾	jn jl	Pu	Palestine	1548	O	r m	M hist 4 t 14 f 3
4665	senéscens *W*	Narcissus-leav	♂	△	pr	½	jn jl	W	Germany	1596	O	co	Bot mag 1150
4666	grácile *H K*	Carolina	♂	△	pr	3	mr ap	W	Carolina	1776	O	r m	Bot mag 1129
4667	angulósum *W*	angular-stalked	♂	△	pr	1	jn jl	L Pu	Germany	1739	O	co	Bot mag 1149
4668	striátum *W*	streaked-leaved	♂	△	pr	1	my jn	W	C G H	1800	O	co	Bot.m 1035 1524
4669	narcissiflórum *W.*	Narcissus-flwd	♂	△	pr	1	jl au	W	France	...	O	r m	Vill delph 2 t 6
4670	canadénse *W*	Canadian	♂	△	pr	½	jn jl	W	N Amer	1739	O	co	
4671	ursinum *W*	Ramson	♂	△	pr	1	ap my	W	Britain woods		O	co	Eng bot 122
4672	triquetrum *W*	triangular-stkd	♂	△	pr	¾	my jn	W	Spain	1759	O	co	Bot mag 869
4673	Clusiánum *W*	Clusius's	♂	△	pr	¾	jn au	W	S Europe	1803	O	co	C. s hist 1 p 192
4674	Móly *W*	great-yellow	♂	△	pr	2	jn	Y	S. Europe	1604	O	co	Bot mag 499
4675	trióccum *W*	three-seeded	♂	△	pr	½	jl	W	N Amer	1770	O	co	
4676	cérnuum *Roth*	drooping	♂	△	pr	1	jn	W pu	N Amer	1806.	O	co	Bot. mag 1324
4677	stellatum *B M*	Missouri	♂	△	pr	¾	jn	Li	N Amer	1811	O	co	Bot mag 1570
4678	bisúlcum *B M*	furrowed	♂	△	pr	¾	jl	Pu	Siberia	...	O	co	Bot mag 1381
4679	baicalénse *W en*	Baical	♂	△	pr	¾	jn jl	Pu	Siberia	1816.	O	co	
4680	rúbens *W en*	red	♂	△	pr	1	jn jl	Pa pu	Germany	1805	O	co	
4681	frágrans *Vent*	fragrant	♂	△	pr	1½	s o	W	W Indies	1822.	O	co	Vent. cels t 26
4682	acútum *Sp*	acute	♂	△	pr	1	jl	Pa pu	.... ..	1819	O	co	
4683	foliósum *Fisch*	leafy	♂	△	pr	1	jl	Pu	.....	1817.	O	co	
4684	proliferum *Schr*	Tree-Onion	♂	△	cu	3	jl o	W	. .	1820	O	co	Bot. mag 1469
4685	ochroleúcum *W en*	pale-yellow	♂	△	pr	1	jn jl	Pa.Y	Hungary	1816	O	co	Pl rar hu 2 t 186
4686	Cépa *W*	common-onion	♂	⊙	cul	3	jn jl	W	.... ..		S	r m	Fl græc t 326
4687	fistulósum *W*	Welsh-Onion	♂	△	cul	1½	ap my	Gr	Siberia	1629	O	co	Bot mag 1230
4688	Schœnoprásum *W*	Chives	♂	△	cul	½	my jn	F	Britain mpas		S	r m	Eng bot 2438
4689	sibíricum *W*	Siberian	♂	△	pr	1	jl au	W	Siberia	1777	O	co	Bot mag 1141
4690	setáceum *W en*	bristly	♂	△	pr	½	jl au	G w	Hungary	1805	O	co	Wald & Kit t 68
4691	Chamæ-Móly *W*	dwarf-Moly	♂	△	pr	¼	ja f	G w	S. Europe	1774	O	co	Bot mag 1203
797	ALBU'CA *W.*	ALBUCA						*Asphodelæ*	*Sp* 17—19.				
4692	altíssima *W*	tall	♂	⟨△⟩	or	4	ap my	W	C G H	1780	O	r m	Jac ic 1 t 36
4693	major *W*	great	♂	⟨△⟩	or	3	ap my	G s	C G H	1759	O	r m	Bot mag 804



History, Use, Propagation, Culture,

A Porrum (From *pori*, in Celtic, to eat) *Leek*, Engl, *Poireau*, Fr, *Lauch*, Ger, and *Poro*, Ital, has a cylindrical scaly imperfect bulb, which is blanched in gardens, and much used in soups and stews It is sown in March, transplanted in May in shallow drills, and being slightly earthed up as it advances, is fit for use in October, and remains in that state till April or May following

A. sativum, *Ail*, Fr, *Knoblauch*, Ger, and *Aglio*, Ital, has soboliferous bulbs, which are used in seasoning, and sometimes in medicine It is cultivated by dividing the bulb, and planting the soboles in February or March They are fit to take up in the September following, and laid up in a dry situation till wanted for use

A. scorodoprasum. (From σκοροδον, onion, and πρασον, leek, as it both leek and onion) *Ail d'Espagne*, Fr, *Rockenbolben*, Ger., and *Scorodoprasso*, Ital, has bulbs like garlic, but the soboles or cloves are smaller. It is cultivated for the same purposes as that species, and is considered as having a more delicate flavor.

A. ascalonicum (growing near Ascalon) *Eschalôte*, Fr, *Schalotte*, Ger., and *Scalogna*, Ital., is the mildest of cultivated Alliums. It has a soboliferous bulb, small fistular leaves, and seldom flowers. It is propagated by the clove, planted in autumn or spring, and taken up for use in August or September. It is very subject to insects, which autumn and shallow planting are found to counteract (*Calcd. Mem* i. 109. and *Hort. Trans.* ii. 98. *Encyc of Gard* 3847)

4647 Bulbs compound, Stamens 3-pointed
4648 Leaves crenulate, Sheaths 2-edged, Stamens 3-pointed
4649 Lake Allium carinatum, but the stamens are three-pointed
4650 Stamens subulate twice as long as flower, Spathe longer than umbel

Umbel bulbiferous Leaves not flat

4651 Leaves half round, Spathes much longer than umbel, Sepals obtuse, Stamens simple exserted
4652 Stamens 3-pointed
4653 Leaves rough half-round furrowed beneath, Stamens simple

B *Leaves radical, not fistular*

4654 Scape rounded, Umb many-fl. fastigiate, Leaves linear channelled angular beneath, Stam subulate
4655 Scape rounded, Leaves lin lanceol. Umb fastigiate, Sepals very narrow, Stamens simple
4656 Scape rounded, Leaves lanceolate, Umb hemispherical, Sepals spreading, Stamens simple
4657 Scape rounded, Lvs lin lanc wavy, Umb hemispherical, Roots very long, Stam simple twice as long as fl

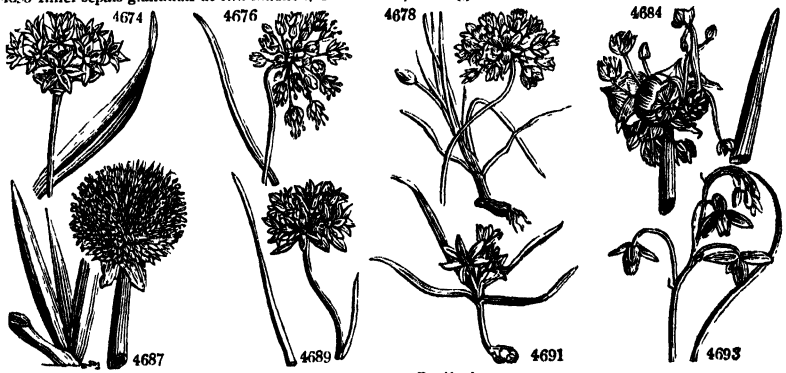
4658 Scape oblique 4 cornered, Leaves linear, Umb fastigiate, Stamens simple as long as fl
4659 Scape rounded, Leaves half-round, Spathe acum longer than umbel, Stam simple longer than flower
4660 Scape ½ rounded, Leaves lanceolate acuminate flaccid ciliated sheathing, Umbel fastigiate, Sepals obtuse
4661 Scape 2-edged angular, Umbel clustered, Stamens simple as long as flower, Leaves linear oblique
4662 Scape nearly 2-edged, Umbel capitate, Stamens longer than flower, Leaves linear spiral
4663 Scape 2-edged, Umb. drooping before flowering, afterw erect, Lvs lin flat, Stam 3-pointed longer than fl
4664 Scape rounded, Leaves subulate, Umbel globose, Stamens 3-pointed
4665 Scape 2-edged, Leaves linear convex and smooth beneath, Umbel roundish, Stamens subulate
4666 Scape rounded very long, Leaves linear channelled, Stamens subulate connate at base
4667 Scape 2-edged, Leaves linear channelled angular beneath, Umbel fastigiate
4668 Scape 3-cornered shorter than the lin furrowed leaves, Umb fastigiate, Stamens simple, Sepals obtuse
4669 Scape rounded longer than the linear subulate leaves, Umb fastig Stamens simple, Sepals mucronate
4670 Scape rounded, Leaves linear
4671 Scape 3-cornered, Leaves lanceolate stalked, Umbels fastigiate
4672 Scape and leaves 3-cornered, Stamens simple
4673 Scape rounded, Leaves linear flat ciliated, Umb few-flowered, Sepals obovate concave
4674 Scape nearly cylindrical, Leaves lanceolate sessile, Umbel fastigiate
4675 Scape half-round, Leaves lanceolate oblong flat smooth, Umbel globose, Seeds solitary
4676 Scape 4-cornered, Umb fastigiate cernuous, Leaves linear flat, Stamens subulate longer than flower
4677 Leaves twisted linear, Umbel loose, Filam subulate as long as flower
4678 Scape rounded longer than leaves, Umb compact, Stam subul as long as flower
4679 Scape rounded at end, Umbel half globose, Leaves linear flat chann at base, Stam subul longer than fl
4680 Scape rounded, Umb fastigiate, Leaves half-round compressed, Stam lanceolate shorter than fl
4681 Scape rounded, Umb few-flowered fastigiate, Leaves lin channelled, Stam lanceolate shorter than fl.

C *Leaves fistular.*

4682 Scape leafy, Umb fastigiate, Spathes nearly equal, Sepals mucronate
4683 Scape leafy at base
4684 Scape fistular twisted, Umb bulbiferous proliferous, Stamens 3-pointed
4685 Scape rounded with an angle, Leaves linear obtuse, Umb rounded, Stamens setaceous twice as long as fl.
4686 Scape ventricose beneath longer than the round leaves
4687 Scape as long as the round ventricose leaves
4688 Scape as long as the round subulate leaves
4689 Scape not quite naked round, Leaves half-round, Stamens subulate, Sepals lanceolate acute
4690 Scape round, Leaves setaceous subulate ciliated, Sepals ovate lanceolate emarginate at ends
4691 Scape scarcely any, Capsules cernuous, Leaves flat ciliated

§ 1 *Three stamens fertile.*

4692 Inner sepals glandular at end inflexed, Leaves subulate channelled recurved
4693 Inner sepals glandular at end inflexed, Peduncles spreading, Leaves linear lanc flat reflexed



and Miscellaneous Particulars

A cepa (*Cep* signifies head in Celtic) *Oignon*, Fr, *Zwiebel*, Ger. and *Cipolla*, Ital, is universally cultivated for the kitchen, and is used as a pot-herb, salad, and pickle. It is commonly raised from seed, which is sown on rich, loamy, and rather moist soil, in March; and being thinned, weeded, and the soil stirred, the bulbs will be fit to take up in September, when they may be kept through the winter like potatoes or apples It is also grown from small bulbs, which are planted on the surface of the soil in March, and swell to a large size (if not earthed up) in the course of the season. Sometimes onion-seeds are sown in autumn in a very dry situation, and the young plants are taken up and transplanted in spring or a sowing is made very early in spring on a warm border or on a hot-bed, and the crop transplanted from that

There is a variety called the underground-onion, which multiplies its bulbs by offsets below the surface

The species called the tree onion, like several others, produces its bulbs instead of or among the umbel of flowers It is occasionally cultivated, but chiefly as matter of curiosity.

A. fistulosum is grown chiefly as a scallion, or spring salad onion. It has almost no bulb, but large succulent fistular leaves, strong in flavor It is sown in autumn, and fit to be used in spring

797 *Albuca*. Derived from *albus*, white, in allusion to the color of the flowers of this genus. Not a very happy allusion though, because the flowers are mostly green The stem of the Asphodel was called *albucus* by

4694 minor *W*	small	☿	△	or	1	my jn	Y	C. G H.	1768.	O	s l Bot. mag 720
4695 flaccida *Jac*	flaccid	☿	△	or	2	my jn	Y.w	C G H.	1791.	O	r.m Jac ic 2. t 144
4696 viridiflóra *W.*	green-flowered	☿	△	or	1	jn jl	G	C. G. H.	1794	O	r m Bot mag 1656
4697 coarctáta *W*	channel-leaved	☿	△	or	2	my jn	Y	C. G. H.	1774	O	r.m
4698 fastigiáta *W.*	level-topped	☿	△	or	1½	my jn	W	C G H.	1774	O	r m Bot rep 450
4699 caudáta *W*	upright-flower	☿	△	or	2	my jl	W	C G H.	1791.	O	r m Jac ic 2 t 442
4700 setósa *W*	bristly	☿	△	or	1	my jl	G	C G H	1795	O	r m Bot. mag 1481
4701 vittáta *B M.*	ribbon	☿	△	or	½	jl au	Y G	C G H	1802	O	s p Bot mag 1329
4702 physódes *B M*	dingy-flowered	☿	△	or	¾	jn jl	W	C G H	1804	O	r.m Bot mag 1046
4703 exuviáta *B M*	Adder's-skin	☿	△	or	1	my jl	W	C G H.	1795	O	r m Bot mag. 871
4704 aúrea *Jacq*	golden	☿	△	or	1½	my jl	G Y	C G H.	1818.	O	r m
4705 abyssínica *Jacq.*	Abyssinian	☿	△	or	2	au	W	Abyssinia	1818	O	r m
4706 frágrans *W.*	sweet-scented	☿	△	or	1	jn jl	Y G	C G H	1791	O	s p Jac schœn 1 t 81
4707 viscósa *W.*	clammy-leaved	☿	△	or	1	my jn	W G	C. G H	1779.	O	r m Jac ic 2 t 445
4708 spirális *W*	spiral-leaved	☿	△	or	¾	jn	W	C G H	1795.	O	s p Jac ic 2 t. 439

†798 XANTHORRHŒ'A. *R Br* Xanthorrhœa *Asphodelœ* *Sp* 3—7

4709 hástilis *R Br*	yellow-gum	☤	△	cu	4	ap my	W	N S W	1803	Sk	s p
4710 minor *R Br*	small	☤	△	cu	2	...	W	N S W.	1804	Sk	s p
4711 bracteáta *R Br.*	long-bracted	☤	△	cu	2	...	W	N S W	1810	Sk	s p

799 THYSANO'TUS *R Br* Thysanotus. *Asphodeleæ* *Sp* 2—21

4712 juncéus *R Br*	Rush-like	☽	△	pr	¼	au s	Pu	N S W.	1804.	O	s p Bot reg 656
4713 isanthérus *R Br.*	even-anthered	☿	△	pr	¼	au s	Pu	N S. W.	1822	O	s p Bot reg 655

800 ERIOSPER'MUM *W* Eriospermum *Asphodeleæ* *Sp* 5—9

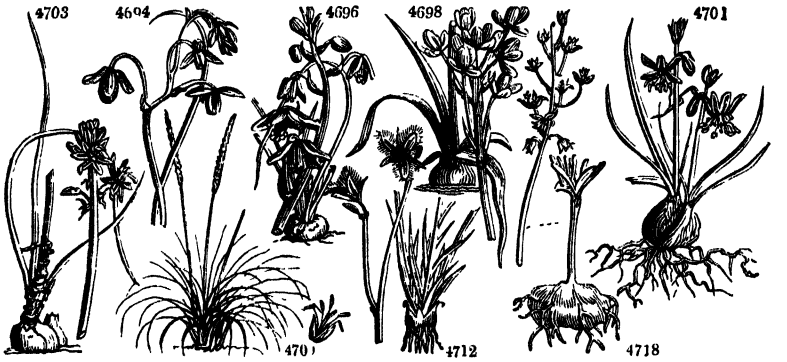
4714 latifólium *W*	broad-leaved	☿	△	cu	1	jn au	L B	C G H	1800	Sk	s p Bot mag 1382
4715 pubéscens *Jacq*	downy	☿		cu	1	jn	W G	C G H	1820	Sk	s p Bot reg 578
4716 lanceæfólium *W*	spear-leaved	☿	△	cu	1	jn au	L B	C G H	1795	Sk	s p Jac. ic 2 t 421
4717 parvifólium *W*	small-leaved	☿	△	cu	½	jn au	D B	C. G H	1795	Sk	s p Jac ic 2. t 422
4718 foliolíferum *B R*	leaflet-bearing	☿	△	cu	¾	jn au	Y.G	C G H	1806.	Sk	s p Bot reg 795

801 GA'GEA *Sal* Gagea *Asphodeleæ.* *Sp* 6—7

4719 lútea *B M*	bundle-flower'd	☿	△	pr	¼	mr ap	Y	Britain	woods	O	s p Bot. mag 1200
4720 sylvática *W en.*	wood	☿	△	pr	¼	mr ap	Y	Europe	...	O	s p P l u N a 5 t l f 1
4721 spathácea *W*	sheathed	☿	△	pr	¼	my	Y	Germany	1759.	O	s p H in us an 15 t1
4722 mínima *P S*	starry	☿	△	pr	¼	my	Y	Sweden	1759	O	s p
4723 circumáta *L*	netted	☿	△	pr	¼	my jn	Y	Siberia	1789	O	s p Pall it t. D t 2
4724 serotína *B M*	mountain	☿	△	pr	¼	jn	Y	Wales	...	O	s p Eng bot 793

802 ORNITHO'GALUM *W* Star of Bethlehem *Asphodeleæ* *Sp* 29—47

4725 umbiflórum *W*	one-flowered	☿	△	or	¼	my jn	Y	Siberia	1781	O	s p N c p 18 t.6 f.3
4726 ixioides *H K*	Ixia-like	☿	△	or	¾	my jn	W	California	1796	O	s p
4727 níveum *W.*	snowy	☿	△	or	¼	my jn	W	C G H	1774	O	r m Bot. reg 235
4728 umbellátum *W.*	common	☿	△	or	1	ap jn	W	England	me.pa	O	co Eng bot 130
4729 virens *Lindl*	greenish	☿	△	or	1½	jn jl	G	Del Bay	1823	O	co Bot reg 814
4730 narbonénse *W*	Narbonne	☿	△	or	1½	jl	W	S Europe	1810	O	co Bot. mag 2510
4731 fimbriátum *Bieb*	fringed	☿	△	or	½	f mr	W	Crimea	1820	O	co Lindl coll 28
4732 pyrenáicum *W*	spiked	☿	△	or	2	jn jl	G	England	past	O	co Eng bot 499
4733 stachyódes *W*	close-spiked	☿	△	or	2½	ap jl	L Y	S Europe	1771	O	co Ren spec t. 90
4734 lácteum *W*	milk-white	☿	△	or	1	jn jl	W	C G H	1796	O	r m Bot mag 1134
4735 revolútum *W*	revolute-flower	☿	△	or	1	mr jn	W	C G H	1795	O	r m Bot mag 653
4736 elátum *B Rep*	tall	☿	△	or	3	mr	W	Egypt	1804	O	r m Bot rep 528
4737 latifólium *W*	broad-leaved	☿	△	or	1½	jn jl	W	Egypt	1629	O	r m Bot mag 876
4738 scilloides *W*	squill-like	☿	△	or	1½	jn jl	W	C G H	1795	O	r m Jac sch 1 t 888
4739 prasínum *B Rcg*	green-flowered	☿	△	or	1½	jn jl	G	C G H	1816	O	r m Bot reg 158
4740 comósum *W*	short-spiked	☿	△	or	¾	jn au	W	Austria	1596	O	p l Jac. ic. 2. t. 426
4741 pyramidále *W*	pyramidal	☿	△	or	2	jn jl	W	Spain	1752	O	r m Jac ic 2 t 425



History, Use, Propagation, Culture,

the Latins A genus of little beauty, but of easy management in sandy loam and decayed vegetable soil, and propagation is effected by suckers from the old bulbs, or by taking off leaves with a scale, and planting them round the edge of a pot of sandy loam

798 *Xanthorrhœa.* From ξανθος, yellow, and ῥεω, to flow. The plant produces a yellow gum

799 *Thysanotus* From θυσανος, a fringe, on account of the fringe of the sepals. Elegant little New Holland plants, with bright purple blossoms and slender grassy leaves

800 *Eriospermum.* From εριον, wool, and σπερμα, seed, on account of the envelope of the seed. Very curious little Cape plants, with deformed or unusually shapen leaves

801. *Gagea.* Named by R. A Salisbury, Esq, after his friend Sir Thomas Gage, a great amateur of botany. A genus of curious little bulbous plants, none of which exceed the height of more than three or four inches, and principally distinguished from Ornithogalum by the yellow color of their flowers.

4694 Inner sepals glandular at end inflexed, Scape erect, Fl nodding, Lvs linear subulate channelled smooth
4695 Inner sepals glandular at end inflexed, Peduncles spreading at right angles, Lvs lanc lin. obliquely bent
4696 Inner sepals glandular at end infl. Scape erect wavy, Fl cernuous, Lvs lin subul chann. outside hairy
4697 Inner sepals vaulted at end, Leaves smooth, Peduncles the length of bractes

§ 2 *Six stamens fertile*

4698 Inner sepals vaulted at end, Leaves lin flattish, Scape shorter than leaves, Pedunc very long spreading
4699 Inner sepals glandular at end inflexed, Leaves lin lanc convol upright shorter than scape
4700 Inner sepals glandular at end reflexed, Leaves lin lanc. flattish, Pedunc at right angles, Flowers erect
4701 Scape shorter than leaves few-flowered, Flowers nodding, Filam 2-toothed
4702 Leaves lanceolate, Raceme pyramidal before the leaves, Filam glandular at base
4703 Leaves lin subulate channelled, Scape simple shorter than leaves, Scales of root wrinkled across
4704 Inner sepals glandular at end inflexed, Lvs lin lanc flat, Pedunc very long erect spreading, Fl upright
4705 Inner sepals vaulted at end, Leaves lin lanceol channelled upright, Pedunc. shorter than nodding flow
4706 Inner sepals vaulted at end, Leaves lin lanc channelled, Pedunc. spreading the length of nodding flow
4707 Inner sepals vaulted at end, Lvs lin subul chann hairy clammy, Ped spread twice as long as nodd. fl.
4708 Inner sepals vaulted at end, Leaves lin subulate convolute at the end spirally twisted villous

4709 Stem very short, Leaves 2-edged lengthwise, Scape very long higher than the spike
4710 Stemless, Leaves 3 cornered flat in front beyond the middle hollowed, Scape very long higher than spike
4711 Stemless, Leaves 3 cornered below the middle in front little raised above middle concave, Bracts very long

4712 Roots fibrous, Stems branched diffuse rounded striated, Branches somewhat angular, Anthers unequal
4713 Bulbs fascicled, Leaves radical channelled nearly as long as the rounded simple stem

4714 Leaves roundish acuminate cucullate at base
4715 Leaf sub-cordate acute cucullate pubescent
4716 Leaves ovate lanceolate at the edge wavy involute
4717 Leaves elliptical obtuse flat
4718 Leaf proliferous, Leaflets filiform undivided sessile

4719 Radical leaf linear flat, Peduncles simple umbellate, Sepals obtuse smooth, Bulbs clustered
4720 Radical leaf linear lanc flat, Pedunc simple somewhat umbellate, Sepals obtuse smooth, Bulb solitary
4721 Leaves linear filiform upright, Pedunc about 3 with a three-leaved involucrum
4722 Scape angular naked, Pedunc umbellate branched pubescent, Sepals lanc acute
4723 Scape naked, Pedunc 3 umbell pubescent, Leaves filiform, Three outer sepals longer than the others
4724 Leaves half cylindrical, Cauline dilated at base

4725 Scape 2-leaved, Leaves opp Pedunc 1-fl Outer sepals lanc retuse inner ellipt twice as broad
4726 Scape naked, Flowers umbelled, Filam all 2-forked bearing the anther in the middle
4727 Raceme few-flowered, Sepals lanceolate, Leaves filiform channelled, Filam subulate
4728 Corymb few-flowered, Pedunc longer than bractes, Filam subulate
4729 Raceme spiked many-fl Lvs lin lanc weak, Every other stamen with two teeth, Bractes longer than fl.
4730 Raceme oblong, Filam lanceolate membranous, Pedunc and fl spreading
4731 Corymb few-flowered shorter than lanceolate strongly fringed leaves
4732 Raceme very long, Sepals linear obtuse, Filam lanceol equal, Style the length of stamens
4733 Raceme very long, Sepals lanc oblong, Filam broad lanceol alternately shorter
4734 Raceme long, Filam subulate alternate lanceolate, Bractes membranous ovate twice as long as pedunc
4735 Raceme few-flowered, Sepals linear oblong obliquely bent emarginate, Filam lanc subul Leaves linear
4736 Leaves short oblong erect, Scape very long, Flowers campanulate the length of stamens
4737 Raceme very long, Filam subulate, Pedunc much longer than flower, Leaves lanceolate
4738 Raceme very long, Filam subul Pedunc length of fl Bractes the length of pedunc Lvs lin lanc loose
4739 Lvs glaucous twisted upwards, Raceme divaricating on a long scape, Filaments with an ovate base
4740 Raceme very short, Bractes lanc the length of flowers, Sepals obtuse, Filam subulate
4741 Raceme conical, Fl numerous ascending, Sepals oblong flat, Stam lanc equal, Style very short



and Miscellaneous Particulars

802 *Ornithogalum* From ὄρνις, a bird, and γάλα, milk. No good explanation has been offered of the application of this word, that of Tournefort is not worth quoting. O. squilla is the officinal squill. It has a bulb almost as big as the human head, pear-shaped, and tunicate like the onion. From the middle of the root arise several shining leaves a foot long, and two inches broad at their base, lessening all the way to the top, where they end in points They continue green all the winter, and decay in the spring, then the flower-stalk comes out, rising two feet high, naked about half way, and terminated by a pyramidal thyrse of white flowers

The squill is one of the few medicines known in the early ages of Greece, which is still held in great estimation It is very nauseous, intensely bitter and acrimonious, without any perceptible smell It is poisonous to several animals if much handled it exulcerates the skin, and in large doses frequently repeated, it not only excites nausea, but strangury, bloody urine, and hæmorrhoids, with fatal inflammation and gangrene of the stomach and bowels. Under proper management, however, it is a medicine of great practical utility. In

4742 odorátum *W*	sweet-scented	☿	△	or	1½	my jn	P Y	C G. H	1795	O	r.m Bot rep 260
4743 barbátum *W*	bearded	☿	△	or	1	my jl	W	C G H	1795	O	r.m Jac. sch 1. t 91
4744 juncifólium *W*	Rush-leaved	☿	△	or	¾	jl au	W	C G H	1794	O	r m Bot mag. 972
4745 rupéstre *W*	rock	☿	△	or	½	my au	W	C G H.	1795	O	r.m
4746 arábicum *W*	great-flowered	☿	△	or	1½	mr ap	W	Egypt	1629	O	r m Bot. mag 728
4747 thyrsoides *W*	thyrse-flower	☿	△	or	1½	jn jl	W	C G H	1757	O	r m Bot mag. 1164
4748 aúreum *W*	golden	☿	△	or	¾	jn jl	Y	C G H.	1790	O	r m Bot mag. 190
4749 flavissimum *Jac*	great-yellow	☿	△	or	1	jn jl	Y	C G H	1804	O	r m Jac. ic. t. 436
4750 coarctátum *W*	close-flowered	☿	△	or	1½	jn jl	W G	C G H	1804	O	r m Jac ic t. 435
4751 caudátum *W*	long-spiked	☿	△	or	3	f au	W G	C G H	1774	O	r m Bot mag 805
4752 umbílicum *B M*	one-leaved	☿	△	or	½	jn jl	W	Gibraltar	1805	O	r.m B mag. 935 953
4753 Squilla *B. M*	officinal Squill	☿	△	or	3	ap my	W	S. Europe	1629.	O	r.m Bot. mag. 918

†*803. SCI'LLA *W* Squill — *Asphodeleæ* *Sp* 21—35

4754 itálica *W*	Italian	☿	△	or	¾	ap jl	B	Switzerl	1605.	O	p l Bot. mag. 663
4755 peruviána *W*	corymbose	☿	△	or	1	my	D B	Spain	1687	O	r m Bot. mag. 749
4756 lusitánica *W*	Portugal	☿	△	or	½	my	L B	Portugal	1777	O	p l Bot. mag 1999
4757 Lilio-Hyacinthus *W*	Lily-rooted	☿	△	or	1	my jl	B	S Europe	1597	O	co Red. lil 205
4758 amœ'na *W*	nodding	☿	△	or	½	mr ap	L B	Levant	1596	O	p.l Bot mag 341
4759 sibírica *H K.*	Siberian	☿	△	or	½	f mr	B	Siberia	1796	O	p l Bot. mag 1025
4760 præ'cox *W*	early-flowering	☿	△	or	¼	mr ap	D B	... .	1790	O	p l
4761 vérna *W.*	vernal	☿	△	or	½	ap my	B	Britain rocks		O	s l Eng bot 23
4762 umbílica *L*	one-leaved	☿	△	or	½	my jn	W	Portugal	...	O	s.l
4763 hyacinthoides *W*	Hyacinth	☿	△	or	½	au	B	Madeira	1585	O	r m Bot mag 1140
4764 autumnális *W*	autumnal	☿	△	or	½	au s	Pk	England dr pa		O	p l Eng bot 78
4765 bifólia *W*	two-leaved	☿	△	or	½	f ap	B	England woods		O	p l Eng bot 24
4766 umbellâta *W en*	umbelled	☿	△	or	¼	ap	B	Pyrenees	1822.	O	p l B ph n 41 t.8 f 6
4767 cérnua *Lk*	cernuous	☿	△	or	½	ap my	Pk	Spain	1815	O	p l
4768 indica *Roxb*	Indian	☿	⧄	or	1	...	...	E Indies	1816	O	p l
4769 campanulâta *W*	Spanish	☿	△	or	1	my jn	D P	Spain	1633	O	p l B mag 127 1102
4770 non scripta *Sm*	Harebell's	☿	△	or	¾	mr jn	B	Britain woods		O	co Eng bot 377
β cárnea	*flesh-colored*	☿	△	or	¾	mr jn	Pk	Britain woods		O	s l Bot mag 1461
γ alba	*white*	☿	△	or	¾	mr jn	W	Britain woods		O	s l
4771 brevifólia *B M*	short-leaved	☿	△	or	½	ja	Pk	C G H	1811	O	s l Bot mag 1468
4772 corymbósa *B M*	Cape	☿	△	or	¼	au d	Pk	C G H	1793	O	s l Bot rep 345
4773 esculénta *B M*	Quamash	☿	△	ec.	1	my jl	P B	N Amer	1811	O	s l Bot mag 1574
§4774 romána *B M*	Roman	☿	△	or	1	my	W	Italy	1596	O	s.l Bot mag 939

804 PUSCHKI'NIA. *Bieb* Puschkinia — *Asphodeleæ* *Sp* 1

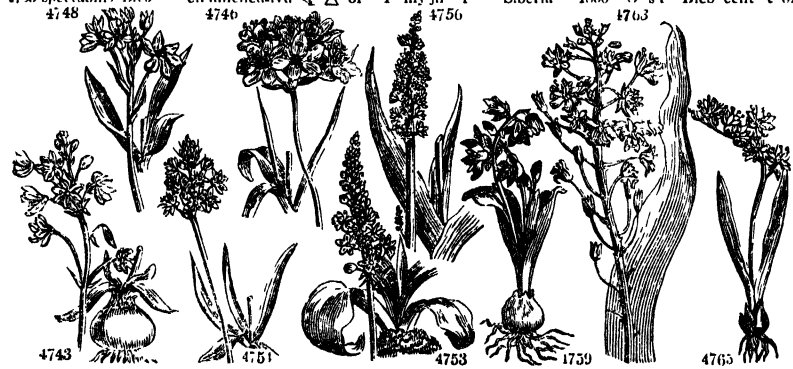
4775 scilloides *Bieb*	little	☿	△	or	½	my jn	P B	Siberia	1819	O	s l Lindl coll. 24

†805 MASSO'NIA *W* Massonia — *Asphodeleæ* *Sp* 9—10

4776 latifólia *W*	broad-leaved	☿	⧄	cu	½	mr ap	W	C G. H	1775	O	s l Bot. mag 848
4777 longifolia *Jacq*	long-leaved	☿	⧄	cu	½	mr ap	W	C G. H	...	O	s l Jac sch 4 t 457
β candida Burchell	*white*	☿	⧄	cu	½	mr ap	W	C G H	...	O	s l Bot reg 694
4778 muricáta *H K*	prickly-leaved	☿	⧄	cu	¼	ap my	W	C G H	1790	O	s l Bot mag 559
4779 scabra *H K*	shagreen-leaved	☿	⧄	cu	½	ja p	W	C G H	1790	O	s l Bot rep 220
pustulata B M											
4780 echináta *W*	rough-leaved	☿	⧄	cu	½	my	W	C G H	1790	O	s l
4781 pauciflóra *H K*	few-flowered	☿	⧄	cu	½	my	W	C G H	1790	O	s l
4782 angustifólia *W*	narrow-leaved	☿	⧄	cu	½	mr ap	W	C G H	1790	O	s l Bot mag 736
4783 undulâta *W*	waved-leaved	☿	⧄	cu	½	ap	W	C G H	1791	O	s l
4784 ensifólia *B M*	trumpet-flower	☿	⧄	cu	½	f s	L	C G H	1790	O	s.l Bot mag 554

806 EREMU'RUS *Bieb* Eremurus — *Asphodeleæ* *Sp* 1

4785 spectábilis *Bieb*	ch mnelled-lvd	☿	△	or	1	my jn	Y	Siberia	1800	O	s l Bieb cent t 61



History, Use, Propagation, Culture,

dropsy it has long been esteemed the most certain and effectual diuretic with which we are acquainted, and it is usually employed in asthma

803 *Scilla* From σκυλλω, to injure, according to Miller, because its root is a violent poison as well as an article of medicine In Arabic it is called *asgyl*, has not the name *scilla* been obtained rather from this root? The genus is so ill defined that botanists are more guided by their blue colour than by any precise mark, in referring plants to this rather than Ornithogalum

S peruviana or hyacinth of Peru is erroneously named, being a native of Spain It is valuable as an evergreen, or rather wintergreen, its fine lucid green leaves appearing before winter and continuing through that season, till it sends up its thick succulent scapes about the end of April There are two varieties, one with a deep blue, and the other with a white flower Like other Spanish bulbs it is liable to be destroyed by an extraordinary severe winter

S. verna is a maritime plant found on the coast of Cornwall, Wales, the Isle of Man, and the Hebrides.

S non-scripta is the Hyacinthus of that name of Linnæus, the *Jacinte des bois*, of the French, and *Nederlandische* or *Englische Hyacinthe*, of the Germans The fanciful specific name of non-scriptus was

4742 Raceme long, Filam subul Sepals lanc at the end callous inflexed, Leaves linear depressed flat
4743 Raceme few-fl Filam subulate, Sepals lin obtuse 3 outer bearded at end, inn mucron Leaves filiform
4744 Raceme long many-fl. Filam. subulate, Sepals lanc. acute, Leaves filiform subulate
4745 Leaves filiform fleshy, Scape few-flowered
4746 Corymb many-flowered, Filam. subulate, Cor broadly campan Outer sepals obsoletely 3-toothed
4747 Corymbs many-fl racemose, Filam alternately forked, Leaves lanceolate
4748 Raceme contracted corymbose, Filam alternately emarg Leaves lanc with cartilaginous teeth
4749 Like the last, but the flowers very yellow, and the bractes very narrow the length of the flower-stalk
4750 Raceme many-fl contracted, Altern filam emarginate, Leaves linear channelled
4751 Raceme very long, Leaves lanc linear, Flowers spreading, Stam dilated alternately wedge-shaped
4752 Leaf solitary longer than scape, Flowers few spiked sessile
4753 Flowers without the leaves, Bractes reflexed

4754 Raceme conical oblong
4755 Corymb clustered conical
4756 Raceme oblong conical, Sepals lined
4757 Raceme few-flowered, Peduncles without bracteæ, Leaves lanceol lying on the ground
4758 Scape angular, Peduncles alternate shorter than flower, Bractes obtuse very short
4759 Four-leaved, Scapes many half-rounded striated 2-flowered decumbent after flowering
4760 Scape angular, Raceme corymbose, Peduncles twice as long as fl Bractes obsolete
4761 Raceme few-flowered with bractes, Flowers campanulate, Leaves linear channelled radical many
4762 Leaf roundish somewhat spiked on one side
4763 Raceme cylindrical many-flowered, Sepals half as long again as the ovaries, Peduncles colored
4764 Leaves filiform linear, Flowers corymbose, Peduncles naked ascending the length of the flower
4765 Flowers racemose, Leaves lanceolate linear about two elevated on a scape
4766 Scape rounded, Corymb few-flowered umbelled, Bractes filiform the length of peduncles
4767 Flowers campanulate 6-parted, Raceme cernuous
4768 A species which has not yet been seen in flower, nor described
4769 Raceme many-fl obl conical, Flowers campan erect, Bractes 2-parted longer than pedunc. Lvs. lanceol.
4770 Flowers campanulate 6-parted revolute at end

4771 Flowers 6-parted, Raceme cernuous, Leaves shorter than scape
4772 Flowers funnel-shaped corymbose erect, Scape shorter than the leaves
4773 Scape longer than keeled linear leaves, Spike racemose, Five sepals ascending, the lower deflexed
4774 Flowers campanulate half six-cleft racemose, Stamens membranous

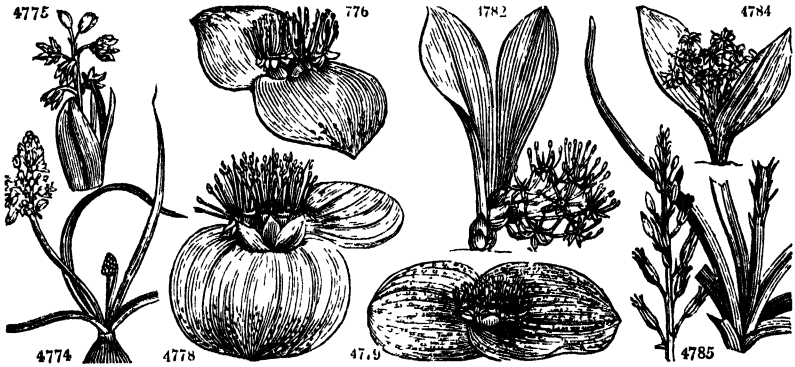
4775 The only species, like a pale-flowered variety of *Scilla sibirica*

4776 Leaves roundish smooth
4777 Leaves lanceolate oblong acuminated

4778 Leaves roundish smooth towards the end muricated
4779 Leaves roundish veiny warted rough

4780 Leaves ovate and lanceolate with hairy tubercles, Sepals filiform
4781 Leaves lanceolate and elliptical veinless warted, Warts naked, Sepals ovate
4782 Leaves oblong lanceolate flat smooth
4783 Leaves lanceolate wavy smooth
4784 Leaves lanceolate, Sepals much shorter than the tube, Filam capillary alternately longer

4785 Scape naked simple, Stamens twice as long as flower, Leaves linear channelled



and Miscellaneous Particulars

applied to this plant by Dodonæus, because it has not the marks of Ai, Ai, on the petals, as other hyacinths are supposed to have, and therefore is not the Hyacinthus poeticus This idea has its origin in the Roman mythology, in which Apollo, being much grieved for the death of the youth Hyacinthus, changed his blood into a flower which bore his name, &c It is a native of almost every part of Europe and of Persia

804 *Puschkinia* Named after Count Mussin Pouschkin, a Russian botanist and patron of botany A very remarkable little plant, resembling a Scilla in appearance, but well defined by the very curious union of its stamens into a cup

805 *Massonia* So named by Thunberg, after Mr Francis Masson, author of Stapeliæ Novæ, a successful botanical collector at the Cape of Good Hope, Madeira, the West Indies, and finally North America, into whose wildernesses he went to die Very singular plants, with broad leaves lying flat on the ground, and compact umbels of flowers

806 *Eremurus* From ἐρημος, desert, and οὐρα, a tail tail of the desert. Its long spikes of yellow flowers may be easily imagined to merit such an appellation in their native abodes

807 BULBI'NE. *W en.* Bulbine. *Asphodeleæ.* *Sp* 7—19.

4786	frutéscens *W en*	shrubby	⚹	⊔	or	2	mr au	Y	C. G H.	1702.	C s.l	Bot. mag 816
4787	rostráta *W en.*	beaked	⚹	⊔	or	2	mr au	Y	C G H	1812.	C s.l	Jac ic 2 t. 403
4788	aloóides *W en*	Aloe-leaved	⚸	△	or	1	ap au	Y	C G. H	1732.	O s l	Bot. mag 1317
4789	pugioniformе *Lk*	dagger-leaved	⚸	△	or	1	ap jn	Y	C G H	1793	Sk s.l	Bot mag 1454
4790	longiscápa *W en.*	glaucous-leaved	⚸	△	or	1	ap au	Y	C G. H	1759	Sk r.m	Bot. mag 1339
4791	ánnua *W en*	annual		○	or	½	my.jn	Y	C G H	1731.	S s.p	Bot mag 1451
4792	ciliáta *Lk*	ciliated	⚸	△	or	2	my	Y	C G H	1823.	S s p	

808 ASPHO'DELUS. *W.* Asphodel. *Asphodeleæ.* *Sp* 8—10

4793	lúteus *W*	yellow	⚸	△	or	3	my jn	Y	Sicily	1596.	R co	Bot. mag 773
4794	tauricus *W en.*	Taurian	⚸	△	or	3	my jn	W	Tauria	1812.	R co	Bot. cab. 1102
4795	ramósus *W.*	branched	⚸	△	or	2	my	W	S Europe	1551.	R co	Bot. mag. 799
4796	álbus *W*	upright	⚸	△	or	2	my	W	S Europe	...	R co	Blackw. t. 238
4797	fistulósus *W.*	onion-leaved	⚸	△	or	1½	jn s	W	S Europe	1596.	R co	Bot. mag. 964
4798	clavátus *Roxb*	club-seeded		ⓞ	or	1	jl au	W	E. Indies	1808	S co	
4799	créticus *Lam*	Candian	⚸		or	2	jn	Y	Candia	1821	R co	Bot. cab. 915
4800	intermédius *Horn*	intermediate		△	or	1½	jl	W	Canaries	1822	R co	

† 809 ANTHE'RICUM *W* Anthericum *Asphodeleæ.* *Sp* 25—50

4801	nútans *W*	nodding	⚸	△	or	1	ap au	W	C G H	1812	Sk s l	Jac ic. 2 t. 407
4802	latifólium *W*	broad-leaved	⚸	△	or	2	ap au	W	C G H	1812.	Sk s l	Jac ic 2 t. 408
4803	serotínum *L*	late-flowering	⚸	△	or	½	au s	W	England	moun	Sk s l	Eng bot. 793
§4804	ramósum *L*	branched	⚸	△	or	2	my jn	W	Europe	1570	Sk s l	Bot. mag 1055
4805	péndulum *Horn*	pendulous	⚸	△	or	1½	jl	W	N Holl	1822	Sk s l	
4806	albucoides *Ait*	Albuca-like	⚸	△	or	1	jl	W	C G H	1788	Sk s l	
4807	sulphúreum *W & K*	sulphur-colored	⚸	△	or	1	ap au	P Y	Hungary	1823	Sk s l	Bot mag 2623
4808	glaúcum *Fl pe*	glaucous	⚸	△	or	1½	...	W	Peru	1823	Sk s l	Bot cab 1580
4809	semibarbatum *R Br*	half bearded	⚸	△	or	1	jl	Y	N Holl	1820	Sk s l	Bot cab 330
4810	filifólium *Jacq*	thread-leaved	⚸	△	or	¾	my	W	C G H	1820	Sk s l	Bot reg 557
4811	pomeridiánum *Ker*	afternoon	⚸	△	or	2	jn	W	C G H	1819.	Sk s l	Bot. reg 564
	Scilla pomeridiana											
4812	physódes *B M*	dingy-flowered	⚸	△	or	1	jn jl	W	C G H	1795	O r m	Bot mag. 1045
4813	asphodeloides *P S*	upright-leaved	⚸	ⓞ	or	2	jn au	W	C G. H.	1759	O r m	Jac vind t 181
4814	hispidum *P. S*	hairy-leaved	⚸	△	or	1½	my jn	G w	C. G H	1774.	O s p	Jac ic 2 t 409
4815	frágrans *W*	sweet-scented	⚸	△	or	1	ap.my	W	C G H	1795	Sk s p	Bot reg 311
4816	flexifólium *W*	flexuose-leaved	⚸	△	or	½	my jn	W	C G H	1795.	Sk s p	Jac ic 2 t. 412
4817	filiförme *W*	thread-leaved	⚸	△	or	1	ap	W	C G H	1774	Sk s p	
4818	floribundum *W*	thick-spiked	⚸	△	or	1	mr ap	W	C G H	1774	Sk s p	
4819	revolútum *W*	curled-flowered	⚸	△	or	2	s d	W	C G H	1731	Sk s l	Bot. mag 1044
4820	vespertínum *W*	afternoon-flow	⚸	△	or	2	my s	W	C G H	1803	Sk s l	Bot mag 1040
4821	graminifolium *W*	waved-leaved	⚸	△	or	1½	jn	W	C G H	1794	Sk s l	Jac ic 2 t 411
4822	triflórum *W*	three-flowered	⚸	△	or	1	au o	W	C G H	1782	Sk s l	Jac. ic 2 t 410
4823	canaliculátum *W*	channelled lvd	⚸	△	or	1	ap my	W u	C G H	1774	Sk r m	Bot mag 1124
§4824	Liliágo *W*	grass-leaved	⚸	△	or	1	my jn	W	S Europe	1596	Sk s l	Bot mag 914
§4825	Lilias'trum *W*	Savoy	⚸	△	or	1½	my jn	W	S. Europe	1629.	Sk co	Bot mag 318

†810 ARTHROPO'DIUM *R Br* Arthropodium *Asphodeleæ* *Sp* 2—6

4826	paniculátum *R Br*	panicled	⚸	△	or	3	my s	W	N S W	1800	C s p	Bot mag 1421
4827	cirrátum *R Br*	New Zealand	⚸	△	or	3	my jn	W	N Zeal	1821	Sk s p	Bot reg 709

811 CHLORO'PHYTUM *Ker* Chlorophytum *Asphodeleæ* *Sp* 3—5

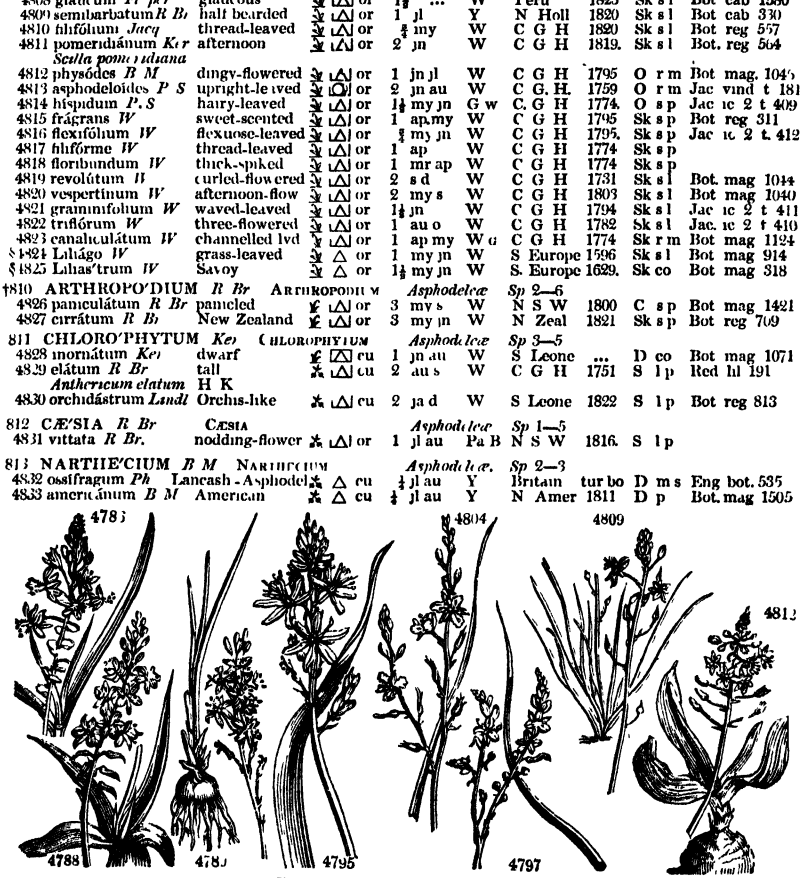
4828	inornátum *Ker*	dwarf	⚸	⊠	cu	1	jn au	W	S Leone	...	D co	Bot mag 1071
4829	elátum *R Br*	tall	⚹	△	cu	2	au s	W	C G H	1751	S l p	Red lil 191
	Anthericum elatum	H K										
4830	orchidástrum *Lindl*	Orchis-like	⚹	△	cu	2	ja d	W	S Leone	1822	S l p	Bot reg 813

812 CÆ'SIA *R Br* Cæsia *Asphodeleæ* *Sp* 1—5

4831	vittata *R Br.*	nodding-flower	⚹	△	or	1	jl au	Pa B	N S W	1816.	S l p	

813 NARTHE'CIUM *B M* Narthecium *Asphodeleæ.* *Sp* 2—3

4832	ossifragum *Ph*	Lancash.-Asphodel	⚹	△	cu	¼	jl au	Y	Britain	tur bo	D m s	Eng bot. 535
4833	americánum *B M*	American	⚹	△	cu	¼	jl au	Y	N Amer	1811	D p	Bot. mag 1505



History, Use, Propagation, Culture,

807 *Bulbine* From βολβος, a bulb The species are deservedly common in flower gardens, being at once shewy, fragrant, of easy culture, and rapid increase by suckers

808 *Asphodelus* From α, privative, and σφαλλω, to supplant that is to say, a flower which cannot be supplanted or surpassed *Linn* The yellow and white species are old inhabitants of our gardens, of easy culture and rapid increase Immense tracts of land in Apulia are covered with the latter species, which affords very good nourishment to the sheep It was sacred to Proserpine, and used in funeral ceremonies

809 *Anthericum* A name applied by the Greeks to the stem of the asphodel, and not misapplied to this set of plants, which in some sort resemble the asphodel Plants with fleshy leaves, and spikes of bright yellow flowers, easily cultivated if kept dry

4786 Leaves fleshy rounded, Stem shrubby erect branched
4787 Leaves fleshy rounded glaucous, Stem shrubby short rooting
4788 Leaves fleshy tongue-shaped lanceolate flat on both sides
4789 Leaves fleshy linear acuminate channelled, Scape twice as long as leaves
4790 Leaves fleshy subulate half rounded flexuose glaucous 3 times as short as scape
4791 Leaves fleshy subulate rounded, Scape racemose
4792 Leaves ensiform fleshy 3 cornered fringed, Scape simple, Raceme very long

4793 Stem leafy, Leaves 3 cornered striated
4794 Stem leafy, Lvs subul 3 cornered striated, Bractes membranous lanceol. : the upper longer than flowers
4795 Stem naked branched, Pedunc. altern. longer than bract, Leaves ensiform carinate smooth
4796 Stem naked simple, Pedunc clustered the length of bractes, Leaves linear keeled smooth
4797 Stem naked, Leaves upright striated subulate fistular
4798 Leaves linear weak, Scape erect branched, Flowers small
4799 Stem leafy naked above branched, Leaves filiform striated toothed ciliated
4800 Stem nearly naked, Leaves upright cylindrical fistular

4801 Leaves fleshy lanceolate flat concave at base reflexed at end, Raceme nodding at end
4802 Leaves fleshy oblong lanceolate acuminate nerved straight 4 times as short as scape
4803 Leaves flattish, Scape 1-flowered
4804 Leaves flat, Scape branched, Flowers flat, Pistils straight
4805 Leaves linear keeled shorter than the branched scape, Flowers clustered in threes pendulous
4806 Leaves linear channelled smooth cartilaginous at edge, Scape simple
4807 Leaves lanc linear channelled with an obtuse concave end, Scape and raceme simple, Flowers spreading
4808 Raceme simple long many-flowered, Pedunc spreading in flower, appressed in fruit
4809 Roots fibrous, Filaments declinate the outer not bearded
4810 Leaves filiform flexuose reflexed longer than scape, Scape simple filiform, Raceme few-flowered
4811 Leaves flaccid glaucous with the edge and nerves rough, Stem panicled branched, Filam not bearded

4812 Leaves oblong, Raceme corymbose, Stamens dilated in middle papillose
4813 Leaves fleshy linear-subulate half-rounded upright
4814 Leaves fleshy compressed hispid
4815 Leaves rounded filiform upright shorter than scape, Scape simple
4816 Leaves linear filiform flexuose reflexed at base ciliated the length of the branched scape
4817 Leaves filiform rounded roughish, Filaments smooth, Sepals lanceolate
4818 Leaves flat smooth linear lanceolate acute, Scape simple, Raceme many-flowered cylindrical compact
4819 Leaves 3-cornered rough, Scape branched, Flowers revolute
4820 Leaves linear ensiform keeled 3-cornered shorter than the branched scape
4821 Leaves linear flat depressed shorter than the branched scape, Alternate sepals wavy
4822 Leaves channelled sword-shaped, Scape simple, Bractes remote 3-flowered
4823 Leaves fleshy hairy sword-shaped 3-cornered channelled on the narrow side, Scape simple
4824 Leaves flat, Scape simple, Flowers flat, Pistil declinate
4825 Leaves flat, Scape simple, Flowers campanulate, Stamens declinate

4826 Racemes divided, Pedicels clustered, Inner sepals crenulate, Capsules pendulous
4827 Raceme divided, Bractes leafy, The bearded half of filam with 2 appendages at base, Lvs lanc ensiform

4828 Stemless, Leaves lanceolate radical little longer than simple scapes
4829 Leaves flat, Scape branched, Peduncles clustered, Flower flat

4830 Lvs lanceol. acuminate upright spreading, Panicle branched upright many-flowered, Branches smooth

4831 Flowers nodding, Stamens propendent, Filaments striped, Leaves flat, Bulbs clustered

4832 Leaves ensiform, Filaments woolly
4833 Bractes unequal the lower embracing the stalk, the upper setaceous



and Miscellaneous Particulars

810 *Arthropodium.* From ἀρθρον, a joint, and πους, a foot, on account of the jointed footstalks of the flowers. Distinguished by its bearded filaments.

811 *Chlorophytum* From χλωρος, green, and φυτον, a plant. Very inconspicuous flowers requiring a bark-bed, but easily cultivated under such circumstances.

812 *Caesia* Named after Frederick Cæsius, who lived in 1703

813 *Narthecium* From ναρθηξ, a rod or wand, in allusion to the slender spike of flowers This genus resembles a small Anthericum, from which genus it has been separated.

814 DIANELLA. *Lam*	Dianella.				*Asphodeleæ*		*Sp* 6—15				
4834 lævis *R. Br*	smooth	✱ △ or	2	au	B	N. Holl.	1822.	Sk s.p			
4835 longifólia *R Br*	long-leaved	✱ △ or	2½	au	B	N Holl.	1822.	Sk s p	Bot. reg 734		
4836 strumósa *Ker*	strumous	✱ △ or	1½	mr	B	N Holl.	1822.	Sk s.p	Bot reg 751		
4837 nemórósa *Lam* D ensifolia W.	wood	✱ △ or	2	au	B	E. Indies	1731	Sk s p	Bot mag 1404		
4838 cærúlea *R Br*	blue	✱ △ or	2	my au	B	N S W	1783	R s p	Bot. mag 505		
4839 divaricáta *R Br*	divaricated	✱ △ or	3	jl au	B	N S. W	1805.	R s p			
815 EUSTREPHUS *R Br*	Eustrephus				*Asphodeleæ*		*Sp* 2				
4840 latifólius *R Br*	broad-leaved	⚘ □ or	3	jn jl	P Pu	N S. W	1800	C s p	Bot. mag. 1245		
4841 angustifólius *R Br*	narrow-leaved	⚘ □ or	3	jl	P Pu	N S W	1820.	C s p			
†816 ASPARAGUS *L*	Asparagus.				*Asphodeleæ*		*Sp* 21—32				
4842 officinális *L*	common	⚹ △ cul	4	jn au	G	England sea co		S r m	Eng bot. 339		
4843 sylváticus *W & K*	wood	⚹ △ cu	2	jn au	G	Hungary ..		R r m	Pl rar hu 3 t 201		
4844 verticillária *Lieb*	whorl-leaved	⚹ △ cu	2	jn au	W	Caucasus	1752.	R r m	Buxb. cen 5 t 37		
4845 declinátus *W*	long-leaved	⚹ △ cu	5	...	W G	C G H	1759	R s p			
4846 maritimus *Bieb*	maritime	⚹ △ cu	2	jn	G	Caspian	1823	R s p			
4847 decúmbens *W*	decumbent	⚹ □ cu	2	my	W G	C G H	1792.	R s.p	Jac.schœn.1 t 97		
4848 scándens *W*	climbing	⚹ △ cu	6	...	G	C G H	1795	R s p			
4849 dahuricus *Fisch*	Dahurian	⚹ △ cu	3	my	G	Dauria	1823.	R s p			
4850 falcátus *W*	sickle-leaved	⚹ □ cu	3	...	W G	E Indies	1792	R s p	Bur zeyl t 13 f 2		
4851 racemósus *W*	branching	⚹ □ cu	3	...	W G	E Indies	1808	R s p			
4852 Broussonéti *Jacq*	Broussonet's	⚹ □ cu	2	...	..	Canaries	1822	R s p			
4853 retrofráctus *W*	Larch-leaved	⚹ □ cu	4	au s	W	Africa	1750	R s p	Pluk al t 375 f 3		
4854 asiáticus *W*	Asiatic	⚹ □ cu	3	.	W	Asia	1759	R s p	Pluk al t 15 f 4		
4855 æthiópicus *W*	angular stalked	⚹ □ cu	3	...	W	C G H	1816	R s p			
4856 álbus *W*	white	✱ □ cu	2	...	W	Spain	1540.	R s p	Moris s 1 t 1 f 3		
4857 acutifólius *W*	needle-leaved	⚹ □ cu	2	..	W G	Spain	1640	R s p	Fl græc 337		
4858 flexuósus *W*	flexuous	⚹ △ cu	3	jl au	G	C G H	...	R s p			
4859 aphýllus *W*	prickly	✱ □ cu	3	...	W G	S Europe	1640.	R s p	Moris s 1 t 1 f 2		
4860 subulátus *W*	awl-leaved	⚹ □ cu	3	...	..	C G H	1811	R s p			
4861 capénsis *W*	Cape	⚹ □ cu	4	ap my	G	C G H	1691	R s p	Jac schœ 3 t 266		
4862 sarmentósus *W*	linear-leaved	⚘ □ cu	6	au	W G	Ceylon	1710	R r m	Rhe mal 10 t 10		
817 DRIMIA *Jacq*	Drimia				*Asphodeleæ*		*Sp* 7—11				
4863 altissima *Jacq*	tallest	☿ △ or	1½	au s	W G	C G H	1791	O s p	Bot mag 1074		
4864 elàta *B M*	tall	☿ △ or	2	o n	R G	C G H	1799	O s p	Bot mag 822		
4865 ciliáris *B M*	ciliated	☿ △ or	1½	s	Pu w	C G H	...	O s p	Bot mag 1444		
4866 pusilla *W*	dwarf	☿ △ or	½	my jn	G	C G H	1793	O s p	Jac ic 2 t 374		
4867 lanceæfólia *B M*	Copperas-leav'd	☿ △ or	¼	s o	Pu	C G H	1800	O s p	Bot mag 643		
4868 revolúta *B M*	reflex-flowered	☿ △ or	½	au	G	C G H	1774.	O s p	Bot mag 1380		
4869 média *Jacq*	intermediate	△ or	1½	au	W	C G H	1820	O s p			
818 UROPETALON *Ker*	Uropetalon				*Asphodeleæ*		*Sp* 4				
4870 glaúcum *Burchell*	glaucous-leaved	☿ △ or	1	jl au	G	C G H	1816	O l p	Bot reg 156		
4871 crispum *Burch*	curled-leaved	☿ △ or	..	.. ..	G	C G H	1816.	O l p			
4872 serotinum *Ker*	late-flowering	☿ △ or	¾	m au	G R	Spain	1629	O l p	Bot mag 859		
4873 fulvum *Hort*	tile-red	☿ △ or	¾	m au	G R	Mogadore	1808	O l p	Bot mag 1185		



History, Use, Propagation, Culture,

814 *Dianella* A diminution of *Diana*, the name which the genus originally received from Commerson The species are found in the recesses of forests, where the goddess of hunting may be supposed to inhabit

815 *Eustrephus* From *ευ*, well, and *στρεφω*, to turn, in allusion to the twining habit of the species

816 *Asparagus* From *σπαραασσω*, to tear, on account of the strong prickles with which some of the species are armed Some are dioecious, and others are prickly evergreen climbers A officinalis, *Asperge*, Fr, *Spargel*, Ger, and *Isparago*, Ital, is one of the oldest and most delicate of culinary vegetables It is found on the sea-shores in different parts of Britain and in many parts of Europe, and is abundant in the inland sandy plains in Russia, Turkey, and Greece Asparagus was in much esteem both among the Greeks and Romans It is much praised by Cato and Columella, and Pliny mentions a sort which grew near Ravenna, a deep sandy country, three shoots of which would weigh a pound. It is equally admired by the moderns, and assiduously cultivated in private gardens everywhere, and to a great extent round London, Paris, and Vienna In no part of the world is it grown to such perfection as in the market gardens round London That of the parish of Mortlake is particularly strong and succulent the soil is a sandy loam, deeply trenched, and well manured, the seed is sown in drills and thinned out till the plants stand six inches apart in the row, and the rows are a foot asunder Round Paris and Vienna more pains are taken in preparing the soil, by forming excavations and filling them with layers of turf, durable manure, as bones, wood-chips, &c, sand, manure, loam, &c., but though plantations on such beds last longer than on our's, they do not yield better shoots, and it may justly be questioned whether they are equally profitable to the cultivator

The culinary preparations of asparagus are few, its very delicate flavor rather being deteriorated than improved by powerful tastes It is best boiled and served alone, to be eaten with butter and salt, or with the points of the shoots cut in small pieces, and served up as green pease It is esteemed diuretic, and in Paris

4834 Radical leaves sword-shaped flat shorter than the stem with the keel and edges smooth, Panicle simple
4835 Radical leaves ensiform long smooth at the edge and keel, Panicle upright
4836 Leaves bright-green smooth, Panicle lax decomp Sepals of pendulous flower reflexed, Fllam. strumous
4837 Leaves linear-lanceolate at the edge prickly, Keel smooth

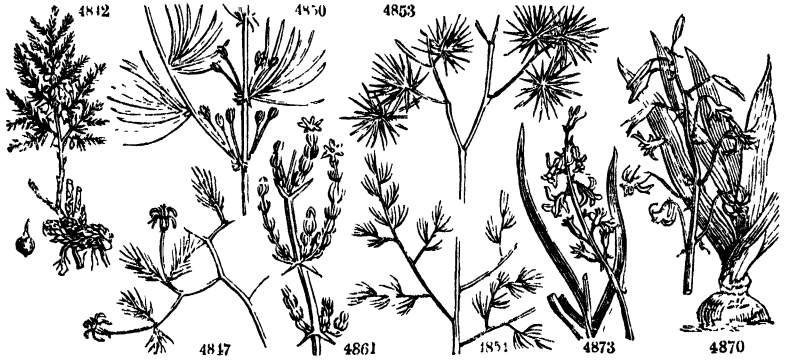
4838 Stem leaves numerous long ensiform rough at the edge and keel, Branches of panicle short
4839 Leaves radical lin -lanceolate at the keel and edges smooth, Panicle decompound straggling

4840 Leaves ovate or elliptical-lanceolate, Anthers after flowering twisted
4841 Leaves linear or linear-lanceolate, Anthers after flowering straight

4842 Stem herbaceous round erect, Leaves setaceous
4843 Stem herbaceous erect rounded, Leaves setaceous ½-whorled and whorled, Stipules solitary unarmed
4844 Stem half-climbing, Branches straggling, Leaves setaceous curved, Flowers globose
4845 Stem unarmed rounded, Branches declinate, Leaves setaceous
4846 Stem much branched wavy, Leaves setaceous pungent, Flowers campanulate
4847 Stem herbaceous unarmed decumbent much branched, Branches wavy, Leaves setaceous
4848 Herbaceous unarmed twining, Leaves lanceolate falcate
4849 Stem herbaceous erect, Branches straight, Leaves bundled setaceous long, Peduncle nodding
4850 Prickly solitary recurved, Branches round, Leaves fascicled linear falcate, Peduncle 1-fl clustered
4851 Prickles solitary, Branches striated, Leaves bundled linear-subulate falcate, Racemes many-fl axillary
4852 Branches striated, Leaves linear falcate unequal, Flowers few
4853 Prickles solitary, Branches round reflexed bent back, Leaves setaceous bundled
4854 Prickles solitary, Stem erect, Branches filiform, Leaves bundled setaceous
4855 Prickles solitary reversed, Branches angular, Leaves lanceolate linear
4856 Prickles solitary, Branches angular wavy, Leaves bundled 3-cornered blunt deciduous
4857 Stem unarmed angular shrubby, Leaves needle-like rigid perennial mucronate equal
4858 Herbaceous unarmed, Branches wavy, Leaves lanceolate
4859 Stem unarmed angular shrubby, Leaves subulate striated unequal diverging
4860 Unarmed, Branches bent back, Leaves rounded subulate
4861 Spines 4, Branches clustered rounded, Leaves setaceous
4862 Leaves solitary linear lanceolate, Stem wavy, Prickles recurved

4863 Leaves oval sub-erect plain, Raceme long cylindrical, Bractes hooked back upon themselves
4864 Leaves linear lanc obliquely bent smooth, Flowers nodding
4865 Leaves linear keeled ciliated
4866 Leaves lanceolate smooth channelled at base, Flowers erect
4867 Leaves wedge-shaped smooth, Scape few flowered
4868 Leaves lanceolate smooth wavy, Peduncles horizontal
4869 Leaves linear lanceolate half-round

4870 Leaves broad lanceolate erect much shorter than scape, Peduncles very long
4871 An undescribed species, said to be in the gardens about London
4872 Leaves bright green channelled striated, Sepals oval the length of stamens
4873 Leaves glaucous, Raceme lax, Sepals linear much spreading longer than stam



and Miscellaneous Particulars.

is much resorted to by the sedentary operative classes, as taylors, weavers, &c when they are troubled with symptoms of gravel or stone

There are some varieties and subvarieties of asparagus, but excepting the red-topped and green-topped, the others are merely local varieties, and can hardly be said to be obtainable by seed

In the kitchen garden asparagus is generally grown in beds four feet broad, and in rows a foot or eighteen inches apart by nine inches in the row The plants are either raised from seed where they are to remain, or raised on a seed bed the preceding year and transplanted The value of the crop depends on the soil being dry, sandy, trenched two and a half or three feet deep, and powerfully manured During winter the beds are covered with dung or litter to protect them from the frost In spring this is raked off into the alleys and dug in, while the beds are stirred with a fork, to admit the air, heat, rain, &c to stimulate the rising shoots Asparagus from seed will be fit to cut the third year, in perfection the fifth, and will continue good for ten or twelve years The season for cutting is from the middle of April to the middle of June

Asparagus is extensively forced, generally by taking up the roots and placing them on dung or tan beds; but sometimes a more gentle forcing is given by covering the beds with dung in the manner of forcing sea-cale. By the former mode earlier crops are obtained, but the roots are lost, by the latter, the crop is only forwarded a week or two, but the roots remain to produce the following year

817 *Drimia* So called from the Greek word δριμυς, caustic, because the juice of the roots is so very acrid, as, when applied to the skin, to cause inflammation and even blisters

818 *Uropetalon* From ουρα, a tail, and πεταλον, a petal, in allusion to the manner in which the divisions of the flower are lengthened out. Curious and rare bulbous plants, very nearly related to Zuccagnia, perhaps not generically distinct.

819 HYACIN'THUS *B M* Hyacinth — *Asphodeleæ. Sp 2—3.*

4874	amethýstinus *W*	Amethyst-col	☿	△	or	¾ ap my	B	S. Europe	1759.	O l p	Red. lil. 14
4875	orientális *W.*	garden	☿	△	or	¾ mr.ap	B	Levant	1596.	O r.m	Bot. mag 937

820 ZUCCAG'NIA. *Thunb.* Zuccagnia — *Asphodeleæ Sp. 1—2.*

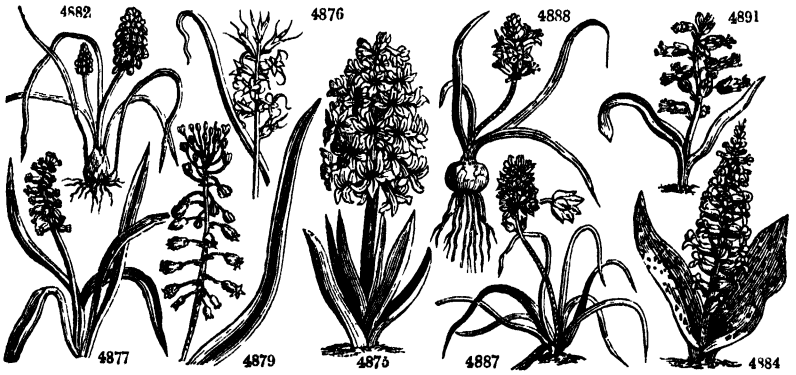
4876	viridis *Thunb*	green	☿	⧋	or	⅔ au	G	C G. H	1774	O l p	Red. lil 203

821 MUSCA'RI *B M* Grape-hyacinth — *Asphodeleæ Sp 6—8*

4877	moschátum *B M*	musk	☿	△	or	¼ ap my	B	Levant	1596.	O s l	Bot mag 734
	β flávum B M	*yellow*	☿	△	or	¼ ap my	G ʏ	Levant	1596.	O s l	Bot mag 1565
4878	ciliátum *Cyr*	ciliated	☿	△	or	1 my	Br pu	Crimea	1822.	O s l	Bot. reg 394
4879	comósum *R. L*	purple	☿	△	or	⅓ ap my	B	S Europe	1596.	O s l	Bot mag 133
	β monstrósum	*feathered*	☿	△	or	⅓ ap my	B	S Europe	1596	O s l	Moris s 4 t 11 f 2
4880	pállens *Fisch*	pallid	☿	△	or	⅓ my	Pa B	Crimea	1822	O s.l	
4881	botryoides *B M*	blue	☿	△	or	⅓ ap my	B	Italy	1596	O s l	Bot mag 157
4882	racemósum *B M*	starch	☿	△	or	¼ ap	B	Europe	...	O s l	Bot mag 122

†822 LACHENA'LIA *W* Lachenalia — *Asphodeleæ. Sp 26—29*

4883	glaucina *W.*	sea-green	☿	⧋	pr	1 mr ap	G w	C G H	1795	O s.l	Jac ic 2 t. 391
4884	orchioides *W*	Orchis-like	☿	⧋	pr	1 f ap	G ʏ	C G H	1752	O s l	Bot. mag 1269
4885	pállida *W*	pale-flowered	☿	⧋	pr	½ mr ap	Pa B	C G H	1782	O s l	Bot reg 287
4886	hyacinthoides *W*	Hyacinth-flow	☿	⧋	pr	⅓ mr ap	W R	C G. H	1812	O s l	Jac ic 2 t 382
4887	angustifólia *W*	narrow-leaved	☿	⧋	pr	1 ap my	W	C G H	1793	O s l	Bot mag 735
4888	contamináta *W*	contaminated	☿	⧋	pr	⅓ f mr	Pk	C G H	1774.	O s l	Bot mag 1401
4889	pátula *W*	spreading-flow	☿	⧋	pr	⅔ ap my	W pk	C G H	1795.	O s l	Jac ic 2 t 384
4890	frágrans *W*	sweet-scented	☿	⧋	pr	1 mr my	W R	C G H	1798	O s l	Bot reg 302
4891	unicolor *B M*	self-colored	☿	⧋	pr	¼ my jn	Pk	C G H	1806.	O s l	Bot mag 1373
4892	lúcida *B M*	glossy-leaved	☿	⧋	pr	⅓ mr my	Pk	C G H	1798	O s l	Bot mag 1372
4893	racemósa *B M*	starch	☿	⧋	pr	1½ my	W g	C G H	1811	O s l	Bot. mag 1517
4894	pustuláta *W*	blistered	☿	⧋	pr	1 ja ap	W o	C G H	1790	O s l	Bot mag 817
4895	purpúreo-cærúl *b m*	purple-blue	☿	⧋	pr	1 ap my	B P	C G H	1798	O s l	Bot mag 745
4896	nervósa *B M*	nerved-leaved	☿	⧋	pr	⅔ jn	Pk	C G H	1810	O s l	Bot. mag 1497
4897	violácea *W*	violet	☿	⧋	pr	1 mr ap	L B	C G H	1795	O s l	Jac ic 2 t 394
4898	bifólia *B M*	cowled-leaved	☿	⧋	pr	⅓ mr ap	Pk	C G H	1813.	O s l	Bot. mag 1611
4899	rósea *B Rep*	rose-colored	☿	⧋	pr	1 ap my	Pk	C G H	1800	O s l	Bot rep t 296
4900	unifólia *W.*	one-leaved	☿	⧋	pr	⅓ mr ap	W B	C G H	1795	O s l	Bot mag 766
4901	sessilifóra *B Rep*	sessile-flowered	☿	⧋	pr	⅓ my jn	R	C G H	1804	O s l	Bot rep 460
4902	isopétala *W*	equal-flowered	☿	⧋	pr	⅔ my jn	W pu	C G H	1804	O s l	Jac ic 2 t 401
4903	tricolor *W*	three colored	☿	⧋	pr	1 ap my	R ʏ	C G H	1774	O s l	Jac ic rar 1. t 61
4904	lutcola *Jacq*	yellow	☿	⧋	pr	1 ap my	Y R	C G H	1774	O s l	Bot mag 1704
4905	pendula *Jacq*	pendulous	☿	⧋	pr	⅔ mr my	R ʏ	C G H	1789	O s l	Bot cab 267
4906	rubida *W*	dotted-flower'd	☿	⧋	pr	⅔ s o	R	C G H	1803	O s l	Bot mag 993
4907	quadricolor *Jacq*	four-colored	☿	⧋	pr	1 mr ap	Sc ʏ	C G H	1774	O s l	Bot. rep 148
4908	serótina *Jacq*	late	☿	⧋	pr	⅔ au	Pk	Spain	1820	O s l	



History, Use, Propagation, Culture,

819 *Hyacinthus* Every one knows the fable of Hyacinthus, who was killed by Apollo and changed to this flower Bochart, however, remarking that the ancients applied the name to a red flower, concludes that the Arabic *yâgdut*, which signifies red, has something to do with the name. A conjecture certainly sufficiently learned, but less plausible

H orientalis is the origin of one of our finest florist's flowers, and, like the tulip and narcissus, of a considerable commerce to the Dutch It is a native of the East, and abundant about Aleppo and Bagdat, where it flowersin February It seems to have been first cultivated as a flower by the Dutch, but when is unknown. Most probably in the beginning of the sixteenth century, soon after the revival of commerce in the west of Europe, when the merchants of Holland traded to the eastern shores of the Mediterranean and the Archipelago About the end of the sixteenth century there were seven or eight varieties known in England In 1620, Swertius, in his Florilegium, figured forty varieties, Miller says the Haarlem florists in his time (say 1720) had above 2000 varieties, and though the passion for this flower has greatly declined, they have still upwards of half that number. In England three or four hundred sorts are annually imported from the Dutch florists by the seedsmen

A fine double hyacinth is characterized by strength and enlargement of all the parts, and by bright distinct colors The fundamental varieties are double, semidouble, single, red, white, purple, blue, and yellow, in many different shades and variegations A variety degenerates in a few years; but some have existed undeteriorated upwards of a century Varieties are raised from seed, and flower the fourth or fifth year: their names are after the growers or their patrons, favorite friends, public characters, or the celebrated names of history and antiquity

The seeds of the hyacinth are sown in October, after they have ripened, or in the following March They remain three years with no other culture than covering with a little earth in autumn, but the fourth season they are transplanted into beds, where they remain two or three years longer till all the bulbs have flowered

The soil is essentially a very sandy loam and vegetable mould, and if in forming the beds this soil can be made to the depth of two feet, and at the bottom of the bed a layer of six or nine inches of cow-dung

4874 Flowers campanulate half 6-cleft cylindrical at base
4875 Flowers funnel-shaped half 6-cleft ventricose at base

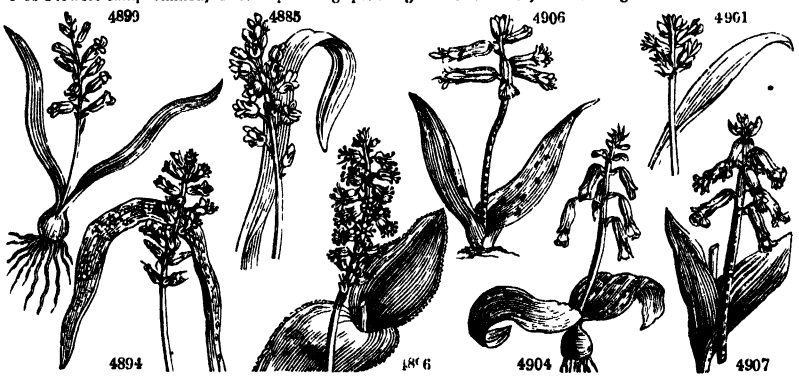
4876 Leaves linear channelled longer than scape

4877 Flowers cylindrical ovate uniform horizontal subsessile

4878 Flowers camp cylindrical half 6-cleft, Pedunc in fruit very long and horizontal
4879 Flowers cylindrical angular on long stalks, the upper sterile on very long stalks

4880 Flowers campan cylindrical, Limb erect shorter than tube, Leaves lin lanc erect
4881 Flowers globose uniform the lower remote, Leaves linear upright channelled
4882 Flowers ovate uniform clustered . the upper sessile, Leaves lax dependent linear

4883 Flowers campanulate sessile, Inner sepals longer spreading obtuse, Leaves lin lanc smooth
4884 Flowers campanulate sessile, Inner sepals longer spreading obtuse, Lvs obl lanc with cartila cren edge
4885 Flowers campanulate sessile, Inner sepals longer spreading obt. Scape ang at end short than lin obl lvs
4886 Fl campanulate sessile, Inner sepals longer spreading emarg Lvs lin chann lax twice as long as scape
4887 Fl campan. sessile, Inner sepals longer spreading obov obt Lvs lin channelled lax longer than scape
4888 Fl camp cylind. on short stalks erect, Inner sep long lanc obt erect, Lvs lin chann lax long than scape
4889 Flowers camp stalked, Inner sepals longer obovate spreading, Lvs lanc channelled shorter than scape
4890 Fl camp stalked horizontal, Inner sep longer obt Stam longer than fl Lvs lanc twice as short as scape
4891 Leaves two, Scape not longer than leaves, Fl short horizontal, Stamens long declinate
4892 Leaves two oblong, Raceme compact, Flowers short campanulate nearly as long as stamens
4893 Leaves three lanceolate blistered shorter than scape, Flowers campanulate erect
4894 Flowers camp on short stalks, Inner sep long obtuse, Scape 3 cornered reclinate, Leaves blistered
4895 Fl camp stalked, Inner sep long obt. revol Stam longer than fl Scape angular at end, Leaves blistered
4896 Leaves two oval-edged, Flower erect conical shorter than spreading stamens
4897 Fl camp flat at base length of stalk, Inner sep long. obt Stam longer than fl Scape ang at end, Lvs obl.
4898 Leaves lanceolate erect unequal the larger cucullate at base, Scape few-flowered shorter than leaves
4899 Lvs lin lanc two-spreading, Flowers whole-colored with the outer sepals nearly as long as the inner
4900 Flowers cylindrical length of stalks, Inner sepals longer obtuse unequal, Leaf one lin lanceol
4901 Lvs two lin lanc spreading, Fl erect sessile clust ovate with inner sep much the narrowest and longest
4902 Flowers cylind. stalked, Sepals linear obtuse equal, Scape angular at end, Leaves lanc deflexed
4903 Flowers cylind stalked pendulous, Inner sepals longer emarginate, Leaves lanceolate
4904 Flowers cylind stalked pendulous, Inner sepals longer emarginate spreading, Leaves obl spreading
4905 Leaves twin obl not spotted, Scape erect not spotted, Flowers cylindrical pendulous
4906 Flowers cylind on short stalks pendulous, Inner sepals longest, Leaves oblong
4907 Leaves twin lin lanc spotted, Scape erect, Flowers pendulous with the inner limb of sepals spreading
4908 Flowers camp stalked, Outer sepals long spreading inner connate, Leaves long channelled



and Miscellaneous Particulars

deposited, the plants will thrive the better The season of planting is from the middle of October to the middle of November The bed should be protected from heavy rains and severe frosts by the usual means, and about the beginning of April, when the flowers begin to open, an awning of canvass should be fixed over them, to exclude all extremes of weather, and the more brilliant moments of sunshine In three weeks or a month after blooming the bulbs should be taken up, unless they are intended to remain for seed They should be dried in the shade, or under a few inches of dry earth, kept dry, and afterwards cleaned and wrapped up in separate papers, or laid on open airy shelves till wanted for replanting

The hyacinth forces well, especially some of the blue sorts, it also does better than most bulbs when planted on water

820. *Zuccagnia* This plant was named in honor of Attili Zuccagni, superintendant of the garden at Florence. It is scarcely a different genus from Uropetalon.

821. *Muscari* Something which smells of musk, called μοσχος in Greek, *muscus* in Latin, *misk* in Arabic (*Forskahl.*) M. comosum, β monstrosum, is a most ornamental border flower The bulb is large, ovate, and solid: the leaves narrow, a foot long, with obtuse points the flower-stalks rise near a foot and a half high, they are naked at the bottom for about seven or eight inches, above which the panicles of flowers begin, and terminate the stalks. The flowers stand upon pedunclcs which are more than an inch long, each sustaining three, four, or five flowers, whose petals are cut into slender filaments like hairs, they are of a purplish blue color, and, having neither stamina nor germ, never produce seeds. The other species are very pretty hardy flowers

M racemosum was named starch hyacinth by William Curtis, from the smell of the flower.

822 *Lachenalia.* So named in honor of Wernerus de la Chenal, of Switzerland, author of some medical and botanical tracts printed at Basle. The numerous species of this genus were chiefly introduced from the Cape by Masson: they bear a strong general resemblance, and are yet individually different, they may be styled diminutive, but pretty, they grow readily in sand and peat, and may be forced or retarded so as to flower at almost any season. They must be very sparingly watered when not in a growing state

823 PHOR'MIUM. *W.*	Flax-lily.					*Asphodeleæ*	*Sp.* 1.						
4909 tenax *W*	Iris-leaved	ℓ	⧋	ec	6	au	G w	N. Zeal.	1788	R	l s p	Cook. it. v.2. t.96	
824 CYANEL'LA *W.*	Cyanella.					*Asphodeleæ*	*Sp.* 2—4						
4910 capénsis *W.*	purple-flower	♃	⧋	pr	1	jl au	B	C G. H	1768.	O	s.p	Bot mag 568	
4911 lútea *W.*	yellow-flowered	♃	⧋	pr	1	jl au	Y	C G H.	1788	O	s p	Bot. mag 1252	
825 LEON'TICE. *W*	Leontice					*Berberideæ.*	*Sp* 2—3.						
4912 chrysógonum *W*	oak-leaved	⁂	△	cu	1	mr jn	Y	Levant	1740.	D	s l p	M his 3 t 15 f 7	
4913 Leontopétalon *W*	Lion's-leaf	⁂	⧋	cu	1	ap my	Y	Levant	1597.	D	s l.p	M. his. 3 t.15 f 6	
826 CAULOPHYLLUM *Mich*	Caulophyllum					*Berberideæ.*	*Sp* 1—2.						
4914 thalictroídes *Ph*	Columbine-lvd	♃	△	cu	½	my	Y G	N Amer.	1755.	D	s.p	Mic. Am 1 t 21	
827. DIPHYLLE'IA *Mich*	Diphylleia					*Berberideæ*	*Sp* 1						
4915 cymósa *Mich*	blue-berried	♃	△	pr	½	my jn	W	N. Amer	1812.	D	l.p	Bot mag 1663	
828 PRU'NOS *W*	Winter berry					*Rhamneæ*	*Sp* 6—11						
4916 verticillátus *W*	deciduous			or	6	jl au	W	N Amer	1736	L	s p	Dend. brit 30	
4917 ambíguus *Ph*	Carolina			or	4	..	W	Carolina	1812	L	l t s	Dend brit 29	
4918 lævigátus *Ph*	smooth			or	4	jl au	W	N Amer. ...		L	l t s	Dend. brit 28	
4919 lanceolátus *Ph*	scarlet-berried			or	4	jn jl	W	Carolina	1811	L	l t.s		
4920 gláber *W*	evergreen			or	1½	jl au	W	Canada	1759	L	l t s	Bot. cab. 450	
§4921 lúcidus *W*	shining		⌴	or	2	jn jl	W	.....	1778	L	l t s		
†*829 BER'BERIS *W.*	Barberry					*Berberideæ*	*Sp* 10—38						
4922 vulgáris *W*	common			fr	8	ap my	Y	England	bu pl.	L	co	Eng. bot. 19	
β violácea	*purple-fruited*			fr	8	ap my	Y	.....	...	L	co		
γ alba	*white-fruited*			fr	8	ap my	Y	... ..	...	L	co		
4923 canadénsis *Ph*	Canada			fr	8	ap my	Y	Canada	1759	L	co		
4924 ilicifólia *W*	Holly-leaved			or	4	jl au	Y	T del Fue	1791	L	r m		
4925 crética *W*	Cretan			or	6	ap my	Y	Candia	1759	L	co	Fl græc 342	
4926 sibírica *W*	Siberian			or	1	jn jl	Y	Siberia	1790	L	co	Bot reg 487	
4927 emargináta *W en*	emarginate			or	3	ap my	Y	Siberia	1790	G	co		
4928 sinénsis *Desf*	Chinese			or	4	ap my	Y	China	1815	G	co	Dend. brit 26	
4929 fasciculáris *Dec*	clustered			or	10	ap my	Y	California	1819	C	co	Bot mag 2393	
4930 aristáta *Dec*	Nepal			or	6	ap my	Y	Nepal	1820	C	co	Hook ex fl 98	
4931 heterophýlla *Juss*	various-leaved			or	4	ap my	Y	Magellan	1805	L	co	Hook ex fl 14	
830 NANDI'NA *W*	Nandina.					*Berberideæ.*	*Sp* 1						
4932 doméstica *W*	garden		⌴	or	6	jn jl	G Br	China	1804	C	p.l	Bot. mag 1109	
831 COSSIG'NIA *Juss*	Cossignia					*Sapindaceæ*	*Sp* 1						
4933 pinnáta *Lam*	pinnated		□	or	10	...	..	Mauritius	1824	C	p l		
832 HIL'LIA *W*	Hillia					*Rubiaceæ*	*Sp.* 2						
4934 longiflóra *W*	long-flowered		□	or	1½	f mr	W	W. Indies	1789	C	s p	Bot mag 721	
4935 tetrándra *W*	mountain		□	or	1	jn jl	W	Jamaica	1793	C	s p	Swz fl oc t.11	



History, Use, Propagation, Culture.

823 *Phormium* From φορμος, a basket This plant sends up numerous leaves, which in New Zealand and Norfolk Island are manufactured into matting, or a coarse thread is separated from them and made into cordage and coarse linen, as is done from different species of Aloe, Agave, and Liliaceæ in the Levant and south of Europe The plant thrives in any rich light soil, increases readily by offsets, and is said to stand the open air about Cork, where thoughts are entertained of using it as a substitute for flax The experiments, however, which have been made in New Holland by some spirited individuals respecting its cultivation, have all failed.

824 *Cyanella* Derived from κυανος, blue, in allusion to the color of the flowers of some species; all are very pretty and easily cultivated

825 *Leontice* An abridgment of *Leontopetalum*, its ancient name, from λεων, a lion, and πετηλον, a leaf, because the shape of the leaves was thought to resemble the print of a lion's foot.

826. *Caulophyllum* From καυλον, a stem, and φυλλον, a leaf Its leaves are so terminated by the stalk, as to appear a mere continuation of a stem

827. *Diphylleia* From δις, two, and φυλλον, a leaf The plant has never more than two leaves

828. *Prinos.* This was the Greek name of the evergreen oak, from πριω, to saw, on account of the strongly toothed leaves of that plant. The species are low shrubs of little beauty, but of the easiest culture in any light soil

829 *Berberis. Berbérys*, according to Golius, (p 246), is the Arabic name of this plant. B vulgaris is at once an ornamental shrub, a fruit tree, a hedge plant, a dye, a drug, and a reputed enemy to the corn farmer When covered with flowers in spring, or with fruit in autumn, it is a fine object. The leaves are of a yellowish or bluish green, and gratefully acid to the taste The smell of the flowers is offensive when near, but pleasant at a certain distance. The berries are so very acid, that birds seldom touch them The berberry, however, is cultivated for the sake of these, which are pickled and used for garnishing dishes; and being boiled with sugar, form a most agreeable rob or jelly, they are used likewise as a sweetmeat, and are put into sugar-plums or comfits. As a medicine the fruit is considered a mild restringent acid, agreeable to the stomach, and of efficacy (like other vegetable acids) in hot bilious disorders, and in a putrid disposition of the humours. The roots boiled in a lye yield a yellow colour and in Poland they dye leather of a fine yellow

4909 The only species, resembling an *Agave*

4910 Stem leafy panicled, Racemes divaricating, Leaves lanceolate wavy
4911 Scape naked branched, Racemes erect, Leaves linear lanceolate flat

4912 Leaves pinnated, Leaflets whorled lanceolate acute 3-pointed
4913 Radical leaves biternate, cauline ternate, Fruit ovate

4914 Cauline leaf triternate, floral biternate

4915 Quite smooth, Leaves palmate angular lobed serrated with taper-pointed lobes

4916 Leaves obovate lanceolate acuminate doubly serrated, Veins beneath hairy
4917 Leaves oval pointed at each end mucronate serrulate pubescent beneath, Female flowers solitary
4918 Leaves lanceol serrated acuminate smooth on each side, Flowers all 6-cleft
4919 Leaves lanceol very finely and distantly serrated acute at each end quite smooth, Male flow. 3-androus
4920 Leaves lanceol obt smooth serrated at end
4921 Leaves elliptical acuminate smooth somewhat serrated at end

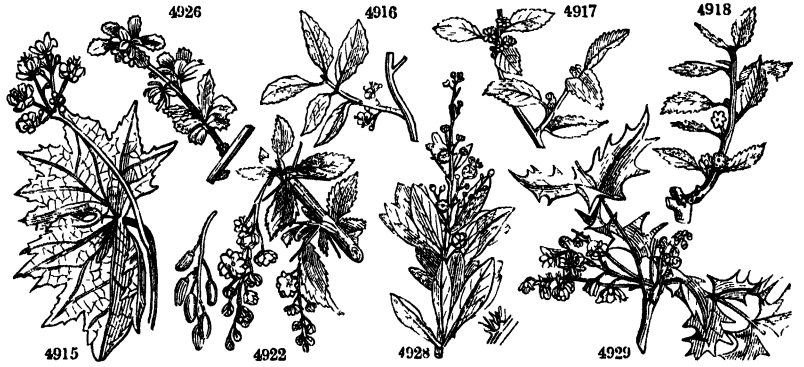
4922 Racemes simple pendulous, Leaves obovate ciliate-toothed

4923 Branches dotted, Prickles in 3s, Lvs simple obovate remotely toothed, Racemes short, Fruit globular
4924 Spines 3-parted, Leaves oval with a few large spiny teeth, Ped short 4-fl Peduncles elongate corymbose
4925 Spines 3-5-parted, Leaves oval-oblong entire or serrated, Racemes 3-8-flow almost shorter than leaves
4926 Spines 3-7-parted, Leaves lanceolate obovate ciliate-toothed, Peduncles 1-flowered shorter than leaf
4927 Spines 3-parted, Leaves lanceolate obovate ciliate serrate, Racemes pendulous, Petals emarginate
4928 Spines 3-parted very few, Leaves obl obtuse entire or a little toothed, Racemes many-fl nodding
4929 Lvs pinnated in 4 or 5 pairs, Leaflets ovate lanceolate spreading toothed, Racemes erect much clustered
4930 Spines simple scarcely two-toothed at base, Lvs obl with 4 or 5 spiny teeth, Racemes spreading many-fl
4931 Spines 3-parted, Lvs ovate lanceolate smooth some entire some three-toothed, Pedicels solitary one-flow

4932 Leaves supra-decompound with lanc entire leaflets

4933 Leaves pinnate lanceolate emarginate

4934 Cor 6-cleft, Segments lanceolate revolute, Leaves ovate acute
4935 Cor 4-cleft, Segments ovate, Leaves obovate



and Miscellaneous Particulars

with the bark of the root The inner bark of the stems also will dye linen of a fine yellow, with the assistance of alum. Kine, sheep, and goats are said to eat it, horses and swine to refuse it. This species varies with red, purple, pale yellow, and stoneless fruit

Insects of various kinds are remarkably fond of the flowers of the barberry, and the Æcidium Berberidis, its particular inhabitant, is supposed to generate the dust which, carried from the bush by winds, and lighting on wheat and other growing corns, gives rise to the Puccinia, a minute fungus, which closes up the pores of the leaves, and appears like rust or mildew (*Sir J Banks on Blight, &c*) Many highly respectable authorities in Britain, on the continent, and in America, are in favor of and against this opinion Willdenow, Withering, and Dwight have stated various remarkable cases on good authority Sir J Banks and his draughtsman Bauer proved the fact of the mildew being a fungus

Linnæus observed, that when bees in search of honey touch the filaments, the anthers approximate to the stigma and explode the pollen Sir J. Smith ascertained that the same effect is produced by touching the inside of the filaments with a small bit of stick (*Phil Trans* vol lxxviii 1 158)

All the other species are much esteemed as ornamental plants B aristata is a fine hardy evergreen shrub. B. ilicifolia and emarginata are also hardy, but less ornamental. B fascicularis is a beautiful ornamental nearly hardy shrub, remarkable for its pinnated leaves

830. *Nandina* *Nandin* is the name of this shrub in Japan, where it is a garden shrub the flowers are in panicles, and succeeded by berries of the size of a pea. In the greenhouse it grows freely in loam and peat, and ripened cuttings, with their leaves on, root in sand under a hand-glass

831. *Cossigna* Named by Commerson, after M. de Cossigny, a French naturalist, then living at Pondicherry Fine plants with handsome pinnated leaves

832 *Hillia.* So named by Jacquin, in honor of Sir John Hill, author of many large works on botany and other parts of natural history, as well as general literature Owing to some differences with his contemporaries, and writing against the Royal Society, after being rejected as a fellow, his memory in England has not met with much respect; in truth it was but little that it deserved. The species are of easy culture, and cuttings root readily in sand.

†*833. RICHARDIA. *L.* RICHARDIA
§4936 scábra *L.* rough ⚘ ⊓ w 2 s W Vera Cruz ... C l.p Lam ill t 254

834. CANARI'NA *W.* CANARINA
4937 Campánula *W* Canary ♃ △ or 3 ja mr O Canaries 1696 R r m Bot. mag 444

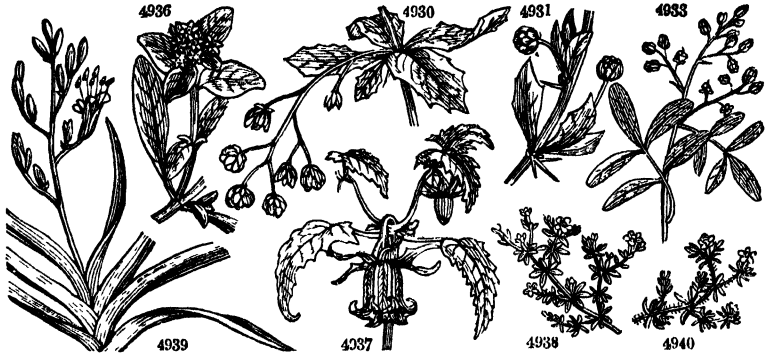
835. FRANKE'NIA. *W* SEA-HEATH. *Frankeniaceæ* *Sp* 4—16
4938 læ'vis *W.* smooth ⚹ △ cu ½ jl au F England sal m. D s.l Eng bot 205
4939 Nóthria *W* Cape ⚹ △ cu ½ jn au F C G. H. 1816 D s l Be c 171 t 1 f 2
4940 hirsúta *W.* hairy ⚹ △ cu ½ jn jl I. B Siberia 1789. D s l Pl. græc 343
4941 pulverulénta *W.* powdery ⚹ △ cu ½ jl R England sea co. D s.l Eng. bot 2222

†836. PEP'LIS. *W.* WATER PURSLANE. *Salicariæ* *Sp* 1—2.
4942 Pórtula *W.* common ≗ O cu ½ jl s Pu Britain wat. pl. S aq Eng. bot 121

DIGYNIA.

837 ORY'ZA *W.* RICE *Gramineæ* *Sp* 1
4943 sativa *W* common ⚔ ▯ ag 2 jl Ap E. Indies 1596 S aq Cat. car. 1. t 1

838 ATRAPHAX'IS *W* ATRAPHAXIS. *Polygoneæ* *Sp* 2—3.
4944 spinósa *W* prickly ⚘ △ cu 2 au Ap Levant 1732 C l p Dend. brit. 119
4945 undulàta *W* waved-leaved ⚘ ⊔ cu 2 jn jl Ap C. G H. 1732 C l p Dil el. t. 32 f 36



History, &c., Propagation, Culture,

833 *Richardia* So named by Houston, after Richard Richardson, an English botanist. Cuttings root in sand under a glass

834 *Canarina* That is to say, a plant native of the Canaries This plant, Sweet observes, "is very desirable, as it flowers in autumn and winter, when few other plants are in bloom After flowering, the stem lies down, and the roots continue dormant all the summer, when they need but little water When they begin to grow they had better be placed in the stove, as they will not flower so abundantly in the greenhouse A light loamy soil suits them best, or a mixture of loam and peat, and they are readily increased by dividing the roots, or from cuttings planted in the same kind of soil under a hand-glass" (*Bot Cult* p 162)

835 *Frankenia* In honor of John Frankenius, professor of botany at Upsal, who first enumerated the plants of Sweden in Speculum Botanicum, 1638, and Speculum Botanicum Renovatum in 1659

836 *Peplis.* One of the Greek names of the Purslane The plant now so called resembles the Purslane in some points

837 *Oryza* From the Arabic word *Aruz*, the Greeks coined their word ὄρυζα, and the various modern nations of Europe their *rice, riz, reis,* &c. O sativa, the common rice, has the culm from one to six feet in length, annual, erect, simple, round, jointed Leaves subulate-linear, reflex, embracing, not fleshy Flowers in a terminating panicle Calycine leaflets lanceolate Valves of the corolla equal in length, the inner valve even, awnless, the outer twice as wide, four-grooved, hispid, awned Style single, two parted

O mutica, the dry or mountain rice, cultivated in Ceylon, Java, and of late in Hungary, has the culm three feet high, and more slender Fruit longish, with awns the longest of all. It is sown on mountains and in dry soils, rots with a long inundation, and perishes with sea water

The varieties of rice, as of other cultivated grain, are as numerous as the different soils, climates, and other physical circumstances, in which it is cultivated besides the dry rice, the chief sorts, by some considered species, are the O præcox, or early rice, and the O glutinosa, or clammy rice, both cultivated in irrigated lands

The native place of rice, like that of the other sorts of grain in common use, is unknown, it is cultivated in great abundance all over India, where the country will admit of being flooded, in the southern provinces of China, in Cochinchina, Cambodia, Siam, Japan, &c In Japan it is very white, and of the best quality It has also been introduced into cultivation in the southern kingdoms of Europe, Italy, Spain, the south of France, and within a few years into Hungary and Westphalia. In Carolina it has long been a staple commodity. Houghton's account of its introduction there is, that Ashby was encouraged to send a hundred pound bagfull of rice to that province, from which, in 1698, sixty tons were imported into England. Dalrymple says, that rice in Carolina is the result of a small bag of *paddy*, given as a present from Dubois, treasurer of the East India Company, to a Carolina trader A Dutch vessel also, from Madagascar, brought rice into the same province, and to this is attributed their having two kinds. (*Oriental Repertory*, 1)

In the hilly parts of Java, and in many of the Eastern islands, the mountain rice is planted upon the sides of hills, where no water but rain can come, it is, however, planted in the beginning of the rainy season, and reaped in the beginning of the dry season The natives call it *Paddy Gunung*, which signifies mountain rice It is entirely unknown in the western parts of India, but it is well known in Cochinchina, where it thrives in dry light soils, mostly on the sides of hills, not requiring more moisture than the usual rains and dews supply, neither of which are frequent at the season of its vegetation

There is a kind of hill rice which is hardy enough to grow on the edge of the Himalayan snows. It is almost to be expected, that this will, at some future time, prove an acquisition of value to the European cultivator.

Rice is extensively cultivated in the East Indies and China, and chiefly on low grounds near large rivers,

4936 The only species, Leaves lanceolate ovate rough

4937 The only species, Leaves stalked hastate toothed

4938 Flowers solitary, Petals repand obtuse, Leaves linear ciliated at base
4939 Flowers fascicled, Petals acute, Leaves linear ciliated at base
4940 Flowers fascicled, Petals repand obtuse, Leaves linear oblong hairy at base
4941 Flowers solitary, Petals subrepand, Leaves roundish ovate powdery beneath

4942 Flowers hexandrous axillary solitary, Flowers stalked rounded ovate

DIGYNIA.

4943 The only species

4944 Prickly
4945 Unarmed. Leaves wavy



and Miscellaneous Particulars.

which are liable to be annually inundated, and enriched by the deposition of mud According to Sir George Staunton's account, the Chinese obtain two crops of rice in a year from the same ground, and cultivate it in this way from generation to generation on the same soil, and without any other manure than the mud deposited by the water of the river used in overflowing it. After the waters of the inundation have withdrawn, a few days are allowed for the mud to get partially dry, then a small spot is enclosed by a bank of clay slightly ploughed and harrowed, and the grain, previously steeped in dung, diluted with animal water, is then sown very thickly on it. A thin sheet of water is immediately brought over it, either by a led stream, or the chain-pump Thus a seed-bed or nursery is prepared, and, in the meantime, the remainder of the tract is preparing for being planted When the plants are six or seven inches high, they are transplanted in furrows made by the plough, so as to stand about a foot apart every way, water is then brought over them, and kept on till the crop begins to ripen, when it is withheld, so that when harvest arrives the field is quite dry It is reaped with a sickle, threshed with a flail or the treading of cattle, and the husk taken off by beating it in a stone mortar, or passing it between two flat stones, as in a common meal mill. The first crop being cut in May, a second is immediately prepared for by burning the stubble, and this second crop ripens in October or November After removal, the stubble is ploughed in, which is the only vegetable manure such lands can be said to receive from man. In Japan, Ceylon, and Java, according to Thunberg, Davis, and Raffles, aquatic rice is cultivated nearly in the same manner Mountain-rice is grown much in the same way as our barley.

In Lombardy and Savoy rice is sown on rich lands, the sower often wading to the knees in water · one crop a year only is obtained, but four crops are often taken in succession In America a similar practice obtains.

In Westphalia, and some other parts of the south of Germany, rice has long been cultivated, there it is sown on lands that admit of irrigation, but the water is not admitted till the seed has germinated, and it is withdrawn, as in Italy, when the crop comes into flower From long culture in a comparatively cold country, the German rice has acquired a remarkable degree of hardiness and adaptation to the climate, a circumstance which has frequently been alluded to as an encouragement to the acclimating of exotics. It is found, Dr Walker remarks (*Essays on Nat. Hist*), that rice seeds direct from India will not ripen in Germany at all, and even that Italian or Spanish seeds are much less early and hardy than those ripened on the spot.

In Hungary rice has not been long cultivated the mountain sort has chiefly been tried, and that in the manner of our barley or summer-wheat

In England a crop of rice has been obtained near Windsor, on the banks of the Thames

In the stove, or in a hot-bed, rice may be grown in pots of rich soil placed in pans of water, and in August they may be set in the greenhouse, or under any glass roof open at the sides, and they will produce perfect grains

By far the best imported rice is that from Carolina it is larger and better tasted than that of India, which is small, meagre, and the grains frequently broken As an article of diet, rice has been extolled as superior almost to any other vegetable but, whatever it may be in warmer climates, where it is a common, and to many persons almost their only food, it does not appear so well calculated for European constitutions as the potatoe; for we find that the poor constantly reject the use of rice when potatoes are to be had; and whilst these can be obtained, we may venture to predict, that rice will always be considered in this country, rather as a dainty, to be eaten with sweet condiments, spices, fruit, &c than as ordinary food. (*Wellich's Family Cyclopædia.*)

838 *Atraphaxis.* A name given by the Greeks to the Atriplex of the Latins, derived from α, privative, and τραφω, to nourish, that is to say, a plant yielding no nourishment. Cuttings root freely in sand under a glass, but the plants are of neither beauty nor curiosity

TRIGYNIA.

839. FLAGELLA'RIA. *W.* Flagellaria.
4946 indica *W* Indian ☗ ☐ cu 7 jn.jl W India 1782. Sk p l Red. lil. 237

840. SCHEUCHZE'RIA. *W* Scheuchzeria
4947 palústris *W.* marsh ♐ △ cu ½ my jn Br England sp. bo S m.s Eng. bot. 1801

841. TRIGLO'CHIN. *W.* Arrow Grass.
4948 palústre *W* marsh ♐ △ ec 1 jl au ☗ Britain wa me S m.s Eng. bot 366
4949 bulbósum *B M* bulbous-rooted ☿ ⧍ cu 1 o Pu C G H 1806 S s.p Bot mag 1445
4950 maritimum *W* sea ♐ △ ec 1 my au G Britain sal m S m s Eng bot 255

842. LICHTENSTEI'NIA *W* Lichtensteinia.
4951 lævigáta *W.* smooth ♐ ⧍ pr 1 ... B C G. H 1824. S s.l Bot. mag 994

843 MYRSIPHYL'LUM *W en* Myrsiphyllum.
4952 asparagoides *W en* broad-leaved ♃ ⧍ cu 6 mr o G w C G. H 1702 R s p Her lugd t. 681
4953 angustifólium *W* narrow-leaved ♃ ⧍ cu 6 mr d G w C. G H 1752. R s p Til p 17 t 12. f 2

844 TOFIEL'DIA *Hud.* Tofieldia
4954 alpina *Smith* Scotch ♐ △ cu ¼ jl au G Britain bgs m S m s Eng bot 536
4955 pubéscens *Mich* downy ♐ △ cu ½ ap my W N. Amer 1790 S m.s Pl. ma t 342 f.3

†*845 MELANTHIUM *L* Melanthium
4956 púmilum *W* dwarf ♐ ⧍ cu ¼ my jn W C G H 1800. O s.l
4957 gramineum *Cav.* grassy ♐ ⧍ cu 1 my jn W Mogador 1823 O s l Cav ic t 587 f 1
4958 júnceum *W* Rush-leaved ♐ ⧍ cu ¼ jn n Pk C G H. 1788 O s p Bot. mag 558
4959 secúndum *W* side-flowering ♐ ⧍ cu 1 jn n W C G H 1812 O s.p La ill t 269. f 2
4960 unifórum *W.* yellow ♐ ⧍ cu ½ jn jl L Y C G H. 1787 O s p Bot mag 767
4961 viride *W* branching ♐ ⧍ cu ¼ o n G C G. H 1788 O s p Bot mag 994

846 MEDE'OLA *W en* Medeola.
4962 virginica *W* Indian Cucum ♐ △ cu ½ jn Y G Virginia 1759. R s.p Bot mag 1316

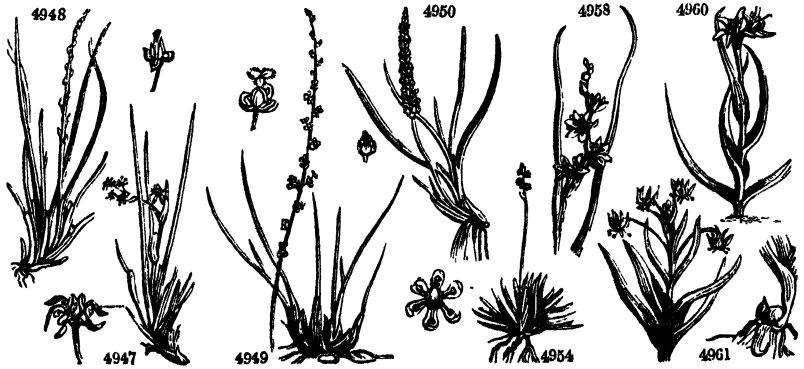
847 XEROPHYL'LUM *Mich* Xerophyllum
4963 setifólium *W* bristle-leaved ☿ cu 2 my jn W N. Amer. 1823. R s.p Bot. mag 748

848. WURMBE'A. *L* Wurmbea
4964 longiflóra *W* bell-flowered ♐ ⧍ cu my jn W C G H 1788 O s l Bot mag 1291
4965 spicáta *B M* spiked ♐ ⧍ cu my jn Pu C. G. H. 1788 O s l Bot. mag 694
4966 capénsis *W.* spotted-flower ♐ ⧍ cu ½ my jn Br y C G H. 1768 O s p

849 ANDROCYM'BIUM *W* Androcymbium
4967 eucomóides *W* dwarf ♐ ⧍ cu ½ mr.my G C. G H. 1794 O s p Bot mag 641

850 TRIL'LIUM. *W.* Trillium
4968 séssile *W.* sessile-leaved ⁂ △ or ¼ ap my Br N Amer 1759 R s p Bot mag 40
4969 petiolátum *Ph.* Plantain-leaved ⁂ △ or ½ ap my Br N Amer 1811 R s p
4970 erythrocárpum *Mi* painted-flower ⁂ △ or ½ my jn W N Amer 1811 R s p Bot. mag. 3002
4971 ovátum *Ph* purple-flower ⁂ △ or ½ my jn P Pu N Amer 1812 R s p
4972 púmilum *Ph* dwarf ⁂ △ or ¼ my jn R Carolina 1812 R s p
4973 cérnuum *W* drooping-flow ⁂ △ or 1½ ap my W N Amer 1758 R s p Bot mag 954
4974 erectum *W* stinking ⁂ △ or ½ ap my Br N Amer 1759 R s p Bot mag 470
β album *white-flowered* ⁂ △ or ½ ap my W N Amer R s p Bot mag 1027
4975 péndulum *Ph* pendulous ⁂ △ or ½ ap my W N Amer 1805 R s p W ho b 1 t. 35
4976 grandiflórum *Ph* large-flowered ⁂ △ or ½ ap m W N. Amer 1790 R s p Par lond 1

Juncæ ? Sp 1.
Alismaceæ. Sp. 1
Alismaceæ. Sp 3—.
Melanthaceæ. Sp 1.
Smilaceæ Sp 2
Melanthaceæ. Sp 2—7
Melanthaceæ. Sp 6—12.
Smilaceæ Sp 1.
Melanthaceæ. Sp. 1
Melanthaceæ. Sp 3.
Melanthaceæ. Sp 1.
Melanthaceæ. Sp 9—10.



History, Use, Propagation, Culture,

839. *Flagellaria.* From *flagellum*, a thong, in allusion to the length, toughness, and slenderness of its shoots.

840. *Scheuchzeria* So named by Linnæus, in memory of the two brothers, John James Scheuchzer, professor of mathematics at Zurich, author of Itinera Alpina, and John, professor of physic at Zurich, author of a famous Treatise on Grasses A curious little marsh plant.

841. *Triglochin.* From τρεις, three, and γλωχις, a point, in allusion to the three angles of the capsule All domestic cattle are fond of the hardy species, which afford an early bite on the sides of Highland mountains, and are greedily eaten where they occur in salt marshes.

842. *Lichtensteinia* Named after M Von Lichtenstein, a Prussian traveller at the Cape of Good Hope.

843. *Myrsiphyllum.* From μυρσινη, a myrtle, and φυλλον, a leaf, in allusion to the resemblance between the leaves of the species and those of myrtle

844. *Tofieldia.* Named by Hudson, after a Mr Tofield, a country gentleman living near Doncaster.

TRIGYNIA.

4946 A shrub with distichous branches, Leaves cirrhous at end

4947 A rushy aquatic plant

4948 Capsules 3-celled linear
4949 Capsules 3-celled smooth linear narrowed at end
4950 Capsules 6-celled ovate

4951 The only species, Sepals very narrow

4952 Leaves ovate cordate at base oblique
4953 Leaves alternate ovate-lanceolate

4954 Smooth, Flowers clustered in spikes, Sepals obtuse, Capsules oblong
4955 Scape rachis and leaf-stalks downy all over

4956 Leaves lanceolate bearded at base, Stem 3-flowered, Sepals sessile
4957 Stemless, Leaves imbricated grassy, Flowers sessile
4958 Leaves linear subulate, the upper dilated at base, Spike wavy, Sepals with claws
4959 Leaves linear, Spike one-sided, Sepals with claws
4960 Leaves lin lanc longer than one-flowered stem, Sepals lanc. with claws
4961 Peduncles one-flowered cernuous

4962 Leaves whorled in the middle of stem, in threes at the summit

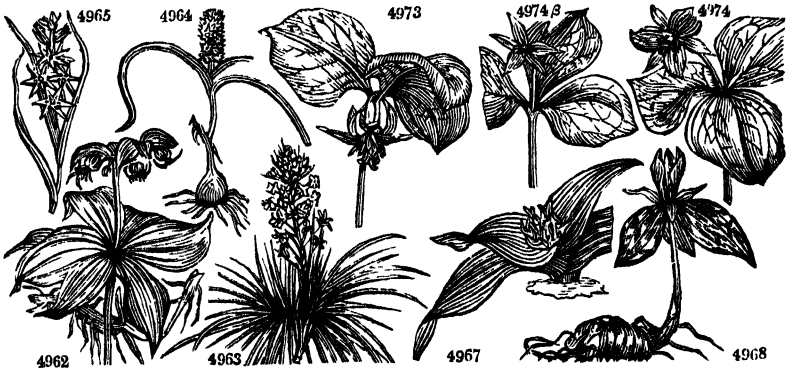
4963 Leaves of the stem setaceous

4964 Spike many-flowered longer than leaves, Tube twice as long as limb
4965 Leaves lanceolate channelled upright, Tube shorter than stellate limb
4966 Leaves lanceolate hooded

4967 Leaves oblong lanceolate cucullate

4968 Flower sessile erect, Petals lanceolate erect twice as long as calyx
4969 Flower sessile erect, Petals linear lanceolate erect a little longer than calyx
4970 Stalk of flower nearly erect, Petals oval-lanceolate acute recurved about twice as long as narrow calyx
4971 Stalk of flower erect, Petals oblong acute spreading a little longer than calyx
4972 Stalk of flower erect, Petals scarcely longer than calyx, Leaves oval oblong obtuse sessile
4973 Stalk of flower recurved, Petals lanceolate acuminate flat reflexed the length and breadth of calyx
4974 Stalk of flower inclining, Flower nodding, Petals scarcely longer but much broader than calyx

4975 Flower pendulous, Petals ovate with a short point, Leaves rounded rhomboid acuminate subsessile
4976 Flower cernuous, Petals spatulate-lanceolate erect at base much longer than calyx



and Miscellaneous Particulars.

845 *Melanthium.* A name applied by the Greeks to the Nigella of the Latins What resemblance the modern plant bears to the ancient has not been stated

846 *Medeola* A name in remembrance of Medea, the famous sorceress, given to this plant on account of supposed powerful effects in medicine, but which it is now thought not to possess

847 *Xerophyllum.* From ξηρος, dry, and φυλλον, a leaf: its leaves appear as if withered An American plant with a long spike of white flowers, resembling Helonias

848 *Wurmbea* So called by Thunberg, in gratitude for services rendered him at Batavia by one Wurmb, a Dutch agent there Jussieu considers this not generically distinct from Melanthium

849 *Androcymbium* From ανηρ ανδρος, a man, or, in botanical language, a stamen, and κυμβος, a little boat, in allusion to the peculiar conformation of the stamens and their appendages.

850 *Trillium* From *trilix*, triple, the calyx has three sepals, the corolla 3 petals, the pistil 3 styles, and the stem 3 leaves These are curious little plants, somewhat difficult to keep Sweet says they do best on a bed of peat, and may be increased, though slowly, by the division of the root or by seeds

†851. COL'CHICUM. *W.*	MEADOW-SAFFRON.					*Melanthaceæ. Sp* 7								
4977 autumnâle *W.*	common	♃	△	m	½	s o	Pu	Britain	mead.	O	s.p	Eng bot. 133		
β album	*white-flowered*	♃	△	m	½	s o	W	Britain	mead	O	s p			
4978 arenárium *W en*	sand	♃	△	or	½	s o	Pu	Hungary	1816	O	s p	Pl rar h. 2.t.179		
4979 byzántinum *B M.*	broad-leaved	♃	△	or	½	s o	Pu	Levant	1629	O	s p	Bot. mag. 1122		
4980 variegâtum *I.*	chequer-flower.	♃	△	or	½	au o	Pu	Greece	1629	O	p l	Bot. mag 1028		
4981 umbrósum *Fisch.*	Crim	♃	△	or	½	au o	Pk	Crimea	1819.	O	p l	Bot reg 541		
4982 versicolor *Kit.*	changeable	♃	△	or	½	au	Pu	Crimea	1820.	O	p l	Bot reg 571		
4983 montânum *L*	mountain	♃	△	or	½	au	Pu	S Europe	...	O	p.l	All. p 1. t. 74 f.2		
*852. HELO'NIAS *L.*	HELONIAS.					*Melanthaceæ. Sp* 8								
§4984 lútea *B. M.*	spiked-flower	♇	△	or	2	jl au	Y	N. Amer	1759.	R	s p	Bot mag 1062		
4985 bullâta *W.*	spear-leaved	♇	△	or	1	ap my	Pu	N. Amer	1758.	R	s p	Bot mag. 747		
4986 læ'ta *B M.*	channel-leaved	♇	△	or	½	jn	W	N Amer	1770	R	s p	Bot. mag 803		
§4987 glabérrima *B M*	smooth	♇	△	or	1	my jn	Y	N. Amer	1811.	R	s p	Bot mag 1680		
§4988 bracteâta *B M*	large-bracted	♇	△	or	1½	my jn	G	N Amer.	1811.	R	s p	Bot mag. 1703		
4989 ténax *Ph*	tough-leaved	♇	△	or	1½	...	W	N. Amer	1811	R	s.p	Ph amer. 1 t. 9		
4990 angustifólia *Mich.*	narrow-leaved	♇	△	or	1	my jn	W	N. Amer	1823	R	s.p			
4991 graminea *B. M*	panicled	♇	△	or	2	my jn	W	N. Amer.	1812.	R	s p	Bot mag. 1599		
853. NOLI'NA *Mich*	NOLINA.					*Melanthaceæ. Sp* 1.								
4992 georgiâna *M*	Georgian	♃	△	or	2½	jl.au	W	Georgia	1812.	R	s p	Pl ma t. 342 f 1		
854. APONOGE'TON *W*	APONOGETON					*Fluviales Sp* 3.								
4993 monostáchyon *W*	simple-spiked	≛	⍁	cu	½	au o	Pk	E. Indies	1803.	O	p l	Bot. rep 406		
4994 distáchyon *W*	broad-leaved	≛	⍁	cu	½	my jl	W	C G H.	1788	O	p l	Bot mag 1293		
4995 angustifólium *W*	narrow-leaved	≛	⍁	cu	½	ap s	W	C G. H.	1788	O	p l	Bot mag 1268		
†855 SABAL. *P S*	SABAL					*Palmæ Sp.* 1								
4996 Adansóni *B M*	Adanson's	🌴	⍁	or	6	jn au	G	Florida	1810.	S	s l	Bot. mag 1434		
*856 RU'MEX *W*	DOCK					*Polygoneæ. Sp* 37—79								
4997 Patiéntia *W.*	Patience	✱	△	cul	4	jn jl	G	Italy	1573	R	co	Blackw h t 489		
4998 sanguíneus *W*	bloody-veined	✱	△	cul	3	jn jl	G	England	sha pl		co	Eng bot 1533		
4999 crispus *W*	curled	✱	△	m	2	jn jl	G	Britain	rubble		co	Eng bot 1998		
5000 Británnica *W*	Virginian	✱	△	m	2	jn jl	G	N Amer.	...		co	Plu alm.t.354 f 1		
5001 persicarioides *W*	Persicaria-like		○	cu	2	jn jl	G	N Amer	1773	S	co			
5002 ægyptiacus *W.*	Egyptian		○	cu	1½	jn jl	G	Egypt	1734	S	co	Till pis. t.37 f.1		
5003 dentâtus *W*	dentated		○	cu	½	jl au	G	Egypt	1732	S	co	Di el. t 158. f 191		
5004 marítimus *W*	golden	✱	△	w	1	jl au	G	Britain	salt ma	R	co	Eng bot. 725		
5005 palústris *Sm*	yellow-marsh	✱	△	w	2	jl.au	G	England	mar	R	co	Eng bot 1932		
5006 divaricâtus *W*	spreading		○	w	2	jl au	G	Italy	1793	S	co	Til. pis t. 37. f. 2		
5007 acûtus *W*	sharp	✱	△	dy	2	jn jl	G	Britain	wat pl	R	co	Eng bot 724		
5008 obtusifólius *W*	broad-leaved	✱	△	w	3	jn.au	G	Britain	rubble	R	co	Eng bot. 1999		
5009 púlcher *W*	Fiddle	✱	△	w	2	jn au	G	Britain	gra pa.	R	co	Eng. bot. 1576		
5010 confértus *W*	close-headed	✱	△	cu	4	jn jl	G	.....	1796	R	co			
5011 nemorósus *Schr*	wood	✱	△	cu	2	jl	G	Germany	...	R	co			
5012 condylódes *Bieb*	whole-colored		○	cu	3	jl	G	Caucasus		S	co			
5013 brasiliénsis *Lk*	Brasilian	🌴	△	cu	1½	my	G	Brazil	1822.	R	co			



History, Use, Propagation, Culture,

851 *Colchicum* From Colchis, saith Dioscorides, where this plant grows in abundance; but it is probable that the term Colchicum was applied to all poisonous plants, among which this certainly held no inconsiderable place The economy of this plant in regard to its bulbs, flowers, and seeds, is singular, and may be classed with other anomalies found in Crocus, &c The bulb, which in C. autumnale is about the shape and size of that of a tulip, is formed in the following manner · —

From the permanent, striated, dilated tuber of the old root, situated on one side, and clothed with the coats of the preceding root-leaves, a new plant springs, which is tuberous at the base, throws out fibres at bottom like other bulbs, and is received into the bosom of the former tuber, which embraces it half round This has an outer radical spathe, which is cylindric and tubular, cloven at top on one side, and half under ground. From two to six flowers half emerge from this spathe without leaves In the mean time the fruits, much later than the flowers, sit on the stem rising out of the spathe. As the plant advances the new tuber increases, the old one, deprived of its nutriment, perishes, and at the same time the former pushes forth from its base the germ of a succeeding plant. There are commonly two lateral germs from the same tuber, one lower, just described, bearing the flower and seed, the other superior, caulescent like the former, but more slender, and scarcely floriferous

The flowers, which arise with long slender tubes from the root, die off in the end of October, without leaving any external appearance of seeds These lie buried all the winter within the bulb, in spring they grow up on a fruit-stalk, and are ripe about the time of hay-harvest May not the very great length of the styles account in some measure for the delay in the ripening of the seeds? As this plant blossoms late in the year, and probably would not have time to ripen its seeds before winter, Providence has contrived its structure such, that it may be performed at a depth within the earth, out of the reach of the usual effects of frost, and as seeds buried at such a depth are known not to vegetate, a no less admirable provision is made to raise them above the surface when they are perfected, and to sow them at a proper season

4977 Leaves flat lanceolate erect

4978 Leaves linear channelled erect, Styles shorter than flower
4979 Leaves 5 ovate-oblong very broad, Flowers very numerous
4980 Leaves wavy spreading
4981 Two or many-flowered, Sepals linear oblong obtuse, Leaves small oval grassy-green
4982 Leaves 4 glaucous spiral, Flowers small very dwarf, Style one
4983 Leaves appearing with flower linear much spreading

4984 Scape leafy, Leaves oblong lanceolate, Flowers dicecious
4985 Leaves lanceolate ensiform nerved, Bractes linear-lanceolate
4986 Scape leafy, Raceme oblong, Bractes short oblong, Leaves smooth lanceolate linear
4987 Leaves channelled nerved, Segments of flower broad ovate with a transverse nectary at base
4988 Root horizontal, Leaves lanc. erect, Bractes longer than flower, Nectaries distinct
4989 Scape leafy, Raceme showy lax, Bractes membranous, Leaves subulate setaceous very long
4990 Raceme oblong lax, Leaves very long and narrow, Caps. oblong
4991 Leaves grassy, Panicle loose, Segments of flower ovate acute

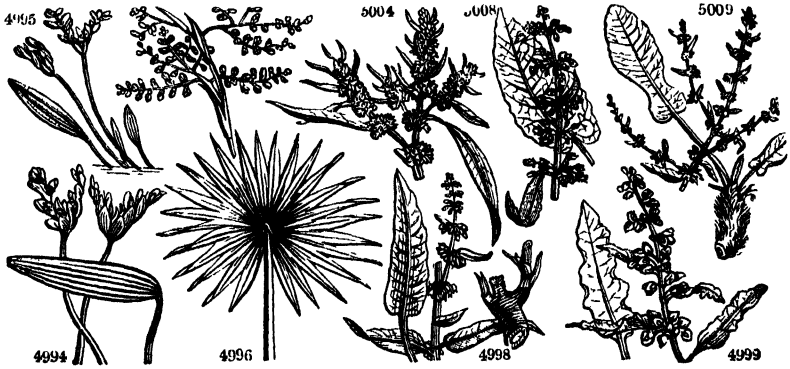
4992 Leaves very long narrow dry, Flowers racemose

4993 Leaves oval, Spike one cylindrical
4994 Spike bifid, Leaves linear oblong floating, Bractes entire
4995 Spike bifid, Leaves linear lanc. erect, Bractes bipartite

4996 The only species

§ 1 *Hermaphrodite. Valves marked with a grain*

4997 Valves cordate entire one grained, Leaves ovate lanceolate
4998 Valves entire · one grained, Leaves cordate lanceolate
4999 Valves entire all grained, Leaves lanceolate wavy acute
5000 Valves ovate entire veinless all grained, Fruit-stalks pendulous, Leaves lanceolate
5001 Valves toothed all grained, Leaves lanceolate
5002 Valves trifid setaceous · one grained
5003 Valves toothed all grained, Leaves lanceolate
5004 Valves toothed grained, Leaves linear
5005 Valves lanceolate grained toothed at base, Leaves linear lanc Whorls distant
5006 Valves toothed all grained, Leaves cordate-oblong obtuse pubescent
5007 Valves toothed all grained, Leaves cordate-oblong acuminate
5008 Valves toothed all grained, Leaves cordate oblong obtuse crenate
5009 Valves toothed one grained, Radical leaves panduriform
5010 Valves rounded cordate repand · one grained, Leaves cordate oblong wavy at edge
5011 Valves oblong obtuse entire : one grained, Leaves lanceolate
5012 Valves entire lanceol. one grained, Leaves cordate lanceolate
5013 Valves entire lanceolate acute grained, Upper leaves linear-lanceolate



and Miscellaneous Particulars

There are a few varieties of common Colchicum cultivated by florists, *viz.* the white, striped-flowered, striped-leaved, broad-leaved, many-flowered, and double-flowered No cattle are said to eat it, though it is remarkably abundant in the meadows of the Italian Alps, and the leaves must certainly be frequently made into hay

C autumnale, as a medicine, has been known since the days of Hippocrates. It possesses diuretic, purgative, and narcotic properties and on the continent, where it was recommended to notice by Baron Stoerck, it is a favorite remedy in dropsy, particularly hydrothorax, and in humoral asthma. But as it does not differ in its mode of action from squill, and is more uncertain in its operation, it has not been much used in that complaint in this country In gout and rheumatism, however, its efficacy has been fully ascertained and in allaying the pain it may be almost said to possess a specific property. It operates on the bowels chiefly, and the nerves, diminishing the action of the arterial system. (*Thomson's Mat Med* 257)

All the species are ornamental as border-flowers, and may be blown in water-glasses.

852 *Helonias* Derived from ἕλος, a marsh. Some of the species grow in bogs in N. America These plants delight in a moist situation and peat soil : they increase slowly by dividing at the root or by seeds.

853. *Nolina* Named after an American botanist of French extraction, called P. C Nolin. This plant is best grown in pots, as it requires protection during winter.

854 *Aponogeton* A name of the same meaning as Potamogeton (see that genus), of which it is probably an incomplete anagram. These plants are bulbous aquatics, and grow freely in loam and peat plunged in a cistern of water They are very pretty ornaments of the aquarium.

855 *Sabal.* A name employed by Adanson. It is supposed to have no meaning

856 *Rumex* A name given by the Latins to a root of thorn

R patientia (so called from the slowness of its operation as a medicine) and sanguineus, were formerly



CLASS VII.—HEPTANDRIA. 7 STAMENS.

A SMALL class, of which the Parinarium, which is a good tropical fruit, and the valuable Horse-chesnut, Æsculus, are the only remarkable genera The Astranthus is a curious genus of the natural order of Homalineæ.

Order 1. MONOGYNIA. 7 Stamens 1 Style.

862. *Trientalis* Cal 7-leaved Cor 7-parted, equal, flat Berry without juice
863 *Disandra* Cal about 7-parted Cor. rotate, 7-parted. Caps 2-celled, many-seeded
864 *Pisonia* Cal campanulate, 5-cleft Cor O Berry 1-celled, 1-seeded
865 *Petiveria* Cal 4-leaved Cor O Style lateral. Stigma pencil-shaped Seed 1, with four reflexed awns at the end.
866 *Æsculus* Cal 1-leaved, inflated Cor 4–5-petaled, unequal, pubescent, inserted in the calyx. Caps. 3-celled Seeds large, chesnut-like
867 *Jonesia* Cal 2-leaved Cor funnel-shaped, with a closed fleshy tube and 4-cleft limb. Nectary, a ring inserted in the throat of the tube A Legumen

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MONOGYNIA.

862. TRIENTA'LIS. *W*	WINTER-GREEN				*Primulaceæ*	*Sp* 2							
5044 europæ'a *W*	oval-leaved	♃	△	cu	4	my jn	W	Britain	m wo	R	s p	Eng. bot 15
5045 americána *Ph*	spear-leaved	♃	△	cu	4	jl au	W	N Amer	1816	R	s p	
863 DISAN'DRA *W.*	DISANDRA				*Scrophularineæ*	*Sp* 1							
5046 prostráta *W*	trailing	♃	⧋	or	4	my au	Y	Madeira	1771	R	p l	Bot. mag 218
864 PISO'NIA *W.*	PISONIA.				*Nyctagineæ*	*Sp* 8 — 12.							
5047 aculeáta *W*	prickly	♀	□	cu	10	mr.ap	G	Jamaica	1739	C	p l	Lam ill. t. 861
5048 frágrans *Lk*	fragrant	♚	□	cu	3	...	...	.....	1823	C	p l	
5049 macrophýlla *Lk*	long-leaved	♚	□	cu	3	...	...	... ..	1823	C	p l	
5050 nigricans *W*	black	♚	□	cu	3	...	G w	W Indies	1806	C	p l	
5051 obováta *Lk*	obovate	♚	□	cu	3	...	...	.....	1823.	C	p l	
5052 mexicána *W*	Mexican	♚	□	cu	4	...	...	Mexico	1824	C	p l	
5053 nítida *W*	shining	♚	□	cu	3	...	...	Madagas	1824	C	p l	
5054 grándis *R Br*	large	♚	⊔	or	12	...	...	N. Holl	1805	C	p l	
865 PETIVE'RIA *W*	PETIVERIA.				*Chenopodeæ*	*Sp* 2							
5055 alliácea *W.*	Garlic-scented	♃	□	cu	2	jn jl	W	Jamaica	1759	C	p l	Tr ehr 33 t 67
5056 octándra *W*	dwarf	♃	□	cu	2	jn jl	W	W. Indies	1737.	C	p l	Pl ic 213 t. 219
†*866. ÆS'CULUS *W*	HORSE-CHESNUT				*Hippocastaneæ.*	*Sp.* 8 —10							
5057 Hippocástanum *W*	common	♃		tm	40	ap my	W	Asia	1629	S	co	Sch arb 1 t 38
§5058 Pávia *W*	red-flowered	♃		or	20	my jn	Sc	N Amer	1711	G	s l	Dend brit 120
5059 discolor *Ph*	dwarf	♃		or	8	my	R	Georgia	1812	G	s l	
§5060 fláva *W*	yellow-flowered	♃		or	20	my jn	Y	N Amer	1764	G	s l	Dend brit. 103
5061 glábra *W en.*	smooth-leaved	♃		or	12	my jn	G y	N. Amer	1812	G	co	



History, Use, Propagation, Culture,

862. *Trientalis* From *treis*, the third of a thing; why so named we do not understand. Sir J E Smith says, "Few persons have seen the fruit of this plant, and it was most unaccountably mistaken, even by Linnæus and Gærtner The valves of the ripe capsule become concave externally, convex and polished within, and have been taken for a permanent corolla But they are opposite to the calyx leaves, which the segments of the corolla are not The beautiful tunics of the seeds were supposed to be the skin of a dried berry, and are not faithfully represented by Gærtner. (*English Flora*, vol ii 208)

863 *Disandra*. From *dus*, difficult, and *anyr andros*, a male, or, in botanical composition, a stamen, that is to say, a plant of which the stamens are subject to vary, and therefore difficult for botanists A trailing plant with bright yellow flowers

864 *Pisonia*. So named by Plumier, in honor of William Piso, a physician at Amsterdam, author of the Natural History of Brazil, 1648, fol P. aculeata is an inelegant tree with round reclining spiny branches, wanting support. It is common in the savannahs and other low places in the island of Jamaica, and in

868 *Dracontium* Spathe cymbiform. Spadix covered Cal O Petals 5 A berry
869 *Calla* Spathe ovate. Spadix covered Cal O. Cor O A berry
870 *Parnassum* Cal. 5-cleft. Petals 5 Stamens 14, of which 7 are barren. Drupe fleshy cribrose. Nut 2-celled, with 1-seeded cells.

Order 2. DIGYNIA.  7 Stamens 2 Styles.

871. *Limeum* Cal 5-leaved. Petals 5, equal. Caps. globose, 2-celled.

Order 3 TETRAGYNIA  7 Stamens. 4 Styles.

872 *Saururus* Cal. a spike of 1-flowered scales Cor O Ovaries 4 Berries 4, 1-seeded
873. *Astranthus* Cal O Cor hypocrateriform, with a 14-cleft limb Seed 1, small, superior.

Order 4. HEPTAGYNIA.  7 Stamens 7 Styles.

874 *Septas* Cal 7-parted. Petals 7 Ovaries 7 Caps 7, many seeded.

MONOGYNIA.

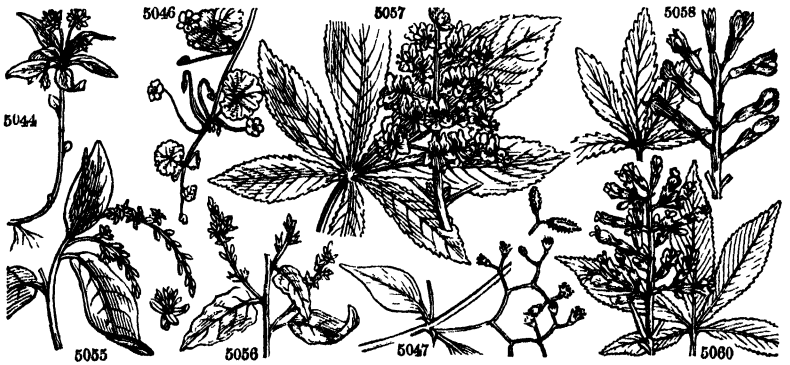
5044 Leaves lanceolate entire
5045 Leaves narrow lanceolate acuminate oblique

5046 Leaves reniform crenate, Flower-stalks in pairs

5047 Spines axillary horizontal, Leaves ovate narrowed at each end, Corymbs axillary
5048 Unarmed, Leaves opposite acuminate narrowed into a short stalk very smooth fleshy
5049 Unarmed, Leaves opposite a little narrowed towards the base entire smooth, Lateral nerves parallel
5050 Unarmed, Leaves ovate acuminate, Flowers cymose erect, Fruit berried
5051 Unarmed, Leaves opposite acute scarcely narrowed at the base entire smooth with parallel nerves
5052 Leaves ovate entire villous, Flowers in umbels
5053 Leaves shining pointed (*Lilac de Madagascar*)
5054 Leaves oblong acuminate smooth, Cymes compound, Flowers polygamous, Fruit spiny

5055 Flowers hexandrous
5056 Flowers octandrous

5057 Leaves digitate 7, Petals 5 spreading
5058 Leaves quinate smooth unequally toothed, Petals 4 with connivent claws the length of the calyx
5059 Leaves quinate pointed at each end downy beneath unequally toothed, Petals 4
5060 Leaves quinate beneath at the rib pubescent, Petals 4 with connivent claws longer than the calyx
5061 Leaves quinate quite smooth, Petals 4 spreading with claws the length of the calyx, Fruit spiny



and Miscellaneous Particulars.

several other islands in the West Indies, where it is very troublesome to whoever passes, fastening itself by its strong crooked thorns to the clothes, and the seeds being glutinous and burry, also fasten themselves to whatever touches them so that the wings of the ground-doves and other birds, are often so loaded with the seeds, as to prevent their flying, by which means they become an easy prey.

865 *Petiveria* So named by Plumier, in honor of James Petiver, apothecary of London, and fellow of the Royal Society, author of Museum, 1695; Gazophylacium, 1702, collected into one volume folio, with many plates P alliacea, is common in savannahs and woods in the West Indies, where it is a troublesome weed, and tastes the milk of cows that feed on it It is so acrid, that on chewing a little, it burns the mouth and leaves the tongue black, dry, and rough, as it appears in a malignant fever. It is thought, however, to be coveted by Guinea-hens, and hence its vulgar name of Guinea-hen weed.

866 *Æsculus*, or *Esculus*, as Pliny writes it. A name which the Latins gave to a tree which furnished them with an esculent nut that plant was the Quercus Esculus of Linnæus. *Marronier*, Fr, *Marronen-*

5062 cárnea *Hort*	flesh-colored	or	7	jn	Pu	N. Amer.	1823	G	co	Dend brit 121		
5063 pállida *W en*	pale-flowered	or	12	jn	G Y	N Amer	1812.	G	co			
§5064 parviflóra *H K.*	small-flowered	or	6	jl au	W	N. Amer	1786.	L	s l			
867 JONE'SIA *W*	Jonesia			*Leguminosæ. Sp* 1								
5065 pinnáta *W*	winged-leaved	ft	20	...	O	E. Indies	1796.	C	p l	Rh mal 5. t. 59		
868 DRACON'TIUM *W*	Dragon			*Aroideæ Sp* 3—9								
5066 polyphýllum *W*	purple-stalked	cu	2	mr jn	Ap	India	1759.	R	lt l	Bot reg 700		
5067 spinósum *W*	prickly	cu	2	ap my	Ap	Ceylon	1759.	R	lt l			
5068 pertúsum *W*	perforated	cu	6	ap jn	Ap	W Indies	1752.	R	p l	J sch 2 t 184 5		
869 CAL'LA *W*	Calla			*Aroideæ. Sp* 3—5								
§5069 æthiópica *W*	Ethiopian	or	3	ja my	Ap	C G H	1731	Sk	r m	Bot mag 832		
5070 palústris *W*	marsh	cu	½	jl au	Ap	N Europe	1768	D	p	Bot mag 1831		
5071 aromática *Roxb*	aromatic	or	2	jl	Ap	China	1813	D	r m	Bot mag 2279		
870 PARINA'RIUM *Juss*	Parinarium			*Chrysobalaneæ Sp* 2—5								
5072 excélsum *Sab*	Guinea Plum	fr	60	...	W	S Leone	1822	C	l			
5073 macrophýllum *Sab*	Gingerbr Tree	fr	6	...	W	S. Leone	1822	C	r l			

DIGYNIA.

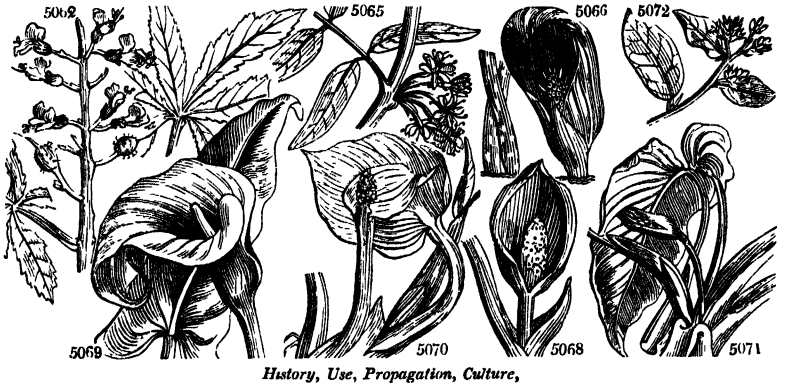
871 LI'MEUM *W*	Limeum		*Portulaceæ Sp* 1—4							
5074 africánum *W*	African	w	½ jn jl	W	C G H	1774	R	s p		

TETRAGYNIA.

872 SAURU'RUS *W*	Lizard's-tail		*Aroideæ Sp* 3							
5075 cérnuus *W*	drooping	cu	2	s	Ap	Virginia	1759	D	s p	
5076 lucidus *Jacq*	shining	cu	1½	s	Ap	N Amer	1791	D	l	Jacq ecl t 18
5077 chinénsis *Hort*	Chinese	cu	1½	..	Ap	China	1819	D	l	
873 ASTRAN'THUS *L*	Astranthus		*Homalineæ Sp* 1—2							
5078 cochinchinénsis *Lour*	Cochinchinese	cu	4	jn jl	W	China	1823	C	r m	Bot mag 804

HEPTAGYNIA.

874 SEPTAS *W*	Septas		*Sempervivæ Sp* 3							
5079 capénsis *W*	Cape	cu	¾	au s	W	C G H	1774	R	s p	Bot rep 90
5080 globiflóra *B M*	globe-flowered	cu	¾	mr ap	W	C G H	1809	R	s p	Bot mag 1472
5081 umbélla *H. S*	skreen	cu	½	jl	W G	C G H	1800	R	s p	



History, Use, Propagation, Culture,

baum, Ger, and *Marrone*, Ital Æ. hippocastanum (*ἵππος*, horse, horse-chesnut; because it was formerly a veterinary medicine) is a magnificent tree, at once grand from its magnitude and massy form, and beautiful when in blossom, from being covered with spikes of delicate white and pink flowers, protruding from among elegant digitate leaves It is a rapid growing tree, and speedily produces a considerable bulk of timber, which, however, is of little value as such The plant is best adapted for an ornamental tree in the outskirts of plantations, in avenues, or singly on lawns It is much prized by the French as an ornamental avenue tree, and when the geometric style of gardening was in vogue in this country was a good deal planted, as at Bushy park, Canons, Castle Howard, &c During the rage for the picturesque, it fell into disrepute from its "compact lumpish parabolic form," but the public are now convinced that there are other beauties besides those peculiarly adapted for representation by painters, and the taste for trees beautiful or interesting from their flowers, foliage, or other details, is now reviving The nuts or capsules are large and mahogany colored, and have often occasioned regret that they are not edible, like those of the Spanish chesnut Deer eat them greedily, and may be seen watching about the trees for their fall during windy weather. In Turkey they are ground and mixed with horse provender According to some, swine and sheep may be fattened on them, and poultry when they are boiled They are of a saponaceous nature, and broken and steeped in hot water might save soap, where that article is excessively dear This tree migrated from the northern parts of Asia into England by Constantinople, Vienna, Italy, and France Parkinson in 1629 places it in his orchard as a fruit tree, and describes the nuts as superior to the ordinary sort

E Pavia was so named by Boerhaave, in honor of Peter Paw, a Dutchman, and professor of botany at Leyden, in 1601

The other species have beautiful flowers, but are not free growing trees

5062 Leaves 6-7-nate obov acuminate 2-serrate, Petals 4 connivent with claws shorter than cal Anth smooth
5063 Leaves quinate, Petals spreading with claws shorter than calyx, Stam twice as long as cor Fruit spiny
5064 Leaves quinate, Petals 4, Stamens twice as long as corolla

5065 The only species

5066 Leaves supradecompound, pedate, Segments pinnatifid, Scape much shorter than leaf-stalks
5067 Leaves sagittate, Peduncles and petioles prickly
5068 Stem climbing, Leaves cordate ovate bored through

5069 Leaves sagittate cordate, Spathe cucullate, Spadix male upwards
5070 Leaves cordate, Spathe flat, Spadix hermaphrodite all over
5071 Leaves cordate acuminate, Spathe boat-shaped hiding the spadix

5072 Leaves ovate-oblong green above white beneath
5073 Leaves long oblong-lanceolate very white all over

DIGYNIA.

5074 Leaves oblong stalked

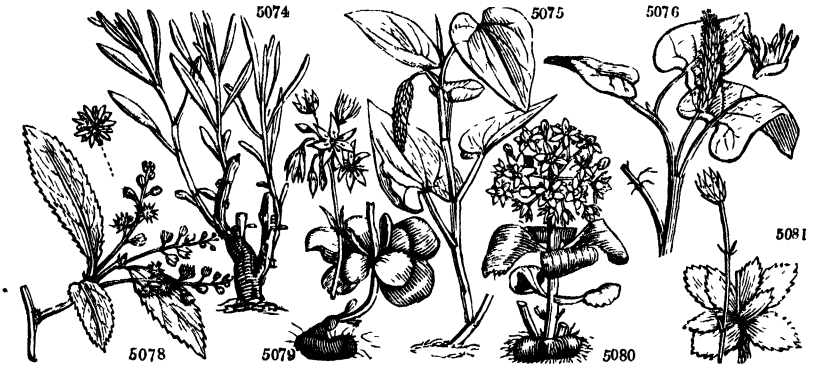
TETRAGYNIA

5075 Leaves cordate stalked
5076 Leaves deeply cordate ovate-lanceolate shining
5077 Leaves cordate ovate acuminate shining nerved

5078 Leaves ovate lanceolate serrated

HEPTAGYNIA.

5079 Leaves connate crenate roundish, Stem nearly leafless
5080 Floral-leaves 4 spatulate doubly crenate, Umbel compound
5081 Stem-leaves about two hooded and connate into a skreen, Flowers many minute



and Miscellaneous Particulars

867 *Jonesia* Named in honor of the famous Sir W Jones, who to his other accomplishments added the knowledge of botany The most fragrant tree of India Large cuttings root well in sand under a hand-glass.

868 *Dracontium* From δρακων, a dragon The stems of some species are mottled like the skin of a snake

869 *Calla* A name of one of Pliny's plants, which probably was applied to something of the same natural order as that now called Calla

870. *Parinarium* The Guiana name of the genus is Parinari Very fine trees with fine bunches of terminal flowers, which are succeeded by plum-like fruits, that in hot climates are esteemed and served up at table It has been called Petrocarya by Schreber and other Linnæan botanists, who fancy science to depend upon names

871 *Limeum* An ancient name of a poisonous plant It is derived from λοιμος, pest, poison It was used, says Pliny, to poison arrows with The plant to which modern botany has applied this name is a dangerous poison

872 *Saururus* From σαυρα, a lizard, and ουρα, a tail, on account of its long and pyramidal tail, which may be compared to the tail of a lizard Aquatic plants with neat foliage, but with no beauty in their flowers

873 *Astranthus* From αστερ, a star, and ανθος, a flower, on account of the star like disposition of the segments of the flower A small Chinese bush with serrated leaves, and spikes of pale whitish green flowers

874 *Septas.* From *septem*, seven. All the parts of the flower are in seven. Very neat little Cape plants, with umbels of white flowers.



Class VIII. — OCTANDRIA. 8 Stamens.

This is a class, which, with reference to the plants which compose it, is of much consequence to the botanist and gardener To the former it is recommended by the singular Melastomaceous plants which it contains, the curious Michauxia, and the Jeffersonia, remarkable for its capsule, which opens like a snuff-box. To the gardener it possesses irresistible attraction, not only in the delightful Tetratheceæ, Boroniæ, and Correas of New Holland, in the Dimocarpus of China, celebrated for its truly excellent fruit, and in the Fuchsias, Œnotheras, Combretums, and Vacciniums, some of which form the pride of our hardy gardens; but also in the magnificent tribe of Heaths, which are certainly the most beautiful of plants under cultivation This is abundantly attested by the splendid collections of Lee of Hammersmith, Rollison of Tooting, and last, but not least, of Loddiges of Hackney, where the precision of science is combined with the allurements of form and coloring

Order 1 MONOGYNIA.  8 Stamens. 1 Style.

§ 1. *Ovary superior*

875 *Tropæolum* Cal 1-leaved, 5-cleft, spurred Petals 5, unequal Nuts coriaceous, furrowed. Seed 1, roundish.
876 *Roxburghia* Cal 4-leaved. Petals 4. Nectary 4 lanceolate leaves inserted in the middle of the petals Anthers 2, hanging down from the base of each nectarial leaf Caps 1-celled, 2-valved, many seeded Seeds on a spongy placenta.
877 *Grisiea* Cal 4-cleft. Pet. 4, from the recesses of the calyx Filaments very long, ascending Capsule globose, 1-celled, many-seeded
878 *Boronia* Cal. 4-cleft, persistent. Petals 4, ovate Nect. coronate. Filam ciliated, incurved. Stigma capitate Caps 4, 2-valved Seeds solitary, with an arillus
879 *Tetratheca* Cal 4-cleft Petals 4 Anthers 4-celled Caps 2-celled, 5-valved, with valves bearing the septa in their middle Seeds about 2
880 *Correæa* Cal campanulate Petals 4 Caps 4-celled, opening with 4 valves Cells 1-2-seeded.
881. *Mimusops* Cal 4-leaved. Petals 4 Nectary 16-leaved Drupe pointed.
882 *Ornithrophe* Cal 4-parted Petals 4, bearded in the middle. Ovary double Berries 2, 1-seeded
883 *Dimocarpus* Sepals 5 Petals 5, reflexed, villous inside Berries 2, one of which is often abortive, barked, tubercled, 1-celled, 1-seeded.
884 *Melicocca* Cal 3-parted. Petals 4, reflexed below the calyx Stigma peltate Drupe with a bark
885 *Blighia.* Cal 5-parted. Petals 5 Style very short Stigmas 3. Seed solitary with a very large arillus
886 *Metaxba* Cal 5-parted Petals 5, with two scales at their base Caps. oblong, 1-celled, 2-seeded
887 *Koltreuteria* Sepals 5 Petals 4, irregular Nect 4 bifid scales Caps inflated, 3-celled, with 2-seeded cells
888 *Guarea* Cal 4-toothed. Petals 4 Nectary cylindrical, bearing the anthers on the orifice Caps 4-celled, 4-valved Seeds solitary.
889 *Amyris* Cal 4-toothed Petals 4, oblong, spreading Stigma capitate Berry drupaceous, by abortion 1-seeded
890 *Ximenia* Cal 4-cleft Petals 4, hairy, revolute Drupe 1-seeded
891 *Bæckia* Cal 5-cleft. Petals 5 Caps 3-4-celled, many-seeded, covered with the calyx Seeds few
892 *Erica.* Sepals 4, persistent. Cor 4-cleft, persistent. Filaments inserted in the receptacle Anthers bifid. Caps membranous, 4-8-celled
893 *Menziesia* Cal 1-leaved Cor 1-petalous, ovate Filam inserted in the receptacle Caps. 4-celled, with the septa from the inflexed edges of the valves. Seeds many, numerous
894 *Chlora* Sepals 8 or 10 Cor. 1-petalous, 8-cleft. Caps 1-celled, 2-valved, many-seeded
895 *Michauxia* Cal many-cleft Cor rotate, 8-10-parted, revolute Nect. 8-valved, staminiferous. Caps 8-10-celled, many-seeded
896 *Jeffersonia* Sepals 5, colored, deciduous Petals 8, incurved spreading Stamens surrounding the ovary Caps obovate, stipitate, 1-celled, opening below the end.
897 *Dodonæa* Sepals 4 Cor. O. Filaments very short. Anth. oblong. Caps 3-celled, 3-winged Seeds 2
898 *Lawsonia* Cal. 4-cleft. Petals 4 Stamens in 4 pairs Caps 4-celled, many-seeded. Seeds angular

§ 2. *Ovary inferior.*

A *Seeds many*

899 *Osbeckia* Cal 4-cleft its lobes separated by a fringed scale Cor of 4 or 5-petals Anthers rostrate Caps 4-5 celled, surrounded by the truncated tube of the calyx Recept compressed, half ovate.
900 *Rhexia* Cal urceolate, 4-5-cleft. Petals 4, inserted in the calyx, oblique Anthers declinate Caps setose, 4 celled, inside the calyx Recept lunate. Seeds numerous cochleate
901 *Œnothera* Cal tubular, 4-cleft, with deciduous deflexed segments Petals 4, inserted in calyx Stigma 4-cleft Caps 4-celled, 4-valved, inferior Seeds naked, affixed to a 4-cornered central receptacle
902 *Gaura* Cal 4-cleft, tubular Petals 4, ascending towards the upper side Nect inferior, 1-seeded.
903 *Epilobium* Cal 4-cleft, tubular Petals 4 Caps oblong, inferior Seeds comose
904 *Fuchsia* Cal funnel-shaped, colored, deciduous Petals 4, in the throat of calyx, alternate with its segments Nectary an 8-furrowed gland Stigma capitate Berry oblong, obtuse, 4-cornered, 4-celled
905 *Jambolifera* Cal 4-toothed. Petals 4, funnel-shaped Filaments flattish. Stigma simple Fruit a 4-celled drupa
906. *Oxycoccus* Cal. 4-cleft Cor 4-parted, with linear revolute segments. Filaments conniving. Anthers tubular, 2-parted. Berry many-seeded
907 *Vaccinium* Cor urceolate or campanulate, 4-5-cleft, with reflexed segments. Filaments inserted on the ovary. Berry 4-5-celled, many-seeded.

B *Seed one*

908 *Memecylon* Cal with a striated bottom, and an entire edge Cor 1-petalous. Anthers inserted on the side of the end of the filament Berry crowned with the cylindrical calyx
909 *Lagetta* Cor caducous, tubular, 4-toothed, with 4 petal-like glands. Drupe hairy, pisiform, 1-seeded
910. *Daphne* Cor. 4-cleft, like a corolla, withering, including the stamens Drupe 1-seeded.
911. *Dirca* Cor. tubular, with an obsolete limb Stamens longer than tube Berry 1-seeded.

912. *Gnidia.* Cor. funnel-shaped, 4-cleft; with 4-8-petaloid scales at the orifice. Nut somewhat drupaceous
913. *Stellera.* Cor. 4-cleft, inflated in middle Stam inserted in throat, very short. Nut 1, beaked.
914 *Passerina.* Cor. 4-cleft, naked. Style filiform, lateral, long. Stamens inserted on the tube Nut 1, coated.
915 *Lachnæa* Flowers in heads Cor. 4-cleft, with an unequal limb Filaments long, with an unequal insertion. Nut somewhat drupaceous
916. *Combretum.* Cal. 4 toothed, campanulate, superior. Petals 4, inserted in the calyx Stamens very long. Caps. 4-angular, with membranous angles, 1-celled. Seed 1, oblong.

Order 2. DIGYNIA.  8 Stamens. 2 Styles.

917. *Galensa* Cal. 4-cleft. Cor. O Capsule roundish, 2-seeded.
918 *Aphananthe* Sepals 5. Two stamens opposite 2 sepals, 6 opposite and alternate with three other sepals
919. *Weinmannia.* Sepals 4 Petals 4 Caps. 2-celled, 2-beaked.
920 *Mohringia.* Sepals 4. Petals 4. Caps. 1-celled, 4-valved.

Order 3. TRIGYNIA.  8 Stamens 3 Styles

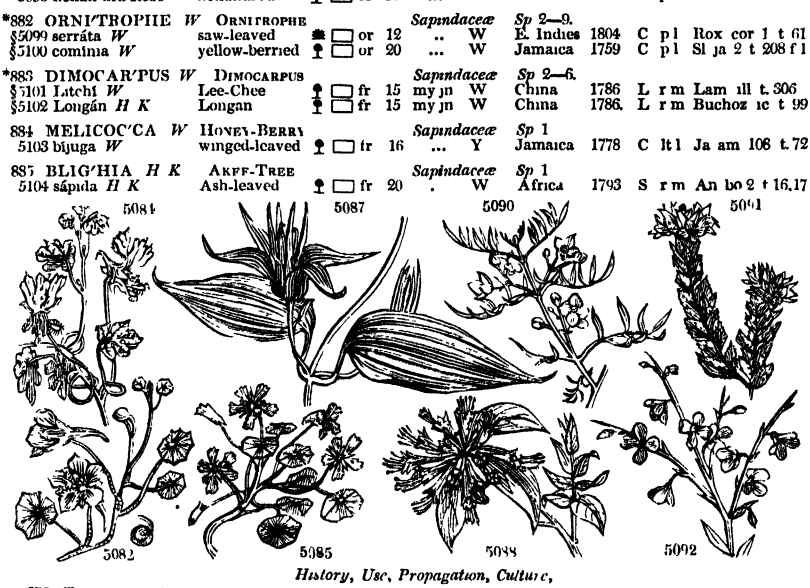
921 *Polygonum.* Cal. O Cor. 5-parted, like a calyx Seed 1, angular, covered. (Stamens and styles uncertain in number)
922 *Coccoloba.* Cal. 5-parted, colored, finally becoming berried. Cor O Berry formed of the calyx, 1-seeded.
923 *Paullinia* Sepals 5. Petals 4 Nect. 4-leaved, unequal Caps turbinate, 3-cornered, 3-celled, with 1-seeded cells. Seeds with an arillus.
924 *Serjania.* Sepals 5. Petals 4 Nect 4-leaved. Samaræ 3, longitudinally united, globose, connected downwards in a membranous wing
925. *Cardiospermum* Sepals 4 Petals 4 Nect 4-leaved, unequal. Caps 3, connate, inflated.
926. *Sapindus.* Sepals 4. Petals 4. Caps fleshy, connate, ventricose.

Order 4. TETRAGYNIA.  8 Stamens. 4 Styles.

927 *Verea* Sepals 4 Cor hypocrateriform, 4-cleft, with acute segments, and a ventricose tube Scales 4, at the base of the ovaries, linear Capsules 4, 1-celled, many-seeded
928 *Bryophyllum* Sepals 4. Petals 4, connate into a cylinder Seeds many
929. *Paris* Sepals 4 Petals 4, narrower Anth attached to the middle of filament Berry 4-celled
930 *Adoxa* Cal. 2-3-cleft, inferior. Cor 4-5-cleft, superior Berry 1-celled, 4-5-seeded, united with the calyx.
931 *Elatine* Sepals 4 Petals 4 Caps 4-celled, 4-valved, depressed, many seeded, the dissepiments opposite the sutures
932 *Haloragis* Sepals 4, superior Petals 4, caducous Drupe dry Nut 4-celled
933. *Forskohlea.* Cal. 4-leaved Petals 8 spatulate. Seeds 4 enveloped in wool.

MONOGYNIA.

†875 TROPÆ'OLUM *W*	INDIAN CRESS			*Tropæoleæ*	*Sp* 5—13								
5082 minus *W.*	small	☽ ○	or	½	jn o	O Y	Peru	1596	S	s l	Bot mag. 98		
β flore pleno	*double-flowered*	♀ ◯	or	1	jn o	O Y	Peru	1596	C	s l			
5083 május *W*	great	☽ ○	cul	6	jn o	O Y	Peru	1686	S	s l	Bot mag 23		
β flore pleno	*double-flowered*	☽ △	or	6	jn o	O	Peru	1686	C	r m			
5084 adúncum *Sm*	fringe-flowered	☽ ◯	or	3	jn.o	O	Peru	1775	S	r m	Bot. mag 1351		
T peregrinum B M													
5085 pinnátum *B R*	pinnate-flower	♀ △	or	2	jn o	P	.....	...	C	r m	Bot rep 535		
5086 hýbridum *W*	hybrid	♀ ◯	or	4	jn.au	O	.....	...	C	r m	Ber. ac. h 32 t 1		
876 ROXBURG'HIA *W*	ROXBURGHIA			*Aroideæ*	*Sp* 1.								
5087 gloriósoides *Roxb*	Gloriosa-leaved	♃ △	or	6	ap	Pk G	E Indies	1803	Sk	p.l	Bot mag 1500		
877 GRISL'EA *W*	GRISLEA			*Salicariæ*	*Sp* 1—3								
5088 tomentósa *W*	downy	♣ ▭	pr	3	my jn	R	E Indies	1804	C	s p	Bot reg. 30		
878 BORO'NIA *Sm*	BORONIA			*Rutaceæ*	*Sp* 3—13								
5089 ledifólia *Gay*	Ledum-leaved	♣ ▭	or	1½	mr ap	W	N S W	1814	L	s p	Vent malm 59		
5090 pinnáta *Sm*	Hawth.-scent	♣ ▭	or	2	f.my	Pu	N S W	1794	L	s p	Bot rep 58		
5091 serrulàta *Sm*	Rose-scented	♣ ▭	or	3	jn jl	R	N S W.	1816	L	s p	Bot. reg 842		
879 TETRATHE'CA *W*	TETRATHECA			*Tremandreæ*	*Sp* 1—5								
5092 júncea *W*	rushy	♣ ▭	pr	2	jl au	Pu	N S W	1803	C	s p	Sm nov h 1 t 2		
880 CORRÆ'A *W*	CORRÆA			*Rutaceæ*	*Sp* 3—4								
5093 álba *B Rep*	white-flowered	♣ ▭	or	3	ap jl	W	N S. W	1793	C	s p	Bot rep 18		
5094 speciósa *B Rep*	red-flowered	♣ ▭	or	3	ap jl	R	N S W	1806	L	s p	Bot reg 26		
5095 vírens *H K*	green-flowered	♣ ▭	or	2	my n	G	N S. W.	1800.	C	s p	Bot reg 3		
881 MI'MUSOPS *W*	MIMUSOPS.			*Sapoteæ*	*Sp* 3—6								
5096 Elengi *W*	pointed-leaved	♀ ▭	or	15	...	W	E Indies	1796	C	p l	Rox cor 1 t 14		
5097 Kaúki *W*	obtuse-leaved	♀ ▭	or	10	...	W	E Indies	1796	C	p l	Rum am 3 t 8		
5098 hexan'dra *Roxb*	hexandrous	♀ ▭	or	10	...	W	India	1804	C	p l	Rox cor 1 t. 15		
*882 ORNI'TROPHE *W*	ORNITROPHE			*Sapindaceæ*	*Sp* 2—9.								
§5099 serráta *W*	saw-leaved	♣ ▭	or	12	..	W	E. Indies	1804	C	p l	Rox cor 1 t 61		
§5100 cominia *W*	yellow-berried	♀ ▭	or	20	...	W	Jamaica	1759	C	p l	Sl ja 2 t 208 f 1		
*883 DIMOCAR'PUS *W*	DIMOCARPUS			*Sapindaceæ*	*Sp* 2—6.								
§5101 Litchi *W*	Lee-Chee	♀ ▭	fr	15	my jn	W	China	1786	L	r m	Lam ill t. 306		
§5102 Longán *H K*	Longan	♀ ▭	fr	15	my jn	W	China	1786.	L	r m	Buchoz ic t 99		
884 MELICOC'CA *W*	HONEY-BERRY			*Sapindaceæ*	*Sp* 1								
5103 bijuga *W*	winged-leaved	♀ ▭	fr	16	...	Y	Jamaica	1778	C	l t l	Ja am 108 t. 72		
885 BLIG'HIA *H K*	AKEE-TREE			*Sapindaceæ*	*Sp* 1								
5104 sápida *H K*	Ash-leaved	♀ ▭	fr	20	.	W	Africa	1793	S	r m	An bo 2 t 16,17		



History, Use, Propagation, Culture,

875 *Tropæolum* From *tropæum*, a trophy The leaf resembles a buckler, and the flower an empty helmet, of which trophies were formed T majus is an ornamental annual, and also a culinary plant The flowers are eaten in salads, and are very grateful they are also used as a garnish The seeds, which consist of three conjoined berries or nuts, with grooved wrinkled gibbous husks that become fungous when dry, are pickled in salt and vinegar, and used as a substitute for capers, to which some prefer them In the evening the flowers emit spontaneously at certain intervals visible sparks like those of an electric machine This was first observed by the daughter of Linnæus

876 *Roxburghia* In honor of William Roxburgh, M D born in Scotland, and settled in the East Indies, author of a splendid work on the plants of the coast of Coromandel. A singular plant, the natural affinities of which are yet obscure, it grows in loam and peat, and may be increased, though but slowly, by dividing at the root

877 *Grislea* So named after G Grisley, a Portuguese surgeon, author of Viridarium Lusitanicum, 1661 A free flowering shrub of considerable beauty, it grows in loam and peat, and cuttings root in sand under a hand-glass in heat

878 *Boronia* So named after Francis Borone, an Italian servant of Dr Sibthorp, who perished from an accident at Athens Pretty little New Holland plants, generally with red flowers These are valuable plants, as flowering nearly all the year "They thrive best in sandy peat, with the pots well drained with broken potsherds They may be propagated by layers or ripened cuttings, taken off at a joint and planted in sandy peat, and placed under a bell-glass, will strike root, if properly managed the glass must be taken off occasionally to dry them, as they are very liable to damp off"

879 *Tetratheca* From τετρα, four, and θηκη, a cell, in allusion to the four cells of the anthers, for which the plants are remarkable Cuttings root in sand under a bell-glass

880 *Correæa* So named after Joseph Correa de Serra, a learned Portuguese, who, without publishing much, was one of the most profound theoretical botanists of this age He died at Lisbon in 1823 "Ripened cuttings

* *MONOGYNIA.*

5082 Leaves peltate repand mucronate, Petals acute

5083 Leaves peltate repand, Petals obtuse

5084 Leaves peltate 5-lobed palmate toothed, Petals jagged

5085 Leaves peltate, Lobes obtuse unequal, Flowers pinnate
5086 Leaves peltate 5-lobed, Lobes obtuse repand, Petals cuneate toothed at end

5087 Leaves cordate many-nerved

5088 Leaves minute tomentose beneath, Corymbs axillary spreading

5089 Leaves linear lanceolate entire tomentose beneath
5090 Leaves pinnated with an odd one in 2-4-pairs very smooth, Leaflets linear acute, Pedunc dichotomous
5091 Leaves simple trapeziform acute serrulate at end smooth

5092 Leaves alternate few lanceolate and branches smooth

5093 Leaves ovate downy beneath, Teeth of calyx small acute distant
5094 Leaves ovate obtuse beneath rusty with down, Flowers erect, Calyx truncate
5095 Leaves ovate-oblong cordate, Flowers pendulous, Calyx with 4 acute teeth

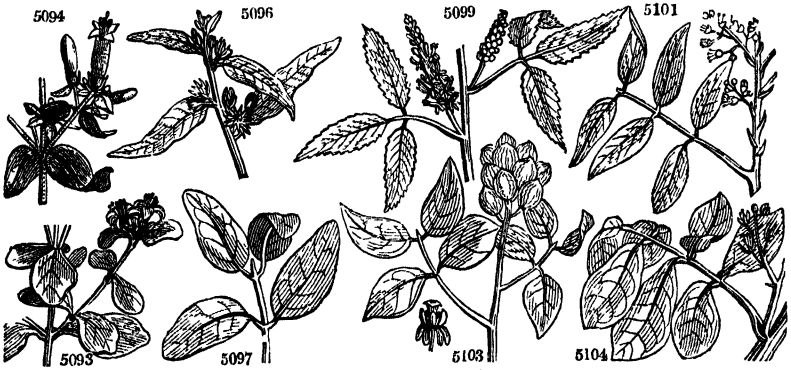
5096 Leaves alternate ovate acuminate
5097 Leaves alternate clustered at the ends of the branches oblong very obtuse
5098 Leaves alternate obovate emarginate, Flowers hexandrous

5099 Leaves ternate rough, Leaflets stalked ovate acuminate serrate, Racemes simple
5100 Leaves ternate, Leaflets stalked oblong narrowed at each end pubescent beneath, Racemes compound

5101 Leaves pinnated, Leaflets flat acute, Fruit scaly, Flowers apetalous
5102 Leaves pinnated, Leaflets rugose blunt, Fruit hispid, Flowers pentapetalous

5103 The only species

5104 The only species



and Miscellaneous Particulars

will root freely in sand under a bell or hand-glass The cuttings must not be planted too thick, or they will be liable to damp C. speciosa has generally been reckoned difficult to strike from cuttings, but it roots as freely as the others if properly managed, and requires the same treatment"

881 *Mimusops* From μιμος, an ape, and οψις, figure The flowers are thought to resemble the countenance of a monkey Ripened cuttings root readily in sand under a hand-glass

882. *Ornithrophe* From ορνις, a bird, and τροφη, nourishment Its fruit is much eaten by small birds In the Isle de France it is called *bois de merle*, or *thrush-wood*. Cuttings root in sand under a hand-glass

883. *Dimocarpus* From δισμος, double, and καρπος, fruit, its fruit grows in pairs These are fruit-bearing trees, cultivated in China The fruit is a berry in bunches of a red color, and rather larger than the grape The bunches are small, the skin of the berry is tough and leathery, the pulp is colorless, semitransparent, and of a slightly sweet subacid taste The fruit of D Litchi is frequently brought to England dried like raisins; that of D Longan has been ripened by John Knight, Esq of Lee Castle, in a lofty stove, erected for the purpose of growing tropical fruits A bunch was presented to the Horticultural Society, in September 1816, "supposed to be the only one ever produced in Europe, and which persons well acquainted with the long-yen in its native places of growth, pronounced to be quite as good as those grown within or near the tropics" (*Hort. Trans* ii 408)

884 *Melicocca.* From μελι, honey, and κοκκος, fruit, its fruit, which resembles the yolk of an egg, has a very sweet flavour mixed with a little acid This tree is cultivated in some parts of South America and in Jamaica for its fruit, which grows to the size of a large plum, and is very mellow The natives suck it for the sake of the salivation which it produces In our stoves it thrives well in light loamy soil, and cuttings root in sand under a hand-glass in heat

885. *Blighia* Named in honor of the famous Captain Bligh, who first carried the bread-fruit to the West Indies This is an esteemed African fruit tree with a reddish or yellow pome, about the size of a goose's egg,

886 METAI'BA. *Aubl.*	METAIBA.					*Sapindaceæ* *Sp* 1.								
5105 guianen'sis *Aubl* *Ephelis fraxinea W*	Ash-leaved	♀	▭	tm	60	...	W	Guiana	1803.	C	p l	Au gui 1. t 128		
887. KÒLREUTE'RIA. *W*	KÖLREUTERIA.					*Sapindaceæ.* *Sp* 1.								
5106 paniculáta *W*	panicled	♣		or	10	jl au	W	China	1763.	R	co	Bot. reg. 320		
888. GUA'REA *W*	GUAREA.					*Meliaceæ* *Sp* 1—5.								
5107 trichilioides *W.*	Ash-leaved	♀	▭	tm	15	my jn	W	S. Amer	1752.	L	r m	Cav. di. 7. t. 210		
889. AMY'RIS *W*	AMYRIS.					*Terebintaceæ* *Sp* 2—28.								
5108 polygama *W.*	simple-leaved	♀	▭	or	12	jn jl	W	Chili	1790	C	p l	Cav. ic 3. t. 239		
5109 sylvática *W.*	wood	♀	▭	or	16	jn,jl	W	Carthag	1793.	C	l p	J a. ed. pl. t. 188		
890 XIME'NIA *W*	XIMENIA					*Olacneæ* *Sp* 1—3								
5110 americána *W*	American	♀	▭	or	15	...	W	W Indies	1759.	C	s p	J. am. pic. t. 107		
891 BÆC'KIA *Sm*	BÆCKIA					*Myrtaceæ* *Sp* 3—7.								
5111 frutéscens *Sm*	Chinese	♣	⌴	pr	3	s d	W	China	1806	L	s l	Osb iter t 1		
5112 virgáta *Sm*	twiggy	♣	⌴	pr	3	au o	W	N Caled	1806.	C	s p	Bot. rep 598		
5113 densifólia *Sm*	close-leaved	♣	⌴	pr	3	au o	W	N S. W	...	C	s l p			
†*892. ERI'CA *W.*	HEATH					*Ericeæ* *Sp* 294—300								
§5114 Plukenétii *L*	Plukenet's	♣	⌴	spl	½	ap jl	R	C G H	1774	C	s p	And hea vol 1		
5115 Petivérii *W*	Petiver's	♣	⌴	spl	2	mr jl	Y	C G H	1774	C	s p	L. ill. t. 288 f 3		
5116 Bánksia *W*	Banks's	♣	⌴	el	½	f jl	W pu	C G H	1787.	C	s p	And. hea. vol. 1		
5117 penicillifióra *Sal calyculata* Wendl	white-pencilled	♣	⌴	or	2	ap jl	W	C G H.	1774	C	s p	And. hea. vol. 2		
5118 folliculáris *Salisb melástoma* Andr	yellow-pencill	♣	⌴	or	2	f jl	Y	C G H	1794.	C	s p	And. hea. vol 1		
5119 verticillata *Andr*	verticillate	♣	⌴	el	1	jl o	Sc	C G H	1774	C	s p	And hea vol 1		
5120 Sebána *Donn*	Seba's	♣	⌴	el	2	mr jn	O	C G H	1774	C	s p	And hea vol 1		
5121 Ewerána *H K*	Ewer's	♣	⌴	spl	2½	jl n	Pk o	C G H	1793	C	s p	And hea vol 2		
5122 sociflóra *Salisb*	green-pencilled	♣	⌴	cu	2	ap my	G	C G H	1799	C	s p	And hea. vol. 1		
5123 densifólia *W*	dense-leaved	♣	⌴	or	2	mr au		C G H	1811	C	s p			
5124 grandiflóra *L*	great-flowered	♣	⌴	spl	3	my s	Y	C G H	1775	C	s.p	Bot mag 189		
5125 cephalótes *Thunb.*	purple-headed	♣	⌴	or	1	mr jl	Pu	C G. H.	1812	C	s p			
5126 cruénta *H K*	bloody-flowered	♣	⌴	el	2	my s	D R	C G. H	1774	C	s p	And hea vol 1		
5127 perspícua *W*	clear-flowered	♣	⌴	el	1½	mr jn	W pu	C. G H.	1790	C	s p	W er.1 p 7 c ic		
5128 speciósa *Andr*	specious	♣	⌴	or	2	jn s	R.G	C G H	1800	C	s p	Bot cab. 575		
5129 ignéscens *Andr*	fiery	♣	⌴	or	1½	mr in	R	C G H.	1792.	C	s p	And hea. vol 2		
5130 discolor *Andr*	different-color	♣	⌴	or	2	mr n	R.G	C G H	1788	C	s p	And. hea. vol 1		
5131 versicolor *W*	various-colored	♣	⌴	or	2	my n	O R	C G H	1790.	C	s p	And hea. vol. 1		
5132 fasciculáris *H K* *octophýlla* L *coronáta* Andr	cluster-flower	♣	⌴	spl	1½	f jn	Pu	C G H.	1787.	C	s p	And. hea. vol. 1		
5133 splendens *P S.*	splendid	♣	⌴	spl	2	ap s	S	C G. H	1792.	C	s p	W er 8 p 5 c ic		
5134 mammósa *L*	nipple	♣	⌴	el	2	jl o	Pu	C G H	1762.	C	s p	And hea vol 1		
5135 prócera *W*	lofty	♣	⌴	or	6	ap jn	W	C G H.	1791	C	s p			
5136 gélida *Andr.*	green verticill	♣	⌴	spl	3	ap jl	G w	C G H	1790	C	s p	Bot cab. 699		
5137 serratifólia *Andr.*	saw-leaved	♣	⌴	or	1½	au d	O	C G H	1790	C	s p	And hea vol 1		



History, Use, Propagation, Culture,

with the arillus of the seed of a grateful subacid flavor In the West Indies it is esteemed very wholesome and nourishing Here it grows well in loam and peat, and ripened cuttings with all their leaves on root best in sand under a hand-glass

886 *Metaiba* The vernacular name of the plant in French Guiana Large cuttings root best under a hand-glass in sand.

887 *Kolreuteria* So named by Laxmann, in honor of Joseph Gottlieb Kölreuter, who published *De plantis quibusdam Rariorib*us, *Tubing*, 1755, with a dissertation *De Insectis Coleopteris* He also made many experiments on the pollen of flowers, hybrid plants, &c published in the Petersburgh Transactions

This shrub should be planted in as sheltered a situation as possible, as it will not flower if too much exposed, and if the wood is not well ripened, the tops of the shoots will be injured by the frost.

888 *Guarea* The natives of Cuba call the plant *Guara* This tree, though it has an inconspicuous flower, yet has fine large leaves All parts of the plant, especially the bark, smell strong of musk, and may be used instead of that perfume for many purposes The wood is full of a bitter resinous substance, which renders it unfit for rum-hogsheads, being observed to communicate both its smell and taste to all spirituous liquors: but it is often cut for staves and heading, when there is a scarcity of other timber The powder of the bark is said to be a good emetic, and is sometimes used among the negroes for that purpose Ripened cuttings root in sand under a hand-glass

889 *Amyris* Derived from μύρρα, myrrh Its resinous gum has an excellent perfume. Almost every species of this genus produces some valuable gum or resin A. gileadensis produces the celebrated balm of Gilead It is a shrub with purplish branches, striated a little, with crowded ternate leaves, and protuberant buds loaded with balsamic resin

5105 Leaves alternate abruptly pinnated in 2-3 or 4 pairs

5106 The only species Leaves pinnated toothed torn

5107 Stalks of the leaves short tumid inflated

5108 Leaves simple lanceolate entire, Racemes simple axillary numerous
5109 Leaves ternate crenate acute

5110 Peduncles many-flowered, The lower usually changed into spines

5111 Leaves opposite beardless, Teeth of calyx membranous colored
5112 Leaves linear lanceolate, Peduncles axillary umbelled
5113 Leaves imbricated four ways obtuse with a little reflexed point, Teeth of calyx leafy

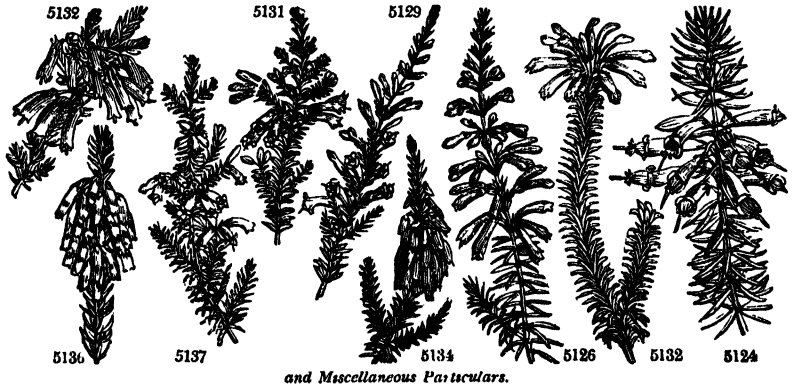
A TUBIFLORÆ *Corollas long and cylindrical*

5114 Stamens long connivent colored, Leaves in threes, Calyx imbricated, Bractes distant from calyx
5115 Stamens long connivent colored, Leaves in threes, Calyx imbricated, Flowers solitary, Cor cylindrical
5116 Stamens long connivent colored, Leaves in threes, Calyx imbricated, Segments of cor reflexed
5117 Stamens long connivent colored, Lvs. in 3s, Cal imbricated, Fl 3, Cor globose scarcely longer than cal.

5118 Stamens long connivent colored, Leaves in threes, Calyx imbricated, Flowers solitary, Cor conical

5119 Anth bearded, Style incl Cor cylind contracted above the base, Fl pend Leaves 4 whorled
5120 Stamens long connivent colored, Leaves in threes, Cal imbricated, Flowers 3, Cor, cylindrical incurved
5121 Anthers bearded, Leaves in threes, Flowers terminal solitary
5122 Stamens exserted colored, Leaves in 3s, Cal imbricated, Flowers 3, Cor conical, Leaves recurved
5123 Anth bearded incl Style exsert Cor tubular clavate pubes Fl axill Leaves 3 imbricated
5124 Anthers beardless exserted, Cor incurved smooth, Style long, Flowers axillary stalked, Lvs 6 smooth
5125 Anth beardless included, Style exserted, Cor tubular clavate, Cal pubescent, Fl capitate, Leaves 6
5126 Ant beard includ. Style exsert. Cor tub incurv Cal simple gland tooth Fl axill. whorl Lvs 3 rough
5127 Anthers beardless, Lvs 3, Flowers solitary or 3 term Cal imbric Cor villous [at edge
5128 Cor cylind Anthers bearded, Lvs 3, Fl term 3, Cal imbric Style exserted rounded at end
5129 Anthers beardless, Lvs 4, Fl term Bractes ovate distant from cal Sepals ovate acumin
5130 Anthers bearded included, Style exserted, Cor tubul clav Cal double, Fl term 3, Lvs 3 smooth
5131 Anthers beardless, Leaves 3 smooth, Fl 3 term Cal imbric Corolla smooth
5132 Anth. bearded, Style incl. Cor cylind ventric Flowers umbelled capitate, Lvs 8 linear truncate

5133 Anth beardless exserted, Cor tub clavate pubescent, Fl term racemose, Leaves 5 or more smooth
5134 Anth bearded, Style includ. Cor. clav cylind Flow umbell Lvs 6 linear reflexed
5135 Anth beardless included, Style exserted, Cor ventricose at base, Fl term Lvs 4 pubescent erect
5136 Anth bearded, Lvs 4-6, Fl axill. Cal imbr Bract lanc Sepals broad lanceol
5137 Anth beardless, Lvs 4 ciliated, Fl term Two bractes next cal one distant, Cor smooth



and Miscellaneous Particulars.

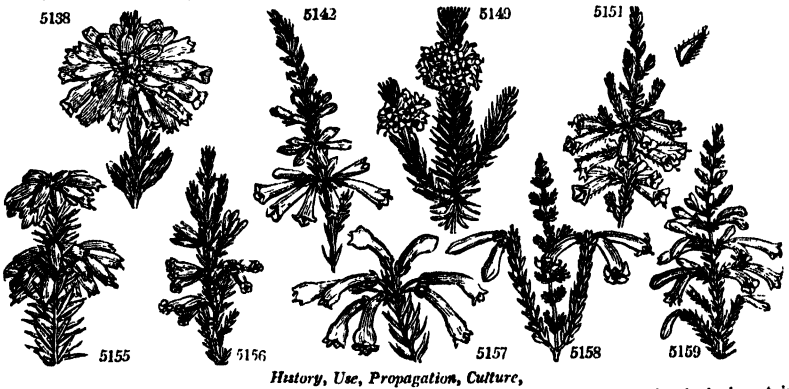
A Opobalsamum produces the balsam of Mecca It has pinnate leaves, with sessile leaflets It grows near Bederhunin, a village between Mecca and Medina, in a sandy rocky soil, confined to a small tract about a mile in length, and attains the height of fifteen feet. The balsam is obtained by incision. Neither of these species are yet introduced to Britain: those we possess grow in loam and peat, and cuttings root freely in a pot of sand under a hand-glass.

890. *Ximenia.* Francis Ximenes was a Spanish naturalist from whom we have, published in 1615, four works upon the plants and animals useful in medicine in New Spain The flowers of this tree have an odor like frankincense: the fruit is yellow, shiny, the size of a pigeon's egg, with a thin rind and sweet subacid pulp: it is eaten by negroes and children in the West Indies. Cuttings root in sand under a hand-glass.

891 *Bæckia* From Abraham Bæck, who was physician in ordinary to the king of Sweden, and who communicated plants to Linnæus, by whom the genus was dedicated. These plants are of free growth in sandy loam and peat, and so hardy as to require little more than protection from frost during winter Young cuttings root in sand under a bell-glass

892 *Erica.* From ἐαγω, to break, in allusion to the brittle branches of the plant It was also reputed a specific for breaking the stone in the bladder. *La bruyère*, Fr, *Heide*, Ger., *Erica*, Ital, and *Brezo*, Span. Ling or common heath abounds in barren wastes in every part of Europe, and especially in the northern countries Though little regarded in warm climates, the different species of native Erica are made subservient to a great variety of purposes in the bleak and barren highlands of Scotland, and other northern countries. The poorer inhabitants cover their cabins with them instead of thatch, or else twist them into ropes, and bind down the thatch with them in a kind of lattice work They also make the walls with alternate layers of heath, and a sort of cement made of black earth and straw The hardy Highlanders frequently

5138	clavæflóra *Salisb* *sessiliflóra* Andr	club-flowered	el	½	au	o	G	C	G	H	1799	C s p And. hea. vol. 2
5139	spicáta *Thunb*	spiked	pr	2½	ja	d	L Y	C	G	H	1789	C s p And. hea vol. 1
5140	transpárens *W.*	transparent	dc	1½	my		W	C	G	H	1800	C s p Bot cab. 177
5141	virescens *Lodd.*	greenish	or	1	my		Y o	C	G	H	1820	C s p Bot. cab 233
5142	flam'mea *Andr*	flame-flowered	or	1½	my.	o	L Y	C	G	H	1798	C s p And hea vol 2
5143	Patersónia *Andr.*	Paterson's	or	2½	mr	au	Y	C	G	H	1791	C s p And hea. vol 1
5144	glandulósa *W.*	glandul -haired	or	1	my	jn	R o	C	G	H	1801.	C s p
5145	gilva *Wendl*	dull-yellow	or	1	my	jn	Y	C	G	H	1820	C s p
§5146	Sparman'ni *W.*	Sparrmann's	spl	1	mr	s	D O	C	G	H	1794	C s p And. hea. vol. 3
5147	perspícua *Wendl.*	glassy	or	1½	my	jn	Pk	C	G	H	1819.	C s p
5148	costáta *Andr*	ribbed-flowered	or	2	f	jn	Pk	C	G	H	1795	C s p And hea. vol. 1
5149	purpúrea *W*	purple-flower	el	2	ja	d	L Pu	C	G	H	1789	C s p Bot cab 703
5150	eláta *Andr.*	tall	or	3	jl	s	O	C	G	H	1790	C s p And hea vol. 2
5151	sulphúrea *Lodd*	sulphur	el	2	jn	jl	Y	C	G	H	1805	C s p Bot mag 1984
5152	laniflóra *Wendl* *sordida* Andr	sordid	or	1	mr	au	L S	C	G	H	1790	C s p And hea. vol. 1
5153	tubiflóra *L*	tube-flowered	de	2	ap	jl	Pk	C	G	H	1775	C s p And. hea vol 1
5154	simpliciflóra *Donn*	single-flowered	or	2	mr	jl	O	C	G	H	1774	C s.p W er 17 p 69
5155	Archéria *Andr*	Lady Archer's	or	1½	au	n	D S	C	G.	H	1796	C s p And hea vol 2
5156	spúria *Andr*	spurious	or	2	ap	au	Pu	C	G	H	1796	C s p And hea vol 1
5157	Hibber'tia *Andr*	Hibbert's	spl	2	jn	s	O Y	C	G	H	1800	L s p And. hea. vol 3
5158	conspícua *H K*	conspicuous	or	2	my	au	D.Y	C	G	H	1774	C s p And hea. vol 2
5159	curviflóra *I*	curve-flowered	or	2	jl	o	Y	C	G	H	1774	C s p And. hea vol 1
5160	triphyl'la *Lk*	three leaved	spl	2	jl	n	R \	C	G	H	1822	C s p
5161	monadélpha *B M*	monadelphous	or	1½	my	jn	Pk	C	G	H	1789	C s p Bot mag 1370
5162	concínna *H K*	blush	dc	2½	s	o	F	C	G	H	1773	C s p And hea vol 2
5163	pellúcida *Andr*	pellucid	or	2	jn	n	W	C	G	H	1800	C s p And hea vol 3
5164	Linnæána *H K*	Linnæus's	dc	1½	ja	my	W	C	G	H	1790	C s p And hea. vol 2
5165	hirsúta *Lodd*	hairy	el	1	mr	ap	W pu	C	G	H	1800	C s p Bot cab 754
5166	erubéscens *Andr*	reddish	or	1½	mr	jl	F	C	G	H	1800	C s p And hea vol 3
5167	Leeána *H K.*	Lee's	or	2½	ja	au	O \	C	G	H	1788	C s p And hea vol 1
5168	colórans *Lodd*	coloring	or	2	ap	jn	W R	C	G	H.	1817	C s p Bot cab 224
5169	onosmaeflóra *Sal*	onosma-flower.	el	1½	mr	s	Y	C	G	H	1789	C s p And hea vol 1
5170	víridis *Andr*	green-flowered	cu	2½	my	s	D G	C	G	H	1800	C s p And hea vol. 2
§5171	sanguínea *Lodd*	bloody	el	1	ja	d	Cr	C	G	H	1815	C s p Bot cab 86
5172	longifolia *Donn*	long-leaved	or	2	f	jl	R	C	G	H	1787	C s p Ic hor kew 4
5173	pínea *W*	Pine-tree-leav	or	2	au.	d	R	C	G	H	1790	C s p Bot cab 1259
5174	aúrea *Andr*	gold-colored	el	2	jl	s	O	C	G	H	1799.	C s p And hea vol 2
5175	elongáta *Lodd.*	turbinate	de	1½	f	n	W	C	G	H	1810	C s p Bot cab 738
5176	lanáta *Wendl*	woolly	or	1	f	my	O	C	G	H	1775	C s p W eric 5 p 5 c ic
5177	Bowieána *Lodd.*	Bowie's	el	1	au	d	W	C	G	H	1822	C s p Bot cab 842
5178	coccínea *L*	scarlet-flower'd	or	1½	ja	d	D R	C	G	H	1783	C s p And heaths, v 1
5179	exúdans *Lodd*	dewy	cu	1½	o	n	R	C	G	H	1810.	C s.p Bot cab 287
5180	Massóni *Thunb*	Masson's	gr	3	jl	o	R o	C	G	H	1787	L s p Bot mag 356
5181	gemmífera *Lodd*	gem-bearing	spl	1	my	jl	S	C	G	H	1802	C s p Bot cab 457
5182	bicolor *Andr*	two-colored	or	2	mr	o	G R	C	G	H.	1790.	C s p Bot cab 1001
5183	exsúrgens *Andr*	quiver-formed	spl	1½	ja	d	D O	C	G	H	1792	C s p Bot cab 835
§5184	vestita *Thunb*	tremulous	spl	3	ja	d		C	G	H.	1789	C s p
	α álba	*white*	el	2	ja	d	W	C	G	H	1789	C s p And heaths, v 1
	β incarnáta	*flesh-colored*	spl	2	ja	d	P k	C	G	H	1789.	C s p And heaths, v 2
	γ purpúrea	*purple*	spl	2	ja	d	Pu	C	G	H	1789	C s p And heaths, v 1
	δ rósea	*rosy*	de	3	ja	d	L R	C	G	H	1789	C s p And heaths, v 2
	ε fulgida	*bright-red*	spl	3	ja	d	O	C	G	H	1789	C s p And heaths, v.2
	ζ coccínea	*scarlet*	spl	3	ja	d	D.R	C	G	H	1789	C s p And heaths, v 1
	η lútea	*yellow*	spl	3	ja	d	Y	C	G	H	1789	C s p And heaths, v 3
5185	rósea *Andr*	rose-colored	el	2½	jn	o	L R	C.	G	H	1798	C s p Bot cab 782
5186	Nivénia *Andr*	Niven's	spl	½	f	jl	Pu	C	G	H	1799	C s p And heaths, v 2
5187	áspera *Andr*	rough	or	1	my	jn	Y	C	G	H	1802	C s p And heaths, v 3
5188	cylindrica *Andr*	cylindric	or	2	my	jn	W	C	G	H	1798	C s p And heaths, c ic



History, Use, Propagation, Culture,

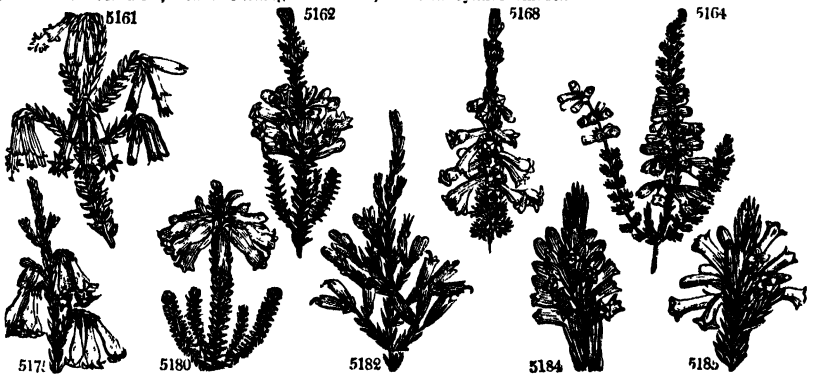
make their beds with it In most of the western isles they dye their yarn of a yellow color, by boiling it in water with the green tops and flowers of this plant, and woollen cloth boiled in alum water, and afterwards in a strong decoction of the tops, comes out a fine orange color In some of these islands they tan their leather in a strong decoction of it Formerly the young tops are said to have been used alone to brew a kind of ale, and Boethius relates that this liquor was much used by the Picts. In some of the isles it is said they still brew ale with one part malt, and two parts of the young tops of heath, sometimes adding hops In many parts of Great Britain besoms are made of it The turf, with the heath growing on it, is cut up and dried for the fuel of the cottager, for heating ovens, covering under-ground drains, &c Sheep and goats will sometimes eat the tender shoots, but they are not fond of them Cattle not accustomed to browse on heath give bloody

5138 Anth. bearded, Lvs 4-6, Fl. axill Cal imbr Sepals orbicular obovate

5139 Anthers bearded, Lvs 4-6, Flow. axillary, Cal imbric Sepals rhombold with long claws
5140 Anth beardless, Leaves 4 3-cornered ciliated, Flowers terminal subsolitary
5141 Anthers included bearded, Cal leafy, Leaves 4 hairy, Flowers terminal, Style exserted
5142 Anthers beardless included, Lvs 3-4, Flowers terminal few, Cal. imbr Cor. pubescent
5143 Anthers bearded, Lvs 4-6, Fl axillary, Cal imbric Sepals subulate from a broad base
5144 Anth. beardless, Lvs. 4 linear glandular hairy, Cor. clavate, Cal. hispid
5145 Anthers bearded, Style incl Cor cylind. Sepals membran Fl axill whorl Lvs. 4 lin smooth
5146 Anth beardless, Lvs 4, Fl. term. 4 closely packed in a 4-cornered head, Sep. lin.-subul Ped very short
5147 Anthers beardless, Flowers solitary or 3, Cal imbric Cor villous
5148 Anthers beardless, Flowers 3, Cal imbricated, Cor smooth, Leaves pubescent
5149 Anth beardless exserted, Ovary turbinate, Lvs. 4-6, Fl axillary, Two bractes close to cal one remote
5150 Anthers beardless exserted, Lvs 4-6, Flowers axill Bractes remote, Ovary with 8 furrows smooth
5151 Anthers beardless included, Bractes next calyx, Cor hairy solitary, Leaves 4 hairy
5152 Anthers exserted gibbous at base, Bractes remote, Cal leafy, Lvs 4, Branches hairy, Fl terminal

5153 Anthers beardless, Lvs 4, Bractes a little distant from cal Sepals oblong revolute at edge
5154 Anthers beardless exserted, Lvs 4, Bractes linear distant from cal Sepals ovate acuminate
5155 Anth beardless, Lvs 4-6, Fl axill Two bractes next cal one remote, Ovary cylind Cor pubescent viscid
5156 Anthers beardless included, Lvs 4, Fl term few, Bractes lin remote, Sepals ovate acuminate
5157 Anthers beardless, Lvs 4-6, Fl axill. Two bractes next cal one remote, Ovary cylind Cor smooth viscid
5158 Anthers beardless included, Lvs 4, Fl term few, Bractes remote, Sepals ovate obtuse
5159 Anth beardless, Cor curved clavate smooth, Fl solitary term Leaves 4 linear smooth
5160 Anth. beardless included, Cal leafy imbricated, Leaves 3 smooth spreading, Style exserted
5161 Anth beardless exserted, Cor cylind ovate, Sepal col obl obt Leaves 3 appressed erect, Fl 3 terminal
5162 Anth beardless included, Cor cylindrical narrowed at base, Fl term umbell Leaves 6 smooth
5163 Anth beardless, Lvs 4, Fl. term 4 closely packed in 4-cornered head, Sepals lin subul Ped length of fl
5164 Anth beardless, Leaves 4, Fl term 4 closely packed in a 4-cornered head, Sepals lanceolate
5165 A handsome species with tufted hairy leaves It resembles E. linnæana
5166 Anth beardless, Leaves 4, Fl term 4 closely packed in a 4-cornered head, Sepals ovate roundish
5167 Anth beardless, Leaves 4, Fl axillary, Cor ribbed, Bractes nearly as long as calyx
5168 Anth beardless included, Leaves 6 ciliated, Flowers terminal, Cor clavate at first white afterwards red
5169 Anth beardless, Lvs 4-6, Fl axillary, Cor ribbed cylind with a spreading limb, Bractes ½ length of cal
5170 Anth beardless, Lvs 4-6, Fl axill Cor ribbed widest in middle with a revol limb, Bractes length of cal
5171 Leaves spreading smooth, Flowers clavate incurved smooth
5172 Anth beardless, Leaves 4-6, Fl axillary, Cor not ribbed, Sepals linear
5173 Anth beardless, Leaves 4-6, Fl. axillary, Cor not ribbed, Sepals from a broad base linear subulate
5174 Anth. beardless, Leaves 4-6, Fl axillary, Cor not ribbed, Sepals ovate acuminate
5175 Leaves upright smooth, Fl term 4 turbinate hairy
5176 Anth includ beardless, Bractes remote from flower, Leaves very short imbricated
5177 Leaves 3 smooth spreading distant, Fl axillary pendulous cylindrical smooth
5178 Anth beardless included, Leaves 4-6, Fl axill Two bractes next cal one remote, Ovary turbinate
5179 Leaves 4 hairy clammy, Fl cylindrical terminal curved smooth, Style exserted
5180 Anth beardless, Leaves 4-6 hairy, Fl axill Two bractes next cal one remote, Ovary clavate
5181 Leaves short with long hairs, Fl large axillary pendulous cylindrical with a green mouth
5182 Anth bearded, Leaves 3 ovate rough, Fl 3 cernuous smooth, Cal villous colored
5183 Anth beardless exserted, Leaves 4-6, Fl axill Bractes remote, Ovary with 4 furrows smooth
5184 Anth. beardless included, Lvs. 4-6, Fl axill Bractes remote, Limb of cor revolute, Ovary with 8 furrows [silky upwards

5185 Anth beardless included, Leaves 4-6, Fl axill Bractes remote, Limb of cor erect spreading
5186 Anth beardless exserted, Leaves 3, Fl terminal numerous, Bractes remote
5187 Anth beardless included, Leaves 3 hairy, Fl capitate, Cal imbr Cor very hairy
5188 Anth beardless, Leaves 4 triangular smooth, Fl term cylindr smooth

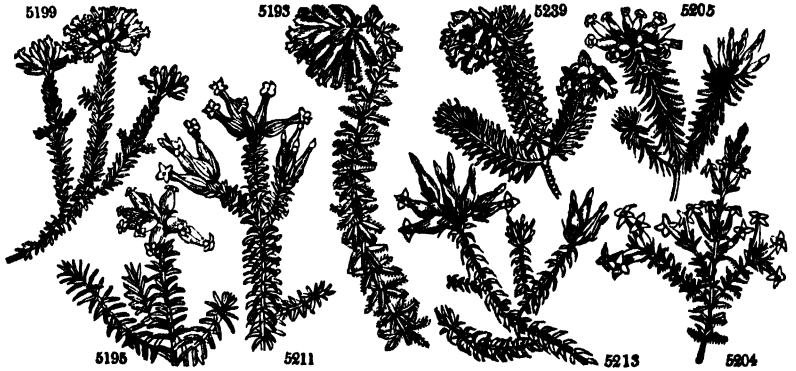


and Miscellaneous Particulars.

milk, but are soon cured by drinking plentifully of water The branches of heath afford shelter, and the seeds a principal part of their food to many birds, especially those of the grouse kind: and for this purpose the seed-vessel is formed and protected in such a manner, that the seeds are preserved a whole year, or even longer. Bees collect largely from the flowers, and honey made from them was anciently supposed to be of a bad quality, but in fact it is only of a darker color The foliage affords nourishment to the Phalæna quercus or great egger moth. Dodder frequently entwines itself about this plant, and gives it a singular appearance.

Till the latter end of the last century, this genus consisted of three or four humble British shrubs, and the heath of Spain (E. mediterranea), a slow growing tree. But when the Cape of Good Hope fell into the hands of the British, collectors were sent out, and soon brought to light some hundreds of species. It may serve as

5189	Monsónia *Thunb.*	Lady Monson's	el	4	ap s	W	C. G. H.	1787.	C	s.p	Bot. mag. 1915
§5190	Halicácaba *L*	bladder-flower	or	1	my au	Y	C. G H	1780.	C	s.p	And heaths, v.2
5191	lanuginósa *Andr*	large brown-fl	or	1½	ja s	P.Y	C G. H	1803.	C	s.p	And. heaths, v.3
5192	glábra *Lk.*	smooth	de	1	my au	W	C G. H	1820	C	s.p	
5193	cerinthoides *L*	Honey-wort-fl	spl	4	my n	D.S	C G. H	1774.	C	s p	Bot. mag. 220
5194	pectiniflóla *Sal.*	pectinated	or	2	jn n	R	C. G. H.	1800	C	s p	
5195	princeps *Andr.*	fine-red	or	1½	my jl	S	C. G. H.	1800	C	s.p	Bot. cab 647
5196	blánda *Andr.*	charming	or	½	ap s	L.P	C G. H	1800	C	s p	And heaths, v 3
5197	inflàta *W.*	inflated	or	1½	my s	W R	C G. H	1800	C	s p	Th.eric 67 t.2 f.2
5198	ferruginea *Andr*	rusty	or	1	my jl	R	C G. H.	1798.	C	s p	And. heaths, v.3
5199	metulæflóra *B M*	nine-pin	el	1	jn au	O	C G. H	1798.	C	s p	Bot. mag. 612
5200	túmida *Ker*	tumid	or	1½	my s	Sc	C G. H	1812.	C	s p	Bot reg. 65
5201	fistulæflóra *Sal*	white slender-fl	de	2	s	W	C G H	1800	C	s p	And. heaths, v 3
5202	obbáta *Andr*	bottle	or	1½	ap jl	W R	C G H.	1796	C	s.p	And heaths, v 2
5203	acuminàta *Andr.*	pointed-leaved	el	1½	jl o	R	C G H.	1800	C	s p	Bot. cab. 216
5204	Lawsóni *B M*	red slender-fl.	el	3	ap jn	F	C. G. H.	1802.	C	s.p	Bot mag. 1720
5205	ventricósa *Thunb*	Porcelain	cu	1	ap s	F	C G H	1787	C	s p	Bot mag 350
5206	præ'gnans *Andr*	swelled	or	2	my jl	R	C G H	1796	C	s p	And heaths, c ic
5207	glutinósa *W*	glutinous	or	2	jn o	Pu	C G. H.	1787.	C	s p	Ico hor Kew 17
	β droseroides Lam.	*sundew-like*	or	2	jl o	Pu	C G H	1787.	C	s p	Pet mus t. 161
5208	tetragóna *Thunb*	square-flower'd	or	1½	jl s	L Y	C G H	1789.	C	s p	And heaths, v 3
5209	Irbyána *Andr*	Irby's	or	1½	jn o	W G	C G H	1800.	C	s p	And heaths, v 3
5210	jasminiflóra *Andr.*	Jasmine-flower	de	2	jn n	W pk	C G. H	1794.	C	s p	And heaths, v 1
5211	ampullácea *Curt*	flask	or	2	jn au	W R	C G H.	1790.	C	s p	Bot mag 303
5212	Shannoniána *Lodd.*	Lady Shannon's	el	1½	jn	W pu	C G H.	1806.	C	s p	Bot. cab 168
5213	retórta *Thunb*	recurved-leav'd	or	1	my au	Pk w	C. G H.	1787.	C	s p	Bot. mag. 362
5214	tenuiflóra *Andr.*	yellow-slend.-fl.	or	1½	ap jn	L Y	C G. H.	1800	C	s p	And heaths, v 3
5215	Cliffórdia *Lodd*	Lady Clifford's	de	1	ap my	W	C G H	1812	C	s p	Bot cab 34
5216	hyacinthoides *Andr.*	Hyacinth-flow	or	1	jn au	Pk	C. G H	1798.	C	s p	And heaths, v 3
§5217	fastigiáta *L*	clustered	or	1½	my s	Pu	C G H.	1797.	C	s p	Bot cab 256
	Walkéria Andr										
5218	infundibulàris *Lk*	funnel-shaped	or	1	ap my	Pu	C G H	1821.	C	s p	Bot. cab 589
§5219	Aitónia *Andr.*	Aiton's	or	2	jn s	W pu	C G H	1790	C	s p	Bot. mag 429
5220	lútea *L*	yellow	or	½	f my	P Y	C G H	1774.	C	s p	And heaths, v 1
5221	comósa *L.*	tufted	or	½	ap au		C G H	1787.	C	s p	Ico hor Kew 18
	α rúbra	*red-flowered*	de	½	ap au	Pk	C G H	1787	C	s p	W eri 12 p 7 c.ic
	β álba	*white-flowered*	el	½	ap au	W	C G H	1787	C	s p	And heaths, v 2
5222	muscári *W*	musk	fr	1½	mr jl	W	C G H	1790	C	s p	And heaths, v 1
5223	daphnæflóra *Sal*	Daphne-flower	de	1½	ap my	Pa pu	C G H	1791.	C	s p	Bot cab 154
5224	Parmentiéri *Lodd*	Parmentine's	de	1	jl au	Pa pu	C G H	1810	C	s p	Bot. cab 197
5225	Bonplándia *I odd*	Bonpland's	pr	1	mr s	Pa Y	C G. H	1812	C	s p	Bot cab 345
5226	Humeána *I odd*	Sir A Hume's	el	1½	mr ap	Pk	C G H	1808	C	s p	Bot cab 380
5227	denticuláta *L*	toothletted	or	1½	ap my	Pu	C G H	1821	C	s p	Bot cab. 1090
5228	radiáta *Andr*	radiated	or	1	au n	C	C G H	1798	C	s p	And heaths, v 1
5229	aristáta *Andr*	awned	or	1½	mr au	D P W	C G H	1801	C	s p	And. heaths, v 3
5230	primuloides *Andr.*	Cowslip-flower	or	½	ap jl	P w	C G H	1802	C	s p	Bot mag 1548
	β múndula Lodd	*neat*	pr	½	my jl	R w	C G H.	...	C	s p	Bot cab 114
5231	moschàta *Lodd*	musk-scented	ft	1½	my jl	G	C G. H	1805	C	s p	Bot cab 614
5232	concáva *Lodd.*	concave	el	½	mr ap	Pa pu	C G H	1808	C	s p	Bot cab 134
5233	Coventryána *Lodd*	Lord Coventry's	pr	1	jn jl	Pk	C G H.	1808	C	s p	Bot. cab 423
5234	erósa *Lodd*	bitten	de	½	ap my	Pa pk	C G H	1817	C	s p	Bot. cab 133
5235	juliána *Lodd*	July	el	½	jl	R	C G H.	1800	C	s p	Bot cab 799
5236	tróssula *Lodd.*	neat	pr	1½	ap my	W pk	C G H.	1800	C	s p	Bot. cab. 668
§5237	corniflóla *L*	Coris-leaved	pr	1½	au d	Pa pu	C. G. H.	1774	C	s p	Bot. mag 423
	calycina W										
5238	andromedæflóra *An.*	Andromeda-fl.	pr	2	mr jn	Pk	C G H	1803.	C	s p	Bot mag. 1250
5239	élegans *Andr*	elegant	el	½	mr n	G	C G H	1799	C	s p	Bot. mag 966
5240	triflóra *L.*	three-flowered	or	1½	my jn	W	C G H.	1774.	C	s p	Wen eri. 12 p 13



History, Use, Propagation, Culture,

an easily recollected date, to say that all of them were sent home during the reign of George III., and as a tribute to merit, that most of them were gathered by Mr Francis Masson Their beauty needs no encomium; many are pretty, some are graceful or elegant, a few splendid, and there are curious, grotesque, and odoriferous species. Their culture and propagation is one of the most delicate branches of the art of gardening: it may be said to have been invented in England, and in the Hammersmith nursery, and places Britain far before all countries in this art as in so many others.

The only soil in which heaths will grow is earth of peat: if any substitute can be found, it is in leaf-mould

B. VENTRICOSÆ. *Corolla inflated*

5189 Anthers bearded, Bractes oblong next cal Cor. twice as long as calyx
5190 Anthers bearded, Bractes ovate next cal Cor. 4-cleft thrice as long as calyx
5191 Anthers bearded, Bractes ovate next cal Cor. 4-parted scarcely twice as long as calyx
5192 Anthers bearded included, Cal. leafy, Bractes remote from fl. Leaves 4 spreading smooth
5193 Anthers beardless, Flowers terminal, Two bractes next fl : one remote, Cor viscid-hairy
5194 Cal rhomboid-spatulate, Cor woolly inside, Leaves narrow-ovate cuneate pectinate
5195 Anth. beardless, Fl term Two bractes next fl · one remote, Cor smooth, Sepals lin lanceolate
5196 Anth. bearded, Two bractes next fl , one remote, Leaves 6, Beards of anth. very short
5197 Anth bearded, Bractes remote, Leaves 4 smooth, Beards of anth. very long
5198 Anth. beardless, Fl term 8, Bractes remote, Leaves 4, Sepals terminated by 3 or more bristles
5199 Anth. beardless, Fl term Two bractes next cal , one remote, Cor smooth, Sepals ovate acuminate
5200 Pubescent, Two subul. bractes next cal Leaves decussate 4, Cor villous many times longer than calyx
5201 Cal minutely ciliated, Tube narrow-cylindrical urceolate, Anthers beardless
5202 Anth beardless, Fl. term 4, Cal. imbric Sepals ovate oblong acute, Leaves recurved ciliated
5203 Anth. beardless, Fl. term. many, Cal imbric Leaves recurved terminated by a bristle

C. LIMBATÆ. *Corolla elongated, narrowed upwards, with a flat limb.*

5204 Anth beardless, Leaves ciliated and flowers 4, Sepals subulate, Stigma exserted
5205 Anth bearded, Bractes remote, Leaves 4 ciliated, Beards of anth very short
5206 Anth bearded included, Leaves 4 ciliated, Fl capitate, Bractes remote
5207 Anth bearded included, Cor globose ovate, Leaves opposite and scattered fringed with glands linear

5208 Anth. beardless, Fl terminal 3, Leaves 3, Bractes remote, Sepals subulate, Cor 4-cornered
5209 Anth included beardless, Fl. umbelled, Bractes remote
5210 Anth beardless, Fl term. 3, Leaves 3, Bractes remote, Sepals ovate oblong
5211 Anth beardless, Fl term 4, Leaves 4, Bractes remote
5212 Flowers long conical striped, with a flat limb, The whole surface of corolla shining
5213 Anth beardless, Fl term 8, Leaves 4, Bractes remote, Sepals terminated by a long bristle
5214 Anth beardless, Fl term 4, Cal imbricated, Sepals from a broad base, subulate, entire
5215 Anth beardless, Fl term. Leaves 4 smooth, Cor slender, Style included
5216 Anth beardless, Fl term 4, Cal. imbricated, Sepals ovate acuminate serrulate
5217 Anth. beardless included, Flowers fascicled, Style included, Leaves 4

5218 Anth included beardless, Leaves 4 smooth erect, Fl term Cal imbricated leafy
5219 Anth. beardless, Leaves 3, Fl term Fl 3, Bractes remote, Cor viscid
5220 Anth bearded, Style included, Flowers terminal, Leaves lin 2 smooth, Branches deflexed
5221 Anth beardless included, Style included, Leaves 4, Flowers clustered

5222 Anth beardless, Cor somewhat 4-cornered, Sepals lanceolate entire, Fl term sessile, Leaves 4 smooth
5223 Cal ovate cuspidate scarcely serrated, Cor. three lines long, Limb twice as short as tube recurved
5224 Leaves 4 spreading, Fl 4 terminal
5225 Leaves 4 erect, Fl simple on little axillary branches, Cor ovate
5226 Leaves 3 smooth erect imbricated, Fl 3 terminal, Cor hypocrateriform, Tube slender
5227 Anth. beardless included, Sepals membranous ciliate toothed, Fl term sessile, Leaves 4 smooth
5228 Anth beardless included, Leaves 4-6, Fl axill Bractes remote, Limb of cor revolute, Ovary smooth
5229 Anth beardless, Fl terminal, Cal. imbricated, Fl 4 Sepals oblong obtuse, Leaves recurved setose
5230 Anth beardless, Flowers terminal subsessile 5, Bractes next calyx, Leaves spreading 5

5231 Leaves short erect, imbricated, Flowers terminal solitary, Tube ovate, Limb recurved
5232 Leaves 3 filiform spreading, Fl 3 term rotate, Stamens and styles exserted
5233 Leaves dense acerose smooth erect, Fl axillary, Tube cylindrical
5234 Leaves densely imbricated erect, Flowers large axillary, Petals sawed
5235 Leaves dense spreading, Fl 4 terminal, Tube ovate longer than limb
5236 Leaves 4 narrow erect smooth, Flowers terminal 4 very numerous, Tube ventricose

D CALYCINÆ *Corolla inclosed in the inflated calyx*

5237 Anthers crested, Cor. ovate, Style included, Cal turbinate, Leaves 3, Flowers umbelled

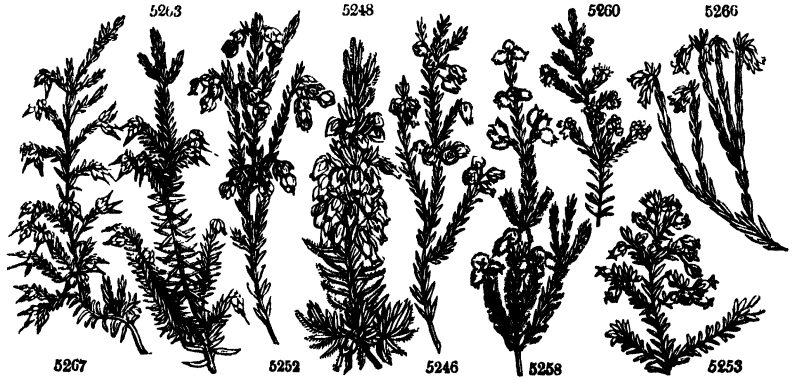
5238 Anthers crested, Bracteas remote, Leaves 3 much longer than the joints green
5239 Anth. crested, Leaves 3, Cal imbricated, Style included, Flowers terminal, numerous
5240 Anth crested, Leaves 3, Cal imbricated, Style included, Flowers terminal three



and Miscellaneous Particulars.

sifted very fine and mixed with fine sand Earth of peat is obtained by collecting peats from bogs or turf from the surface of peaty wastes and moist places, and laying the peats or turves in a heap to rot and moulder into earth This they will require several years to do, but in the meanwhile a portion of mould may be obtained whenever it is wanted, by turning the turves and sifting the fragments Sometimes this peat is found without any mixture of sand, at other times, where streams have run into the bog or lake while the peat was forming, it is mixed with fine sand that had been held suspended in the water This last is the best sort of peat for the Erica family, and therefore where peat is not sandy naturally, fine white sand

5241	flagellária *Lk*	wiry		pr	1½	my	P y	C	G	H	1820	C	s p
5242	bracteáta *Thunb*	red-bracted		or	½	my jn	R	C, G.	H.		1800.	C	s p
5243	túrgida *Lk*	turgid		el	1	ap jl	Pu	C. G.	H		1821	C	s.p
5244	lachneæfólia *Andr*	Lachnea-leav'd		de	1½	my jl	W	C. G.	H.		1793.	C	s.p
5245	nigrita *L.*	black-tipped		cu	½	mr jn	W	C. G.	H.		1790	C	s p
5246	báccans *L*	Arbutus-flower		or	1½	ap jn	Pu	C G.	H		1774	C	s p
5247	túgax *Salisb*	fugacious		or	1½	mr ap	Pu	C G.	H		1800	C	s p
5248	triúmphans *Lodd*	conquering		el	2	my jn	W	C, G	H.		1802.	C	s.p
5249	phylicoides *W*	phylica-like		or	1½	ap jn	W	C G.	H		1800.	C	s.p
5250	incúrva *Wendl.*	incurved		de	1½	my jl	W	C G	H		1821.	C	s.p
5251	tenuifólia *L*	slender-leaved		or	1	ap my	Pk	C G	H		1794	C	s p
5252	Thunbérgia *W.*	Thunberg's		pr	1½	my au	O	C G.	H		1794	C	s p
5253	taxifólia *H K*	Yew-leaved		or	1	jl.n	Pu	C G	H		1788	C	s p
5254	petiolàta *Thunb.*	Rosemary-leav		cu	½	mr jl	Pa pu	C G	H		1774.	C	s p
5255	imbricáta *L*	imbricated		or	1	my au	Pk	C G	H		1786.	C	s p
5256	velleriflóra *Salisb.*	woolly-flower'd		cu	1½	f jn	W	C. G	H.		1774	C	s p
5257	Brunádes *L*	Brunia-like		cu	1½	ap jn	W	C. G	H.		1790.	C	s p
§ 5258	capitáta *L*	downy-headed		or	1½	mr jl	Y	C. G	H		1774	C	s p
5259	pátens *Andr*	spreading		or	1½	mr jn	Pu	C. G.	H		1800	C	s p
5260	fimbriáta *Andr*	fringed		or	½	mr jn	Pa pu	C G.	H		1800.	C	s p
5261	melanthéra *Thunb*	dark-anthered		el	1½	jn	Pa pu	C G	H		1803.	C	s p
5262	flácida *Lk*	flaccid		de	1	my	W	C G	H		1822.	C	s p
5263	sexfária *H K*	six-angled		or	½	my au	W	C G	H		1774.	C	s p
5264	frágrans *Andr*	fragrant		ft	½	mr jn	Pu	C G	H		1803	C	s p
5265	oppositifólia *Andr*	opposite-leaved		or	½	mr my	W	C G	H.		1804.	C	s p
5266	bifióra *Lk*	two-flowered		de	½	ap jn	W	C G	H		1819	C	s.p
5267	spumósa *L*	frothy		cu	1½	my au	W	C G	H		1786	C	s p
§ 5268	vulgáris *L*	common		ec	2	f jl	Pu	Britain			heaths.	C	s p
	Calluna vulgaris Sal												
	β álba	*white-flowered*		or	2	f jl	W		.....		...	C	s p
	γ flore pleno	*double-flowered*		or	2	f jl	Pu		.....		...	C	s p
§ 5269	glauca *Sal*	glaucous		or	2	my jl	D Pu	C	G	H.	1792	C	s p
5270	pyrolæflóra *Sal*	Pyrola-flower'd		or	1½	my jl	W	C	G	H.	1790	C	s p
5271	láxa *Andr*	loose-flowered		or	1½	f s	B	C	G	H	1800	C	s.p
5272	lúcida *Andr*	lucid		or	1½	ap jn	D Pu	C	G.	H	1800	C	s p
5273	squamósa *Andr*	scaly-cupped		or	½	ap jn	F	C	G	H	1794	C	s p
5274	togáta *B M*	large-cupped		or	½	jn jl	R	C	G	H	1812	C	s p
5275	canaliculáta *Andr*	channelled		or	½	f au	R	C	G	H	1799	C	s p
5276	horizontális *Andr*	horizontal-lvd		de	1½	jl s	Pk	C	G	H	1800	C	s p
5277	globósa *W*	globular-flower		or	1½	jl s	Pk	C	G	H	1789	C	s p
5278	gnaphalódes *W*	Gnaphal-like		cu	1	f au	W	C	G	H.	1812	C	s p
5279	rubélla *Lodd*	thrift-flowered		pr	2	jn	Pk	C	G	H	1814	C	s p
§ 5280	árdens *Andr*	glowing		or	2	ap jn	S	C	G	H	1800	C	s p
5281	nitida *Andr*	nitid		de	2	jl o	W	C	G	H	1800	C	s p
5282	physódes *L*	sticky		de	1½	mr jl	W	C	G	H	1788	C	s p
5283	viridipurpurea *W*	green and purp		or	3	my au	G Pu	Portugal			...	C	s p
5284	arbórea *L*	tree		or	5	f jn	W	S	Europe		1658	C	s p
	β stylósa P S	*long-styled*		pr	5	f jn	W	S	Europe		1658	C	s p
5285	resinósa *B M*	varnished		or	1½	my au	O	C	G	H	1803	C	s p
5286	Lambertia *Andr*	Lambert's		de	1	my au	W	C	G	H.	1800	C	s p
5287	incarnáta *Thunb*	flesh-colored		or	1½	my au	R	C	G	H	1791	C	s p
5288	rúbens *Thunb*	red-flowered		or	1	jn s	D R	C	G	H	1798	C	s p
5289	fíbula *Lk*	button		or	1½	jl	Pu	C	G	H	1823	C	s p
5290	axillária *Thunb*	axil-flowered		or	1	my jl	Pk	C	G	H	1798	C	s p
5291	margaritácea *Thunb*	pearl-flowered		el	1½	my s	W	C	G	H	1775	C	s p
5292	péndula *Wendl*	pendulous		or	1½	jl au	Pu	C	G	H	1791	C	s p
5293	laterális *W*	side-flowered		cu	1½	mr jl	R	C	G	H	1791	C	s p
5294	empetrifólia *L*	Crowberry-lvd		or	1½	ap jn	Pu	C	G	H	1774	C	s p
5295	incurva *Andr*	incurved		de	1	mr my	W	C	G	H	1802	C	s p



History, Use, Propagation, Culture,

or sand of any color, provided it be free from irony impregnation, should be procured and mixed with it This sand admits the water to penetrate into the soil and reach the roots of the plant, and also to drain away from the roots so as not to rot them Pots filled with pure peat-earth are apt to be either hard, dry, and impenetrable to water, or otherwise as wet as a saturated sponge The free growing kinds (according to Sweet) thrive best in good black peat, and like largish pots to grow in The dwarf and hard-wooded kinds like a very sandy peat, and smaller pot, well drained with broken potsherds and rough bits of turfy peat, they also require less water than the free growing kinds, as they grow chiefly at the Cape on the tops and sides of mountains, and in the crevices of rocks, &c chiefly in very sandy soil, and but little of it

5241 Anth. crested, Leaves 3, Cal. imbricated, Sepals carinate, Flowers terminal three, Style included
5242 Anth beardless, Leaves 3 lanceolate smooth, Fl umbelled surrounded by colored bractes
5243 Anthers crested, Leaves 3 mucronate smooth with a white edge, Sepals lanceolate, Flowers terminal
5244 Anthers bearded, Leaves 3 oval imbricated, Flowers capitate
5245 Anthers bearded, Leaves 3 smooth, Cor campanulate, Style included, Flowers 3 sessile
5246 Anthers bearded, Leaves 4, Appendages subulate pectinate longer than the anther
5247 Anthers bearded, Style included, Cor ovate 4-cornered, Fl terminal 3, Leaves 3 or 4, Stem pubescent
5248 Leaves long ciliated spreading, Fl axill. Cor cylindrical, Cal. with keeled sepals
5249 Anth bearded included, Style included, Cor campan Fl axill nodding, Leaves 3 imbricated 6 ways
5250 Anth. beardless exserted, Style exserted, Cor campan Fl terminal capitate, Leaves 4-incurved ciliated
5251 Anth beardless included, Cor and calyx scarlet, Leaves opposite
5252 Anth beardless, Cor flat, Tube globose, Style exserted, Leaves 3
5253 Anth beardless included, Cor ovate, Flowers in umbelled corymbs, Lvs 3 triangular cartilagin at edge
5254 Anthers beardless exserted, Style exserted, Cor. campanulate, Flowers 3 terminal, Lvs 3 lanc. smooth
5255 Anthers beardless exserted, Cor campanulate, Cal imbricated, Style exserted, Leaves 3
5256 Anthers much exserted beardless, Cor campanulate length of the very hairy calyx, Leaves spreading
5257 Anthers much exserted beardless, Cor campanulate longer than the very hairy calyx, Leaves erect
5258 Anthers beardless included, Cor. globose campan Cal woolly, Flowers sessile, Lvs 3 lin obtuse villous
5259 Anthers beardless included, Leaves broadish, Fl terminal, Cal imbricated
5260 Anthers beardless included, Leaves 3 lines long, Fl capitate, Cal ciliated
5261 Anthers beardless of middle length, Cor campan longer than cal Style exserted, Leaves 3
5262 Leaves 4 hairy, Fl capitate, Sepals and bractes very hairy, Cor globose, Anthers beardless exserted
5263 Anthers beardless exserted, Style exserted, Cor. campan Leaves 3 imbricated in 6 rows
5264 Anthers beardless, Leaves linear 3 smooth, Limb of cor revolute
5265 Anthers beardless, Leaves appressed, Fl capitate, Cor limbate
5266 Leaves 2 channelled, Fl term on short stalks, Sepals ovate acute, Anth included crested
5267 Anth beardless included, Cor 3, Style exserted, Leaves 3
5268 Anthers bearded, Leaves opposite sagittate

5269 Anth crested, Leaves 3 erect spreading much longer than joints glaucous, Bractes remote from calyx
5270 Leaves wedge-shaped, Cal. ovate cuneate, Cor 4-cornered spherical, Anthers bearded
5271 Anth crested, Leaves 3 ciliated, Cal imbricated, Style exserted
5272 Anth crested, Leaves 3 smooth, Cal imbricated, Style exserted
5273 Anth crested, Leaves 4
5274 Anth crested, Leaves opp appressed, Cal large cup-shaped, Sepals rounded mucronate
5275 Anth beardless, Leaves 3, Bractes remote, Cor campan
5276 Anth beardless, Leaves and flowers 4
5277 Anth. beardless, Leaves 4, Flowers 8
5278 Anth crested, Cor ovate covered, Style included, Leaves 3, Stigma 4-parted
5279 Anth beardless, Leaves opposite imbricated appressed, Umbels terminal many-flowered

E. GLOBOSÆ. *Corolla small, globose*

5280 Cor globose, Anth crested, Two bractes next the calyx, the third remote
5281 Cor globose, Anth crested, All bractes close to calyx
5282 Cor globose, Anth crested, Bractes remote from cal Leaves glandular at edge, Sepals ovate
5283 Anthers bearded, Cor campanulate, Style included, Leaves 3, Flowers scattered
5284 Anth. bearded, Style exserted, Cor camp globose, Leaves 3 or 4 roughish, Branches pubescent

5285 Cor globose glutinous, Anth crested, Bractes remote, Leaves roughish
5286 Cor globose, Leaves quite smooth, Anth crested
5287 Anth crested, Leaves 3 ovate smooth, Flowers umbelled ovate, Cal entire, Branches villous
5288 Anth crested, Leaves 3 linear smooth, Fl umbelled globose, Cal lanceolate short, Branches smooth
5289 Leaves 3 or 4 spreading finely ciliated, Fl terminal, Bractes remote, Sepals ovate, Anth included crested
5290 Anth beardless, Leaves 3 triangular smooth, Fl racemose globose, Branches downy
5291 Anth crested, Style exserted, Cor. globose campanulate, Fl terminal umbelled, Leaves 4 smooth erect
5292 Anth. crested, Style included, Cor ovate, Umb many-fl. terminal, Leaves 4 or 5, Branches pendulous
5293 Anth bearded, Cor globose camp Cal appressed ciliated, Fl term and axill 1-sided, Lvs 4 horizontal
5294 Anth bearded, Style exserted, Cor campanulate, Fl whorled, Leaves 6 linear hairy
5295 Anth. beardless exserted, Cor campanulate, Fl term capitate, Leaves 4 incurved ciliated

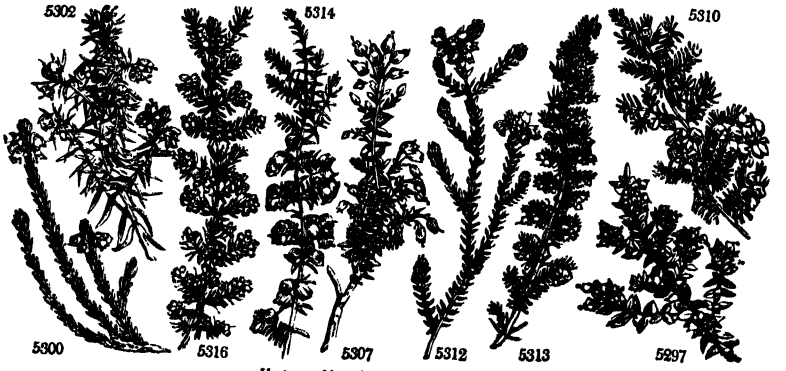


and Miscellaneous Particulars.

The climate for the heaths is not required to be warm during winter; if the frost is excluded, that will be enough Some species, as the E. persoluta for example, will even bear to have the ground about their roots frozen without injury, provided it is not thawed in the sun, or too suddenly, or in a very warm temperature. In general the heaths may be kept in the coldest part of the greenhouse, and those not in flower in pits, well covered at night with mats or prepared coverings of reeds or straw. Too much fire-heat in winter will hurt them as much as any thing, as they only require to be kept from frost most of the kinds might be preserved through the winter in frames the only difficulty is to keep the damp from them.

Heaths require a great deal of air and light, and therefore should be placed near the glass and near such

5296	planifólia *L*	flat-leaved	●	⌊⌋	or	2	jl s	Pu	C	G	H	1795	C	s p	W er 8.p 7.c ic.
5297	serpyllifólia *Lodd.*	thyme-leaved	●	⌊⌋	pr	½	jn jl	W	C	G	H.	1810	C	s p	Bot. cab 744
5298	marifólia *Thunb*	Marum-leaved	●	⌊⌋	or	2	my jn	W	C.	G	H.	1773	C	s.p	And hea. vol. 1
5299	hispídula *Thunb*	bristly-stemmed	●	⌊⌋	el	1	jn au	Pu	C	G	H	1791	C	s p	
5300	Schollióna *Lodd*	Scholl's	●	⌊⌋	cu	1½	my jn	Pu	C	G	H	1810.	C	s.p	Bot. cab. 538
5301	Blandfórdia *Andr*	Ld. Blandford's	●	⌊⌋	or	1½	mr jn	Y	C	G	H	1803.	C	s.p	And hea. vol. 3
5302	sanguinolénta *Lodd*	blood-colored	●	⌊⌋	pr	½	my jl	Cr	C	G.	H.	1818.	C	s p	Bot. cab 468
5303	Savillèia *Andr*	Savile's	●	⌊⌋	or	½	jn jl	R	C	G.	H	1800	C	s p	And. hea. c. ic.
5304	aggregáta *Wendl*	clustered	●	⌊⌋	el	½	jl	Pu	C	G	H	1820	C	s p	Bot. cab. 1678
	β alba	*white flowered*	●	⌊⌋	el	½	jl	W	C.	G.	H	1822	C	s.p	
5305	congésta *Wendl*	close-headed	●	⌊⌋	de	1	jn jl	W	C	G	H	1820	C	s p	Bot cab 1743
5306	paniculáta *L*	panicled	●	⌊⌋	or	1	f ap	R	C	G	H.	1774.	C	s.p	Bot. cab. 1194
	β alba	*white-flowered*	●	⌊⌋	or	1	f ap	W	C.	G	H	1774			
5307	suavéolens *Lodd*	sweet-scented	●	⌊⌋	el	1	au	Pk	C.	G	H	1800.	C	s p	Bot. cab 24
5308	amœ'na *Wendl.*	feathery	●	⌊⌋	or	1	mr jl	Pu	C.	G	H	1795.	C	s p	W e.17 p.73 c ic.
	plumósa Andr														
5309	lævis *Andr*	smooth	●	⌊⌋	de	1	my jn	W	C	G.	H	1821	C	s p	Bot. cab 1393
5310	Peziza *Lodd*	mushroom	●	⌊⌋	de	1	mr s	W	C	G	H	1812	C	s p	Bot. cab 265
5311	grácilis *Wendl*	gracile	●	⌊⌋	or	½	f jn	W	C	G	H	1794.	C	s p	W er 8 p.9 c ic.
5312	midulária *Lodd*	nestling	●	⌊⌋	pr	2	mr ap	Pk	C	G	H.	1809	C	s p	Bot. cab. 764
5313	persoluta *L*	garland	●	⌊⌋	or	1½	t my	Pu	C	G	H	1774	C	s p	Bot cab. 342
5314	grandinósa *Lodd*	hailstone	●	⌊⌋	pr	½	mr.ap	W	C	G	H.	1810.	C	s p	Bot. cab. 627
5315	pubéscens *L*	pale-downy	●	⌊⌋	or	1½	f d	Pu	C	G	H	1790	C	s p	Bot cab 167
5316	hirtiflóra *H K*	hairy-flowered	●	⌊⌋	cu	1½	ap jn	Pu	C	G	H	1790	C	s p	Bot. mag 481
	multæformis W														
5317	cistifólia *Lk*	cistus-leaved	●	⌊⌋	cu	1	my jn	W	C	G	H.	1823.	C	s p	
5318	mucósa *L*	mucous	●	⌊⌋	el	1½	f au	R	C	G	H	1787	C	s p	And. hea. vol. 1
5319	ramentácea *L*	slender-branch	●	⌊⌋	el	1½	jl d	D R	C	G	H	1786	C	s p	And. hea. vol 1
5320	mellífera *Lk*	honey-bearing	●	⌊⌋	or	1	ap my	Pu	C	G	H	1820	C	s p	
5321	odoráta *Andr*	perfumed	●	⌊⌋	de	1	ap jl	W	C	G	H	1804	C	s p	Bot cab. 633
5322	canéscens *Andr*	hoary	●	⌊⌋	el	1½	my au	Pk	C	G	H	1790	C	s p	And hea. vol. 2
	cruciphala A H														
5323	pura *Lodd*	pure	●	⌊⌋	pr	½	au s	W	C	G	H	1807	C	s.p	Bot. cab 72
5324	racemósa *Thunb*	racemed	●	⌊⌋	el	1½	ap my	Pk	C	G	H	1795	C	s p	W.er 10 p 3.c ic.
5325	absinthoídes *L*	wormwood-like	●	⌊⌋	or	1½	mr jn	Pu	C	G	H	1792	C	s p	
5326	scariósa *Thunb*	many-flowered	●	⌊⌋	or	1	jn jl	Pu	C	G	H	1800	C	s p	Bot cab 477
5327	campanuláta *Wendl*	bell-flowered	●	⌊⌋	el	1	ap au	Y	C	G	H	1791	C	s p	And. hea vol 1
5328	scopária *L*	small-green-fl	●	⌊⌋	pr	6	ap my	G	C	G	H	1770	C	s p	L e n 14 c fig. fl
5329	triceps *Lk*	three-headed	●	⌊⌋	de	1	my jn	W	C	G	H	1820	C	s p	Bot. cab 962
5330	coarctáta *Wendl.*	crowded	●	⌊⌋	cu	1	my s	Pu	C	G	H	1801	C	s p	
5331	actæa *Lk*	Actæon	●	⌊⌋	pr	1	my jn	Pa pu	C	G	H	1822	C	s p	
§5332	conférta *Andr*	crowded-flower	●	⌊⌋	de	1½	f o	W	C.	G	H	1800	C	s p	And. hea vol 2
5333	penicillifióra *Sal*	white-pencilled	●	⌊⌋	cu	2	my au	W. Br	C	G	H	1792	C	s p	W er 4 p 5.c ic
	calyculáta Wendl														
5334	villósa *Andr*	villous	●	⌊⌋	cu		f jn	W	C	G	H	1800	C	s p	And hea. vol 3
5335	tiaræflóra *Andr*	turban-flowered	●	⌊⌋	pr		my au	R	C	G	H	1800	C	s p	And. hea. vol 3
5336	mutábilis *Andr*	mutable	●	⌊⌋	pr	½	f o	Cr	C	G	H	1798	C	s p	Bot. cab 46
5337	obliqua *W*	oblique-leaved	●	⌊⌋	or	1½	au o	Pu	C	G	H	1789	C	s p	And hea vol 1
5338	flávа *Andr*	three-lvd -y.ll	●	⌊⌋	el	1½	s ap	Y	C	G	H	1795	C	s p	Bot cab 882
5339	decóra *Andr*	graceful	●	⌊⌋	cl	2	ja n	Pu	C	G	H	1790.	C	s p	And. hea vol 3
5340	cordáta *Andr*	heart-leaved	●	⌊⌋	de	¾	ap jn	W	C	G	H	1799	C	s p	And hea vol 3
5341	Passerina *W*	Sparrow-wort	●	⌊⌋	cu		my n	W	C	G	H	1800	C	s p	Pet gaz t 3 f 7
5342	setácea *Andr*	bristly-leaved	●	⌊⌋	pr	1½	f ap	W	C	G	H	1796	C	s p	And hea vol 1
5343	tenuissima *P S*	slender	●	⌊⌋	pr		f au	R	C	G	H	1803	C	s p	W er 6 p 9 c ic
5344	floribúnda *Lodd*	many-flowered	●	⌊⌋	cu	1	my jn	Pa pu	C	G	H	1800	C	s p	Bot cab 176



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glass as may be opened to admit air every mild day in the year. They require also very regular supplies of water, not much at a time, but so frequently that the earth may never get dry or the plant droop Many kinds of plants, if they have suffered for want of water, may be recovered by an abundant supply, and placing them under a bell-glass on a little heat, but if once the roots of a heath are thoroughly dried, no art of the gardener will recover the plant. This is the true reason why so many heaths are destroyed when introduced as chamber plants, and also by gardeners who are ignorant of their nature

Heaths are propagated by cuttings, seeds, and a few by layers. In propagating by cuttings, the tender tops are taken at whatever season of the year they begin to grow, which with most sorts is about the month of June. The strong growing kinds require the cuttings to be rather larger than the others, and some of the stunted growing kinds should be kept in the hot-house a little while when they begin to grow, to draw them to a sufficient length of young wood, or cuttings cannot be procured Then take the extreme points of the shoots, and with a sharp penknife cut off their lower ends at right angles, placing the cutting on the nail of the thumb, as in cutting the nib of a pen The cutting will be from three quarters to an inch long: strip off the leaves from the lower end to nearly half the length of the cutting, and, in order that this may be done

5296 Anth. bearded exserted, Cor. campanulate, Leaves 3 or 4 ovate acute fringed with glands
5297 Leaves 3 ovate, Fl very minute 3-6 term Style long exserted
5298 Anth bearded, Cor. ovate conical, Style middling, Leaves 3 ovate pubescent white beneath
5299 Anth beardless included, Cor. roundish, Leaves 3 ovate acute ciliated, Stem hispid
5300 Shoots long, Leaves smooth erect imbricated, Fl axillary, Cor. globose shorter than stalk nodding
5301 Tube of cor cup-shaped, Fl axillary, Cal. imbric Leaves 4
5302 Leaves 3 spreading acerose, Cor campanulate rough with short hairs
5303 Bractes remote, Cor with a short open limb, Anth included bearded
5304 Flowers capitate, Bractes remote, Cor hairy, Anth included bearded

5305 Leaves hairy, Flowers capitate, Anth included bearded
5306 Bractes remote, Flowers very abundant, Anth included bearded, Style exserted

5307 Leaves 3 ovate ciliated spreading, Fl term 3, Bractes remote, Cor ovate shorter than its stalk
5308 Anth bearded, Style included, Cor. camp Cal villous, Fl. axill. whorled, Leaves 4 imbric villous

5309 Anth included bearded, Fl capitate, Bractes remote
5310 Leaves 3 narrow spreading, Cor 4 globose campanulate [quite smooth
5311 Anth bearded, Style exserted, Cor camp Sepals linear smooth, Fl terminal umbelled, Leaves 4, Stem
5312 Branches slender upright, Leaves 3 short smooth, Fl clustered terminal, Cor globose campanulate
5313 Anth bearded, Style included, Cor camp Sepals ciliated, Leaves 3-4 smooth, Branches pubescent
5314 Leaves 2 spreading very narrow, Leaves 3 terminal, Cor globose smooth
5315 Anth bearded, Style included, Cor ovate pubescent, Leaves 3 hairy, Stem hairy
5316 Anth. bearded, Leaves 4 or more hairy, Fl terminal, Cor pubescent

5317 Leaves 4 covered with glandular hairs, Fl capitate, Bractes none, Cal hairy, Anth included bearded
5318 Anth bearded, Cor globose mucous, Ped 3 term longer than fl Leaves 4 linear with a cartil serrul edge
5319 Anth crested, Style included, Cor globose, Fl umb Leaves 4 linear 3-cornered smooth
5320 Leaves 4 and branches hairy, Fl capitate 4 or more, Cal leafy, Anth exserted bearded, Style long exserted
5321 Anth beardless, Bractes remote
5322 Anth beardless, Leaves linear 3 smooth, Limb of cor revolute

5323 Leaves 3 short smooth, Fl solitary term Cor. ovate smooth, Anth a little exserted
5324 Anth beardless, Leaves 4 lanceolate villous, Fl racemose, Cal downy
5325 Anth. beardless included, Cor ovate campanulate, Style exserted, Stigma funnel-form, Leaves 3
5326 Anth. beardless, Leaves 3 linear smooth, Fl camp racemose, Bractes remote
5327 Anth beardless, Leaves linear 3 smooth, Limb of cor spreading recurved
5328 Anth beardless, Leaves linear 3 smooth, Limb of cor erect
5329 Anth beardless exserted, Leaves 3 ciliated at base, Fl term 3, Sepals scarious
5330 Anth beardless included, Stigma calyptcate, Cor dilated upwards, Bractes remote
5331 Anth beardless exserted, Leaves 3 smooth, Fl term Style exsert. Stigma peltate
5332 Anth beardless, Leaves linear 4 smooth, Flowers terminal nearly 12
5333 Anth beardl exsert Cor urceol smooth, Fl term umb Leaves 3 pointed ciliated imbricated

5334 Anth beardless exserted, Fl urceolate villous, Leaves 3 revolute villous
5335 Anth beardless exserted, Fl cernuous turban-shaped covered by calyx, Leaves 3
5336 Leaves 3 or 4, Fl terminal 2, Cor downy changing from green to crimson
5337 Anth crested, Cor ovate viscid, Fl term umb Leaves scattered arcuate truncate
5338 Leaves 3 erect imbricated smooth, Fl axill Cor urceolate, Style exserted
5339 Anth beardless included, Fl axillary spiked, Cor campan ribbed, Leaves 6 obtuse
5340 Anth beardless, Leaves 3 ovate villous
5341 Anth beardless, Leaves 3, Cal 4-cleft very densely downy
5342 Anth beardless, Leaves 3 hispid, Sepals hairy upwards, Cor smooth
5343 Anth bearded included, Cor very small obov obt smooth, Fl umb erect and cernuous, Lvs 3-4 smooth
5344 Leaves two distant, Fl numerous very minute globose campanulate, Style exserted



and Miscellaneous Particulars

without injuring the shoot, use a sharp penknife or a pair of small scissors, for the least bruise or wound spoils the cutting This done, dibble the cuttings into pots filled with moistened white sand from pits, or with any small sand from pits or rivers, or, in default of that, with powdered sandstone When they are all planted, water the whole to fix them still better, and when the moisture has subsided, cover them with a small crystal or greenish crystal bell-glass fitted within the rim of the pot, and place them in the shade on a spent hot-bed, keeping them quite close till rooted The free-striking sorts will have roots in two months, and the others at different periods from three to twelve months, most of them will be ready for transplanting into pots of the smallest size in the following March Their rooting is easily known by their beginning to shoot, and then the bell should be taken off an hour or two daily

Many Ericas ripen their seeds in this country, and of other sorts seeds are regularly obtained by the nurserymen from the collectors at the Cape of Good Hope Imported seeds generally arrive in the winter, and should be sown early in the spring following, in pots filled with equal parts of peat and sand well incorporated, the seeds should be thinly covered with earth gently pressed down, and bell-glasses placed over them as over the cuttings. The soil must be kept moderately moist by gentle waterings, and in about six or seven weeks

5345 austrális *L*	Spanish	♃	or	½	mr	jl	Pu	Spain	1769	C	s.p	And. hea vol 3
5346 cinérea *H K.*	fine-leaved	♃	ec	1	jn	s	Pu	Britain	hea	L	s.p	Eng bot. 1015
β álba	*white-flowered*	♃	or	1	jn	s	W	Britain	hea.	L	s p	
5347 stricta *Donn.*	straight-branc	♃	or	2	au	n	Pu	S. Europe	1765.	C	s p	And. hea. vol. 2
5348 reflexa *Lk.*	reflexed	♃	cu	1½	my	jn	W	C. G H	1820	C	s p	Bot. cab 1787
5349 cérnua *L*	drooping-flow	♃	or	1	au	d	Pu	C. G H.	1791.	C	s p	Bot. cab 822
5350 lanceoláta *Pers*	spear-leaved	♃	or	1	jn	d	W	C G H	1791.	C	s.p	W er 8 p 13 c.ic.
5351 leucanthéra *Andr*	white-tipped	♃	or	¾	ja	my	W	C. G. H.	1803	C	s.p	
5352 tétralix *L.*	cross-leaved	♃	ec	1	jn	au	F	Britain	mo. h	C	s p	Eng bot. 1014
β álba	*white-flowered*	♃	or	1	jn	au	W	.....	...	L	s p	
5353 cinerascens *W en*	ash-colored	♃	or	1	ap	my	Pu	C G. H	1810	C	s.p	
§5354 urceoláris *Thunb*	pitcher-flower	♃	or	1½	my	jl	W	C G H	1778.	C	s.p	Ic hor kew 16
5355 cúbica *L*	cube-flowered	♃	or	1	ap	jl	Pu	C G H	1790.	C	s p	And. hea. vol 1
5356 assúrgens *Lk.*	rising	♃	de	1	my	jn	W	C G H.	1821	C	s p	
5357 nudiflóra *W*	small-bracted	♃	or	2	jl	au	D Y	C G H	1783	C	s p	Sm. ined. 3 t 57
5358 incána *Wendl*	hoary	♃	cu	1½	jn	au	W	C G H.	1810	C	s p	
β rubra	*red-flowered*	♃	cu	1½	jn	au	R	C G. H.	1810	C	s p	
5359 regerminans *W*	cluster-flower	♃	or	1½	my	au	R	C G H.	1791	C	s p	Bot cab 1728
5360 scabriuscula *Lk*	roughish	♃	el	1	my	jn	W	C. G H.	1805.	C	s.p	Bot cab. 517
5361 bracteoláris *Lam*	many-bracted	♃	or	1	mr	jl	R	C G H.	1800	C	s p	
5362 protrúdens *Lk*	protruding	♃	le	1	ap	my	W	C. G H.	1805	C	s p	
5363 flexuósa *Andr*	zigzag	♃	or	1½	ap	jl	W	C G H	1792	C	s p	And hea vol 1
dwarricáta Wendl												
5364 umbelláta *L*	umbelled	♃	or	3	my	jl	Pu	Portugal	1782	C	s p	And hea vol. 2
5365 staminea *Andr*	reflexed-stam.	♃	or	2	jn	s	R	C G H.	1799	C	s p	And hea vol. 3
5366 latifólia *Andr*	broad-leaved	♃	or	2	my	au	R	C G H	1800	C	s p	And hea vol 2
5367 cárnea *L*	early-fl -dwarf	♃	pr	¼	ja	ap	Pa pu	Germany	1763	L	s p	Bot. mag 11
β herbácea Wendl	*herbaceous*	♃	pr	¼	jn	ap	Pk	... ..	...	L	s p	
5368 mediterránea *L*	Mediterranean	♃	or	4	mr	my	Pu	Portugal	1648	C	s p	Bot mag 471
5369 arbúscula *Lodd*	little tree	♃	pr	1	f	au	R	C G H	1810	C	s p	Bot. cab 843
§5370 vágans *L*	Cornish	♃	or	1	jl	au	R	Cornwall	hea	C	s p	Eng bot 3
β alba	*white-flowering*	♃	or	1	jl	au	W	... ..	...	C	s p	
5371 longipeduncúlata *L*	long-stalked	♃	pr	1	jl	au	Pk	C G H	1805	C	s p	Bot cab 103
5372 ciliáris *L*	ciliated	♃	or	1	jl	s	Pu	Portugal	1759	C	s p	Bot mag 484
5373 pilósa *Lodd*	pilose	♃	cu	¾	jn		G	C G H.	1800	C	s p	Bot cab 606
5374 álbens *W*	pallid	♃	or	1	mr	au	W	C G H	1789	C	s p	Bot mag 440
5375 propéndens *Andr*	pendent	♃	or	1½	jl	au	Pu	C G H	1800	C	s p	And hea vol. 2
§5376 pyramidális *B M*	pyramidal	♃	pr	1½	f	my	Pk	C G H	1787	C	s p	Bot mag 366
5377 echniflóra *Andr*	Echium-flower	♃	el	1½	f	jn	Sc	C G H	1798	C	s p	And hea vol 3
5378 filamentósa *Andr*	long-peduncled	♃	or	2	ja	d	Pu	C G H	1800.	C	s p	Bot reg 6
5379 pulchélla *Thunb*	neat	♃	de	1½	jn	s	R	C G H	1792	C	s p	Th cr n 24 t 4
5380 viscária *W*	clammy-flower	♃	el	2½	mr	jl	R	C G H	1774	C	s p	Ic hort. kew. 1
5381 flexicaúlis *H K*	crook-stalked	♃	or	½	ja	my	Pu	C. G H	1800	C	s p	And hea vol 2
glandulósa Andr												
5382 tenélla *Andr*	delicate	♃	or	½	my	au	Pu	C G H	1791	C	s p	And hea vol. 2
5383 alopecuroides *Wen*	scurfy	♃	el	¾	my	jn	Pa pu	C G H	1810	C	s p	Bot cab 874
5384 furfurósa *Sal*	column -thread	♃	or	1	au	d	R	C G H	1789	C	s p	And hea vol 1
5385 multiflóra *W*	many-flowered	♃	or	2	jn	n	F	France	1731.	C	s p	And. hea vol 2
5386 deprésa *W*	depressed	♃	el	¾	jn	au	Y	C G H	1789	C	s p	And hea vol. 2
rupestris Andr												
5387 nána *Sal*	dwarf	♃	el	¾	my	au	Y	C G H	1792	C	s p	
5388 palustris *Andr*	marsh	♃	or	1	my	o	F	C G H	1799	C	s p	And hea vol 2
5389 formósa *W*	beautiful	♃	or	2	jn	s	R	C G H	1795	C	s p	Thu en n 82 t 3
α álba	*white-flowered*	♃	or	2	jn	s	W	C G H	1795.	C	s p	
β rúbra	*red-flowered*	♃	or	2	jn	s	R	C G H	1795	C	s p	
5390 flórida *W*	florid	♃	or	1	my	au	R	C G H	1803	C	s p	Thu en n 64 t 6



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the seeds, if fresh, will begin to come up, when the glasses may be removed by degrees, and the pots kept near the glass, and shaded from the mid-day sun till autumn, when they may be transplanted into pots of the smallest size

Seeds which are saved in this country may be sown as soon as gathered, if they ripen before November; but if after that period, it will be better to preserve them till spring, and then treat them like foreign seeds

Only a few heaths are propagated by layers, such as E. Massoni, retorta, petiolata, and one or two other delicate sorts, which when layed require two years to throw out roots On the continent most sorts of heaths are propagated by layers, because there they are ignorant of the easiest mode of managing cuttings.

One of the best growers of heaths in Britain is a gardener of the name of Henderson, at Woodhall, in West Lothian. This judicious cultivator has had an extensive collection of Ericæ for upwards of thirty years under his care, and has given some account of his mode of management in a late volume (vol. iii p. 323.)

F OVATÆ. *Corollas small, not globose.*

5345 Anthers crested, Cor. cylindrical, Style exserted, Leaves 3 spreading
5346 Anthers crested, Cor ovate, Leaves 3, Stigma capitate

5347 Anth. bearded, Style included, Cor ovate, Fl. term umbelled, Leaves 4 lin. horizontal
5348 Anth crested included, Leaves 3 recurved rough at edge, Cal short, Cor. campanulate viscid
5349 Anth crested, Leaves 4 ovate ciliated, Fl capitate, Cal. ciliated
5350 Anth. crested, Leaves 4 lanc. erect smooth, Fl capitate cernuous
5351 Anth crested included, Fl capitate, Leaves 3 or 4 lines long
5352 Anth crested, Cor. ovate, Style included, Leaves 4 ciliated, Fl capitate

5353 Very like E. cinerea, but the branches and calyx are downy with long hairs, Leaves 5 ciliated
5354 Anth. bearded, Cor ovate-conical villous, Style included, Sepals lanceolate, Fl umb Leaves 3
5355 Anth beardless included, Cor camp acute, Style included, Cal 4 cornered, Leaves 4 spreading
5356 Anth bearded included, Leaves 4 spreading hairy, Cor. dilated at end, Fl terminal
5357 Anth beardless exsert Style exsert Leaves 3, Branches downy
5358 Anth. bearded included, Leaves obtuse hairy, Fl capitate, Bractes remote, Cor silky

5359 Anth bearded, Cor ovate, Style included, Cal acute, Fl racemose
5360 Anth. bearded included, Style included, Cor slender, Leaves 4 obtuse glandular, Fl capitate
5361 Anth crested included, Cor prismatical, Leaves 3, Fl in bundles, Bractes many imbric involving the fl
5362 Anth beardless nearly exserted, Leaves 4 spreading hairy, Fl terminal umbelled, Sepals ovate
5363 Anthers beardless exserted, Cor oval twice as long as smooth calyx

5364 Anthers beardless exserted, Cor campan Style exserted, Leaves 3 acerose
5365 Anth exserted, Fl axill Leaves linear 3, Filam very long reflexed
5366 Anth exserted, Fl axill Leaves 3 ovate
5367 Anth exserted, Fl. axill Leaves linear 3 or 4, Bractes in middle of flower stalks, Cor conical

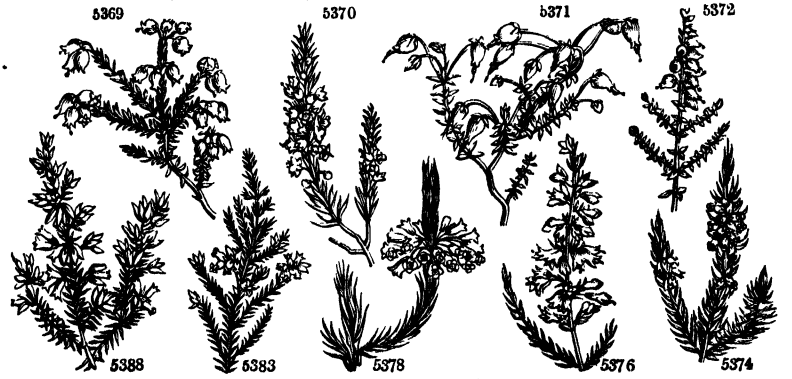
5368 Anth exserted, Fl axill Leaves 4-5, Bractes above the middle of flower-stalk, Cor urceolate
5369 Leaves short spreading, Fl terminal urceolate, Style a little spreading
5370 Anth exserted, Fl axill. Leaves 4-5, Cor campanulate, Pedunc the length of cor.

5371 Anth and style much exserted, Flowers axillary on very long slender hairy stalks
5372 Cor conical, Leaves 3 ovate ciliated, Anth beardless
5373 Plant all over hairy, Cor ovate, Sepals brown at end, Stamens and style exserted
5374 Cor. conical, Leaves 3 linear smooth, Anth beardless
5375 Cor cylindrical, Fl term Bractes remote, Anth beardless, Sepals ovate
5376 Cor cylind dilated upwards, Fl term Bractes remote, Anth beardless, Sepals subul from a broad base
5377 Cor. cylindrical dilated upwards, Fl axill Two bractes next cal Sepals ovate oblong
5378 Cor cylindrical dilated upwards, Fl axill Sepals subulate, Peduncles longer than flower
5379 Cor cylindrical dilated upwards, Fl axill Sepals subulate, Peduncles much shorter than flower
5380 Cor cylindrical dilated upwards, Fl axill Sepals linear
5381 Cor. conical, Anth. beardless, Leaves 4, Limb of cor erect

5382 Anth beardless, Leaves linear 4 smooth, Fl terminal 4
5383 Anth beardless included, Fl term Bractes remote, Cor narrowed upwards
5384 Leaves 3, Anthers beardless exserted, Flowers terminal
5385 Anth exserted, Fl axill Bractes remote, Leaves lin 5, Cor camp Limb reflex Ped twice as long as cor
5386 Cor cylindrical, Fl term Bractes remote, Anth bearded

5387 Stem spread on the ground, Leaves obtuse, Cor dewy outside clavate, Anth bearded
5388 Anth beardless included, Cor linear downy, Leaves downy 4
5389 Anth. crested, Leaves 3 ovate entire smooth, Fl umb furrowed, Cal. spreading entire

5390 Anth. bearded, Style included, Cor globose, Cal villous reflexed, Fl term umbelled, Leaves 4 hairy



and Miscellaneous Particulars

of the Caledonian Horticultural Society's Memoirs. He keeps his Ericas, he says, "at all times cool and airy, opening the glasses in winter when there is no frost, and letting the wind blow on them, and using no fire but in time of frost" "Never," he says, "shift any plant till the pot is quite full of roots. When the plants get large, several of them will continue in good health for three or four years without shifting, and flower well I have plants of E retorta here, in pots seven inches in diameter, which are very bushy, being eighteen inches across, and fourteen inches high above the pot, E. infundibuliformis, two feet and a half in diameter, and two feet nine inches high; Erica pilosa between five and six feet high and three feet across, in pots eleven inches in diameter: these have not been shifted for five years, and are in high health, and covered with strong fine flowers from the mouth of the pot to the top of the plant" (*Caled Mem* iii 327)

"A prejudice," Page observes, "having spread that the culture of heaths is difficult, one of the greatest ornaments of the greenhouse has hence of late been neglected, although the method of culture is as easy and nearly as certain as that of the Geranium, but requiring a little more delicacy in the execution"

5391 Solan'dra *Andr.*	Solander's	♣	⊔	el	1	mr s	Pk	C. G. H.	1800	C	s.p	And. hea. vol 2
5392 acúta *Andr.*	pointed-cupped	♣	⊔	de	½	my jl	R	C. G. H.	1799.	C	s.p	And. hea vol. 2
5393 empetroides *Andr.*	close-flowered	♣	⊔	or	1½	my.au	L.F	C. G. H.	1788	C	s p	And. hea. vol 2
5394 turrigera *Sal*	Cypress	♣	⊔	or	1½	jn s	R	C G H	1796.	C	s.p	
§5395 Bergiána *W*	Bergius's	♣	⊔	cu	1½	ap au	Pu	C. G. H.	1787.	C	s p	And. hea. vol. 2
quadriflóra Andr												
5396 barbáta *Andr*	bearded	♣	⊔	or	1	my.au	W	C. G H.	1799	C	s p	And hea vol. 2
5397 retroflex'a *Wendl.*	jointed	♣	⊔	el	1	jl.s	W	C. G. H	1787.	L	s p	W er. 8 p 7.c. ic.
pulchélla Andr												
articuláris Thunb.												
5398 thymifólia *Andr.*	Thyme-leaved	♣	⊔	de	½	my.au	Pu	C G H.	1789	C	s p	And. hea vol. 2
5399 ténuis *W en*	slender-flower	♣	⊔	el	1	f o	Pk	C G. H.	1790	C	s p	
5400 hírta *W*	hairy-leaved	♣	⊔	or	2	ap jn	R.Pk	C G H	1795	C	s p	Th er. n 56 t 2
5401 strigósa *W*	dwarf-downy	♣	⊔	or	1½	mr ap	Pa R	C G H	1775.	C	s p	
5402 molleáris *Sal*	soft-leaved	♣	⊔	de	1	ap o	R	C G H	1803	C	s p	Schne ic n 17
5403 racemíflora *Andr*	compact-flow	♣	⊔	or	1½	ap jn	R	C G H	1803.	C	s p	And. hea. vol 3
5404 pilulífera *W*	ball-bearing	♣	⊔	cu	1	ap my	R	C G H	1789	C	s p	
5405 catervæflóla *Sal*	huddled leaved	♣	⊔	or	½	ap jn	R	C. G. H	1790	C	s p	
5406 tardiflóra *Sal*	pubescent	♣	⊔	cu	1½	mr s	Pu	C G H	1790.	C	s.p	Bot. mag. 480
E pubescens B M												
5407 parviflóra *Sal*	small-fl -downy	♣	⊔	pr	1	mr s	Pk	C G H	1790	C	s p	
5408 exígua *Sal*	small-downy	♣	⊔	pr	1	mr s	Pk	C G H.	1790	C	s p	

Rhodoraceæ Sp 5—6.

*803 MENZIE'SIA *Sm*	MENZIESIA											
5409 ferruginea *Ph*	ferrugineous	♣		or	½	my jn	Br	N Amer	1811	L	s p	Sm ic in 1 t 56
5410 globulária *Ph*	globular-flow	♣		or	½	my jn	Br	N Amer	1806	L	s p	Par lond 44
5411 pilósa *W*	pilose	♣		or	½	my jn	Br	.....	1822	L	s p	
5412 polifólia *H K*	Irish	♣		or	2	jn s	Pu	Ireland	moun	L	s p	Eng bot. 35
β nána	*dwarf*	♣		cu	½	jn s	...	Ireland		L	s p	
5413 cærúlea *L T*	Yew-leaved	♣		or	½	jn jl	B	Scotland	hea.	L	s p	Eng bot 2169

Gentianeæ. Sp 1—2

894 CHLO'RA *W.*	YELLOW-WORT											
5414 perfoliáta *W*	perfoliate		○	or	1	jn jl	Y	Britain	ch so	S	s l	Eng bot 60

Campanulaceæ Sp 1

895 MICHAUX'IA *W*	MICHAUXIA											
5415 campanuloides *W*	rough-leaved	☿	◎	or	4	jn au	L B	Levant	1787	S	r l	Bot mag 219

Papaveraceæ Sp 1

896 JEFFERSO'NIA *Ph*	JEFFERSONIA											
5416 diphylla *Ph*	two-leaved	☿	△	pr	½	my	W	N Amer.	1792	D	s.l	Bot. mag. 1513

Terebintaceæ Sp 5—17

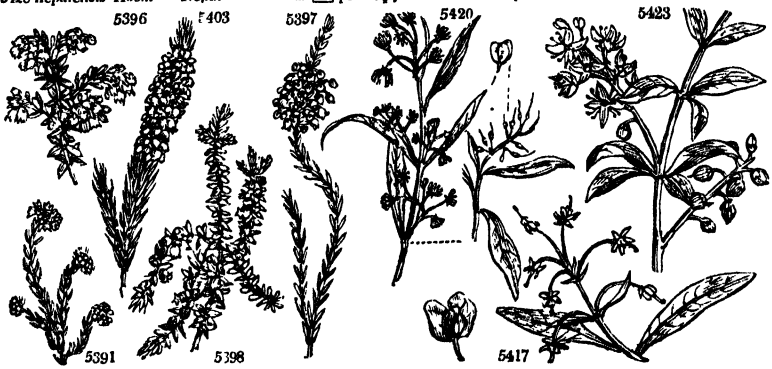
897 DODONÆA *W*	DODONÆA											
5417 viscósa *W*	clammy	♣		un	6	jn jl	G	S. Amer	1690	C	p l	Cav ic p 4 t.327
5418 bialáta *Ath*	two-winged	♣		un	4	...	G	S Amer	1822	C	co	
5419 oblongifólia *Lk*	oblong	♣		un	4	...	G	.....	1823	C	co	
5420 triquetra *W*	three-sided	♣		un	5	jn au	G	N S W	1790	C	s p	Bot rep 230
5421 angustifólia *W*	narrow-leaved	♣		un	5	my au	G	Jamaica	1758	C	s p	

Salicariæ Sp 3—6

898 LAWSO'NIA *W*	LAWSONIA											
5422 inérmis *W*	Henna-plant	☿		cu	10	...	W	Egypt	1759	S	s p	Rauw ic 60 t. 7
5423 spinósa *W*	prickly	☿		cu	18	..	W	E Indies	1759	S	s p	Rh mal 1 t 40
5424 purpúrea *Lam.*	purple	☿		cu	12	...	Pu	E Indies	1820	S	s p	

Melastomaceæ Sp 4—7

899 OSBECK'IA *W*	OSBECKIA											
5425 zeylánica *W*	Ceylon	♐	◎	pr	2	jl au	Y	Ceylon	1799	C	s p l	Bot. reg 565
5426 Chinénsis *W*	Chinese	♃		pr	2	jl	Pu	China	1818	C	s p	Bot reg 542
5427 stellàta *Don*	starry	♃		pr	1	jn au	Pk	Nepal	1820	C	p l	Bot reg 674
5428 nepalénsis *Hook.*	Nepal	♃		pr	1½	jn	Pu	Nepal	1821	C	p l	Hook ex fl 31



History, Use, Propagation, Culture,

(*Prodromus*, &c art *Erica*) Those who complain of the difficulty of growing the heath, are often, as Loddiges remarks, ignorant people who have never had a heath to grow

One circumstance in favor of the culture of heaths is, that they are not subject to insects, or at least very rarely so (*Greenhouse Companion*, p 62)

The number of species is here reduced to those which are certainly different from each other. Of those enumerated in garden catalogues many are mere repetitions of each other

893 *Menziesia* Named in honor of Mr Archibald Menzies, an assiduous and successful botanist, who accompanied Vancouver, in the capacity of his surgeon, in his voyage round the world He is still living, and the ornament of the private circle in which he moves Small heath-like plants, all hardy, and requiring the same cultivation as Erica.

894 *Chlora* From χλωρος, green, in allusion to the color of the dried flower of C perfoliata. The whole plant dyes yellow.

895 *Michauxia.* In memory of Andrew Michaux, botanist to the king of France, who travelled into Syria,

5391 Anth. crested included, Flowers capitate campan. cernuous, Leaves 4 cernuous
5392 Anth. crested included, Fl. 3, Leaves 4 subulate erect mucronate
5393 Anth. bearded, Cor campan. Fl whorled, Leaves 6 hairy spiral
5394 Leaves narrow, Cal recurved horizontal, Cor. globose with segm. imbricated at base
5395 Anth. crested, Leaves 3 lanceolate rough, Fl 3, Cal ciliated reflexed

5396 Anth. crested included, Cor. urceolate hairy, Fl. umbelled, Leaves 4 ovate
5397 Anth. bearded included, Cor globose much less than colored calyx, Leaves 3 with a membranous edge

5398 Anth 2 horned included, Cor axill solitary, Leaves 3 ovate cordate ciliated
5399 Anth bearded included, Style exserted, Cor camp smooth, Fl. term sol Leaves 3 lin Branches hairy
5400 Anth. bearded, Leaves 3 linear hispid, Fl. umbelled, Cal rough
5401 Anth bearded, Cor camp smooth, Leaves 4 pubescent ciliated
5402 Cal 4-cleft, Cor linear smooth urceolate with a recurved limb, Capsule hairy
5403 Anth bearded included, Flowers racemose, Leaves 6 clustered
5404 Anth bearded, Leaves 4 ciliated, Fl umb Cal navicular ciliated at end
5405 Anth bearded perforated, Leaves 4, Stem angular downy, Cor narrow obovate
5406 Anth. bearded, Leaves 4, Cal. appressed, Cor linear pubes. with a very short recurved limb, Caps hairy

5407 Anth bearded, Leaves 4, Cal. appressed, Cor linear pubescent, Capsule smooth [smooth
5408 Anth bearded, Leaves 4, Cal appressed, Cor linear pubes with an oval tube and very short limb, Caps.

5409 Leaves obov lanc. beneath, beyond the nerves smooth, Cal 4-cleft, Fl urceol 8-androus
5410 Leaves pubescent beneath, Calyx 4-fid, Cor with a globose tube
5411 Leaves oval pubescent, Fl term aggregate nodding
5412 Leaves beneath densely downy, Cal. 4-parted, Tube of cor oval

5413 Leaves linear obtuse with cartilaginous teeth, Flowers 5-cleft decandrous

5414 Leaves perfoliate

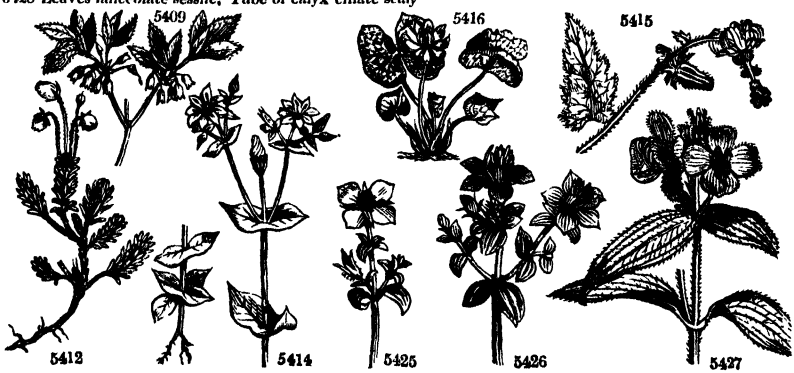
5415 The only species

5416 The only species

5417 Leaves obovate oblong viscous, Fl racemose, Fruit with 2 or 3 wings longer than stalk
5418 Leaves lanc narrowed at both ends viscid, Racemes branched, Fruit always with 2 wings length of stalk
5419 Leaves obl mucronate entire, Fl term sessile
5420 Leaves lanceolate narrowed at each end, Branches 3-cornered, Fruit with narrow wings
5421 Leaves oblong lanceolate with revolute edge, rather clammy, Flowers in short racemes

5422 Unarmed, Leaves subsessile ovate acute at each end
5423 Branches spiny
5424 Leaves subsessile lanceolate with terminal corymbs of flowers

5425 Leaves stalked, Calyx hispid
5426 Leaves sessile, Calyx smooth
5427 Leaves lanc obl acumin 5 nerved and branches hispid, Cal. covered with entangled radiate hairs
5428 Leaves lanceolate sessile, Tube of calyx ciliate scaly



and Miscellaneous Particulars.

Persia, and North America, and discovered this his genus It is a handsome biennial, which bears a profusion of shewy flowers bearing some distant resemblance to those of the Passion-flower

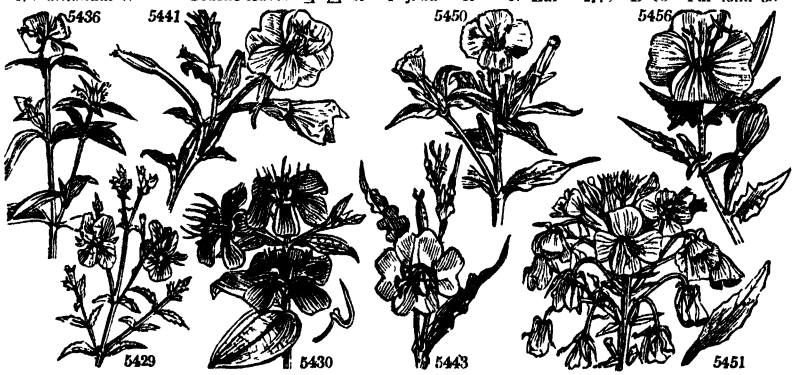
896. *Jeffersonia.* Named after Mr Jefferson, the celebrated President of the United States. A very curious plant, remarkable for the peculiar mode of dehiscence of its capsule.

897 *Dodonæa.* So named in honor of Rambert Dodoens, professor of medicine, a famous botanist of the sixteenth century, author of Fragum Historia, 1552; and Pemptades, 1583. He was born at Malines, in 1518, and died in 1585 The species are ugly tropical shrubs, of neither use nor beauty

898 *Lawsonia.* In memory of Isaac Lawson, M D author of A New Voyage to Carolina, London, 1709 L. inermis is the Henna plant, with the leaves of which the Egyptian women dye their nails pink It is of easy culture and propagation

899. *Osbeckia.* So named by Linnæus, in honor of Peter Osbeck, a Swedish clergyman, member of the academy of Stockholm, and of the society of Upsal: author of a voyage to China and the East Indies, in 1751. Englished by Forster, in 1771. Little plants resembling Melastoma. Young cuttings strike freely under a hand-glass.

†*900. RHEX'IA. *W.*	Rhexia.			*Melastomaceæ*	*Sp.* 7—50.							
5429 mariána *W.*	Maryland	pr		½ jn au	Pu	N Amer	1759.	D	s p	Bot. cab. 366		
§5430 viminea *Don.*	twiggy	or		6 jn au	Pu	Brazil	1821	D	s.p	Bot reg 664		
5431 ciliósa *Ph*	ciliated	pr		1 jn au	Cr	Carolina	1812.	D	p.l	Ph. am. l. t. 10		
5432 bival'vis *W*	two-valved	cu		2 my.jn	W	Guiana	1893	S	p.l			
5433 virginica *W.*	Virginian	pr		½ jn au	Pu	N Amer	1759	D	p l	Bot mag. 968		
§5434 aquática *W*	marsh	pr		...		S. Amer.	1793.	C	p l	Aub. gui 1 t.169		
5435 holosericea *Humb*	silky	or		10 jl	B	Brazil	1816.	C	p l	Bot. reg 323		
§5436 glomeráta *W*	headed	or		1½ jl	W	W Indies	1818.	C	p l	Bot. cab. 334		
†901. ŒNOTHE'RA. *W*	Œnothera			*Onagrariæ.*	*Sp.* 32—41							
5437 biénnis *W*	common	or		4 jn s	Y	N Amer	1629	S	co	Flor dan 446		
5438 grandiflóra *W.*	great-flowered	or		4 jn au	Y	N Amer	1778	S	co	Bot mag 2068		
5439 parviflóra *W*	small-flowered	or		4 jn au	Y	N Amer	1757	S	co	Meerb ic 1 t.34		
5440 muricáta *W*	prickly-stalked	or		3 jl au	Y	N Amer	1789	S	co	M co got. 6 t.1		
5441 longiflóra *W*	long-flowered	or		3 jl s	Y	B Ayres	1776	S	co	Bot mag 365		
5442 mollissima *W*	soft wave-leav	or		2 jn o	Y	B Ayres	1732	S	co	Sch. han 1 t.105		
5443 odoráta *W*	sweet-scented	or		2 ap au	Y	S Amer	1790	D	co	Bot. reg 147		
5444 noctúrna *W.*	night-smelling	or		2 ap au	Y	C G H	1790.	S	co	Jac. ic. 3. t. 455		
5445 villósa *W*	villous	or		2 jl au	Y	C G H	1791.	S	co			
5446 dentata *Lindl*	toothed	or		½ jn au	Y	Peru	1818.	D	co	Lindl coll 10		
5447 fruticósa *W*	shrubby	or		3 jn au	D Y	N Amer	1757	D	s p	Bot. mag 332		
5448 púmila *W.*	dwarf	or		½ my s	D Y	N Amer	1757	D	p l	Bot mag 365		
5449 rósea *W*	rosy-flowered	or		1 my au	Pk	Peru	1783	D	p l	Bot mag 347		
§5450 purpúrea *W*	purple-flowered	or		1 my au	Pu	N Amer	1794	C	co	Bot mag. 352		
Œ Romanzovii Bot reg 562												
5451 corymbósa *B M*	corymbose	or		3 s	Y	Mexico	1816	D	co	Bot. mag. 1974		
5452 stricta *Ledebure*	upright	or		1½ jn jl	Y	....	1822	S	co			
5453 média *Link*	intermediate	or		2 jl au	Y	N Amer	1823.	D	p l			
5454 lineáris *Mœh*	linear	or		1½ jn	Y	N Amer	1822	D	co			
5455 sinuáta *W*	scollop-leaved	or		3 jl	Y	N Amer	1770	S	s l	M co got. 5 t 9		
5456 tetráptera *W*	white-flowered	or		1 jn au	W	Mexico	1796	S	s l	Bot mag 468		
5457 cæspitosa *B M*	turfy	or		1 jn jl	W	N Amer	1811	D	p l	Bot. mag 1593		
5458 macrocárpa *B M*	Missouri	or		4 jn jl	Y	N Amer	1811	D	s p	Bot mag. 1592		
5459 glaúca *Ph*	glaucous	or		2 my o	Y	N Amer	1812.	D	s p	Bot. mag 1606		
5460 Fraséri *Ph*	Fraser's	or		1½ my o	Y	N Amer	1811	D	s p	Bot. mag. 1674		
5461 tenuifólia *Fl p*	fine-leaved	pr		1½ jl s	Y Pu	Peru	1824.	D	co			
5462 acaúlis *Cav*	stemless	or		½ my s	W	Chili	1821	D	co	Bot. reg 763		
§5463 tenélla *Fl per*	slender	pr		½ ap au	Pu	Chili	1822	S	co	Bot mag 2424		
5464 speciósa *Hook*	shewy	or		1 mr s	W	N Amer	1821	S	co	Hook ex fl 80		
5465 virgáta *Fl. per*	twiggy	pr		1½ jn	Pu	Peru	1823	D	co	Fl. per t 515		
5466 hírta *Lk*	hairy	or		1 my jl	Y	California	1823	S	co			
5467 triloba *Nutt*	three-lobed	or		⅝ my s	Y	N. Amer	1822	D	co			
5468 albicáulis *Ph.*	white-stalked	cu		½ my au	W	N Amer	1811	S	s p			
†902 GAU'RA *W*	Gaura			*Onagrariæ*	*Sp* 5—7							
5469 biénnis *W*	biennial	or		5 au o	R w	N Amer	1762	S	p l	Bot. mag 389		
5470 coccínea *Ph*	scarlet	or		½ au o	S	Louisiana	1811	S	s l			
5471 fruticósa *W*	shrubby	pr		3 ...	R w	S Amer	1816	S	s l	Jac ic 3 t 457		
5472 mutábilis *W*	changeable	pr		1½ jl au	Y	N Amer	1795.	S	s l	Bot mag 388'		
5473 tripétala *Cav*	three-petalled	cu		1 au	Pk	Mexico	1804	S	s l	Cav ic 4 t 396 f 1		
903. EPILO'BIUM *W*	Willow-herb			*Onagrariæ*	*Sp* 15—20							
5474 angustifólium *W*	Rose-bay	or		4 jl au	Pu	Britain	mea	D	m s	Eng bot 1947		
5475 angustissimum *W*	linear-leaved	or		2 jl au	Pu	Al of Eur	1775	D	m s	Bot mag 73		
5476 latifólium *W*	Orache-leaved	or		4 jl au	R	N Eur	1779	D	co	Par lond 58		



History, Use, Propagation, Culture,

900. *Rhexia* A Greek name employed by Pliny to designate a Boragineous plant It is derived from *ῥῆσσω*, to burst, that is to say, good against ruptures The hardy species thrive best in a bed of peat, or they will grow very well in pots

901. *Œnothera* Derived from *οἶνος*, wine, and *θηρεύω*, to hunt The roots of this plant, O biennis, eaten after meals, are incentives to wine-drinking, as olives are This is an ornamental genus of easy culture in light rich soil, and they increase either by seeds or cuttings O. biennis is called the night primrose, because the flowers usually open between six and seven o'clock in the evening The mode of their expanding is curious. The petals are held together at top by the hooks at the end of the calyx, the segments of which first separate at bottom and discover the corolla, a long time before it acquires sufficient expansive force to unhook the calyx at top, when it has accomplished this, it expands very fast, almost instantaneously, to a certain point, and then makes a stop, taking a little time to spread out quite flat: it may be half an hour from the first bursting of the calyx at bottom to the final expansion of the corolla, which commonly becomes flaccid in the course of the next day, sooner or later according to the heat or coolness of the weather. The

5429 Lvs. sess. lanc. 3-nerved villous ciliated, Cal stellate hairy
5430 Leaves ovate lanc 5-nerved hairy on each side, Panic term loosely many-fl.
5431 Leaves finely hispid at edge, Stem quadrangular smooth, Flowers solitary in an involucre
5432 Decandrous, Lvs. sessile smooth ovate obtuse 3-nerved, Caps 2-valved
5433 Lvs sessile lanceolate 3-nerved serrate ciliated, Cal. glandular ciliated
5434 Lvs opp cordate crenulate hairy, Pan term. trichotomous, Branches filiform much spreading
5435 Leaves cordate oval silky on each side 7-nerved sessile, Pan term Flowers with bractes 10-andr.
5436 Lvs stalked ovate entire 3-nerved villous, Fl terminal clustered

5437 Lvs ovate-lanceolate flat, Stem muricated villous, Stamens shorter than cor.
5438 Lvs ovate-lanceolate, Stamens declinate, Stem shrubby
5439 Lvs ovate-lanceolate flat, Stem smooth subvillous, Stamens longer than cor.
5440 Lvs lanc flat, Stem purp muricated, Stamens length of cor.
5441 Lvs toothletted, Stems simple hairy, Petals distant 2-lobed
5442 Lvs lanceolate wavy
5443 Lvs linear lanceolate toothletted wavy pubescent glaucous, Stem hairy
5444 Lvs lanc repand toothed pubescent, Stem rounded pubescent
5445 Lvs lanc. villous, Stem angular hairy
5446 Lvs sublinear toothletted, Caps cylindr very narrow toothed
5447 Lvs lanceol somewhat toothed acute, Caps stalked obl clavate angular
5448 Lvs lanc entire obtuse, Caps somewhat stalked ellipt ovate angular
5449 Lvs ovate narrowed at each end toothed, lower lyrate, Caps stalked obovate angular
5450 Lvs. glaucous smooth lanceolate entire, Caps. sessile ovate angular

5451 Stem upright hispid furrowed, Leaves lanc repand toothletted, Caps sess angular cylindrical
5452 Stem muricated, Lower lvs linear very long toothletted, cauline lanceolate
5453 Stem erect pubescent, Lvs lanc lin soft pubescent, Caps obl rounded sessile
5454 Pubescent, Lvs lin lanc acute at each end entire, Fl term aggregate, Caps clavate 4-cornered
5455 Lvs toothed sinuated, Caps prismatical
5456 Lvs lanc. pinnatifid at base, Caps obovate with 4 wings
5457 Lvs lanc cut-toothed, Caps obl sessile, Tube of cal very long, Pet 2-lobed
5458 Stem branched, Lvs lanc stalked with distant glandular teeth, Caps ellipt 4-winged on short stalks
5459 Leaves broad-oval repand toothed lævigated glaucous, Caps ovate 4-cornered
5460 Stem simple below, Leaves ovate stalked glandular toothletted, Racemes leafy, Caps obovate 4-cornered
5461 Lower leaves oblong, upper linear, Caps cylindrical straight, Petals crenulate
5462 Leaves pinnatifid, with the terminal segment large and toothletted
5463 Leaves linear obovate, Caps cylindrical curved
5464 Downy, Leaves oblong lanc toothed subpinnatifid, Raceme naked, Caps obovate angular
5465 Leaves lyrate and lanceolate toothed, Caps stalked clavate
5466 Hairy, Leaves lanc toothletted, Caps axillary curved angular acute
5467 Very like Œnothera acaulis, from which it is chiefly distinguished by its yellow flowers
5468 Finely pubescent, Stem and nerves of leaves white, Leaves pinnatifid, Fl spiked

5469 Leaves lanc toothed, Pet obovate ascending spreading, Style and stamens declinate
5470 Leaves lin lanc toothletted, Spike close, Petals as long as cal. Stigma entire
5471 Leaves lin lanc toothletted, Style and stamens straight
5472 Leaves ovate toothed, Pet ovate acute cruciate, Style and stamens straight
5475 Leaves lin lanc. deeply toothed, Pet 3 ascending, Stamens 6 declinate

5474 Leaves scattered lin lanc entire veiny, Fl unequal
5475 Leaves scattered lin obsoletely toothletted veinless, Petals unequal entire
5476 Leaves altern and opposite lanc. ovate nearly entire pubescent veinless, Fl. unequal



and Miscellaneous Particulars

uppermost flowers come out first in June, the stalk keeps continually advancing in height, and there is a constant succession of flowers, till late in autumn The roots are eaten in some countries in the spring

O longiflora has flowers uncommonly large and shewy, which continue from July to October

The dwart North American herbaceous kinds, are among the most beautiful plants of our borders

902 *Gaura* A very curious genus, so called from γαυρος, superb. Its flowers are rose colored, in fine terminal spikes. Plants with the habit of Œnothera, and requiring the same management

903 *Epilobium* From επι, upon, and λοβος, a pod; that is to say, a flower growing upon a pod E. angustifolium is a native of most parts of Europe, from Lapland to Italy It is valuable in shrubberies as thriving under the drip of trees, and succeeds every where, even in the smoke of cities, and in parks it is a good plant to adorn pieces of water, being hardy, of rapid increase, not much relished by cattle, and very shewy when in flower According to Haller, the young shoots are eatable, although an infusion of the plant stupifies, the pith when dried, is boiled, and becoming sweet, is by a proper process made into ale, and this into vinegar by the Kamtschatdales, it is also added to the cow-parsnip, to enrich the spirit that is prepared

5477 hirsútum *W*	Codlins& Cream	△	or	4	jl au	Pu	Britain	wat.pl	D	co	Eng bot. 838		
5478 parviflórum *E B*	small-flowered	△	pr	2	jl au	Pu	Britain	wat.pl.	D	co	Eng bot. 795		
5479 villósum *W*	Cape	⧋	or	2	jl au	Pu	C. G H.	1799	D	co			
5480 montánum *W.*	broad-smth-lv.	△	w	2	jn jl	Pu	Britain	woods	D	co	Eng bot. 1177		
5481 róseum *Sm*	pale-smooth-lv	△	w	1½	jl	Pk	England	mar.	D	m s	Eng bot 693		
5482 alsinifólium *Sm*	Chickweed-lvd.	△	w	¾	jl	Pk	Britain	sc. al.	D	m s	Eng. bot. 2000		
5483 tetragónum *W*	square-stalked	△	w	2	jl	Pu	Britain	mar.	D	m s	Eng. bot 1948		
5484 colorátum *W*	Pink-flowered	△	or	2	jl	Pu	N Amer.	1805.	D	l p			
5485 alpéstre *Schmidt*	alpine	◯	pr	½	jn jl	Pu	Switzerl.	1820.	S	l p			
5486 dahúricum *Fisch*	Daurian	○	pr	¾	jl	W	Dauria	1822.	S	cā			
5487 palústre *W*	round-stalked	△	w	3	jl	Pu	Britain	mar	D	co	Eng bot. 346		
5488 alpinum *W*	Alpine	△	w	¾	jn	R	Britain	al riv	D	s l	Eng. bot. 2001		

†904 FUCH'SIA *W.* FUCHSIA — *Santalaceæ. Sp* 4—18

5489 coccínea *W*	scarlet	⊔	or	6	my au	S Pu	Chili	1788	C	p l	Bot mag 97		
5490 grácilis *Lindl decussáta* B M.	slender	⊔	or	3	my.o	S.Pu	Chili	1823	C	p l	Bot. reg 847		
5491 excorticata *W.*	barked	⊔	or	3	jn o	G Pu	N. Zeal	1824.	C	p l	Bot. reg 857		
5492 lycioides *W*	Boxthorn-leav	⊔	or	2	ap o	S	Chili	1796.	C	p l	Bot mag 1024		

*905 JAMBOLI'FERA *L* JAMBOLIFERA — *Terebintaceæ Sp* 1—3.

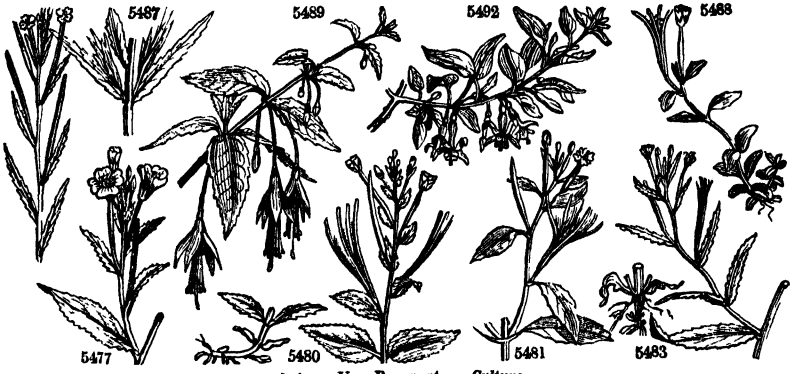
§5493 pedunculáta *Dec*	peduncled	▭	cu	4	f d	G	E. Indies	1800	C	lt.l	Vah sym 3. t 61		

906 OXYCOC'CUS *P S* CRANBERRY — *Ericeæ. Sp* 3

5494 palústris *P S*	common		fr	¼	my jn	Pk	Britain	tur bo	L	p	Eng bot 319		
5495 macrocárpus *Ph*	large-fruited		fr	½	my jn	Pu	N Amer	1760	L	p	Dend brit 122		
5496 erythrocárpus *P S O erectus* Psh	upright		fr	2	my jn	Pk	N Amer.	1806.	L	p	Dend. brit 31		

907 VACCINIUM *L* WHORTLE-BERRY. — *Ericeæ Sp* 27—30

5497 myrtíllus *L.*	Bilberry		fr	1½	ap jn	R	Britain	hea	L	p	Eng. bot 456		
β fructu albo	*white-fruited*		fr	1½	ap jn	G	Britain	moors.	L	p			
5498 palúdum *H K.*	pale		or	2	my jn	W	N Amer	1772	L	p			
5499 stamíneum *L*	long-stamened		or	2	my jn	W	N Amer	1772	L	p	Pl al t. 339 f 3		
5500 álbum *L*	white-flowered		or	2	my jn	W	N Amer	1772	L	p	Bot. rep. 263		
5501 cæspitósum *Mich*	turfy		or	¼	...	W	Hud Bay	1823	L	p	Bot mag 3429		
5502 uliginósum *L*	Bleaberry		fr	2	ap my	Pk	Britain	...	L	p	Eng. bot. 581		
5503 diffúsum *H K arbóreum* Mich	tree		or	20	my jl	Pk	Carolina	1765.	L	p	Bot. cab. 1885		
5504 angustifólium *H K myrtilloides* Mich	Bluets		or	2	ap my	Pk	N Amer	1776.	L	p	Bot. mag. 3447		
5505 dumósum *B M hirtéllum* H K	bushy		or	3	my jn	W	N. Amer	1774.	L	p	Bot. mag. 1106		
5506 fuscátum *H K formósum* Andr	clustered-flow		or	2	my jn	Pk	N Amer	1770.	L	p	Bot. rep. 97		
β angustifólium	narrow-leaved		or	2	my jn	Pk	N Amer	...	L	p			
5507 frondósum *L glaúcum* Mich	Blue Tangles		or	3	my jn	W	N Amer	1761.	L	p	Bot. rep. 140		
β ventátum H K	*red-twigged*		or	3	my jn	Pk	N Amer	1770.	L	p			
5508 ligustrinum *L*	Privet-leaved		or	3	my.jn	Pu	N Amer	...	L	p			



History, Use, Propagation, Culture,

from that plant, as fodder, goats are said to be extremely fond of it, and cows and sheep to eat it; the down of the seeds mixed with cotton or fur has been manufactured into stockings and other articles of clothing

E. hirsutum is found only in rich moist soil by water The leaves smell like scalded codlings or gooseberry pye when green, but lose that odor when dry Cattle are rather fond of the plant both recent and dried

904 *Fuchsia* So named in honor of Leonard Fuchs, a famous German botanist, author of Historia Stirpium, in 1542, with 516 excellent engravings in wood. F coccinea is one of the most elegant of deciduous greenhouse shrubs; the young wood and nerves of the leaves are tinged with purplish red: the pendent blossoms, like most produced from the axils of the leaves, as the shoots grow, continue during the greater part of the growing season, and are succeeded as they fade by a purple berry. The finest specimen in England of this species is at Salt-Hill

Many other species have been lately introduced, some of which will probably be very handsome. South America contains some most splendid species, of which we know nothing in this country

905 *Jambolifera.* From *fero*, to bear, and *Jambol*, the name of a Malabar fruit. Cuttings strike freely in sand under a hand-glass

906. *Oxycoccus* From ὀξυς, acid, and κοκκος, fruit, on account of its acidity A genus well distinguished from Vaccinium, by the narrow revolute segments of corolla These are pretty little trailing evergreen plants, to which a peat soil and rather a moist situation are absolutely necessary · they are very little changed by culture.

O palustris bears edible berries which are gathered wild both in England and Scotland, and made into tarts Lightfoot says, twenty or thirty pounds worth are sold each market day, for five or six weeks together,

5477 Leaves opp and altern subamplexicaul ovate-lanceolate hairy, Stem much branched hairy
5478 Leaves sessile lanc pubescent, Stem simple villous, Root fibrous
5479 Leaves altern lanceolate serrated hairy
5480 Leaves opp ovate toothed
5481 Leaves stalked ovate acute toothed, Stem erect branched square, Petals bifid
5482 Leaves on short stalks ovate acute toothed shining, Stem ascending simple, Petals half bifid
5483 Leaves lanceolate toothletted, the lower opposite, Stem square
5484 Stem round pubescent, Leaves lanc serrul stalked opp upper alternate smooth veiny
5485 Leaves opp and alt ovate toothletted sess smooth, Fl. axill sess Caps 4-cornered
5486 Stem erect simple, Leaves toothed pubescent, Ovary with scattered hairs
5487 Leaves sessile lanc toothletted, Stem rounded, Stigma undivided
5488 Leaves on short stalks opp. lanc ellipt obt entire, Stem ascending few-flowered

5489 Peduncles 1-flowered axillary, Leaves in threes serrated
5490 Branches slightly downy, Leaves opposite stalked smooth, Flowers much longer than leaves

5491 Peduncles axillary 1-flowered, Leaves ovate alternate
5492 Flowers stalked axillary, Sepals reflexed, Leaves ovate-lanceolate about 3

5493 Leaves oblong lanceolate smooth, Cymes terminal shorter than the leaves

5494 Leaves oval revolute at edge acute white beneath, Segm of cor oval
5495 Leaves oblong flat obtuse, Segm of cor lanceolate

5496 Leaves oval acuminate serrulate ciliated, Flower not revolute at first

5497 Peduncles 1-flowered, Leaves serrate ovate deciduous, Stem angular

5498 Leaves ovate acute serrulate smooth, Racemes with bractes, Cor cylind camp
5499 Leaves oval ac ent glauc beneath, Pedic sol axill filif Cor open camp Anth exserted [exserted
5500 Lvs. oval or obov acute ent glauc ben Nerves and veins pub Ped axill sol filif Cor open camp Anth
5501 Dwarf tufted glabrous, Leaves cuneate rounded deeply sawed membranous, Fl sol
5502 Leaves small obov obt. ent above smooth, beneath veiny pubescent glaucous, Fl. sol cor urceolate
5503 Leaves stalked obovate acute at each end serrate, Racemes nodd Cor cylind camp. Anth included

5504 Leaves narr. lanceol membr ent Nerves and edge pubescent beneath, Fl scatt sol nearly sessile

5505 Branches and lvs covered with resin dots, Lvs obov ent Rac with bractes, Cor camp with round seg

5506 Lvs obl. acute serrul smooth, Racemes aggreg term corym Cor. cylind with short erect seg Style exsert

5507 Leaves obov. blunt ent glaucous and resinous beneath, Racemes loose, Cor ovate campanulate

5508 Branches ang Leaves subsess erect mucron lanc Clusters sessile, Cor oblong ovate, Fl stalks none



and Miscellaneous Particulars

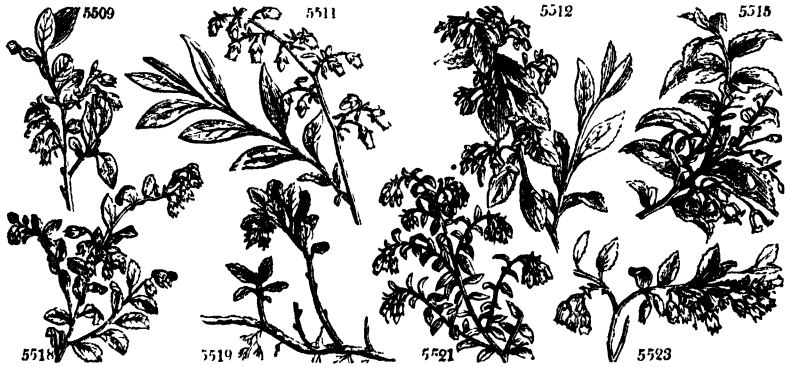
in the town of Langtown, on the borders of Cumberland The plant might no doubt be cultivated with equal ease as the American species

O macrocarpus furnishes the cranberries sent from America it was first cultivated in this country by Sir J Banks, on the margin of a pond (*Hort Trans* i 71), and subsequently both in moist and dry situations by different cultivators Peat earth is essential to every mode of culture, but a much less degree of moisture will do than was at first believed Salisbury found it do very well in pots of bog earth set in the shade, and Milne found "vigorous shoots and abundant crops produced on dry beds of peat earth, even in the warm summer of 1822." The American cranberry he found easier to cultivate than the common sort, but Hallet found both the cranberry and bilberry succeed perfectly under such treatment (*Hort. Trans* iv 483, and v 279

907 *Vaccinum* A name, the derivation of which is not known. Neither are commentators more decided as to what was the Vaccinium of the Latins The only conclusion to which they have come, is that the Vaccinia nigra of Virgil are the same as the μέλαν ὑακινθος of the Greeks. The species are neat little evergreen under shrubs, and inhabitants of moist alpine or subalpine regions in peat earth.

V. Myrtillus is an elegant and also a fruit-bearing plant The young fresh green leaves, and wax-like red flowers appear in May, and towards autumn the leaves grow darker and more firm, and the ripe berries are gathered in the north for tarts, and in Devonshire and Poland are eaten with clotted cream (*Fng Bot*) The berries are very acceptable to children, either eaten by themselves or with milk, or in tarts The moor-game live upon them in the autumn The juice stains paper or linen purple. Goats browse upon the plant; sheep are not fond of it, horses and cows refuse it. (*Withering*) The berries have an astringent quality, and in Arran and the Western Isles are given in diarrhœas and dysenteries with good effect. The High-

5509 resinósum *H. K.*	clammy		or	4	my jn	...	N Amer	1772.	L	p		W. am. t. 30 f 69
α viridéscens	*green-flowered*		or	3	my jn	Y G	Canada	1772.	L	p		
β rubescens	*red-flowered*		or	3	my jn	Pk	N Amer.	1772.	L	p		Bot mag. 1288
γ parviflórum Andr	*small flowered*		or	3	my jn	R Y	N. Amer	1804	L	p		Bot rep 125
5510 corymbósum *L*	corymbose		or	7	my	W	N. Amer	1806.	L	p		Bot mag 3433
dasomorphum Mich												
5511 amœ'num *H K*	broad-leaved		or	6	my jn	Pk	N Amer	1765	L	p		Bot rep. 138
5512 virgátum *H K*	twiggy		or	3	ap my	Pk	N. Amer	1767.	L	p		Bot. rep 181
5513 galœzans *Mich*	Gale-leaved		or	2	my.jn	W	N Amer	1806	L	p		
5514 tenéllum *H K.*	Pensylvanian		fr	1½	my jn	Pk	N. Amer	1772	L	p		Bot. mag. 3434
pensylvánicum Mich												
ramulósum W.												
hámile W												
5515 padifólium *Sm*	Madeira		fr	4	jn au	Pk	Madeira	1777.	L	p		Bot. mag. 974
arctostáphylos B. M												
5516 meridionále *Stuz*	Jamaica		or	2	mr jn	W G	Jamaica	1778	L	p		
5517 myrtifólium *Mich*	Myrtle-leaved		pr	1	my jl	W	Carolina	1812	L	p		
5518 crassifólium *Andr*	thick-leaved		pr	1	jn jl	Pk	Carolina	1787.	L	p		Bot mag 1152
5519 Vitis Idœa *L*	Cow-Berry		pr	¾	ap jn	Pk	Britain	...	Sk	p		Eng bot 508
β május	*large*		pr	¾	ap jn	Pk	N Amer.	...	Sk	p		Bot cab 616
γ máximum	*largest*		pr	¾	ap jn	Pk	N Amer	...	Sk	p		
5520 hispidulum *W*	Snowberry		fr	¼	ap my	W	Huds Bay	1815	L	p		Pursh am. t 23
Gaultheria serpyllifolia Psh.												
5521 nítidum *Psh*	glossy		pr	2	my jn	Pk	Carolina	1794	L	p		Bot rep 480
β decúmbens	*decumbent*		pr	¾	my jn	Pk	Carolina	1794	L	p		Bot mag. 1550
5522 myrsinites *Mich.*	Myrsine-leaved		pr	1½	my jn	Pk	Carolina	...	L	p		
β lanceolátum	*lanceolate*		pr	1½	my jn	Pk	Florida	...	L	p		
γ obtúsum	*obtuse*		pr	1½	my jn	Pk	Carolina		L	p		
5523 buxifólium *Andr*	Box-leaved		cu	1	my jn	Pk	N Amer	1794.	L	p		Bot mag. 928
brachýcerum Mich												
908 MEMECYLON *W*	Memecylon				*Santalaceæ*		*Sp* 1—6					
5524 capitellátum *W*	Ceylon		or	10	jl	...	E. Indies	1796.	L	p.l		Bur. zeyl. t. 30
909 LAGE'TTA *J*	Lagetta				*Thymelææ*		*Sp* 1					
5525 linteária *P S*	lace-bark		cu	6	ja d	W	Jamaica	1793	C	l p		Lam. ill. t. 289
910 DAPHNE *W*	Daphne				*Thymelææ*		*Sp* 1—34					
5526 Mezéreum *W*	Mezereon		m	4	f ap	Pk	England woods		C	p l		Eng bot 1381
α rúbrum	*red-flowered*		or	4	f ap	Pk	England woods		C	p l		
β álbum	*white-flowered*		or	4	f ap	W	....	..	C	p l		
5527 Thymelæ'a *W*	smooth-leaved		or	3	f ap	Y	Spain	1815				Pl al t. 329 f 2
5528 Tarton-ra'ra *W*	silvery-leaved		or	3	my jl	W	France	1640	G	s l		Fl græc 354
5529 alpina *W*	Alpine		or	2	my jl	W	Italy	1759	S	p l		Bot cab. 66
5530 Lauréola *W*	Spurge Laurel		or	6	ja mr	G	Brit'un woods		S	s l		Eng bot. 119
5531 póntica *W*	Pontic		or	3	ap my	G	Pontus	1759	C	s l		Bot mag 1282
5532 timifólia *W*	Bonace-bark		or	6			Jamaica	1733	C	l p		
5533 Gnídium *W*	Flax-leaved		or	2	jn au	W	Spain	1597	G	s l		Bot cab 150
5534 odóra *W*	sweet-scented		or	3	mr d	Pu	China	1771	C	r m		Bot mag. 1587
5535 Cneórum *W*	trailing		or	1	ap s	Pk	Austria	1752	L	s p		Bot mag. 313
5536 altáica *W*	Altaic		or	3	ap my	W	Siberia	1796	G	p l		Bot mag 1875
5537 oleoides *B M*	Olive-leaved		or	2	ja d	W	Crete	1815	G	p l		Bot. mag 1917
5538 collina *W*	hairy		or	3	ja jn	Pu	Italy	1752	L	s l		Bot mag 428
β neapolitana Hort	*Neapolitan*		or	2	ja jn	Pu	Naples	1822	L	s l		Bot reg 8.2



History, Use, Propagation, Culture,

landers eat them with milk, and make them into tarts and jellies, which last they mix with whisky to give it a relish to strangers

V. uliginosum grows taller than the common bilberry, and has large globular, black, glaucous fruit These have less flavor, but abound with a weak acid juice (*Eng Bot*) In large quantities it occasions giddiness, and a slight head-ache, especially when full grown and quite ripe. (*Linn. Suec* and *Withering*) Many vintners in France are said to make use of the juice to color their wines red (*Withering*) They furnish an ardent spirit which is highly volatile and intoxicating. The Alpine birds feed upon the fruit, and it is very common in their haunts (*Villars*)

V. Vitis idœa is of very humble growth and almost herbaceous, though evergreen. The berries are red, acid, astringent, and bitter They are scarcely to be eaten raw, and though made into pies in Derbyshire, where they are called cow-berries, their flavor is far inferior to the cranberry Their best use is for making a rob or jelly, which is eaten with all kinds of roast meat in Sweden, and is far preferable to that of the red currant as a sauce for venison It is also an excellent medicine in colds, sore throats, and all irritation of the mouth or fauces (*Smith, Brit* and *Eng Bot*) Linnæus says, that they are sent in large quantities from West Bothnia to Stockholm for pickling, and the same thing is confirmed by Dr Clarke. Miller was informed that this plant was used for edgings in Norway

V. tenellum is a very good fruit.

5509 Lvs. stalked obl. oval blunt entire beneath resin. Racemes lateral one-sided, Cor. ovate conical 5 angular

5510 Fl branches leafless, Lvs obl. oval acute at each end ent. young ones downy on both sides, Rac. short scaly

5511 Flowering branches leafless, Lvs obl acute at each end smooth, Racem clust. bract. Cor cylind Cal refl
5512 Flowering branches oblong leafl Lvs lanc acute at each end serrul smooth, Rac sess corym obl. bract. Cor cylind contracted at mouth
5513 Lvs sessile cuneate-lanc serrul veiny pubes Clust sess Cor ov. much contracted at mouth, Style exsert
5514 Branches angular green, Leaves sess ovate lanc mucronate, Fasc clustered term sessile, Cor. ovate

5515 Flowers racemose, Leaves crenulate ovate smooth

5516 Leaves ovate obl. acute serrate flat shining, Racemes terminal erect, Cor prismatical
5517 Creeping very smooth, Leaves stalked oval shining, Clusters axill sessile few-flowered, Cor glob camp.
5518 Spread Lvs obl lanc acute at each end serr rigid smooth, Racem. term corymb Fl nodd Cor. open camp.
5519 Dwarf, Leaves obovate emarginate serrulate shining above dotted beneath, Cor cylind camp.

5520 Stem creeping hispid, Leaves roundish oval acute bristly at edge

5521 Erect much branched, Leaves evergeen obl lanc acute at each end rigid, Cor open camp deeply 5-toothed

5522 Leaves very small sessile oval mucron beneath hairy dotted, Clusters term and lat Cor obl. ovate

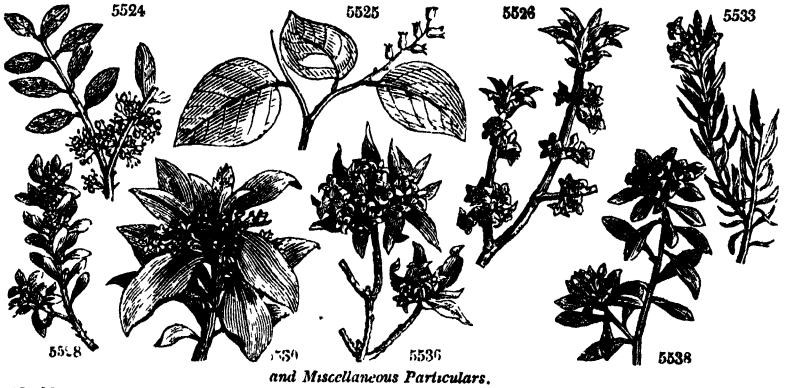
5523 Dwarf, Leaves obovate crenate toothed smooth, Filam gland Stigma cap Cor. short ovate

5524 Leaves ovate stalked, Umbels capitate axillary sessile

Spikes panicled terminal, Leaves ovate acute

5526 Flowers sessile three on the stem, Leaves lanceolate deciduous

5527 Flowers sessile axillary, Leaves lanceol Branches simple
5528 Flowers sessile lateral aggregate at the base scaly, Leaves obovate nerved silky
5529 Flowers sessile lateral aggregate, Leaves lanceolate obtuse downy beneath
5530 Racemes axillary 5-flowered, Leaves lanceolate smooth
5531 Peduncles lateral 2-flowered, Leaves lanceol ovate
5532 Racemes compound erect, Flowers terminal clustered, Leaves oblong
5533 Racemes term panicled, Leaves linear lanceolate cuspidate
5534 Head terminal sessile many-flowered, Leaves scattered obl lanceol smooth
5535 Flowers fascicled term sessile, Leaves lanceol naked mucronate
5536 Flowers term subsessile, Leaves opp obl lanceol obtuse narrowed at base glabrous
5537 Flowers twin terminal sessile, Leaves elliptic lanceol smooth
5538 Flowers fascicled terminal, Leaves obovate obtuse above very smooth beneath villous



and Miscellaneous Particulars.

908 *Memecylon.* The Greek name of the fruit of the Arbutus. The shrub now so called has a certain degree of resemblance to the Arbutus Young cuttings plunged in sand in heat and covered with a hand-glass will root freely.

909. *Lagetta* This plant in Jamaica is called Lagetto Ripened cuttings will root in sand under a hand-glass

910. *Daphne.* The Greek name of the Laurel This is a genus of diminutive shrubs, mostly evergreens of great beauty and fragrance in the flower, and with a peculiar velvet texture in the leaf It is mentioned by Linnæus as a characteristic of the genus, that the terminating buds of the shoots produce leaves, and the lateral ones flowers This affords a hint to the cultivator to be sparing of his knife

D. Mezereum (*Mádzaryoûn* is the Persian name according to Richardson), *Laureole gentile*, Fr., *Kellerhals*, Ger., and *Laureola femina*, Ital., is an old inhabitant of the shrubbery, and deservedly much admired for its precocity and fragrance It thrives well in loamy soil, and will grow in the shade and even drip of other trees It is a native of all parts of Europe from Lapland to Sicily, but was first received from Elbing before it was observed to be a native The roots of Mezereon acquire a very large size in proportion to the branches, and have more the character of the fusiform or ramose roots of a herbaceous, than of a ligneous vegetable They are remarkably hot and acrid, and have long and in most countries been a popular topical

911. DIR'CA. *W.* Leather-wood — *Thymelææ* *Sp* 1
5539 palústris *W* marsh ec 6 mr ap Y Virginia 1750. S s.l Bot reg. 292

912 GNI'DIA *W* Gnidia — *Thymelææ* *Sp* 8—13
5540 pinifólia *W* Pine-leaved pr 1 my jn Pa.Y C. G H 1768. C s p Bot. reg 19
5541 imbérbis *H K* smooth-scaled pr 1½ ap au Pa Y C G. H. 1792 C s p Bot. mag 1463
5542 simplex *W* Flax-leaved el 1 my jn Pa Y C. G H 1786. C s p Bot. mag. 812
5543 capitáta *W* purple-twigged cu 1 jn jl Pa Y C G H. 1788. C s p
5544 oppositifólia *H K* opposite-leaved pr 1 my jl Pa Y C. G. H 1783 C s p Bot. reg 2
5545 sericea *H K* silky pr 1½ my jl Pa.Y C. G H. 1786 C s p Bot rep. 225
5546 denudáta *Lindl* shaven pr 1½ my jl Pa Y C G. H 1820 C s p Bot. reg. 757
5547 lævigáta *Thunb* polished pr 1 my jl Pa.Y C. G. H 1822. C s p

913. STELLE'RA *W.* Sellera — *Thymelææ* *Sp* 1—3.
5548 Passerina *W* Flax-leaved cu 1 jl au W S Europe 1759 C s p Jac. ic 1 t 68

914. PASSERI'NA *L.* Sparrow-wort. — *Thymelææ* *Sp* 8—19
5549 filiformis *W* filiform cu 1 jn au W C G H 1752. C s p Wen. ob t 2 f 15
5550 hirsúta *W* shaggy cu 1½ jn s W S. Europe 1759 C p l Bot mag 1949
5551 tenuiflóra *W cn* slender-flower cu ½ jn s W C G H ... C s p
5552 capitáta *W* headed cu 1 jn o W C G H. 1789 C s p Wen ob t 2 f 17
5553 uniflóra *W* one-flowered cu ½ ap my W C G H 1759 C s p Wen ob t 2 f 18
5554 grandiflóra *W* great-flowered cu 1 my jn W C G H 1789 C s p Bot mag 292
5555 spicáta *W* spiked cu 1 my jn W C G H 1787. C p l Bot. cab 311
5556 láxa *W* lax cu ½ jn jl W C G. H. 1804 C p l Bot. cab 755

915 LACHNÆ'A *W* Lachnæa — *Thymelææ* *Sp* 5—28
5557 conglomeráta *W* clustered or 2 jn jl W C G H 1773 S r m
5558 eriocéphala *W* woolly-headed or 2 jn jl W C G H 1793 C p l Bot mag 1295
5559 purpúrea *H K* purple-flowered or 2 jn jl Pu C G H. 1800 C p l Bot mag 1504
5560 glaúca *H K* glaucous or 2 my jl W C G H. 1800 C p l Bot mag. 1658
5561 buxifólia *Lam* green-box-leaved or 2 my jl W C G H. 1800 C p l Bot. mag. 1657

†916 COMBRE'TUM *W* Combretum — *Combretaceæ* *Sp* 2—20
5562 purpúreum *W* purple or 15 jn d S Madagasc 1818 C r m Bot. mag 2102
5563 comósum *Hort* comose or 20 .. Pu S. Leone 1821. C r m

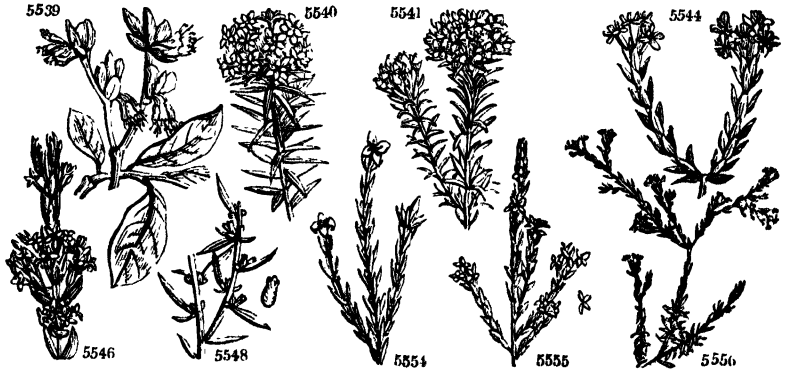
DIGYNIA

917 GALE'NIA *W* Galenia — *Chenopodeæ* *Sp* 1—3
5564 africána *W* African cu 2 jn au W C G H 1752 C p l Lam. ill. t. 314

918 APHANAN'THE *Lk* Aphananthe — *Amaranthaceæ* *Sp.* 1.
5565 celosioides *Lk* Cock's-comb cu 1½ jl W G Brazil 1813. C p l

919 WEINMAN'NIA *L* Weinmannia — *Saxifragæ* *Sp* 1—12.
5566 pinnáta *L.* pinnate or 6 my jn W Jamaica 1815. C r m

920 MŒHRIN'GIA *W* Mœhringia — *Caryophylleæ* *Sp* 1—3
5567 muscósa *W* mossy w ½ jn jl L.Pu S. Europe 1775 s l Sch ha. 1 t. 108



History, Use, Propagation, Culture,

application for the toothach The whole plant is extremely acrid, especially when *fresh*, and if retained in the mouth excites great heat and inflammation, particularly of the throat and fauces The berries when swallowed prove a powerful poison, not only to man, but to many quadrupeds Both the bark and the berries of Mezereon in different forms have been long used externally in cases of obstinate ulcers and ill-conditioned sores In France the bark is used as an application to the skin, which, under certain management, produces a serous discharge without blistering, and is thus rendered useful in chronic cases of a local nature, answering the purpose of what is called a perpetual blister, while it occasions less pain and inconvenience. In our own country the Mezereon has been principally employed in syphilitic cases. The branches make a good yellow dye.

D Laureola is valuable in the shrubbery as thriving under the shade and drip of other trees, and never growing to an unshapely size and figure, and in the nursery as affording stocks for the more rare species. The roots and other parts of the plant possess similar qualities to those of the Mezereon.

911 *Dirca.* From δίειμι, a fountain A plant which grows in watery places *Bois de Plomb*, Fr This shrub grows in hilly swamps in North America it is in all its parts remarkably tough, and the twigs are in consequence used for rods, and the bark for ropes, baskets, &c. Layers are generally two years in rooting; cuttings do not succeed, and it does not ripen seeds here Snails, Sweet observes, are particularly fond of this plant.

912. *Gnidia.* One of the names given by the ancients to the Daphne. These plants "thrive well in a sandy peat soil, with their pots well drained with broken potsherds care must be taken not to over water them, or to let them flag for want of water, as their roots are very tender and are easily killed; the tenderest kinds are G oppositifolia, and G pinifolia (*Bot Cult* p 198.)

5539 The only species Flowers appearing before the leaves

5540 Leaves scattered 3-cornered, Flowers in umbellate heads, Scales four bearded
5541 Leaves scattered 3-quetrous linear acute floral lin lanc shorter than heads, Scales eight beardless
5542 Leaves all linear acute, Flowers terminal sessile, Scales four and cor smooth
5543 Leaves scattered lanc smooth, Flowers capitate surrounded by bractes, Peduncle naked
5544 Leaves opp lanceolate tomentose, Flowers terminal, Scales 4
5545 Leaves opp ovate tomentose, Flowers terminal, Scales 8
5546 Leaves ovate oblong imbricated hairy with naked nerves
5547 Leaves opp. ovate smooth, Fl. terminal subcapitate

5548 Leaves linear, Flowers axillary sessile 4-cleft

5549 Leaves lin convex imbricated in 4 rows, Branches downy
5550 Leaves fleshy smooth outside, Stems downy
5551 Leaves linear smooth, Fl sessile in terminal filiform silky heads
5552 Leaves linear smooth, Heads stalked downy
5553 Leaves lin. opposite, Flowers term solitary, Branches smooth
5554 Quite smooth, Leaves oblong acute concave rugose outside, Fl term sessile solitary
5555 Leaves ovate villous, Flowers lateral solitary
5556 Leaves ovate scattered, Flowers capitate, Branches lax cernuous

5557 Heads clustered, Leaves loose
5558 Heads solitary woolly, Flowers imbricated in four rows
5559 Leaves opp imbricated 4 ways, Heads smooth
5560 Leaves scattered elliptical ovate, Heads woolly
5561 Leaves oval sessile very smooth, Fl capitate woolly

5562 Leaves opposite ovate acute, Racemes one-sided bracteate, Bractes shorter than peduncle, Fl. decandrous
5563 Leaves opp. oblong hairy, Racemes numerous terminal one-sided

DIGYNIA.

5564 Erect shrubby, Leaves linear fleshy

5565 Flowers loosely spiked very minute, Bractes lanceolate membranous

5566 Leaves pinnate, Leaflets obovate crenate smooth

5567 Leaves linear connate, Sepals flat the length of the stem-joints lanceol acute



and Miscellaneous Particulars.

913 *Stellera.* So named by Gmelin, in memory of Georg Wilh Steller, adjunct of the academy at Petersburg, who collected plants in Kamtschatka, and died in Siberia, in 1746. An inconspicuous plant resembling the next genus and requiring the same culture

914. *Passerina* From *passer*, a sparrow Its seed has an appendage at the end like the beak of a sparrow Young cuttings root freely under a bell-glass in sand

915 *Lachnæa* Derived from λαχνη, wool, on account of the woolly heads of flowers.

916 *Combretum* A nam employed by Pliny The plant of the ancients could have no relation to the plant now called by this name, which is a genus of splendid climbing shrubs, with beautiful branches of flowers which are often crimson or purple, and sometimes white. A number of species are found at Sierra Leone. They are all stove plants

917. *Galenia.* So named by Linnæus from the famous physician Claudius Galenus, born at Pergamus, 133 years before the Christian æra. A coarse-looking shrub, with the leaves obscurely papillose or bladdery, and the stem round

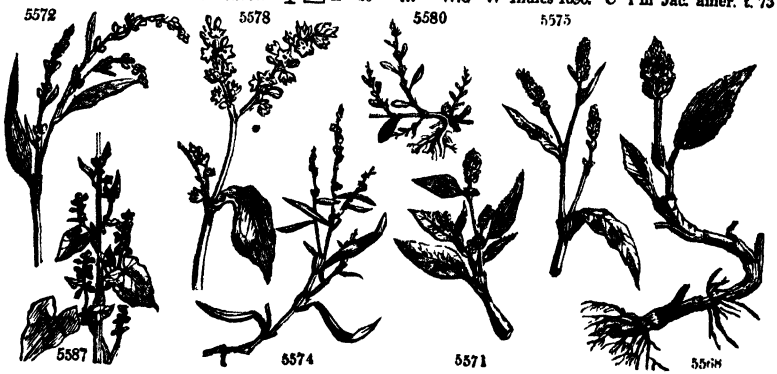
918. *Aphananthe* A name contrived from α, privative, φαινω, to be remarkable, and ανθος, a flower that is to say, a plant which is not remarkable for the beauty of its flowers. A curious little Brazilian weed

919 *Weinmannia.* In honor of John William Weinmann, a German botanist, who published in 4 vols folio, his Phytanthoza Iconographica, about the middle of the last century. Handsome shrubs, with pinnated leaves.

920. *Mœhringia.* So named by Linnæus, from Paul Henry Gerard Moehring, a physician, author of Hortus Proprius, 1736. A little inconspicuous weed-like plant It suits very well for rock-work, or to be grown in small pots

TRIGYNIA.

*921. POLY'GONUM	*W*	PERSICARIA				*Polygoneæ*	*Sp* 36—60.						
5568 amphibium *L*	amphibious		△	w	1	jn au	Pk	Britain dit		D	s l	Eng. bot. 436
5569 ocreátum *L*	spear-leaved		△	pr	2	jn s	W G	Siberia 1780		D	s l	Gmel sib 3. t. 8
5570 virginiánum *L.*	Virginian		△	w	3	au s	W	N. Amer. 1640.		D	a.l	Pa. th. 857. f 6
5571 lapathifólium *H. K*	pale-flowered		○	w	1	jn s	G	England dungh.		S	a.l	Eng bot. 1382
5572 Hydropiper *L*	Water Pepper		○	w	1	jl s	R	Britain wat pl		S	s l	Eng bot. 989
5573 tinctórium *Loureiro*	dyer's		○	dy	2	jl au	R	China 1776		C	s l	
5574 minus *W*	small		○	w	½	au s	Pk	England wat co		S	s l	Eng bot. 1043
5575 Persicária *L*	spotted		○	w	2	jl au	Pk	Britain dit.		S	s l	Eng bot. 756
5576 mcánum *Schmidt*	hoary		○	w	2	jl.au	W	Germany 1804.		S	s l	Pet h. br t 3.f.8
5577 barbátum *L*	bearded		△	cu	2	jn	W	China 1819.		S	a.l	
5578 orientále *L*	common		○	or	6	jl o	R	E. Indies 1707.		S	co	Bot. mag. 213
β álbum	*white-flowered*		○	or	4	jl o	W.G	E. Indies 1781.		S	co	
§5579 frutéscens *W*	shrubby		○	or	2	jl au	Pk	Siberia 1770.		L	s l	Bot. reg 254
5580 aviculáre *L*	Knot-grass		○	w	3	ap o	G	Britain rubble.		S	co	Eng bot. 1252
5581 arenárium *Bieb*	sand		○	w	1	my.au	Pu	Hungary 1807		S	co	Pl. rar. hu. t 67
5582 élegans *Tenore*	elegant		⊠	pr	2	ap au	W G	Naples 1824.		D	co	
5583 erectum *L*	upright		○	w	1	jl au	P R	N Amer 1792.		D	a.l	
5584 chinénse *W*	Chinese		○	dy	6	jl au	W.G	China 1795		S	s l	Bur in t 30 f 3
5585 sagittátum *W*	arrow-leaved		○	cu	6	jl au	W G	N. Amer. 1759.		S	a.l	Lin hor cl t 12
5586 arifólium *W*	Arum-leaved		○	cu	6	my o	W.G	N Amer 1816		S	s l	Pl am. t. 398 f 3
5587 Convólvulus *L.*	common-climb		○	w	3	my s	W G	Britain corn fl.		S	s l	Eng bot 941
5588 dumetórum *L.*	bush		○	un	12	my s	W	S Europe 1803		S	co	Flor dan t. 756
5589 scandens *L.*	American-clim		△	un	12	jl s	Pk	N. Amer 1749.		D	co	Pl. al. t. 177. f. 7
5590 littorále *Lk*	sea-shore		△	un	1	jn	W G	S Europe		S	co	
5591 Bellar'di *All*	Bellardi's		△	un	1	jn jl	W G	S Europe		S	co	Al ped t 90. f. 2
5592 acetósum *Bieb*	sour		○	un	½	d	W G	Crimea 1820		S	co	
§5593 crispulum *B M*	upright		△	pr	1½	jl au	W pk	Siberia 1800		C	s l	Bot. mag 1065
5594 Bistórta *L.*	Snake's-weed		△	m	1½	my s	Pk	Britain me pa.		D	co	Eng bot. 509
5595 vivíparum *L*	Alpine-Bistort		△	pr	½	my s	W G	Britain al. pas		D	s l	Eng bot 669
5596 divaricátum *L.*	divaricating		△	un	2	jl au	W G	Siberia 1759		D	co	Gm si 3 t 11. f 1
5597 undulátum *L*	wave-leaved		△	un	3	jn jl	W G	Siberia 1789		D	a.l	Gmel. sib 3. t.10
5598 acídulum *W en.*	narrow-leaved		△	un	2	jn jl	W G	Siberia 1816.		D	a.l	
5599 salignum *W en.*	Willow-like		△	un	4	my au	W G	Siberia 1816		D	s l	
5600 tatáricum *L.*	Tartarian		○	un	2	jl au	W pk	Siberia 1759		S	a.l	Gm. si 3.t.13.f 1
5601 emarginátum *Roth*	notch-seeded		○	cu	2	jl au	Pk	China 1796		S	s l	
5602 Fagopýrum *L*	Buck-Wheat		○	ag	2	jl au	Pk	England corn fl.		S	s l	Eng bot. 1044
5603 alpínum *All*	alpine		△	un	1	my au	W	Switzerl 1816.		D	s l	Al ped. t. 68 f 1
922. COCCOLO'BA. *W.*		SEASIDE-GRAPE				*Polygoneæ.*	*Sp* 8—20						
5604 uvífera *W.*	round-leaved		□	fr	60	...	W.G	W Indies 1690.		C	r m	Jac. amer. t. 73



History, Use, Propagation, Culture,

921. *Polygonum* From πολυς, many, and γονυ, knee, many joints These are nearly all common weeds of temperate climates P Bistorta, being one of the strongest vegetable astringents, might well be applied to the purpose of tanning leather, if it could be procured in sufficient quantity. The young shoots were formerly eaten in herb-puddings in the north of England, where the plant is known by the name of Easter Giant, and about Manchester they are substituted for greens under the name of Patience Dock. (*Curtis, Withering*) The root was formerly considered to be alexipharmic and sudorific

P. vivíparum is so named on account of the flowers frequently changing into vegetable bulbs. The roots have the same qualities as those of P. Bistorta, and are eaten in Sweden and Lapland, Siberia and Tartary.

P. amphibium is one of the most difficult weeds to eradicate from recovered alluvial lands, and has no equal in this respect unless Equisetum The roots, which in the water are properly stems, are found to a great depth in such soils, and though by fallowing or otherwise stirring the surface, the leaves may be prevented from showing themselves for several years, yet if the field be allowed to lie a year in grass, the surface will be found abounding with Polygonum. Many tracts in Scotland which have been recovered from rivers and estuaries for an unknown series of years still abound with this plant, and as under such circumstances it never advances so far as to flower and seed, the individuals must be the same which formerly were suspended in the water. As an aquatic, it has a gay, showy appearance, when in flower.

P. Hydropiper is a powerful diuretic, and will dye woollen cloth of a yellow color.

P. tinctorium, and also chinense and aviculare, are cultivated in China for dying cloth of a beautiful blue or green.

TRIGYNIA.

§ 1. *Flowers pentandrous.*

5568 Half digyn. Spike ovate, Stipules lacerate, Leaves oblong or lanceolate
5569 Flowers trigynous, Leaves lanceolate
5570 Flowers half digynous, Cor. 4-cleft unequal, Leaves ovate

§ 2 *Flowers hexandrous*

5571 Flowers digynous, Stipules unarmed, Pedunc rough, Seeds depressed on each side
5572 Flowers half digynous, Leaves lanc. wavy not spotted, Spikes filiform nodding
5573 Flowers trigynous, Spikes twiggy, Stipules smooth truncate ciliated, Leaves ovate acute smooth
5574 Flowers nearly monogynous, Leaves lin. lanceol flat, Spikes filiform erect, Stem rooting at base
5575 Flowers half digynous, Spikes ovate-oblong erect, Pedunc smooth, Stipules ciliated
5576 Flowers digynous, Spikes oblong, Leaves obl lanceolate pubescent beneath
5577 Flowers trigynous, Spikes twiggy, Stipules truncate ciliated, Leaves oblong acute smoothish

§ 3 *Flowers heptandrous*

5578 Flowers digynous, Leaves ovate, Stem erect, Stipules hairy hypocrateriform

§ 4. *Flowers octandrous*

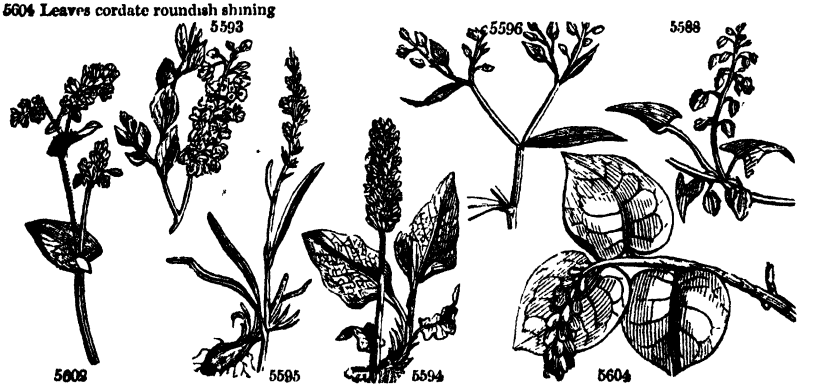
* *Stem twining*

5579 Leaves lanceolate narrowed each way, Stipule lanceol shorter than the joint. — TRAGOPYRUM *Bieb*
5580 Flowers axill. Leaves ellipt lanceol rough at edge, Nerves of stipules remote
5581 Flowers trigynous, Spikes term. leafless, Leaves lanc lin. Stems angular declinate herbaceous
5582 Flowers large axillary, Spike compact, Stem stout sheathed
5583 Flowers trigynous axillary, Leaves oval, Stem erect herbaceous
5584 Flowers trigynous, Peduncles rough, Leaves ovate stalked, Bractes cordate sessile
5585 Leaves sagittate, Stem prickly
5586 Leaves hastate, Stem prickly
5587 Leaves cordate sagittate, Stem angular, Segm. of cal. obtusely keeled
5588 Leaves cordate, Stem smooth, Leaves keeled winged
5589 Leaves cordate, Raceme simple axillary, Stem smooth
5590 Stem procumbent, Leaves oblong acute veiny fleshy, Stipules ciliated much shorter than the joints
5591 Flowers axill trigynous, Leaves ellipt lanceol Sheaths ciliated
5592 Flowers trigynous axillary, Leaves lanceolate fleshy veinless, Stipules 2-parted

* *Stem not twining*

5593 Leaves stalked obovate mucronulate smooth with a crisp revolute edge
5594 Stem simple one-spiked, Leaves ovate wavy running down the stalk
5595 Stem simple one-spiked, Leaves revolute lanceolate at edge
5596 Flowers trigynous racemose, Leaves lanceolate smooth, Stem divaricating spreading smooth
5597 Flowers trigynous panicled, Leaves lanceolate wavy rough above pubescent beneath
5598 Flowers trigynous racemose panicled, Leaves linear lanceolate smooth
5599 Flowers trigynous racemose-panicled, Leaves linear lanceolate smooth acuminate ciliated at edge
5600 Leaves cordate sagittate, Stem unarmed, Seeds toothed
5601 Leaves cordate sagittate, Stem unarmed, Seeds truncate at end emarginate winged
5602 Leaves cordate sagittate, Stem unarmed, Angles of seeds equal
5603 Flowers trigynous racemose-panicled, Leaves ovate lanc smooth ciliated at edge

5604 Leaves cordate roundish shining



and Miscellaneous Particulars

P orientale is a well known annual, showy, and fit for shrubberies. The seeds were first sent to Europe by Tournefort, who saw it growing in the garden of the monks of the three churches near Mount Ararat. They cultivate this plant there, not only for the beauty of the flowers, but for its medicinal qualities, which are the same with those attributed to our common species (*Mill. Fig*) The seeds are farinaceous.

P aviculare is so named from the gratefulness of its seeds to small birds, the English name, knot-grass, from the knottiness of the stem, and because it is eaten by cattle, many such plants having obtained the name of grass, though they bear no similitude to real grasses. Hogs eat it with great avidity, and hence it is known in many countries by the name of hogweed All other domestic quadrupeds are said to eat it. The seeds are useful for every purpose in which those of buckwheat are employed, but they are much smaller.

P. Fagopyrum, (*Fagus*, beech, and *συρος*, corn, its grain is like the mast of beech,) properly beechwheat, *Bled noir* or *Sarrazin*, Fr. Buckwheat is considered a native of Asia and not of Europe, though sometimes found in a seemingly wild state. It will not, however, bear the frosts of our springs or the severity of winter. In China and other countries of the East, it is cultivated as a bread corn. The flower is also used in cookery and bread-making in various parts of Europe, to make cakes and crumpets in England, and as rice or gruel in Germany and Poland. The seed is said to be excellent for horses and poultry, the flowers for bees, and the plant green for soiling cows, cattle, sheep or swine. As an agricultural plant it is valuable, as standing only a short time on the ground, but it produces little straw for manure.

922. *Coccoloba* From *κοκκος*, fruit, and *λοβος*, a lobe; the fruit has three lobes. C. uvifera is a common tree in most of the sugar colonies, generally near the sea. It is remarkable for its large leaves, and when of

5605 latifólia *Lam* broad-leaved ♀ ▭ or 20 ... W a S Amer 1812 C r m La. il t 316 f 4
5606 pubéscens *W* downy ♀ ▭ tm 70 ... W a W. Indies 1690 C r.m Pl. phy 222. f. 8
5607 excoriáta *W* oval-leaved ♀ ▭ tm 80 ... W a W Indies 1733. C r m Pl ic t 146. f 1
5608 punctáta *W.* spear-leaved ♀ ▭ or 15 ... W a W Indies 1733 C r m Jac am 114 t 77
5609 barbadénsis *W.* Barbadoes ♀ ▭ tm 60 ... W.a Barbadoes 1790 C r m Jac obs. 1. t. 8
5610 diversifolia *Jacq* various-leaved ♀ ▭ or 20 au W.a St. Dom 1818 C r m Hook ex. fl 102
5611 laurifólia *Jacq* laurel-leaved ♀ ▭ or 20 au W a Caraccas 1822. C r.m Jac. sch 3. t. 267

923 PAULLI'NIA. *W* Paullinia *Sapindaceæ* *Sp* 6—39
5612 pinnáta *W.* winged-leaved ♂ ▭ or 15 ... W a W. Indies 1752 C r.m Jac ob 3 t.62 f 12
5613 curassávica *W* shining-leaved ♂ ▭ or 18 ... W a S Amer 1739 C r.m Jac. ob 3 t 61 f 8
5614 barbadénsis *W* Barbadoes ♂ ▭ or 16 ... W a W. Indies 1786 C s p Jac ob 3 t.62 f 9
5615 polyphylla *W* Supple-Jack ♂ ▭ or 20 ... W a W Indies 1739 R s p Jac ob.3.t 61 f 10
5616 caribæ'a *Jac* Caribæan ♂ ▭ or 10 ... W a W Indies ... C s p Jac ob 3 t 62 f 7
5617 meliæfólia *Juss.* Beadtree-lvd ♂ ▭ or 12 ... W a Brazil 1819. C s p Hook. ex fl 110

924. SERIA'NA *W* Seriana *Sapindaceæ.* *Sp* 2—21
5618 sinuáta *W* sinuate-leaved ♂ ▭ or 15 ... W a S Amer ... C co Jac ob 3.t.61 f 2
5619 caracásana *W* tooth-leaved ♂ ▭ or 15 ... W a Caraccas 1816. C co Jac sch 1. t. 99

925 CARDIOSPER'MUM *W* Heart-seed *Sapindaceæ* *Sp* 3—12
5620 Halicácabum *W* smooth-leaved ♃ ◯ cu 4 jl W a India 1594 S co Bot mag. 1049
5621 Corindum *W* Parsley-leaved ♃ ◯ cu 4 jl au W a Brazil 1750 S co
5622 pubéscens *Lag* downy ♂ ▭ cu 6 jn S N Spain 1823 S co

926. SAPIN'DUS *W* Soap-Berry *Sapindaceæ* *Sp* 6—18
5623 Saponária *W* common ♀ ▭ ec 20 ... W a W Indies 1697 S p l Com hort t 94
5624 marginatus *W en* edged ♀ ▭ or ... W a Carolina ... S p l
5625 rigidus *W* Ash-leaved ♀ ▭ or 25 jl s W a America 1759 S p l Pl alm t.217 f 7
5626 longifólius *Vahl* long-leaved ♀ ▭ or 16 ... W a E. Indies 1820 S co
5627 emarginátus *Vahl* emarginated ♀ ▭ or 12 ... W a E Indies 1822 S r.m
5628 rubiginósus *Roxb* rusty ♀ ▭ or 15 ... W a E. Indies 1 p l Rox cor. 1 62

TETRAGYNIA.

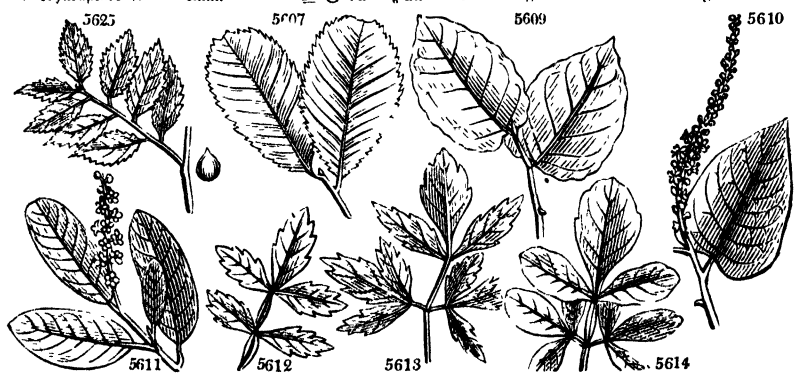
*927 VE'REA *W* Verea *Sempervireæ* *Sp* 3—8
§5629 lacináta *P S.* cut-leaved ♃ ▭ or 2 jl au Y E. Indies 1781 Ls s l Plant grass 100
§5630 crenáta *W* Vere's ♃ ▭ or 2 jl s Y S Leone 1793 Ls s l Bot. mag 1436
§5631 acutifióra *Haw* white-flowered ♃ ▭ or 2 jl s W E. Indies? 1806. Ls s l Bot rep. 560

928 BRYOPHYL'LUM *Sal* Bryophyllum *Sempervireæ* *Sp* 1
5632 calycinum *Sal* large-cupped ♃ ▭ cu 2 ap jl G Pu E Indies 1800 Ls s l Par lond 3

929 PA'RIS *W* Paris *Asphodelæ?* *Sp* 1—2
5633 quadrifólia *W* Herb ♃ △ cu ½ mr jn G Britain woods D p l Eng bot. 7

930 ADOX'A *W* Moschatel *Saxifragæ* *Sp* 1
5634 Moschatéllina *W* tuberous ⁂ △ cu ¼ mr my G w Britain woods D s p Eng. bot. 453

931 ELA'TINE *W* Water-wort *Caryophylleæ* *Sp* 1—4
5635 Hydropiper *W* small ≐ ○ cu ¼ au G England mar la S s l Eng bot 955



History, Use, Propagation, Culture,

a considerable size, its wood is valued for cabinet work. The berries are of the size of grapes, reddish brown or purplish without, with a thin pulp, rather astringent, and a large stone within All the species grow freely in light loamy soil, and ripened cuttings, taken off at the joint, and placed under a hand-glass, in a pot of sand, will root freely one cutting under a glass is sufficient, as the leaves must not be shortened (*Bot Cult* 41)

923 *Paullinia* So named by Linnæus, from Simon Paulli, professor of botany at Copenhagen; author of Botanicum Quadripartitum, 1640, and Flora Danica, 1648 P polyphylla affords a well known walking-stick In the woods of Jamaica it rises with a slender, woody, tough, flexile stalk, and ascends among the bushes to a considerable height When the wood is ripe it is cut down, barked, and used as riding or walking sticks

All the species succeed well in a light loamy soil, and large sized cuttings root in sand under a hand-glass

924. *Serjana* Named by Schumacher, after one Paul Serjeant Cuttings root in sand under a hand-glass

925 *Cardiospermum.* From καρδια, a heart, and σπερμα, seed, in allusion to its round seeds, which are marked with a spot like a heart The plant is remarkable for its inflated membranous capsule, from which it is sometimes called balloon vine

926. *Sapindus* A syncope of sapo-indicus, Indian soap Its fruit is covered with a pulp, which is used in America for washing linen S Saponaria bears a berry as large as a cherry, inclosing a nut of a shining black when ripe These nuts were formerly brought to England for buttons to waistcoats, some were tipped with silver, and others with different metals, they were very durable, as they do not wear, and seldom broke The skin or pulp which surrounds the nut is saponaceous, and is used in America to wash linen, but it is very apt to burn and destroy it, if often used, being of a very acrid nature

The whole plant, especially the seed-vessel, being pounded and steeped in ponds, rivulets, or creeks, is ob-

5605 Leaves entire very broad contracted at base
5606 Leaves orbicular pubescent
5607 Leaves oblong-ovate acute cordate at base, Racemes pendulous
5608 Leaves lanceolate ovate
5609 Leaves cordate ovate wavy
5610 Leaves of the branchlets ovate, of the branches ovate cordate
5611 Leaves oblong obtuse at each end coriaceous flat

5612 Caps pyriform, Leaves in 2 pairs with an odd one, Leaflets ovate lanceolate sessile crenate
5613 Valves of caps half obcordate, Leaves 2 ternate, Leaflets oval crenate, Footstalk edged
5614 Valves of caps. half ovate villous, Leaves 2 ternate, Leaflets oval entire and serrated coriaceous
5615 Valves of caps obovate, Leaves supradecompound, Leaflets ovate cuneate crenate at end
5616 Leaves biternate, Leaflets oval toothletted at end, Branches prickly
5617 Caps pyriform 3-winged at end, Leaves in 3 pairs with an odd one, Leaflets subsessile pubescent beneath

5618 Leaves ternate, Leaflets ovate lanceol toothed sinuated, Wings of fruit dilated behind
5619 Leaves biternate, Leaflets oblong remotely toothed quite smooth, Wings of fruit rounded behind

5620 Stem stalks and leaves smooth, Leaves biternately cut, Segm stalked cut-toothed
5621 Leaves beneath downy biternately cut, Segments stalked cut obtuse
5622 All over pubescent, Capsules obtuse

5623 Rachis of leaves winged, Leaflets entire lanceol of 3-4 pairs the terminal with long points
5624 Rachis of leaves winged unarmed, Leaflets lanceolate of 6 pairs
5625 Rachis not winged, Leaflets ovate oblong smooth of 3 pairs
5626 Rachis not winged, Leaflets lanceolate smooth of 5 pairs one terminal
5627 Rachis not winged, Leaflets oblong emarginate villous beneath
5628 Rachis not winged, Leaflets oblong lanceolate acute villous beneath of 3-5 pairs

TETRAGYNIA.

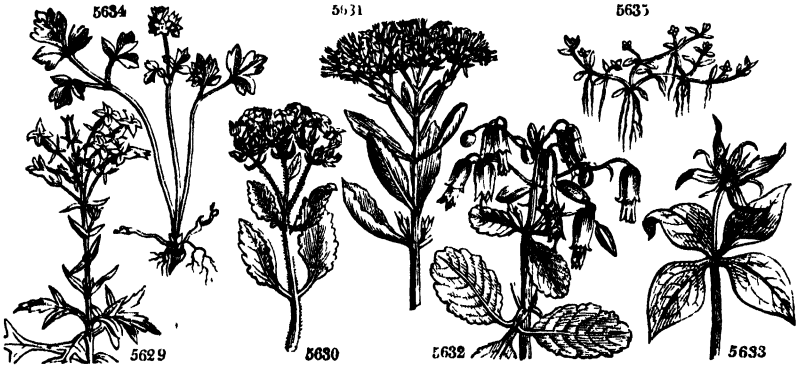
5629 Leaves 3-parted toothed the floral linear entire
5630 Leaves obovate doubly crenate
5631 Leaves broad lanceolate opposite crenate thick, Segm of cor acute

5632 Leaves oval crenate, Flowers long pendulous cylindrical

5633 All the parts of the plant green and in fours

5634 The only species

5635 Leaves opposite, Flowers alternate stalked tetrapetalous



and Miscellaneous Particulars

served to intoxicate and kill the fish Loureiro celebrates the berries, slightly bruised and steeped in water, as a very excellent soap; and remarks that it is only required to use them with prudence, all abstergents being in some degree corrosive

927 *Verea* So named after the late James Vere, Esq, a gentleman of fortune, who patronized gardening, and had once a fine collection of living plants The species thrive best in sandy loam, and should be plunged in the bark pit to make them flower The leaves placed on a pot of mould, or on the tan, will shoot out young plants from the notches of the margin (*Bot Cult* 35)

928 *Bryophyllum* From βρυω, to grow, and φυλλον, a leaf If the leaves are laid upon damp earth their notches push forth roots, whence proceed young plants This plant requires very little water, and the pot to be well drained it flowers best plunged in a tan heat, rich loamy soil suits it best

929 *Paris* According to some authors, this word is derived from *par*, equal, in allusion to the regularity of the parts of the plant Few plants are more readily distinguished than this, by the proportion and regularity of all the parts

The regular number is four, or some aliquot part or multiple of that number There are, however, sometimes only three leaves, and they are even said to vary from one to seven. The calyx also has sometimes three leaves The leaves and berries are said to partake of the properties of opium, and the juice of the latter to be useful in inflammations of the eyes Linnæus says, the root will vomit as well as ipecacuanha, given in a double quantity It is a suspicious plant, which has nevertheless been used in medicine in a great variety of ways

930. *Adoxa* From α, privative, and δοξα, glory — inglorious. This plant is minute, and by no means beautiful, and grows in obscure places.

931. *Elatine* From ελατη, a fir, in Greek Its fine leaves have been compared to those of a fir-tree.

†932. HALO'RAGIS. *W.* Haloragis — *Halorageæ* *Sp.* 1—5
5636 Cercódia *W.* whorl-flowered ♃ ⊔ cu 2 ap s G R New Zeal. 1772. C s.p Jac. ic. 1. t. 69

933 FORSKOH'LEA. Forskohlea. — *Urticeæ.* *Sp.* 3—5.
5637 tenacíssima *W.* clammy ○ cu 1½ jl au G Egypt 1767. S lt.l Jac. vind. 1. t. 48
5638 cándida *W* rough ♇ △ cu 1½ jn jl W G C G H 1774 C lt l
5639 angustifólia *W.* narrow-leaved ○ cu 2 jl au G w Teneriffe 1779 S lt l M c g. p. 24 t. 2



History, Use, Propagation, Culture,

932. *Haloragis* From ἁλς, αλος, the sea, and ραξ, the berry of a bunch of grapes. This plant grows on the sea shore, and its fruit is globular like a berry

933. *Forskohlea.* In memory of Peter Forskóhl, a Swede, born in 1732, he was professor at Copenhagen,

5636 Leaves serrate, Flowers whorled

5637 Pilose hispid, Leaves elliptical unarmed, Sepals oblong lanceolate acute
5638 Rough, Leaves elliptical wavy unarmed, Sepals ovate obtuse
5639 Strigose, Leaves lanceolate with spiny teeth, Sepals lanceolate subulate



and Miscellaneous Particulars

travelled at the expence of the king of Denmark into Egypt and Arabia, and died in the latter country of the plague in 1763. Inelegant plants, with the aspect of a nettle.



Class IX. — ENNEANDRIA. 9 Stamens.

One of the smallest of the Linnean classes, containing, however, three important genera, the Laurel, famous for the valuable spices it produces, and for the beautiful foliage of its insipid species, the Cashew nut, well known at the tables of the great or luxurious, and the Rhubarb, one of the most valuable of medicines.

The class itself is extremely unnatural, and the assemblage of genera most incongruous.

Order 1 MONOGYNIA.  9 Stamens 1 Style.

934. *Laurus* Cal 4-6-parted Nect 3 glands, with 2 bristles surrounding the ovary Anthers opening transversely Valves hinged to the upper side

MONOGYNIA.

†*934 LAU'RUS *W*	Laurel				*Laurinæ*	*Sp* 18—68						
§5640 Cinnamómum *W*	Cinnamon	♀	▭	m	20	jn s	G y	Ceylon	1763	L	s p	Bot. rep 596
§5641 Cássia *W*	Bastard-Cinn	♀	▭	m	50	my s	W	E Indies	1768	C	s p	Bot mag 1636
§5642 Malabátrum *P S*	tall	♀	▭	or	30	. .	G y	E. Indies	1805.	C	s p	Rhe mal 5 t 58
§5643 cámphora *W*	Camphire-tree	♀	⌴	m	20	mr jn	G w	Japan	1727	C	s p	Jac col 4 t.3. f 2
5644 chloróxylon *W*	Cogwood-tree	♀	⌴	tm	60	...	G w	Jamaica	1778	C	s p	Bro jam t. 7. f 1
5645 aggregata *Sims*	glaucous	♀	⌴	or	3	ja f	G y	China	1806.	L	s p	Bot. mag 2497
5646 nóbilis *W*	Sweet-Bay	♀		or	15	ap my	Y w	Italy	1561	C	s l	Zorn ic 52
β undulàta	*wave-leaved*	♀		or	4	ap my	Y w	.....	...	C	s l	
γ salicifólia	*willow-leaved*	♀		or	6	ap my	Y w	.....	...	C	s l	
§5647 Culilában *L*	Culilaban	♀	▭	or	20	...	G y	E. Indies	1823.	C	s.l	Rumph. 2 t. 14

5640 5641



5643 5645 5646

History, Use, Propagation, Culture,

934 *Laurus* From the Celtic *blaur* (the *b* is dropped in pronunciation, *laur*), green The laurel is perpetually green This genus contains several important spice or drug-bearing trees, besides the poetical laurel and a fruit tree.

L. Cinnamomum (*qu* China Amomum) has a smooth ash-colored bark, a short erect trunk, and wide spreading branches, which form an elegant head The leaves are of a bright green above, pale beneath, and white veined, the flowers are in panicles, have no shew, and are inodorous, or perhaps somewhat fœtid, the fruit is the size of a middling olive, soft, insipid, and of a deep blue, it encloses a nut, the kernel of which germinates soon after it falls, and therefore cannot easily be transported to a distance. The timber is white, and not very solid, the root is thick and branching, and exudes abundance of camphor The inner bark forms the cinnamon of commerce There are many varieties, and probably some of them species, especially in the island of Ceylon, but only four are said to be barked. Besides Ceylon, the tree grows plentifully in Malabar, Cochin China, Sumatra, and the Eastern islands It has been cultivated in the Brazils, the Mauritius, India, Jamaica, and other places The soil in which it thrives best is nearly pure quartz sand That of the cinnamon garden near Colombo in Ceylon, was found by Dr Davy to consist of 98·5 of silicious sand, and of 1·0 only of vegetable matter in 100 parts "The garden is nearly on a level with the lake of Colombo, its situation is sheltered, the climate is remarkably damp, showers are frequent, and the temperature is high and uncommonly equable" (*Davy's Ceylon*, p 30)

The trees that grow in the valleys, in a white sandy soil, are fit to be barked when four or five years old, but those in a wet soil or in shady places, require to be seven or eight years of age The bark is good for nothing if the tree be older than eighteen years The tree was formerly propagated by a species of pigeon that ate the fruit and voided the seed, but since Falck, one of the Dutch governors, about the middle of the eighteenth century, raised it from berries sown in his garden, it has been regularly cultivated

The barking commences early in May, and continues until late in October Branches of three years old are selected, and topped off with a pruning knife or bill hook To remove the bark a longitudinal incision is made through it on both sides of the shoot, so that it can be gradually loosened and taken off entire, forming hollow cylinders The bark in this state, tied up in bundles, is allowed to remain for twenty-four hours, by which a fermentation is produced that facilitates the separation of the epidermis, which, with the green pulpy matter under it, is carefully scraped off The bark now soon dries, contracts, and assumes the quilled form, after which the smaller pieces are put within the larger The cinnamon, when dry, is tied up in bundles of 70lbs weight, and carried to the Government store-house, where the quality is determined by inspection of the bundles It was formerly chewed for this purpose, and the surgeons who used to be thus employed, had their

935. *Anacardium* Cal. 5-parted. Petals 5, reflexed Anthers 9, and one filament barren. Nut reniform, upon a fleshy receptacle
936 *Cassytha* Cal 6-parted. Nect 3 truncate glands surrounding the ovary. Inner filaments glandu-liferous Drupe 1-seeded
937. *Eriogonum.* Cal. campanulate, 6-cleft. Nut 1, 3-cornered, covered by the calyx.

Order 2 TRIGYNIA.  9 Stamens 3 Styles.

938. *Rheum* Cor 6-cleft, persistent. Nut 1, 3-cornered

Order 3 HEXAGYNIA.  9 Stamens 6 Styles.

939 *Butomus* Sepals 6 Caps. 6, many-seeded.

MONOGYNIA.

5640 Leaves 3-nerved ovate-oblong, Nerves vanishing towards the end
5641 Leaves triple-nerved lanceolate
5642 Leaves opp. very long acute at each end triple-nerved veiny across
5643 Leaves triple-nerved lanceolate ovate
5644 Leaves 3-nerved ovate coriaceous, Nerves reaching the end
5645 Leaves ovate acuminate 3-nerved glaucous beneath, Flowers axillary numerous
5646 Leaves lanceolate veiny perennial, Flowers 4-fid dioicous

5647 Leaves triple-nerved opposite



and Miscellaneous Particulars

mouths so excoriated, as to be unable to continue the process longer than two days together: but tasting is now seldom had recourse to

Cinnamon bark is astringent, cordial, and tonic. But the principal use of cinnamon is to cover the nauseous state of other remedies (*Thomson's London Dispensatory*, 554)

An oil is procured from the leaves and roots of cinnamon, the former is called the oil of cloves, and the latter the oil of camphor: both are powerfully stimulant, and used in cramps of the stomach, flatulent colic, hiccough, toothach, and nervous langour

According to Sweet L. Cinnamomum is the hardest plant of the genus to cultivate in our stoves. "I have scarcely," he says, "ever seen it do well any where but at Messrs Loddiges," who generally keep their stoves warmer than other gardeners usually do, and the cinnamon likes a warm atmosphere, and very little water in winter It grows best in a mixture of sandy loam and peat, the pots being well drained with small potsherds. Ripened cuttings soon take root in a pot of sand, plunged under a hand-glass, in a good moist heat. (*Bot. Cult.* 74.)

The plant has regularly flowered and ripened seeds in the hothouse of the Bishop of Winchester for several years past.

L. Cassia is also decorticated like the cinnamon, but it is considered of inferior value, on account of containing a greater proportion of mucilage What are called Cassia buds, are not obtained from this tree, but are the hexangular fleshy receptacles of the seed of the L. Cinnamomum. Cassia bark and buds are used in the same manner as cinnamon bark: the tree also affords an oil of similar use In our stoves, the cassia grows more readily than the cinnamon, the same kind of soil suits it; and cuttings root freely treated in the same manner. (*Bot. Cult* 74.)

L. Camphora, an alteration of the Arabic name, *kâfour*, is nearly allied to the cinnamon tree. The roots, wood, and leaves of this tree have a very strong odor of camphor, and from the roots and smaller branches it is obtained by distillation They are cut into chips, which are suspended in a net within a kind of still or iron pot, the bottom of which is covered with water, and an earthen head fitted to it, heat is then applied, and the steam of the boiling water, penetrating the contents of the net, elevates the camphor into the capital, where it concretes on straws, with which that part of the apparatus is lined Camphor is stimulant, narcotic, and diaphoretic, but its stimulant powers are very transitory, and followed by sedative effects. In moderate doses it operates as a cordial, increasing the heat of the body, and exhilarating, besides softening, and removing fuller the pulse, and promoting diaphoresis, in large doses it allays irritation and spasm, abates pain, and induces sleep But in immoderate doses camphor produces vomiting, vertigo, delirium, convulsions, and other

5648 indica *W.*	Royal-bay	♀	▭	tm	20	mr o	G Y	Madeira	1665.	C	l p	Pl. alm. t. 304 f. 1
5649 fœtens *W.*	Madeira, or Til.	♀	▭	tm	20	mr o	G Y	Madeira	1760	C	l p	
5650 canariénsis *W. en.*	Canary	♀	▭	or	10	...	G Y	Canaries	1815.	C	l p	
5651 Pérsea *W*	Alligator Pear	♀	▭	fr	30	...	G Y	W Indies	1739.	C	l p	Pl. alm. t. 267. f. 1
5652 Borbónia *W*	brd.-lvd -Carol.	♀	▭	or	15	ap.my	Y G	N. Amer.	1739	C	l p	Cat. car. 1. t. 63
5653 carolinénsis *P S*	Red-Bay	♀	▭	tm	15	ap my	Y G	N. Amer	1806.	L	l p	
5654 geniculáta *Ph.*	flexuose	♂		or	6	ap.my	Y	N Amer.	1759	L	l p	Bot mag. 1471
5655 Diόspyrus *Ph.*	twiggy	♂		or	6	ap my	G Y	N Amer.	1810	L	l p	Bot. mag. 1470
5656 Benzoïn *W*	Benjamin-tree	♂		m	8	ap my	Y.G	N Amer	1683	S	p.s l	Com hort. 1 t 97
5667 Sássafras *W*	Sassafras-tree	☿		m	50	my jn	G Y	N. Amer	1633	S	p s.l	Cat. car. 1. t 55

935 ANACARDIUM. *W* CASHEW-NUT — *Terebintaceæ. Sp* 1. ?

5658 occidentále *W*	common	☿	▭	fr	12	...	R	India	1699.	C	r m	Cat. car. 3. t 9

936. CASSYTHA — CASSYTHA. — *Laurinæ Sp.* 1—2

5659 filiformis *W*	filiform	♂	▭	cu	3	ap au	W	E Indies	1796.	C	s p	Pl. al. t. 172. f. 2

†937 ERIO'GONUM *Mi* ERIOGONUM. — *Polygoncæ Sp* 2—3

5660 tomentósum *Ph*	woolly	☿	△	cu	2	my jn	Y	Carolina	1811.	S	l p	Mich. am. t. 24
5661 sericeum *Ph*	silky	☿	△	cu	1	jl	Y	Missouri	1811.	S	l p	

TRIGYNIA.

938 RHE'UM *W*	RHUBARB					*Polygoncæ*	*Sp.* 7—10					
5662 Rhapónticum *W*	common	✱	△	cul	4	my jn	W G	Asia	1573.	R	co	Sabb. hort. 1. t 34
5663 undulátum *W*	Bucks	✱	△	cul	4	my jn	W G	China	1734.	R	co	Amæn ac 3 t 4



History, Use, Propagation, Culture,

deleterious effects The greater part of the camphor brought to Europe is obtained in Sumatra from the Dryobalanops Camphora. This tree is cut and split, and the camphor which is found concreted in the heart of it is picked out and washed in a ley of soap Zea describes a variety of camphor which is procured in South America from a tree, the botanical characters of which are not yet known, but which is termed *caratta* by the natives The camphor exudes from the bark in the form of tears. (*Thomson's London Dispensatory*, 356)

L. Chloroxylon has its specific from the color of the wood, χλωρον, green, and ξυλον, wood, it is esteemed one of the best timber trees in Jamaica, and used on all occasions where strength and durability are required: being both hard and tough, it answers better than any other wood for the cogs of sugar mills

L. nobilis, the *Laurier*, Fr, *Lorbeerbaum*, Ger, *Alloro*, Ital, *Laurel*, Span, the *Laurus* of the Romans, and *Daphne* of the Greeks, was designated *nobilis* by Linnæus, because it was consecrated to priests, sacrifices, and heroes in the ages of antiquity, and has been celebrated accordingly To the poet and sculptor it still affords emblems for victorious heroes, and it is also used in cookery and medicine In the south of Italy it grows to a sufficient height to be considered a tree, but is so prolific in suckers and low shoots as always to have the character of a shrub. It forms a dense and yet broken and picturesque mass of a very fine deep green, inclining to olive, and is abundantly covered with berries, which are dark purple or black, when ripe. Oil is obtained from the latter by boiling water Both the leaves and the berries have a sweet fragrant odour, and an aromatic, astringent taste, and the oil, which is of a yellowish green color, has a stronger but similar odor and taste Water distilled from the leaves shews traces of prussic acid, and it is probably on this component that their medicinal and poisonous property depend Leaves, berries, and oil are narcotic and carminative. (*Thomson's London Dispensatory*, 360)

L. indica grows in the Canary Isles and Virginia. The wood is of a yellow color, not heavy, good for building, but better still for furniture it is called *Vignatico* in the island of Madeira, and is probably what is imported into England under the name of Madeira mahogany It is hardly to be distinguished from mahogany, except that it is somewhat less brown (*Hawkesw Voy* II p 5)

L. Persea (Persea is a name under which Theophrastus describes an Egyptian tree not now known,) has a trunk as large as our common apple tree, the bark is smooth, and of an ash color, the branches are very succulent and soft, beset with pretty large oblong smooth leaves, like those of laurel, of a deep green color The flowers are, for the most part, produced towards the extremities of the branches. The fruit is the size of one of our biggest pears The pulp of the fruit is covered with a tough skinny coat, and contains a large rugged seed, which is wrapped up in one or two thin membranous covers This fruit is held in great esteem in the West Indies the pulp is of a pretty firm consistence, and has a delicate rich flavor, it gains upon the palate of most persons, and becomes soon agreeable even to those who cannot like it at first, but it is so rich and mild, that most people make use of some spice or pungent substance to give it a poignancy, and, for this purpose, some make use of wine, some of sugar, some of lime-juice, but most of pepper and salt This fruit seems equally agreeable to the horse, the cow, the dog, and the cat, as well as to all sorts of birds, when plentiful, it makes a great part of the delicacies of the negroes. (*Browne*)

L. Borbonea was regarded by Plumier as a genus distinct from Laurus, and he applied what is now its specific name, in memory of Gaston Bourbon, son of Henry IV and uncle of Louis XIV It is a very common tree in swamps in Carolina, and affords a fine grained wood excellent for cabinets, some of the best resembles watered satin.

L. Sassafras (Sassafras is an alteration of the Spanish word *Saxifras*, which signifies *Saxifrage*, the virtues of which are attributed by the Spanish Americans to this plant,) has the flowers often imperfect as to the male and female organs, which, before observation was so accurate and scientific as at present, led to the conclusion

5648 Leaves veiny lanceolate perennial flat, Branches scarred, Flowers racemose
5649 Leaves veiny elliptical acute perennial, Axils of veins villous beneath, Racemes panicled
5650 Leaves veiny oblong acute at each end perennial shining, Peduncle axill 3-4-flowered
§5651 Leaves ovate coriaceous transversely veiny perennial, Flowers corymbose
5652 Leaves lanceolate perennial, Calyx of fruit berried
5653 Leaves oval lanc perenn glaucous beneath, Berries globose
5654 Branches divaricating flexuose, Leaves oval obtuse smooth at the base beneath bearded, Anth 4-celled
5655 Twiggy naked-flowering, Leaves decid oblong beneath veiny downy, Flowers clustered, Buds villous
5656 Leaves nerveless ovate acute at each end entire annual
5657 Leaves entire and 3-lobed

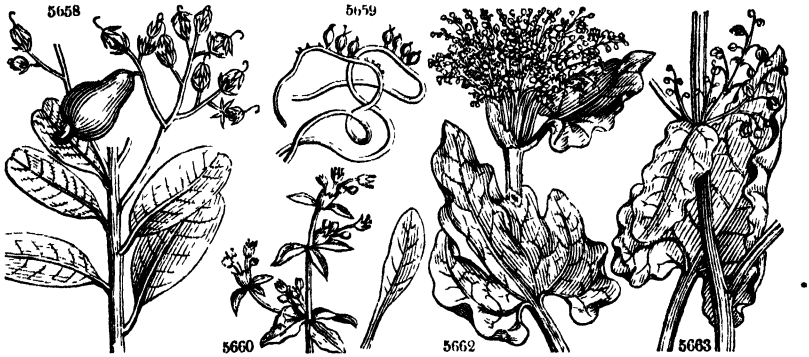
5658 The only species

5659 Branches filiform lax

5660 Leaves sessile cauline 3 4 cuneate obovate smooth above
5661 Leaves radical stalked lanc oblong villous above

TRIGYNIA.

5662 Leaves obtuse smooth, Veins beneath hairy, Leafst furrowed above rounded at edge
5663 Leaves villous wavy, Leatst flat above with an acute edge



and Miscellaneous Particulars

that one plant bore only males and the other only hermaphrodites, it is now found the alleged males are only imperfect hermaphrodites. The wood, root, and bark have a fragrant odor, and a sweetish aromatic taste. their sensible qualities and virtues depend on an essential oil, which can be obtained separate by distilling the chips or the bark with water it is a stimulating diaphoretic and diuretic, and has been employed in cases of scurvy, chronic rheumatism, gout, and in cutaneous affections, but its effects are very uncertain, and even the diaphoresis which it is supposed to occasion may rather be ascribed to the guaiac, and other more powerful medicines, with which it is generally combined (*Thomson's London Dispensatory*, 361)

The species are well divided into several genera, such as Laurus, Tetranthera, Cinnamomum, and others but as this division has not been applied to the old species of Laurus generally, it has not been practicable to adopt it here

935 *Anacardium* From ανα, in composition, like, and καρδια, heart, in allusion to the form of the nut This is an elegant tree, bearing panicled corymbs of sweet smelling flowers, succeeded by an edible fruit of the pome kind, of a yellow or red color This fruit or apple has an agreeable sub-acid flavor, with some degree of astringency The juice expressed and fermented yields a pleasant wine, and distilled, a spirit is drawn from it, far exceeding arrack or rum, making an admirable punch, and powerfully promoting urine The dried and broken kernels are occasionally imported for mixing with old Madeira wine, the flavor of which they improve prodigiously Some planters in the West Indies roast the ripe fruit, or slice one or two into a bowl of punch, to give it a pleasant flavor The astringency of the juice has recommended it as a very signal remedy in dropsical habits.

The nut protrudes from one end of the apple (*Long*) It is of the size and shape of a hare's kidney, but is much larger at the end next the fruit than at the other The outer shell is of an ash color, and very smooth, under this is another which covers the kernel, between these there is a thick inflammable oil, which is very caustic, this will raise blisters on the skin, and has often been very troublesome to those who have incautiously put the nuts into their mouths to break the shell This oil has been used with great success in eating off ring-worms, cancerous ulcers, and corns, but it ought to be applied with caution The kernel when fresh, has a most delicious taste, and abounds with a sweet milky juice It is an ingredient in puddings, &c When older it is generally roasted, and in this state is not so proper for costive habits Ground with cacao it makes an excellent chocolate When kept too long it becomes shrivelled, and loses its flavor and best qualities. The thick oil of the shell tinges linen of a rusty iron-color, which can hardly be got out, and if any wood be smeared with the oil, it prevents the wood from decaying

From the body of the tree is procured, by tapping or incision, a milky juice, which will stain linen of a deep black, that cannot be washed out again

This tree also annually transudes from five to ten or twelve pounds weight of a fine semi-transparent gum, similar to gum arabic, and not inferior to it in virtue or quality, except that it has a slight astringency, which, perhaps, renders it in some respects more valuable. (*Long's Jam* iii. 725, &c)

As a stove-plant it grows in light loam or rich mould, and ripe cuttings with their leaves, planted in a pot of sand, and plunged under a hand-glass, will strike root

936. *Cassytha* The Greek name of the Cuscuta, which this plant much resembles in habit and characters of analogy Its affinity, however, is very curious, from a minute analysis of its constituent parts it has been decided by the most learned botanists to be referable to Laurineæ

937 *Eriogonum* From εριον, wool, and γονυ, a knee The stem of this plant is very woolly at the joints. The species thrive best in pots, and are principally to be increased by seeds

938 *Rheum.* This name was ingeniously supposed by Linnæus to have been derived from ῥεω, to flow, because the root causes a discharge of bile It, nevertheless, was formed from *Rha*, the ancient name of the Volga.

5664 palmátum *W.*	officinal	✱	△	m	5	ap my	W a	Bucharia	1763.	R	co	Lin. fasc. 7. t. 4
5665 compáctum *W.*	thick-leaved	✱	△	m	3	my jn	W a	Tartary	1758.	R	co	Mill. ic. 2 t 218
5666 tatáricum *W.*	Tartarian	✱	△	m	3	my jn	W a	Tartary	1793.	R	co	
5667 Ribes *W*	warted-leaved	✱	△	cul	2	my jn	W a	Levant	1784	R	co	An. mus. 2. t. 49
5668 hfbridum *W.*	bastard	✱	△	cul	5	my.jn	W.a	Asia	1778.	R	co	Mur. co. got. t. 1

HEXAGYNIA.

939 BU'TOMUS. *W* Flowering-Rush *Butomeæ Sp.* 1—2.

5669 umbellátus *W*	umbelled	✱	△	el	2	ju jl	Pk	Britain	dit.	D	rl	Eng bot 671



5664 5666

History, Use, Propagation, Culture,

Ammianus Marcellinus, lib. xii., says, "the *Rha* is a river, on the border of which grows a root, which bears its name, and is much renowned in medicine." The construction of the specific names confirms this, *Rha* ponticum, *Rha* barbarum, whence the name *Rhubarb* was obtained

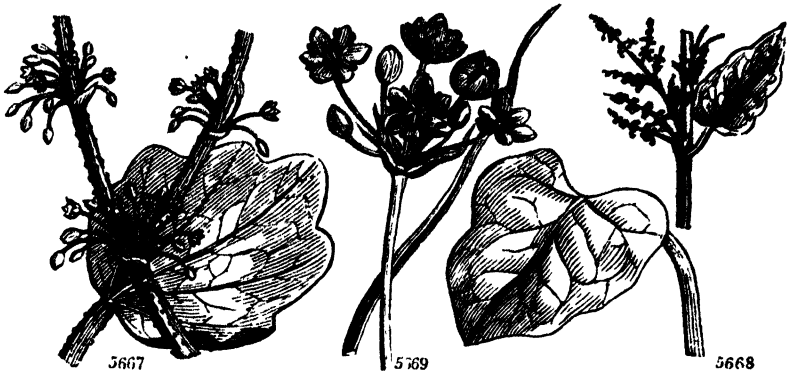
R. Rhaponticum was thought to be the true rhubarb of druggists, till Dr Hope of Edinburgh described the R. palmatum, some seeds of which he had received from Russia, as of the genuine species. It is not, however, finally settled, whether these species or the R. compactum yield the foreign roots, nor does it appear of much consequence, as these three species agree so nearly in their medical properties, that any of them may be used with equal certainty of success. All the rhubarb of commerce, known under the names Turkey or Russian, and East Indian or Chinese, grows on the declivities of the chain of mountains in Tartary which stretches from the Chinese town Sini to the lake Kokonor near Thibet. The soil is light and sandy, and the Bucharians assert that the best grows in the shade on the southern side of the mountains Rhubarb, however, is also cultivated in China, in the province of Chen See, where it is called *Has-houng* In Tartary, the roots are taken up twice a-year, in spring and in autumn, and after being cleansed and decorticated, and the smaller branches cut off, the body of the root is divided transversely into pieces of a moderate size, which are placed on tables, and turned three or four times a-day, during five or six days A hole is then bored through each piece, by which it is hung up to dry, exposed to the air and wind, but sheltered from the sun In about two months, the roots have lost seven parts in eight of their weight, and are fit for the market In China, the roots are not dug up till winter, and the cultivators, after cleaning, scraping off the bark, and cutting them, dry the slices by frequently turning them on stone slabs heated by a fire underneath, after which, the drying is completed by hanging them up in the air exposed to the greatest heat of the sun (*Thomson's London Dispensatory*, 471)

Rhubarb has been cultivated in different parts of Britain with a view to drying the root for medical purposes with the most perfect success, but such is the prejudice in favor of the foreign article, that sufficient de-

5664 Leaves palm acute roughish, Leafst. above obscurely furrowed rounded at edge
5665 Leaves somewhat lobed very obtuse shining finely toothletted smooth
5666 Leaves cordate ovate entire flat smooth, Leafst. half-round angular, Panicle furrowed
5667 Leaves very obtuse somewhat warted, Veins beneath spinulose, Leafst. flat above rounded at edge
5668 Leaves smooth above somewhat lobed acute, Recess of base contracted

HEXAGYNIA.

5669 Flowers in handsome terminal umbels



and Miscellaneous Particulars.

mand was not produced to encourage the cultivator The only point in which British culture was rather deficient was in the drying, but that a little experience would soon have overcome.

R. Rhaponticum and hybridum, indeed any of the species, are or may be cultivated for the petioles of the leaves in a green state, to be used in tarts and pies, as a substitute or along with gooseberries. All that is required is a dry soil well enriched and trenched two, or better, three feet deep The plants the year after planting may have half their leaves slipped off for the cook, as soon as they arrive at full growth Keeping the plants from flowering will obviously strengthen the leaves

Tart rhubarb may be forced either by taking up the roots and planting them in pots, or by covering them with dung where they grow in the open garden, as is done with sea-kale It may also be blanched, as is done with that vegetable (See *Encyc of Gard.* art *Rheum*)

R. Ribes is so called from a rob made from its stalks, and called *Rybès of Serapias*

It is thought that all the supposed species are reducible to Rhaponticum, undulatum, palmatum, and ribes. It is certainly very difficult to distinguish the others

939 *Butomus* From *βους*, an ox, and *τεμνω*, to cut; the sharp leaves of the plant cut and cause to bleed the mouths of cattle feeding upon it.

This is the only plant of the class Enneandria that grows wild in Britain. It is an elegant aquatic. "The water-Gladiole, or grassie-Rush," says Gerarde, "is of all others the fairest and most pleasant to behold, and serveth very well for the decking and trimming up of houses, because of the beautie and braverie thereof."

The corolla varies in different shades of red, or purple mixed with white, and is sometimes entirely white. The stem at bottom and the peduncles at top are often tinged with red. The number three is evidently predominant in the fructification, the corolla being doubly tripetalous, the stamens thrice three, the pistils six, the capsules six, in a hexagon form, the involucre three-leaved.



Class X. — DECANDRIA. 10 Stamens.

This is the last of the Linnean classes in which the stamens are distinct, and bear any determined relation to the other parts of the flower It is composed of portions of a considerable number of natural orders, of which the most important is Leguminosæ, with which the class usually is made to commence These are of two kinds those which are papilionaceous, and those which have a regular expanded flower. The former are remarkable in their kind for bearing distinct stamens combined with a papilionaceous corolla, the greater part are natives of New Holland or the Cape of Good Hope, a very few of the Northern Hemisphere, and al. of them ornamental plants Of those with regular flowers the most beautiful genus is the Bauhinia, which, in the latitudes of the tropics, constitutes the most formidable obstacle to the passage of human beings through the woods, which are interlaced in every direction by the climbing or leaning stems of these and other plants commonly called *Lianes*, the most extensive genus is Cassia, the species of which are little esteemed as objects of ornament, but of material importance in medicine, the famous Senna of the shops being the produce of at least three species The Hæmatoxylon and Swietenia, the one producing Logwood, the other Mahogany, are included in this class, as are the important Quassia drug, and the beautiful tribes of Kalmias, Rhododendrons, and Andromedas

The second and succeeding orders are chiefly occupied by the most important of the genera of the natural order of Caryophylleæ, the whole of which have lately been remodelled and arranged, under the direction of Decandolle, by M Seringe, an ingenious Swiss botanist. Of this order the most extensive genus is Silene, and the most beautiful Dianthus, out of which the fine carnations, pinks, and piccotees of the florist have been obtained

Order 1 MONOGYNIA.  10 Stamens 1 Style.

§ 1 *Leguminosæ Flowers papilionaceous.*

940 *Edwardsia* Cal. 5-toothed Pod 4-winged, many-seeded

941. *Sophora* Cal 5-toothed Pod necklace-shaped, not winged, many-seeded.

942 *Ormosia* Cal 5-cleft, 2-lipped. Stigmas 2, approximate, obtuse. one on one side. Pod compressed, woody, 1-3-seeded.

943. *Anagyris.* Cal 5-toothed, 2-lipped Keel of 2 petals, which are larger than the wings, which are longer than the standard Pod compressed, many-seeded

944 *Thermopsis* Cal. oblong 4-5-cleft, 2-lipped, convex behind. Petals of equal length. Standard reflexed at edges Keel obtuse. Stamens persistent Pod compressed, linear, many-seeded

945. *Virgilia.* Cal. 5-cleft Petals of equal length, standard not reflexed at edges. Stigma beardless. Pod compressed, oblong, many-seeded.

946 *Cyclopia* Cal 5-cleft, unequal, pushed inwards at base Standard with longitudinal wrinkles · wings with a transverse plait. Stamens deciduous Stigma bearded on one side Pod compressed, many-seeded

947 *Baptisia* Cal. half 4-5-cleft, 2-lipped Petals of equal length Standard reflexed at edges. Stamens deciduous Pod ventricose, stalked, many-seeded

948 *Podalyria* Cal 5-cleft, unequal, pushed inwards at base Standard larger than the rest Stamens persistent, connate at base Pod ventricose, many-seeded

949. *Chorozema.* Cal. half-5-cleft, 2-lipped. Keel ventricose, shorter than wings Style short, hooked. Stigma oblique, obtuse Pod ventricose, many-seeded

950 *Podolobium* Cal 5-cleft, 2-lipped Keel compressed, the length of the wings, which are equal to the expanded standard. Ovary many-seeded in a single row Style ascending. Stigma simple. Pod stalked, linear, oblong, moderately ventricose, smooth inside

951 *Oxylobium.* Cal deeply 5-cleft, rather 2-lipped Keel compressed, the length of the wings, which are equal to the open standard. Style ascending Stigma simple Pod many-seeded, ventricose, ovate, acute.

952. *Callistachys* Cal. 2-lipped. Standard erect, keel and wings drooping Style incurved. Stigma simple Pod stalked, woody before ripening, many-celled.

953 *Brachysema* Cal 5-cleft, but little unequal, with a ventricose tube Standard shorter than the compressed keel, which is as long as the wings. Ovary with a stalk, surrounded at base by a little sheath. Style filiform, long Pod many-seeded, ventricose

954 *Gompholobium.* Cal 5-parted, nearly equal. Standard unfurled. Stigma simple Pod many-seeded, nearly spherical, very obtuse, smooth

955 *Burtonia* Cal. deeply 5-cleft. Cor deciduous Petals nearly equal Ovary 2-seeded Style subulate, dilated at base Stigma blunt, beardless Pod roundish, moderately inflated No appendage to the seed.

956 *Jacksonia* Cal. 5-parted, nearly equal Corolla and stamens deciduous Ovary 2-seeded. Style subulate, filiform. Stigma simple. Pod moderately inflated, ovate or oblong, with valves downy inside No appendage to the seed

957 *Viminaria* Cal. 5-toothed, angular Style capillary, a little longer than the 2-seeded ovary Stigma simple Pod valveless, ovate No appendage to the seed

958 *Sphærolobium* Cal 5-fid, 2-lipped Style on one side at the end, with a membranous appendage, on the other beardless Stigma terminal Pod spherical

959 *Aotus* Cal. 5-cleft, 2-lipped. Stamens deciduous Ovary 2-seeded. Style filiform. Pod 2-valved No appendage to the seed.

960 *Dillwynia* Cal 5-cleft, 2-lipped, narrow at base Petals and stamens deciduous, inserted into the middle of tube of calyx Standard twice as broad as long, spreading, 2-lobed. Ovary 2-seeded. Style hooked Stigma capitate Pod inflated Seeds with an appendage

961 *Eutaxia* Cal. 2-lipped Standard a little broader than long Ovary 2-seeded. Style hooked. Stigma capitate. Pod moderately ventricose Seed with an appendage Leaves opposite

962. *Sclerothamnus* Cal 5-cleft, 2-lipped, with 2 bractes at base. Keel as long as wings. Ovary 2-seeded, stalked. Style ascending filiform. Stigma simple. Pod ventricose

963. *Gastrolobium* Cal 5-cleft, 2-lipped, without bractes Petals of equal length Ovary 2-seeded, stalked Style subulate, ascending Stigma simple Pod ventricose Seeds with an appendage.

964. *Euchilus.* Cal deeply 5-cleft, 2-lipped, the upper lip very large, with 2 bractes at base Keel as long as wings Ovary 2-seeded, stalked. Style subulate, ascending Stigma simple. Pod compressed. Appendage of the seed with the hind lobes entire

965. *Pultenæa.* Cal. 5-cleft with even-sized lips, 2-bracted Ovary sessile, 2-seeded. Style subulate, ascending. Stigma simple. Appendage of the seed with the hind lobes cut.

966. *Daviesia* Cal. angular without bractes Keel shorter than standard Ovary stalked, 2-seeded Style straight. Stigma simple. Pod compressed, angular, opening with elasticity. Appendage of seed entire behind.

967. *Mirbelia.* Cal. 5-cleft, 2-lipped. Pod 2-celled, with each suture bent inwards.

968. *Cercis.* Cal. 5-toothed. Pod compressed with the seed-bearing suture winged. Seeds obovate, with a straight embryo.
969 *Schotia* Cal. 5-cleft. Petals 5, inserted on the calyx, and approaching the papilionaceous form. Pod stalked.

§ 2. *Leguminosæ Flowers nearly regular.*

970 *Bauhinia.* Cal. 5-cleft, deciduous Petals spreading, oblong, clawed; the upper one more distant; all inserted in the calyx.
971. *Afzelia* Cal tubular, with a 4-cleft deciduous limb. Petals 4, with claws · the upper very large The upper filaments sterile. Pod many-celled Seed with an arillus at base
972. *Hymenæa* Cal 5-parted. Petals 5, nearly equal Pod filled with a powdery fæcula.
973 *Cynometra.* Cal 4-leaved · the opposite leaves largest Pod 1-seeded, fleshy
974. *Cassia* Cal. 5-leaved. Petals 5 The three upper anthers sterile, three lower beaked.
975 *Cathartocarpus.* Cal. 5-parted, deciduous Cor. regular, of 5 petals. The lower filaments bowed. Pod long, round, woody, many-celled. Cells filled with pulp
976. *Parkinsonia* Cal. 5-cleft Petals 5, ovate, the lowest reniform Style O Pod necklace-shaped
977 *Poinciana.* Cal. 5-parted Petals 5, clawed, the upper dissimilar Stamens very long, all fertile Pod plano-compressed
978 *Cæsalpinia* Cal. 5-parted, with the lowest segment largest and vaulted. Petals 5. Stamens woolly at base, all fertile Pod unarmed Seeds compressed.
979 *Guilandina.* Cal. 5-cleft, the lowest segment largest Petals inserted in the neck of the calyx, nearly equal. Pod prickly. Seeds stony
980 *Hyperanthera.* Cal 5-parted. Petals inserted in calyx, unequal Pod 3-valved, torulose. Seeds winged
981 *Hoffmannseggia* Cal 5-parted, persistent Petals 5, clawed, spreading · the upper broader, glandular at base Filaments glandular Stigma clavate Pod linear, compressed, many-seeded
982 *Adenanthera.* Cal 5-toothed. Petals 5 Anthers with a globose gland at their extremity Pod membranous Seeds lentiform
983. *Cadia* Cal 5-cleft Petals 5, equal, obcordate Pod many-seeded.
984 *Prosopis* Cal hemispherical, 4-toothed Pod many-seeded
985 *Hæmatoxylon* Cal 5-parted Petals 5 Caps lanceolate, 1-celled, 2-valved, valves navicular.
986. *Copaifera.* Cal O Petals 4 Pod 1-seeded

§ 3 *Ovary superior Stamens united in a tube Flowers complete*

987. *Trichilia* Cal 4-5-toothed Petals 4-5, ovate or oblong Stamens sometimes nearly distinct. Caps. 3-celled, 3-valved, with one or two seeded cells Seeds with a berried arillus
988 *Melia.* Cal 5-toothed Petals 5 Drupe with a five-celled nut.
989. *Quassia* Cal. urceolate, 4-5-toothed. Petals 4-5, short, silky outside. Stamens with a short tube. Stigma capitate Caps coriaceous, 4-5-celled, opening at the end into 4-5-valves
990 *Swietenia* Cal. 5-cleft Petals 5 Caps 5-celled, woody, opening at base Seeds imbricated, winged.
991. *Ekebergia.* Cal 4-parted. Petals 4 Nect. a ring surrounding the ovary Berry 5-seeded
992. *Heynea* Cal. 5-toothed. Petals 5 Style 1 Ovary 2-celled. Caps 2-valved, 1-celled, 1-seeded. Seed with an arillus not winged.

§ 4 *Ovary superior Stamens separate Flowers complete*

993 *Guaiacum* Cal 5-parted, unequal Petals 5, equal Caps. angular, 2-5-celled
994 *Zygophyllum.* Cal 5-leaved Petals 5. Nect. 10-leaved, covering the ovary and bearing the stamens. Caps 5-celled.
995 *Fagonia* Cal 5-leaved. Petals 5, cordate Caps 5-celled, 10-valved, with 1-seeded cells
996 *Tribulus* Cal 5-parted. Petals 5, spreading Style O Caps 5, gibbous, spiny, many-seeded.
997. *Dictamnus* Cal. 5-leaved, deciduous. Petals 5, clawed, unequal Filam. declinate, with glandular dots Caps 5, united
998 *Ruta* Cal 5-parted Petals concave Recept surrounded by 10 honey-spots Caps. lobed.
999 *Crowea* Cal 5-parted Petals 5, sessile. Stamens flat, subulate, connected by entangled hairs Anthers united lengthwise to the filaments on their inner side Style from the base of the ovary. Caps 5, united. Seeds with an arillus
1000. *Codon* Cal 10-parted Cor campanulate, 10-cleft Caps many-seeded
1001 *Gomphia* Petals 5 Filaments scarcely any Anthers long, pyramidal, erect, opening at end by a double pore
1002 *Quassia* Cal. 5-leaved. Petals 5 Nect 5-leaved. Drupes 5, distant, 2-valved, 1-seeded, inserted on a fleshy receptacle.
1003 *Limonia* Parts of the flower 4 or 5 Stamens free, twice as numerous as petals, or sometimes as many only Fruit berried, pulpy, 4-5-celled, with 1-celled seeds.
1004 *Glycosmis* Parts of the flower 5 Stamens with flat subulate filaments, and elliptical anthers. Style short, cylindrical Ovary 5-celled Fruit fleshy, 1-2-celled, 1-2-seeded. Coat of the seed membranous.
1005. *Murraya* Parts of the flower 5 Cor campanulate Stamens with linear subulate stamens, and roundish anthers Fruit fleshy, berried, 1-2-celled, 1-2-seeded. Coat of the seed thick, woolly
1006 *Cookia* Parts of the flower 5. Petals navicular, villous Stamens with linear distinct filaments, and roundish anthers. Fruit berried, globose, 1-5-celled, with one-seeded cells
1007. *Gærtnera* Cal 5-parted. Petals 5 torn Filaments slightly cohering at base: one longer than the rest. Samara 1-seeded, with four unequal wings.
1008. *Monotropa* Cal like a corolla, gibbous at the base Capsule 5-celled, many-seeded.
1009. *Dionæa* Cal. 5-leaved Petals 5 Capsule 1-celled, gibbous, many-seeded.
1010 *Garuga* Cal campanulate, 5-cleft, bearing the stamens. Petals equal. Stigma 5-lobed. Drupe with 2-5 1-seeded nuts.
1011. *Kalmia* Cal 5-parted. Cor hypocrateriform, with a limb having 5 horns beneath. Caps. 5-celled.
1012 *Ledum* Cal 5-cleft. Cor flat, 5-parted. Caps. 5-celled, bursting at base.
1013 *Rhodora.* Cal. 5-toothed. Petals 3. Stamens declinate Caps 5-celled.
1014 *Rhododendron* Cal 5-parted. Cor somewhat funnel-shaped. Stamens declinate Caps 5-celled.
1015. *Epigæa* Outer calyx 3-leaved, inner 5-parted Cor salver-shaped. Caps. 5-celled.
1016. *Andromeda* Cal 5-parted Cor ovate, with a 5-cleft orifice Caps. 5-celled: valves contrary to the dissepiment.
1017. *Enkianthus* Cal small, persistent. Cor. campanulate, with a 5-cleft limb. Nectaries 5, at base of corolla. Anthers 2-horned. Capsule 1
1018. *Gaultheria* Outer calyx 2-leaved: inner 5-cleft, ovate Nect. with 10 points. Caps. 5-celled, clothed with an inner berried calyx
1019 *Arbutus.* Cal 5-parted. Cor ovate, with a 5-cleft orifice; pellucid at base. Berry 5-celled.
1020. *Clethra* Cal 5-parted. Petals 5 Stigma 3-fid. Caps. 3-celled, 3-valved.
1021. *Mylocaryum.* Cal. 5-toothed. Petals 5. Stigma capitate, 3-cornered, sessile. Caps. 3 or 4-winged, 3-celled.
1022. *Pyrola* Cal 5-parted Petals 5. Capsule 5-celled, opening at the angles.
1023 *Chimaphila.* Cal. 5-parted Petals 5 Stigma sessile, thick, orbicular, sunk in the ovary Anthers beaked, opening by a 2-valved cleft. Caps. 5-celled, opening at the angles.

1024. *Inocarpus.* Cal bifid Cor funnel-shaped. Stamens in a double row. Drupe 1-seeded.
1025. *Styrax.* Cal. inferior Cor. funnel-shaped Drupe 2-seeded

§ 5 *Ovary inferior. Flowers complete.*

1026. *Jussiæa.* Cal. 4-5-parted Petals 4-5. Caps 4-5-celled, oblong, opening at the angles. Seeds numerous, minute.
1027. *Getonia.* Cal 5-leaved, persistent. Filaments alternately broader, 5 in the orifice of the calyx Seed coated, oblong, crowned by the calyx
1028. *Quisqualis* Petals 5, inserted on a filiform calyx
1029. *Melastoma.* Cal 5-cleft, campanulate Petals 5, inserted in calyx Berry 5-celled, surrounded by calyx.
1030 *Petaloma* Petals 5, between the segments of the calyx Berry 1-celled
1031 *Acisanthera.* Cal. ventricose, 5-cleft Petals 5. Anthers sagittate, versatile Caps. crowned, 2-celled, many-seeded.

§ 6 *Flowers incomplete, or apetalous.*

1032 *Datis* Involucre 4-leaved. Cor 4-5-cleft. Berry 1-seeded
1033 *Bucida* Cal 5-toothed, superior Berry 1-seeded
1034 *Samyda* Cal 5-parted, colored. Nect. campanulate, stamen-bearing Caps berried inside, 4-valved, 1-celled. Seeds nidulant

Order 2 DIGYNIA  10 Stamens 2 Styles.

1035 *Royena* Cal. urceolate. Cor 1-petalous, with a revolute limb Caps 1-celled, 4-valved.
1036 *Trianthema* Cal mucronate under the end. Cor O Stam 5-10 Ovary blunt. Caps cut round
1037 *Scleranthus* Cal 1-leaved Cor O Seeds 2, included in calyx
1038 *Cunonia* Petals 5 Sepals 5 Capsule 2-celled, acute
1039 *Hydrangea* Cal superior, 5-toothed Petals 5 Caps 2-celled, 2-beaked, opening by a hole between the beaks
1040 *Chrysosplenium* Cal 4-5-cleft, colored Cor O Caps 2-beaked, 1-celled, many-seeded.
1041 *Saxifraga* Cal 5-parted. Petals 5 Caps. 2-beaked, 1-celled, many-seeded
1042 *Tiarella.* Cal. 5-parted. Petals 5, inserted in the calyx, entire Caps 1-celled, 2-valved · one valve largest
1043 *Mitella.* Cal. 5-cleft Petals 5, inserted in calyx, pinnatifid. Caps. 1-celled 2-valved, with equal valves
1044 *Gypsophila* Cal 1-leaved, campanulate, angular Petals 5, ovate, sessile Caps globose, 1-celled.
1045 *Saponaria* Cal 1-leaved, naked Petals 5, clawed. Caps 1-celled, oblong
1046. *Dianthus* Cal. cylindrical, 1-leaved, with scales at the base. Petals 5, clawed Capsule cylindrical, 1-celled.

MONOGYNIA.

†940 EDWARDSIA *Sal* Edwardsia *Leguminosæ* *Sp* 3.

5670 grandiflóra *Sal*	large-flowered	♣	⌴	or	12	my jn	Y	N Zeal	1772.	C	s p	Bot. mag 167
5671 chrysophýlla *Sal*	golden-leaved	♣	⌴	or	12	my jn	Y	N Zeal.	...	C	s p	Bot reg 738
5672 microphýlla *Sal*	small-leaved	♣	⌴	or	6	my jn	Y	N Zeal	1772	C	s p	Bot mag 1442

941. SOPHO'RA *H. K.* Sophora *Leguminosæ* *Sp* 4—.

5673 tomentósa *W.*	downy	♃	▭	or	12	...	W	India	1690	C	p l	Trew ehret t.59
5674 japónica *W*	Japanese	♃		tm	40	au s	W	Japan	1753	S	s l	Bot. rep 585
5675 alopecuroides *W*	Fox-tail	♃	△	or	4	jl au	B	Levant	1731.	D	r l	Pall. astr. t 87
5676 flavéscens *W*	Siberian	♃	△	or	2	my jl	Y	Siberia	1785	D	r l	

942 ORMO'SIA *Jacks* Ormosia. *Leguminosæ.* *Sp* 1—4

5677 dasycárpa *Jacks*	smooth-leaved	♀	▭	or	10	jn jl	B	W Indies	1793	C	lt l	Lin. tran 10 t.26



History, Use, Propagation, Culture,

940. *Edwardsia* Named after the late Mr Sydenham Edwards, a celebrated botanical draughtsman. The reputation of the Botanical Magazine has arisen almost wholly from the skill he displayed in the management of the figures of that work. These plants are hardy enough to survive through our winters out of doors, when they are not very severe but are best protected under a frame, or planted in a conservatory: they generally ripen seeds, by which, or by young cuttings planted under a bell-glass in sand, they may be readily encreased. (*Bot. Cult.* 183.)

Order 3. TRIGYNIA.  10 Stamens. 3 Styles.

1047. *Cucubalus.* Cal. 1-leaved, inflated. Petals 5, clawed. Berry superior, 1-celled, many-seeded.
1048 *Silene.* Cal. 1-leaved, ventricose. Petals 5, clawed. Caps ½-3-celled, opening at end, many-seeded.
1049. *Stellaria* Cal. 5-leaved, spreading Petals 5, 2-parted. Caps 1-celled, many-seeded.
1050. *Arenaria* Cal. 5-leaved, spreading Petals 5, entire Caps 1-celled, many-seeded.
1051 *Cherleria.* Cal 5-leaved. Nectaries 5, bifid, petal-like Every other anther sterile. Caps 3-valved, 3-celled, 3-seeded
1052 *Brunnichia* Cal ventricose, 5-cleft. Cor O. Caps 3-cornered, 1-celled, 1-seeded.
1053. *Gardella.* Cal. 5-leaved, petaloid. Nect. 5, two-lipped, bifid Caps 3, united, many-seeded
1054. *Malpighia.* Sepals 5, with two honey pores at base. Petals 5, roundish, clawed. Filaments cohering at base. Drupe 1-celled, with 3 one-celled nuts
1055. *Banisteria.* Cal. 5-parted, with two honey pores outside at the base. Petals roundish, clawed. Filaments cohering at base. Samaræ 3, 1-seeded, with a single wing at end
1056. *Hiræa* Cal. without glands Petals 5, with claws Samaræ 3, surrounded by two opposite wings.

Order 4. PENTAGYNIA.  10 Stamens. 5 Styles.

1057 *Cnestis.* Petals 5 Capsules 5, one-seeded
1058. *Averrhoa.* Sepals 5. Petals 5, spreading upwards. Stamens inserted in a nectariferous ring: every other one shorter. Apple 5-cornered, 5-celled
1059 *Spondias* Cal 5-toothed. Petals 5 Drupe with a 5-celled nut
1060 *Cotyledon.* Cal 5-cleft Cor 1-petalous Five honey scales at the base of ovary. Caps 5.
1061 *Sedum.* Cal 5-cleft. Petals 5 Five honey scales at base of ovary. Caps. 5
1062 *Penthorum* Cal. 5-cleft. Petals O to 5 Caps 5-pointed, 5-celled.
1063 *Grielum* Cal. 5-cleft. Petals 5 Filaments persistent Pericarps 5, one-seeded.
1064. *Biophyton* Sepals 5 Petals 5 Stamens all distinct, the five outer shortest. Styles 5, emarginate at end Capsule ovate, round, somewhat 5-cornered.
1065. *Oxalis* Sepals 5, distinct or united at base Petals 5 Stamens united at base, the five outer shortest. Styles 5, pencil-shaped, or capitate at end Capsule oblong or cylindrical.
1066 *Agrostemma.* Cal 1-leaved, coriaceous Pet 5-clawed. Limb obtuse, undivided. Caps 1-celled.
1067 *Lychnis* Cal. 1-leaved, oblong, smooth Petals 5-clawed, with a nearly 2-fid limb Caps 5-celled.
1068 *Cerastium.* Sepals 5 Petals bifid Capsule 1-celled, opening at end
1069 *Larbræa* Cal 5-cleft, urceolate at base Petals 5, biparted, perigynous. Styles 5 Ovary 1-celled, many-seeded. Capsule 6-valved at end.
1070 *Spergula.* Sepals 5. Petals 5, entire Capsule ovate, 1-celled, 5-valved

Order 5 DECAGYNIA.  10 Stamens 10 Styles

1071. *Phytolacca.* Sepals 5 Berry superior, 10-celled, 10-seeded

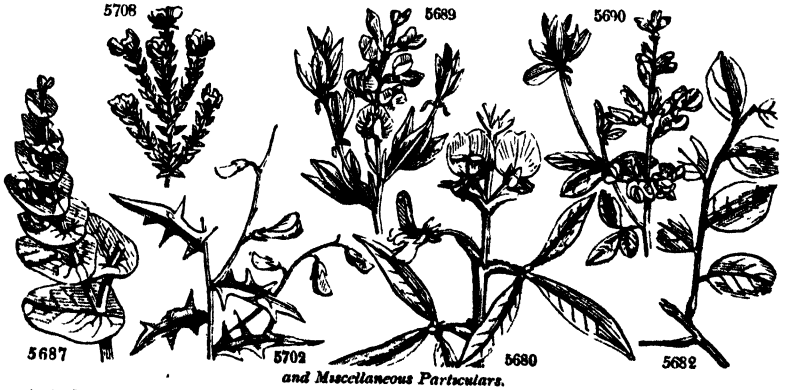
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MONOGYNIA.

5670 Leaflets 13-19 lanceolate oblong
5671 Leaflets 8-10 lines long obovate, Pubescence yellowish brown
5672 Leaflets 25-41 obovate

5673 A tree, Leaflets roundish or oval very obtuse at each end as well as the calyx downy
5674 A tree, Leaflets oblong ovate acute and pods smooth
5675 Herbaceous, Leaflets oblong when full-grown silky above
5676 Herbaceous, Leaflets ovate-oblong smoothish

5677 Leaflets 9-11 acuminate smooth on each side, Pods downy



and Miscellaneous Particulars.

941 *Sophora.* An alteration of the Arabic name *Sophera.* This genus has been much altered from what it formerly was. It now consists chiefly of fine trees, some of which are hardy.
942. *Ormosia.* From ορμος, a necklace, for making which the handsome seeds, red with a black-eye, of the species are well adapted. The kind cultivated in England is exceedingly rare.

*943. ANAGY'RIS. *W.* BEAN-TREFOIL.
§5678 fœ'tida *W.* stinking ♃ ▭ or 9 — *Leguminosæ* Sp 3. ap my Y — Spain 1570. C p l — Bot. cab. 740
5679 latifólia *W. en.* broad-leaved ♃ ▭ or 10 ap my Y — Teneriffe 1815. C p l
5680 indica *Wall.* Nepal ♃ ▭ or 8 jl Y — Nepal 1821. S p.l — Hook ex. fl. 131
Baptisia nepalénsis Hook.

944. THERMOP'SIS. *R Br* THERMOPSIS.
5681 lanceoláta *R. Br* sharp-leaved ♃ △ pr 1 — *Leguminosæ.* Sp. 1—3. jn jl Y — Siberia 1776. D lt.l — Bot. mag. 1389
Podalyria lupinoides W

945 VIRGI'LIA. *Lam.* VIRGILIA
5682 lútea *Ph* yellow-flower'd ♃ △ or 15 — *Leguminosæ* Sp. 4—7. jn.jl Y — N Amer. 1812. C p.l — Mich. arb. c. ic.
5683 aúrea *H K* great-flowered ▭ or 6 jl Y — Abyssinia 1777. C p.l — L'H.st. no.1 t 75
5684 intrúsa *H. K* small-flowered ▭ or my au Y w — C G H. 1790 C p l
5685 capénsis *H K* vetch-leaved ▭ or 2 jl.au W — C. G H. 1767. C p l — Bot mag. 1590

946 CYCLO'PIA. *R Br* CYCLOPIA
5686 genistoides *H K* Genista-leaved or 2 — *Leguminosæ* Sp. 1—2. jl.au Y — C. G H. 1787. C p l — Bot. mag. 1259

947 BAPTU'SIA *R Br* BAPTISIA
5687 perfoliáta *H K.* perfoliate ♃ △ pr 3 — *Leguminosæ.* Sp. 5—7 au Y — Carolina 1732. D c — D elt. t 102. f 122
5688 villósa *Ph* villous ♃ △ or 2 jn jl Y — N Amer 1811. D c
5689 australis *H K* blue-flowered ♃ △ or 4 jn jl B — N Amer. 1758. D c — Bot. mag. 509
5690 álba *H K* white-flowered ♃ △ or 2 jn.jl W — N. Amer 1724 D c — Bot. mag 1177
5691 tinctória *H K* dyer's ♃ △ or 1½ jl.au Y — N Amer 1759 D c — Bot. mag. 1099

948 PODALY'RIA *R Br* PODALYRIA
5692 myrtillifólia *H* Myrtle-leaved ▭ or 6 — *Leguminosæ* Sp 10—13 ap jl Pu — C G H 1795. C p l
5693 sericea *H K* silky ▭ or 6 ja o Pu — C G H 1778. C p l — Bot. mag 1923
5694 cuneifólia *V* wedge-leaved ▭ or 6 my au W — C G. H 1804 C p l — Vent cels 49
5695 bifióra *W* two-flowered ▭ or 6 f jn Pu — C G. H 1789 C p.l — Bot. mag 753
5696 calyptráta *H K* one-flowered ▭ or 6 ap jl Pu — C G H 1792. C p l
5697 styracifólia *B M* Storax-leaved ▭ or 6 my jl Pk — C. G. H ... C p l — Bot. mag 1580
5698 buxifólia *W* Box-leaved ▭ or 2 my jl B — C G H. 1790 C p l — Bot. reg 869
5699 oleæfólia *P L* Olive-leaved ▭ or my Pu — C G. H. 1804 C p l — Par lond. 114
5700 hirsúta *H K* hairy ▭ or 2 jl au B — C G H 1774. C p l — Bot. rep 525
5701 cordáta *H K* heart leaved ▭ or 2 my jl B — C G H 1794 C p l

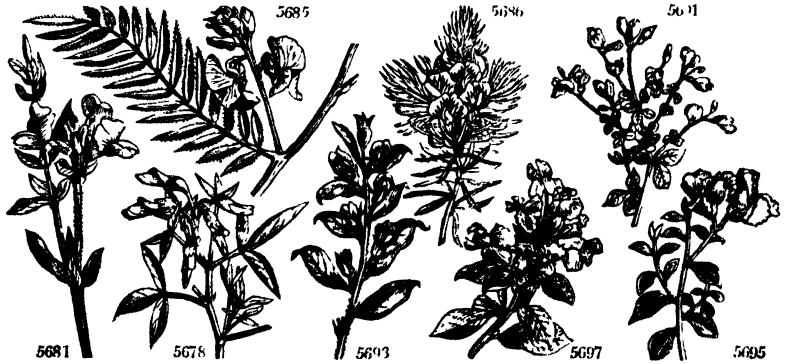
†949 CHOROZE'MIA. *Lab* CHOROZEMIA
5702 ilicifólia *H K* Holly-leaved ▭ or 3 — *Leguminosæ.* Sp. 3 mr o Y — N Holl 1803 S s p — Lab. voy 1 t 21
5703 nána *H K* dwarf ▭ or ½ mr o Y — N Holl 1803 S s p — Bot. mag 1052
5704 rhómbea *H K* few-flowered ▭ or 2 ap jn Y — N Holl 1803. S s.p — Bot cab 1619

†950 PODOLO'BIUM *H K* PODOLOBIUM
5705 trilobátum *H K* common ▭ or 2 — *Leguminosæ* Sp 1—2 ap jl Y — N S W 1791 S s p — Bot. mag 1477

*951 OXYLO'BIUM *H K* OXYLOBIUM
5706 arboréscens *H K.* tall ▭ or 6 — *Leguminosæ* Sp 3—5 ap jn Y — V Dn L. 1805 S s p — Bot reg 392
5707 ellipticum *H K* oval-leaved ▭ or 3 my s Y — V Dn L. 1805 S s p — Lab n ho l t 135
5708 cordifólium *H K* heart-leaved ▭ or 3 ap s Y — N S W 1807 S s p — Bot rep 492

952 CALLISTA'CHYS. *Vent* CALLISTACHYS
5709 lanceoláta *V* spear-leaved ▭ or 3 — *Leguminosæ* Sp 2—3. jn au Y — N Holl. 1815 S s p — Bot. reg. 216
5710 ováta *B M* oval-leaved ▭ or 3 jn au Y — N Holl 1815 S s p — Bot. mag 1925

953 BRACHYSE'MA *H K* BRACHYSEMA
5711 latifólium *H K* broad-leaved ▭ or 3 — *Leguminosæ* Sp 2 ap jl Cr — N Holl 1803 C s p — Bot reg 118
5712 undulátum *Ker* wavy-leaved ▭ cu 3 — mr ap G — N S W 1820. C s p — Bot reg 642



History, Use, Propagation, Culture,

943 *Anagyris.* From ἀνα, like, and γυρος, a circle Its pod is curved inwards at its extremity Small trees native of the South of Europe and North of Africa, and one doubtful species of Nepal. Young cuttings root in sand under a hand-glass

944 *Thermopsis.* So named from the resemblance of the flower to that of a Lupine This genus is cultivated with difficulty: it grows best in a light loamy soil, and may be increased by seed, dividing the root is liable to injure the plant, so that it is increased with difficulty by that means. (*Bot. Cult.* 427)

945. *Virgilia.* A genus dedicated by Lamarck to the poet Virgil, whose Georgics contain many things interesting to botanists.

946. *Cyclopia* Named by Ventenat, from κυκλος, a circle, and πους, a foot, in allusion to the replicate circle which is found about the base of the pods

947. *Baptisia.* So named from βαπτω, to dye, in allusion to the economical properties of some species. Herbaceous plants of easy cultivation, and as border flowers ornamental.

948. *Podalyria.* Podalyrius was a son of Æsculapius Small Cape shrubs, with simple silky leaves and purple blossoms The species may be grown in leaf mould and peat, or peat loam, and rooted by cuttings in sand, or raised from seeds.

949. *Chorozemia* M. Labillardiére originally discovered this plant upon the south-west coast of New

5678 Leaves lanceolate acute
5679 Leaves elliptical obtuse
5680 Leaves lanceolate shining silky beneath

5681 Leaflets oblong-lanceolate, Stipules lanceolate twice as long as stalk, Pedicels whorled

5682 Leaves pinnate, Leaflets with a short point smooth, Racemes long pendulous
5683 Stamens persistent, Ovaries downy, Leaflets oval obtuse pointless
5684 Stamens persistent, Ovaries smooth, Base of calyx pushed inwards, Leaflets oval obt. with a little point
5685 Stam decid woolly at base, Ovaries downy, Keel acuminate, Leaflets lanceolate

5686 Leaflets subulate and sepals pointless, Bractes oblong ovate shorter than peduncle, Branchlets smooth

5687 Leaves perfoliate entire roundish
5688 Stem and leaves very hairy, Leaflets oval obtuse, Raceme terminal spiked
5689 Leaves ternate stalked, Leaflets cuneate lanceolate, Stipules longer than stalk lanceolate
5690 Leaves ternate stalked, Leafl ellipt. obl. Stipules deciduous subulate shorter than stalk, Ovaries smooth
5691 Leaves ternate stalked, Leafl. roundish obovate, Stipules setaceous obsolete

5692 Leaves oblong obovate on both sides with the calyxes silky, Pedunc one-fl. as long as leaves
5693 Leaves oblong obovate on both sides with the calyxes silky, several times longer than the 1-flow. fl-stalk
5694 Leaves cuneiform emarginate silky, Pedunc shorter than leaf
5695 Leaves oval silky on both sides shorter than 2-fl peduncle, Cal downy rough
5696 Lvs oval and obov pubes beneath netted · when full-grown not silky, Cal. vill. with a scarious refl. limb
5697 Leaves ovate reticulate, Branches hairy angular striated, Peduncles as long as leaves
5698 Leaves simple ovate downy, Fl axillary, Peduncles longer than leaf
5699 Leaves elliptical-lanceolate, Peduncles 1-fl shorter than leaves, Calyx deeply split
5700 Leaves villous stalked upper ovate, lower roundish, Cal villous with segments as long as wings
5701 Leaves cordate roundish subsessile very villous, Segments of villous calyx shorter than wings

5702 Leaves pinnatifid-toothed spiny oblong-lanceolate · with an entire point longer than the teeth
5703 Leaves sinuate-toothed spiny oblong obtuse, Bractes below the end of stalk
5704 Leaves entire flat mucronate. lower rhomboid orbicular, the upper elliptical lanceolate

5705 Lvs opp spiny toothed 3-lobed with a transverse base, Lateral lobes much shorter than term toothed one

5706 Leaves lin lanc. Bractes adhering to top of the footstalk, Corymb clust Pods scarcely longer than cal.
5707 Leaves oval obl. Bractes deciduous below the end of footstalk, Corymb. clust. Pods twice as long as cal
5708 Leaves ovate cordate hairy, Umb. terminal sessile

5709 Leaves lanceolate acute
5710 Leaves ternate obovate mucronate silky beneath.

5711 Leaves ovate flat, Standard oblong obovate
5712 Leaves elliptical wavy mucronate, Standard oblong cordate



and Miscellaneous Particulars

Holland, at the foot of the mountains, in a loamy soil, near a spot where, after having been tantalised with finding many salt springs, his party had just met with an ample supply of fresh water. This welcome refreshment, of which he speaks feelingly in his book, seems to have suggested a name for this plant, which he had properly determined to constitute a new genus. He called it *Chorozêma*, evidently from χορος, a dance or joyous assembly, and ζημα, a drink, in allusion to the circumstance just mentioned. (*Smith*)

This genus ripens abundance of seeds, from which it may be readily increased, and also by young cuttings in sand under a bell-glass.

950 *Podolobium*. This and the succeeding names ending in *lobium*, refer in that part of their derivation to their pod; this genus is called from πους ποδος, a foot, the pod being on a stalk The species may be treated as Chorozemia.

951. *Oxylobium*. From οξυς, pointed, the pods being pointed. See Podolobium.

952. *Callistachys*. From καλος, beautiful, and σταχυς, a spike, in reference to the fine spikes of yellow flowers. These are handsome conservatory shrubs, which grow rapidly and flower freely. They may be raised from seeds or cuttings in sand under a bell-glass.

953. *Brachysema*. From βραχυς, short, and σημα, a standard. The standard of the flower of the genus is very short This is a handsome climber, increased by layers, cuttings in sand, or by seeds.

954. GOMPHOLO'BIUM. *H K* Gompholobium — *Leguminosæ* *Sp.* 7—10

5713 latifólium *H. K*	broad-leaved	de	2	mr s	Y	N. S W	1803.	C	s p	Ex. bot 58	
G. fimbriátum Sm											
5714 grandiflórum *Sm*	large-flowered	de	2	mr s	Y	N, S W	1803.	C	s.p	Bot. reg. 484	
5715 marginátum *H K*	small-flowered	de	2	mr.s	Y	N Holl	1803.	C	s p		
5716 polymórphum *H K*	variable	de		mr au	Y	N Holl.	1803.	C	s p	Bot mag 1533	
5717 minus *Sm*	hairy-stalked	de	2	mr au	Y	N S W.	1812	C	s p		
5718 tomentósum *H K*	tomentose	de	3	ap jl	Y	N Holl	1803	C	s p	Lab n ho 1.t 134	
5719 venústum *H K*	purple-flowered	de	3	ap jl	Pu	N Holl	1803.	C	s p		

†955 BURTO'NIA *H K* Burtonia — *Leguminosæ.* *Sp* 1—3

5720 scábra *H K.*	rough-leaved	pr		my jl	Y	N Holl.	1803	C	s.l p		

956. JACKSO'NIA *H K* Jacksonia — *Leguminosæ* *Sp* 2—4.

5721 scoparia *H K*	Broom-like	pr		jn au	Y	N S W	1803	C	s p	Bot cab 427	
5722 spinósa *H K.*	spinous	pr		ap s	Y	N Holl	1803	C	s p	Lab n ho l t 136	

957. VIMINA'RIA. *H K* Rush-broom — *Leguminosæ* *Sp* 2

5723 denudáta *H K.*	leafless	cu	3	jn s	Y	N Holl	1789	C	s p	Bot. mag. 1190	
5724 laterifióra *Link*	side-flowering	cu	3	jn s	Y	N Holl.	1824	C	s p		

958 SPHÆROLO'BIUM *H K* Sphærolobium. — *Leguminosæ* *Sp* 2—4

5725 vimíneum *H K*	yellow-flowered	or	2	my au	Y	N Holl.	1802	S	s p	Bot. mag. 969	
5726 médium *H K*	red-flowered	or	3	jn au	R	N Holl	1803	S	s p		

959 AO'TUS *H K.* Aotus — *Leguminosæ* *Sp* 1—3

5727 villósa *H K*	villous	or	2	ap jn	Y	N Holl	1790	S	s.p	Bot mag 949	

960 DILLWY'NIA *H K* Dillwynia — *Leguminosæ* *Sp* 6—10

5728 floribúnda *H K*	close-flowered	or	2	ap jl	Y	N S. W	1794	C	s l p	Ex bot t 26	
5729 ericifólia *H K*	Heath-leaved	or	2	mr jl	Y	N S W	1794	C	s l p	Ex bot t 25	
5730 glabérrima *H K*	smooth	or	2	mr jl	Y	N S. W	1800	C	s l p	Bot mag 944	
5731 parvifólia *B M*	small-leaved	or	2	mr jl	Y	N S W	1800	C	s l p	Bot mag 1527	
5732 cinerásc ens *R Br*	grey	or	2	mr jl	Y	N S W	1819	C	s l p	Bot mag 2247	
5733 juniperina *Lodd*	juniper-leaved	pr	2	ap my	Y	V Di L	1818	C	s l p	Bot. cab 401	

961 EUTA'XIA *H K* Eutaxia — *Leguminosæ* *Sp* 1—2.

5734 myrtifólia *H K*	Myrtle-leaved	pr	1½	mr jn	Y	N Holl	1803	C	s l p	Bot. mag 1274	

962 SCLEROTHA'MNUS *H K* Sclerothamnus — *Leguminosæ* *Sp* 1

5735 microphýllus *H K*	small-leaved	pr	1	my jn	Y	N Holl	1803	C	s l p		

963 GASTROLO'BIUM *H K.* Gastrolobium — *Leguminosæ* *Sp* 1—3

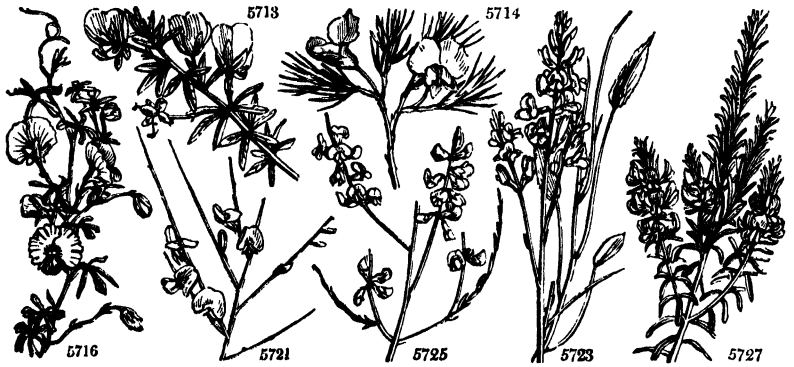
5736 bilobum *H K*	two-lobed	or	2	mr my	Y	N Holl	1803	C	s l p	Bot. reg 411	

964 EUCHI'LUS *H K* Euchilus — *Leguminosæ* *Sp* 1

5737 obcordátus *H K*	heart-leaved	or	2	mr jn	Y	N Holl	1803	C	s l p	Bot. cab 60	

†965 PULTENÆ'A *H K* Pultenæa — *Leguminosæ* *Sp* 12—19

5738 daphnoides *H K*	Daphne-leaved	or	2	jn jl	Y	N S W	1792	C	s l p	Bot mag 1394	
5739 obcordáta *H K.*	heart-leaved	or	2	my jl	Y	V Di L	1808	C	s l p	Bot mag 574	
5740 scábra *H K*	rough-leaved	or	1½	my jl	Y	N S W	1803	C	s l p		
5741 retusa *H K*	blunt-leaved	or	1	ap my	Y	N S W	1789	C	s l p	Bot reg 378	
5742 stricta *B M*	upright	or	2	ap jn	Y	N S W	1803	C	s l p	Bot mag 1588	
5743 linophýlla *H K*	Flax leaved	or	2	my jl	Y	N S W	1789	C	s l p	Sch s.han 3 t 18	
5744 paleácea *Sm*	chaffy	or	1½	ap jl	Y	N S W	1789	C	s l p	Bot cab 291	
5745 stipulária *H K*	scaly	or	2	ap jl	Y	N S W	1792	C	s l p	Bot mag 435	
5746 vestita *H K*	awned	or	3	ap jl	Y	N Holl	1803	C	s l p		
5747 villósa *H K*	villous	or	2	ap my	Y	N S W	1790	C	s l p	Bot mag 967	



History, Use, Propagation, Culture

954 *Gompholobium* The name of this genus alludes to the tumid shape of the legume, which swells from a narrow base upwards, according to the primary signification of γομφος, a word thence used to signify a club or wedge, or any thing formed upon a similar principle Delicate plants, difficult to preserve, requiring a large proportion of sand in the peat, and moderate watering Young cuttings root under a bell-glass in sand.

955 *Burtonia.* A genus defined in the Hortus Kewensis, without an explanation of the origin of the name This plant, Sweet observes, requires more than ordinary treatment to keep it in good health, an equal mixture of very sandy loam and peat is the best soil for it, and the pots to be well drained with small potsherds, that the water may pass off freely, as nothing is more injurious to it than too much water Young cuttings are not difficult to root, planted in sand under a bell-glass, it may also be raised from seeds, which are sometimes produced (*Bot Cult* 156)

956 *Jacksonia* Named after Mr Jackson, formerly librarian to Aylmer Bourke Lambert, and an excellent practical botanist, of whom too little is known Young cuttings will root in sand under a bell-glass, or ripened ones under a hand-glass.

957 *Viminaria* From *vimen*, a twig The appearance of the species which have no leaves is that of a bundle of naked twigs.

5713 Leaves term Leafl. lin or obl lin an inch and more long, Stem erect, Keel fringed, Cal in fruit reflexed

5714 Leaves ternate linear mucronate straight, Branches angular smooth
5715 Leaves ternate, Leafl obovate edged flat, Stipules as long as leafstalk, Cor. length of calyx
5716 Lvs tern and quinate, Leafl linear recurved at edge, somewhat dilated at end, Stem procum. or twining
5717 Leaves ternate linear smooth mucronate, Branches round hairy, Keel hairy
5718 Leaves pinn. Leafl subulate linear mucronate rough above, Cal hairy shorter than pod, Keel silky ciliate
5719 Leaves pinn of many pairs, Leafl. subulate veiny revolute at edge and calyxes smooth, Cor. purple

5720 Leaves ternate, Cal smooth, Style beyond the middle beardless

5721 Arborescent unarmed, Branches angular, Racemes terminal
5722 Shrubby, Branches spiny 2-3-chotomous spreading angular, Bractes very short

5723 Segments of calyx straight ovate
5724 Flowers racemose, Segments of calyx lanceolate reflexed

5725 Tube of cal a little shorter than lips, Style included bowed from the base, Cor yellow
5726 Tube of cal twice as short as the lips, Cor red

5727 Cal silky with appressed hairs, Pods stalked, Seeds dotted rugose, Leaves rough above

5728 Flowers axillary ternate, Leaves subulate mucronate
5729 Corymbs terminal sessile, Leaves subul rough with dots divaricate twisted, Branches pubescent
5730 Corymbs terminal stalked, Leaves filiform erect smooth, Mucro weak recurved
5731 Leaves short spreading decussate, Fl capitate, Pedunc with two bractes, Stigma capitate
5732 Corymbs terminal sessile, Leaves filiform erect, with a weak short point, Branches silky
5733 Leaves acerose horizontal, Branches weak, Heads 3-9-flowered

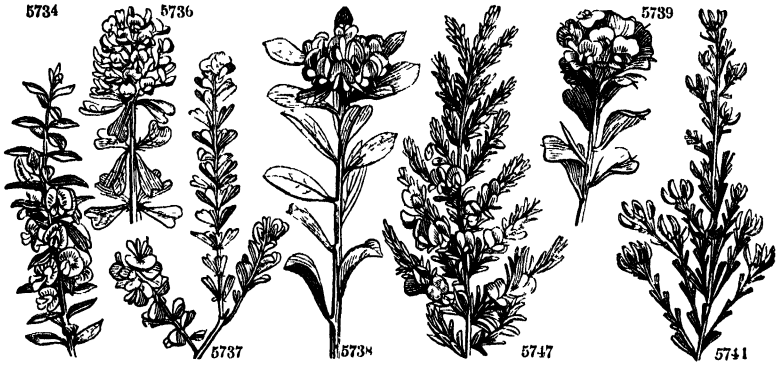
5734 Leaves lanceolate or lanceolate-obovate, Peduncles axillary twin, Appendages of wings very short

5735 The only species

5736 Lvs beneath somew silky retuse, Lobes round longer than little point, Stalk of pod as long as tube of cal

5737 The only species

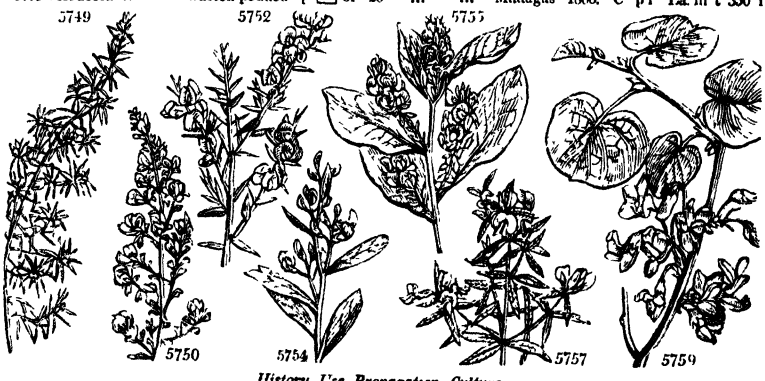
5738 Heads terminal, Leaves obovate oblong flat quite smooth 3 times as long as broad, Point pungent
5739 Heads term. Leaves cuneate obcord retuse flat smooth scarcely twice as long as broad, Point pungent
5740 Heads term few-fl Leaves cuneate truncate bristly pointed recurved at edge rough above villous beneath
5741 Heads term Leaves linear retuse blunt flat smooth, Bractes a little longer than cal
5742 Heads term Leaves obovate mucronate smooth, Stem upright, Calyx and pods hairy
5743 Bractes shorter than 6-8-fl head, Lvs lin with a little point and recurv edge, Stip shorter than footstalk
5744 Leaves linear mucronate revolute recurved at end, Stipules solitary 2-nerved with membr torn sheaths
5745 Heads many-fl Bractes about as long as cal Leaves flat linear acute, Stipules bind flat imbricated
5746 Fl axill Leaves linear lanceolate mucronate smooth, Stip imbric ciliated, Cal and bractes bearded
5747 Racemes leafy, Leaves linear oblong, above concave, beneath cal and branchlets pilose



and Miscellaneous Particulars

958 *Sphærolobium* From σφαιρα, a sphere, the pods being nearly spherical. See Jacksonia
959 *Aotus* From α, privative, and ωτα, ears, in allusion to the want of the appendages to the calyx in this genus In Pultenæa, to which it is most nearly allied, they are very distinct
960. *Dillwynia* Named by Sir James Edward Smith, after Mr Lewis Weston Dillwyn, whose labors upon Confervæ and other parts of British botany are well known These plants being liable to suffer from wet, the pots must be well drained with sherds and refuse peat siftings Young cuttings root freely in sand under a bell-glass.
961 *Eutaxia* From ευταξια, modesty, in allusion to the humble, modest appearance of the plant Mr Sweet directs to top the plants frequently when young, otherwise they are apt to run up naked and unsightly.
962 *Sclerothamnus* From σκληρος, hard, and θαμνος, a shrub The species are rigid plants with stiff hard leaves
963 *Gastrolobium* From γαστηρ, the belly; or, in botanical composition, something inflated. The pods of the genus are much swollen
964 *Euchilus* From ευ, well, and χειλος, a lip, well lipped The upper lip of the calyx is very large
965. *Pultenæa* Named after William Pulteney, M D, author of a view of the writings of Linnæus, and

5748 flexilis *H. K*	shining-leaved	☘	▭	or	1½	ap jn	Y	N S W	1801	C	s l p	
5749 tenuifólia *R Br*	thin-leaved	☘	▭	or	1½	ap my	Y	N S W.	1817	C	s.l.p	Bot. mag 2086
5750 biloba *R Br*	two-lobed	☘	▭	or	2	ap my	Y	N S. W.	1817	C	s.l p	Bot. mag 2091
966. DAVIE'SIA *L T*	DAVIESIA					*Leguminosæ*		*Sp.* 6—10				
5751 aciculáris *Sm.*	needle-leaved	☘	▭	or	2	jn jl	Y	N S. W	1804	C	s.l p	
5752 ulicina *Sm*	Furze-leaved	☘	▭	or	3	ap au	Y	N S W	1792.	C	s l p	Bot. cab 44
5753 corymbósa *Sm*	glaucous-leav'd	☘	▭	or	2	my au	Y	N S W	1804.	C	s l p	
5754 mimosoides *H K.* *D glauca* Lodd.	green-leaved	☘	▭	or	2	jn au	Y	N. S W.	1809.	C	s.l p	Bot rep. 611
5755 latifólia *H K*	broad-leaved	☘	▭	or	3	my au	Y	N S W	1805.	C	s.l p	Bot mag 1757
5756 aláta *Sm*	winged	☘	▭	or	3	my au	Y	N S W	1818	C	s.l p	Bot. reg. 728
†967. MIRBE'LIA *I T*	MIRBELIA					*Leguminosæ*		*Sp* 2—4				
5757 reticuláta *L T*	reticulated	☘	▭	or	3	my au	B	N S. W.	1792.	C	s l p	Bot. mag. 1211
5758 dilatáta *H K*	lobed-leaved	☘	▭	or	3	my au	B	N Holl	1803	C	s l p	
968. CER'CIS *W*	JUDAS-TREE					*Leguminosæ*		*Sp* 2				
5759 Siliquástrum *W*	European	♆		or	20	my jn	Pu	S Europe	1596.	L	co	Bot. mag 1138
5760 canadénsis *W*	American	♆		or	18	my jn	Gr	N Amer	1730	L	co	Mill. ic. t. 2
969 SCHO'TIA *W*	SCHOTIA					*Leguminosæ*		*Sp* 3—7.				
5761 speciósa *H K*	small-leaved	☘	▭	or	5	jl d	Cr	C G H	1759	C	l p	Bot. rep. 348
5762 tamarindifólia *H K*	Tamarind-leav	☘	▭	or	6	my s	Cr	C. G H	1795	C	l p	Bot. mag 1153
5763 stipuláta *H K*	large-stipuled	☘	▭	or	5	my s	Cr	C G H	1794	C	l p	
970 BAUHI'NIA *W*	MOUNTAIN-EBONY					*Leguminosæ*		*Sp* 13—30				
5764 scándens *W*	small-lvd clim	♃	▭	or	90	...	W s	E. Indies	1799	C	l p	Rhe mal 8 t 29
5765 racemósa *W*	great-leaved	♃	▭	spl	20	...	...	E Indies	1790	C	lt l	Vah sym 3. t.62
5766 aculeáta *W*	prickly-stlkd.	♃	▭	or	6	jn au	W	W Indies	1787	C	lt l	Plu ic t 44 f 1
5767 diversifólia *W*	dwarf	♃	▭	or	5	jn s	W	W Indies	1742.	C	lt l	Hort cliff t. 15
5768 aurita *W*	long-eared	♃	▭	pr	6	s	W	Jamaica	1756.	C	lt l	Mill ic 1 t 61
5769 porrécta *W*	smooth-leaved	♃	▭	pr	15	jl	St	W Indies	1737	C	lt.l	Bot. mag 1708
5770 parvifólia *W*	small-flowered	♃	▭	pr	20	...	W	E Indies	1808	C	lt l	
5771 variegáta *W*	variegated	♃	▭	or	20	jn jl	St	E. Indies	1690	C	lt.l	Rh mal. 1 t. 32
5772 cándida *W*	white	♃	▭	or	10	my jn	W	E. Indies	1777	C	lt.l	
5773 purpúrea *W*	purple	♃	▭	or	25	...	P	E. Indies	1778	C	lt l	Rh mal 1 t. 33
5774 tomentósa *W*	tomentose	♃	▭	or	12	..	Y w	E Indies	1808	C	lt l	Rh mal 1 t. 35
5775 acumináta *W*	acute-leaved	♃	▭	or	8	..	W	E. Indies	1808	C	lt l	Rh mal 1. t 34
5776 forficáta *Link*	pincer-leaved	♃	▭	or	6	...	W	Brazil	1823	C	lt l	
971 AFZE'LIA *Sm.*	AFZELIA					*Leguminosæ*		*Sp* 1				
5777 africána *Sm*	african	♇	▭	tm	30	...	Cr	S Leone	1821	C	r m	
†972 HYMENÆ'A *W*	LOCUST-TREE					*Leguminosæ*		*Sp* 2				
5778 Courbaril *W*	leathery-leaved	♇	▭	or	20	...	Y p	W Indies	1688	C	p l	La ill t 330 f 1
5779 verrucósa *W*	warted-podded	♇	▭	or	20	...	...	Madagas	1808.	C	p l	La ill t 330 f 2



History, Use, Propagation, Culture,

of various other works of merit. These are small New Holland bushes, with numerous yellow flowers, frequently brown on the outside

966 *Daviesia* Named after the Rev Hugh Davies, a Welsh botanist Plants like furze The species root best when the cuttings are somewhat ripened and planted in pots of sand, and covered with a hand-glass without bottom heat

967 *Mirbelia* In honor of Mr Mirbel, a distinguished French physiological botanist, whose elucidations of the reticulated structure of vegetables make it proper to consecrate to his merits plants remarkable for their reticulation

968 *Cercis* Κιρκις is a name of Theophrastus, supposed to have appertained to the tree now so called *Gaunter* or *Arbre de Judée*, Fr, *Arbold Amor*, Span Handsome low trees, with singular leaves and fine shewy flowers These having an agreeable poignancy, and being abundant on the branches, are frequently eaten in salads on the continent, and those of the C canadensis are pickled by the French families in Canada The wood of both species is finely veined with black and green, and takes a good polish, and the young branches of the Canadian species are said to dye wool of a fine nankeen color They may be propagated either by layers or seeds the latter make the best plants. Gerarde, in compliance with the popular notions of his time, says, "this is the tree whereon Judas did hang himselfe, and not upon the elder tree, as it is said"

969 *Schotia* So named by Jacquin, in memory of Richard van der Schott, a Dutchman, gardener at Schoenbrunn, and his companion in his travels This beautiful genus has lately been increased by Burchell, the African traveller "They require," Sweet observes, "rather more warmth than a common greenhouse, to keep them in good health through the winter The coldest part of the stove will suit them better, but they should not be plunged in the tan, as they want no bottom heat A mixture of loam and peat is the best soil for them, and cuttings planted in sand, and plunged in mould (not in tan), under a hand-glass, will strike root" (*Bot Cult* 105)

970 *Bauhinia* So named by Plumier, in honor of the two famous botanists, John and Caspar Bauhin. The species consist of trees or shrubs, most of them climbing The leaves are simple, but two-lobed or two-

5748 Very smooth, Fl axill Leaves oblong linear mucronate flat
5749 Heads terminal 2-flowered, Fruit lateral, Leaves subulate linear hairy above concave
5750 Heads terminal few-fl. Leaves wedge-shaped at the end dilated 2-lobed above rough beneath silky

5751 Leaves linear revolute pungent straight rough, Flowers axillary solitary
5752 Branches spiny smooth spreading, Leaves lanceolate or linear, Pedunc axill 1-fl Bractes 8 imbricated
5753 Leaves linear oblong flat pointless, Pedunc axill twin corymbose many-fl Calyx regular
5754 Branches unarmed, Lvs long-lanc. with a very short weak point, Corymbs axill Upper lip of calyx retuse

5755 Branches unarmed, Leaves ellipt. or oval veiny attenuated at base, Racemes axillary many-fl.
5756 Stem leafless winged, Umbels lateral, Calyx and bractes fringed

5757 Leaves lanceolate linear veiny, Ovaries 2-seeded
5758 Leaves wedge-shaped at the end dilated-trifid

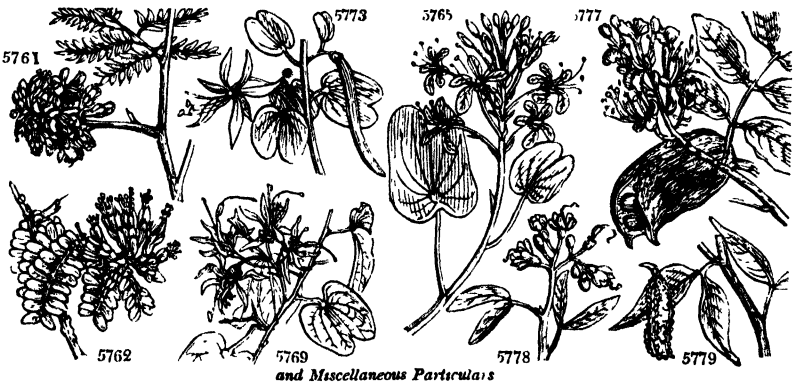
5759 Leaves orbicular cordate
5760 Leaves cordate acuminate

5761 Leaves 7-10 pairs oval-lanceolate mucronate, Stipules subulate
5762 Leaves 8-10 pairs oval obtuse mucronate or not, at the base in front a little swollen
5763 Leaves 5 pairs oval acute mucronate, Stipules half-ovate falcate mucronate

5764 Stem tendril-bearing, Lobes of leaves attenuated
5765 Stem tendril-bearing, Fl triandr on outside with stam at base hairy, Lvs downy beneath, Lobes rounded
5766 Stem prickly
5767 Leaves smooth, Lobes divaricate acute 2-nerved, Petals lanceolate
5768 Leaves at the base nearly transverse, Lobes lanceolate porrect 3-nerved, Petals lanceolate
5769 Leaves cordate, Lobes porrect acute 3-nerved, Petals lanceolate
5770 Racemes axill and term nodding, Petals linear, Lobes of leaves rounded smooth
5771 Cal 1-leaved bursting, Petals sessile ovate, Lobes of leaves ovate obtuse
5772 Leaves cordate downy beneath, Lobes ovate obtuse, Cal narrowed upwards lengthened
5773 Flowers triandrous, Lobes of leaves oval obtuse
5774 Leaves cordate, Lobes half orbicular downy
5775 Leaves ovate, Lobes acuminate half-ovate spreading
5776 Stem prickly, Leaves cordate with porrect 4-nerved lobes

5777 Leaves alternate abruptly pinnated, Pod woody, Seeds black with a scarlet arillus

5778 Leaflets coriaceous veinless unequal at base, Flowers of panicle stalked
5779 Leaves veiny unequal at base, Panicle wavy spreading, Pedunc. many-fl Pods warted



and Miscellaneous Particulars

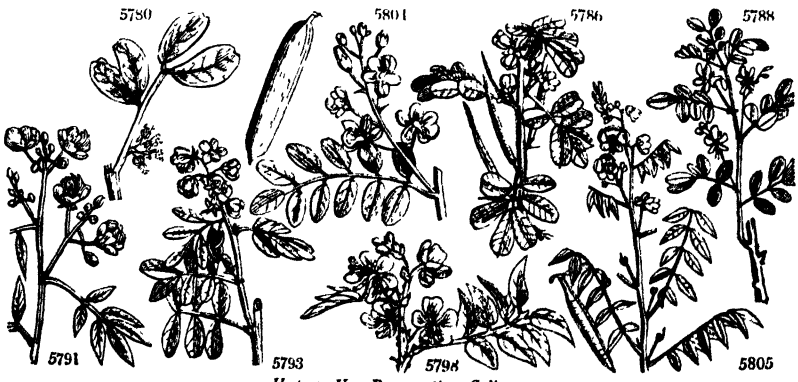
parted, which circumstance gave occasion, it is said, to Plumier to name this genus from the two brothers They merit a place in the stove, where they are easily cultivated in light loamy soil, and cuttings taken off when the plants are in a growing state, not over ripened, nor yet quite succulent, with their leaves on, will do well in sand under bell-glasses in moist heat. The species rarely flower in this country In their native woods they are great ornaments of the trees, among which they climb in every direction The stem of Bauhinia scandens, which had twined around a smaller plant, is said to have been the origin of Æsculapius's snaken rod, which he brought from India

971. *Afzelia* Named by Sir J E Smith, after Dr Adam Afzelius, an amiable and excellent Swedish botanist, resident for many years, in the service of the African Company, at the colony of Sierra Leone, and now living at Upsal.

972 *Hymenæa* A poetical application of this plant, the leaves of which grow in pairs, to Hymen, the god of marriage *Courbaril* is a vernacular American name This tree is abundant in the West Indies, where it grows to a large size, with a spreading head It has stiff sub-perfoliate leaves obliquely placed, and terminal spikes of flowers, which are succeeded by thick, fleshy, brown pods, shaped like those of the garden bean, they are six inches long, and two inches and a half broad, of a purplish brown color, and a ligneous consistence, with a large suture on both edges; they contain three or four roundish compressed seeds, divided by transverse partitions, and inclosed in a whitish substance of fine filaments, as sweet as honey. The Indians eat this substance with great avidity, though it is apt to purge when fresh gathered, but it loses this quality as it grows old.

Between the principal roots of the tree exudes a fine transparent resin, yellowish or red, which is collected in large lumps, is called gum Anime, and makes the finest varnish that is known, superior even to the Chinese lacca for this latter use it is dissolved in the highest rectified spirits of wine It burns readily, and with a clear flame, emitting a grateful and fragrant smell, for which reason it is sometimes ordered by way of fumigation in the chambers of persons laboring with asthmas or suffocative catarrhs Its vapours not only strengthen the head, but all parts of the body affected with cold. Some apply it outwardly, dissolved in oil or spirits of wine, to strengthen the nerves An oil may be distilled from it, useful in palsies, in cramps, and

973. CYNOMETRA *W*	CYNOMETRA						*Leguminosæ*		*Sp* 1—2						
5780 cauliflóra *W.*	stem-flowering	♀	☐	or	30	...	Y	P	E. Indies	1804.	C	s.l.p	Lam ill t. 331		
974 CASSIA *W*	CASSIA						*Leguminosæ.*		*Sp* 56—149						
5781 diphýlla *W.*	two-leaved	♿	⦻	pr	3	my jl	Y		W Indies	1781.	C	lt l	Ca. ic 5 t 600 f 1		
5782 Ab'sus *W*	four-leaved		⦻	un	¾	jn jl	Y		India	1777	C	lt.l	Burm zeyl t. 97		
5783 viminea *W.*	twiggy	♣		pr	3	...	Y		W Indies	1786.	S	p l			
5784 bacillária *W.*	rod	♣		or	3	...	Y		E. Indies	1782	C	co			
5785 Tágera *W.*	long-podded	♿	⦻	w	1½	jl	Y		E Indies	1803	C	p l			
5786 Tora *W.*	oval-leaved			w	3	au	Y		E Indies	1693.	C	r m	Dill. elt. 63. t. 78		
5787 bicapsulária *W*	six-leaved	♣		or	4	my jn	Y		W. Indies	1739	C	p l	Plu ic t. 76. f 1		
5788 sennoides *W*	Senna-leaved	♣		or	3	jl.au	Y		E. Indies	1808	S	s p	Jac ic 1 t 70		
5789 acuminata *W*	pointed	♣		or	8	...	Y		Surinam	1820.	S	s p			
5790 mollissima *W en*	soft-leaved	♣		or	6	...	Y		S. Amer	1816	S	p l			
5791 corymbósa *W*	corymbose	♣		or	3	jl	Y		B Ayres	1796	C	s p	Bot. mag 633		
5792 emarginata *W*	notch-leaved	♣		or	15	my jn	Y		Jamaica	1759	C	p l	Sl hi 2 t 180 f 1 4		
5793 obtusifólia *H K*	blunt-leaved			w	2	jl au	Y		Jamaica	1732	C	p.l	Dil. el t. 62 f 72		
5794 péndula *W en*	pendulous	♣		or	3	jl au	Y		S Amer	1820.	C	p l			
5795 lævigáta *W en*	• smooth	♣		pr	3	my au	Y		... .	...	C	lt l			
5796 sericea *W*	silky-leaved			w	1½	my.au	Y		Jamaica	1731	C	s p			
5797 dispar *W en*	unequal	♣		or	3	..	Y		S Amer	1824	C	s.p			
5798 occidentális *W*	occidental	♣		pr	1½	my au	Y		W Indies	1759	C	p l	Bot reg. 83		
5799 pátula *W*	shining	♣		pr	2	au s	Y		W Indies	1778	C	lt l			
5800 prostráta *W en*	prostrate	⁂		or	¾	my au	Y		S Amer	1819	C	co			
5801 arborescens *W*	tree	♣		un	3	jn jl	Y		E Indies	1800	C	p l	Rh ma 6 t 9,10		
5802 itálica *Lam*	Italian Senna		⦻	or	3	jn jl	Y		S Europe	..	S	co	Mo h 2 t 24 f 2		
5803 Sénna *H K*	false Senna		⦻	m	3	jl au	Y		Egypt	1640	S	lt l			
5804 orientális *P S*	true Senna		○	m	3	jl au	Y		Levant	..	S	lt.l	Tabern ic 507		
5805 ruscifólia *W*	Ruscus-leaved	♣		or	2	my jl	Y		Madeira	1816	C	lt l	Jac ic 1 t 71		
5806 purpurea *Roxb*	purple	♣		or	4	jn au	Y		E Indies	1821	C	co	Bot reg 806		
5807 ægyptiaca *W en*	Egyptian	♣		or	3	my	Y		Egypt	1822	C	co			
5808 bifióra *W*	two-flowered	♣		or	6	ap d	Y		W Indies	1766	C	p l	Bot mag 810		
5809 chinénsis *W*	Chinese	♣		or	4	jn	Y		China	1807	S	p l	Jac ic 1 t. 73		
5810 hirsúta *H K*	woolly	♿	⦻	w	4	jl	Y		America	1778	C	s p			
5811 coromandeliána *W en*	Coromandel	♣		or	4	jn	Y		E. Indies	1822	C	co			
5812 lanceoláta *P S*	lanceolate	♣		pr	3	jl	Y		W Indies	1822	C	co			
5813 bracteáta *W*	bracteate	♣		or	6	ap d	Y		W Indies	1822	C	co			
5814 tomentósa *W*	tomentose	♀		or	15	jl s	Y		W Indies	1822.	C	co			
5815 glandulósa *W*	glandular	♣		pr	4	au o	Y		W Indies	1822	C	co	Bot. mag 3435		
5816 grándis *W*	fine	♀		or	25	..	Y		W Indies	1822	C	co	Brey cent. t. 14		
5817 planisiliqua *P S*	flat-podded	♣		pr	4	my jl	Y		W Indies	1822	C	co	Plum spec t. 77		
5818 robinioides *W en*	Robinia-like	♣		or	10	jl	Y		S Amer	1823	C	co			
5819 stipulácea *W*	large-stipuled	♣		or	3	.	Y		Chili	1786	C	lt l	Feu per 3 t. 42		
5820 cuspidáta *W en*	cuspidate	♣		or	4	jn au	Y		S Amer	1820	C	co			
5821 marilándica *W*	Maryland	♿	△	pr	4	au o	Y		N Amer	1723	C	s p	Di el t. 260 f 339		
5822 aláta *W*	broad-leaved	♣		or	12	...	Y		W Indies	1731	C	p l	Jac obs 2 t. 45 f 2		
5823 ligustrina *W*	Privet-leaved	♣		or	6	jl	Y		Baham Is.	1726	C	p l	Bot reg 109		
5824 multiglandulósa *W*	glandular	♣		pr	4	jn au	Y		Teneriffe	1779	C	s p	Jac ic 1 t. 72		
5825 frondósa *W*	smooth-shrub	♣		or	3	mr ap	Y		W Indies	1769	C	lt l	Jac ic 1 t 74		
5826 Sóphera *W*	round-podded	♣		or	4	jl.s	Y		E Indies	1658	C	lt l	Rh ma 2 t 52		
5827 reticuláta *W en*	Matapasto	♣		or	10	au.s	Y		S. Amer	1821	C	co			
5828 auriculáta *W*	eared	♣		or	4	...	Y		E. Indies	1777	C	lt l	Pl alm t. 314 f 4		
5829 Chamæcrista *W*	dwarf	♿	⦻	pr	1	jn s	Y		America	1699	S	r m	Bot mag 107		
5830 hirta *W en*	long-haired	♣		or	3	jl s	Y		S Amer	1820	C	co			
5831 marginata *W en*	white-edged	♣		el	3	my jl	Y		Surinam	1823	C	co			
5832 mimosoides *W*	Mimosa-leaved	♿		pr	2	jn s	Y		Ceylon	1806	S	lt l			
5833 microphýlla *W*	small-leaved	♿	⦻	pr	2	jn s	Y		Santa Cr	1810	S	lt l			
5834 nictitans *W*	Virginian	♿		pr	2	jl	Y		N Amer	1800	S	lt l	Pl alm t. 314 f 5		
5835 capénsis *Th*	Cape	♣		or	3	jn	Y		C G H	1816	S	lt l	Bot cab 511		
5836 procumbens *W*	procumbent		○	w	1½	jn jl	Y		N Amer	1806	S	lt l	Com pet t. 11		



History, Use, Propagation, Culture,

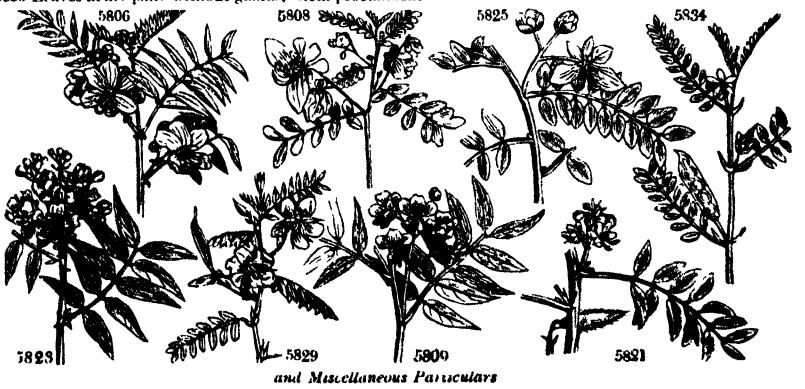
contractions of the sinews The solution in spirits has been thought not inferior to Guaiacum in venereal cases. A decoction of the leaves expels flatulency, and gives ease in colicky pains, by gently opening the bowels, and the inward bark is an excellent vermifuge in substance or decoction

The tree is excellent timber, but it must be very old before it is cut, otherwise the heart will be but small. It is in great request for wheel-work in the sugar-mills, particularly for cogs to the wheels, being extremely hard and tough it is so heavy, that a foot cube weighs about a hundred pounds, and it will take a fine polish It is much inhabited by wild honey bees. (*Browne*)

Besides this locust-tree, there is the American tree of that name, Robinia Pseud acacia, and the locust-tree of scripture, Ceratonia siliqua

5780 Flowers growing upon the trunk

5781 Leaves 1 pair and calyxes smooth, Stipules cordate-lanceolate
5782 Leaves 2 pairs obovate, Two subulate glands between the lower pair
5783 Leaves 2 pairs ovate oblong acuminate, An obl. gland between the lower pair, Spines obsolete 3-toothed
5784 Leaves 2 pairs ovate oblique, An obtuse gland between the lowest, Racemes axill stalked
5785 Leaves 3 pairs with a gland on the footstalk, Stipules ciliate cordate acuminate
5786 Leaves 3 pairs obovate outer largest, A subulate gland between the lower pair
5787 Leaves 3 pairs obovate smooth the inner roundest with a globose gland between
5788 Leaves 3 pairs, Leaflets obtuse elliptical, A gland between the lower leaves
5789 Leaves 3 pairs, Leaflets ovate acuminate, A sessile gland between the leaflets
5790 Leaves 3 pairs ovate acuminate with soft down on each side
5791 Leaves 3 pairs lanceolate subfalcate smooth, A gland between the lowest, Corymbs stalked, Pods cylind.
5792 Leaves about 4 pairs ovate, Flowers racemose irregular, Stem arborescent
5793 Leaves 3 pairs obovate obtuse beneath very villous outer largest, A gland between lowest, Pods recurved
5794 Leaves 3 or 4 pairs obovate the outer largest, A gland between the lower pairs, Pods pendulous rounded
5795 Leaves 4 pairs ovate hairy with a subulate gland between the leaflets, Peduncles 4-flowered
5796 Leaves 4 pairs obovate pubescent ciliated, A stalked gland between all, Pedunc 4-fl Pod jointed
5797 Leaves 4 or 5 pairs oblong obtuse the outer the largest with a gland between every pair
5798 Leaves 5 pairs ovate lanceolate rough at edge. outer largest, A gland at foot of leafstalk
5799 Leaves 5 pairs oblong acute smooth, A gland at base of footstalk, Branches smooth
5800 Leaves 5 pairs elliptical smooth with an obl. gland between the lower, Stip subul falcate, Rac axillary
5801 Leaves 5 pairs elliptical smooth, An oblong gland between the lower, Racemes axillary
5802 Leaves 5 pairs cordate obtuse, Stalks without glands
5803 Leaves 6 pairs obovate smooth, Stalks without glands, Spikes racemose, Pods leafy compressed falc ate
5804 Leaves 5 pairs lanceolate equal, Gland above the base of the leafstalks
5805 Leaves 6 pairs ovate lanceolate smooth with a gland at the base of the stalk, Pod compressed edged
5806 Leaves 8-9 pairs ovate lanceol hairy with a gland at base of stalk, Racemes many-fl shorter than leaves
5807 Leaves 6 pairs lanceolate acute the outer largest, A gland on leafstalk, Peduncles 2 flowered
5808 Leaves 6 pairs obl smooth lower smaller with a subulate gland between the lowest, Stalks 2-flowered
5809 Leaves 6 pairs ovate acute smooth, with a gland at the base of the stalk, Pod cylindrical hooked
5810 Leaves 5-6 pairs ovate acuminate woolly the outer largest
5811 Leaves 6 or 8 pairs lanceolate acute smooth, with a gland on the leafstalk, Pod round smooth
5812 Leaves 2 pairs obovate veiny, Stipules lanceolate appressed, Leaflets nearly equal
5813 Leaves 10 pairs oblong obtuse without glands, Racemes long, Bractes ovate tumid imbricated
5814 Leaves 6-8 pairs linear obliquely rounded at base above hairy, Panic axillary, Pod villous
5815 Leaves in many pairs with many glands, Stipules subulate
5816 Leaves 2 pairs velvety without glands
5817 Leaves 5 pairs ovate lanceolate smooth with a gland at the base of the leafstalk
5818 Leaves 6-9 pairs lanceolate acuminate smooth, A gland on the leafstalk
5819 Leaves 8 pairs ovate-lanceolate, A gland between the lower, Stipules ovate very large
5820 Leaves 10 pairs ovate-lanceolate obtuse mucronate smooth, Stalk without gland
5821 Leaves 8 pairs ovate-oblong equal, Gland at the base of the leafstalk
5822 Leaves 8 pairs oval-oblong the outer smaller, Leafstalks without glands, Stipules spreading
5823 Leaves 7 pairs lanceolate the outer smallest, A gland at base of leafstalk
5824 Leaves 6 pairs oval-obl obt hairy the outer largest, A subulate gland between each pair, Pods linear
5825 Leaves 9 pairs oval-obl smooth obt. A cylindrical gland between the lowest, Footst. with no gland at base
5826 Leaves 10 pairs lanceolate with an oblong gland at the base
5827 Leaves 10 pairs, Leaflets oblong rounded at each end beneath hoary, No gland on stalk, Pod compressed
5828 Leaves 12 pairs obtuse mucronate, Glands many subulate, Stipules reniform bearded
5829 Leaves many pairs, Gland of the footstalk stalked, Stipules ensiform
5830 Branches hairy, Stipules lanceolate linear with elevated lines, Leaflets cuspidate
5831 Leaves 15 pairs, Leaflets with a cartilaginous white edge and a subulate gland between every pair
5832 Leaves many pairs linear with an obsolete gland at the base of the leafstalk, Stipules setaceous
5833 Leaves many pairs linear mucronate with a gland between the lowest, Pedunc solitary 1 fl.
5834 Leaves many pairs, Flowers pentandrous, Stem erect
5835 Leaves many pairs linear, Stem flexuose erect villous The plant in Bot Cab is something else?
5836 Leaves many pairs without glands, Stem procumbent



and Miscellaneous Particulars

973 *Cynometra* A name contrived to indicate the peculiar form of the pods of this genus, which grow from the old stems and branches of the tree Large cuttings root best planted in sand, and plunged in heat under a hand-glass

974 *Cassia* According to Olaus Celsus, this name is to be traced to the Hebrew, *Ketzoth*, rendered by Κασιαν in the Septuagint, and Latinized by *Cassia*. Cuttings of the species, which do not seed freely, root in pots of sand, in moist heat, and covered by a hand-glass.

Of the trivial names of different species of Cassia, that of *Absus* is the name under which it is described by Professor Alpinus, and is supposed to have arisen from a river of Palestine of that name *Tagera* is a Malabar name, *Sophera*, an Egyptian name, and *Senna*, the Arabic name of the plant — *Sænna*.

975 CATHARTOCAR'PUS *P S* CATHARTOCARPUS *Leguminosæ Sp* 2—5.
5837 Fis'tula *P. S* purging ♣ □ m 3 jn jl Y E. Indies 1731. C 1p Rh mal. 1 t. 22
5838 javánicus *P S* Java ♣ □ m 4 ... Pk E Indies 1779. C 1p Co. hort. 1. t.111

976. PARKINSO'NIA *W* PARKINSONIA *Leguminosæ. Sp* 1
5839 aculeáta *W* prickly ♣ □ or 12 .. Or W Indies 1739. C 1p Jac. amer t. 80

†977. POINCIA'NA *H K* POINCIANA *Leguminosæ. Sp.* 2
5840 pulchérrima *H K.* Flower-fence ♣ □ or 10 jn s R y G E. Indies 1691 S r m Bot mag 995
5841 elàta *H K.* smooth ♣ □ or 15 ... Y E. Indies 1778. S r m

†978 CÆSALPI'NIA *H K* BRASILETTO *Leguminosæ Sp* 9—18
5842 bijuga *W* broad-leaved ♀ □ ec 15 ... Y Jamaica 1770 S p l Sl h 2 t. 181 f 2,3
5843 brasiliénsis *W* smooth ♀ □ ec 20 ... Or Jamaica 1739. S p l
5844 Sap'pan *W* narrow-leaved ♀ □ ec 20 ... Y E. Indies 1773. S p l Roxb cor 1.t 16
5845 Crista *Sw* oval-leaved ♀ □ ec 15 ... W y Jamaica ... S p l Plu gen t 68
5846 mimosoides *W* Mimosa-leaved ♣ □ pr 6 ... Y E Indies 1806. S p l Rh mal 6. t 8
5847 Nóga *H K* acute-leaved ♣ □ ec 10 ... Y E Indies 1801. S p l Rum am. 5 t 50
5848 cassioides *W en* Senna-like ♣ □ or 6 ... ... S. Amer. 1821 S p l
5849 mucronáta *W en* mucronate ♣ □ or 6 ... ... Brazil 1823. S p l
5850 punctáta *W en* dotted ♣ □ or 6 ... .. Brazil 1820 S p l

979 GUILANDI'NA *H K* NICKER-TREE *Leguminosæ Sp* 1—7.
5851 Bónduc *H K* oval-leaved ♀ □ or 12 .. Y India 1640 C s p Lam ill t 336

*980 HYPERANTHE'RA *W* HORSE-RADISH-TREE *Leguminosæ Sp* 1—2
§5852 Moringa *W* smooth ♀ □ or 10 ... ... E Indies 1759 C p l Jac ic 3 t 461

981 HOFFMANSEG'GIA *Cav* HOFFMANSEGGIA *Leguminosæ Sp* 1—2
5853 falcária *Cav* sickle-leaved ♣ □ cu 2 jl au ... Chili 1806. C s l p Cav ic t 392

982. ADENANTHE'RA *W* ADENANTHERA *Leguminosæ Sp* 2—5
5854 Pavonina *W* yellow-flowered ♣ □ or 5 my au Y E Indies 1759 C s l p
5855 falcáta *W* woolly-leaved ♣ □ or 5 ... Y E. Indies 1812 C s l p Ru. amb. 3 t 111

983 CA'DIA *W* CADIA *Leguminosæ Sp* 1
5856 purpúrea *W* purple ♣ □ cu 6 ja jl W pu Arabia 1775. C l.t.l Pic h p 9 c ic

984 PRO'SOPIS *Rox* PROSOPIS *Leguminosæ Sp* 1
5857 spicigera *L* eatable-podded ♀ □ ec 20 .. W o E. Indies 1812 C r m Roxb cor 1 t 63

985 HÆMATOX'YLON *W* LOGWOOD *Leguminosæ Sp* 1
5858 campechiánum *W* common ♀ □ dy 20 ... Y S Amer 1724 C r.m Cat. car 2. t 66

986 COPAI'FERA *W* BALSAM OF CAPIVI *Leguminosæ Sp* 1
5859 officinális *W* officinal ♀ □ m 20 .. S Amer 1774. C s l Jac amer t. 86



History, Use, Propagation, Culture,

975 *Cathartocarpus* From καθαιρω, to purge, and καρπος, fruit, the fruit of the species being a strong cathartic The species may be treated as Cassia

976. *Parkinsonia* So named by Plumier, in memory of John Parkinson, apothecary, of London, author of Paradisus Terestris, 1629, and Theatrum Botanicum, 1640 It is a handsome low tree, not unlike the Laburnum, and planted in the West Indies near houses, as the latter is in this country.

977 *Poinciana* So named by Tournefort, in memory of De Poinci, governor of the Antilles, placed by Linnæus among the promoters of botany

P pulcherrima is a low spiny tree, with an odor, when the leaves are bruised, like savin It is a native of both Indies, and in Barbadoes is planted in hedges, whence the name of flower-fence, or Spanish carnations, which it is there called In our stoves they require a strong heat to make them flower well. They are readily increased either by cuttings or seeds

978 *Cæsalpinia* So named by Plumier, in honor of Andreas Cæsalpinus, chief physician to Pope Clement VIII, and the father of systematic arrangement in plants, in his now very scarce work, entitled, De Plantis, libri sedecim, Flor 1583 He died at Rome in 1602 The wood of all the genus may be used in dying In our stoves the plants are thorny, and, therefore, not being much liked, are seldom suffered to grow large enough to flower freely

C sappan is a prickly tree, with the heart of the wood red, heavy, and very hard: it dyes a beautiful red, which, however, is said not to stand It is very durable in sea-water, and exported abundantly by the Chinese for trenails in ship-building, and as a dye

C crista and brasiliensis afford the Brazil wood used in dying, and extensively imported to England from the West Indies The timber of the last species is elastic, tough, and durable, and takes a fine polish, it is of a beautiful orange-color, full of resin, and yields a fine full tincture by infusion The best Brazil wood is said to be produced by Cæsalpinia echinata Cuttings, Sweet observes, will not root freely, but will sometimes succeed if taken off in a growing state, but not too young, and plunged in a pot of sand, under a hand-glass, in moist heat (*Hot Cult* 32)

979 *Guilandina* Named after Melchior Guilandin, a Prussian traveller in Africa, and demonstrator of Botany at Padua He died in 1590 The species are all fine trees, with large compound leaves.

980. *Hyperanthera* From ὑπερ, upon, and ανθηρα, an anther The five barren stamens of this

5837 Leaves 5 pairs
5838 Leaves 12 pairs

5839 The only species

5840 Prickly, Calyxes unequal smooth
5841 Unarmed, Calyxes equal downy

5842 Prickly, Leaves doubly in 2 pairs, Leaflets obcordate and calyxes smooth, Stam as long as corolla
5843 Unarmed, Leaflets ovate-oblong, Rachis pubescent, Cal downy, Stamens shorter than corolla
5844 Prickly, Leafl obl oval unequ sided obt and cal smooth, Stamens longer than cor Upper petal very small
5845 Prickly, Leaflets oval, Racemes simple, Petals ovate shorter than the smooth calyx
5846 Prickly, Leaflets oblong obtuse, Stamens shorter than cor Pods woolly
5847 First petiole prickly beneath, Leaflets acute and cal smooth, Pods 1-2-seeded
5848 Stipules spiny, Leaflets oblong retuse, Leafstalks hairy
5849 Prickly, Leaflets oblong obtuse mucronate smooth
5850 Unarmed, Leaflets unevenly bipinnate, Leaflets elliptical obtuse mucronate dotted

5851 The only species

5852 Flowers half decandrous, Leaves about bipinnate, Lower leaflets ternate, Pods 3-cornered

5853 Stem decumbent, Leaves bipinnate ovate glaucous

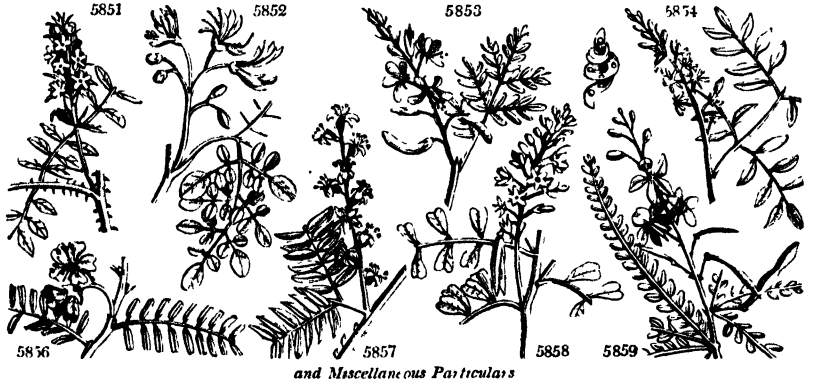
5854 Leaves decompound smooth on each side
5855 Leaves decompound downy beneath

5856 The only species

5857 The only species Branches spiny, Leaves alternate conjugate

5858 The only species Leaves abruptly pinnated, Leaflets obcordate

5859 The only species



and Miscellaneous Particulars

genus are surmounted by the five fertile ones (*Lahl*) Cuttings root best under a hand-glass in sand

981 *Hoffmanseggia* Named by Cavanilles, after John Charles Hoffmansegg, whom he calls a distinguished naturalist It may be with some propriety be employed to commemorate the merits of the present distinguished Count Hoffmansegg Cuttings, somewhat ripened, root under a hand-glass in sand

982 *Adenanthera* From ἀδην, a gland, and ἀνθηρα, an anther The essential character of the genus is to have each anther tipped with a gland Large cuttings, with the leaves not shortened, root best in a pot of sand plunged in heat under a hand-glass (*Bot Cult* 13)

983 *Cadia* Contrived by Forskahl, from the Arabic name of the plant, — *qadhy*

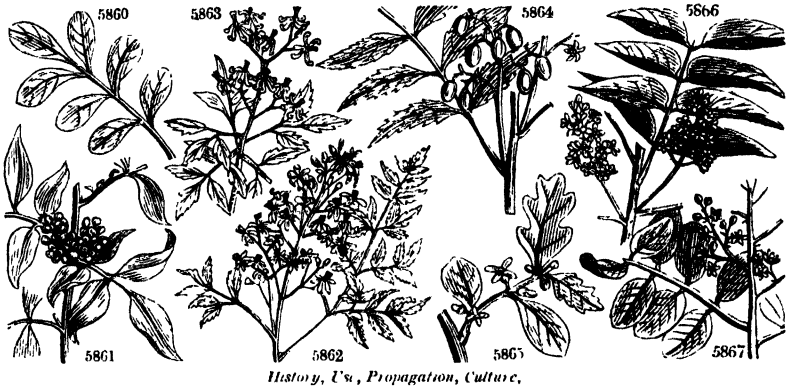
984 *Prosopis* One of the names under which Dioscorides described the Acrtium Lappa The present plant has no sort of resemblance to that of the ancients. It is a leguminous plant, and the pods are eaten as a condiment in India.

985 *Hæmatoxylon* From αἱμα, blood, and ξυλον, wood, in allusion to the color of an infusion of its wood. The logwood of commerce This is a crooked stemmed low tree, with pinnate leaves, originally from the Bay of Campeachy, the inner bark and wood red, the latter dark and very hard It makes an excellent fence, the smaller shoots are cut for hoops, and the stems for exportation for dying The gum is a gentle subastringent. In our stoves it grows well in loam and leaf-mould, kept rather moist, and cuttings root in sand under a hand-glass in heat.

986 *Copaifera* This tree is so called from bearing the drug Copaiba, which is the name given to the tree itself by the people of Brazil *Beaume de Copahu*, Fr, *Kopaiva Balsam*, Ger, *Balsamo del Copapiba*, Ital. This is a lofty elegant tree, with a handsome branching head, the extreme branches flexuose at the axils, the bark ash-colored, and the leaves pinnate It grows abundantly in the woods of Tolu, near Carthagena, and of Quito, in Brazil The copaiba balsam of the shops is procured by wounding or boring these trees to the pith, near the base of the trunk, when it flows abundantly, in the form of a clear colorless liquid, which is thickened, and acquires a yellowish color by age The operation is performed two or three times in the same year, and from the older trees the best balsam is obtained.

Copaiba balsam is stimulant, diuretic, and gently purgative It has been recommended in pulmonary complaints, and it certainly affords considerable relief in hæmorrhoidal affections. (*Thomson's London Dispensatory*, 265.) It may be increased by ripened cuttings in sand under cover.

987. TRICHI'LIA. *W*	TRICHILIA.				*Meliaceæ*	*Sp* 2—18						
5860 glábra *W*	smooth	♣ □	or	10	jn jl	W	W Indies	1794.	C	l p	J amer t 175.f 38
5861 odoráta *B R.*	sweet-scented	♣ □	or	10	jn jl	W	W Indies	1801.	C	l p	Bot. rep. 637
988 ME'LIA. *W*	BEAD-TREE.				*Meliaceæ*	*Sp* 3—7						
5862 Azedarách *W*	common	✱ ⌊	or	40	jn au	B	Syria	1656.	S	s.l	Bot. mag. 1066
5863 sempervírens *W*	evergreen	♣ □	or	40	jn au	B	Jamaica	1656	C	s l	Bot reg 643
5864 Azadirách'ta *W*	Ash-leaved	♣ □	or	60	jn au	W	E. Indies	1759	C	s l	Cav. dis 7 t. 208
989 QUIVI'SIA *Cav*	QUIVISIA				*Meliaceæ*	*Sp* 1—4						
5865 heterophylla *Cav*	various-leaved	♣ □	cu		...	W	Is France	1822.	C	p l	Cav. diss t. 213
990 SWIETE'NIA. *W*	MAHOGANY-TREE				*Meliaceæ*	*Sp* 2—3						
5866 Mahágoni *W*	common	♣ □	tm	80	...	R	W. Indies	1734	C	p l	Cav. dis. 7 t. 209
5867 febrífuga *W*	Febrifuge	♣ □	m	60	...	R	E Indies	1796	C	p l	Rox cor 1 t 17
991 EKEBER'GIA *W*	EKEBERGIA				*Meliaceæ*	*Sp* 1						
5868 capénsis *W*	Cape	♣ ⌊	or	20	jl au	W	C G H	1789.	C	p l	Lam ill. t 358
992 HEY'NEA *Rox*	HEYNEA				*Meliaceæ*	*Sp* 1						
5869 trijuga *Roxb*	Walnut-like	♣ □	or	20	s	W	Nepal	1812	C	l p	Bot mag 1738
993 GUAI'ACUM *W*	LIGNUM-VITÆ-TREE.				*Rutaceæ*	*Sp* 1—4						
5870 officinále *W*	officinal	♣ □	m	40	jl s	B	W Indies	1694	C	l p	Lam ill t 342
*994 ZYGOPHYLLUM *W*	BEAN-CAPER.				*Zygophyllæ*	*Sp* 8—19						
5871 cordifólium *W*	heart-leaved	♣ ⌊	cu	6	o	O	C G H	1774	C	l p	
§5872 Fabágo *W*	common	✱ △	cu	4	jl s	O w	Syria	1596	C	l p	Lam.ill t.345 f 1
5873 fœ'tidum *W* *insuave* B M	fœtid	♣ ⌊	pr	4	jn au	O Y	C G H	1790	C	l p	Bot mag 372
5874 maculátum *W*	spotted-flower	♣ ⌊	pr	4	o n	Y	C G H	1782	C	l p	
5875 álbum *W*	white	♣ ⌊	or	2	o n	W	Canaries	1779	C	l p	Linn dec. I t 6



History, Use, Propagation, Culture,

987 *Trichilia* From τριχα, ternary, nearly all the parts of the plant, the leaves, the stigmas, the cells of capsule, the seeds, being produced by threes T glabra is a tall branching tree, with an unpleasant fœtid smell The species are rarely seen in collections, and seldom, when cultivated, flower

988 *Melia* Μελια was the Greek name of the manna ash, from μελι, honey. This tree has been thought to resemble the ash in its foliage

M azedarach *azadaracht*, Arab) grows to a large tree in the south of Spain and Italy, producing long loose bunches of blue flowers, succeeded by pale yellow berries, about the size of a cherry These berries consist of a pulp, which is poisonous in a high degree, and mixed with grease, will kill dogs, enclosing a nut which is bored and strung as beads by the Catholics

M sempervirens is considered by some as only a variety of the Azedarach

989 *Quivisia* The tree is called *Bois de Quivi* in the Isle of France

990 *Swietenia* So named by Jacquin, in honor of the illustrious Gerard L B Von Swieten, archiater to Maria Teresa, Empress of Germany, who at his persuasion founded the botanic garden at Vienna.

S mahagoni The mahogany tree is a lofty branching tree, with a wide handsome head, the flower of Melia, and the fruit of Cedrela, about the size of a turkey's egg It grows in the warmest parts of America, as in Cuba, Jamaica, Hispaniola, &c The trees on the Bahama islands are not so large, but are more curiously veined, and are known in Europe as Madeira wood They generally grow on the solid rock, where there seems to be no earth for their nourishment Mahogany, like other timber, varies in durability, firmness of grain, and other circumstances, with the soil on which it is grown The best is furnished from the rocky soils of St. Domingo and the Bahama islands

S febrifuga is a lofty tree, in general apearance like the Mahogany The wood is of a dull red color, remarkably hard and heavy, it is reckoned by the natives the most durable wood they know, and on that account is used for all the wood-work in their temples, it is also very serviceable for various other purposes The bark is internally of a light red color a decoction of it dyes brown of various shades, according as the cloth has been prepared Its taste is a bitter and astringent united, and very strong, particularly the bitter, at the same time not any way nauseous or otherwise disagreeable In India it is used for the cure of intermittents with considerable advantage, and has also been found efficacious in most of the diseases in which the cinchona bark proves serviceable (*Thompson's London Dispensatory*, 533)

991 *Ekebergia* Charles Gustavus Ekeberg was a Danish naturalist, who travelled in Asia from 1770 to 1771 Cuttings to succeed must have their leaves entire, and be planted in sand and covered.

992 *Heynea* Named after Dr Benjamin Heyne, a learned German botanist and physician, who travelled many years in India, where he formed a large collection of dried plants

993 *Guaiacum* From *guaiac*, the name given to the tree by the natives of Guiana. *Gïjuac*, Fr , *Guajakgumma*, Ger , *Guajaco*, Ital. This tree rises forty feet high, and is four or five feet in circumference, with many divided knotted branches, greyish bark, and abruptly pinnate leaves. It has blue flowers, which are succeeded by compressed berries of a roundish form The tree takes many years to arrive at its full growth The roots run far into the ground perpendicularly, contrary to the usual growth of timber trees in the West Indies, which generally shoot the largest prongs of their roots in a horizontal direction, and are commonly observed to run very near the surface The bark is thick and smooth, the wood of a dark olive color, and cross grained, the strata running obliquely into one another, in form of an X It is a valuable timber where

5860 Leaves pinnated smooth, Outer leaflets largest
5861 Leaflets lanceolate undulate, Flowers with 4 petals

5862 Leaves bipinnate, Leaflets smooth somewhat quinate
5863 Leaves bipinnate, Leaves cut rugose shining about 9, Petiole rounded at base
5864 Leaves pinnate

5865 Leaves alternate oval and obovate entire sinuate-toothed or pinnatifid, Pedicels twin axillary 1-flowered

5566 Leaves pinnate in four pairs, Leaflets ovate-lanceolate equal at base, Panicles axillary
5867 Leaves pinnate in four pairs, Leaflets elliptical rotundish emarginate unequal at base, Panicle terminal

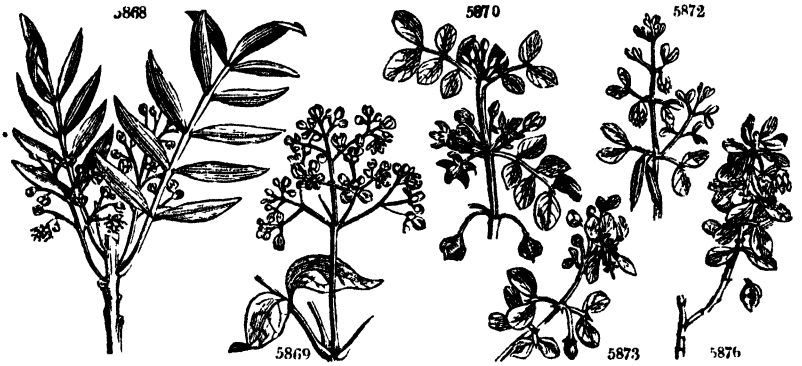
5868 The only species, Leaves pinnated with an odd one, Panicles axillary

5869 Leaves pinnated with an odd one in 3 pairs, Pan. axill. on long stalks

5870 Leaflets of 2 or 3 pairs obtuse, Capsules 2-celled

5871 Leaves simple opposite sessile roundish
5872 Leaves conjugate stalked, Leaflets obovate, Peduncles erect, Calyx smooth
5873 Leaves conjugate stalked, Leaflets obovate, Flower nodding, Calyx pubescent

5874 Leaves conjugate stalked, Leaflets linear-lanceolate
5875 Leaves conjugate stalked, Leaflets clavate fleshy with a cobweb surface



and Miscellaneous Particulars

strength and duration is required, and weight no object. It takes a fine polish, turns well, and is much used for ship blocks. It is one of the most valuable trees of the West Indies, since the timber, the bark, fruit, leaves, and blossom, are all applicable to some useful purpose The wood yields by incision the peculiar substance called Guaiacum, erroneously termed a gum, of great importance in medicine.

All the parts of this tree possess medicinal qualities, but the wood and the peculiar substance afforded by it are the only parts used the virtues of the wood depend altogether on the peculiar matter it contains. This is spontaneously exuded from the tree, and is called native gum. it concretes in tears, which are semipellucid, and very pure, but the greater part of it is obtained by making incisions into the trunk, or, as it is termed, jagging the tree. This operation is performed in May, and the juice which flows copiously, is concreted by the sun It is also obtained by sawing the wood into billets, and boring a hole longitudinally through them, so that, when one end of a billet is laid on a fire, the guaiac melting runs through the hole from the opposite end, and is collected in a calabash Boiling the chips or raspings in salt and water also separates the guaiac, which, as it rises to the surface, may be collected by skimming

Both the wood and the guaiac are stimulant, diaphoretic, diuretic, and purgative. The wood was introduced into Europe by the Spaniards as a remedy for lues venerea in 1508, and gained much celebrity from curing Van Hutten; but it had long before been used for the same purpose by the natives of St. Domingo It obtained so much reputation, that the exhibition of mercury was discontinued for a considerable length of time, and even in the eighteenth century its specific powers over this disease were maintained by Boerhaave, but frequent disappointments and more correct observations have shown that it possesses no powers of eradicating the venereal virus, and that it is useful only after a successful mercurial course, for repairing the strength and vigor of the system, "and where a thickened state of the ligament, or of the periosteum, remains, or where there are foul indolent ulcers," (*Pearson's Observations*, &c p 10) or in suspending the progress of some of the secondary symptoms for a short time, as ulcers of the tonsils, eruptions, and nodes. The decoction of the wood has been found more useful in cutaneous diseases, scrofulous affections of the membranes and ligaments, and in ozæna. The guaiac itself is an efficacious remedy in chronic rheumatism and arthritic affections, as well as those diseases for which the decoction of the wood is usually given; and in every respect it may be regarded as the active ingredient of the wood Its sensible effects are a grateful sense of warmth in the stomach, dryness of the mouth and thirst, with a copious flow of sweat, if the body be kept externally warm, or if the guaiac be united with opium and antimonials: but when the body is freely exposed, instead of producing diaphoresis, it augments considerably the secretion of urine (*Thomson's London Dispensatory*, 318.)

Lignum vitæ in the stove grows freely in loam and peat. "Cuttings," Sweet observes, "are generally supposed to be difficult to root, but I find ripened cuttings, taken off at a joint, root readily, planted thin in a pot of sand, and plunged under a hand-glass in heat When the cuttings are rooted, which will be easily perceived by their growing at the top, they should be potted off, when great care must be taken not to break off the young roots in taking the sand from them, as they are very small and easily broken Pot them off in very small pots, and keep them under a close glass or a few days, till they have struck fresh root, when they must be exposed to the air by degrees" (*Bot. Cult.* 63.)

994. *Zygophyllum.* From ζυγος, a pair, and φυλλον, a leaf; all the leaves grow in pairs. *Morgsana*, which is the name of one species, is the Syrian name of the plant. These are plants of little ornament, generally with fleshy leaves, and flowers of a yellow or whitish yellow color.

5876 Morgsána *W.*	four-leaved	♣ ▭	cu	3	my s	Y	C G. H	1732.	C	l.p	Dl.elt.t.116.f.141
5877 sessilifólium *W*	sessile-leaved	♣ ▭	cu	3	jl.au	Y	C. G. H.	1713.	C	l.p	Bot. mag. 2184
5878 coccineum *L*	scarlet	♣ ▭	or	3	...	S	Egypt	1823.	C	s p	Forsk. ic. t. 11
995. FAGO'NIA. *W.*	Fagonia				*Zygophylleæ.*	*Sp.* 2—10.					
5879 crética *W*	Cretan	◯	cu	1½	jn au	Y	Candia	1739.	S	lt.l	Bot. mag. 241
5880 arábica *W.*	Arabian	♣ ◯	cu	2	jn au	Y	Arabia	1759.	S	lt.l	
996. TRI'BULUS. *W.*	Caltrops.				*Zygophylleæ.*	*Sp* 3—7.					
5881 máximus *W.*	great	◯	pr	1½	jn jl	Y	Jamaica	1728.	S	s.l	Jac. ic 3. t. 462
5882 terréstris *W.*	small	○	cu	1	jn jl	Y	S. Europe	1596.	S	co	Lam.ill t.346.f.1
5883 cistoides *W*	Cistus-like	♐ △	pr	1½	jl	Y	S Amer.	1752.	C	lt l	Bot. reg. 791
997 DICTAM'NUS *W.*	Fraxinella				*Rutaceæ. Sp.* 2						
5884 Fraxinélla *Link.*	red	♑ △	or	3	my.jl	Pu	Germany	1596.	R	p l	Jac aust.5. t.428
5885 álbus *L.*	white	♑ △	or	3	my jl	W	Germany	1596,	R	p l	
*998. RU'TA *W.*	Rue				*Rutaceæ Sp* 10—24						
5886 gravéolens *W*	common	♏	m	3	jn s	G Y	S. Europe	1562	C	co	Lam. ill. 345 t. 1
5887 montána *W*	mountain	♑ △	un	2	au.s	G Y	S. Europe	1596	C	co	Jac ic. 1. t. 76
5888 chalepénsis *P S*	brd -lvd -Afric.	♏ ▭	un	2	jn.s	G.Y	Africa	1722.	C	r.m	
5889 angustifólia *P S*	narrow-leaved	♏ ▭	un	2	jn s	G Y	Africa	1722	C	r m	Bot. mag 2311
5890 pinnáta *W*	winged-leaved	♏ ▭	un	2	mr au	G Y	Canaries	1780	C	r m	
5891 pubéscens *W en.*	pubescent	♑ △	un	1½	my au	G Y	Spain	1816.	C	co	
5892 limifólia *W*	Flax-leaved	♑ △	un	1½	jn s	G Y	Spain	1752.	C	r m	Bot. rep 565
5893 patavína *L*	Paduan	♑ △	un	1½	jn jl	G Y	Italy	1819	C	r m	Michel gen t 19
5894 macrophýlla *Sol*	large-leaved	♑ △	un	3	jl	G Y	Africa	1820	C	r m	Bot mag 2018
5895 albiflóra *Hook*	white-flowered	♐ △	pr	2	jl au	W	Nepal	1823	C	r m	Hook. ex fl 79
†999 CRO'WEA *Sm*	Crowea				*Rutaceæ. Sp* 1.						
5896 saligna *Sm*	Willow-leaved	♣ ▭	or	3	jl.d	Pu	N S. W.	1790	C	s.l p	Bot. mag. 989
1000 CO'DON *W*	Codon.				.....	*Sp* 1					
5897 Royéni *W*	prickly	♐ ◯	cu	s			C G H.	1801.	S	lt.l	Bot. rep 325
1001 GOM'PHIA *W*	Button-flower				*Ochnaceæ*	*Sp* 2—24.					
5898 nítida *W*	glossy-leaved	♣ ▭	el	4	...	Y	Jamaica	1803	C	s l	Ann mus. t. 13
5899 obtusifólia *Dec*	obtuse-leaved	♣ ▭	el	3	...	Y	Jamaica	1803	C	s l	Ann mus t. 8
*1002 QUAS'SIA *W.*	Quassia.				*Simarubaceæ*	*Sp* 2—4					
5900 amára *W*	bitter	♀ ▭	m	20	jn jl	R	Guiana	1790	C	p l	Bot. mag. 497
§5901 Simarúba *W*	winged-leaved	♣ ▭	or	6	...	R	W Indies	1789	C	p l	Aub.gu 2 t.331 2



History, Use, Propagation, Culture.

995 *Fagonia* So named by Tournefort, in honor of Mons. Fagon, archiater to Louis XIV., and a great patron of botany Small prickly plants of no beauty

996. *Tribulus* From τρεις, three, and βολος, a point, in reference to the points of the capsules *La Croix du Chevalier*, Fr. The term *Caltrops* is taken from the form of the fruit, which resembles the machines that were formerly cast in the way to obstruct an enemy's cavalry It is composed of five nuts, united into a subglobular whorl armed with prickles

T terrestris is a native of most of the hot and temperate parts of the world · it is common about Kingston in Jamaica, where it is called Turkey blossom, and planted in gardens for the sake of its flowers, which have an agreeable smell The fowls are observed to feed much on them, which is thought both to fatten them and heighten their flavor In the south of Europe, it is a common weed in arable land, and is troublesome to cattle by the prickly fruit running into their feet. All the species are pretty, though seldom cultivated.

997. *Dictamnus* An ancient name of what is now supposed to be the Origanum Dictamnus *Fraxinella*, Fr., in allusion to the remarkable similarity which exists between the leaves of the plant and Fraxinus, the ash. The whole plant, especially when gently rubbed, emits an odor like that of lemon-peel, but when bruised it has something of a balsamic scent. This fine scent is strongest in the pedicels of the flowers, which are covered with glands of a rusty red color, exuding a viscid juice or resin, which exhales in vapor, and in a dark place may be seen to take fire The root is used in medicine, and, it is said, with much success, as an opiate and drastic

998 *Ruta* This name is nearly the same in all languages. Πηγανη, in Greek, *Ruta*, in Latin, *ruz*, in Runic, *rude*, *ruta*, or *rutu*, in Anglo-Saxon, *rutiza*, in Sclavonic; in French and English, *rue*, &c. The root of the word is beyond the ingenuity of etymologists R. graveolens was formerly in much repute as a medicinal plant, and also as emblematical of repentance and grace In Shakspeare and other old authors, it is called herb of grace, as rosemary is called herb of remembrance. The leaves have a powerful unpleasant odor, and a hot, bitter, nauseous taste In the recent state they will inflame and blister the skin; but much of this is dissipated in drying Medicinally, rue is stimulant and antispasmodic, and is supposed to possess emmenagogue powers It was in high estimation as early as the time of Hippocrates, who frequently ordered it in female complaints. In modern practice, it is chiefly used in hysteria and flatulent colic. (*Thomson's London Dispensatory*, 487)

999. *Crowea.* So named by the president of the Linnean Society, after his friend James Crowe of Norwich, an excellent British botanist, whose collection of willows we believe still exists This plant continues in flower the greater part of the year. An equal mixture of sandy loam and peat is the best soil for it, and care must be taken not to over water it, or it will look yellow and unhealthy. It likes an airy situation,

5876 Leaves conjugate stalked, Leaflets obovate, Stem shrubby
5877 Leaves conjugate sessile, Leaflets lanceolate oval rough at edge, Stem shrubby
5878 Leaves with double leaflets stalked, Leaflets cylindrical fleshy smooth, Petals acuminate

5879 Spiny, Leaflets lanceolate flat smooth
5880 Spiny, Leaflets linear convex

5881 Leaflets in 4 pairs. the outer larger, Pericarps 10-seeded blunt
5882 Leaflets in 6 pairs nearly equal, Seeds with four horns
5883 Leaflets in 8 pairs nearly equal

5884 Leafstalk obscurely edged
5885 Leafstalk scarcely edged at all

5886 Leaves supradecompound, Leaflets oblong terminal obovate, Petals entire
5887 Leaves supradecompound, Leaflets all linear, Petals entire
5888 Leaves supradecompound oblong, Terminal leaflet obovate, Petals toothed
5889 Leaves supradecompound, Lobes oblong cuneate nearly equal, Bractes very small ovate, Petals ciliate
5890 Leaves pinnate, Leaves lanceolate attenuate at base serrate crenate, Petals entire
5891 Leaves mostly ternate lanceolate pubescent lateral very short, Cal and ovaries villous
5892 Leaves simple lanceolate smooth, Filaments ciliated, Stem simple herbaceous
5893 Leaves in middle ternate linear narrowed at the base entire, Calyxes villous
5894 Leaves pinnatifid, Segments oblong somewhat stalked the terminal very large, Petals ciliated
5895 Leaves bipinnate with obovate retuse leaflets, Flowers 4-petalous 8-androus

5896 The only species

5897 The only species

5898 Leaves ovate-lanceolate acuminate serrated at end, Cal as long as cor. Berries ovate
5899 Leaves lanceolate entire very obtuse at end, Branches of panicle short angular

5900 Flowers hermaphrodite, Leaves pinnate with an odd one, Leaflets opposite sessile, Stalk jointed winged
5901 Flowers monœcious, Leaves abruptly pinnated, Leaflets alternate stalked, Stalk naked



and Miscellaneous Particulars.

and not to be crowded amongst other plants. Cuttings strike root freely in sand, under a bell-glass. (*Bot. Cult* 173)

1000 *Codon* From *κωδων*, a bell The corolla of this plant is globular, and formed like a bell in its upper part A scarce Cape shrub, of which Thunberg speaks in terms of great delight upon finding a solitary individual growing by the side of a precipice in its native country

1001. *Gomphia.* From *γομφος*, a club, but the application is not obvious These are most beautiful tropical bushes, with long spikes of brilliant yellow flowers, and neat serrated shining entire leaves.

1002 *Quassia* So named by Linnæus, in memory of Quass., a negro slave of Surinam, who found and discovered to Rolander, a Swede, the wood of Q excelsa, which he had employed with success as a secret remedy in the malignant endemic fevers of Surinam

Q amara is a lofty tree with strong branches, white light wood, their bark and leaves not unlike those of the common ash. The flowers are in terminal racemes, of a bright red The root, wood, bark, and indeed all the parts of this tree are intensely bitter Linnæus says that the wood of the root is a noble remedy, but that the wood of the small branches, which has since been substituted for it, is good for nothing The wood of both is now thought to be less intensely bitter than the bark, which is at present regarded as the most powerful medicine. Quassia has no sensible odor; its taste is that of a pure bitter, more intense and durable than that of almost any other known substance: it imparts its virtues more completely to watery than spirituous menstrua, and its infusions are not blackened by the addition of martial vitriol. It is said that considerable quantities of this drug are used by the brewers instead of hops

Q Simaruba, or mountain damson, as it is called in Jamaica, is a tall tree with alternate branches, and a smooth grey bark, maculated with yellow spots The leaves are pinnate; the flowers are male and female on the same axillary panicles, yellowish white; the fruit consists of five smooth, ovate, black, one-celled berries, on a common receptacle, and open spontaneously when ripe.

The officinal part of this tree is the bark of the root, It is inodorous, and has a bitter, but not disagreeable taste The pieces are of a very fibrous texture, rough, scaly, warty, and of a full yellow color in the inside when fresh. Alcohol and water take up all its active matters by simple maceration, at a temperature of sixty degrees of Fahrenheit better than at a boiling heat, it is tonic, and has been employed with advantage in intermittent fever, obstinate diarrhœa, dysentery, and dyspeptic affections. (*Thomson's London Dispensatory*, 462)

The different species of quassia flower freely in the stove; are of easy culture in loam and peat, and are increased by ripened cuttings taken off at a joint, and not deprived of their leaves, and planted in a pot of sand under a hand-glass.

*1003 LIMO'NIA. *W*	Limonia.				*Aurantiaceæ. Sp* 2—11.							
§5902 monophýlla *W*	simple-leaved	▭ or	4	...	W	E. Indies	1777.	C	r m	Rox. cor. 1. t. 83		
5903 crenulàta *H. K.*	crenulate	▭ or	4	...	W	E. Indies	1808.	C	r m	Rox. cor. 1. t. 86		
1004. GLYCOS'MIS. *Corr.*	Glycosmis.			*Aurantiaceæ. Sp.* 3								
5904 citrifólia *Lindl.*	various-leaved	▭ fr	6	ja.d	W	China	...	C	r m	Bot. mag. 2416		
Lemónia parviflóra B M												
5905 pentaphýlla *Corr*	five-leaved	▭ or	20	jn jl	W	E. Indies	1790.	C	r.m	Rox cor. 1. t 84		
5906 arbórea *Corr.*	tree	▭ or	20	my au	W	E. Indies	1796.	C	r.m	Rox. cor. 1 t. 85		
1005 MURRA'YA *W*	Murraya			*Aurantiaceæ. Sp* 2.								
5907 exótica *W*	Ash-leaved	▭ ft	8	au s	W	E Indies	1771.	C	lt l	Bot. reg 434		
5908 paniculáta *Wall.*	panicled	▭ ft	8	jl	W	E Indies	1823	C	r.m	Hook. ex. fl. 134		
1006. COOK'IA. *W.*	Wampee-tree			*Aurantiaceæ Sp.* 1—2.								
5909 punctáta *W.*	Chinese	▭ fr	15	...	W	China	1795.	C	lt.l	Jac.schœ.1. t.101		
1007 GÆRTNE'RA. *W.*	Gærtnera.			*Malpighiaceæ. Sp* 1—3.								
5910 racemósa *W*	clustered	▭ or	15	mr ap	W	E. Indies	1796.	C	p l	Bot. rep. 600		
1008. MONO'TROPA. *W*	Yellow Bird's-nest.			*Monotropeæ. Sp* 2—4								
5911 uniflóra *Mich*	one-flowered	△ cu	½		W	N. Amer.	1824.	S	s p	Hook ex fl 85		
§5912 Hypópithys *W*	common	△ cu	½	jn jl	W	Britain woods.		S	s p	Eng. bot. 69		
1009 DIONÆ'A. *W*	Dionæa			*Droseraceæ. Sp* 1								
§5913 Muscípula *W*	Venus's Flytrap	⌓ cu	½	jl.au	W	Carolina	1768.	L	a.p	Bot. mag 785		
1010 GARU'GA *Rox*	Garuga			*Terebintaceæ. Sp* 1								
5914 pinnáta *H K.*	winged-leaved	▭ or	20	...		E. Indies	1808.	S	p l	Rox cor 3 t. 208		
*1011 KAL'MIA *W*	Kalmia			*Rhodoraceæ. Sp* 4—5								
5915 latifólia *W*	Calico-bush	or	8	my jl	R	N Amer	1734	L	s p	Bot. mag 175		
5916 angustifólia *W.*	Sheep-Laurel	or	5	my jl	R	N Amer	1736.	L	s p	Bot. mag 331		
β rúbra	*red-flowered*	or	5	my jl	R	N Amer	.....	L	s p	Bot. cab 502		
5917 glaúca *W*	glaucous	or	2	ap my	Pu	N Amer	1767	L	s p	Bot. mag. 177		
β rosmarinifólia Ph.	*Rosemary-leav*	or	2	ap my	R	N Amer	1812	L	a.p			
5918 hirsúta *W.*	hairy	▭ or	1½	au s	R	N. Amer	1786	L	a.p	Bot. mag. 138		



History, Use, Propagation, Culture,

1003 *Limonia* The general denomination of the citron in Arabia is *lymoûn*, whence limon and lemon, to which fruits this genus is nearly related L monophylla is a small thorny tree, with a berry the size of a small nutmeg, very like a lime, and called by the Hindoos wild lime. Ripened cuttings of the species root in sand, under a hand-glass plunged in a moist heat

1004. *Glycosmis* From γλυκυς, sweet, and οσμη, smell, all the parts of the plant, leaves, flowers, fruit, having an agreeable perfume G pentaphylla is an elegant fragrant shrub, very common in most uncultivated lands in Coromandel, but chiefly under large trees, where birds have dropped the seeds It flowers all the year there. The whole plant, when drying in the shade, diffuses a pleasant permanent scent, the flowers are exquisitely fragrant, birds eat the berries greedily

G arborea has also very fragrant flowers

G citrifolia is a beautiful stove plant, not, indeed, remarkable for the showiness of its flowers, but most valuable on account of its fruit, which is about the size of a hazel nut, very juicy and sweet, and produced in profusion in our stoves

1005 *Murraya* So named by Koenig, in honor of John Andrew Murray, knight of the Swedish order of Vasa, professor of medicine and botany at Gottingen, and an editor of Linnæus's Systema Vegetabilium. The species are trees of the smallest size, with dotted pinnated leaves and fragrant white flowers, quite like those of an orange

1006 *Cookia* Named by Sonnerat in honor of our celebrated Captain Cook The fruit is much esteemed in China, where it arrives at the size of a pigeon's egg, growing in bunches, and it is called Wampee It grows well in light loam, and ripened cuttings with their leaves on root in sand in a moist heat

1007 *Gærtnera* In memory of Joseph Gærtner, M D F R S Acad. Imp Petrop Memb, author of a most excellent work on the fruits and seeds of plants, Stutg. 1788 It is a large climbing woody shrub, cultivated all over the coast of Coromandel, on account of the beauty and fragrance of its flowers. In the stove it requires a good deal of room to flower freely It is easily increased in sand under a hand-glass. The genus is now referred to the natural order of Malpighiaceæ, among which it is remarkable for its white flowers.

1008. *Monotropa* From μονος, one, and τρεπω, to turn · its flowers are all turned one way It is parasitical and without leaves, of a pale uniform hue, having a simple scaly stem, allied in habit to Orobanche, to some of the Orchis tribe in its peculiarity of scent, which is like that of primrose, or beans in blossom. The root is fibrous, much branched, and somewhat creeping, growing among dead leaves or in half decaying vegetable mould. Sir J E. Smith says, he could never find it truly parasitical In Sweden, Linnæus informs us, it is given dry to sheep affected with a cough

Its natural affinity, which is certainly to the heath, Pyrola, and similar plants, is very singular and unexpected.

5902 Leaves simple, Spines solitary
5903 Leaves pinnate, Leaflets oblong lanceolate crenulate, Spines solitary

5904 Leaves simple and 3-leaved, Leaflets ovate-oblong acuminate, Peduncles axillary shorter than stalk

5905 Leaves pinnate in 2 pairs, Leaflets elliptical entire
5906 Leaves pinnate in 2 pairs, Leaflets oblong obsoletely serrate

5907 Leaflets ovate, Peduncles many-fl corymbose
5908 Leaflets ovate-acuminate, Pedunc. axill. and solitary

5909 Leaves ovate-lanceolate acuminate nearly equal at base

5910 Leaves pinnated, Leaflets ovate-lanceolate

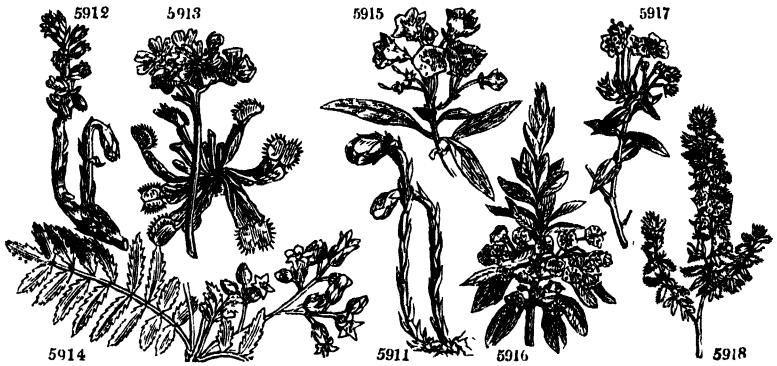
5911 Large cernuous, Scales close together
5912 Flowers smooth lateral octandrous

5913 The only species

5914 The only species

5915 Leaves ovate-elliptical ternate and scattered, Corymbs terminal
5916 Leaves oblong, Corymbs axillary, Bractes linear-lanceolate, Pedunc and calyx downy with glands

5917 Leaves opposite oblong polished beneath glaucous revolute at edge, Branches 2-edged
β Leaves linear more revolute green beneath
5918 Leaves alternate and opposite ovate-lanceolate and branches hairy, Pedunc. axill 1-flowered



and Miscellaneous Particulars

1009 *Dionæa.* One of the names of Venus It is a singular plant in respect of its leaves, which are of an anomalous form, and have a singular motion by which they catch insects, whence the specific name, *muscipula*, a fly-trap The root is scaly, almost like a bulb, and not prolific in fibres The leaves have the petiole winged as in the orange; the extreme part, or proper leaf, is the part that operates as a trap Linnæus affirms, that when the entrapped insect ceases to struggle and is quiet, the leaf opens and permits it to escape This does not agree with Ellis's account, for he affirms that the lobes never open again, so long as the animal continues there He thinks it probable, that a sweet liquor discharged by the red glands tempts the insect to its destruction He adds, that if a straw or a pin be introduced between the lobes, they will grasp it as fast as if it were an insect The flowers grow in a corymb resembling an umbel It is rather difficult to preserve Sweet finds it "thrive best when planted in a pot of Sphagnum with a little mould at the bottom of the pot, and placed in a pan of water" Shepherd, of the Liverpool botanic garden, finds that leaves of Dionæa so placed will root and form new plants In all cases it is necessary that an abundance of fresh cool air should be supplied to the plants

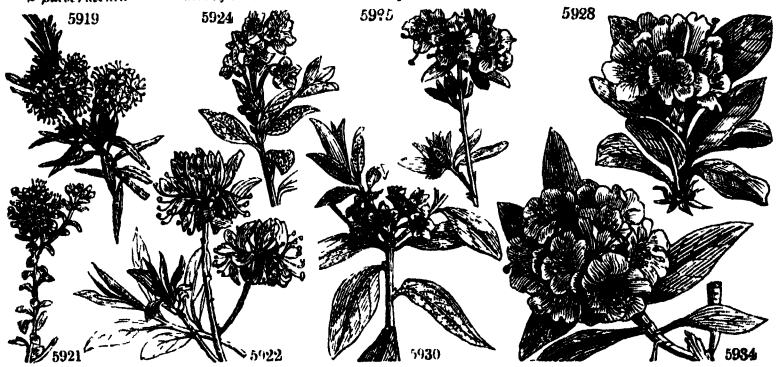
1010 *Garuga* *Garugo* is the Telinga name of the plant, which is rare in our stoves, although not of recent introduction

1011. *Kalmia* So named by Linnæus in honor of Peter Kalm, professor at Abo in Sweden, author of Travels in America The species are beautiful peat earth shrubs, deserving a place in every American ground K. latifolia is a native of Carolina and other parts of North America, of Pennsylvania, New York, &c. but only in particular places; on rocks, hanging over rivulets, and on the sides of barren hills on the most sterile soil The noxious qualities of this elegant shrub lessen that esteem which its beauty claims, for though deer feed on its green leaves with impunity, yet when cattle and sheep, by severe winters deprived of better feed, eat the leaves, many die annually It blossoms in May, and continues in flower a great part of the summer (*Catesby*) The flesh of the American partridge is said to be poisonous in the winter from its feeding upon the buds of this plant. But Wilson denies this statement. The Indians use a decoction of the leaves for purposes of self-destruction A few drops of the tincture poured upon the body of a large and vigorous rattle-snake, killed the reptile in a short time. An ointment made of the powdered leaves has been used with much success in tænia capitis, and some other cutaneous affections. (See *Bigelow's Medical Botany*)

The wood, being very hard, is very useful in smaller works. The Indians are said to make small dishes, spoons, and other domestic utensils out of the roots. these are large, of a soft texture, and easily wrought when green, but when dry become hard and smooth (*Curtis.*)

K. angustifolia is also reputed poisonous to sheep and cattle.

1012. LE'DUM. *W*	Labrador-tea.				*Rhodoraceæ.*	*Sp* 3.						
5919 palústre *W.*	marsh	ħ.	or	2	ap my	W	Europe	1762.	L	s.p	Bot. cab. 560
β decúmbens	*dwarf*	ħ.	or	½	ap my	W	Huds Bay	1762.	L	s p	
5920 latifólium *W.*	broad-leaved	♠	or	3	ap my	W	N. Amer.	1763	L	s p	Bot. cab 534
5921 buxifólium *W*	box-leaved	ħ.	or	½	ap my	W	N. Amer.	1736.	L	s p	Bot. reg. 531
Ammyrsine buxifolia Ph.											
1013 RHO'DORA *W*	Rhodora				*Rhodoraceæ*	*Sp* 1.						
5922 canadénsis *W.*	Canadian	♠	or	3	ap my	Pu	N Amer.	1767.	L	p l	Bot. mag 474	
†1014. RHODODEN'DRON *W*	Rhododendron				*Rhodoraceæ.*	*Sp.* 15—23.						
5923 ferrugíneum *W*	rusty-leaved	ħ.	or	1½	my jl	S	Switzerl.	1752.	L	s.p	Bot. cab 65	
5924 hirsútum *W*	hairy-leaved	ħ.	or	1½	my jl	S	Switzerl.	1656.	L	s p	Bot mag 1853	
5925 daúricum *W*	Daurian	♠	or	3	mr d	Pu	Siberia	1780	L	s.p	Bot mag 636	
β atrovírens	*dark-leaved*	♠	or	3	f ap	Pu	Siberia	...	L	s.p	Bot reg. 194	
5926 camtchátic.um *W*	Kamtchatka	♠	or	2	...	Pu	Kamtsch	1802	L	s.p	Pall ross 1 t. 33	
5927 chamæcístus *W*	Thyme-leaved	ħ.	or	½	my jn	Pa pu	Austria	1786.	C	s.p	Bot. mag 488	
5928 caucasicum *W*	Caucasian	ħ.	or	1	au	Pu	Caucasus	1803	L	s p	Bot mag 1145	
5929 chrysánthum *W*	yellow	ħ.	or	½	jn jl	Y	Siberia	1796.	L	s p	Par lond 80	
5930 punctátum *W*	dotted-leaved	♠	or	4	jn au	Pk	N Amer	1786	L	s.p	Bot rep 36	
β májor	*large dotted-leaved*	♠	or	6	jn au	Pk	N Amer	1786.	L	s p	Bot reg 37	
5931 máximum *W*	large	♠	spl	20	jn au	Pk	N Amer	1736	L	s p	Bot mag. 951	
β álbum Ph	*white*	♠	or	20	jn au	W	N Amer	1811.	L	s p		
γ purpúreum Ph	*tree*	♠	spl	25	jn au	Pu	N Amer	...	L	s p		
5932 catawbiénse *Ph*	Catawba	♠	or	4	jn au	Pū	N Amer	1809	L	s.p	Bot mag 1671	
5933 pónticum *W*	common	♠	spl	12	my jn	Pu	Gibraltar	1763	L	s p	Bot mag 650	
β obtúsum	*obtuse*	♠	spl	12	my jn	Pu	Gibraltar	1763	L	s.p	Dend brit 162	
γ myrtifólium	*myrtle-leaved*	♠	spl	12	my jn	Pu	Gibraltar	1763	L	s.p	Bot. cab 908	
5934 arbóreum *Sm*	tree	♠	spl	20	...	Pu	Nepal	1820	L	s.p	Ex bot t 6	
5935 azaloides *Hort*	Thompson's hybr	♠	spl	3	jn au	Pk	... ..	...	L	s.p	Bot rep 379	
5936 hýbridum *B Reg*	Herbert's hybr	♠	spl	3	jn au	Pk	... ..	...	L	s.p	Bot. reg 195	
1015 EPIGÆ'A *W*	Epigæa				*Rhodoraceæ*	*Sp* 1						
5937 répens *W*	creeping	ħ.	pr	½	jl au	W	N Amer	1736	L	s p	Bot. reg 201	
†*1016 ANDRO'MEDA *W*	Andromeda				*Ericeæ*	*Sp* 26—39						
§5938 hypnoídes *W*	Moss-like	ħ.	pr	½	jn jl	Pk	Lapland	1798.			Fl dan 10	
§5939 mariána *W*	Maryland	♠	or	2	jn jl	W	N Amer	1736	L	s p	Pl. m t. 448 f 6	
α ováta	*oval-leaved*	♠	or	2	jn jl	W	N Amer	1736	L	s p	Bot. mag 1579	
β oblónga	*oblong-leaved*	♠	or	2	jn jl	W	N Amer	1736	L	s p		
§5940 ferrugínea *Ph*	rusty-leaved	♠	or	3	jn jl	W	N Amer	1784.	L	s.p	Vent. malm 80	
§5941 rígida *Ph*	rigid	♠	or	20	ap my	W	N Amer.	1774.	L	s p	Bot cab 430	
5942 jamaicénsis *W*	Jamaica	□	or	6	...	W	Jamaica	1793.	L	s p	Bot cab 1873	
§5943 speciósa *Ph*	large-flowered	♠	or	3	jn s	W	Carolina	1800	L	s p	Bot cab 551	
α nítida	*smooth-leaved*	♠	or	3	jn s	W	Carolina	1800.	L	s p	Bot mag 970	
β pulverulénta	*mealy-leaved*	♠	or	3	jn s	W	Carolina	1800	L	s p	Bot mag 667	



History, Use, Propagation, Culture,

1012 *Ledum* Λήδον was the name applied by the ancients to the plant producing the substance called Ladanum, and now known by the name of Cistus Ledum In foliage the Ledum of modern botanists agrees with the plant of the ancients Pretty American plants, very commonly cultivated for the beauty of their flowers

1013 *Rhodora* A name of the same meaning as Rhododendron It is well known in shrubberies as remarkable for its purple flowers appearing on the naked shoots before the leaves come out

1014 *Rhododendron* From ῥόδον, a rose, and δενδρεον, a tree, because the flowers resemble in color bunches of roses. Some of the species form beautiful and even splendid ornaments to the shrubbery or American ground, and all of them are interesting and deserving of culture

R ferrugineum and hirsutum abound on the high mountains of Switzerland, Austria, Savoy, Piedmont, Dauphiné, and terminate ligneous vegetation as we ascend, and furnish the shepherds with their only fuel The grouse are said to eat them, and the white hares sometimes gnaw the bark in hard weather, but animals do not seem to feed on them, except from want of other food, and they are suspected of being in a small degree poisonous The galls of some small insect are frequent on them

R. dauricum is almost peculiar to the subalpine tracts of eastern Asia, it appears first at the mouth of the river Jenisea, and beyond that, especially from the river Uda, in the pine woods, it begins to be common; but about Baikal it is most abundant, and extends through the deserts of the Mongols to China and Tibet at the Lena it becomes more rare, and beyond that it is much lower, with a more slender flower and narrower leaves. (*Pallas*)

R. Camtschaticum is an elegant evergreen under shrub, it grows abundantly in the peninsula of Kamtchatka and Behring's island in muddy places on the mountains

R. caucasicum is a native of the higher rocks of Caucasus, near the perpetual ice, in the highest range of shrubby vegetation, with Myrtillus and Vitis idæa

R chrysanthum is a beautiful evergreen, resembling R dauricum, and like it is a native of the alpine regions of Siberia, where it is a noted remedy for rheumatism It is cultivated in this country with the

5919 Leaves linear revolute at edge beneath downy

5920 Leaves oblong revolute at edge beneath downy, Flowers about pentandrous
5921 Leaves ovate oblong flat smooth

5922 The only species

5923 Leaves smooth leprous beneath, Corolla funnel-shaped
5924 Leaves elliptical acute ciliated dotted beneath, Corolla funnel-shaped
5925 Leaves smooth dotted naked, Corolla rotate

5926 Leaves ciliate nerved, Corollas rotate, Calyxes leafy
5927 Leaves elliptical acute glandular ciliated naked, Cor rotate, Petals obtuse
5928 Leaves scabrous rusty with down beneath, Umb terminal, Cor rotate, Petals roundish
5929 Leaves oblong scabrous beneath discolored smooth, Umbels terminal, Cor rotate, Pet. obovate irregular
5930 Leaves oblong smooth beneath dotted with resin, Umbels terminal, Cor funnel-formed

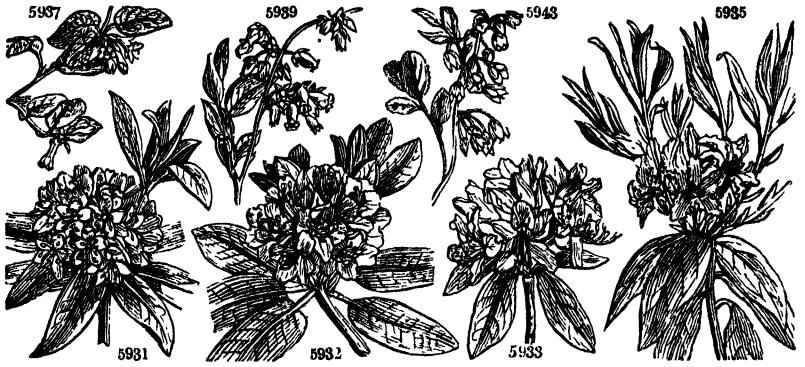
5931 Leaves oblong glabrous discolored beneath, Umb. terminal, Cor rotate, Petals roundish
β Leaves cuneate-lanceolate flat
γ Leaves larger oblong-elliptical flattish
5932 Leaves short oval rounded at each end smooth discolored beneath, Sepals elong obl Cor campanulate
5933 Leaves oblong smooth · of the same color on both sides, Corymbs terminal, Cor. campan rotate

5934 Leaves lanceolate acute silvery beneath, Flowers clustered campanulate, Calyxes woolly
5935 Leaves thin rugose lanceolate smooth subdeciduous
5936 Leaves oval coriaceous glaucous beneath

5937 Leaves cordate ovate entire, Cor cylindrical

5938 Leaves imbricated subulate smooth, Pedunc solitary terminal, Cor globose-campanulate
5939 Pedunc. aggregate on the branches, Cor ovate cylindrical, Leaves oblong-ovate entire deciduous

5940 Pedunc aggregate axillary, Cor globose, Leaves ellipt entire beneath mealy scaly
5941 Arborescent, Lvs coriaceous cuneate-lanc acute entire with downy scales beneath, Fl.-stalks scurfy rusty
5942 Pedunc aggregate, Cor ovate transparent, Lvs altern. broad lanc obtuse entire cinereous beneath
5943 Pedunc. aggregate, Cor globose campanulate, Leaves oval subserrate shining



and Miscellaneous Particulars.

greatest difficulty. The leaves have an austere, astringent, bitterish taste, and are stimulant, narcotic, and diaphoretic When taken, they first increase the arterial action and the heat of the body, producing diaphoresis, and these effects, according to Dr Home's observations, are followed by a proportional diminution of excitement, the pulse in one case having been reduced thirty-eight beats. It has not been much used in this country (*Thomson's London Dispensatory*, 477)

R. maximum grows on rocks and in barren soils, where it continues flowering great part of the year, and is very ornamental.

R ponticum grows in wet places in beech and alder coppices, on rocky mountains, but not on high alps.

Rhododendrons are commonly propagated by layers, but some sorts produce seeds, and seeds of others are obtained from America. The seeds "should be sown early in spring, in flat pans or pots of peat soil, and very thinly covered they may then be set in a close frame, or at the front of a hothouse, till they come up, watering them slightly when dry, as soon as they are high enough to be laid hold of, they must be pricked out in other pots, which should be placed in a shady situation, they may stand in a frame a few days till they have taken fresh root, but they must not remain long, or it will spoil them The small kinds may be propagated freely by cuttings, taken off in the young wood, and planted in sand, under a bell-glass." (*Bot. Cult* 815)

1015. *Epigæa*. From επι, upon, and γη, the earth The stem grows flat upon the ground, and throws out roots all the length of its branches A very pretty little American plant with delicate white flowers

1016 *Andromeda* Named in allusion to the virgin Andromeda, who, like this plant, was confined in a marsh, and surrounded by monsters of the waters. For an ingenious explanation of this application, see Linnæus's Flora Lapponica. The species are neat little plants, and some of them considerable shrubs and trees. They all require peat earth, and a moist situation; for those of them which do not grow naturally in bogs are mostly inhabitants of alpine regions, where the air is always more moist than on plains.

A. hypnoides has the appearance of a moss, spreads over great tracts of ground in the Lapland alps, and adorns them with its beautiful red flowers. The Andromeda is generally increased by layers, but may be also raised from seeds. "These must be very thinly covered, as they are small, and would rot if covered deep:

5944	polifólia *W.*	marsh	♃	or	1	my.s	Pk	.....	...	L	a.p	Eng. bot. 35
	α latifolia	*broad-leaved*	♃	or	1	my.s	Pk	N. Amer.	...	L	a.p	
	β média	*Wild Rosemary*	♃	or	1	my s	W	Britain tur bo.		L	s p	Eng bot. 713
	γ angustifólia	*narrow-leaved*	♃	or	1	my.s	Pk	N. Amer.	...	L	s p	P ro. 2. t. 70 f 13
	A. glaucophylla Lk.											
	δ subulàta	*awl-leaved*	♃	or	1	my s	Pk	.....	...	L	a.p	
§5945	japonica *W*	Japan	♃	or	3	...	W	Japan	1806	L	s p	Th jap t. 22
§5946	paniculàta *Ph*	panicled	♃	or	3	my jn	W	N Amer.	1748.	L	s p	Dend brit. 37
§5947	salicifólia *Wats*	willow-leaved	♃	or	4	jn	W	N Amer	...	L	s p	Dend brit 38
§5948	spicàta *Wats*	spiked	♃	or	2	jn	W	N Amer	...	L	s p	Dend brit. 36
5949	multiflóra *Wats.*	many-flowered	♃	or	2	jl	W	N Amer	...	L	s p	Dend. brit. 128
5950	crispa *Link*	curled	♃	or	3	...	W	N Amer	1824	L	s p	
§5951	frondósa *Ph.*	bristly-flowered	♃	or	3	my jn	W	N. Amer	1806	L	s p	
§5952	arbórea *W*	Sorrel-tree	♄	or	40	jl s	W	N Amer	1752.	S	s p	Bot. mag 905
§5953	racemósa *W*	branching	♃	ft	3	jl	W	N. Amer	1736.	S	s p	
§5954	Catesbæ'i *W*	Catesby's	♃	or	2	jn jl	W	N Amer	1793	Sk	s p	Bot. mag 1955
	A spinulosa Psh											
§5955	axillàris *W.*	axil-flowering	♃	or	1	my au	W	N Amer	1765	Sk	s p	Duhamel. 1. 39
	β longifólia	*long-leaved*	♃	or	1	my au	W	N Amer.	...	Sk	s p	Bot mag 2357
§5956	coriácea *W*	thick-leaved	♃	or	2	jn au	Pk	N. Amer.	1765.	L	s p	Bot mag 1095
	A nitida Psh											
	β rubra Lodd	*red-flowered*	♃	or	3	jn au	R	N Amer				Bot cab. 672
§5957	acuminàta *W*	acute-leaved	♃	or	3	au	W	N Amer.	1765.	L	s p	Ex bot 2 t. 89
	A lucida Jacq	*Pepe or stem-w*										
	A populifólia Lam											
	A reticulàta Walt											
	A laurina Mich											
§5958	floribúnda *Ph*	many-flowered	♃	or	3	my jn	W	N Amer	1812	L	s p	Bot. mag. 1566
§5959	calyculàta *Ph*	Box-leaved	♃	or	1½	f ap	W	N Amer	1748	L	s p	P ro 2 t 72 f 1
	α ventricósa	*globe-flowered*	♃	or	1½	f ap	W	Russia	1748	L	s p	Bot mag 1286
	β latifólia	*broad-leaved*	♃	or	1½	f ap	W	Newfoun	1748	L	s p	Bot cab 530
	γ nana	*dwarf*	♃	cu	½	f ap	W	... .		L	s p	Bot. cab. 862
5960	angustifólia *Ph*	narrow-leaved	♃	or	3	f ap	W	N Amer	1748	L	s p	
1017	ENKIAN'THUS *B M*	ENKIANTHUS.				*Ericeæ*	*Sp.* 1?					
5961	quinqueflóra *B M*	Canton	♃	el	3	f s	Pk	China	1812	C	s l p	Bot. mag. 1649
†1018	GAULTHE'RIA *W*	GAULTHERIA				*Ericeæ*	*Sp* 1—3					
5962	procúmbens *W*	trailing	♃	pr	½	jl s	W	N Amer.	1762.	Sk	s p	Bot rep. 116
†*1019	AR'BUTUS *W*	STRAWBERRY-TREE				*Ericeæ*	*Sp.* 8—15					
5963	Unédo *W.*	common	♃	or	10	s.d	W	Ireland	ir ro	S	co	Eng bot 2377
	β rúbra	*red-flowered*	♃	or	10	s d	Pk	.....	...	L	co	Bot. cab. 123
	γ plena	*double-flowered*	♃	or	5	s d	W G	.....	...	L	co	
	δ integrifólia	*entire-leaved*	♃	or	6	s d	Pk	.....	...	L	co	Bot. mag 2319
5964	canariénsis *Lam*	long-leaved		or	8	my jn	W G	Canaries	1796	L	co	Bot mag 1577
5965	Andráchne *W*	oriental	♃	or	6	mr ap	W G	Levant	1724	G	p l	Bot. reg 113
§3966	alpina *W*	black-berried	♃	or	½	ap my	W G	Scotland	sc mo	Sk	s p	Eng bot 2030
§5967	Uva-ur'si *W*	Bear-berry	♇	or	½	ap jn	F	Britain	al hea.	L	s p	Eng bot 714
5968	phillyreæfólia *P. S*	Phyllyrea-leav	♃	or	½	...	...	Peru	1812	C	s p	
5969	Andrachnoides *Link*	hybrid	♃	or	8	f my	W.G	.....	...	C	s p	Bot. reg 619
	A hybrida B R											
5970	serratifólia *Nois*	serrate	♃	or	6	f mr	W G	.....	...	L	a.p	Bot. cab 580



History, Use, Propagation, Culture,

when about an inch high they should be planted out thinly in other pots, where they will grow strong, and, when large enough, may be planted in the open ground Spring is the best time to plant them out, as the frost and worms are apt to throw them out of the ground in winter, if planted out in autumn. (*Bot. Cult* 278)

1017 *Enkianthus* From ἔγχυος, a pregnant woman, a name given to the plant by Loureiro, because the great colored buds appear as if pregnant with the flowers which afterwards appear This beautiful genus, as Sweet observes, has generally been considered difficult to propagate. the difficulty is now removed, as ripened cuttings root readily planted in pots of sand, and placed under a hand-glass, without bottom heat The best soil for it is an equal mixture of sandy loam and peat, and care must be taken not to overwater it when not in a growing state when it gets pretty large it is one of the most ornamental plants for the greenhouse or conservatory. (*Bot. Cult.* 186) There are several species confounded under the common name Enkianthus quinqueflora.

1018 *Gaultheria* Named after one Gaulthier, a French physician at Quebec A small evergreen plant, cultivated in the American border for the sake of its ornamental bright scarlet berries. The species may be increased by dividing at the root, by suckers, layers, or from seeds

1019 *Arbutus.* An ancient name of this plant, said to be traceable to the Celtic *ar bosse*, austere bush, in allusion to the roughness of the fruit. In like manner Unedo is said by Pliny to have been so called from *unum edo*, I eat one, because, being found disagreeable, no one could eat a second. *L'Arbousier*, Fr, *Landbeere*,

5944 Pedunc aggregate, Cor. ovate, Leaves alternate lanceolate revolute
α Leaves oblong
β Leaves lanceolate
γ Leaves linear-lanceolate

δ Leaves subulate
5945 Racemes 1-sided panicled terminal, Leaves lanceolate obovate acute serrulate at end
5946 Racemes terminal panicled, Cor roundish, Leaves ovate entire
5947 Raceme compound, Leaves lanceolate subserrulate hairy shining
5948 Spikes terminal 1-sided, Leaves membranous smooth oval-lanceolate serrulate acute
5949 Raceme compound terminal crowded, Leaves narrow lanceolate rough at edge pilose beneath
5950 Leaves lanceolate wavy beneath rusty scaly, Cor. campan finally of 5 petals, Anthers awned
5951 Hispid with pubescence, Leaves obov lanc acute serrul. Cor globose hispid, Anthers awned
5952 Panicles terminal, Cor pubescent, Leaves elliptical acuminate toothletted
5953 Racemes term simple bracted, Cor cylindrical, Leaves obl-lanceolate serrated
5954 Racemes terminal and axillary 1-sided, Cor. ventricose tubular, Leaves oblong lanc. finely serrated

5955 Racemes axillary simple, Cor oblong, Leaves ovate acute serrulate

5956 Racemes axillary simple, Leaves ovate entire shining, Branchlets 3-cornered

5957 Racemes axillary simple, Leaves ovate lanceolate acuminate serrate

5958 Quite smooth, Leaves obl. ovate acute finely serrulate, Racemes axillary and terminal clustered
5959 Peduncles solitary axillary 1-sided Bractes 2, Leaves oval scaly dotted obsoletely serrated
α Cor ventricose, Leaves obl lanceolate
β Cor obl cylindrical, Leaves oblong oval obtuse
γ Very dwarf
5960 Pedunc solitary axillary, Bractes 2, Leaves narrow oblong lanceolate, Corolla oblong oval

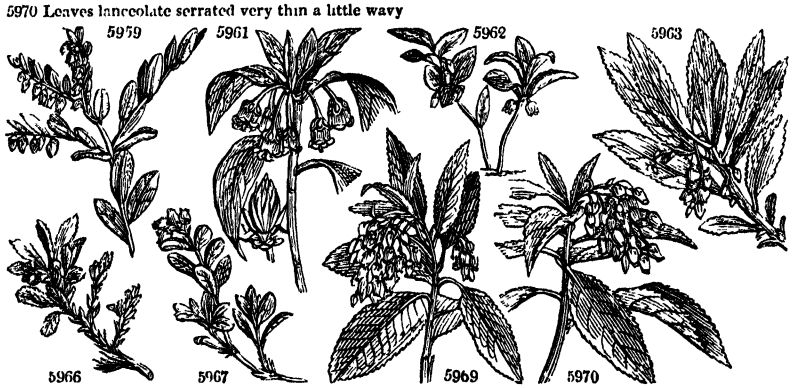
5961 The only species

5962 Leaves oblong obovate mucronate toothed crowded, Stem procumbent

5963 Stem arborescent, Leaves oblong lanceolate, Panicles smooth nodding, Berries many-seeded

5964 Leaves oblong-lanceolate serrated, Panicles vertical hispid glutinous
5965 Stem arborescent, Leaves ovate entire or serrated, Pan pubescent erect, Berries many-seeded
5966 Stems procumbent, Leaves rugose serrated
5967 Stems procumbent, Leaves entire
5968 Stem much branched, Leaves lanceolate acuminate acutely serrate, Flowers axillary
5969 Bark deciduous, Ovary smooth. The same as next?

5970 Leaves lanceolate serrated very thin a little wavy



and Miscellaneous Particulars

Ger, and *Arbuto*, Ital This genus includes one of the most elegant of hardy shrubs, the A. unedo This evergreen is peculiarly beautiful in October and November, covered at once with blossoms and ripe fruits It is a native of the south of Europe, and is found also near Killarney in Ireland, where it has probably been brought from Spain or Italy at an early period by the priests. It grows there on limestone rocks, in greater luxuriance than it is often to be met with in the woods of Italy. in both countries the fruit is eaten, and in Spain both a sugar and spirit is extracted from it.

A uva ursi, *La Busserole*, Fr, *Barrenbeere*, Ger, and *Uva d'orzo*, Ital., is abundant in many parts of the continent, especially the alpine regions It dyes an ash color, tans leather, the berries are food for grouse and other game, and the leaves are used in medicine The fresh leaves are inodorous, and have a slightly bitter astringent taste, leaving a sweet sensation in the mouth. When properly dried and powdered, they acquire an odour similar to that of hyson tea, but the taste remains the same, the degree of bitterness only being increased (*Thomson's London Dispensatory*, 163)

It is used sometimes in calculous complaints and ulcerations of the urinary organs

The dwarf species of this genus and those of Rhododendron and Andromeda, are very fit plants for rock work. A alpina thrives best in peat kept moist and shaded. All the species may be increased by seeds, or by budding and inarching on each other: the dwarf kinds root readily by layers.

The Uva ursi has been brought into notice in modern times as an efficient remedy in nephritic and even in calculous cases European practitioners have doubted its powers, but it has found many supporters of respec-

1020. CLE'THRA. *W.*	CLETHRA.					*Ericeæ*	*Sp* 6—8.						
5971 alnifólia *Ph*	Alder-leaved		or	4	au o	W	N. Amer. 1731.	L	s.p	Lam ill. t. 369			
5972 tomentósa *Ph.*	woolly-leaved		or	4	au o	W	N. Amer. 1731	L	s p	Dend. brit. 39			
5973 scábra *Ph*	rough-leaved		or	4	au o	W	Georgia 1806.	L	s.p				
5974 paniculáta *W*	panicled		or	4	au o	W	N Amer. 1770.	L	s p				
5975 acumináta *Ph*	acute-leaved		or	4	au o	W	Carolina 1806.	L	s.p	Bot. cab. 1427			
5976 arbórea *W.*	tree		or	8	au.o	W	Madeira 1784.	C	p l	Bot. mag. 1057			
β minor	*dwarf*		or	2	au.o	W	Madeira ...	C	p.l				
1021 MYLOCA'RYUM *W en*	BUCKWHEAT-TREE					*Ericeæ. Sp* 1							
5977 ligustrinum *Ph*	Privet-like		or	8	my jn	W	Georgia ...	L	p.l	Bot. mag. 1625			
1022 PY'ROLA *W.*	WINTER-GREEN					*Ericeæ*	*Sp* 6—10						
5978 rotundifólia *W.*	round-leaved	△	cu	½	jn jl	W	Britain woods.	C	s p	Eng bot. 213			
5979 média *E B*	intermediate	△	cu	½	jn jl	W	England woods	C	s p	Eng bot. 1945			
5980 minor *W*	lesser	△	cu	½	jn jl	R	Britain moi. w.	C	s p	Eng bot. 158			
5981 secunda *W*	serrated	△	cu	½	jn jl	W	Britain moi. w.	C	s p	Eng bot. 517			
5982 rósea *E B*	rose-colored	△	cu	½	jl.au	Pk	England woods	C	s p	Eng bot. 2543			
5983 unifióra *W*	single-flowered	△	cu	½	jn jl	W	Britain al. wo.	C	s.p	Eng bot. 146			
1023 CHIMA'PHILA *Ph*	CHIMAPHILA					*Ericeæ. Sp* 2							
5984 maculáta *Ph*	spotted-leaved	△	pr	½	jn	W	N Amer 1752	Sk	s.p	Bot. mag. 897			
5985 corymbósa *Ph*	corymb-flower	△	pr	½	jn	Pk	N Amer 1752	Sk	s p	Bot. mag. 778			
Pyrola umbellata B M													
1024 INOCAR'PUS. *W.*	OTAHEITE-CHESTNUT					*Sapoteæ Sp* 1							
5986 édulis *W*	eatable		fr	20	...	W	South S Is 1793	C	l p	Lam ill. t. 362			
1025 STY'RAX *W*	STORAX.					*Ebenaceæ.*	*Sp* 4—6						
5987 officinále *W*	officinal		or	12	jl	W	Italy 1597	L	s l	Bot. rep 631			
5988 grandifolium *W*	great-leaved		or	6	jl	W	N Amer 1765	L	s l	Dend brit 129			
5989 pulveruléntum *Ph*	powdery		or	4	jn jl	W	N Amer 1794	L	s.l	Dend. brit. 41			
5990 lævigátum *W*	smooth		or	4	jl au	W	N Amer 1765	L	s l	Dend brit. 40			
S glábrum Cav													
†1026. JUSSIÆ'A *W*	JUSSIÆA					*Onagrariæ*	*Sp* 5—34						
5991 grandifióra *W*	great- owered	△	or	1½	jl o	Y	Carolina 1812.	C	s p				
5992 suffruticósa *W*	tall	△	or	1½	au s	Y	India 1808	C	s p	Bot. rep. 621			
5993 octoválvis *P S*	spear-leaved	◯	or	2	jl.s	Y	S Amer ...	C	s p				
5994 erécta *W*	upright	◯	or	3	jl s	Y	S Amer 1739	C	s p	Pl ic t 175 f 2			
5995 scábra *W en*	rough	△	or	4	jl s	Y	S. Amer 1816	C	s p				
1027 GETO'NIA *Roxb*	GETONIA					*Combretaceæ*	*Sp* 1—2						
5996 floribúnda *Roxb*	many-flowered		or	6	...	Ap	E. Indies 1815.	C	l.p	Rox cor t 87			



History, Use, Propagation, Culture,

tability in North America The late professor Barton found the plant of much service in his own case of nephritic paroxysms alternating with gout in the feet It has also been recommended as a remedy in pulmonary complaints (See *Bigelow's Med Botany*)

1020 *Clethra* Κληθρα was the name given by the Greeks to the Alder, to which, in its leaves, this bears some resemblance Pretty upright North American plants, with white flowers One species is a native of Madeira

1021 *Mylocaryum* From μυλη, a mill, and καρυα, a kernel or stone, the four wings of the nut may be easily likened to the four sails of a small mill. A North American plant, with the habit of Andromeda, or rather of Clethra

1022 *Pyrola* A diminution of Pyrus, to which, in the leaves, this is thought to be similar A genus of elegant little plants, mostly evergreens They grow naturally in the shade, and in rocky or very poor soils, in the garden on sand or gravel shaded, and they are increased by seeds or young cuttings, planted under a hand-glass All the species are powerfully astringent and tonic, and one or more of the American sorts is said to constitute the chief ingredient in the scorbutic draughts of Whitlaw

P uniflora, Sir J E Smith says is one of the most curious and elegant of British flowers

1023 *Chimaphila* From χειμα, winter, and φιλεω, to love, a sort of translation of the English name winter-green The species may be treated as Pyrola, which they much resemble

1024 *Inocarpus* From ις ινος, fibre, and καρπος, fruit The envelope of the nut is composed of tough interwoven fibres. It is a lofty tree, with alternate subcordate leaves, and flowers in racemes succeeded by by nuts called *Ratta* in Otaheite The kernel of these, which is kidney-shaped, and about an inch in diameter, is eaten roasted by the inhabitants of the Society and Friendly Isles, the New Hebrides, New Guinea, the Molucca isles, &c It is sweetish, but less pleasant than the chesnut, harder and less farinaceous. The bark is astringent, and is used in the dysentery In New Guinea they smear the heads of their arrows with the expressed resinous juice (*Forst Escul*)

1025 *Styrax* A name altered by the Latins from the Arabic *asathirak* Pliny says, that the Arabs in his time used the resin to flavor the perfumes of which they are so fond S officinale is a low tree with slender branches, ovate leaves, flowers in racemes from the sides of the branches, succeeded by ovate globular juiceless drupes, containing one or two angular nuts. From this tree storax is obtained in Asiatic Turkey It issues from incisions made in the bark, and as it was formerly the custom to collect and export it in reeds, it was named Styrax calamita. It has a fragrant odour, and a pleasant subacidulous, slightly pungent, and

5971 Leaves obovate serrate beneath pubescent, Raceme simple bracted
5972 Leaves cuneate obovate acute upwards finely serrated beneath white with down
5973 Leaves broad cuneate obovate acute coarsely serrated rough on each side
5974 Leaves lanceolate obovate serrated smooth, Panicle narrow bracted
5975 Leaves oval acuminate smooth on each side glaucous beneath, Racemes white with down
5976 Leaves oblong acuminate serrated smooth, Racemes panicled, Peduncles hairy

5977 Leaves cuneate lanceolate acute, Racemes spiked terminal

5978 Stamens ascending, Style declinate, Raceme many-flowered
5979 Stamens straight, Style declinate long, Peduncle twisted, Raceme many-flowered
5980 Stamens and styles straight, Flowers racemose spreading
5981 Raceme 1-sided
5982 Stamens and styles straight, Flowers racemose closed, Petals rounded obtuse, Peduncle straight
5983 Peduncle 1-flowered

5984 Peduncles 2-flowered
5985 Peduncles umbelled

5986 The only species

5987 Leaves ovate beneath villous, Racemes simple shorter than the leaf
5988 Leaves obovate villous beneath, Lower peduncles axillary solitary 1-flowered
5989 Leaves subsessile oval or obovate beneath powdery, Fl axill. and term in threes on short stalks
5990 Leaves oblong smooth on each side, Peduncles axillary 1-flowered solitary or twin

5991 Root creeping, Stems erect with peduncles and calyxes villous, Lower leaves spatulate upper lanceolate
5992 Erect villous, Flowers tetrapetalous octandrous stalked
5993 Erect, Flowers tetrapetalous octandrous stalked, Caps many-valved, Leaves lanceolate
5994 Erect smooth, Flowers tetrapetalous octandrous sessile
5995 Flowers tetrapetalous octandrous, Stem erect angul. hairy, Leaves oblong hairy

5996 Leaves opposite ovate, Flowers panicled, Bractes lanceolate



aromatic taste, is stimulant, and in some degree expectorant It was formerly much prescribed in asthma, catarrh, phthisis, and menstrual obstructions, but it is now scarcely ever employed, except as an adjunct on account of its fragrance.

Benzoin is obtained from the S. Benzoin, by wounding the bark near the origin of the lower branches The tree is never wounded under six years of age, and cannot sustain these annual incisions above twelve years (*Thomson's London Dispensatory*, 525)

As shrubs this genus affords some plants that may be considered pretty and desirable, on account of their small size and free flowering They grow best in sandy loam, are commonly propagated by layers, and may also be increased by seeds, which they occasionally ripen

1026 *Jussiæa* An obscure and most uninteresting genus of plants, selected, not very happily, to commemorate the family of the Jussieus, which has for more than a century and a half been at the head of botanical science Antoine de Jussieu, born in 1686, and died in 1758, was professor of botany at the Jardin du Roi, and member of the academy of sciences He published various papers upon exotic plants, and a discourse upon the progress of botany He also edited the works of Barrelier. Bernard de Jussieu, his brother, born in 1698, died in 1777, was professor at the same garden, and member of the same academy He also was author of various papers upon plants, a second edition of Tournefort's History of the Plants growing near Paris, and an arrangement of the plants growing in the garden of Trianon, which was published by his nephew Joseph de Jussieu, a third brother, born in 1704, and died 1779 He was sent to South America by Louis XV, and remained there for six and thirty years He made many discoveries, and brought home many new plants Lastly, Antoine Laurent de Jussieu, their nephew, born in 1748, and still living, as demonstrator of botany at the Jardin du Roi, member of the Institute and of every learned body in Europe He brought, in his Genera Plantarum, published in 1789, to a degree of extraordinary perfection, that system, the outlines of which had been traced by the hand of Tournefort, and partially filled up by his uncle Bernard. That system has now superseded, among men of science, all others, and if as yet inapplicable to merely popular purposes, can never be dispensed with in all philosophical investigations.

1027 *Getonia* A Malabar plant, the meaning of whose name has not been explained. Cuttings root freely in sand, under a hand-glass, and plunged in heat.

1028. QUISQUA'LIS. *W.*	QUISQUALIS					*Combretaceæ.* *Sp* 1—4.								
5997 Indica *W*	Indian			or	20	my au	O R	E. Indies	1815.	C	l p	Bot. mag 2033		
5998 pubéscens *Burm.*	pubescent			or	20	...	O R	E. Indies	1815.	C	l p	Bur. ind. t. 35 f 2		
†*1029. MELAS'TOMA. *W.*	MELASTOMA					*Melastomaceæ* *Sp* 23—196								
5999 áspera *W.*	rough			or	6	au n	P	E. Indies	1815.	C	l p	Bur. zeyl. t. 72		
6000 velutina *W*	velvetty-leaved			or	8	jl o	Pu	W. Indies	1815.	C	l p			
§6001 trinérvia *W.*	three-nerved			or	8	jl	Pu	Jamaica	1793.	C	s p			
6002 octándra *W*	octandrous			or	3	...	W	Ceylon	1815	C	l p			
§6003 tetrándra *W*	tetrandrous			or	2	...	...	Jamaica	1815.	C	l p			
§6004 hirta *W*	hairy			or	6	s d	Pu	Jamaica	1740.	C	s p	Pl al. t. 264 f 1		
§6005 Acinodéndron *W.*	oval-leaved			or	6	...	Pu	Jamaica	1804.	C	l p	Plu. ic. 142. f 2		
6006 cymósa *W.*	cyme-flowered			or	2	ap au	Pu	S Amer.	1792.	C	l p			
§6007 rúbra *W*	red			or	6	my jn	Pu	Guiana	1793.	C	s p	Au gui 1. t. 161		
§6008 purpúrea *W*	purple			or	8	...	Pu	Guiana	1804.	C	l p	Au. gui. 1. t. 154		
6009 grössa *W*	large-leaved			or	12	...	...	S Amer	...	C	l p			
6010 malabáthrica *W*	bristly			or	6	jn au	Pu	E. Indies	1793	C	s p	Bot. mag 529		
6011 corymbósa *H K*	corymb-flower			or	2	mr o	Pk	S Leone	1792.	C	s p	Bot. mag 904		
6012 ecostáta *H K.*	ribless			or	4	my jn	Pu	Jamaica	1793	C	s p			
§6013 Tamonéa *Aubl* *Fothergilla* Hort.	Fothergill's			or	20	...	Pu	S Amer	1815.	C	s.p	Au. gui. 1. t. 175		
§6014 álbicans *Swz*	white-leaved			or	6	...	Pu	Jamaica	1815	C	s.p			
§6015 lævigáta *W*	smooth			cu	6	...	W G	S Amer.	1815	C	s.p	Bot. reg 663		
§6016 discolor *W*	two-colored			or	15	...	Pu	W Indies	1793	C	s.p	Plu ic t 42. f 1		
6017 nepalénsis *Lodd*	Nepal			or	2	au	Pu	Nepal	1820	C	p l	Bot. cab 707		
§6018 heteromálla *Don*	Brazil			or	6	ja d	Pu	Brazil	1819	C	p l	Bot. reg 644		
§6019 granulósa *Lam*	Commerson's			or	10	au.s	Pu	Brazil	1819	C	p l	Bot. reg 671		
6020 osbeckioides *Sims*	osbeckia-like			pr	2	s.o	Pu	Mauritius	1817.	C	p l	Bot mag 2235		
6021 sanguínea *Sims*	bloody			or	6	s o	Pk	China	1818	C	p l	Bot mag. 2241		
*1030 PETALO'MA *W*	PETALOMA					*Melastomaceæ* *Sp* 1—2								
6022 myrtilloides *Swz.*	Bilberry-like			or	10	...	W Y	W Indies	1823	C	p l	Sl. hist. t 187 f 3		
1031 ACISANTHE'RA. *J*	ACISANTHERA					*Salicariæ* *Sp* 1.								
6023 quadráta *P S*	four-sided			cu	3	...	...	Jamaica	1804	C	p l	Br jam t 22. f 1		
1032 DA'IS *W*	DAIS					*Thymelææ* *Sp* 1—7								
6024 cotinifólia *W*	Cotinus-leaved			or	10	jn jl	W.G	C. G. H.	1776.	R	s l	Bot. mag. 147		
1033. BUCI'DA *W*	OLIVE-BARK-TREE					*Santalaceæ.* *Sp* 1—2.								
6025 Búceras *W*	Jamaica			cc	25	au s	Y w	Jamaica	1793	C	l.p	Lam ill t 356		
†1034 SAMY'DA *W*	SAMYDA					*Samydeæ.* *Sp* 4—12								
6026 nítida *W.*	glossy			un	7	...	W G	W Indies	1793	C	l p	Br jam t. 23. f 3		
6027 pubéscens *W*	pubescent			un	4	my au	...	W Indies	1793	C	l p	Jac. amer 132		
6028 serrulata *W.*	Elm-leaved			pr	3	jl	W	W Indies	1723	C	s p	Ja. co 2 t 17 f 1		
6029 rósea *H K.*	rose-colored			pr	4	jn jl	Pk	W Indies	1793	C	s p	Bot mag 550		

DIGYNIA.

1035 ROYE'NA *W*	ROYENA					*Ebenaceæ* *Sp* 9—15						
6030 lúcida *W*	shining-leaved			cu	4	my jn	W	C G H	1690	C	p l	La ill t. 370 f 1
6031 villósa *W*	heart-leaved			cu	6	jn jl	W	C G H	1774	C	p l	
6032 pállens *W.*	pale			cu	4	jn jl	W	C G H	1789	C	p l	
6033 glábra *W*	Myrtle-leaved			cu	4	s	W	C G H	1731	C	l p	Com hor 1 t 65
6034 pubéscens *W en*	pubescent			cu	4	jl au	W G	C G H	1752.	C	l p	Bot reg. 500
6035 hirsuta *W. en*	hairy-leaved			cu	7	jl au	W	C G H	1752	C	p l	La ill t 370 f 2
6036 angustifólia *W.*	Willow-leaved			cu	4	jn jl	W	C G H	1789	C	p l	
6037 ambigua *Vent*	obovate-leaved			cu	6	jn jl	W	C G H	1815	C	p l	Vent. mal. t. 17
6038 polyándra *W*	oval-leaved			cu	6	...	W	C G H	1774	C	p l	



History, Use, Propagation, Culture,

1028. *Quisqualis* A Latin word, expressive of uncertainty It was given by Rumphius to a tree of Amboyna, because it was subject to variation It is a fine climbing genus of easy culture The best soil for the species is a mixture of loam and peat, and cuttings root freely in sand, under a hand-glass. (*Bot. Cult* 100)

1029 *Melastoma* From μελας, black, and στομα, mouth Many of the species produce black berries similar to gooseberries, and which stain the mouth black This is a very numerous genus of shrubs and low trees, the species display great unity of character, and may be considered ornamental They require but little water in winter, and are easily increased in sand, plunged in a moist heat

1030. *Petaloma.* From πεταλον, a petal, and λωμα, an edge Flowers of which the petals are inserted on the edge of the calyx A small plant with the leaves, but not flowers, of Melastoma

1031. *Acisanthera.* From ακις, a point, the anthers being pointed. Plants with the habit of Melastoma.

5997 Leaves ovate
5998 Leaves subcordate pubescent

5999 Leaves ovate-lanc. entire 3-nerved rough, Fl terminal subcorymbose
6000 Leaves 3 nerved entire sessile ovate acute villous silky, Racemes brachiate, Stems square
6001 Leaves 3-nerved without a marginal one entire smooth on each side thin, Racemes term Fls sessile
6002 Leaves entire 3-nerved ovate-lanc smooth, Margin and nerves hispid beneath, Fl terminal
6003 Leaves entire 3-nerved oblong emarginate at base, Raceme erect term. Fl. tetrandrous
6004 Leaves toothletted 5-nerved ovate-lanceolate, Stem hispid
6005 Leaves ovate acuminate toothletted 5-nerved, Cymes axillary
6006 Leaves cordate acumin 5-nerved serrulate pubescent, Cymes terminal, Sepals roundish, Stamens 5 sterile
6007 Leaves cordate subcrenate beneath rusty with down, Flowers axillary and lateral solitary sessile
6008 Leaves ovate lanceolate acuminate 5-nerved pilose somewhat toothletted, Branches bifid, Panic term
6009 Leaves entire 5-nerved subcordate scabrous, Cor little hairy outside
6010 Leaves entire 5-nerved lanceolate ovate rough
6011 Leaves 7-nerved ovate subcordate acuminate ciliated with teeth, Corymb terminal, Flowers 1-sided
6012 Leaves 3-nerved without ribs ovate-lanceol. acuminate toothletted, Corymbs term trichotomous powdery
6013 Leaves 5-nerved obl lanceol. acute entire hoary beneath, Pedunc. umbelled, Bractes double

6014 Leaves 5-nerved entire ovate acute smooth above beneath hoary, Flowers clustered sessile
6015 Leaves entire 5-nerved ovate-oblong smoothish acuminate smooth at edge
6016 Leaves 5-nerved nearly entire oblong acuminate smooth beneath yellowish, Racemes cymose
6017 Leaves lanceolate ciliated 3-nerved obtuse at base, Stems square, Flowers terminal solitary
6018 Leaves cordate oval entire stalked beneath woolly, Petals obcordate, Petals bowed at base
6019 Branches winged, Leaves oval-lanceol with a long point, Petals obovate pointed, Filam. woolly above
6020 Leaves oblong elliptical 3-nerved ciliated, Calyx setose at end
6021 Stamens 12, Leaves ovate-lanceolate 5-nerved, Stems and globose ovaries very hispid

6022 Peduncles solitary 1-flowered

6023 Leaves 3-nerved ovate crenate opposite

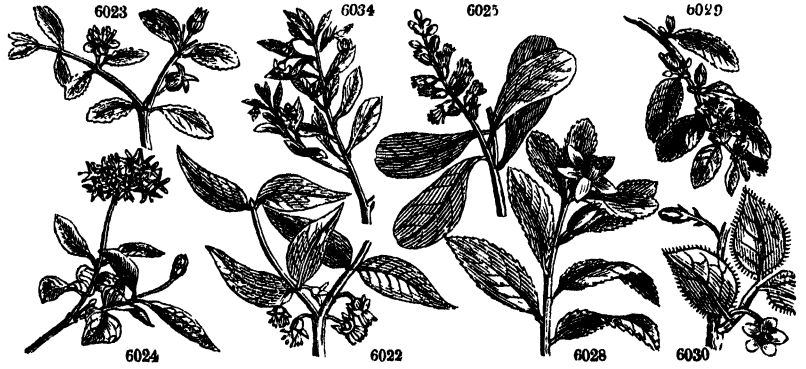
6024 Leaves obovate obtuse, Flowers 5-cleft decandrous

6025 Spikes elongated, Leaves wedge-shaped smooth

6026 Flowers octandrous, Leaves cordate smooth
6027 Flowers dodecandrous, Leaves ovate downy beneath
6028 Flowers 12-androus, Leaves ovate oblong serrulate
6029 Flowers 12-androus clustered, Leaves oblong obtuse serrated pubescent on each side

DIGYNIA.

6030 Leaves ovate roughish
6031 Leaves cordate oblong downy beneath
6032 Leaves oblong obovate obtuse smooth
6033 Leaves lanceolate smooth
6034 Leaves obovate lanceolate pubescent
6035 Leaves oblong lanceolate very villous
6036 Leaves lanceolate acute hairy beneath
6037 Leaves obovate villous coriaceous, Fl stalked polyandrous polygynous
6038 Leaves elliptical, Flowers polyandrous polygynous



and Miscellaneous Particulars.

1032 *Dasi* A name of unknown application The plant resembles in its leaves the Rhus cotinus, whence its specific name. It may be increased by cuttings of the roots placed in a warm situation

1033 *Lucida.* From *βους*, an ox The form of the fruit when ripe resembles the horn of such an animal This tree grows in Jamaica in low swampy lands near the coast; it is remarkable for its slender crooked branches, and the tufted disposition of the leaves. it grows to a considerable size, is reckened an excellent timber tree, and the bark is greatly esteemed by the tanners.

Well ripened cuttings root in sand, plunged in heat, and covered

1034. *Samyda.* *Σαμυδα* is the Greek name of the birch, to which this genus may be likened in its leaves The species are rather tardy in growth, but not difficult to root in sand under a hand-glass

1035. *Royena.* So named by Linnæus, in honor of Adrian Van Royen, who with his son David were successively professors of botany at Leyden It consists of shrubs of little beauty, which are increased by ripened cuttings in sand under a hand glass They are chiefly natives of the Cape of Good Hope

1036. TRIAN'THEMA. *W.* TRIANTHEMA.					*Portulaceæ*	*Sp* 2—12.							
6039 monógyna *W.*	Purslane-leav.	☆	▢	w	2	jl au	G	Jamaica	1710.	S	co	Plant. grass. 10
6040 decándra *W*	trailing	☆	▢	w	1½	jl au	G	India	1762.	S	co	Bur. in. t. 31. f.
†1037 SCLERAN'THUS. *W.* KNAWEL.					*Portulaceæ*	*Sp* 2—3.							
6041 ánnuus *W*	annual		○	w	½	jl au	G	Britain	sa. fl.	S	co	Eng. bot. 351
6042 perénnis *W.*	perennial		△	w	½	au.s	G	Britain	sa.hea.	D	co	Eng. bot. 352
1038 CUNO'NIA. *W.* CUNONIA					*Cunoniaceæ*	*Sp* 1—2?							
6043 capénsis *W.*	Cape	♀	⌊⌋		20	au	W	C. G. H.	1816	C	co	Bot. reg. 828
†1039 HYDRAN'GEA *W* HYDRANGEA					*Saxifrageæ?*	*Sp* 5.							
6044 arboréscens *W*	shrubby			or	6	jl au	W a	Virginia	1736.	L	p l	Bot mag 437
6045 cordáta *Ph*	heart-leaved			or	8	jl au	W a	Carolina	1806.	L	p l	Dend. brit 42
6046 nívea *Ph. radiata* W	white-leaved			or	5	jl au	W a	Carolina	1786.	L	p l	Dend. brit. 43
6047 quercifólia *W.*	Oak-leaved			or	4	jn s	W a	Florida	1803	C	p l	Bot. mag 975
6048 horténsis *W*	changeable			or	3	ap s	Pk	China	1788	C	p l	Bot mag 438
1040 CHRYSOSPLE'NIUM *W* GOLDEN SAXIFRAGE.					*Saxifrageæ.*	*Sp* 2.							
6049 alternifólium *W*	alternate-leav		△	cu	¼	ap my	Y	Britain	w sh.p	D	m l	Eng bot. 54
6050 oppositifólium *W.*	opposite-leaved		△	cu	¼	ap my	Y	Britain	w.sh.p.	D	m.l	Eng. bot. 490
*1041 SAXI'FRAGA. *W* SAXIFRAGE					*Saxifrageæ*	*Sp* 56—70.							
6051 higuláta *Wall*	hgulate	♀	⌊⌋	or	1	ap jn	W	Nepal	1821.	D	p l	Bot cab. 747
6052 crassifólia *W*	thick-leaved	♀	△	or	1	mr my	P	Siberia	1765	D	s l	Bot. mag 196
6053 cordifólia *M n.*	heart-leaved	♀	△	or	1	mr my	P	Siberia	1779	D	s l	
6054 Cotylédon *W.*	pyramidal	♀	△	or	2	my jl	W a	Al of Eur	1596.	D	s l	Fl. dan 241
6055 récta *P S*	straight-leaved	♀	△	or	1	my jl	W a	Al of Eur.	...	D	s l	Pl ph t. 221. f 1
6056 Aizóon *P S*	large-margined	♀	△	or	1	my jl	W.a	Al of Eur	1731	D	s l	Jac aus 5 t. 438
6057 intácta *W en*	small-margined	♀	△	or	1	my jl	W a	Tyrol	...	D	s l	Hort ber 2. t.75
6058 mutáta *W en*	Saffron-colored	♀	△	or	½	jn jl	L.Y	Switzerl	1779	D	s l	Bot. mag 351
6059 pensylvánica *W.*	Pensylvanian	♀	△	or	2	my jn	G.y	N Amer	1732	D	s l	Di. el t.253 f.328
6060 hieraciifólia *W*	Hawkweed-lvd	♀	△	or	2	my jn	W a	Hungary	1789	D	s.l	Pl rar. h 1 t.18
6061 erósa *Ph*	jagged-leaved	♀	△	or	1	my jn	Y a	N Amer.	1812	D	s l	
6062 punctáta *W*	dotted-flowered	♀	△	or	1	my jn	W	Siberia	1699	D	s l	Mo h 3 t. 9 f 17
6063 umbrósa *W.*	London-pride	♀	△	or	1	ap jn	F	Britain	mount	D	s l	Eng bot. 663
6064 hirsúta *W*	hirsute	♀	△	or	1	my jn	F	Ireland	ir mou	D	s l	Eng bot. 2322
6065 Géum *W*	kidney-leaved	♀	△	or	1	jn jl	W	Ireland	ir mou.	D	s l	Eng bot. 1561
6066 cuneifólia *W*	wedge-leaved	♀	△	or	½	my jn	W a	Switzerl	1768	D	s l	Pl rar h 1 t. 44
6067 leucánthemifólia *Ph*	Stock-leaved	♀	△	or	½	jn	W	N Amer.	1812.	D	s l	Bot. mag 2959
6068 sarmentósa *W*	Chinese	♀	△	or	2	jn jl	W.R	China	1771	D	s.l	Bot. mag 92
6069 cuscutifórmis *I odd*	Dodder-like	♀	△	pr	½	jn jl	W	China	1815	D	s l	Bot. cab 186
6070 virginiénsis *Ph*	Virginian	♀	△	or	½	my jl	W	N Amer	1790	D	s.l	Bot. mag. 1664
6071 congésta *Sweet niváta* Ph.	close-flowered	♀	△	or	½	my jl	W	N Amer	1812	D	s l	



History, Use, Propagation, Culture,

1036 *Trianthema* From τρεις, three, and ανθος, flower, the flowers growing by threes in the axillæ of the leaves. The species are weeds in their native countries, and of little interest here

1037 *Scleranthus* From σκληρος, hard, and ανθος, a flower, when in seed the envelopes of the flower appear very much indurated S annuus is common throughout Europe and Siberia on a sandy soil. It flowers about the middle of summer, and sows its seeds very abundantly in autumn, which produce a crop of young plants that generally survive the winter, or, if destroyed, are replaced by another crop arising from those seeds that happen not to vegetate till spring (*Eng Bot*) The Swedes and Germans receive the vapour arising from a decoction of it into their mouths, to cure the tooth-ache (*Withering*)

S. perennis in several parts of Europe has its roots attacked by the insect Coccus Polonicus, *Lin.* which yields a fine crimson dye, and is said likewise to live on S. annuus and some Potentillæ Sir J. Smith has "never been able to find this insect on these plants in England" (*Flora Brit* ii 283)

These two species are occasionally found in abundance upon barren heathy wastes

1038. *Cunonia.* In memory of John Christian Cuno, of Amsterdam, who described his own garden in Dutch verse in 1750. This is a handsome tree, with fine shining green foliage, contrasted by numerous dense elongated branches of small milk-white flowers, and twigs of a red color having the habit of a tropical rather than of a Cape plant Its colonial name is *Rood Elze* (red alder), although the tree has not in any point of view the least resemblance to the alder of Europe.

1039 *Hydrangea.* From ὑδωρ, water, and αγγειον, a vessel The common garden species, H. hortensis, is quite a marsh plant, and to be managed well should have a very copious supply of water in summer A large plant will consume ten or twelve gallons daily, in warm weather

H quercifolia is an elegant plant when in leaf, but as it is barely within the limits of ligneous plants, it dies down to the ground on the approach of frost. H. hortensis is much valued on account of the great profusion of its very elegant flowers, which are monstrous in the same manner as the Viburnum opulus. It has never

6039 Flowers pentandrous monogynous
6040 Flowers about decandrous digynous

6041 Calyx of fruit spreading
6042 Calyx of fruit closed

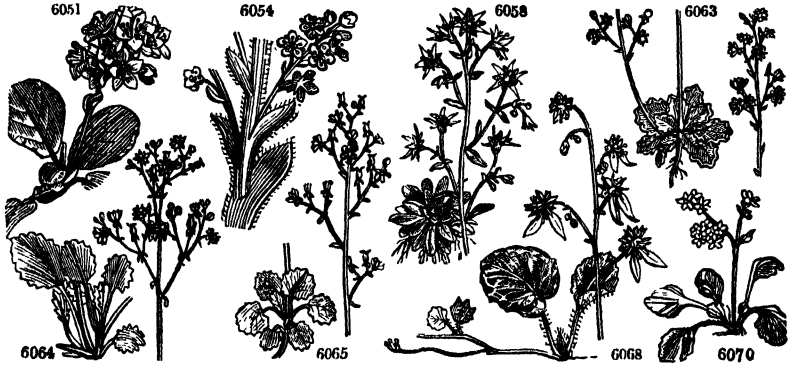
6043 The only certain species

6044 Cymes naked, Leaves oblong ovate acuminate toothed smooth
6045 Cymes radiate, Leaves cordate toothed
6046 Leaves ovate acuminate toothed beneath white with down, Serratures mucronate

6047 Cymes radiate, Leaves oblong sinuate-lobed toothed
6048 Cymes radiate, Leaves elliptical narrowed at each end toothed smooth

6049 Leaves alternate
6050 Leaves opposite roundish hairy, Stems decumbent

6051 Leaves orbiculate or oval stalked pimpled ciliate cordate at base, Petals round, Sepals mucronate
6052 Leaves oval retuse obsolctely serrated stalked, Stem naked, Panicle bearded
6053 Leaves cordate orbicular serrated stalked, Panicle headed
6054 Leaves radical ligulate with cartilaginous teeth, Stem panicled leafy, Cal. hairy with glands
6055 Radical leaves rosed straight glaucous supine crenate, Panicle simple
6056 Leaves radical lingulate with cartilag teeth, Stem simple racemose leafy, Cal. smooth
6057 Radical leaves aggreg lanc. obov with cartilaginous teeth, Stem leafy clammy, Calyxes glandular
6058 Leaves rad. lingulate with a cartilaginous repand edge, Stem racemose leafy, Cal with gland hairs
6059 Leaves obl. lanc hairy toothletted, Stem naked, Peduncles alternate in corymbose heads
6060 Leaves obl. lanc. smooth repand toothed, Stem naked, Peduncles 1-flowered aggregate
6061 Smoothish, Leaves oblong-lanc acute eroded, Stem naked, Panicle oblong
6062 Leaves roundish toothed with long stalks, Stem naked
6063 Leaves obovate retuse with cartilaginous crenæ, Stem naked panicled
6064 Leaves cordate oval retuse with cartilaginous crenæ, Stem naked panicled
6065 Leaves reniform toothed, Stem naked panicled
6066 Leaves cuneiform very obtuse repand, Stem naked panicled
6067 Very hairy, Lvs elongate spatulate acutely toothed, Stems divaricate dichotomous, Panic. capillary lax
6068 Leaves roundish toothed hairy, Runners creeping, Two petals long
6069 Leaves rhomboid-toothed variegated hairy, Runners very weak, Petals nearly equal
6070 Leaves cuneate obovate somewhat toothed shorter than stalk, Stem panicled
6071 Leaves roundish cuneate crenate in front, Stem naked simple, Flowers clustered racemose



and Miscellaneous Particulars

been found in a wild state, but is extensively cultivated in the gardens of China and Japan, from whence it was introduced to Kew by Sir Joseph Banks The flowers are almost always barren; they are naturally of a rose color, but under certain circumstances of culture they become blue. The yellow loam of Hampstead Heath and some other places, and some sorts of peat earth are found to produce this effect, but the cause is not yet ascertained. Dr Daalen, of Antwerp, finds that turf-ashes, and, still more effectually, those of the Norway spruce, the wood generally used as fuel by him, applied to the roots of Hydrangea, produced the blue color of the petals (*Neil's Hort Journ* 122.) According to Busch, of Petersburgh, "the hydrangea will be turned blue by watering the young plant, the summer before, with alum water Our grey colored earth, under the black moor-earth, has the same effect, being combined with aluminous salt." (*Hort. Trans* vol iv. 568.) Sweet recommends a bed of peat, and says, the longer it remains there the bluer will be the flowers

The hydrangea, to flower freely, must not be allowed more than three or four strong shoots from the same root, it must have abundance of pot room, and plenty of water when in flower. It is a good plan to shift the plants twice or oftener during the early part of the season If plunged and turned out of the pot into an open border in the end of May, they will flower vigorously, and will even stand the winter around and south of London, and flower yearly, and if well protected in winter very freely and strongly. The flowers are produced from the extremities of the shoots of the current year.

1040 *Chrysosplenium* From χρυσος, gold, and σπλην, the spleen; a figurative name applied to this plant, with reference to its medicinal qualities It is said to be a powerful cathartic In the Vosges the plants are used copiously as a salad, under the name of *Cresson de Roche.*

1041. *Saxifraga. Saxum-frango,* to break the stone, a name contrived in reference to supposed medicinal qualities which are now forgotten.

An elegant genus of alpine plants, which have long been favorites in gardens. Many of the species are

6072	nivális *W*	clustered-Alp	♀	△	or	½ jn jl	W	Britain	sc. alp.	D	s.l	Eng. bot. 440
6073	stellária *W*	starry	♀	△	or	½ jn jl	W	Britain	al riv.	D	s l	Eng bot. 167
6074	bryoides *W.*	thrd.-moss-like	♀	△	or	½ jn.jl	W	Switzerl.	1752	D	s l	Jac m 2 t. 5. f 1
6075	cæ'sia *W.*	gray	♀	△	or	½ my jn	W	Switzerl.	1752	D	s.l	Bot. cab. 421
6076	androsácea *W*	Androsace-lvd	♀	△	or	½ my jn	W	Austria	1792	D	s l	Jac aus. 4. t. 389
6077	oppositifólia *W*	opposite-leaved	♀	△	or	½ mr ap	Pu	Britain	al. roc	D	s l	Eng. bot. 9
6078	áspera *W*	rough	♀	△	or	½ au	W	Switzerl	1752	D	s l	Jac aust. 5. t 31
6079	Hírculus *W.*	yellow-marsh	♀	△	or	½ au	Y	England	tu bo	D	s.l	Eng bot. 1009
6080	Aizoides *Haw*	smaller-mount.	♀	△	or	½ jl au	Y	Britain	al. riv.	D	s l	
6081	autumnális *Haw*	larger-mount.	♀	△	or	½ jl au	Y R	Britain	...	D	s.l	Eng. bot 39
6082	rotundifólia *W*	round-leaved	♀	△	or	1 my jn	W R	Austria	1596	D	s l	Bot. mag 424
6083	granuláta *W*	grain-rooted	♀	△	or	1 my	W	Britain	me pa.	D	s l	Eng bot 500
	β *plena*	*double-flowered*	♀	△	or	1 ap jl	W	.....	...	D	s l	
6084	cárnua *W*	drooping	♀	△	or	½ jl	W	Scotland	sc alp	D	s l	Eng bot. 664
6085	rivulária *W*	Alpine-brook	♀	△	or	½ jn jl	W	Scotland	sc alp	D	s l	Eng. bot. 2275
6086	hederácea *W*	Ivy-leaved	☘	☖	or	½ jl	W	Levant	1752	S	s l	
6087	pentadáctyla *Lap*	five-fingered	♀	△	or	½ my jn	W	Pyrenees	1815	D	s l	Lapey. fl t. 40
6088	geranioides *W*	Crane's-bill-lvd	♀	△	or	½ ap my	W	Pyrenees	1770	D	s l	Lapey fl t 43
6089	pedatifida *L T*	pedatifid	♀	△	or	½ my jn	W	Scotland	sc alp	D	s l	Eng bot 2278
6090	ceratophýlla *H K*	shining-calyxed	♀	△	or	½ my jn	W	Spain	1804	D	s l	Bot mag 1651
6091	ajugifólia *W*	Bugle-leaved	♀	△	or	1 jn jl	W	Pyrenees	1770	D	s l	Lapey fl t 31
6092	platypétala *L T*	broad-petalled	♀	△	or	1 jn	W	Scotland	al roc	D	s l	Eng bot 2276
6093	sibírica *W*	Siberian	♀	△	or	1 my jn	W	Siberia	1802	D	s l	
6094	tridactýlites *W*	Rue-leaved		○	w	½ ap my	W	Britain	walls	S	s l	Eng bot. 501
6095	petræ'a *W*	rock	♀	△	or	½ ap my	W	Norway	1752	D	s l	Fl dan 68
6096	adscéndens *W*	ascending	♀	△	or	½ my	W	Pyrenees	1752.	D	s l	Jac ic 1 t. 81
6097	Sternber'gii *W en.*	large-flowered	♀	△	or	1 my	W	Germany	...	D	s l	
6098	hírta *E B*	hairy	♀	△	or	1 jn	W	Scotland	sc alp	D	s l	Eng bot. 2291
6099	palmáta *E B*	palmate	♀	△	or	½ my jn	W	Wales	wal p	D	s l	Eng bot 455
6100	elongélla *L T*	long-stalked	♀	△	or	1 ap my	W	Scotland	sc alp	D	s l	Eng bot 2277
6101	hypnoides *W*	mossy	♀	△	or	½ ap jn	W	Britain	al roc	D	s l	Eng bot. 454
6102	moscháta *W*	musky	♀	△	or	½ my jn	L Y	Pyrenees	...	D	s l	Lapey fl t 37, 38
6103	pygmæ'a *Haw.* *moscháta* E B	pigmy	♀	△	or	½ my jn	W Y	Scotland	sc. alp	D	s.l	Eng bot. 2314
6104	cæspitósa *W*	tufted	♀	△	or	½ my *jn*	Cr	Wales	w alp	D	s l	Eng bot 794
6105	grœnlándica *H K*	Groenland	♀	△	or	½ jl	W	Pyrenees	1732	D	s l	Lapey fl t 19
6106	muscoides *W.*	Moss-like	♀	△	or	½ my jn	W Y	Pyrenees	...	D	s.l	Lapey fl t 34

1042 TIAREL'LA *W* Tiarella — *Saxifrageæ* — *Sp* 3—10

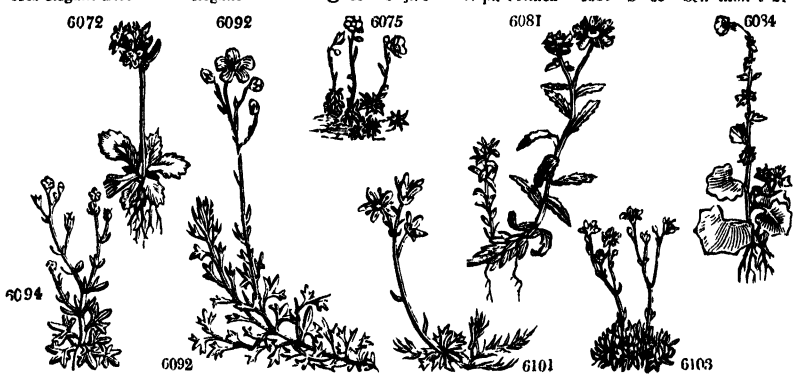
6107	cordifólia *Ph*	heart-leaved	♀	△	or	½ ap my	W	N Amer	1731	D	s p	Bot. mag. 1589
6108	Menziésii *Ph*	leafy-stemmed	♀	△	or	1 ap my	W	N Amer	1812	D	s p	
§6109	biternáta *Vent*	biternate	♀	△	or	2 my jn	W	Carolina	1812	D	s.p	Vent. malm. 54

†1043. MITEL'LA *W* Mitella — *Saxifrageæ.* *Sp* 5—10

6110	diphýlla *W*	two-leaved	♀	△	pr	½ ap my	W	N Amer	1731	D	p l	Bot reg 166
6111	cordifólia *Ph*	heart-leaved	♀	△	pr	½ ap my	W	N Amer	1812	D	p l	La ill t 373 f 3
6112	núda *W*	Kidney-leaved	♀	△	pr	½ jn au	W	N Amer	1758	D	p l	La ill t 373 f 2

1044 GYPSOPHILA *W* Gypsophila — *Caryophyllcæ.* *Sp* 16—36

6113	Struthium *L*	fleshy-leaved	☘	△	or	2 jl au	W	Spain	1729	D	p l	Bar, ic t 119
6114	fastigiáta *L*	one-rowed	☘	△	or	1½ jn jl	W	Germany	1739	D	p l	G sib 4 t 61 f 1
6115	arenária *W & K*	sand	☘	△	or	1½ jl au	W	Hungary	1801	D	p l	Pl rar h t 41
6116	viscósa *Murr*	clammy		○	or	1½ jn jl	W	Levant	1773	S	p l	Mur. co g t 3
6117	altíssima *L*	upright	☘	△	or	1½ jl au	St	Siberia	1759	D	p l	Gm sib 4 t 60
6118	perfoliáta *L*	perfoliate	☘	△	or	2 jl au	F	Spain	1732	D	p l	Dill elt t 276
6119	acutifólia *Fisch*	acute-leaved	☘	△	or	3 jl au	W G	Siberia	1820	D	co	
6120	paniculáta *L.*	panicled	☘	△	or	4 jn jl	W	Siberia	1759	D	p l	Jac au 5 t ap 1
6121	glaúca *Bieb*	glaucous	☘	△	or	1½ jl s	W	Caucasus	1822	D	co	
6122	élegans *Bieb*	elegant		○	or	2 jn s	W pk	Crimea	1823	S	co	Sch mon t 21



History, Use, Propagation, Culture,

quite easy to cultivate, and although naturally mountaineers, not incapable of breathing the more impure air of towns and vallies. The greater part known are delicate and difficult to rear they are regardless of cold, but suffer from mild and humid weather during the winter months Most of the species are perennial, with either fibrous or granular roots, and a few are annual Of the latter one species, S tridactylites, is common upon very old walls in England, flowering in the beginning of the spring. The parts of fructification are extremely variable in this genus, and have given rise to the construction of many supposed genera, the constituents of which have the recommendation of agreeing with one another pretty well in habit The limits, however, of these genera are too obscure, and the gradations by which they are united so obvious, that they have not yet been adopted by men of science generally Without interfering with that question, the old mode of considering Saxifrage has been here adhered to, as being the most popular and the best under-

6072 Leaves obovate crenate subsessile, Stem naked, Flowers headed
6073 Leaves serrate, Stem naked branched, Petals acuminate
6074 Leaves lanc. mucronate with a cartilaginous ciliated edge, Stem naked few-fl Cal. obtuse
6075 Leaves linear perforated dotted aggregate recurved, Stem many-fl.
6076 Leaves lanc. obtuse hairy, Stem naked 2-flowered
6077 Leaves ovate opposite imbricated: the upper ciliated
6078 Cauline leaves lanc alternate ciliated, Stems procumbent
6079 Cauline leaves lanc alternate naked unarmed, Stem erect
6080 Cauline leaves lin subul scattered naked unarmed, Stem decumbent
6081 Cauline leaves linear alternate ciliated radical aggregate
6082 Cauline leaves reniform toothed stalked, Stem panicled
6083 Cauline leaves reniform lobed, Stem branched, Root granular

6084 Cauline leaves palmate stalked, Stem very simple 1-fl bulbiferous
6085 Cauline leaves palmate: the upper floral ovate, Stem simple about 2-flowered
6086 Cauline leaves ovate lobed, Stem filiform weak
6087 Leaves cuneiform 3-parted with trifid linear segments, Stem simple ascending, Petals lanceolate
6088 Radical leaves reniform 5-lobed many-cleft, Cauline linear, Stem nearly naked branched
6089 Rad. lvs reniform pedatifid 7-lobed, Caul palmate and lin Stem nearly naked branched, Pet lin obov.
6090 Smooth, Radical leaves 3-lobed, Lobes many-cut, lateral segments falcate, Stem panicled, Cal colored
6091 Radic. leaves palm. 5-parted, Cauline linear undivided, Stems ascending many-fl.
6092 Leaves hairy trifid or 5-fid bearded, Runners procumbent, Stem leafy, Petals obovate rounded
6093 Leaves reniform palm hairy, Stem and flower-stalks filiform
6094 Caul leaves wedge-shaped trifid alternate, Stem erect branched
6095 Leaves wedge-shaped, Radic. entire and 3-toothed, Cauline 5 toothed, upper trifid, Pedunc. about 3-fl.
6096 Leaves palmate 3-parted, Segments subtrifid, Stem branched ascending
6097 Leaves cuneiform palmate 5-fid ciliated longer than the linear petiole, Runners very short tufted
6098 Leaves hairy 3 or 5-parted, Lobes elliptical acute, Runners ascending, Petals obovate 3-nerved
6099 Leaves hairy palmate 5-cleft and trifid, Stem leafy panicled, Petals roundish
6100 Leaves ciliated cuneate trifid nearly 5 cleft, Pedunc solitary elongate 1-fl
6101 Cauline leaves lin entire and trifid, Runners procumbent, Stem erect nearly naked
6102 Radic leaves aggregate entire and trifid acute linear, Stem viscid nearly racemose, Petals length of cal.
6103 Radic. leaves aggregate membranous lin lanceolate entire or trifid, Stem nearly naked about 2-fl.

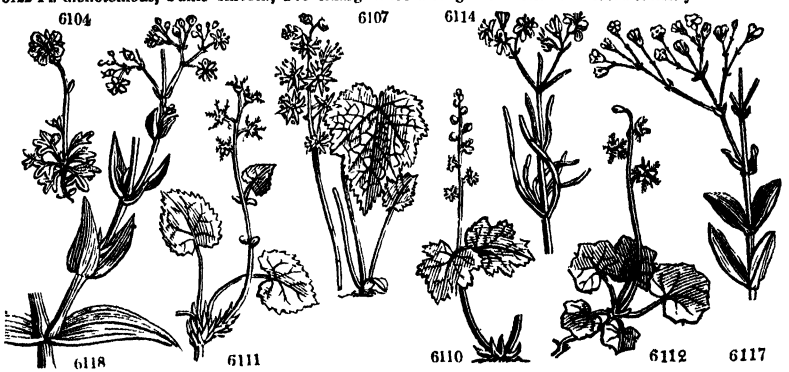
6104 Radic leaves aggr linear obtuse trifid cut, Stem erect many-fl Petals twice as long as cal
6105 Leaves imbric cuneate-palmate ciliated, Petals round, Styles spreading, Stigmas flat woolly
6106 Radical leaves aggregate entire and trifid oblong obtuse, Stem filiform about 2-fl, Pet as long as calyx

6107 Leaves cordate acutely lobed toothed, Scape racemose
6108 Leaves ovate cordate acute shortly lobed toothed, Raceme filiform spiked
6109 Leaves biternate

6110 Leaves cordate about 3-lobed toothed, Scape 2-leaved
6111 Leaves orbiculate reniform doubly crenate lucid, Scape setaceous lucid
6112 Leaves reniform repand ciliated, Scape naked

1 *Calyxes not scaly*

6113 Flowers clustered, Stems simple roughish, Leaves linear fleshy
6114 Flowers corymbose, Stem ascending, Leaves lanc lin obsoletely 3-cornered obt. 1-sided, Stam exserted
6115 Flowers corymbose, Petals rarely subemarginate, Leaves linear fleshy smooth flat
6116 Flowers corymbose, Branches divaricating, Leaves ovate lanc smooth at the base cordate amplexicaul.
6117 Branches spreading, Flowers panicled small, Pan much branched, Fl-stalks viscid
6118 Flowers panicled, Panic much branched polished, Leaves ovate lanc halt stem-clasping
6119 Fl trichotomous panicled, Pedunc villous viscid, Petals emarginate twice as long as calyx
6120 Fl panicled very minute dioecious, Peduncles smooth filiform divaricating, Leaves lin lanc rough
6121 Fl panicled, Panic divaricating, Branches few-flowered pubescent viscid, Leaves lin lanc obtuse
6122 Fl. dichotomous, Panic smooth, Pet emarg twice as long as cal Leaves lanceolate fleshy



and Miscellaneous Particulars

stood. The species are subject to great variation in appearance, and to much diversity of opinion among those who profess to be best acquainted with them A middle course has here been taken, by which the doubtful kinds have been omitted, and those which are recognised, if not defined, satisfactorily, are alone admitted

1042. *Tsarella* From *tsara*, a particular kind of head-dress, a mitre, in allusion to the form of its capsule Pretty little North American herbaceous plants, related to saxifrage, and easily cultivated in pots of light sandy peat and loam

1043. *Mitella* A diminutive of *mitra*, a mitre, so named for the same reason as the last genus, which it altogether resembles in habit and constitution

1044 *Gypsophila*. From γυψος, chalk, and φιλεω, to love, most of the species delight in chalky districts.

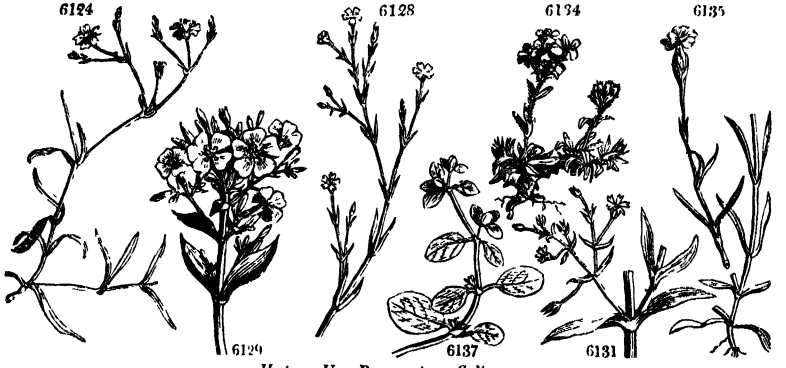
6123 Stevéni *Fisch*	Steven's	♃	△	or	2	jl au	W	Iberia	182.	D	co
6124 répens *L*	creeping	♃	△	or	½	jl s	St	Siberia	1774	D	p l Bot. mag 1448
6125 dúbia *W*	doubtful	♃	△	or	1	my s	W	.....	1815	D	p l
6126 prostráta *L*	trailing	♃	△	or	1	jl s	W	Siberia	1759.	D	p l Bot mag 1281
6127 murális *L*	wall	♃	△	or	½	jn.o	F	Germany	1739.	D	s l La. ill. t. 375. f. 1
6128 Saxífraga *L*	small	♃	△	or	½	jl au	Pk	Germany	1774	D	p l Ex bot 2 t. 90
β rígida Dec	*rigid*	♃	△	or	½	jn au	Pk	France	1769	D	s l

1045 SAPONA'RIA *W* Soapwort — *Caryophyllcæ* *Sp* 6—17.

6129 officinális *W*	common	♃	△	or	2	jl o	Pk	England	hed.	D	co Eng. bot. 1060
β plena	*double-flower*	♃	△	or	2	jl o	Pk	.....	...	D	co
6130 vaccária *W*	perfoliate		○	or	2	jl au	Pk	Germany	1596	S	s l Mor ox 5 21 27
6131 pórrigens *W*	hairy		○	or	1	jl au	Pk	Levant	1680	S	s l J vind 2 t 109
6132 ocymoides *W*	Basil-leaved	♃	△	or	¼	my jl	R	France	1768	R	s p Bot mag 154
6133 orientális *W*	small-annual	♃	△	or	1	jn au	Pk	Levant	1732	R	s p Dr. el.t 167 f 204
6134 lútea *W.*	yellow	♃	△	or	½	jn au	Y	Switzerl.	1804	R	s p Smith spic t 5

†1046 DIA'NTHUS *W* Pink — *Caryophyllcæ* *Sp* 60—113

6135 prólifer *L*	proliferous		○	pr	¾	jl au	Pk	England gra.pa		S	p l Eng bot 956
6136 dimínutus *L*	small-flowered		○	pr	½	jl	Pk	S Europe	1771	S	p l
6137 armèria *L*	Deptford		○	or	1	jl s	R	England gra.pa		S	p l Eng bot 317
6138 pseud-armeria *Bieb*	false Deptford	♿	△	or	1	jl au	Pu	Crimea	1820	C	p l Bot mag 2288
6139 discolor *Sims*	two-colored	♿	△	or	1	jn s	Pu	Caucasus	1803.	C	s l Bot mag 1162
6140 barbátus *L*	Sweet-William	♿	△	or	1½	jn jl	Pk	Germany	1573.	C	r m Bot mag 207
6141 latifólius *W*	broad-leaved	♿	△	or	1½	jl s	Pk	... ..	...	C	s l Sw fl gard 2
6142 japónicus *Thunb*	Japanese	♿	△	or	1	jn o	Pk	China	1804	C	p l Thunb jap. t. 23
6143 cephalótes *Ser*	headed	♿	△	or	1½	jn o	Pk	. ..	1823	C	p l
6144 capitátus *Dec*	capitate	♿	△	or	1½	jn o	Pu	Caucasus	1822	C	p l
6145 polymórphus *Bieb* *β dentátus* Lk	variable	♿	△	or	1	jn o	R	Crimea	1822	C	p l
6146 ferrugíneus *L*	rusty	♿	○	or	1½	jl s	Br	Italy	1756	S	p l Mi ic 1 t 81 f 1
6147 Carthusianórum *L*	Carthusian	♿	△	or	1½	jl au	R	Germany	1573	C	s l Loes pruss t 7
6148 atrorúbens *All*	dark-red	♿	△	or	1	jl s	Cr	Italy	1802	C	s l Jac ic 3 t 467
6149 arbóreus *L*	tree	♿	⎯	or	1½	jn au	Pk	Greece	1820.	C	s l Bot cab 459
6150 fruticósus *L*	fleshy-leaved	♿	⎯	or	1½	jn s	Pk	Greece	1815	C	r m Tourn it. 1 t 9
6151 suffruticósus *W*	shrubby	♿	⎯	or	1½	jn jl	Pk	Siberia	1804	C	p l
6152 carolinánus *Walt*	Carolina	♿	△	or	1	jn s	Pu	N Amer	1811	C	r m
6153 áspер *W*	rough-stalked	♿	△	or	¾	jl s	Pk	Switzerl	1822	C	s l
6154 collínus *W & K*	hill	♿	△	or	¾	jl s	W	Hungary	1800	C	s l Par lond. 62
6155 campéstris *Bieb*	field	♿	△	or	1	jl au	W R	Tauria	1815	C	s l Bot. mag 1876
6156 nítidus *W & K*	shining	♿	△	or	1	jl au	R	Carpath	1822	C	s l
6157 diffúsus *Sibth*	diffuse	♿	△	or	1½	jl au	R	Cyprus	1820	C	s l
6158 hirtus *Vill*	hairy	♿	△	or	1	jl au	R	France	1821	C	s l
6159 guttátus *Bieb*	rough-leaved	♿	△	or	1	jl s	R	Caucasus	1816	C	s l
6160 versícolor *Fisch.*	changeable	♿	△	or	1½	jl s	R v	Russia	1823	C	s l
6161 praténsis *Bieb*	meadow	♿	△	or	1	jl s	W v	Crimea	1820	C	s l
6162 chinénsis *L*	China	♿	○	or	1	jl s	R	China	1713	S	r m Bot mag 25



History, Use, Propagation, Culture,

Some of the species are fine border plants, but the greater part are of little beauty, and only grown in botanic gardens

1045 *Saponaria* In allusion to its mucilaginous sap, which is said to be fit for supplying the place of soap, *sapo* S officinalis plena is considered a border flower, but is inconvenient unless kept in pots, from its spreading very much by the roots, which are underground creepers, like those of couch The leaves form a lather with soap, and take out spots of grease in the same manner The whole plant is bitter, and was formerly used to cure the itch and the venereal disease

1046 *Dianthus* Διος, ανθος, the flower of God, or divine flower, so named on account of its pre eminent beauty Most of the species of this genus are highly valued, not only for the beauty of their flowers, but also as being evergreens, their foliage during winter being as abundant and vivid as in summer The fragrance of some of the species is peculiarly grateful, and no plant in this respect surpasses the carnation D barbatus is an old inhabitant of the flower garden, and was much esteemed in Gerarde's time "for its beauty to deck up the bosoms of the beautiful, and garlands and crowns for pleasure" The varieties are numerous, but as the plant has never been treated by florists as a leading flower, they have not been named or improved A hybrid variety called the Mule, or Fairchild's Sweet-William, is supposed to have been produced from seeds of the

6123 Fl panic. Stem diffuse, Leaves lin lanc. grassy carinate cæsious
6124 Stems panic few-fl Stam shorter than emarginate petals, Leaves linear smooth
6125 Petals obovate emarginate campan Stamens shorter than corolla, Leaves linear somewhat fleshy
6126 Stems panicled, Styles longer than emarginate petals, Leaves lin lanc smooth
6127 Stem dichotomous panicled much branched, Fl axill solitary, Leaves lin flat as long as fl.-stalks

2 *Calyxes supported by 2-4 scarious scales*

6128 Stems numerous erect stiff, Fl panicled terminal, Leaves linear rigid

6129 Flowers fascicled panicled, Cal rounded villous yellowish, Leaves ovate lanc acute or not

6130 Fl panicled, Cal pyramid 5-ang smooth, Bractes membranous acute, Leaves ovate lanc sessile
6131 Stem erect, Branches divaric with clammy hairs, Fl on long stalks axill. Leaves lanc linear
6132 Stems erect branched, Fl panic and corymbose, Cal slender glandular purple, Lvs ovate lanc. 1-nerved
6133 Stem dichotomous, Branches divaricating, Fl axill Cal hispid round, Leaves linear spatulate
6134 Tufted, Stems 2-leaved, Flowers headed with an involucre, Cal woolly

§ 1 *Flowers capitate or corymbose, sessile or stalked*

* *Bractes ovate, blunt*

6135 Scales of calyx ovate pointless longer than tube, Leaves serrulate
6136 Like the last, but the flowers nearly solitary

** *Bractes lanceolate, acute, Calyxes villous*

6137 Flowers loosely bundled, Scales lanc subul as long as tube, Leaves subulate, Calyxes hairy
6138 Flowers densely bundled, Scales ovate subul as long as tube, Pet beard Lvs subul pub rough upright
6139 Fls aggreg Scales long than cal striat rough, Lvs lin short than joints rough, Stem simple rough upw

*** *Bractes ovate or lanceolate, Calyxes smooth*

6140 Flowers aggregate fascicled, Scales ovate subulate as long as tube, Leaves lanceolate
6141 Flowers aggregate racemose corymbose, Scales ovate lanceolate finally longer than calyx, Lvs obl. lanc.
6142 Flowers aggregate fascicled, Scales acute ciliated twice as short as tube, Leaves ovate short
6143 Fls subsess capitate, Scales imbric mucron at end spreading a little short than tube, Lvs long narrow
6144 Glaucous, Fls sess capitate, Scales broad ovate with a long awn longer than head, Upper lvs dilat. at base
6145 Dark green, Flowers sessile capitate, Scales ovate very short pointless, Leaves narrow rough

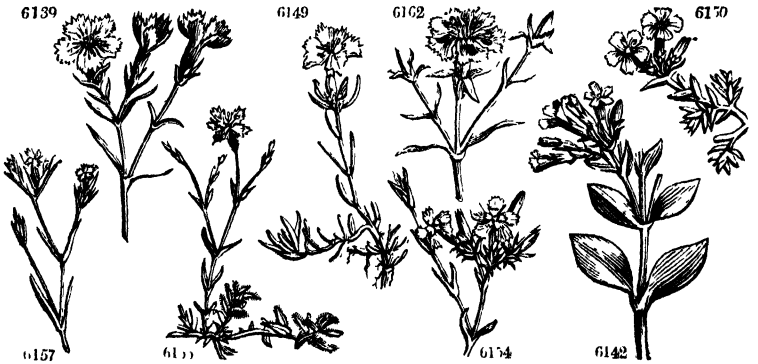
β Flowers panicled fastigiate and solitary stalked

6146 Fl aggregate, Involucres and scales scarious rufous oblong awned a little shorter than cal
6147 Fl aggregate sessile and stalked, Scales ovate awned shorter than tube, Leaves linear 3-nerved
6148 Like the last, but flowers aggregate headed sessile 8
6149 Flowers aggregate, Claws of petals very long, Scales mucronulate closely imbricated, Leaves subul fleshy
6150 Flowers aggregate, Claws of pet as long as cal Scales mucr closely imbric very short, Leaves lanc. obt
6151 Flowers aggregate, Scales ovate subulate thrice as short as tube, Leaves lin lanc narrowed at each end
6152 Flowers aggregate on long stalks, Scales twice as short as tube

§ 2 *Flowers panicled or solitary*

* *Petals toothed*

6153 Flowers fascicled, Scales ovate lanceolate shorter than tube, Petals acutely toothed, Lvs lin. lanc rough
6154 Like the last, but the flowers more numerous, and the leaves linear lanc
6155 Stem panicled somewhat hairy, Fl sol Scales ovate acute twice as short as cal Leaves subul.
6156 Flowers fascicled twin, Scales awned as long as calyx, Petals crenate, Stem decumbent, Lvs lanc obt.
6157 Flowers somewhat corymbose, Scales furrowed mucron twice as short as tube, Stems diffuse smoothish
6158 Flowers nearly sol Scales ovate mucron much shorter than cal Pet crenate, Lvs subul rough at edge
6159 Stem panicled smooth, Flowers solitary, Scales ovate awned as long as tube, Leaves subulate nerved
6160 Stem many-fl smooth, Scales cuspid spreading shorter than tube, Pet downy at orifice, Lvs lin roughish
6161 Stem panicled, Fl sol Scales acuminate appressed, Petals acutely toothed, Leaves subul lanc
6162 Stem branched, Fl sol Scales linear leafy, Petals toothed, Leaves lin lanc



and Miscellaneous Particulars

carnation impregnated by a Sweet-William D caryophyllus is considered the source whence have sprung the numerous varieties of the carnation, and some think those also of the pink The pink, however, is more probably derived from some of the smaller growing species, as plumarius, deltoides, armeria, carthusianorum, &c.

The carnation is rarely found wild in England, but it may be gathered on the south side of the Swiss Alps It seems to have been unknown to the ancients, at least in its cultivated state, not being mentioned by Pliny, or sung by any of the Roman poets. It has, however, been cultivated from time immemorial in Europe, and is in the highest favor for its beauty and rich spicy odour It is the principal florist's flower of Germany and Italy, from which countries the British florists procure their best carnation seed, and also some esteemed varieties

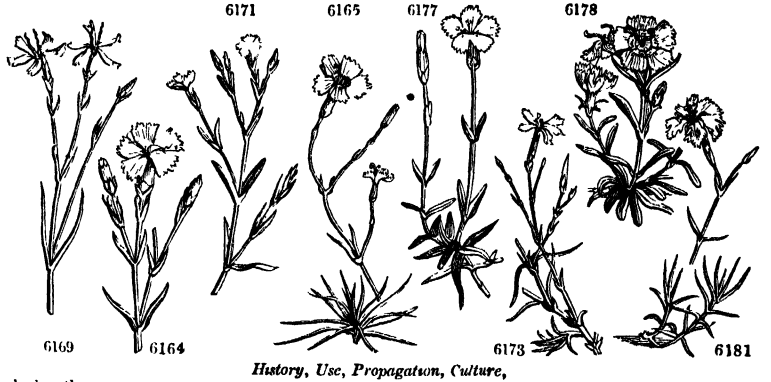
The varieties of carnation amounted to nearly 400 named sorts in the beginning of the eighteenth century, and the number has not since diminished. They are arranged in three classes, flakes, bizarres, and picotees Flakes have two colors only, and their stripes large, going quite through the leaves, *bizarres*, Fr (odd, irregular) are variegated in irregular spots and stripes, and with no less than three colours, *picotees*, Fr. (*piquetée*, pricked or spotted) have a white ground, spotted or pounced with scarlet, red, purple, or other colors Of

6163 montánus *Bieb.* two-colored ♀ △ or ¾ jn s R Caucasus 1803 C s.l
6164 caryophýllus *L.* Clove ♀ △ or 2 jn au F England walls C r m Eng bot. 214
β *flore pléno* *Carnation* ♀ △ or 2 jn au Cr England ... C r m Bot mag 39
γ *frutícosus* *tree-Carnation* ♀ or 3 jn au Cr England ... C r.m Bot. mag. 1662
δ *imbricátus* *wheat-ear* ♀ △ or 1½ jn au F England ... C r.m Bot. mag. 1740
6165 virgíneus *Sims* virgin ♀ △ or 1 jn jl W S Europe 1732. C s.l Bot. mag 1740
D *sylvestris* Jacq
6166 monadélphus *Vent* procumbent ♀ △ or 1 jn jl Pk Levant ... C s.l Vent. cels t. 39
D *procúmbens* Pers
6167 sylváticus *Hoppe* wood ♀ △ or 1½ jn s R Ratisbon 1815 S p l
6168 pomeridiánus *L* afternoon ♀ △ or 1 jn jl Y Levant 1804 C s l Par. lond 57
6169 leptopétalus *W* narrow-petalled ♀ △ or 1½ jl W Caucasus 1814 C s l Bot. mag 1739
6170 púngens *L* pungent ♀ △ or 1 au o Pk Spain 1781 C s l
6171 deltoides *L* maiden ♀ △ or ⅝ jn o F Britain gra.pa C s l Eng bot. 61
6172 glaúcus *L* glaucous-leaved ♀ △ or ¼ jn o W Britain .... C s l Di el t 298 f 348
6173 crenátus *Thunb* long-cupped ♀ ⧊ or 1 au F C G H. 1817 C s l Bot. reg. 256
6174 rigidus *Bieb* rigid ♀ △ or ¾ jn o R Casp Sea 1802 C s.l
6175 clavátus *Spr* clavate ♀ △ or 1 jn o F .... C s.l
6176 suavis *W* sweet ♀ △ or 1 jn o Pa pk .... C s.l
6177 cæsius *Sm* mountain ♀ △ or ¼ jn jl F Britain rocks C s l Eng bot. 62
6178 alpínus *L* alpine ♀ △ or ¼ jn jl R Austria 1759 C s l Bot mag. 1205
6179 Hornemánni *Ser* Hornemann's ♀ △ or 1 jn jl R Italy ... C s l
6180 Sternbergii *Sibth* Sternberg's ♀ △ or 1½ jn jl R .... C s l
6181 petræus *W. & K* rock ♀ △ or ¼ jl au Pk Hungary 1804. C s l Bot. mag. 1204

6182 gállicus *Pers* French ♀ △ or ⅝ jn au Pu S France ... C s l
6183 álbens *H K.* Cape ♀ ⧊ or ¾ au W C G H 1787 C p l
6184 plumárius *L* feathered ♀ △ or ¼ jn au W pu Europe 1629 C s l
6185 horténsis *W* garden ♀ △ or 1 jl au St Hungary 1805 C r m
6186 caucásicus *Sims.* Caucasian ♀ △ or 1 jn s Pu Caucasus 1803 C s l Bot mag 795
6187 frágrans *Bieb* fragrant ♀ △ or 1 jn Pu Austria 1804 C r m Bot mag 2007
6188 punctátus *Spr* dotted ♀ △ or 1 jn PaLi ..... C r m Bot cab 896
6189 serotinus *W & K* late-flowering ♀ △ or 1 jl s Pu Hungary 1804 C s l Pl. rar h 2 t 172
6190 arenárius *L* sand ♀ △ or ¼ my Pu Europe .. C s l
6191 fimbriátus *Bieb* fringed ♀ △ or 1½ jn au Li Iberia 1815 C s.l Bot. mag 1069
D *orientalis* Sims
6192 plumósus *Spr.* feathered ♀ △ or 1½ jl s W Li M Bald ... C s l
6193 monspessulánus *L* Montpelier ♀ △ or 1 jl au R Montpel 1764 C p l
6194 supérbus *L* superb ♀ △ or 2 jl s W Europe 1596. C s l Bot mag 1148

TRIGYNIA.

1047 CUCU'BALUS *L* CAMPION *Caryophylleæ* *Sp* 1
6195 báccifer *H. K* berry-bearing ☿ △ w 1½ jn jl W England hed D co Eng bot. 1577



History, Use, Propagation, Culture,

each class there are numerous varieties, arranged under the farther subdivisions of scarlet flake, pink flake, purple flake, yellow flake, &c , scarlet bizarre, crimson bizarre, &c , and purple picotee, yellow picotee, &c

Picotees are rather smaller flowers than carnations, and are distinguished by the serrated margins of their petals, the colors are principally yellow and white spotted, and the plants are considered hardier than the other sorts Whatever colors the flower may be possessed of, they should be perfectly distinct, and disposed in long regular stripes, broadest at the edge of the lamina, and gradually becoming narrower as they approach the unguis, or base of the petal, there terminating in a fine point Each petal should have a due proportion of white, *i e* one half, or nearly so, which should be perfectly clear and free from spots. Bizarres, or such as contain two colors upon a white ground, are esteemed rather preferable to flakes, which have but one, especially when their colors are remarkably rich, and very regularly distributed. Scarlet, purple, and pink are the three colors most predominant in the carnation, the two first are seldom to be met with in the same flower, but the two last are very frequently

New varieties are procured from seeds, and thousands of seedlings are annually blown by florists and amateurs, sometimes without one being found worth keeping Established or approved varieties are continued by layering and cuttings, or, as they are commonly called, pipings The soil in which the carnation thrives best is a rich loam rather sandy than otherwise, the climate should be free from extremes of every kind, for which reason they are commonly grown in pots, and protected by a frame during winter, and covered by an awning while in bloom Carnations grow exceedingly well in beds of properly prepared soil, over which frames are placed in winter, and an awning of canvass or bunting when the plants are in blossom Those who are curious in blowing their carnations have a great many nice and curious operations to perform when they come into flower Such petals as are plain, or run from the proper colors of the variety, are extracted by a particular instrument, the remaining petals are next arranged so as to form a convex imbricated surface; the calyx being slit down or tied up as may be necessary to aid this end Then the flowerstalks are neatly tied to sticks, and the flower supported in a pendant attitude by means of properly formed brass wires.

6163 Stem branch upw. closely dichotom Fl sol. Bract. with a spread leafy point, Lvs lin. subul. 3-nerv. hairy
6164 Stem branched, Fl sol. Scales very short ovate, Petals very broad beardless, Lvs. lin. sub. channelled glauc

6165 Stem branched or simple, Fl. sol Scales very short 4 ovate, Pet. broad beardless toothed

6166 Stem dichotomous panicled many-fl glaucous, Fl sol Scales 4 pungent spreading shorter than tube

6167 Fl. sol subcorymb Scales ov lanc short than tube, Lvs lin lanc obsol 3-nerv. smooth, Pet twice toothed
6168 Fl sol Scales ovate acute very short, Petals emarginate or nearly entire
6169 Stem branched, Fl sol Scales ovate acute very short awned, Pet lanc narrow, Leaves subul roughish
6170 Stem few-fl Fl sol Scales very short mucron spreading, Tube gibbous, Pet entire, Lvs cæspitose subul.
6171 Stem decumb branched, Fl sol Scales ovate lanc acute twin, Upper leaves narr acute: lower oblong obt
6172 Like the last, but flowers white, Leaves and stem glaucous
6173 Stem branched, Fl sol Scales 6 lanc. appressed, Pet smooth cuneate obovate, Lvs lin acum channelled
6174 Stems tufted few-fl Fl sol Scales ovate acute short, Leaves subul spreading downy rough
6175 Stem 1-fl Scales 2 ovate acute short spreading, Cal contracted in middle, Lvs. lin. chann roughish at edge
6176 Stem 1-fl Scales 4 acute short, Petals bearded doubly serrated, Leaves lin spreading
6177 Stems tufted about 1-fl Scales roundish short, Pet. crenate downy, Leaves bluntish rough at edge
6178 Stem 1-fl Outer scales as long as tube inner much shorter, Pet crenate, Leaves obl obtuse
6179 Pedunc bind term Scales lanc cusp erect short than tube, Pet. cut, Lvs lin nerved serrul rough at edge
6180 Stems about 2-fl. Scales 4 ovate acute twice as short as tube, Petals serrate downy, Leaves linear
6181 Stem about 1-fl Scales obovate mucronate, Pet beardless many-cut, Leaves subul entire smooth nerved

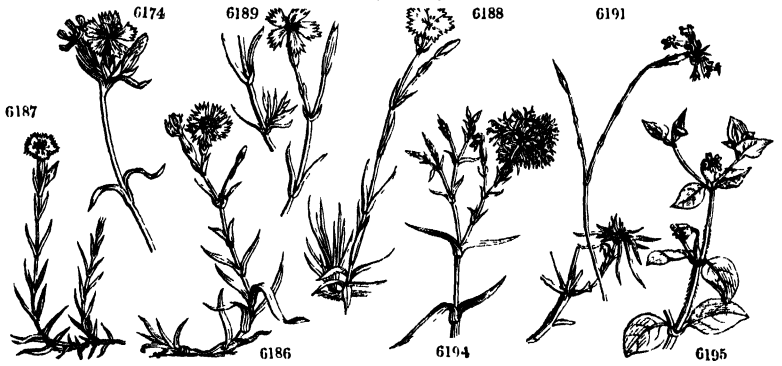
** *Petals fringed*

6182 Stems ascending about 1-fl Scales short ovate, Pet toothed many-cut, Leaves lin ciliated
6183 Fl sol Scales 4 lanc short, Petals emarginate at the end fringed toothed
6184 Glaucous, Stems 2-3-fl Teeth blunt, Bractes ovate very short pointed, Leaves lin rough at edge
6185 Like the last, but the petals bearded at their orifice
6186 Stem pan few-fl Fl sol Scales ovate acum Petals equally cut crenate, Leaves glaucous rough at edge
6187 Stems 1-fl Scales ovate lanceolate acuminate shorter than tube, Pet beardless, Lvs subul rough at edge
6188 Stem branched few-fl Scales 4 blunt short, Petals beardless dotted, Leaves glaucous linear flaccid
6189 Stems 1-fl Scales ovate obtuse four times as short as calyxes, Pet naked, Leaves subul glauc ciliated
6190 Stems 1-fl Scales ovate obtuse, Leaves linear
6191 Stem half-shrubby branched at base 2-fl Scales 6 lanc shorter than cal Leaves subul rough

6192 Fl scattered solitary, Scales lanc lin spreading a little shorter than tube, Leaves lin nerved flaccid
6193 Stem panicled few-fl Fl sol Scales subul straight twice as short as tube, Petals digitate, Lvs lin serrul
6194 Stem panic many-fl Fl fastigiate, Scales short ov. mucron Pet. beyond the middle pinn. many-cut hairy
[at orifice

TRIGYNIA.

6195 Branches divaricating, Leaves ovate, Cal campanulate, Pet distant



and Miscellaneous Particulars

Behind the petals a circle of card paper is sometimes fixed to keep them in position, and the pot in which the plant grows is placed on a particular description of saucer, by which it is surrounded by water, in order to prevent the approach of ground insects, and especially of the earwig These and a number of other operations will be found described at length in Maddock's Florist's Directory, and in the Encyclopædia of Gardening. (Sec. 6406)

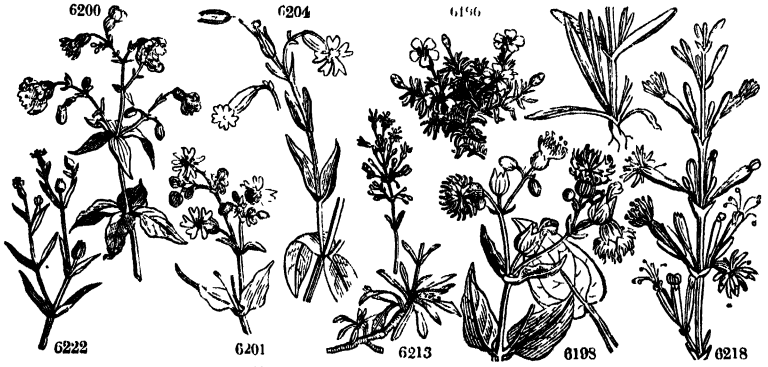
The pink, as a florist's flower, is of much less antiquity than the carnation: it is scarcely mentioned by Gerarde, and Parkinson has given very few varieties It was chiefly grown as a border flower till within the last fifty years, since which it has been greatly improved and many fine varieties originated Being one of the hardiest and least expensive of fine flowers, it is much cultivated by operative mechanics and manufacturers round large towns, and no where to such an extent as about Paisley, by the muslin weavers there

The varieties of pink most cultivated are chiefly those called pheasant's eyes, which seem to have sprung from D. plumarius Cob pinks are a large sort seemingly intermediate between pinks and picotee carnations, red early pinks are smaller plants than cobs, but larger than pheasant's eyes, and seem to have sprung from cobs and D armerius or deltoides The Paisley growers reckon above three hundred varieties of the pheasant's eyes -To garden pinks in general Wildenow gives the appellation of D hortensis.

The propagation and culture of the pink is the same as that of the carnation, excepting that it is less frequently kept in pots or frames, but planted in beds of fresh loamy soil, and the small side shoots reduced in the autumn in order to throw more strength into those intended to produce flowers the following season. Some cover their pink bed with an awning Not more than eight or ten flowers are ever allowed to expand on one plant, and these, if they shew a tendency to bursting at the calyx, are to be tied as in carnation culture.

1047. *Cucubalus.* A name signifying a bad subject; an evil weed. According to Miller, the berries of this plant are no less deadly than those of Nightshade.

1048	SILENE. *L*	Catchfly			*Caryophylleæ.*	*Sp* 107—217						
6196	acaulis *L*	stemless	♃	△	pr	½	jn au	Pk	Britain sc alp	D	p l	Eng bot 1081
6197	pumilio *Sturm*	dwarf	♃	△	pr	½	jn au	Pu	Germany 1823	D	co	Stur d f 1 t 11
6198	fimbriáta *Sims*	fringed-flower	♃	△	pr	1½	my au	W	Caucasus 1803	D	s l	Bot mag 908
6199	lácera *Sims*	torn	♃	△	pr	1½	my au	W	Caucasus 1818	D	co	Bot mag 2255
6200	stellàta *H K.*	four-leaved	♃	△	pr	1	jn au	W	*N* Amer 1696	D	co	Bot mag 1107
6201	inflàta *Sm*	inflated	♃	△	cu	1	my s	W	Britain co fi	C	co	Eng bot 164
6202	maritima *W*	sea	♃	△	cu	½	au s	W	Britain sea sh.	D	s l	Eng. bot. 957
6203	fabária *H K.*	thick-leaved	♃	△	cu	½	jn au	W	Sicily 1731	S	co	Boc m 133 t 92
6204	Béhen *L*	bladder		○	w	2	jn jl	W	Crete 1713	S	co	Di el. t.317 f 409
6205	indica *Roxb*	Nepal	♃	△	w	2	jn jl	Pu	Nepal 1823	C	co	
6206	viscaginoides *Horn*	simple	♃	△	cu	½	jn jl	Pk	Dauria 1824	D	co	
6207	procumbens *Murr*	procumbent	♃	△	cu	½	jn jl	Pk	Siberia 1823	D	co	
6208	rubella *L*	small-red		○	pr	½	my jn	F	Portugal 1732	S	co	Di el t.314 f 406
6209	apétala *W*	petalless		○	cu	1	jn jl	Ap	 1801	S	co	
6210	asperuliifólia *Bieb*	spurrey-like	♃	△	pr	½	jn jl	W	Armenia 1824	D	co	
6211	Gypsóphila *Desf*	little	♃	△	pr	½	jn jl	W	 1822	D	co	
6212	carnósa *Mench*	fleshy		○	w	1	jn jl	Pu	 1823	S	co	
6213	Otites *Pers*	Spanish	♃	△	cu	2	jl au	Y	England gra so	D	co	Eng bot 85
6214	volgénsis *Otth*	Volga	♃	△	pr	1	jl au	Pk	Volga 1824	D	co	
6215	parviflóra *Pers*	small-flowered	♃	△	pr	1	jl au	Pk	Hungary 1796.	D	co	
6216	effusa *Otth*	effuse	♃	△	pr	1	jl au	Pk	Volga 1823	D	co	
6217	sibírica *Pers*	Siberian	♃	△	cu	1½	jn au	Pk	Siberia 1773	D	co	H go 1 p 150 ic
6218	multiflóra *Pers*	many-flowered	♃	◯	cu	1	jn au	R	Hungary 1794	S	co	Pl rar h 1 t 56
6219	tatárica *Pers*	Hyssop-leaved	♃	△	pr	2	jn au	Pk	Russia 1760	D	co	
6220	gigantéa *L*	gigantic	♂	◯	pr	3	jn jl	R	Africa 1738	C	s l	Walt ho t 11
6221	viscósa *Pers*	clammy	♃	◯	or	2	jl	R	Levant 1739	D	co	Tour it 2 p 361
6222	cónica *L*	corn		○	w	1	jn jl	Pu	England san fi	S	s l	Eng bot 922
6223	conoídea *L*	conoid		○	pr	1	jn jl	Pu	S Europe 1683	S	s l	Mor s 5 t 3 f 6
6224	undulàta *H K*	wave-leaved	♂	◯	cu	1½	au	R	C G H 1775	S	p l	
6225	ánglica *L*	English		○	w	¾	jn jl	W	Britain san fi	S	co	Eng bot 1178
6226	lusitánica *L*	Portugal		○	pr	1	jn jl	Pk	Portugal 1732	S	co	Di el t 311 f 401
6227	tridentáta *Desf*	three-toothed		○	pr	½	my jn	Pk	Barbary 1823	S	s l	
6228	gállica *L*	French		○	pr	1	my jn	Pk	France 1683	S	s l	Di el t 310 f 399
6229	oxymoides *Desf*	Basil-like		○	pr	1	mr jn	Pu	.. 1823	S	co	
6230	distícha *W*	two-ranked		○	pr	1½	jn jl	R	. . 1817	S	s l	Schra pl r t 39
6231	cerastoides *L*	Cerastium-lvd		○	cu	½	jl au	W	S Europe 1752	S	s l	Di el t 309 f 397
6232	quinquevúlnera *L*	variegated		○	or	1	jn au	Bd	England san fi	S	co	Eng bot 86
6233	noctúrna *L*	spiked		○	cu	2	jn au	Br	S Europe 1683	S	s l	Di el t 310 f 400
6234	reflèxa *L*	reflexed	♃	△	cu	1	jl au	Br	S Europe 1726	D	co	Mag mo 171 ic
6235	micropétala *Dec*	small-petaled		○	un	¾	jn jl	R	1821	S	co	
6236	micrántha *Lk*	minute-flower'd		○	un	¾	jn jl	R	Portugal 1823	S	co	
6237	canéscens *Ten*	hoary	♃	△	un	1	jn jl	R	Naples 1822	D	co	
6238	dichótoma *Ehr*	dichotomous		○	un	1½	jn jl	Pk	Hungary 1791	S	s l	Pl rar h t 29
6239	nyctántha *W*	various-leaved		○	cu	1½	jn au	Br	. . 1815	S	co	
6240	bellidifólia *Jacq*	Daisy-leaved		○	pr	1	jn jl	Pk	1794	S	s l	Jac vind 3 t 81
6241	vespertina *Retz*	evening		○	cu	2	jl au	Br	Barbary 1796	S	co	Bot mag 677
6242	crassifólia *L*	thick-leaved	♂	◯	cu	1	jl au	Br	C G H 1774	R	p l	
6243	grácilis *Dec*	slender		○	pr	1	jl au	W	1823	S	co	
6244	jemseénsis *W*	two-colored	♃	△	pr	1½	jn jl	Pk	Siberia 1817	D	s l	
6245	ciliáta *Pourr*	ciliated		○	cu	½	jn au	Pu	Crete 1804	S	s l	
6246	pendula *L*	pendulous		○	or	1	my jl	R	Sicily 1731	S	s l	Bot mag 114
6247	quadridentáta *Dec*	four-toothed	♃	△	pr	½	my jl	W	Alps 1822	D	co	
6248	pusilla *W & K*	dwarf	♃	△	un	¼	jn jl	Pk	Hungary 1804	D	s l	Pl rar h 3 t 212
6249	alpéstris *Jacq*	Austrian	♃	△	un	½	my jl	R	Austria 1774	D	s l	Jac aus 1 t 96
6250	rupéstris *L*	rock	♃	△	un	½	my jl	R	Switzerl 1774	D	s l	Ll dan 4



History, Use, Propagation, Culture,

1048 *Silene* A poetical name, after the God Silenus, who is represented as always drunk and covered with slaver, as the species of this genus usually are with a viscid secretion This is a large family of small plants, neither remarkable for use, beauty, or as bad weeds S inflata, the Cucubalus Behen *L*, may be used as a substitute for asparagus or green pease, the young shoots having the flavor of both They ought to be gathered

§ 1. *Tufted, Stems scarcely any, Calyx somewhat inflated, Peduncles 1-flowered.*

6196 Smooth, Stems dense, Leaves lin lanc Flowers dioecious, Calyx campanulate
6197 Stems less dense, Leaves lin spatulate pubescent, Cal inflated hairy

§ 2 *Caulescent, Flowers solitary or panicled, Calyx bladdery inflated*

6198 Pubescent, Leaves large ovate-lanc Fl in large panicles, Cal much inflated, Petals fringed
6199 Hispid, Leaves ovate-lanc on long stalks wavy, Cal much inflated, Pet lacerated crowned
6200 Stems erect branched pubescent, Leaves 4 whorled lanc with long points smooth, Fl pan Cal bladdery
6201 Stems branched, Fl pan Cal bladdery ovate, Pet bifid naked, Styles very long
6202 Like the last, but hairy with ovate lanc. leaves
6203 Like the last, but creeping with smaller nearly spatulate leaves
6204 Smooth branch Lvs lanc the lower stalk Fl pan. Cal ovate veiny, Pet with 2 very short lobes crowned
6205 Pubescent, Stems very tall branch Lvs large lanc Fl pan Cal ov netted, Pet with a claw hairy at base
6206 Smooth, Stem erect simple rather leafy, Lvs lin scarcely ciliat Fl in pan spikes, Claws of pet not ciliated
6207 Smooth with very leafy branched procumbent stems, Leaves lanc Fl axill opp and terminal, Petals bifid
6208 Nearly smooth, Stems little branched, Leaves obovate serrulate-ciliated, Fl pan Pet obcordate crowned
6209 Hoary, Stem erect branched, Leaves lanc the upper linear, Fl few term Petals O
6210 Stems procumb. diffuse 2-3-chotomous branched, Lvs small lin Petals half-bifid with an obcord crown
6211 Nearly smooth, Stems wavy branched leafy, Leaves lin lanceolate, Petals 2-lobed
6212 Smooth, Stem erect, Leaves acute glaucous, Fl solitary, Pet lanceolate with a 2-lobed crown

§ 3 *Caulescent, Flowers spiked in whorls* [Fl small dioecious

6213 Leaves erect, with a few branches, which are scarcely pubesc or leafy, Lower lvs numerous spatul fleshy,
6214 Stem pubesc branched, Lower leaves large lanc spatulate upper lin long, Fl panicled with linear petals
6215 Hoary, Stems assurgent nearly simple, Leaves spatulate lanc Cal spherical 10-striped
6216 Stems erect nearly simple, Lvs lin lower obt Fl very numerous and small, Cal obov clavate 10-striped
6217 Half-shrubby smooth, Stems much branch Lvs lin lanc shortly ciliat numerous, Cal infl clav 10-striped
6218 Stem simple, Lvs lin lanc lower broader stalk Cal clavate cylindr 10-strip Pet 2-part Stam very long
6219 Smooth, Stems erect simple very leafy, Lvs lanc small, Spike dense, Cal clavate netted, Stam very long
6220 Velvety, Radical leaves cochleate smooth, Cal tubular 10-striped, Pet 2-fid, Stamens very long
6221 Pubescent very viscid, Stem simple thick leafy, Leaves large lin lanc wavy, Fl large nodding

§ 4 *Caulescent, Calyx conoid, at the bottom retracted, with very long teeth*

6222 Pubescent, Leaves linear soft, Cal short conical
6223 Stems pubescent, Leaves lanc lin nearly smooth, Cal long conical
6224 Pubescent, Leaves lanceolate wavy the lower stalked, Fl large in loose dichotomous panicles

§ 5 *Caulescent, Flowers spiked, axillary, not opposite, Calyx with 10 stripes.*

* *Calyx cylindrical*

6225 Hairy, Stems branched, Leaves lanc acute, Cal ventricose with very long teeth, Petals small crowned
6226 Very hairy, Stems much branched, Lower leaves obovate spat upper lanc obtuse, Petals undivided
6227 Stems branched, Leaves lin lanc Spike 1-sided, Cal cylindrical with 10 ribs, Teeth long, Pet 3-toothed
6228 Hairy, Stems branched, Lower lvs spatulate upper lanc obtuse, Cal teeth short, Pet obov crowned
6229 Hairy, Stems branched, Leaves spatulate, Spike 1-sided few-fl Cal very hairy, Pet obovate crowned
6230 Hairy, Stem much branched, Leaves lanc cusp Spikes twin dense, Pet small bifid
6231 Stems simple villi Leaves pub lower spatul, upper lanc Spike 2-ranked few-fl Pet obov retuse crowned
6232 Pubesc Stems branch Lvs lanc lower obt Spike 1-sid Cal villi with short teeth, Pet roundish crowned
6233 Stem branch hairy below, Lvs pubesc with a long fringe at base, Cal cyl nearly smooth ribbed and netted
6234 Like the last, but flowers few distant, Petals smaller
6235 Hairy, Stem branched leafy, Leaves lin lanc Flowers terminal, Cal cylindr Pet bifid
6236 Hairy, Fl sessile 1-sided, Cal cylindr appressed, Petals small deeply emarginate

** *Calyx clavate*

6237 Hoary, Stems prostrate branched, Lvs obovate spatulate ciliated at base, Fl 1-sided erect, Pet bifid
6238 Stems branch pubesc Lvs scabrous ciliat base lower spatul, upper lanc Fl sess nodding, Pet 2-parted
6239 Pubescent, Lvs somewhat fleshy lower spatulate, upper lanceolate, Cal long clavate, Petals 2-fid
6240 Hairy, Stem erect slender branched, Lvs lanc Spikes twin 2-sided, Cal cylindr clavate, Pet bifid
6241 Pubesc Stems branch Lvs spatul obt Spikes twin 1-sided, Cal bladdery, Pet 2-parted with ov lobes
6242 Velvety, Stem procum branch leafy, Lvs ov spatul fleshy, Bract very small, Pet with long claws emarg
6243 Smth Stem erect slend branch Lvs lin scarcely ciliat low ov Fl on long stks Pet 2-part with lin lobes
6244 Smooth, Stems usually simple, Lvs somewhat fleshy lin lanc Cal ov ventric Pet bifid with 4-lob append
6245 Pubesc Stems numerous prostrate very leafy at base, Lvs lin setaceous ciliated, Recesses of calyx deflexed
6246 Pubescent branched supine, Leaves ovate lanc Fl axillary pendulous, Petals bifid crowned

§ 6 *Caulescent, Stems upright, Peduncles filiform, Calyx campanulate or cylindrical*

6247 Tufted, Stems erect slender branched, Lvs small linear very narrow, Fl small, Petals short 4-toothed
6248 Like the last, but the radical leaves broader, Peduncles long upright
6249 Root branched, Stems simple leafy, Lvs lanc lin obt Fl large paniced, Petals broad 4-cleft, Seed ciliated
6250 Smooth, Stems erect branched, Leaves ovate lanc Fl panicled very small, Petals obcordate



and Miscellaneous Particulars.

when about two inches long, and the more they are blanched the better Bryant (*Flora Dietetica*) says, its culture would well reward the gardener's trouble S viscosa is a popular border flower, especially the double variety

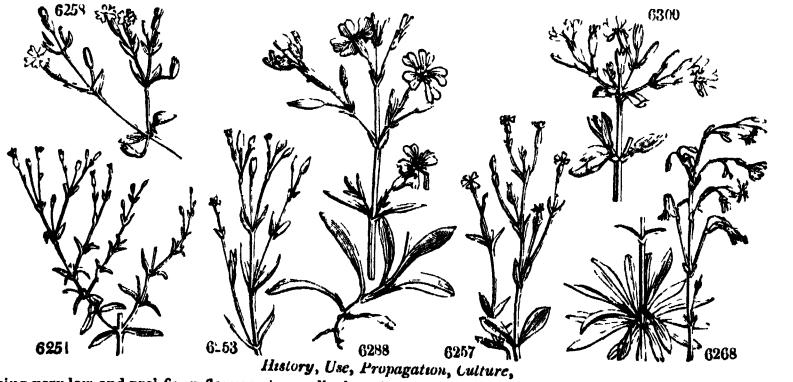
S. quinquevulnera was formerly in culture as a border flower, but is now seldom used for that purpose:

6251 **inapérta** *L.*	unopen-flower.	○	un	2	jn.jl	Br	Madeira	1732.	S	s l	Di el t 315 f 407
6252 **clandestina** *Jacq.*	hidden-flower	○	un	1	jn jl	R	C G H.	1801.	S	co	Jac. col a. t. 3 f 3
6253 **antirrhina** *L*	Snap-dragon	○	un	1	jn jl	R	N. Amer.	1732.	S	p l	Di. el. t.313.f 403
6254 **geminiflóra** *W*	twin-flowered	○	cu	1	jn jl	Pu	.....	1816	S	co	
6255 **flavéscens** *W & K.*	yellowish	♃ △	pr	1	jn jl	Y	Hungary	1804.	D	p l	Pl. rar. h 2 t.175
6256 **linifólia** *W*	Flax-leaved		○ pr	1	jl au	G y	.....	1817.	S	s l	
6257 **crética** *L.*	Cretan		○ pr	½	my au	G. w	Candia	1732.	S	s l	D c t 314 f 404,5
6258 **sedoides** *Jacq.*	Sedum-like		○ pr	¼	jl	G w	Crete	1804.	S	co	Jac. co s t.14.f.1
6259 **saxifraga** *L.*	Saxifrage	♃	△ cu	½	jn au	F	France	1640	D	s l	Bot. cab. 454
6260 **petræ'a** *W & K*	rock	♃	△ pr	¼	jn au	W	Hungary	1822.	D	co	
6261 **campánula** *Pers*	Bell-flowered	♃	△ pr	½	jn au	G w	Piedmont	1823.	D	co	

6262 **longipétala** *Vent*	long-petaled		○ pr	1	jn au	G w	Barbary	1822	S	co	Vent cels. 83
6263 **nútans** *L*	Nottingham	♃	△ w	2	jn jl	W	Britain	cal. ro	D	co	Eng bot 465
6264 **saxátilis** *Sims*	stone	♃	△ cu	½	jn jl	G	Siberia	1800	D	s l	Bot. mag 685
6265 **livida** *W*	livid	♃	△ pr	1	jn jl	W	Carniola	1816	D	s l	
6266 **ténuis** *W*	slender	♃	△ pr	¾	jl	G w	Baical	1816.	D	p.l	
6267 **viridiflóra** *L*	green-flowered	♃	ⓞ cu	2	jn jl	G w	Spain	1739	S	p l	Herm par 199
6268 **chlorántha** *W*	pale-flowered	♃	△ cu	1½	jn au	G w	Germany	1732	D	s l	Di el t 316 f 408
6269 **cathólica** *Otth*	panicled	♃	△ cu	1½	jl s	G w	Italy	1711	D	co	Jac vind 1 t 59
6270 **élegans** *Brot*	elegant		○ pr	1½	jl s	W	Portugal	1819	S	co	
6271 **répens** *Dec*	creeping	♃	△ pr	1	jl s	Pk	Siberia	1822	D	co	
6272 **virginica** *L*	Virginian	♃	△ or	1	my au	Pu	N Amer	1783	D	p l	Pl alm t 203 f 1
6273 **stricta** *L*	upright		○ pr	1	jn jl	Pu	Spain	1802	S	co	
6274 **muscípula** *L*	Spanish		○ or	1½	jl.au	R	Spain	1596	S	p l	
6275 **noctiflóra** *L*	night-flowering		○ cu	2	jl	Pk	England	san fi	S	s l	Eng bot 291
6276 **ornáta** *H K*	dark-colored	♃	ⓞ cu	1	my s	Pu	C G H	1775	S	p l	Bot. mag 382
6277 **ægyptíaca** *L*	Egyptian		○ cu	1	jl au	Pk	Egypt	1800	S	s l	
6278 **sericea** *All*	silky		○ cu	1½	jn au	Pk	S Europe	1801	S	s l	All ped t 79 f 3
6279 **picta** *Pers*	painted		○ pr	1	jn au	Pk	.....	1822.	S	co	
6280 **portensis** *Bon.*	Oporto		○ cu	1	jl au	Pk	Portugal	1759	S	s l	
6281 **reticuláta** *Desf*	netted		○ cu	1	jl au	Pk	Barbary	1804	S	p l	Desf atl 1 t 99
6282 **pennsylvánica** *Mich*	Pennsylvanian	♃	△ or	1	jn jl	R	N Amer	1806	D	p l	Bot. reg 247
6283 **vallésia** *L*	Woolly-leaved	♃	△ cu	¼	jn au	F	Switzerl	1765	D	s l	Boc mus t 54
6284 **fruticósa** *L*	shrubby	♃	▭ pr	1½	jn jl	Pk	Sicily	1629	C	p l	Com hort t 33
6285 **cas'pica** *Pers*	Caspian	♃	△ pr	¾	jn jl	Pk	Caucasus	1823	D	co	
6286 **amœ'na** *L*	Tartarian	♃	△ pr	1	jl	W	Tartary	1779	D	p l	
6287 **supina** *Bieb*	trailing	♃	△ pr	¾	jn au	Pk	Caucasus	1804	D	s l	Bot mag 1997
6288 **paradóxa** *L*	Dover	♃	△ cu	1	jl	Pk	Europe	..	D	p l	Jac vind 3 t 84
6289 **chlorœfólia** *Sm*	Armenian	♃	△ cu	1	au s	L Y	Armenia	1796	D	p l	Bot mag 807
6290 **itálica** *Dec*	Italian	♃	ⓞ cu	1½	my jn	W	Italy	1759	S	co	Jac obs 4 t 79
6291 **pátula** *Desf*	spreading	♃	△ pr	1	my jn	Pk	Barbary	1823	D	co	
6292 **polyphýlla** *L*	many-leaved	♃	△ pr	1	jn jl	R	Germany	..	D	p l	Cl hist 1 t 290
6293 **nemorális** *W & K*	grove	♃	ⓞ pr	1	jn jl	R	Hungary	1822	S	co	
6294 **longiflóra** *Ehr*	long-flowered	♃	△ or	1½	jl s	L Pu	Hungary	1793	D	p l	Pl rar h 1 t 8
6295 **bupleuroides** *L*	spear-leaved	♃	ⓞ cu	2	jn jl	W pu	Persia	1801	C	p l	Tourn it t 154
6296 **mollíssima** *Pers*	velvet	♃	△ cu	1	jl s	Pk	Italy	1739	D	co	
6297 **régia** *Sims*	splendid	♃	△ or	1½	my au	Cr	N Amer	1811	D	p l	Bot mag 1724
6298 **ascéndens** *Lag*	ascending		○ cu	¾	my au	Pk	Spain	1822	S	co	
6299 **cæspitósa** *Stev*	tufted	♃	△ pr	½	my au	Pk	Caucasus	1824	D	co	
6300 **atócion** *Murr*	orchis-flowered		○ pr	¾	my jl	Pk	Levant	1781	S	s l	Jac vind 3 t 32
orchidéa L. f											
6301 **arméria** *L*	Lobel's		○ or	1½	jl s	Pk	England	cor fi	S	s l	Eng bot. 1398
β alba	*white-flowered*										
6302 **compácta** *Fisch*	compact		○ or	1½	jl s	Pk	Caucasus	1823	S	co	Bot cab 1678

1049 STELLA'RIA. *W.* STITCH-WORT *Caryophyllcæ* *Sp* 18—56

6303 **némorum** *W.*	wood	♃	△ w	1	ap jn	W	Britain	mo wo	D	co	Eng bot. 92
6304 **latifolia** *P S.*	broad-leaved	♃	△ w	1½	jn au	W	Germany	1816	D	co	
6305 **média** *E B*	chickweed		○ w	¼	ja d	W	England	rubb	S	co	Eng bot 537
Alsine média W											



History, Use, Propagation, Culture,

being very low and prolific in flowers, it is well adapted for sowing in pots S Armeria is one of the annual border flowers of the seed shops

1049 *Stellaria* The parts of the flower are stellate The species are grassy-looking plants of the easiest

6251 Smooth, Stems erect branched, Lvs lanc. acute: lower obt Petals not opening obcordate, Stam. usually 5
6252 Pubesc. Stem erect much branched slender, Lower lvs. obl obt.: upper lanc. narrow, Pet. short erect bifid
6253 Nearly smooth, Stem erect branched somewhat leafy, Leaves lanc acute ciliated, Fl. small panicled
6254 Pubescent, Stems branched, Lower leaves ellipt spatulate upper lanc Fl term twin, Petals bifid
6255 Pubescent, Stems erect branch. straight, Low lvs. lanc spat up linear, Fl loosely panicled, Pet. 2-lobed
6256 Stems branched, Leaves lin spatulate, Fl term Cal cylindr clavate, Petals 2-fid
6257 Smooth, Stems erect branched, Low lvs ov. stalked obt.: up lin. acute, Fl. loosely panic Cal ov clavate
6258 Viscid pubesc Stems erect much branch. Lvs fleshy low spatul; up ov Fl small, Pet. obcord crowned
6259 Tufted, Stems assurgent, Lvs lin acute, Peduncles very long, Cal long clavate, Petals 2-parted crowned
6260 Tufted shortly bristly, Stems assurgent, Leaves lin. with bristly teeth, Fl small, Petals 2-fid crowned
6261 Smth Stems erect or assurg somew branch leafy at base, Lvs lanc lin acute. low spat. Pet. 2-part naked

§ 7. *Caulescent, Flowers panicled, rarely solitary, Pedicels opposite short, Calyx tubular.*

* *Flowers nodding, Calyxes cylindrical*

6262 Smooth viscid, Stems erect, Lvs somewhat fleshy lin lanc fringed with fine bristles, Pet very long 2-part. [reflexed
6263 Pubesc Stems leafy at base, Radical lvs spatul upper lanc lin. Pet 2-parted reflexed with a long crown
6264 Like the last, but smooth, less branched, and less leafy, Leaves linear, Petals often green
6265 Like the last, but stems flexuose broken down, Petals white above beneath livid green
6266 Smooth, Leaves lin lanc ciliated at base, Fl pan erect, Cal ventricose cylindr Petals 2-parted
6267 Hairy soft, Stem branch leafy, Lvs large ov acum Fl in large nodding panicles, Pet. with very long claws
6268 Smooth, Stems erect simple scarcely leafy, Petals 2 parted with filiform lobes [crowned

** *Flowers erect, Calyxes clavate*

6269 Velvety glutinous upwards, Stem erect branched leafy, Fl small loosely panicled, Stamens very long
6270 Stem short about 2-flowered pubescent, Radic. leaves lanc lin acute, Cauline very short, Pet bifid
6271 Scarcely pubesc Root long creeping, Stem erect almost simple, Lvs lin grassy acute, Fl few erect panic
6272 Viscid pubesc Stem procumb assurgent branch Fl large panic Cal large clavate, Pet broad bifid crowned
6273 Scarcely pubesc Stem upright branched, Lvs lin lanc Fl panicled erect, Cal netted, Pet small emarginate
6274 Smoothish viscid, Stem erect, Alternate branches long, Cal large clavate netted, Petals bifid
6275 Visc pubes Stems erect branch Lvs large, Fl large panic every other stripe of cal veiny, Teeth very long
6276 Pubes Stems erect branch Lvs lanc obt Fl panic every other stripe of cal veiny, Pet with broad toothl
6277 Subtomentose, Stems branch Lvs obov stalked, Fl term erect, Pet obcord 2-toothed at base [lobes
6278 Silky, Stems branched, Lvs with a long fringe at base, Fl large term Pet 2-parted crowned
6279 Stems much branch scarcely pubesc Lower lvs. obov spatul Lvs lin acute, Cal clavate striped with red
6280 Tufted smooth subviscid, Stems branched at base, Lvs lin Fl panic Cal netted, Pet bifid with lanc lobes

*** *Flowers erect, Calyxes long clavate* [at base

6281 Smooth visc Stems branch Lvs lanc lin Cal very long clav nett Pet obcord with a tooth on each side
6282 Viscid pubescent, Stems procumbent, Leaves lin long, Cal long tubular, Petals slightly emarg crenate
6283 Tufted viscid pubesc Root woody, Stems low assurgent little branched, Cal long netted, Petals bifid
6284 Suffruticose, Stems suberect smooth branched at base, Cal long cylindr viscid-villous, Petals 2-lobed
6285 Scabrous, Stems bran Fl term in the dichotomies, Cal long cylin Pet 2-part tooth on each side at base
6286 Pubescent, Root woody, Stems diffuse branched, Leaves soft numerous below, Petals halt bifid
6287 Tufted viscid pubescent, Stems woody supine branched, Lvs lin acute, Petals with narrow diverging lobes
6288 Stems erect pub Lvs roughish scarcely ciliat Fl large pan Pet. with broad obov lobes & 2-part append
6289 Very smooth glaucous, Stems branched, Leaves roundish acuminate, Fl large, Cal not striped
6290 Pilose pubesc Stems much branch Lower lvs ovate-spatul up lin Fl in large panic Pet 2-lob naked
6291 Pubesc visc Stems erect branch Branch spread Low lvs ov spatul Cal long narrow, Pet ½ bifid crowned
6292 Pubescent, Stems assurgent much branched leafy, Leaves linear acute, Cal clavate, Petals bifid
6293 Stem simple pubescent, Leaves pubescent lower large rounded stalked, Petals 2-parted crowned
6294 Smooth, Stem twiggy, Leaves lin lanc. radical very long, Cal very long, Petals 2-parted crowned
6295 Smooth clammy, Stem assurgent branch Lvs lin lanc acute lower very long, Upper bractes with a broad
6296 Silky, Stems erect branch Lvs wavy, Calyxes long clavate, Pet 2-part crowned [membranous margin
6297 Viscid pubescent, Lvs lanceol Cal long tubular, Petals lanceolate crowned, Stamens very long
6298 Villous viscid, Lvs lin lanceol obt ciliated, Peduncle 1-fl spreading in seed, Cal. circularly reflexed at base

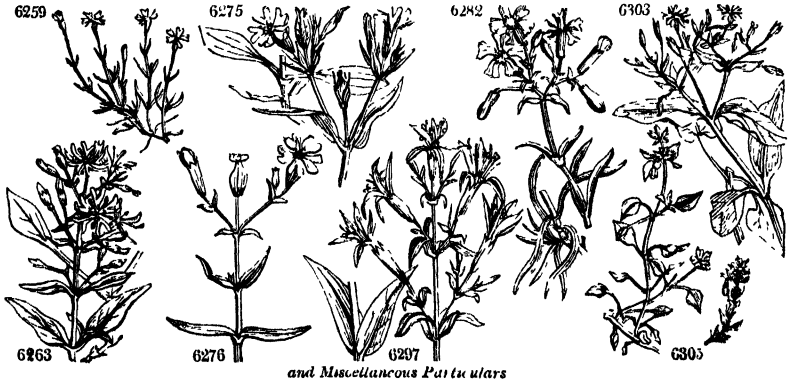
§ 8 *Caulescent, Flowers corymbose, Cal clavate, 10-striped*

6299 Tufted roughish, Root thick woody branch Stems simple slender very leafy at base, Lvs small lin acute
6300 Viscid, Stem much branch pubesc Lvs round subcihated the lower on long stalks, Fl loosely corymb

6301 Very smooth glaucous viscid, Leaves ovate-lanc Fl in panicled corymbs, Petals obcordate crowned

6302 Smooth, Stems erect branched, Upper leaves lanceolate lower linear lanc Umbel dense, Petals obovate

6303 Lower leaves cordate stalked upper lanc sessile, Petals twice as long as calyx
6304 Stems diffuse dichotomous rooting at base, Lower lvs ovate stalked cord upper sess Pet shorter than cal.
6305 Stems procumbent with a lateral 1-sided hairy line, Leaves lanc very tender, Fruit deflexed



and Miscellaneous Particulars

culture S media is a well known weed, never found but on rich friable soils in a state of culture the seeds and flower buds are a favorite food of finches and other small birds.

6306	dichótoma *W*	forked	☿	^	w	1½	ja d	W	Britain clt gr	S	co	
6307	bulbósa *Wulf.*	bulbous	☿	△	w	1	ja d	W	Carinthia 1823	S	co	Jacq icon t. 468
6308	viscída *Bieb*	clammy		○	w	1	ja d	W	Hungary 1820	S	co	Wal & Kit t 22
6309	Holóstea *W*	greater	☿	△	w	1	ap jn	W	Britain woods	D	co	Eng bot. 511
6310	Laxmánni *Fisch*	Laxmann's		○	w	1	ap jn	W	Siberia 1823	S	co	
6311	graminea *W*	lesser	☿	△	w	1	ap jn	W	Britain hed b	D	co	Eng bot 803
6312	glaúca *H K*	glaucous marsh	☿	△	w	¾	my au	W	Britain moi m	D	p l	Eng bot 825
6313	crassifólia *Ehr.*	thick-leaved	☿	△	w	1	my au	W	Germany ..	D	co	
6314	uliginósa *H K*	bog		○	w	1	m jl	W	Britain rivul	S	co	Eng bot 1074
6315	cerastoides *W*	Alpine	☿	△	w	½	jn jl	W	Scotland sc alp	D	co	Eng bot 911
6316	Arenária *W*	sand		○	w	½	jn	W	Spain 1799	S	co	
6317	scapígera *W*	naked-stalked	☿	△	w	¼	jn jl	W	Scotland sc rivu	D	co	Eng bot 1269
6318	dahúrica *W*	daurian	☿	◑	w	1	jn jl	W	Dahuria 1818	S	co	
6319	murális *Lmk*	wall		○	w	½	jn jl	W	Candia 1824	S	co	
6320	longipes *Hook*	long-stalked	☿	◑	w	⅔	jn jl	W	N Amer 1820	S	p l	

1050 ARENA'RIA *W* SANDWORT *Caryophyllæ Sp* 45—140

6321	segetális *Lam* / *Alsine segetális* W	corn		○	w	⅔	jn o	W	France 1805	S	co	Vail par t 3 f. 3
6322	purpúrea *Pers*	purple		○	cu	½	jl	Pu	Spain 1823	S	s l	
6323	rúbra *L*	red		○	cu	½	jn au	Pu	Britain san fi	S	s l	Eng bot 852
6324	marina *Roth*	marine	☿	△	cu	½	jn jl	Pu	Britain sea co	D	s l	Eng. bot. 958
6325	média *L*	downy		○	w	½	jl	W	France 1795	S	co	
6326	canadénsis *Pers*	Canada		○	w	½	jn jl	W	N Amer. 1812	S	p l	
6327	grammifólia *Sch*	grass-leaved	☿	△	pr	½	jn jl	W	Siberia 1815.	D	co	Sch gott t 5
6328	longifólia *Bieb*	long-leaved	☿	△	pr	½	jn jl	W	Siberia 1823	D	co	Gmel si t 63 f 2
6329	rígida *Bieb*	stiff	☿	△	pr	½	jn jl	W	Siberia 1823	D	co	
6330	pinifólia *Bieb*	pine-leaved	☿	△	cu	½	jl au	W	Caucasus 1823	D	s p	
6331	subulàta *Scr*	subulate	☿	△	pr	½	jl au	W	Caucasus 1822	D	s p	
6332	juniperina *L*	Juniper-leaved	☿	△	pr	½	jn jl	W	Armenia 1800	D	s p	Sm ined 1 t 35
6333	stricta *Mich*	upright	☿	△	pr	½	my jn	W	N Amer 1812	D	s p	
6334	laricifólia *L* / *rostrata* W & K	Larch-leaved	☿	△	pr	¼	au	W	Britain ...	D	s.p	Jac aus 3 t 272
6335	striáta *Vill*	striated	☿	△	pr	½	jn au	W	Switzerl 1683	D	s p	All pe 2 t 26 f 4
6336	Austríaca *Jacq*	Austrian	☿	△	pr	½	jn s	W	Austria 1793	D	s p	Jac aus 3 t 270
6337	triflóra *L*	three-flowered	☿	△	pr	½	ap jl	W	S Europe 1816	D	s p	C ic 3 t 240 f 2
§6338	grandiflóra *L*	great flowered	☿	△	pr	½	jn s	W	Switzerl. 1783	D	s p	All ped 10 f 1
6339	vérna *L*	vernal	☿	△	w	½	my au	W	Britain mount	D	s p	Eng bot 512
6340	Gerárdi *W*	Gerard's	☿	△	pr	½	my au	W	France 1822	D	s p	
6341	saxátilis *L*	rock	☿	△	pr	½	jl au	W	Germany 1732	D	s p	Gm si 4 t 63 f 2
6342	péndula *W & K*	pendulous	☿	△	pr	½	jn jl	W	Hungary 1816	D	co	Pl rar h 2 t 87
6343	tenuifólia *L*	fine-leaved		○	pr	½	jn jl	W	England san fi	S	co	Eng bot 219
6344	mediterránea *Lk*	Mediterranean		○	cu	½	jn jl	W	Mediterr 1823	S	co	
6345	recurva *All*	recurved	☿	△	pr	½	jn jl	W	Alps 1822	D	co	Jac col t 16
6346	setácea *Thuill*	setaceous	☿	△	w	½	jn jl	W	France ..	S	co	
6347	fasciculáta *Gouan.*	level-topped		○	w	½	m	W	Scotland sc mo	S	s p	Eng bot 1744
6348	filifólia *Forsk*	thread-leaved	☿	△	cu	½	jn jl	W	Arabia ..	D	s p	Vah sym 1 t 12
6349	mucronáta *Dec* / *Alsine mucronáta* W	bristly	☿	◑	pr	½	jn	W	S Europe 1777	S	co	Hall hist 1 t.17
6350	polygonoides *Jacq*	knotgrass-like	☿	△	cu	½	jl au	W	Switzerl 1822	S	co	Al ped t 64 f 4
6351	verticillàta *W*	whorled	☿	⌐	pr	½	jl	W	Armenia 1823	C	s p	
6352	tetráquetra *L*	square	☿	△	pr	½	au	W	Pyrenees 1731	D	s p	All p 2 t 89 f 1
6353	lanceoláta *All*	lanceolate	☿	△	cu	½	au	W	Switzerl 1823	D	s l	Al. ped t 26 f 5
6354	cherleroides *Vill*	cherleria-leaved	☿	△	pr	½	jl au	W	France .	D	s p	
6355	montána *L*	mountain	☿	△	cu	½	ap jl	W	France 1800	D	s p	Bot mag 1118
6356	serpyllifólia *L*	thyme leaved		○	w	½	jn jl	W	Britain walls	S	co	Eng bot 923
6357	pubéscens *Dec*	pubescent	☿	○	pr	½	jl	W	. .. ..	S	co	
6358	brevicaulis *Stern*	short-stalked	☿	△	pr	½	jn jl	W	Alps 1823	D	co	
6359	scábra *Pers*	rough	☿	△	cu	½	m jl	W	Alps 1822	D	co	
6360	ciliáta *L*	fringed	☿	△	pr	¼	mr au	W	Ireland ir mou	S	s p	Eng bot 1745
6361	multicaulis *Jacq*	many-stalked	☿	△	pr	½	jl au	W	Europe 1794	D	s p	J co 1 t 17 f 1
6362	trinérvis *L*	Plantain leaved		○	w	⅔	my jn	W	Britain woods	S	s p	Eng bot 1483



History, Use, Propagation, Culture,

1050 *Arenaria* From *arena*, sand, in which most of the species are found They are of most difficult discrimination, and are chiefly diminutive weeds found almost exclusively on sandy soils The flowers vary

6306 Hairy, Lvs cord ovate stem-clasping, Stem dichotomous, Fl solitary, Sepals lanc ac longer than petals
6307 Leaves ovate lanceol nearly veinless, Pedunc 1-fl Sepals lanc acute twice as short as petals
6308 Villous viscid, Leaves lin lanc Stems dichotomous diffuse, Petals and capsule longer than calyx
6309 Lvs lanc acum serrulate roughish the upper broader and shorter, Pedunc filiform very long, Pet 2-fid
6310 Stem erect few-fl Lvs linear acute entire smoothish, Pedunc filiform very long, Petals 2-parted
6311 Leaves linear smooth at edge, Stems diffuse, Fl panicled divaricating, Petals the length of calyx
6312 Glaucous, Leaves lin lanc smooth at edge, Floral scarious, Petals twice as long as cal Stem erect weak
6313 Leaves ovate-lanceol entire smooth thick, Sepals ovate-lanceol much shorter than petals
6314 Leaves ovate-obl Pet deeply divided shorter than calyx, Caps ovate oblong longer than calyx
6315 Leaves obl pubescent, Pedunc 1-fl twin, Pet larger than cal Caps obl nearly twice as long as sepals
6316 Leaves spatulate, Stem erect bifid viscid, Branches alternate, Petals emarginate
6317 Leaves linear lanc obtuse very dense, Pedunc 1-fl and umbelled, Pet scarcely longer than calyx
6318 Leaves lanc entire sessile acute, Base and stem pubescent, Fl axill solitary
6319 Glandular pubescent, Stem procumbent, Leaves ovate fleshy, Petals scarcely longer than calyx cut
6320 Very smooth, Leaves linear-lanc Pedunc terminal dichotomous bracted, Pet broad obovate 2-parted

§ 1 *Caps 3-valved, Leaves linear, with scarious stipules at base*

6321 Smooth, Stem erect, Leaves subulate 1-sided, Petals shorter than calyx
6322 Hispid, Stem erect, Branches divaricating, Lvs setaceous twice as short as joints, Pet. obt shorter than calyx
6323 Stems prostrate hairy, Leaves filiform shorter than the joint, Sepals lanceolate obtuse scarious at edge
6324 Like the last, but nearly smooth
6325 Stems prostrate, Leaves half cylindrical fleshy as long as joints, Seeds with a membranous wing
6326 Pilose subhispid, Leaves filiform longer than joint, Stamens 5, Seeds obcord compressed, Caps globose

§ 2 *Leaves grassy, linear, lanceolate or rounded, without stipules, Caps 3-valved*

* *Leaves grassy*

6327 Stems erect simple, Lvs subul. filiform rough, Panic trichotomous pubescent lax, Calyxes very obtuse
6328 Leaves subulate-filiform serrulate, Stems erect simple Panicle trichotomous smooth compact
6329 Leaves lin setaceous ciliated rough, Stems erect rigid simple, Sepals acute scarcely longer than corolla
6330 Stems ascending few-fl pubescent, Lvs setaceous rigid, Culine straight, Sepals obtuse striated villous
6331 Leaves setaceous rigid mucronate striated, Stems panicled few-fl Sepals lanc much shorter than corolla

** *Leaves subulate or linear*

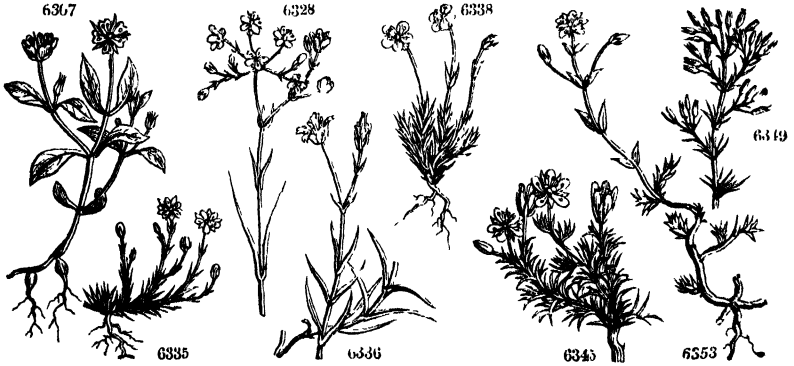
6332 Lvs subulate rigid spiny: lower fascicled, upper distant, Stems erect firm, Pet obov twice as long as cal
6333 Erect smooth many-stemmed, Leaves subulate linear erect, Pan few fl Petals conspicuously striated
6334 Leaves subulate tooth-ciliated, Stems ascending 3-6-fl roughish, Cal cylindrical, Sepals 3-nerved hairy

6335 Like the last, but stems rigid few-fl Leaves long straight, Pedunc and calyx viscid hairy
6336 Lvs lin subul 3-nerved, Stem panicled, Pedunc terminal very long twin downy, Pet obt emarginate
6337 Like the last, but stems 2-4-fl Leaves narrow recurved
6338 Lvs subulate broadish flat 3-nerved ciliated, Radical clustered, Stems 1-fl Pedunc very long pubescent
6339 Tufted many-stemmed, Leaves subulate obtuse nerved, Stems panicled elongated
6340 Erect branched, Leaves linear subulate 3-nerved, Pedunc twin terminal 1-flowered
6341 Leaves subulate, Stems panicled, Sepals ovate
6342 Stems filiform rooting very long diffuse, Flowering branches erect few-fl Lvs lin flat acute fascicled
6343 Leaves subulate setaceous, Stem branched dichotomous, Sepals subulate striated much longer than petals
6344 Stem much branched, Leaves lin recurved, Sepals with a long point and membranous edge
6345 Radical lvs clustered recurved subul 1-sided, Stems tufted simple 2-fl Sepals and peduncles hairy gland
6346 Stem much branched, Fl panicled fastigiate, Leaves setaceous fascicled 1-sided ciliated at base
6347 Leaves subulate fascicled setaceous, Stems erect straight simple, Sepals acuminate with 2 lines
6348 Leaves setaceous fascicled with 2 stripes, Stems suffruticose dichotomous, Pedunc term 1-2-flowered
6349 Lvs setaceous not ciliated at base, Stems tufted prostrate at base, Pedunc longer than leaf, Sepals awned

6350 Procumbent, Leaves linear obt Peduncles 2 or 3 1-flowered with 2 bractes at base, Sepals without nerves
6351 Leaves subulate rigid spiny and flowers whorled, Pedunc 4-fl capitate

*** *Leaves lanceolate, oval or rounded*

6352 Leaves ovate carinate recurved edged imbricated 4 ways, Stems straight downy, Sepals rigid acute keeled
6353 Tufted villous, Branches ascending, Leaves lanceolate narrow acute rigid nerved
6354 Like the last, but smaller, with creeping and tufted stems, and imbricated leaves
6355 Pubescent, Leaves lanc linear, Barren stems very long procumbent, Pedunc terminal long 1-flowered
6356 Leaves ovate acute sessile regular ciliated and smooth, Sepals lanceolate 3-nerved acute green opaque
6357 Pubescent, Lvs ovate acute stalked, Stems spreading branched elongated, Sepals acute shorter than cor
6358 Leaves oblong acute 3-nerved ciliated imbricated, Stem prostrate, Sepals lanceolate acuminate striped
6359 Leaves lanc acute spreading hard rough, Stem simple short, Sepals ovate acuminate striped
6360 Leaves ovate and obovate blistered rugose more or less nerved and ciliated, Stems procumbent
6361 Like the last, but leaves pulpy thick and sepals scarcely nerved
6362 Stem slender branched, Lvs ovate acute stalked ciliated nerved, Pedunc long bent down after flowering



and Miscellaneous Particulars

considerably in the number of their stamens, more generally falling short of than exceeding the regular number.

6363 baleárica *L* Majórca ☽ △ pr ¼ mr au W Majorca 1787. D s p L h. stir 1 t 15
6364 peploides *L* Sea-chickweed ☿ △ pr ¼ my jl W Britain sea sh. D s p Eng bot. 189
6365 procúmbens *Vahl* procumbent ☿ △ pr ¼ jl au R Egypt 1801. D s p Vahl. sy. 2 t. 33

051 CHERLE'RIA *W* CHERLERIA.
6366 sedoides *W* dwarf ☿ △ or ¼ jl au Y w Scotland sc alp D s l Eng bot 1212

1052 BRUNNI'CHIA *W* BRUNNICHIA
6367 cirrhósa *W* Carolina ♃ ⌴ or 6 ... Pk Carolina 1787. C l p Gær s l. t 45 f 2

1053 GARIDEL'LA *W* GARIDELLA
6368 Nigellástrum *W* Nigella-leaved ○ or 1½ jn jl B G France 1736. S co Bot. mag 1266

*1054 MALPI'GHIA *W* BARBADOS CHERRY
6369 glábra *W* smooth-leaved ♀ □ fr 16 mr jl R W Indies 1757 C p l Bot mag 813
6370 punicifólia *W* Pomegran.-lvd ♚ □ or 12 .. Pk W Indies 1690 C p l Plum ic t 166. t.2
§6371 polystáchia *H K* many-spiked ♚ □ or 10 mr my Y W Indies 1806 C p l Bot rep 604
§6372 mé lia *H K* intermediate ♚ □ or 10 mr my Y W Indies 1790 C p l
§6373 glandulífera *Jacq* quadriglandular ♚ □ or 10 mr my Y W Indies 1806 C p l Jac ic 3. t 469
§6374 glandulósa *W* biglandular ♚ □ or 10 ... Y W Indies 1804 C p l Ca dis 8 t 239 f 2
§6375 nítida *W* glossy-leaved ♚ □ or 6 mr au Pk W Indies 1733 C p l Ca dis 8 t 239 f 1
6376 fucáta *B Reg* painted ♚ □ or 8 mr au R ..... 1814 C p l Bot reg 189
M. macrophylla Desf
6377 urens *W* stinging ♚ □ fr 3 jl o Pk S Amer 1737 C p l Bot reg 96
6378 angustifólia *W* narrow-leaved ♚ □ or 7 jl au Pk W Indies 1737 C p l Bot cab 321
§6379 canéscens *B* downy-leaved ♀ □ or 20 .. ... W Indies 1742 C p l
§6380 crassifólia *W* thick-leaved ♀ □ or 20 au Y S Amer 1793 C p l Aub gu 1 t 182
§6381 Mouréila *Aubl* yellow-spiked ♀ □ or 20 au Y S Amer 1823 C p l Aub gu 1 t 183
§6382 lúcida *W* wedge-leaved ♚ □ or 6 my au Pk W Indies 1759 C p l Bot mag 2462
§6383 coriácea *W* leathery-leaved ♀ □ or 30 my au Pk Jamaica 1814 C p l Slo h 2 t 163 f 1
§6384 volúbilis *Sims* twining ⚳ □ or 10 au s Y W Indies 1793 C p l Bot mag 809
6385 aquifólium *W* Holly-leaved ♚ □ or 7 au s Pk S Amer 1759 C p l C di 8 t 230 f 2
6386 coccífera *W* Kermes'Oak-lv ♚ □ or 2 ... Pk W Indies 1733 C p l Bot. reg 568

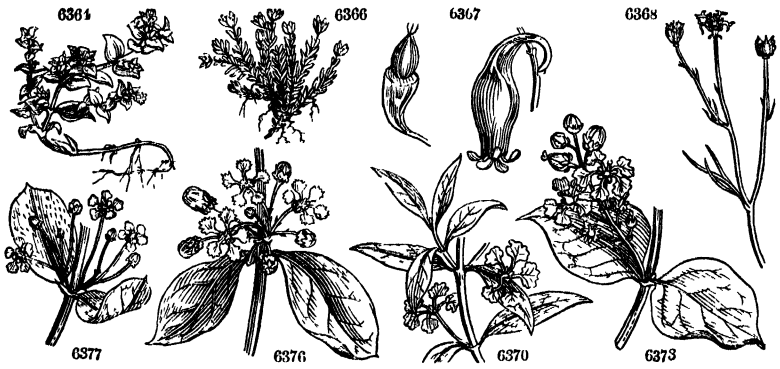
†*1055 BANISTERIA *W* BANISTERIA
6387 ciliáta *W* ciliated ♃ □ or 10 ... Y Brazil 1796 C s l Cav dis 9 t 254
6388 purpúrea *W* purple ♃ □ or 10 .. Pu W Indies 1759 C s l C di 9 t 246 f 1
§6389 chrysophýlla *W.* Star-apple-lvd. ♃ □ or 10 . Y Brazil 1793 C r m Jac. sch 1 t. 105
6390 laurifólia *W* Bay-leaved ♃ □ or 10 jl au Y Jamaica 1733 C s l
§6391 nítida *W* glossy ♃ □ or 10 . .. S Amer 1809 C s l Cav diss t 244
6392 sericea *P S* silky ♚ □ or 10 ... Y Brazil 1810 C s l Cav dis 9 t 258
6393 fulgens *W* shining-fruited ♃ □ or 6 ... Y W Indies 1759 C r m
6394 heterophýlla *W* various-leaved ♃ □ or 10 ... Y S Amer 1812 C s l Cav. dis t 253
§6395 brachiáta *B* cross-branched ♃ □ or 10 ... Y W Indies 1759 C s l

1056 HIRÆ'A *W* HIRÆA
6396 reclináta *W* reclined ♚ □ or 10 .. Y W Indies .. C s l Jac am t. 176

1057 CNES'TIS *Lam* CNESTIS
6397 glábra *Lam.* smooth ♚ □ or 10 .. W G Mauritius 1823 C s l Lam. il t. 387 1

PENTANDRIA.

1058 AVERRHO'A *W* AVERRHOA
6398 Bilimbi *W* Bilimbi-tree ♚ □ fr 8 au s R Y E Indies 1791 C s l Cav dis 7 t. 219
6399 Carambóla *W* Carambola-tree ♚ □ fr 14 ... G R E Indies 1793 C s l Cav dis 7 t. 220



History, Use, Propagation, Culture,

1051 *Cherleria.* John Henry Cherler was an assistant of John Bauhin in preparing his Historia Plantarum. A little obscure weed

1052 *Brunnichia* A catalogue of the books upon natural history was published by one Mr. F. Brunnich, a Danish naturalist, in 1793

1053 *Garidella* So named by Tournefort, in honor of Pierre Garidel, M D., physician at Aix in Provence, author of Histoire des Plantes qui naissent en Provence, 1719, with many figures. A plant of little curiosity or beauty Small inconspicuous plants of the easiest management

1054 *Malpighia* So named by Plumier in honor of Marcello Malpighi, professor of medicine at Bologna, author of Anatome Plantarum, 1765 and 1769, a celebrated work, the best of its time on the structure of vegetables. The species are handsome evergreen trees and shrubs, some of them fruit-bearing and others climbers M glabra is grown for its fruit in the West Indies, and the fruit of M urens is also eaten under the name of Barbadoes cherry, but that of both species is much inferior to European cherries. All the species have the under sides of their leaves covered with prickly bristles which when handled run into the fingers. Ripened cuttings root freely in sand under cover

1055 *Banisteria* So named by Dr Houstoun, in memory of the Rev. John Banister, a curious botanist, who lost his life in search after plants in Virginia The species are chiefly evergreen climbers and twiners, some of them, as B fulgens and chrysophylla, have fine shewy foliage as well as beautiful flowers.

6363 Tufted creeping, Leaves ovate shining fleshy ciliated, Pedunc long 1-fl. Flowers cernuous
6364 Leaves ovate acute fleshy approximated, Fl solitary on short stalks, Sepals obl acute as long as cor.
6365 All over pubescent, Leaves lin. lanceol. Stems prostrate much branched, Seeds very minute

6366 Leaves spreading

6367 Leaves cordate sagittate

6368 Petals sessile spreading, Stamens 10-12

6369 Leaves ovate entire smooth, Peduncles umbelled
6370 Leaves ovate entire smooth, Peduncles 1-flowered
6371 Leaves entire oblong acute smooth shining with 2 glands beneath at the base
6372 Leaves entire oblong lanceolate acute smooth with 2 glands at a distance from the base
6373 Leaves ovate nearly entire with hairs on both sides, Fl -stalks with a truncate gland at top
6374 Leaves ovate elliptical acuminate entire smooth with 2 glands at base
6375 Leaves oblong acuminate entire smooth, Racemes axillary, Fl monogynous
6376 Leaves elliptical shining hairy beneath, Fl axillary corymbose

6377 Leaves obl ovate with decumbent stiff bristles, Peduncles 1-fl aggregate
6378 Leaves lin lanceol with decumbent bristles on each side, Peduncles umbelled
6379 Leaves obl obtuse pubescent, Racemes axillary compound
6380 Leaves ovate entire obtuse downy beneath, Racemes terminal
6381 Leaves ovate downy beneath acute, Flowers yellow spiked
6382 Leaves obovate wedge-shaped entire veinless shining, Raceme terminal
6383 Leaves ovate acute entire smooth on each side, Racemes terminal spiked
6384 Leaves oval acuminate shining, Racemes corymbose terminal
6385 Leaves lanceol. toothed-spiny hispid beneath
6386 Leaves subovate toothed-spiny

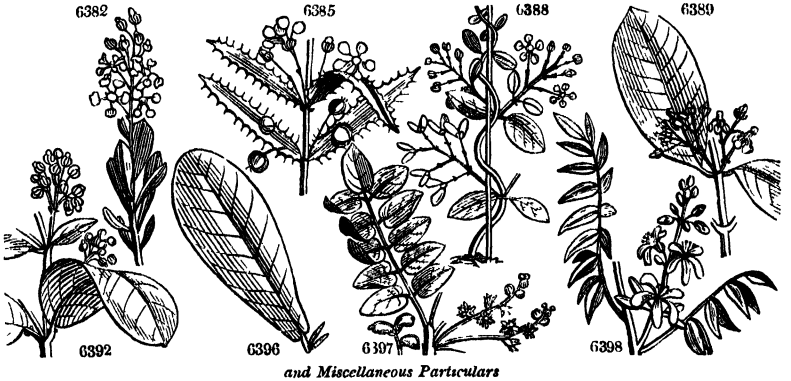
6387 Leaves orbicular cordate ciliate toothletted smooth, Petioles with 2 glands
6388 Leaves roundish ovate obtuse smooth, Racemes axillary and terminal, Seeds erect
6389 Leaves ovate oblong acutish towards the end obsoletely ciliated beneath shining gold-colored
6390 Leaves ovate-oblong rigid, Racemes terminal
6391 Leaves ovate oblong entire beneath shining, Panicle terminal leafy
6392 Branches 2-edged, Leaves ovate downy beneath, Petioles with 2 glands
6393 Leaves subovate downy beneath, Racemes brachiate, Peduncles umbelled
6394 Leaves downy beneath orbicular cordate, Branches divaricating roundish, Petioles with 2 glands
6395 Leaves subovate, Branches brachiate, Seeds narrower inwards

6396 Leaves simple obovate obtuse pubescent above smooth beneath

6397 Leaves pinnated, Leaflets ovate stalked smooth on each side, Racemes fascicled

PENTAGYNIA.

6398 Leaves pinnated, Leaflets ovate-lanceolate, Fruit oblong with obtuse angles
6399 Leaflets ovate unequal acuminate, Fruit obl acute-angled



and Miscellaneous Particulars

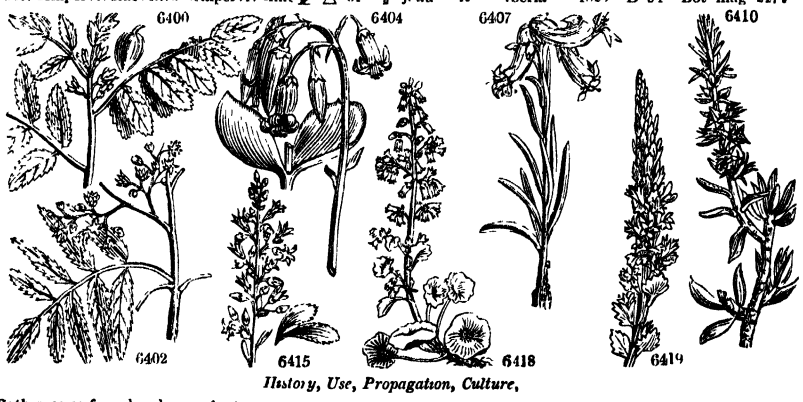
All of them root freely in ripened wood in sand under a hand-glass In most respects they resemble the last genus

1056. *Hiræa* Named after John Nicholas de la Hire, a French physician, who died in 1727. Plants with the appearance of Banisteria.

1057 *Cnestis* From κνηθω, to scratch The capsules, covered with hairs, excite a troublesome itching Fine evergreen stove shrubs.

1058. *Averrhoa* So named in honor of Ebn Elvelid Ebn Rushad, commonly called Averrhoes, of Corduba in Spain, a famous commentator on Aristotle and Avicenna He also published Calliget, or the plants used in food, &c He died at the beginning of the thirteenth century The specific names are vernacular appellations The species are evergreen trees, singular for the fruit growing frequently on the trunk itself, below the leaves the flowers grow in racemes, the fruit is a five-celled pome. A Bilimbi is a beautiful tree with a green fleshy oblong fruit the thickness of the finger, filled with a grateful acid juice, the substance and seeds not unlike those of cucumber They make a syrup of the juice, and a conserve of the flowers, which are esteemed excellent in fevers and bilious disorders A carambola bears a fruit the size of a hen's egg, with a pulpy subacid juice, used ripe and also pickled green, and employed also in dying, and other economical purposes The petioles and branches of this tree are said to have a peculiar sensitive quality, of which an account is given by Dr Bruce in the Philosophical Transactions,

1059 **SPON'DIAS** *W*	Hog Plum				*Terebintaceæ*	*Sp* 3—7.						
6400 Mómbin *W*	flat-stemmed	♃	□	pr	10	.	Y G	W Indies	1817.	C	s p	Slo. his 2. t 219
6401 Myrobálanus *W*	yellow	♃	□	pr	30	...	Y G	W Indies	1739*	C	s p	Mer sur t. 13
6402 dulcis *W*	Otaheite-apple	♃	□	pr	50	.	Y G	Society Is	1793	C	s p	Lam. ill t 384
†*1060 **COTYLE'DON** *W*	Navel-wort				*Sempervivæ*	*Sp* 17—20						
6403 orbiculáta *Haw*	round-leaved	♃	⌴	cu	2	jl au	R	C G H	1789	C	s l	
6404 ováta *Haw*	ovate-leaved	♃	⌴	cu	2	jl o	R	C G H	1789	C	s l	Bot mag. 321
6405 papillária *L*	conical	♃	⌴	cu	1½	au	R	C G H	1822	C	s l	Bot mag
6406 oblónga *Haw*	oblong-leaved	♃	⌴	cu	2	jl s	R	C G H	1690	C	s l	
6407 curviflóra	curve-flowered	♃	⌴	cu	1½	o	Or	C G H	1818	C	s l	Bot mag 2044
6408 ramosissima *Mill*	many-branched	♃	⌴	cu	2	...	.	C G H	1768	C	s l	
6409 fasciculária *W*	cluster-leaved	♃	⌴	cu	1	jl s	R	C G H	1759	C	s l	Burm afr t 18
§6410 coccínea *W*	scarlet	♃	⌴	cu	2	o	Sc	C G H	1816	C	s l	Bot cab 832
6411 decussata *Sims*	cross-leaved	♃	⌴	cu	1½	au	Sc	C G H	1819	C	s l	Bot mag 2518
6412 hemisphærica *W*	thick-leaved	♃	⌴	cu	1	jn jl	. .	C G H	1731	C	s l	Plant grass 87
6413 spuria *W*	narrow-leaved	♃	⌴	cu	1	jl au	.	C G H	1731	C	s l	Com rar t 23
§6414 cæspitósa *Haw* *linguæfórmis* H K	tongue-leaved	☿	△	cu	1	jn au	Y	California	1796	C	s l	
§6415 serráta *W*	notch-leaved	☿	△	cu	1	jn jl	Y	Siberia	1732	C	s l	Di el t 95 f 112
§6416 hispánica *W*	Spanish	☿	◯	pr	½	jn jl	Y	Spain	1796	C	s l	Plant grass 122
6417 Malacophýllum *W*	annual		○	pr	½	jn jl	P s	Davuria	1815	C	s l	P it 3 ap t G f 1
§6418 umbilicus *W*	Penny-wort	☿	△	pr	½	jn jl	Y	Britain sha roc		C	s l	Eng bot 325
β Mucizóni Brot	*Portuguese*	☿	△	pr	½	jn jl	Y	Portugal	1823	S	s l	
§6419 lutea *W*	yellow	☿	△	pr	½	jn jl	Y	England moi ro		C	s l	Eng bot 1522
†*1061 **SE'DUM** *W*	Stone-crop				*Sempervivæ*	*Sp* 41—60						
6420 verticillátum *W* *S triphyllum* Haw	whorl-leaved	☿	△	or	1	jl s	Pk	S Europe ...		D	s l	Am ac 2 t 4 f 14
6421 máximum *Haw*	great-purple	☿	△	or	2	jl s	W	Spain	1794	D	s l	
6422 álbicans *Haw*	great-white	☿	△	or	2	jl s	W	Europe	1794	D	s l	
6423 Telephium *E B*	common Orpine	☿	△	or	2	jl s	Pu	Britain bor ft		D	s l	Eng bot 1319
6424 Telephioides *Mich*	Rhodiola-lvd	☿	△	or	1	jl s	Pu	N Amer	1810	D	s l	
6425 Anacámpseros *W*	evergreen	☿	△	or	½	jl au	Pu	France	1596	D	s l	Bot mag 118
6426 divaricátum *W*	spreading	☿	⌴	or	½	jn jl	Pk	Madeira	1777	R	s l	
6427 Aizóon *W*	yellow	☿	△	or	1	jl s	Y	Siberia	1757	D	s l	Plant grass 101
6428 spurium *W cn*	fringed	☿	△	or	½	jl s	Pk	Caucasus	1816	D	s l	Bot mag 2370
6429 oppositifólium *B M*	opposite-leaved	☿	△	or	½	jl s	W	Caucasus	..	D	s l	Bot mag 1807
6430 hybridum *W*	Germander-lvd	☿	△	or	½	my jl	Pu	Siberia	1766	D	s l	Mur c go 6 t 5
6431 populifolium *W*	Poplar-leaved	☿	△	or	1	jl au	W	Siberia	1780	D	s l	Bot mag 211
6432 ternátum *Ph*	Purslane-leaved	☿	△	or	½	jl au	W	N Amer	1789	D	s l	Bot reg 142
6433 stellátum *W*	starry		○	or	½	jn jl	W	S Europe	1640	S	s l	Cam ho 7 ic 2
6434 spathulátum *W cn*	spathulate	☿	◯	or	½	jn jl	W	Hungary	1815	S	s l	Pl ra h 2 t.104
6435 Cepæa *B*	panicled		○	or	1	jl au	W	France	1640	S	s l	
§6436 spinósum *W cn* *Crássula spinósa* W	spiny	☿	△	or	½	au	W	Siberia	1790	D	s l	Gm sib t 67 f 2
6437 dasyphýllum *W*	thick-leaved	☿	△	pr	½	jn jl	W	England walls		D	s l	Eng bot 656
6438 reflexum *E B*	reflex-leaved	☿	△	or	1	jn jl	Y	Britain walls		D	s l	Eng bot 695
6439 glaucum *E B*	glaucous	☿	△	or	½	jl au	Y	England bar sa		D	s l	Eng bot 2477
6440 collinum *W cn*	hill	☿	△	or	1	jn au	Y	.	1815	D	s l	Plant grass 115
6441 virescens *W cn*	greenish-flower	☿	△	or	1	jn au	G s	.. ..	1815	D	s l	
6442 septangulare *Haw*	seven-rowed	☿	△	or	½	jn jl	Y	.	1796	D	s l	
6443 virens *W*	green	☿	△	or	⅛	jn jl	Y	Portugal	1774	D	s l	
6444 rupéstre *W*	rock	☿	△	pr	½	jl au	Y	England rocks		D	s l	Eng bot 170
6445 Forsterianum *H K*	Forster's	☿	△	or	½	jl au	Y	Wales w roc		D	s l	Eng bot 1802
6446 cærúleum *Vahl*	pale-blue	☿	△	or	½	jl au	P B	Africa	1822	D	s l	Bot reg 520
6447 sempervivoides *Bch*	Sempervivum-like	☿	△	or	½	jl au	R	Iberia	1823	D	s l	Bot mag 2474



History, Use, Propagation, Culture,

Both species form handsome plants in our stoves, they grow freely, and ripened cuttings root readily in sand under a hand glass

1059 *Spondias* One of the Greek names of the plum The plants of this genus bear fruit like plums, which are also called hog plums in the West Indies These are deciduous fruit-bearing trees, natives or cultivated in both Indies S Mombin (the South American name) flowers from the sides of the branches, and is known by its oblong or ovate fruit like a plum, having a luscious thin pulp covering a large fibrous stone. The skin is yellow, purple, or variegated, the pulp is yellow and thin, having a singular but not unpleasant taste, and a sweet smell The seed scarcely ever ripens, but it is so easily increased by cuttings, that if a branch laden with young fruit be set in the ground, it will grow, and the fruit will soon come to maturity In St. Domingo they make hedges of the boughs, which flower and bear fruit in a few months. It is also cultivated for the sake of the fruit, though it is not in much esteem in Jamaica

The flowers of S Myrobalanus (the Myrobalanus of Dioscorides was an Egyptian or Arabian tree, which

6400 Common petiole compressed
6401 Common petiole round, Leaves shining acuminate
6402 Common petiole round with 6 pairs of leaflets which are serrated and ribbed

6403 Leaves orbicular spatulate powdery obtuse with a point, Fl panicled, Stem erect branched
6404 Leaves ovate spatulate obtuse powdery with a point edged with red, Fl panicled, Stem erect branched
6405 Leaves opp rounded ovate, Flowers corymbose
6406 Leaves obl spatulate obtuse smooth with a point, Fl panicled, Stem erect branched
6407 Leaves semicylindrical scattered, Fl panicled nodding, Tube curved
6408 Leaves ovate spatulate obtuse with a point powdery, Fl panicled, Stem much branched divaricating
6409 Leaves wedge-shaped fascicled, Stem thickened, Branches fleshy conical
6410 Leaves obovate acute fleshy, Spike leafy terminal
6411 Leaves crossing rounded mucronate glaucous, Fl panicled pendulous
6412 Leaves half orbicular scurfy dotted flat above, Fl few small sessile
6413 Leaves spatulate obtuse naked with a point
6414 Leaves glaucous narrow tongue-shaped at the end obcuneate mucronate, Fl cymose, Stem leafy

6415 Leaves oval crenate, Stem spiked
6416 Leaves oblong nearly round, Flowers fascicled
6417 Leaves lanceolate acute fleshy, Spike cylindrical terminal leafless
6418 Leaves peltate crenate, Stem nearly simple, Fl pendulous, Bractes entire

6419 Leaves peltate crenate, Stem nearly simple, Flowers erect, Bractes toothed

6420 Leaves whorled 4

6421 Leaves amplexicaul cordate ovate obtuse unequally and deeply serrated
6422 Leaves amplexicaul cordate oblong obtusely serrated whitish
6423 Leaves flattish serrated, Corymb leafy, Stem erect
6424 Leaves flat ovate acute at each end toothed, Flowers in corymbose fascicles
6425 Leaves wedge-shaped narrowed at the base subsessile, Stems decumbent, Fl corymbose
6426 Leaves wedge-shaped rhomboid emarginate stalked, Stems branched, Pan terin divaricating
6427 Leaves lanceolate serrated flat, Stem erect, Cyme sessile terminal
6428 Leaves roundish obovate flat crenated at end with a cartilaginous muricated edge
6429 Leaves flat opposite spatulate toothed
6430 Leaves wedge-shaped concave somewhat toothed aggregate, Branches creeping, Cyme terminal
6431 Leaves flat cordate toothed stalked, Corymbs terminal
6432 Leaves whorled obovate entire smooth, Cyme in three divisions
6433 Leaves flattish angular, Fl lateral subsessile solitary
6434 Stems branched, Leaves entire lower spatulate, Stigmas acute
6435 Leaves flat lanceolate, Stem branched, Flowers panicled, Petals acute awned
6436 Radical leaves obovate with a long mucronate point, Stem simple, Spike term long

6437 Leaves opposite ovate obtuse fleshy, Stem weak, Fl scattered
6438 Leaves subulate scattered separate at base the lower recurved
6439 Leaves glaucous subulate scattered separate at base, Fl cymose, Cal lanceolate
6440 Lvs rounded subulate acute those of the barren branches glaucous spreading, Branches of cyme recurved
6441 Lvs rounded subulate acute those of the barren branches glaucous spreading, Branches of cyme compact
6442 Leaves subulate in 7 rows glaucous very close distinct at base [erect
6443 Leaves subulate scattered separate at base, Fl in cymes Petals half as long as lanceolate calyx
6444 Leaves subulate scattered separate at base glaucous, Fl in cymes, Petals twice as long as calyx
6445 Leaves subulate spreading in many rows close, Cal short obtuse
6446 Leaves oblong alternate obtuse separate at base, Cyme bifid smooth
6447 Leaves flat spatulate ovate acute entire pubescent, Corymb hemispherical



and Miscellaneous Particulars

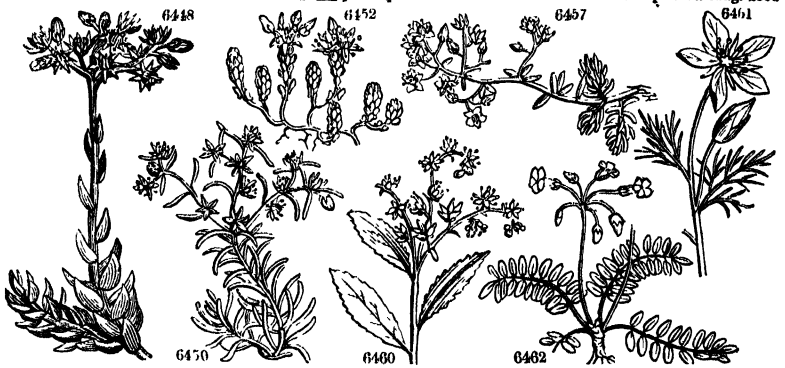
bore a perfumed fleshy fruit Jacquin applied the name to this South American plant, which is nearly similar in properties) come out before the leaves make their appearance, and are succeeded by yellow plums the size of a pigeon's egg, which are eaten by children, and considered excellent food for hogs It grows by large cuttings as freely as the other S aulosis a handsome tree, the pulp of the fruit is firmer than that of the others, and tastes like a Remette apple It is cultivated in the Society and Friendly islands, especially in Otaheite, the fruit is of a gold color, hangs in little nodding bunches, and is esteemed both tasteful and wholesome its flavor resembles that of the pine-apple

1060 *Cotyledon* From κοτυλη, a vessel or cup Many of the species of this genus have cup-shaped leaves The species are succulents of little beauty, and of the easiest culture in light earth and lime rubbish, or in sand and loam

1061. *Sedum* From *sedere*, to sit these plants growing upon the bare rock, look as if sitting upon it The species are low succulents, some of them pretty, others curious, but none of them remarkable in any way.

6448	altissimum *P S*	tall	♃ △ or	jl au	P Y	S. Europe	1769	D	s.l	Jac. vind. 1. t. 81
	Sempervivum sedtforme W									
6449	quadrifidum *W*	four-cleft	♃ △ or	½ jl	Y	N Asia	1800.	D	s l	Pa. it. 3. a t P f 1
6450	hispánicum *W*	Spanish	♃ △ or	½ jn jl	P Y	Spain	1732	D	s.l	Jac. au 5 t a 47
6451	álbum *W*	white	♃ △ pr	½ jn jl	W	England rocks		D	s.l	Eng bot. 1578
6452	ácre *W.*	biting	♃ △ pr	½ jn	Y	Britain walls		D	s.l	Eng. bot. 839
6453	sexanguláre *W*	insipid	♃ △ pr	½ jn jl	Y	England walls.		D	s l	Eng bot 1946
6454	ánglicum *W*	English	♃ △ pr	½ jl au	W	Britain rocks		D	s l	Eng. bot. 171
6455	ánnuum *W*	annual	○ pr	⅛ tu	W	N Europe	1739	S	s l	
6456	villósum *W*	hairy	♃ △ pr	½ jn jl	Pk	Britain m al p		D	s l	Eng bot 394
6457	monregalénse *P S*	clammy	♃ △ pr	½ jn jl	W	S Europe	1816.	D	s l	Bot. cab 464
6458	atrátum *H*	dark-annual	○ pr	⅛ au	Pu	Italy	1795	S	s l	Jac. aus. 1. t. 8
6459	núdum *W.*	naked-branch	♃ ⌴ pr	½ jl au	W	Madeira	1777.	R	s l	

1062	PENTHO'RUM *W*	Penthorum.		*Sempervivæ*	*Sp.* 1.					
6460	sedoides *W*	American	♃ △ cu	1 jl au	G Y	Virginia	1768	D	s.l	Lam. ill. t. 390
1063	GRIE'LUM *W*	Grielum		*Rosaceæ.*	*Sp* 1.					
6461	tenuifólium *W*	slender-leaved	♃ ⌓ un	2 ap my	Y	C G H	1790.	R	p l	Sw. ger. 2. t. 171
1064.	BIO'PHYTUM *D C*	Biophytum		*Oxalideæ*	*Sp* 1—2					
6462	sensitivum *D C*	sensitive	⊡ pr	½ jl s	Y	China	1823	S	s.l	Jac. ox t 78 f 4
	Oxalis sensitiva L									
†1065	OX'ALIS *W*	Oxalis		*Oxalideæ*	*Sp* 72—154					
6463	Plumíeri *Jacq*	Plumier's	♃ □ or	2 ja d	Y	S Amer.	1823	C	p l	Bot reg. 810
6464	perénnans *Haw*	perennial	♃ ⌓ or	2 my s	Y	N S W	...	O	s p	
6465	Dillénii *Jacq*	annual	○ pr	2 my au	Y	America	1798	S	s p	Dill elt t 221
	β flórida Salisb	*fine-flowering*	○ pr	2 my au	Y	America	1798	S	s p	
6466	stricta *L*	upright	♃ △ pr	1½ jn o	Y	N Amer	1658	O	s p	Jac ox t. 4
6467	cornículata *L*	procumbent	♃ △ pr	½ my o	Y	Britain sh roc		O	s p	Eng bot 1726
6468	microphýlla *Poir*	red-flowered	⊡ pr	½ ...	Y	N S W	...	S	s p	
	rúbens Haw									
6469	répens *Thunb*	creeping-stalk	♃ ⌓ pr	1 mr ap	Y	C G H	1793	O	s p	Jac ox t 78 f 1
6470	rósea *Jacq*	rosy	♃ ⌓ pr	½ mr ap	R	Chili	1823	O	s p	Bot mag 2415
6471	lateriflóra *Jacq*	lateral	♃ ⌓ pr	½ mr ap	Pu	C. G H	1824	O	s p	Jac. sch t. 204
6472	macróstylis *Jacq*	long-styled	♃ ⌓ or	½ o n	Pu	C G H	1793	O	s p	Jac. ox t. 9
6473	tubiflóra *Jacq*	tube-flowered	♃ ⌓ or	1 o n	Pk	C G H	1790	O	s p	Jac ox. t. 10
6474	secúnda *Jacq*	side-flowering	♃ ⌓ or	½ o n	La	C G H	1790	O	s p	Jac. ox t 12
6475	hírta *L*	hairy-stalked	♃ ⌓ or	⅔ o n	La	C G H	1787	O	s p	Jac ox t 13
6476	multiflóra *Jacq*	many-flowered	♃ ⌓ or	½ f mr	La	C G H	1789	O	s p	Jac ox t 15
6477	rubélla *Jacq*	branching-red	♃ ⌓ or	½ s n	Pk	C G H	1791	O	s p	Bot. mag. 1031
6478	rosácea *Jacq*	rose-colored	♃ ⌓ pr	½ s n	Pk	C G H	1793	O	s p	Bot. mag 1698
6479	reptátrix *Jacq*	creeping-rooted	♃ ⌓ pr	½ n d	F	C G H	1795	O	s p	Jac ox t 20
6480	incarnáta *L*	flesh-colored	♃ ⌓ pr	½ ap jn	F	C G H.	1739	O	s p	Jac. ox. t. 71
6481	sericea *L*	silky	♃ ⌓ or	½ ap my	Y	C G H	1794	O	s p	Jac ox. t. 77 f 1
6482	violácea *L*	violet-colored	♃ △ or	½ my jn	L Pu	N Amer	1772	O	s p	Jac ox t 80 f 2
6483	caprina *L*	Goat's-foot	♃ ⌓ or	½ mr jn	F	C G H.	1757	O	s p	Jac ox t 76. f 1
6484	cérnua *Thunb*	drooping	♃ ⌓ or	½ f my	Y	C G H.	1757	O	s p	Jac ox. t 6
6485	compréssa *Jacq*	compressed	♃ ⌓ or	½ ja d	Y	C G H.	1794	O	s p	Jac ox t. 78. f 3
6486	dentáta *Jacq*	toothed	♃ ⌓ or	½ n d	F	C G H	1793.	O	s p	Jac. ox t 7
6487	lívida *Jacq*	livid	♃ ⌓ or	½ o n	F	C G H	1793	O	s p	Jac ox t 8
6488	lobáta *Sims.*	lobed	♃ ⌓ pr	½ o n	Y	C G H.	1823.	O	s.p	Bot. mag. 2386



History, Use, Propagation, Culture.

They seem destined by nature to clothe rocks and dry arid places, after a certain portion of vegetable soil has been generated by lichens and mosses

Orpine is the French name of two or three species S album is said to have the same virtues as used to be attributed to the houseleek, Sempervivum tectorum it is pickled by some in the manner of samphire S acre is considered antiscorbutic, its juice applied to the skin blisters it, taken inwardly it vomits, and applied externally to gangrenes promotes suppuration

1062 *Penthorum* From πεντε, five, in allusion to the five-marked angles of the capsules. Succulent North American plants of no beauty whatever

1063 *Grielum* A small uninteresting Cape plant, with yellow flowers and hoary leaves like southernwood. Derived from γεριος, old, in allusion to its hoary aspect

1064. *Biophytum.* Βιος φυτον, plant of life, in allusion to the lively irritable nature of the foliage This genus, the Oxalis sensitiva of Jacquin, has been lately divided by M De Candolle from Oxalis, chiefly on

6448 Petals 8, Leaves scattered · the lower rounded, upper depressed

6449 Leaves scattered rounded obtuse, Stem simple, Fl in umbels with 4 petals
6450 Leaves linear rounded depressed scattered, Cyme open, Petals 4
6451 Leaves oblong obtuse roundish sessile spreading, Cyme branched
6452 Leaves subovate adnate-sessile gibbous nearly erect alternate, Cyme trifid
6453 Leaves subovate adnate-sessile gibbous nearly erect imbricated six ways
6454 Leaves subovate adnate-sessile gibbous alternate, Cyme branched bifid
6455 Stem erect solitary annual, Leaves ovate sessile gibbous alternate, Cyme recurved
6456 Leaves oblong flattish above and peduncles axillary about 1-fl pubescent, Petals ovate obtuse
6457 Leaves whorled linear, Stem procumbent panicled, Peduncles villous viscid
6458 Stem erect, Flowers corymbose fastigiate
6459 Leaves scattered oblong-cylindrical obtuse, Stems shrubby much branched, Cymes terminal

6460 The only species

6461 Peduncles simple 1-fl. *Leaves* tripartite multifid linear downy

6462 Peduncles many-fl at end

§ 1 *Peduncles many-flowered, Stems suffruticose, Cells of ovary usually* 1 *seeded*
6463 Stem erect leafy, Umbel 4-fl the length of leaves, Leaflets entire ovate obtuse

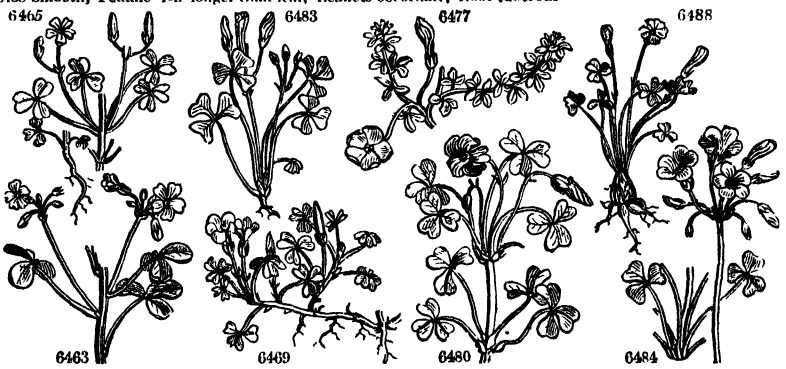
§ 2 *Caulescent, Leaves palmate* 3-*foliate, Leaflets all sessile, obcordate*
6464 Peduncle 2-3-fl somewhat longer than leaf-st Lvs 2-lobed obcord ciliated, Styles a little longer than inner
6465 Stem hairy, Umb 5-6-fl longer than leaves, Lvs obcordate, Styles longer than both stamens [stamens
β Stem decumbent, Peduncles 2 or 3-flowered
6466 Stem erect, Umbels 2-6-fl about as long as leaves, Leafl obcord Styles the length of inner stamens
6467 Stem rooting, Peduncles shorter than leafst Leafl obcordate, Styles the length of inner stamens
6468 Smoothish, Peduncle 2-fl longer than leafst Leafl 2-lobed, Styles the length of inner stamens

6469 Stem rooting, Peduncle 2-fl the length of leafst Leaflets obcordate, Styles middling
6470 Stem erect, Peduncle axill four times as long as leaf at the end corymbose racemose, Leafl obcordate
6471 Stem naked at base, Peduncle lateral umbell at end, Leafl cun emarg Styles shorter than outer stamens

§ 3 *Caulescent, Leaves sessile,* 3-*leaved, villous, not glandular, Peduncle axillary,* 1-*flowered*
6472 Stem branch Ped. much long than lvs Bractes next cal Leafl lin emarg Styles long than inner stam
6473 Ped 4 times as long as lvs Bractes appressed to cal Leafl lin cun obt Styles shorter than outer stamens
6474 Stem declined, Branches 1-sided, Leafl lin -cuneiform, Peduncles scarcely longer than leaves
6475 Leafl lin cun ret. Ped much long than lvs Bractes remote from cal Stam with neither teeth nor glands
6476 Stem much branched, Leafl lin cuneate obt Peduncle much shorter than lvs Bractes remote from cal
6477 Leafl lin cuneate, Peduncle much longer than leaves, Bractes remote from cal Styles intermediate
6478 Leafl obl cuneiform, Peduncle much longer than leaves, Bractes remote from cal Styles intermediate

§ 4 *Caulescent, sparingly leafy, Leaves stalked,* 3-5-*leaved, Peduncle axill* 1-*flowered*
6479 Stem short, Leaves on long stalks, Leafl 3 ovate-rounded, Styles very short
6480 Stem branched, Leaves stalked in fascicled whorls with 3 obcordate leaflets, Styles very long

§ 5. *Stemless, Peduncle* 1-2 *or many-flowered, Leaves radical, many-leaved, usually* 3-*leaved*
6481 Leafl 3 obcordate silky, Umbel longer than leaves, Fl nodding, Styles intermediate
6482 Leafl 3 obcordate smooth, Umb 3-9 fl Styles very short, Fl nodding
6483 Leafl. 3 obcordate 2-lobed smooth, Umb 2-4-fl Flowers erect, Styles very short
6484 Leafl 3 obcordate 2-lobed smooth subciliated, Umb many-fl Fl drooping, Styles very short
6485 Petiole flattish, Leafl 3 obcordate pubescent, Umb 2-fl Sepals entire, Styles very long
6486 Leafl. 3 obcordate smooth subciliate, Umb 2-5-fl Sepals 3-toothed at end, Styles very long
6487 Leafl 3 obcordate 2-parted beneath violet, Umbel 2-fl Styles middling
6488 Smooth, Peduncle 1-fl longer than leaf, Leaflets obcordate, Root tuberous



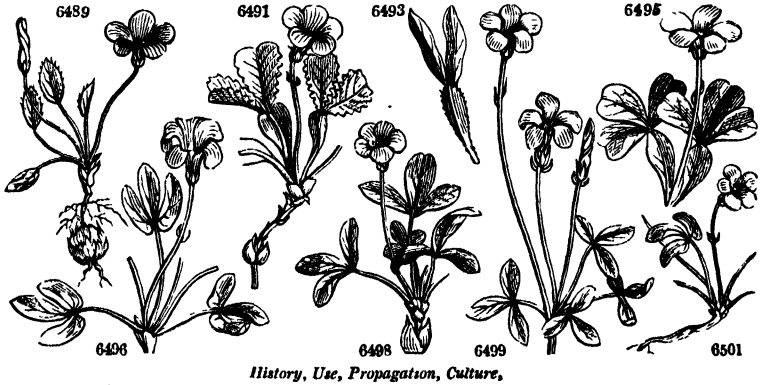
and Miscellaneous Particulars

account of its irritable pinnated foliage, and its stamens being distinct, and five of them only being perfect It is a very pretty annual, and if well managed so as to acquire, as in China, a stem six or nine inches high, is quite a remarkable object Cultivated in common earth, and propagated by seeds, which it produces in abundance

1065. *Oxalis* The Oxalis of the ancients, which was named from ὀξυς, sharp, or sour, was a very different plant from this, which is thought to have been the Oxys of Pliny The name employed by Linnæus has, however, been adopted by his followers, although Clusius, Ray, Plumier, Tournefort, Haller, and others, called the genus Oxys

This is a tribe of pretty little plants, of which most of the species flower freely, but all of them are without their leaves half the year The root is commonly bulbous; in some species only thick and fleshy, in a few branched the bulbs consist of fleshy scales, sometimes closely imbricate, sometimes loose and diverging In a few the subterraneous stipe and the terminating fibre of the bulb produce little dog-toothed bulbs, in such

6489 monophýlla *L.*	simple-leaved	♂ △ pr	½ on	Y	C G. H.	1774.	O s.p	Jac. ox. t. 79. f 3
6490 rostráta *Jacq.*	beaked	♂ △ pr	½ on	Pv	C. G H.	1795.	O s.p	Jac. ox. t. 22
6491 crispa *Jacq*	curled	♂ △ pr	½ on	W	C G. H.	1793.	O s p	Jac. ox t 23
6492 leporina *Jacq.*	hare's-eared	♂ △ pr	½ on	W	C G H.	1795.	O s p	Jac ox t. 25
6493 asinina *Jacq*	ass's-eared	♂ △ pr	½ nd	Y	C G H	1792	O s p	Jac. ox. t. 24
6494 lanceæfólia *Jacq*	spear-leaved	♂ △ pr	½ on	Y	C. G H.	1795	O s p	Jac. ox. t. 26
6495 fabæfólia *Jacq.*	Bean-leaved	♂ △ pr	½ on	Y	C. G. H.	1794.	O s p	Jac. ox. t. 27
6496 laburnifólia *Jacq.*	Laburnum-lvd.	♂ △ pr	½ so	Pu	C. G H.	1793.	O s.p	Jac. ox. t. 28
6497 sanguínea *Jacq*	bloody-leaved	♂ △ pr	½ od	Y	C G. H.	1795	O s p	Jac. ox. t. 29
6498 tricolor *Jacq.*	three-colored	♂ △ pr	½ od	W R	C G H.	1794	O s.p	Jac ox t 47
6499 ciliáris *Jacq*	ciliate-leaved	♂ △ or	½ on	Pu	C G. H	1793	O s p	Jac ox t. 30
6500 arcuáta *Jacq*	bowed	♂ △ or	½ on	V	C G H.	1795	O s p	Jac ox t 31
6501 flácida *Jacq*	flaccid	♂ △ pr	½ on	W R	C G H.	1812.	O s.p	Jac ox t 51
6502 ambígua *Jacq.*	ambiguous	♂ △ pr	½ sd	W	C G H	1790	O s p	Jac. ox t. 43
6503 unduláta *Jacq.*	wave-leaved	♂ △ pr	½ on	W	C G. H.	1795	O s p	Jac. ox t 44
6504 fuscáta *Jacq*	brown-spotted	♂ △ pr	½ my jn	Y	C G H.	1795	O s p	Jac. ox t. 45
6505 sulphúrea *Jacq*	sulphur-color	♂ △ pr	½ on	Pv	C G H	1795	O s p	Jac ox t 63
6506 speciósa *W*	specious	♂ △ pr	½ sn	Pu	C G H.	1690.	O s.p	Jac. ox. t 60
6507 variábilis *Jacq*	variable	♂ △ or	½ od	W.R	C. G H	1795	O s p	Jac ox t. 52
β grandiflóra Jacq	*great-flowered*	♂ △ or	½ od	W	C. G. H	1790	O s p	Jac ox. t. 54
γ Simsii D C	*Sims's*	♂ △ or	½ od	W	C. G H.	1790	O s p	Bot. mag 1683
6508 purpúrea *W*	purple	♂ △ pr	½ on	Pu	C G H	1812.	O s p	Jac. ox. t. 56
6509 convéxula *Jacq.*	convex-leaved	♂ △ or	½ n ja	Pk	C G H.	1789	O s p	Jac ox t. 55
6510 margináta *Jacq*	green-edged	♂ △ pr	½ sd	W	C G H	1812.	O co	Jac ox t 68
6511 pulchélla *Jacq*	beautiful	♂ ▭ el	½ on	W	C G H	1795	O co	Jac ox t 69
6512 obtúsa *Jacq*	blunt-leaved	♂ △ or	½ on	R	C G. H	1812.	O s p	Jac ox t. 79 f 1
6513 lanáta *L*	woolly-leaved	♂ △ or	½ on	W	C G H.	1791	O s p	Jac ox t. 77 f.2
6514 acetoséila *L*	common	♂ △ cul	½ ap my	F	Britain	grov.	O co	Eng bot 762
6515 americána *Dec*	American	♂ △ pr	½ ap my	W	N. Amer	...	O co	
6516 tenélla *Jacq.*	slender	♂ △ or	½ ap my	Lt	C G. H	1793	O s p	Jac. ox. t. 19
6517 nátans *L*	floating	♂ △ or	½ sd	W	C G H	1795	O s.p	Jac ox t. 76 f 2
6518 filicaúlis *Jacq.*	bilobed-leaved	♂ △ or	½ so	V	C G H	1815.	O s p	Jac sch 2 t 205
6519 bífida *Thunb*	cloven-leaved	♂ △ or	½ so	V	C G H	1791	O s p	Jac. ox. t. 79. f.4
6520 cuneifólia *Jacq.*	wedge-shaped	♂ △ or	½ ap my	W	C G H.	1793.	O s p	Jac ox t 41
6521 lineáris *Jacq.*	linear-shaped	♂ △ or	½ s.n	V	C. G H	1795.	O s p	Jac ox. t 32
6522 reclináta *Jacq.*	reclining	♂ △ or	½ s.n	Pk	C. G. H.	1795.	O s p	Jac. ox. t. 34
6523 glábra *Thunb*	smooth	♂ △ or	½ my jn	Pu	C G H	1795.	O s p	Jac ox t 76. f.3
6524 versicolor *L*	striped-flower	♂ △ or	½ ja mr	Cr	C G H	1774	O s p	Bot. mag 155
6525 elongáta *Jacq.*	elongated	♂ △ or	½ so	W	C G. H	1791.	O s.p	Jac. ox t 37
6526 tenuifólia *Jacq*	fine-leaved	♂ △ or	½ on	W R	C G H.	1790	O s p	Jac. ox t. 38
6527 polyphylla *Jacq.*	many-leaved	♂ △ or	½ ja s	Pa pu	C G H	1791.	O s p	Jac ox t 39
6528 filifólia *Jacq*	thread-leaved	♂ △ or	½ ja s	Pk	C. G H.	1892	O s p	Jac sch t 273
6529 pentaphylla *Sims*	five-leaved	♂ △ pr	½ fn	Pk	C. G. H.	1800.	O s.p	Bot. mag 1549
6530 lupinifólia *Jacq*	Lupine-leaved	♂ △ pr	½ on	Y	C G. H.	1791	O s p	Jac ox t 72
6531 fláva *L*	narrow-leaved	♂ △ pr	½ mr ap	Y	C. G. H	1775	O s p	Bot. reg 117
6532 pectináta *Jacq*	pectinated	♂ △ pr	½ sn	Y	C G H	1790	O s.p	Jac ox t 75
6533 flabellifólia *Jacq*	fan-leaved	♂ △ pr	½ sn	Y R	C G H	1789	O s p	Jac ox. t 74
6534 tomentósa *L*	downy-leaved	♂ △ pr	½ ap my	W	C G H	1791	O s p	Jac ox t. 81



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abundance as to fill the whole pot to the very bottom, as in purpurea, cernua, reptatrix Sometimes the bulb strikes very deep, as in tomentosa, the original bulb near the surface striking a radical fibre downright from its base, which puts out from its side a new bulb, producing the next year's plant, whilst the former perishes. Sometimes fusiform, thick and long fibres spring in a monstrous form from the bulbs, as in glandulosa and some others Some of the species have a proper stem (*Caulis*), when it bears all the leaves and peduncles alternately, and not in a terminating umbel this is either branched or quite simple, and that for the most part inconstantly Others have a stipe, the leaves and flowers being aggregate together at the end of the stalk, this bears none or very few leaves along it, seldom many. In some species the stipe is always subterraneous, as in breviscapa, purpurea, &c.; in others it is always above ground, as in gracilis, versicolor, tenuifolia. Stipes are commonly quite simple, some, however, are branched, the branches terminating in umbels, as in incarnata and polyphylla. Hence the division of the species into caulescent and stipitate The leaves are not, perhaps, truly sessile in any of the species, they are subsessile in a few, but in most are petioled They are simple in three species, binate in four, digitate in six, in the rest ternate. almost all of them have an acid

§ 6. *Stemless, Leaves simple.*

6489 Leaves ellipt. obtuse, Scape 1-fl Filam smooth, Styles middling covered with glandular hairs
6490 Leaves obovate retuse, Scape 1-fl. Styles very short, Filaments glandular

§ 7 *Stemless, Leaves 2 or 3-leaved, Stalks winged.*

6491 Leafl 2 roundish obovate emarginate wavy at edges Styles very long and filaments glandular
6492 Leafl. 2 ellipt emarg. with a cartilaginous toothletted edge, Filam glandular
6493 Leafl 2 lanceolate with a cartilaginous toothletted edge, Filam. glandular
6494 Leafl 2-3 with a cartilaginous scabrous edge, Filam smooth
6495 Leafl. 3 obovate emarg mucronate, Styles and filaments glandular

§ 8. *Stemless, Leaves stalked, 3-leaved, Stalks not winged.*

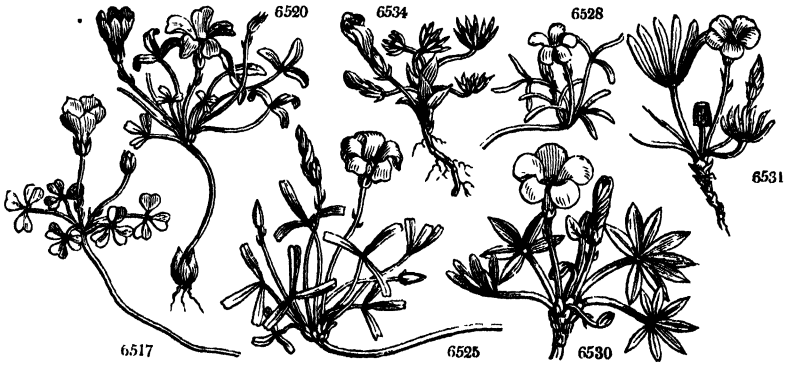
6496 Pubescent, Lateral leaflets obliquely oblong middle lanceolate, Scapes higher than petioles
6497 Pubescent, Leafl obl. obt. middle cuneate at base, Scapes length of petiole
6498 Pubescent, Leafl. obl obt. middle subcuneate, Scapes longer than petiole
6499 Pubesc. Leafl obl obt. submarg Peduncs longer than petiole with 2 bractes immediately below the cal.
6500 Pubescent, Leafl obl. emarg Peduncs length of petiole with 2 bractes immediately below the cal
6501 Pubescent, Leafl obl. retuse middle cuneate, Peduncles twice as long as leaves with 2 bractes in middle
6502 Subhirsute, Leafl obov obl. obt Peduncs equal to petiole with 2 bractes in their middle, Styles glandular
6503 Subhirsute, Leafl obov obl obt Ped. longer than petioles with 2 bractes below their middle, Styles hairy
6504 Pubesc. Leafl obt. lateral ovate midd cuneate, Peduncs twice as long as petiole with 2 bractes in midd
6505 Pubesc. Leafl roundish, Peduncs. as long as pet with 2 bractes at base, Calyx with clavate hairs at edges
6506 Pub Leafl roundish, Ped. as long as pet. with 2 bractes below mid Cal with simple and glan hairs mixed
6507 Pub Leafl round mid cun at base, Ped as long as lvs or long with 2 bractes below mid. Styles very short
β Flowers large, Leaves red beneath
γ Flowers large, Leaves green on both sides
6508 Pubesc Leafl roundish, Scapes longer than leaf with 2 bractes below the middle
6509 Smooth, Leafl roundish dotted, Stipules dilated acuminate, Bractes alternate
6510 Pub. Leafl. obcor. roundish, Scapes nearly twice as short as pet. with 2 bractes in mid Styles intermediate
6511 Pub Leafl. obcor roundish, Scapes thrice as short as petiole with 2 bractes in midd Styles very long
6512 Densely pubesc. Leafl obcordate, Scape longer than leaves with 2 bractes above middle, Cal. obtuse
6513 Woolly, Leafl. obcordate, Cal. acute
6514 Root toothed creeping, Leafl obcord downy, Scape longer than leaves, Petals oval obtuse
6515 Root toothed creeping, Leafl obcord downy, Scape longer than leaves, Pet obl unequally emarginate
6516 Smoothish, Leaflets obcordate, Scape longer than the leaves, Styles very short
6517 Leaflets obcordate smooth, Peduncs the length of leaves, Styles very short
6518 Leafl obcord 2-lobed, smooth, Peduncs longer than leaf, Styles intermediate
6519 Leafl obcord 2-lobed smooth, Peduncs longer than leaf, Styles very long
6520 Leafl cuneate emarg. hairy, Peduncs the length of petiole, Styles very short, Filam glandular
6521 Leafl lin emarg downy, Peduncs shorter than petiole with 2 bractes at summit, Styles very long
6522 Leaflets linear subcuneate emarginate, Peduncs. as long as petiole, Style intermediate

§ 9. *Leaves 3 or 5-leaved, glandular at end*

6523 Leaflets 3 linear cuneiform emarginate dilated with many glands beneath
6524 Leaflets 3 linear emarginate with 2 glands beneath, Styles and filaments glandular
6525 Leaflets 3 linear emarginate with 2 calli at end, Styles very short
6526 Leaflets 3 linear emarginate with many glands beneath, Styles very short, Inner filaments glandular
6527 Leaflets 3 linear emarginate with 2 glands beneath, Styles intermediate and filaments glandular
6528 Leaflets 3 linear entire at end and glandular, Styles very long and inner filaments glandular
6529 Leaflets 5 linear at the end nearly entire with 2 callous glands, Styles intermediate

§ 10 *Leaves palmate or peltate, many-leaved, not glandular at end.*

6530 Leaflets 7 lanceolate acutish smooth spotted at base, Petioles compressed, Styles very short
6531 Leaflets 6-7 smooth linear channelled acute, Styles very short, Filam glandular
6532 Leaflets 7 smooth lin lanc obtuse, Cal appressed, Styles very long and filaments glandular
6533 Leaflets 7-9 smooth lin emarg Cal reflexed at end, Styles intermediate
6534 Leaflets 9-19 all over downy lanceolate cuneate emarginate

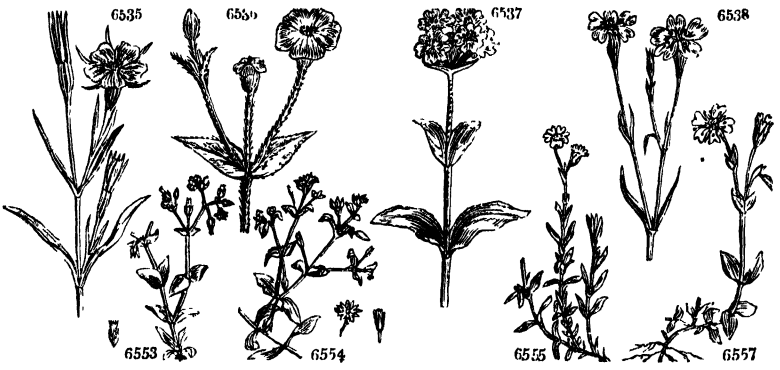


and Miscellaneous Particulars

taste, whence their names of Oxalis or Oxys, wood Sorrel, &c The partial stem bearing the flower is a peduncle in the caulescent, a scape in the stipitate species.

Many of the species ripen seeds, from which, or from offsets, they are readily propagated, and grown in light sandy soil · care being taken to give the pots little or no water when the plants are in a dormant state An excellent work has been written on the genus by Jacquin, in which ninety-six species are described. All that were known in Europe at that time, were cultivated in the Imperial gardens of Schönbrunn with great success, under the immediate inspection of Jacquin, by whom the following directions are given for their management They are best kept in pots which will hold a good many roots. The earth should be so light and sandy as never to become hard, but always to be soft enough not to resist the point of the finger when pressed upon it, when the flowering time is passed, the pots should be placed aside, where they require neither care nor water, but are well protected from mice In the beginning of August they should be placed in the open air and moderately watered. About the end of that month, or a little later, the leaves should appear About the middle of September, earlier or later, according to the weather, they should be placed in a very sunny, airy greenhouse,

†1066 **AGROSTEM'MA** *W*	Rose-Campion					*Caryophylleæ*	*Sp* 4						
6535 Githago *W.*	Corn-cockle	○	w	3	jn jl	Pu	Britain	cor. fl	S	co	Eng. bot 741		
β nicæen'sis W.	*Italian*	○	or	3	jn jl	W	Italy	1794	S	co			
6536 coronária *W.*	common	☿	△	or	3	jn s	R	Italy	1596	S	co	Bot. mag 24	
β alba	*white-flowered*	☿	△	or	3	jn s	W	.....	...	S	co		
γ plena	*double-flowered*	☿	△	or	¾	jn s	R	.....	..	C	r m		
6537 Flos-jóvis	umbelled	☿	△	or	1½	jl	R	Germany	1726	S	co	Bot mag 398	
6538 Cæli-rósa	smooth-leaved		○	or	1	jl au	F	Levant	1713	D	s.l	Bot mag 295	
1067 **LYCH'NIS.** *W*	Lychnis					*Caryophylleæ.*	*Sp* 9—12						
6539 chalcedónica *W*	scarlet	☿	△	or	2	jn jl	R	Russia	1596	D	p l	Bot mag 257	
β alba	*white-flowered*	☿	△	or	2	jn jl	W	Russia	...	C	p l		
γ plena	*double-flowered*	☿	△	or	2	jn jl	B	Russia	...	C	p l		
6540 Flos-cúculi *W*	Ragged-Robin	☿	△	or	1½	jn s	Pk	Britain	m me	D	co	Eng bot 573	
6541 coronáta *W*	Chinese	☿	△	or	1½	jn s	R	China	1774	C	p l	Bot mag 223	
6542 fúlgens *Fisch*	splendid	☿	△	or	1½	jn jl	Sc	Siberia	1822	C	p l	Bot mag 478	
6543 viscária *W*	viscid	☿	△	or	1	my jn	Pk	Britain	rocks	D	co	Eng bot 788	
β plèna	*double*												
6544 alpina *W.*	Alpine	☿	△	or	½	ap my	Pk	Scotland	sc roc	D	p l	Eng bot 2254	
6545 læ'ta *W*	small		○	or	½	jl	F	Portugal	1778.	C	s l		
6546 diúrna *With*	red-flowered	☿	△	or	2	jn jl	Pu	Britain	...	D	co	Eng bot 1579	
sylvestris W en													
6547 vespertina *With*	white-flowered	☿	△	or	2	jn jl	W	Britain	wa.&fi.	D	co	Eng bot 1580	
dioica W en													
1068 **CERAS'TIUM** *W*	Mouse-ear Chickweed					*Caryophylleæ*	*Sp* 18—69						
6548 pertoliátum *W*	perfoliate		○	w	2	jn jl	W	Greece	1725	S	co	Di el t 217 f 284	
6549 vulgátum *W*	common		○	w	¼	ap jn	W	Britain	san pl	S	co	Eng bot 789	
6550 viscósum *W*	narrow-leaved	☿	△	w	½	ap s	W	Britain	pas	D	co	Eng bot 790	
6551 diffúsum *P S*	spreading	☿	△	w	½	ap s	W	.....	..	D	co		
6552 brachypétalum *P S*	small-flowered	☿	△	w	½	ap my	W	... ..	1816	D	co		
6553 semidecándrum *W.*	least		○	w	¼	mr ap	W	Britain	walls	S	co	Eng bot 1630	
6554 tetrándrum *H K*	tetrandrous		○	w	¼	my jn	W	Scotland	san sh	S	co	Eng bot 166	
6555 arvénse *W*	field	☿	△	w	½	my au	W	Britain	cor fi	D	co	Eng bot 93	
6556 dichótomum *W*	forked		○	w	½	jn jl	W	Spain	1725	S	co		
6557 alpinum *W*	Alpine	☿	△	w	½	jn jl	W	Britain	w alp	D	co	Eng bot 472	
6558 ovátum *W en*	oval-leaved	☿	△	w	¼	jn jl	W	Carinthia	1816	D	co		
6559 strictum *W*	upright	☿	△	w	1	my jl	W	Austria	1793	D	co	Sc. car t 19 f 1	
β suffruticosum W.	*suffruticose*	☿	△	w	1	my jl	W	S Europe	1796	D	co		
6560 máximum *W*	greatest		○	w	2	jn jl	W	Siberia	1792	S	co	Gm si 4 t 62 f 2	
6561 dahúricum *Fisch*	glaucous	☿	△	w	1½	my s	W	Siberia	1815	D	co	Bot mag 1789	
amplexicáule B M													
6562 dioicum *W*	Spanish	☿	△	w	½	jn jl	W	Spain	1766	D	co		
6563 latifólium *W*	broad-leaved	☿	△	w	½	jn jl	W	Britain	w alp	D	co	Eng bot 473	
6564 tomentósum *W.*	white	☿	△	w	½	jn jl	W	S Europe	1648	D	co		
6565 mánticum *W*	long-peduncled		○	w	½	jn jl	W	Hungary	1801	S	co	Pl rar h t 96	
1069 **LARBRE'A** *St Hil*	Larbrea					*Caryophylleæ*	*Sp* 1						
6566 aquática *St Hil*	water	☿	△	w	1	jl	W	Britain	wat pl	D	co	Eng bot. 538	



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when they will flower well Oxalis monophylla and rostrata will not, however, blossom unless placed in a very hot stove

O Acetosella, *la petite oseille* or *surelle*, Fr, is used as a salad plant, and is more delicate than the Rumex salads: its acid approaches nearly to that of the juice of lemons, or the acid of tartar, with which it also corresponds in its medical effects, being esteemed refrigerant, antiscorbutic, and diuretic An infusion of the leaves, or a whey made by boiling the plant in milk, given in ardent fevers, is said to allay inordinate heat, and to quench thirst

The expressed juice depurated, properly evaporated, and set in a cool place, affords a crystalline acid salt in considerable quantity, which may be used whenever vegetable acids are wanted It is employed to take iron moulds and ink stains out of linen, and is sold under the name of essential salt of lemons (*Withering*) This salt when genuine, which it seldom is, consists of the vegetable alkali and a peculiar acid, which, according to Bergman, seems more allied to the acid of sugar than that of tartar What is sold for it in this country, appears sometimes to consist of C Tart, with the addition of a small quantity of vitriolic acid For taking out spots in linen, the stained part is dipped in water, sprinkled with a little of the salt powdered, then rubbed on a pewter plate, after which the spot is washed out with warm water (*Curtis, from Neum Chem by Lewis*) Twenty pounds of leaves fresh yield six pounds of juice, from which two ounces, two drachms, and one scruple of salt have been obtained (*Lewis*)

1066 *Agrostemma* Αγρου στεμμα, crown of the field The beauty of the flowers of the common cockle weed well entitles it to such a distinction The foreign species are very pretty annuals A Githago (*gith* or *gith* was the name of certain black and aromatic grains, supposed to have been of Nigella sativa, which were employed by the Romans in cookery The seeds of the plant Githago are externally similar) is an ornamental weed, and along with corn poppy and blue bottle makes a fine appearance in the fields of the slovenly husbandman, where the soil is dry and gravelly

6535 Hairy, Stem dichotomous, Flowers on long stalks, Leaves linear
β A slight variety, with longer divisions to the calyx
6536 Downy, Stem dichotomous, Peduncles long 1-fl. Cal. campanulate ribbed

6537 Downy, Flowers in umbellate heads, Cal cylindr clavate ribbed
6538 Smooth, Stem dichotomous panicled erect, Flowers terminal solitary

6539 Smoothish, Flowers fascicled, Cal cylindr clavate ribbed, Petals 2-lobed

6540 Stems ascending smoothish, Fl dichotomous fascicled, Cal camp 10-ribbed, Pet. torn with an appendage
6541 Smooth, Flowers terminal and axillary 1-3, Cal rounded clavate ribbed, Petals torn
6542 Hairy, Fl 2-3 fastigiate, Cal rounded clavate woolly, Petals 4-cleft
6543 Stem viscid about the joints, Limb of petals nearly entire, Leaves linear spatulate

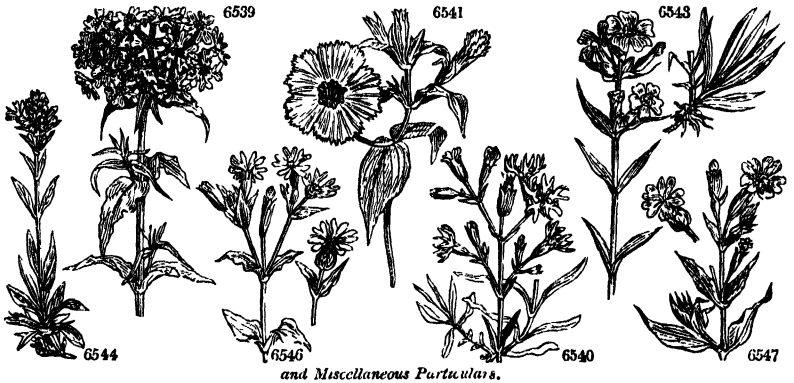
6544 Smooth, Stems tufted upright, Fl in dense capitate umbels, Cal camp Petals bifid
6545 Fl solitary, Cal with ten keels, Petals bifid, linear-lanc subciliated
6546 Fl dichotomous panicled dioecious, Petals ½-bifid, Lobes narrow diverg Caps round

6547 Fl dichotomous panicled dioecious, Petals ½-bifid, Lobes broad approximating, Caps conical

6548 Smooth glaucous, Stem erect branched or simple, Leaves lanceolate connate obtuse
6549 Hairy pale green viscid, Leaves ovate, Petals length of calyx, Fl longer than fl.-stalk
6550 Hairy viscid diffuse, Leaves lanceolate oblong
6551 Stem much branched villous, Leaves ovate-lanc hispid, Flowers numerous in dichotomous panicles
6552 Leaves ovate, Flowers panicled, Cal villous longer than petals, Caps scarcely longer than sepals
6553 Hairy viscid, Flowers pentandrous, Petals emarginate
6554 Hairy subviscid, Flower 4-fid 4-androus, Pet bifid shorter than calyx
6555 Leaves linear lanceolate obtuse ciliated at base, Pet twice as long as calyx
6556 Glutinous hairy, Fl solitary in the dichotomies, Sepals lanc acute the length of petals, Leaves lanc.
6557 Leaves ellipt naked or hairy, Pan dichotomous few-fl with bractes, Caps oblong recurved
6558 Stems prostrate, Leaves ovate acute subciliated smooth, Flowers terminal subcorymbose
6559 Leaves sublinear acuminate smooth, Peduncles glandular, Pet. twice as large as calyx
β Leaves very narrow and smooth
6560 Downy, Leaves lanc-lin acute, Flowers very large in dichotomous umbels, Pet crenate and 2-lobed
6561 Leaves cordate ovate, Stem clasping, Peduncles in fruit very long deflexed

6562 Hairy viscid, Leaves lanceolate, Fl dioecious, Petals thrice as long as calyx
6563 Leaves elliptical scabrous, Peduncle terminal simple subsolitary, Capsule ovate
6564 Leaves oblong spatulate hoary, Sepals hoary scarious at edge, Caps cylindr longer than calyx
6565 Very smooth, Leaves lanc linear, Peduncle very long, Caps acute shorter than corolla

6566 This is the Cerastium aquaticum of English botany



and Miscellaneous Particulars.

A coronaria and flos-jovis are shewy border flowers, the first generally increased by seeds, and the other by cuttings or division of the plant

1067 *Lychnis* From λυχνος, a lamp, in allusion to the cottony leaves of some species, which have been used as wicks to lamps L. chalcedonica, *Croix de Malthe*, Fr and Portug, *Croce de Cavalcere*, Ital, and *C de Jerusalem*, Span, is an old and much esteemed border flower, the double varieties of which require some care in cultivation, to prevent their returning to the single state, and to propagate them by cuttings L. fulgens and coronata are also very handsome species "They do best in a light rich loamy soil, but they must be often taken up and divided, or they dwindle away, the best time of doing this is early in spring L. coronata thrives and flowers abundantly if planted out in the open ground in spring, but it requires to be taken up in autumn and potted, or the severe frosts in winter will kill it, or injure it very much All may be raised by cuttings planted under hand-glasses, or by seeds, which often ripen in abundance (*Bot Cult* 389)

L viscaria and flosculi are more hardy, and grow in common garden soil, and increase abundantly by division they are both old inhabitants of the flower garden L. diurna and vespertina are also border flowers in their double varieties

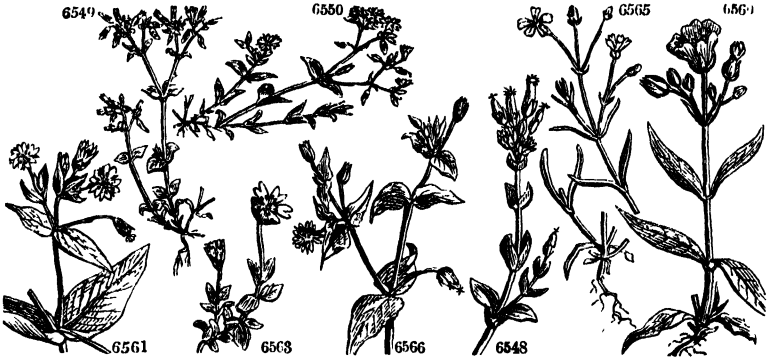
1068 *Cerastium* Derived from κερας, a horn, in allusion to the cornute form of the capsule of many species. Most of the annual species, and some of the others, are weeds, a few may be grown in pots or on rock-work, for both of which they seem well adapted. They are very prolific in seeds, and contribute materially to the support of small birds.

1069 *Larbrea* A genus founded by Aug St Hilaire, in the second volume of Mémoires du Muséum, upon the Cerastium aquaticum of Linnæus. He named it after the Abbé de Larbre, who at the age of 80, published a Flora of Auvergne.

1070 SPER'GULA. *W*	SPURREY.				*Caryophylleæ*	*Sp* 5—14.								
6567 arvénsis *W.*	rough-seeded		○	w	½	jl au	W	Britain	san fi.	S	co	Eng bot 1535
6568 pentándra *W.*	smooth-seeded		○	w	½	jn jl	W	England	san fi	S	co	Eng. bot. 1536
6569 nodósa *W.*	knotted	♃	△	w	½	jl.au	W	Britain	san he	D	co	Eng bot. 694
6570 saginoides *W.*	smooth-awl-sh	♃	△	w	½	jn au	W	Scotland	sc alp.	D	co	Eng bot. 2105
6571 subulàta *W.*	ciliated-awl-sh	♃	△	w	½	jn jl	W	Britain	san he.	D	co	Eng. bot. 1082

DECAGYNIA

1071. PHYTOLAC'CA *W*	PHYTOLACCA				*Chenopodeæ.*	*Sp* 6.						
6572 octándra *W*	white-flowered	♃	⧄	or	6	jl n	W o	Mexico	1732.	C	s l	Di el. t 239 f 308
6573 abyssínica *W.*	African	♃	□	or	6	my jn	W o	Africa	1775	R	s l	Hoff c. goet. t.2
6574 dodecandra *W en.*	recurved-leaved	♃	⧄	or	6	my jn	R	.....	...	C	s l	
6575 decándra *W*	Virginian Poke	♃	△	cul	5	au s	L Pu	Virginia	1615	C	s.p	Bot. mag. 931
6576 icosándra *W*	red	♃	⧄	or	3	jl n	W	E Indies	1758	C	s p	Mill ic t. 207
6577 dioica *W*	tree	♃	□	or	8	...	W o	S Amer	1768	C	s p	L'her st no.t.70



History, Use, Propagation, Culture,

1070 *Spergula.* From *spargere,* to scatter, because it scatters its seeds abroad, to the great profit of the farmer in Holland, who obtains from it meadows affording the most delicious butter S arvensis is a common weed in sandy soils, in Scotland called yarr, and in Norfolk pickpurse In the Netherlands and in Germany it is sown on corn stubbles, to supply a bite for sheep during winter It may be sown and reaped in eight weeks, either in autumn or spring It is said to enrich the milk of cows, so as to make it afford excellent butter, and the mutton fed on it is preferable to that fed on turnips Hens eat spurry greedily, and it is supposed to make them lay a great number of eggs, whether in hay, or cut green, or pasture Von Thaer observes, it is the most nourishing, in proportion of its bulk, of all forage, and gives the best flavored milk and butter It has been recommended to be cultivated in England, but it is not likely that such a plant can ever pay the expense of seed and labour in this country, even on the poorest soil, or at all events, as Professor Martyn observes, we have many better plants for such soils

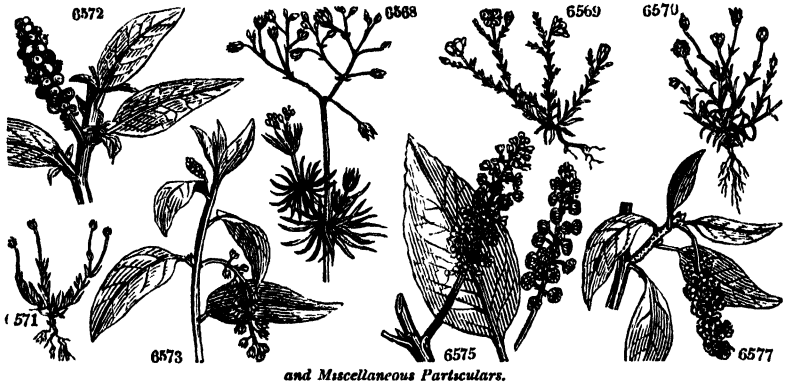
1071 *Phytolacca* From φυτον, a plant, and *lacca,* lac, that is to say, a plant whose fruit gives out a fine red color like lac The English-American name Poke, applied to one species, is a corruption of Pocan, the name by which it was formerly known in Virginia

P decandra has large ramose roots, shoots half an inch in diameter, and five or six feet high, the leaves five inches long, and two and a half inches broad, smooth and of a deep green It grows vigorously in a good deep soil, and furnishes ample supplies of young shoots, which in America and the West Indies are boiled and eaten as spinage. (*Correa de Serra, in Hort Trans* IV. 446)

6567 Leaves whorled, Pedunc in fruit reflexed, Seeds reniform angular rough
6568 Leaves whorled, Flowers pentandrous, Seeds depressed winged smooth
6569 Leaves opposite subulate smooth · upper fascicled, Cal not nerved
6570 Leaves opposite subulate blunt naked, Pedunc solitary very long smooth
6571 Leaves opposite subulate awned ciliated, Pedunc very long solitary hairy

DECAGYNIA.

6572 Flowers octandrous octogynous
6573 Flowers decandrous pentagynous
6574 Flowers dodecandrous octogynous, Leaves ovate obl with a recurved point
6575 Flowers decandrous decagynous
6576 Flowers icosandrous decagynous
6577 Flowers dioecious



and Miscellaneous Particulars.

An ounce of the dried root, infused in a pint of wine, and given to the quantity of two spoonfuls, operates kindly as an emetic, and is preferable to most others, as it hardly alters the taste of the wine. In its medicinal properties, the Phytolacca approaches nearer to Ipecacuanha than to any other vegetable, but it is slower in its effects, and it remains longer in action, although it may be checked by an opiate Sometimes its operation produces vertigo and stupor The powder of the leaves possesses the same virtues as the root, but in a weaker degree It is one of the plants which have had a temporary reputation for the cure of cancer, and some sensible men have been converts to its efficacy The fermented berries give out a liquor which yields alcohol by distillation. From half a bushel of the berries, six pints of spirits were obtained, sufficiently strong to take fire and burn with readiness Two ounces of this given to a dog occasioned nausea and drowsiness, with slight spasmodic motions, but no vomiting Poultry are fond of the berries, but if eaten in large quantities, they give the flesh a disagreeable flavor The juice stains paper and linen of a beautiful purple color, but it will not last long, if a method could be found of fixing the dye, it might be very useful. The vignerons in Portugal for many years used the juice of the berries of the elder-bush to give a deep color to the Port wines, to which it was thought to communicate a disagreeable taste when mixed in too great a quantity Complaint of this practice having been made to government, orders were given that the stems of that plant should be cut down and destroyed before they produced berries but they forgot to include the Phytolacca in the proscription, so that the berries of that plant supply the same purpose in a much worse manner.

Class XI. — DODECANDRIA. 12 Stamens.

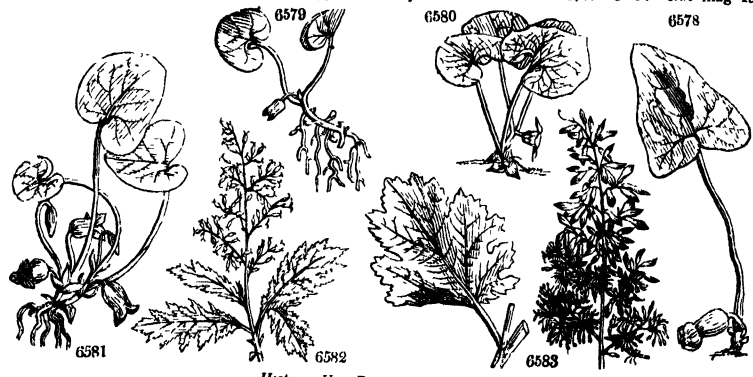
This is a small incongruous class, containing no extensive genus of importance except Euphorbia. Some botanists have been of opinion that it ought to be cancelled, but it is probable that Linnæus understood the application of his own principles as well as some of his more pretending followers, and it is certain that if the Linnean plan can be made to act successfully, its artificial arrangement must be rigorously observed Euphorbia and Reseda, which are usually referred hither, should more properly be referred, the former to Monœcia, and the latter to Polygamia

Order 1 MONOGYNIA 12 Stamens 1 Style

1072 *Asarum* Cal 3-4-cleft, superior Cor O Capsule coriaceous, crowned.
1073 *Bocconia* Cal 2-leaved Cor O Style bifid Caps 2-valved, 1-seeded
1074 *Bassia* Sepals 4 Cor 8-cleft, with an inflated tube Stamens 16 Drupe 5-seeded
1075 *Blakea* Sepals 6, inferior, with a superior entire calyx Petals 6 Caps 6-celled, many seeded
1076. *Begonia* Cal 7-cleft Petals 7 Stamens 14 Berry 7-celled, many-seeded.
1077 *Agathophyllum* Petals 6 Calyx truncate Drupe 1-seeded
1078 *Rhizophora* Cal 4-parted Cor 4-parted Stigmas 2 Seed 1 very long, fleshy at base
1079 *Garcinia.* Sepals 4, inferior. Petals 4 Berry 8-seeded, crowned by the peltate stigma
1080 *Grangeria* Cal. 5-cleft Petals 5 Stamens 15 Drupe 3-cornered Nut 3-cornered, bony, 1-seeded.
1081 *Halesia* Cal 4-toothed, superior Cor 4-cleft Nut quadrangular, 2-seeded
1082 *Decumaria* Sepals 8-12, superior Petals 8-12 Caps 8-celled, many-seeded
1083 *Eurya* Cal. 5-leaved, with 2 bractes at base Petals 5 Caps 5-celled, many-seeded
1084 *Aristotelia* Sepals 5 Petals 5 Style trifid Berry 3-celled Seeds twin
1085 *Cancella* Cal 3-lobed Petals 5 Anthers 16, united to an urceolate nectary. Berry 1-celled, 2-4-seeded
1086 *Cratæva* Petals 4 Cal 4-cleft Berry 1-celled, many-seeded
1087 *Triumfetta* Petals 5 Sepals 5 Capsule hispid, opening in four
1088 *Peganum* Petals 5 Sepals 5, or O Capsules 5-celled, 3-valved, many-seeded
1089 *Hudsonia* Petals 5 Sepals 3, tubular Stamens 15 Capsules 1-celled, 3-valved, 3-seeded.
1090 *Nitraria* Petals 5, vaulted at end Cal 5-cleft Stamens 15 Drupe 1-seeded
1091 *Portulaca* Petals 5 Cal. 2-fid Capsule 1-celled, cut across
1092 *Talinum.* Petals 5 Sepals 2. Capsule 3-6-valved, many-seeded Leaves without stipules. Seeds not winged
1093 *Anacampseros* Like Talinum, but having stipules and winged seeds
1094 *Lythrum* Cal 12-toothed, tubular, unequal at base. Petals 6, inserted in calyx Caps 2-celled, many-seeded
1095 *Nesæa* Like Lythrum, but calyx campanulate
1096 *Hennia* Cal 12-toothed Petals 6 Capsule 4-celled.

MONOGYNIA.

1072 A'SARUM *W*	Asarabacca				*Aristolochiæ*	*Sp* 4—5				
6578 arifolium *Mich*	arum-leaved	♄	△	cu	½ jn	Br	N Amer	1823	D	p.l Hook ex fl 40
6579 europæ'um *W*	common	♄	△	m	¾ my	P	England woods		D	p l Eng bot 1083
6580 canadense *W*	Canadian	♄	△	cu	¾ ap jl	Br	Canada	1713	D	p l Bot cab 889
6581 virginicum *W*	sweet-scented	♄	△	cu	¾ ap my	Br	Virginia	1759	D	p l Sweet fl gard 18
*1073 BOCCO'NIA *W*	Bocconia				*Papaveraceæ*	*Sp* 2—3				
6582 frutéscens *W*	Tree Celandine	♣	□	or	10 ja.ap	W ɣ	W Indies	1739	S	r m Bot. cab 83
§6583 cordáta *W*	heart-leaved	♃	△	or	6 my au	W ɣ	China	1795	C	s l Bot mag 1905



History, Use, Propagation, Culture,

1072 *Asarum* An ancient name, said to have been formed from α, privative, and σύρω, bandage, because it was not used in garlands of which the ancients were so fond, in that case it should be *Asārum* The common name, *Asarabacca*, is Latin, *qu* the berry of Asarum? Little inconspicuous herbaceous plants The leaves of A europæum are emetic, cathartic, and diuretic, and, perhaps, as Dr Cullen has remarked, they form the most useful species of errhine stimulants A proper dose snuffed up the nose for a few successive evenings at

1097 *Cuphea* Cal 6-12-toothed, occasionally gibbous at base Pet 6, inserted in calyx, or O Caps 1-celled, opening on one side longitudinally along with the calyx
1098 *Klenhovia* Sepals 5 Petals 5 Nect. campanulate, 5-toothed, staminiferous, united to the column of ovary. Ovary stalked Caps with 5-angles and 5-cells inflated, cells 1-seeded

Order 2. DIGYNIA  12 Stamens 2 Styles.

1099. *Callicoma* Flowers in round heads Calyx 4-5-leaved Corolla O
1100 *Helwocarpus* Sepals 4 Petals 4 Styles simple Caps 2-celled, compressed, radiating on each side longitudinally
1101. *Agrimonia.* Cal 5-toothed, surrounded by another Petals 5. Grains 2, in the bottom of the calyx

Order 3 TRIGYNIA  12 Stamens 3 Styles.

1102 *Reseda* Involucre many-leaved spreading Hermaphrodite flower central, apetalous, surrounded by several fringed petaloid barren flowers
1103 *Euphorbia* Involucre 1-leaved, ventricose, regular Flowers naked, aggregate Female floret surrounded by many monandrous male florets
1104 *Pedilanthus* Like Euphorbia, but involucre calciform
1105 *Vinca* Cal 5-leaved, inferior Petals 5 Stigmas 3 Nut 2-3-celled, half inferior

Order 4 TETRAGYNIA  12 Stamens 4 Styles

1106 *Calligonum* Cal 5-parted Corolla O Filaments about 16, united at base Ovary superior, 4-cornered. Styles 4 Nut with a many winged crust, 1-celled

Order 5 PENTAGYNIA  12 Stamens 5 Styles

1107. *Gimus* Sepals 5 Cor O Nectary with bifid bristles Caps 5-angular, 5-celled, 5-valved, many-seeded
1108 *Blackwellia* Cal ½-superior, persistent, at the base turbinate, many-parted, with villous ciliated segments Petals 15 Capsule 1-celled, many-seeded
1109 *Gastonia* Cal entire Petals 5-6 Stam 10-12 two opposite each petal Styles 10-12, very small, united at base Capsules 10-12-celled.

Order 6 DODECAGYNIA  12 Stamens 12 Styles

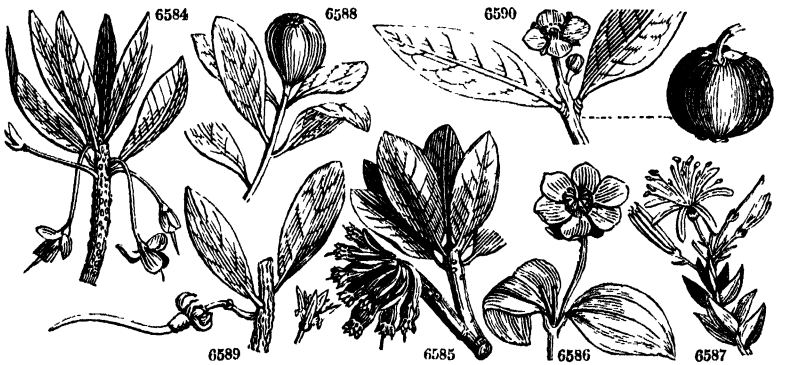
1110 *Sempervivum* Cal 12-parted Petals 12 Caps 12, many-seeded

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MONOGYNIA.

6578 Leaves subhastate cordate, Calyx tubular shortly trifid
6579 Leaves reniform obtuse twin
6580 Leaves reniform mucronate
6581 Leaves cordate obtuse smooth stalked

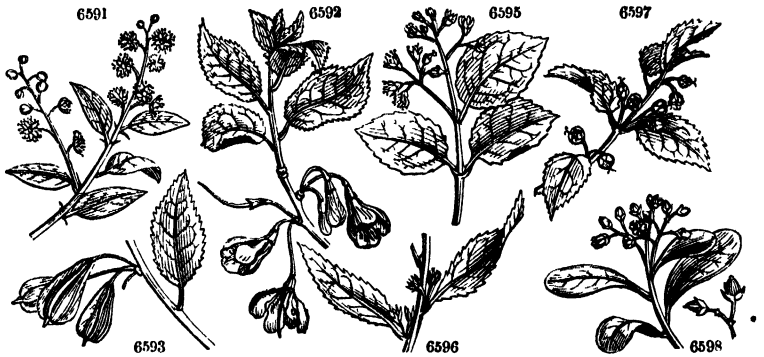
6582 Leaves oblong sinuated
6583 Leaves cordate somewhat lobed



and Miscellaneous Particulars.

bed time occasions a copious discharge from the nostrils, which continues to flow for several days (*London Dispensatory*, 185.) The herb was formerly employed to correct the effects of excessive drinking, whence in French it is still called *cabaret*
1073. *Bocconia* In memory of Paolo Boccone, M D, a Sicilian, and Cistercian monk under the name of Sylvius; author of Icones et Descriptiones rariorum Plantarum Siciliæ, Melitæ, Galliæ, et Italiæ, pub-

1074 BAS'SIA. *W.*	BASSIA				*Sapoteæ*	*Sp* 2—4						
6584 longifólia *W.*	long-leaved	♀	▭	or 40	...		E. Indies	1811	C	p.l	Lam. ill t. 398
6585 latifólia *W*	broad-leaved	♀	▭	or 40	...	Y	E. Indies	1799	C	p l	Rox cor. 1 t. 19
1075 BLA'KEA *W*	BLAKEA				*Melastomeæ*	*Sp* 1—4						
6586 trinérvia *W*	three-ribbed	♀	▭	or 14	jn jl	W	Jamaica	1789	L	s p	Bot mag 451	
1076. BEJA'RIA. *Ph.*	BEJARIA				*Rhodoraceæ*	*Sp* 1—3						
6587 racemósa *Ph.*	sweet-scented	♣	⌴	or 4	jn jl	Pu	Florida	1810	C	l p	Vent. cels. t. 52	
1077. AGATHOPHYL'LUM *W*	MADAGASCAR-NUTMEG				. . .		*Sp* 1					
6588 aromáticum *W.*	aromatic	♀	▭	or 30	...	W	Madagasc	1823	C	p l	Sonn it t. 127	
1078. RHIZO'PHORA *W*	MANGROVE				*Rhizophoreæ*	*Sp* 1—9						
6589 Man'gle *W*	common	♀	▭	cu 10	...		E. Indies	1820	C	p l	Jacq am. t. 89	
1079 GARCI'NIA *W*	MANGOSTEEN				*Guttiferæ*	*Sp.* 1—8						
6590 Mangostána *W*	common	♀	▭	fr 20	...	Pu	Java	1789.	C	r m	Bot cab 845	
1080 GRANGE'RIA *Lam*	GRANGERIA.				. . .		*Sp* 1					
6591 borbónica *Lam*	Bourbon	♀	▭	or 40	...	W	Bourbon	1823.	C	p l	Lam ill. t. 427	
1081 HALE'SIA *W*	SNOWDROP-TREE.				*Ebenaceæ*	*Sp* 2—4						
6592 tetráptera *W*	four-winged	♣		or 6	ap my	W	Carolina	1756	C	p l	Bot mag 910	
6593 diptera *W*	two-winged	♣		or 6	ap my	W	N Amer	1758	C	p.l	Cav. dis 6 t 187	
1082 DECUMA'RIA *W*	DECUMARIA				*Myrtaceæ*	*Sp* 2						
6594 bárbara *Ph*	smaller	♃		or 4	jl au	W	Carolina	1785	L	p l		
6595 sarmentósa *Ph.*	larger	♄		or 30	jl au	W	Carolina	1758	L	p l	Act par 1 t. 13	
1083 EU'RYA *Thunb*	EURYA				*Ternstromeaceæ*	*Sp* 1—4						
6596 chinénsis *Abel*	Chinese	♣	⌴	pr 2	f d	W	China	1823	C	p.l	Abel.China,c fig	
1084 ARISTOTE'LIA *W*	ARISTOTELIA				*Rhamneæ?*	*Sp* 1						
6597 Mácqui *W.*	shining-leaved	♣		or 4	ap my	W u	Chili	1733.	C	l.p	Dend brit 44	
1085 CANEL'LA *W*	CANELLA				*Guttiferæ*	*Sp* 1						
6598 álba *W*	Laurel-leaved	♀	▭	or 40	.	W	W Indies	1735	L	r l	Linn.trans.1. t.8	



History, Use, Propagation, Culture,

lished by Morrison at Oxford, 1764, quarto, and other works B frutescens is very ornamental in its foliage. The Indian kings, Hernandez tells us, planted it in their gardens, which must have been for its beauty, as it is neither culinary nor medicinal, though the juice is acrid, and used in the West Indies to take off warts.

1074 *Bassia* So named by Koenig, in honor of Ferdinando Bassi, curator of the botanic garden at Bologna Tall trees, natives of the hottest parts of the East Indies, with tufted alternate leaves growing only at the end of the shoots Ripened cuttings root freely in sand

1075 *Blakea* So named by Dr Patrick Browne, after Mr Martin Blake of Antigua, a great promoter of useful knowledge, and a patron of the doctor's Natural History of Jamaica This is one of the most beautiful plants of the West Indies It supports itself for a time by the help of some neighboring shrub or tree, but it grows gradually more robust, and at length acquires a pretty moderate stem, which divides into a thousand weakly declining branches, well supplied with beautiful rosy blossoms on all sides It cannot display itself to so great advantage in our stoves, but it flowers freely, and thrives well in loam and peat, well supplied with water Ripe cuttings root in sand in moist heat and covered

1076 *Bejaria* So named by Mutis, in honor of Bejar, a Spanish botanist The original species are natives of New Grenada. That in gardens, which is a native of the southern states of North America, is a beautiful shrub from three to four feet high, with pink flowers of an agreeable scent. It is found upon the banks of swamps and ponds, and requires the protection of a frame or greenhouse

1077. *Agathophyllum* From ἀγαθὸς, good, and φύλλον, a leaf The leaf has a pleasant smell like cloves In Madagascar, where it is called *Ravendsara*, it forms a large tree with a rufous aromatic bark, and a heavy insipid wood. The leaves are alternate and coriaceous The dried fruit is very aromatic

1078 *Rhizophora* From ῥίζα, a root, and φέρω, to bear, in allusion to the numerous roots which are emitted by the seeds, which vegetate among the branches of the tree while yet adhering to their footstalk. This is the common Mangrove, which covers immense tracts of coast within the tropics, rooting and vegetating even as far as low water mark

1079 *Garcinia* So named in honor of Laurent Garcin, M D, F R S, who travelled into the East Indies. *Mangostana* is the Malayan name This tree bears a fruit, which in the East Indies ranks with that of the pine-apple It rises with a taper stem, sending out many branches, not unlike a fir-tree, with oval leaves, seven or eight inches long The flower is like that of a single rose, the fruit round, the size of a middling orange; the shell is like that of the pomegranate, the inside of a rose color, divided by thin partitions, as in oranges, in which the seeds are lodged, surrounded by a soft juicy pulp, of a delicious flavor, partaking of the strawberry and the grape, and is esteemed one of the richest fruits in the world. It is a native of the Molucca islands, whence it has been transplanted to Java and Malacca The head of the tree is in the form of a parabola, so fine and regular, and the leaves so beautiful, that it is looked upon in Batavia as the tree most proper for adorning a garden, and affording an agreeable shade It was introduced to England in 1789. According to Dr. Garcin, (*Phil. Trans*) "it is esteemed the most delicious of the East Indian fruits, and a

6584 Leaves lanceolate, Peduncles 1-flowered very long horizontal axillary
6585 Leaves elliptical acute, Peduncles 1-flowered nodding terminal

6586 Calyxes two, Leaves with three nerves finely striated across beneath

6587 Leaves ovate-lanceolate smooth, Flowers terminal in panicled racemes

6588 Leaves stalked alternate obovate obtuse coriaceous entire smooth

6589 Leaves acute, Fruit subulate-clavate

6590 Leaves ovate, Peduncles 1-flowered

6591 Leaves alternate stalked ovate entire smooth veiny

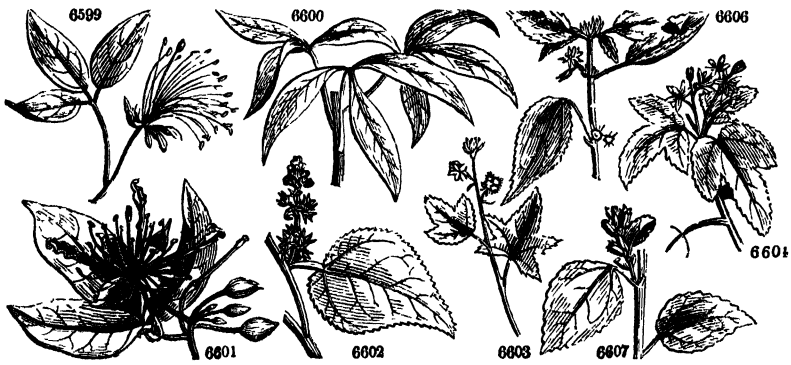
6592 Leaves ovate acuminate, Veins hairy beneath, Wings of the fruit equal
6593 Lvs. obl. ovate obtusely pointed green on both sides very soft beneath, Wings of fruit alternately larger

6594 Leaves all ovate, Stem climbing
6595 Lower leaves rounded upper ovate-lanceolate, Stem sarmentose

6596 Branches at end pubescent, Leaves cuneate oval, Flowers axillary

6597 Leaves opposite evergreen ovate shining serrated

6598 Leaves oblong obtuse shining, Racemes terminal



and Miscellaneous Particulars.

great deal of it may be eaten without any inconvenience, it is the only fruit which sick people are allowed to eat without scruple It is given with safety in almost every disorder, and we are told that Dr Solander, in the last stage of a putrid fever in Batavia, found himself insensibly recovering by sucking this delicious and refreshing fruit The pulp has a most happy mixture of the tart and sweet, and is no less salutary than pleasant It is propagated by ripe cuttings in sand in moist heat But the plant rarely survives long after its importation

1080 *Grangeria* Named after N Granger, a traveller in Egypt, Persia, &c who died at Bassora in 1733. His voyage into Egypt was published in 1745 This is a tree the size of an oak, with alternate ovate entire leaves The flowers are small, in small terminal and axillary racemes.

1081. *Halesia.* So named by Ellis, in honor of the learned and venerable Stephen Hales, D. D, F. R. S., author of Vegetable Staticks, 1727 The species are very ornamental shrubs, valuable for blossoming early in the season. The flowers hang in small bunches all along the branches, each bud producing from four to eight or nine, they appear before the leaves, are of a pure snowy whiteness, and last for two or three weeks, they are succeeded by pretty large winged juiceless drupes, hanging likewise in bunches The leaves of H. diptera are six times the size of those of H tetraptera, and the fruit has two large wings and two minute ones. They are propagated by cuttings of the roots

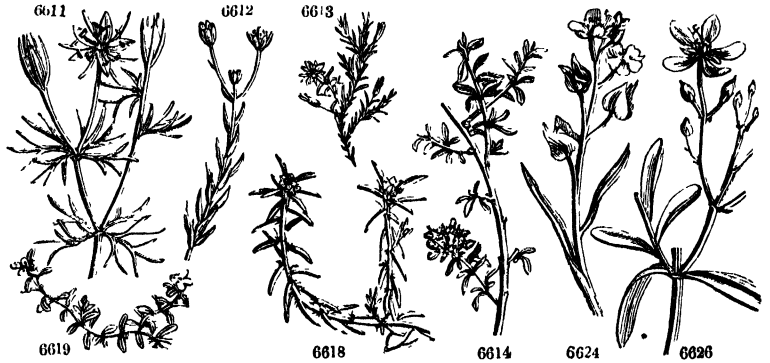
1082 *Decumaria* Derived from *decem*, ten, all the parts of fructification answering to the number 10. It is commonly propagated by layers, but will grow by cuttings in sand under a hand-glass.

1083 *Eurya* A name of Thunberg's, supposed to have been formed from *ωευς*, broad, its application no one has been able to discover. The Eurya chinensis is a little evergreen bush, bearing many whitish flowers on the under side of the branches and hidden by the leaves. It is easily propagated by cuttings.

1084 *Aristotelia* After the celebrated ancient philosopher and naturalist Aristotle. Macqui is the name of this shrub in Chili. It grows freely in a sheltered situation, but its flowers are of little beauty They are succeeded by small berries of a purple or black color, slightly acid and eatable the inhabitants of Chili make a wine from them, which they give in fevers, and for curing the plague It is increased by layers or ripened cuttings.

1085. *Canella.* A name given by Murray, on account of the resemblance between its wood and the aromatic flavor of *Canella*, Cinnamon This tree rises very straight, from ten to fifty feet in height. The branches are erect, not spreading, and only at the top of the tree, furnished with petiolated leaves of a dark green color, thick, and shining like those of the laurel, and emitting a similar odor The flowers, which exhale a powerful aromatic perfume, are small, seldom open, and in bunches. The inner bark of the branches is freed from the cuticle, and dried in the shade This bark is stimulant, and slightly tonic It is a useful adjunct to bitters in some cases of dyspepsia and atonic gout; but it is employed chiefly on account of its flavor, and to correct the griping quality of the resinous cathartics. It is said to prove useful in scurvy (*London Dispensatory*, 207.)

*1086. CRATÆ'VA. *W*	Garlick-Pear.					*Capparideæ*	*Sp* 3—12						
6599 gynándra *W.*	thin-leaved	♀	□	or	12	...	W pu	Jamaica	1789	C	r m	Plu alm t.147 f.6
6600 Tápia *W.*	smooth	♀	□	or	30	...	W	India	1752	C	r m	Com hort 1 t 67
§6601 frágrans *H K*	sweet-scented	♀	□	or	6	jn jl	W	S. Leone	1795.	C	r.m	Bot. mag 596
1087 TRIUMFETTA *W*	Triumfetta					*Tiliaceæ*	*Sp* 9—29						
6602 Lappula *W*	prickly-seeded	♣	□	un	6	jl au	Y G	Jamaica	1739	C	l p	Plum ic t. 255
6603 Bartrámia *W*	Currant-leav'd	♣	□	un	3	jn jl	Y G	E Indies	1739	C	l p	Ru am.6 t 25 f 2
6604 semitriloba *W*	mallow-leaved	♣	□	un	6	jl	Y	W Indies	1773	C	co	Jac vind 3 t 76
6605 grandiflóra *W*	large-flowered	♣	□	un	3	...	Y	W Indies	1810	C	co	
6606 an'nua *W*	annual		◯	un	2	au s	Y	E. Indies	1760	C	co	Bot mag 2296
6607 rhomboidea *Jacq*	rhomboidal	♣	□	un	3	au s	Y	Peru	1818	C	co	Lind coll. 29
6608 macrophýlla *Vahl*	large-leaved	♣	□	un	3	au s	Y		1820	S	co	
6609 trichoclada *Link*	hairy-branched		◯	un	3	au s	Y	Nepal	1823	S	co	
6610 oblongáta *Wall*	oblong		◯	un	2	au s	Y	Nepal	1823	S	co	
1088 PE'GANUM *W*	Pe'ganum					*Rutaceæ*	*Sp* 2						
6611 Hármala *W*	Syrian-Rue	☿	△	cu	1	jl au	W	Spain	1570	C	co	Lam ill 401
6612 daúricum *W*	Milkwort-lvd	☿	△	cu	1	jl au	W	Siberia	1816	C	s l	Gm. sib. 4 t 68
1089 HUDSO'NIA *W*	Hudsonia					*Cistineæ*	*Sp* 1						
6613 ericoides *W*	Heath-leaved	♃	⎽	pr	¾	my jl	Y	N Amer	1805.	L	s p	Bot cab 192	
1090 NITRA'RIA *W*	Nitraria					*Ficoideæ*	*Sp* 1—3						
6614 Schoberi *W*	thick-leaved	♃		cu	1½	my au	P B	Siberia	1778	C	s l	Dend brit 130	
†1091 PORTULA'CA *W*	Purslane					*Portulaceæ*	*Sp* 8—12.						
6615 sativa *H S*	garden		◯	cul	1½	au s	Y	S Amer	1652	S	co		
6616 oleráceа *H S*	small		◯	cul	½	jn jl	Y	Europe	1582	S	r m	Plant grass 128	
6617 parvifólia *H S*	small-leaved		◯	cu	½	au	Y	Jamaica	1799	S	s l		
6618 pilósa *W*	hairy		◯	cu	½	jn	Pk	W Indies	1690	S	s l	Bot reg 792	
6619 quadrifida *W*	creeping		◯	cu	½	au s	Y	E Indies	1773	S	s l	Jac col 2 t 17 f 4	
6620 Meridiána *W*	noonday		◯	pr	½	my jn	Y	E. Indies	1791	S	s l		
6621 foliósa *Lindl*	Guinea		◯	pr	½	jn	Y	Guinea	1822	S	s l	Bot reg 793	
6622 mucronáta *Link*	mucronate		◯	pr	½	jn	Y	...	1822	S	s l		
†*1092 TALI'NUM *Haw*	Talinum					*Portulaceæ*	*Sp* 6—18						
6623 teretifólium *Psh*	round-leaved	☿	△	pr	1	au	Pu	N Amer	1823	D	s l	Bot cab 819	
§6624 ciliátum *R & P*	ciliated	☿	△	pr	1	au	Pu	Chili	1823	S	s p	Hook ex. fl 82	
6625 triangulare *W*	triangular	☿	□	pr	¾	au s	W	W Indies	1739	C	p l	Jac obs 1 t 23	
6626 crassifólium *W*	thick-leaved	☿	□	pr	1	au s	R	. ...	1800	C	p l	Jac vind 3 t 52	
6627 pátens *W*	spreading-flow	☿	◯	pr	1	au o	R	S Amer	1776	C	p l	Bot. rep 253	
6628 reflexum *H S*	yellow-flower	☿	◯	pr	1	au o	Y	S Amer	1800	C	p l	Bot mag 1543	
1093 ANACAMP'SEROS *L*	Anacampseros					*Portulaceæ*	*Sp* 5—7						
6629 rotundifólia *B M*	round-leaved	♃	⎽	cu	¾	jl s	Pk	C G H	1732	C	s l	Bot cab 591	
Talinum Anacampseros W													
6630 arachnoides *B M*	cobweb	♃	⎽	cu	¾	jl s	Pk	C G H	1790	C	s l	Bot mag 1368	
6631 rúbens *Haw*	red-leaved	♃	⎽	cu	⅝	jl s	R	C G H	1796	C	s l		
6632 filamentósa *B M*	thready	♃	⎽	cu	1	au s	Pk	C G H	1795	C	s l	Bot mag 1367	
6633 lanceoláta *Haw*	spear-leaved	☿	△	cu	1	au s	Pk	C G H	1796	C	s l		



History, Use, Propagation, Culture,

1086 *Cratæva* In honor of Cratævus, a Greek botanist and contemporary of Hippocrates. C Tapia, an American name, produces a fruit about the size of an orange, with a mealy pulp and a strong smell of garlic, which is communicated to the animals that feed on it All the species prefer a rich loamy soil, and may be increased by cuttings in sand under a hand-glass

1087 *Triumfetta* So named by Plumier, in memory of Giov Battista Triumfetti, prefect of the botanic garden at Rome, author of Hortus Romanus, 1681, and other works T semitriloba has a tough strong bark which serves for ropes and other conveniences of that kind in the inland parts of the West Indies The whole plant is mucilaginous and emollient Cuttings root in sand under a hand-glass All the species are uninteresting weed-like shrubs of tropical countries

1088 *Peganum* Πηγανον was the Greek name of the rue, which the modern plant resembles Harmala is the Arabic name (*harmel*) of the species so called The species are of easy culture and propagation in any light soil

1089 *Hudsonia* So named by Linnæus, in honor of William Hudson, apothecary of London, F R S, and author of Flora Anglica, 1762 and 1778, octavo. It is a heath-like plant which grows in peat soil, and young cuttings are rooted in sand under a bell-glass It is extremely rare in gardens

1090 *Nitraria* So named by Schreber, who first found it in Siberia near the nitre works, with other saline vegetables. This is a curious thorny shrub, peculiar to the salt deserts of Siberia. Pallas informs us, that the berries, though saltish and insipid, are eaten in the Caspian desert, but in that arid soil they are almost the only luxury Camels feed on the twigs Linnæus had the shrub twenty years before it flowered in Sweden;

6599 Unarmed, Leaves entire, Flowers gynandrous
6600 Leaflets ovate acuminate, Petals ovate roundish obtuse with globose ovaries
6601 Stem twining, Cor regular, Petals very long wavy, Peduncles capitate-racemose

6602 Leaves emarginate at base, Flowers without calyx
6603 Leaves entire at base undivided
6604 Leaves half three lobed, Flowers complete
6605 Leaves subcordate ovate entire serrated rather hairy · the floral ones lanceolate, Branches hairy
6606 Leaves ovate undivided rarely lobed
6607 Leaves rhomboid the upper lanceolate ovate, Flowers complete
6608 Leaves ovate cordate entire unequally serrated acuminate downy glandular at base, Fl complete
6609 Leaves ovate cordate 7-nerved acuminate serrate hairy, Flowers clustered
6610 Leaves oblong serrate 5-nerved softly hairy, Fl terminal clustered

6611 Leaves multifid, Stem herbaceous
6612 Leaves oblong acute, Stem herbaceous

6613 Leaves subulate acerose hairy, Calyx erect pubescent

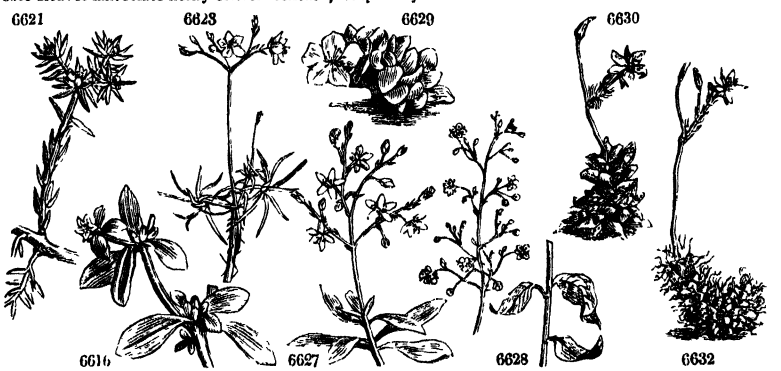
6614 Leaves entire obtuse

6615 Leaves wedge-shaped fleshy, Fl sessile, Stem and branches nearly erect
6616 Leaves wedge-shaped fleshy, Fl sessile, Branches prostrate
6617 Much branched prostrate, Leaves wedge-shaped minute fleshy, Fl on long stalks and sessile
6618 Leaves subulate alternate hairy at the axillæ, Flowers sessile terminal
6619 Bractes 4, Flowers 4-fid, Joints of the stem hairy
6620 Leaves elliptical fleshy flat, Joints hairy, Flowers sessile terminal
6621 Leaves subulate, Cal hairy, Involucre many-leaved, Flowers about 3, Petals retuse
6622 Axils hairy, Leaves obversely oblong, Involucre 8-leaved

6623 Leaves cylindrical fleshy, Corymbs terminal stalked
6624 Leaves linear oblong ciliated, Flowers solitary
6625 Leaves flat channelled wedge-shaped emarginate mucronate, Raceme simple with a 3-cornered peduncle
6626 Leaves flat obovate mucronate, Corymb long, Peduncle 3-cornered
6627 Leaves ovate flat, Panicle terminal, Peduncle dichotomous
6628 Leaves lanceolate sessile opposite, Panicle branched

6629 Leaves ovate difform smooth green, Peduncles round long panicled

6630 Leaves ovate acuminate difform green shining cobwebbed, Raceme simple, Peduncles round long
6631 Leaves ovate acuminate difform shining cobwebbed dark-red, Rac simple, Peduncles very long
6632 Leaves imbricated expanded dark-green cobwebbed rugose above, Threads axillary longer than leaves
6633 Leaves lanceolate fleshy convex beneath, Scape leafy short 1-flowered



and Miscellaneous Particulars

and during ten years having in vain tried to make it flower in the garden at Upsal, he at length succeeded by watering the plant with salt water, it flowered, however, at Gottingen without this assistance Murray expresses a surprise that it has not been used in its native soil for making soda · but perhaps it does not grow in sufficient quantity, or there may be an ample harvest in that salt region of plants that answer the same purpose

In this country it thrives in sandy loam with a little salt put round it, and is increased by layers, or cuttings in sand under a hand-glass

1091 *Portulaca.* An ancient name of unknown origin The species are succulents of the easiest culture P sativa and oleracea were formerly cultivated as potherbs, salads, for garnishings and pickling, though now little used for any of these purposes.

1092. *Talinum* One of those names invented by Adanson, which probably were the mere creations of that botanist's erratic brain This is a succulent genus allied in habits to Portulaca, and of the easiest culture.

1393 *Anacampseros* Ανακαμψιεως was the name of a plant, to which the ancients attributed the quality of restoring the passion of love, for which purpose it was used in philtres and incantations from ανακαμπτω, to return, and εως, love The species are succulents, and grow freely in a sandy loam mixed with a little lime rubbish, and require but little water Cuttings root readily, but should be laid to dry a few days before being planted Leaves taken off close to the plants, and laid to dry a few days, and then planted, will root, and shoot out young plants at their base

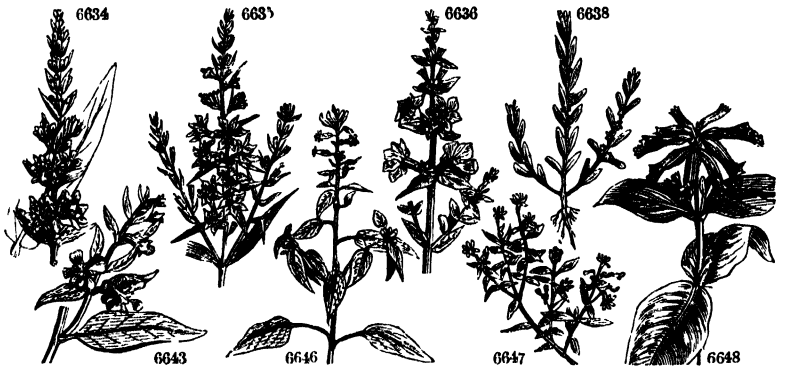
1094	LYTH'RUM. *W.*	LYTHRUM.					*Salicariæ*	*Sp.* 5—10.						
6634	Salicária *W*	common	♃	△	or	4	jl au	Pu	Britain	riv ba.	D	co	Eng. bot 1061	
6635	virgátum *W.*	fine-branched	♃	△	or	3	jn s	Pu	Austria	1776.	D	co	Bot. mag. 1003	
6636	alátum *Ph*	winged-stalked	♃	⧋	or	3	my n	Pu	N Amer.	1812.	D	s.l	Bot. mag. 1812	
6637	lineáre *W*	white-flowered	♃	△	or	1½	jl.au	W	N Amer	1812.	D	s.l		
6638	hyssopifólium *W*	Hyssop-leaved		○	or	1	au	Pu	England	wat.pl.	S	s.l	Eng. bot. 292	
*1095.	NESÆ'A. *Kunth*						*Salicariæ.*	*Sp* 2—3.						
6639	triflóra *Kunth* *Lythrum triflorum*	three-flowered W	♃	△	or	2	au	B	America	1802	D	p.l		
6640	verticillâta *Kunth*	whorl-flowered	♃	△	or	2	jl s	Pu	N Amer	1759	D	p l		
1096.	HEI'MIA *Lnk.*	HEIMIA					*Salicariæ*	*Sp.* 1						
6641	salicifólia *Link*	willow-leaved	♣	□	or	5	au s	Y	Mexico	1821.	C	p l		
1097	CU'PHEA *Jacq*	CUPHEA					*Salicariæ.*	*Sp* 7—19						
6642	viscosissima *W*	clammy	♐	⧈	or	1	jl au	Pu	America	1776.	C	s l	Sw fl gard 60	
6643	procúmbens *Cav*	procumbent		⧈	or	1	jl s	Pa pu	Mexico	1816	S	s l	Bot reg 182	
6644	lanceoláta *H K*	smooth-styled	♐	⧈	or	1½	...	Pu	Mexico	1796.	C	s.l		
6645	decándra *H K*	decandrous		□	or	1½	jn o	Pu	Jamaica	1789	C	s l		
6646	circæoides *Sims*	Circæa-like		⧈	or	¾	s	Pu	S Amer	1821.	C	s l	Bot mag 2201	
6647	multiflóra *Lodd*	many-flowered	♣	□	pr	1½	s	Pu	Trinidad	1820	C	p l	Bot. cab 808	
6648	Melvílla *Lindl*	scarlet & green	♣	□	or	2	au	Sc	Guiana	1823	C	p l	Bot reg 852	
1098	KLEINHO'FIA *W*	KLEINHOFIA					*Malvaceæ.*	*Sp* 1						
6649	Hospita *W*	heart-leaved	♀	□	or	20	...	Pu	E. Indies	1800.	C	p l	Cav. dis. 5 t 146	

DIGYNIA.

1099	CALLI'COMA *B R*	CALLICOMA					*Cunoniaceæ*	*Sp* 1						
6650	serrátifólia *B R*	saw-leaved	♣	⌴	or	4	my au	Y	N S W	1793	C	s p	Bot rep 566	
1100	HELIOCAR'PUS *W*	HELIOCARPUS.					*Tiliaceæ*	*Sp* 1—2						
6651	americánus *W*	American	♣	□	or	16	...	Pu	Vera Cruz	1733	C	p.l	Lam. ill t 409	
1101	AGRIMO'NIA. *W*	AGRIMONY.					*Rosaceæ*	*Sp* 6—9						
6652	Eupatória *W*	common	♃	△	m	3	jn jl	Y	Britain	bor fi	D	co	Eng. bot. 1335	
6653	odoráta *W*	sweet-scented	♃	△	or	4	jl	Y	Italy	1640	D	co		
6654	répens *W*	creeping	♃	△	or	2	jl s	Y	Levant	1737	D	co		
6655	parviflóra *W*	small-flowered	♃	△	or	2	jl	Y	N Amer	1766	D	co		
6656	striáta *Ph*	white-flowered	♃	△	or	2	jn au	W	N Amer.	1812	D	co		
§6657	Agrimonoides *W*	three-leaved	♃	△	or	1½	jn au	Y	Italy	1739	D	co	Col ecp 1 t 144	

TRIGYNIA.

1102	RE'SEDA *W*	RESEDA					*Resedaceæ*	*Sp* 19—23.						
6658	Lutéola *W*	Dyer's-weed		○	ag	2	jn jl	Ap	Britain	wa gr.	S	s l	Eng bot. 320	
6659	crispáta *Link*	curled		○	un	2	jn jl	Ap	Portugal	1823.	S	co		



History, Use, Propagation, Culture,

1094. *Lythrum* From λυθρον, black blood, in allusion to the color of the flowers L. Salicaria (willow-like, from *Salix*) although a common British plant, is considered a handsome border flower, and several varieties, differing chiefly in size, are in cultivation The whole plant is astringent, and has been used in medicine and tanning

1095 *Nesæa* Plants formerly referred to Lythrum, from which they seem to be satisfactorily distinguished

1096 *Heimia* Named by Link, in honor of Dr Heim, a celebrated Berlin physician A beautiful stove shrub with fine spikes of yellow flowers

1097. *Cuphea* From κυφος, curved, in reference to the form of its capsule Pretty herbaceous or shrubby plants, resembling Lythrum in aspect. C Melvilla is a very handsome stove shrub resembling Bouvardia coccinea.

1098 *Kleinhofia* So named by Linnæus, after Kleinhoff, formerly director of the botanic garden in Java. The leaves when bruised smell like violets, the flowers appear the greater part of the year, and the tree is seldom without fruit in all its different stages Cuttings root in sand under a hand-glass

1099 *Callscoma.* From καλος, beautiful, and κομη, hair, in allusion to the tufted yellow heads of flowers, for which the plant is remarkable Ripened cuttings root in sand under a hand-glass

1100 *Heliocarpus* From ἡλιος, the sun, and καρπος, fruit. The valves of its round and elegantly ciliated capsule resemble a little sun surrounded by its rays Cuttings root in sand under a hand-glass, and Miller found the seeds to vegetate after being kept ten years

1101 *Agrimonia* A corruption of the word *Argemone*, by which name the ancients distinguished a plant reputed useful in cataract of the eye, which in Greek was termed *argema* A Eupatoria was formerly regarded as a remedy of much importance as a tonic and deobstruent, but though still retained in the London Materia Medica, is seldom or never prescribed The root in spring is sweet scented, and the flowers fresh

6634 Leaves opp. cordate lanceolate, Flowers spiked 12-androus
6635 Leaves opp. lanc. Panicle virgate, Flowers 12-androus 3 together
6636 Leaves opp ovate obl acute cordate at base closely sessile, Branches 4-winged, Fl. axil. sol. 6-androus
6637 Leaves opposite linear, Flowers opp hexandrous
6638 Leaves alternate linear, Flowers hexandrous

6639 Smooth, Leaves opp. subsessile lanceolate entire, Pedunc axill opposite, Head 3-flowered

6640 Leaves opp somewhat downy stalked, Flowers whorled linear

6641 Leaves linear-lanceolate acute, Flowers axillary

6642 Fl. axill. solitary, Leaves ovate-lanceolate scabrous above, Stem erect hispid, Style hairy
6643 Branches decumbent viscous, Leaves ovate lanceolate hispid on short stalks
6644 Fl. axill sol Lvs. lanc hairy, Stem erect hairy, Style smooth, The 2 long filam having a tuft of wool longer [than anthers
6645 Raceme term. Leaves ellipt. and branches pubesc Stem shrubby, Fl decandrous
6646 Raceme term. Pedicels scattered, Bractes linear, Leaves ovate stalked pubescent
6647 Leaves small lanceolate, Flowers small solitary terminal, Bush compact
6648 Leaves lanceolate scabrous narrowed at each end, Racemes term. Cal long bowed, Petals O

6649 A smooth tree, with broad cordate acuminate entire leaves

DIGYNIA.

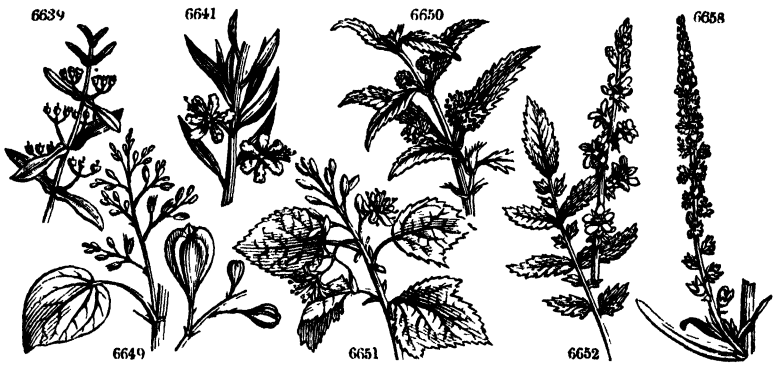
6650 The only species

6651 The only species

6652 Fruit hispid, Cauline leaves pinn with obl ovate leaflets, Spikes elevated, Pet twice as long as calyx
6653 Fruit hispid, Leaves pinnate with obl leaflets the lower veiny short, Pet twice as long as calyx
6654 Fruit hispid, Cauline leaves pinnate with obl leaflets, Spikes subsessile, Petals 3 times as long as calyx
6655 Fruit hispid, Cauline leaves pinnate with many lanceol leaflets, Petals half as long again as calyx
6656 Spikes virgate, Fruit reflexed turbinate furrowed crowned with hairs
6657 Fruit smooth, Cauline leaves ternate, Stamens usually 8

TRIGYNIA.

6658 Leaves lanc entire with a tooth on each side at base, Cal 4-fid
6659 Leaves lanceolate wavy entire with two glands at base



and Miscellaneous Particulars

gathered smell like apricots When the plant is coming into flower it will dye wool a full nankeen color, and gathered in September a darker yellow. It has been used for dressing leather Sheep and goats eat it, but kine, horses, and swine refuse it.

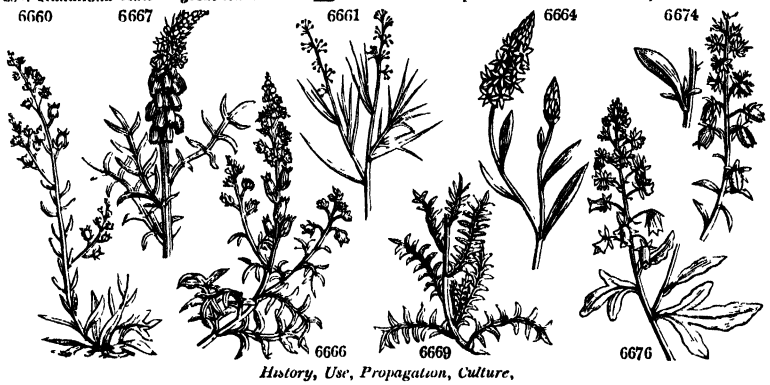
1102. *Reseda.* From *resedo*, to calm, to appease The Latins thought it useful as a topical application in external bruises R Luteola, a diminutive of *luteus*, yellow, is used by dyers, especially in France (Chaptal's Chimie appliqué à l'Agriculture, &c.) It affords a most beautiful yellow dye for cotton, woollen, mohair, silk and linen. Blue cloths are dipped in a decoction of it, in order to become green The yellow color of the paint called Dutch Pink, is obtained from this plant The entire plant, when it is about flowering, is pulled up and employed both fresh and dried Mr Swayne observes, that it is one of the first plants which grow on the rubbish thrown out of coal pits It flowers in June and July The root and bottom leaves are formed from the fallen seeds before winter, and thus it happens in this, as in many other cases, that the wild plant is biennial, whilst the cultivated plant, growing from seeds sown in the spring, is annual It is an observation of Linnæus's, that the nodding spike of flowers follows the course of the sun, even when the sky is covered; pointing towards the east in a morning, to the south at noon, westward in the afternoon, and to the north at night.

R. odorata is a well known and universal favorite The flowers are highly odoriferous, and there are very few to whom this odor is offensive The plant is in great demand in London for rooms and placing in balconies, and forms for these purposes an extensive article of culture among the florists and market gardeners. The plants are in many cases sown and transplanted into pots, three or four plants to a pot four inches in diameter. To obtain plants for blowing from December to February, a sowing should be made in July in the open ground, and the plants potted in September The crop for March, April, and May, should be sown not later than the twenty-fifth of August, the plants from this sowing will not suffer by exposure to rain, whilst they are young, they must, however, be protected from early frosts, like the winter crop, they are to

6660 **canéscens** *W*	hoary	△	un	1	my jl	Ap	Spain	1597	D	s l	Cl his 1 t. 295
6661 **glaúca** *W.*	glaucous	△	un	1	my jl	Ap	S Europe	1700	D	s l	Pl alm. t.107 f 2
6662 **dipétala** *W*	Flax-leaved	◎	un	1½	au	Ap	C G H	1774	C	s.l	
6663 **scopária** *Brouss*	Broom-like	▭	un	½	au s	Ap	Teneriffe	1815	C	s l	
6664 **sesamoides** *W.*	spear-leaved	○	un	1	jl au	Ap	France	1787.	S	s l	All p 2. t. 88 f 3
6665 **viréscens** *Horn.*	green	○	un	1½	jl au	Ap	Spain	1820	S	co	
6666 **fruticulósa** *W*	shrubby	▭	un	1	s	Ap	Spain	1794	C	s l	Jac ic 3 t 474
6667 **álba** *W*	upright-white	◑	un	3	my o	Ap	S Europe	1596	C	s l	Lob ic. 222
6668 **prunósa** *Delisle*	frosted	△	cu	1	jn	Ap	Egypt	1824	C	s l	
6669 **undáta** *W*	wave-leaved	△	un	1	jn au	Ap	Spain	1739	D	s l	Bar rar t. 587
6670 **bipinnáta** *W*	bipinnate-leav	▭	un	2	jn au	Ap	Spain	1816	C	s l	
6671 **saxátilis** *Pourr*	rock	△	un	1½	jn au	Ap	Spain	1816	D	s l	
6672 **ramosíssima** *W*	branching	△	un	2	jn au	Ap	Britain	ch so	C	s l	Eng bot 321
6673 **lútea** *W*	Base-rocket	◎	un	3	jl au	Ap	S Europe	1752	S	s l	Jac aust 2 t 132
6674 **Phyteúma** *B*	trifid	○	un	1½	jn s	Ap	Palestine	1791	S	s l	Lind coll 22
6675 **mediterránea** *W*	Mediterranean	○	un	1½	jn s	Ap	Egypt	1752.	S	r m	Bot mag 29
6676 **odoráta** *W*	Mignonette	○	ft	1	jn o	Ap	Egypt	1752	S	r m	Bot. reg 227
β frutéscens	*tree-mignonette*	▭	or	2	jn o	Ap	Egypt	1752	S	r m	

†1103 EUPHORBIA *W* Spurge. *Euphorbiaceæ Sp 135—160*

6677 **uncináta** *Dec*	twin-spined	▭	gr	¾	jn au	Ap	C G H	1794	C	s l	Plant grass 151
6678 **trigóna** *Haw*	upright-triang	▬	gr	9	jl au	Ap	E Indies	1768	C	s l	
6679 **antiquórum** *Haw*	spreading-trian	▬	gr	9	jl au	Ap	E. Indies	1688	C	s p	Rh mal 2 t 42
6680 **láctea** *Haw*	marbled	▬	gr	4	jl au	Ap	E. Indies	1804	C	s p	
6681 **canariénsis** *W*	Canary	▬	gr	20	mr ap	Ap	Canaries	1697	C	s p	Plant grass 140
6682 **heptagóna** *W*	seven-angled	▬	gr	3	jl n	Ap	C G H	1731	C	s p	Brad suc 2 13
6683 **enneagóna** *Haw*	nine-angled	▬	gr	3	jl o	Ap	C G H	1790	C	s p	
6684 **mammillária** *W*	warty-angled	▭	gr	2	jl au	Ap	C G H	1759	C	s p	Com præl t 9
6685 **cereiformis** *W*	naked	▭	cu	2	jn jl	Ap	C G H	1731	C	s p	Bur afr t. 9 f 3
6686 **officinárum** *W*	officinal	▬	m	6	jn jl	Ap	Africa	1597	C	s p	Plant grass 77
6687 **polygóna** *Haw*	many-angled	▬	gr	3	jl s	Ap	C G H	1790	C	s p	Bot. cab 1344
6688 **nerifólia** *W*	Oleander-lvd	▬	gr	3	jn jl	Ap	India	1690	C	s p	Plant grass 46
6689 **Hystrix** *W*	Porcupine	▭	gr	6	jn au	Ap	C G H	1695	S	s p	Jac sch 2 t. 207
6690 **várians** *Haw*	variable-stem'd	▭	gr	4	...	Ap	E. Indies	1800	C	s p	
6691 **grandifólia** *Haw*	great-leaved	▬	cu	6	...	Ap	S Leone	1798.	C	s p	



History, Use, Propagation, Culture,

be thinned in November, leaving not more than eight or ten plants in each pot, and at the same time, the pots being sunk about three or four inches in some old tan or coal ashes, should be covered with a frame, which it is best to place fronting the west for then the lights may be left open in the evening, to catch the sun whenever it sets clear The third, or spring crop, should be sown in pots, not later than the twenty-fifth of February, these must be placed in a frame, on a gentle heat, and as the heat declines the pots must be let down three or four inches into the dung-bed, which will keep the roots moist, and prevent their leaves turning brown, from the heat of the sun, in April and May The plants thus obtained, will be in perfection by the end of May, and be ready to succeed those raised by the autumnal sowing (*Rushon in Hort Trans* ii 372)

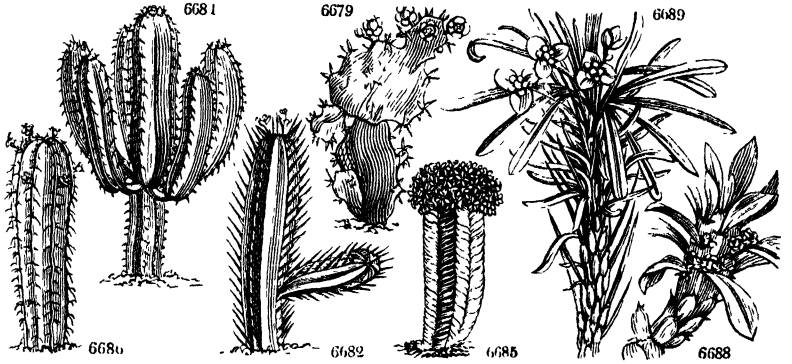
R. odorata frutescens, if left to itself, hardly appears a distinct variety, but trained against a wall or to a stick it, and also the common mignonette, may be made to assume a frutescent character According to Sabine, the tree mignonette is to be propagated from seeds sown in spring, it may also be increased by cuttings, which will readily strike The young plants should be put singly into small pots, and brought forward by heat, that of a gentle hot-bed being preferable, but they will grow well without artificial heat As they advance, they must be tied to a stick, taking care to prevent the growth of the smaller side shoots, by pinching them off, but allowing the leaves of the main stem to remain on for a time to support and strengthen it When they have attained the height of about ten inches or more, according to the fancy of the cultivator, the shoots must be suffered to extend themselves from the top, but must be occasionally stopped at the ends, to force them to form a bushy head, which by the autumn will be eight or nine inches in diameter, and covered with bloom. Whilst the plants are attaining their proper size, they should be shifted progressively into larger pots, and may ultimately be left in those of about six inches in diameter at top (*Hort Trans* iii 181)

Mr Lindley's theory of the nature of the inflorescence of this genus being remarkable, and only explained in his Collectanea Botanica, which is in few hands, it is here transcribed entire "The usual idea of the flower of Reseda has been, that it is furnished with a calyx of a variable number of divisions, with as many petals, producing from their surface certain anomalous appendages, and with an ovary and stamens inserted on a great fleshy body, called nectary by Linnæan botanists, squama by others, and raised to the rank of a distinct organ by M Mirbel, under the name of Gynophore To us, however, it has always appeared, that this could by no means be the real structure of the plant, and that by a slight alteration of terms it not only might be much more satisfactorily explained, but its real affinity ascertained with some degree of probability For even allowing for a moment an analogy between the nectary of this plant and the discus of others, particularly of some Tiliaceæ, there is still a great difficulty remaining to be overcome in the anomalous structure of the supposed petals, of which we can imagine no probable explanation We are therefore of opinion, that a much more natural mode of understanding Reseda is to consider it as having compound flowers, taking the calyx of authors for an involucrum, their petals for neutral florets, and their nectary for the calyx of a fertile

6660 Leaves lanceolate wavy hairy
6661 Leaves linear toothed at base, Styles 4
6662 Leaves linear entire, Styles 4, Barren florets 2
6663 Leaves linear entire, Fl trigynous, Fruit clavate, Stem twiggy
6664 Leaves lanceolate entire, Fruit stellate
6665 Nearly related to R luteola, but the leaves are not toothed at base
6666 Leaves pinnate recurved at end, Styles 4, Involucre 5-parted spreading, Stem half shrubby
6667 Leaves pinnate, Styles 4, Involucres 6-parted
6668 Branches above and younger leaves covered with large distinct blisters
6669 Leaves pinnate wavy, Styles 3 or 4
6670 Leaves bipinnatifid very rough, Flowers spiked
6671 Leaves all trifid segments of the upper leaves linear flat, of the lower lanceol wavy, Stem quite simple
6672 Leaves linear simple or trifid, Stem erect branched, Fruit obovate
6673 Leaves all trifid the lower pinnate
6674 Leaves entire and 3-lobed, Involucres 6 parted very large
6675 Leaves entire and 3-lobed, Involucres shorter than florets
6676 Leaves entire and 3-lobed, Involucres as long as florets

§ 1 *Stem thick, fleshy, naked, or with a few leaves, Flowers dispersed*
* *Prickly*

6677 Fleshy prickly compressed channelled inflexed at end, Prickles twin diverging
6678 Naked erect prickly triangular jointed, Branches erect somewhat channelled
6679 Prickly nearly naked triangular jointed, Branches spreading
6680 Naked prickly jointed with 3-cornered expanded branches obsoletely marbled with white
6681 Prickly naked nearly quadrangular, Prickles twin hooked, Fl subsessile
6682 Prickly naked with 7 angles, Prickles solitary subulate flower ascending
6683 Prickly naked erect with 9 angles, Prickles solitary flower-bear ascending fuscous, Branches penaulous
6684 Prickly half naked, Angles warted with spines between, The young warts leafy
6685 Prickly naked with many angles, Prickles solitary subulate
6686 Prickly naked with many angles, Prickles twin
6687 Prickly naked with numerous simple erect 10-13-angled stems, Prickles dark
6688 Prickly half naked, Prickles twin, Angles obliquely warted leafy upwards, Leaves oblong
6689 Stem round half naked leafy upwards, Leaves lanc linear, Peduncle 1-fl at length spiny
6690 Prickles twin, Stem rounded or angular, Angles obliquely warted, Leaves nearly oblong
6691 Prickles twin horizontal, Stem rounded simple, Leaves oblong spatulate very large



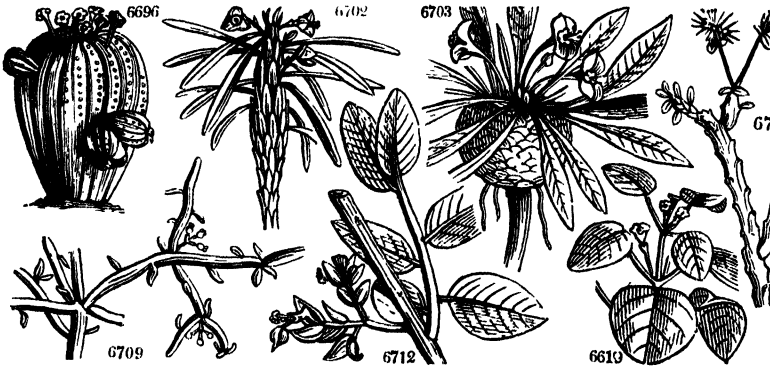
and Miscellaneous Particulars

floret in the middle In support of this opinion, we may observe, firstly, that there is a difference in the time of expansion of the neutral florets, and of the stamens of the fertile one, the former being quite open, in very many capitula, before one anther of the latter has burst in a single flower Secondly, that there is an evident analogy between the appendages of the neutral florets, and the stamens of the perfect florets, inasmuch as in Reseda odorata those of the upper sterile florets are of nearly the same number as the real stamens, because in Reseda alba, and some others, in which a union of filaments takes place in the perfect floret, there is a corresponding but more complete union of the sterile appendages, and because occasionally, in Reseda odorata, stamens are changed into bodies altogether similar to the sterile appendages, and in Reseda Phyteuma the same appearance is always assumed by the perfect stamens after the anthers have performed their functions Thirdly, that there is an equal analogy between the calyx of the neutral florets, and that of the perfect floret, because both have a peculiar glandular margin, the same form, both produce their stamens from their surface, and because the upper edge of the calyx in sterile florets has the same relation to the axis of each particular head, as that of the perfect floret has to the axis of the whole inflorescence. In Reseda Phyteuma, which has the margin of its neutral florets rolled back, the same thing occurs in the perfect floret Fourthly, that there is no instance of the same analogy existing between the discus and petals of other plants We may also observe, that in Reseda Phyteuma, there is a campanulate tube to the calyx, into the upper edge of which the stamens are inserted

" To determine the affinity of Reseda to other orders, will not be so easy as to explain its structure One cannot avoid remarking the resemblance between its calyx and the squama of Amentaceæ and Ulmaceæ. Ficoideæ, Grossulaceæ and Cacti, on account of placentation and structure of seed, may be supposed to have a certain relation to it as may Chenopodeæ with regard to inflorescence, absence of petals, and habit. But we are disposed to believe its real place in the system is in the neighbourhood of Euphorbiaceæ, where we have placed it in Flora Scotica They agree with it in having the same sort of aggregation of flowers, similar habit, no corolla, and ternary division of ovarium The insertion of their ovula is the same, as is also the direction of the radicle They differ, however, firstly, in the presence of albumen, which yet is not entirely absorbed in Reseda till the seed is perfectly ripe, and which exists even after that time in the seed of R alba, where it is fleshy as in Euphorbiaceæ Secondly, in their solitary seeds, in which respect Resedaceæ may be supposed to bear the same relation to Euphorbiaceæ as Campanulaceæ do to Compositæ, or as some sections of Rubiaceæ to the others In R suffruticulosa the ovules appeared to be reduced to a single row, and the same is said to obtain in Ochradenus Thirdly, in elastic dehiscence of capsule, but as this is not universal in Euphorbiaceæ, it is not, strictly speaking, an objection of importance " (*Lindley's Coll Bot*)

1103 *Euphorbia* Euphorbus was physician to Juba, king of Mauritania, and first used this plant in medicine This is a genus of grotesque and curious plants, few of them of either beauty or use, and most of

6692	cucumerína *W*	Cucumber-like	♃		gr	½	...	Ap	C G H.	...	C	s p	Vail. it. t. 5
6693	magnimam'ma *Haw*	large-warted	♃		gr	3	...	Ap	Mexico	1823	C	s p	
6694	lanífera *Haw*	wool-bearing	♃		gr	3	...	Ap	Mexico	1823.	C	s p	
6695	geminispína *Haw*	double-spined	♃		gr	3	...	Ap	Mexico	1823.	C	s p	
6696	melofórmis *W*	Melon-like	♃		gr	⅔	my s	Ap	C G H	1774	C	s p	Bot rep 617
6697	Caput-medúsæ *W*	gr Med Head	♃		gr	2	au	Ap	Africa	1731	C	s p	Com præl. t. 7
6698	tesselláta *Haw*	chequer'd M H	♃		gr	1	au	Ap	.....	1788	C	s p	
6699	fructuspína *Haw*	small Med Hd.	♃		gr	⅔	au	Ap	C G H	1731	C	s p	Plant grass 150
6700	procúmbens *Haw*	least M Hd.	♃		gr	⅓	au	Ap	C G H	1768	C	s p	Bur. afr t 10 t 1
6701	anacántha *W*	scaly	♃		gr	1	s o	Ap	C G H	1727	C	s p	Plant. grass 144
6702	cláva *W*	club	♃		gr	1	mr au	Ap	C G H	1774	C	s p	Jac ic. l. t 85
6703	strpleurifólia *W.*	cone-shaped	♃		gr	1½	jn jl	Ap	C G H	1791	C	s p	Jac sch 1 t. 106
6704	mauritánica *W*	Barbary	♃		cu	1½	jn.au	Ap	Africa	1732	C	s p	Di el t 289 f 373
6705	hamáta *Haw*	hooked	♃		cu	1½	...	Ap	C G H	1795	C	s p	Bur afr. t. 6 f 3
6706	Ornithópus *Jacq.*	Bird's-foot	♃		gr	1	jn au	Ap	C G H	1816.	C	s p	Jac frag t. 120
6707	aphylla *Brouss*	leafless	♃		cu	1½	jn.au	Ap	Teneriffe	1815	C	s p	
6708	balsamífera *W*	Balsam	♃		cu	1	...	Ap	Canaries	1779	C	s p	
6709	Tirucálli *W*	Indian-Tree	♃		gr	3	...	Ap	India	1690.	C	s p	Rh. mal. 2. t 44
6710	atropurpúrea *W en.*	dark-purple	♃		cu	3	...	Ap	Teneriffe	1815	C	s p	Bot mag 3321
6711	piscatória *W.*	smth spear-lvd	♃		cu	3	...	Ap	Canaries	1777	C	s p	
6712	bracteáta *Jacq*	bracteated	♃		cu	1½	...	Ap	.....	1809	C	s p	Jac sch 2 t 276
6713	péndula *Haw*	pendulous	♃		cu	1	...	Ap	.....	1808	C	s p	
6714	dendroides *W*	tree-like	♃		cu	1½	...	Ap	Italy	1768	C	s p	Mo 10 t 1 f 11 12
6715	cyathóphora *W*	colored	¥		pr	1½	jl au	Ap	S. Amer	1806	C	s p	Bot. reg 765
6716	repánda *Haw*	waved	¥		cu	2	au	Ap	E. Indies	1808	C	s p	
6717	biglandulósa *Haw.*	twin-glanded	♃		cu	3	s	Ap	Bourbon	1808.	C	s.p	
6718	nudiflóra *Jac*	naked-flowered	♃		cu	6	au	Ap	.....	1800	C	s l	Jac ic 3 t 470
6719	cotinifólia *W.*	Cotinus-leaved	♃		or	10	jl au	Ap	S Amer	1690	C	s p	Hook ex fl 59
6720	petioláris *Sms*	long-stalked	♃		cu	3	my jn	Ap	W Indies	1800	C	s p	Bot mag 883
6721	mellífera *W*	honey-bearing	♃		pr	6	ap my	Ap	Madeira	1784	C	s l	Bot mag 1105
6722	linarifólia *W*	Toad-flax-lvd	♃		cu	3	...	Ap	... ..	1794	C	s l	Jac ic 1 t 86
6723	variegáta *B M*	pie-bald			cu		s	Ap	Louisiana	1811	S	s l	Bot mag 1747
6724	prunifólia *Jacq*	Plum-leaved	¥		cu	2	jn jl	Ap	.....	1790.	S	s l	Jac. sch 3 t. 277
6725	ocymoidea *W.*	Basil-leaved			w	1	jn au	Ap	S Amer	1733	S	s.l	
6726	dentáta *Mich*	toothed			w	1	jn jl	Ap	N Amer	1806	S	s l	
6727	hypericifólia *W*	Hypericum-lv			w	1½	jn s	Ap	America	1727	S	s l	Hook. ex fl 36
6728	Humbóldtii *W en.*	Humboldt's	¥		w	1	jl o	Ap	S Amer	1809	C	s l	
6729	prostráta *W.*	trailing red			w	½	jl o	Ap	W Indies	1758	S	s l	
6730	rósea *W.*	rosy			w	⅔	au	Ap	E. Indies	1808	S	s.l	
6731	maculáta *W*	spotted			w	1½	jl	Ap	S Amer	1660	S	s l	Jac vin 2 t 186
6732	picta *W*	painted	¥		w	1	my jl	Ap	S Amer	1789.	S	s l	Jac ic 3 t 477
6733	pilulífera *W*	globular	¥		w	½	jn au	Ap	E Indies	1800	C	s l	Jac ic 3 t 478
6734	hyssopifólia *W*	Hyssop-leaved	¥		w	1	au s	Ap	W Indies	1787.	C	s l	
6735	thymifólia *W*	thyme-leaved			w	½	jl au	Ap	India	1699	S	s l	Pl alm t. 113 f 2
6736	chamæsýce *W.*	scollop-leaved			w	½	jl au	Ap	S Europe	1752	S	s l	Mo h 10 t 2 f 19
6737	Péplis *W*	purple			w	1	jl au	Ap	England sea sh		S	s.l	Eng bot 2002
6738	polygonifólia *W*	knot-grass-lvd			w	½	jn jl	Ap	N Amer	1704.	S	s l	Jac co s t 13 f 3
6739	Ipecacuánhæ *W*	Ipecacuanha	¥		w	2	jn jl	Ap	N Amer	1812	D	s l	Bot mag 1494
6740	canaliculáta *Pers.*	channelled			w	1	jn jl	Ap	Carthagm	1819	S	co	Bot. cab. 727
6741	Péplus *W*	petty			w	⅔	jl au	Ap	Britain clt gr		C	s l	Eng bot 959
6742	falcáta *W.*	sickle-leaved			w	1	jn au	Ap	S Europe	1699	C	s l	Jac. aus. 2 t 121
6743	exígua *W.*	dwarf			w	½	jl	Ap	Britain cor fi		C	s.l	Eng. bot. 1336



History, Use, Propagation, Culture,

the annuals poisonous weeds. One species (E. edulis), not yet introduced, is said to be used as a pot-herb in Cochin China, one (E. punicea) is a very splendid plant, and the E. officinarum, and one or two other species gathered along with it, are used in medicine They are all milky, mostly herbaceous, several however shrubby, upright for the most part, very few of them creeping, some are leafless, but most of them are leafy. Stems angular or tubercled, or more frequently cylindric or columnar; unarmed, or in the angular sorts resembling the upright Cactuses, and armed with prickles, which are either solitary or in pairs, placed in a single row on the top of the ridges Such as have leaves have them simple, most frequently alternate and naked, in some sorts, however, they are opposite, and are then commonly attended with stipules, and in a few they are placed by threes in whorls Peduncles in the leafless sorts naked, bearing from one to three flowers; in the leafy ones axillary, but more frequently from two to five or more in a terminating umbel, each some-

6692 Prickly elliptical obtuse furrowed, Prickles subsolitary, Peduncles 3-flowered
6693 Warts very large green downy at end, Spines about 4 strong black at end
6694 Simple rounded obovate with warts woolly at end [than the rest
6695 Columnar, Warts small numerous with many small spines between, Two spines in each cluster longer

** *Unarmed.*

6696 Unarmed globose with many angles
6697 Unarmed imbricated, Warts with one leaf, Flowers somewhat stalked, Divisions palmate
6698 Stem closely tessellated with warts upwards thickly branched
6699 Unarmed imbricated with warts bearing a linear leaf
6700 Unarmed with round procumbent branches, Warts 4-cornered
6701 Unarmed imbricated, Warts with a roundish leaflet, Fl term solitary sessile with palmate segments
6702 Unarmed imbricated, Warts with a lanceolate leaflet, Fl stalked with entire segments
6703 Unarmed imbricated capitate, Warts rhomboid with lanceolate stalked leaves, Segm of flower entire
6704 Unarmed half naked shrubby filiform flaccid, Leaves alternate
6705 Warts large imbricated hooked at end the upper having an oval leaflet at length withering
6706 Unarmed warted, Warts with a deciduous leaf, Pedunc solitary or 3 terminal 1-flowered
6707 Unarmed naked leafless branched, Branches square, Fl solitary terminal
6708 Unarmed shrubby upright, Head terminal, Leaves lanceolate smooth glaucous
6709 Unarmed half naked shrubby filiform erect, Branches spreading regularly clustered

§ 2. *Stem uniform, shrubby, upright, Flowers scattered or aggregate, not in umbels*

6710 Unarmed, Leaves lanceolate clustered entire, Umbel terminal sessile, Involucre connate colored
6711 Unarmed shrubby upright, Umbel 5-fid term Involucre oblong, Leaves lanceolate smooth
6712 Unarmed shrubby, Leaves oblong alternate distichous, Bractes persistent
6713 Unarmed shrubby naked, Branches rounded effuse dependent jointed
6714 Umbel multifid dichotomous, Involucre subcordate the first 3-leaved
6715 Unarmed, Leaves panduriform ovate, Fl term suberect, Involucre colored
6716 Villous, Leaves with long stalks alternate broadly ovate repand-toothed, Stem erect striated
6717 Leaves opp minute stalked obovate entire, Two glands on the stem at the base of petioles
6718 Unarmed shrubby, Leaves ovate entire, Cyme axillary naked
6719 Leaves opp subcordate stalked emarginate entire, Stem shrubby
6720 Stalks whorled longer than the orbicular leaf, Fl solitary, Stem unarmed naked
6721 Leaves scattered lanceolate acute smooth, Pedunc dichotomous, Caps muricate
6722 Unarmed shrubby, Leaves scattered lanc mucron Fl solitary term with a 3-leaved involucre Caps muricate
6723 Leaves oval entire wavy edged with white, Caps smooth, Stem hairy
6724 Dichotomous, Leaves ovate serrate acute villous, Fl solitary, Upper dichotomies cymose

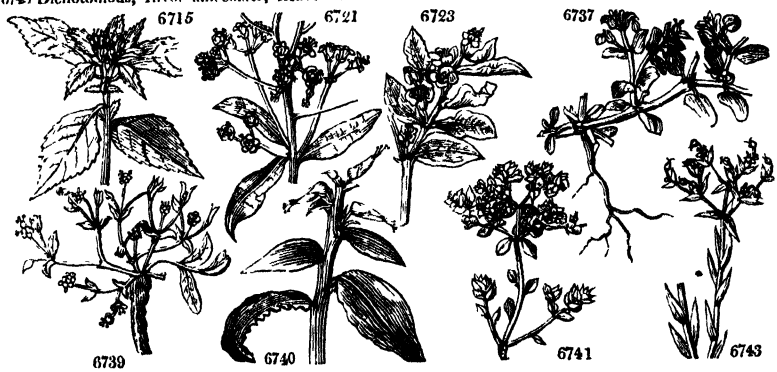
§ 3. *Dichotomous, herbaceous, Flowers solitary or aggregate, not umbelled.*

6725 Unarmed branched, Leaves subcordate entire shorter than their stalk, Fl solitary
6726 Dwarf hairy, Leaves opp oval toothed, Flowers clustered at the end of branches
6727 Dichotomous, Leaves serrate oval-obl smooth, Corymbs terminal, Branches divaricate
6728 Dichotomous, Leaves ovate obl acute at each end smooth stalked entire, Capsules smooth
6729 Dichotomous, Leaves oval obsol serrated, Pedunc axill 3-flowered, Stems diffuse smooth
6730 Dichotomous diffuse, Lvs obov oblique somewhat cord at base toothletted at end, Pedunc 1-fl. axillary
6731 Dichotomous, Leaves serrate oblong hairy, Fl axill solitary, Branches spreading
6732 Dichotomous, Leaves ovate hairy stalked entire, Pedunc axill 1-fl Caps smooth
6733 Dichotomous, Leaves serrate oval oblong, Pedunc 2-headed axillary, Stem erect
6734 Dichotomous, Leaves subcrenate linear, Fl fascicled term Stem erect
6735 Dichotomous, Leaves serrate oval-obl Heads axill clustered subsessile, Stems procumbent
6736 Dichotomous, Leaves crenulate roundish smooth, Fl solitary axill Stems procumbent
6737 Dichotomous, Leaves entire half cordate, Fl solitary axillary, Stems procumbent
6738 Leaves opp entire lanceolate obtuse, Fl solitary axillary, Stems procumbent
6739 Dichotomous, Leaves entire lanceolate, Peduncles axillary 1-fl as long as leaves, Stem erect
6740 Branches alternate dichotomous channelled filiform, Leaves ovate stalked pubescent

§ 4 *Flowers umbelled with an involucre*

* *Umbel trifid*

6741 Dichotomous, Invol ovate, Leaves entire obovate stalked
6742 Dichotomous, Invol subcordate mucronate, Leaves lanceol obtuse
6743 Dichotomous, Invol lanceolate, Leaves linear



and Miscellaneous Particulars.

times in a many-flowered head, but more often dichotomous, trichotomous, or even tetrachotomous, with single flowers between the divisions at the base and in the forkings, having bractes in number the same with the peduncles, forming a sort of involucre The juice of every species of Spurge is so acrid that it corrodes and ulcerates the body wherever it is applied, so that it is seldom used internally. Externally it is dropped on warts or corns to remove them, and in the hollow of a decayed tooth, to remove the pain by destroying the nerve, or it is rubbed behind the ears to give relief in the tooth-ache by blistering.

E officinarum, and also antiquorum and canariensis, furnish the Euphorbium of the Materia Medica In the lower regions of Mount Atlas, the inhabitants collect the concreted gum resin, which they call *furbume*, in September It is obtained by making slight incisions in the branches of the plant with a knife, from which a milk-like juice exudes, and forms into tears of an oblong or roundish form. The quantity yielded is so

6744 **minima** *Haw*	least	○	w	½	jl s	Ap	.....	1800	C	s l		
6745 **micrántha** *W.*	small-flowered	○	w	1	jl s	Ap	Persia	1803	C	s l		
6746 **tuberósa** *W*	tuberous	♃ ⌊⌋	cu	⅝	o d	Ap	Ethiopia	1800	C	s l	Bur afr 9 t 4	
6747 **acumináta** *Bieb.*	pointed	○	w	1	o d	Ap	Albania	1820.	S	co	Boc. sic t. 13. f.1	
6748 **Láthyris** *W*	Caper	☿ ◯	w	3	my o	Ap	England d st pl		S	co	Eng bot 2255	
6749 **valentina** *Pers*	Spanish	○	w	1½	jl au	Ap	Spain	1804	S	s l		
6750 **diffúsa** *W*	diffuse	○	w	½	jl au	Ap	Austria	1798	S	s l	Jac ic 1 t 88	
6751 **A'pios** *W*	Pear-rooted	☿ △	w	⅜	jn jl	Ap	Candia	1596	D	s l		
6752 **læ'ta** *W*	Mezereon-lvd	♃ ⌊⌋	cu	1	jn jl	Ap	.....	1758.	C	s l	Jac ic 1 t 87	
6753 **genistoides** *W*	Genista-like	♃ ⌊⌋	cu	1	jl au	Ap	C G H	1808	C	s l		
6754 **spinósa** *W*	prickly	♃ ⌊⌋	cu	2	my s	Ap	Levant	1710	C	s l	Dend brit. 45	
6755 **nummulariæfólia** *W en*	Moneyw lvd	♃ ⌊⌋	cu	⅜	jl	Ap	.....	1800	C	co		
6756 **epithymoides** *W*	broad-leaved	☿ △	cu	1	my jn	Ap	Austria	1805	D	co	Bot rep 616	
6757 **dúlcis** *W*	sweet	☿ △	cu	1	my jn	Ap	S Europe	1759.	D	co	Jac aus 3 t 213	
6758 **carniólica** *W*	Carniolian	☿ △	cu	1	au	Ap	Carniola	1795	D	co	Scop carn t 21	
6759 **Pithyúsa** *W*	Juniper-lvd	♃ ⌊⌋	cu	1	jn jl	Ap	S Europe	1741	C	s l	Boc sic t 5	
6760 **portlándica** *W*	Portland	☿ △	pr	¼	my s	Ap	Britain sea sh		D	s l	Eng bot 441	
6761 **Parálias** *W*	sea	☿ △	pr	1	jl s	Ap	England sea sh		C	s l	Eng bot 195	
β suffrutcósa	*shrubby-sea*	♃ ⌊⌋	cu	1	jl s	Ap	....		C	s l		
6762 **rigida** *Haw*	rigid	♃	cu	2	jl au	Ap	. ....	1795	C	s l		
6763 **júncea** *W*	rushy	☿ ⧊	cu	1	jl au	Ap	Madeira	1779	D	s l	Jac sch 1. t 107	
6764 **aléppica** *W*	Aleppo	☿ △	cu	1	jl au	Ap	Crete	1739	D	s l	Alp exot t 64	
6765 **segetális** *W*	corn	○	w	⅛	jl au	Ap	S Europe	1699	D	s l	Jac aus 5 t 450	
6766 **bumbellata** *Pers*	double-umbell	☿ △	cu	1	au	Ap	Barbary	1780	D	s l	Po it ed ger t 1	
6767 **angustifólia** *Haw*	narrow-leaved	☿ △	cu	1	jl	Ap	.. ...	1780	D	s l		
6768 **multicorymbósa** *Ha*	many-flowered	☿ △	cu	1	jl	Ap	.... .	1805	D	s l		
6769 **provinciális** *W*	linear-leaved	○	w	1½	au n	Ap	S Europe	1800	S	s l		
6770 **juncoides** *Haw*	Rush like	◫	w	1	jl	Ap	... .	1800	S	s l		
6771 **helioscópia** *W*	Wart-wort	○	w	⅜	jl au	Ap	Britain cor fi		S	s l	Eng bot 883	
6772 **serráta** *W*	narr notch-lvd	☿ ⧊	cu	1	jl	Ap	S Europe	1710	D	s l	Jac ic 3 t 483	
6773 **crética** *Haw*	Cret in hoary	☿ △	un	3	...	Ap	Levant	1768	C	r m		
6774 **punícea** *W*	scarlet-flowered	♒ ⌊⌋	spl	6	ja s	Ap	Jamaica	1778	C	s l	Bot reg 190	
6775 **verrucósa** *W*	warted	☿ △	un	⅜	jn	Ap	France	1800	C	s l	Mor s 10 t 3 f 3	
6776 **corollata** *W*	great-flowered	☿ △	un	1½	jl s	Ap	N Amer	1803	D	s l	Bot cab 390	
6777 **spathulæfólia** *Haw*	spatula-leaved	♃ ⌊⌋	cu	2	au	Ap	... ..	1800	C	s l		
6778 **coralloides** *W*	Coral-stalked	☿ △	un	1	jn s	Ap	S Europe	1752	D	s l		
6779 **androsæmifólia** *Donn*	Tutsan-leaved	☿ △	un	2	jl s	Ap	Hungary	1804	D	s l		
6780 **pilósa** *W*	hairy	☿ △	un	1½	my au	Ap	Siberia	1758	D	s l	Gm sib 2 t 93	
6781 **orientális** *W*	oriental	☿ △	un	1	jn jl	Ap	Levant	1739	D	s l		
6782 **platyphyllos** *W.*	annual-warty	○	w	1	jl au	Ap	England	cor fi	S	co	Jac aust t 376	
β stricta E. B	*upright-warty*	○	w	1½	jl au	Ap	England	. .	S	co	Eng bot 333	
6783 **literáta** *W*	blotch-leaved	○	w	1	au	Ap	. ..	1790	S	co	Jac ic 3 t 482	
6784 **E'sula** *W*	leafy-branched	☿ △	cu	½	my jl	Ap	Britain woods		S	co	Eng bot 1399	
6785 **sylvática** *W*	wood	♃ ⌊⌋	un	2	jl s	Ap	S Europe	1768	D	co		
6786 **Erythrina** *Link*	fleshy	☿ ⧊	cu	1	jl s	Ap	C G H	1823	D	co		
6787 **glareósa** *Bieb*	sandy	☿ △	w	1	jl s	Ap	Tauria	1822	D	co		
6788 **bialáta** *Link*	two-winged	○	w	¾	jl s	Ap	.....	182	S	co		
6789 **uralénsis** *Fisch*	Ural	☿ △	w	3	jl s	Ap	Ural	1821	D	co		
6790 **micrántha** *Bieb*	small-fl wered	○	un	½	my	Ap	Tauria	1822	S	co	Bux cen 2 t 25	
6791 **crispáta** *Horn*	crisp	☿ △	un	3	my	Ap	...	1821	D	co		
6792 **condylocárpa** *Bieb*	Heart-leaved	☿ △	un	½	my	Ap	Caucasus	1823	D	co		
6793 **fragifera** *Link*	berry-bearing	☿ ⧊	un	2	my	Ap	Italy	1820	D	co		
6794 **Gerardiána** *H*	Gerard's	☿ △	un	1	jl	Ap	Germany	1801	C	co	Jac aust t 436	
6795 **Cyparissias** *W*	Cypress	☿ △	pr	2	my s	Ap	England woods		D	co	Eng bot 840	
6796 **virgáta** *W & K*	twiggy	☿ △	un	1	jl	Ap	Hungary	1807	D	co	Pl rar h t 162	
6797 **myrsinites** *W*	glaucous	☿ △	un	1	ap jn	Ap	S Europe	1570	D	s l	Lobel ic t 355 f 1	
6798 **imbricáta** *P S*	imbricated	♃ ⌊⌋	cu	1	au s	Ap	Portugal	1804	C	s l		
6799 **macénsis** *W*	sharp-leaved	☿ ⧊	un	1½	...	Ap	Spain	1809	D	s l	Jac ic 3. t 485	



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considerable, that the plants are cut once only in four years, the supply then obtained being sufficient for that space of time for all Europe The recent juice is so corrosive as to erode the skin wherever it touches, and the people who gather the gum are obliged to tie a cloth over their mouth and nostrils, to protect them from the acrid dust of the withered branches, which induces the most violent sneezing It is inodorous, and, when first chewed, has little taste, but it soon gives a very acrid burning impression to the tongue, palate, and throat, which is very permanent, and almost insupportable Euphorbium possesses powerful cathartic, emetic, errhine, and rubefacient properties It has been given as a hydragogue in dropsies, but, owing to the violence of its effects, its internal use is now exploded neither as an errhine can it be used alone, for it occasions so

6744 Dichotomous, Umbel trifid, Involucre broad obovate, Leaves entire obovate spatulate on long stalks
6745 Dichotomous, Leaves lanceolate obovate serrate, Involucre cordate, Caps warted
6746 Involucre 4-leaved, Stem naked, Leaves oblong emarginate
6747 Umbel subtrifid, Leaves mucronate, Cauline spatulate lanceolate Involucre ovate, Caps smooth

*** Umbel 4 or 5-fid*

6748 Umbel 4-fid dichotomous, Leaves opposite entire
6749 Umbel 4-fid trifid, Involucre ovate acute, Leaves lanceolate lower spatulate
6750 Umbel 4-fid dichotomous, Involucre obtuse, Leaves alternate cuneate emarginate mucronate Stem diffuse
6751 Umbel 4-fid bifid, Involucre reniform the first obcordate
6752 Umbel 4 or 5-fid twice dichotomous, First involucre oblong upper rhomboid-roundish, Leaves linear lanceolate
6753 Umbel 5-cleft bifid, Involucre ovate, Leaves linear erect
6754 Umbel 5-cleft simple, Involucre ovate, first 3-leaved, Leaves oblong entire
6755 Umbel 5-cleft bifid, Upper leaves rounded obovate serrulate mucronate lower lanceolate reflexed
6756 Umbel 5-cleft bifid, Involucre ovate toothletted, Leaves entire lanceolate oblong villous beneath
6757 Umbel 5-cleft bifid, Involucre subovate toothletted, Leaves lanceolate obtuse, Caps. warted hairy
6758 Umbel 5-cleft bifid, Rays nodding, Involucre ovate entire, Leaves lanceolate acute, Caps warted smooth
6759 Umbel 5-cleft bifid, Involucre ovate mucronate, Leaves lanceolate the lower involute imbricated downwards
6760 Umbel 5-cleft dichotomous, Involucre subcordate concave, Leaves linear lanceolate acute smooth spreading
6761 Umbel 5-cleft bifid, Involucre cordate reniform, Leaves imbricated upwards

6762 Branches filiform, Leaves numerous linear oblong retuse Rib mucronate, Fl solitary terminal
6763 Umbel 5-cleft dichotomous, Leaves and involucre linear lanceolate acute
6764 Umbel 5-cleft dichotomous, Involucre ovate lanceolate mucronate, Lower leaves setaceous
6765 Umbel 5-cleft dichotomous, Involucre cordate acute, Leaves linear lanceolate the upper broadest
6766 Umbel multifid double, Involucre subcordate, Leaves linear
6767 Umbel multifid clustered, Involucre subcordate, Leaves numerous close very narrow
6768 Umbel multifid dichotomous, Involucre half orbicular cordate, Sterile branches many, Lvs linear lanceolate obtuse
6769 Umbel 5-cleft bifid, Involucre cordate mucronate, Leaves oblong
6770 Umbel 5-cleft bifid, Involucre half orbicular cordate subimbricate, Leaves linear imbricated backwards
6771 Umbel 5-cleft bifid dichotomous, Involucre obovate, Leaves cuneiform serrate smooth, Caps smooth
6772 Umbel 5-cleft trifid dichotomous, Involucre 2-leaved reniform, Leaves amplexicaul cordate serrate
6773 Umbel multifid bifid, Involucre orbicular, Leaves linear lanceolate villous
6774 Umbel 5-cleft trifid, Involucre oval acuminate colored, Caps smooth, Leaves glaucous beneath
6775 Umbel 5-cleft trifid, Involucre ovate, Leaves lanceolate serrulate villous, Caps warted
6776 Umbel 5-cleft trifid dichotomous, Involucre and leaves oblong obtuse, Divisions of involucre white
6777 Umbel 4-fid bifid, Involucre obovate, Leaves spatulate lanceolate entire reflexed, Stem half shrubby branched
6778 Umbel 5-cleft trifid dichotomous, Involucre ovate, Leaves lanceolate, Caps woolly
6779 Naked smooth, Umbel 5-cleft bifid, Leaves sessile lanceolate veiny on each side
6780 Umbel 5-cleft trifid bifid, Involucre ovate entire, Leaves lanceolate hairy subserrulate at end
6781 Umbel 5-cleft 4-fid dichotomous, Involucre roundish acute, Leaves lanceolate
6782 Umbel 5-cleft 3-fid dichotomous, Involucre with a hairy keel, Leaves serrate lanceolate, Caps warted

6783 Umbel 5-cleft 3-fid dichotomous, Involucre lanceolate, Leaves lanceolate toothed pubescent, Caps smooth warted
6784 Umbel multifid bifid, Involucre subcordate 2-horned, Barren branches with 1-shaped leaves
6785 Umbel 5-fid bifid, Involucre perfoliate cordate acute, Leaves lanceolate entire
6786 Leaves lanceolate obtuse, Umbel 5-fid dichotomous, Involucre ovate obtuse 2-horned
6787 Umbel 5-fid bifid, Leaves spatulate lanceolate mucronate coriaceous serrulate, Involucre ovate, Caps smooth
6788 Leaves obversely obl Involucre oblong and ovate serrulate at end, Umbel 5-fid dichotom Caps keeled twice
6789 Leaves linear with long points entire smooth, Umbel 5-fid bifid, Involucre lanceolate, Leaves 2-horned
6790 Umbel trifid dichotomous, Leaves serrate somewhat hairy lower spatulate, upper and involucre spatulate
6791 Upper branches hairy, Leaves smooth lanceolate, Caps warted, Involucre cordate
6792 Umbel sub-5-fid bifid, Caul leaves and involucre cordate lanceolate obtuse toothletted, Involucre reniform
6793 Leaves lanceolate, Umbel 5-fid, Involucre oval obtuse, Caps ramentaceous hairy

**** Umbel 6-many-fid*

6794 Umbel multifid dichotomous, Involucre roundish entire, Branches none
6795 Umbel multifid dichotomous, Involucre subcordate, Branches sterile, Leaves setaceous, Cauline lanceolate
6796 Umbel multifid bifid, Involucre subtriangular, Leaves sessile erect, Caps rough
6797 Umbel 8-fid bifid, Involucre subovate, Leaves spatulate spreading fleshy mucronate rough at edge
6798 Umbel dichotomous bifid, Involucre roundish mucronate, Leaves obovate imbricate serrulate
6799 Umbel 5-fid bifid, Involucre cordate roundish entire, Leaves lanceolate mucronate coriaceous



and Miscellaneous Particulars.

much inflammation as to produce hæmorrhage from the nostrils, and swells the integuments of the head. When properly diluted, however, with starch or any other inert powder, and cautiously used, it is an effectual and excellent errhine in lethargy, deafness, palsy, amaurosis, and similar cases. (*London Dispensatory*, 298)

E. Lathyris has seeds about the size and color of caper buds, and in Paris is sometimes substituted for that pickle Eaten in any quantity they must prove highly deleterious

E. helioscopia has a peculiarly acrid milky juice, which is often applied by country people to eat off warts, but should be used with caution where the parts are tender According to Linnæus, sheep eat it, and are purged by it, and their flesh acquires a bad taste, but this is not the case with cows

6800 palústris *W*	marsh	♀	△	un	4	my au	Ap	Sweden	1570	D	s l	Fl dan 866
6801 emarginàta *W*	freckled	♀	△	un	2	jl au	Ap	Italy	1758	D	co	
6802 hibérnica *W*	Irish	♀	△	cu	1	my jn	Ap	Britain	fields	D	co	Eng bot 1337
6803 salicifólia *W*	willow-leaved	♀	△	w	2	my jn	Ap	Hungary	1804	D	co	Pl rar h t 55
6804 amygdaloides *W*	Almond-leav	♂		or	2	mr jn	Ap	England	woods	D	co	Eng bot 256
6805 charácias *W*	upright-red	♂		pr	4	mr jn	Ap	England	mo pl	C	co	Eng bot 442
6806 glaucéscens *W*	glaucous	♀	△	un	1	mr m	Ap	... ..	1823	D	co	
6807 agrária *Bieb*	field	♀	◯	w	1	jn	Ap	Crimea	1821	S	co	
6808 pállida *W*	pale	♀	△	un	1½	jn	Ap	Hungary	1822	D	co	
6809 prócera *Bieb*	tall	♀	△	un	2	au	Ap	Crimea	1819	D	co	Gmel sib t 94
6810 ceratocar'pa *Ten*	horn-fruited	♀	△	un	1	jl au	Ap	Naples	1823	D	co	Ten. neap t 63
6811 salicifólia *Hort*	willow-leaved	♀	△	un	1½	jn	Ap	Hungary	1820	D	co	

1104 PEDILAN'THUS *Neck* SLIPPER PLANT. *Euphorbiaceæ* *Sp* 1—3

6812 tithymaloides *Kunth*	Myrtle-leaved	♂	▭	cu	1½	jl au	Ap	S Amer	1820	C	co	Bot reg 837
6813 carinatus *Donn*	keeled	♂	▭	cu	1½	jl au	Ap	.....	1817	C	co	Bot mag 2514

1105 VISNEA *W* VISNEA. *Ebenaceæ* *Sp* 1

6814 Mocanéra *W*	Canary	♂	▭	or	5	...	W	Canaries	1815	C	l p	

TETRAGYNIA.

1106 CALLI'GONUM *W* CALLIGONUM. *Polygoneæ* *Sp* 1—5

6815 Pallásia *W*	Caspian	♂		or	4	au	G w	Casp Sea	1780.	C	l p	Pall ros.2 t 77,78

PENTAGYNIA.

1107 GLI'NUS *W* GLINUS. *Ficoideæ* *Sp* 1—3

6816 lotoides *W*	hairy		◯	un	1½	jl	Y	S Europe	1788	S	s l	Boc sic 21 t 11

1108 BLACKWELLIA *Juss* BLACKWELLIA. *Homalineæ* *Sp* 1—6

6817 integrifolia *Lam*	entire-leaved	♂	▭	or	6	..	W	Madagasc	1823	C	s p	Lam ill t 412 f 2

†1109 GASTO'NIA *Juss* GASTONIA. *Araliaceæ* *Sp* 1—2

6818 palmata *Wall*	palmate	♂	▭	or	4	f mr	W a	.....	1818.	C	p l	Bot. reg. 894

DODECAGYNIA.

*1110 SEMPERVI'VUM *W* HOUSELEEK. *Sempervivæ* *Sp* 20

6819 arbóreum *W*	tree	♂	▭	or	9	mr d	Y	Levant	1640	C	s l	Bot reg 99
β variegátum	*striped-leaved*											
6820 canariénse *W*	Canary	♂	▭	or	1½	jn jl	Y	Canaries	1699	R	s l	Plant grass 141
6821 glutinósum *W*	clammy	♂	▭	or	1½	jl au	Y	Madeira	1777	C	s l	Bot mag 1963
6822 glandulósum *W*	glandulous-lvd	♂	▭	or	1	mr my	Y	Madeira	1777	C	s l	
6823 cilátum *W en*	white-flowered	♂	▭	or	1½	..	W	Teneriffe	1815	C	s l	Bot mag 1978
6824 Smithii *Sims*	Smith's	♂	▭	or	1	jl au	Y	Teneriffe	1815	C	s l	Bot mag 1980
6825 tabulæforme *Haw*	table-shaped	♂	▭	or	1½	jl au	Pa Y	Teneriffe	1817	C	s l	Bot cab. 1328
6826 flagelliforme *Fisch*	running	♀	△	or	¾	jl au	R	Siberia	1823	C	s l	
6827 tortuósum *W*	gouty	♂	▭	or	¾	jl au	Y	Canaries	1779	C	s l	Bot mag 206
6828 villósum *W*	villous		◯	or	½	jn jl	Y	Madeira	1777	D	s l	Bot mag 1800
6829 stellátum *Sm*	starry		◯	or	½	jl au	Y	M Baldo	1790	D	s l	Seg veron 2 t 17
6830 tectórum *W*	common	♀	△	or	1	jn s	F	Britain	roofs	D	s p	Eng bot 1320
6831 africánum *Haw*	African	♀	△	or	1	.	.	C G H	1768	D	s l	
6832 dodrantále *W en*	smth-lvd-cann		◯	or	1	jl au	Pk	Teneriffe	1815	S	s l	
6833 hirtum *L*	hairy	♀	△	or	1	jn jl	W	Italy	1804	D	s p	Schmidt ic t 17
6834 soboliferum *B M*	Hen & Chicken	♀	△	or	½	jn jl	Pa Y	Germany	.	D	s p	Bot mag 1457



History, Use, Propagation, Culture,

Many of the stove species of this genus are succulents, and will thrive the better if a little lime rubbish be added to their sandy loam They are somewhat difficult to strike Sweet says, "The way I have succeeded best, is to stick them in the tan amongst the pots in a good heat, and not cover them with any glass" (*Bot. Cult.* 55)

The inflorescence of this genus is not now considered to consist of twelve stamens surrounding an ovary, but almost as in Reseda, of a number of monandrous naked male florets surrounding a naked female floret This manner of understanding Euphorbia was first indicated by Jussieu, and afterwards correctly explained by Mr Brown

1104 *Pedilanthus* From πεδίλον, a slipper, and ἄνθος, a flower, in allusion to the form of the involucre A genus resembling Euphorbia in properties and appearance

1105 *Visnea* This seems to be a blunder of the younger Linnæus for *Visnea*, which now is the name of a distinct genus, which see Ripened cuttings root freely in sand

6800 Umbel multifid 3-fid bifid, Involucre ovate, Leaves lanceolate, Branches barren
6801 Umbel multifid bifid, Involucre broadly cordate Leaves obl. emarg smooth, Stem branched, Capsules warted
6802 Umbel 6-fid dichotomous, Involucre oval, Leaves entire, Branches none, Capsules warted
6803 Umbel multifid dichotomous, Involucre reniform cordate, Leaves lanceolate villous
6804 Umbel multifid dichotomous, Involucre perfoliate orbiculate, Leaves obtuse
6805 Umbel multifid bifid, Involucre perfoliate emarginate, Leaves lanceolate entire
6806 Leaves linear lanceolate entire close together, Capsules smooth
6807 Umbel multifid bifid, Cauline leaves and involucres cordate oblong rough at edge subserrulate
6808 Umbel multifid trifid, Involucre roundish, Leaves lanc attenuated, Stem simple, Caps. smooth
6809 Umb 5-fid 3-fid dichotomous, Leaves lanceolate hairy serrulate at end, Capsules smooth
6810 Leaves lanceolate entire smooth, Caps. warted smooth, otherwise like E. palustris
6811 Leaves entire lanceolate villous, Umb. multifid, Inv. reniform cordate

6812 Leaves ovate acuminate
6813 Leaves ovate acuminate keeled beneath

6814 The only species

TETRAGYNIA.

6815 Fruit winged, Wings membranous crisp toothed

PENTAGYNIA.

6816 Stem hairy, Leaves obovate

6817 Leaves ovate obtuse usually entire, Fl. terminal panicled

6818 Leaves palmate, Stem aculeate

DODECAGYNIA.

6819 Stem arborescent smooth branched, Leaves cuneiform smoothish ciliated, Ciliæ spreading smooth

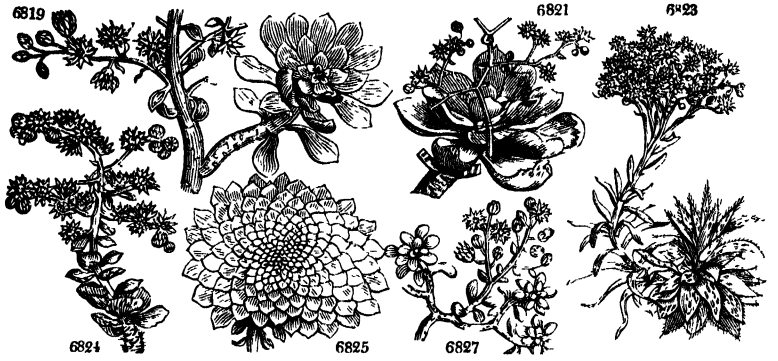
6820 Stem shrubby, Leaves orbicular-spatulate villous, Nectaries nearly square truncate
6821 Stem shrubby, Leaves cuneiform viscid ciliated, Ciliæ cartilaginous appressed
6822 Stem shrubby, Leaves orbicular-spatul glutinous at edge with globose glands and cuneiform trunc nects.
6823 Leaves obovate acute smooth with a cartilaginous edge, Cymes clustered
6824 Stem with dense spreading bristles, Leaves curved with longitudinal green spots beneath
6825 Leaves closely packed together in a broad flat disk
6826 Suckers spreading lateral, Leaves ovate mucronate warted, Branches of cyme bifid
6827 Leaves obovate gibbous beneath villous, Nects 2-lobed
6828 Leaves spatuate cuneiform obtuse villous, Nects palmate
6829 Stem pubescent, Leaves spatulate scattered
6830 Leaves ciliated, Suckers spreading, Nects cuneiform with a swelling
6831 Margins of leaves serrate toothed, Offsets spreading
6832 Leaves entire oblong ovate smooth stalked, Cymes spreading, Pedunc and calyx hairy
6833 Leaves stem and petals hairy at end
6834 Leaves ciliated, Offsets short round nearly sessile, Petals 6 fringed



and Miscellaneous Particulars

1106 *Calligonum* From καλος, beautiful, and γονυ, a knee or joint This plant produces, instead of leaves, curious grêenish excrescences disposed in joints, which give it a remarkable appearance.
1107 *Glinus* A name employed by Theophrastus to designate a kind of maple This plant is, however, more like a purslane
1108 *Blackwellia* Named after Elizabeth Blackwell, who published an Herbal in 1735, containing figures of between two and three hundred plants, drawn and engraved by herself. Curious stove plants with pretty foliage, but inconspicuous spikes of whitish green flowers.
1109 *Gastonia* Named by Commerson after Gaston de Bourbon, son of Henry IV. In the Isle de Bourbon it is called *Bois d'éponge*
1110. *Sempervivum* From *semper vivere*, to live for ever, in allusion to the tenacity of life common to plants of the genus. This is a succulent genus, some species of which are ornamental or singular, and others

6825 globíferum *W*	globiferous	♄ △ or	½ jn jl	Y	Germany	1731	D s p	Bot mag 507	
6826 montánum *W*	mountain	♄ △ or	½ jn jl	R	Switzerl	1752	D s l	Plant grass 105	
6827 arachnoideum *W.*	cobweb	♄ △ or	½ jn jl	R	Italy	1699	D s p	Bot mag 68	
6828 monánthos *W.*	one-flowered	♄ △ cu	½ jl s	R	Canaries	1777	D s l	Bot mag 93	



History, Use, Propagation, Culture,

curious S tectorum, common on the roofs of buildings, is used by country people as an application to burns, inflammations, and ulcers, alone, in a bruised state, or mixed with cream Linnæus informs us, that house-



Class XII. — ICOSANDRIA. Stamens many, perigynous, or inserted into the Calyx.

To gardeners this is one of the most interesting of the Linnean classes, containing a greater proportion than any other of objects which come within their observation and management It also consists of genera for the most part naturally allied, and comprises not only the most remarkable portion of Pricoideæ, all Cacti, and the chief of the Myrtaceæ, but almost every genus of the beautiful and hardy tribes of Rosaceæ Its characters are well defined, and depend upon the insertion of a number of distinct stamens, exceeding twenty, into the inner surface of the calyx, modifications of which organ are here found to be of more than ordinary importance in characterising the genera

The genera are extremely natural, and have been all studied with unusual attention Some difference of opinion exists among botanists as to the limits which ought to be assigned to them, and great diversity of nomenclature has thence arisen "But," as has been observed by a modern author, "in a class so strictly natural as this is, greater difficulty is always to be expected in finding characters for genera, than in those of which our knowledge is more imperfect, and whose series of individuals may therefore be considered less complete" In the apple and pear tribe, Pomaceæ, where the greatest difficulty is thought to exist, we adopt Mr Lindley's arrangement, as published in the Transactions of the Linnean Society, which we find admitted by all botanists of authority

But if it is difficult to ascertain the definite limits of the genera of Icosandria, it is yet more perplexing to arrive at a satisfactory conclusion respecting the species of which the genera are constituted Having all been, as long as gardens have existed, the objects of cultivation, it has happened that many individuals have, under the action of domestication, wandered so far from their original types, as to have acquired new characters for themselves, of so peculiar a kind as to have rendered it impossible at the present day to refer them with certainty to the source from which they originally sprung To remedy this confusion, which has been thus increasing for ages, some persons have thought it necessary to distinguish the species by such artificial characters as they are now found to possess, without reference to any changes the genera may have undergone, but it has been found that no facilities of discrimination have been gained by multiplying distinctions in consideration of differences which are neither permanent or remarkable, nor connected with natural habit, but purely artificial To others it has appeared proper to endeavour to reduce the aberrant forms which now exist to those from which, upon mature consideration, they may be presumed to have been derived, and to simplify the arrangement and discrimination of the species by confining them within their primitive limits As we think the latter to be the most simple principles of arrangement, and as they are certainly the most philosophical, we shall here follow those authors who have adopted them

It is usual in this class to distinguish the orders with two and three styles from that with five but the different species vary so much in the same genus in this respect, that we have only separated the genera into those with one style, Monogynia, with two, three, or five styles, Di-Pentagynia, and with many styles, Polygynia.

Order 1 MONOGYNIA.  Many perigynous Stamens. 1 Style

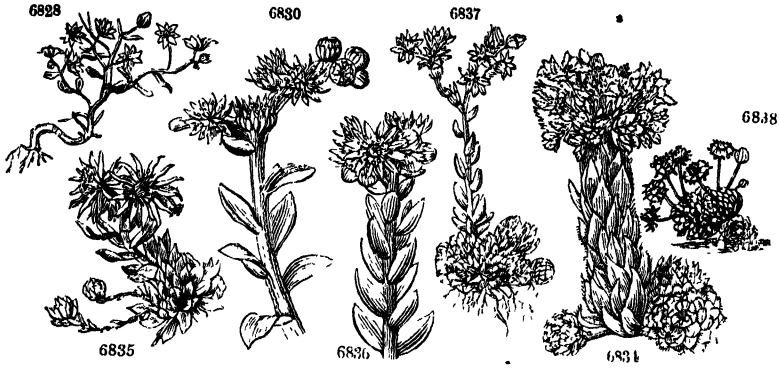
§ 1 *Ovary inferior*

1111. *Cactus* Cal imbricated. Petals numerous, in many rows the inner the largest Stigma many-cleft Berry many-seeded.

1112. *Rhipsalis* Cal 3-4-parted, very short Teeth acuminate, membranous, very fine Berry 1-celled, pellucid Seeds 12, in the centre

1113. *Bartonia.* Cal 5-cleft Petals many Caps cylindrical, 1-celled at the end with 3-5 lid-like valves. Placentas 3-5, parietal, bearing seeds in a double row

6835 Leaves ciliated, Offsets globose
6836 Leaves entire, Offsets spreading
6837 Leaves with entangled hairs, Offsets round
6838 Leaves rounded clavate clustered, Pedunc naked 1-fl Nects obcordate



and Miscellaneous Particulars

leek is a preservative to the coverings of houses in Smoland It may easily be made to cover the whole roof of a building, whether of tiles, thatch, or wood, by sticking the offsets on with a little earth or cow dung

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1114 *Philadelphus* Cal 4-5-parted Petals 4-5 Style 4-cleft Caps half-superior, 4-5-celled, many-seeded Seeds with an arillus
1115 *Leptospermum* Cal persistent at base, 5-cleft, half-superior Petals 5, clawed, round, longer than stamens Stigma capitate Caps depressed, 4-5-celled Seeds angular, slender
1116 *Fabricia* Cal 5-cleft, half-superior Petals 5, sessile Stigma capitate Capsule many-celled Seeds winged.
1117 *Metrosideros* Cal 5-cleft, half-superior Petals 5 Stamens very long, separate Stigma simple Caps 3-4-celled
1118 *Psidium* Cal 5-cleft Petals 5 Berry soft, pulpy, many-seeded Cotyledons leafy, very small Radicle very large, arcuate Testa bony
1119 *Eugenia* Cal 4-5-parted, superior Petals 4-5 Fruit fleshy, 1-celled, 1-seeded Cotyledons half-cylindrical Radicle very small Testa membranous
1120. *Caryophyllus* Cal funnel-form Fruit dry, 1 or 2-celled Otherwise like Eugenia
1121 *Myrtus* Cal 5-cleft Petals 5 Berry 2 or 3-celled, many-seeded Radicle and cotyledons distinct
1122 *Calyptranthus* Cal truncate, before flowering covered with an hemispherical deciduous lid Cor O Berry 1-celled, 4-seeded
1123 *Pimenta* Cal 5-fid Petals 5 Ovary 2-celled Ovules solitary, appense Style straight Stigma somewhat capitate
1124 *Olyntha.* Cal 5-cleft Petals 5 Stigma hooked Berry 1-celled Seeds angular Embryo conferruminate
1125 *Stravadium* Cal 4-cleft Petals 4 Fruit 4-cornered, 1-seeded Flowers in terminal racemes Leaves alternate
1126 *Eucalyptus* Cal truncate, covered with an entire deciduous lid Cor O Capsule 4-celled, opening at end, many-seeded
1127 *Punica* Cal 5-cleft. Petals 5 Berry many-celled, many-seeded Seeds berried. Placentas parietal

§ 2 *Ovary superior*

1128 *Amygdalus* Cal 5-cleft Petals 5 Drupe with a nut perforated on its surface
1129 *Prunus* Cal 5-cleft Petals 5 Drupe with a hard smooth nut
1130 *Chrysobalanus* Cal 5 cleft Petals 5 Style lateral Drupe with a 5-furrowed, 5-valved nut

Order 2. DI-PENTAGYNIA  Many perigynous Stamens 2 to 5 Styles

§ 1 *Ovary inferior*

1131 *Mespilus* Cal 5-parted, with leafy divisions Disk large, honey-bearing. Styles smooth Apple turbinate, open, 5-celled, with a bony putamen
1132 *Crataegus* Cal 5 toothed Petals spreading, orbicular Ovary 2-5-celled Styles smooth Apple fleshy, oblong, closed by the teeth of the cal, or by the thickened disk Putamen bony
1133 *Pyrus* Cal 5-toothed Petals roundish Apple closed, 5-celled, with a cartilaginous putamen Cells 2-seeded Testa cartilaginous
1134 *Cydonia* Cal 5-parted, with leafy divisions Apple closed, many-seeded Testa mucilaginous
1135 *Photinia* Cal 5-toothed Petals reflexed Ovary half-superior, villous, 2-celled Styles 2, smooth Pericarp 2-celled, included in the fleshy calyx Testa cartilaginous
1136 *Raphiolepis* Cal. with a funnel-shaped deciduous limb Filaments filiform Ovary 2-celled Apple closed by the thickened discus, with a papery putamen Seeds gibbous
1137 *Eriobotrya* Cal woolly, bluntly 5-toothed Petals bearded Stamens erect, the length of teeth Styles 5, filiform, included, hairy Apple closed, 3-5-celled Chalaza none Radicle included between the bases of cotyledons
1138 *Amelanchier* Cal 5-toothed Petals lanceolate Ovary 10-celled Ovules solitary Apple 3-5-celled, with a cartilaginous putamen

1139. *Colonéaster* Flowers polygamous Cal turbinate, bluntly 5-toothed. Petals short, erect Stamens length of teeth Styles smooth, shorter than stamens. Achenopses parietal, included in calyx.

§ 2 *Ovary superior.*

1140 *Waldsternia* Cal 10-cleft, the alternate segments smaller Petals 5 Styles clavate, deciduous. Grains 2, obovate

1141 *Spiræa* Cal spreading, 5-cleft Petals 5 Caps 1-celled, 2-valved, opening inwards, 1-3-seeded.

1142 *Gillenia* Cal. infundibuliform, 5-toothed Petals 5 Stamens very short. Capsule 5-celled

1143 *Sesuvium* Cal 5-parted, colored Petals O Caps ovate, 3-celled, cut round, many-seeded.

1144. *Aizoon* Cal. 5-parted. Pet. O Caps. 5-celled, 5-valved.

Order 3. POLYGYNIA. Stamens many, perigynous. Styles many

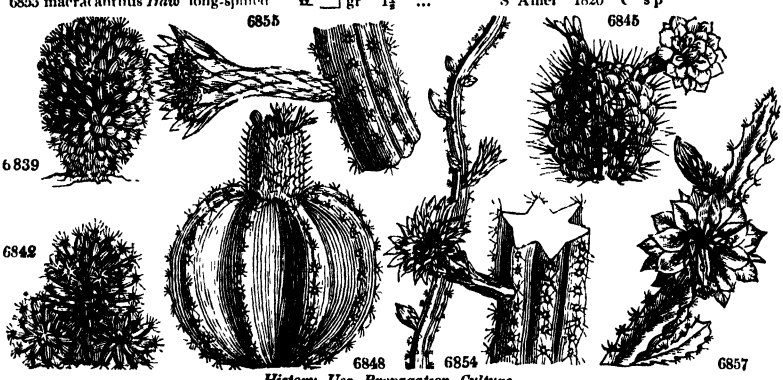
1145 *Tetragonia* Cal 3-5-parted Petals O Drupe inferior, with a 3-8-celled nut

1146 *Mesembryanthemum* Cal 5-cleft. Petals many, linear. Capsule turbinate, fleshy, inferior, many-seeded

1147 *Hymenogyne* Styles about 12, united in a delicate tube Caps. 1-celled, many-seeded Otherwise like Mesembryanthemum

MONOGYNIA.

†*1111 CACTUS *W*	Cactus				*Cacts*	*Sp*	68—90					
6839 *mammillàris L*	small red-spin'd	♃	fr	1	jl au	W	W Indies	1688	C	s p	Plant grass 111
6840 *coronàtus W*	garland	♃	gr	5	...	...	S Amer	1820	C	s p	
6841 *deprèssus Dec.*	depressed	♃	gr	½	...	...	S Amer	1789	C	s p	Bot cab 1673
6842 *stellàris W*	hoary	♃	cu	½	my jn	Pk	S Amer	1815.	C	s p	Bot. cab 79
6843 *viviparus Pursh*	viviparous	♃	cu	½	...	R	Louisiana	1811	C	s p	
6844 *gibbósus Haw*	gibbous	♃	gr	½	jl au	W	... ..	1808	C	s p	Bot reg 137
6845 *magnimammus Haw*	large-teated	♃	gr	½	..	...	Mexico	1823	C	s p	
6846 *lánter Haw*	woolly	♃	gr	½	...	...	Mexico	1823.	C	s p	
6847 *geminispinus Haw*	two-spined	♃	gr	½	..	...	Mexico	1823	C	s p	
6848 *Melocáctus L*	Turk's Cap	♃	fr	1½	jl au		W. Indies	1688	C	s p	Plant grass 112
6849 *recurvus Mill*	recurved	♃	gr	¾	..	..	.... .	1768	C	s p	
6850 *nóbilis Haw*	crook-spined	♃	gr	2	..	...	Mexico	1796	C	s p	
6851 *senilis Haw*	old	♃	gr	½	.		Mexico	1823	C	s p	
6852 *latispinus Haw*	broad-spined	♃	gr	½	..	.	Mexico	1823	C	s p	
6853 *macracánthus Haw*	long-spined	♃	gr	1½	...		S Amer	1820	C	s p	



History, Use, Propagation, Culture,

1111 *Cactus* A name under which Theophrastus describes a spiny plant, an article of food, which grew in Sicily This genus consists of succulent plants, permanent in duration, singular and various in structure, generally without leaves, and having the stem or branches jointed, for the most part armed with spines in bundles, with which, in many species, bristles are intermixed. These bundles of spines are placed on the top of the tubercles in the smaller melon thistle, which is tubercled all over, and produces its flowers between the tubercles In the great melon thistle the spines are ranged in a single row on the ridge of the ribs These are of an ovate or globular form The torch thistle, on the contrary, are slender, rise up high, are jointed and branched, many of them are almost cylindrical, with from five to ten shallow ribs, some, however, are square or three cornered The structure of the creeping Cereuses is the same with these, except that the stems are weak and cannot support themselves, they therefore seek support from trees, and throw out roots from the stem, like ivy In the Indian figs the branches are jointed, and flatted like the sole of a shoe, the bundles of spines or bristles are scattered over the surface, and the flowers are produced from the edge of the extreme branches In the Phyllanthus the branches are thinner, they are indented along the edge, and the flowers come out singly from the indentures This seldom has any spines. Pereskia has a round stalk with leafy branches, the leaves alternate, flat, and thick, the prickles are large and stiff, and come out in bundles on the stalk and branches, chiefly at the axils, the flowers are produced several together from the axils also. In this and the Indian figs the flowers are pitcher-shaped, in the other species they are subcylindrical and longer, in Phyllanthus very long The fruit in some of the sorts is small, like currants; but in most it is larger, and shaped like a fig, whence their name of Indian fig.

C. melocactus, the great melon thistle or Turk's cap, appears like a large fleshy green melon, with deep ribs, set all over with strong sharp thorns When it is cut through the middle, the inside is found to be a soft, green, fleshy substance, very full of moisture The flowers and fruit are produced in circles round the upper part of the cap. Some of those which have been brought to England, have been more than a yard in circumference, and two feet and half high including the cap But in the West Indies there are plants near twice as large. Linnæus observes, that this plant resembles a hedge-hog in its form and spines, and on the top has a discoid, convex, villous body, from which the flowers proceed.

1148 *Rosa* Cal. urceolate, 5-cleft, fleshy, contracted at orifice Petals 5. Grains bony, hairy, included in the fleshy tube of calyx.
1149. *Rubus* Cal 5-cleft. Petals 5 Berry composed of many cohering fleshy grains. Receptacle nearly dry
1150 *Dalibarda* Cal 5-cleft. Petals 5 Berry dry Styles 5, long, deciduous.
1151 *Fragaria* Cal 10-cleft Pet 5 Grains inserted upon a fleshy deciduous receptacle
1152 *Comarum* Cal 10-cleft Petals 5, less than calyx. Receptacle ovate, spongy, persistent.
1153 *Potentilla* Cal 10-cleft Petals 5 Grains rugose, roundish, naked, fixed to a small dry receptacle.
1154 *Tormentilla* Like Potentilla, but cal 8-cleft Petals 4
1155 *Geum* Cal 10-cleft Sepals unequal Petals 5 Grains generally with a jointed awn.
1156 *Kerria* Cal 5 cleft. Pet. 5, orbicular Ovaries 5-8, smooth, globose. Ovules solitary Styles filiform. Capsules globose
1157 *Calycanthus.* Stamens unequal, deciduous, the 12 outer fertile Grains many
1158 *Chimonanthus* Stamens equal, persistent, the 5 outer fertile, in maturity closing the orifice of the calyx by their united bases
1159 *Dryas* Cal simple, 8 cleft Petals 8 Grains with a hairy tail
1160 *Colurus* Like Sieversia, but the style jointed with the top of ovarium and deciduous, and the achenia glandular, included in the long turbinate tube of the calyx
1161 *Sieversia* Cal 10-cleft Petals 5 Stamens indefinite Ovaries indefinite, with an ascending ovule Styles terminal, continuous Achenia awned with the persistent style Embryo erect

MONOGYNIA.

6839 Roundish covered with ovate bearded tubercles
6840 Simple clavate, Tubercles ovate with woolly spines at end, Wool shorter than spines
6841 Roundish depressed with ten angles
6842 Proliferous, Warts small cylindrical, Spines fine whitish the lowest like hairs
6843 Roundish multiplex, Warts cylindrical bearded above furrowed proliferous
6844 Roundish deeply 16-angled, Angles with a remarkable swelling below each parcel of spines
6845 Warts large very green downy at end, Spines about 4 strong expanded
6846 Simple rounded obovate, Warts woolly at end with more than 20 spines
6847 Columnar, Warts small very numerous with little spines between, 2 in each parcel much longer than rest
6848 Roundish with about 14 angles
6849 Roundish with 15 angles, Spines broad recurved numerous
6850 Oblong with many angles, Angles and spines middle-sized straight
6851 Oblong with about 20 angles, Rays of spines capillary long
6852 Depressed spheroidal with about 21 angles, Rays of spines variable the lowest very broad flat deflexed
6853 Rounded bright green with 14 angles, Ribs straight with long thick white spines



and Miscellaneous Particulars

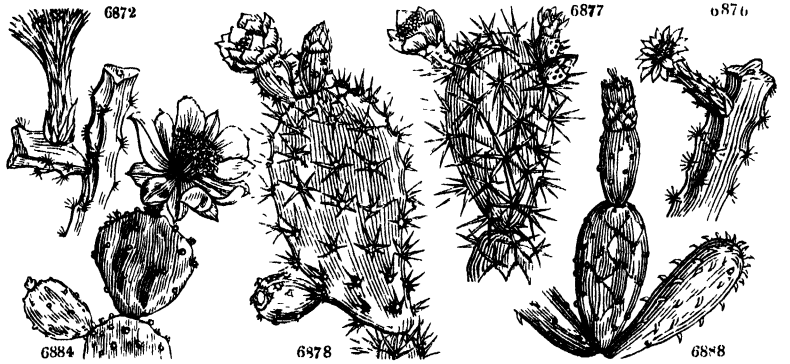
C melocactus, mammillaris, and proliferus, by many thought to be but one species, grow upon the steep sides of rocks in the hottest parts of America, where they seem to be thrust out of the apertures, having little or no earth to support them their roots shooting down into the fissures of the rocks to a considerable depth, so that it is troublesome to get the plants up As they delight in such rocky places, they seldom live long when transplanted into a better soil In times of great drought the cattle repair to the barren rocks where these plants grow, rip them up with their horns, tear off the outside skin, and greedily devour all the fleshy moist part The fruit is frequently eaten by the inhabitants of the West Indies. It is about three quarters of an inch in length, of a taper form, drawing to a point at the bottom, but blunt at the top: the taste is an agreeable acid

C repandus has a fruit about the size and shape of a Bergamot pear, having many soft spines on the skin; the outside is a pale yellow, the inside very white, full of pulp, having a great number of small black seeds lodged in it It frequently flowers in July, and in warm seasons will perfect its fruit, which has very little flavor in this country, but is frequently served up at table in the West India islands

The fruit of lanuginosus and peruvianus are also occasionally eaten where they are natives

C grandiflorus and flagelliformis have flowers remarkable for their beauty and sweetness C grandiflorus, when arrived to a sufficient strength, will produce many exceeding large, beautiful, sweet scented flowers, like most of this kind, of very short duration, scarcely continuing six hours full blown: nor do the flowers ever open again when once closed They begin to open between seven and eight of the clock in the evening, are fully blown by eleven, and by three or four in the morning they fade, and hang down quite decayed, but during their short continuance, there is scarcely any flower of greater beauty, or that makes a more magnificent appearance, for the calyx of the flower, when open, is near a foot diameter; the inside of which, being of a splendid yellow color, appears like the rays of a bright star, the outside is of a dark brown, the petals being of a pure white add to the lustre; the vast number of recurved stamens surrounding the style in the centre of the flower make a fine appearance add to all this the fine scent of the flower, which perfumes the air to a considerable distance. There is scarce any plant which deserves a place in the hothouse so much as this, especially as it may be trained against the wall, where it will not take up any room. The usual season of its

6854	**hexagónus** *L.*	four-angled	♀	gr	35	Jl au	W	Surinam	1690	C	s p	Bot rep 513		
6855	**peruviánus** *W*	Peruvian	♀	tr	3	au	W	Peru	1728	C	s l	Plant grass 58		
6856	**tetragónus** *L*	six-angled	♀	gr	3	Jl	W	S Amer.	1710	C	s p			
6857	**speciosissimus** *Desf*	beautiful	♀	or	3	Jl	Cr	S Amer	1816	C	s p	Bot reg 486		
6858	**pentagónus** *L*	five-angled	♀	gr	3	Jl	W	S Amer	1769	C	s l			
6859	**Royéni** *L*	nine-angled	♀	tr	2	...	...	S Amer	1728	C	s l			
6860	**albispinus** *Salm*	white-spined	♀	or	2	...	...	S Amer	1820	C	s l			
6861	**lanuginósus** *L*	woolly	♀	tr	1	Jl	W	W Indies	1690	C	s p	Herm par t 115		
6862	**repándus** *L*	wavy-angled	♀	tr	20	au	W	W Indies	1728	C	s p	Bot reg 386		
6863	**obtúsus** *Haw*	blunt	♀	cu	3	.	..	.....	1820	C	s p			
6864	**imbricátus** *Haw*	imbricated	♀	cu	3	..	...	.. ..	1820.	C	s p			
6865	**níger** *Salm*	black	♀	cu	3	..	..	.. ..	1820	C	s p			
6866	**cylindricus** *L*	cylindric	♀	cu	3	..	..	Peru	1799	C	s l	Bot mag 3301		
6867	**serpentínus** *H*	serpentine	♀	gr	4	.		Peru	...	C	s.l			
6868	**multanguláris** *W*	many-angled	♀	tr	¾	..	.	S Amer	1815	C	s l			
6869	**heptagónus** *W*	seven-angled	♀	gr	3	Jl	W	W Indies	1728	C	s l			
6870	**trianguláris** *L*	great-triangul	♀	tr	1	Jl au	W	W Indies	1690	C	s.p	Bot mag 1884		
6871	**triqueter** *W*	least-triangular	♀	cu	3	..	.	S Amer	1794	C	s p			
6872	**trigónus** *Haw*	small-triangul	♀	cu	1	.	W	S Amer	1809	C	s p	Plu am t 200 f 2		
6873	**grandiflórus** *L*	night-flowering	♀	spl	1	Jn au	W Y	Jamaica	1700	C	s p	Bot rep 508		
6874	**réptans** *W*	trailing	♀	cu	2*			. ....	1813	C	s l			
6875	**flagelliformis** *I*	creeping	♀	or	6	mr Jn	Pk	Peru	1690	C	s l	Bot mag 17		
6876	**quadrangulárisHaw**	quadrangular	♀	or	3	.	.	S Amer	1809	C	s l	Plu am t 199 f 1		
6877	**elátior** *W*	great bk-spin'd	♀	gr	6	Jl au	Y	S Amer	1731	C	s l	Dil el t 294 f 379		
6878	**Tuna** *L*	yellow-spined	♀	clt	3	Jl au	Pa Y	S Amer	1731	C	s l	Plant grass 138		
6879	**nigricans** *Haw*	lesser-bk-spin	♀	cu	3	au	Pk	S Amer	1795	C	s l	Bot mag 1557		
6880	**polyánthus** *Haw*	many-flowered	♀	cu	3	Jl au	Y	S Amer	1811	C	s l	Plant grass c ic		
6881	**brasiliénsis** *W*	thin-branched	♀	cu	6	Jl au	Y	Brazil	1816	C	s l			
6882	**humilis** *Haw*	humble	♀	cu	1½	.		. ..	1795	C	s l			
6883	**Dillénii** *Ker*	Dillenius's	♀	cu	5	o	Pa Y	.....	1810	C	s l			
6884	**opuntia** *L*	Indian Fig	♀	fr	2	Jl au	Y	S Europe	1596	C	s l	Bot mag 2303		
6885	**strictus** *Haw*	oval-upright	♀	gr	3	Jl au		. ..	1796	C	s l	Plant grass c ic		
6886	**decumánus** *W*	great-oblong	♀	gr	10	.		S Amer	1768	C	s l			
	Opúntia máxima Haw													
6887	**tuberculátus** *H*	warted	♀	cu	1			. ...	1818	C	s l			
6888	**cochnilliter** *L*	Cochineal Fig	♀	clt	5	Jl s	Pu	S Amer	1688	C	s l	Bot rep 533		
6889	**monacánthus** *W*	single-spined	♀	cul	2			S Amer	1816	C	s l			
6890	**elongátus** *W*	long	♀	cu	3	.		.	1817	C	s l			
6891	**triacánthos** *W*	three-spined	♀	gr	2	.	.	S Amer	.	C	s l			
6892	**lanceolátus** *Haw*	spear-shaped	♀	gr	2	Jl	Y	S Amer	1796	C	s l			
6893	**tomentósus** *Link*	downy	♀	cu	2	...		..	1820	C	s l			
6894	**subnérmis** *Link*	few spined	♀	cu	2	..		...	1819	C	s.l			
6895	**spinosissimus** *L*	cluster-spined	♀	gr	20	Jl		Jamaica	1732	C	s p			
6896	**férox** *W*	ferocious	♀	gr	3	.		S Amer	1817	C	s p			
6897	**curassávicus** *L*	Pin-pillow	♀	gr	6	Jn Jl		Curassao	1690	C	s p	Knor the 2 t s 2		
6898	**frágilis** *Nutt*	brittle	♀	gr	2	.		N Amer	1814	C	s p			
6899	**foliósus** *W*	glaucous	♀	gr	2	..	Y	S Amer	1817	C	s p			
6900	**pusillus** *Haw*	small Indi Fig	♀	fr	½	Jn	Y	S Amer	1805	C	s p			
6901	**phyllánthus** *L*	Spleeny rt	♀	gr	2*	Jn	Pk	S Amer	1710	C	s p	Plant grass 145		
6902	**phyllanthoides** *Dec*	winged	♀	gr	2	..	Pk	Jamaica	1817	C	s p	Bot mag 2092		
	C alátus W													



History, Use, Propagation, Culture,

flowering in July, and when the plants are large, many flowers will open the same night, and there will be a succession of them for several nights together Sometimes six, eight, or ten flowers open at the same time on one plant, making a most magnificent appearance by candle-light but none of them are succeeded here by any appearance of fruit,

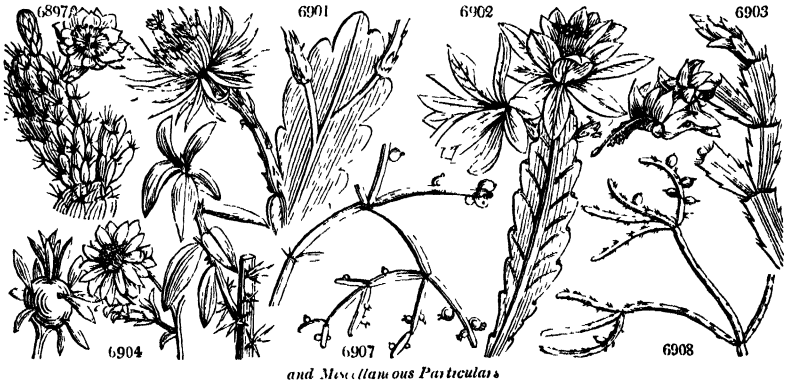
C. flagelliformis produces a greater number of flowers than the foregoing sort they come out in May, and sometimes earlier, when the season is warm The petals are of a fine pink color both within and without, they are not so numerous, and the tube of the flower is longer than that of the other These flowers keep open three or four days, provided the weather, or the place where the plants stand, be not too warm, and during their continuance they make a fine appearance This sort has very slender trailing branches, which require a support. they are not jointed, nor do they extend so far as those of the other sort Fruit sometimes succeeds the flowers, but seldom ripens

C triangularis, the strawberry pear, *Poirer de Chardon*, Fr, bears the best flavored fruit of any of the sorts, it is slightly acid, and at the same time sweet, pleasant, and cooling, in Martinique and other West India islands it is much esteemed

C opuntia, native of the country of the Opuntiani, whose chief town was Opus, in the vicinity of Phocis, though like the others a native of America, is now found growing wild on the sides of the roads between Rome and Naples and other parts of Italy, and even in the Valais Gerarde says, it was brought from Virginia into England, and Collinson had it from Newfoundland It was fruited in Scotland in a stove by

6854 Erect with deep furrows long with 6 distant angles
6855 Erect with deep furrows long with about 8 obtuse angles
6856 Erect with deep furrows long with 4 compressed angles
6857 Erect with deep furrows long slightly quadrangular with toothed angles
6858 Erect with deep furrows long jointed with about 5 angles
6859 Erect slender with shallow furrows jointed with 9 angles, Joints ovate, Spines as long as wool
6860 Erect slender with shallow furrows jointed with 9 angles not glaucous, Spines white, a variety of the last
6861 Erect slender with shallow furrows long with 9 obsolete angles, Spines shorter than wool
6862 Erect slender with shallow furrows long with 8 compressed wavy angles, Spines longer than wool
6863 Erect slender with shallow furrows, Branches jointed few bluntly triangular
6864 Erect slender with shallow furrows, Scarcely any Surface covered with variously imbricated lobed divisions
6865 Erect slender with shallow furrows black with numerous brown spines longer than the wool
6866 Erect slender with shallow furrows weak cylindrical, Surface covered with netted crossing furrows
6867 Erect rounded below long elegant with about 9 angles, Spines snow white weak, Wool very short
6868 Erect with 18 close obtuse angles with bristly yellowish spines longer than the wool
6869 Erect with deep furrows oblong with 7 angles
6870 Creeping triangular rooting
6871 Decumbent rooting 3-cornered, Spines fascicled divaricating seven two or three lines long
6872 Creeping rooting 3-cornered with scarcely channelled angles, Spines 5-7 in stellate fascicles
6873 Creeping rooting with about 5 angles
6874 Creeping 5-cornered with subulate spines longer than the wool
6875 Creeping rooting hispid with 10 angles
6876 Creeping with 3 or 4 angles which are scarcely channelled, Spines 5-7 in stellate parcels
6877 Erect, Joints broadly ovate-oblong, Spines subulate very long blackish
6878 Erect, Joints broadly ovate-oblong, Spines subulate long yellow
6879 Erect, Joints oblong and lanceolate, Spines of various shapes brownish black
6880 Joints oblong and ovate, Spines of various shapes yellow, Fl numerous solitary
6881 Stem rounded, Branches ovate compressed flat, Spines solitary or 3 together subulate strong
6882 Joints cuneate obovate decumbent, Spines variously shaped yellow
6883 Erect, Joints obovate roundish glaucous, Stigma 6-lobed
6884 Creeping prostrate, Joints ovate, Spines even numerous hair-shaped
6885 Erect, Joints ovate elliptical, Spines even numerous short
6886 Joints ovate oblong very thick, Spines unequal

6887 Jointed proliferous, Joints oval, Warts with a cluster of spines the length of the wool
6888 Joints ovate oblong unarmed
6889 Erect, Joints lanceolate-oblong, Clusters of spines fuscous weak with one strong white spine
6890 Erect, Joints oblong or oval, Spines numerous variable brown, one very long straw-colored
6891 Jointed proliferous, Joints ovate oblong with strong white spines longer than wool
6892 Nearly erect, Joints lanceolate with even short spines, Leaves 3 lines long
6893 Branches oblong with short soft hairs, Spines small
6894 Branches oblong scarcely spiny
6895 Joints very long slender compressed, Spines very long slender clustered white
6896 Joints oblong with numerous stiff spines of which one is very long and white at base
6897 Joints brittle cylindrical ventricose compressed much divaricating
6898 Joints brittle compressed short, Spines numerous variable white erect
6899 Jointed proliferous, Joints lanceolate-glaucous, Spines bristly longer than wool
6900 Joints brittle linear-lanceolate divaricating, Spines unequal
6901 Proliferous smooth branched ensiform compressed serrated with a central woody rib
6902 Branches ensiform compressed obovate with spreading teeth, Spines few setaceous longer than wool

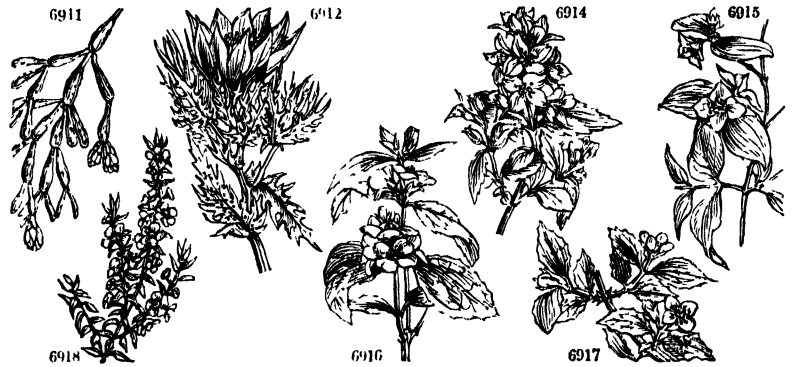


and Miscellaneous Particulars

Justice, in 1750, and recently by Braddick, near London, in the open air This active horticulturist, having eaten with pleasure of the prickly pear in Virginia, was desirous of cultivating it here He recollected that the plant in its wild state delighted in a dry soil, amongst rocks, near the skirts of the sunny sides of the forests, and having heard that it would stand the open air in this country, he planted it in the compost described below, placed in a sheltered situation open to the sun "The first plant that I turned out has lived in the open ground of this country for six or seven years, during which period it has endured one exceeding hard winter, and several trying springs, and in all, except the two first years, it has never failed to ripen its fruit and seeds, so that it may be now considered decidedly acclimated The compost used by me for growing the Cactus Opuntia, is the following one half is carbonate of lime, for which lime-rubbish from old buildings will answer, the remaining half consists of equal portions of London clay and peat-earth, having the acid neutralised by barilla these are intimately blended and sifted One square yard of this compost I conceive to be sufficient for one plant, which must be placed in the middle of a small artificial hillock, raised eighteen inches above the surface of the ground, which ground should be rendered perfectly dry, if not naturally so, by under-draining Neither the leaves, flowers, nor fruit should ever be suffered to touch the ground, but they should as constantly as they are produced be kept from the earth by placing stones, pebbles, flints, or bricks under them, in imitation of artificial rock-work." (*Hort Trans* ii 238)

C Ficus indica is very common in Jamaica, and on it feed the wild sort of cochineal insect The fruit is large and of a deep purple color, and when eaten dyes the urine of a bloody color

6903 truncátus *Link.*	truncate	♃	gr	1	jn	Pk	Brazil	1818	C	s p	Bot reg. 696
6904 Peres'kia *L.*	Barbad Gooseb	♃	gr	5	o n	W	W Indies	1696	C	s.p	Dil el t.227.f.294
6905 grandifólius *Haw*	large-leaved	♃	gr	3	...	...	Brazil	1818.	C	s p	
6906 longispínus *Haw*	long-spined	♃	gr	2	...	...	S. Amer	1808	C	s p	
†1112. RHIP'SALIS *Gært*	RHIPSALIS				*Cacti.*	*Sp 5.*					
6907 Cassútha *G*	naked	♃	cu	1	s	Y	W. Indies	1758.	C	s p	Hook. ex fl. 20
Cáctus péndulus W											
6908 parasíticus *Haw*	parasitic	♃	cu	1	...	Y	S. Amer.	1800	C	s p	Plant. grass 59
6909 grandiflorus *Haw*	large-flowered	♃	cu	1	jl	W	.....	1818	C	s p	
6910 fasciculátus *W en*	bundled	♃	cu	1	...	Y	S Amer	1817	C	s p	
6911 salicornoides *Haw*	salt-wort	♃	cu	1½	jn	Y	E. Indies	1817	C	s p	Bot. mag 2461
†1113. BARTONIA. *Ph*	BARTONIA				*Loaseæ*	*Sp. 2*					
6912 ornáta *Ph*	naked-seeded	☿	or	2	jl s	W	Missouri	1811	C	s p	Bot mag 1487
6913 núda *Ph*	winged-seeded	☿	or	2	jl s	W	Missouri	1811	C	s p	
†1114. PHILADEL'PHUS *W*	SYRINGA				*Myrtaceæ*	*Sp 4—6*					
6914 coronárius *W*	common		or	8	my jn	W	S Europe	1596	L	co	Bot. mag. 391
β nánus	dwarf		or	2	my jn	W	....	...	L	co	
6915 inodórus *W*	scentless		or	2	jn jl	W	Carolina	1738	L	co	Bot mag 1478
6916 grandiflórus *Ph*	large-flowered		or	6	jn jl	W	Carolina	1811	L	co	Bot reg 570
6917 hirsútus *Nutt*	hairy		or	3	jn	W	N Amer	1820	L	co	Dend. brit 47
1115 LEPTOSPER'MUM *W*	LEPTOSPERMUM				*Myrts*	*Sp 16—20*					
6918 scopárium *W*	New Zeal Tea		or	6	jn jl	W	New Zeal	1772	C	p l	Bot rep 622
6919 flavéscens *W*	yellowish		or	5	my jl	Y	N S W	1787	C	p l	Sch s ha 24 t 14
6920 attenuátum *W*	fine-branched		or	5	my jl	W	N S W	1795	C	p l	
6921 lanígerum *H K.*	hoary		or	5	jn jl	W	N S W	1774	C	p l	Bot cab 1192
6922 pubéscens *W*	pubescent		or	5	jn jl	W	N S W	1774	C	p l	
6923 grandifólium *L T*	large-leaved		or	5	jn jl	W	N S W.	1803	C	p l	Bot mag 1810
6924 parvifólium *W*	small leaved		or	5	jn jl	W	N S W	1789	C	p l	
6925 stellátum *Cav.*	short-leaved		or	5	jn jl	Y	N S W	1790	C	p l	Cav ic 4 t. 330
6926 arachnoideum *W*	cobweb		or	3	my jl	W	N S W	1795	C	p l	Gær sem 1 t 35
6927 flexuósum *Lamk*	flexuose		or	10	my jl	W	N S W	1823	C	p l	
6928 juniperinum *W*	Juniper-leaved		or	2	jn jl	W	N S W	1790	C	p l	Vent malm 89
6929 baccátum *W*	berry-fruited		or	3	jn jl	W	N S W	1790	C	p l	Cav ic 4 t 331 f 2
6930 porophy'llum *Cav*	dotted		or	3	jn jl	W	N S W	1800	C	p l	
6931 triloculáre *V*	trilocular		or	2	jn jl	W	N S W	1800	C	p l	Bot cab 701
6932 ambíguum *W*	hook leaved		or	3	jn jl	W	N S W.	1791	C	p l	Exot bot 1 t 59
1116 FABRI'CIA *W*	FABRICIA				*Myrtaceæ*	*Sp 2*					
6933 myrtifólia *W*	oppos.te-leaved		or	3	...	Y	N Holl	...	C	s p	Gæ sc l t 355 f 4
6934 lævigáta *W*	smooth-leaved		or	3	my jn	Y	N S. W	1788	C	s p	Bot mag 1304



History, Use, Propagation, Culture,

C tuna (*tyn* the Arabic name for fig) is used as a hedge plant in Spain, South America, and the West Indies When the island of St Christopher was to be divided between the English and the French, three rows of the tuna were planted by common consent between the boundaries (*Sloane*) Sir J E Smith informs us, that the stamens of the flower are very irritable, and that if a feather be drawn through them, in two or three seconds they begin to lie down gently on one side, and in a short time become recumbent at the bottom of the flower

C cochinillifer is the species on which the cochineal insect chiefly feeds The insect feeds on other succulent plants besides those of the Cactus genus, but this species is cultivated because least annoying by its prickles It produces an edible fruit larger than that of C opuntia On the top of the fruit there grows a red flower this when the fruit is ripe, falls down on the top of it, and covers it so that no rain or dew can wet the inside A day or two after, the flower being scorched up by the heat of the sun, the fruit opens wide, and the inside appears full of small red insects The Indians, when they perceive the fruit open, spread a large linen cloth, and then with sticks shake the plant, to disturb the insect, so that they take wing to be gone, but keep hovering over the plant, till by the heat they fall down dead on the cloth, where the Indians let them remain two or three days till they are dry The cochineal plants are called by the Spaniards Toona. They are planted in the country about Guatimala, Chiape, and Guaxaca, in the kingdom of Mexico

The difference, in point of goodness, observable in the cochineal, is entirely owing to the plant it feeds upon The prickly pear (C tuna) so abundant in Jamaica, is covered with the insects, but not having their proper food, they are in general diminutive, and have very little red tincture in their bodies The delicate red colored juice of the fruit is the natural food of the insect The exuviæ and animal salts of the insect are, from the minuteness of its parts, inseparable from the essential principles of the dye, and must diminish the brilliancy of the color and this has put some persons upon inspissating the juice of the fruit itself The ripe fruit is said to check fluxes by its mild restringency, it is also a powerful diuretic, and sometimes imparts a tinge to the urine

C pereskia, so called from the generic name of Plumier, who made this species a distinct genus, in memory of N. F Peiresk of Aix, whose name, as Tournefort says, is his only monument, has fruit about the size of a walnut, having tufts of small leaves on it, and within a whitish mucilaginous pulp

In our stoves, according to Sweet, "sandy loam, or loam mixed with a little brick rubbish, is the best soil for all the Cacti: the pots should be as small as the plants will allow, and well drained with potsherds They

6903 **Branched, Joints short oblong truncated**
6904 **Leaves elliptical fleshy, Spines about ¼ an inch long, Buds little woolly**
6905 **Spines numerous variable strong, Leaves lanc oblong with a strong rib beneath**
6906 **Leaves elliptical fleshy, Spines ¼ an inch long, Buds very woolly**

6907 **Branches pendulous whorled round smooth naked green**

6908 **Branches pendulous whorled round green the younger covered with bundles of white hairs**
6909 **Branches round as thick as a quill, Spines scarcely any**
6910 **Pendulous, Branches rounded fascicled, Hairs bundled in six lines**
6911 **Jointed erect, Branches round and angular, Young spines in minute inconspicuous parcels**

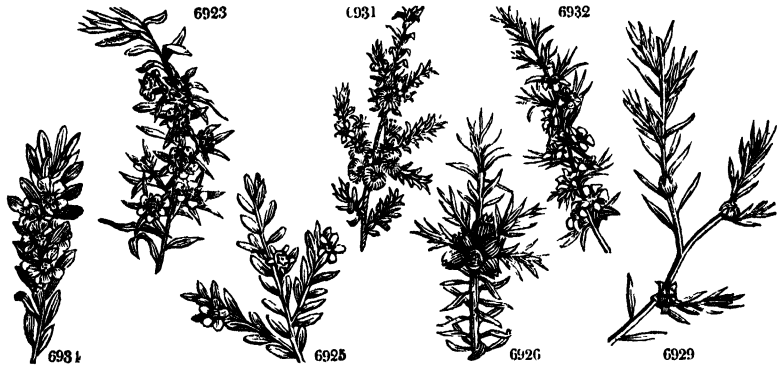
6912 **Ovary leafy, Seeds naked**
6913 **Ovary naked, Seeds winged**

6914 **Leaves somewhat toothed ovate oblong**

6915 **Leaves quite entire**
6916 **Leaves ovate acuminate toothletted, Axils of veins hairy, Stigmas 4 linear**
6917 **Leaves hairy oblong-ovate acute sharply and angularly toothed**

6918 **Leaves ovate mucronate obsoletely 3-nerved, Cal smooth with colored membranous teeth**
6919 **Leaves lin -lanc obtuse nerveless, Cal smooth with membranous naked teeth**
6920 **Leaves lanc lin acute 3-nerved, Cal silky villous, with membr colored naked teeth**
6921 **Leaves oblong or oval mucr pubescent on each side obsoletely 3-nerved, Branches villous, Cal very vill.**
6922 **Leaves lanc. oblong hairy oblique reflexed at end**
6923 **Leaves oval lanceolate, Young shoots colored, Flowers large. Teeth of calyx colored**
6924 **Leaves obovate nerveless, Branches and calyxes hairy with membranous colored teeth**
6925 **Leaves ovate lanceolate short three nerved, Fl sol sessile, Cal entire persistent**
6926 **Leaves subulate pungent, Branches hairy, Calyxes and teeth villous**
6927 **Branches flexuose, Flowers sessile fascicled, Cal hairy**
6928 **Leaves lin -lanc pungent, Branches silky, Cal smooth with membranous colored naked teeth**
6929 **Leaves lin -lanc pungent, Branches hairy, Cal smooth with membranous col pubescent teeth**
6930 **Leaves oblanc. densely dotted, Fl sol terminal, Sepals deciduous**
6931 **Leaves acicular rigid fascicled, Flowers solitary, Teeth of calyx colored**
6932 **Leaves linear recurved at end, Cal. smoothish, Teeth leafy lanc naked, Stamens longer than cor.**

6933 **Leaves lanceolate obovate opp Teeth of calyx round**
6934 **Leaves obovate altern glaucous, Teeth of calyx triangular**



and Miscellaneous Particulars

require very little water The best way to flower them is to expose them to the air all the summer, which makes them get plump and throws them into flower-bud Most of the species are fine flowers Cuttings, after they are taken off, should be left to dry a few weeks till they are shrivelled, then potted, and they will root immediately (*Bot Cult* 31)

1112 *Rhipsalis* From ῥιπή, a willow branch, in allusion to the flexible decumbent branches of the genus Curious, branched, jointed, leafless, prostrate plants Culture as in Cactus

1113 *Bartonia* Named by Pursh, in honor of Dr B S Barton of Philadelphia, an American botanist Beautiful plants, with alternate pinnatifid rough glaucous leaves, and large white flowers, which open during the night, and spread a most agreeable odor Very rare, if they yet exist, in collections

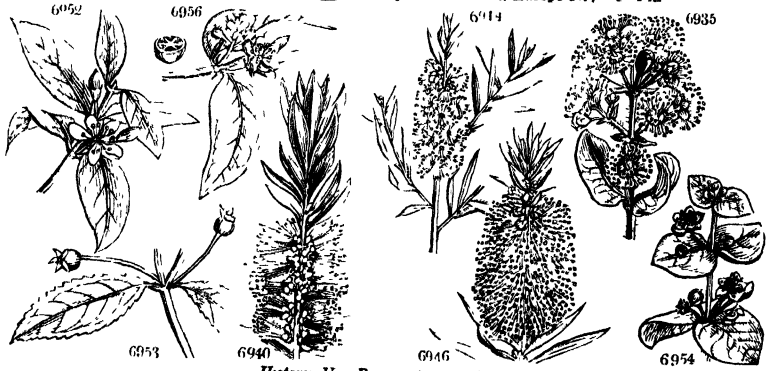
1114 *Philadelphus* A name used by Athenæus for a tree which is now unknown Bauhin applied it to this genus The species are free flowerers, well adapted for the shrubbery The native country of P coronarius is not known, it is generally referred to the south of Europe, but it has only been found twice in Italy, and then in situations where it might have been planted The flowers have the appearance and odor of those of the orange, but the odor in near contact is much more powerful Seeds are seldom produced in this country The leaves taste like fresh cucumbers P grandiflorus is a very shewy plant. All the species grow freely in common soil, and are increased by layers

1115 *Leptospermum.* From λεπτος, slender, and σπερμα, seed, in allusion the extreme tenuity of the seeds. Pretty New Holland plants L scoparium grows commonly in dry places near the shores in New Zealand, and the underwood in Adventure Bay, Van Dieman's Land, chiefly consists of this shrub. The leaves were used by Captain Cook's ships' crews as tea, whence they named it the tea plant. The leaves have a very agreeable bitter flavor, with a pleasant smell, when fresh, but lose something of both, when dry If the infusion was made strong, it proved emetic to some, in the same manner as green tea. It was also used with spruce leaves, in equal quantity, to correct their astringency in brewing beer from them, and they rendered the beer exceedingly palatable

Young cuttings of all the species will root readily in sand, under a bell-glass; the species may also be raised from seeds, but plants from cuttings are best, as they flower young, and the seedlings do not flower till they attain a considerable size (*Bot Cult* 214)

1116 *Fabricia.* Dedicated by Gærtner to John Christian Fabricius, the famous Entomologist. The species

*1117 METROSIDE'ROS. *W*	Metrosideros				*Myrtaceæ*	*Sp* 16—20							
§6935 hispida *Sm*	rough	♣	▭	or	6	my au	Y	N S W.	1789.	C	s l	Exot bot 1 t 42
§6936 floribúnda *Sm.*	many-flowered	♣	▭	or	6	jl au	W	N S W	1788.	C	s l	Vent. mal. t. 75
§6937 costáta *Sm*	ribbed	♣	▭	or	6		Y	N S W	1816.	C	s l	Gæ. se 1. t. 34 f 2
6938 glomulifera *W*	cluster-flowered	♣	▭	or	15	my jn	Y G	N S W	1805	C	s l	
6939 angustifólia *W*	narrow-leaved	♣	▭	or	6	...	Y G	C G H	1787	C	s l	
6940 marginata *P S*	margined	♣	▭	or	6	...	P Y	N S W	1816	C	s l	Cav ic 4 t 332
§6941 linearis *W*	linear-leaved	♣	▭	or	6	jn jl	W	N S W	1788	C	s l	Ser han 19 t 11
§6942 pimifolia *W en*	Pine-leaved	♣	▭	or	6	jn jl	G	N S W	..	C	s l	Wen col 1. t 16
§6943 viminalis *W*	long-leaved	♣	▭	or	10	mr jn	R	N S W	1800	C	s l	Gæ se 1 t 34 f 4
§6944 saligna *W*	willow-leaved	♣	▭	or	6	my jn	R	N S W	1788	C	s l	Bot mag 1821
§6945 lanceoláta *W*	spear-leaved	♣	▭	or	10	jn n	Cr	N S W	1788	C	s l	Bot mag 2090
§6946 speciósa *B M*	splendid	♣	▭	or	10	mr jn	Cr	N S W	1803	C	s l	Bot mag 1761
§6947 vera *I indl*	true Iron-wood	♀	▭	or	20	mr jn	G	E Indies	1819	C	s l	Lindl coll 18
§6948 superflórus *I odd*	over-blowing	♣	▭	or	6	mr jn	Cr	N S W	1818	C	p l	Bot. cab 523
§6949 lineariifolia *Link*	linear-leaved	♣	▭	or	10	mr jn	R	N S W	1820	C	p l	
§6950 rugulosa *W*	wrinkled	♣	▭	or	6	mr jn	Pk	N S W	1821	C	p l	
1118 PSI'DIUM *W*	Guava				*Myrtaceæ*	*Sp* 7—10						
6951 pyriferum *B*	white	♀	▭	fr	7	jn jl	W	W Indies	1656	C	r m	Rum am 1 t 47
6952 pomiferum *W*	red	♀	▭	fr	20	jn jl	W	W Indies	1692	C	r m	Rhe mal 3 t 35
6953 aromáticum *W*	aromatic	♀	▭	or	5	..	W	W Indies	1779	C	r m	Aub gui 1 t 191
6954 cordátum *B M*	cordate	♀	▭	fr	5	my jl	W	W Indies	1811	C	r m	Bot mag 1779
6955 montánum *W*	mountain	♀	▭	fr	4	..	W	W Indies	1779	C	r m	
6956 polycárpum *And*	clustered	♀	▭	fr	3	my	W	Trinidad	1810	C	r m	Bot reg 653
6957 Cattleianum *I indl*	purple	♀	▭	fr	20	my jn	W	S Amer	1818	C	r m	Lindl coll 16
*1119 FUGE'NIA *W*	Fuglnia				*Myrtaceæ*	*Sp* 14—37						
§6958 malaccénsis *W*	Malay Apple-tr	♀	▭	fr	25	my au	S	E. Indies	1758	C	s p	Bot rep 458
§6959 Jámbos *W*	narrow-leaved	♀	▭	fr	25	t jl	G Y	E Indies	1768	L	s p	Bot mag 1696
6960 barwensis *W*	many-flowered	♣	▭	or	20		W	S Amer		L	s p	Jac ic 3 t 486
§6961 myrtifólia *Ker* *M australis* B M	myrtle-leaved	♣	▭	or	8	ap jl	W	N Holl	1818	L	s p	Bot reg 627
6962 axillaris *W*	axillary	♣	▭	or	10	s	W	Jamaica	1793	C	s p	
6963 frágrans *W*	sweet-scented	♣	▭	or	8	ap my	W	Jamaica	1790	C	s p	Bot mag 1242
6964 Mum *W*	small-fruited	♣	▭	or	10	..	W	Guiana	1803	C	s p	Au gui 1 t 197
6965 elliptica *W*	round-fruited	♣	▭	or	8	my s	W	N S W.	1790	C	s p	Bot mag 1872
6966 ligustrina *W*	privet leaved	♣	▭	or	8	au	W	Hispaniol	1798	C	s p	
6967 umiflóra *W*	one-flowered	♣	▭	or	7	ja mr	W	Brazil	1799	C	s p	Bot mag 473
§6968 zeylánica *W*	Ceylon	♣	▭	or	10	jn jl	W	Ceylon	1798	C	s p	Bot rep 619
6969 latifolia *W*	broad-leaved	♣	▭	or	10	..	W	Guiana	1793	C	s p	Aub gui 1 t 199
1120 CARYOPHYL'LUS *P S*	Clove-Tree				*Myrtaceæ*	*Sp* 1						
6970 aromáticus *P S*	aromatic	♀	▭	cul	20	.	W	Moluccas	1797	C	l p	Ru amb 2 t 1 2
*1121 MYR'TUS *W*	Myrtle				*Myrtaceæ*	*Sp* 10—35						
6971 communis *W*	common	♣	▭	or	6	jl au	W	S Europe	1597	C	r m	Du ar e n t 43
α romána	*broad-leaved*	♣	▭	or	6	jl au	W	S Europe	1597	C	r m	Mil. ic. t 184 f 1
β tarentina	*Box-leaved*	♣	▭	or	6	jl au	W	S. Europe	1597	C	r m	



History, Use, Propagation, Culture,

requiring to grow to a good size before they produce flowers are well adapted for a conservatory. the culture and propagation as in Leptospermum

1117 *Metrosideros* From *μητρα*, the heart of a tree, and *σιδηρον*, iron, in allusion to the hardness of the wood One species (M vera) is called iron wood The Chinese make their rudders and anchors of it, and among the Japanese it is so scarce and valuable that it is only allowed to be manufactured in the service of their king The bark is used as a remedy for fluor albus and diarrhœa, being mixed with Pinang, and a small quantity of cloves and nutmegs This is a genus distinguished at sight by the peculiar character of the shrubs of Australasia, with both sides of the leaf alike M hispida, lanceolata, and speciosa, are beautiful plants, but not tree flowerers They are rather difficult to strike Sweet recommends "ripened wood planted under a bell-glass in sand"

1118 *Psidium* One of the Greek names of the Pomegranate In English it is called *Guava*, a corruption of the American name *Guayaba* Most of the species are cultivated in the tropics for their fruit, which also ripens freely in this country, though it is of little merit P pyriferum bears fruit the size of a hen's egg, yellowish, with a peculiar smell The rind is brittle and fleshy, pulp rather firm, full of bony seeds, flesh colored, sweet, aromatic, and pleasant In the West Indies it is eaten with avidity, not only by the natives, but by Europeans with those who are not accustomed to it, the Guava is apt to occasion a slight flux, but Jacquin affirms, that when he has been thirsty on a journey he has eaten of it to satiety without suffering any harm It is eaten raw in the dessert, but the seeds are scarcely separable It is also preserved with sugar. P. pomiferum has fruit like a pomegranate, which is seldom eaten, though eatable, and being astringent is counted strengthening for the stomach P Cattleianum is reckoned one of the best of the Guavas, the fruit is of a fine deep claret color, and the pulp in consistence and flavor bears a considerable resemblance to the strawberry

All the species are of easy culture in light and rather rich loam, and are increased readily by seeds, layers, or cuttings in sand under a hand-glass

6935 Leaves opposite cordate at base stem-clasping, Branches calyxes and peduncles hispid
6936 Leaves opposite stalked ovate lanceolate, Panicle brachiate, Pedic umbelled
6937 Leaves opposite stalked lin-lanc acuminate oblique, Panicle brachiate decompound
6938 Leaves opposite ovate netted veiny beneath pubescent, Heads lateral stalked and bractes downy
6939 Leaves opposite lin-lanc naked, Pedunc axillary umbelled, Bractes lanc smooth
6940 Leaves alternate lanceolate 3-nerved, Fl racemose clustered terminal smooth
6941 Leaves scattered linear channelled acute rigid, Fl lateral clustered sessile
6942 Leaves alternate lin filiform rigid mucronate channelled rough, Fl. clustered sessile
6943 Leaves alternate linear-lanceolate, Fl clustered lateral pubescent
6944 Leaves alternate lanceolate narrowed at each end mucronate, Fl lateral clustered sessile smooth
6945 Leaves alternate lanceolate mucronate, Fl lateral clustered sessile pubescent
6946 Leaves scattered lanceolate veiny glandular mucronate, Caps downy at end
6947 Leaves ovate-lanceolate acuminate quite smooth, Cymes stalked many-flowered
6948 Very like M lanceolata, but the blossoms appear more copiously
6949 Leaves alternate lin-lanceolate with a long acute point
6950 Leaves lin-lanceolate with a long point dotted rough

6951 Leaves elliptical pubescent beneath, Peduncles 1-flowered
6952 Leaves oblong lanceolate pubescent beneath, Peduncles 3-flowered
6953 Leaves oblong acuminate smooth, Peduncles 1-flowered
6954 Leaves sessile cordate rounded smooth on each side, Pedunc 1-fl. clustered
6955 Leaves oblong acuminate crenulate shining, Peduncles many-fl
6956 Leaves ovate oblong acute sub-crenate, pubescent above rugose beneath, Branches reclinate
6957 Leaves obovate smooth coriaceous, Fruit purple

6958 Leaves entire oblong, Peduncles 4-fl lateral
6959 Leaves entire lanceolate, Pedunc 4-fl terminal
6960 Leaves entire ovate-lanceolate, Ped many-fl axillary shorter than petiole
6961 Leaves elliptical, Pedunc trichotomous lateral and terminal, Stamens much longer than petals

6962 Leaves entire oblong acuminate obtuse flat, Pedunc axill many-fl the length of petioles
6963 Leaves entire roundish ovate obtuse, Pedunc axill many-fl trichotomous the length of leaves
6964 Leaves entire oblong-lanceolate acuminate, Pedunc axillary many-fl racemose shorter than leaf
6965 Leaves entire elliptical acuminate, Pedunc panic axill and terminal, Fruit globose
6966 Leaves entire lanceolate narrowed at base obtuse veinless, Pedunc 1-fl solitary terminal
6967 Leaves entire ovate-lanceolate, Pedunc 1-flowered solitary lateral
6968 Leaves entire oblong acuminate coriaceous not dotted, Pedunc 1-fl filiform
6969 Leaves entire ovate oblong acuminate netted with veins, Pedunc 1-fl. about 3 in fruit nodding

6970 The only species

6971 Flowers solitary, Involucre 2-leaved
α Leaves ovate longer than the peduncles
β Leaves ovate with round berries



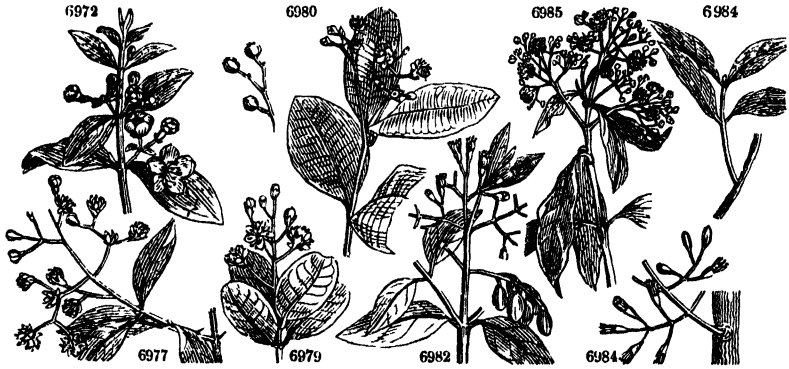
and Miscellaneous Particulars

1119. *Eugenia* In honor of Prince Eugene of Savoy, who was a protector and encourager of botany, and possessed a botanic garden. Some of the species bear edible fruits. that of E. malaccensis is ovate, an inch and a half in diameter, flesh smelling like the rose, agreeable to the taste, and wholesome. It is generally cultivated between the tropics E Jambos bears smaller fruit, edible, but not so much esteemed, it is nevertheless excellent, resembling in appearance and flavor a Brussels apricot, and produced in great abundance in the stove All the species grow freely in two-thirds loam and one-third peat, and flower abundantly when the plants are of a good size Ripened cuttings strike root freely in sand under a hand-glass.

1120 *Caryophyllus* The Arabs, who have been acquainted from all antiquity with the clove, called it *qarunfel*, which the Greeks altered into *Caryophyllon* *Girofliier*, Fr. The fruit is thought to bear some resemblance to a nail, and hence is called clove, *clou*, Fr, *Chiode*, Ital, *Clavo*, Span, *Naghel*, Ger. and Dutch The whole tree is aromatic, and the fruit or clove is considered as one of the hottest and most acrid substances of the aromatic class, and as such is often used, not only internally, but externally, as a stimulant, as in paralytic cases for example, in which the oil of cloves has been administered to advantage. it is also made use of in the tooth ache, in which it often succeeds in suddenly abating and subduing the pain A tincture of cloves in rectified spirit is kept in the shops, as well as the essential oil, which latter is perhaps seldom free from sophistication For culinary purposes, the uses of cloves are innumerable. The Dutch, who had for a long time the monopoly of the spice trade, prevented while they could the tree from being removed from the Moluccas and other islands, where it grows naturally, but the French now cultivate it in Cayenne and St. Domingo There are a few specimens in the British gardens It grows freely in loam and peat, and ripened cuttings are not difficult to root in sand, in moist heat under a hand-glass.

1121 *Myrtus* From *μυρον*, perfume. *Μυρτος* of the Greeks. *Le Mirte*, Fr, *Myrte*, Ger, *Myrtus*, Dutch, *Mirto*, Ital and Span, *Myrta*, Portug, *Myrtel*, Dan. and *Myrten*, Swed The common myrtle is a well known popular shrub, which has been in English gardens for an unknown length of time, evidently from

γ ítálica	*Italian, or upr*		or	6	jl au	W	S Europe	1597.	C	r.m			
β bæ'tica	*Orange-leaved*		or	6	jl au	W	S Europe	1597	C	r m	Blackwell, t. 114		
α lusitánica	*Portugal*		or	6	jl au	W	S Europe	1597.	C	r m	Clus. hist. 1. t. 1		
ζ bélgica	*broad-lvd Dutch*		or	6	jl au	W	S Europe	1597	C	r m			
η mucronáta	*Rosemary-lvd.*		or	2	jl au	W	S. Europe	1597.	C	r m			
6972 tomentósa *W*	woolly-leaved		or	6	jn jl	Pu	China	1776	C	s p	Bot mag 250		
6973 bifióra *W*	two-flowered		or	10	ap my	W	Jamaica	1759.	L	s p	Br jam. t. 25 f 3		
6974 lúcida *W.*	shining		or	6	...	W	Surinam	1793	L	s p			
6975 dumósa *W.*	bushy		or	3	jn jl	W	W Indies	1793.	L	s p			
6976 Grégii *W*	Greg's		or	6	...	W	Dominica	1776.	L	s p	Gæ. se. 1. t 33 f 3		
6977 virgultósa *W.*	twiggy		or	6	jl au	W	Jamaica	1787	L	s p	Plu ic t 208. f 1		
§6978 ácris *W.*	Wild Clove-tree		or	10	my jl	W	Jamaica	1759	L	s p	Pl alm t. 155 f 3		
6979 coriácea *W*	Sumach-leaved		or	30	...	W	Hispaniol	1759	L	s p	Pl. ic. t 208. f 2		
§6980 pimentoides *Lindl.*	Allspice-like		or	20	my	W	W Indies ...		L	s p	Bot. cab. 178		
*1122. CALYPTRAN'THES *W*	Calyptranthes				*Myrtaceæ*		*Sp* 4—6						
6981 Zuzýgium *W*	oval-leaved		tm	20	my jl	W	W Indies	1778	L	s p	Br jam t 7 f 2		
§6982 Jambolána *W*	Jambolana-tree		or	20	...	W	E Indies	1796.	L	s p	Ru amb 1 t. 42		
6983 Chytracántha *W*	forked		or	20	mr my	W	Jamaica	1778	L	s p	Br jam t. 37 f 2		
§6984 caryophyllifolia *W*	clove-leaved		or	20	...	W	E. Indies	1822.	L	s p	Ru. amb 1. t. 41		
1123 PIMEN'TA *Lindl*	Pimenta				*Myrtaceæ*		*Sp* 1						
6985 vulgáris *Lindl*	Allspice-Tree		cul	30	my jl	W	W. Indies	1723.	L	s p	Bot. mag. 1236		
Myrtus Pimenta L.													
1124 OLYN'THIA *Lindl*	Olynthia.				*Myrtaceæ*		*Sp* 1						
6986 disticha *Lindl*	globe-berried		or	2	ap jl	W	Jamaica	1793.	L	s p	Bot mag 867		
Mýrtus distícha W													
1125 STRAVA'DIUM *Juss*	Stravadium				*Myrtaceæ*		*Sp* 1—2						
6987 acutángulum *Juss*	sharp-angled		or	20	...	...	E. Indies	1822.	L	s p	Rumph 3 t 116		
1126 EUCALYP'TUS *W*	Eucalyptus				*Myrtaceæ*		*Sp* 30—40						
6988 robusta *Sm*	Brown Gum-tr		tm	30	au s	W	N S. W	1794	L	l p	Sm no hol t 13		
6989 rostráta *Cav*	beaked		tm	30	...	W	N S W	1804	L	l p	Cav ic 4 t 342		
6990 piluláris *Sm*	narrow-leaved		tm	30	...	W	N S W	1804	L	l p			
6991 tereticórnis *Sm.*	long-horned		tm	30	...	W	N S W	1804	L	l p			
6992 resinífera *Sm.*	Red Gum-tree		tm	30	ap jl	W	N S W	1788	L	l p	Bot. rep 400		
6993 margináta *Sm*	thick-edged		tm	30	ap jl	W	N Holl	1794	L	l p			
6994 capitellata *Sm*	headed		tm	30	...	W	N Holl	1804	L	l p	Sm. n. holl. 42		
6995 saligna *Sm*	willow-like		tm	30	...	W	N. S W	1804	L	l p			
6996 botryoides *Sm*	bunched		tm	30	...	W	N S W	1804	L	l p	Cav ic 4 t. 341		
6997 botryoides *Sm*	glaucous-leaved		tm	30	ap jl	W	N Holl	1803	L	l p	Cav. ic. 4 t. 341		
6998 hæmastóma *Sm*	red-mouthed		tm	30	...	W	N Holl.	1803	L	l p			
6999 piperita *Sm*	Peppermint-tr		tm	30	...	W	N S W.	1788	L	l p			
7000 obliqua *W*	oblique-leaved		tm	100	jl au	W	V Diem	1774	L	l p	Par lond 15		
7001 corymbósa *W*	corymbus-flow		tm	30	...	W	N S. W	1788	L	l p	Cav ic. 4 t. 340		



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what Gerarde and Evelyn say, before the invention of greenhouses, and probably in that case preserved by covering or housing in rooms It was a great favorite among the ancients, for its elegance, and its evergreen sweet leaves It was sacred to Venus, either on this account, or perhaps because it flourishes most in the neighbourhood of the sea Myrtle-wreaths adorned the brows of bloodless victors, and were the symbol of authority for magistrates at Athens Both branches and berries were put into wine, and the latter were used in the cookery of the ancients The myrtle was also one of their medicinal plants All parts of it are astringent, but it is discarded from modern practice

M. coriacea, sometimes called wild cinnamon, is a most elegant tree, with a handsome ash-colored straight trunk, and pyramidal head It grows slowly, and flowers late twice a year In old trees, the bark becomes white, and hangs down in shreds which have an aromatic quality The timber is red, very hard, and used in mill-work The berries, which are the size of peas, and of an agreeable aromatic smell and taste, are used in culinary purposes.

1122 *Calyptranthes* From καλυπτρον, a lid, and ανθος, a flower, in allusion to the peculiar manner in which the segments of the calyx, being grown together, fall off

Zuzygium, is so called from συζυγος, coupled, in allusion to the manner in which the branches and leaves are united by pairs. C Jambolana, frequently called the Java plum, bears a black esculent berry. Cuttings of this genus, Sweet observes, "do not strike freely, ripened ones strike best in sand under a bell-glass, but the plants root best from layers" (*Bot Cult* 34)

1123 *Pimenta* A genus readily distinguishable from Myrtus by the structure of its ovarium. It is a handsome tree, common in the hilly parts of the north side of Jamaica The flowers are without shew, and are succeeded by spherical purple berries crowned with a persistent calyx: they are called Jamaica pepper or all-spice, from their taste being thought to resemble a composition of all other spices The berries are gathered before being ripe, and are carefully dried on mats or terraced floors in the shade. In ten or twelve

γ Leaves ovate-lanceolate acute
δ Leaves ovate-lanceolate close together
ε Leaves lanceolate ovate acute
ξ Leaves lanceolate acuminate
η Leaves lin.-lanceolate acuminate. Very small

6972 Peduncles 1-flowered, Leaves 3-nerved downy beneath
6973 Peduncles 2-flowered, Leaves lanceolate
6974 Peduncles about 3-fl Leaves subsessile lanceolate attenuated
6975 Racemes axillary very short, Leaves stalked broad lanceolate acuminate
6976 Peduncles axillary many-fl Leaves ellipt. acute entire pubescent beneath
6977 Racemes lateral and terminal, Leaves broad lanceolate attenuated
6978 Peduncles axillary terminal and corymb trichotomous, Leaves ellipt convex coriaceous veiny dotted
6979 Peduncles 3-chotomous terminal, Leaves roundish elliptical convex coriaceous veinless dotted
6980 Leaves elliptical flat with close parallel transverse veins, Cymes stalked few-flowered shorter than leaves

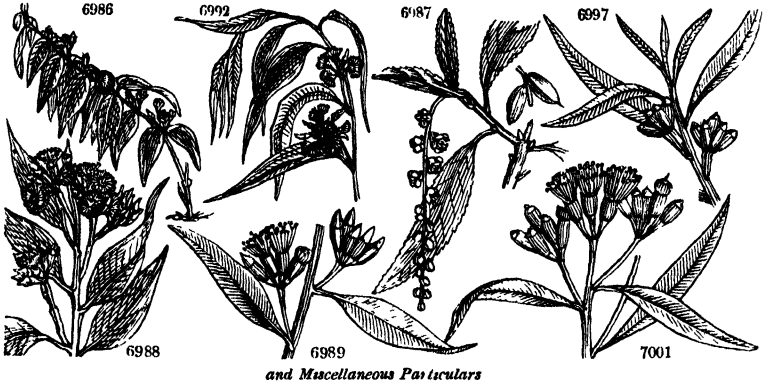
6981 Pedunc axillary 3-chotomous spreading, Leaves ovate obtuse, Branches dichotomous
6982 Panic subterminal, Leaves ovate emarginate
6983 Peduncles terminal panicled trichotomous downy, Leaves ovate attenuated at end
6984 Panicles lateral, Leaves elliptical ovate entire

6985 Flowers trichotomous panicled, Leaves oblong lanceolate acuminate

6986 Leaves distichous deflexed ovate-lanceolate

6987 Leaves crenate, Raceme very long, Drupe ovate

6988 Lid conical contracted in middle broader than calyx, Leaves ovate
6989 Lid rostrate, Umbels lateral, Leaves ovate-lanceolate attenuate oblique
6990 Leaves linear lanceolate, Lid conical contracted in middle, Umb lateral
6991 Lid conical rounded very smooth membranous, Umb lateral solitary
6992 Lid conical rounded coriaceous twice as long as calyx, Umb lateral solitary
6993 Leaves ovate thickened at edge, Umbels lateral
6994 Leaves ovate-lanceolate, Heads lateral solitary, Fruit globose
6995 Leaves lin.-lanceolate, Heads lateral solitary, Fruit turbinate
6996 Lid hemispherical obtuse, Heads lateral solitary, Fruit turbinate
6997 Heads lateral solitary, Pedunc cuneate compressed, Fruit turbinate
6998 Umb lateral and terminal, Pedunc compressed, Branches angular
6999 Pedunc. compressed, Branches angular, Umbels lateral panicled or solitary
7000 Pedunc. and branches round, Umb lateral solitary
7001 Umb corymbose panicled terminal, Calyx round, Lid hemispherical mucronulate



and Miscellaneous Particulars

days they become wrinkled, dry, and of a dark brown color, and are then packed in bags or casks for sale. Some kiln-dry them by which the same object is sooner effected The berries have an agreeable aromatic subastringent taste, resembling that of a mixture of cinnamon, cloves, and nutmegs, with the warm pungent taste of the cloves, qualities which reside chiefly in the cortical part of the dried berry, and are better extracted by a watery infusion, than by spirit or distillation They are much used in the kitchen, and also by the druggists to cover the disagreeable taste of other remedies, or to give them warmth An oil is obtained by distillation which is said to be nearly equal to that of oil of cloves, and sometimes substituted for it

1124 *Olynthia.* So named from ὀλυνθος, a little fig or berry. A genus separated from Myrtus on account of the singular manner in which all the parts of the seed are consolidated. A small stove plant common in collections.

1125. *Stravadium.* The Malabar name of this plant is *Tyera samstrawadi*, from which Stravadium has been contrived A fine tree with racemose flowers, and large, four-cornered, oblong fruit. A delicate stove plant rarely seen

1126. *Eucalyptus* From ω, well, and καλυπτω, to cover as with a lid; a name, therefore, with the same meaning as Calyptranthes, No 1122 This genus consists of the loftiest timber trees of New Holland Botanists knowing them principally from dried specimens, their respective heights cannot be stated correctly They are all of the tallest habit, and soon grow beyond the limits of our stoves. In Van Dieman's Island a manufactory has been established for the preparation of extract of tannin from the bark of various species of Eucalyptus. A considerable quantity of the substance has been imported into England recently, and it is said to have been found by the tanners to be twice as powerful in its operation as oak-bark.

E. resinifera produces a gum resin something like the Kino of druggists (obtained from a species of Pterocarpus), and for all medical purposes full as efficacious.

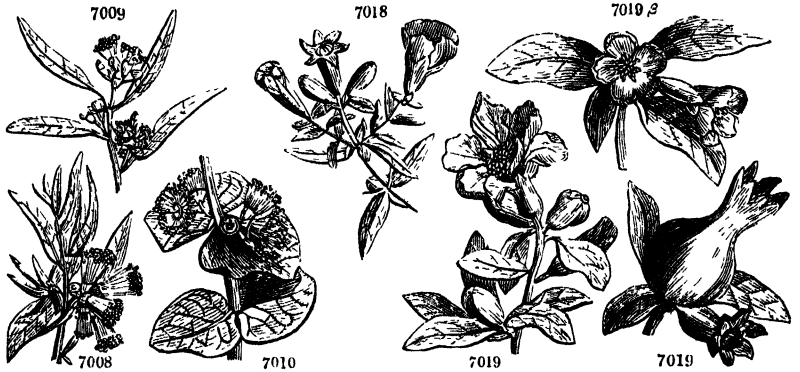
All the species, Sweet observes, "are fine plants for a large conservatory, as they grow very fast, and are

7002 paniculáta *L T.*	panicled		or	30	...	W	N. S. W.	1804.	L	s p		
7003 cornúta *Lab*	horned		or	30	...	W	N Holl.	1803	L	s.p	Lab. voy. 1. t. 20	
7004 reticuláta *Link*	netted		or	30	...	W	N Holl	1823	L	co		
7005 longifólia *Link.*	long-leaved		or	30	...	W	N. Holl.	1823	L	co		
7006 média *Link*	intermediate		or	30	...	W	N Holl	1823.	L	co		
7007 mucronáta *Link*	mucronate		or	30	...	W	N. Holl.	1823	L	co		
7008 triántha *Link*	three-flowered		or	30	...	W	N. Holl.	1823	L	co		
7009 persicifólia *Lodd*	Peach-leaved		or	30	jl	W	N Holl	1817	L	co	Bot. cab. 501	
7010 pulverulénta *Link.*	powdery		or	30	jn	W	N Holl	1816.	L	co	Bot. mag 2087	
7011 elongáta *Link*	long		or	30	...	W	N Holl	1823	L	co		
7012 myrtifólia *Link*	myrtle-leaved		or	6	...	W	N Holl	1823	L	co		
7013 microphýlla *Link*	small-leaved		or	30	...	W	N. Holl	1823	L	co		
7014 stenophýlla *Link*	narrow-leaved		or	30	...	W	N Holl	1823	L	co		
7015 hypericifólia *Dum*	Hypericum-lvd		or	30	...	W	N Holl.	1823	L	co		
7016 hirsúta *Link*	hairy		or	30	...	W	N Holl	1823	L	co		
7017 purpurascens *Link*	dark-branched		or	30	...	W	N Holl.	1823	L	co		

1127. PU'NICA *W.*	Pomegranate.				*Myrti*	*Sp 2*						
7018 nána *W*	dwarf		or	5	jl s	R	W Indies	1723	C	r.m	Bot. mag. 634	
7019 Granátum *W*	common		fr	18	jn s	S	S Europe	1548	C	r m	Bot mag 1832	
β álba	*white-flowered*		or	10	jn s	S	China	..	C	r m	Bot. rep 96	
γ pléna	*double-flowered*		or	10	jn s	S	S Europe	...	C	r m	Tr ehr. t. 71. f 2	

*1128 AMYG'DALUS. *W*	Almond				*Rosaceæ*	*Sp 6*						
§7020 Pérsica *W*	common Peach		fr	15	ap my	R	Persia	1562	B	h l		
β Nectárina	*Nectarine*		fr	15	ap my	R	Persia	1562	B	h l		
γ pléna	*double-flowered*		or	15	ap my	R	Persia	. .	B	h l		
7021 commúnis *W*	Sweet-almond		fr	15	mr ap	R	Barbary	1548	S	h l		
δ amára	*Bitter-almond*		fr	15	mr ap	R	Barbary	1548	S	h l	Blackw t 195	
7022 nána *W*	common-dwarf		or	2	mr ap	R	Russia	1683	B	s l	Bot mag 161	
7023 incána *W*	woolly		or	2	mr ap	R	Caucasus	..	B	s l	Pall ross 1 t 7	
7024 orientális *W*	silvery-leaved		or	10	mr ap	R	Levant	1756	B	s l	Bot cab. 1137	
7025 púmila *W*	double-dwarf		or	4	my jn	R	China	1683	L	s l	Bot. mag 2176	

Prúnus sinénsis P S



History, Use, Propagation, Culture,

generally well clothed with beautiful foliage, they will also flower freely, when of a moderate size. The best soil for them is a mixture of loam and peat, and cuttings of them may be struck in sand under a bell-glass, but they are not so free to root, as most of this natural order are (*Bot Cult* 189)

1127 *Punica* This fruit was called by the ancients *Malum Punicum*, Carthaginian apple, because, as Pliny tells us, the tree was first known to grow in the vicinity of Carthage Hence has the term Punica been constructed. P nana has very small fruit and flowers, and is used in the West Indies as a hedge-plant, as P Granatum (from *granum*, grain, on account of the numerous grains of its fruit) is in the south of France and in Italy The latter, in its wild state, is a thorny bush not unlike our hawthorn the flowers have a fine appearance, and the fruit is very ornamental It will produce fruit, trained against a south wall, in many parts of England, and under a glass case, or against a flued wall, it is probable, the fruit might be as highly flavored as that imported from Genoa and Leghorn The flowers come out at the ends of the branches, singly, or three and four together, and, therefore, in pruning, care must be had to bring into action only the strongest buds For this purpose, all the weak shoots should be cut out, and the stronger ones shortened, so as to produce bearing-shoots over the whole tree The best soil is a rich strong loam

The double-flowering varieties are to be treated in the same manner, and are highly ornamental.

1128 *Amygdalus* The Greek name of the almond The species are fruit-trees, or ornamental trees and shrubs, both much esteemed for the gay color and early appearance of their flowers A Persica, the peach and nectarine, bears the most exquisitely delicious of European fruits, it is more gratifying to the palate by its mass of juicy pulp than the grape, and more delicate than the melon Some, however, prefer the grape and melon to the peach and nectarine, but the most delicate of taste consider the latter as surpassed only by the pine-apple The varieties of peach and nectarine are numerous, and by raising from seed might easily be rendered innumerable. The best varieties have been raised in France, at Montreuil, a village of peach growers for the Paris market. Some good varieties have been raised in England by Mr Knight, and other members of the Horticultural Society The peach, to attain its proper flavor, must be protected by glass during the spring and earlier summer months, and exposed to the direct influence of the weather during the ripening process Ripened under glass, unless very liberal supplies of air are given, the flavor will be very inferior Mr Knight considers that the direct rays of the sun (without the intervention of glass) are of great advantage to the proper ripening, and essential to the coloring of the peach

Linnæus divides the A Persica into two varieties, that with downy fruit, or the peach, and that with smooth fruit, or the nectarine. There are various instances on record (*Hort Trans* vol 1 p 103) of both fruits growing on the same tree, even on the same branch, and one case has occurred of a single fruit partaking of the nature of both. The French consider them as one fruit, arranging them in four divisions, the *pêches*, or free-stone peaches, the flesh of whose fruit separates readily from the skin and the stone, the *pêches lisses*, or free-stone nectarines, or free-stone smooth peaches, the *pavies*, or cling-stone peaches, whose flesh is firm, and adheres

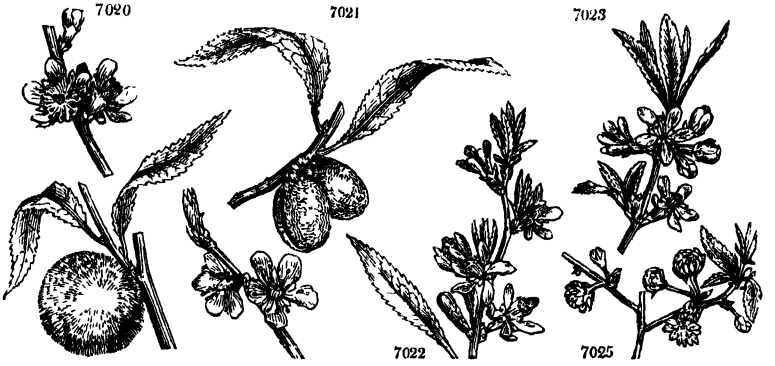
7002 Lid hemispherical obtuse, Cal angular, Umb. panicled terminal
7003 Lid very long and cornute, Heads lateral solitary, Style persistent 3-4-fid at base, Leaves lin. lanceolate
7004 Leaves lanceolate subfalcate acuminate subovate at base oblique netted with veins beneath
7005 Leaves lanceol unequal at base, on one side rounded with an incurved point, Branches axillary many-fl.
7006 Leaves lanceolate with a long point at the base subovate oblique with parallel nerves beneath
7007 Leaves lanceol. with a short point wavy with parallel nerves beneath and a marginal nerve on both sides
7008 Leaves obl. unequal at base attenuated somewhat falcate with axillary 3-fl peduncles and sessile flowers
7009 Leaves lanceolate stalked, Pedunc. short axillary 6-12-flowered
7010 Leaves amplexicaul with a short point glaucous beneath
7011 Leaves lanc attenuated with a filiform point netted with veins beneath
7012 Leaves acute reticulated, the nerves united at the margin
7013 Leaves falcate at end, those on the branchlets small clustered
7014 Leaves linear narrowed at base obtuse veiny with nerves united on this side the edge
7015 Leaves 6 lines long and 1½ broad with the lateral parallel nerves united on this side the edge
7016 Leaves stalked cordate obtuse with nerves downy beneath, Branches and peduncles strigose
7017 Leaves amplexicaul. lanceolate with a long point glaucous beneath

7018 Leaves linear, Stem shrubby
7019 Leaves lanceolate, Stem arborescent

7020 Leaves with all the serratures acute, Flowers sessile solitary

7021 Lower serratures of the leaves glandular, Flowers sessile in pairs

7022 Leaves ovate attenuate at base simply and finely serrate
7023 Leaves oblong lanceolate serrate downy beneath
7024 Leaves lanceolate entire silvery perennial shorter than footstalk
7025 Leaves lanceolate doubly serrated



and Miscellaneous Particulars

both to the skin and stone, and the *brugnons*, or nectarines, or cling-stone smooth peaches *Knight* (*Hort Trans* iii 1)

The double-blossomed peach is one of the most ornamental of spring-flowering trees, its blossoms appear about three weeks later than those of the common peach

A communis and amara, and especially the former, are employed as ornamental trees in front of shrubberies, and in suburban gardens In the south of France, Italy, Spain, and different parts of the Levant, they are cultivated for their fruit. In France they have above a dozen species or varieties, besides a hybrid called the almond-peach (See *Duhamel*) The common and bitter almond are only to be distinguished by the taste of the kernels of their fruit. The Jordan almonds, which come from Malaga, are the best sweet almonds brought to England, the bitter come chiefly from Magadore The bitter cuticle of almonds is taken off by immersion in boiling water The almond eaten as food is not very digestible, and requires to be well masticated

Robertson (*Hort. Trans* iii 382) and various botanists consider the peach and almond as one species

Four distinguished and ingenious attempts have been made to class the varieties of peaches and nectarines by the leaf and flower as well as the fruit the first is by Poiteau, in the Bon Jardinier, the next by Count Leheur, in his Pomone Française, the third by Robertson, nurseryman, of Kilkenny, whose arrangement is founded on the glands of the leaves, and the fourth, and most important, by Mr George Lindley, in the fifth volume of the Horticultural Society's Transactions The latter writer has, in a peculiarly distinct manner, arranged no fewer than 155 sorts of peaches and nectarines in well defined divisions or sections.

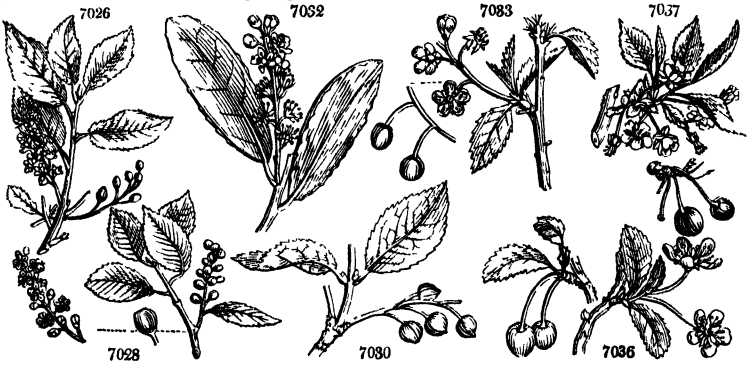
The bitter almond contains less fixed oil, than the sweet almond, and a portion of prussic acid or hydrocyanic acid, upon which its narcotic power is supposed to depend This variety is said to operate as a poison on dogs and some other animals, but not generally on the human species The distilled water exerts an action not less deleterious than that of laurel water on the human frame It produces vertigo, head-ache, tinnitis aurium, dizziness of sight, and vomiting, when taken to the extent of thirty drops only, and a drachm of it has killed a stout dog. When a large doze is taken, death almost instantly follows. In order to counteract its poisonous effects recourse is had to diffusibles, as brandy and ammonia, or three or four spoonfuls of oil of turpentine may be given at intervals of half an hour The fixed oil, which both varieties of the almond yield by expression in large quantity, is insipid and inodorous when heat has not been employed.

Sweet almonds are used more as food than as medicine, but they afford little nourishment. Heartburn is said to be relieved by eating six or eight of them decorticated. When triturated with water, milky mixtures or emulsions are formed, and they are also used in pharmacy for assisting, by trituration, the combination of substances, such as camphor and the resins with water Bitter almonds are scarcely ever used medicinally. (*London Dispensatory*, 151)

A. nana and pumila are very ornamental shrubs, both in their double and single varieties.

Rosaceæ Sp. 33—47.

*1129. PRU'NUS *W*	PLUM & CHERRY											
§7026 Pádus *W.*	Bird-cherry		or	30	ap my	W	Britain	woods.	L	co	Eng bot. 1383
β rúbra W	*Cornish-Bird*		or	30	ap my	W	Britain	...	L	co	Will ar t. 4 f 2
§7027 virginiána *Ph.*	Virginian		or	30	my jn	W	Virginia	1724	L	co	Will ar. t. 5 f 2
§7028 serótina *W*	American-Bird		or	30	my jn	W	N Amer	1629	L	co	Dend. brit. 48
§7029 occidentális *W*	West Indian	▭	or	20	ja d	W	Jamaica	1784	L	co	
§7030 lusitánica *W*	Portugal Laurel		or	20	jn	W	Portugal	1648	S	co	Mill. ic t.196 f.1
§7031 carolinána *W*	Evergreen Bird		or	30	my	W	Carolina	1759	L	co	
§7032 Lauro cérasus *W*	common Laurel		or	12	ap my	W	Levant	1629	C	co	Duh ar 1 t 133
§7033 Maháleb *W*	perfumed		or	20	ap my	W	Austria	1714	G	co	Jac aust 3 t 227
§7034 púmila *W*	dwarf		or	2	my	W	N Amer	1756.	L	s l	Mill ic t 89 f.2
§7035 hyemális *P S*	Black choke-ch		or	4	my	W	N Amer	1805	L	s l	
§7036 chamæcérasus *W*	bastard-cherry		or	8	my	W	Austria	1597	L	s l	Jac ic 1 t 90
§7037 Cérasus *W*	common-cherry		fr	20	ap my	W	England	woods	G	s l	Eng bot 706
§7038 Pseúdo-cerasus *Lmd*	Chinese-cherry		fr	6	ap my	Pk	China	1821	G	co	Bot reg 800
§7039 semperflórens *Ehr*	Toussaint-cher		fr	20	ap my	W	.....	...	G	co	Dend brit 131
§7040 ávium *W.*	Corone-cherry		or	50	ap my	W	England	...	S	co	Blackw t 425
§7041 pensylvánica *W*	Pensylvanian		or	30	my	W	N Amer	1773	S	co	Will ar t 3 f 8
§7042 nigra *W*	black		or	20	ap my	W	N Amer	1773	G	co	Bot. mag 1117
§7043 japónica *P S*	Japan	⌴	or	2	mr my	Pk	Japan	1810	G	co	Bot. reg 27
§7044 brigantiáca *Vill*	Briançon Apr		fr	20	ap my	W	Dauphiny	1823	G	co	
7045 doméstica *W*	common-Plum		fr	20	ap	W	England	hed	G	r m	Eng bot 1783
7046 insititia *W*	Bullace-tree		fr	20	ap	W	Britain	hed	S	co	Eng bot. 841
7047 cerasífera *W*	Myrobalan		or	8	ap my	W	N Amer	1629	L	r m	
7048 depréssa *Ph*	Sand-cherry		or	4	my	W	N Amer	1805	L	s l	Bot. cab. 1607
§7049 Chicasa *Ph*	Chickasaw-Plum		or	6	ap my	W	N Amer	1806	L	s l	
7050 maritima *Ph*	sea		or	4	my	W	N Amer	1800	L	s l	
7051 Susquehánna *Ph*	glaucous-leaved		or	6	my	W	N Amer	1800	L	s p	
7052 spinósa *W*	Sloe tree		or	15	mr ap	W	Britain	hed	S	co	Eng bot. 842
§7053 prostráta *W*	Birch-leaved	⌴	or	1	ap my	Pk	Crete	1802	L	s l	Bot. reg 136
§7054 boreális *Mich*	Choke-cherry		or	20	my jn	W	N Amer	1822	L	co	Bot. cab 1598
§7055 pygmæ'a *W*	pigmy		or	4	my	W	N Amer	1823	B	co	
§7056 armeniaca *L*	common-apric		fr	15	f mr	W	Levant	1548	L	b	Lam. ill t. 431



History, Use, Propagation, Culture,

1129. *Prunus* The origin of this name is wholly unknown The Greeks called it *προυνη*, and the Latins *prunus* From this genus have been obtained the principal characters of that section of the natural order Rosaceæ, which is called Amygdaleæ or Prunaceæ, and which is curiously and chemically known by the presence of Prussic acid all in the species, and in all their parts

P Padus (a name of Theophrastus), the bird-cherry, is an ornamental tree, by its purple bark, leafy bunches of white flowers, and berries successively green, red, and black It is common in the native woods of Scotland and Sweden, and in both countries the berries are infused in spirits in order to give them an agreeable flavor. The fruit is nauseous to the taste, though greedily eaten by birds. The bark is used by the Finlanders to cure venereal complaints, and also with success by regular practitioners in Stockholm for the same purpose (*Stockholm Acts*) The tree is very leafy, and dislikes a wet soil, but bears lopping as copsewood. The wood is beautifully veined, and used for cabinet work in France, as is that of P virginiana in America.

P rubra greatly resembles P Padus P carolinıana is an imperfect evergreen

P. Lauro-cerasus is one of our most popular evergreens It was first brought from Constantinople to Holland in 1576, the first we read of in England was one at Highgate, in the garden of Mr James Cole, a merchant of London, who, as Parkinson informs us, used to cover it in winter with a blanket. In less than half a century afterwards (1688), Ray informs us, the laurel was common in English gardens It is now as universal in shrubberies as the rose The kernel-like flavor of the fresh leaves has led to their use in flavoring custards and other culinary preparations, but as these leaves are poisonous, they ought to be used with caution To brute animals the effect of the distilled water of laurel leaves is almost instant death; and two women in Dublin, and Sir T Boughton in England, have been poisoned by it

P lusitanica is a most beautiful evergreen shrub, nearly as universal as the lauro-cerasus. It was brought to England from Portugal, but does not appear to be a native of that country; probably of Madeira or some other islands possessed by the Portuguese in the sixteenth or seventeenth centuries

P Mahaleb (*Mahhaleb* the Arabic name) flowers profusely, and disperses an odor resembling that of Clematis for a considerable distance around Its fruit is round, shining black, and so hard that it has been bored for beads by the catholics The wood is perfumed and used by the French in cabinet-work, especially in the village of St. Lucie, near Commercy, whence, among the French, the plant has obtained the name of *Bois de St Lucie*

P. Cerasus, the cultivated cherry, is by some considered a distinct species, and by others only a variety of P. avium, the gean or wild black cherry Lucullus is said to have first introduced the cultivated cherry to Italy, in 73 A. C from a town in Pontus in Asia, called Cerasus, whence its specific name, and it was introduced to Britain 120 years afterwards Many suppose that the cherries introduced by the Romans into Britain were lost, and that they were re-introduced in the time of Henry VIII by Richard Haines, the fruiterer to that monarch. But though we have no proof that cherries were in England at the time of the Norman conquest, or for some centuries after it, yet Warton has proved, by a quotation from Lidgate, a poet who wrote about

7026 Flowers racemose, Racemes pendulous, Lvs. decid. doubly serrat somewhat rugose, Petioles with 2 glands
β Serratures of leaves less, Racemes more erect
7027 Flowers racemose, Racemes erect, Leaves deciduous doubly toothed smooth, Stalks with 4 glands
7028 Flowers in loose racemes, Lvs. decid simply serrated lower serratures glandular, Rib beard towards base
7029 Flowers in lateral racemes, Leaves without glands oblong acuminate entire smooth on each side
7030 Flowers racemose, Racemes lateral, Leaves evergreen without glands oblong acuminate entire
7031 Flowers racemose, Leaves evergreen ovate-lanceolate serrated without glands
7032 Flowers racemose, Leaves evergreen with two glands at back
7033 Flowers corymbose terminal, Leaves ovate
7034 Umbels sessile aggregate few-flowered, Cal acute, Branches virgate round, Leaves narrow lanceolate
7035 Umbels sessile aggregate few-fl Sepals lanc Stipules setaceous compound, Lvs. obl. oval suddenly pointed
7036 Umbels sessile, Leaves obovate obtuse smooth with glandular serratures
7037 Umbels somewhat stalked, Leaves ovate-lanceolate smooth folded together
7038 Leaves obovate acuminate flat serrated, Racemes pubescent
7039 Flowers racemose, Calyxes serrated, Leaves ovate serrated glandular at base
7040 Umbel sessile, Leaves ovate-lanceolate pubescent beneath folded together
7041 Umbel subsessile aggregate many-fl at length panicled, Leaves obl lanceolate serrated smooth
7042 Umbel sessile solitary few-fl Leaves deciduous ovate acuminate finely serrated, Petioles with 2 glands
7043 Peduncles solitary, Leaves ovate acuminate smooth, Branches unarmed
7044 Fl. lateral clustered, Leaves doubly serrated roundish acute
7045 Peduncles subsolitary, Leaves lanceolate ovate convolute, Branches not spiny
7046 Peduncles twin, Leaves ovate villous beneath convolute, Branches spiny
7047 Peduncles solitary, Leaves elliptical smooth, Fruit pendulous, Branches nearly unarmed
7048 Umbel sessile clustered few-fl Cal obtuse, Branches angular prostrate, Lvs cun lanc glaucous beneath
7049 Buds clustered 2-fl Ped very short, Cal smooth, Leaves oblong acum serrulate, Branches spiny
7050 Pedunc. subsolitary, Leaves ovate-oblong acuminate doubly serrated
7051 Peduncles solitary, Leaves obovate obl beneath glaucous serrated entire at base
7052 Peduncles solitary, Leaves ellipt lanceolate pubescent beneath, Branches spiny
7053 Peduncles twin, Leaves ovate cut serrate without glands beneath white, Stem prostrate
7054 Flowers corymbose, Ped elongated, Leaves oval oblong eroded membranous smooth
7055 Umbels sessile aggregate few-fl Leaves ovate ellipt acute smooth on each side with 2 glands at base
7056 Flowers sessile, Leaves subcordate



and Miscellaneous Particulars

or before 1415, that the hawkers in London were wont to expose cherries for sale in the same manner as is now done early in the season The tree is now very generally cultivated both as a wall and standard fruit, and has been forced for upwards of two centuries

The Romans had eight varieties of cherry in the British gardens are upwards of forty sorts The French divide their cherries into *griottes*, or tender-fleshed, *bigarreaux*, or hard-fleshed, and *guignes*, or small fruits The fruit of many varieties is somewhat heart-shaped, hence the very general cognomen, why some sorts are called dukes is not as obvious The Morello cherry is very distinct from the other varieties, bearing almost exclusively on the preceding year's wood, and the pulp of the fruit having the consistence and flavor of the Morel, whence the name Cherries are grafted or budded on seedlings from cherry-stones, or better from seedlings of the wild cherry For dwarfing, they are worked on the bird cherry or perfumed cherry the latter is preferred in Holland.

Cherry trees are very ornamental in shrubberies and woods, and valuable as encouraging the different species of thrush The gum of cherry trees is eatable, and equal to that of gum arabic, the wood is hard and tough, and used by the turner and cabinet maker

Prunus Pseudo-Cerasus, the Chinese cherry, is of recent introduction, and most valuable on account of its bearing an excellent fruit, and producing it abundantly in a forcing-house

P avium, the gean, *guignc*, Fr, attains a large size, and its timber is of considerable value the black corone cherry is supposed to be an improved variety of it, as are the different geans

P domestica is generally considered the original of the plum tree, *Prune*, Fr, *Pflaumen*, Ger, and *Prugno*, Ital Many, however, conjecture that P insititia, spinosa, and domestica, are the same species There are several sorts of plums found wild in Britain, independently of the sloe, such as the bullace, damson, muscle, and winesour The plum is said to love a lofty exposure, and to be favorable to the growth of grass under it. The bark dyes yellow, the wood is used in turnery, and the dried fruit or prune is formed into electuaries and gentle purgatives Prunes were originally brought from Damascus, whence their name of damask, but are now chiefly imported from France

There are a great many varieties of the plum in France, and in British gardens nearly a hundred sorts By far the best dessert plum is the greengage, *Reine Claude*, Fr, *Regina Claudio*, Ital It is well known throughout Europe, and perfectly distinct from every other variety The damson is the best baking plum, and the winesour the best for sweetmeats Plums are generally grafted or budded on muscle or damson stocks.

Prunus Armeniaca, *Abricot*, Fr, *Abricosenbaum*, Ger., *Albicocco*, Ital, *Albarcoque*, Portug is a fruit tree next in esteem to the peach From its trivial name, it is generally supposed to have originated in Armenia, but Regnier and Sickler assign it a parallel between the Niger and the Atlas, and Pallas states it to be a native of the whole of the Caucasus, the mountains there, to the top, being covered with it, Thunberg describes it as a very large, spreading, branchy tree in Japan Grossier says, that it covers the barren mountains to the west of Pekin, that the Chinese have a great many varieties of the tree double-

§7057 sibirica *W* Siberian-apric fr 6 ap Pk Siberia 1788. L r m Pall ross. 1. t. 8
§7058 dasycárpa *Ehr* Black-apricot fr 15 ap W Siberia 1800 B co

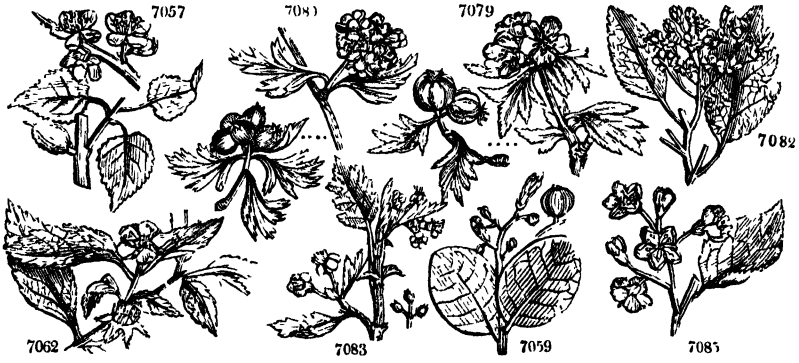
†1130. CHRYSOBA'LANUS *W* COCOA PLUM *Rosaceæ Sp 2—4*
7059 Icáco *W* West Indian fr 15 ... W W Indies 1752. L r m Jac amer t 94
7060 oblongifólius *Ph.* American or 3 my jn W Georgia 1812. C l.p Bartr. iter. c. ic

DI-PENTAGYNIA.

1131 MESPILUS *Lindl* MEDLAR *Rosaceæ Sp 2.*
7061 germánica *W* common-catabl fr 12 my jl W England hed. G h l Eng bot 1523
7062 grandiflóra *H K* large-flowered or 12 my jn W ..... 1800 L co Ex. bot. 1. t. 18

†*1132 CRATÆGUS *L* HAWTHORN. *Rosaceæ Sp 21—32*
§7063 coccinea *W* Scarlet-fr Haw or 20 ap my W N Amer 1683 B co Dend. brit 62
7064 cordáta *W* Maple-leaved or 20 my W N Amer 1738 B co Dend brit 63
7065 pyrifólia *W* Pear-leaved or 15 jn W N Amer 1765 B co Dend. brit. 61
C edulis Hort
7066 ellíptica *W* oval-leaved or 20 my W N Amer 1765 B co
7067 glandulósa *W* hollow-leaved or 20 my jn W N Amer 1750 B co Dend brit 58
7068 flava *W* yell Pear-berr or 20 my W N Amer 1724 B co Dend brit 59
7069 parvifólia *W* Gooseberry-lvd or 15 my jn W N Amer 1704. B co Dend brit 65
7070 punctáta *W* spotted-fruited or 15 my W N Amer 1746 B co Dend brit 57
7071 Crus-gálli *W* Cockspur-thorn or 20 my jn W N Amer 1691. B co Dend brit 56
β pyracánthifólia *Pyracantha-lv* or 20 my jn W N Amer. ... B co
γ salicifólia *Willow-leaved* or 20 my jn W N Amer . B co
7072 Pyracántha *Lindl* Evergr -thorn or 10 my W S Europe 1629. S s l Schm arb t. 90
7073 spathuláta *Ph* spatula-leaved or 15 my jn W N Amer 1806 B co
7074 apiifólia *Ph* Parsley-leaved or 15 my jn W N Amer 1812 B co
7075 Oxyacántha *E B* common-Haw or 15 my jn W Britain hed. S co Eng. bot. c. ic.
β rósea *red-flowered* or 15 my jn R .... B co
γ major *great-fruited* or 15 my jn W .... B co
δ præcox *Glastonbury* or 15 my jn W .... B co
ε pléna *double-flowered* or 15 my jn W .... B co
ξ aúrea *yellow-berried* or 15 my jn W .... B co
7076 eriocárpa *Lindl* woolly-fruited or 15 my jn W Britain woods B co
7077 monógyna *Pall* one-styled or 15 my jn W Siberia ... B co Pall ross 1 t. 12
7078 Azarólus *W* Azarole or 15 my jn W S Europe 1640 B co Bot rep 579
7079 tanacetifólia *B R* Tansy-lv Azar or 15 my jn W Greece 1789 B co Bot rep 591
7080 odoratissima *B R* sweet-sc Azar or 15 my jn W Crimea . . B co Bot. rep 590
7081 pentagyna *W & K* five-styled or 15 my jn W Hungary 1820 B co
7082 torminális *L.* Wild-service tm 50 ap my W England woods S co Eng bot. 298
7083 nigra *W & K* black or 20 ap my W Hungary 1819 G co Dend. brit 64

†1133 PY'RUS *Sm* PYRUS *Rosaceæ Sp. 24—30*
7084 arbutifólia *Ph* red-berried or 4 my jn W N Amer 1700 G co Mill ic. 100
7085 melanocárpa *Ph* black fruited or 4 my jn W N Amer 1700 S co Schm. arb t 86



History, Use, Propagation, Culture,

blossomed, which they plant on little mounts for ornament, and dwarfs in pots for their apartments. It appears from Turner's Herbal, that the apricot was cultivated here in 1562, and in Hackluyt's Remembrancer, 1582, it is affirmed, that the apricot was procured out of Italy by Wolfe, a French priest, gardener to Henry VIII The fruit seems to have been known in Italy in the time of Dioscorides, under the name of *Præcocia*, probably, as Regner supposes, from the Arabic, *Berkoch*, whence the Tuscan, *Bacoche* or *Albicocco*, and the English *Apricock*, or, as Professor Martyn observes, a tree when first introduced, might have been called a *præcox*, or early fruit, and gardeners, taking the article *a* for the first syllable of the word, might easily have corrupted it to apricocks The orthography seems to have been finally changed to apricot about the end of the last century

There are fifteen or twenty excellent varieties of apricot, besides the peach apricot, a large fruit supposed to be a hybrid between a peach and an apricot The trees are generally budded on plum stocks, and always trained against walls Apricots do not force freely

1130 *Chrysobalanus* From χρυσος, gold, and βαλανος, an acorn, in allusion to the size, color, and form of its fruit C Icaco (the West Indian name) bears flowers and fruit not unlike the plum, which is sold in the markets of the West Indies, and eaten both raw and preserved Both species grow well in a sandy loam Large cuttings root best, taken off at a joint, and planted thinly in a pot of sand, without having their leaves injured, and a hand glass placed over them (*Bot Cult* 39.)

1131. *Mespilus* In Greek μισπιλη, from μισος, half, and πιλος, bullet, the fruit resembling half a bullet or round ball In French it is called *nefle*, from the Celtic *naff*, which also signifies truncate M. Germanica, bears a turbinated berry, which is eaten raw in a state of incipient decay It is little cultivated, but one or two trees are generally introduced in shrubberies or in complete orchards There are one or two varieties besides the wild sort, what is called the Dutch medlar is reckoned the best It is grafted on seedlings of the

7057 Flowers sessile, Leaves ovate acuminate simply serrate, Petioles without glands
7058 Flowers sessile, Leaves ovate acuminate doubly serrate, Petioles with glands

7059 Leaves orbicular alternate, Flowers in loose racemes
7060 Leaves wedge-shaped hoary beneath, Stamens smooth, Flowers in large panicles

DI-PENTAGYNIA.

7061 Unarmed, Leaves lanceolate downy beneath, Flowers sessile solitary
7062 Leaves cuneate oblong woolly beneath, Petals roundish or oval, Stamens smooth, Fruit obl. ovate

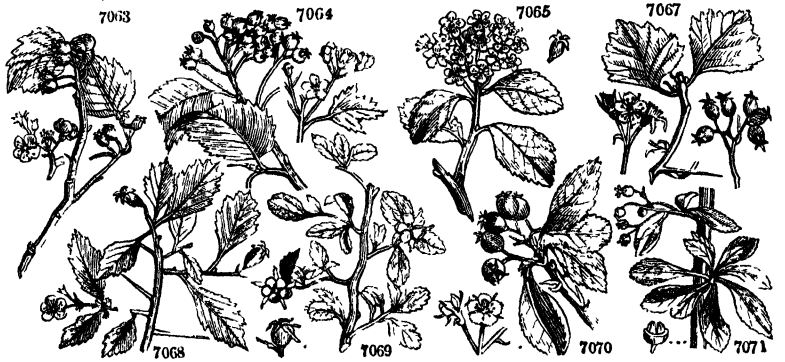
7063 Spiny, Leaves cordate ovate cut angular smooth, Petioles and cal glandular, Styles 5
7064 Spiny, Leaves cordate ovate cut angular smooth, Pet. and cal without glands, Styles 5
7065 Spiny or not, Lvs ovate ellipt. cut serrate somewhat plaited and hairy, Cal villous, Sep lin.-lanc. Styles 3

7066 Spiny, Leaves ellipt unequally serr smooth, Pet and cal glandular, Berries round with 5 seeds
7067 Spiny, Lvs ov wedge-shaped ang smooth shining, Pet. stip and cal glandular, Berries oval with 5 seeds
7068 Spiny, Lvs obov cuneiform angul smooth shining, Pet stip and cal glandular, Berries turbin 4-seeded
7069 Spiny, Leaves cuneiform ovate cut serrate, Sepals lanc cut the length of pet Styles 5
7070 Spiny or not, Leaves obovate cuneiform smooth serrated, Cal villous, Sepals subulate entire
7071 Spiny, Leaves obovate cuneiform subsessile shining coriaceous, Sepals lanc serrate, Styles 2

7072 Spiny, Leaves lanc ovate crenate, Cal of fruit obtuse
7073 Spiny, Leaves fascicled small very much narrowed downwards subpatulate trifid, Cal downy
7074 Spiny, Leaves deltoid cut-lobed, Tube of calyx oblong with serrated sepals
7075 Leaves obtuse subtrifid serrated smooth, Pedunc. and cal nearly smooth, Sepals lanc. acute

7076 Leaves obtuse 3-lobed serrated smooth, Pedunc and calyx covered with wool
7077 Spiny, Leaves 5-cleft cut wedge-shaped, Lower lobes divaricating, Stipules half cordate
7078 Leaves obtuse subtrifid toothed pubescent, Sepals ovate
7079 Leaves pinnatifid hairy on both sides, Segments serrate, Flowers with bractes
7080 Leaves pinnatifid downy on both sides, Segments trifid
7081 Leaves ovate trifid serrated at the axillæ of the veins beneath hairy, Pedunc and cal pubesc. Styles 5
7082 Leaves cordate ovate cut-lobed serrated, Lower lobes divaricating, Flowers corymbose
7083 Leaves lobed sinuate serrated at the base truncate cuneate beneath villous, Calyxes villous, Styles 5

7084 Unarmed, Lvs obovate obl acute crenate toothed downy beneath, Rachis glandular above, Cal downy
7085 Unarmed, Leaves obovate obl acuminate serrated smooth beneath, Rachis glandular above, Cal. smooth



and Miscellaneous Particulars

wild medlar, or on any other species of the same genus often on the common thorn. The other species bears fruit similar to M. germanica, but more dry

1132. *Cratægus* From κρατος, force, on account of the extreme hardness of the wood of the original Cratægus, which appears to be what is now called Pyrus aria, the beam-tree This is a very ornamental genus of small hardy trees, valuable for the neatness of their foliage, the earliness of their flowers in spring, and the rich colors of their berries in autumn

C oxyacantha, οξυς, ακανθα, sharp-spine, is the best hedge plant in Europe, and also furnishes some highly ornamental varieties, especially the double-blossomed and scarlet-blossomed.

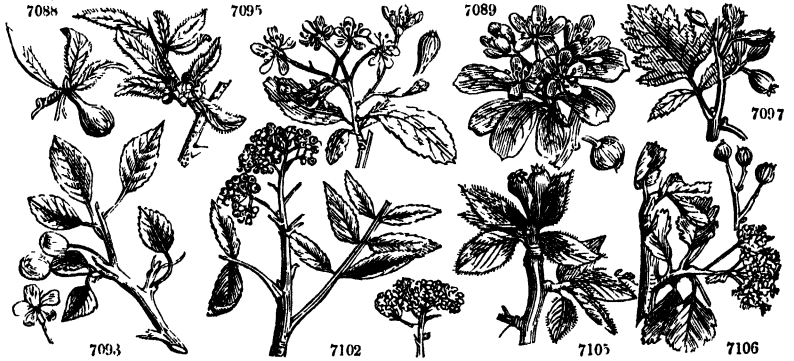
The fruit of C odoratissima is very agreeable That of the Azarole (*âl z'arour* Arabic, according to Castel and John de Souza) is much esteemed in the South of Europe In this country it rarely arrives at perfection

1133 *Pyrus* From the Celtic *peren*, the Anglo-Saxons made *pere*, the English, *pear*, the French, *poire*, and the Latins, *pyrus*, or for the fruit, *pyrum* From the Celtic word *aps*, which also signified a fruit resembling an apple, the Greeks obtained απιος, the English, *apple*, the Germans, *apfel*. To this day the French distinguish a tribe of small fruited apples by the name *aps*

P malus, *Pomme*, Fr, *Apfel*, Ger, and *Pomo*, Ital., is the most popular of British fruits None can be brought to so high a degree of perfection with so little trouble, and of no other are there so many excellent varieties in general cultivation, calculated for almost every soil, situation, and climate, which our islands afford Very good apples are grown in the Highlands and Orkneys, and even in the Shetland isles, (*Calcd Hort Mem* vol. ii) as well as in Devonshire and Cornwall, some sorts are ripe in the beginning of July, and others, which ripen later, will keep till June. Unlike other fruits, those which ripen latest are the best

The tree attains a great age, is in general very prolific, and the timber is valuable for the turner, millwright

7086	commúnis *W.*	common-Pear		or	20	ap	W	England woods.	G	co	Eng. bot. 1784
7087	Pollvéria *W*	woolly-leaved		or	15	ap jn	W	Germany 1786.	G	co	
7088	salicifólia *W.*	Willow-leaved		or	20	my jn	W	Russia 1780	G	co	Bot reg 514
7089	nivális *W.*	white-leaved		or	6	my	W	Austria ...	L	p l	Jac. aus 2 t. 107
7090	Málus *W.*	Apple-tree		fr	20	ap my	W	Britain woods	G	r m	Eng bot. 179
7091	spectábilis *W*	Chinese-apple		fr	20	my	Pk	China 1780	G	co	Bot. mag 267
7092	prunifólia *W*	Siberian-crab		fr	20	ap my	Pk	Siberia 1758	G	co	Mill ic 2 t. 269
7093	baccáta *W*	small-fruited		or	15	ap my	Pk	Siberia 1784.	G	co	Dend brit 51
7094	coronária *W*	sweet-sc crab		or	20	my	Pk	Virginia 1724	G	co	Bot mag 2009
7095	angustifólia *W*	narrow-leaved		or	20	my	Pk	N Amer 1750	G	co	Dend brit 132
7096	A'ria *W*	white Beam-tr		tm	40	my jn	W	Britain mountains	G	co	Eng bot 1858
7097	intermédia *W*	Swedish Bm-tr		tm	40	ap my	W	Sweden 1789	G	co	Fl dan 301
7098	hýbrida *Monch*	hybrid		tm	40	ap my	W	....	S	co	Monch weis t 9
7099	pinnatífida *L. B.*	Bastard Serv		tm	40	my jn	W	England rocks	S	co	Eng bot. 2331
	Sórbus hýbrida W										
7100	doméstica *L B*	True Service		fr	30	my jn	W	England mountains	S	co	Eng bot 350
7101	aucupária *L B*	Mountain Ash		or	30	my jn	W	Britain mountains	S	co	Eng bot 337
7102	americána *Ph*	purple-berried		or	15	my jn	W	Canada 1782	L	co	Dend brit. 54
7103	microcárpa *Ph*	small-fruited		or	10	my jn	W	N Amer ...	L	co	
7104	Chamæ Mespilus *La*	Bastard Quince		or	8	my jn	W	Pyrenees 1683	L	co	Schm arb t 87
7105	sinuata *Thoun*	Mt Sinai Medl		fr	20	my jn	W	Levant 1820	G	co	Dend brit 49
7106	édulis *W*	eatable		fr	10	ap my	W	France 1816	G	co	Dend. brit 52
7107	dioica *W.*	dioecious		cu	10	ap my	W	 1818	G	co	
1134	CYDO'NIA *Juss*	Quince				*Rosaceæ*	*Sp* 3—4				
7108	vulgáris *W en*	common		fr	20	my jn	W	Austria 1573	L	h l	Jac aus 4 t 342
7109	japónica *P S*	Japan		or	4	ja d	S	Japan 1815	L	r l	Bot mag 622
	β alba	*white*		or	4	ja d	Pk	... .	L	r l	Bot cab. 541
7110	chinénsis *Thoun*	Chinese		fr	15	my jn	Pk	China 1818	L	co	Bot reg 1243
†1135	PHOTI'NIA *Lndl*	Photinia				*Rosaceæ*	*Sp* 3—5				
7111	serrulata *Lndl*	smooth-leaved		or	10	ap jl	W	China 1804.	C	p l	Bot. mag 2105
	Cratægus glábra B										
7112	arbutifólia *Lndl*	Arbutus-lvd		or	10	jl au	W	California 1796	G	p l	Bot reg 491
7113	dúbia *Lndl*	doubtful		or	10	...	W	Nepal 1821.	L	p l	Linn tr. 13. t 10
	Mesp bengalensis Hort										
1136	RAPHIOLE'PIS *Lndl*	Indian Hawthorn				*Rosaceæ*	*Sp.* 4—6				
7114	indica *Lndl*	common		or	4	f au	W	China 1806	C	p l	Bot. mag 2461
7115	rúbra *Lndl*	red		or	4	f au	W	China 1820.	C	p l	Lindl coll 3
7116	phæostémon *Lndl*	long-stamened		or	4	f au	W	China 1820	C	p l	Bot reg 468
7117	salicifólia *Lndl*	willow-leaved		or	3	f au	W	China 1821	C	p l	Bot reg 652
†1137	ERIOBO'TRYA. *Lndl*	Loquat				*Rosaceæ*	*Sp* 1—4				
7118	japónica *Lndl*	common		fr	15	o	W	Japan 1787	G	s l	Vent malm. 19



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and cabinet maker The Romans had twenty-two varieties, and there are now several hundreds in Britain and France, and some excellent sorts from America They are usually divided into dessert, baking, and cyder fruits, the first high flavored, the second such as fall or become mellow in baking or boiling, and the third austere, and generally fruits of small size Besides this division, apples are classed as pippins or seedlings, pearmains or somewhat pear-shaped fruits, rennets or queens, specked fruits, calvilles or white-skinned fruits, russets or brown fruits, codlings or falling fruits, and burknots, which grow readily by cuttings Most sorts of apple form ugly trees as standards, but are otherwise very ornamental in shrubberries from their blossoms The crabs, and especially the varieties obtained from the Siberian crab, form much the handsomest heads, and have also more brilliant blossoms The apple may be propagated by layers, and many sorts by cuttings, but the usual mode is by grafting on crab-stocks, and for dwarfing on stocks of the paradise apple

P communis, *Poirier*, Fr, *Birnbaum*, Ger, and *Pero*, Ital, is a fruit-tree next in popularity and value to the apple tree It is a greatly superior dessert fruit, but not so valuable for culinary purposes and the press There are fewer good sorts of pears, in proportion to the number of current varieties, than of apples, but a few, as the Jargonelles, Bergamots, Beurrées, Chaumontelles, &c are most exquisite dessert fruits, and are much easier of digestion than the apple It arrives in greater perfection in France and the north of Italy than in England The Chaumontelles of Guernsey are in high repute, as are the St Germain's and other sorts of Picardy, and the Beurrées of Milan The Romans had thirty-six varieties, and there are many hundreds in the French and British nurseries, most of them good for little Professor Van Mons, of Brussels, and M Duquessie, of Mons, fruited about 8000 seedling pears, from which they obtained nearly 800 sorts worth cultivating (*Neill's Hort Tour*) The varieties are divided into dessert and baking fruits, and also into melting or butter pears, *beurrées*, Fr, breaking pears, *crevers*, Fr, and perry, *poirée*, Fr, fruits The tree is grafted on seedlings of the same species, and for dwarfing and precocity on the quince It is a much handsomer upright growing tree than the apple, more durable, and its wood hard and valuable for the turner and millwright, but its blossoms being white, are less showy than those of the apple

P domestica, and the other species of service are very ornamental trees, their leaves are mostly white

7086 Leaves ovate serrated, Pedunc. corymbose
7087 Leaves serrated downy beneath, Flowers corymbose
7088 Leaves lin lanc hoary white with down beneath, Fl. axillary solitary subsessile
7089 Leaves ovate stalked entire silky beneath, Flowers corymbose
7090 Umbel sessile, Leaves ovate oblong acuminate serrated smooth, Claws shorter than cal Styles smooth
7091 Umbel sessile, Leaves oval oblong serrated smooth, Claws longer than cal Styles woolly at base
7092 Umbel sessile, Pedunc pubescent, Styles woolly at base, Leaves ovate acuminate
7093 Leaves equally serrulate, Pedunc clustered, Apples like berries, Cal. deciduous
7094 Leaves cordate cut-serrate angular smooth, Pedunc corymbose
7095 Leaves lanc oblong shining tooth-serrated narrowed at base entire, Pedunc. corymbose
7096 Leaves roundish ovate cut serrate hoary beneath, Flowers corymbose
7097 Leaves ovate lanceolate cut-lobed toothed beneath snow-white, Flowers corymbose
7098 Leaves pubescent beneath pinnated with the last pinna very large pinnatifid and simple
7099 Leaves half pinnated downy beneath

7100 Leaves pinnated villous beneath
7101 Leaves pinnated smooth on both sides
7102 Leaves pinnated, Leaflets acute almost equally serrated and common petiole smooth
7103 Lvs pinnated, Leaflets acuminate unequally cut serrated and common petiole smooth, Serratures bristly
7104 Leaves oval acutely serrated smooth, Fl in corymbose heads [mucronate
7105 Leaves ovate oblong entire somewhat downy, Peduncle simple downy corymbose
7106 Leaves oblong cuneate at base unequally and doubly serrated hoary beneath, Fl corymbose
7107 Leaves oval serrated, Fl solitary diœcious, Pet. linear the length of calyx

7108 Leaves downy deciduous
7109 Leaves smooth shining evergreen

7110 Leaves smooth deciduous

7111 Leaves oblong acute serrulate, Pedicels longer than calyx

7112 Leaves oblong lanc distantly toothed, Pedicels shorter than calyx
7113 Leaves lanceolate distantly serrated, Panicle hairy

7114 Raceme imbricated with persistent foliaceous bractes, Petals roundish
7115 Leaves ovate lanceolate acuminate at each end, Pet lanc Stamens upright shorter than calyx
7116 Leaves long lanceolate, Stamens spreading longer than the calyx
7117 Leaves linear lanceolate, Sepals subulate much longer than stamens, Panicle contracted

7118 Leaves lanceolate serrated



and Miscellaneous Particulars

underneath, and they are generally profusely covered with blossoms and fruit. Of P domestica there are two varieties, the pear and apple-shaped, cultivated in some parts of France and near Genoa for their fruits Those like the medlar and quince are not eaten till in a state of incipient decay There are but few of the true service in English gardens, but the P hybrida and pinnatifida are common, and their fruit, which resembles that of the mountain ash, is sometimes made use of

P aucuparia and Americana are handsome trees for shrubberies, the former very popular in suburban gardens

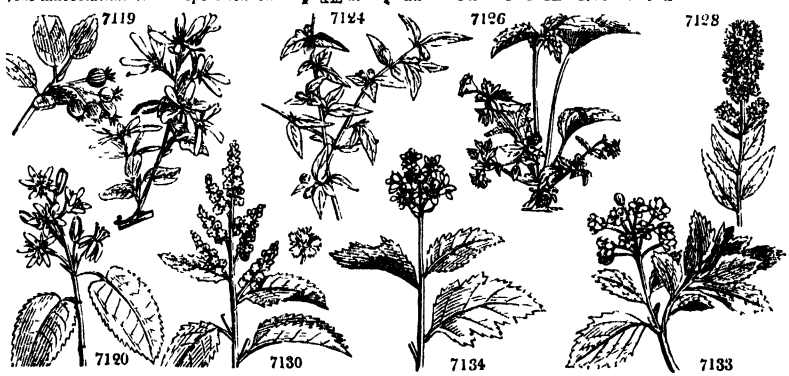
1134 *Cydonia* So called from being native of the ancient town Cydon in the Island of Crete; or perhaps it may be a corruption of malus-*cotonea*, by which the Latins designate the fruit. C vulgaris is a deformed low tree, sometimes cultivated for its fruit, which is a pome with a persisting calyx like the medlar It is used as a marmalade for flavoring apple-tarts. It prefers moist loam, and is raised by layers It is most in use, however, as a stock for the pear C japonica is a beautiful low bush, remarkable for the brilliancy of its blossoms, which vary from the richest scarlet to the most delicate blush color It is hardy, and well adapted for single plants, upon grass, or for forming ornamental hedges in flower gardens

1135 *Photinia* So named, we believe, from φως φωτος, light, in allusion to the lucid surface of the leaves of the species P. serrulata and arbutifolia are elegant shrubs, and nearly hardy The latter succeeds perfectly against a south wall

1136 *Raphiolepis.* From ραφις, a needle, and λεπις, a scale, in allusion to the numerous, subulate, persistent bracteæ, which are mixed among the racemes of flowers. Pretty Chinese small shrubs, formerly known under the collective name of Cratægus indica

1137 *Eriobotrya.* From εριον, wool, and βοτρυς, a bunch of grapes, in allusion to the woolliness of its raceme This genus is excellently characterized by the structure of its seed, of which the radicula is retracted within the cotyledons, not exserted as in all the other genera of Pomaceæ E Japonica produces an agreeable fruit about the size of a gooseberry, of a fine yellow color, and, according to Sir Joseph Banks, as good as the mango To ripen it with flavor, it requires the temperature of the stove, and comes into use in March. It may be grafted on any species of the genus, or on the hawthorn

†1138. AMELAN'CHIER. *Lindl*	Amelanchier					*Rosaceæ*	*Sp.* 3—4							
7119 vulgáris *Lindl*	Alpine		or	6	ap my	W	S Europe	1596	L	co	Bot. mag 2480			
7120 Botryápium *Lindl*	snowy		or	12	ap my	W	N Amer	1746.	L	co	Schm. arb t. 84			
7121 ovális *Lindl*	oval-leaved		or	8	ap my	W	N. Amer.	1800	L	co				
†1139 COTONEAS'TER. *Lindl*	Cotoneaster.					*Rosaceæ*	*Sp* 4—5							
7122 vulgáris *Lindl*	dwarf		or	4	ap my	Pk	Europe	1656	L	co	Schm arb t 89			
7123 tomentósa *Lindl*	quince-leaved		or	4	ap my	Pk	....	1759	L	co				
7124 acuminata *Lindl*	taper-pointed		or	4	ap my	Pk	Nepal	1820.	L	co	Linn tr 13 t 9			
7125 affinis *Lindl.*	downy Nepal		or	4	ap my	Pk	Nepal	1820	L	co	Bot. cab. 1522			
1140 WALDSTE'INIA *W*	Waldsteinia					*Rosaceæ*	*Sp* 1							
7126 geoides *W*	Avens-like		△	pr	¾	jn jl	Y	Hungary	1804.	D	l p	Bot. cab. 492			
†1141 SPIRÆ'A *W*	Spiræa					*Rosaceæ*	*Sp* 23—34							
7127 lævigáta *W*	smooth-leaved		or	4	ap jn	R	Siberia	1774	L	p l	Sch. arb. 1 t 49			
S altaica Pall														
7128 salicifólia *W cn.*	willow-leaved		or	5	jn au	Pk	Britain	mod.h.	L	co	Eng bot 1468			
β alba	*white-flowered*		or	5	jn au	W	N Amer	...	L	co	Mil ic t 257 f 2			
7129 carpinifólia *W en*	Hornbeam-lvd		or	4	jn au	W	N Amer.	...	L	co	Dend brit 66			
7130 tomentósa *W*	tomentose		or	5	au s	Pk	N Amer	1736.	Sk	p l	Sch arb 1 t. 51			
7131 alpina *W*	Alpine		or	3	jl	W	Siberia	1806	Sk	p l	Pall ros 1 t 20			
7132 hypericifólia *W*	Italian May		or	5	ap my	W	N Amer	1640	L	co	Sch arb 1 t 20			
7133 chamædrifólia *W*	Germander-lvd		or	1½	jn jl	W	Siberia	1789	L	p l	Pall ros 1 t 15			
7134 ulmifólia *W*	Elm-leaved		or	3	jn jl	W	Carniola	1790	L	p l	Jac vin 2 t. 140			
7135 betulifólia *Pall*	Birch-leaved		or	2	jn jl	Pk	N Amer	1812	L	p l	Dend brit 67			
7136 crenáta *W*	Hawthorn-lvd		or	2	ap my	W	Siberia	1739	L	p l	Sch. arb 1 t 55			
7137 oblongifólia *W en*	oblong-leaved		or	3	my jn	W	Hungary	1816	L	p l	Pl. rar h 3.t 235			
7138 triloba *W*	three-lobed		or	3	my	W	Siberia	1801	L	p l	Dend. brit 68			
7139 thalictroides *W*	MeadowRue-lv		or	2	my	W	Siberia	1790	Sk	p l	Pall ros 1 t 18			
7140 obováta *W en*	obovate-leaved		or	3	my jn	W	Hungary	1816	Sk	p l				
7141 opulifólia *W*	Gueld Rose-lv		or	5	jn jl	W	N Amer	1690	L	co	Sch arb 1 t 52			
7142 sorbifólia *W*	pinnated		or	4	au	W	Siberia	1759	Sk	co	Sch arb 1 t 58			
β alpina	*large-flowered*		or	3	au	W	Siberia	1817	Sk	co	Pall ros 1 t 25			
7143 bélla *Sims*	pretty		or	2	jl au	R	Nepal	1820	L	co	Bot mag 2426			
7144 corymbósa *Lodd*	corymbose		or	1½	jl au	W	N Amer ?	1819	L	co	Bot cab 671			
7145 crataegifólia *Link*	Hawthorn-lvd		or	3	jl au	W	. ..	1823	L	co				
7146 Arúncus *W*	Goat's-beard		or	4	jn jl	W	Siberia	1633	D	p l	Pall ros 1 t 26			
7147 Filipéndula *W*	Dropwort	△	or	2	jn o	W	Britain	m pas	D	co	Eng bot 284			
β plena	*double-flowered*	△	or	1½	jn o	W			D	co				
7148 Ulmária *W*	Meadow-sweet	△	or	2	jn o	W	Britain	m me	D	co	Eng bot 960			
β plena	*double-flowered*	△	or	2	jn o	W	Britain	m me.	D	p l				
7149 lobáta *W*	palmated	△	or	2	jl au	R	Siberia	1765	D	p l	Jac vin. 1. t 88			
1142 GILLE'NIA *Monch*	Gillenia					*Rosaceæ*	*Sp* 2							
7150 trifoliáta *Monch*	three-leaved	△	or	2	jn au	R w	N Amer.	1713	D	p l	Bot mag 489			
7151 stipulácea *W.*	large-stipuled	△	or	2	jn au	R w	N Amer	1805	L	co				
1143 SESU'VIUM *W*	Sesuvium					*Ficoideæ*	*Sp* 5—7							
7152 Portulacástrum *W*	Purslane-lvd	△	or	2	jn jl	R w	W Indies	1692	C	r m	La ill t 434 f 1			
7153 séssile *P S*	sessile-flowered	△	or	3	jn jl	R w	W Indies	...	C	r m	Plant grass 9			
7154 revolutifólium *W en*	revolute-leaved	△	pr	1½	jl au	R w	S. Amer	.	D	l p	Bot. mag 1701			
7155 longifólium *W en*	long-leaved		pr	1½	jl au	R w	S Amer	1816	S	l p				
7156 répens *W. en*	creeping		pr	1	jl au	R w	E. Indies	1816	S	l p	R. am 5 t 72 f 1			
1144 AIZO'ON *W*	Aizoon					*Ficoideæ*	*Sp* 4—16							
7157 canariénse *W*	Purslane-lvd.		or	1	jl au	Y	Canaries	1731	S	r m	Bot rep 201			
7158 glinoides *W*	hairy		or	1	jn au		C G H	1774	C	r m				
7159 hispánicum *W*	Spanish		or	¾	jl au	Ap	Spain	1728	C	r m	Plant grass 80			
7160 lanceolátum *W*	spear-leaved		or	¾	au	Pk	C G H.	1752	S	r m				



History, Use, Propagation, Culture,

1138 *Amelanchier* According to Clusius, *Amelancier* is the old Savoy name of the plant. It has been adopted by Mr Lindley as the title of a small group of plants nearly related to Pyrus, but curiously distinguished by the 10-cells of the ovary

1139 *Cotoneaster* Named in allusion to the cottony nature of the fruit and young branches of the most common species Small inconspicuous bushes, with solitary pink flowers almost hidden among the leaves

1140 *Waldsteinia* Named by Willdenow, in honor of Franz de Waldstein, a distinguished German botanist. Plants with the aspect of Potentilla or rather Geum

1141. *Spiræa* Σπειρα, signifies a cord *Spireon* is Pliny's name for a plant the blossoms of which are used in garlands. That plant is thought to have been the Viburnum Lantana. This genus affords some orna-

7119 Leaves roundish elliptical acute pubescent beneath, Sepals smooth, Germen villous
7120 Leaves oblong elliptical cuspidate smooth, Sepals smooth, Germen pubescent
7121 Leaves roundish elliptical acute smooth, Petals obovate, Sepals and germen pubescent

7122 Leaves ovate rounded at base, Cal. and pedunc. naked
7123 Leaves elliptical obtuse at each end, Cal. and pedunc. woolly
7124 Leaves ovate acuminate a little hairy on each side, Cal and pedunc naked
7125 Leaves ovate attenuate at base, Cal and pedunc woolly

7126 Leaves radical stalked 5-lobed

7127 Leaves lanceolate entire sessile, Racemes compound

7128 Leaves oblong serrated smooth, Racemes decompound

7129 Leaves ovate elliptical acute at each end smooth coarsely serrated, Racemes spreading panicled
7130 Leaves lanceolate unequally serrate downy beneath, Flowers doubly racemose
7131 Leaves linear-lanceolate toothletted smooth, Corymbs lateral
7132 Leaves obovate entire, Umbels sessile
7133 Leaves obovate cut-toothed at end, Corymbs stalked
7134 Leaves ovate lanceolate doubly toothed, Corymbs stalked
7135 Leaves broad ovate cut-serrate smooth, Corymbs terminal compound leafy
7136 Leaves obovate acute toothed at end 3-nerved, Corymbs close stalked
7137 Leaves oblong lanceolate serrated at end and entire, Corymbs stalked
7138 Leaves roundish bluntly lobed toothed, Umbels stalked
7139 Leaves obovate obtuse 3-lobed, Umbels lateral sessile
7140 Leaves obovate obtuse at the end bluntly and unequally 3-nerved, Corymbs axillary sessile
7141 Leaves ovate 3-lobed serrated, Corymbs stalked
7142 Leaves pinnated, Leaflets even serrated, Flowers panicled

7143 Leaves ovate acute smooth serrated stalked glaucous beneath, Cymes pubescent
7144 Leaves oblong bluntly and irregularly serrated, Flowers in dense corymbs
7145 Leaves obovate obtuse forwards doubly serrated smooth, Corymbs terminal compound, Flowers capitate
7146 Leaves supra-decompound, Spikes panicled, Flowers dioecious
7147 Leaves pinnated, Leaflets even serrated, Flowers corymbose

7148 Leaves pinnated downy beneath, The end lobe larger and 3-lobed, the side ones undivided

7149 Leaves pinnated smooth, The end lobe 7-lobed, the lateral 3-lobed, Corymbs proliferous

7150 Stipules linear entire, Calyx tubular campanulate
7151 Stipules leafy ovate cut-toothed, Calyx campanulate

7152 Leaves spatulate oblong, Joints of stem tumid, Fl stalked
7153 Flowers sessile, Leaves linear oblong flat
7154 Leaves linear lanc revolute at edge, Fl terminal sessile
7155 Leaves lin spatulate, Joints of stem equal, Fl stalked
7156 Leaves lanc spatulate, Joints of stem creeping filiform, Fl. stalked

7157 Leaves cuneiform ovate, Flowers sessile
7158 Leaves roundish cuneiform pilose, Fl sessile, Cal hairy
7159 Leaves lanceolate, Flowers sessile apetalous
7160 Leaves lanceolate, Flowers panicled



and Miscellaneous Particulars

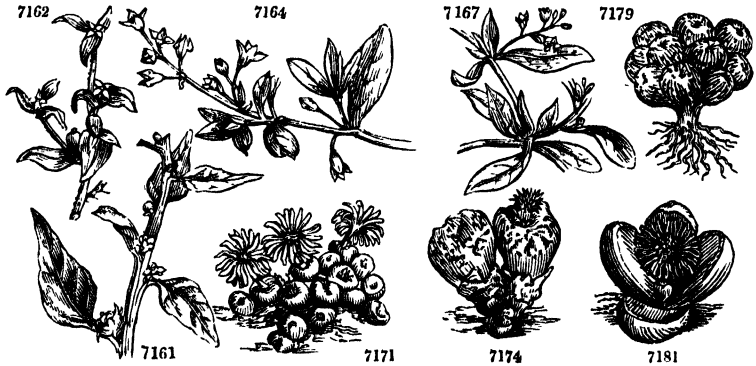
mental shrubs, free flowerers, and of easy culture, as S. salicifolia, hypericifolia, tomentosa, &c. The herbaceous species, especially filipendula, ulmaria, and aruncus, are also very ornamental

1142. *Gillenia* A genus well divided by Monch from Spiræa, from which it differs in so many respects as to make it astonishing that the species should ever have been referred to that genus, even by the most unreasonable advocate of the exploded doctrines of synthetical botany. Pretty North American plants with lobed discolored leaves, and white flowers

1143 *Sesuvium* Meaning of the name unknown Inelegant plants with the habit of purslane.

1144 *Aizoon* From αει, always, and ζαω, alive, always alive, or evergreen A name given by the Greeks to the Sempervivum. This is an uninteresting genus, only known among the curious.

1145. TETRAGO'NIA	*W*	TETRAGONIA				*Ficoideæ*		*Sp* 10—16.					
7161 expánsa *W*		N Zeal spinage		cul	b	au s	G	N. Zeal.	1772.	C	s l	Bot mag 2362	
7162 crystállina *W*		Diamond		un	2	jn	G	Peru	1788	S	s.l	Plant. grass. 54	
7163 fruticósa *W.*		shrubby		un	2	jl s	G	C G H	1712	C	s l	Mil ic 2 t 263 f 2	
7164 decúmbens *W*		trailing		un	1	jl.s	G	C G H	1758	C	s l	Plant grass 23	
7165 Tetrápteris *Haw.*		winged-seeded		un	2	jl s	G	C G. H.	1795	C	s l		
7166 spicáta *W*		spiked		un	1	jl	G	C G H	1795	C	s.l		
7167 herbácea *W*		herbaceous		un	½	jn jl	G	C G H.	1752	C	s l	Co hort. 2. t 109	
7168 echináta *W*		Hedge-hog		un	½	my.au	G	C G H.	1774	C	s l	Plant grass 113	
7169 lineáris *Haw*		linear		un	1	s	G	C G H	1819	C	s l		
7170 obováta *Haw*		obovate		un	1½	...	...	C G. H	1821	C	s l		
1146 MESEMBRYAN'THEMUM *L*		FIG-MARYGOLD.				*Ficoideæ*		*Sp* 291—350					
7171 minútum *Haw*		minute		cu	1in	s n	Pk	C G H	1795	C	s l	Bot. mag 1376	
7172 minimum *Haw*		small		cu	1in	s d	Pa.Y	C G H	1776	C	s l		
7173 perpusíllum *Haw*		very small		cu	½	s d	Pa Y	C G. H	1819	C	s.l		
7174 obcordéllum *Haw*		obcordate		cu	½	f o	W	C G H	1776	C	s l	Bot. mag 1647	
7175 obconéllum *Haw*		conical		cu	½	f o	W	C G. H.	1786.	C	s l		
7176 ficiformе *Salm*		fig-like		cu	1in	f o	...	C. G. H	1819	C	s l		
7177 truncatéllum *Haw*		truncated		cu	1in	f o	Pa.Y	C G H	1795.	C	s l		
7178 fibulitórme *Haw*		cloth-button		cu	1in	...	...	C G H	1795	C	s l		
7179 uvæformе *Haw*		berry-like		cu	1in	...	...	C G H	1890	C	s l	Bur dic t 10 f 2	
7180 nuciformе *Haw*		Nut-shaped		cu	1in	...	...	C G H	1790	C	s l		
7181 testiculáre *Ait*		short white-lvd		cu	½	n	W	C G H	1774	C	s l	Bot mag 1573	
7182 octophýllum *Haw*		eight-leaved		cu	½	n	Y	C G H	1819	C	s l		
7183 obtúsum *Haw*		obtuse-cloven		cu	½	mr ap	Pk	C G H	1792	C	s l		
7184 fissum *Haw*		cleft-leaved		cu	½	...	...	C G H	1776	C	s l		
7185 digitiformе *Thunb*		finger-leaved		cu	½	...	...	C G H	1775	C	s l		
7186 magnipúnctum *Sal*		large-dotted		cu	½	...	Y	C G H.	1822	C	s l		
β uncíale		*small*		cu	½	...	Y	C G H	1822	C	s.l		
γ affine		*allied*		cu	½	...	Y	C G H	1822	C	s l		
7187 cánum *Haw*		hoary		cu	1in	...	Y	C G H	1795	C	s l		
7188 aloides *Haw*		aloe-like		cu	½	. .	Y	C G H	1819	C	s l		
7189 canínum *Haw*		dog-chap		gr	½	au o	Y	C G H	1717	C	s l	Plant grass. 95	
7190 lupínum *Haw*		wolf's-chap		gr	½		Y	C G H		C	s l		
7191 vulpínum *Haw*		fox-chap		gr	½	au o	Y	C G H	1795	C	s l		
7192 hýbridum *Haw*		bastard		gr	½	...	Y	C. G H	...	C	s l		
7193 álbidum *L*		white		gr	½	jl au	Y	C G H	1714	C	s l	Bot mag 1824	
7194 tigrínum *Haw*		tiger-chap		gr	½	s n	Y	C G H	1790	C	s l	Bot reg 200	
7195 felinum *Haw*		cat-chap		gr	½	au n	Y	C G H	1730	C	s l	Plant grass 152	
7196 mustellinum *Haw*		weasel-chap		gr	½		Y	C G H	1820	C	s l		
7197 murinum *Haw*		mouse-chap		gr	½	s	Y	C G. H	1790	C	s l		
7198 dolábriformе *Haw*		hatchet-leaved		gr	½	my n	Y	C G H	1705	C	s l	Plant grass 6	
7199 scapigerum *Haw*		great-scaped		cu	½	au s	Y	C G. H	1823.	C	s l		
7200 carinans *Haw*		keeled		cu	½	...	...	C G H	1818	C	s l		
7201 denticulátum *Haw*		toothed		or	½	ap	Y	C G H	1793	C	s l		
β glaúcum		*glaucous*		or	½	ap	Y	C G H.	...	C	s l		
γ candidissimum		*fair*		or	½	ap	Y	C G H	...	C	s l		
7202 robústum *Haw*		robust		or	½	...	Y	C. G H	1795	C	s l		
7203 compáctum *H K*		compact		or	½	n	Y	C G H	1780	C	s l		
7204 quadrífidum *Haw*		quadrifid		or	½	n	Y	C G H	1795	C	s.l		
7205 bífidum *Haw*		bifid		or	½	n	Y	C G. H	1795	C	s l		
7206 bibracteátum *Haw*		double-bracted		or	½	ap n	Y	C G H	1803	C	s l		
7207 rostrátum *L*		heron-beaked		or	½	ap	Y	C G H	1732	C	s l	Di el t.186 f 229	
7208 tuberculátum *Mill*		warted		or	½	ap	Y	C. G H	1732	C	s l		
7209 ramulósum *Haw*		small heron-be		or	½	mr n	Y	C G H	1791	C	s l		
7210 pisiformе *Haw*		Pea-shaped		or	½	.	W	C G H	1796.	C	s.l		



History, Use, Propagation, Culture,

1145 *Tetragonia* From τετρας, quaternary, and γωνια, an angle, in allusion to the four angles of the bony pericarpium The species are succulent trailers of no beauty, but possibly all fit to be used, like Chenopodium, as a spinage T expansa has been so used by Captain Cook when visiting New Zealand, and lately introduced for the same purpose in British gardens, as a summer spinage, it is as valuable as the orache, or perhaps more so. Every gardener knows the plague that attends the frequent sowing of common spinage through the warm season of the year, without that trouble it is impossible to have it good, and with the utmost care it cannot always be obtained exactly as it ought to be, (particularly when the weather is hot and dry,) from the rapidity with which the young plants run to seed. The New Zealand spinage, if watered, grows freely, and produces leaves of the greatest succulency in the hottest weather Anderson, one of its earliest cultivators, had only nine plants, from which, he says. "I have been enabled to send in a gathering for the kitchen every other day since the middle of June, so that I consider a bed with about twenty plants quite sufficient to give a daily supply, if required, for a large table."

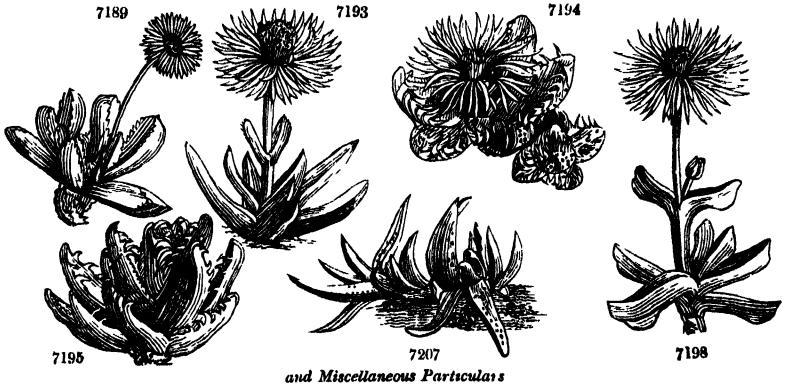
7161 Herbaceous, Leaves ovate rhomboid, Fruit with 4 horns
7162 Frosted, Leaves ovate sessile, Fruit not horned
7163 Shrubby, Leaves linear, Fruit winged
7164 Shrubby frosted, Leaves obovate, Fruit winged
7165 Procumbent, Leaves sessile lanceolate decumbent, Wings of fruit 8 alternately smaller
7166 Smooth herbaceous erect, Lower leaves ovate upper lanceolate smooth, Fl. racemose
7167 Smooth herbaceous, Leaves ovate stalked, Fruit winged
7168 Herbaceous, Leaves rhomboid ovate, Fruit ubinate
7169 Leaves alternate linear revolute at edge with a dorsal line above
7170 Leaves alternate frosted obovate with winged decumbent stalks

§ 1 *Stem none or very short, Root perennial, Leaves large.*

7171 Whitish polished unarmed, Flower with a long tube
7172 Smooth rather glaucous with branched confluent spots, Ovary exserted
7173 Smooth green with great confluent branched spots, Ovary included
7174 Glaucous, Spots branched confluent, Ovary included
7175 Green, Spots confluent wart-like, Ovary included
7176 Pyriform glaucous retuse at end, Spots generally distinct green and obsolete
7177 Very depressed and rather glaucous, Spots nearly distinct, Ovary exserted
7178 Somewhat hoary and pubescent much depressed
7179 Nearly globose pale green berry-shaped with little dark scarcely confluent spots
7180 Glaucous smooth, Ends of the leaves unequally distinct flat above
7181 Leaves about 4 broadly ovate or parabolical half rounded expanded
7182 Leaves 6-8 oblong-ovate half round erect
7183 Green, Leaves unequally half rounded acinaciform obtuse
7184 Whitish, Leaves equally half rounded very blunt
7185 Stemless, Leaves rounded very smooth
7186 Leaves perfect about 4 clavate 3-cornered very thick glaucous with many large dots

7187 Leaves hoary at the base half rounded and thin upwards gibbous and keeled
7188 Stemless, Leaves entire half round green marbled at the end keeled 3-cornered
7189 Stemless, Lvs glaucous towards the end and the bractes incurved and toothed, Pedunc length of leaves
7190 Leaves glaucous, Marginal fringes numerous very deep
7191 Nearly stemless Lvs glauc towards end entire or with large teeth, Bractes entire, Pedun longer than leaves
7192 Stemless smooth whitish, Lvs half round entire at end keeled 3-cornered little thickened with a recurved
7193 Stemless very smooth white, Leaves thick subulate 3-cornered obtuse with a point [point
7194 Green stemless, Leaves cordate ovate expanded marbled with white and with a deep fringe
7195 Stemless glaucous, Leaves deeply tooth-fringed obsoletely dotted with a cartilaginous keel at end
7196 Stemless green with clear spots, Leaves 3-cornered towards the end with a shortly toothed fringe
7197 Nearly stemless glaucous, Leaves with 3 rows of toothed fringe and small dots
7198 Leaves exactly hatchet-shaped, The old stem nearly six inches high and erect
7199 Leaves keeled 3-cornered green, Scape strong paniculed 2-edged
7200 Leaves erect incurved keeled upwards long glaucous rugose with large dots
7201 Leaves very glaucous triquetrous compressed at the end with a dilated keel which is often toothletted

7202 Leaves obt dotted with gibbous pustules at the base in the inside, Stem strong short decumbent branch
7203 Stemless, Leaves connate dotted half round at the end triquet reflexed acute, Fl sessile, Cal. cylin 6-fid
7204 Nearly stemless, Leaves hoary glaucous obtuse towards the end with a few spots, Cal 4-fid
7205 Nearly stemless, Leaves glaucous very blunt with many dots, Cal 2-4-fid
7206 Nearly stemless branched, Leaves subul elong dott very glauc Bractes 4 crossing shorter than scape
7207 Stemless, Leaves subulate elongated acute glauc much dott Bractes 2 longer than scape
7208 Like the last, but leaves half cylindr connate warted outside
7209 Leaves obl at the base inside with elevated pustules, Old stem three inches long decumbent
7210 Leaves papulose iced, the first psiform, the next half round, Stem much branched corky



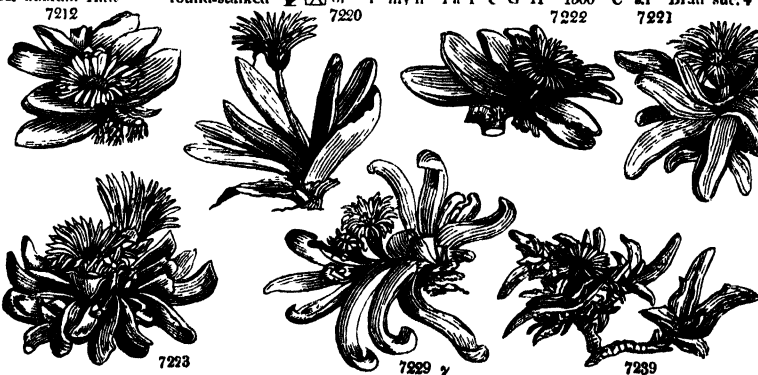
and Miscellaneous Particulars

The seed should be sown in the latter end of March in a pot, which must be placed in a melon-frame; the seedling plants, while small, should be set out singly in small pots, and kept under the shelter of a cold frame, until about the twentieth of May, when the mildness of the season will probably allow of their being planted out, without risk of being killed by frost. The plants must be put out three feet apart in very rich soil. In five or six weeks from the planting, their branches will have grown sufficiently to allow the gathering of the leaves for use. In dry seasons, the plants will probably require a good supply of water They put forth their branches vigorously as soon as they have taken to the ground, and extend before the end of the season three feet on each side.

1146. *Mesembryanthemum.* From μεσημβρια, the mid-day, on account of the flowers usually expanding at that time the termination *anthemum*, which signifies flowering, is, to say the least of it, superfluous. The species of this extensive genus are singular, yet beautiful, and some even splendid plants. Their leaves are of odd shapes, and the habits of most of the sorts slovenly and insignificant, though some are grotesque, but the

7211	monilifórme *Haw.*	bracelet	♀	△	or	½	mr	ap	W	C	G	H.	1791	C	s.l	
7212	scalprátum *Haw*	great-tongue	♀	△	or	½	au	o	Y	C	G	H.	1714	C	s.l	Di el. t.183 f.224
7213	frágrans *Salm*	fragrant	♀	△	or	½	...		Y	C	G	H.		C	s.l	
7214	præpin'gue *Haw*	soft-tongue	♀	△	or	½	au	o	Y	C.	G	H	1792	C	s.l	
7215	médium *Haw*	intermediate	♀	△	or	½	au	o	Y	C	G	H.	...	C	s.l	
7216	cultrátum *Haw*	cultrate	♀	△	or	½	au	o	Y	C	G	H.	1820.	C	s.l	
7217	lúcidum *Mill*	shining	♀	△	or	½	au	o	Y	C	G	H	1732.	C	s.l	
7218	adscéndens *Haw*	ascend-tongue	♀	△	or		au	n	Y	C	G	H.	1805	C	s.l	
7219	pustulátum *Haw.*	blistered	♀	△	or	½	au		Y	C	G	H	1818.	C	s.l	
7220	lóngum *Haw.*	long-tongue	♀	△	or	½	au	o	Y	C	G	H	1725	C	s.l	Plant grass. 71
	α *deprémsum* B M	*depressed*	♀	△	or	½	au	o	Y	C.	G	H	...	C	s.l	
	β *declive* Haw	*sloping*	♀	△	or	½	au	o	Y	C	G	H	...	C	s.l	
	γ *anguʻtatus* Haw	*tufted*	♀	△	or	½	au	o	Y	C	G	H	...	C	s.l	
	δ *purpuras'cens* H w	*purple-green*	♀	△	or	½	au	o	Y	C	G	H.	1819.	C	s.l	
	ε *uncátum* Haw	*leaden-green*	♀	△	or	½	au	o	Y	C	G	H	1819.	C	s.l	
	ξ *attoʻtus* Haw	*narrow-drop*	♀	△	or	½	au	o	Y	C	G	H	1819.	C	s.l	
7221	linguætórme *Haw*	common-tong	♀	△	or		mr	n	Y	C	G	H	1732.	C	s.l	Bot cab 1307
	β *rufescens* Haw	*reddish-green*	♀	△	or	½	mr	n	Y	C	G	H	1732.	C	s.l	
	γ *subcruciátum* Haw	*subcruciate*	♀	△	or	½	mr	n	Y	C	G.	H	1820.	C	s.l	
	δ *prostrátum* Haw	*prostrate*	♀	△	or	½	mr	n	Y	C.	G	H		C	s.l	
	ε *assúrgens* Haw	*upright*	♀	△	or	½	mr	n	Y	C	G	H	1819	C	s.l	
7222	látum *Haw*	blunt-tongue	♀	△	or	½	mr	n	Y	C	G	H.	1620	C	s.l	Di el t 184 t.225
	β *breve* Haw	*short*	♀	△	or	½	mr	n	Y	C.	G	H	1802	C	s.l	
7223	depréssum *Haw*	depressed-tong	♀	△	or	½	s	n	Y	C	G	H	1795	C	s.l	Bot. mag 1866
	β *lividum* Haw	*livid*	♀	△	or	½	s	n	Y	C	G	H	1819	C	s.l	
7224	cruciátum *Haw*	cross-leaved	♊	□	or	½	my	n	Y	C	G	H	1792.	C	s.l	
7225	taurinum *Haw*	Bull's-horn	♊	□	or	½	s	n	Y	C	G	H	1795	C	s.l	
7226	Sálmii *Haw*	Salmian	♊	□	or	½	s	n	Y	C	G	H	1818	C	s.l	
	β *semicruciatum* Sal.	*half-crossed*	♊	□	or	1	s	n	Y	C	G	H	1818	C	s.l	
	γ *angustifólium* Haw	*narrow-leaved*	♊	□	or	1	s	n	Y	C	G	H	1823	C	s.l	
7227	surrectum *Haw*	*erect*	♊	□	or	1	s	n	Y	C	G	H	1819	C	s.l	
	β *brevifólium* Haw	*short-leaved*	♊	□	or	½	s	n	Y	C	G	H	1819	C	s.l	
7228	heterophýllum *Haw*	various-leaved	♀	△	or	½		..	Y	C	G	H	1795	C	s.l	
7229	angustum *Haw*	slender-tongue	♀	△	or	½	mr	o	Y	C	G	H	1790	C	s.l	
	β *pállidum* Haw	*pale*	♀	△	or	½	mr	o	Y	C	G	H	1790	C	s.l	
	γ *heterophýllum* Jack	*variable*	♀	△	or	½	mr	o	Y	C	G	H	1790	C	s.l	Bot rep 540
7230	diffórme *Haw*	deformed	♊	□	or	¾	au		Y	C	G	H	1732	C	s.l	Di el t 194 f 242
7231	bidentátum *Haw*	*two-toothed*	♊	□	or	1	au		Y	C	G	H	1818	C	s.l	
	β *május* Haw	*large*	♊	□	or	1½	au		Y	C	G	H	1818	C	s.l	
7232	semicylindricum *Ha*	semi-cylindric	♊	□	or	½	mr	n	Y	C	G	H	1732	C	s.l	Di el. t.194.f 241
7233	gibbósum *Haw*	gibbous	♀	△	or		ja	ap	R	C	G	H	1780	C	s.l	
7234	luteoviride *Haw*	yellow-green	♊	□	or	½	ja		R	C	G	H	1795	C	s.l	
7235	perviride *Haw*	dark-green	♀	△	or		ja	my	R	C.	G	H.	1792	C	s.l	
7236	pubéscens *Haw*	downy	♀	△	or	½	ja	my	R	C	G	H	1792	C	s.l	
7237	calamitórme *L.*	quill-shaped	♀	△	or	1	jl	s	W	C	G	H	1717	C	s.l	Plant. grass 5
7238	obsubulátum *Haw*	reverse-quilled	♊	□	or	1	...		W	C	G	H	1796	C	s.l	
7239	cylindricum *Haw*	cylindrical	♀	△	or		f	s	R	C	G	H	1792	C	s.l	
7240	teretifólium *Haw*	round-quilled	♀	△	or		t	s	R	C	G	H	1794	C	s.l	
7241	teretiusculum *Haw*	turgid	♀	△	or		..		R	C	G	H	1794.	C	s.l	
7242	bellidiflórum *L*	Daisy-flowered	♀	△	or	½	jn	au	R	C	G	H	1717	C	s.l	Di el. 189 f 233
	β *subulátum* Mill	*great-green*	♀	△	or	½	jn	au	R	C	G	H	1717.	C	s.l	
	γ *viride* Haw	*Pea-green*	♀	△	or	½	jn	au	R	C	G	H	1717	C	s.l	
7243	acutum *Haw*	great-awl-leav	♀	△	or		ap	n	R	C	G	H	1793	C	s.l	
7244	punctátum *Haw*	spotted awl-lvd	♀	△	or	½	ap	n	R	C	G	H.	1793	C	s.l	
7245	diminútum *Haw*	diminutive	♀	△	or	½	ap		R	C	G	H	1789	C	s.l	
	β *caulicuʻlátum* Haw	small-stemmed	♀	△	or	½	ap		R	C	G	H	1789.	C	s.l	

7246	lóreum *Dill*	leathery-stlkd	♀	△	or	1	s		Pa	Y	C	G	H	1732	C	s.l	Di. el t.200 f 255
7247	diversifólium *L.*	short horned-lv	♀	△	or	1	mr	o	Pa	Y	C	G	H	1819	C	s.l	Di el t.198.f 252
	β *glaúcus* Haw	*glaucous*	♀	△	or	1	au		Pa.	Y	C	G	H	1726	C	s.l	
	γ *brevifólium* Haw	*short-leaved*	♀	△	or	1	au		Pa	Y	C	G	H	...	C	s.l	
	δ *lætc-wrens* Haw	*bright-green*	♀	△	or	1	au		Pa	Y	C	G	H.	...	C	s.l	
	ε *atro-wrens* Haw	*dark-green*	♀	△	or	1	au		Pa	Y	C	G	H	...	C	s.l	
7248	decipiens *Haw*	middle	♀	△	or	1	au		Pa	Y	C	G	H	1820	C	s.l	
7249	dúbium *Haw*	round-stalked	♀	△	or	1	my	n	Pa	Y	C	G	H	1800	C	s.l	Brad suc. 4 t.40



History, Use, Propagation, Culture,

flowers make ample amends by their profusion, the brilliancy of their colors, and the length of time the species continue in flower. Few are annual, fewer biennial, many are perennial, but most are shrubby,

7211 First leaves connate spheroidal, next half round subulate very long recurved green
7212 Leaves sloping graver-shaped very broad thickest on one edge at the base inside pimpled, Fl sessile
7213 Nearly stemless Lvs. tongue-shaped thick, one convex blunt at end, the other with a long keel, Fl stlkd frag.
7214 Leaves obliquely tongue-shaped pale green very soft, the younger ciliated pubesc hooked inwards at end
7215 Nearly stemless, Lvs tongue-shaped sloping 4-inches long, 1-broad cultrate, Peduncle an inch long
7216 Nearly stemless, Lvs distichous tongue-shaped at the edge and end cultrate. Fl stalked
7217 Leaves long very green and polished, Peduncle longer than calyx, Caps small depressed
7218 Leaves broad tongue-shaped ascending obtuse green longer than peduncles
7219 Leaves tongue-shaped ascending 5-6-in long, 3-11-lines broad, with large pimples at the base inside
7220 Leaves long tongue-shaped shining thinner, Flowers subsessile, Caps large depressed

722 Leaves unequally tongue-shaped thick green partially keeled, Caps little elevated subsessile

7222 Leaves tongue-shaped obtuse thick often sloping and a little hollowed, Caps large conical subsessile

7223 Prostrate, Lvs narr. tongue-shaped obt. recurved depressed variously bent inwards at end, Caps depressed

7224 Leaves lin tongue-shaped half cylindr very soft cruciate, Old stem three inches long
7225 Leaves bifarious obliquely crossed half round obt very thick yellowish green incurv Old stem 6 in high
7226 Stemless, Lvs ½ cylin subul variously obliquely hooked blunt with broad smooth spots at base, Caps flat [half included

7227 Lvs. crossing suberect or spreading half round subulate acute soft often pustulate at base, Ovary exserted [stalked

7228 Stemless, Leaves green deformed the upper longest
7229 Leaves linear linguiform half cylindrical very long

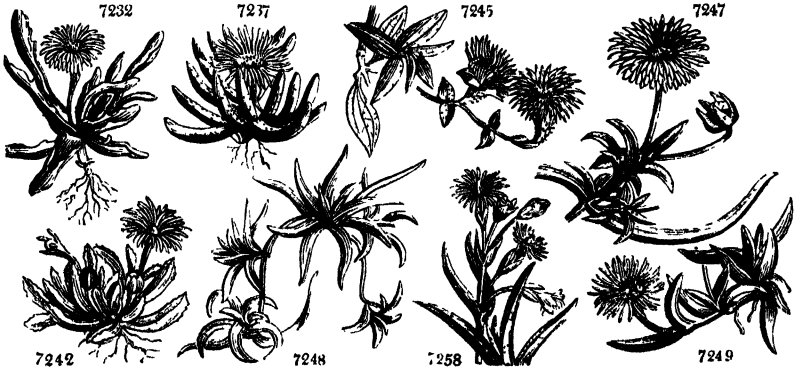
7230 Lvs. obliquely cruciate long variously obliquely deformed with one or more obscure teeth, Old stem 3-6-in
7231 Lvs. ½ cylin thick soft with two large opp fleshy teeth beyond the midd at the end variously and obliquely [deformed
7232 Lvs very narr tongue-shap ½ round towards end oblique with 1 or 2 obsolete teeth, Old stem branch 6 in.
7233 Nearly stemless, Leaves yellowish green spreading ovate half cylindrical rarely keeled at end
7234 Stem weak two or three inches long, Lvs obl ½-cylindr upwards 3-cornered yellowish green
7235 Stem weak two or three inches long, Leaves half-cylindr. 3-cornered or subovate very green
7236 Leaves downy hoary or silky smooth
7237 Leaves subulate glaucous at the base above flat, Styles 8
7238 Leaves obsubulate thick obtuse green
7239 Leaves 3-cornered cylindr subglaucous dotted 3 inches long, The old stem 3 inches closely branched
7240 Lvs 4 in long green roundish or cylindr the younger polished ½ round very green the old stems 6 in.
7241 Leaves 3-cornered rounded very thick green dotted two inches long [polished
7242 Leaves 3-cornered blunt with three rows of teeth at end, The old stem branched half shrubby

7242 Leaves half round subulate incurved with clear spots, Spots obsolete not wrinkled
7244 Leaves half round subulate incurved with clear spots, Spots large numerous with a white head
7245 Leaves half round subulate incurved with clear spots, Spots nearly middle sized with a little white point

§ 2. *Cluster-leaved Stem about a foot high decumbent perennial, Leaves in capitate clusters, Flowers polygamous, Calyx 5-leaved*

7246 Lvs capit. closely clustered ½ cylindr 3-cornered elong recurv somewhat glaucous, Stems roundish white
7247 Lvs capitate closely clustered long 3-cornered half cylindr glaucous or green, Stems angular red

7248 Lvs somewhat clustered long ½-cylindr 3-cornered minutely wrinkled, Stems prostrate with distant joints
7249 Leaves clust longish broad erect half cylindr 3-cornered shining, Joints close, Styles 12



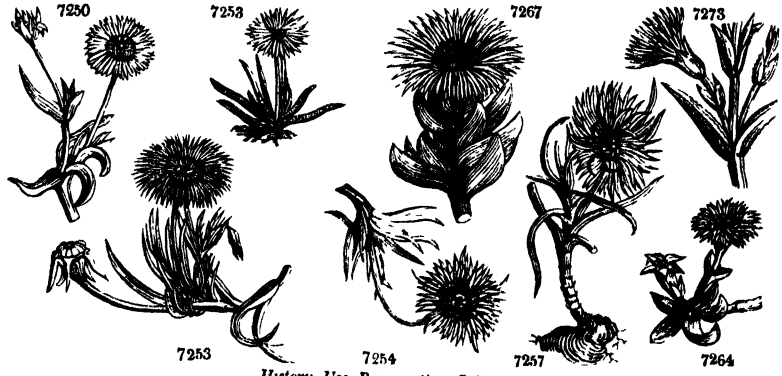
and Miscellaneous Particulars

especially towards the base Leaves mostly opposite, seldom alternate, thick, or succulent, of various forms Flowers solitary, axillary, or extra-axillary, but more frequently terminating The fruit is some-

7250	corniculátum *Haw*	long-horned	☿	△	or	1	mr my	Pa Y	C	G	H	1732	C s 1	
	β isophýllum Dec	*equal-leaved*	☿	△	or	1	mr my	Pa Y	C	G	H.	1732	C s 1	Plant. grass 108
7251	procúmbens *Haw.*	procumbent	☿	△	or	1	mr my	Pa Y	C	G	H	1820	C s.1	
7252	tricolórum *Haw*	three-colored	☿	△	or	1	o	Y a	C	G	H	1794	C s.1	Bot mag 2144
7253	pugioniférme *L.*	long dagger-lvd.	♓	□	or	1	jl s	Pa.Y	C	G	H.	1714	S s.1	Dill elth t 269
	β cárneum Haw.	*flesh-colored*	♓	□	or	1	jl s	Pk	C	G	H	1714.	S s.1	
	γ purpúreum Haw	*purple*	♓	□	or	1	jl s	Pu	C	G	H	1714	S s.1	
	δ biénne Haw	*biennial*	♓	□	or	1	jl s	Pa Y	C	G	H	1714	S s1	
7254	capitátum *Haw.*	short dagger-lv	♓	□	or	1	jl s	Pa.Y	C	G	H	1717.	S s.1	Bot reg 404
7255	brevicaúle *Haw*	dwarf dagg lvd	♓	□	or	½	jl s	Pa.Y	C	G	H	1820	S s1	
7256	corúscans *Haw.*	glittering-dagg	♓	□	or	1	jl s	Pa Y	C	G	H	1812.	S s1	
7257	elongátum *Haw*	dwarf-tuberous	⁂	□	or	1	my	Pa Y	C	G	H	1793.	S s1	
	β minus Haw	*small*	⁂	□	or	1	my	Pa.Y	C.	G	H.	1793.	S s1	Bot. reg 493
	γ fusiférme Haw	fusiform	⁂	□	or	1	my	Pa Y	C	G	H.	1793.	S s1	

7258	geminiflórum *Haw.*	small pale	♀	□	or	¾	...	Pk	C	G	H	1819	C s1	Jacq. frag 56
7259	simile *Haw*	short-jointed	♀	□	or	1	...	Pk	C	G	H	1819.	C s1	
7260	láxum *W*	long-jointed	♀	□	or	½	my	Pk	C	G	H	1820	C s1	
7261	sarmentósum *Haw*	sarmentose	♀	□	or	1½	ap	Pk	N	Holl		1805	C s1	
7262	rigidicaule *Haw*	stiff-stemmed	♀	□	or	½	my jn	Pk	C	G	H	1819	S s1	
7263	Schóllii *Salm*	large-rough	♀	□	or	1	my jn	Pk	C	G	H	1810.	S s1	Jac frag t 51 f 2
7264	filamentósum *Haw*	thready	♀	□	or	¼	mr ap	Pk	C	G	H	1732	C s1	Dill el t 212 f 273
7265	serrulátum *Haw*	saw-leaved	♀	□	or	⅛	n d	Pk	C	G	H	1795	C s1	
	β viridus Haw	*greener*	♀	□	or	⅛	n d	Pk	C	G	H	...	C s1	
7266	rubricaule *Haw*	red-stalked	♀	□	or	⅛	f d	Pk	C	G	H	1802.	C s1	
	β densius Haw	*crowded*	♀	□	or	⅛	...	Pk	C	G	H	1818	C s1	
	γ subvirens Haw	*tall-green*	♀	□	or	⅛	...	Pk	C	G	H	1818	C s1	
7267	acinaciférme *L.*	scymetar-leav	♀	□	or	⅛	au s	Pk	C	G	H	1714	C s1	Bot rep 580
	β lóngum Haw	*long*	♀	□	or	⅛	au s	Pk	C	G	H	...	C s1	
7268	lævigátum *Haw*	polished	♀	□	or	⅛	jn	Pk	C	G	H	1802	C s1	
7269	rubrocinctum *Haw*	red-bordered	♀	□	or	⅛	. .	Pk	C	G	H	1811	C s1	
	β compréssum Haw	*compressed*	♀	□	or	⅛	au	Pk	C	G	H	...	C s1	
	γ tenerum Haw	*delicate*	♀	□	or	⅛	au	Pk	C	G	H	...	C s1	
7270	subulátum *Haw*	pale Daisy-flow	♀	△	or	¼	.	Pk	C	G	H	1768	C s1	Plant grass 41
7271	édule *L*	Hottentots' fig	♀	□	or	¼	jl au	Pk	C	G	H	1690	C s1	Dill el t 212 f 272
7272	dimidiátum *Haw*	Lesser Hot fig	♀	□	or	¼	...	Pk	C	G	H	1811	C s1	Plant grass. 89
7273	glaucéscens *Haw*	glaucescent	♀	□	or	⅛	jl	Pk	N	Holl		1804	C s1	
7274	Róssi *Haw*	Ross's	♀	□	or	⅛	...	Pk	V	Di	L	1820	S s1	
7275	virésens *Haw*	virescent	♀	□	or	¼	jn	Pk	N	Holl		1804	C s1	
7276	æquilaterále *Haw*	equal-sided	♀	□	or	⅛	jn	Pk	N	Holl		1791	C s1	
7277	virens *Haw*	upright-green	♀	□	or	¼	jn	Pk	C	G	H	1821	C s1	
7278	réptans *H K*	creeping	♀	□	or	½	jl au	Pk	C	G	H	1774	C s1	
7279	austrále *Haw*	New Zealand	♀	□	or	½	jl au	Pk	N	Zeal		1773	C s1	
7280	crassifólium *L*	thick-leaved	♀	□	or	½	my au	Pk	C	G	H	1727	C s1	Di el t 201 f 257
7281	clavellátum *Haw*	club-leaved	♀	□	or	¼	jn jl	Pk	N	Holl		1803	C s1	
	β minus Haw	*small*	♀	□	or	¼	jl au	Pk	C	G	H	1810	S s1	

7282	forficátum *L*	scissar-leaved	☿	□	or	1½	s o	Pk	C	G	H	1758.	C s1	Jac vind 1 t 26
7283	geminátum *Haw*	twin-shooted	☿	□	or	1½	. .	W	C	G	H	1792	C s1	
7284	marginátum *Haw*	white-edged	☿	□	or	1	...	W	C	G	H	1793.	C s1	
7285	rostéllum *Haw*	little-beak	☿	□	or	½	jn	W pk	C	G	H	1820	S s1	
7286	perfoliátum *Mill*	great-perfoliate	☿	□	or	1	jn au	Pa pu	C	G	H	1714	C s.1	Dil el t 192 f 240
	β monacánthum Bradl.	*one-spined*	☿	□	or	1	jn au	Pa pu	C	G	H	..	C s1	
7287	uncinéllum *Haw*	small-hooked	☿	□	or	1	jn au	Pa pu	C	G	H	1819	C s1	Dill elth f 239
7288	uncinátum *Haw*	lesser-perfoliate	☿	□	or	1	au	Pa pu	C	G	H	1725.	C s1	Plant grass 54
7289	semidentátum *Haw*	slender-hooked	☿	□	or	1	au	Pa pu	C	G	H	...	C s1	
7290	viride *Haw*	green-perfoliate	☿	□	or	1	jl	Pa pu	C	G	H	1792	C s.1	
7291	acutángulum *Haw*	acute-angled	☿	□	or	1½	...	W	C	G	H	1821.	C s1	
7292	curtum *Haw*	short-sheathed	☿	□	or	1½	...	W	C	G	H	...	C s.1	
	β május Haw.	*large*	☿	□	or	1½	.	W	C	G	H	...	C s1	
	γ politum Haw	*polished*	☿	□	or	1½	.	W	C	G	H	...	C s.1	
	δ minus Haw	*small*	☿	□	or	1½	..	W	C	G	H	...	C s.1	
7293	vaginátum *Haw*	sheathed	☿	□	or	1½	jl au	W	C	G	H	1802	C s1	
	β parviflórum Haw	*small-flowered*	☿	□	or	1½	jl au	W	C.	G	H	...	C s.1	



History, Use, Propagation, Culture,

times shaped like a fig. Linnæus arranged the species from the color of the flower; Haworth chiefly from the leaves.

7250 Leaves clust 3-cornered ½ cylindr very long glaucous incurved, Stems scarcely angular, Joints distant

7251 Leaves in pairs corniculate incurved ½ cylindr 3-cornered glaucous, Stems flexuose procumbent
7252 Leaves exactly cylindr. three inches long acute green, Styles 20
7253 Leaves glaucous about a foot long 3-cornered, Angles dilated with a broad furrow, Stem simple

7254 Leaves somewhat glaucous 6-7 inches long 3-cornered, Old stem simple
7255 Leaves green 3-4 inches long 3-cornered, Old stem two inches high simple erect
7256 Leaves dagger-shaped long glittering, Stem shrubby perennial
7257 Leaves glauc about a span long bluntly 3-cornered channelled or half round, Root large tuberous fleshy

§ 3 *Trailers Stems prostrate or creeping, angular, Calyx 5-leaved, Flowers polygynous, Leaves connate at base acutely 3-cornered*

7258 Branches long slender spreading, Lvs equilateral 3-corn green hooked a little outwards at end, Fl 3 or 2
7259 Lvs equilateral 3-corn glauc much dotted straight at end lon than joints, Edges not serr Stems firm proc
7260 Lvs conn comp 3-corn very green warted often short than joints, Edges finely tooth Branches very slen.
7261 Runners 1½ foot long slender rooting, Lvs clustered compressed 3-corn bright green not rough at edge
7262 Leaves long equilateral 3-cornered straight roughish at edge, Stem firm procumbent
7263 Leaves compressed 3-cornered large recurved serrulate very rough, Old stems firm decumbent [decum
7264 Lvs bright green clust thick comp 3-corn acinacif dott lon than joints with rough edges, Stems short
7265 Lvs. comp 3-corn acinacif glauc not serrated and scarcely cartilaginous at edge generally lon than joints

7266 Lvs comp. 3-corn greenish rugose the edges with cartilaginous serratures generally shorter than joints

7267 Leaves acinaciform, Edges curled wavy rough

7268 Leaves acinaciform polished glaucous with entire cartilaginous edges
7269 Leaves acinaciform with the edges and keel rough and red

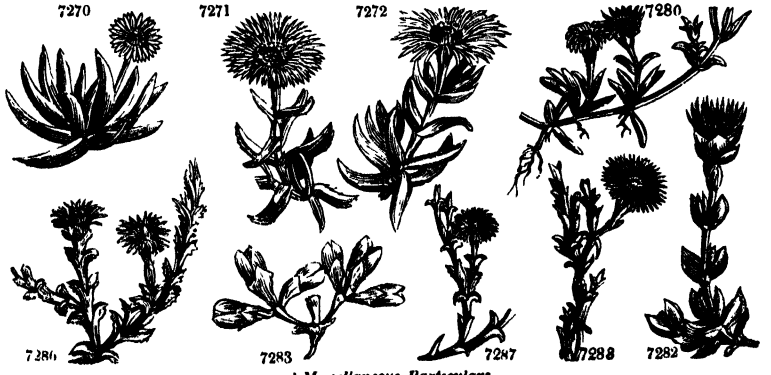
7270 Leaves compressed 3-cornered acinaciform and equilateral, Every edge roughish
7271 Old leaves equilateral 3-cornered green incurved three inches long blistered inside at base, Keel serrulate
7272 Leaves about two inches sharply 3-cornered, the old ones comp with their keel upwards serrulate burnt
7273 Young lvs incurved equilateral 3-cornered soft glauc with a cartilaginous smoothish white edge, Styles 7
7274 Leaves acinaciform or compressed 3-cornered glauc with a pink smooth cartilag edge, Stems prostrate
7275 Leaves not equilateral 3-cornered greenish, Stems prostrate, Pedunc terminal solitary winged, Styles 8
7276 Leaves equilateral 3-cornered greenish, Edges smooth cartilaginous, Stems weak prostrate
7277 Lvs comp 3-corn acinacif smooth dotted green, in the inside at the base blistered, Keel roughish at edge
7278 Leaves clustered 3-cornered acute glaucous with large rough pellucid dots, Stems filiform very weak
7279 Leaves glaucous dotted 3-cornered incurved smooth
7280 Leaves 3-cornered not dotted smooth very green half cylindrical at base
7281 Leaves clustered expanded obsoletely 3-cornered clavate obtuse green with a little point

§ 4 *Perfoliate Leaves connate sheathing generally three-cornered upwards, usually hooked at end, Calyx 5-leaved*

7282 Leaves 3-cornered compressed green prickly at end, Stem 2-edged decumbent
7283 Leaves erect white smooth 3-cornered thick sheathing beyond their middle with a cartilaginous edge
7284 Leaves 3-cornered subacinaciform white at edge, Keel dilated
7285 Leaves beaked connate half round subulate recurved dotted green, Stems prostrate branched knotty
7286 Leaves white thick hard dotted usually with about three spines beneath, Branches few

7287 Leaves whitish thick dotted recurved at end usually with one spine beneath, Branches many
7288 Leaves greenish with two spines beneath at the end
7289 Branches simple slender upright hard, Lvs 3-cornered dotted white with 1-4 teeth at the back upwards
7290 Leaves quite entire very green smooth thick hooked backwards at the end
7291 Leaves acute-angled 3-cornered acum incurved recurved green rough at edge
7292 Erect, Lvs usually close recurved smooth green with the angles roughish above, Sheath often sharp

[rough upwards
7293 Erect roughish, Lvs about an inch long spreading straight recurv at end, Sheaths green smooth, Angles



and Miscellaneous Particulars.

Most of the species are so hardy, that on dry rock-work, in a sheltered part of the garden, they will endure ordinary winters. Every thing, however, depends on keeping them dry Among the hardy sorts may be reckoned

7294 parviflórum *Haw*	small-flowered	♃	or	3	au	W	C	G	H	1800	C s l	
7295 rigidum *Haw*	rigid	♃	or	1½	au	W	C.	G	H	1793	C s l	
7296 tenéllum *Haw*	least-perfoliate	♃	or	1½	au	W	C	G	H	1792	C s l	
7297 imbricátum *H K*	imbricated	♃	or	3	jl	W	C	G	H	1792	C s l	
β *médium* Haw.	*intermediate*	♃	or	3	jl	W	C	G	H	...	C s l	
γ *víride* Haw	*green*	♃	or	3	jl	W	C	G	H.	...	C s l	
7298 multiflórum *Haw.*	many-flowered	♃	or	3	jl s	W	C	G.	H	1792	C s l	Plu phy t 117 f 1
β *minus* Haw	*small*	♃	or	3	jl s	W	C	G	H	...	C s l	
γ *rúbrum* Haw	*red-flowered*	♃	or	3	jl s	Pk	C	G	H.	...	C s l	
δ *pátens* W	*spreading*	♃	or	3	jl s	W	C	G	H	1820	C s l	
ε *nítens* Haw	*shining*	♃	or	3	..	..	C	G	H.	...	C s l	
7299 umbellátum *Haw*	umbel flowered	♃	or	3	jn s	W	C	G	H	1727	C s l	Dil el t 208 f 266
β *anómalum* W	*anomalous*	♃	or	3	jn s	W	C.	G	H	...	C s l	
7300 tumidulum *Haw*	tumid	♃	or	3	mr	Pk	C	G	H	1802	C s l	
β *minus* Haw	*small*	♃	or	3	mr	Pk	C	G	H.	1820	C s l	
7301 foliósum *Haw*	leafy	♃	or	3	s	Pk	C	G.	H	1802.	C s l	
7302 lineolátum *Haw*	lined	♃	or	½	jl s	...	C	G	H	1819.	C s l	
β *lævc* Thunb	*smooth*	♃	or	½	jl s	...	C	G.	H	1819	C s l	
γ *nítens* Haw	*shining*	♃	or	½	jl s	...	C	G.	H.	1819	C s l	

7303 serrátum *L*	saw-keeled	♃	or	2	jn jl	Pk	C	G	H	1707	C s l	Dil el t 192 f 238
7304 gladiátum *Jacq*	purple-serrate	♃	or	2	jn	Pk	C	G	H	1792	C s l	
7305 heteropétalum *Haw*	various-petaled	♃	or	2	my au	Pk	C	G	H	1794	C s l	
7306 glaucinum *Haw*	glaucine	♃	or	1½	jl au	Pk	C	G	H	...	C s l	
β *crássum* Haw	*thick-leaved*	♃	or	1½	jl au	Pk	C	G	H	.	C s l	
7307 mutábile *Haw*	changeable	♃	or	1½	jl s	Pk	C	G	H	1792	C s l	Plant grass 60
7308 inclaúdens *Haw*	open-flowered	♃	or	1½	jn s	Pk	C	G	H	1805	C s l	Bot rep 388
7309 cauléscens *Mill*	smooth delta-lv	♃	or	1½	my jl	Pk	C	G	H	1731	C s l	D e t 195 f 242-4
7310 deltoídeum *Haw*	great delta-lvd	♃	or	1½	my	Pk	C	G	H	1731	C s l	Plant grass 53
7311 muricátum *Haw*	small delta-lvd	♃	or	1½	my	Pk	C	G	H	1731	C s l	D e t 195 f 245-7
β *minus* Haw	*less*	♃	or	1½	my	Pk	C	G	H	...	C s l	
7312 microphýllum *Haw*	small-leaved	♃	or	¼	my	Pk	C	G	H	1795	C s l	
7313 mucronátum *Haw*	mucronated	♃	or	¼	..	Pk	C	G	H	1794	C s l	
7314 pygmæ'um *Haw*	pigmy	♃	or	¼	.	Pk	C	G	H	1805	C s l	
7315 pulchéllum *Haw*	neat	♃	or	¼	ap	Pk	C	G	H	1793	C s l	
β *revolútum* Haw	*revolute*	♃	or	¼	ap	Pk	C	G.	H	...	C s l	

7316 máximum *Haw*	moon-leaved	♃	or	1½	mr au	Pk	C	G	H	1787	C s l	Bot reg 358
7317 lunátum *W*	lunate	♃	or	1	jl	Pk	C.	G	H	1812	C s l	
7318 falcátum *L*	sickle-leaved	♃	or	1	jn au	Pk	C	G	H	1727	C s l	D e t 213 f 275-6
7319 decúmbens *Haw*	decumbent	♃	or	1	my o	Pa R	C	G	H.	1759	C s l	
7320 incúrvum *Haw*	incurved	♃	or	1½	jn	Pk	C	G	H	1802	C s l	
β *dilátans* Haw	*gibbous-keeled*	♃	or	1½	jn	Pk	C	G	H	...	C s l	
γ *pállidus* Haw	*pale*	♃	or	1½	jn	Pk	C	G	H	..	C s l	
δ *densifólium* Haw	*dense-leaved*	♃	or	1½	jn	Pk	C	G	H	1819	C s l	
ε *róseum* W	*rosy*	♃	or	1½	jn	Pk	C	G	H	...	C s l	
7321 confértum *Haw*	crowded-le ved	♃	or	1½	s o	Pk	C	G	H	1805	C s l	
7322 falciförme *Haw*	sickle-shap	♃	or	1½	jl au	Pk	C	G	H	1805	C s l	
7323 glomerátum *L*	clustered	♃	or	1½	jn au	Pk	C	G	H	1732	C s l	Dil elt f 274
7324 infléxum *Haw*	inflexed	♃	or	1	jn au	Pk	C	G	H	1819	C s l	
7325 scábrum *L*	scabrous	♃	or	1½	jl	Pk	C	G	H	1731	C s l	Dill elt t 251
7326 versicolor *Haw*	changeable-fl	♃	or	1	my au	Pk	C	G	H	1795	C s l	
7327 retroflexum *Haw*	white-barked	♃	or	1½	my o	Pk	C	G	H	1794	C s l	
7328 imbricans *Haw*	imbricating	♃	or	2	my o	Pk	C	G	H	1818	C s l	
7329 deflexum *H K*	deflexed	♃	or	1	jl o	Pk	C	G	H	1774	C s l	
7330 leptáleon *Haw*	slender	♃	or	1½	jl o	Pk	C	G	H	1819	C s l	
7331 polyánthon *Haw*	copious-flower	♃	or	1	au	Pk	C	G	H	1805	C s l	Bot cab 1281
7332 flexile *Haw*	flexile	♃	or	1½	au	Pk	C	G	H	1820	C s l	
7333 polyphýllum *Haw*	many-leaved	♃	or	2	jn o	Pk	C	G	H	1819	C s l	
7334 violáceum *Dec*	violet	♃	or	2	jn o	Pu	C	G	H	1820	C s l	
7335 emarginátum *L*	notch-flowered	♃	or	2	jn au	Pk	C	G	H	1732	C s l	Dil el t 197 f 250
7336 dilatátum *Haw*	dilated	♃	or	3	jn au	W	C	G	H	1820	C s l	
7337 virgátum *Haw*	twiggy	♃	or	3	f ap	Pk	C	G	H	1793	C s l	
7338 bracteátum *Haw*	bracted	♃	or	1½	jl o	Y	C	G	H	1774	C s l	Bot cab 251
7339 anceps *Haw*	two-edged	♃	or	1½	s o	Pk	C	G	H	1811	C s l	
β *pállidum* Haw	*pallid*	♃	or	1½	n	P Pk	C	G	H	1819	C s l	



History, Use, Propagation, Culture,

M. hispidum, striatum, barbatum, crassifolium, glaucum, uncinatum, corniculatum, &c Hardy, and vet shewy sorts, are M. inclaudens, aurantium, perfoliatum, deltoides, barbatum, &c. These will grow and

7294 Leaves half an inch long smooth suberect, Keel not serrulate, Stem three feet high and branches erect
7295 Lvs about three lines long horiz and sheaths smooth, Keel rough at end, Branches very stiff and spread.
7296 Lvs 3 lines long and more spreading thin and sheaths rough at edge, Branches filiform decumbent
7297 Lvs somewhat compressed 3-cornered glauc. about one inch long, Branches many erect, Cal. turbinate

7298 Leaves somewhat compressed 3-cornered glaucous and the branchlets spreading

7299 Leaves distant roundish somewhat glaucous roughish with dots, Sheaths tumid at end

7300 Leaves remote greenish smooth about an inch and half long recurved at end, Sheaths tumid at end

7301 Leaves somewhat glaucous smooth clustered obtuse an inch long with a recurved point
7302 Leaves connate incurve-recurved blunt, Keel roughish at end with a sheathing line at base

§ 5 *Delta-leaved Leaves more or less deltoid or hatchet formed Flowers pink*

7303 Leaves subulate 3-cornered dotted with the keel serrated backward
7304 Leaves glaucous compressed 3-cornered gladiate, Keel cartilaginous torn, Petals much longer than calyx
7305 Lvs clust not dotted glauc shortly falcate gladiate, Angles cartilag Petals much shorter than calyx
7306 Lvs clust compressed 3-cornered shortly acinaciform glauc entire dotted with a cartilaginous edge

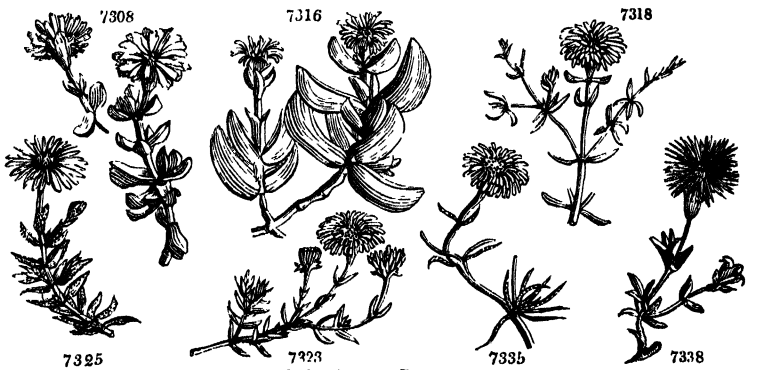
7307 Leaves distinct clust. equilaterally 3-corn shortly acinaciform green dotted with a cartilaginous edge
7308 Lvs subdelt smooth very green with a gibb entire keel, Pet not closing the inner imbricate very short
7309 Leaves clustered glaucous long 3-cornered deltoid, The sides not toothed, Keel entire
7310 Leaves clust very glauc 3-corn deltoid toothed in three rows, Keel of the bractes and sepals entire
7311 Leaves clust deltoid with the bractes and sepals 3-cornered glaucous toothletted in three rows

7312 Leaves 3-corn acuminate awned green blistered inside at the base, Branches much clustered
7313 Leaves obl ovate acute glaucous 3-corn with a little white point at end
7314 Leaves connate at base oblong ovate half round not pointed, the winter leaves joined almost to the end
7315 Leaves acute equilaterally 3-corn cymbiform grey obsoletely dotted with a downy fringe and recurv point

§ 6 *Triquetrous Leaves more or less 3-cornered distinct Cal 5-leaved Styles 5*

7316 Leaves large clustered much compressed 3-corn incurved very glaucous, Stem woody erect bushy
7317 Leaves small much clust somewhat connate compressed 3-corn closely incurved, Branches clustered
7318 Leaves minute distinctly compressed 3-cornered falcate, Branches numerous filiform
7319 Leaves much compressed 3-corn very glauc attenuate at each end incurved, Branches much clustered
7320 Leaves compressed 3-corn very glaucous attenuate at each end acinaciform, Stem erect

7321 Leaves 3-corn clust robust incurved very glaucous, Stem erect much branched
7322 Leaves much clustered thick acinaciform falcate with large spots glaucous
7323 Lvs bluntly 3-corn comp glauc incurv atten at each end, Pedunc and branches erect filiform comp
7324 Lvs clustered falcate inflexed from 3-cornered half round compressed subglaucous smooth
7325 Leaves subtriquetrous green shining warted very rough, Sepals ovate acuminate, Petals crenate at end
7326 Leaves subtriquetrous glaucescent warted very rough, Sepals ovate-acuminate, Petals two toothed at end
7327 Leaves subtriquetrous very glaucous rough, Sepals and petals distant reflexed, Stamens clust Bark white
7328 Erect woody, Leaves lin obsoletely 3-corn smoothish glauc. white imbricated at the ends of old branches
7329 Leaves subtriquetrous glauc roughish attenuated downwards, Stems clust deflexed, Pet very numerous
7330 Leaves subtriquetrous glauc. attenuated upwards smooth, Keel roughish, Branches distant filiform
7331 Leaves small glauc 3-corn rough, Branches bushy clust The young bark brown, Flowers panicled
7332 Leaves small often longer than the joints but inwards by pairs glauc 3-corn obtuse smooth
7333 Leaves much clust strong incurved-recurved clavate compressed dotted glaucous, Branches bushy
7334 Leaves compressed bluntly 3-corn roughish with dots glaucous, Sepals like spines spreading
7335 Leaves subglaucous subtriquetrous rough, Calyxes spiny, Petals deeply emarginate
7336 Leaves distinct remote subrecurved triquetrous much comp dotted glauc. Keel gibbous above middle
7337 Leaves distinct distant triquetrous compressed acute subglaucous dotted, Branches twiggy
7338 Leaves green, Bractes 4 broadly ovate keeled embracing the calyx, Pet. white at base, Branches fuscous
7339 Branches decumbent 2-edged brown, Leaves acinaciform 3-corn with sides membranous downwards, Dots large pellucid elevated



and Miscellaneous Particulars.

flower vigorously if planted in a bed in the open air and protected during winter, or if planted in a common pit, and matted over during frost

7340	grácile *Haw.*	starry	☼	or	1½	au n	R	C	G	H.	1794.	C s.l
	stellátum Haw											
7341	radiátum *Haw*	rayed	☼	or	1½	au n	R	C.	G	H	1732	C s l
7342	compréssum *Haw.*	compressed	☼	or	1½	jl s	D.R	C	G	H.	1792	C s l
7343	pátulum *Haw*	spreading	☼	or	1½	o n	Pk	C	G	H.	1811	C s l
7344	ásperum *Haw*	rough	☼	or	1½	...	...	C	G	H	1818.	C s l
	β *cærulésccns* Haw.	*blue*	☼	or	1½	...	...	C	G.	H.	1820	C s.l
7345	formósum *Haw*	white-eyed	☼	or	1	au s	Cr	C	G	H	1820	C s l
7346	spectábile *Haw*	showy	☼	or	1	my au	Cr	C	G	H	1787	C s l
7347	conspicuum *Haw*	dark-showy	☼	or	1	s o	Cr	C	G	H	1806	C s l
7348	blándum *Haw*	bland	☼	or	1½	jn	Pk	C	G.	H	1810	C s l
7349	curviflórum *Haw.*	curve-flowered	☼	or	2	jn	W	C	G	H.	1818	C s l
7350	aúreum *L.*	golden-flower'd	☼	or	1	mr o	Y	C	G	H.	1750	C s.l
7351	cymbifólium *Haw*	boat-leaved	☼	or	1	...	Y	C	G	H	1822	C s l
7352	auránticum *Haw*	orange-flower'd	☼	or	1½	jn au	Y	C	G	H	1793	C s.l
7353	glaucum *L*	glaucous-leav'd	☼	or	1½	jn jl	Or	C	G	H	1696	C s l
7354	strictum *Haw*	erect	☼	or	3	...	Y	C	G	H	1795	C s.l
7355	cymbiforme *Haw.*	boat-shaped	☼	or	1½	...	Y	C	G	H	1793	C s l
7356	graminforme *Haw*	gram-leaved	☼	or	½	s o	Y	C	G	H	1727	C s l
7357	mólle *H K*	soft-leaved	☼	or	1	o	Pk	C	G	H	1774.	C s l
7358	coccíneum *Haw*	scarlet-flowered	☼	or	1½	my s	S	C	G	H.	1696	C s.l
7359	bicolórum *L*	two-colored	☼	or	1½	my s	Or	C	G	H	1732	C s l
	β *pátulum* Haw.	*spreading*	☼	or	1	my s	Or	C	G	H	...	C s l
	γ *minus* Haw	*small*	☼	or	½	my s	Or	C	G	H	...	C s l
7360	mæquále *Haw.*	unequal-cupped	☼	or	1	my s	Or	C	G	H	1716.	C s l
7361	tenuifólium *L.*	slender-leaved	☼	or	1	jn s	S	C	G	H	1700	C s l
	β *eréctum* Haw	*erect*	☼	or	1½	jn s	S	C	G	H	...	C s l
7362	variábile *Haw*	variable	☼	or	1½	jn au	Y	C	G	H	1796	C s l
7363	spinifórme *Haw*	thorn-leaved	☼	or	1	s o	Pk	C	G	H	1793	C s l
	β *subaduncum* Haw	*hooked*	☼	or	1	s o	Pk	C	G.	H	...	C s l
7364	curvifólium *W*	crooked-leaved	☼	or	1	o	Pk	C.	G	H	1799	C s l
7365	flexifólium *Haw*	bent-leaved	☼	or	1½	o	Pk	C	G	H	1820	C s l
7366	adúncum *Haw.*	hook-leaved	☼	or	1	⅛ mr	Pk	C	G	H	1795	C s l
7367	filicaúle *Haw.*	thread-stalked	☼	or	1½	s	Pk	C	G.	H	1800.	C s l
7368	spinósum *L.*	thorny	☼	or	1½	jn s	Pk	C	G	H	1714	C s.l
7369	stipuláceum *L*	upright-shrub	☼	or	1½	my jn	Pk	C	G	H	1723.	C s l
7370	corallinum *Thunb*	coral	☼	or	1	my jn	Pk	C	G	H	1820	C s l
7371	prodúctum *Haw*	long-calyxed	☼	or	1	my jn	Pk	C	G	H	1822	C s l
7372	Hawórthii *Donn*	Haworth's	☼	or	1	ja jn	Br	C	G	H	1793	C s.l
7373	læ've *H K.*	white-wooded	☼	or	1½	jl s	...	C	G	H	1774	C s l
7374	verruculátum *L*	spot-leaved	☼	or	1½	my jn	Y	C	G	H.	1731.	C s.l
	β *Candóllii* Pl gr.	*Decandolle's*	☼	or	1½	my jn	Y	C	G	H	...	C s l
7375	insititum *W*	purple and saff	☼	or	1	au o	Pu	C	G	H	1780	C s l
	púrpuro-cróceum Haw											
	β *flávo-cróceum* Haw	*yellow and saff*	☼	or	1	au o	Y	C	G	H	1816.	C s l
	γ *minus*	*small*	☼	or	¾	au o	Y	C	G	H	...	C s l
7376	crystállinum *L*	Ice-plant	✱	or	1	my au	W	Greece			1727	S s l
7377	glaciále *Haw*	frozen	✱	or	¾	my au	W	Greece			...	S s l
7378	pinnatifidum *L*	jagged	✱	or	1	my o	Y	C	G	H	1774	S s l
7379	sessiliflórum *H K*	sessile-flowered	✱	or	¾	jl	Y	C	G	H	1774	S s l
	β *álbum* Haw.	*white*	✱	or	¾	jl	W	C	G	H.	...	S s l
7380	humifúsum *H K*	narrow-lvd icy	☼	or	¾	jl au	W	C	G	H.	1774.	C s l
7381	Aitóni *Jacq*	Aiton's	☿	or	¾	jn o	Pk	C	G	H.	1774	S s l
7382	lanceolátum *Haw*	spear-leaved		or	¾	my au	W	C	G	H	1795	S s l
	β *róseum* Haw	*pink*		or	¾	my au	Pk	C	G	H	1813	S s l
7383	cordifólium *L*	heart-leaved	☼	or	¾	my s	Pk	C	G	H	1774	C s l
7384	pomeridiánum *L.*	great yellow-fl		or	1	jl au	Y	C	G	H	1774	S s l
	β *glábrum*	*smooth*		or	1	jl au	Y	C	G	H	..	S s l
7385	Candollii *Haw.*	Decandolle's		or	¾	au	Y	C	G	H	1815	S s.l
7386	pilósum *Haw*	hairy-yellow		or	¾	jn au	Y	C	G	H	1800	S s l
7387	calenduláceum *Haw*	Pot-marigold		or	¾	au	Y	C	G	H	1819	S s l
7388	Helianthoides *H K*	Sun-flower		or	¾	au o	Y	C	G	H	1774	S s l
7389	límpidum *H K*	transparent		or	1	jl	R	C	G	H	1774	S s l



History, Use, Propagation, Culture,

M nodiflorum grows wild in Italy and Egypt, and in the latter country is burnt for potash, which it produces in excellent quality.

7340 Leaves glauc. slender roughish, Bractes ovate acute almost surrounding the calyx, Branches very slender [straight

7341 Leaves glaucous, Bractes broad ovate, Branchlets clustered, Stem hoary
7342 Leaves glauc equilateral 3-corn very rough, Bractes ovate acute embracing the peduncles upwards
7343 Leaves 6-12 lines long half erect glauc with little pellucid rough dots
7344 Leaves compressed 3-corn. longish bluish-green with rough pellucid dots, Keel usually onetoothed

7345 Low, Leaves green sparkling in the sun and branches very dense, Flower-stems decumbent
7346 Lowish, Lvs glauc. 3-corner and branches very close, Fl.-stems ascending or erect, Styles obovate twice
7347 Leaves green sparkling in the sun and branches close, Flower-stems erect [as short as stamens
7348 Lvs. close compressed 3-cornered very green, Ped longer than bract, Flowers spreading flat in the sun
7349 Leaves compressed 3-cornered glaucous, Branches stout, Pedunc. clavate, Corolla incurved
7350 Leaves cylindrical 3-cornered, Petals orange, Styles dark purple
7351 Leaves cymbiform pale-green with large dots, Branches few 2-edged hoary
7352 Lvs very glauc 3-corn compressed, Sepals obl. ovate, Pet deep orange imbricated, Styles purple outside
7353 Lvs acutely 3-corn much compressed glauc roughish, Sepals ovate cordate, Pet sulphur, Styles yellow
7354 Leaves 3-cornered obtuse expanded glaucous with large spots, Stem much branched woody stiff erect
7355 Leaves 3-cornered spreading cymbiform glaucous, Stems branched, Branches filiform nearly erect close
7356 Lvs distinct 3-corn ovate granular 3 lines long, Flowers yellow opening in the evening, Stems expanded
7357 Leaves spreading turgid 3-cornered hoary bluntly dotted at edge, Branches clustered 2-edged decumbent

§ 7. *Slender, Leaves distinct, dotted, rounded, without warts, Flowers opening in the morning, red, orange, or yellow*

7358 Lvs rounded 3-corn somewhat compressed obt glauc Pedunc smooth at base, Sepals obt. nearly equal
7359 Leaves 3-cornered acute green, Pedunc and cal unequal rough, Petals yellow inside

7360 Leaves about 3-cornered very green, Pedunc in fruit clavate, Sepals very unequal, Branches loose
7361 Leaves half round subcompressed subulate green smooth longer than joints, Stems erect or procumbent

7362 Lvs 3-corn compressed glauc rough, Sepals unequal, Petals changing from yellow to pink, Stems effuse
7363 Branches and lvs cylindrical subul spuniform erect recurved at end, Pedunc and keels of bractes rough

7364 Lvs distant expanded at base incurv half round subul Branch firm suberect roughish angul compressed
7365 Lvs 3-cornered subulate incurved below hooked at end, Branches filiform compressed wavy decumbent
7366 Leaves clustered half cylindrical acuminate much recurved at end, Branches erect very close
7367 Tufted, Leaves clustered half cylindrical acuminate with filiform very weak creeping stems
7368 Leaves rounded 3-cornered dotted distinct, Spines branched
7369 Leaves long rounded 3-cornered subulate incurved glaucous edged at base
7370 Leaves rounded incurved smooth thickest in middle glaucous, Stem straight branched
7371 Flowers terminal 3, Two sepals deeply divided
7372 Leaves subulate rounded 3-cornered acute somewhat incurved very glaucous, Bark chestnut-colored
7373 Leaves clustered cylindrical obtuse arcuate glaucous smooth
7374 Leaves connate at base very close and glaucous 3-cornered cylindrical soapy, Flowers afternoon

7375 Leaves clustered 3-cornered half cylindrical mealy obtuse shorter than joint soapy, Sepals very unequal

§ 8 *Warted, Leaves and branches almost always more or less warted, Root biennial or annual*

7376 Leaves large ovate acute wavy frosted with three nerves beneath, Root biennial
7377 Leaves large altern ovate much wavy, as are the stems and cal, bespangled with ice drops, Root annual
7378 Leaves oblong pinnatifid pimpled, Petals minute yellow
7379 Leaves flat spatulate and stems pimpled, Branches divaricating, Fl sessile

7380 Leaves amplexicaul spatulate keeled, Pimples conical rough, Petals very minute
7381 Leaves opp and altern ovate spatulate wavy pimpled, Branches and calyxes angular, Fl afternoon
7382 Leaves altern lanceolate bluntish pimpled, Calyxes stalked crystalline

7383 Leaves stalked cordate ovate, Stems procumbent spreading, Cal 4-cleft 2-horned
7384 Leaves broad lanceolate flattish smooth ciliated distinct, Stem peduncle and ovaries hairy

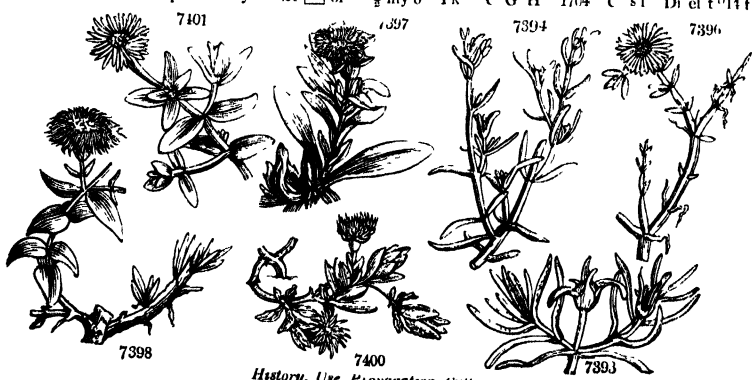
7385 Leaves opp lanc acute subciliate, Pedunc solitary subterminal very long hairy, Sepals lanceolate
7386 Lvs lin.-lanc ciliated, Stems branched effuse, Pedunc bractes and cal shorter than flower woolly villous
7387 Leaves lin.-lanc scarcely spatulate and calyx ciliated, Sepals linear thick or turgid, Pedunc scabrous
7388 Leaves spatulate flat smooth, Pedunc very long, Cal flat at base angular
7389 Leaves opp spatulate blunt rough, Pimples oblong, Sepals oblong blunt contracted in middle



and Miscellaneous Particulars.

M crystallinum is a popular hothouse annual, which does well in the open air in the summer season.
M. umbellatum forms one of the handsomest shrubs of the genus, standing without support with a stout

7390 **tricolor** *Haw.*	three-colored	☐	or	¾	jl	R	C	G.	H	1795	S	sl
β rōseum Haw	*pink*	☐	or	¾	jl	Pk	C	G	H	1795	S	sl
γ linefre Thunb	*linear*	☐	or	¾	jl	W	C	G	H	1819	S	sl
7391 villósum *L*	villous	☐	or	1	jl	Ap	C	G	H	1759	C	sl
7392 caducum *H K*	deciduous	☐	or	1	jl au	Pk	C,	G	H.	1774	S	sl
7393 apétalum *H K*	dwarf-spread	☐	or	1	jl au	Ap	C	G	H	1774	S	sl
7394 nodiflórum *L*	knot-flowered	☐	or	1	au o	W	Egypt			1759	S	sl
7395 ciliátum *H K*	ciliated	☐	or	1	...	W	C,	G	H	1774	C	sl
7396 geniculiflórum *L*	joint-flowering	☐	or	1	jl s	W	C	G.	H	1727	C	sl
7397 Tripólium *L*	Aster-leaved	☐	or	⅛	jn o	Pa Y	C	G	H	1700	C	sl
7398 expánsum *L*	Houseleek-lvd	☐	or	⅛	jl au	Pa Y	C	G	H	1705	C	sl
7399 várians *Haw*	varying	☐	or	⅛	jl o	Pa Y	C	G	H	1706	C	sl
7400 tortuósum *L*	twisted-leaved	☐	or	⅛	jn o	Pa Y	C	G	H	1705	C	sl
7401 pállens *H K*	pale-flowered	☐	or	⅛	jl au	Pa Y	C	G	H	1774	C	sl
7402 lorátum *Haw*	lorate	☐	or	⅛	jl au	W	C	G	H	1819,	C	sl
7403 relaxátum *W*	lvid strap-leav	☐	or	1	jl au	Pk	C	G	H	1815	C	sl
7404 crassifólium *Haw*	thick-leaved	☐	or	⅛	jl au	Pa Y	C,	G	H	1815	C	sl
7405 anatómicum *Haw*	skeleton-leaved	☐	or	⅛	jl au	W	C	G	H	1803	C	sl
β frágile Haw	*brittle*	☐	or	⅛	jl au	W	C	G	H	1803	C	sl
7406 réctum *Haw*	straight	☐	or	⅛	jl au	W	C	G	H	1819	C	sl
7407 crassuloides *Haw*	Crassula-like	☐	or	⅛	jl au	Pk	C,	G	H	1819	C	sl
7408 incómptum *Haw*	persistent	☐	or	⅛	jl au	W	C	G	H	1819	C	sl
7409 splendens *L*	shining	☐	or	1⅛	jn au	W	C	G	H	1716	C	sl
7410 flexuósum *Haw*	zigzag	☐	or	1⅛	jl au	W	C	G	H	1795	C	sl
7411 acumminátum *Haw*	acuminate	☐	or	2	au s	W	C	G	H	1820	C	sl
7412 sulcátum *Haw*	sulcate	☐	or	3	au s	W	C	G	H	1819	C	sl
7413 fastigiátum *Haw*	level-topped	☐	or	1⅛	jl s	W	C	G	H	1794	C	sl
β reflérum Haw	*reflexed*	☐	or	1⅛	au s	W	C	G	H	1792	C	sl
7414 umbellifiórum *W*	umbellate	☐	or	1½	au s	W	C	G	H	1820	C	sl
7415 pallécens *Haw*	pallid	☐	or	1½	au s	W	C	G	H	1820	C	sl
7416 micránthum *Haw*	small-blossom	☐	or	1⅛	.	W	C	G	H.	1804	C	sl
parvifiórum Jacq												
7417 júnceum *Haw*	Rush-leaved	☐	or	1	au o	Pk	C	G	H	1800	C	sl
7418 granulátum *Haw*	granulated	☐	or	1⅛	.	..	C	G	H	1820	C	sl
7419 ténue *Haw*	slender	☐	or	1	...	...	C	G	H	1819	C	sl
7420 longispinulum *Haw*	long-spined	☐	or	1	au.n	Pa Y	C	G	H	1820	C	sl
7421 spinulíterum *Haw*	spinulescent	☐	or	1	jn o	Pa Y	C	G	H	1794	C	sl
7422 grossum *Haw*	gouty	☐	or	1	au o	Pa Y	C	G	H	1774	C	sl
7423 salmóneum *Haw*	salmon-colored	☐	or	3	au o	Pa Y	C	G	H	1819	C	sl
7424 canaliculátum *Haw*	channel-leaved	☐	or	2	jl o	Pk	C	G	H	1794	C	sl
7425 viridiflórum *H K*	green-flowered	☐	or	2	jl n	Gr	C	G	H	1774	C	sl
7426 tenuiflórum *Jacq*	slender-flower	☐	or	2	jl n	Pk	C	G	H	1820	C	sl
7427 mtidum *Haw*	mtid	☐	or	2	jl o	Y	C	G	H	1790	C	sl
7428 brachiátum *H K*	three-forked	☐	or	1⅛	jn au	Y	C	G	H	1774	C	sl
7429 subincánum *Haw*	hoary	☐	or	2	au s	W	C	G	H	1820	C	sl
7430 testáceum *Haw*	tile-colored	☐	or	3	au s	Or	C	G	H	1820	C	sl
7431 tuberósum *L*	tuberous-rooted	☐	or	2	jn o	Or	C	G	H	1714	C	sl
7432 noctiflórum *L*	night-flowering	☐	or	2	jn au	W pk	C	G	H	1714	C	sl
β stramineum Haw	*straw-colored*	☐	or	2	jn au	Str	C	G	H	1732	C	sl
7433 fúlvum *Haw*	grey-barked	☐	or	2	jn au	Str	C	G	H	1820	C	sl
7434 defoliátum *Haw*	clubbed	☐	or	2	jn au	W pk	C	G	H	1820	C	sl
7435 horizontále *Haw*	horizontal-lvd	☐	or	2	jn au	Str	C	G	H	1795	C	sl
7436 speciósum *Haw*	specious	☐	or	1⅛	my o	S	C	G	H	1793	C	sl
7437 micans *L*	glittering	☐	or	1⅛	my au	S	C	C	H	1714	C	sl
7438 maculátum *Haw*	spotted-stalked	☐	or	1⅛	.	S	C	G	H	1792	C	sl
7439 flávum *Haw*	small-yellow	☐	or	⅛	au	Pk	C	G	H	1820	C	sl
7440 obliquum *Haw*	oblique	☐	or	1	au	Pu	C	G	H	1819	C	sl
7441 parvifólium *Haw*	small-leaved	☐	or	⅛	au	Pu	C	G	H	1820	C	sl
7442 brevifólium *H K*	short-leaved	☐	or	1	jl o	R	C	G	H	1777	C	sl
7443 subglobósum *Haw*	globular	☐	or	1	jl o	R	C	G	H	1795	C	sl
7444 pulverulántum *Haw*	dusty-leaved	☐	or	¼	my	Pk	C	G	H	1792	C	sl
7445 hispidum *L*	hispid	☐	or	¼	my o	Pu	C	G	H	1704	C	sl
β platypétalum Haw	*broad-petalled*	☐	or	¼	my o	Pu	C	G	H	1820	C	sl
7446 hirtéllum *Haw*	dwart-bristly	☐	or	⅛	my n	Pk	C	G	H	1792	C	sl
7447 cándens *Haw*	glowing-icy	☐	or	⅛	.	.	C	G	H	1820	C	sl
7448 floribundum *Haw*	pale-bristly	☐	or	⅛	my o	Pk	C	G	H	1704	C	sl



History, Use, Propagation, Culture,

stem, two or three feet high, with terminating white flowers, which open, when the sun shines, from seven or eight in the morning to two or three in the afternoon, and smell like those of the hawthorn The fruit of M. edule is eaten by the Hottentots and Dutch inhabitants of the Cape, and is called Hottentots' figs.

7390 Leaves linear inflexed channelled blunt rough, Pedunc and calyx jewelled with crystals

7391 Leaves pubescent connate not dotted, Stem hairy [of leaves
7392 Leaves filiform half round distinct, Pimples ovate, Fl. lateral sessile the terminal surrounded by a pair
7393 Leaves amplexicaul distinct linear flat above pimpled longer than joints, Fl stalked
7394 Leaves alternate roundish obtuse ciliated at base
7395 Leaves opp connate half round, Stipules membranous reflexed torn fringe-like
7396 Leaves half round papulose distinct, Fl sessile axill Cal 4-cleft
7397 Leaves alternate lanceolate flat not dotted, Stems lax simple, Cal 5-cornered
7398 Leaves flattish lanceolate not dotted spreading distinct opp and altern remote
7399 Leaves lanc acuminate keeled fleshy bluntly 3-cornered channelled, Pedunc very thick
7400 Leaves flattish oblong ovate papulose clustered connate, Cal 3-leaved 2-horned
7401 Leaves amplexicaul glaucous distinct obl lanc inflexed concave, Sepals ovate obl longer than cor
7402 Leaves lorate long channelled inflexed blunt very glaucous convex beneath, Sepals obtuse as long as cor
7403 Lvs lorate obl blunt glauc livid channelled dotted papulose keeled, Stems branched rounded decumbent
7404 Leaves lorate acuminate green smooth, Stem very short and thick
7405 Leaves lanc elliptical crystalline when dead having only the nerves remaining, Stems procumbent

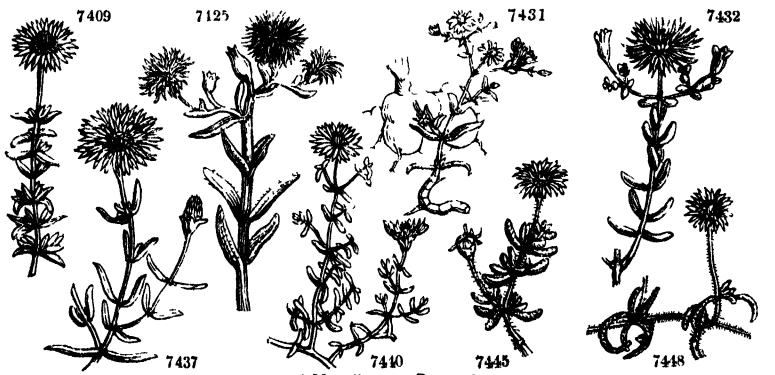
7406 Leaves connate ovate papulose, Branches erect clustered
7407 Leaves lanc lin somewhat channelled convex beneath, Fl solitary termin d [acute
7408 Lvs clustered papulose erect somewhat imbricate subul half round, Fl ternate cymose, Sepals digitiform
7409 Leaves half round not dotted recurved distinct close, Cal terminal finger-shaped
7410 Lvs close flexuose recurved very green half round, Sepals finger-shaped, Stems flexuose shining slender
7411 Leaves acuminate green, Sepals 2 much elongated
7412 Leaves close linear subulate half round pale green deeply channelled, Sepals acute
7413 Leaves close flexuose reflex subulate half round glaucous, Sepals equal 5 membranes on each side

7414 Leaves distinct roundish pimpled, Stem erect, Branchlets 1-flowered
7415 Leaves opposite amplexicaul distichous oblong-lanceolate acute bluntly keeled, Pimples minute
7416 Leaves lanc linear keeled not dotted distinct, Flowers stalked, Two sepals very long

7417 Lvs subulate half round acute remote, Fl term dichotomous, Sepals very unequal, Branches sometimes
7418 Branches round granular closely dotted [rush-formed
7419 Leaves very slender 1-sided effuse, Leaves erect linear very fine
7420 Branches procumbent knotted at the base, Spines of the leaves very long
7421 Leaves close half round channelled, Stem and branches erect thick
7422 Leaves lin round obtuse narrowed at each end, Old stem strumose at base, Branches effuse
7423 Branches filiform weak long prostrate, Old roots strumose above, Leaves lin furrowed longer than joints
7424 Leaves lin half round with shining pimples, Stems procumbent filiform
7425 Leaves half round pimpled hairy, Cal hairy, Stem thick, Branches diffuse knotty
7426 Leaves half round blunt channelled spreading iced, Branches diffuse weak cinereous
7427 Beautifully pimpled all over, Leaves half round, Branches knotty slender, Fl small dichotomous
7428 Stems and leaves cylindrical pimpled, Branches dichotomous
7429 Leaves expanded compressed 3-cornered somewhat hoary soft recurved at end mucronate
7430 Leaves half round somewhat triquetrous glaucous, Fl dichotomous testaceous, Stem erect shrubby
7431 Leaves subtriquetrous compressed minutely pimpled recurved at end, Old root tuberous large
7432 Leaves remote obsoletely cylindrical glaucous, Fl 2 ternate cymose, Bark white

7433 Leaves remote subcylindrical glaucous exactly half erect, Fl ternate, Bark cinereous
7434 Leaves half round, Pedunc terminal aggregate clavate cymose
7435 Leaves remote half cylindrical glaucous exactly horizontal, Fl ternate
7436 Leaves half cylindrical subul subacute incurved sparkling, Sepals and petals obtuse, Cor funnel-shaped
7437 Leaves half cylindrical obtuse subrecurved much sparkling, Sepals and petals subacute
7438 Leaves expanded remote blunt compressed subcylindrical, Stems very rough spotted
7439 Leaves half round narrowed at each end sparkling incurved erect variously bent, Branches filiform
7440 Leaves distant cylindrical blunt small shining pimpled one of each pair deflexed, Branches hard suberect
7441 Leaves graniform expanded bluntly 3-cornered papulose shining, Branches hard rough erect
7442 Leaves cylindrical blunt spreading short, Branches numerous diffuse filiform
7443 Leaves expanded very short or globose cylindrical, Branches numerous filiform divaricating decumbent
7444 Leaves cylindrical 3-cornered obtuse with white dots, Calyx 6-cleft
7445 Leaves cylindr very blunt and cal smooth obconical green pimpled sparkling, Stamens longer than styles

7446 Leaves close cylindrical blunt with crystalline pimples, Cal turbinate hairy, Stamens length of styles
7447 Leaves cylindrical incurved crystalline hoary blunt sparkling, Branches long weak procumbent
7448 Lvs subcylindr incurv pimpl obt Cal hemispheric pimpl hairy cluster Branch numerous spreading



and Miscellaneous Particulars.

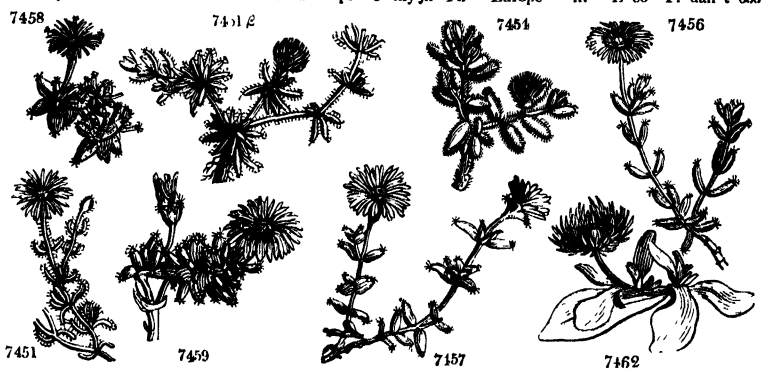
Mr Haworth's arrangement of the genus, which is the only intelligible one, is here followed

Respecting the general culture of the genus, Sweet observes, "the dwarf kinds require but little water, and to be grown in small pots in a very sandy or gravelly soil The species should be kept quite dry when in a dormant state,

7449 torquátum *Haw*	twisted	♃	or	¾ my o	Pk	C G H.	1820.	C	s.l		
7450 calycínum *Haw.*	long-cupped	♃	or	¾ jl au	W	C. G. H	1819.	C	s l		
7451 striátum *Haw.*	striped-bristly	♃	or	¾ my o	Pk	C G H	1727.	C	s l	Dill elth f 281	
β pállens	*pale*	♃	or	¾ my o	W	C G H.	...	C	s.l	Plan grass t.130	
7452 attenuátum *Haw*	slender	♃	or	¾ my o	W	C G H	1821	C	s.l		
7453 hispifólium *Haw*	bristle-stemmed	♃	or	¾ my o	W	C G H	1818	C	s.l		
β róseum Haw.	*rosy*	♃	or	¾ my o	Pk	C G. H.	1818.	C	s l		
7454 echinátum *H K*	hedge-hog	♃	or	¾ jl o	Y	C G H	1774	C	s l	Plant grass 24	
7455 strumósum *Haw*	tubr hedge-hog	♃	or	¾ au	Pa.Y	C G H.	1820	C	s l		
7456 barbátum *L*	trailing beard	♃	or	¾ jn au	Pk	C G H	1705	C	s.l	Plant. grass 28	
7457 stelligerum *Haw*	lesser bearded	♃	or	¾ my o	Pk	C G H.	1793	C	s l	Bot mag 70	
7458 stellátum *Dec*	small bearded	♃	or	¾ s.o	Pk	C G H.	1716.	C	s l	Dill elth. f 235	
M hirsútum Haw											
7459 dénsum *Haw*	dwarf bearded	♃	or	¾ my au	Pk	C G H	1732	C	s l	Bot mag 1220	
7460 bulbósum *Haw*	bulbous	♃	or	¾ au	Pk	C G H	1820	C	s l		
7461 intonsum *Haw*	black-bearded	♃	or	¾ jl	Pk	C G H	1824	C	s l		
1147 HYMENO'GYNE *Haw*	HYMENOGYNE			*Ficoideæ* *Sp* 1							
7462 glábra *Haw*	smooth	◯	cu	¾ jl o	Pa.Y	C G H	1787	S	s l	Bot rep 57	
Mesemb glabrum H K											

POLYGYNIA.

†*1148 ROSA *W*	Rose			*Rosaceæ* *Sp* 59—90						
7463 berberifólia *Pall*	Berberry-leavd	♃	or	1½ jn jl	Y	Persia	1790	C	r m	Par lond. 101
7464 férox *Lawr*	hedge-hog	♃	or	3 jn au	R	Caucasus	1796	L	co	Bot reg 420
7465 Kamchática *Vent*	Kamtchatka	♃	or	4 jl au	R	Kamtsch	1802	L	co	Bot reg 419
β K nítens Lindl	*shining*	♃	or	4 jl au	R	.....	1822	L	co	Bot. reg 824
7466 involucráta *Rox*	involucrated	♃	or	3 jl au	W	E. Indies	1818	L	co	Bot reg 739
7467 bracteáta *Wendl*	Macartney	♃	or	2 au o	W	China	1795	C	l p	Vent cels t 28
β b scabricáulis Lindl	*rough-stemmed*	♃	or	2 au o	W	China	...	C	l p	Bot mag 1377
7468 nítida *W*	glossy	♃	or	2 jn au	R	N Amer	1807.	L	co	Lindl. ros t. 2
7469 rápa *Bosc*	Turneps	♃	or	4 jn au	R	N Amer	.	L	co	Red ros 1 t 7
7470 lucida *Ehr*	shining-leaved	♃	or	2 jn au	R	N Amer	1724	L	co	Di el t 245 f 316
7471 gemélla *W*	twin-flowering	♃	or	3 jl au	R	N Amer	1800	L	co	
7472 láxa *Lindl*	sprdg Carolina	♃	or	3 jl au	R	N Amer		L	co	Lindl ros. t. 3
7473 parviflóra *Ehr*	small-flowered	♃	pr	1½ jn au	F	N. Amer	1724	L	s p	Lawr ros t 3
— *flore pleno*	*double*	♃	pr	1½ jn au	F	N Amer	...	L	co	
7474 Woódsii *Lindl*	Wood's	♃	or	3 my jn	R	N Amer	...	L	co	
7475 carolina *L*	Carolina	♃	or	6 jn jl	R	N Amer	1726	L	s p	Lindl ros. t 4
β florida Donn	*smooth Carolina*	♃	or	5 jn jl	R	N Amer	...	L	s p	
7476 fraxinifólia *Bork*	ash-leaved	♃	or	6 my jn	R	Newfound	...	L	co	Bot reg 458
7477 cinnamómea *L*	Cinnamon	♃	or	6 my	Pk	Europe	...	L	co	Eng bot 2388
β c flore plèno	*double*	♃	or	5 my jn	Pu	Europe	.	L	co	Lindl ros t. 5
γ flore semipleno	*semidouble*	♃	or	7 my jn	R	Siberia	1805	L	co	
7478 majális *Retz*	dwarf-cinnam	♃	pr	3 my jn	Pk	Europe	...	L	co	Fl dan t 688



History, Use, Propagation, Culture,

but when growing freely, and at the flowering season, they require a moderate supply of water The stronger and more woody kinds may be planted in a richer soil, but the poorer the soil is, the dwarfer they will grow, and the more abundantly they will flower, they also require more water than the dwarf kinds, particularly at the flowering season, but need very little in winter A good dry frame is sufficient to preserve them through the winter, with the covering of mats in frosty weather Cuttings of any of them strike root readily, planted in pots of earth, and kept dry till they begin to wither, when they may have a little water, and they will root very soon (*Bot Cult* 224)

1147 *Hymenogyne* From *ὑμην*, a membrane, and *γυνη*, a woman, or, in botanical language, a style, in allusion to the cohesion of the styles into a membranous tube An artificial division of Mesembryanthemum

1148 *Rosa* From *rhos*, signifying red in Armorican, whence *ῥοδον*, Greek, and *rosa*, Latin The rose has been a favorite flower from time immemorial among the civilized nations of Europe and Asia The shrub varies in size in different species, from one foot to six or eight, and the colors are red, white, yellow, purple, striped, simple, or in almost numberless shades and mixtures, the flowers are single, semi-double, and double The odour is universally grateful It is cultivated in every garden, from that of the most humble cottager upwards, some species, as R centifolia, damascena, &c are also cultivated by commercial gardeners on a large scale for distilling rose water, and for making attar, or essential oil of roses Six pounds of rose leaves will impregnate by distillation a gallon of water strongly with their odor, but a hundred pounds affords scarcely half an ounce of attar The rose is also used in medicine Botanists are not agreed as to the number of

7449 Lvs subcylindr incurved pimpled obt. hoary, Cal hemispheric pimpled numerous, Stamens longer than
7450 Leaves cylindrical fine, Two sepals leafy much longer than the others [styles
7451 Erect, Leaves subulate half cylindrical, Cal. woolly, Stamens the length of styles

7452 Slender, Lvs half cylindr blunt or half round, Cal. hairy at base, Pedunc long and branches decumbent
7453 Branches, leaves, peduncles, and calyxes hispid

7454 Leaves obl ovate subtriquetrous gibbous, Sepals very unequal filiform ragged hispid the length of petals
7455 Leaves close depressed cylindrical hispid all over, Old root tuberous
7456 Procumbent, Leaves remote suboblong exactly half erect with 5 rays at end, Cal 5-cleft very irregular
7457 Erect decumbent, Leaves remote nearly oblong horizontal flat above with 6 rays at end, Cal 5-cleft equal
7458 Lvs tufted hoary thick half round pimpl. rough with many rays at end ciliated at base, Cal. 6-8-fid hairy

7459 Densely tufted, Leaves half round papulose rough with many rays at end, Cal 6-cleft very hairy
7460 Branches villous, Leaves horizontal, Root tuberous
7461 Branches erect decumbent hairy, Leaves with about 10 rays at end, Calyx with a black beard

7462 Leaves on long stalks spatulate lanceolate green

POLYGYNIA.

DIV I SIMPLICIFOLIA *Lindl ros mon* p 1

7463 Leaves simple

DIV II FEROCES *Lindl* p 3.

7464 Arms very close unequal of the same form
7465 The prickles below the stipules falcate larger than the rest, Leaves opaque
β Leaflets shining

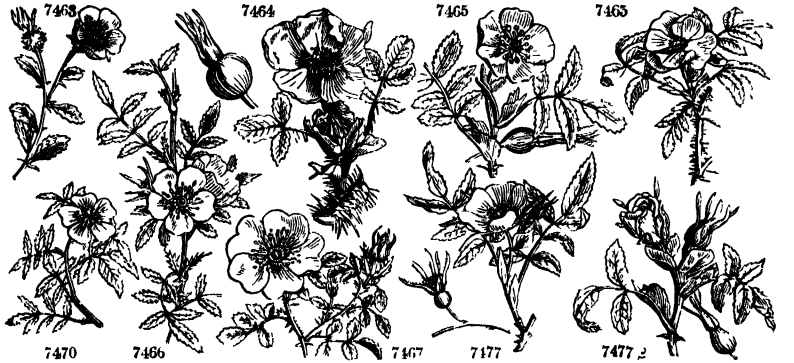
DIV III. BRACTEATÆ *Lindl* p 7

7466 Leaflets lanceolate elliptical downy beneath, Bractes contiguous pectinate
7467 Leaflets oblong obtuse very smooth, Bractes closely appressed pectinate
β Branches covered with setæ

DIV IV CINNAMOMEÆ *Lindl* p 13

7468 Dwarf, Arms very close and slender, Leaflets shining narrow lanceolate flat
7469 Tall diffuse, Branchlets unarmed, Leaflets oblong wavy shining, Fruit hemispherical
7470 Compact, Prickles of the branches stipulary, Leafl obl imbricated flat shining, Fruit depressed globose
7471 Fruit depressed glob and pedunc smooth, Fl twin, Leafl obl acute, Petioles and veins pubesc beneath
7472 Diffuse, Branches twiggy nearly unarmed, Leafl oblong wavy opaque glaucous
7473 Dwarf, Stipules linear, Prickles acicular, Leaflets lanceolate smoothish finely serrated, Cal visc d

7474 Erect, Prickles stipulary straight, Leaflets oblong glaucous blunt smooth
7475 Stipules convolute, Leaflets lanceolate, Sepals spreading
β Leaflets not downy
7476 Tall unarmed, Branches upright glaucous, Leafl opaque wavy not downy [beneath
7477 Tall cinereous, Branches upright, Prickles stipulary straight, Stipules wavy, Leafl oblong rugose downy [beneath
7478 Dwarf cæsious, Branches straight coloured, Prick scatt nearly equal, Stip lin Leafl obl flat glaucous



and Miscellaneous Particulars.

original species of this genus some regard all the European species as originated from one source, others, and especially the moderns, divide them into species, subspecies, and varieties The most scientific work which has appeared in England on roses is the Rosarum Monographia of Mr Lindley, 1819, in which above a hundred species or subspecies are described, and some of them figured; Miss Lawrence has published ninety plates of A Collection of Roses from Nature, 1810 In France, Guillemeau has published Histoire Naturelle de la Rose, 1800, and Redouté and Thory are engaged in a splendid work, in folio, entitled Les Roses, containing plates of all the known species and varieties of this flower Thory has published a separate tract on their culture, entitled Prodrome de la Monographie du Genre Rosier, &c 1820, Pronville, a Nomenclature Raisonnée, in 1818, and Vibert, Observations, &c., in 1820 A copious and intelligent account of the Scotch roses has been given by Mr Sabine (*Hort Trans* iv 231), and some hundreds of new varieties have flowered from seedling plants in the Hammersmith nursery, and will soon be found in the sale catalogues

Species and varieties The lists of the London and Paris nurserymen contain upwards of 500 names that of Calvert and Co., Englishmen, who have established a nursery at Bonne-Nouvelle near Rouen, enumerates near 900 sorts. The greater part of these have been raised, within the last thirty years, from seed on the continent, where it ripens better than in this country A number of varieties have also been raised in Britain, especially of the R spinosissima, or Scotch rose, of which above 300 varieties are procurable in the Glasgow nursery New varieties are raised in France and Italy annually, Villaresi, royal gardener at Monza, has raised upwards of fifty varieties of Rosa indica, not one of which has, as far as we know, reached this

7479 macrophýlla *Lindl*	long-leaved		or	6	...	...	Nepal	1822	C	co	Lindl ros. t. 6
7480 alpina *L*	Alpine		or	3	m j	Pk	Switzerl	1683	L	r m	Bot reg 424
β pyrenáica Gouan	*Pyrenæan*		or	3	m j	Pk	Pyrences	...	L	co	Gouan ill t 19
γ pendulina L	*pendulous*		or	5	my m	Pu	Switzerl	1726.	L	co	Laur ros t 91
7481 rubélla *Sm*	reddish		or	2	m j	Pk	England	sea sh	L	co	Eng bot 2521
3 r melanocárpa Lind	*intermediate*		or	2	m j	Pk	. ....	...	L	co	
7482 stricta *Lindl*	upriy Carolina		or	3	m	Pk	N Amer	...	L	co	Lindl ros t 7
7483 aciculáris *Lindl*	acicular		or	6	my m	Pk	Siberia	1805	L	co	Lindl. ros t 8
β a pauciflóra Lindl	*few-flowered*		or	6	my m	Pk	Siberia	1813.	L	co	
7484 sulphúrea *H K*	double-yellow		or	3	j l	Y	Levant	1629	L	s l	Bot reg 46
7485 lutéscens *Psh*	hispid-stemmed		or	3	my m	Pa Y	Siberia?	1780	L	co	Lindl ros t 9
hispida B M											
7486 spinosíssima L	Scotch		or	2	m j	W R	Britain	sa hea	L	p l	Eng bot 187

Garden Varieties

Blush, Anderson's Double	Blush, Double Rose	Marbled, Double Dark
Lady's	Blush, Dutch Double	Marbled, Double Light
Blush, Double Lady's	Blush, Princess Double	Purple, Double
Blush, Double Pink	Crimson, Double	Purple, Small Double Light
Blush, Double Provins	Marbled, Double Crimson	Red, Double Dark

β s revérsa Lindl	*reversed*		or	1	my m	W	Siberia	1814	L	co	Bot reg 431
γ s Pallasi Lindl	*Pallas's*		or	2	my m	W	Siberia	...	L	co	Pall ross t 75
δ sanguisorbifolia Do	*Burnet-leaved*		or	3	my m	W	... .	...	L	co	
7487 grandiflóra *Lindl*	large-flowered		or	4	my m	W	Siberia	1818	L	co	Bot reg 888
7488 myriacántha *D C*	many-spined		or	1	my m	W	S France	1820	L	co	Lindl ros t. 10
7489 Bieberstéinii *Lindl*	Bieberstein's		or	2	my m	W	Caucasus	1822	L	co	
R ferox Bieb											
7490 involuta *Sm*	Dr Walker's		or	2	m j	W R	Hebrides	moun	L	co	Eng bot 2068
7491 revérsa *W & K*	reversed		or	7	m j	W R	Hungary	1816	L	co	W & K h t 264
7492 Sabini *Woods*	Sabine's		or	8	my m	W R	Britain	woods	L	co	
β Donána Woods	*Don's*		or	4	my m	Pk	Britain	hed	L	co	

7493 damascéna *Mill*	Damask		or	3	m j	Pk	Levant	1573	L	co	Laur ros t 38

Garden Varieties

Agathe, Rouge	Belgic, Blush	Damas Argente
Argentea	Blush, Early	Damas Pourpré
Auguste, Belle	Blush, Imperial	Damask, Blush
Aurora	Blush Monthly	Damask, Red
Bifera Carnea	Blush, Watson's	Damask, White
Bifera de Naples	Brunswick	Egyptian
Bifera Grandiflora	Cluster, Pale	Emperor
Belgique carnée	Couronnée, Belle	Felicité
Belgique violette	Couronnée Petite	Goliath



History, Use, Propagation, Culture,

country Some of them are quite black, others shaped like a ranunculus, and many of them highly odoriferous The most remarkable only are here arranged under the species to which they are referable

A modern invention, of Dutch origin, in the culture of roses, is that of forming standards, by budding on stocks of any of the hardy woody growing sorts, as the dog rose, R canina, or the tree rose, R villosa. They are budded at different distances from the ground, according to taste and the purposes in view, and form, after a few years, handsome round heads, which flower freely, and preserve the variety a longer time than in plants raised from cuttings or layers They are particularly valuable for shrubberies and lawns, where the culture at the root required by dwarf roses could not be given, and if omitted would occasion the degeneracy of the variety

New varieties of the rose are obtained from seed, but the usual mode of propagation is by layers All will grow by cuttings, and some, as the sempervirens, freely, but that mode is seldom resorted to For preserving delicate varieties, the best mode seems decidedly that of budding on hardier sorts.

No species of rose, wild or cultivated, thrives well in or very near large towns, on account of the smoke and confined air The yellow and Austrian roses (R lutea and R bicolor) are difficult to flower in any situation, but seldom or never blow in the suburbs of London even the monthly rose does not thrive so well there as at some miles distance in the country Roses are generally planted in the front of shrubberies, and in borders, they are also planted by themselves in rose gardens or rosaries, in groups on lawn, either with common edgings, or with edgings of wire, in imitation of basket-work These last are called baskets of roses, the ground enclosed in the basket-margin is made convex, so as to present a greater surface to the eye, and increase the illusion, the shoots of the stronger sorts are layered or kept down by pegs till they strike roots

7479 Lvs very long, Petioles with a few glands and lanc leafl downy ben Sep very narr longer than pointed [petals

Div. V PIMPINELLIFOLIÆ. *Lindl* p 36

7480 Unarmed, Fruit long pendulous, Peduncle hispid
β Tube of calyx and peduncle hispid
γ Leaflets several and stem colored
7481 Arms close equal, Fruit long pendulous
β Fruit dark colored shorter than usual
7482 Much branched, Branchlets unarmed, Fruit long pendulous
7483 Tall, Branches acicular unequal, Leafl glauc rugose convex, Fruit obampullaceous cernuous
β Foliage bright pale green
7484 Stipules linear dilated at end divaricating, Leafl glauc flattish, Tube hemispherical [simply serrate
7485 Arms of branches very close uneq reflex. slender, those of the branches very small nearly equal, Leafl flat

7486 Arms unequal, Leaflets flat naked simply serrated

Garden Varieties

Red, Double Light	White, Large Double	Yellow, Globe Double
Red, True Double	White, Large Semi double	Yellow, Large Double
Two-colored, Large Double	White, Small Double	Yellow, Pale Double
Two-colored, Small Double	White, Whitley's Double	Yellow, Small Double

β Dwarf, Arms very slender the lower deflexed, Fruit ovate
γ Taller, Arms nearly equal close
δ Tall, Leaflets 9-11 oblong, Fruit depressed globose
7487 Setæ of the branches none, Prickles nearly equal distant, Leaflets flat not downy simply serrate
7488 Arms unequal the larger dagger-shaped, Leaflets glandular not downy round
7489 Arms unequal the larger falcate strong, Branches and orbicular leaflets glandular

7490 Arms very unequal and close, Leaflets doubly serrate pubescent, Petals convolute, Fruit aculeate
7491 Arms setaceous nearly equal reflexed, Leaflets doubly serrate pubescent, Fruit hispid
7492 Setæ few, Prickles unequal distant, Leaflets doubly serrated downy, Sepals compressed
β Setæ scarcely any, Prickles nearly straight

Div VI CENTIFOLIA. *Lindl* p 60

7493 Arms unequal the larger falcate, Sepals reflexed, Fruit long

Garden Varieties

Gracieuse	Præstans	Quatre Saisons sans épines
Hundred-leaved, Petite	Prolifc	Quatre Saisons, semidouble
Incomparable	Perpetual	Royal, Great
Mignonne, Favorite	Quatre Saisons	Swiss
Monarque, Grande	Quatre Saisons blanche	Valiant
Monthly, Red	Quatre Saisons, flesh-colored	Versailles
Monthly, White	Quatre Saisons Francois	York and Lancaster
Paragon	Quatre Saisons panaché	Zealand
Parnassus	Quatre Saisons pompone	



and Miscellaneous Particulars.

into the ground, so that the points of the shoots furnished with buds appear only above the soil, which is sometimes covered with moss or small shells Under this treatment, the whole surface of the basket becomes, in two or three years, covered with rose buds and leaves of one or of various sorts Where one of the larger free-growing sorts is employed, as the moss, or any of the Provence varieties, one plant may be trained so as to cover a surface of many square yards Where different sorts are introduced in the same basket, they should be as much as possible assimilated in size of leaves and flowers and habits of growth, and as different as possible in the colors of their flowers By mixing small-flowered with large showy sorts, the beauty of the former is lost without adding to the effect of the latter

In rosaries, commonly, but one plant of a sort is introduced, and the varieties which most resemble each other are placed together, by which their distinctions are better seen Particular compartments are often devoted to one species, as the Scotch, Chinese, yellow, burnet-leaved, &c which has an excellent effect, sometimes a piece of rock-work in the centre is covered with the creeping roses, and on other occasions these are trained to trellis-work, which forms a fence or hedge of roses round the whole In this hedge, standard roses are sometimes introduced at regular distances, a grove of standards is also frequently formed in the centre of the rosary, and sometimes they are introduced here and there in the beds

Standard roses, however, have certainly the best effect in flower borders, or when completely detached on a lawn their sameness of form, and that form being compact and lumpish, prevents them from grouping well, either among themselves or with other objects Their beauty consists in their singularity as rose plants, and in their flowers, and, therefore, to display these beauties to the best advantage, they require to be seen singly, or in succession This is the case where they occur as single objects on a lawn, or in the centre, and here and

7494 Centifólia *L* Provins ♣ or 3 jn au Pk S Europe 1596 L r m Red ros 1 t. 1
R provinciális Mill

Garden Varieties

Aunay, Belle d'
Aurora
Belgic, Red
Blandford or Kingston
Blush Royal
Bourbon
Bright Crumpled
Cabbage, Blush
Cabbage, Single
Carmine
Carmine, Superb
Centfeuilles anemone
Centfeuilles de Bruxelles
Centfeuilles de Hesse
Centfeuilles gaufrée
Chamois
Cluster
Constance
Cramois, Grand
Cumberland
Dragon
Duchesse d'Angoulême
Duchesse de Berri
Elysian
Emperor
Juno
Louis XVIII
Malta
Mère Gryone
Mottled Purple
Neapolitan
One-sided
Œillet
Pencilled
Petite Hollande
Persian

β *muscósa* Mill *Moss* ♣ or 3 jn jl Pk .... L r m Red ros 1. t. 8

Garden Varietus

Moss, Blush
Moss, Common
Moss, Dark

γ *Pompónsa* D C *Pompone* ♣ or 2 jn jl Pk .... L r m Red ros. 1 t. 21

Garden Varieties.

Dwarf Bagshot
De Meaux
Mossy de Meaux
Mignonne Charmante
Pompone
Pompone, Proliferous

δ *c bipinnáta* Red *bipinnate* ♣ or 3 jn jl R .... L co Red ros 2 t. 4
7495 gállica *L* officinal ♣ or 2 jn jl R S Europe 1596 L co Bot. reg 448

Garden Varieties

Admirable
Aigle noir
Albanian
Amaranth
Antwerp
Atlas
Belle Aurore
Burning Coal
Beauté Aimable
Beauté Rouge
Beauté Suprême
Bijou
Bishop
Black Frizzled
Blue
Bouquet rouge royale
Brunette
Brussels
Buonaparte
Cardinal
Carmine
Carmine Brillante
Carmine, Proliferous
Carnation
Catalonian
Champion
Chancellor
Changeable
Cherry
Clementine
Coquette
Couleur de feu
Cramoisie, Grand
Cramoisie, Belle
Crimson, Dutch
Crimson, Purple
Crimson, Royal
Crown
Cupid
Damask, Black
Delicious
Dingy
Duc de Guiche
Duchesse d'Orleans
Dwarf Proliferous
Enchanter
Enfant de France
Eucharis
Fanny Bias
Fiery
Flanders
Flemish
Formidable
Fringed
Garnet
Gay
Giant
Gloria Mundi
Granaat Appel
Grand Monarque
Grand Sultan
Henry IV
Hermine, Belle
Hervy
Hollande, Noir de
Hundred-leav, Blush
Hundred-leav, Dutch
Hundred-leaved, Singleton's
Imperatrice
Incomparable
Infernal
Invincible
Italian
Josephine
Junon
King
La Dauphine
L'Ombre agreable
L'Ombre superbe
Leyden
Lisbon
Lively
Lurid
Maiden
Majorca
Malabar
Malta
Manteau Royal
Marbled
Marbled, Dark
Marbled, Double
Marbled, Grand
Margaret
Matchless
Mauve
Mignonne



History, Use, Propagation, Culture,

there among groups of flowers, or in lines or avenues, along flower walks In the gardens of the Grand Trianon, they are planted profusely in large masses, like plantations of trees and shrubs, and there much of their individual beauty is lost, and no good general effect produced.

Most species of the rose, in their wild state, grow in sandy and rather poor soil, except such as are natives of woods, where the soil is richer, and comparatively moist. But all the cultivated roses, and especially the double-flowering kinds, require a rich loamy soil, inclining to clay rather than sand, and they require also, like most double flowers, plenty of moisture when in a growing state.

To produce strong flowers, roses require some attention to pruning, old wood should be yearly cut out, and the young shoots thinned and shortened according to their strength, and whether number or magnitude of flowers be wanted Those sorts which throw up numerous suckers should be taken up every three or four years, reduced, and replanted, and most sorts, excepting the standards, will be improved by the practice, provided attention be paid to remove a part of the old soil, and replace it by new The points of the shoots

7494 Arms unequal: the larger falcate, Leaflets glandular-ciliate, Fl cernuous, Cal. viscid, Fruit oblong

Garden Varieties

Pompon, Gros
Pourprée Aimable
Pourprée Favorite
Pourprée Violette
Prolific
Provins, Blush
Provins, Cabbage
Provins, Childings
Provins, Common
Provins, Damask
Provins, Dutch
Provins, Early
Provins, Grand
Provins, Imperial
Provins, Invincible
Provins, Royal
Provins, Scarlet
Provins, Semidouble
Provins, Shailers
Provins, Single
Provins, White
Rouge Superbe
Sans pétales
Souchet
Spongs
Striped Nosegay
Surpassante
Syren
Trianon, Belle de
Versailles
Vilmorin

β Calyxes and peduncles mossy

Garden Varieties

Moss, Prolific
Moss, Single
Moss, Striped
Moss, White

γ Smaller in every part

Garden Varieties

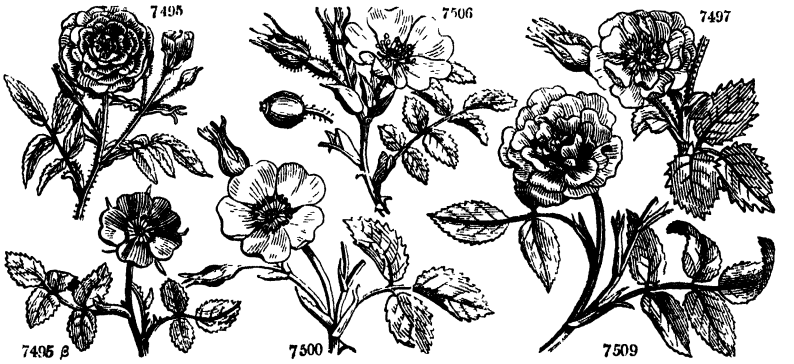
Provins, Dwarf
Provins, Small
Rheims, De
St. Francis

δ Leaves bipinnate

7495 Arms nearly equal of the same shape weak, Leaflets rigid elliptic Fl. erect, Sep. ovate, Fruit nearly round

Garden Varieties

Mignonne, Blush
Mignonne, Dark
Mignonne, Favorite
Mignonne, Red
Mignonne, Semidouble
Mignonne, Striped
Mirabelle
Mogul
Montauban
Morocco
Mottled, Black
Natalie
Negrette
Negro
Ninon de l'Enclos
Nonpareil
Nonsuch
Normandy
Officinal
Officinal, Blush
Officinal, Carmine
Orleans
Ornement de Parade
Panachée, Petite
Paradise
Paragon
Pavot
Perruque
Phœnix
Picate
Pluto
Pæstana
Pomona
Pompadour
Pomponne Bizard
Pomatowsky
Poppy
Porcelaine
Portland
Pourprée, Belle
Pourpre Bouquet
Pourpre Charmante
Pourpre de Tyr
Pourprée, Grande Belle
Pourprée, Point
Pourpres, Roi des
Pourpre Velours
Prince
Princess
Prince William V
Prolific
Pronville
Proserpine
Provins Pulmonaire
Purple, Blue
Purple, Bright
Purple, Favorite
Purple, Grand
Purple, Light
Purple, Royal
Pyramid
Queen
Ranunculus
Ranunculus, Early
Red and Violet
Royal Red
Roi de France
Rosa Mundi
Rose de Parade
Royal Virgin
Sable
Sanspareil
Sceptre
Shell
Spanish
Stadtholder
Stepney
St John's
Striped Nosegay
Superb Red
Sultana
Trafalgar
Triumphant
Tuscany
Two-Colored
Velvet, Double
Velvet, Semidouble
Velvet, Single
Velvet, Striped
Venetian
Victory
Violet, Dark
Violette, Belle
Violette and Rouge



and Miscellaneous Particulars

of the more delicate sorts of roses, are very apt to die when pruning is performed in winter or spring, to avoid the consequences of this evil, many give a second pruning in June, or do not prune the tender sorts at all till the beginning of that month A very good time for performing the operation, is immediately after the bloom is over, cutting out old exhausted wood, shortening shoots which have flowered to a good bud accompanied with a healthy leaf, but leaving such shoots as are still in a growing state untouched till October Where very large roses are wanted, all the buds but that on the extreme point of each shoot should be pinched off as soon as they make their appearance, and the plant liberally supplied with water To lessen evaporation, and keep up a constant moisture at the roots of their roses, the Paris gardeners generally mulch them with half-rotten stable-dung, or partially rotten leaves.

The earliest flowering rose is the monthly, which, in mild seasons, and planted against a wall, will sometimes flower in the beginning of April, the roses next in succession are the cinnamon, which flowers in May, the damask in the end of May or beginning of June, the blush, York and Lancaster, Provins, and Dutch

β plúmula L.	*wild offic nal*		or	2	jn jl	R	Austria	1810	L	co	Jac aus t 198	
7496 parvifólia *Ehr*	Burgundy		or	1	jn jl	Pu	Europe	...	L	r m	Bot reg 452	
7497 turbináta *H K*	Frankfort		or	5	jn au	Pk	.....	1629	L	r m	Miss L ros t 63	
7498 villósa *L*	Apple-bearing		or	8	jn jl	R	Britain	highl v	L	r m	Eng bot 583	
7499 tomentósa *Sm*	downy-lvd dog		or	6	jn jl	Pk	England	hed	L	co	Eng bot 990	
β móllis Sm	*soft*		or	6	jn jl	R	Britain	hed	L	co	Eng bot 2459	
γ t resinósa Lindl	*turpentine*		or	4	jn jl	R	Ireland	...	L	co		
7500 álba *L*	single white		or	4	jn jl	W	Crimea	1597	L	r m	Miss L. ros t. 37	

Garden Varieties

Agate — Blush, Double White — Eliza — Henriette, Belle
Belle Aurore — Bouquet Blanc — Feuille fermée — Joanne d'Arc
Bi uche Y eaur vert — Celestial — Grand Cuisse de — Maiden's Blush, Cluster
Blanche de Belgique — Duc d'Yorck — Nymphe

7501 hibérnica *Sm*	Irish		or	2	jn n	Pk	Ireland	ir thi	Sk	co	Eng bot. 2196	
7502 lútea *Mill*	single-yellow		or	3	jn	Y	Germany	1596	L	r m	Bot mag 363	
— *punicea* Mill	*Austrian*		or	3	jn	Y o	Germany	1596	L	r m	Bot mag 1077	
7503 rubiginósa *L*	Sweet Briar		or	5	my jn	Pk	Britain	ch ba. S		co	Eng bot 991	

Garden Varieties

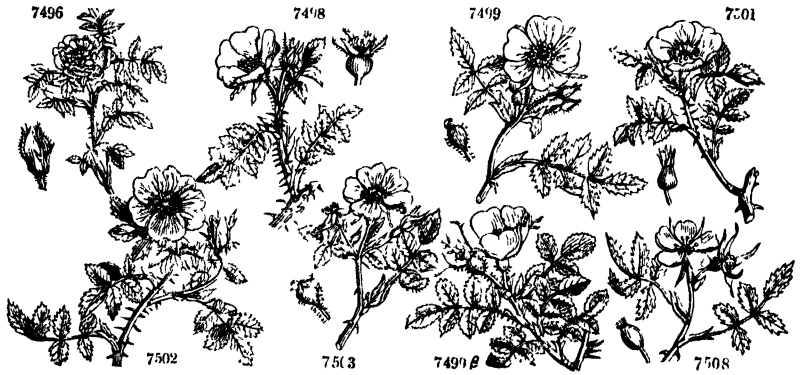
American, Single — Clementine — Double — Maiden
Blush — Cluster — Dwarf, Semidouble — Mammings

β micrántha Sm	*small-flowered*		or	6	my jl	Pk	Britain	thick	L	co	Eng bot 2490	
γ urnbellata Leers	*Semid Sw Briar*		or	4	my jn	Pk	Germany		L	r m	Miss L ros t. 65	
δ sépium Thuill	*dwarf*		or	6	my jn	Pk	Britain	thick	L	co		
ε inodóra Agdh	*scentless*		or	6	my jn	Pk	Britain	hed	L	co		
R Borreri Woods												
7504 prumósa *Lindl*	frosted		or	3	my jn	Pk	Siberia	1818	L	co		
7505 glutinósa *Sm*	Cretan		or	2	my jn	Pk	Candia	1821	L	co	Red ros 1 t 125	
7506 caucásea *Lindl*	Caucasian		or	20	jn jl	R	Caucasus	1798	L	co	Lindl ros t 11	
7507 canina *L*	dog, or Hip		or	8	jn jl	Pk	Britain	hed	L	co	Eng bot 992	
δ collina Jacq	*hill*		or	8	jn jl	Pk	Britain	hed	L	co		
ε dumetórum Thuill	*bushy*		or	8	jn jl	Pk	England	hed	L	co	Eng bot 2579	
7508 rubrifólia *Vill*	red-stained		or	6	jn jl	Pu	Europe	1814	L	co	Bot reg 430	
β Redutéa Thory	*Redoute's*		or	3	jn jl	Pu	....	1822	L	co	Red ros 1 t 38	
7509 índica *L*	blush Chinese		or	20	ja d	F	China	1789	C	p l	Lawr ros. t. 26	

Garden Varieties, referable either to Rosa indica or R. semperflorens

Alba — Bengale à fl panaché — Carnescens — Cucullata
Animating — Bengale Blanche — Centifólia — Elegant
Atro-nigra — Bichonia — Chiffonnée — Florida
Bengale à Bouquet — Boursault — Cérise éclatante — Gigantea

β odoratíssima Sweet	*Sweet Chinese*		or	3	f au	Pa.pk	China	1810	C	p l	Bot reg 804	
γ pumila Red	*dwarf*		or	1	my au	Pk	China	...	C	p l	Red ros 1 t 42	
δ longifolia W	*willow-leaved*		or	5	my au	Pk	China	.	C	p l	Red ros 2 t 12	
7510 semperflórens *Curt*	ever-blowing		or	10	ja d	Cr	China	1789	C	p l	Bot mag 284	
7511 Lawrenceána *Sweet*	Miss Lawrence's		or	1	ja d	R	China	1810	C	p l	Bot. mag 1762	
7512 microphylla *Roxb*	small-leaved		or	3	..	Pk	E Indies	1823	C	p l		
7513 systýla *Bat*	one-styled		or	6	my jl	Pk	Britain	hed	L	co	Eng. bot 1895	
β s Monsónae Lindl	*Lady Monson's*		or	3	my jl	Pk	Britain	hed	L	co		
7514 arvénsis *Huds*	white-dog		or	8	jn jl	W	Britain	hed.	L	co	Eng bot 188	
β hýbrida Schleich	*Double-Hep*		or	4	my jn	Pk	Switzerl	.	L	co		



History, Use, Propagation, Culture,

hundred-leaved, in June, July, and August The Virginia and musk roses are the latest European sorts, they flower in September, and in shaded situations will sometimes continue in bloom till the middle of October, but the earliest rose (the monthly) is also the latest, and generally continues flowering till interrupted by frost The earliest sorts may be materially forwarded by being planted against a south wall, and if portable sashes are placed before them, and the wall is either flued and heated by fires, or a lining of dung placed behind, the plants may be brought to flower in February or March The monthly rose being protected by glass in autumn, or aided by artificial heat, may be continued in bloom till Christmas A very

β Flowers single, Roots creeping
7496 Dwarf, Arms nearly equal, Leaflets rigid ovate acute finely serrate, Sepals ovate

DIV VII. VILLOSÆ. *Lindl* p 72

7497 Tube of calyx turbinate
7498 Leaflets ellipt obtuse, Fruit very large with close stiff prickles, Sepals viscid hispid
7499 Leaflets ovate nearly acute, Fruit hispid or naked
β Root-shoots upright, Sepals nearly simple
γ Dwarf cæsious, Leaflets narrow, Flowers very red
7500 Leaflets oblong glaucous naked above simply serrate, Sepals reflexed, Fruit unarmed

Garden Varieties.

Maiden's Blush, Great	Nova cælestis	Rosea	Triangularis
Maiden's Blush, Small	Nova plena	Simonville	White, Double
Moraga la Favorite	Petite cuisse de Nym-	Spineless Virgin	White, Semidouble
Muscat rouge	phe	Thornless, Double	

7501 Prickles unequal: the smaller setiform, Leaflets ovate acute naked simply serrate

DIV. VIII RUBIGINOSÆ. *Lindl* p 84

7502 Prickles straight, Leaflets flat concave, Cal nearly naked entire

7503 Prickles hooked, Leaflets rugose opaque, Cal and peduncles hispid

Garden Varieties

Monstrous	Petite Hessoise	Scarlet	White, Semidouble
Mossy	Royal	Tree, Double	Zabeth

β Prickles nearly equal or none, Sepals deciduous
γ Branches of the inflorescence very prickly, Fruit long
δ Branches weak flexuose, Leaflets acute at each end, Sepals very long and narrow
ε Prickles much hooked nearly equal, Leaflets less glandular than usual, Sepals deciduous

7504 Branches glandular, Leaves frosted on each side the upper somewhat whorled
7505 Branches hairy, Leaflets hoary roundish viscid

DIV IX CANINÆ *Lindl* p 97

7506 Leaflets soft ovate, Ovaries 50-60
7507 Leaflets rigid ovate, Ovaries 20-30
β Leaflets more or less hairy beneath, Sepals and peduncles hispid
γ Leaflets hairy on both sides, Sepals and peduncles smooth
7508 Prickles small distant, Leaflets ovate and branches glaucous opaque discolored, Ovaries 20-30
β Dwarf with setæ upon the branches
7509 Leaflets ellipt acuminate smooth crenate serrate glaucous beneath, Ovaries 40-50

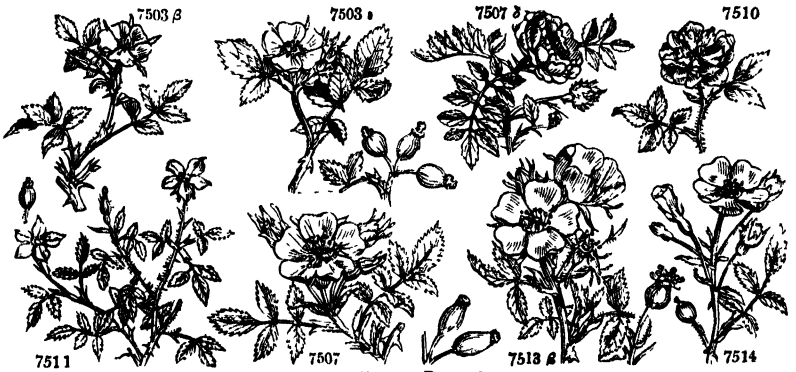
Garden Varieties, referable either to Rosa indica or R. semperflorens

Lie de Vin	Monstrosa	Purpurea	Thisbe
Lucida	Moonshine	Sanguinea	Terneaux
Major	Nigra	Sans épines	Veloutée
Minor	Noisette	Subalba	

δ Fruit ovate, Flowers very fragrant
γ A little bush, smaller in every respect
δ Leaves lanceolate, Branches nearly unarmed
7510 Leaflets ovate-lanceolate crenate serrate, Ovaries 15, Petals entire
7511 Dwarf, Leaflets ovate acute finely serrated, Petals acuminate, Ovaries 7-8
7512 Leaflets finely serrate shining, Cal. muricated with very dense prickles, Sep short broad acute apiculate

DIV X STYLEÆ. *Lindl* p 111

7513 Root-shoots assurgent, Prickles very strong hooked
β Stem lower, when in flower erect many-flowered, Branches with a few setæ
7514 Root-shoots flagelliform, Prickles unequal falcate, Leaflets glaucous beneath
γ Root-shoots thicker and shorter when in fl erect many-fl Branches with a few scat setæ, Styles distinct



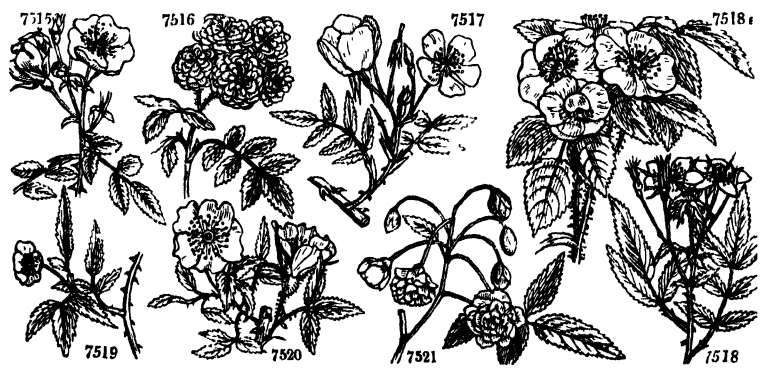
and Miscellaneous Particulars

common mode of obtaining late roses, and one of the greatest antiquity, is by cutting all the flower shoots off when the buds begin to appear, or by rubbing off all the rudiments of shoots, of every kind, early in spring, a second crop is in consequence produced, which will not be in a state to bloom before the autumn.

The best roses for forcing are the common and moss Provence, the Indian sorts force well, or rather, in stoves, continue in bloom all the year, but the commoner varieties of these not being fragrant, they are in less repute than the European roses Rose plants should be a year in pots previously to the autumn when it is intended to force them, they should be planted in pots of six or eight inches diameter, in rich loam, and

7515 **sempervírens** *L*	evergreen		or	20	jn au	W	S Europe	1629	L	co	Bot. reg 465
β subdeclívus	*Ayrshire*		or	20	jn au	W	.....	1818	L	co	
7516 multiflóra *Thunb*	bramble-flow		or	12	jn jl	Pk	China	1804	C	s l	Bot mag 1059
7517 Brunónii *Lindl*	Brown's		or	12	...	W	Nepal	1822	C	co	Lindl ros t 14
7518 moscháta *Mill*	musk		or	12	jl o	W	Barbary	1596	L	r m	M Lawr ros t 64
β —fl pleno	*double-musk*		or	12	jl o	W	Barbary	1596	L	r m	M Lawr ros t 53
γ m nepalénsis Lindl	*Nepal*		or	12	jl o	W	Nepal	1822	L	co	Bot reg 829
δ arbórea Pers	*tree*		or	30	...	..	Persia	1824	L	co	
s m nívea Lindl	*snow-bush*		or	4	jl	W	.....	1822	L	co	Bot reg 861
ζ ematina Bosc	*Muscade-rouge*		or	4	jl au	Pk	.....	1822	L	co	
7519 rubifólia *R Br*	bramble-leave l		or	6	au s	F	N Amer	1800	L	p l	
β r fenestrátus Lindl	*smooth-leaved*		or	4	au s	F	N Amer	1800	L	p l	Lindl ros t 15
7520 **sínica** *Ait*	3-leaved China		or	5	my jl	W	China	1759	L	p.l	Lindl ros t 16
7521 Bank'siæ *R Br*	Lady Banks's		or	20	jn jl	W	China	1807	C	p l	Bot reg t 397
β —flore lúteo	*yellow*		or	...	...	Y	China	1824	C	p l	Bot cab 1900

1149 RU'BUS *W*	BRAMBLE				*Rosaceæ Sp* 42—68						
7522 rosæfólius *Sm*	Rose-leaved		or	3	ap o	W	Mauritius	1811	C	p l	Smith ic 3 t 60
β coronárius	*double-flower'd*		or	3	ap o	W	Mauritius	1811	C	p l	Bot mag 1783
7523 pinnátus *W*	pinnate		or	5	jn jl	Pk	Madera	1789	C	p l	
7524 Idæ'us *W*	Raspberry		fr	5	my jn	W	Britain	m wo	Sk	r m	Eng bot. 2442
7525 occidentális *W*	Americ R sph		fr	5	my jn	W	N Amer	1696	Sk	co	Dil el t 247 f 319
7526 pauciflórus *Wall*	Nepal Raspber		fr	10	my au	R	Nepal	1822	C	co	Bot reg 854
7527 cuneifólius *Ph*	plaited-leaved		or	3	jn jl	W	N Amer	1811	Sk	co	
7528 canadénsis *W*	purple-stalked		or	3	jn jl	W	N Amer	1811	Sk	co	
7529 híspidus *W*	bristly		or	3	au	W	Canada	1768	Sk	co	
7530 cæ'sius *W*	Dewberry		fr	2	jn jl	W	Britain	bor fl	Sk	co	Eng bot 826
7531 corylifólius *E B*	Hazel leaved		or	10	jl	W	Britain	hed	Sk	co	Eng bot 827
7532 fruticósus *W*	common		or	10	jn s	Pk	Britain	hed	L	co	Eng bot 715
β álbus	*white-fruited*		or	10	jn s	W	Britain	...	L	co	
γ plénus	*double-flowered*		or	6	jn s	Pk	Britain	...	L	co	
7533 argútus *Link*	fine-toothed		or	3	jn jl	W	N Amer	1823	L	co	
7534 sánctus *Schreb*	holy		or	8	jn jl	Pk	Palestine	1823	L	co	
7535 paniculátus *Schlect*	panicled		or	10	jn jl	W	.	1821	L	co	
7536 sanguinoléntus *Link*	blood-red		or	4	...	R	I France	1824	C	co	
7537 jamaicénsis *Swz*	Jamaica		or	6	...	..	Jamaica	1822	C	co	
7538 ulmifólius *Schott*	elm-leaved		or	10	jn s	W	Spain	1823	L	co	
7539 Sprengélii *Weihe*	Sprengel's		or	10	jn s	Pk	Germany	1823	L	co	
7540 Schlechtendáhlii *We*	Schlechtendahl s		or	10	jn jl	W	Europe	1823	L	co	
7541 rugósus *Smith*	rugose		or	6	...	W	S Amer	1824	L	co	
7542 plicátus *Weihe*	plicate		or	10	jn s	W	Britain	hed	L	co	
7543 rhamnifólius *Weihe*	Buckthorn-lvd		or	10	jn s	W	Britain	hed	L	co	
7544 nítidus *Weihe*	shining		or	3	jn s	W	Britain	thick	L	co	
7545 tomentósus *W en*	woolly-leaved		or	10	jn s	W	Germany	..	L	co	
7546 glandulósus *W en*	glandular		or	10	jn s	W	Germany	1816	L	co	
β R leucostáchys Smith											
7547 hírtus *W en*	hairy		or	10	jn s	W	Hungary	1816	L	co	Pl rar hu 2.t 141
7548 lacinátus *W en*	jag leaved		or	12	jn s	W	.....	...	L	co	Dend brit 69
7549 triviális *Ph*	procumbent		or	7	jn jl	W	N Amer	1789	Sk	co	
7550 villósus *W*	shaggy		or	3	jl au	W	N Amer	1777	Sk	co	
7551 strigósus *Ph*	strigose		or	3	jn jl	W	N Amer	..	Sk	co	
7552 flagelláris *W en*	shining-leaved		or	6	jn jl	W	N Amer	1789	Sk	co	
7553 inérmis *W en*	smooth		or	12	jn jl	W	N Amer	1805	Sk	co	
7554 odorátus *W*	flowering		or	7	jn jl	R	N Amer	1700	Sk	co	Bot mag 323
7555 suberéctus *E B*	upright		or	4	jn s	W	Britain	woods	Sk	co	Eng bot 2572



History, Use, Propagation, Culture,

plunged in an open airy situation, their flower buds pinched off as they appear, and the plants put early into a state of rest, by excluding the sun and rain, but not a free circulation of air

All the species of roses are very liable to the attacks of insects, especially of the aphides, some, and especially the briar and Scotch rose, are attacked by the Cynips rosæ, which, by puncturing the bark, occasions the production of rose galls, and of those mossy tufts often seen on wild roses, which were known formerly under the name of Bedeguar, and used in medicine Under cover tobacco smoke will prove an effectual remedy for the aphides, but the larvæ of many others, and especially of tipula and the tenthredinidæ, which occasion the wrapping up and shrivelling of the leaves, can only be removed by washing with lime-water or hand picking

1149 *Rubus* From the Celtic *rub*, which signifies red Many of the species are only biennial woody plants, producing suckers or stolones from the roots, which ripen and drop their leaves one year, and resume their

7515 Root-shoots climbing, Prickles nearly equal falcate, Leaves evergreen
β Leaves nearly deciduous
7516 Branchlets pedunclcs and calyx downy, Leaflets soft lanceolate rugose, Stipules pectinate
7517 Branchlets lanceolate, Leaflets and calyxes downy glandular, Stipules entire [acuminate
7518 Branchlets nearly naked, Leaflets ellip. acumin glauc. beneath with connivent serratures, Sepals comp
β Flowers double
γ Leaflets ovate lanceolate, Petals acute, Pedicels and calyxes glandular
ζ Stem arborescent
ε Stem branched, Leaflets ovate-obl acuminate rugose, Petals large obcordate
ζ Stem erect, Flowers double pink [pistiform
7519 Branchlets not downy, Leaflets ovate lanc with diverging serratures, Stipules entire, Sepals ovate, Fruit
β Leaflets smooth on each side

DIV XI BANKSIANÆ.

7520 Stipules setaceous deciduous, Petioles and rib prickly, Fruit muricate
7521 Branches and fruit unarmed

** Shrubby*

7522 Leaves quinate pinnate and ternate green on each side, Stem and petioles prickly, Fl solitary

7523 Leaves quinate pinnate and ternate rugose smooth on each side, Stem petioles and pedunc prickly, Raceme
7524 Leaves quinate pinnate and ternate white beneath, Leafl. rhomboid lined [terminal
7525 Leaves three white beneath, Stem prickly, Petioles round
7526 Lvs pinnate, Stem round, Leafl 5-7 obl pilcate serr white beneath, Pan cymose, Pet shorter than calyx
7527 Branches pet and ped downy, Leafl 3-5 cuneate obovate unequally toothed upwards, Racemes term pan
7528 Smoothish, Leafl 10-5-3 lanceolate naked on each side finely serrated, Stem unarmed, Bractes lanceolate
7529 Leaves 3 naked, Stems and petioles very hispid, Bristles stiff
7530 Leaves ternate nearly naked the lateral 2-lobed, Stem prickly round
7531 Stem erect roundish, Prickles many close, Leafl 5 pubesc beneath, the lateral sessile, Cal of fl reflexed
7532 Stem angular furrowed, Leafl 5 obtuse shining and even above, hoary beneath, Pan decomp hoary

7533 Stem with small straight prickles, Leafl 3 and 5 obl acum doubly and finely serr pubes beneath, Fl pan
7534 Stems square hoary, Leafl 3 obov round unequally and finely cut-tooth hoary beneath, Pan small hoary
7535 Stem aculeate, Leafl 3-5 unequal ovate acumin serr with fine white down beneath, Fl panicled
7536 Stem densely prickly and strigose, Leafl 5 lanc acum serrul smooth, Pedunc axill few-flowered
7537 Lvs 3-5 cut-serr downy beneath, Stem petioles and leaves pubesc with recurved prickles, Pan diffuse
7538 Stem decum very prick Leafl 3 subcord ov doub acute cren smooth prick beneath, Branches very red
7539 Differs from R. corylifolius in having the upper shoots and peduncles covered with short hairs
7540 Differs from the last in having the leaves covered all over beneath with soft hairs
7541 Unarmed, Branches lvs beneath and calyxes downy with brown hairs, Lvs 3-lobed, Fl sol on short stalks
7542 Stem suberect angular prickly smooth, Leafl 5 cordate ovate cusp pubes beneath, Pan simple
7543 Stem angul furrowed, Leafl 5 orbicular cusp hoary beneath, Pan comp divaricating, Cal prickly at base
7544 Stem suberect angular smooth, Leafl 5 ovate shining pubes beneath, Panicle prickly
7545 Leaves 3 obovate downy and soft on each side, Fl panicled
7546 Leaves tern Leafl roundish ovate acum mucronate serr Stem pet ped and cal prickly and glandular

7547 Lvs 5-3 hairy, Leafl ov acum unequally serr Stem decum and pet prickly and gland Ped unarm gland.
7548 Lvs 3-5-nate, Leafl pinn Stem pet. and ped with recurved prickles
7549 Procumbent, Stipules subulate, Lvs 3-5 digitate, Leafl ovate obl smoothish serrate, Pedicels solitary
7550 Leaves 5 ellipt acumin finely serrate villous on each side, Stem and petioles prickly
7551 Unarmed hispid, Leafl 3 or pinnate quinate ovate blunt at base white beneath the odd one cordate
7552 Lvs 3-nate smooth unequally serr interm ov-cuneate at base, lat rhomb Stem round proc and pet. prick
7553 Lvs ternate, Leafl ovate acute unequally serrate downy beneath, Stem pet and ped unarmed
7554 Leaves simple palmate, Stem unarmed many-leaved many-flowered
7555 Leaves pinnate about 7 hairy beneath the upper ternate, Stem ascending with small straight prickles



and Miscellaneous Particulars

foliage, produce blossom shoots, flower, and fruit, and die the next. The common raspberry and bramble are examples

R. idæus is a native fruit, greatly improved by cultivation; it has a grateful subacid taste, and like the strawberry, is one of the few fruits that does not undergo the acetous fermentation in the stomach There are red and yellow varieties, and one very excellent sort that bears twice a-year, in July and September The raspberry requires a soft rich moist soil, and if a plant stands singly or a single row is planted by itself, the situation should be gently shaded Where a plantation is made of several rows together it may be placed in the open garden, as the plants will shade one another to a sufficient degree. Frequent renewal is necessary to prevent the stools getting large and matted when they send up only weak suckers No more suckers should be left at the stools than are intended to bear the following year, unless young plants are wanted, and if very

7556 moluccánus *W*	Molucca	♃	□	or	3	jl au	R	E Indies	1810.	Sk l p	Ru am 5. t 47 f 2
7557 refléxus *Ker.*	reflexed	♃	□	or	3	jl au	R	China	1817		Bot reg 461
7558 parvifólius *L*	small-leaved	🌳		or	2	au s	Pk	China	1818	L co	Bot. reg. 496
7559 saxátilis *W*	stone	⚹	△	or	½	jn	W	Britain m wo		Sk p l	Eng bot 2233
7560 triflórus *Richardson*	Americ.-stone	⚹	△	or	¾	jn	W	Canada	..	Sk p l	
7561 pistillátus *Ph*	close-styled	⚹	△	or	½	jn jl	R	Labrador	1802	Sk p l	Exot bot 2 t 86
7562 árcticus *E B*	dwarf-crimson	⚹	△	fr	½	my au	Pk	Scotland al ro		Sk p l	Eng bot 1585
7563 chamæmórus *W*	Cloud-berry	⚹	△	fr	½	my jn	W	Britain moun		Sk p l	Eng. bot 716

1150 DALIBAR'DA. *Mœch* Dalibarda — *Rosaceæ* *Sp* 2—3

7564 violæoides *Mi répens* Ph	Violet-leaved	⚹	△	cu	½	my jn	W	N Amer	1768.	D l p	Mich ame 1 t 27
7565 fragarioides *Mi*	Strawberry-lvd	⚹	△	cu	½	my jn	W	N Amer.	1803	D l p	Mich.ame.1 t 28

1151 FRAGA'RIA *W* Strawberry — *Rosaceæ* *Sp* 9

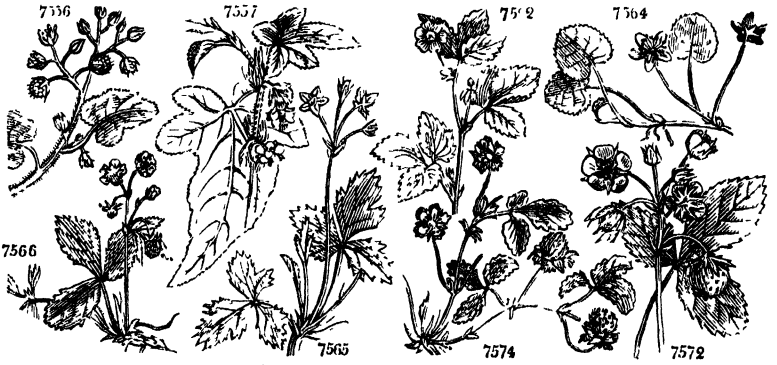
7566 vésca *W*	wood	⚸	△	fr	1	ap my	W	Britain woods		S s.l	Eng bot. 1524
7567 monophýlla *W*	one-leaved	⚸	△	fr	1	my jn	W	... .	1773	Rs s.l	Bot. mag 63
7568 collina *W*	Green Pine	⚸	△	fr	¾	ap.n	W	Germany	1768	Rs r l	
7569 elatior *W*	Hautboy	⚸	△	fr	1½	ap my	W	Britain woods		Rs r l	Eng bot 2197
7570 canadénsis *Mich*	Canada	⚸	△	fr	1½	ap my	W	N Amer	..	Rs r l	
7571 virginiána *Ph*	scarlet	⚸	△	fr	1	ap my	W	N Amer	1620	Rs r l	Duha arb 1 t 5
7572 grandiflóra *W*	Pine	⚸	△	fr	1	ap my	W	Surinam	1759	Rs r.l	Mill ic 2 t 288
7573 chiloénsis *W*	Chili	⚸	△	fr	¾	my jn	W	S Amer	1727	Rs r l	Duha arb 1 t 3
7574 indica *H K*	yellow-flower'd	⚸	△	or	1	my.o	Y	India	1805	Rs s p	Bot reg 61

*1152 CO'MARUM *W.* Comarum — *Rosaceæ* *Sp* 2

7575 palústre *W*	Marsh Cinquef	⚹	△	cu	2	jn jl	Pu	Britain	sp bo	D p	Eng. bot 172
§7576 fragarioides *W en* *Fragária stenúta* E. B	Strawberry-like	⚹	△	w	1	mr my	W	Britain	banks	D l p	Eng bot. 1785

†1153 POTENTIL'LA *W* Cinquefoil — *Rosaceæ* *Sp.* 40—74

7577 fruticósa *W*	shrubby	🌳		or	4	jn au	Y	England m b pl		L co	Eng bot 88
7578 floribunda *Ph*	cluster-flower	🌳		or	4	jn o	Y	N Amer	1811	L co	Dend brit 70
7579 Anserina *W*	Wild Tansey	⚹	△	w	¾	my s	Y	Britain m me		D co	Eng bot 861
7580 atrosanguinea *Lodd*	crimson	⚸	△	or	1½	my s	Pu	Nepal	1822	D co	Bot cab 786
7581 nepalénsis *Hook.*	Nepal	⚸	△	or	1½	jn jl	Pu	Nepal	1822	D co	Hook ex fl 88
7582 Salesóvii *W en* *P glabra* Lodd	white-shrubby	🌳		or	2	jn au	W	Siberia	1823	L p l	Bot cab 914
7583 spléndens *Wall*	fine	⚸	△	or	1	..	Y	Nepal	1822	D co	Bot mag. 2700
7584 hispida *W en*	hispid	⚹	△	pr	⅓	jl au	Y	Dauria	1797	D co	
7585 sericea *W*	silky	⚹	△	pr	½	my jn	Y	Siberia	1780	D co	
7586 multifida *W*	cut leaved	⚹	△	pr	½	my jn	Y	Siberia	1759	D co	
7587 fragarioides *W*	Strawberry-lvd	⚹	△	pr	½	my jn	Y	Siberia	1773	D co	Gm si 3 t 34 f 2
7588 ruthénica *W*	Russian	⚹	△	pr	¾	my jn	Y	Siberia	1799	D co	Mor s 2 t 20 f 2
7589 rupéstris *W*	rock	⚹	△	pr	1	my s	W	England al roc		D co	Eng bot 2058
7590 bifúrca *W*	bifid-leaved	⚹	△	pr	1	jn jl	L Y	Siberia	1773	D co	Gm it 1 t 27 f 1
7591 pimpinelloides *W*	Burnet-leaved	⚹	△	pr	½	jn au	Y	Levant	1758	D co	Bux cen 1 t 48
7592 pensylvánica *W*	Pensylvanian	⚹	△	pr	1	jn au	Y	N Amer	1725	D co	Jac vin 2 t 180
7593 supina *W*	trailing	⚹	△	pr	¼	jl au	Y	Siberia	1696	D co	Jac aus 5 t 406
7594 récta *W*	upright	⚹	△	pr	1	jn jl	Y	S Europe	1648	D co	Jac aus 4. t 383
7595 argéntea *W*	silvery	⚹	△	pr	1	jn au	Y	Britain	gra pa	D co	Eng bot 89
7596 intermédia *W*	various-leaved	⚹	△	pr	1	my s	Y	Switzerl	1786	D co	
7597 adscéndens *W en*	ascending	⚹	△	pr	1	jn jl	Y	Hungary	1806	D co	



History, Use Propagation, Culture,

large fruit is the object, no suckers should be left at all on the contrary, when the strongest suckers are wanted, the fruit-bearing shoots should be cut down

R occidentalis is a showy plant for large shrubberies The fruit of R cæsius is blue, edible, and it continues till frost R corylifolius and fruticosus are both common in our hedges, the shoots of the latter are much tougher than those of the former, and are preferred by thatchers for binding their roofs, and by straw-hive and mat makers The berries, eaten at the moment they are ripe, are cooling and grateful, a little before, they are coarse and astringent, and a little after, disagreeably flavored or putrid They are sometimes made into pies, but great care is requisite in gathering the fruit, for one berry of the last sort will spoil a whole pie. The double-flowering variety is considered very ornamental

The fruit of R arcticus and chamæmorus is eaten in the north of Scotland and Sweden In the latter country, Dr Clarke informs us, it is much prized in soups, sauces, and for making vinegar, and Dr Clarke was cured of a bilious fever by eating great quantities The plant is rather difficult to preserve in gardens, but by raising successive generations from the seed it might perhaps be subjected to the same culture as the cranberry The fruit of R. pauciflorus, the Nepal raspberry, is very agreeable

1150 *Dalibarda* Denis Dalibard was a French botanist, who published, in 1749, a catalogue of the plants in the neighbourhood of Paris. Small plants, resembling the little species of Rubus

7556 Leaves simple cordate somewhat lobed downy beneath, Stem prickly decumbent
7557 Branches round villous, Lvs. cordate obl 5-lobed the middle lobe elongated, Stip and bractes pectinate
7558 Leaves 3-5 downy beneath, Stem peduncles and petioles with recurved prickles

** *Herbaceous.*

7559 Leaves tern naked, Runners creeping herbaceous, Panic few-flowered
7560 Leaves tern naked, Leafl rhomboid acute cut serrate the odd one stalked, Flowers about 3
7561 Stem unarmed 1-flowered, Leaves term smooth finely serrate, Pet. obl. entire, Styles approximating
7562 Leaves ternate, Stem unarmed 1-flowered
7563 Leaves simple lobed, Stem unarmed 1-flowered

7564 Leaves simple cordate crenate, Peduncles 1-flowered

7565 Leaves ternate, Leafl cuneate serrate-cut, Tube of cal obconical

7566 Cal of fruit reflexed, Pubescence of petioles spreading, of the peduncles appressed
7567 Leaves simple
7568 Cal of fruit erect, Pubescence of pedun erect, of petioles much spreading, Leaves downy on each side
7569 Cal of fruit reflexed, Pubescence of pedunc and petioles much spreading
7570 Large, Leaves broad oval, Pedic long recurved pendulous, Rtcept much excavated globose villous
7571 Cal of fruit spreading, Pubescence of petioles erect, of peduncles appressed, Leaves smoothish above
7572 Cal. of fruit erect, Pubescence of peduncles and petioles erect, Lvs smoothish above
7573 Cal. of fruit erect, Pubescence of peduncles and petioles much spreading, Lvs. villous on each side
7574 Outer sepals larger than the rest obovate 3-toothed

7575 Leaves pinn Petals smaller than calyx
7576 Leaves tern Petals larger than calyx

7577 Leaves pinnate, Leafl lin obl flat, Petioles long, Branches 1-2-fl
7578 Leaves pinnate, Leafl lin obl revolute at edge, Petioles short, Corymbs terminal
7579 Leaves interruptedly pinnate silky, Leaflets finely serrate, Stem creeping, Pedunc 1-fl
7580 Leaves ternate stalked, Leafl obovate cut serrate white with down beneath, Sepals ellipt Pet obcordate
7581 Rad lvs quinate cauline tern Leafl cuneate obl serrate, Stipules large adnate entire
7582 Leaves pinnate white with down beneath, Leafl serrate, Stem shrubby

7583 All over silky, Lvs interruptedly pinn Fl dichoto corymb Sepals ov acute, Stem erect nearly simple
7584 Lvs interruptedly pinn with spread hairs, Leafl lanc cut toothed, Stip cut, Pet obcord larger than cal.
7585 Lvs bipinnatifid in many pairs downy on each side segments parallel approximating, Stem decumbent
7586 Lvs bipinnatifid in four pairs smooth above downy beneath segments distant, Stem decumbent
7587 Leaves pinnate the outer largest, Runners creeping
7588 Rad leaves subpinn cauline tern Leafl lanc unequally coarsely serrate hairy on each side
7589 Leaves pinnate alternate, Leafl 5 ovate crenate, Stem erect
7590 Leaves pinnate nearly equal, Leafl oblong subbifid the outer confluent
7591 Leaves pinnate, Leafl roundish toothed equal, Stem erect
7592 Leaves pinnate upper ternate, Leafl deeply toothed, Stem erect pubescent
7593 Leaves pinnate, Leafl oblong deeply toothed, Stem decumbent dichotomous, Pedun axill. solitary
7594 Leafl 7-5 lanceolate coarsely toothed, Petals obcordate larger than calyx, Stem erect
7595 Leafl. 5 cuneiform cut downy beneath, Stem erect
7596 Radic leaves 5-nate, Cauline ternate, Stem nearly erect much branched
7597 Lvs. 5-nate with adpressed hairs of the branches ternate, Leafl obl cuneate deeply toothed, Stem ascend.



and Miscellaneous Particulars

1151 *Fragaria* From *fragrans*, in allusion to the perfumed fruit *Fraisier*, Fr., *Erdbeere*, Ger., and *Tragolo*, Ital. This is a genus of fruit-bearing herbaceous plants, of which there are few in the vegetable kingdom, and none to equal the strawberry in wholesomeness and excellence This fruit is universally grateful, alone, or with sugar, cream or wine, and has the property, so valuable for acid stomachs, of not undergoing the acetous fermentation. Besides the species or subspecies enumerated, there are upwards of sixty mongrel varieties or different names, some of which, recently produced from seed, are of great excellence The strawberry is not only a valuable and easily cultivated out-door fruit, but forces well, and with a little trouble in choosing a succession of sorts, they may be had at the dessert every month in the year, though during the three winter months they are without flavor

In cultivating the strawberry an open situation and rich loamy soil, rather strong, is required for most varieties; and from their large mass of foliage and flowers, they must, till the fruit is set, have copious supplies of water. The row culture is most convenient, and frequent renewal insures vigorous plants and large fruit

1152 *Comarum* A name given by the Greeks to the Arbutus. The Comarum of the moderns produces a fruit not unlike that of the Arbutus

1153 *Potentilla* In allusion to its supposed *potential* virtues in medicine These, however, appear to con-

7598	hirta *W*	hairy		pr	1	my s	Y	S. Europe	1725	D	co		
7599	stipulária *W.*	stipular		pr	1	jl au	Y	Siberia	1797	D	co	Gm. sl 3. t.37. f 2	
7600	opáca *W*	small-rough		pr	½	my jn	Y	S Europe	1680.	D	co	Jac ic 1. t. 91	
7601	vérna *W*	spring		pr	½	mr my	Y	Britain hghl p		D	co	Eng bot. 37	
7602	aúrea *W*	golden		pr	½	my jl	Y	Scotland sc alp		D	co	Eng. bot 561	
7603	astracánica *W*	Astracan		pr	1	jn au	Y	Siberia	1787	D	co	Jac ic 1 t 92	
7604	álba *W*	white		pr	½	f au	W	Wales w alp		D	co	Eng. bot 1334	
7605	cauléscens *W*	Alpine		pr	1	my jn	Y	Austria	1759.	D	co	Jac aus 3. t 220	
7606	Clusiána *W*	Clusius's		pr	1	jl au	Y	Austria	1806.	D	co	Bot mag 1327	
7607	lupinoides *W*	close-flowered		pr	½	jn jl	Y	Al. of Eur	1739	D	co	Bot. cab 654	
7608	nítida *W*	shining		pr	½	jn jl	Y	Austria	1798	D	co	Jac au 5 t.ap 25	
7609	réptans *W*	common		pr	½	jn s	Y	Britain me pa.		D	co	Eng bot. 862	
7610	sarmentósa *W en*	sarmentose		pr	½	jl	Y	N Amer	1804	D	co		
7611	diffúsa *W en*	various-leaved		pr	½	m au	Y	... ..	1817	D	co		
7612	monspeliénsis *W*	Montpelier		pr	½	jl au	Y	France	1680	D	co	M h s 2 t 20 f 2	
7613	nívea *W.*	snowy		pr	½	jn au	W	Siberia	1816	D	co	Bot cab. 460	
7614	norvégica *W*	Norwegian		pr	½	jn jl	Y	N Europe	1764	D	co	Fl dan 171	
7615	tridentáta *W*	trifid-leaved		cu	½	jn jl	W	Scotland sc alp		S	co	Eng bot 2389	
7616	grandiflóra *W*	great-flowered		or	1	jn jl	Y	Siberia	1640	D	co	Bot mag. 75	

1154 TORMENTIL'LA *L* Septfoil. *Rosaceæ* *Sp* 2

7617	réptans *W*	large-flowered		w	½	jn jl	Y	Britain	me pa.	Rs	co	Eng bot 864	
7618	erécta *W*	common		w	1	my o	Y	Britain	bar pa	D	co	Eng. bot. 863	
	officinális E. B												

1155 GE'UM *W* Avens *Rosaceæ.* *Sp* 10—20

7619	strictum *Ph*	upright		or	1	my jn	St	N Amer	1778.	D	pl	Jac ic. 1 t 93	
7620	agrimonoides *Ph*	Agrimony-lvd		or	1½	jn jl	W	N Amer	1811	D	pl		
7621	álbum *Ph*	white-flowered		or	1	jl au	W	N Amer	1730	D	pl	Jac vin. 2 t. 175	
7622	virginánum *Ph*	small white-fl		or	1½	jl au	W	N Amer. ..		D	pl		
7623	macrophýllum *W en*	large-leaved		or	2	jn jl	Y	Kamtsch	1804	D	pl		
7624	urbánum *W*	common		or	1½	my au	Y	Britain	woods	D	pl	Eng bot 1400	
7625	intermédium *W en*	wood		or	1½	my au	Y	...	1794	D	pl	W ho b. 1 t 69	
7626	rivále *W*	water		or	1	jn jl	R Br	Britain	m mea	D	pl	Eng bot. 106	
7627	hýbridum *Jac*	hybrid		or	1	jn jl	R Br	Europe	...	D	pl	Jac ic 1 t. 94	
7628	pyrenáicum *W*	Pyrenean		or	1½	jn jl	Y	Pyrenees	1804	D	pl	Lam ill t. 443	

1156. KER'RIA *Dec* Kerria *Rosaceæ* *Sp* 1

7629	japónica *Dec*	Japan		or	3	ja d	Y	Japan	1804.	C	co	Bot mag. 1296	
	Corchorus japonicus L.												

1157. CALYCAN'THUS *L* Allspice *Calycantheæ* *Sp* 3—5.

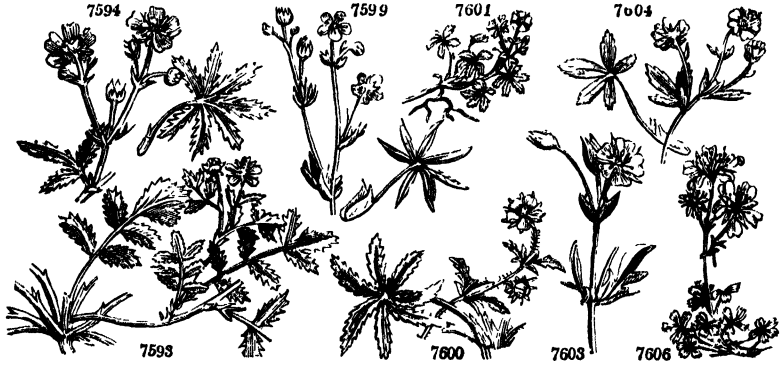
7630	flóridus *W*	Carolina		ft	6	my au	Br	Carolina	1726.	L	lp	Bot mag 503	
7631	fértilis *W*	glaucous-lvd		ft	3	my au	Br	Carolina	...	L	lp	Bot reg 404	
7632	lævigátus *W en*	smooth-leaved		ft	3	my jl	Br	N Amer	1806	L	lp	Bot reg 481	

1158 CHIMONAN'THUS *Lindl* Chimonanthus. *Calycantheæ* *Sp* 1

7633	frágrans *Lindl*	Japan		ft	6	f d	Y R	Japan	1766	L	lp	Bot. mag 466	
	Calycánthus præcox W												
	β grandiflorus Lindl	*large-flowered*		ft	8	f d	Y R	China	...	L	co	Bot reg 451	

1159 DRY'AS. *W* Dryas. *Rosaceæ* *Sp* 1—3

7634	octopétala *W.*	mountain		cu	½	jn au	W	Britain	al roc	D	s p	Eng bot. 451	



History, Use, Propagation, Culture,

sist of nothing beyond a slight vulnerary quality P fruticosa and floribunda are shewy shrubs P anserina is remarkable for the silvery whiteness of its foliage, which is eaten by geese, as the roots were once by the country people in some places All the species are pretty, and deserving cultivation

1154 *Tormentilla* From *tormina*, the dysentery, which this plant was formerly employed for curing T erecta was once a plant of some importance in œconomy and medicine The roots are still used in most of the Western Isles of Scotland and in the Orkneys for tanning leather, for which they are superior even to oak-bark They are first boiled in water, and the leather is then steeped in the cold liquor In the islands of Tirey and Col, the inhabitants have destroyed so much ground by digging them up, that they have been prohibited the use of them They are also used for dying of a red color And Mr. Young informs us, that many swine are reared with them on the mountains of Killarney

In the London Materia Medica it is employed in intermittents, and as a local application in the form of gargle and lotion, in ulcerations of the tongue and mouth, against spongy gums, and as an application to fœtid ill conditioned sores, but it is seldom used. (*London Dispensatory*, 538.)

1155. *Geum.* From γεύω, to taste well The roots of G urbanum have a mildly astringent aromatic taste, somewhat like that of cloves, whence this plant has the name of Caryophyllata. They should be gathered in dry warm situations, for in shady moist places they have little virtue. Gathered in the spring, and put fresh into ale, they give it a pleasant flavor, and prevent its turning sour. Infused in wine, it is esteemed a good

7598 Leafl 5-7 cuneiform cut pilose, Stem erect hairy
7599 Leafl 7 sessile seated upon a dilated stipule
7600 Rad. lvs 5-7 lin cuneiform toothed, Petals retuse the length of calyx, Stems filiform decumbent hairy
7601 Leaves 5-nate obovate toothed pubescent, Pet. obcord. larger than calyx, Stems declinate
7602 Rad lvs. 5-nate, Leafl cuneif ciliate 5-toothed at end, Caul 3-nate subsess Pet obcord. larger than calyx
7603 Rad lvs 5-nate oblong toothed upper 3-parted, Cor larger than calyx, Stem ascending
7604 Leaves 5-nate with connivent serratures at end, Stems filiform procumbent, Recept. hairy
7605 Leaves 5-nate with connivent serratures at end, Stems many-fl decumbent, Recept. hairy, Pet obovate
7606 Leaves 5-nate with connivent serratures at end, Stems many-fl decumbent, Recept. hairy, Pet roundish
7607 Leaves 5-nate silky on each side, Leafl obovate bluntly toothed at end, Pet. length of cal. Recept. woolly
7608 Leaves subtern downy with 3 connivent teeth, Stems 1-fl. Recept. woolly
7609 Leaves 5-nate, Stem creeping, Pedunc 1-flowered
7610 Leaves 5-nate obovate coarsely serr Stip cut bifid, Pedunc 1-fl axill. Stem producing runners
7611 Rad lvs subpinnate cauline ternate, Leafl lanc unequally and coarsely serrated with spreading hairs on [each side
7612 Leaves ternate, Stem branched erect, Peduncles with a knee at base
7613 Leaves ternate cut downy beneath, Stem ascending
7614 Leaves ternate, Stem dichotomous, Pedunc axillary
7615 Leaves ternate cuneiform 3-fid at end
7616 Leaves ternate toothed hairy on both sides, Stem decumbent longer than leaves

7617 Stem creeping, Leaves stalked
7618 Stem nearly erect, Leaves sessile

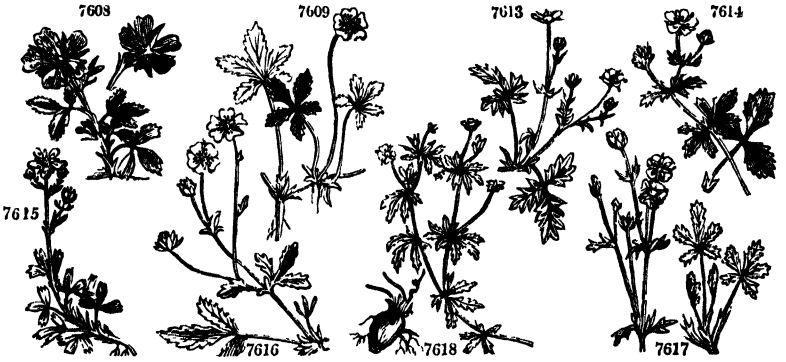
7619 Fl erect, Awns hooked naked, Caul lvs pinn Leafl. and stipules split, Petals longer than calyx
7620 Fl erect, Lvs pinn Leafl nearly equal irregularly cut toothed, Stip ovate nearly entire Pet oval length of [calyx
7621 Fl erect, Rad lvs pinn cauline tern upper simple, Lower stip cut, Pet length of calyx
7622 Fl. erect, Awns hooked naked, Caul lvs tern upper lanc Petals shorter than calyx
7623 Fl. erect, Awns hooked naked hairy at end, Rad lvs lyrate pinnate terminal pinnate cordate
7624 Fl erect, Awns hooked naked, Caul lvs tern radical lyrate pinnate
7625 Fl nodd. Pet length of cal Awns hooked naked, Grains hairy, Rad lvs lyrate pinn · cauline ternate
7626 Fl nodd. Pet length of cal Awns feathery twisted in the middle
7627 Fl nodd Cal leafy longer than the polypetalous corolla
7628 Fl. nodd. Pet longer than cal. Awns hairy twisted at base, Rad lvs lyrate pinnate cauline simple trifid

7629 The only species

7630 Leaves oblong downy beneath
7631 Leaves lanceolate smooth on each side glaucous beneath
7632 Sepals lanc Lvs obl acute by degrees somewhat rugose smooth and green on each side, Branches very [straight and erect

7633 The only species Fl small very fragrant pale yellow appearing in the winter

7634 Leaves toothed



and Miscellaneous Particulars.

stomachic; but in water, Haller affirms it to have been attended with bad effects, when given in malignant fevers, producing delirium. Chewed in the mouth, the roots take off from a disagreeable breath

1156 *Kerria.* So named after Mr William Ker, a botanical collector, who was sent some years since to China, whence he sent many curious plants The plant named after him is the common Corchorus japonica of the gardens.

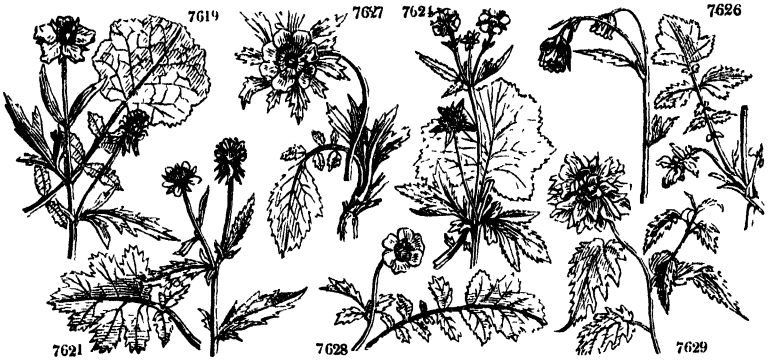
1157 *Calycanthus* From καλυξ, and ανθος, a flower, the calyx being colored and similar to petals, which are not present in the genus Small North American shrubs, with chocolate-colored blossoms. The flowers of C floridus have an agreeable scent like those of allspice, and is so called in Carolina.

1158 *Chimonanthus* From χειμων, winter, and ανθος, a flower, in allusion to the period of the year when its blossoms are produced. C fragrans is highly odoriferous, and though hardy, deserves a place in the front border of a conservatory, on account of the odor it disperses early in spring

1159 *Dryas* A name poetically applied to this little plant, from the resemblance of its leaves to those of the oak, which was sacred to the Dryads. This is a delicate evergreen plant, and with its snow-white blossoms is a great ornament to alpine heights. The stalk and branches are woody and perennial, lying flat upon the ground, and spreading wide about the root in tufts

It requires some care to preserve it in gardens, and grows better in a shaded bed of peat than in pots.

1160 COLU'RIA *R Br.* Coluria					*Rosaceæ*	*Sp* 1—3.						
7635 potentilloides *R. Br* Siberian	♃	△	pr	½	jn	O	Siberia	1780	D	pl	Jac. vin 3 t. 68	
1161. SIEVER'SIA *Willd* Sieversia					*Rosaceæ*	*Sp* 2—4						
7636 montána *R Br.* mountain	♃	△	pr	½	my s	Y	Austria	1597	D	co	Jac aus. 4. t. 373	
7637 réptans *R. Br.* creeping	♃	△	pr	½	jn au	Y	Switzerl.	1775	D	pl	Jac. au. 5. t. ap 22	



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1160 *Coluria* From κολιὸς, deprived of the tail, or, as we usually say in English, bob-tailed Distinguished by Mr Brown from Geum, principally on account of the deciduous nature of the style or tail of the grains.

Class XIII. — POLYANDRIA. Stamens many, hypogynous, or inserted under the Ovary.

This class agrees with the last in having hermaphrodite flowers, with an indefinite number of stamens, which neither cohere in any part of their length, nor are distributed in distinct parcels, but it is distinguished by the stamens being inserted distinctly from the floral envelopes, immediately under the ovary, into what has been called the *receptacle* by Linnæus and his followers, *torus*, by Mr Salisbury, and *thalamus*, by some other botanists The class consists of the greater part of several extensive natural orders, such as Ranunculaceæ, Magnoliaceæ, Cistineæ, &c , and, like the last, is replete with subjects of interest to gardeners and florists The various kinds of Clematis form the most valuable portion of the hardy climbing plants of the verandah The brilliant varieties of the ranunculus and anemone constitute the most attractive part of the flower garden Pæonia, well known for the richness of its coloring, and the robustness of its constitution, is the ornament of every cottage, and the noble varieties of Magnolia, the pride of the North American forest, are the finest exotics of the shrubbery Nymphæa and Nelumbium are beautiful genera of aquatic plants Annona, or the custard apple, is one of the most important of the fruit trees of tropical countries, and the celebrated water vine of Sierra Leone is a species of Tetracera Nor must Sarracenia, with its curious pitcher-like leaves, Papaver, from which opium is extracted, Cimicifuga, whence is obtained the antidote to the dangerous bite of the rattle-snake, Bixa, or the arnotta tree, from the fruit of which the coloring matter for the red cheese of England is procured, nor Hepatica, with its modest beauties, be omitted.

The commencement of M Decandolle's laborious Systema Vegetabilium has included nearly every thing contained in the class, and is followed in the discrimination of the species, as being the best authority which can be taken.

Order 1. MONOGYNIA  Stamens many, hypogynous Style 1

1162. *Capparis* Cal 4-leaved, coriaceous, deciduous Petals 4 Stamens long. Stigma capitate. Berry with a rind, 1-celled, stalked, subglobose, or like a pod

1163 *Marcgraavia* Cal 6-leaved, imbricated. Corolla monopetalous, calyptriformis. Berry many-celled, many-seeded. Style O

1164. *Actæa.* Cal 4-leaved, deciduous Petals 4. Berry 1-celled Seeds half orbicular

1165. *Sanguinaria.* Cal 2-leaved Petals 8 Pod ovate, 1-celled

1166. *Podophyllum.* Cal 3-leaved Petals 9 Berry 1-celled, crowned with the stigma

1167. *Chelidonium* Cal 2-leaved Petals 4 Pod 1-celled, linear Dissepiment O. Seeds several, crested

1168 *Romeria* Petals 4 Caps long, 2-3-4-valved, the valves opening from the vertex to the base. Seeds reniform, scurfy, without a glandular crest

1169. *Glaucium.* Cal. 2-leaved Petals 4 Pod 2-celled, linear, 2-3-valved. Seeds several, dotted.

1170. *Papaver.* Cal 2-leaved Petals 4 Capsule 1-celled, opening by pores under the persistent stigma

1171. *Meconopsis.* Petals 4 Style short. Stigmas 4-6, radiating, convex, distinct. Capsule opening with 4-6 valves.

1172. *Argemone* Cal 3-leaved Petals 6 Capsule half valved

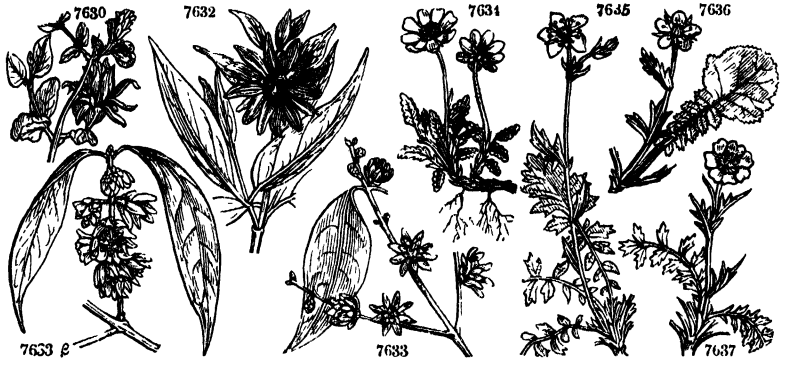
1173 *Sarracenia.* Cal. double, 3-5-leaved Petals 5 Caps 5-celled Style with a clypeate stigma.

1174. *Nymphæa.* Sepals at the base of the discus Petals and stamens connected with the whole of the discus, which covers the carpella.

1175. *Limnocharis.* Sepals 3. Petals 3, very delicate, withering Plant monocotyledonous.

7635 Stem about 2-flowered, Awns straight naked, Cal of fruit erect, Lvs pinnate toothed

7636 Leaves pinnate the outer leaflet very large round, lower smaller by degrees
7637 Leaves pinnate cut, Runners creeping



and Miscellaneous Particulars

1161. *Sieversia* Named by Willdenow, after M Sievers, a well known Russian botanical collector Plants resembling Geum in habit.

1176 *Nuphar* Sepals, petals, and stamens inserted at the base of the discus
1177 *Euryale* Sepals, petals, and stamens united with the discus, which covers the carpella.
1178 *Bixa.* Cal 5-toothed Petals 10 Capsule hispid, 2-valved
1179 *Pyrckia* Cal 3-leaved, besides two extra leaves at base Cor O Berry 5-angled, many-seeded.
1180 *Sloanea* Cal 1-leaved, 5-cleft Cor O Anthers united to filaments beneath the end. Caps echinate, 3-6-celled, 3-6-valved. Seeds 2, with a berried arillus
1181. *Apeiba* Cal 5-leaved Petals 5 Caps echinate, many-celled
1182 *Spurmannia* Cal 4-leaved Petals 4 Filaments cohering at base, torulose Capsule echinate, 5-angled, 5-celled Cells 2-seeded
1183 *Entelea* Sepals 4-5 Petals 4 Stamens indefinite, uniform Anthers roundish, incumbent Stigma denticulate Caps roundish, echinate, 6-celled, half 6 valved, many-seeded.
1184 *Muntingia* Cal 5-parted Petals 5 Berry 5-celled, 1-5-many-seeded
1185 *Grewia* Cal 5-leaved, coriaceous, colored inside Petals 5 Scales 5 Ovary usually stalked. Drupe 4-lobed, 4-celled Nut 1-4-seeded
1186 *Tilia* Cal 5-parted Petals 5 Capsule coriaceous, globose, 5-celled, 1-valved, opening at base, 1-seeded
1187 *Corchorus* Cal 5-leaved, deciduous Petals 5 Style scarcely any Stigma 1-3 Capsule pod-shaped, 2-celled, 2-5-valved, many-seeded
1188 *Grias* Cal 4-cleft Petals 4 Stigma sessile, cruciate Drupe with an 8-furrowed nut
1189 *Calophyllum* Cal 4-leaved, colored Petals 4 Drupe globose
1190 *Mammea* Cal. 2-leaved Petals 4 Berry very large, 4-seeded
1191 *Ochna* Cal 5-leaved Petals 5 Berries 1-seeded, with a large roundish receptacle
1192. *Elæocarpus* Cal 5-leaved Petals 5, torn Anthers 2-valved at end Drupe with a curly nut.
1193 *Alangium* Cal 6-10-toothed, superior Petals 6-10, linear Berry coated, 1-3-seeded
1194 *Mentzelia* Cal 5 leaved Petals 5 Capsule inferior, cylindrical, many-seeded
1195 *Lagerstroemia* Cal 6-cleft, campanulate Petals 6 Stamens many, of which the six outer are the kest Caps 4-6-celled, many-seeded
1196. *Ægle* Cal 1-leaved, 5-lobed Petals 5, spreading Style short, thick. Berry coated, turbinate, globose, finally woody, with 12-16 cells
1197 *Cistus* Cal 5-leaved, with two small leaflets Petals 5 Caps 5-celled, the valves bearing the dissepiments in the middle
1198 *Helianthemum* Divisions of the calyx often unequal the two outer the smallest Caps 1-celled, 3-valved, with the dissepiment in the middle of the valves

Order 2 DI-TRIGYNIA  Stamens many, hypogynous Styles 2-3.

1199 *Bauera* Cal 7-9-leaved, persistent Petals 7-9, deciduous Caps inflated, 2-celled, many-seeded.
1200 *Fothergilla* Cal truncate, entire Cor O Filaments very long, clavate Ovary bifid. Caps 2-celled, 2-horned Seeds solitary, bony
1201 *Curatella* Cal 5-leaved Petals 4 Styles 2 Caps 2-parted Cells 2-seeded.
1202 *Paeonia* Cal 5-leaved Petals 5 Style O Caps many-seeded, like a pod
1203 *Hibbertia* Stamens distinct, filiform, equal Anthers oval, oblong. Ovaries 1-15 Styles filiform, inflexed Carpella membranous, generally 1-2-seeded
1204 *Delphinium* Cal O Petals 5 Nectary bifid, cornute behind Siliques 3-1
1205 *Aconitum.* Cal O Petals 5, the upper vaulted Nectaries 2, hooded, stalked, recurved. Siliques 3-5
1206. *Trachytella.* Carpella 1-2, berried, many-seeded; otherwise Tetracera.

Order 3. PENTAGYNIA.  Stamens many, hypogynous. Styles 5

1207. *Cimicifuga.* Cal 4-leaved Cor. with four urceolate nectaries. Caps 4. Seeds scaly
1208. *Aquilegia* Cal O Petals 5 Nectaries 5, horned between the petals Caps 5, distinct

1209. *Nigella.* Cal. 0 Petals 5. Nectaries 5, trifid between the corolla.
1210. *Reaumuria* Cal 5-leaved Petals reflexed, 5 Caps 5-celled, 5-valved, many-seeded. Seeds woolly
1211. *Colbertia* Ten stamens much longer than the others Carpella 5, united? Stigma capitate Seeds several in each cell, reniform, inclosed in a pellucid pulp
1212 *Tetracera* Flowers often dioecious or polygamous Carpella 3-5, capsular, surrounded by the imbricated sepals. Seeds 1-2, shining, ovate, with an arillus

Order 4. POLYGYNIA.  Styles many. Stamens many, hypogynous.

1213 *Nelumbium* Cal 4-5-leaved. Petals many Fruit turbinate, in a truncate discus, with several 1-seeded hollows Nuts ovate, crowned with the persistent style
1214 *Dillenia* Cal 5-leaved Petals 5 Capsules many-seeded, connate, replete with pulp
1215 *Illicium* Cal 6-leaved Petals 27 Caps many, placed in a circle, 2-valved, 1-seeded.
1216. *Liriodendron.* Cal 3-leaved. Petals 6. Samaræ imbricated in a cone Caps 1-2-seeded, not opening, attenuated
1217 *Magnolia* Cal 5-leaved. Petals 6-9. Caps 2-valved, 1-seeded, imbricated in a cone. Seeds pendulous
1218 *Michelia* Cal 3-leaved Petals 15 Berries many, 4-seeded
1219 *Uvaria* Cal 3-leaved Petals 6 Berries numerous, pendulous, 4-seeded
1220 *Annona* Sepals 3, united at base, concave, cordate, acute Petals 6, thick; the interior thicker or none Anthers subsessile, with a dilated angular end Berry pulpy, many-celled towards the outside
1221 *Artabotrys* Cal 3-parted Petals 6 Stamens hypogynous Ovaries distinct, 2-seeded. Berries 2-seeded Seeds collateral erect, without arillus
1222 *Guatteria* Sepals 3, united at base, ovate, subcordate, acute. Petals 6, ovate or obovate. Berries dry, coriaceous, ovate or subglobose, stalked, 1-seeded
1223 *Asimina* Cal 3-parted Petals 6, spreading, ovate-oblong, the inner smallest. Anthers subsessile. Berries usually 3, sessile Seeds several

MONOGYNIA.

†*1162. CAPPARIS *W*	Caper-Tree				*Capparideæ*	*Sp* 10—116					
7638 spinósa *W*	common	☼	cul	3	my au	W	S. Europe 1596	C	s l	Bot mag 291	
7639 jamaicénsis *W*	Jamaica	☼	or	4	..	W	Jamaica 1793	C	r m	Jac am e p t 101	
7640 frondosa *W.*	large-leaved	☼	or	7	...	G	Carthag 1800	C	s l	Jac. amer t 103	
7641 ovâta *W*	acute-leaved	☼	or	3	my au	W	S Europe ...	C	s l	Boc sic. t. 42. f 3	
7642 salig'na *P. S.*	Willow-leaved	☼	or	8	..	W	Sant Crus 1807	C	r m		
7643 lineâris *W*	linear-leaved	☼	or	15	...	W	W Indies 1793	C	r m	Jac amer t 102	
7644 Bréynia *W.*	Oleaster-leav'd	☼	or	11	...	W	W Indies 1752	L	l p	Jac amer t 103	
7645 cynophallóphora *W*	Bay-leaved	☼	or	8	...	G w	W Indies 1752	C	r m	Jac amer t 98	
7646 odoratissima *W.*	sweet-scented	☼	or	6	...	W	Caraccas 1814	C	r m	Jac schœ l t 110	
7647 ferruginea *W*	ferruginous	☼	or	4	..	W	Jamaica ...	C	s l	Bro. jam.t 28 f 1	
1163. MARCGRAA'VIA *W*	Marcgraavia				*Capparideæ*	*Sp* 1—2					
7648 umbellâta *W*	umbelled	♀	cu	20	...	W	W. Indies 1792.	C	s.l.p	Jac. amer. t 96	



History, Use, Propagation, Culture,

1162 *Capparis* From its Arabic name *Kabar*, from which the Greeks made καππαρις *Capparis*, Fr *Capsolo*, Ital and *Kapernstrauch*, Ger This is a genus of low shrubs, some of which produce berries and others pods C spinosa has the habit of the common bramble, it grows in similar situations in the south of Europe, and especially on rocks and ruins The chief supply of caper buds is from Sicily, but the plant is cultivated in the neighbourhood of Toulon in orchards, in the intervals between fig and olive trees, and in the neighbourhood of Paris, where it is trained on low walls, and the shoots during winter laid down and covered with soil to protect them from the frost In this country it is generally treated as a stove plant, though it has stood the winter in the open air in some situations, and by raising from the seed for several generations might probably be naturalized A plant stood near a century against the wall of the garden of Camden House, Kensington, it produced many flowers annually, though the young shoots were frequently killed to the stump during winter

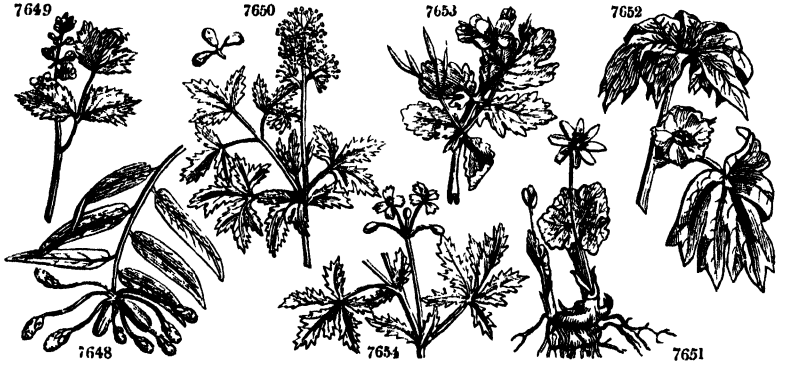
As a pickle, the flower buds of the caper are in great esteem throughout Europe In Italy, the unripe fruit is prepared in the same way as the flower buds, both are highly acrid and burning to the taste. In the isles of the Mediterranean, and near Toulon, the flower buds of the caper are gathered just before they begin to expand, which forms a daily occupation during six months, when the plants are in a flowering state As the buds are gathered they are thrown into a cask among as much salt and vinegar as is sufficient to cover

1224. *Xylopia* Cal. 3-5 lobed Petals 6, the exterior largest. Stamens usually inserted in a globose receptacle Berries 2-15, on short stalks, compressed, frequently dry and opening Seeds shining
1225 *Hepatica* Invol 3 leaved, 1-flowered, resembling a calyx, entire. Sepals petaloid, 6-9, arranged in 2 or 3 rows Ovaries many Grains without an awn
1226 *Anemone.* Invol 3-leaved, distant from the flower, cut Sepals 5-15, petaloid Petals O.
1227 *Clematis* Invol O, or like a calyx under the flower. Sepals 4-8, colored Petals O, or shorter than the sepals Grains terminating in a feathery awn
1228 *Naravelia* Petals 6-12, longer than calyx Grains seated on a thick hollow stalk
1229 *Thalictrum* Invol. O Petals O Grains dry, not awned, sometimes stalked, sometimes with a longitudinal furrow
1230 *Adonis* Sepals 5, appressed Petals 5-15, with a naked claw Grains many, 1-seeded, spiked, ovate, pointed with the persistent hardened style
1231 *Knowltonia* Sepals 5. Petals 5-15, with a naked claw. Ovaries upon a globose receptacle. Grains 1-seeded, berried, with a deciduous style
1232 *Ficaria* Sepals 3, deciduous Petals 8, with a honey-pore at base. Grains obtuse
1233 *Ranunculus* Sepals 5, not deciduous. Petals 5, rarely 10, with a honey-scale at base. Grains pointed
1234 *Trollius* Sepals colored, 5-10-15, deciduous, petaloid Capsules many, subcylindrical, many-seeded.
1235 *Isopyrum* Sepals 5, deciduous Petals 5, equal, tubular, 2-lipped. Ovaries 2-20 Capsules compressed, membranous, many-seeded Seeds minute, dotted
1236. *Eranthis* Involucre under the flower, cut into many divisions Sepals 5-8, colored, oblong, deciduous. Petals 6-8, tubular Capsules stalked Seeds globose
1237. *Helleborus* Sepals 5, persistent, roundish, obtuse, large, usually green Petals 8-10, tubular, nectariferous. Stigmas orbicular Capsules coriaceous
1238 *Coptis.* Sepals 5-6, colored, petaloid, deciduous Petals small, cucullate. Stamens 20-25 Caps. 6-10, on long stalks, membranous, 4-6-seeded
1239 *Caltha* Sepals 5, colored, round. Petals O Stamens many Capsule spreading, 1-celled, many-seeded
1240 *Hydropeltis* Sepals 3-4 Petals 3-4 Ovaries 6-18 Seeds in a pendulous ovate globose capsule
1241 *Hydrastis* Sepals 3, ovate. Petals O. Carlopsides berried, many in a head, terminated by the style, 1-celled, 1-2-seeded.

MONOGYNIA.

7638 Pedunc 1-fl solitary, Stipules spiny, Leaves roundish obtuse smooth, Caps oval
7639 Pedunc many-fl Leaves obl obt emarginate downy beneath, Cor. campanulate
7640 Pedunc umbelled, Leaves clustered in parcels
7641 Pedunc 1-fl solitary, Stipules spiny, Leaves roundish ovate acute smooth, Capsules oval
7642 Leaves linear lanceolate dilated downwards obtuse at each end smooth, Fruit round torulose
7643 Pedunc racemose, Leaves linear
7644 Pedunc racemose, Leaves perennial oblong, Cal and pedunc downy, Fl octandrous
7645 Pedunc many-fl terminal, Leaves elliptical blunt smooth, Glands axillary, Fruit cylindrical torulose
7646 Pedunc many-fl Leaves obl lanceolate acute dotted with scales beneath
7647 Pedunc umbelled, Leaves persistent lanceolate downy beneath, Flowers octandrous

7648 Leaves ovate-oblong acuminate veiny



and Miscellaneous Particulars.

them, and as the supply of capers is increased more vinegar is added When the caper season closes, the casks are emptied, and the buds sorted according to their size and color, the smallest and greenest being reckoned the best, and put into small casks of fresh vinegar for commerce. They will in this state keep fit for use for five or six years It is said to be a common practice to put filings of copper in the first pickle to save vinegar, and give the buds a green color The best capers are called nonpareilles, and the second best capucines (*N. Cours complet d'Agr*, art *Caprier*)

Most of the species are very shewy when in flower · C cynophallophora has large petals, and stamens upwards of four inches long Ripe cuttings of all the species grow readily in sand

1163 *Marcgravia.* In memory of George Marcgraaf, of Leibstadt, author of a voyage to Brazil in 1648 A sub-parasitical creeping shrub at first it is radicant like some ferns, but as it advances, the stem becomes shrubby, adhering still by its fibres to the trunk of some tree, to the top of which it frequently runs, at length dividing into several subdivided loose pendulous branches, commonly terminated by flowering umbels It is frequent in the cool wooded mountains of Jamaica, and, according to Browne, *appears in such various forms*, that it has been mistaken for different plants in the different stages of its growth. It grows freely in British stoves, and cuttings root in sand under a glass. The genus is remarkable for the transformation of part of the bractes into fistular bodies, resembling the pitchers of some other plants.

1164 ACTÆ'A *Ph*	ACTÆA				*Ranunculaceæ* *Sp.* 2									
7649 spicáta *W en*	Bane-berry	♑	△	or	3	ap jn	W	Britain m wo.		R	s l	Eng. bot 918		
7650 americána *Ph.*	American	♑	△	or	3	ap jn	W	N Amer. ...		R	p l	Corn.canad. t 77		
α álba	*white-berried*	♑	△	or	3	ap jn	W	N. Amer ...		R	p l			
β rúbra	*red-berried*	♑	△	or	3	ap jn	R	N Amer ...		R	p l			
1165 SANGUINA'RIA	*W* PUCCOON				*Papaveraceæ* *Sp* 1									
7651 canadénsis *W*	Bloodwort	⁂	△	pr	½	mr ap	W	N Amer 1680		R	s p	Bot mag. 162		
†1166. PODOPHYL'LUM	*W* DUCK'S-FOOT				*Podophyllaceæ* *Sp* 1—2									
7652 peltátum *W*	May-Apple	♑	△	cu	½	my	W	N Amer 1664		D	s p	Bot mag 1819		
1167 CHELIDO'NIUM	*W* CELANDINE				*Papaveraceæ* *Sp* 2—5									
7653 május *W*	common	♑	△	w	2	ap o	Y	Britain sha.ba		D	co	Eng bot 1581		
7654 lacinátum *W en*	jagged	♑	△	or	2	ap o	Y	S. Europe ...		D	co	Mill ic 1 t 92 f 2		
1168 ROME'RIA *Med*	ROMERIA				*Papaveraceæ* *Sp.* 1—3									
7655 hybrida *Dec*	hybrid		○	or	2	my jn	Pu	Britain hed.		S	co	Eng. bot t 201		
Chelidonium hybridum L														
1169 GLAU'CIUM *J*	HORN-POPPY				*Papaveraceæ* *Sp* 3—5									
7656 lúteum *H K*	yellow		○	or	2	jn o	Y	Britain san sh		S	co	Eng bot. 8		
7657 fúlvum *H K*	orange		◌	or	2	au s	Or	S Europe 1802		S	co	Sweet fl gard 35		
7658 phœnícium *H K*	red		○	or	2	jn jl	R	England san fi.		S	co	Eng bot. 1433		
†1170 PAPA'VER *W*	POPPY				*Papaveraceæ* *Sp* 11—26									
7659 hýbridum *W*	mongrel		○	or	1¼	jn jl	S	England chal fi		S	co	Eng bot. 43		
7660 Argemóne *W*	rough		○	or	1¼	jn jl	S	Britain corn fi		R	co	Eng bot 643		
7661 alpinum *W*	Alpine	♑	△	or	⅔	jn jl	Y	Austria 1759		S	co	Jac aus 1 t 83		
7662 nudicaule *W*	naked-stalked		◌	or	1½	jn au	Or	Siberia 1730		S	s l	Bot mag 2344		
β lúteum	*yellow-flowered*		◌	or	1½	jn au	Y	Siberia 1730		S	s l	Bot. mag 1633		

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History, Use, Propagation, Culture,

1164 *Actæa* Aκτη was the Greek name of the elder, which this plant resembles in foliage and fruit Weed-like plants seldom seen in gardens The berries of A. spicata are poisonous, and with alum yield a black dye. The tubers of A racemosa are called snake root, and much used in North America by self-practitioners, and as an antidote against poison and the bite of the rattle snake

1165 *Sanguinaria* From *sanguis*, blood All parts of the plant on being wounded discharge a blood-colored fluid. This is a singular and very delicate looking plant. It has a tuberous fleshy root with red fibres and a reddish juice from each bud of the root there springs only a single fig-like glaucous leaf, with a one-flowered scape, the flower has no smell, and is very fugacious It abounds in the woods of Canada, and in the back settlements, where the Indians stain themselves with its red juice

1166 *Podophyllum* From πους ποδος, a foot, and φυλλον, a leaf, in allusion to the long firm stalk on which the leaves are placed Low neat herbaceous plants, with white flowers hidden by the overshadowing broad leaves

1167 *Chelidonium* From χελιδων, the swallow, because it was thought to flower with the arrival of that bird, and to perish with its departure The English word celandine appears to be a corruption of chelidonium The juice of C majus is of an orange color and very acrimonious It cures tetters and ringworms Diluted with milk it consumes white opake spots on the eyes It destroys warts, and cures the itch There is no doubt but a medicine of such activity will one day be converted to more important purposes (*Wstherng*) The root, according to Loureiro, is extremely bitter, and greatly esteemed among the natives of Cochin-China, for a variety of uses in medicine

1168 *Romeria* Named after J J Römer, professor of botany at Landshut, and the collaborator of Schultz in an edition of the Species Plantarum of Willdenow He died in 1820 A genus intermediate between Chelidonium, Glaucium, and Papaver

1169 *Glaucium* All the parts of the species appear covered with a *glaucous* bloom. Handsome sea-coast plants G luteum has large and numerous flowers, which, although of short duration, succeed one another in great abundance during most part of the summer, make a fine contrast with the sea-green dew-bespangled leaves, and are a great ornament to our sandy shores The whole plant abounds in a yellow juice, is fœtid, and of a poisonous quality, and said to occasion madness.

1170 *Papaver* Said by De Theis to have been so called from the Celtic *papa*, which signifies *pap*, or the soft food given to children, in which the seeds were formerly boiled to make the infants sleep Opium is derived from οπος, juice, it is supposed to have been the Nepenthes of Homer Rhœas, the name of one of the species, is from ρεω, to flow or fall, in allusion to the quickly perishable nature of the flowers The poppy produces a great quantity of seeds, for which reason Cybele, the mother of the gods, is represented crowned with poppy-heads as a symbol of fecundity

The species of this genus are all shewy, with large, brilliant, but fugacious flowers They are all easy of culture in almost any soil, and one species affords that singular medicine opium P. Rhœas is one of the commonest weeds among corn on gravelly soils, but in its double and semidouble variegated varieties, it is also one of the handsomest of garden annuals The capsules, as in P somniferum, contain a milky juice of a narcotic quality: an extract from them has been successfully employed as a sedative, and some foreign practitioners are said to prefer this extract to opium

P. somniferum, although it is found growing wild in the southern parts of Europe, and even in England, yet there is every reason for thinking that its seed must have been carried to these parts from Asia. It was very early cultivated in Greece, perhaps at first solely for the sake of its seed, which was used as food. It is extensively cultivated in most of the states of Europe in the present age, not only on account of the opium,

7649 Berries roundish, Petals length of stamens, Raceme ovate, Leaves 2-3 ternate
7650 Berries ovate-oblong, Petals shorter than stamens, Raceme ovate, Leaves bi-triternate

7651 The only species

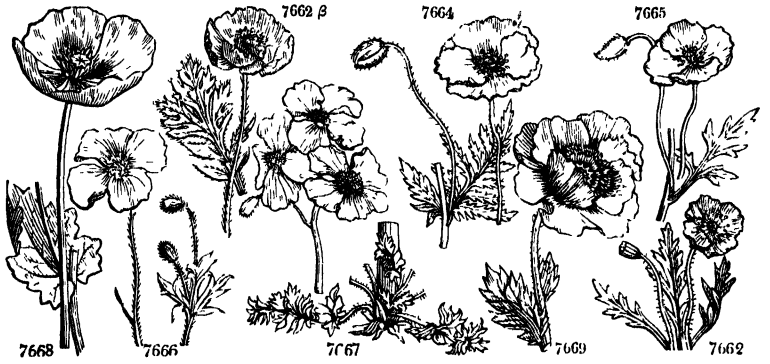
7652 Stem erect 2-leaved 1-flowered, Fruit ovate

7653 Peduncles umbelled, Leaves pinnated with roundish toothed lobed segments, Petals elliptical entire
7654 Peduncles umbelled, Leaves pinnated with finely cut segments, Petals serrated or cut

7655 Pods 3-4-valved erect with rigid bristles at end

7656 Stem smooth, Cauline leaves repand, Pod warted roughish
7657 Stem smooth, Cauline leaves roundish sinuated, Pods rough, Flowers subsessile
7658 Stem hairy, Cauline leaves pinnatifid cut, Pod bristly

7659 Caps subglobose torose hispid, Stem leafy many-flowered
7660 Caps clavate hispid, Stem leafy many-flowered
7661 Caps hispid, Scape 1-fl naked hispid, Leaves bipinnate
7662 Caps hispid, Scape 1-fl naked hispid, Leaves simple pinnate sinuated



and Miscellaneous Particulars

for which it is reared in Turkey, Persia, and India, but also on account of the capsules, and of the bland oil obtained from the seeds All the parts of the poppy contain a white, opaque, narcotic juice, but it abounds more in the capsules hence these are the only officinal parts of the plant, and for them chiefly is the plant cultivated in this country They are gathered as they ripen, and as this happens at different times, there are annually three or four gatherings They are brought to market in bags, each containing about 3000 capsules, and sold to the druggists The London market is chiefly supplied from Mitcham in Surrey

The milky juice of the poppy, in its more perfect state, which is the case in warm climates only, is extracted by incisions made in the capsules, and inspissated, and in this state forms the opium of commerce The mode of obtaining it appears to have been nearly the same in the time of Dioscorides as is at this day adopted The plants, during their growth, are carefully watered and manured, the watering being more profuse as the period of flowering approaches, and until the capsules are half grown, when it is discontinued, and the collection of the opium commences At sunset, longitudinal incisions are made upon each half-ripe capsule, passing from below upwards, and not penetrating to the internal cavity The night dews favor the exudation of the juice, which is collected in the morning by women and children, who scrape it from off the wounds with a small iron scoop, and deposit the whole in an earthen pot, where it is worked by wooden spatules in the sunshine, until it attains a considerable degree of thickness It is then formed by the hand into cakes, which are laid in earthen basins to be further exsiccated, when it is covered over with poppy or tobacco leaves Such is the mode followed in India, and according to Kampfer's account, nearly the same is practised in Persia, and when the juice is drawn in a similar manner in this country and inspissated, it has all the characters of pure opium

Opium is brought to this country in chests from Turkey and India The Turkey opium is in flat pieces, covered with leaves East Indian opium is in round masses, covered with the petals of the poppy in successive layers, to the thickness nearly of one-fourth of an inch Mr Kerr relates, that at Babar, it is frequently adulterated with cow-dung, the extract of the poppy procured by boiling, and various other substances In Malava it is mixed with oil of sesamum, which is often one half of the mass, ashes and the dried leaves of the plant are also used It is also adulterated with the aqueous extract of the capsules, the extracts of Chelidonium glaucum, Lactuca virosa, and Glycyrrhiza glabra, and sometimes with gum arabic, tragacanth, aloes, and many other articles

Poppy heads or capsules possess anodyne properties, they are chiefly employed, boiled in water, as fomentations to inflamed and ulcerated surfaces, and a syrup, prepared with the inspissated decoction, is used as an anodyne for children, and to allay the tickling cough in chronic catarrh and phthisis.

Opium operates as a powerful and very diffusible stimulus, but its primary operation is followed by narcotic and sedative effects in a degree much greater than could be expected from the previous excitement it induces It acts directly on the nervous system, and when taken into the stomach destroys irritability, and allays pain in the most distant parts of the body, independent of the circulation, and without inducing any change on the composition of the blood As the principle, therefore, on which opium acts is the same over all the body, the topical application of it is capable of producing similar effects, only in a diminished degree, to those resulting from it when it is taken into the stomach.

In moderate doses, opium increases the fulness, the force, and the frequency of the pulse, augments the heat of the body, quickens respiration, and invigorates both the corporeal and mental functions, exhilarating even to intoxication, but by degrees these effects are succeeded by langour, lassitude, and sleep, and in many instances headach, sickness, thirst, tremors, and other symptoms of debility such as follow the excessive use

7663 armeniacum *Lam.*	Armenian	○	or	1½	jn s	Y	Armenia	1815	S	s p		
7664 Rhœ'as *W.*	common-corn	○	or	2	jn jl	Sc	Britain	corn fi	S	co	Eng bot 645	
7665 dúbium *W*	smooth	○	or	2	jn jl	Sc	Britain	san fi	S	co	Eng bot 644	
7666 caucásicum *M B*	Caucasian	○	or	1½	jn jl	Y	Caucasus	1813	S	co	Bot mag 1675	
7667 floribúndum *Desf*	many-flowered	☿	or	1½	jn jl	Sc	Levant	1815	S	co	Bot reg 134	
7668 somníferum *W*	garden	○	m	4	jl au	W	England	corn fi	R	co	Eng bot 2145	
7669 orientále *W*	oriental	☿	or	3	my jn	R	Levant	1714	R	co	Bot mag 57	
7670 bracteátum *Lindl*	bracted	☿	or	3	my jn	R	Siberia	1818	R	co	Lindl coll 23	
1171 MECONOP'SIS *Vig* Meconopsis					*Papaveraceæ* *Sp* 1—4							
7671 cámbrica *Vig*	Welsh	☿	or	1	my au	Y	England	al roc	R	s p	Eng bot 66	
†1172 ARGEMO'NE *B* Argemone					*Papaveraceæ* *Sp* 1							
7672 mexicána *W*	Mexican	○	or	2	jl au	Y	Mexico	1592	S	s p	Bot mag 243	
β albiflóra Sims	*white-flowered*	○	or	2	jl au	W	Mexico	1821	S	s p	Bot mag 2342	
1173 SARRACE'NIA *B* Side-saddle-Flower					*Papaveraceæ affinis* *Sp.* 4—6							
7673 flava *B*	yellow		cu	2	jn jl	Y	N Amer	1752	R	m s	Bot mag 780	
7674 variolária *Ph* *adúnca* Ex bot t 53	hook-leaved		cu	1	jn jl	Y	N Amer	1803	R	m s	Bot mag 1710	
7675 rúbra *B* *psittacina* Ph	red		cu	1	jn jl	Pu	N Amer	1786	R	m s	Hook ex fl 13	
7676 purpurea *B*	purple		cu	1	jn jl	Pu	N Amer	1640	R	m s	Bot mag 849	
1174 NYMPHÆ'A *W* Water-Lily					*Nymphæaceæ* *Sp* 10—20)							
7677 álba *W*	white		or		jn jl	W	Britain	riv &c	R	m s	Eng bot 160	
7678 odoráta *W*	sweet-scented		or		jl	W	N Amer	1786	R	m s	Bot. mag 819	
β minor	*small sweet-sc*		or		jl	W	N Amer	1812	R	m s	Bot mag 1652	
7679 nítida *B M*	cup-flowered		or		jl au	W	Siberia	1809	R	m s	Bot mag 1359	
7680 pygmæ'a *H K*	pigmy		or		my s	W	China	1805	R	m s	Bot mag 1525	
7681 Lótus *W*	Egyptian Lotus		or		jn s	Pk	Egypt	1802	R	m s	Bot mag 797	
7682 pubéscens *W*	Indian Lotus		or		my au	Pk	E Indies	1803	R	m s	Bot rep 391	
7683 rubra *B M*	red-flowered		or		jl au	R	E Indies	1803	R	m s	Bot mag 1280	
β rósea B M	*rose-colored*		or		jl au	Pk	E Indies	1803	R	m s	Bot mag 1364	



History, Use, Propagation, Culture,

of ardent spirits, supervene In very large doses the primary excitement is scarcely apparent, but the pulse seems to be at once diminished, drowsiness and stupor immediately come on, and are followed by delirium, sighing, deep and stertorous breathing, cold sweats, convulsions, apoplexy, and death The appearances on dissection are those which indicate the previous existence of violent inflammation of the stomach and bowels, but notwithstanding the symptoms of apoplexy which an overdose, when it proves fatal, occasions, no particular appearance of an inflammatory state or fulness of the vessels of the brain are perceived

The Turks call opium *afiom*, and in the *tersakhana*, or opium shops of Constantinople, they take it in graduated doses from ten grains to one hundred grains in a day It is mixed with rich syrup and the inspissated juices of fruit, to render it more palatable and less intoxicating, and is taken with a spoon, or made up into small lozenges stamped with the words, Mash Allah, literally, "The work of God" The Tartar couriers, who travel great distances, and with astonishing rapidity, take nothing else to support them during their journeys (*Dallaway's Constantinople*, quarto, 78) There is, however, some reason for supposing that the Mash Allah, or Maslach of the Turks, contains other narcotics, as those of hemp and of lolium, as well as opium

The use of opium for the purpose of exhilarating the spirits has long been known in Turkey, Syria, and China, and of late years it has been unfortunately adopted by many, particularly females, in this country Russell says, that in Syria, when combined with spices and aromatics, he has known it taken to the amount of three drachms in twenty-four hours Its habitual use cannot be too much reprobated It impairs the digestive organs, consequently the vigour of the whole body, and destroys also gradually the mental energies The effects of opium on those addicted to its use, says Russell, are at first obstinate costiveness, succeeded by diarrhœa and flatulence, with the loss of appetite and a sottish appearance The memories of those who take it soon fail, they become prematurely old, and then sink into the grave, objects of scorn and pity Mustapha Shatoor, an opium eater in Smyrna, took daily three drachms of crude opium The visible effects at the time, were the sparkling of his eyes, and great exhilaration of spirits He found the desire of increasing his dose growing upon him He seemed twenty years older than he really was, his complexion was very sallow, his legs small, his gums eaten away, and the teeth laid bare to the sockets He could not rise without first swallowing half a drachm of opium (*Phil Trans* xix 289)

When opium has been taken in an overdose, the first thing to be done for counteracting its bad effect, is the exhibition of a powerful emetic, and for this purpose sulphate of zinc, or sulphate of copper dissolved in water, should be immediately swallowed, and the vomiting kept up for a considerable time, and urged by irritation of the fauces Large draughts of vinegar and water, or other acidulated fluids, should afterwards be frequently taken, and the powers of the habit supported by brandy, coffee, and cordials The sufferer should be kept awake, and, if possible, in continued gentle motion Currie recommends the affusion of warm water at 106 degrees or 108 degrees for removing the drowsiness (*London Dispensatory*, 426)

Medical men have of late sought to discover the sedative principle of opium, and have found it in the extractive, from which a crystallized salt called morphia is obtained Some foreign physicians, and Mr

7663 Caps ellipt obl and calyxes smooth, Stem much branch smoothish, Lvs. pinnated, Lobes lin terminated
7664 Caps. smooth globose, Stem hairy many-fl Leaves pinnatifid cut [by a bristle
7665 Caps oblong smooth, Stem many-fl with appressed bristles, Leaves pinnatifid cut
7666 Caps ov.-obl. smooth, Stem much branched and peduncovered with decid setæ, Lvs glauc pinnatifid
7667 Caps smooth obl Sepals hairy, Stem many fl hispid, Leaves pilose: the lower pinnate
7668 Calyxes and caps smooth, Leaves stem-clasping cut
7669 Caps smooth, Stems 1-fl rough, Leaves scabrous pinnate serrate
7670 Caps smooth, Stems 1-fl rough, Leaves scabrous pinnate serrate, Flowers subtended by leafy bractes

7671 Caps smooth obl Stem many-fl smooth, Leaves pinnate cut

7672 Caps 6 valved, Leaves spiny

7673 Leaves erect tubular, Valve with a contracted neck, at the end flat erect
7674 Leaves long, their tube dotted at back, Appendage short vaulted incurved

7675 Lvs short colored upwards with netted veins, Tube of leaf ending in a recurv vaulted mucron appendix

7676 Leaves cucullate ventricose spreading arcuate

7677 Leaves cordate entire, Lobes imbricated round, Calyx 4-leaved
7678 Leaves cordate entire emarginate, Lobes divaricating, Point obtuse, Calyx 4-leaved

7679 Leaves cordate entire, Lateral nerves beneath level, Petioles smooth, Pet acute, Rays of stigma 12-20
7680 Leaves cordate entire, Lateral nerves beneath level, Petioles smooth, Pet acute, Rays of stigma 8
7681 Leaves cordate toothed very smooth, Lobes approximating, Calyx 4-leaved
7682 Leaves reniform toothed downy beneath, Lobes round, Calyx 4-leaved
7683 Leaves peltate finely toothed, beneath downy without spots



and Miscellaneous Particulars

Thomson, the author of The London Dispensatory, have found that a quarter of a grain of the acetate of morphia produces the most beneficial effects that can be expected from an anodyne, allaying pain, and procuring sleep without in any degree affecting the central functions (*London Dispensatory*, 420)

A variety of P somniferum, known as the black poppy, from the color of its seeds, is cultivated for these to some extent, they are called maw seed, and generally stained of a light blue color

P Rhœas (*œillette*, Fr) and also somniferum are cultivated in Flanders and Germany for their seeds, which are bruised for an oil used in cookery as a substitute for that of olives In Poland and some parts of Russia, the seeds are used as a seasoning to soups, gruels, and porridge

Professor Martyn, in his edition of Miller's Dictionary, has collected a body of facts, which clearly prove that opium may be produced to any extent in Britain, and of equal quality to that procured from abroad, the value of labor in this country, however, does not admit of such a thing We have seen samples of opium made in the south of England quite equal to that of foreign growth, but we understood that the labor of collecting it was greater than could be afforded for its market price

P cambricum is admired for its yellow petals, and orientale and bracteatum are very splendid plants

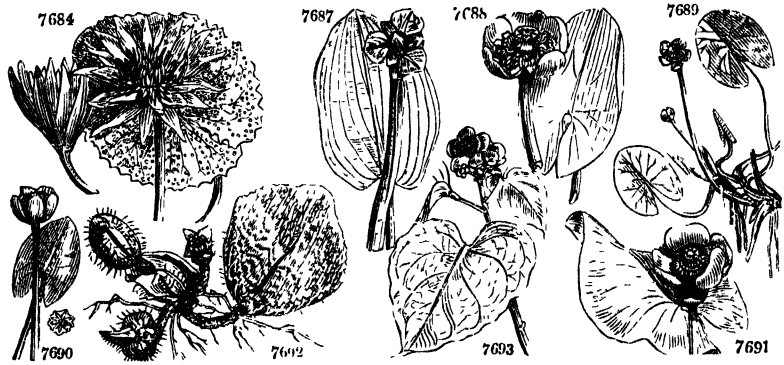
1171 *Meconopsis* From μηκων, a poppy, and οψις, resemblance A genus of herbaceous shade-loving plants, just intermediate between Papaver and Argemone The flowers are yellow

1172 *Argemone* From *argema*, the name by which the cataract of the eye was known, and which was thought to be cured by this plant A mexicana is a troublesome weed in the West Indies, with a fig-like fruit, armed with prickles, and thence, by the Spaniards, called *Figo del infierno* The whole plant abounds with a milky glutinous juice, which turns in the air to a fine bright yellow, and when reduced to consistence is not distinguishable from gamboge In very small doses it is probably of equal efficacy, given in dropsies, jaundice, and cutaneous eruptions It is esteemed very detersive, and generally used in diseases of the eyes but the infusion is looked upon as a sudorific and resolutive, which may be used with success on many occasions The seeds are said to be a much stronger narcotic than opium

1173 *Sarracenia* So named by Tournefort in honor of Dr Sarrazin, a French physician of rank residing in Quebec, who sent this genus to him from Canada it is called side-saddle flower from the resemblance of the stigma to a woman's pillion These plants are remarkable for the singular form of the leaves, which are tubular and hold water, and some species have lids or covers, which it is alleged shrink and close over the mouth of the tribe in dry weather, so as to prevent the exhalation of the water In great drought birds and and other animals resort to them They grow in bogs in Carolina and Virginia, and in British gardens thrive very well in pots with turfy peat at the bottom, and the upper part filled with sphagnum, or water-moss, in which the plants must be set, and then placed in pans of water, they succeed best in frames in a shady situation (*Bot Cult* 417)

1174 *Nymphæa* The *Nymph*, or Naiad of the streams The species are beautiful aquatics, especially N alba, which has a large flower filled with petals, so as almost to appear double it raises itself out of the water and expands about seven o'clock in the morning, and closes again, reposing upon the surface, about

7684 versicolor *H K*	changeable	♃ △	or		au	Pk	E Indies	1807	R	m s	Bot. mag 1189
7685 cærúlea *H K.*	blue	♃ △	or		jn s	B	C G H	1792	R	m s	Bot mag 552
7686 stellàta *W.*	star-flowered	♃ △	or		jn s	B	E. Indies	1803	R	m s	Bot rep 330
					Hydrocharideæ Sp 1—2.						
†1175 LIMNOCHA'RIS *Rich*	Limnocharis										
7687 Plumiéri *Rich*	Plumier's	♃ △	or	1½	jn n	Y	Brazil	1822	S	m s	Bot. mag. 2525
					Nymphæaceæ Sp 4—6						
†1176. NU'PHAR *H K*	Nuphar										
7688 lútea *H K.*	common-yellow	♃ △	or		jn jl	Y	Brit pools,&c		R	m s	Eng bot 159
7689 Kalmiána *H K.*	Canadian	♃ △	or		jl.au	Y	Canada	1807	R	m s	Bot mag 1243
7690 minima *E B*	least yellow	♃ △	or		jl au	Y	Scotland al lak.		R	m s	Eng bot. 2292
7691 ádvena *H K*	three-colored	♃ △	or		jl au	Y	N Amer	1772	R	m s	Bot. mag 684
					Nymphæaceæ Sp 1.						
1177 EURY'ALE *H K*	Euryale										
7692 férox *H K*	prickly	♃ ⊠	or		jl s	R	India	1809.	R	m s	Bot mag 1447
					Bixineæ Sp 1—2						
1178 BI'XA *W*	Arnotta										
7693 Orellána *W*	heart-leaved	☤ □	m 20		my au	Pk	W Indies	1690	S	s p	Bot mag 1456
					Bixineæ Sp. 1—7						
†1179 PROCK'IA *L.*	Prockia										
7694 Crúcis *L*	ovate	♣ □	cu 3		jl au	Y	W Indies	1822.	C	s p	Vah.symb 3.t.64
					Tiliaceæ Sp 1—8						
1180 SLO'ANEA *W*	Sloanea										
7695 dentáta *W*	Chestnut-leav'd	☤ □	tm 40		...	W	S Amer	1752.	S	p l	Plum ic. 244
					Tiliaceæ Sp 4—7						
1181 APEI'BA *W*	Apeiba										
7696 Tibóurbou *W*	hairy	♣ □	or 7		...	Y	S Amer	1756	C	p l	Aub. gui l t 213
7697 Petoúmo *W*	hoary	☤ □	tm 40		...	Y	S Amer	1817	C	p l	Aub gui l t 215
7698 áspera *W*	prickly-capsul'd	☤ □	tm 50		...	Y	Cayenne	1792	C	p l	Aub gui l t 216
7699 lævis *W*	smooth-leaved	☤ □	or 10		...	G	Cayenne	1817	C	p l	Aub. gui l t 214
					Tiliaceæ Sp 1						
1182 SPARRMAN'NIA *W*	Sparrmannia										
7700 africána *W*	African	☤ ⌴	or 10		mr jl	W	C G H	1790	C	p l	Bot. mag 516
					Tiliaceæ Sp 1						
1183 ENTELE'A *R Br*	Entelea										
7701 arboréscens *R Br*	arborescent	☤ ⌴	or 20		my	W	N Zeal	1820	C	p l	Bot. mag. 2480
					Tiliaceæ Sp 1						
1184 MUNTIN'GIA *W*	Muntingia										
7702 Calabúra *W*	Jamaica	♣ □	cu 3		jn jl	W	Jamaica	1690	C	p l	Jac amer. t. 107



History, Use, Propagation, Culture,

four in the afternoon The roots have an astringent bitter taste, they are used in Ireland, in the Highlands of Scotland, in the island of Jura, &c to dye a dark brown or chesnut color Swine are said to eat it, goats not to be fond of it, kine and horses to refuse it The flowers, the herb, and the root were formerly used in medicine, but are all now obsolete

N lotus resembles our common white species very much in the form of the flower and leaves, but the latter are toothed about the edge It is native of the hot parts of the East Indies, Africa, and America It is very common in ponds, lakes, and rivers in Jamaica, and grows in vast quantities in the plains of Lower Egypt near Cairo, during the time they are under water It flowers there about the middle of September, and ripens towards the end of October The Arabians call it Nuphar The ancient Egyptians made a bread of the seed of the Lotus dried and ground

All the species grow well in large pots of water with a few inches of rich soil at the bottom they are propagated by dividing the root, and some sorts which produce bulbs are increased by offsets from these Mr Kent, of Clapton, who cultivated exotic aquatics to great perfection, found that the bulbous rooted Nymphæas, if checked in their growth for want of water, from cold, or excessive heat, were apt to form bulbs at the roots and cease growing for the season Hence the necessity of a regular and powerful moist heat to make them flower freely

1175 *Limnocharis* From λιμνος, a marsh, and χαρις, dear, so called because the species are marsh plants They have beautiful umbels of yellow flowers, and are very easily cultivated in a stove They are increased by seeds

1176. *Nuphar* The Arabic name is *naûfar*, according to Forskahl The species are shewy plants closely resembling Nymphæa. N lutea is a native of most parts of Europe, and also of America Linnæus states, that swine are fond both of the leaves and root, that goats are not fond of it, and that kine, sheep, and horses refuse it. also that crickets are driven out of houses by the smoke in burning it, and that both they and cock-roaches are destroyed by the roots rubbed or bruised with milk. Ray observes, that the flowers smell like brandy.

1177. *Euryale* From ευρυαλος, broad, in allusion to the enormous broad floating leaves of the plant. A noble aquatic, easily cultivated in a good stove

1178 *Bixa.* The American name of the tree The drug called Terra Orellana, or Orleana, Roucon or Arnotto, is prepared from the red pulp which covers the seeds of this plant By maceration in hot water, the seeds are separated from the pulp, the latter is then made into balls or cakes, which when dry are fit for use Arnotto of a good quality is of the color of fire, bright within, soft to the touch, and dissolves entirely in water. It is reputed to be cooling and cordial, and is much used by the Spaniards in their chocolate and soups, both to heighten the flavor and to give them an agreeable color. It is esteemed good in bloody fluxes

7684 Leaves peltate at the edge and within the fissure sinuate toothed blistered smooth on each side [end
7685 Leaves peltate nearly entire not dotted smooth on each side 2-lobed at base, Anthers with appendages at
7686 Leaves cordate entire, Lobes divaricating acute, Calyx acute 4-leaved longer than the acute petals

7687 Leaves oblong very blunt at each end, Flowers in umbels

7688 Leaves cordate entire, Lobes approximating, Cal. 5-leaved longer than petals
7689 Sepals 5, Stigma cut with 8-10 rays, Leaves cordate a little out of the water, Petioles roundish
7690 Sepals 5, Stigma lobed with 10 rays, Lvs obl cord dott. sub-pubesc. Petioles at base ½ round, at end nearly
7691 Leaves cordate entire half erect, Lobes divaricating, Cal 6-leaved longer than petals [3-cornered

7692 Petioles and calyxes covered over with stiff prickles, Leaves sometimes 3 feet across

7693 Leaves smooth on each side

7694 Leaves cordate ovate toothed, Peduncles terminal racemose

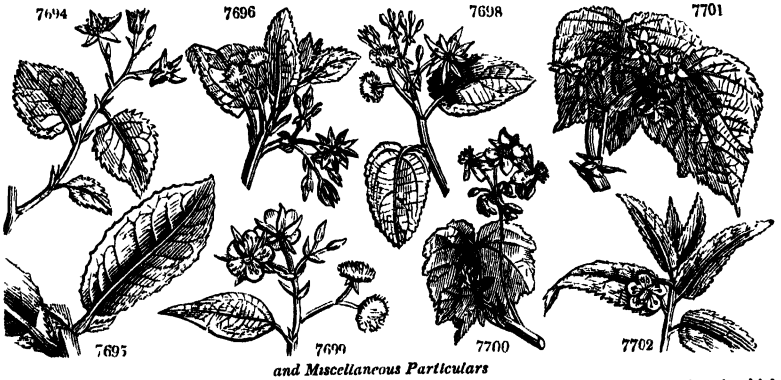
7695 Leaves ovate, Stipules cordate triangular serrated

7696 Leaves cordate lanceol serrate hirsute beneath, Capsules bristly
7697 Leaves obl subcordate serrulate hoary beneath, Caps bristly
7698 Leaves obl subcordate entire pubescent beneath, Caps muricated
7699 Leaves obl obovate acuminate entire smooth, Petals obtuse, Caps scabrous

7700 The only species

7701 The only species

7702 Leaves serrated oblong oblique



and Miscellaneous Particulars

and disorders of the kidnies Mixed with lemon-juice and a gum, it makes the crimson paint with which the Indians adorn their persons It was formerly used by dyers to form the color called aurora, but at present it is not held in much estimation as a dye, though it still maintains its ground with painters Arnotto is well known to be the drug which is used for dying cheese in Gloucestershire, under the name of cheese-coloring It is used in Holland for coloring their butter The bark makes good ropes for the common plantation uses in the West Indies; and pieces of the wood are used by the Indians to procure fire by friction.

1179 *Prockia.* A name of unknown meaning. American or Isle of France plants with alternate entire or toothed leaves, and yellow flowers, which are occasionally unisexual

1180 *Sloanea* Named by Plumier, in memory of the famous Sir Hans Sloane, Bart, physician to the king, and president to the Royal Society, author of the Natural History of Jamaica, and founder of Chelsea garden and hospital. *The leaves are like those of the chesnut, the flowers very large, and the fruit as big as* a tennis ball, armed all over with strong spines, and divided regularly into four cells, each containing one small chesnut. It grows freely in our stoves, and ripened cuttings root in sand under a hand-glass

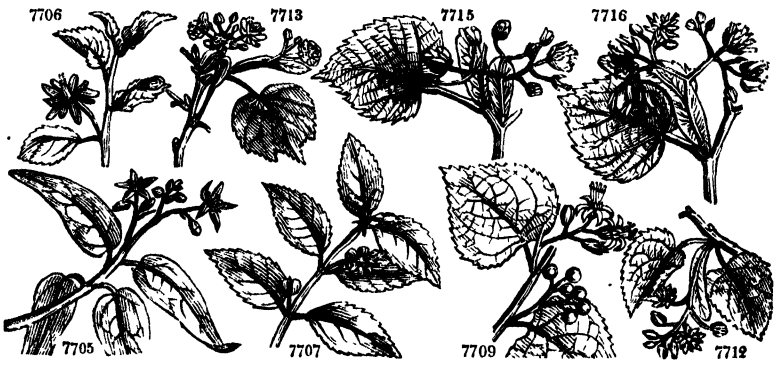
1181 *Apeiba.* The vernacular name of the plant in Guiana Tibourbou and Petoumo are vernacular names among the Caribs The species grow freely in light loamy soil Cuttings must be well ripened, and the glass they are put under should have a little air given it occasionally, or they will damp off The best way of flowering it, is to cut a ring round the bark of a large branch, which stagnates it and throws it into flower. (*Bot Cult* 20)

1182 *Sparmannia.* In memory of Anders or Andrew Sparrman, a Swede, fellow of the Academy of Sciences at Stockholm, who travelled into China, the Cape of Good Hope, and the islands of the South Sea His travels were published in London, 1785, quarto, and there are many descriptions by him in the Philosophical and other transactions. It is a beautiful shrub with snowy white petals, and singular nectaries It grows freely in loam and peat, and cuttings root in sand under a hand-glass

1183 *Entelea.* From ἐντελὴς, perfect So named by Mr. Brown, because all its filaments are fertile, by which character, among others, it is distinguished from Sparmannia A fine New Zealand plant, discovered originally by the botanists with Sir Joseph Banks in Cook's second voyage

1184 *Muntingia* Named by Plumier, after Abraham Munting, professor of botany at Groeningen, died in 1682 *Calabura* is an American name The flowers resemble those of the bramble, and the fruit cherries It grows in Jamaica on calcareous subalpine hills, flowering in spring, and in St. Domingo in the wet parts of woods, flowering in August and September. In our stoves it grows freely in light loam and cuttings root in sand under a hand-glass.

1185. GRE'WIA *W*	Grewia					*Tiliaceæ* *Sp.* 8—65.							
7703 hirsúta *W*	soft-leaved	♀	□	or	10	...	Pu	E Indies	1816.	C	p l		
7704 Mallacócca *W*	rough-fruited	♀	□	or	10	au s	Pa.pu	E. Indies	1792	C	c.p	Forster. 39	
7705 Microcos *H K*	panicled	♀	□	or	7	...	G	E. Indies	1779.	C	c p	Rhee mal 1 t.56	
7706 occidentális *W*	Elm-leaved	♀	□	or	10	jl s	Pu	C G H	1690	C	p l	Bot. mag 492	
7707 orientális *W*	oriental	♀	□	or	10	jl au	Pu	E Indies	1767	C	p l	Rhee. mal 5 t.46	
7708 pilósa *P S*	pilose	♀	□	or	10	...	...	E. Indies	1804.	C	p.l		
7709 asiática *W*	Asiatic	♀	□	or	12	jl.au	Pu	E. Indies	1792	C	p l	Sonn. it. 2. t 138	
7710 tiliæfólia *W*	Lime-tree-leav	♀	□	or	12	...	...	E. Indies	1812	C	p l		
1186 TI'LIA. *W.*	Lime-Tree					*Tiliaceæ* *Sp* 8—10							
7711 rúbra *Dec*	common	☿		tm	50	jn au	Y.o	Britain	woods.	L	co		
7712 intermédia *Hayne.*	intermediate	☿		tm	50	jn au	Y o	Britain	woods	L	co	Fl dan 553	
7713 parvifólia *Ehr*	small-leaved	☿		tm	50	au s	Y o	Britain	woods	L	co	Eng bot. 1705	
7714 platyphýlla *Scop*	broad-leaved	☿		tm	50	au.s	Y o	Britain	woods.	L	co	Vent diss. t.1 f 2	
7715 americána *W*	broad-leaved	☿		tm	30	jn.jl	Y.o	N Amer	1752	L	co	Dend. brit. 134	
T glábra Vent													
7716 pubéscens *W*	pubescent	☿		tm	20	jl au	Y.o	N Amer	1726.	L	co	Dend. brit. 135	
β leptophýlla Vent.	*thin-leaved*	☿		tm	20	jl au	Y.o	N Amer	...	L	co		
7717 álba *W & K*	white	☿		tm	30	jn au	Y o	Hungary	1767	L	co	Dend. brit. 71	
T argentea Dec													
7718 heterophýlla *Vent*	various-leaved	☿		tm	30	jn au	Y o	N Amer	1811	L	co	Vent. diss. t 5	
*1187 COR'CHORUS. *W*	Corchorus					*Tiliaceæ* *Sp* 7—25.							
7719 olitórius *W*	bristly-leaved	☉		w	2	jn au	Y	India	1640	S	co	Camer hort t 12	
7720 triloculáris *W.*	three-celled	☉		w	1	jl.au	Y	Arabia	1790	S	co	Jac vind 2. t.183	
7721 æ'stuans *W*	Hornbeam-lvd.	☉		w	2	jn jl	Y	S. Amer.	1731	S	co	Jac vind 1 t 85	
7722 acutángulus *W*	acute-angled	☉		w	3	jn jl	Y	E Indies	1816	C	co	Plu phyt. t 44. f 1	
7723 capsuláris *W*	heart-leaved	☉		w	1½	jn jl	Y	E. Indies	1725	C	l p	Ru.am 5 t 78 f 1	
7724 hirsutus *W*	woolly-capsul'd	☉		w	1½	jn jl	Y	S Amer	1752	S	p.l	Jac. vind 3 t 57	
7725 siliquósus *W.*	Germander-lv.	☉		un	3	jn.au	R	W Indies	1732.	C	l.p	Jac. vind. 3. t. 59	
1188 GRI'AS *W.*	Anchovy-Pear					*Guttiferis affinis* *Sp* 1.							
7726 caulifióra *W*	stem-flowering	♀	□	fr	50	...	W	Jamaica	1768	C	l.m	Sl.hi 2.t.217 f 1,2	
1189 CALOPHYL'LUM *W*	Calophyllum					*Guttiferæ* *Sp* 2—9							
7727 Inophyllum *W*	sweet-scented	♀	□	tm	90	...	W	E. Indies	1793	C	s l	Rhee mal 4 t 38	
7728 Cálaba *W*	Calaba-tree	♀	□	tm	30	...	W	India	1780.	C	s l	Jac amer. t. 165	
†1190. MAMME'A. *W.*	Mammee-Tree					*Guttiferæ* *Sp* 1—3							
7729 americána *W.*	American	♀	□	fr	60	...	W	S. Amer	1737	C	s l	Ja am. t.182 f.82	



History, Use, Propagation, Culture,

1185 *Grewia* So named by Linnæus, in honor of Nehemiah Grew, M D, F R S, famous for his work on the Anatomy of Vegetables The species are shrubs with elm-looking leaves, generally deciduous, and of no great beauty Cuttings root in sand under a hand-glass in heat Some of the kinds produce a sort of berry which is esteemed by the natives of the country where they grow

1186 *Tilia* A name the meaning of which is unexplained *Tilleul*, Fr, *Linden*, Ger, and *Tiglio*, Ital The species are graceful trees with highly odoriferous flowers, all the soft parts abounding in mucilage

T intermedia is wild in Sweden, and will in some degree bear the smoke of London It is a favorite avenue tree in Holland and Germany, and at Evelyn's suggestions (Sylva) was a good deal employed in this way in England He describes some enormous lime trees in Switzerland, Germany, and Hungary, and speaks of its esteem in these countries, and by the Romans "It is a shameful negligence," he says, "that we are no better provided of nurseries, for a tree so choice and universally acceptable" for in his time they sent into Holland and Flanders, to our excessive cost, whilst our own woods spontaneously produce them, and though of somewhat a smaller leaf, yet altogether as good, apt to be civilized, and made more florid

Lime-tree wood is turned into light bowls and dishes, and into boxes for the apothecaries With the twigs they make baskets and cradles Formerly the bark was used for writing tablets Shoemakers make dressers of the plank to cut leather on The truncheons make a far better coal for gunpowder than that of alder itself, and also scribiets for painters' first draughts The wood is soft, light, and smooth, close grained, and not subject to the worm The most elegant use to which it is applied is for carving. Many of Gibbon's beautiful works in lime-tree are dispersed about the kingdom in our churches and palaces, as in the choir of St. Paul's, the Duke of Devonshire's at Chatsworth, Trinity College Library at Cambridge, &c Evelyn first recommended him to King Charles II The sap inspissated affords a quantity of sugar Boutcher remarks, that the timber is stronger and lighter than any sort of willow, and makes a proper lining for rooms, and when painted will last long

In Lincolnshire, in the forest of Dean, and in various parts of the borders of South Wales they make ropes of the bark. This, by maceration, separates into thin rough layers, and is used for making the mats used by gardeners, and called in the north of Europe bast They form a considerable part of the exports from Russia This quality in the bark, and a great degree of viscidity in the whole tree, evince its acknowledged affinity to the mallow tribe

7703 Leaves lanc. ovate soft, Cal very hairy, Pedunc. 3-flowered
7704 Leaves cordate ovate oblong crenated scabrous, Pedic. axillary 3-flowered, Fruit of 4 pieces
7705 Leaves ovate obl. acum. smooth nearly entire, Fl. terminal panicled
7706 Leaves roundish ovate blunt toothed smooth, Peduncles solitary 1-flowered
7707 Leaves ovate crenate rough on each side, Peduncles axillary 3-flowered
7708 Leaves ovate crenate rough thickish, Pedunc 2-6-fl. axill. and term Fruit pilose
7709 Leaves cordate roundish hoary beneath, Peduncles axillary about 4, longer than petiole
7710 Leaves cordate roundish smooth on each side, Peduncles shorter than petiole

* *Petals naked*

7711 Lvs. cord. uneq at base, Petioles and suckers hairy, Axill of veins beneath beard. Fruit globose smooth
7712 Lvs. cord. acum. ser smth twice as long as stalks, Axill of veins beard. ben Fr membr obl deform 2 seed
7713 Lvs. cord round acum finely serr. smth scarcely longer than stks Ax of veins ben beard Fr round very
7714 Lvs. cord. round acum. finely serr a little downy ben Fr. turb. woody with prominent ribs [thin & brittle

** *Petals with a scale at base*

7715 Lvs. deeply cord. abruptly acum finely serrated coriaceous smooth, Pet trunc. at end cren. Fruit ov ribbed

7716 Lvs trunc at base subcord. oblique dent. serr. pubescent beneath, Pet emarginate, Fruit globose smooth
β Leaves thin deeply and rarely cut
7717 Lvs. cord. subacum. unequal at base serrated snow-white beneath smooth above, Fruit round with 5 ribs

7718 Lvs. ov downy beneath, at base either cordate or obliquely or equally truncate, Fruit round with 5 ribs

7719 Caps. obl. ventricose, Lowest serratures of leaves setaceous
7720 Caps. 3-celled 3-valved 3-cornered, Angles bifid scabrous, Leaves obl Lowest serratures setaceous
7721 Caps obl. 3-celled 3-valved 6-furrowed 6-pointed, Leaves cordate, Lowest serratures setaceous
7722 Caps. prismatical cuneate acutangular 3-toothed, Lvs ovate with about 1 seta at the base, Petioles hispid
7723 Caps. roundish depressed rugose, Lowest serratures of leaves setaceous
7724 Caps roundish woolly, Leaves ovate obtuse downy equally serrated
7725 Caps. linear compressed 2-valved, Leaves lanceolate equally serrate

7726 Leaves 3 feet long obovate, Flowers growing out of the stem and old branches

7727 Leaves oval
7728 Leaves ovate obtuse

7729 Leaves very blunt striated, Peduncles short, Berries 4-seeded



and Miscellaneous Particulars.

The honey made from the flowers of the lime tree is reckoned the finest in the world Near Kowno in Lithuania, there are large forests chiefly of this tree, and probably a distinct variety or species The honey produced in those forests sells at more than double the price of any other, and is used exclusively in medicine and for mixing with liqueurs. (*Encyc of Agric , Poland and Hungary*)

1187. *Corchorus.* Κορχορος, the Greek name of a culinary vegetable, supposed to be the same as that now known as C. olitorius *C* olitorius is sown in great plenty about Aleppo as a pot herb, the Jews boiling the leaves to eat with their meat, whence in French it is called *Mauve-de-Juif* The other species are weeds.

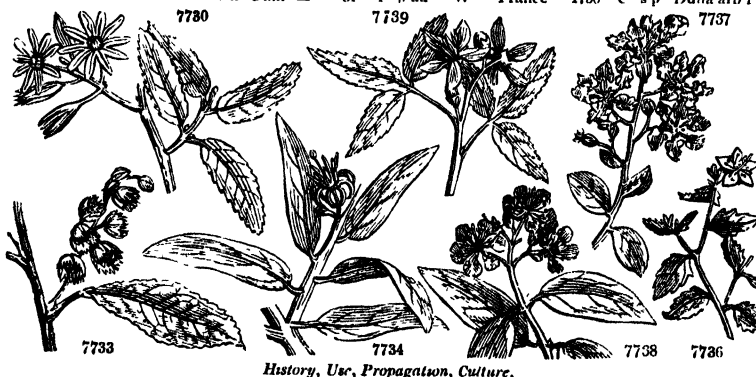
1188. *Grias* From γραω, to eat The fruit is eaten in the West Indies under the name of the Anchovy pear The uprightness of the growth and the largeness of the leaves give this tree a very elegant appearance The fruit is about the size of an alligator's egg, and much like it in shape, only a little more acute at one end, and of a brown russet color It is frequent in many parts of Jamaica, and grows generally in low moist bottoms or shallow water, where the fruit is pickled and eaten in the same manner with the East Indian mango, which it exactly resembles in taste It grows in a loamy soil, and large cuttings, Sweet observes, succeed best in the same soil under a hand-glass in heat

1189 *Calophyllum* From καλος, beautiful, and φυλλον, a leaf, on account of its large beautifully veined leaves C. Inophyllum (ις ινος, fibre, because the middle nerve of the leaf seems to ramify into a multitude of fibres) is a very large tree, with leaves like a water lilly, snow-white fragrant flowers, and fruit like a walnut. The trunk when wounded exudes a viscid yellowish juice, frequently hardening to a gum It is common in Malabar, in sandy soils, and bears fruit twice a year, in March and September, frequently to the age of three hundred years An oil is expressed from the nuts to burn in lamps, to assuage pains, and to make ointments The bark and gum is also used for medical purposes In Java, &c they plant this tree about their houses, for the elegance of the shade and the sweetness of the flowers.

C. Calaba (the name among the Caribs) branches from the ground upwards, and is therefore well adapted for tree hedges It has a green fruit not unlike our cornelian cherry, which is eaten by the natives, and an oil is expressed from it for lamps. Both species grow freely in a light loamy soil, and ripe cuttings are readily struck in sand under a glass and plunged in heat (*Sweet*)

1190 *Mammea* An alteration of its American name, *Mamey* The name having some resemblance to the Latin word *mamma*, a teat, Linnæus attributed the derivation to that word, on account of the large fleshy pointed nature of its fruit. *Abricot-sauvage*, Fr A handsome tree with a spreading elegant head, like those

1191. OCH'NA. *W*	Ochna.				*Ochnaceæ.* *Sp* 2—11.							
7730 obtusáta *Dec*	squarrose	♣ □	or	4	jl au	Y	E. Indies	1790.	C	l p	Roxb. cor 1. t 89	
7731 atropurpúrea *Dec.*	purple-flower'd	♣ □	or	4	...	Pu	C. G H.	1816.	C	l p	Plu al. 263. f 1,2	
1192. ELÆOCAR'PUS. *W.*	Elæocarpus.				*Elæocarpeæ.* *Sp.* 2—10							
7732 serrátus *W*	saw-leaved	♀ □	or	20	...	W	E. Indies	1774.	C	p.l	Burm. zeyl. t.40	
7733 cyáneus *B M*	blue-fruited	♀ □	or	10	jn au	W	N Holl.	1803.	C	p l	Bot. mag 1737	
E. reticuláta Smith												
†1193. ALAN'GIUM *J*	Alangium.				*Myrtaceæ* *Sp* 1—2.							
7734 decapétalum *W*	Sage-leaved	♀ □	or	10	...	Pa pu	E. Indies	1779.	C	p l	Rhee mal.4 t 17	
†1194. MENTZE'LIA *W.*	Mentzelia				*Loaseæ* *Sp* 2—3							
7735 áspera *W*	rough	◎	or	3	jl au	Y	America	1733	S	co	Plum ic 174 f 1	
7736 oligospérma *Nutt*	few-seeded	⚹ △	or	2	my jn	Y	Louisiana	1812.	D	s l	Bot. mag 1760	
1195. LAGERSTRŒ'MIA *W*	Lagerstræmia				*Salicariæ.* *Sp* 2—7							
7737 índica *W*	Indian	♣ □	or	6	au o	Pu	E Indies	1759.	C	s.l	Bot. mag 405	
7738 Reginæ *W*	oblong-leaved	♣ □	or	12	...	R	E Indies	1792	C	p l	Roxb cor 1. t 65	
1196 Æ'GLE *Correa*	Bengal-Quince				*Aurantiaceæ* *Sp* 1—2							
7739 Mármelos *H K*	thorny	♣ □	fr	6	...		E. Indies	1759.	C	l	Rox. cor.2. t 143	
†1197 CIS'TUS *J*	Rock-Rose				*Cistineæ* *Sp* 18—28.							
7740 ladaníferus *W*	Gum-Cistus	♣	or	4	jn jl	W	Spain	1629	C	s p	Bot mag. 112	
β planifólius	*Flat-leaf-Gum*	♣	or	4	in jl	W	Spain	...	C	s p		
7741 monspeliénsis *W.*	Montpelier	♣	or	2	jn jl	W	S Europe	1656	S	s p	Jacq coll 2 t. 8	
7742 láxus *W en*	waved-leaved	♣	or	2	jn jl	W	Spain	1656	S	s p		
7743 hirsútus *W. en*	hairy	♣	or	2	jn jl	W	Portugal	1656	S	s p		
7744 villósus *W*	villous	♣	or	3	jn.jl	Pu	S Europe	1640	C	p l	Duha.arb 1 t 64	
7745 populifólius *W*	Poplar-leaved	♣	or	3	my jn	W	Spain	1656	C	s p	Cav ic 3 t 215	
7746 Corboriénsis *P S*	small Poplar-lv	♣	or	1½	my jn	W	Spain	1656	C	s p		
7747 undulátus *Dun*	wavy	♣	or	2	my jn	Pu	.....	...	C	s p		
7748 vaginátus *W.*	oblong-leaved	♣	or	2	ap jn	Pa pu	Teneriffe	1779	C	p l	Bot reg 225	
7749 crispus *W*	curled-leaved	♣	or	2	jn jl	Pu	Portugal	1656	S	s p	Cav ic 2 t 174	
7750 salvifólius *W*	Sage-leaved	♣	or	2	jn jl	W	S Europe	1548	S	s p	Jac col 2. t 8	
7751 laurifólius *W*	Laurel-leaved	♣	or	4	jn jl	W	Spain	1731	C	s p	Clus 1 p 78 f 1	
7752 heterophyllus *P S*	various-leaved	♣	or	2	jn jl	Pu	Algiers	...	S	s.p	Desf atl 1 t 104	
7753 incánus *W*	hoary	♣	or	2	jn au	Pu	S Europe	1596	S	s p	Bot mag 43	
7754 purpúreus *P S*	purple	♣	or	2	my jl	Pu	.....	...	C	p l	Bot reg 408	
7755 crético *W*	Cretan	♣	or	1½	jn au	Pu	Levant	1731	C	p l	Jac ic 1 t 95	
7756 álbidus *W*	white-leaved	♣	or	2	jn jl	Pa pu	Spain	1640	S	s p	Park theat f 1	
7757 Lédon *W*	many-fl.-Gum	♣	or	1	jl au	W	France	1730	C	s p	Duha arb 1 t 66	



History, Use, Propagation, Culture,

of Magnolia grandiflora, and odoriferous white flowers on peduncles The fruit is roundish, with a leathery rind, inclosing one thinner, containing a firm bright yellow pulp, having a pleasant singular taste, and a sweet aromatic smell, but the skin and seeds are very bitter and resinous. It is eaten raw alone, or cut in slices with wine or sugar, or preserved in sugar In Martinico they distil the flowers with spirit, and make a liquor which they call Eau créole

Some horticulturists are now attempting its culture in our stoves as a fruit tree It grows freely in sandy loam, and ripened cuttings, with the leaves not shortened, root in sand under a hand-glass in heat (*Sweet*)

1191 *Ochna* The Greek name of the wild pear tree, to which the genus so distinguished by Linnæus has no kind of resemblance The species are pretty free-flowering plants, with shining serrated leaves, and long racemes of beautiful yellow flowers. They grow freely in loam and peat, and cuttings root readily in sand under a hand-glass

1192 *Elæocarpus* From ἐλαία, the olive, and καρπος, fruit, in allusion to the shape of its fruit The stones cleaned from the pulp, and set in gold, are formed into necklaces The species thrive in loam and peat, and cuttings root in sand under a hand-glass

1193 *Alangium* So denominated by Lamarck, from a slight alteration of one of its Malabar names, *Alangi*. It grows in light sandy soil, and cuttings root in sand under a hand-glass in moist heat. (*Sweet*)

1194 *Mentzelia* Named after Christian Mentzel, a Prussian, physician to the Elector of Brandenburg, he died in 1701 Curious plants related to Loasa

1195 *Lagerstræmia* So named by Linnæus from Magnus Lagerstroem, of Gottenburgh, director of the Swedish East India Company, who procured many curiosities from China, and gave them to the public L reginæ is a very handsome shrub the flowers are in panicles, a span long, pale rose-colored in the morning, growing deeper through the day, and becoming purple in the evening According to Sweet, this species is rather difficult to preserve through the winter, it requires a good heat, and but little water in winter, if it happens to have too much wet, it is a great chance if it survives · in summer it grows very fast, and requires plenty of room and water Cuttings of both kinds root readily in sand, under a hand-glass (*Bot. Cult.* 73.)

1196. *Ægle.* Αιγλη was one of the Hesperides. Correa de Serra named the genus *Ægle* from the fruit having some resemblance to the orange Sweet observes, that this plant likes a rich loamy soil The wood

7730 Stigma capitate, Petals 8-10, Leaves obovate very blunt serrated
7731 Flowers solitary, Leaves ovate acutely toothed, Sepals ovate

7732 Leaves lanceolate ellipt serrated, Racemes axillary
7733 Leaves obl. lanc. serrated netted, Racemes axillary clustered, Drupes blue

7734 Petals 10, Branches spiny

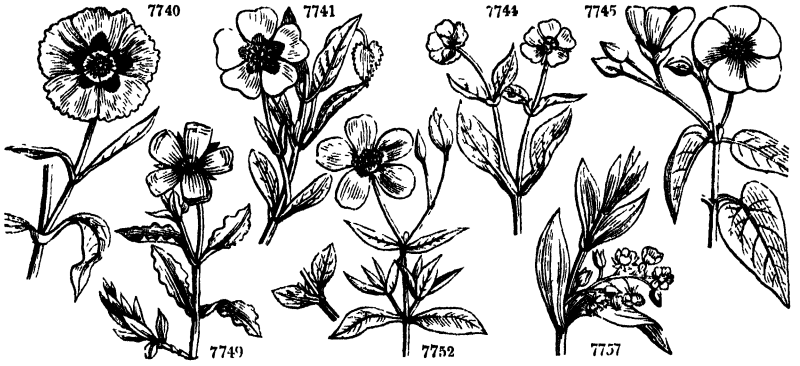
7735 Stem branched, Peduncles axillary, Petals crenate obtuse
7736 Stem branched, Peduncles axillary solitary, Petals acuminate, Fruit reflexed

7737 Petals crisp, Panicle terminal, Leaves roundish ovate acute smooth
7738 Petals wavy, Panicle terminal, Leaves oblong smooth

7739 Middle leaflet stalked, Fruit with 12 cells

7740 Leaves subsessile connate at base lin lanc smooth above downy beneath, Caps. 10-celled

7741 Leaves lin lanc sessile 3-nerved villous on each side, Pedunc cymose 1-sided
7742 Leaves on short stalks ovate lanceolate acum wavy at edge the upper hairy, Cymes hirsute
7743 Lvs sessile obl obt hirsute, Pedunc short 1-fl. or cymose, Caps small in a large hairy pyramidal calyx
7744 Leaves roundish ovate rugose tomentose hairy stalked, Pedunc 1-fl 1-3 together, Calyx villous
7745 Leaves stalked cordate acuminate smooth, Fl cymose, Pedunc. with long bractes
7746 Leaves stalked cordate ovate acuminate fringed at edge rugose and a little glutinous on each side
7747 Leaves sessile linear oblong acute wavy at edge 3-nerved at base, Sepals villous with long points
7748 Lvs lanc acute 3-nerv. hairy reticul beneath stalked, Stalks sheathing the stem with their connate bases
7749 Leaves sessile linear lanceolate waved crisp 3 nerved rugose pubescent, Fl sessile umbelled
7750 Leaves stalked ovate blunt rugose downy beneath, Pedunc long hoary 1-flowered
7751 Leaves stalked ovate lanc 3-nerved smooth above downy beneath, Petioles dilated and united at base
7752 Lvs ovate lanc on short stalks sheathing at base revolute at edge, Pedunc hirsute leafy 1-flowered
7753 Leaves spatulate toment rugose 3-nerved sessile subconnate the upper narrower, Pedunc 1-flowered
7754 Leaves obl lanc acuminate at each end rugose, Stalks short hairy sheathing, Pedunc short 1-2-3
7755 Leaves spatulate ovate downy hairy narrowed into a short stalk wavy at edge, Pedunc short 1-flowered
7756 Leaves sessile obl ellipt hoary downy about 3-nerved, Fl 3-8 in terminal umbels, Outer sepals largest
7757 Lvs conn obl lanc nerv above smooth and shin beneath silky, Fl in corymb. cymes, Ped and cal vill



and Miscellaneous Particulars

requires to be ripened before the cuttings are taken off, then to be planted in a pot of sand without shortening the leaves, and to be plunged under a hand-glass in heat.

1197 *Cistus* Κιστος, in Greek, derived from κιστη, a box, or capsule The capsules of the genus are remarkable All these words have been formed from the Anglo Saxon, *cyst*, which signifies a hollow vessel.

The species are for the most part shewy and free-flowering plants, the colors brilliant, and the petals very fugacious In gardens they are rather difficult to keep in a neat shape, getting naked below, and often dying wholly or in part during severe winters They succeed best in glass cases, which can be entirely removed in summer, or in a dry soil under a warm wall

C villosus has a strong woody stem, the flowers are produced at the ends of the branches, four or five together, almost in form of an umbel, but it rarely happens that more than one is open at the same time The petals are large, purple, and spread open like a rose, they are but of short duration, generally falling off the same day they expand; but there is a succession of fresh flowers every day for a considerable time in May and June, generally again in September and October, if the autumn be favorable, and even in the winter if the plants be protected from frosts

C ledon and ladaniferus produce the gum ladanum, but not in such quantities as C. creticus. The resin, which is secreted from the leaves and other parts of the shrub, is scraped off by means of a kind of rake, to which numerous leathern thongs are appended instead of teeth This instrument being drawn backwards and forwards over the plant from time to time, collects the resin The chief use of this gum in modern practice is in fumigations, its fragrant smell having made it a constant ingredient in such preparations C ladaniferus is the most popular species for warm situations in ornamental scenery

"Most of the species," Sweet observes, "will survive through the winter in the open air, if the weather be not too severe, but it is safest to keep some of all the kinds in pots, that they may be sheltered from severe frosts; and they can be turned out in the borders in spring, when they will thrive and flower well They will succeed in any common soil, or a mixture of loam and peat will suit them very well They may be increased by layers, or young cuttings, as soon as ripened, taken off at a joint, and planted under a hand-glass, will root readily: they may be also raised from seeds, which are produced in abundance" (*Bot Cult* 168.)

†1198	HELIAN'THEMUM. *J* SUN-ROSE.				*Cistineæ.*	*Sp* 48—124.							
7758	Libanótis *W.*	Rosemary-lvd	ħ	or	1	jn	Y	Spain	1752.	C	p l	Barr. ic. 294
7759	umbellátum *P S*	umbel-flower'd	ħ	or	2	jn au	W	S Europe	1731.	C	p.l	
7760	scabrósum *P S*	rough	ħ	or	3	jn jl	Y	Italy	1775.	C	p l	
7761	algarvense *Dun*	Algarvine	ħ	or	3	jl.au	Y	Portugal	1800.	C	p l	Bot. mag. 627
7762	formósum *Dun*	beautiful	ħ	or	3	my jl	Y	Portugal	1780.	C	p l	Bot. mag. 264
7763	atriplicifólium *P S*	Orache-leaved	ħ	or	6	jn jl	Y	Spain	1656	C	p l	Barr. ic 292
7764	halimifólium *P S*	Sea-Purs.-lvd.	ħ	or	4	jn.jl	Y	Spain	1656.	C	p l	Cav. ic. 2. t. 138
7765	canadénse *P S*	Canadian	♑	or	1	jn jl	Y	N. Amer.	1799	S	s l	
7766	Tuberária *P S*	Plantain-leav'd	♑	or	½	jn jl	W	S. Europe	1752.	S	s p	Cav ic. 1 t. 67
7767	guttátum *P S*	spotted-flower.	○	or	½	jn jl	Y	England san.pa		D	s l	Eng. bot. 544
7768	ledifólium *P S*	Ledum-leaved	○	or	½	jn jl	Y	England san pa.		S	s l	Eng bot. 2414
7769	ægyptiacum *P S*	Egyptian	○	or	½	jn jl	W	Egypt	1764	S	s.l	Jac obs 3. t 68
7770	salicifólium *P S*	Willow-leaved	○	or	4	jn au	Y	S. Europe	1759.	S	s p	Cav. ic 2. t. 144
7771	punctátum *P S*	punctated	○	or	½	jn jl	Y	S France	1816.	S	s l	
7772	canariénse *P S*	Canary	♌	or	1½	jn jl	Y	Canaries	1790	C	p l	Jac ic 1. t 97
7773	Fumána *P S*	Heath-leaved	ħ	or	1	jn.jl	Y	France	1752.	S	s p	Jac. aust.3 t 252
7774	læ'vipes *P S*	cluster-leaved	ħ	or	1½	jn au	Y	France	1690.	S	s.p	Bot mag 1782
7775	Barrelièri *Tenore*	Barrelier's	ħ	or	1	jn au	Y	Italy	1820.	S	s p	Bot. mag 2371
7776	glutinósum *P S*	clammy	ħ	or	2	my s	Y	S. Europe	1790.	C	p.l	Cav.ic 2 t.145 f 2
7777	origanifolium *P S*	Marjoram-lvd	ħ	or	2	jn jl	Y	Spain	1795	C	s p	Cav ic 3 t 262
7778	œlandicum *P S*	smooth-leaved	♌	or	½	jn jl	Y	Germany	1816	S	s p	Jac. aust. t 399
7779	tálicum *P S*	Italian	ħ	or	2	jl s	Y	Italy	1799.	C	s p	Barr rar t 366
7780	cánum *W en*	hoary	♌	or	½	jn jl	Y	S Europe	1772	C	p l	Al ped 2. t.45.f 3
7781	marifólium *P S*	Marum-leaved	♌	or	½	my jn	Y	Britain	al roc.	C	s p	Eng bot. 396
7782	squamátum *P S.*	scaly	ħ	or	2	jn jl	Y	Spain	1815	C	s l	Cav. ic 2 t. 139
7783	glaúcum *P S*	glaucous-leav'd	ħ	or	2	jn au	Y	Spain	1815	C	s l	Cav. ic 2. t. 261
7784	tomentósum *Smith*	tomentose	♌	or	½	jl au	Y	Scotland	sc.alp	C	s l	Eng. bot. 2208
7785	serpyllifólium *P S*	WildThyme-lv	♌	or	½	my s	Y	Austria	1731	C	p l	
7786	vulgáre *P S*	common-dwarf	♌	or	½	my s	Y	Britain	gra.ban	C	s l	Eng. bot. 1321
	β flore pleno	*double-flowered*	♌	or	½	my s	Y	.....	...	C	s l	
7787	nummulárium *P S*	Moneywort-lv	♌	or	½	jn au	Y	Spain	1752	C	s l	Cav ic 2. t 142
7788	surrejánum *P S*	dotted-leaved	♌	or	½	jl o	Y	England	ch hil	C	s l	Eng bot. 2207
7789	sampsucifólium *Cav*	bristly-stalked	♌	or	½	jn jl	W	France	...	C	p l	Bot. mag. 1803
7790	elongátum *P S*	long-peduncled	ħ	or	2	jl	Y	Spain	1800	C	p l	
7791	serrátum *P S*	saw-petalled	○	or	½	jn jl	Y	Spain	1804.	D	s p	Cav.ic 2 t 175 f 1
7792	hírtum *P S*	bristly-calyxed	ħ	or	1	jn jl	Y	Spain	1759.	C	s l	Barrel rar. t.488
7793	pulveruléntum *P S*	powdered	♌	or	½	jn jl	W	France	...	C	s l	
7794	aúreum *P S*	golden	♌	or	½	jn au	Y	Montpelier	...	C	s l	
7795	thymifólium *P S*	Thyme-leaved	♌	or	½	jn jl	Y	Spain	1658	C	s l	Barrel ic. 444
7796	lavandulæfólium *P S*	Lavender-leav	ħ	or	2	jn jl	Y	Levant	1739	C	s l	Jac ic 1. t 96
7797	angustifólium *P S*	narrow-leaved	♌	or	½	jn jl	Y	.....	1800	C	s l	Jac hort 3 t. 53
7798	mutábile *P S*	changeable	ħ	or	½	jn jl	R Y	France	1795	C	s l	Jac ic 1. t. 99
7799	polifólium *P S*	white-mount	♌	or	½	my jl	W	England downs		C	s p	Eng bot. 1322
7800	appenninum *P S*	Apennine	ħ	or	2	jn au	W	Italy	1731	C	s.p	Tabern. ic 1062
7801	pilosum *P S*	hairy	ħ	or	1½	jn au	W	S Europe	1731	C	s l	Al.pe 2 t 45 f 1,2
7802	grandiflórum *P S*	large-flowered	♌	or	1	jn jl	Y	Italy	1800	C	s p	Scop carn t 25
7803	róseum *P S*	Rose-colored	♌	or	½	jn.au	Pk	S. Europe	...	C	s p	Jac hort 3. t 65
7804	cróceum *P S*	Saffron-colored	♌	or	½	jn au	Y	Spain	...	C	s l	Desf atl. 2. t.110
7805	sulphúreum *W en*	Sulphur-color'd	♌	or	½	jn jl	P Y	Spain	1815.	C	s.l	

DIGYNIA.

1199	BAUE'RA *H K.*	BAUERA.			*Cunoniaceæ*	*Sp* 1						
7806	rubiæfólia *H K*	Madder-leaved	ħ	pr	1½	jl d	Pk	N S W	1793	C	s p	Bot. mag 715
1200	FOTHERGI'LLA. *W*	FOTHERGILLA			*Hamamelideæ*	*Sp* 4.						
7807	alnifólia *W*	obtuse-leaved	♿	or	4	ap jn	W	N Amer	1765.	L	s.p	Bot mag 1341
7808	májor *B M*	large-leaved	♿	or	4	my jn	W	N Amer	1765	L	s p	Bot mag 1342
7809	Gardéni *Jac*	acute-leaved	♿	or	4	my jn	W	N. Amer	1765.	L	s p	Jac ic 1 t 100
7810	serotína *B M*	green-leaved	♿	or	4	au	W	N Amer	1765	L	s p	



History, Use, Propagation, Culture,

1198. *Helianthemum* From ἥλιος, the sun, and ἄνθος, flower, in allusion to the bright golden radiance of the blossoms. This is a shewy free-flowering genus of little trailing plants, mostly ligneous, and well adapted for rock-work. A number of them answer best kept in pots, and sheltered by frames during winter, but some are quite hardy, and none are more ornamental than the H vulgare, and its varieties with orange, yellow, straw-colored, red, and double flowers It is one of the handsomest plants in cultivation for rock-work. All the species are of easy culture in light soil, and cuttings root freely under a hand-glass

1199. *Bauera.* Named after Francis and Ferdinand Bauer, German botanical draughtsmen of the highest

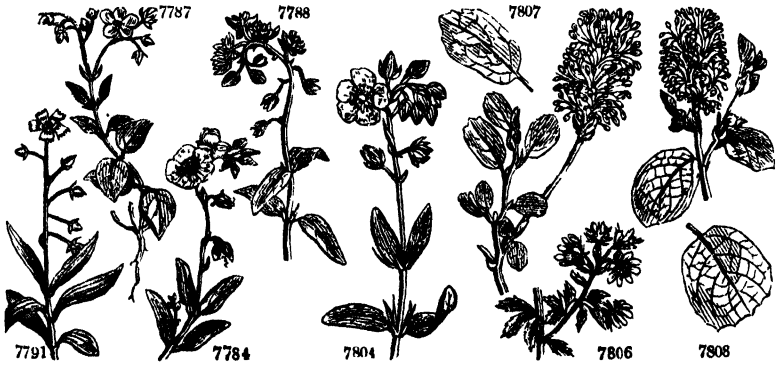
7758 Stem nearly smooth, Lvs. sess. lin. revol. at edge brownish green above hoary beneath, Fl sol. Sep shining
7759 Young shoots visc with downy hairs, Lvs. sess. lin obl viscid downy beneath, Fl in term umb. Sep. villous
7760 Branches hairy rough hoary, Lvs. sess atten at base green above ash-colored beneath, Ped. shorter than
7761 Leaves sessile hoary ovate-lanc. Pedunc panic hairy, Sepals 3 acute hairy [leaves, Cal hairy
7762 Branches villous, Leaves obov. lanc hoary, Pedunc. and cal villous, Sepals 3
7763 Branches white with scales, Leaves broad ovate blunt wavy at base silvery on each side, Cal hairy
7764 Branches white with scales upwards, Lvs. stalked ovate-obl Pedunc long bracted panicl Sepals 5 scaly
7765 Branches hairy, Lvs obl lanc acute hairy pale beneath, Pedunc. hairy 1-fl Capsule shorter than calyx
7766 Stems nearly simple, Radical leaves stalked ov obl 3-nerved hairy, Ped panic few, Cal smooth shining
7767 Stem hairy, Leaves sess. obl. lin 3-nerved villous, Racemes lax without bractes, Ped filiform naked
7768 Stem nearly smooth, Lvs obl ellipt. toothl Fl opp with stipules, Ped. erect smooth shorter than calyx
7769 Lvs. on short stalks lin obl. narr rev at edge, Stip lin subulate, Pedunc thif pubescent, Calyx inflated
7770 Branches hairy, Leaves obov. obl. acute toothletted, Stip lin obl Pedunc and cal hairy
7771 Leaves obl 3-5-nerved rough with short stellate hairs, Racemes long pubescent cinereous few-flowered
7772 Branches hoary, Leaves stalked opp. and alternate blunt glauc Stipules subulate, Raceme term erect
7773 Stem tortuose, Leaves altern lin rough at edge subinvolute, Pedunc sol 1-fl Caps naked
7774 Leaves setaceous glaucous nearly smooth, Stip filiform long, Pedunc racemose, Calyx hairy
7775 Branches villous, Leaves lin. obl. pubesc Stip lin subul mucron erect, Pedunc racemose glutinous
7776 Branches villous glutinous, Leaves lin vill glut ash-colored, Stipules long lax, Pedunc. and cal villous
7777 Leaves stalked ovate hairy on each side, Racemes short term Pet. scarcely larger than calyx
7778 Leaves lanc. ellipt. blunt green on each side, Racemes simple few-fl Cal subglobose ovate
7779 Branches simple long, Leaves pilose hispid lower ovate, upper lanc Racemes simple hairy hoary
7780 Leaves oblong hairy green above hoary beneath, Racemes simple, Pedic and cal hoary
7781 Leaves without stipules stalked ovate cordate, Racemes simple solitary few-flowered terminal
7782 Branches silvery with scales, Leaves stalked obl blunt silvery with small stipules, Cal. scaly
7783 Branches ascend hoary, Leaves downy glaucous the lower round, upper ellipt. Stip and bractes green
7784 Leaves lanc ovate hoary beneath green above, Calyx furrowed with elevated hairy nerves
7785 Leaves obl ellipt. hoary beneath deep green shining above, Calyx hoary its nerves with a few hairs
7786 Leaves scarcely revol. at edge hoary beneath, green and hairy above: lower round, upper obl Rac lax

7787 Lower leaves round: upper obl lin hairy green beneath, Racemes and calyxes hairy
7788 Leaves obov obl somewhat hairy, Racemes few-fl term Pet narrow lanceolate
7789 Leaves ovate-obl. keeled sessile, Peduncles long branched panicled, Stipules O
7790 Stipules O, Leaves lanc hoary hairy beneath, Pedunc long 2-leaved and racemose, Calyxes hairy
7791 Leaves opp lanc 3-nerved hairy viscid, Radical obovate, Racemes without bractes, Petals serrated
7792 Leaves obovate obl revolute at edge downy hairy hoary beneath, Calxes very hirsute white
7793 Leaves obl linear glaucous above hoary beneath, Cal. hoary minutely pubescent, Branches hoary
7794 Leaves lin obl revolute at edge hoary on each side, Calyxes very hirsute white
7795 Leaves lin very short pubescent opp Stip mucronate erect, Pedunc villous few-flowered
7796 Leaves oblong lin revolute at edge the younger hoary on each side, Calyxes glaucous, Sepals ciliated
7797 Leaves short stalked lin oblong hispid above, Racemes lax, Calyx with deciduous hairs
7798 Leaves flat ovate obl. acute smooth above beneath finely downy, Cal striated smoothish
7799 Leaves obl ovate obt. flat beneath hoary above smooth green, Cal striated smooth shining
7800 Leaves stalked obl lin downy beneath glaucous above, Cal shortly hairy striated glaucous obtuse
7801 Leaves linear hoary on each side setose at end, Stipules subulate, Cal hairy nerved striated
7802 Upper leaves flat obl hairy, Stipules ciliated longer than stalk, Fl large, Calyxes hairy
7803 Leaves ovate lanc a little downy on each side, Stipules linear, Ped and cal pilose hirsute
7804 Leaves downy hoary beneath glaucous above revolute at edge, Calyxes yellowish glaucous
7805 Leaves narrow lanc flat with stellate pubescence on each side, Raceme terminal few-flowered

DIGYNIA.

7806 The only species

7807 Leaves cuneate obovate upwards crenate toothed
7808 Leaves ovate-oblong cordate at base, upwards crenate toothed
7809 Leaves ovate acute nearly entire
7810 Leaves oblong acute crenate-toothed upwards, green beneath



and Miscellaneous Particulars.

celebrity. Nothing comparable to their works has ever appeared from any other hand. The species is a hardy free-flowering plant, of easy culture in sandy loam and peat, and cuttings root in the same soil under a glass.

1200 *Fothergilla.* In memory of John Fothergill, M D., an eminent physician and patron of botany, who cultivated a variety of the most curious plants in his garden near London The species are dwarf deciduous shrubs, of easy culture in light soil or peat, and generally increased by layers.

†1201. CURATELLA *W*	CURATELLA.					*Dilleniaceæ*	*Sp* 1—2						
7811 americāna *W*	American	♚	□	or	8	...	W	S Amer.	...	L	s.p	Aub. gui 1 t.232	
†1202. PÆO'NIA. *W.*	PÆONY.					*Ranunculaceæ*	*Sp.* 15—17.						
7812 Moutān *H. K.*	Chinese tree	♚		or	3	ap.jn	Pu	China	1789.	C	p.l	Bot. rep.373 448	
α papaveràcea	*Poppy-flowered*	♚		or	3	ap.jn	W	China	1789.	C	p.l	Bot cab 547	
β Banksiæ	*common*	♚		or	3	ap.jn	Pu	China	1789	C	p.l	Bot. mag 1154	
γ rósea	*Rose colored*	♚		or	3	ap.jn	Pk	China	...	C	p.l	Bot. cab 1035	
7813 albiflóra *Pall*	eatable-rooted	✱	△	or	2	my.jn	W	Siberia	1784	R	s l	Bot. m 1756 2888	
β tatárica	*Tartarian*	✱	△	or	2	my jn	W	Siberia	...	R	s l		
γ sibírica	*Siberian*	✱	△	or	2	my jn	W	Siberia	...	R	s l		
δ rubescens	*blush-colored*	✱	△	or	2	my jn	Pk	Siberia	1784	R	s l	Bot reg 42	
ε unaflóra	*single-flowered*	✱	△	or	2	my jn	W	Siberia	...	R	s l		
ζ Whitleji	*double-white*	✱	△	or	2	my jn	W	China	1784	R	s l	Bot rep 612	
η Humei	*double-crimson*	✱	△	or	2	my jn	R	China	1784	R	s l	Bot mag 1768	
θ frágrans	*Rose-scented*	✱	△	or	2	my jn	R	China	1784	R	s l	Hort trans c ic	
7814 daúrica *H K*	Daurian	✱	△	or	3	my jn	Pu	Siberia	1790	R	s l	Bot mag 1441	
7815 corállina *W*	entire-leaved	✱	△	or	4	my jn	R	England	...	R	s l	Eng bot 1513	
7816 officinális *W*	common	✱	△	or	3	my jn	R	Switzerl	1548	R	s l	Bot mag 1784	
β rósea	*Rose-colored*	✱	△	or	3	my jn	R	... ..	...	R	s l		
γ blánda	*blush*	✱	△	or	3	my jn	Pk	.....	...	R	s l		
δ rúbra	*double-red*	✱	△	or	3	my jn	R	.....	...	R	s l		
ε carnéscens	*flesh colored*	✱	△	or	3	my jn	W	... ..	...	R	s l		
ζ álbicans	*whitish*	✱	△	or	3	my jn	W	.....	..	R	s l		
η lobáta Dec	*lobed*	✱	△	or	3	my jn	R	.....	1823	R	s l		
7817 peregrina *H K.*	Turkish	✱	△	or	2	my jn	D Pu	Levant	1629	R	s l	Bot. mag 1050	
β compácta	*compact*	✱	△	or	2	my jn	Pu	... ..	...	R	s l		
γ Grevillii	*Greville's*	✱	△	or	2	my.jn	Pu	.....	...	R	s l		
7818 crética *Lindl*	early pink	✱	△	or	2	my jn	Pk	Candia	...	R	s l	Bot reg 819	
7819 paradóxa *And.*	paradoxical	✱	△	or	2	my jn	Pu	Levant	...	R	s l		
β fimbriáta	*double-fringed*	✱	△	or	3	my jn	Pu	... ..	...	R	s l	Sweet fl gard 19	
7820 móllis *And.*	soft	✱	△	or	1½	my jn	Pu	.....	...	R			
7821 arietina *And*	Anderson's	✱	△	or	2	my jn	Pu	.....	...	R			
7822 decóra *And*	comely	✱	△	or	2	my jn	Pu	.....	...	R			
α Pallásii	*Pallas's*	✱	△	or	2	my jn	Pu	.....	...	R	s l		
β elátior	*tall*	✱	△	or	2	my jn	Pu	.....	...	R	s l		
7823 húmilis *W* '	dwarf	✱	△	or	2	my	Pu	Spain	1633	R	s l	Bot mag. 1422	
†824 anómala *W*	jagged-leaved	✱	△	or	2	my jn	Pk	Siberia	1788.	R	s l	Bot mag 1754	
lacinaata Pall ross	2 t 85												
†825 hybrida *W*	mule	✱	△	or	2	my jn	R	Siberia	1788	R	s l	Pall ross 2 t 86	
7826 tenuifólia *W*	fine-leaved	✱	△	or	3	my jn	R	Siberia	1765	R	s l	Bot mag 926	

TRIGYNIA

1203. HIBBER'TIA *H K*	HIBBERTIA					*Dilleniaceæ*	*Sp* 3—19						
7827 volúbilis *B Rep*	twining	⚸	└┘	or	4	my o	Y	N S W	1790	C	s p	Bot rep 126	
7828 grossulariæfólia *Sal*	Gooseberry-lvd	⚸	└┘	or	2	mr au	Y	N Holl	1803	C	s p	Bot mag 1218	
7829 dentáta *R Br*	toothed	⚸	└┘	or	3	.	Y	N Holl	1816	C	s p	Bot reg 282	
†1204 DELPHI'NIUM *W*	LARKSPUR.					*Ranunculaceæ*	*Sp* 26—53						
7830 chinénse *Fisch*	Chinese	⚸	△	or	2	s o	Pu	Tartary	1819	S	p l	Bot cab 71	
7831 ambíguum *W*	doubtful		○	or	3	jl au	B	Barbary	1759	S	p l		
7832 consólida *W*	field		○	or	4	jn jl	B	England	san fi	S	r m	Eng bot 1839	
7833 cuneátum *Stev*	wedge-shaped	⚸	△	or	4	jn jl	B	Siberia	1816	D	co	Bot reg 327	
7834 Ajácis *W*	Rocket		○	or	2	jn jl	Pk	Switzerl	1573	S	r m		
7835 aconiti *W.*	Aconite-like	⚸	◯	or	1	jn jl	Pu	Levant	1801	S	p l	Vahl sym 1 t 13	
7836 peregrinum *W*	broad-lvd -ann		○	or	1	jn jl	B	Italy	1629	S	p l	Al ped 2 t 55 f 3	
D junceum Dec													
7837 grandiflórum *W*	great-flowered	⚸	△	or	1½	jn s	D B	Siberia	1741	D	p l	Bot mag 1686	
γ flore-pléno	*double-flowered*	⚸	△	or	2	jn s	D B	....	.	D	p l		



History, Use, Propagation, Culture,

1201. *Curatella.* From *curatus*, worked; a name given by Aublet to the genus, because the leaves, which have a rough surface, are used in Guyana for polishing bows, sabres, and other weapons. A small tree with rough leaves, which grows well in sandy loam, cuttings root in sand under a glass.

1202. *Pæonia.* The physician Pæon was the first to use this in medicine The Greek legend adds, that he used it to cure Pluto of a wound inflicted by Hercules The species are magnificent flowering plants, especially P officinalis and moutan, with their numerous varieties P moutan and its different varieties are hardy enough to bear our winters in the open air, but they do not flower in such perfection as when planted out in a conservatory, or in a pit where they may be protected from the severe frost under glass: they will thrive well in any rich light soil, and ripened cuttings, slipped off, and planted in the ground, in a shady place, without cover, will root freely. (*Bot Cult* 234)

P. edulis has a more slender stem than the common Pæony The Daurians and Mongols boil the root in

7811 Leaves ovate subrepand toothletted rough

7812 Segments of leaves ovate obl glaucous beneath

7813 Capsules smooth recurved, Segm of leaves smooth shining 3-parted with ovate lanceolate lobes

7814 Capsules downy erect, Segm. of leaves glaucous beneath smooth somewhat lobed with blunt obovate lobes
7815 Capsules downy, Segm of leaves ovate entire smooth
7816 Capsules downy nearly straight, Segments of leaves unequally cut smooth, Lobes ovate-lanceolate

7817 Caps. downy erect, Segm of leaves 3-parted cut and entire ovate-lanc flat hairy beneath

7818 Leaves somewhat shining blistered coriaceous glaucous and downy beneath, Ovaries woolly spreading
7819 Caps. downy straight, Segm of leaves many-parted blunt somewhat wavy glaucous beneath hairy

7820 Caps downy straight, Segm of leaves oval-lanc flat lobed imbricated beneath cæsious hairy
7821 Caps downy arcuate spreading, Segm of lvs 3-lobed and pinnatifid decurrent ovate-obl flat hairy beneath
7822 Caps. pubescent spreading, Segm of leaves 3-parted oblong blunt hairy beneath

7823 Caps somewhat pilose nearly erect, Segm of leaves 3-5-parted villous beneath, Lobes obl entire
7824 Caps 5 smooth depressed blunt, Segm of leaves smooth pinnated, Lobes lanc. acuminate

7825 Caps pubescent, Segments of leaves smooth many-parted, Lobes linear
7826 Caps. downy spreading, Segm. of leaves smooth many parted, Lobes linear

TRIGYNIA.

7827 Leaves obovate lanc nearly entire mucronate pubescent beneath, Flowers sessile, Stem twining
7828 Leaves roundish crenate toothed, Fl stalked opp to the leaves, Stems procumbent
7829 Leaves obl acum smooth with awned serratures, Fl stalked trigynous

7830 Like D grandiflorum, from which it differs in having a more rigid stem, and a later time for flowering
7831 Stem erect velvety, Lvs 3-5-part Lobes pinnatifid, Racemes lax, Spur straight pubesc shorter than cal
7832 Stem suberect smth with spread branches, Fls few loosely racem Ped long than bractes, Caps. smooth
7833 Petioles not dilated at base, Lvs cun at base 5-7-lob Lobes cut acute, Raceme lax branch Calyxes smooth
7834 Stem erect smoothish nearly simple, Branches much covered with fls Ped length of bractes, Caps pubesc
7835 Stem erect branch subpub Lvs pedate multifid, Ped very long, Spur incurv at end horiz divid upwards
7836 Stem erect much branch Lvs smooth rigid low multifid, Branc and bractes lin ent Rac lax Pet stalk.

7837 Leaves palmate many-parted, Lobes linear distant, Pedicels longer than bract, Pet shorter than calyx



and Miscellaneous Particulars

their broth, and grind the seeds and put them into their tea P officinalis was by old authors said to be of two sorts, male and female, the flowers of the former being smaller and lighter colored than those of the latter These distinctions, however, were not indicative of sexual difference, the peony being hermaphrodite, but merely of stronger and weaker growing varieties, according to the practice of the age Now they are laid aside, the varieties reduced to seven or eight, of which a full account is given in the Horticultural Transactions (vol. ii 273) Of these, the double red, the most common, when introduced at Antwerp about the end of the sixteenth century, sold for twelve crowns a root A useful account of the species and varieties has been published by Messrs Anderson and Sabine, in the transactions of the Linnean Society

1203 *Hibbertia.* Named after George Hibbert, Esq who was once a distinguished English collector of plants Twining or trailing plants of New Holland, with bright yellow flowers

1204 *Delphinium* From δελφιν, a dolphin, on account of the resemblance between the nectary of the

7838	cheilánthum *Fisch.*	Doroninsk	♃	△	or	2	jn	D B	Siberia	1819.	D p.l	Bot. reg 478
7839	intermédium *W.*	palmated Bee	♃	△	or	8	jl	B	Silesia	1710	D p.l	Mill. ic. t. 119
7840	elátum *W.*	common Pee	♃	△	or	6	jn s	B	Siberia	1597.	D p l	Sch. han 2. t.145
	montanum Dec											
7841	revolútum *Desf*	revolute	♃	△	or	6	jn s	P B	.....	...	D p l	
7842	hýbridum *W.*	hairy	♃	△	or	3	jn s	B	Siberia	1794	D p l	
	hirsútum P S											
7843	mesoleúcum *Link.*	white-eyed	♃	△	or	3	jn.jl	B Y	.....	1822.	D p l	
7844	exaltátum *W.*	American	♃	△	or	3	jl au	B	N Amer.	1758.	D p l	Mill ic. t 250 f.2
7845	azúreum *Ph*	azure	♃	△	or	6	jl au	L.B	Carolina	1805.	D p l	
7846	dictyocárpum *Dec*	netted-capsuled	♃	△	or	½	jn.jl	B	Siberia	1817.	D p l	
7847	tricórne *Ph*	three-horned	♃	△	or	½	jl au	B	N Amer.	1806.	D p l	Bot cab. 306
7848	urceolátum *W*	hollow-leaved	♃	△	or	2	jl.au	B	.....	1801.	D p l	Bot mag. 1791
7849	flexuósum *Bieb*	wavy	♃	△	or	2	jl au	B	Caucasus	1820.	D p l	
7850	ochroleúcum *Stev*	pale-yellow	♃	△	or	2	jn jl	W	Iberia	1823	D p l	
7851	laxiflórum *Dec*	loose-flowered	♃	△	or	3	jn jl	B	Siberia	...	D p l	
7852	puniceum *W*	scarlet-flowered	♃	△	or	4	jl	R	Siberia	1785.	D p.l	
7853	staphiságria *W en*	Stavesacre	♃	○	or	2	ap.au	L B	S Europe	1596.	S s p	Woodv. t. 154
7854	pictum *W en*	panicled	♃	○	or	1½	ap au	L B	S Europe	1816.	S s p	
7855	Requiénii *Dec*	Requien's	♃	○	or	4	my jn	L.B	Majorca	1824.	S co	

†1205 ACONITUM *W* WOLF'S-BANE. *Ranunculaceæ* *Sp* 20—22

7856	paniculátum *Lam.*	panicled	♃	△	or	3	jn s	Pa B	France	1815	D co	Bot. cab 810
7857	ochroleúcum *W.*	pale-white	♃	△	or	3	jn s	L Y	Caucasus	1794	D co	Bot mag 2570
7858	lycóctonum *W.*	great-yellow	♃	△	or	3	jl au	Y	Al. of Eur	1596	D co	Jac aust 4 t.380
7859	japónicum *W*	Japan	♃	△	or	6	jn s	B	Japan	1790.	D co	
7860	variegátum *W.*	variegated	♃	△	or	5	jn au	P W	S Europe	1597	D co	
7861	An'thora *W*	wholesome	♃	△	or	1½	jn au	P Y	Pyrenees	1596.	D co	Jac aust 4 t 382
7862	pyrenáicum *W*	Pyrenean	♃	△	or	¼	jn jl	Y	Pyrenees	1739	D co	
7863	versicolor *Stev*	many-colored	♃	△	or	3	jn s	B.Y	Siberia	1820.	D co	Bot cab 794
7864	septentrionále *W.*	northern	♃	△	or	4	jl au	B	N Europe	1800.	D co	Fl. dan t 123
7865	álbum *W*	white	♃	△	or	4	jl au	W	Levant	1752.	D co	
7866	cam'marum *W*	rostrate	♃	△	or	3	jn s	Pu	Switzerl	1752.	D co	Bot. cab. 203
	rostratum Bernh											
7867	tortuósum *W en*	twisting	♃	△	or	6	jl au	P B	.....	1812.	D co	
7868	neomontánum *W.*	mountain	♃	△	or	3	jl au	B	Europe	1799	D co	Barr ic t 610
7869	speciósum *Otto.*	shewy	♃	△	or	3	jl au	B	.....	1823.	D co	
7870	barbátum *P S*	hairy	♃	△	or	2	jn jl	P Y	Siberia	1807	D co	
7871	bifiórum *Fisch*	two-flowered	♃	△	or	½	jn jl	P B	Siberia	1817.	D co	
7872	Napéllus *W.*	Monk's-hood	♃	△	pr	¼	my jl	B	Europe	1596	D co	
7873	taúricum *W.*	Taurian	♃	△	or	4	jn jl	B	Tauria	1752.	D co	Jac ic 3 t. 492
7874	volúbile *W*	twining	♃	△	or	6	jl au	B	Siberia	1799	D co	
7875	uncinátum *W.*	American	♃	△	or	2	jl au	B	N. Amer.	1768	D co	Bot. mag 1119

PENTAGYNIA.

1206 TRACHYTEL'LA *Dec* TRACHYTELLA *Dulensaceæ* *Sp* 1—2

7876	Actæ'a *Dec*	rough-leaved	♃	□	cu	6	...	W	China	1823.	C p.l



History, Use, Propagation, Culture,

plant and the imaginary figures of the dolphin The species are shewy annuals or perennials, valuable as border flowers The leaves are generally much divided, and the flowers in terminal spikes, blue, purple, or red, never yellow or any shade of that color

D. consolida, (from *consoludare*, to unite; it being formerly reputed as a most powerful vulnerary,) *Pied d'Alouette*, Fr., *Rittersporn*, Ger, is a shewy annual, with blue, pink, purple, and white flowers, and semi-double and double D Ajacis, so called because some traces may be perceived in the flower of what may be likened to the letters AIA, is by some considered as only a variety of this species · both are universally grown as border annuals D elatum is well adapted for shrubberies. All the species are of the easiest culture The species are extremely difficult to distinguish from each other, and are probably in many cases mere varieties.

1205. *Aconitum* So called from growing about Acona, a town of Bithynia. The species are robust free-flowering plants of some beauty and consequence The stems rise from two to six feet in height, upright, strong, furnished with many digitate or palmate leaves, and terminated by panicles or loose spikes of blue or yellow flowers.

A. Napellus, from *napus*, a turnip, its grumous roots resembling little turnips, is a well known poisonous plant. Linnæus says, that it is fatal to kine and goats, especially when they come fresh to it, and are not acquainted with the plant; but that it does no injury to horses, who eat it only when dry. He also relates (from the Stockholm Acts) that an ignorant surgeon prescribed the leaves, and on the patient refusing to take them, he took them himself and died. The ancients, who were acquainted with chemical poisons, regarded the Aconite as the most violent of all poisons Some persons, only by taking in the effluvia of the herb in full flower by the nostrils, have been seized with swooning fits, and have lost their sight for two or three days

7838 Stem erect branch. Lvs 5-part. Lobes obl acumin Pet. shorter than cal Caps. notted with color pubescent
7839 Petioles not dilat. at base, Lvs cord. 5-7-fid up 3-lobed, Lobes cut serr Fed bract cal. and ovaries smooth
7840 Petioles not dilated at base, Leaves downy 5-lobed, Lobes cuneate at base trifid cut, Spur inflexed

7841 Petioles not dilated at base, Lvs orbicular cord. 5-fid, Lobes cut acute deflexed, Bractes 3, Ovaries smooth
7842 Petioles sheathing at base, Lvs. many-part. with lin. lobes, Raceme close, Spur straight longer than flower

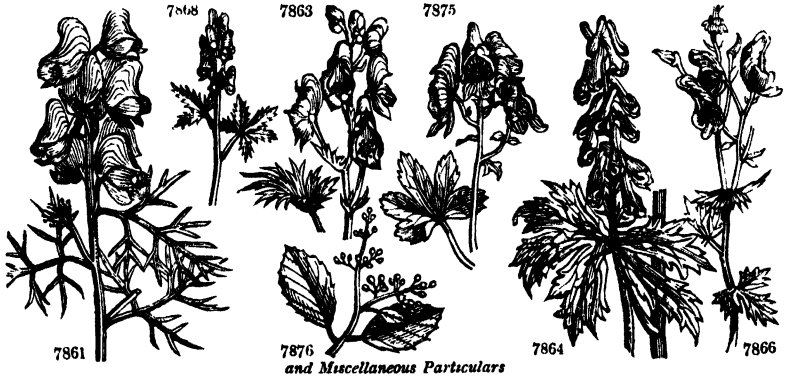
7843 Lvs somewhat dilated at base, Segm cuneiform serr cut in front, Stem upwards and peduncles pubescent
7844 Petioles not dilated at base, Lvs flat trifid beyond the middle, Lobes cuneiform trifid at the end acuminate
7845 Pet. scar dilat. at base, Lvs. 3-5-part multif. with lin lobes, Rac straight, Pet beard at end low. very vill
7846 Pet scar dilat at base, Lvs 3-7-lob Lobes obl ac cut pinnatifid up 3-part Caps nett at keel and edge cil
7847 Pet smth. but scar. sheath at base, Lvs 5-par Lobes 3-5-fid lin Pet. sh than cal Caps refl from their base
7848 Petioles not dilated at base, Leaves concave beyond the middle trifid, Lobes cuneiform cut acuminate at end
7849 Petio not dilat at base, Lvs 5-lob with cut lobes, Stem flexu. and petioles hairy, Bractes lin Caps smooth
7850 Petioles sheathing at base, Lvs many-par with lin subul segm Fl pubesc. Spur acute longer than flowers
7851 Pet not dilat at base, Lvs. 3-7-lob with obl ac cut pinnat lobes, Rac lax branch Bractes and ovaries pub
7852 Petioles sheathing at base, Lvs many-parted in lin lobes, Rac long, Spur straight blunt longer than pedicel
7853 Spur very short, Bracteoles inserted at base of pedicel, Petioles hairy, Pedicels twice as long as flower
7854 Spur scarcely shorter than cal Bracteoles inserted at base of pedicel, Petioles pubesc. Pedic. scarcely longer
7855 Spur nearly as long as calyx, Bractes inserted in the middle of pedicel, Petioles hairy [than flower

7856 Pan divaricating, Branches tortuose, Helmet conical half circular, Spur short thick spiral [at end
7857 Fl spiked or panic numerous, Lvs deeply 3-5-lobed with cuneate trifid lobes, Spur slender straight curv
7858 Helmet conical cylindric Spur slender spirally twisted, Lip divaricating, Lvs palm 3-5-lob beyond middle
7859 Veiny smooth, Pan. smoothish with ascend branches, Bag of hoods very large ventric Spur thick subinvol
7860 Pan divaricating very smooth, Branches tortuose, Spur thick somewhat spiral, Lobes of leaves rhomboid
7861 Fls panic Sep and pet persist Bag of hoods scarcely any, Spur thick spiral, Lvs multif with lin ac segm
7862 All over densely pubesc Lvs. very large palmate 3-5-lobed beyond middle pubesc. Helmet conical cylindr.
7863 Like Anthera, but flowers smoothish variegated with a low subconical helmet [compressed
7864 Like Lycoctonum, but flowers panicled, Stem peduncles and flowers villous, Ovaries smooth or hairy
7865 Ovaries 4-5, Helmet conical with a long claw, Rac. lax simple, Lvs. 3-5-parted with trifid toothed lobes
7866 Pan lax, Helmet conical elongated abruptly mucronate in front, Spur thick spiral, Ovaries 3-5

7867 Pan lax, Branches 1-4-fl Spur thick long abruptly kneed, Bags of hoods inflated, Ovaries 3-5 smooth
7868 Ovaries 3 smooth, Raceme lax corymbose, Ped smooth, Helmet very convex subconical
7869 Pan lax, Helmet exactly conical, Spur very thick blunt very short, Bag of the hoods very large
7870 Fl panic Helmet conical, Spur thick blunt very short. Lvs deeply lobed with narrow diverging segments
7871 Stem very short, Low lvs few on long stalks 5-part with palm segm. Hoods hook blunt, Ovaries 3 villous
7872 Ovaries 3 smooth, Raceme cylindric long, Leaves divided down to petiole with linear acute furrowed lobes
7873 Ovaries 3 smooth, Rac cylindr long very compact, Pedicels smooth shorter than bractes, Lvs subpedate
7874 Stem twining with spreading hairs, Petioles ciliated, Leaves 3-5-parted with pinnatifid lobes, Ovaries 5-7
7875 Pan. lax, Branches diverging, Helmet exactly conical, Leaves 3-lobed with entire lobes, Ovaries villous

PENTAGYNIA.

7876 Leaves very rough toothed



and Miscellaneous Particulars

But the root is unquestionably the most powerful part of the plant Matthiolus relates, that a criminal was put to death by taking one dram of it. Dodonæus gives us an instance, recent in his time, of five persons at Antwerp, who ate the root by mistake, and all died. Dr Turner also mentions, that some Frenchmen at the same place, eating the shoots of this plant for those of masterwort, all died in the course of two days, except two players, who quickly evacuated all that they had taken by vomit. We have an account, in the Philosophical Transactions, of a man who was poisoned, in the year 1732, by eating some of this plant in a salad, instead of celery. Dr Willis also, in his work De Anima Brutorum, gives an instance of a man who died in a few hours, by eating the tender leaves of this plant also in a salad He was seized with all the symptoms of mania The Aconite, thus invested with terrors, has, however, been so far subdued, as to become a powerful remedy in some of the most troublesome disorders incident to the human frame Baron Stoerck led the way by administering it in violent pains of the side and joints, in glandulous scirrhi, tumours, ulcerous tubercles of the breast, &c. to the quantity of from ten to thirty grains in a dose, of an extract, the method of making which he describes

Willdenow and the Dublin College consider that the plant used by Stoerck was the A neomontanum, in which opinion Mr Thomson agrees in his London Dispensatory

All the species are poisonous in a high degree. The limits of the species are extremely obscure, and in a very unsettled state, Decandolle in his Systema, increased the number at that time known, but in his Prodromus many of the species of the Systema are considered mere varieties. Dr. Reichenbach has, however, multiplied the species prodigiously, but with little reason.

1206 *Trachytella* From τραχυτης, roughness These are climbing shrubs with racemose white flowers, and hard rough leaves, which are used in China for polishing metals and hard wood

1207. CIMICI'FUGA *Ph* Bugwort						*Ranunculaceæ* *Sp* 4—6							
7877 Serpentária *Ph.* Black Snakeroot *Actæa racemosa* W.	♑	△	m	3	jn,jl	W,Y	N. Amer.	1732	D	l p	Dill.elt. t 67. f.78			
7878 fœ'tida *W* stinking	♑	△	m	4	jn jl	L,Y	Siberia	1777	D	p l	Lam. ill 487			
7879 cordifólia *Ph.* heart-leaved	♑	△	cu	3	jn jl	W,Y	N. Amer.	1812	D	p l	Bot mag. 2069			
7880 palmáta *Ph.* palmated	♑	△	cu	4	jl au	W,Y	N Amer	1812.	D	p,l	Bot. mag. 1630			
¶1208. AQUILE'GIA. *W* Columbine						*Ranunculaceæ* *Sp.* 8—13							
7881 viscósa *W* clammy	♑	△	or	1½	my jn	Pu	Montpel.	1752	D	co	Goua ill t.19 f.1			
7882 vulgáris *W.* common	♑	△	or	2	my jl	B	Britain	fields.	D	co	Eng bot. 297			
β flore pleno double-flowered	♑	△	or	2	my jl	B	.....	...	D	co				
7883 glandulósa *Fisch* glandular	♑	△	or	1½	my jl	W B	Siberia	1822	D	co				
7884 viridiflóra *Pall* green-flowered	♑	△	or	1½	my jl	G Y	Siberia	1780	D	co	Jacq ic. 1. t. 102			
7885 bícolor *P &* two-colored *hýbrida* B M	♑	△	or	2	my jl	Pu	Siberia	...	D	co	Bot. mag. 1221			
7886 alpina *W* Alpine	♑	△	or	1	my jn	B G	Switzerl	1731	D	co	Bot cab 657			
7887 canadénsis *W* Canadian	♑	△	or	1	ap my	R O	N Amer	1640.	D	s p	Bot. mag. 246			
7888 atropurpurea *W cn* dark-purple	♑	△	or	1	my jn	Pu	Siberia	...	D	s p	Bot. reg. 922			
1209 NIGEL'LA *W* Fennel-Flower.						*Ranunculaceæ* *Sp* 6—11							
7889 damascéna *W* common		○	or	2	jn s	L B	S. Europe	1570	S	co	Bot mag 22			
7890 coarctáta dwarf		○	or	¾	jn s	W G	S Europe	1793	S	co				
7891 sativa *W* small		○	or	1½	jn s	L B	Egypt	1548	S	s l	Zorn ic 119			
7892 arvénsis *W* field		○	w	1½	jn s	W G	Germany	1683	S	s l	Sch han 2 t.146			
7893 hispánica *W* Spanish		○	or	1½	jn s	B w	Spain	1629	S	s l	Bot mag 1265			
7894 orientális *W.* yellow		○	or	1½	jn s	Y	Syria	1699	S	s l	Bot mag. 1264			
1210 REAUMU'RIA. *W.* Reaumuria						*Ficoideæ* *Sp* 1							
7895 hypericoides *W* Hypericum like *linifólia* P L	♑	⌐	pr	2	jl o	Pu	Syria	1800	L	s p	Bot reg 845			
1211 COLBER'TIA *Salisb* Colbertia						*Dilleniaceæ.* *Sp* 1							
7896 coromandeliána *Sal* Coromandel	♀	□	or	15	mr ap	Y	Coroman.	1803.	L	p l	Roxb cor t 20			
1212 TETRA'CERA *L* Tetracera						*Dilleniaceæ* *Sp* 1—23							
7897 potatória *Afz.* Water Vine	♄	□	or	20	...	...	S Leone	1822.	L	p l				

POLYGYNIA.

1213 NELUM'BIUM *J* Sacred-Bean						*Nymphæceæ* *Sp* 2.							
7898 speciósum *W* Indian	♒	⌂	or		jn au	Pk	India	1787.	R	m s	Bot. mag. 903			
β caspicum Fisch *Caspian*	♒	⌂	or		...	Pk	Casp Sea	1822	R	m s				
7899 luteum *W* yellow-flowered	♒	⌂	or		...	Y	Carolina	1810	R	m s				



History, Use, Propagation, Culture,

1207 *Cimicifuga* From *cimex*, a bug, and *fugo*, to drive away, indicating certain virtues a species is supposed to possess The C serpentaria is used with success by the native practitioners in North America, for curing the dangerous bite of the rattlesnake. Tall, leafy herbaceous plants, with the appearance of Actæa.

1208 *Aquilegia* From *aquila*, an eagle; the inverted spurs of the flower have been likened to the talons of a bird of prey The species are smooth-leaved, handsome-flowered plants A vulgaris is an old inhabitant of the flower border the whole plant has been recommended to be used medicinally, but it belongs to a suspicious natural order, and Linnæus affirms, that children have lost their lives by it A alpina is the handsomest species

1209 *Nigella* From *niger*, black, because of the color of the seeds, which are the part of the plant known in cookery The species are curious or neat little plants, with fine cut leaves like fennel N. damascena and sativa are sown as hardy annual flowers, and on the continent, the leaves and seeds of the latter species and N arvensis, are used in cookery instead of more expensive aromatics. They are also said to be extensively used in the adulteration of pepper

1210. *Reaumuria* So named by Hasselquist, in honor of René A F de Reaumur, author of several entomological works, Histoire des Insectes, &c He died in 1757. A small cæsious plant, bearing an abundance of bright lilac flowers

1211 *Colbertia* Named by Mr Salisbury after the famous Colbert, a patron of the Paris garden, who destroyed with his own hands the vines which had been planted therein in lieu of more curious objects. A fine plant, with leaves like those of Dillenia speciosa

1212. *Tetracera* From τετρα, four, and κερας, a horn, because of its four capsules recurved like as many horns. Shrubs or small trees, which are often climbers with alternate stalked naked leaves, often rough above The flowers are panicled or racemose The leaves are remarkable as an exemplification of that mode of nervation which M. Decandolle calls feather-nerving

1213 *Nelumbium* This is called in Ceylon *Nelumbo* Sir James Smith proposed to call the genus by the more classical name of *Cyamus*, but it has been remarked, that it remains to be proved that the holy κυαμος, was this plant. N. speciosum is a native both of the East and West Indies, China, Cochin-China, and Japan,

7877 Monogynous, Racemes very long, Caps. dry dehiscent, Leaves biternate with serrate or cut segments

7878 Ovaries 4 subsessile very vill. Racemes panicled, Lvs ternate or biternate, Segm ovate-lanc cut toothed
7879 Ovaries 2-3 smooth sessile, Racemes panicled, Leaves biternate, Segments cordate at base
7880 Ovaries 12-15 in a roundish head, Racemes dichotomous panicled, Leaves palmate

7881 Spurs incurved, Caps vill Stem few or 1-fl Lvs covered with viscid down, Styles not longer than stamens
7882 Spurs incurved, Caps villous, Stem leafy many-fl. Leaves nearly smooth, Styles not longer than stamens

7883 Spurs incurved twice as short as petals, Upper part of the plant and capsules covered with glandular hairs
7884 Spurs straight longer than limb, Stam as long as petals, Styles long, Petals oval obl shorter than petals
7885 Spurs straight longer than very blunt limb, Styles scarcely longer than stamens and petals, Sepals acute the length of petals
7886 Spurs straight somewhat incurved at end twice as short as limb of petals, Stem 2-3-fl leafy, Lvs finely cut
7887 Spurs straight, Styles and stamens exserted, Sepals acute a little longer than petals, Segm of leaves 3-parted
7888 Spurs straight as long as limb, Styles and stamens as long as sepals, Sepals the length of petals

7889 Anthers blunt, Caps 5 smooth 2-cell united as far as end into an ovate globose one, Fls in a leafy involucre
7890 Anthers blunt, Flowers in an involucre, Sepals erect conniving
7891 Anthers blunt, Caps muricate, Stem erect hairy, Flowers naked
7892 Anthers pointed, Styles 5-7 revolute, Capsules and stem smooth, Branches diverging
7893 Anthers pointed, Styles 8-10 erect Caps smooth 1-nerved at back, Stem erect smooth, Branches erect
7894 Caps 5-10 smooth erect, Styles straight

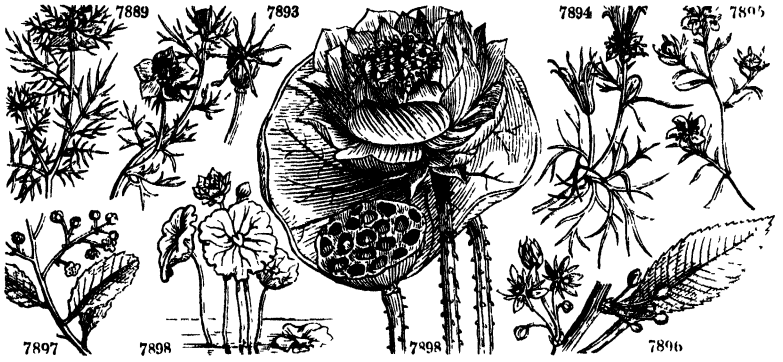
7895 A low shrub, with narrow glaucous leaves

7896 Leaves smooth 10-nerved 1-1½ foot long 6 inches broad

7897 Lvs. oval-obl. blunt or nearly acute smooth roughish above somewhat toothed at end, Pedunc panicled [pubescent

POLYGYNIA.

7898 Petals many, Anthers lengthened beyond the cells into a clavate appendage
β Inner petals scarcely smaller than the outer, blunt
7899 Petals many, Anthers lengthened beyond the cells into a linear appendage



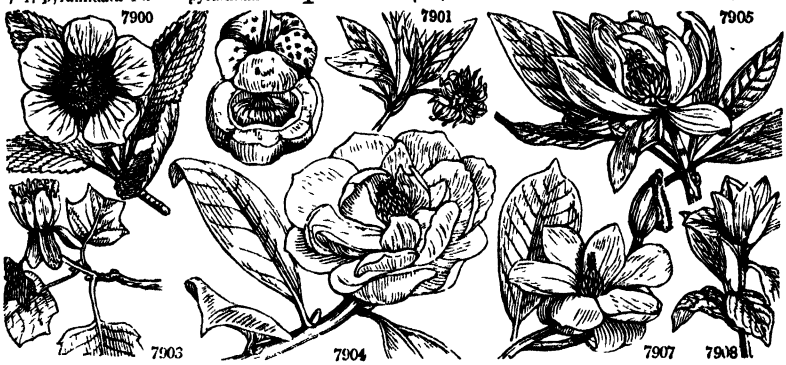
and Miscellaneous Particulars

Persia, and some parts of the Russian empire. Thunberg informs us, that it is considered as a sacred plant in Japan, and pleasing to their deities, and that the images of their idols were often drawn sitting on its large leaves The long stalks are there eaten among other potherbs. Loureiro relates, that it abounds in muddy marshes in India and China, and is cultivated in large handsome pots in the gardens and houses of the mandarins; that there is a variety with the flower of a pure white, and another with a very beautiful luxuriant flower, having about one hundred large petals, white or rose-colored. Both root and seeds are esculent, sapid and wholesome In China it is called Lien wha, and the seeds and slices of the hairy root, with the kernels of apricots and walnuts, and alternate layers of ice, were frequently presented to the British ambassador and his suite at breakfasts given by some of the principal mandarins The Chinese have always held this plant in such high value, that at length they regarded it as sacred That character, however, has not limited it to merely ornamental purposes, for the roots are not only served up in summer with ice, but they are also laid up in salt and vinegar for the winter. The seeds are somewhat of the size and form of an acorn, and of a taste more delicate than that of almonds The ponds are generally covered with it, and exhibit a very beautiful appearance, when it is in flower, and the flowers are no less fragrant than handsome

Sir George Staunton remarks, that the leaf, besides its common uses, has, from its structure, growing entirely round the stalk, the advantage of defending the flower and fruit arising from its centre from contact with the water, which might injure them. He also remarks, that the stem never fails to ascend in the water from whatever depth, unless in case of a sudden inundation, until it attains the surface, when its leaf expands, rests, and swims upon it, and sometimes rises above it. This plant bears the rigorous cold of the Pekin winter, though it is reared with difficulty in European stoves It often grows spontaneously in China, and is propagated in the open air with ease both by the seed and root. The Chinese distinguish many varieties of it

From the root of the Nelumbo, Sir George Staunton says, the Egyptians are supposed to have prepared their Colocasia, but the plant is now no longer found in that country, from which circumstance some naturalists infer, that it never was indigenous there, but cultivated by the inhabitants with extreme care The ancient Romans made repeated efforts to raise it among them, from seeds brought out of Egypt and the

1214. DILLE'NIA. *W.*	DILLENIA				*Dilleniaceæ*	*Sp* 1—9							
7900 speciósa *W.*	large-flowered	♀	□	tm	30	...	Y	E. Indies	1800.	C	p.l	Ex. bot. 1. t. 2, 3
1215. ILLI'CIUM *W.*	ANISEED-TREE				*Magnoliaceæ*	*Sp.* 2—3							
7901 floridánum *W.*	red-flowered	♣	⌐	or	8	ap jn	R	Florida	1766.	L	s p	Bot. mag. 439	
7902 parviflórum *W*	yellow-flowered	♣	⌐	or	6	my jn	Y	Florida	1790.	L	p.l	Vent. cels. 22	
1216 LIRIODEN'DRON. *W*	TULIP-TREE				*Magnoliaceæ*	*Sp* 1							
7903 tulipífera *W.*	common	✲		or	60	jn jl	Y R	N Amer	1663	S	s.l	Bot. mag. 275	
β obtusiloba	*obtuse-lobed*	✲		or	60	jn jl	Y.R	Pensylv.	1663.	S	s l		
†*1217. MAGNO'LIA *W.*	MAGNOLIA				*Magnoliaceæ.*	*Sp* 14—17							
7904 grandiflóra *W.*	Laurel-leaved	♠		spl	20	jn o	W	Carolina	1734	L	l p	Bot. rep. 513	
α cilíptica	*ferruginous*	♠		spl	20	jn o	W	Carolina	1734	L	l p	Bot. rep 518	
β obovàta	*broad-leaved*	♠		spl	20	jn o	W	Carolina	1734	L	l p		
γ lanceolàta	*long-leaved*	♠		spl	20	jn.o	W	Carolina	1734	L	l p	Mich arb t. 1	
7905 glaúca *Ph*	decidu swamp	✲		or	20	jn s	W	N. Amer	1688.	S	p l	Bot. mag 2164	
7906 longifólia *Ph*	evergr swamp	♠		or	20	jn s	W	N Amer.	....	S	p.l		
7907 conspícua *H K*	Yulan	✲	⌐	or	30	f ap	W	China	1789.	G	p.l	Bot. mag 1621	
M Yulan Dec													
7908 obovàta *W*	purple	♣	⌐	or	6	ap jn	Pu	China	1790	L	p l	Bot mag 390	
7909 tomentósa *Thunb*	slender	✲	⌐	or	20	mr ap	Pu	China	1804	L	p l	Par lond 87	
M gracilis Thunb													
M Kobus Dec													
§ 7910 púmila *W*	dwarf	♣	⌐	or	4	ja d	W	China	1786.	C	p l	Bot mag 971	
7911 fuscáta *H K.*	brown-stalked	♣	⌐	or	3	ap my	Br	China	1789	L	p l	Bot mag. 1008	
β annónæfólia P L.	*small-flowered*	♣	⌐	or	3	ap my	Br	China	1804	L	p l	Par. lond 5	
7912 cordáta *Ph*	heart-leaved	✲		or	40	jn jl	Y w	N Amer	1801	L	s l	Bot cab 474	
7913 acuminàta *W*	bluish-flowered	✲		or	60	may jl	Y G	N Amer	1736	L	s l	Bot cab 418	
7914 tripétala *W*	umbrella	✲		or	30	my jn	W	N Amer.	1752	L	s l	Mich arb. t. 5	
M umbrella Lam													
7915 macrophýlla *Ph*	long-leaved	✲		or	30	jn jl	W	N Amer	1800	S	p l	Bot mag 2189	
7916 auriculáta *W*	ear-leaved	✲		or	40	ap my	W	Carolina	1786	L	p l	Bot mag 1206	
7917 pyramidáta *Ph*	pyramidal	✲		or	20	ap my	W	Carolina	1811	G	p l	Bot reg 407	



History, Use, Propagation, Culture,

modern attempts to cultivate it in Europe, though with the assistance of artificial heat, seldom have succeeded

Dr Patrick Browne is of opinion that the ancients confounded two plants under the name of Lotus or Egyptian bean, and that under these titles they described the upper parts of the Nymphæa Nelumbo, and the roots of the lesser Colocasia, now commonly called *coccos* in Jamaica, Arum Colocasia (*Jam.* 243. 332.)

In our stoves the Nelumbium should be grown in a tub or large pot, in a rich loamy soil, and requires a strong heat to flower in perfection The pot or tub should be kept full of water all the time the plants are growing, but may be allowed to get dry when the flowering season is over The plants may be increased by dividing at the root, but it is obtained more readily from seeds, which vegetate freely (*Bot Cult* 83)

Kent of Clapton says, that the seeds will keep forty years, vegetate freely, and flower the first year (*Hort Trans* iii 36)

1214 *Dillenia* So named by Linnæus, in honor of John James Dillenius, the famous professor of botany at Oxford, author of Historia Muscorum, Hortus Elthamensis, &c The species are beautiful trees, with large leathery leaves, and axillary or terminating flowers often also large They thrive best in a light loamy soil. Ripened cuttings, not deprived of their leaves, strike root freely, in a pot of sand plunged under a hand-glass in heat. *Good seeds sometimes arrive from India, when the sooner they are sown the better*; placed in a moderate hot-bed frame, they will succeed well (*Bot Cult* 50)

1215 *Illicium* From *illicio*, to attract, on account of its agreeable perfume I floridanum has very fragrant leaves, and capsules having a strong smell of anise when rubbed This species, and more especially anisatum is powerfully carminative and stomachic In China it is in frequent use for seasoning dishes, especially such as are sweet. In Japan they place bundles and garlands of the aniseed-tree in their temples before their idols, and on the tombs of their friends They also use the powdered bark as incense to their idols A branch put into the decoction of Tetraodon hispidum is supposed to increase the virulence of that poison The bark, finely powdered, is used by the public watchmen to make a chronometer or instrument for measuring the hours, by slowly sparkling at certain intervals in a box, in order to direct when the public bells are to sound.

Ripened cuttings will root in sand, but the plant is most readily increased by layers.

1216. *Liriodendron* From λειριον, a lily, and δενδρεον, a tree. The flowers, which may be likened to a lily or tulip, grow upon one of the loftiest trees of the forest. A smooth tree, not less admired for its fiddle-shaped leaves, than its tulip-like flowers, which are produced at the end of the branches, they are composed of six petals, three without and three within, which form a sort of bell-shaped flower, whence the inhabitants of North America gave it the title of tulip These petals are marked with green, yellow, and red spots, making a fine appearance when the trees are well charged with flowers. When the flowers drop the germ swells, and forms a kind of cone, but it does not ripen in England

The timber is used in America for canoes, but is unfit for boards or planks, as it contracts and expands more than the wood of any other tree

The tulip tree is now very common in Europe, in the south of France and Italy, it is frequent in public avenues, and flowers when twenty or thirty feet high, and of six or seven years growth. In Britain it requires a

7900 Leaves elliptic oblong simply serrated, Peduncles 1-flowered

7901 Petals 27-30 purple: outer oblong; inner lanceolate
7902 Petals 9-12 yellowish ovate roundish

7903 Leaves truncate at end with two broad opposite stipules

7904 Leaves evergreen oval-obl coriaceous shining above ferrugineous beneath, Flowers erect with 9-12 petals

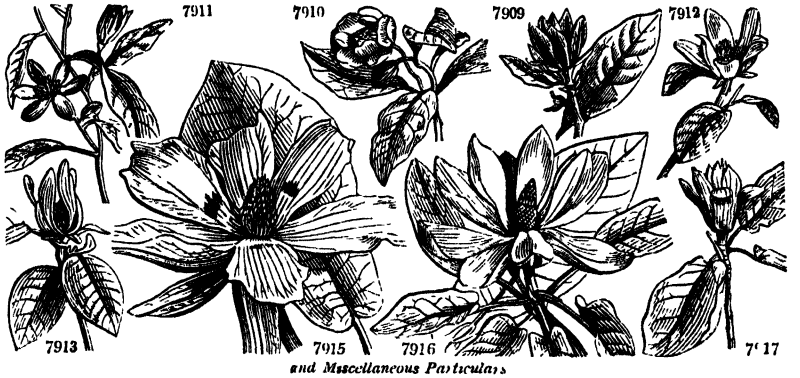
7905 Leaves elliptical blunt glaucous beneath, Flowers with 9-12 contracted petals which are ovate concave
7906 Like the last, but leaves evergreen elliptical acute at each end
7907 Lvs. deciduous obovate abruptly acuminate the younger pubescent, Flowers naked erect with 6-9 petals

7908 Lvs deciduous obov acute netted nearly smooth, Fls erect, Sepals 3, Petals 6 obovate, Styles very short
7909 Lvs. decid. obov point. at each end, younger downy ben, old ones smooth, Fls erect, Sep 3, Pet 6, Styles [very short

7910 Leaves evergreen smooth netted ellipt acuminate at each end subglaucous, Flowers cernuous
7911 Leaves evergreen elliptic obl.: the old smooth, younger and branches fuscous downy, Flowers erect

7912 Lvs deciduous heart-shaped subovate acute, above smooth, beneath somewhat tomentose, Pet. 6-9 obl
7913 Leaves deciduous oval acuminate pubescent beneath, Petals 6-9
7914 Leaves deciduous lanc much spreading, younger downy beneath, Petals 9-12, the outer hanging down

7915 Lvs deciduous very large obl obov subcuneate cordate at base, beneath whitish glaucous, Pet 6-9 ovate
7916 Lvs decid smooth spatulate obov subcord at base, Auricles blunt close, Sep 3 much spread Pet 9 oblong
7917 Lvs decid smth spatul obov subcord at base, of same color on both sides, Auric spread Pet 9 lanc acum



and Miscellaneous Particulars

greater age, though ringing might probably be successfully applied to throwing this and other ornamental trees into a flowering state There are many fine old trees round London, in the parishes of Fulham, Walham-green, Kew, &c, and a very fine one even so far north as Pitcaithly wells in Fifeshire

1217. *Magnolia* In honor of Pierre Magnol, professor of medicine, and prefect of the botanic garden at Montpelier, author of Botanicum Monspeliense, 1676, and other works The species are chiefly large trees with large leaves, and axillary flowers, also very large and highly odorous

M grandiflora is the noblest species, the leaves, which are persistent, are nine or ten inches long, and not unlike those of a common laurel The flowers are produced at the ends of the branches they are very large, and composed of eight or ten petals, narrow at their base, but broad, rounded, and a little waved at their extremities, they spread open very wide, are of a pure white color, and have an agreeable scent

The variety *g* elliptica or Exmouth (having been raised from the seed of an old tree in Sir John Collington's garden of that place) flowers earliest and most freely it is also the hardiest

M glauca is deciduous In America it is known by the names of *white laurel, swamp sassafras*, and *beaver tree* It has the last name, because the root is eaten as a great dainty by beavers, and this animal is caught by means of it Kalm says, these trees may be discovered by the scent of the blossoms at the distance of three quarters of a mile, if the wind be favorable It is beyond description pleasant to travel in the woods at the flowering season, especially in the evening They retain their flowers for three weeks, and even longer The berries also look very handsome when they are ripe, being of a rich red color, and hanging in bunches on slender threads They cure coughs and other pectoral diseases by putting these berries into brandy, and giving a draught of the liquor every morning The wood is made use of for joiners' planes Dillenius remarks, that the flowers never open in a morning, that the calyx falls off at the second opening of the flower, but that the petals dry on, and that the scent resembles that of the lily of the valley, with a mixture of aromatic

M conspicua is much valued as a free flowerer, and on account of the early appearance of its white odoriferous blossoms. *Yulan* is the vernacular name in Japan

M. acuminata bears a fruit about three inches long, like a small cucumber, and is thence called cucumber tree in America

M tripetala has leaves twelve or fifteen inches long and five or six inches wide, narrowing to a point at each extremity, and placed at the ends of the branches in a circular manner like an umbrella, whence its name The flowers are composed of ten, eleven, or twelve large oblong white petals, the wood is soft and spongy, and the leaves drop off earlier than in the other deciduous sorts.

The different species, Sweet observes, are generally increased by layers or seeds: when the layers are first taken off they should be potted in a mixture of loam and peat, and placed in a close frame till they have taken fresh root None of the leaves should be taken off or shortened, nor any shoots be cut off, or their tops shortened, as they will not succeed so well, for the more branches and leaves are on them, the sooner they will strike fresh root. Most cultivators cut off many of the leaves and shoots of layers, when they are first taken off, thinking the roots will not have so much to nourish, which is the very reason

1218. MICHE'LIA *W.*	Michelia.				*Magnoliaceæ.*	*Sp.* 1—7							
7918 Champáca *W.*	sweet-scented	♀	▭	tm 20	...	Y	E. Indies	1779.	C	s.l	Rhe. mal. 1. t.19		
1219 UVA'RIA *W*	Uvaria				*Annonaceæ.*	*Sp* 1—9							
7919 Zeylánica *W.*	Ceylon	♀	▭	or 20	...	R.G	E. Indies	1794	C	p l	Rhe. mal. 2. t. 10		
1220 ANNO'NA *P S*	Custard Apple				*Annonaceæ.*	*Sp* 7—36.							
7920 muricáta *W*	Sour-sop	♀	▭	fr 10	...	G Y	W Indies	1656	C	r.m	Jac obs. 1. t. 5		
7921 Cherimóha *Mill* *tripetala* W.	Cherimoyer	♀	▭	fr 18	jl.au	Br	S. Amer.	1739	C	r m	Trew ehr. t. 49		
7922 squamósa *W.*	Sweet-sop	♀	▭	fr 20	...	W.G	S. Amer	1731	C	r m	Rhe mal. 3 t 29		
7923 paludósa *W*	marsh	♀	▭	or 4	...	G	Guiana	1803	C	r m	Aub gui 1 t.246		
7924 reticuláta *W*	netted	♀	▭	fr 20	..	W G	S Amer.	1690.	C	r m	Rh m. 3. t 30,31		
7925 palústris *W.*	Cork-wood	♀	▭	or 6	...	Y	W Indies	1731	C	r m	Pl alm. t 240 f.6		
7926 glábra *W*	smooth-fruited	♀	▭	or 16	jl.au	Br	Carolina	1774	C	r m	Cat. car. 2. t. 64		
1221 ARTABO'TRYS *R Br*	Artabotrys.				*Annonaceæ*	*Sp* 1.							
7927 odoratis'sima *R Br.* *U hexapetala* W	sweet-scented	♀	▭	or 6	jn jl	G	China	1758	S	r m	Bot. reg 423		
1222. GUATTE'RIA *R & P.*	Guatteria				*Annonaceæ*	*Sp* 2—22							
7928 rúfa *Dun.*	rufous	♀	▭	or 3	jl au	Br	China	1822	C	r m	Bot. reg 836		
7929 virgáta *Dun* *Uvaria lanceolata* Swz	Lancewood	♀	▭	tm 30	...	W	Jamaica	1793	C	p l	Dun mon t. 31		
†1223 ASIMINA *Ad.*	Asimina				*Annonaceæ*	*Sp* 3—5							
7930 triloba *Ph*	trifid-fruited	♀		or 3	au	P l pu	N Amer	1736	S	p l	Cat car 2 t 83		
7931 parviflóra *Ph*	small-flowered	♀		cu 2	ap my	Br	N Amer	1806	L	p l	Dun mon t. 9		
7932 pygmæ'a *Ph*	dwarf	♀		cu 1	...	W	N Amer	1812	L	p l	Bartr. trav. t. 1		
1224 XYLO'PIA *W*	Xylopia				*Annonaceæ*	*Sp* 2—9							
7933 muricáta *W*	rough-fruited	♀	▭	or 4	...	..	W. Indies	1793	C	p l	Br jam t 5 f 2		
7934 glábra *W*	smooth-fruited	♀	▭	tm 20	...		Jamaica	...	C	p.l	Pl. al. t. 238 f. 4		
1225 HEPA'TICA *W en.*	Hepatica				*Ranunculaceæ*	*Sp* 1—3							
7935 triloba *W*	common	♀	△	or ½	f.ap	Pu	Europe	1573	D	s l			
α cærúlea	*blue*	♀	△	or ½	f ap	B	... ..	...	D	s l			
β cærúleo-plèna	*double-blue*	♀	△	or ½	f ap	B	... .	..	D	s l			
γ rúbra	*red*	♀	△	or ½	f ap	R	.... .	...	D	s.l	Bot. mag 10		
δ rubro-plèna	*double-red*	♀	△	or ½	f ap	R	. . ..	...	D	s.l			
ε álba	*red-anth white*	♀	△	or ½	f ap	W	. ....	...	D	s.l			
ξ nívea	*snowy-white*	♀	△	or ½	f.ap	W	.....	...	D.	s.l			



History, Use, Propagation, Culture,

they often lose great part of their crop, layers of any kind of shrub whatever, when first taken off, should not have a single leaf taken off till they have made fresh root · supposing their tops flag ever so much, as long as there is life it will draw up the sap, and help the plant to root afresh The Chinese kinds are often inarched or budded on M obovata, which takes readily (*Bot Cult* 306)

1218 *Michelia* Named by Linnæus, in honor of Pietro Antonio Micheli, of Florence, author of Nova Plantarum Genera, Flor 1729, fol A lofty tree, with fragrant flowers, and fruit edible, but not agreeable In our stoves it grows well in light loam, and cuttings root in sand under a glass and plunged in heat

1219 *Uvaria* The fruit grows in bunches like a small bunch of grapes, whence it has been called *Uvaria* from *Uva* The berries are considered a specific for gonorrhœa, and are used under the name of *cubebs* These are trees or shrubs with erect or trailing stems, and 1-4-flowered axillary peduncles

1220 *Anona* This is called by the Malays, *manoa*, and at Banda, *menona*, which it is presumed that the Europeans have corrupted into Anona As the word signifies in Latin food, it has been adopted by Linnæus in this sense, because of the habitual use made of the fruit by the Americans The species are for the most part fruit trees, with soft pulpy subacid berries, sometimes as large as an orange, but generally more like a plum

A muricata is common in every savannah of Jamaica, flowering in the spring. The large succulent fruit is agreeable to new-comers and over-heated habits, but it is so common, and so much in use among the negroes, that it is now hardly ever used among the better sort of people The smell and taste of the fruit, flowers, and whole plant, resemble very much those of black currants.

A tripetala is a large tree with large bright green leaves The fruit is oblong, scaly on the outside, and of a dark purple color when ripe, the flesh is soft and sweet, and has many brown seeds intermixed with it which are very smooth and shining It is esteemed by the Peruvians as one of their most delicate sorts.

A palustris grows wild in soft marshy places in Jamaica, and bears a fine sweet-scented fruit, of no disagreeable flavour; but it is said to be a strong narcotic, and is not eaten on that account. It is called alligator apple. The wood of this tree is so very soft, even after it is dried, that it is frequently used by the country people instead of corks, to stop up their jugs and calabashes; whence it has now universally obtained the name of cork-wood in Jamaica. (*Browne*)

To bear fruit in our stoves, these trees require a rich loamy soil, rather moist, and to be trained on a wall or trellis close under the glass Ringing would also be useful They are propagated by ripened cuttings, of a good size, with their leaves on, planted in sand, and plunged in heat.

7918 Leaves lanceolate smooth

7919 Leaves lanc. acuminate, Pedunc. lateral solitary 1-flowered

7920 Leaves ovate lanceolate smooth somewhat shining, Pedunc. solitary 1-flowered
7921 Leaves ovate lanceolate not dotted very finely silky beneath, Outer petal downy outside

7922 Leaves lanceolate smooth with pellucid dots, Outer petals smooth
7923 Leaves obl acute somewhat downy above, silky and rufous beneath, Flowers on short stalks
7924 Leaves obl. lanc acute smooth somewhat dotted, Outer petals obl. somewhat closed
7925 Leaves ovate obl coriaceous very smooth, Fl solitary stalked
7926 Leaves ovate lanc smooth, Pedunc opposite the leaves 2-flowered

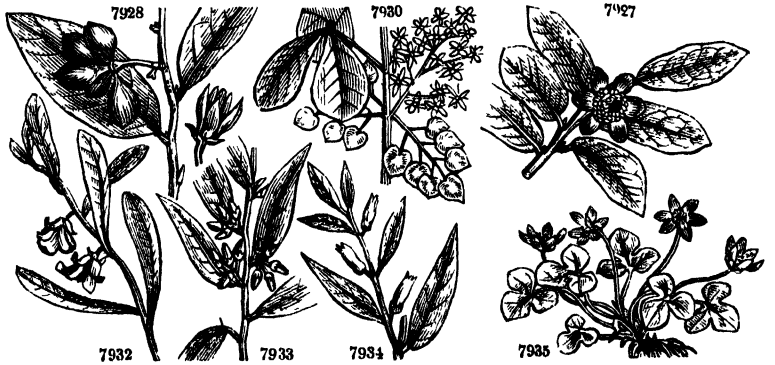
7927 Leaves obl lanc. acuminate smooth shining

7928 Leaves oval acuminate cordate covered beneath, as on the branches, with brown down
7929 Leaves ovate acuminate very smooth nearly sessile, Pedunc axillary 1-flowered

7930 Leaves obl cuneate acuminate, Branches quite smooth
7931 Leaves cuneate obovate mucronate beneath, as on the branches, rufous with down
7932 Leaves obl. linear long-cuneate, Branches quite smooth

7933 Leaves lanc. acuminate strigose beneath bearded at end
7934 Leaves obl. ovate smooth, Pedunc 1-fl solitary

7935 Leaves cordate 3-lobed, Lobes entire



and Miscellaneous Particulars

1221 *Artabotrys.* This name was suggested by the curious grapple or tendril belonging to the peduncle, by which the growing fruit is conveniently suspended on the nearest support A beautiful Chinese plant, cultivated as an ornamental covering to walls, as well as on account of the fragrance of the blossom, which diffuses an odor like that proceeding from the finer kinds of ripe fruit. The genus is intermediate, between Kadsura and Guatteria.

1222. *Guatteria* Named by the authors of the Flora Peruviana, after John Baptist Guatteri, an Italian professor of botany at Parma G virgata is one of the best timber trees in Jamaica for strength and elasticity, it is imported under the name of lance-wood, and much used by coachmakers for shafts to light carriages

1223 *Asimina* A name coined by Adanson, without any meaning Shrubs with deciduous, oblong, often cuneate leaves, and axillary flowers, which often appear before the leaves The species are natives of shady woods in the more southern provinces of North America.

1224 *Xylopia.* Named by syncope from ξυλον πικρον, bitter wood, in allusion to the properties of the wood. Fruit-bearing trees, but not in much esteem as such X glabra is the most useful species. The wood, bark, and berries have an agreeable bitter taste, not unlike that of the orange seed The wild pigeons feed much upon the latter, and owe that delicate bitterish flavor, so peculiar to them in the season, wholly to this part of their food Fresh gathered from the tree, they are agreeable to the palate and grateful to the stomach. The bark is also richly impregnated with this juice as well as the wood, and both yield a very agreeable bitter in the mouth while fresh, but that delicacy diminishes greatly after they are dried The wood is easily wrought, and esteemed a good timber where it is not much exposed to the weather. The bitter quality of this tree is communicated with great facility. A handful of the shavings immersed in water and instantly taken out again, will render it of a very bitter taste Sugar sent over in hogsheads made of this wood was so bitter that no person would purchase it. Bedsteads and presses made of it, are proof against cockroaches and other insects Carpenters who work the wood, perceive a bitter taste in their mouths and throats. A decoction of it is said to be of service in cholics, and to create appetite

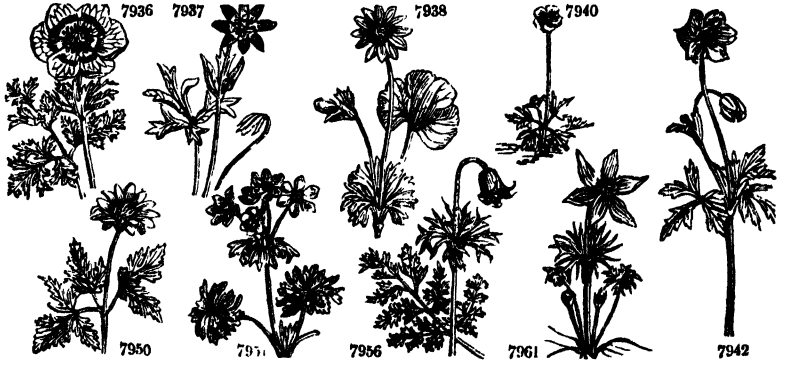
1225 *Hepatica* From ἡπατικος, of or relating to the liver The three lobes of the leaves have been compared to the three lobes of the liver A great favorite of the flower border, both as being evergreen in its foliage, and for its abundant blossoms and great variety of colors and shades.

¶1226. ANEMO'NE. *W. en* ANEMONE *Ranunculaceæ. Sp. 27—49*

7936	coronária *W.*	Poppy	△	or	½	ap my	St	Levant	1596	R l p	Bot. mag. 841
	β plèna	*double-flowered*	△	or	½	ap my	St	.....	...	R r l	
7937	hortènsis *W*	star	△	or	½	ap my	St	Italy	1597	R s p	Bot. mag 123
	A stellata Dec.										
7938	palmáta *W.*	palmated	△	or	½	my jn	Y	Portugal	1597	R s p	Bot. reg. 200
7939	sibírica *W.*	Siberian	△	or	½	jn	W	Siberia	1804.	R s p	
7940	álba *Juss*	white	△	or	½	jn	W	Siberia	1820	R s p	Bot mag. 2167
7941	baldénsis *W*	Strawberry-like	△	or	½	my	W	Switzerl	1792.	R s p	Jac ic 1 t. 103
7942	sylvéstris *W*	Snow-drop	△	or	½	ap my	W	Germany	1596.	R s p	Bot. mag 54
7943	pavonina *Dec*	Peacock-eye	△	or	1	ap my	R	France	...	R s p	Clus ic. f. 1, 2
7944	virginiána *W*	Virginian	△	or	½	my jn	W	N Amer	1722	R s p	Herm. par. t. 18
7945	uralénsis *Dec*	Ural	△	or	½	my	B	Siberia	1824	R s p	
7946	pensylvánica *Ph*	Pensylvanian	△	or	1	my jn	W	N Amer	1766	R s p	
7947	dichótoma *Ph*	forked	△	or	1	my jn	Pa w	N Amer	1768	R s p	Lin fil d 2 t.15
7948	trifólia *W*	three-leaved	△	or	½	ap my	W	France	1597	R s p	Mor s 4 t 25.f 1
7949	nemorósa *W*	wood	△	or	½	mr my	W	Britain	woods	R s p	Eng bot 355
7950	apennina *W*	blue mountain	△	or	½	mr ap	B	England	woods	R s p	Eng bot. 1062
7951	ranunculoides *W*	yellow wood	△	or	½	mr ap	Y	England	woods	R s p	Eng bot. 1484
7952	narcissiflóra *W*	Narcissus-flow	△	or	1	my	W	Siberia	1773	R s p	Bot. mag 1120
7953	thalictroides *W*	Meadow-rue-lv	△	or	½	ap my	W	N Amer	1768	R s p	Bot. mag. 866
7954	alpina *W en*	Alpine	△	or	½	jl	W	Austria	1658.	R s p	Jac aus 1 t. 85
7955	praténsis *W en.*	meadow	△	or	½	my	D Pu	Germany	1731.	R s p	Fl dan t 611
7956	obsoléta *Sims*	pale-flowered	△	or	½	my	Pu	Germany	...	R s p	Bot mag. 1863
7957	Pulsatílla *L*	com Pasque fl	△	or	½	ap my	V	England	ch pa.	R s p	Eng bot 51
7958	Halléri *W en*	Haller's P fl	△	or	½	ap my	Pu	Switzerl	1816	R s p	All ped. t. 80 f 2
7959	vernális *W en*	spring P fl	△	or	½	ap	Pa w	Switzerl	1752	R s p	Fl dan t. 29
7960	cérnua *W*	drooping P fl	△	or	½	my jn	R w	Japan	1806	R s p	
7961	pátens *W en*	spreading P fl	△	or	1	jn jl	Li Y	Siberia	1752	R s p	Bot mag 1994
7962	capénsis *Dec*	Cape	▱	or	1	mr ap	Pu	C G H	1795	S p l	Bot mag 716
	Atragene capensis L.										

†*1227 CLE'MATIS *L* VIRGIN'S BOWER. *Ranunculaceæ Sp 26—90.*

§7963	austríaca *H K*	Alpine		or	12	my jl	B	Austria	1792	C co	Bot. rep 180
§7964	sibírica *H K*	Siberian		or	12	jn jl	W	Siberia	1753.	L co	Pall ross. 2 t.76
§7965	verticillàris *Dec*	American		or	15	my jn	Pu	N Amer	1797.	L s p	Bot mag 887
	A Americana H K.										
7966	glaúca *W.*	glaucous		or	12	ap	Pa Y	Siberia	...	L co	Dend brit. 73
7967	hedysarifólia *Dec*	hedysarum-lv	▱	or	12	o	W	E Indies	1819	L co	Bot reg 599
7968	chinensis *Retz*	Chinese	▱	or	12	...	W G	China	1820	L co	Retz obs t 2
7969	cirrhósa *W*	evergreen		or	12	mr ap	W G	Spain	1596.	C co	Bot. mag 1070
7970	flórida *W*	large-flowered		or	10	ap s	W Y	Japan	1776.	L s l	Bot mag 834
	β flore plèno	*double-flowered*		or	10	ap s	W Y	.....	...	L s l	
7971	Viticélla *W.*	purple		or	20	jn s	Pu	Spain	1569.	S co	Bot mag. 565
	β plèna	*double-purple*		or	20	jn s	Pu	.....	...	L co	
7972	Viórna *W.*	leathery-flower		or	12	jn s	Pu	N Amer	1730.	S co	Di el t 118 f 144
7973	reticuláta *Ph*	netted		or	8	jn s	Pu	N. Amer	1812	L s p	Dend brit 72
7974	cylindrica *H K*	long-flowered		or	8	jl s	B	N Amer	1802	L p l	Bot mag 1160
7975	crispa *B M*	curled-flowered		or	6	jl s	Pa pu	N Amer	1726	L p l	Bot mag 1892
7976	baleárica *Ruch.*	Minorca	▱	or	12	f mr	Y w	Minorca	1783	C co	Bot. mag 959
	calycina W.										
7977	orientális *W*	oriental		or	8	jl o	Y w	Levant	1731	Sk co	Di el t 119 f 145
7978	virginiána *W*	Virginian		or	15	jn au	G	N Amer	1767	L s p	Dend brit. 74
7979	dioica *W*	Jamaica	▱	or	15	my jn	G Y	W. Indies	1733	L s p	Slo ja. 1 t.128.f 1
7980	aristáta *B Reg*	awned-anther	▱	or	15	my au	G Y	N Holl	1812	L s p	Bot reg. 238
7981	brachiáta *B Reg*	armed	▱	or	12	o d	Y G	C G H	...	L s.p	Bot. reg. 97



History, Use, Propagation, Culture.

1226 *Anemone* From ἄνεμος, wind, because the greater part of the species grow in elevated places much exposed to the wind The species are shewy flowering plants, and A coronaria and hortensis are well known florists' flowers, valued for their hardy nature, and also because they will flower at almost any season, according to the time the roots are kept out of the ground, and the season when they are replanted. The prevailing colors are red, white, and blue, and semidouble flowers are in nearly as much repute as double ones. Many new varieties have been raised from seed, but they are not named by the florists, as in the case of tulips and and pinks. The roots of anemones are solid flattened masses like those of ginger, and like them are multiplied by division. A root which has remained in the soil two or three years, if it has room to extend, attains a great breadth, but is still only one root, and hence the mode of sale is by weight, and the roots are divided when planted.

The soil preferred by the anemone is a fresh loam, rather heavy or light The usual time of planting is the end of October, covering the roots three inches, but to have an early bloom they may be planted in the beginning of September, and to have a bloom every month in the year, plant every month. The finer sorts

7936 Leaves ternate with multifid segments and linear mucronate lobes, Sep. 6 oval close

7937 Leaves 3-parted with cuneate cut-toothed lobes, Involucre sessile obl. entire or cut, Sepals 10-12 oblong

7938 Leaves cordate roundish bluntly 3-5-lobed toothed, Involucre sessile trifid, Sepals 10-12 oblong
7939 Leaves ternate with cut-toothed ciliated segments, Involucre on short stalks 3 cut, Sepals 6 round
7940 Leaves ternate or quinate, Segments cut-toothed at the end, Involucre stalked similar, Sepals 5 obovate
7941 Lvs biternate with a branch stalk, Segm many-part with lin lobes, Inv shortly stalk multifid, Sep obl
7942 Leaves ternate or quinate, Segm cut-toothed at end, Involucre stalked similar, Sepals 6 elliptical
7943 Leaves 3-parted with cuneate cut-toothed lobes, Involucre sessile oblong entire or a little cut, Sep very acute
7944 Leaves ternate with trifid acuminate cut-toothed segments, Involucre stalked similar, Sepals 5 elliptical
7945 Involucre leaves on short stalks thrice cut with linear cut-toothed segments, Sepals 5-6 oval-oblong
7946 Leaves 3-parted with cut-toothed acuminate lobes, Involucre sessile similar, Sepals 5 elliptical, Fruit hairy
7947 Leaves 3-parted with cut-toothed oblong lobes, Involucre sessile similar, Sepals 5 elliptical, Fruit smooth
7948 Leaves all stalked ternate with ovate lanc acute-toothed segments, Sepals 5 elliptical obtuse
7949 Leaves ternate with trifid cut-toothed lanc acute segments, Involucre stalked similar, Sepals 6 elliptical
7950 Leaves 3-ternate with a branched stalk, Sepals 12-14 oblong obtuse, Leaves of involucre stalked
7951 Radical lvs 3-5 cut with subtrifid cut-toothed segments, Involucre stalk 3-parted toothed, Sep 5-6 elliptical
7952 Radical leaves villous palmate 3-5-parted with cut-toothed lobes, Lobes lin acute, Fl umbelled
7953 Flowers umbelled, Floral leaves stalked biternate forming a sort of involucre
7954 Leaves biternate with a branched petiole, Segm pinnated cut serrate, Sepals 6 spreading
7955 Leaves pinnated with multifid segments, Lobes linear, Flowers pendulous, Sepals 6 erect reflexed at end
7956 Like the last, but the flower larger and paler, and the lobes of the pinnæ broader and awned
7957 Leaves pinnated with multifid segments, Lobes linear, Flower somewhat nodding, Sepals 6 spreading
7958 Leaves pinnated very villous with 3-parted segments, Lobes lanc lin acum Fl erect, Sep 6 oval lanceol
7959 Leaves pinnated with cuneate lanceolate trifid smoothish segments, Fl. erect, Involucre very villous
7960 Leaves pinnated villous beneath, Segm pinnatifid, Lobes cut oblong, Fl subcernuous, Sep 6 spreading
7961 Leaves pinnate coming after the flowers, Segm 3-parted, Lobes toothed cut at end, Fl erect spreading
7962 Leaves biternate rigid smooth, Segm cuneiform toothed at end

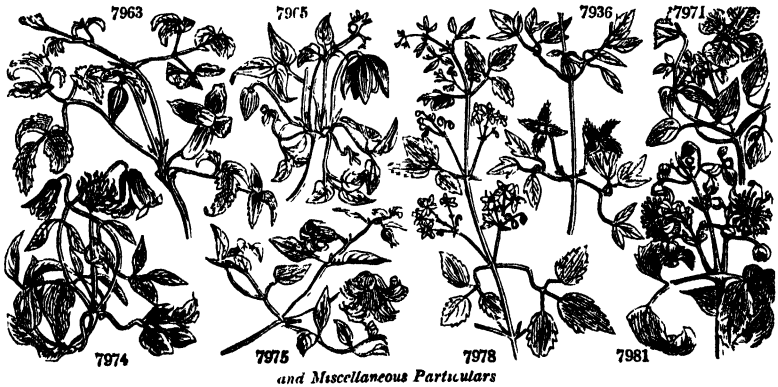
7963 Peduncle 1-fl longer than leaf, Lvs biternate, Segm ovate-lanc acuminate serrate, Pet subspatulate obtuse
7964 Peduncle 1-fl the length of leaf, Leaves biternate with obl lanc acuminate segments, Pet emarginate at end
7965 Peduncle 1-fl Leaves whorled in fours ternate, Segm stalked cordate lanc entire, Petals acute

7966 Leaves pinnate, Segm glaucous smooth cuneiform lobed, Lobes entire blunt, Peduncle trifid
7967 Fl panicled, Leaves ternate, Segm ovate lanc acumin nearly entire smooth 5-nerved at base
7968 Leaves pinnated, Segm ovate lanc entire, Peduncle few-fl longer than leaf, Ovaries about 4, Tails almost
7969 Peduncle 1-fl with an involucrum, Leaves ovate subcordate toothed fascicled [naked
7970 Peduncle 1-fl longer than leaf, Leaves tern decompound, Segm ovate acute entire, Sepals much pointed

7971 Peduncle 1-fl longer than leaf, Leaves entire or ternate decomp Lobes or segm entire, Sepals obovate

7972 Peduncle 1-fl Sep connivent thick reflexed at end acuminate, Lvs smooth with ent or 3-lob ov acute segm
7973 Peduncle 1-fl Sep connivent, Lvs coriaceous netted nerved smooth with stalked 3-lobed or entire segments
7974 Peduncle 1-fl Sep acumin wavy at edge thin, Lvs smooth thin decompound with stalked ov or obl segm
7975 Peduncle 1-fl shorter than leaf, Leaves entire 3-lobed very acute, Sepals conniving at base spreading at end
7976 Peduncle 1-fl with an involucre under the leaf, Leaves ternate with stalked ternate cut-toothed segments

7977 Leaves pinnate with glaucous smooth wedge-shaped 3-lobed segments, Lobes toothed acuminate
7978 Fl panicled dioecious, Leaves ternate, Segm cordate acute coarsely toothed and lobed
7979 Fl panicled dioecious, Lvs tern Segm smooth ovate cordate acuminate 3-nerved ent. Pedicels pubescent
7980 Fl panic. dioec Sep 4 Lvs tern Segm ovate subcord acute coarsely toothed 3-nerv Anth awned at end
7981 Ped 3 1-fl or 3-fid or panic long than lvs Lvs tern or pinn Segm ovate coarsely toothed, Fl-buds globose



and Miscellaneous Particulars

require protection from violent storms and excessive light and heat, but many varieties do exceeding well in borders A very severe winter will destroy the roots if the surface is not mulched, but the anemone is considerably hardier than the ranunculus Anemone pulsatilla is common in borders The roots are mostly tuberous, and when taken up should not be long kept out of ground Like most tuberous plants, they thrive best in a sandy loam

1227 *Clematis* From κλημα, a tendril, the climbing habit of this genus is well known The species are mostly climbing shrubs of rapid growth, free-flowerers, very ornamental, and some are highly odoriferous. C florida, viticella, and flammula are admired species The plants formerly called Atragene, but now properly united to Clematis, are shewy climbers, especially C austriaca, which grows and flowers freely Any common garden soil will suit them, and they are readily increased by layers; or young cuttings, planted under a common hand-glass, will root freely. Seeds are often ripened in abundance, by which any quantity may be raised, they are best sown in pans, or wide-mouthed pots, and placed in a shady situation, where they will

7982 **Massónіana** *Dec*	Masson's	♃	⌴	or	12	...	...	C. G H	...	L	s p	
7983 **Vitálba** *W.*	Traveller's Joy	♃		or	20	jl s	W	England	hed.	S	co	Eng. bot 612
7984 **Flámmula** *W*	sweet-scented	♃		or	20	jl o	W	France	1596.	S	co	Kn. th 2. t. c. 9
α rotundifólia	*round-leaved*	♃		or	20	jl.o	W	France	1596.	L	co	
C frágrans Tenore												
β vulgáris	*broad-leaved*	♃		or	20	jl o	W	France	...	L	co	
γ maritima W.	*narrow-leaved*	♃	△	or	20	jn s	W	S Europe	...	D	p.l	
7985 **erécta** *W*	upright	♃	△	or	3	jn au	W	Austria	1597	D	p l	Jac aus 3 t. 201
7986 **angustifólia** *W*	narrow-leaved	♃	△	or	4	my s	W	Austria	1787	D	p l	Dend brit. 112
7987 **ochroleúca** *W*	silky	♃	△	or	2	jn jl	L Y	N Amer.	1767	D	p.l	Bot. cab. 661
7988 **integrifólia** *W*	entire-leaved	♃	△	or	2	jn.au	B	Hungary	1596	D	p l	Bot. mag. 65
β angustifólia	*narr -entire-lv*	♃	△	or	2	jn au	B	Hungary	...	D	p l	

1228. NARAVE'LIA *Dec* NARAVELIA — *Ranunculaceæ* *Sp* 1.

7989 **zeylánica** *W*	Ceylon	♃	▭	or	12	...	Y	Ceylon	1796	L	s p	Rox cor 2. t 188

1229 THALIC'TRUM *W* MEADOW-RUE — *Ranunculaceæ*. *Sp* 26—52

7990 **alpínum** *W*	Alpine	♃	△	or	½	my jl	W	Britain	bgs m	D	co	Eng bot 262
7991 **fœ'tidum** *W*	fœtid	♃	△	or	½	my jl	W	France	1640	D	co	Pl ra h 2 t 174
7992 **tuberósum** *W*	tuberous-rooted	♃	△	or	2	jn	W	Spain	1713	D	co	M ic 2 t.265 f 2
7993 **Cornuti** *W*	Canadian	♃	△	or	3	my jl	W	N Amer	1640	D	co	Corn can t. 187
T corynellum Dec												
7994 **dioícum** *W*	dœcious	♃	△	or	1	jn jl	L Y	N Amer	1759	D	co	
7995 **elátum** *W*	tall	♃	△	or	2	jn au	L Y	Hungary	1794	D	co	Jac vind 3 t. 95
7996 **május** *W*	greater	♃	△	or	3	jn jl	G Y	England	m thi	D	co	Eng bot 611
7997 **médium** *W*	middle	♃	△	or	1½	jn au	G Y	Hungary	1789	D	co	Jac vind. 3. t 96
7998 **minus** *W*	lesser	♃	△	or	1	jn jl	Pu	Britain	ch pa.	D	co	Eng bot 11
7999 **concínnum** *W en*	neat	♃	△	or	3	jn jl	W G	...	..	D	co	
8000 **rugósum** *W*	rough	♃	△	or	2	jl	W	N Amer	1774	D	co	
8001 **sibíricum** *W*	Siberian	♃	△	or	1	jn jl	L Y	Siberia	1775	D	co	
8002 **squarrósum** *W*	squarrose	♃	△	or	1	jn jl	L Y	Siberia	1806	D	co	
8003 **pubéscens** *Ph.*	pube-cent	♃	△	or	1½	jn jl	L Y	N Amer	1806.	D	co	
8004 **purpuráscens** *W*	purple	♃	△	or	3	jn jl	L P	N Amer	1699	D	co	
8005 **angustifólium** *W*	narrow-leaved	♃	△	or	3	jn jl	W	Germany	1739	D	co	Jac vind 3 t 43
8006 **lúcidum** *W*	shining	♃	△	or	4	my jl	La Y	Spain	1739	D	co	Pl alm t 65 f 5
8007 **flávum** *W*	common	♃	△	or	4	my jl	O	Britain	m me	D	co	Eng. bot 367
8008 **nígricans** *W*	black	♃	△	or	2	my jl	P	Austria	1798	D	co	Jac aus 5 t 421
8009 **glaúcum** *Desf*	glaucous-leav'd	♃	△	or	5	jn jl	Y	Spain	1798	D	co	Mo his t 20 f 1
speciósum W en												
8010 **ranunculinum** *W en*	Ranuncul.-lvd.	♃	△	or	1	jn jl	Pa Y	N Amer.	1806	D	co	
8011 **simplex** *W*	simple-stalked	♃	△	or	1	my jn	L Y	Sweden	1778	D	co	Fl dan 244
8012 **aquilegifólium** *W*	Columbine-lvd	♃	△	or	3	my jl	L Pu	Austria	1731	D	co	Bot mag 2025
β átro-purpúreum	*dark-purple*	♃	△	or	3	my jl	D Pu	Austria	1731	D	co	Bot mag. 118
8013 **galioídes** *W en*	sweet scented	♃	△	or	1	my jl	Y	Alsace	1816	D	co	Mo his t 20 f 8
8014 **contortum** *W*	crook-seeded	♃	△	or	2	jn jl	W	Siberia	1796	D	co	
8015 **petaloideum** *W*	Daurian	♃	△	or	3	jn jl	W	Dauria	1799	D	co	Bot cab 891

1230 ADO'NIS. *L* ADONIS. — *Ranunculaceæ* *Sp* 6—14

8016 **æstivális** *W*	tall	☉		pr	1½	jn jl	Sc	S Europe	1629	S	co	Kn th 2 t. A 12
8017 **autumnális** *W*	Pheasant's-eye	☉		pr	1	my o	Cr	Britain	cor fi	S	co	Eng bot. 308
8018 **flámmea** *W*	flame-colored	☉		pr	1	jn jl	Y	Austria	1800	S	co	Jac. aus 4 t 355
8019 **vernális** *W*	perennial	♃	△	or	1	mr ap	Y	Europe	1629	D	s p	Bot mag 134
8020 **fláva** *Vill*	yellow	☉		pr	1	jn jl	Y	S Europe		S	co	Wein phy t 28
8021 **pyrenáica** *Dec*	Pyrenean	♃	△	or	1½	jl	Y	Pyrenees	1817	D	co	

1231 KNOWLTO'NIA *H K* KNOWLTONIA — *Ranunculaceæ* *Sp* 2—5

8022 **rígida** *H K*	thick-leaved	♃	△	cu	1½	mr my	Y G	C G H	1780	S	p l	Bot cab 850
8023 **vesicatória** *H K*	blistering	♃	△	cu	1½	f.ap	Y G	C G H	1691	S	p l	Bot mag 775

1232. FICA'RIA. *Pers* PILEWORT — *Ranunculaceæ* *Sp* 1—2

8024 **ranunculóides** *Mon*	vernal	✱	△	w	¼	mr my	Y	Britain	he ba	D	l p	Eng bot 584
β plena	*double-flowered*	✱	△	or	¼	mr my	Y	Britain	he ba	D	l p	



History, Use, Propagation, Culture,

remain some time before they come up, they may then be potted off, or planted out in the ground, when they will require to be shaded a little if the weather be warm, till they have taken fresh root. (*Bot Cult.* 281)

1228. *Naravelia.* An alteration of *naravœl*, the name by which the plant is known in Ceylon. A plant with the habit of Clematis, but bearing leaves of only one opposite many-nerved pair, like Lathyrus

1229. *Thalictrum* This name is said to be derived from Θαλλω, to grow green, from the bright color of the young shoots The species are vigorous growing plants, with ramose roots and smooth finely divided leaves; they grow in any soil and situation, and T tuberosum, cornuti, and aquilegifolium, are reckoned handsome ornaments in a border or shrubbery

1230 *Adonis.* The plant which sprang from the blood of Adonis when wounded by the boar Handsome border flowers, especially A vernalis and autumnalis, and of the easiest culture in any common soil.

7982 Leaves pinnate with smooth subglaucous ovate cut-toothed 3-lobed segments
7983 Lvs. pinn. Segm. ovate-lanc cut-toothed acuminate truncate cordate at base, Pedunc. shorter than leaf
7984 Leaves pinnate, Segments smooth entire or 3-lobed round oval oblong or linear rather acute
α Segments nearly round

β Segments oval or oblong lanceolate
γ Segments linear
7985 Leaves pinnate with stalked ovate lanc. entire segments
7986 Pedunc 1-fl. Sepals 6-8 blunt, Leaves pinnate, Segm lanc lin acute or 3-lobed, Stems erect
7987 Pedunc 1-fl Fl suberect, Leaves entire ovate, young ones silky
7988 Pedunc. 1-fl Fl nodding, Leaves entire ovate lanc smooth

7989 The only species

7990 Stem simple almost naked, Raceme simple terminal, Fl nodding, Segm smooth
7991 Stem simple naked at base leafy in middle, panicled at end, Lvs pubescent viscid, Segm blunt toothed
7992 Fl loosely corymbose or subsolitary, Involucre none, Bract subsessile
7993 Fl dioecious, Filam clavate at end, Pericarp obl sessile striated, Segm of leaves bluntly 3-lobed

7994 Fl dioecious, Fil filiform, Segm of leaves roundish cordate bluntly lobed smooth
7995 Stem round without bloom, Fl panicled erect, Segm of leaves smooth ovate or subcordate subtrifid
7996 Stem round without bloom, Fl loosely panic Segm of leaves smooth glauc ben Peric obliq round at base
7997 Stem round without bloom, Fl. loosely panicled, Segm of lvs obl cuneiform sharply trifid upper entire
7998 St. round cover. with a glauc. bloom, Fl loose pan. cern Segm of lvs roundish tooth at end, glauc beneath
7999 Stem round upright, Fl. cernu in a very large spreading panic Segm of lvs smooth cuneif trifid acute
8000 St. erect round striat. green, Pan erect comp Fl clust Segm of lvs ov subcord coarsely cren shin above
8001 Stem roundish, Fl panic cernuous, Segm of lvs smooth ov cuneate trifid, Lobes acute entire or finely cut
8002 Stem round, Fl panicled cernuous, Petioles stem-clasping winged
8003 Stem simple covered with scattered leaves panicled at end, Stem downy viscid
8004 Fl dioecious or monoec Filam filif colored, Segm of lvs roundish coarsely tooth smooth glauc beneath
8005 Stem upright round somewhat furrowed, Root fibrous, Panic multiple erect, Segm of lvs lin lanc entire
8006 St branch round somew. furrow Root fibr Pan multiple erect, Segm of lvs lin lanc ent cuneate at base
8007 Stem branch erect somewhat furrowed, Root fibr Pan multiple erect, Segm of lvs cuneiform trifid acute
8008 St branch. erect somew furrow Root fibr Pan multiple erect, Segm of rad lvs cuneif trif Caul obl lin
8009 Stem erect round striat glauc Pan multip erect close, Seg of lvs subcord ov bluntly trifid glauc. beneath

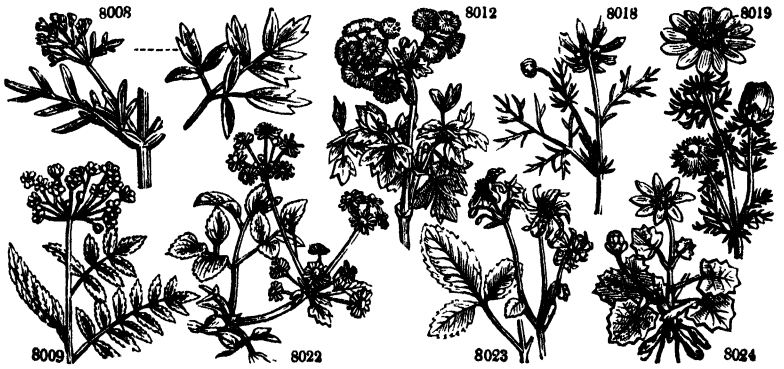
8010 Leaves simple 5-lobed serrated
8011 Stem erect simple angular, Root creeping, Panic erect racemose few-flowered, Segm of leaves linear
8012 Stipules ovate, two at the base of the ramifications of the petiole, Panic corymb Fruit 3-cornered

8013 Stem round upright somewhat furrowed, Root creeping, Panic erect, Segm of lvs lin very narrow entire
8014 Stipules O, Fl loosely corymbose racemose, Fruit 3-cornered pendulous
8015 Stem round nearly naked, Fl corymb Filam dilated at end, Segm of lvs smooth ovate entire or 3-lobed

8016 Cal hispid at base, Pet flat obl blunt, Fruit netted in a long lax spike
8017 Cal smooth, Pet conc conniving scarcely longer than cal Fruit netted in an ovate head
8018 Cal hispid at base, Pet flat acute longer than cal Flower large, Fruit in a cylindrical head
8019 Lower leaves abortive, Upper sessile, Fruit velvety, Pet 10-12 oblong somewhat toothed
8020 Cal smooth distinct at base, Pet flat obl twice as long as cal Fruit smooth in an oblong head
8021 Rad. leaves on long stalks, Stalks trifid, Fruit smooth, Pet 8-10 obl cuneate entire

8022 Umb supradecompound much spreading
8023 Umb simple few-flowered

8024 Root grumous, Stem leafy, Leaves cordate



and Miscellaneous Particulars

1231 ***Knowltonia.*** Named after Thomas Knowlton, once the curator of the botanic garden at Eltham The species grow freely in loam and peat, and are increased by dividing at the root, and by seeds

1232 ***Ficaria.*** So named because the grumous roots bear tubercles like little figs A common wood plant, remarkable for its shining leaves and bright yellow flowers. The young leaves are sometimes used as greens in Sweden, and the roots were formerly applied in poultices to piles in England, probably from their resemblance to that disease. These roots or tubercles lie near the surface, and are sometimes laid bare by the rains, and in this state have induced the ignorant, under the influence of superstition, to fancy that it rained wheat. The plant is injurious in moist grass lands, but is effectually destroyed by a dressing of coal or wood ashes.

1233. RANUN'CULUS. *W.* Crow-Foot. *Ranunculaceæ* *Sp* 49—160

8025	Flámmula *W.*	lesser-Spearw.	△	cu	1	jn s	Y	Britain	wa pl	D	co		Eng bot 387
8026	réptans *W.*	least-Spearw	△	cu	¾	jn s	Y	Britain	wa pl	D	co		Fl dan 108
8027	Língua *W*	great-Spearw	△	cu	2	jn au	Y	Britain	mud d.	D	co		Eng bot 100
8028	nodiflórus *W*	knot-flowered	○	w	½	my jl	Y	Sicily	1714	S	co		Bot mag 2171
8029	gramíneus *W*	grassy	△	or	1	ap jn	Y	Wales	al me	D	co		Eng bot 2306
8030	parnassifólius *W*	Parnassia-lvd	△	or	¾	jn jl	St	S Europe	1769	D	co		Bot mag 986
8031	amplexicaúlis *W*	Plantain-leav'd	△	or	1	ap my	W	Pyrenees	1633.	D	co		Bot mag 266
8032	bullátus *W*	Portugal	△	or	1	my jn	Y	S Europe	1640.	D	co		M his t 31 f 50
8033	Thóra *W*	kidney-leaved	△	or	¾	my jn	Y	Austria	1710.	D	co		Jac aus 5 t.442
8034	monspeliácus *Gouan*	Montpelier	△	or	1	ap my	Y	S France	...	D	co		M his t 30 f 43
8035	lácerus *Dec*	torn	△	cu	¾	my jn	Y	S France	1821	D	co		Bell taur. 5. t.8
8036	ophioglossifólius *Dec*	Snake's-tongue-l	○	w	¾	jn	Y	S Europe	1823	S	co		
8037	salsuginósus *Pall*	salt	△	cu	1	ap my	Y	Siberia	1822	D	co		Jac. vind. t 31
8038	fumariæfólius *Desf*	fumitory-leav'd	△	cu	1	my jn	Y	... ..	...	D	co		
8039	crético us *W.*	Cret n	△	or	1	ap my	Y	Candia	1638	D	co		Mo his.t 31.f 48
8040	cassubicus *W*	Calth i-leaved	△	or	2	jn jl	Y	Siberia	1794	D	co		Bot. mag 2267
8041	auricomus *W*	wood	△	w	1½	ap my	Y	Britain	woods	D	co		Eng bot. 624
8042	arbortivus *W*	three-flowered	△	w	¾	my au	Y	N Amer	1713	D	co		
8043	sceleratus *W*	Celery-leaved	○	p	2	my jn	Y	Britain	wa pl	S	co		Eng bot 681
8044	acontitifólius *W*	Aconite-leaved	△	or	1	my jn	W	Al of Eur	1596	D	co		
	— *flore pléno*	*double-flowered*	△	or	1	my jn	W	Al of Eur	1596	D	co		Bot mag 204
	β *platanifólius* W	*Plane-tree-lvd*	△	or	2	jn jl	W	Germany	1769	D	co		Fl dan 111
8045	pedátus *W en*	pedate	△	or	1	my jn	Y	Hungary	1806	D	co		Bot. mag. 2229
8046	illyricus *W*	Illyrian	△	or	1½	my jn	Y	S Europe	1596	D	co		Jac. aus 3 t 222
	R serriceus W												
8047	asiáticus *W*	common-gard	△	or	¾	my jn	Va	Levant	1596.	D	r m		Mill ic 2 t 216
8048	chærophyllus *L*	villous	△	cu	1	my jn	Y	Portugal		D	r m		Mo h t 30 f 44
8049	rutæfólius *W*	Rue-leaved	△	pr	¼	my jl	Y	Austria	1759	D	r m		Jac col 1 t 6,7
8050	glaciális *W.*	two-flowered	△	pr	¼	jn au	Y	Lapland	1775	D	s l		Fl dan 19
8051	nivális *W.*	snowy	△	pr	¼	jn au	Y	Lapland	1775	D	s l		Fl lap t 3 f 2
8052	montánus *W*	mountain	△	pr	¼	jn au	Y	Lapland	1775	D	s l		Jac aus t 325,6
8053	alpéstris *W*	alpine	△	pr	½	jn au	W	Scotland	al riv	S	co		Eng bot. 2390
8054	pensylvánicus *W*	Pensylvanian	ⓞ	w	1	jn jl	Y	N Amer	1785	D	p l		Jac ic 1 t 105
8055	bulbósus *W*	bulbous	△	w	¼	my jn	Y	Britain	me pa	S	co		Eng. bot 515
8056	hirsutus *H K*	pale hairy	○	w	1	jn o	Y	England	rubble	D	co		Eng bot 1504
8057	marylándicus *Ph*	Maryland	△	un	1	my jl	Pa Y	N Amer	1811	D	co		
8058	répens *W*	creeping	△	w	¼	my au	Y	Britain	me pa	D	co		Eng bot 516
	β *flore pleno*	*double-flowered*	△	or	¾	my au	Y	.....		D	co		
8059	polyánthemos *B*	many-flowered	△	un	¼	my jn	Y	N Europe	1596	D	co		Lob ic 666
8060	ácris *W*	upright	△	w	1½	jn jl	Y	Britain	me pa	D	co		Eng bot 652
	β *flore pléno*	*double-flowered*	△	or	2	jn jl	Y	Britain	..	D	co		Bot mag 215



History, Use, Propagation, Culture,

1233 *Ranunculus* Said to be so called from *rana*, a frog, because the species inhabit humid places frequented by that reptile *Renoncule*, Fr, *Ranunkel*, Ger, and *Ranuncolo*, Ital Some of the species are weeds, one or two border flowers, and R asiaticus is one of our most esteemed florists' flowers. Some of the species are tuberous and others bulbous rooted, but the most part are tuberous R sceleratus is one of the most virulent of our native plants Bruised and applied to the skin it soon raises a blister, and makes a sore by no means easy to heal Strolling beggars have been said to use it for that purpose, in order to excite compassion When chewed, it inflames the tongue, and when taken into the stomach, it produces violent effects It is suspected to have proved poisonous to sheep

R. aconitifolius is a handsome plant, with branching stems, deep green leaves, and pure white flowers, the double variety is an old and much admired border flower

Of R asiaticus the varieties raised from seed are endless Maddock, in the end of the last century, had nearly eight hundred, all with proper names, and ranged as purple, gray, crimson, red, rose, orange, yellow, white, olive, coffee, striped, spotted, &c No plant is more prolific in new varieties from seeds, no two plants, as Maddock observes, producing flowers alike, or the same as the original Established sorts are propagated by offsets, which generally flower the first year rare sorts may be multiplied by dividing the crown of the tuber with a sharp penknife into as many parts as there are buds these will not flower till the second year, but will diminish the risk of losing a very rare variety

The ranunculus prefers a fresh loamy soil, rather than otherwise inclined to clay · it should be well manured, and it is customary, in forming the beds, to place a stratum of well rotted cow-dung six or nine inches below the surface, which both retains moisture and supplies nourishment The roots may either be planted in November or earlier, in which case, to prevent their being destroyed by the frost, they should be mulched, or they need not be planted till March The former mode gives much the strongest bloom, as the roots, when kept in air all the winter, are apt to be over dried, and kept in sand they sometimes get mouldy and in this and similar cases, the progress of vegetation from the planting to the blossoming period, is more rapid than is natural to the species Ranunculus roots will retain their vegetative properties two and sometimes three years, a thing not common among bulbs and tubers, unless preserved dormant in an ice cold room

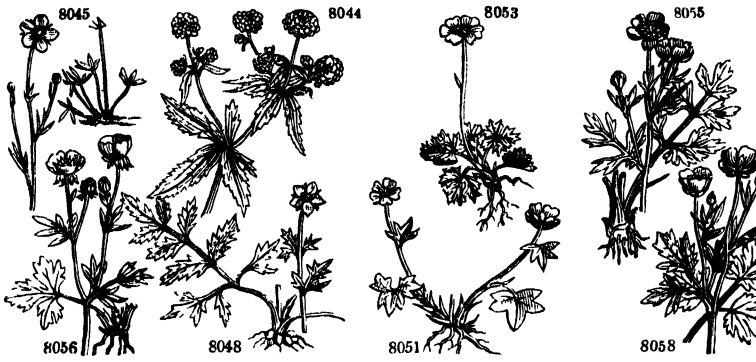
R. bulbosus has a solid white bulb about the size of that of the common Crocus The flowers are some-

8025 Leaves smooth lin. lanc lower stalked, Stem declinate solid rooting at base, Fruit smooth
8026 Leaves lin. entire smooth, Stem creeping and rooting at every joint
8027 Leaves lanc. subserrate sessile half stem-clasping, Stem erect smooth
8028 Rad leaves stalked oval-obl Fl. sess. opposite the leaves, Fruit granular scarcely crowned with the style
8029 Leaves lanc. or lin entire, Stem erect very smooth, Scales of the petals tubular
8030 Rad leaves stalked subcordate ovate-roundish · cauline sessile ovate-lanc. Pedunc. hirsute
8031 Leaves oval-lanceolate acuminate stem-clasping, Scape and peduncles smooth
8032 All the leaves radical stalked ovate toothed, Scapes naked 1-flowered
8033 Leaves smooth reniform crenate, Floral cut, Stem 2-3-fl smooth
8034 Lvs woolly 3-lobed with trifid toothed cuneate lobes upper 3-parted with entire lin lobes, Cal. reflexed
8035 Leaves cuneiform irregularly cut at the end, Stem smooth branched many-fl. Cal. appressed
8036 Lower leaves stalked cordate blunt upper obl sessile, Stem erect hollow, Fruit granular
8037 Rad lvs. stalked oval or subcord. 3-5-tooth. at end, Runners from neck of plant, Scapes naked 1-fl erect
8038 Lvs very smooth many-parted, Lobes obl Scapes many 1-fl with appressed hairs, Cal spreading smooth
8039 Covered with soft hairs, Rad lvs. stalk. cord orbic somewhat cut-tooth Stem branched, Cal appressed
8040 Lvs smooth radic stalked reniform crenate, caul in linear lobes, Cal pubescent shorter than petals
8041 Leaves smooth. radic stalked cordate generally 3-parted or lobed, Calyx pubescent shorter than petals
8042 Lvs. smooth · radic stalk cordate-roundish crenate some 3-parted or cut, Cal smooth longer than petals
8043 Lvs smooth radic stalk 3-part Lobes 3-lob bluntly cut, Cal. smooth, Fruit very small in an obl spike
8044 Lvs palm 3-7-parted cut-toothed upper sessile with lin. lanc. lobes, Stem branch many-fl Cal appressed

β Radic leaves 5-7-lobed with acuminate lobes, Bractes lin entire
8045 Leaves smooth radic. stalked 3-parted or pedate, upper linear, Stem erect few fl Calyx appressed
8046 Lvs silky· first ent lin. lanc, rest 3-part. with entire or 3-part lobes, Stem many-fl Cal somewhat reflexed

8047 Leaves tern or bitern. Segm toothed or cut trifid, Stem erect simple or branched, Fruit in a cylindr spike
8048 Rad lvs stalked villous 3 cut first ovate toothed or 3-lobed, Stem erect 1-2-fl Cal spreading subreflexed
8049 Leaves pinnate with 3-lobed cut multifid lobes, Stem about 1-fl Cal smooth, Pet 8-10
8050 Radical leaves stalked palmate 3-parted with trifid blunt thick lobes, Calyx very hirsute
8051 Leaves smooth: radical stalked 5-fid with entire ovate lobes, Calyx very hirsute twice as short as petals
8052 Rad lvs smooth 3-parted round with trifid blunt segments cauline sess linear-lobed, Cal nearly smooth
8053 Leaves round 3-lobed, Lobes blunt crenate at end, Stem about 1-fl Cal smooth, Pet obcord or 3-lobed
8054 Stem and petioles cover with stiff hairs, Lvs 3-fid with stalk acutely 3-lob segm Cal reflex Style smooth
8055 Rad. lvs stalked 3-cut with trifid cut segm., of which the middle one is stalked, Stem erect, Cal reflexed
8056 Lvs 3-lob. with blunt cut lobes, of which the mid is stalk Cal refl Grains with a single row of minute warts
8057 Stem and petioles with soft hairs at base, Lvs. smooth trif. with 3-lob ac. cut segm Cal. smooth spreading
8058 Lvs pinnate 3-fid with cuneate 3-lobed cut segm Runners creeping, Cal. erect, Grains with an acute point

8059 Lvs. 3-5-lob with lin divisions, Stem erect and petioles with spreading hairs, Pedunc furrowed, Cal hairy
8060 Lvs pubesc or smooth, Lobes cut-tooth. acute upper lin Stem many-fl pubesc Cal vill Grains mucron



and Miscellaneous Particulars

times double, but not so frequently as R acris It is distinguished from R repens, with which it has been confounded by some authors, by its roots, by its never throwing out runners, and by its reflexed calyx, this last character arises from its particular structure, the lower half being thin and almost transparent, and therefore not having a sufficient degree of solidity to support itself upright It is the second flower which, next to the Dandelion, covers the meadows with dazzling yellow Like most of the Crow-foots, it possesses the property of inflaming and blistering the skin, particularly the root, which is said to raise blisters with less pain and more safety than Spanish flies, hence these roots have been applied for that purpose, particularly to the joints in cases of the gout According to Hoffman, beggars make use of them to blister their skins, with a view of exciting compassion The juice of the herb is said to be more acrid than that of R sceleratus, and if applied to the nostrils, it provokes sneezing The roots, on being kept, lose their stimulating quality, and are even eatable when boiled Hogs are fond of them, and frequently dig them up. The herb is too acrid to be eaten unmixed by cattle, accordingly the flowering-stalks are left to perfect the seed in pastures some of it, however, is consumed, and it is not improbable that this and other pungent plants, mixed with the grasses, may act as a powerful stimulus to some animals, as salt does to others It abounds in dry pastures, and flowers in May Besides the name of round-rooted or bulbous Crowfoot, it is called by the common people butter-flower, butter-cups, king-cups, gold-cups, and it is the cuckoo-buds of yellow hue, of Shakspeare. R. repens, hirsutus, and acris, however, are all confounded with this under one name by the vulgar

R repens is an obnoxious plant in every description of gardening and agriculture. From the great variety of soil and situation in which it is found, it assumes many varieties, by a river's side, or in marshes, it will grow three or four feet high, with a stem nearly as large as the human thumb, in barren gravelly fields it is entirely procumbent, with a stem not larger than a small wheat-straw; but in all states it retains the character of the creeping stem, and it does not lose it in cultivation Its principal time of flowering is in June, but it may be found in blossom during most of the ensuing summer months in meadows and pastures, under hedges, in shady waste places, church-yards, and gardens The qualities of this and bulbosus are similar both blister the skin, and are very acrid in taste Like R. acris and bulbosus, it is sometimes found double, but more rarely.

R. acris is supposed to possess the blistering property in a considerable degree, whence Linnæus gave it the

8061 lanuginósus *W*	woolly-leaved	♃	△	or	1	jn jl	Y	S. Europe 1683.	D	co	Fl dan 397
8062 par'vŭlus *W*	little-upright		○	w	½	jl au	Y	England ...	S	co	Col ec. t 316 f 1
8063 hederáceus *W.*	Ivy-leaved	♃	△	pr		my.au	W	Britain wat. pl	D	co	Eng. bot. 2003
8064 aquátilis *W*	various-leaved	♃	△	pr		ap au	W	Britain dit.	D	co	Eng bot. 101
8065 tripartitus *Dec*	three-parted	♃	△	pr		ap au	W	Europe dit	D	co	
8066 pan'tothrix *Dec*	rigid-leaved	♃	△	pr		ap au	W	Britain ...	D	co	
β fluviátilis W	*long-lvd -water*	♃	△	or		ap au	W	Britain ...	D	co	Fl dan 376
8067 arvénsis *W*	corn	♃	△	w	1	jn au	Y	Britain cor fl	D	co	Eng bot 135
8068 oxyspérmus *W*	sharp-grained	♃	△	or	1	my	Pa Y	Caucasus 1822	D	co	
8069 hyperbóreus *L*	northern	♃	△	cu	½	ap my	Y	N Europe 1820	D	co	Fl dan t 331
8070 Gouáni *W*	Gouan's	♃	△	or	1	my au	Y	Pyrenees 1818	D	co	Go ill t 17 f 1,2
8071 nemorósus *Dec*	wood	♃	△	or	1	my au	Y	Switzerl 1810	D	co	
8072 muricátus *W*	prickly seeded		○	w	½	jl au	Y	S Europe 1683	S	co	Vent cels t. 73
8073 parviflórus *W*	small-flowered		○	w	¼	my jn	Y	England gra pl	S	co	Eng. bot. 120

1234. TROI'LIUS. *W* GLOBE-FLOWER. *Ranunculaceæ Sp 3—5*

8074 americánus *Muhl lâxus* Ph	American	♃	△	or	¼	my jl	Y	N Amer 1805	D	co	Bot. mag 1988
8075 europæ'us *W*	European	♃	△	or	2	mv jn	Y	Britain groves	D	p l	Eng bot 28
8076 asiáticus *W*	Asiatic	♃	△	or	1	my jn	D O	Siberia 1759	D	p l	Bot mag 235
β intermédius	*intermedsate*	♃	△	or	1	my jn	Y	....	D	p l	
γ hýbridus	*hybrid*	♃	△	or	1	my jn	Y	....	D	p l	

1235 ISOPY'RUM *W* ISOPYRUM *Ranunculaceæ Sp 2—4*

8077 fumarioides *W.*	Fumitory-lvd		○	pr	1	jn	W G	Siberia 1741	S	s l	Am rut 71 t 12
8078 thalictroides *W*	meadow-rue-lv	♃	△	pr	¼	mr ap	W G	Italy 1759	D	s l	Jac aust 2 t 105

1236 ERAN'THIS *Sal* WINTER-ACONITE *Ranunculaceæ. Sp 1—2*

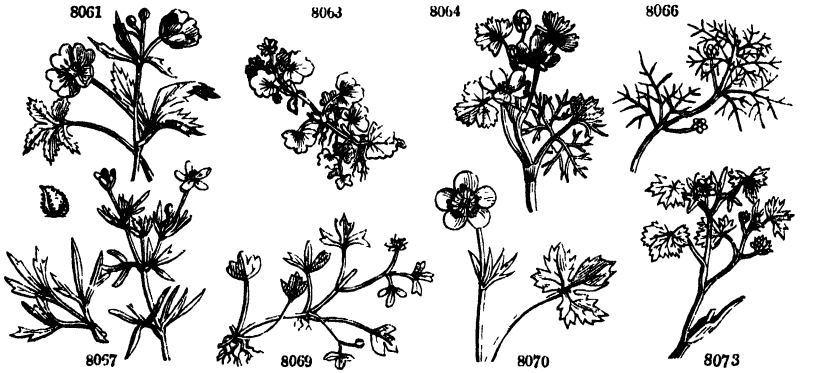
8079 hvemális *Sal*	common	♂	△	or	¼	ja mr	Y	Italy 1596.	O	co	Bot mag. 3

1237 HELLE'BORUS. *W* HELLEBORE *Ranunculaceæ. Sp 7—9*

8080 niger *W*	Christmas Rose	♃	△	or	1	ja mr	Pk	Austria 1596	D	r m	Bot mag 8
8081 víridis *W*	green	♃	△	or	2	mr ap	G	Britain woods	D	co	Eng bot 200
8082 purpurásccns *Pers*	purplish	♃	△	or	1½	mr ap	Pu G	Hungary 1817	D	s l	Pl ra. h 2. t. 101
8083 odórus *W en*	sweet-scented	♃	△	or	1½	mr ap	G	Hungary 1817	D	s l	
8084 dumetórum *W en*	bushy	♃	△	or	1½	mr ap	G	Hungary 1817	D	s l	
8085 fœ'tidus *W.*	Bear's-foot	♃	△	or	1½	f ap	G	England cha pa	D	co	Eng bot 613
8086 lívidus *W*	three-leaved	♃	△	or	1	ja my	Pu	Corsica 1710	D	p l	Bot mag 72

1238 COP'TIS *Sal* COPTIS. *Ranunculaceæ Sp 1—2*

8087 trifólia *Ph*	three-leaved	♃	△	pr	¼	ap my	Br	N Amer 1782	D	p l	Bot cab. 173



History, Use, Propagation, Culture

name of acris Curtis says, that even pulling up the plant, and carrying it to some little distance, has produced a considerable inflammation in the palm of the hand that cattle, in general, will not eat it, yet that sometimes, when they are turned hungry into a new field of grass, or have but a small spot to range in, they will feed on it, and hence their mouths have become sore and blistered According to Linnæus, sheep and goats eat it, but kine, horses, and swine refuse it When made into hay it loses its acrid quality, but then it seems to be too stalky and hard to afford much nourishment if it be of any use it must be to correct, by its warmth, the insipidity of the grasses In many pastures the flowering stems are left standing in vast abundance to disseminate their seeds before they do that, they might easily be cut down with the scythe, or pulled up by women and children after a shower, which would more effectually destroy the plants, they should be gathered into heaps and burnt It flowers in June and July, and is confounded vulgarly with the repens and bulbosus, under the name of butter-flower or butter-cups, under a notion that the yellow color of butter is owing to these plants It is the richness and exuberance of the pasture that communicates this color, and not these flowers, which the cattle seldom or ever touch It is frequent in gardens with a double flower, among other herbaceous perennials, under the name of yellow bachelor's buttons

R. aquatilis produces flowers which are sometimes very large, and make a handsome show in ponds and ditches. the curious variety in the floating and immersed leaves, occasioned by the depth and velocity of the stream, adds to the beauty of this common aquatic plant. Dr Pulteney (*Linn Trans* vol 5 p 19) contradicts the assertions of its deleterious qualities, and proves that it is not merely innoxious, but nutritive to cattle, and capable of being converted to useful purposes in agricultural economy In the neighbourhood of Ringwood, on the borders of the Avon, some of the cottagers support their cows, and even horses, almost wholly by this plant. A man collects a quantity every morning, and brings it in a boat to the edge of the water, from which the cows eat it with great avidity, insomuch that they stint them, and allow only about twenty-five or thirty pounds to each cow daily One man kept five cows and one horse so much on this plant with the little which the heath afforded, that they had not consumed more than half a ton of hay throughout the whole year, none being used except when the river is frozen over. Hogs also are fed with this plant, and improve so well on it, that it is not necessary to give them any other sustenance till they are put up to fatten This property of water-crowfoot is the more remarkable, as all the species have been deemed acrimonious, and some of them are, without doubt, highly so It is probable this species is rendered inert as a poison by growing in the water; although it must be confessed, that in other instances moisture heightens the deleterious property of vegetables, especially in the umbelliferous tribe.

8061 Leaves trifid silky, Lobes broad toothed cut, Stem and petiole with reflexed hairs, Grains hooked
8062 A small variety of R. hirsutus, with a dwarf 1-flowered stem
8063 Lvs. reniform 3-5-lobed with broad entire blunt lobes, Pet. scarcely longer than cal Petals 5-12 [bristles
8064 The submersed lvs capill multifid emersed 3-part. with cuneif lobes tooth at end, Grains hispid with stiff
8065 The submersed lvs capillary multifid: emersed 3-part with cuneif lobes toothed at end, Grains smooth
8066 All the leaves capillary multifid, Pet obovate larger than calyx, Grains smooth

8067 Leaves smooth · radical 3-parted, cauline multifid with lin lobes, Grains with long prickles on each side
8068 Lvs vill. radic stalk. ov 3-part cut, floral 3-part. Stem erect dichotom with spread hairs, Grains muric
8069 Lvs smooth stalk bifid, Lobes oval obl divaricat the mid entire, Sheaths auricled at base, Stem filiform
8070 Radical leaves round with 5 cut lobes cauline sessile palmate, Stem pubescent, Cal subvillous
8071 Rad lvs trifid beyond midd with cuneif trifid lobes, Stem with spread hairs, Grains hooked with style
8072 Lvs smooth stalk roundish 3-lob coarsely tooth. Pedunc opp lvs Cal. spreading, Grains muricate cornute
8073 Lvs vill round 3-lob coarsely tooth. Stems soft decumb Cal reflexed as long as pet Grains tuberculate

8074 Sepals 5-10 spreading, Pet 10-15 shorter than stamens

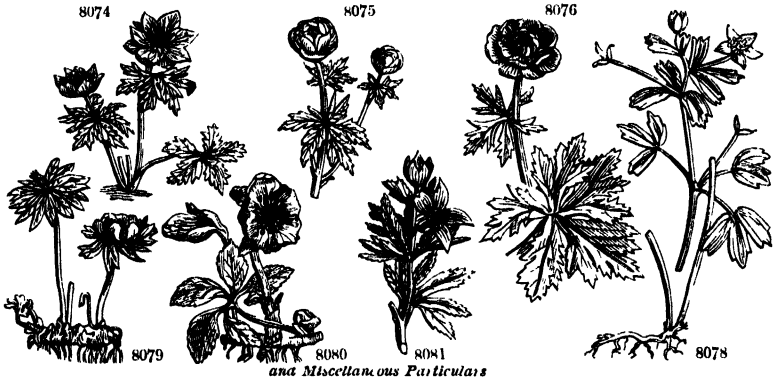
8075 Sepals 15 globose, Pet 5-10 the length of stamens
8076 Sepals 10 spreading, Pet 10 longer than stamens

8077 Caps 10-20, Sepals acute, Root slender nearly simple perpendicular
8078 Caps 1-3, Sepals blunt, Root creeping grumous

8079 Sepals 6-8-oblong

8080 Radical leaves pedate smooth, Scape leafless with 1-2-fl and bractes
8081 Radical leaves pedate smooth, cauline subsessile palmate, Sepals roundish ovate green
8082 Radical leaves palmate downy beneath, Segm cuneate at base 3-5-lobed at end, Sepals roundish colored
8083 Radical leaves palmate downy beneath, Segm obl undivided serrate at end, Sepals ovate obl acute green
8084 Radical leaves very smooth pedate cauline subsessile palmate, Sepals roundish green
8085 Stem many-fl leafy, Leaves pedate very smooth with obl linear segments
8086 Stem many-fl leafy, Leaves 3 cut smooth glaucous beneath, Segments ovate-lanceolate

8087 Leaves trifid with obovate toothed blunt 3-lobed segments, Scape 1-flowered



and Miscellaneous Particulars

This remark of Dr Pulteney's is the more important, as in the Swedish experiments the R aquatilis is recorded as the only one rejected by all the species of domestic cattle, of the common sorts, there is no doubt but that R. Flammula, bulbosus, acris, sceleratus, and arvensis are acrimonious Before the introduction of Cantharides they were used as vesicatories, and are said to act with less pain than flies, without any effect on the urinary passages, but their action is related to be uncertain, and they are accused of frequently leaving ill-conditioned ulcers

The acrimony, even of the most virulent, is wholly dissipated in drying, so that in form of hay they appear to be harmless It is also expelled in decoction, accordingly, the shepherds of Morlachia boil the R sceleratus and eat it, and both R. auricomus and repens are said to be wholly inoffensive, and are ranked by some authors among oleraceous plants

The Ranunculi give out their acrimony wholly in distillation The distilled water of R. sceleratus is intensely acrimonious, and when cold deposits crystals, which are scarcely soluble in any menstruum, and are of an inflammable nature

1234. *Trollius* A name given to this plant by Conrad Gesner It is derived from *trol* or *trolen*, an old German word, signifying something round, in allusion to the form of the flowers The species are showy flowers for the general border, and of the easiest possible culture

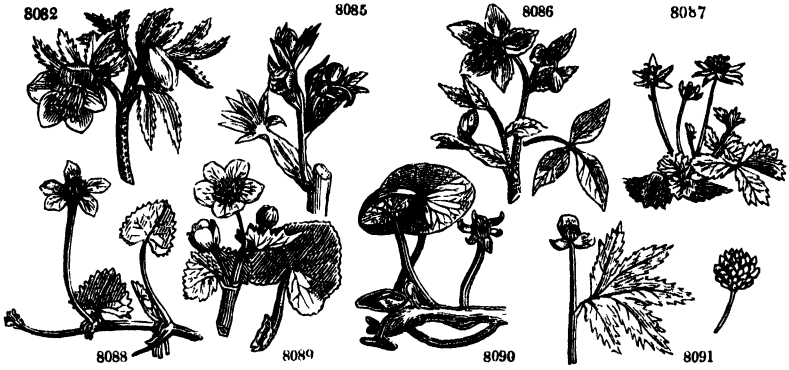
1235 *Isopyrum.* A name given by the Greeks to a plant resembling Nigella, the seeds of which had the same taste These are small herbaceous plants related to Nigella, but with the habit of Thalictrum

1236 *Eranthis* From ἠρα, the earth, and ἀνθος, flower, because the bright yellow blossoms seem to lie upon the earth A pretty little tuberous rooted plant, valuable for the early period at which it flowers

1237. *Helleborus.* From ἑλειν, to cause death, and βορα, food The dangerous qualities of Hellebore are well known Leathery leaved plants, most of which are evergreen, and flower in winter and early in spring H niger and fœtidus have long been in use in popular medicine, especially the latter, as a vermifuge and cathartic They are both admitted in the London Materia Medica, but being violent poisons, require caution in their application H fœtidus, from its deep green and finely divided leaves, forms a most ornamental evergreen bush for the shrubbery

1238 *Coptis* From κοπτω, to cut, in reference to the numerous divisions of the leaves. Small plants, with the habit of Trientalis.

1239. CALTHA *W*	MARSH-MARYGOLD		*Ranunculaceæ* *Sp* 2—7						
8088 rádicans *L T.*	creeping	☘ △ or	½ ap my Y	Scotland	sc	ma.	D	m	s Linn. tr. 8 t 17
8089 palústris *W.*	common	≚ △ or	1 ap my Y	Britain		mar.	D	m	s Eng. bot. 506
β flore pléno	double-flower'd	≚ △ or	1 ap my Y	.....		...	D	m	s
1240. HYDROPELTIS. *H K.*	HYDROPELTIS.		*Hydropeltideæ.* *Sp* 1.						
8090 purpúrea *H K*	purple	⚘ △ cu	jl au R	N Amer.		1798.	D	m	s Bot. mag. 1147
1241 HYDRASTIS *W*	HYDRASTIS		*Ranunculaceæ* *Sp.* 1.						
8091 canadénsis *W*	Canadian	⚘ △ or	½ my jn G	Canada		1759.	D	m	l Mil ic. 2. t. 285



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1239 *Caltha* A syncope of καλαθος, a goblet, in allusion to the form of the corolla, which may be likened to a golden cup The flower-buds of C palustris, gathered before they expand, are said to be a good substitute for capers The juice of the petals boiled with alum dyes paper yellow The whole plant is acrid, and not eaten by cows, unless in case of extreme hunger



CLASS XIV. — DIDYNAMIA. 4 STAMENS, of which two are shorter than the others.

THIS class, which, as its name applies, depends upon the presence of four stamens in the corolla, two of them being longer than the others, is, with the exception of Syngenesia and Gynandria, the most natural and best defined of all Linnæus's great groups, or, as he named them, classes. It is divided into two orders, called Gymnosperm.a and Angiospermia

Gymnospermia contains all the genera with what are popularly but erroneously called by the Linnæan school of botany, naked seeds It answers to the natural order of Labiatæ of Jussieu's method, with the exception of some genera which are excluded on account of having only two stamens, and are found in Diandria Nearly all the class consists of herbaceous plants, those which are called shrubs being for the most part herbaceous plants, whose stems, from the mildness of the climate in which they grow, become perennial The most remarkable plants are the rosemary, hyssop, balm, thyme, mint, and marjoram, for the kitchen or laboratory, and the various species of Teucrium, Lavandula, Phlomis, and Dracocephalum, for the flower garden

In Angiospermia are included the genera with numerous, or rarely a few, seeds, enclosed in a simple pericarpium. These would be combined in a manner not altogether unnatural, if some of the genera were excluded For instance, the beautiful Linnæa, the emblem of the most highly gifted naturalist the world has ever produced, belongs to Caprifoliaceæ, and stands alone in point of natural affinity, the same may be said of Melianthus The greater part of Scrophularineæ, all Melampyraceæ and Orobanchcæ, and nearly the whole of Verbenaceæ and Gesneriæ are found here A considerable portion of Acanthaceæ also occupy a station in this order Among these are many genera of much beauty, but few of interest as useful plants Among the ornamental families every one will recognize the Bignonia, with its elegant orange or yellow trumpet flowers, and frequently twining stem, the Jacaranda, with its fern-like umbrageous foliage and magnificent diadem of blue, the Acanthus, consecrated to sculpture, the noble Clerodendrum, the pride of the Japanese, and the modest Eyebright (Euphrasia) of our English meadows In one part of the class we have the Vervain, surrounded by its mystic moonlight charms, in another, the Antirrhinum tribe, remarkable for the grotesque resemblance of its blossoms to the snouts of animals, and close behind it, imperial Pedicularis, proudly rearing her heraldic honours among the snows and deserts of the frozen north These are succeeded by a long line of forms, principally European, and of various degrees of beauty Among the useful plants, Digitalis, used in medicine, and Sesamum as oil seed, are all which can be particularized.

Order 1. GYMNOSPERMIA.



Pericarpium divided into four lobes resembling naked seeds.

1242. *Ajuga* Upper lip of cor very minute, 2-toothed. Stamens longer than upper lip

1243 *Ansomeles* Calyx tubular, 10-striated, 5-cleft. Upper lip of corolla small, entire; lower trifid, with the middle segment 2-lobed Stamens exserted, ascending Anthers of the short stamens 2-celled, with close cells, of the longer halved or dissimilar. Seeds smooth

1244 *Teucrium.* Upper lip of cor none, 2-parted beyond the base Stamens exserted

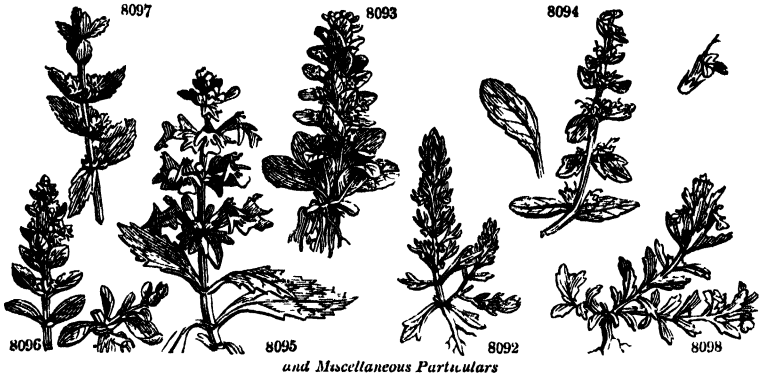
1245. *Westringia* Cal campanulate, 5-toothed Corolla subrotate, with the upper segment bifid. Two of the anthers barren

1246. *Satureja* Cal tubular, striated. Segments of corolla nearly equal Stamens distant.

8088 Stem creeping, Leaves triangular cordate serrate crenate
8089 Stem erect, Leaves cordate roundish crenate with round auricles

8090 An aquatic floating plant, covered all over with viscid slime, Roots fibrous

8091 The only species A small plant with simple stems and a few 3-5-parted leaves



and Miscellaneous Particulars

1240 *Hydropeltis* From ὑδωρ, water, and πελτη, a buckler, that is to say, a water-plant, with a leaf like a round shield A curious little floater, with the aspect of Hydrocharis
1241 *Hydrastis* From ὑδωρ, water, in reference to the humid places wherein it grows The root of this plant is yellow, bitter, pungent, and tonical

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1247 *Thymbra.* Cal subcylindrical, 2-lipped, with a villous furrowed line on each side. Segm. of cor flat Style half bifid
1248 *Hyssopus* Lower lip of cor 3-parted, with the intermediate segm subcrenate Stamens straight, distant
1249 *Nepeta* Cal dry, striated Cor with a longish tube, the middle segments of lower lip crenate Orifice reflexed at edge Stamens approximating
1250 *Elsholtzia* Cal tubular, 5-toothed Upper lip of corolla 4-toothed, lower longer, undivided, somewhat crenulate Stamens distant
1251. *Lavandula* Cal. ovate, somewhat toothed, supported by a bractea Corolla resupinate Stamens within the tube
1252 *Sideritis* Cal 5-fid Cor ringent or subregular the upper lip bifid, lower 3-parted Stamens within the tube The short stigma wrapping over the other
1253 *Bystropogon* Cal with 5 subulate teeth, closed at the orifice with hairs Upper lip of cor bifid; lower trifid Stamens distant
1254 *Mentha* Cor nearly equal, 4-fid, with the broadest segment emarginate Stamens erect, distant
1255 *Perilla* Cal with the upper segment very short Stamens distant Styles 2, united
1256 *Hyptis* Cal 5-toothed, increasing in size Corolla ringent the upper lip bifid, the lower 3-parted, with the intermediate segment shaped like a little bag Stamens inserted in the swollen part of the tube, and declinate
1257 *Horminum* Cal 2-lipped, awned, smooth in the orifice, when past flower, having its upper teeth crossing each other. Upper lip of corolla 2-lobed, lower 3-lobed, with nearly equal segments Leaves radical. Scape nearly naked
1258 *Glechoma* Cal 5-fid Each pair of anthers forming by their union the figure of a cross
1259 *Lamium* Upper lip of corolla entire, vaulted, lower 2-lobed, the orifice toothed at the edge on both sides
1260 *Galeopsis* Upper lip of corolla somewhat crenate, vaulted, lower 2-toothed above.
1261 *Galeobdolon* Cal 5-fid, unequal, awned Upper lip of corolla vaulted, entire, lower trifid, with acute segments Anthers smooth
1262. *Betonica* Calyx awned Upper lip of cor ascending, flattish Tube cylindrical
1263. *Stachys* Upper lip of cor vaulted, lower reflexed at edges, intermediate larger and emarginate. Stamens after flowering reflexed towards the sides
1264 *Zietenia* Cal 5-parted, with subulate very long equal segments Segments of lower lip of cor reflexed, intermediate folded together and emarginate Stamens after flowering reflexed towards the sides. Grain one
1265 *Ballota* Cal. hypocrateriform, 5-toothed, 10-lined Upper lip of cor crenate concave Grains ovate 3-cornered
1266. *Marrubium* Cal hypocrateriform, rigid, 10 lined Upper lip of cor bifid, linear, straight
1267 *Leonurus* Cal 5-angled, 5-toothed Upper lip of cor villous, flat, entire, lower 3-parted, with the middle segment undivided Anthers covered, with shining spots
1268. *Phlomis* Calyx 5-angled, 5-toothed Helmet compressed, keeled, emarginate Seeds bearded at end
1269 *Leucas.* Cal tubular, 10-striated, 8-10-toothed, with an orifice, either equal or oblique Corolla ringent Helmet concave, entire, bearded lower lip 3-fid, with the middle segment largest Anthers twin, beardless, with divaricating lobes Stigma 2-lipped, with the upper segment very short.
1270 *Leonotis.* Differs from the last in having an elongated helmet, and the lower lip small and withering the middle segment scarcely larger than the others
1271 *Moluccella* Cal campanulate, enlarged, wider than corolla, spiny
1272. *Clinopodium.* Involucre of many bristles beneath the whorl Corolla 2-lipped. Upper lip of corolla flat, obcordate, straight.

1273. *Pycnanthemum.* Involucre of many bractes beneath the little heads Cal. tubular, striated. Upper lip of corolla nearly entire, lower trifid Stamens nearly equal.
1274. *Origanum* Cone 4-cornered, spiked, collecting the calyxes Upper lip of corolla erect, flat, lower 3-parted, with nearly equal segments
1275. *Thymus* Orifice of bilabiate calyx closed with hairs Upper limb of corolla flat, emarginate
1276 *Acynos* Cal 2-lipped, furrowed, hispid, gibbous at base, villous at orifice Cor ringent, inflated at orifice, with the upper lip erect, emarginate, the lower 3-parted, spreading. intermediate segm. concave All the stamens fertile
1277 *Calamintha* Cal after flowering closed by hairs Orifice of cor inflated. Upper lip emarginate, lower 3-parted, with the intermediate segment entire, subemarginate or crenulate
1278 *Melissa* Cal dry, flattish above, with the upper lip somewhat fastigiate Upper lip of cor. somewhat vaulted, 2-fid lower less, with middle lobe cordate
1279 *Dracocephalum.* Cor inflated at orifice, with the upper lip concave
1280 *Melittis* Cal smooth, campanulate, blunt, oblique at orifice. Upper lip of cor flat, lower crenate Anthers cruciate
1281 *Ocymum* Cal with the upper lip orbicular, lower 4-fid. Corolla resupinate, with one lip 4-cleft, the other undivided Exterior filaments having a process at their base
1282 *Plectranthus* Upper lip of cal largest Corolla resupinate, ringent, with the tube gibbous upwards, or spurred
1283 *Trichostema* Upper lip of cor falcate, Stamens very long
1284 *Prostanthera* Calyx 2-lipped, in fruit closed Tube striated, lips undivided, blunt. Corolla ringent, with a half bifid helmet middle segment of lower lip large, 2-lobed Anthers spurred beneath
1285 *Scutellaria* Cal entire, after flowering closed with a lid Tube of the corolla elongated
1286 *Prunella* Upper lip of calyx dilated. Filaments forked, upon one point bearing their anthers. Stigma bifid
1287 *Cleonia* Filaments forked, upon one point bearing their anthers Stigma bifid
1288 *Prasium* Cal campanulate, 2-lipped Upper lip of cor. vaulted, lower trifid, with the middle segm. largest cordate Grains berried
1289 *Phryma* Cal 2-lipped, 5-toothed. Grain only one

Order 2 ANGIOSPERMIA  Seeds several, enclosed in an undivided pericarpium.

I *Ovary inferior, or nearly inferior*

1290. *Gesneria* Cal 5-fid Corolla incurved and recurved Capsule 2-celled
1291 *Gloxinia.* Cal 5-leaved Cor campanulate, with an oblique limb Filaments with the rudiment of a fifth inserted upon the receptacle
1292 *Linnæa* Cal double of the fruit 2-leaved, of the flower 5-parted Cor campanulate Berry dry, 3-celled.

II *Ovary superior, polypetalous*

1293 *Melianthus* Cal. 5-leaved, with the lower leaflet gibbous Petals 4, with the nectary below the lowest Capsule 4-celled

III *Ovary superior, monopetalous*

A *Filaments 5, the upper only rudimentary*

1294 *Bignonia* Cal 5-fid, cup-shaped Cor campanulate, 5-fid, ventricose beneath Pod 2-celled Seeds with membranous wings
1295 *Jacaranda* Cal 5-toothed Cor tubular at base, with a dilated throat, and a 5-lobed unequal limb Fifth filament sterile, long, villous at end Stigma with two lips Capsule large, round, woody, with the edge dividing into two valves
1296 *Sesamum* Cal 5-parted Cor campanulate 5-fid, with the lower lobe largest. Stigma lanceolate Capsule 2-celled, the cells divided in two by the inflexed edges of the valves
1297 *Penstemon* Cal 5-leaved Cor 2-lipped, ventricose Fifth filament longer than the rest, and bearded at its upper end Capsule compressed, 2-celled, 2-valved Seeds numerous, subglobose
1298 *Chelone* Cal 5-parted, with two bractes Cor ringent, ventricose Fifth filament shorter than the others Caps 2-celled, 2-valved Seeds numerous, with a membranous edge
1299 *Tourretia* Cal 2-lipped Corolla ringent the upper lip galeate, large, lower 2-toothed, very small Nectary annular, 4-lobed Stigma truncate Capsule 4-celled Dissepiments with 4 wings Seeds cordate
1300 *Martynia* Cal 5-fid Cor ringent Capsule woody, coated, with a hooked beak, 4-celled, 2-valved.

B *Filaments 4 Capsule many-seeded, opening with elasticity. Seeds large, flat.*

* *Calyx bifid*

1301 *Acanthus* Cal 4-parted the two lateral inner segments short, the two outer long, with 3 bractes, of which the middle one is toothed, spiny Cor labiate, having the orifice closed with hairs. Lower lip very large, 3-lobed. Anthers villous Stigma bifid Caps ovate, with 1-2-seeded cells.

** *Calyx 4-fid*

1302 *Barleria* Cal 4-parted. Stamens 2, much smaller than the others Capsule with 4 angles, 2-celled, 2-valved, elastic, without claws Seeds 2

*** *Calyx 5-fid*

1303 *Phaylopsis* Calyx unequal, with a large dorsal segment Cells of the ovary 2-seeded, with the segments of the dissepiment spontaneously dividing in two Otherwise like Blechum
1304 *Ruellia* Cal 5-parted, generally with two bractes Corolla campanulate, with a 5-lobed limb Stamens in pairs Capsule narrowed to each end. Teeth opening elastically Seeds not many
1305 *Blechum* Cal 5-parted, equal Cor funnel-shaped Capsule about 2-celled, 2-valved the segments of the crosswise dissepiment finally becoming loose Seeds many, with hooks
1306. *Aphelandra* Cal 5-parted, unequal Cal 2-lipped Anthers 1-celled. Capsule 2-celled, 2-valved, with a dissepiment crosswise Seeds with hooks
1307 *Crossandra* Cal 5-parted, unequal Cor 1-lipped. Stamens included. Anthers 1-celled. Capsule 2-celled, 2-valved, with a dissepiment crosswise Seeds with hooks

**** *Calyx multifid.*

1308. *Thunbergia.* Cal double outer 2-leaved, inner about 12-toothed Cor. campanulate Capsule beaked, 2-celled.

C. *Filaments 4. Capsule, drupa, or berry few seeded Seeds erect.*

* *Calyx bifid*

1309 *Hebenstreitia.* Cal spathaceous, opening lengthwise beneath. Cor tubular, unequal, with one upper 4-fid lip Stamens projecting from the lower cleft of the corolla Caps 2-seeded.

** *Calyx 4-fid.*

1310 *Hosta.* Cal obsoletely 2-lipped, 4-toothed. Corolla ringent, with the middle segment of the lower lip large, emarginate. Drupe with a 4-celled, 4-seeded nut.
1311 *Gmelina* Cal. about 4-toothed. Cor 4-fid, campanulate Two of the anthers 2-parted, 2-simple. Drupe baccate Putamen bony, 4-celled Cells 1-seeded, the lower sterile
1312 *Lantana* Flowers capitate Cal obsoletely 4-toothed. Limb of corolla 4-fid, with an open orifice. Stigma hooked backwards Drupes heaped, with a 2-celled smooth nut.
1313 *Aloysia.* Calyx deeply 4-cleft Corolla tubular, 4-lobed Stigma emarginate. Stamens 4, perfect. Seeds two
1314 *Lippia* Flowers capitate Cal 4-toothed, roundish, erect, compressed, membranous. Corolla 4-fid, funnel-shaped Drupe dry, 1-seeded, thin, covered by the calyx Nuts two, 1-seeded
1315. *Melampyrum* Capsule 2-celled. Seeds 2, gibbous, polished

*** *Calyx 5-fid*

1316. *Selago* Cal 5-fid Tube of corolla filiform Limb nearly equal. Capsule simple or 2-lobed, each lobe with a seed
1317 *Vitex* Cal 5-toothed Limb of cor 5-6-fid Drupe 1-seeded, with a 4-celled nut.
1318. *Cornutia.* Cal 5-toothed. Stamens longer than corolla Style very long Berry 1-seeded
1319 *Zapania* Flowers capitate Cal 5-toothed Cor 5-fid. Stigma peltate, capitate, oblique. Fruit covered, bladdery, enclosing two seeds
1320 *Priva* Cal inflated, 5-toothed Cor a little longer than the tube of calyx, contracted at orifice. Drupe covered by the calyx Nuts two, 2-celled, 2-seeded Stamens 2-4
1321 *Spielmannia* Cal. 5-fid Limb of cor 5-fid, the orifice closed by hairs. Stigma hooked Drupe with a 2-celled warted nut
1322 *Verbena* Cal 5-fid Cor funnel-shaped, with an incurved tube, and an unequal 5-fid limb. Stamens 4, fertile Fruit bladdery, covered, withering Seeds 4
1323 *Avicennia* Cal 5-parted Cor. 2-lipped the upper lip square Caps coriaceous, rhomboid, 1-seeded. Seed germinating within the capsule
1324 *Caldasia* Cal tubular, 5-toothed Cor hypocrateriform, nearly equal Filaments inserted in top of tube Caps 3-celled, 3-seeded, 3-valved Seeds elliptical
1325 *Clerodendrum* Cal 5-fid, campanulate Corolla with a filiform tube and a 5-parted equal limb Stamens very long, projecting from between the segments of corolla Drupe 4-seeded, with a 1-celled nut
1326 *Volkameria* Cal 5-fid Cor with 1-sided segments Drupe 2-seeded Nuts 2-celled, with 1-seeded cells
1327 *Holmskioldia* Cal colored, very large, campanulate, spreading, with a nearly entire limb a little shorter than the ringent corolla
1328 *Petrœa* Cal 5-parted, very large, colored Corolla rotate Caps 2-celled, 2-seeded in the bottom of the calyx Seeds solitary
1329 *Cuthrexylum* Cal 5-toothed, campanulate Corolla funnel-shaped, rotate Segments villous, above equal Drupe 2-seeded Nuts 2-celled
1330 *Duranta* Cal 5-fid, superior Drupe 4-seeded, covered by the calyx Nut 4-2-celled, 2-seeded
1331 *Pedalium.* Cal 5-parted Cor tubular, ringent, with a 5-cleft limb Filaments hairy at base Anthers in pairs, forming a cross Nut corky, with spiny angles Seeds 2, with an arillus
1332 *Myoporum* Cal 5-parted Corolla campanulate, with a spreading nearly equal 5-parted limb Drupe 1-2-seeded, with 2-celled nuts
1333 *Stenochilus* Cal 5-parted. Cor ringent the upper lip erect, half 4-cleft lower undivided, narrow, deflexed Stamens didynamous, exserted. Ovary 4-celled, with 1-seeded cells Stigma blunt, undivided Drupe berried, 4-celled Seeds solitary
1334 *Bontia* Cal 5-parted Cor 2-lipped, with an oblong tube the lower lip 3-parted, revolute Drupe ovate, 1-seeded, oblique at end

D *Filaments 4 Capsule or berry many-seeded Seeds small, attached to a central receptacle.*

* *Calyx bifid.*

1335 *Orobanche* Cal of 2-lobed lateral leaflets Corolla ringent. Capsule 1-celled, 2-valved, many-seeded Gland at the base of the ovary
1336. *Crescentia* Cal 2-parted, equal Corolla gibbous Berry stalked, 1-celled, many-seeded. Seeds immersed in pulp
1337 *Castilleja* Cal spathaceous, the upper lip bind, lower none Cor 2-lipped the lower lip very short, trifid, with 2 glands between the segments Caps 2-celled

** *Calyx trifid*

1338 *Halleria* Cal 3 or 5-leaved Cor 4-fid, somewhat inflated Berry 2-celled, many-seeded

*** *Calyx 4-fid*

1339 *Lathræa* Cal 4-fid A depressed gland at the base of the suture of the ovary Capsule 1-celled.
1340 *Rhinanthus* Cal 4-fid, ventricose Cor ringent, with the upper lip generally compressed. Capsule 2-celled, blunt, compressed
1341. *Bartsia* Cal. 4-lobed, emarginate, colored Cor smaller than the calyx the upper lip longest Capsule 2-celled Seeds angular
1342. *Euphrasia* Cal cylindrical, 4-fid Corolla 2-lipped the upper lip bifid, the lower 3-lobed, with bifid lobes. Lower anthers with spiny lobes.

**** *Calyx 5-fid.*

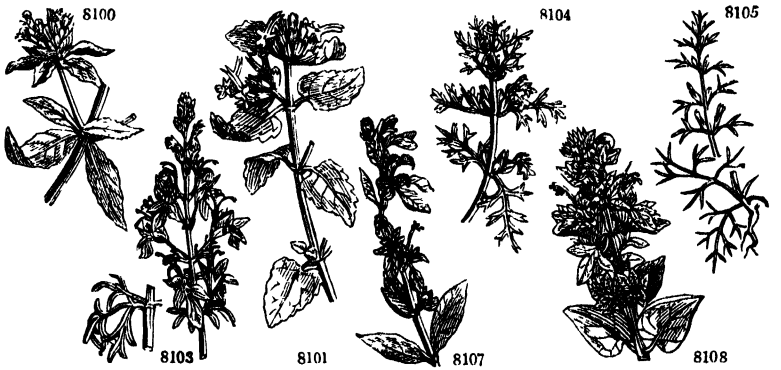
1343 *Antirrhinum* Cal 5-leaved Cor. not spurred, gibbous at base: the upper lip bifid, reflexed, lower trifid, closed by the prominent palate Caps oblique at base, without valves, opening at the end by three pores.
1344 *Linaria* Cal 5-parted, with the two lower segments remote Cor spurred, ringent the orifice closed by the prominent palate Caps ovate 2-valved, opening at the end into 3-5-segments
1345 *Anarrhinum* Cal 5-leaved Cor prominent at base, honey bearing. lower lip flat, without a prominent palate Caps 2-celled, many-valved
1346. *Nemesia* Cal. 5-parted Cor spurred, with a prominent palate. Caps. compressed, truncate, opening lengthwise in the middle, 2-celled, 2-valved Seeds numerous, linear
1347 *Maurandya* Cal 5-parted Cor campanulate, unequal Filaments callous at base. Caps. 2, united, half 5-valved at end.
1348 *Gerardia.* Cal. 5-fid Cor 2-lipped, the lower lip 3-parted, with emarginate lobes: the middle 2-parted Capsule 3-celled, splitting
1349 *Pedicularis* Cal 5-fid Cor ringent Capsule 2-celled, mucronate, oblique. Seeds truncated. Leaves multifid.
1350 *Erinus* Cal 5-leaved Cor with a 5-fid, equal limb Lobes emarginate: the upper lip very short, reflexed Caps 2-celled
1351. *Mimulus* Cal prismatical, 5-toothed. Cor ringent, with the upper lip folded back at the sides. Stigma thick Capsule 2-celled, many-seeded

1352. *Hornemannia.* Cal. tubular, 5-toothed, plaited. Cor with the upper lip emarginate lower 3-lobed. Seeds minute, scurfy.
1353 *Mazus* Cal large, campanulate, spreading Cor ringent, with a pimpled throat Anthers connected. Stigma spatulate. Caps 2-celled, many-seeded
1354 *Isoplexis* Like Digitalis, but corolla campanulate, with the upper segment as long as the lip, and incumbent upon it before expansion
1355 *Digitalis* Cal 5-parted Corolla campanulate, ventricose, 5-fid Capsule ovate 2-celled
1356 *Scrophularia* Cal. 5-fid Cor subglobose, resupinate Caps 2-celled
1357. *Vandellia* Cal 4-fid Cor ringent Two outer filaments from the disk of the lip of cor. Anthers united in pairs Caps 1-celled, many-seeded
1358 *Sibthorpia* Cal 5-parted Cor 5-parted, equal. Stamens in remote pairs Caps. orbicular, compressed, 2 celled, with a transverse dissepiment
1359 *Limosella* Cal 5-fid Cor 5-fid, equal. Stamens approximating in pairs. Caps 1-celled, 2-valved, many-seeded
1360 *Browallia* Cal 5-toothed Cor closed by the prominent orifice Two of the anthers larger than the others Caps 1-celled
1361. *Stemodia* Cal 5-parted Cor 2-lipped Stamens 4. each filament bifid, and bearing two anthers. Capsule 2-celled
1362 *Trevirana* Cal 5-leaved. Cor declinate funnel-shaped. Limb flat, 5-parted, nearly equal Caps. half 2-celled
1363 *Columnea* Cal 5-parted, spreading Corolla ringent the upper lip 3-parted, with the intermediate segment arched, above the base gibbous Capsule berried, 1-2-celled
1364 *Russelia* Cal 5-leaved Cor 2-lipped, with a hairy throat upper lip broader, emarginate, lower trifid, with linear segments Stigma globose Caps 1-celled, 2-valved, many seeded.
1365 *Dodartia* Cal campanulate, angular, 5-toothed Lower lip of cor broad, 3-fid. Stigma bifid Caps globose, 2-celled, covered by the calyx

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GYMNOSPERMIA.

†1242	A'JUGA *W*	BUGLE			*Labiatæ*	*Sp* 8—17					
8092	orientális *W*	oriental	☘	△ or	1½ my jn	B	Levant	1752	D	s p	Dill elt. t 53 f 61
8093	pyramidális *W*	pyramidal	☘	△ or	¼ my jn	Pu	Britain	sc mo	D	s p	Eng bot. 1270
8094	alpina *W*	Alpine	☘	△ or	½ my jl	B	England	moun	D	co	Eng bot 477
8095	genevénsis *W*	Geneva	☘	△ or	½ my jn	F	Switzerl	1656	D	co	Bull herb t 361
8096	réptans *W*	common	☘	△ or	½ my jn	B	Britain	mou w	D	s p	Eng bot. 489
	β álba	*white-flowered*	☘	△ or	½ my jn	W	Britain	mou w	D	s p	
	γ rúbra	*red-flowered*	☘	△ or	½ my jn	R	Britain	mou w	D	s p	
8097	Chamæ'pitys *W*	Ground Pine		○ pr	½ ap jl	Y	England	san fl	S	s l	Eng. bot 77
8098	I'va *W*	musky		○ cu	½ jl au	R	S Europe	1759	S	s l	Fl græca, 525
8099	furcáta *Link*	furcate	☘	⌐ or	½ jl au	B	Nepal	1824	D	co	
1243	ANISOME'LES *R Br*	ANISOMELES			*Labiatæ*	*Sp* 2—5					
8100	malabarica *R Br*	Malabar	☘	□ or	1½ jl au	V	E Indies	1817	C	co	Rheede, 10 t 93
8101	ovàta *R A*	broad-leaved		◻ or	1½ jl au	Pk	E Indies	1783	S	l p	Bur zeyl t.71 f 1
1244	TEU'CRIUM *W*	GERMANDER			*Labiatæ*	*Sp* 44—87					
8102	campanulátum *W*	small-flowered	☘	△ or	1 jl au	W	Levant	1728	D	co	
8103	orientále *W*	great-flowered	☘	△ or	1 jl au	B	Levant	1752	D	co	Bot mag 1279
8104	Bótrys *W*	cut-leaved		○ or	¾ jl s	R	S Europe	1633	S	co	Ger ema 525 f 2
8105	missoliánum *W*	Spanish	☘	△ or	1 jn jl	Pu	Spain	1752	D	co	Mor his t 22 f 19
8106	trífidum *W*	trifid-leaved	♃	⌐ or	1½ jn au	Pu	C G H	1791	C	r m	
8107	fruticans *W*	narrow-leav tr	♃	⌐ or	3 jn s	V	Spain	1640	C	r m	Dil el t.284 f 366
8108	latifólium *B M*	broad-leav tree	♃	⌐ or	3 jn s	V	Spain	1640	C	r m	Bot mag 245
8109	Márum *W*	Cat-thyme	♃	⌐ or	1½ jl s	Pa.pu	Spain	1640	C	r m	Park thea 17 f 2
8110	multiflórum *W.*	many-flowered	☘	△ or	1 jl s	L R	Spain	1731	C	co	Bocc mus t 117
8111	régium *W*	royal	♃	⌐ or	1½ my o	Pu	Spain	1699	C	r m	Plu alm t 65 f 1



History, Use, Propagation, Culture,

1242. *Ajuga.* Said to be an alteration of *abigo*, to expel or drive away The Latins attributed emmenagogue qualities to a plant called *ajuga*, which is believed to be our Teucrium chamæpitys Handsome flowering plants A reptans is vulgarly reputed vulnerary, cooling, and gently astringent It is commonly called *bugle*, which appears to be a corruption of *bugula*, a contracted diminutive of *buglossum*, which the plant resembles in medical qualities.
1243. *Anisomeles.* So named by Mr Brown, from *α*, privative, *ἰσος*, equal, and *μελος*, a member. Tropical downy herbaceous plants Their leaves are crenated, flowers grow in whorls supported by minute bracteæ; the calyxes are glandular, and the corolla of all the species purple.
1244. *Teucrium* Teucer, the Trojan prince, is said by Pliny to have been the first to employ this plant

1366 *Lindernia.* Cal. 5-parted Cor. ringent: upper lip very short. Two lower stamens with a terminal tooth and lateral anther Capsule 1-celled.
1367 *Herpestis* Cal. 5-parted, unequal. 2 inner sepals smaller, covered by the others. Cor tubular, somewhat 2-lipped Stamens included Lobes of anthers spreading Stigma emarginate
1368 *Caprraria.* Cal. 5-parted Cor campanulate, 5-fid, acute Caps 2-valved, 2-celled, many-seeded.
1369 *Buchnera* Cal. absolutely 5-toothed Limb of corolla 5-fid, equal, with cordate lobes Capsule 2-celled
1370 *Manulea* Cal 5-parted Cor funnel-shaped Limb 5-parted, with subulate segments, the four upper large, connected Caps 2-celled, many-seeded
1371 *Angelonia* Cal. 5-parted, nearly equal Cor irregular, spreading, 2-lipped, with a short tube, and arched orifice upper lip 2-parted, lower much larger, 3-parted, with the middle segment slipper-shaped at base
1372 *Schizanthus* Cor irregular: the upper lip 5-fid, lower 3-parted. Two filaments sterile Capsule 2-celled
1373 *Besleria* Cal. 5-parted Cor tubular, gibbous on each side, with a 5-lobed unequal limb. Berry roundish, 1-celled, many-seeded Seeds midulant
1374 *Teedia* Cal 5-parted Cor hypocrateriform, 5-fid, blunt. Style short, persistent Berry 2-celled, many-seeded
1375 *Brunsfelsia* Cal 5-toothed, small Tube of cor very long, with a flat 5-lobed limb Capsule berried, 1-celled, many-seeded, with a very large receptacle.
1376 *Celsia* Cal. 5-parted Cor rotate Filaments bearded Capsule 2-celled
1377 *Alonsoa* Cal 5-parted Cor subrotate, resupinate, 5-fid, with the upper segment largest Stamens declinate Filaments smooth Anthers approximating, similar Capsule 2-celled
1378 *Anthocercis* Cal 5-fid Cor campanulate, regular Rudiment of a 5th filament Stigma capitate Caps 2-celled, 2-valved, many-seeded The inflexed edges of valves inserted in the placenta.

***** *Calyx multifid.*

1379 *Cymbaria.* Cal. 10-toothed Upper lip of cor bifid, lower trifid Capsule cordate, 2-celled

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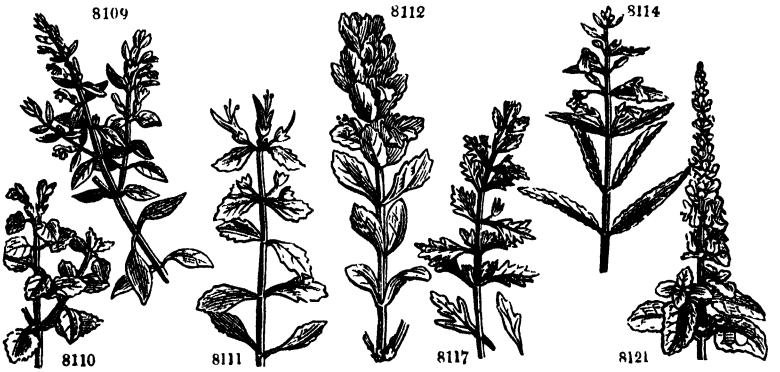
GYMNOSPERMIA.

8092 Leaves ovate, Cor pubescent resupinate
8093 Four-cornered pyramidal villous, Radical leaves very large
8094 Stem simple, Cauline leaves as long as radical leaves
8095 Radical leaves smaller than cauline leaves
8096 Stolones creeping

8097 Leaves trifid, Fl axillary solitary shorter than leaf, Stem diffuse
8098 Leaves linear toothed forwards, Flowers axillary solitary
8099 Leaves stalked subcordate ovate acuminate acutely crenate hairy, Thyrses axillary stalked

8100 Bractes filiform, Leaves lanceolate entire downwards
8101 Leaves ovate subcordate crenate, Whorls many-fl Bractes linear, Calyx hairy, Glands inconspicuous

8102 Leaves multifid, Flowers lateral solitary
8103 Leaves multifid linear, Raceme compound, Pedicels short
8104 Leaves multifid, Whorls halved
8105 Leaves trifid or 5-fid filiform, Flower stalked solitary opposite, Stem decumbent
8106 Leaves lanceolate trifid, Peduncle axillary 3-flowered
8107 Leaves lanceolate entire white beneath, Flowers solitary
8108 Leaves entire rhomboid acute villous downy beneath, Flowers solitary
8109 Leaves quite entire ovate acute stalked downy beneath, Flowers racemose one-sided
8110 Leaves oval toothed forwards, floral entire stalked, Whorls racemose, Stem much branched
8111 Leaves ovate toothed forwards, floral entire sessile, Whorls racemose, Stems branched



and Miscellaneous Particulars.

medicinally Under-shrubs or herbs of little beauty, but several of them aromatic The leaves and younger branches of T. marum (*Mar*, Arabic, signifying bitter), when recent, on being rubbed between the fingers, emit a volatile aromatic smell, which readily excites sneezing, but to the taste they are bitterish, accompanied with a sensation of heat and acrimony. Cats are very fond of these plants, and where there are few will destroy them.

T scorodonia (σκορδον, garlic, the smell of which this plant possesses) in Jersey is used as a substitute for hops, and the beer is said sooner to become clear than when hops are made use of Withering found on trial that it gave too much color to the liquor

T. scordium, also from σκορδον, garlic, was once in high esteem for destroying worms and for fomentations

8112 **Laxmánni** *W*	Laxmann's	△	or	1	jn au	Var	Siberia	1800	C	co	Pl. rar. hu. 1. t. 69
8113 **sibíricum** *W.*	Siberian	△	or	1	jl	Pu	Siberia	1804	C	co	
8114 **asiáticum** *W*	Asiatic	□	or	2	jn o	Pu	.....	1777.	C	r m	Jac. vind. 3. t. 41
8115 **lusitánicum** *Lam*	Portuguese	□	or	1½	jn o	Pu	Portugal	1822	C	co	
8116 Arduíni *L.*	Arduini's	□	or	1½	jn o	Y	Candia	1823.	C	co	
8117 **cubénse** *W*	Cuba	◫	or	1½	my	Pu	Cuba	1733	C	co	Jac. obs. 2. t. 30
8118 **canadénse** *W*	nettle-leaved	△	or	2	au s	Pu	N Amer	1768	D	co	
8119 **virgínicum** *W*	Virginian	△	or	2	my jn	B	N Amer	1768	D	co	Schk hand. 160
8120 **inflátum** *W*	thick-spiked	⊠	or	2	au o	Li	Jamaica	1778	D	co	
8121 **hyrcánicum** *W*	Betony-leaved	△	or	1½	au o	P	Persia	1763.	D	co	Bot mag. 2013
8122 **Abutiloides** *W*	Mulberry-leav	□	or	1½	sp my	Y	Madeira	1777	C	r m	Jac schæ. 3 t 358
8123 **Scorodónia** *W*	Wood Sage	△	or	1½	jl	Y	Britain	woods	C	co	Eng bot 1543
8124 **betónicum** *W*	hoary	□	or	1½	my au	Li	Madeira	1775	C	r m	Bot. mag 1114
8125 **resupinátum** *W*	resupinate	○	or	1	jl au	Pa Y	Barbary	1801	C	r m	Desf. atl 2 t 117
8126 **massiliénse** *W*	sweet-scented	□	or	2	jn jl	Pu	France	1731.	C	r m	Jac vind 1 t 94
8127 **Scórdium** *W*	water	△	or	½	jl au	Pu	England	mar	C	r m	Eng bot 828
8128 **Chamæ'drys** *W*	wall	△	or	½	my au	Pu	England	old w.	C	co	Eng. bot. 680
8129 **heterophýllum** *W*	various-leaved	□	or	2	jn jl	Pu	Madeira	1759	C	r m	
8130 **lúcidum** *W*	shining	△	or	1½	jn s	Br	S Europe	1730	C	r m	Magn hort 52
8131 **flávum** *W*	yellow-flower	□	or	2	jl s	Y	S. Europe	1640	C	r m	Park the. 109 f 1
8132 **montánum** *W*	dwarf mount	□	or	½	jl o	W	S Europe	1710	C	co	
8133 **supínum** *W*	procumbent		or	¾	jn o	W	Austria	1752	C	co	Jac aust 5 t 417
8134 **thymifólium** *P S*	thyme-leaved	△	or	½	jn o	Pu	Spain	1816	C	co	
8135 **pyrenáicum** *W*	Pyrenean	△	or	½	jn au	Pa.w	Pyrenees	1731	D	co	Bot. cab 1387
8136 **aúreum** *W*	golden Poly	□	or	1	jn jl	Y	S Europe	1731	D	co	Cav ic 2 t. 117
8137 **Pólium** *W*	Poly	□	or	1	jl s		S Europe	1562	C	r m	Barr rar t 1074
8138 **flavéscens** *P S*	yellow Poly	□	or	1	jl s	Y	S Europe	...	C	co	Barr rar t 1073
8139 **gnaphalódes** *P S*	woolly-calyxed	□	or	1½	jl s	Pu	Spain	1816.	C	co	Barr rar t 1083
8140 **Pseudohyssópus** *W*	Hyssop-leaved	□	or	1½	jn jl	W	Italy	1804	C	co	Col ecphr 1 t 67
8141 **capitátum** *W*	round-headed	□	or	¾	jl au	Pu	Spain	1731	C	co	Cav ic 2 t. 119
8142 **pycnophýllum** *P S*	close-leaved	△	or	½	jl au	Pu	Spain	1816	C	co	Barr rar. 1096
8143 **púmilum** *W*	small	□	or	½	jl au	Pu	Spain	1816	C	co	Barr rar t 1092
8144 **spinósum** *W*	thorny	○	or	½	my jn	W	Spain	1640	S	co	Cav ic 1. t 31
8145 **subspinósum** *W en*	Minorca	□	or	1½	...	Pu	Minorca	1816	C	co	

1245 WESTRIN'GIA *Sm* Wrist — *Labiatæ* *Sp* 2—8

8146 **rosmarinifórmis** *Sm*	Rosemary-lvd	□	or	4	my au	Pa.B	N S W	1791	C	s p	Bot rep 214
8147 **Dampiéri** *B P*	Dampier'		or		my jl		N Holl	180	C	s p	Bot mag. 3308

1246 SATURE'JA *W* Savory — *Labiatæ* *Sp* 10—17

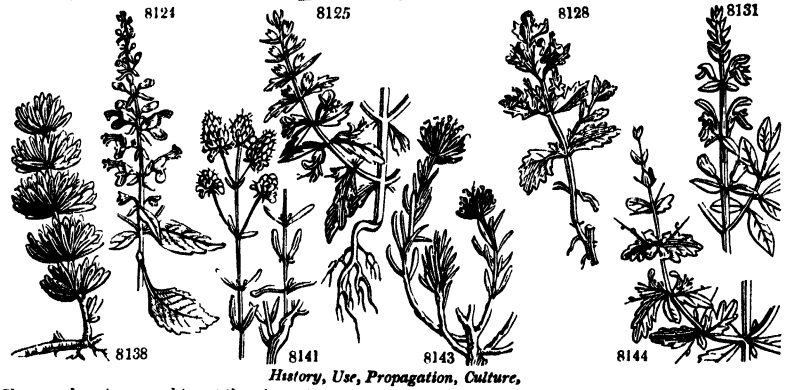
8148 **juliána** *W*	linear-leaved	□	un	1	my s	Pk	Italy	1596	D	co	Lam ill t 504 f 1
8149 **Teneriffæ** *W en*	Teneriffe	□	un	1		Pu	Teneriffe				
8150 **Thýmbra** *W*	whorl-flowered	□	or	1	my jl	Pu	Candia	1640	C	r m	Barr ic t 898
8151 **græ'ca** *W*	Grecian	□	or	¾	jn jl	Pu w	Greece	1759	D	co	Alp exot t 264
8152 **montána** *W*	winter		cul	1½	jn jl	Pu	S Europe	1562	C	co	
8153 **tenuifólia** *Tenore*	fine-leaved	□	un	1½	jn jl	Pu	S. Europe	1822	D	co	
8154 **rupéstris** *W*	rock	△	or	1	jn jl	Pu	Carniola	1768	S	co	Jac ic 3 t. 494
8155 **horténsis** *W*	summer	○	cul	1½	jn au	Pk	Italy	1652	C	r m	Lam ill t 504 f 2
8156 **capitáta** *W*	ciliated		cul	1	jn o	Pu	Levant	1596	C	r m	Barr ic t 897
8157 **viminea** *W*	Pennyroyal-tr	□	cul	1	...	Pu	Jamaica	1783.	C	r m	

1247 THYM'BRA *W* Thymbra — *Labiatæ* *Sp* 2—6

8158 **spicáta** *W*	spike-flowered	□	cu	1½	jn jl	Pa pu	Levant	1699.	C	co	Pluk al t 116. f 5
8159 **verticillata** *W*	whorl-flowered	□	cu	1½	jn jl	Pa pu	Spain	1702.	C	co	

†*1248 HYSSO'PUS *W* Hyssop — *Labiatæ* *Sp* 5—7

8160 **officinális** *W*	common		or	2	jn s	B	S Europe	1548	C	co	Jac aust 3 t 254
8161 **orientális** *W en*	oriental		or	2	jn s	B	Caucasus		C	co	Bot mag 2299
§8162 **Lophánthus** *W*	Mint-leaved	△	or	2	au s	Y	Siberia	1752	C	p l	Jac vind 2 t 182
§8163 **nepetoides** *W*	square-stalked	△	or	5	au o	Y w	N Amer	1692	D	p l	Jac. vind 1 t 69
§§8164 **scrophulariifólius** *W*	Figwort-leaved	△	or	5	jl au	Pk	N Amer	1800	D	co	Herm par t 106



History, Use, Propagation, Culture,

Sheep and goats are said to eat this plant horses, cows, and swine to refuse it. If cows, compelled by hunger, eat it, their milk gets a garlic flavor

T. chamædrys, is said to have cured Charles V of the gout, by a vinous decoction taken for sixty successive days. It is commonly called Germander, which seems to be a corruption of the word Chamædrys, for the French call it *germandrée*, an evident alteration of *gamandré*, under which name it first appeared in the very rare Herbier de Mayence, printed in 1485

1245. *Westringia.* Named by Sir J E Smith, in honor of Dr John Peter Westring, physician to the king of Sweden, and author of several learned papers on the Lichen tribe A genus of New Holland plants, chiefly from the colder parts of that country, and having the appearance of our Rosemary.

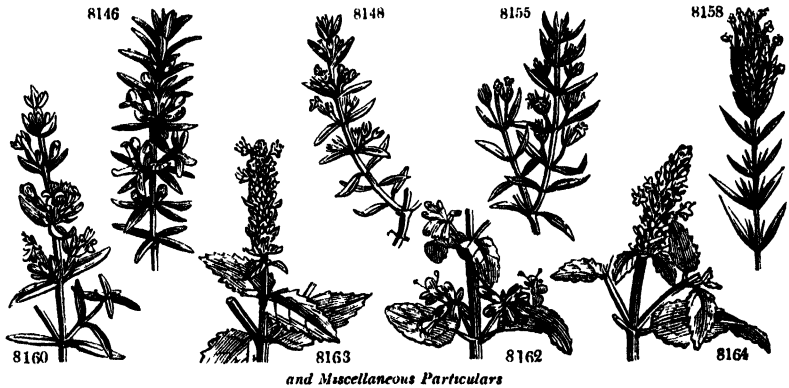
8112 Leaves ovate-oblong villous nearly entire, Flowers axillary solitary sessile
8113 Leaves ovate serrate smooth, Pedunc. sol. 3-flowered · intermediate sessile, Bractes linear lanceolate
8114 Leaves lanceolate repand-serrate rectangular at base, Fl. racemose one-sided, Calyx 2-lipped
8115 Leaves lanceolate crenate rugose, Flower racemose one-sided, Calyx 2-lipped
8116 Leaves ovate serrate, Raceme spiked round sessile terminal
8117 Leaves cuncate serrate cut smooth narrowed into the stalk, Flower solitary stalked
8118 Leaves ovate-lanceolate serrate hoary beneath, Stem erect round terminal, Whorls 6-leaved
8119 Leaves ovate unequally serrate, Racemes terminal, Bractes shorter than flower-stalk
8120 Leaves oblong acuminate unequally serrate pubescent, Spikes sessile terminal, Cal inflated villous
8121 Leaves cordate oblong obtuse, Stem brachiate dichotomous, Spikes very long terminal sessile spiral
8122 Leaves cordate toothed acuminate, Racemes lateral nodding
8123 Leaves cordate subpubescent toothed stalked, Racemes axillary one-sided, Stem erect herbaceous
8124 Leaves lanceolate crenate tomentose hoary beneath, Racemes terminal, Flower stem brachiate
8125 Leaves cuneiform lanc. serrated villous, Racemes axillary and terminal, Cor resupinate
8126 Leaves ovate rugose cut crenate hoary, Stems erect, Racemes straight one-sided
8127 Leaves oblong sessile toothed nearly naked, Fl axillary stalked in pairs, Stem diffuse pubescent
8128 Leaves cuneiform ovate cut crenate stalked, Fl ternary, Stems procumbent somewhat hairy
8129 Leaves elliptical crenate, Fl lateral solitary, Lip of cor woolly outside, Leaves various in form
8130 Leaves ovate cut serrate smooth, Whorls halved, Stems erect smooth
8131 Leaves ovate crenate floral entire, Whorls halved racemose, Stem bearded in two rows
8132 Corymbs terminal, Cal with acute unarmed teeth, Leaves lanceolate entire downy beneath
8133 Corymbs terminal, Cal. with acute mucronate teeth, Lvs linear entire revolute at edge downy beneath
8134 Heads terminal few-flowered, Leaves stalked ovate blunt downy beneath, Stem procumbent
8135 Corymbs terminal, Leaves cuneiform orbicular crenate hairy
8136 Corymbs terminal hairy, Leaves ovate serrate and stems densely woolly at the ends yellow and shining
8137 Heads roundish stalked, Leaves lanceolate blunt crenate revolute at edge downy, Stem decumbent
8138 Heads roundish, and leaves, which are linear lanceolate crenate forwards, tomentose yellow at end
8139 Fl solitary clustered, Leaves linear revolute crenate, Calyxes woolly
8140 Heads roundish lax, Leaves lanceolate crenate forwards downy hoary, Stem woolly corymbose
8141 Heads stalked, Leaves lanceolate crenate tomentose, Stem erect
8142 Heads roundish, Leaves linear revolute crenate forwards close and stem densely woolly
8143 Heads terminal sessile, Leaves linear revol at edge packed in four close rows, Stem procumbent downy
8144 Spiny, Upper lip of calyx ovate, Corolla resupinate, Peduncles twin
8145 Leaves entire ovate acute stalked revolute at edge pubescent downy beneath, Fl racemose

8146 Leaves beneath and calyxes silvery, Teeth half as long again as tube
8147 Leaves beneath and calyxes ash-colored opaque, Teeth half as short as tube

8148 Whorls fastigiate, Leaves linear lanceolate rough
8149 Lvs acute revolute at edge pubescent, Pedunc axillary many-fl Bractes much shorter than calyx
8150 Whorls roundish hispid, Leaves obovate oblong acuminate veinless dotted hispid
8151 Pedunc axillary 3-6-flowered, Bractes shorter than calyx, Leaves ovate hispid veiny beneath
8152 Pedunc axillary cymose one-sided, Sepals acuminate mucronate, Leaves lin lanc entire mucronate
8153 Stem erect branched with spreading hairs, Upper leaves hairy acute, Ped 1-flowered axillary
8154 Ped axill cymose one-sided, Sepals blunt unarmed, Lvs roundish ovate atten at base toothed bluntish
8155 Pedunc axillary cymose, Leaves lanceolate entire, Stem brachiate
8156 Flowers spiked, Leaves keeled dotted ciliated
8157 Fl axillary 3 subsessile, Bractes linear, Leaves oblong entire attenuate at base smooth hispid beneath

8158 Flowers spiked, Bractes heaped linear ciliate
8159 Flowers whorled, Leaves linear lanceolate entire

8160 Fl. whorled racemose 1-sided, Middle lobe of cor 2-lobed entire, Leaves lanceolate, Teeth of calyx erect
8161 Fl whorled racemose 1-sided, Midd lobe of cor 2-lobed entire, Lvs lin lanc Teeth of cal spreading uneq
8162 Pedunc axillary cymose, Cor resupinate, Middle lobe crenate, Leaves oblong cordate toothed [tooth
8163 Spikes whorled cylind Midd lobe of cor crenate, Style shorter than cor Lvs subcord ov acum sharply
8164 Spikes whorl cylind Midd lobe of cor crenate, Style longer than cor Lvs cord -ov acum bluntly tooth



and Miscellaneous Particulars

1246. *Satureja.* The Arabs call all labiate plants by the collective name of *ss'atar*, according to Bochart. Forskahl says, they call the wild Thyme *ss'atar* S. montana and hortensis have been cultivated as culinary aromatics from time immemorial, and much more formerly than now, when almost all European species are superseded by those of the East Indies

1247. *Thymbra.* A name of uncertain origin The ancients gave it to a plant analogous to Thyme. Possibly it may have been so called after the name of a place Thymbræa, a town in Lydia, was the spot where the famous battle was fought between Cyrus and Crœsus, in which the fate of the latter was decided

1248 *Hyssopus* Latinized from the Hebrew name *ezob* The Arabic name *azzaf*, is evidently the same.

1249. NEPETA. *W*	Cat-mint					*Labiatæ*	*Sp* 25—40						
8165 catária *W.*	common	♃	△	cu	2	jl s	W	Britain	ro sid	D	co		Eng. bot. 137
8166 angustifólia *W*	narrow-leaved	♃	△	cu	2	jn jl	Pu	Spain	1798	D	co		
8167 crispa *W*	curl-leaved	♃	△	cu	2	jl au	Pa B	Levant	1800.	D	co		
8168 pannónica *W.*	Hungarian	♃	△	cu	4	au o	R	Hungary	1683	D	co		Jac aust 2 t 129
8169 cærúlea *W*	blue	♃	△	cu	1½	my jn	B	.....	1777	D	co		
8170 violácea *W*	violet-colored	♃	△	cu	2	jl s	B	Spain	1723	D	co		Boc mus t. 36
8171 longiflóra *Vent*	long-flowered	♃	△	cu	2	jn au	V	Persia	1802	D	co		Vent cels 66
8172 Mussini *Bieb*	scolloped-leav.	♃	△	cu	2	my au	V	Siberia	1804	D	co		Bot. mag 923
8173 incána *W*	hoary	♃	△	cu	⅔	au	W	Levant	1723.	D	p l		
8174 ucránica *W*	Ukraine	♃	△	cu	2	jl au	W	Ukraine	1789	D	co		
8175 Nepetélla *W*	small	♃	△	cu	1	jl au	R	S Europe	1758	D	co		
8176 gravéolens *W*	strong-smelling	♃	△	cu	1½	jl au	Pu	S Europe	1804	D	co		All ped. 2 t f 1
8177 núda *W*	naked	♃	△	cu	1½	jl au	W	S Europe	1710	D	co		Jac aus 1 t 24
8178 multibracteáta *Desf*	many-bracted	♃	△	un	3	jl au	Pu	Algiers	1817	D	co		Desf atl t. 123
8179 coloráta *W en*	Nettle-leaved	♃	△	un	2	jl au	Pu	Caucasus	1806	D	co		
8180 melissæfólia *W en*	Balm-leaved	♃	△	un	2	jl au	W	Candia	1752	D	p l		
§8181 itálica *W*	Italian	♃	△	un	1	jn au	Y w	Italy	1640	D	p l		Jac vind 2 t 112
8182 marrubioides *W en*	Horehound-lv	♃	△	un	1½	jn au	R	... .	...	D	co		
8183 reticuláta *W*	netted	♃	△	un	2	jl au	Pu	Morocco	1801	D	co		Desf atl 2 t 124
8184 lamifólia *W en*	Lamium-leav'd	♃	△	un	1½	jl au	Pu	Armenia	1806	D	co		
8185 teucriifólia *W en*	Teucrium-lvd	♃	△	un	1½	jl au	Pu	Armenia	1816	D	co		
8186 tuberósa *W*	tuberous-root	♃	△	un	2	jn au	V	Spain	1683	D	co		Barr ic t 602
8187 lanáta *W*	woolly	♃	△	un	1½	my jn	Pu	S Europe	1774	D	co		Jac obs 3 t. 75
§8188 multífida *W*	multifid	♃	△	un	⅔	jl au	W	Siberia	1796	D	co		Gmel sib 2 t 55
8189 botryoides *W*	annual		○	un	1½	jn jl	W	Siberia	1779	S	co		Cav ic 1 t. 49
1250 ELSHOLT'ZIA *W*	Elsholtzia					*Labiatæ*	*Sp* 2—5						
8190 ocymoides *Pers*	Basil-like	♃	□	un	1	jl	Pu	E Indies	1824	S	co		
8191 cristáta *W*	crested		○	or	1½	my jl	Pk	Siberia	1789	S	co		Lam ill t 502 f 2
*1251 LAVAN'DULA *W*	Lavender.					*Labiatæ*	*Sp* 8—12						
8192 Spica *W*	common	♃		clt	2	jl s	Li	S Europe	1568	C	s l		Sch han 2 t 157
β alba	*white flowered*	♃		or	2	jl s	W	..	...	C	s l		
γ latifolia W en	*broad-leaved*	♃		clt	2	jl s	Li	S Europe	1568	C	s l		
8193 Stœchas *W*	French	♃	□	or	1½	my jl	Li	S Europe	1562	C	s l		Bauhel ic t 201
8194 víridis *W*	Madeira	♃	□	or	1½	my jl	Pu	Madeira	1777	C	p l		Hot et Lu 1 t 4
8195 dentáta *W*	tooth-leaved	♃	□	or	1½	jn s	Li	Spain	1597	C	p l		Bot mag 400
8196 pinnáta *W*	pinnated	♃	□	or	1½	ap au	Li	Madeira	1777	C	p l		Bot mag 401
8197 multífida *W*	cut-leaved	♃	◇	or	1½	jl s	Li	Canaries	1597	S	p l		Lob ic 432
8198 abrotanoides *W*	Southernw.-lv	♃	□	or	1½	jn s	Li	Canaries	1699	C	co		Comm rar t 27
§8199 carnósa *W*	thick-leaved	♃	◇	or	1½	jn jl	Li	E Indies	1788	C	co		Lin am ac 10. t 3
1252 SIDER'ITIS *W*	Ironwort					*Labiatæ*	*Sp* 17—43						
8200 canariénsis *W*	Canary	♃	□	or	3	my au	Y	Canaries	1697	C	r m		Jac vind 3 t 30
8201 cándicans *W*	Mullein-leaved	♃	□	cu	3	ap jl	Y Br	Madeira	1714	C	r m		Com hort 2 t 99
8202 montána *W*	mountain		○	or	1½	jl au	Y Br	Austria	1752	S	co		Jac aust 5 t 434
8203 élegans *W en*	dark-flowered		○	or	1½	jl	Y	.. .	1787	S	co		Mur co got 1 t 4
8204 romána *W*	Roman		○	or	1	jn au	W	Italy	1740	S	co		Cav ic 2 t 187
8205 syríaca *W*	Syrian	♃	□	or	1½	jn s	W y	Levant	1597	C	r m		Sabb hort 3 t 40
8206 taúrica *W en*	Taurian	♃	□	cu	1½	jn s	Pa Y	Tauria	1822	C	co		
8207 perfoliáta *W*	perfoliate	♃	△	or	2	au n	Y	Levant	1731	C	co		
8208 incána *W*	Lavender-lvd	♃	□	or	1½	jl au	Y	Spain	1752	C	co		Cav ic 2 t 186
8209 ilicifólia *W en*	Holly-leaved	♃	△	or	1½	jn s	Y	Levant	..	C	co		
8210 spinósa *W en*	spiny	♃	△	or	1½	jn s	Y	Spain	.	C	co		
8211 hyssopifólia *W en*	Hyssop-leaved	♃	△	or	1	jn n	L Y	Pyrenees	1597	C	co		Sch han 2 t 158
8212 scordioides *W*	scollop-leaved	♃	△	or	1	au n	Y	France	1597	C	co		Barr ic t 343



History, Use, Propagation, Culture,

Vide John de Souza, p 106 The plant to which this name was given is involved in uncertainty. It appears to have been one of the smallest plants, whence some have inferred that "the Hyssop which groweth out of the wall" is a kind of moss H officinalis, a neat little evergeen tuft, and most ornamental and fragrant when in flower, was once in considerable repute as a popular medicine, but is now almost out of use

1249 *Nepeta* Said by Linnæus to be derived from *Nepet*, a town of Tuscany, mentioned by Pliny N cataria is called catmint, because cats are very fond of it, especially when it is withered, when they will roll themselves on it, tear it to pieces, and chew it with great pleasure Ray observes, that plants which he transplanted from the fields into his garden were always destroyed by the cats, unless he protected them with thorns till they had taken good root and came into flower, but that they never meddled with plants raised from seed. Miller has confirmed this by his own experience, having frequently set a plant from another part of the garden within two feet of others which came up from seeds, when the former was torn in pieces and destroyed by the cats, whilst the latter remained unhurt The true reason of this difference is assigned by Ray, that the cat is fond of it in a languid withering state, or when the peculiar scent of the plant is excited by being handled or bruised in gathering or transplanting Hence the English vulgar saying,

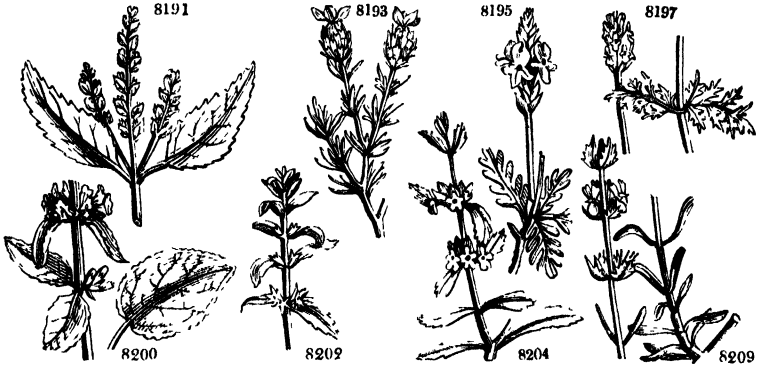
8165 Flowers spiked, Whorls somewhat stalked, Leaves stalked cordate tooth-serrated
8166 Corymbs stalked spiked, Leaves lanceolate rugose tomentose bluntly serrated
8167 Spike whorled interrupted, Leaves cordate toothed rugose waved crisp stalked hoary
8168 Cymes stalked many-flowered, Leaves lanceolate oblong cordate naked, Lateral lobes of cor reflexed
8169 Cymes stalked many-fl hairy, Lvs oblong cordate villous subsessile, Lateral lobes of cor reflexed
8170 Cymes stalked many-fl pilose, Leaves cordate stalked naked subsessile, Lateral lobes of cor spreading
8171 Cymes remote stalked 1-sided few-fl Lvs cordate blunt crenate glandular beneath floral all sessile
8172 Cymes stalk. 1-sid: lower rem Lvs cord blunt cren rug downy without glands floral generally stalked
8173 Cymes stalked many-flowered, Leaves stalked oblong subcordate crenate downy
8174 Flowers panicled, Leaves lanceolate serrate sessile naked
8175 Cymes stalked, Leaves cordate oblong lanceolate deeply serrate downy
8176 Leaves cordate oblong serrated, Bractes linear, Whorls 8-12-flowered incurved nearly 1-sided
8177 Racemes whorled naked, Leaves cordate oblong sessile naked
8178 Flowers sessile in whorled spikes, Bractes lan. longer than calyx pubesc Leaves stalked villous beneath
8179 Cymes stalked racemose, Leaves obl cordate serrate beneath hoary and rugose with veins
8180 Leaves cordate oblong crenate stalked, Stem smooth angular, Flowers whorled capitate clustered
8181 Fl sessile in whorled spikes, Bractes lin the length of calyx, Leaves stalked
8182 Fl sessile in whorled spikes, Whorls distant capitate, Bractes lanc length of cal Leaves stalked entire
8183 Leaves sessile lanceolate in approximated whorls, Bractes ovate with netted veins [at end
8184 Cymes stalked many-fl Tube of cor filiform curved, Leaves ovate cordate blunt stalked serr pubescent
8185 Cymes stalked few-fl racemose, Leaves ovate cordate blunt stalked toothed pubescent
8186 Spikes term Bractes obl. acum nerved with colored lines, Lvs cord pubesc Lateral lobes of cor reflexed
8187 Spikes term, Bractes ov nerved rugose subscariose, Lvs obl cord. villous, Lateral lobes of cor spreading
8188 Flowers spiked, Leaves pinnatifid entire
8189 Flowers spiked, Lateral lobes of cor spreading, Leaves pinnatifid with lin nearly equal segments

8190 Stems prostrate, Leaves ovate subserrate, Spikes terminal, Calyx scarious at end
8191 Spikes solitary unilateral erect, Bractes veiny

8192 Leaves sessile lin lanc revolute at edge, Spike interrupted naked

8193 Leaves sessile lin downy revolute at edge, Spike contracted comose subsessile, Bractes 3-lobed
8194 Leaves sessile lin rugose villous revolute at edge, Spike comose, Bractes undivided
8195 Leaves sessile linear pectinate-pinnate, Spike contracted comose
8196 Lvs stalked pinnate, Leaflets cuneate, Spike imbricated
8197 Lvs stalked hoary, Leafl. pinnatifid crosswise, Spike simple 4-corn spiral, Bractes ovate nerved villous
8198 Lvs. stalked pinnate nearly smooth, Leafl pinnatifid crosswise, Spike branched interrupted 4-cornered
8199 Lvs stalked ovate cordate serrate fleshy, Spike 4-cornered, Calyxes recurved

8200 Shrubby villous, Lvs cordate oblong acute stalked, Spikes whorled before flowering nodding
8201 Shrubby downy, Lvs ovate lanc cordate narrowed at end white beneath, Whorls about 8-fl remote
8202 Herbaceous without bractes, Cal larger than cor spiny, Upper lip trifid
8203 Herbaceous without bractes villous, Stem diffuse, Segm of calyx nearly equal spiny
8204 Herbaceous decumbent without bractes, Leaves spatulate toothed at end, Cal spiny, Upper lip ovate
8205 Half-shrubby woolly, Leaves lanc nearly entire, Fl in whorled spikes, Bractes cordate acute downy
8206 Half-shrubby downy, Lvs. lanc cren Fl in whorled spikes, Bractes cord acum reticulated with nerves
8207 Herbac pilose-hispid, Upper lvs lanc amplexicaul toothletted, Bractes cord acum netted hairy at edge
8208 Half-shrubby downy, Lvs linear lanceolate nearly entire, Flowers and bractes toothed
8209 Hirsute, Lvs lanc spiny toothed, Bractes round cord shorter than cal with spiny teeth, Whorls distant
8210 Hirsute, Lvs lanc spiny toothed, Bractes cord acum longer than cal with spiny teeth, Whorls close
8211 Lvs lanc smooth entire, Bractes cord toothed-spiny, Calyxes equal
8212 Leaves lanc toothed smooth above, downy beneath, Bractes ovate toothed spiny, Calyxes equal



and Miscellaneous Particulars

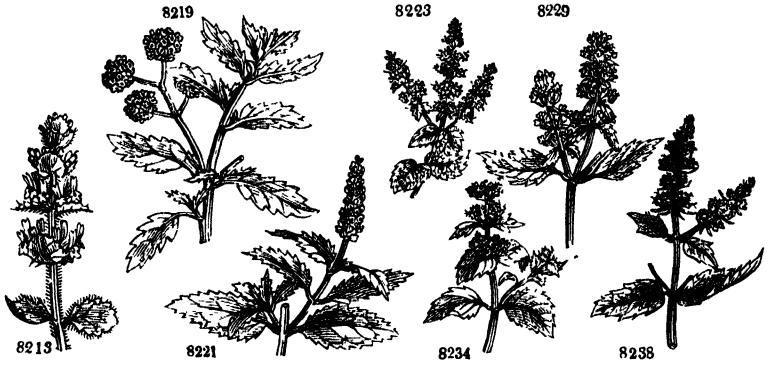
"*If you set it*
The cats will eat it,
If you sow it
The oats will not know it."

1250 *Elsholtzia* Named by Willdenow, in memory of a Prussian botanist, John Sigismund Elsholtz, who lived in the middle of the seventeenth century Inconspicuous hardy herbaceous plants of little merit

1251 *Lavandula* From *lavare*, to wash The use of the distilled water of this plant is well known. The flowers of L spica have an agreeable fragrant odour, and warm bitterish taste Alcohol extracts their virtues completely, and elevates in distillation all their odorous parts, water acts less completely The oil, however, on which their virtues depend, is obtained separate in distillation with water, in the proportion, according to Lewis, of one ounce of oil from sixty ounces of the flowers Lavender is stimulant and tonic The oil extracted by alcohol enters into several compositions The dried leaves in powder were used formerly as a sternutatory, but they are now neglected The flowers are cut in dry weather, when they begin to blow. (*London Dispensatory*, 862)

1252 *Sideritis* From σίδηρος, iron A name given by the Greeks to a plant by which were cured all

8213	hirsúta *W.*	hairy	☽ △	or	1½	jn jl	Y	S. Europe	1731.	C	co	Cav. ic 4. t. 302
8214	crispáta *W en.*	curled-leaved	☽ △	or	1½	jn s	Y	Gibraltar	1816	C	co	
8215	crética *L.*	Candian	♃ ⌴	cu	1½	jn s	W	Candia	1823	C	co	
8216	fœ'tida *W.*	stinking	☽ △	un	1	jn n	Y	Spain	1822.	C	co	
1253	BYSTROPO'GON *W*	Bystropogon				*Labiatæ*	*Sp* 4—7					
8217	plumósus *W*	woolly-flower'd	♃ ⌴	or	1½	jn jl	Pa pu	Canaries	1779	C	p l	L'her. sert n 4
8218	origanifólius *W*	entire-leaved	♃ ⌴	or	1½	jl au	Pa pu	Canaries	1815	C	p l	L'her sert n 5
8219	canariénsis *W*	Canary	♃ ⌴	or	1½	jn au	Pa pu	Canaries	1714	C	p l	Com hort 2 t 65
8220	punctátus *W*	cluster-flower'd	♃ ⌴	or	1½	jl.s	Pa pu	Madeira	1775.	C	p l	L'her sert n 7
†*1254	MENTHA *W.*	Mint				*Labiatæ*	*Sp* 35—43					
8221	Auriculária *W*	Indian	☾ ⍁	or	1	jl.au	Pu	E. Indies	1796	D	co	Rum amb 6 t.16
8222	lævigáta *W en*	polished	☽ △	or	1½	jl	Pu	.....	...	D	co	
8223	rotundifólia *W*	round-leaved	☽ △	or	2	au s	R	England	mo pl	D	co	Eng bot. 446
	β variegáta	*variegated*	☽ △	or	2	au s	R	.....	.	D	co	
8224	gratissima *W*	oblong-leaved	☽ △	or	1½	jl.au	Pu	Germany	1799	D	co	
8225	pubéscens *W en.*	pubescent	☽ △	or	1½	jl au	Pu	.....	...	D	co	
8226	pyramidália *Tenore*	pyramidal	☽ △	or	2	jl au	Pu	Naples	1824	D	co	
8227	víridis *W*	spear	☽ △	cul	2	au	Pu	Britain	mar	D	co	Eng bot 2484
8228	incána *W en*	hoary	☽ △	or	1½	jl.au	Pu	.....	1790	D	co	
8229	piperita *W*	pepper	☽ △	m	2	au s	Pu	England	wat pl	D	co	Eng bot 687
8230	glabráta *W*	smooth	☽ △	or	1	jl au	Pu	Egypt	1802	D	co	
8231	crispa *W*	curled	☽ △	or	2	jl au	Pu	Siberia	1640	D	co	
8232	crispáta *W en*	crumpled	☽ △	or	1½	jl au	Pu	.....	1807	D	co	
8233	unduláta *W en.*	wave-leaved	☽ △	or	1½	jl au	Pu	.....	1816.	D	co	
8234	odoráta *Smith*	Bergamot	☽ △	or	1	jl.au	Pu	England	wat pl	D	co	Eng bot. 1025
	M citrata W											
8235	balsamea *W en*	Balsam-scented	☽ △	or	1½	jl au	Pu	Italy	1804	D	co	
8236	niliaca *W*	Egyptian	☽ △	or	2	jl au	Pu	Egypt	1796	D	co	Jac hort 3 t 87
8237	nemorósa *W en*	wood	☽ △	or	2	jl au	Pu	Britain	. .	D	co	Fl dan t 484
8238	sylvéstris *W*	wild	☽ △	or	2	jl au	Li	Britain	wat pl	D	co	Eng bot 686
8239	macrostáchya *Ten*	long-spiked	☽ △	or	2	jl au	Pu	S. Europe	...	D	co	
	M rotundifolia W	en										
8240	lavandulácea *W en*	Lavender-lvd	☽ △	or	1	jl au	Pu	Spain	1823	D	co	
8241	rúbra *H K*	common-red	☽ △	or	1½	s	Pu	Britain	wat pl	D	co	Eng bot 1413
8242	acutifólia *H K.*	sharp-leaved	☽ △	or	1	s	Li	Britain	wat pl	D	co	Eng bot 2415
8243	boreális *Mich*	northern	☽ △	pr	¾	s	Pu	N Amer	1824	D	co	
8244	hirsúta *H K*	hairy-water	☽ △	or	1½	jl s	Li	Britain	wat pl	D	co	Eng bot 447
8245	capénsis *W*	Cape	☽ ⌴	or	1	jl au	Pu	C G H	1816	D	co	
8246	austriáca *W en*	Austrian	☽ △	or	1	jl au	Pu	Germany	1809	D	co	
8247	sativa *W*	tall-red	☽ △	or	2	au s	Pu	England	...	D	co	Eng bot. 448
8248	hírta *W en*	shaggy	☽ △	or	1½	au s	Pu	. . .	...			
8249	grácilis *H K*	narrow-leaved	☽ △	or	1	au	Pu	Britain	wat pl	D	co	Eng bot 449
8250	arvénsis *H K.*	corn	☽ △	or	¾	jl s	Li	Britain	corn fi	D	co	Eng. bot. 2119
	β præ'cox S M	*early-flowering*	☽ △	or	¾	jn	Pu	Britain	...	D	co	Sole's Mints,c ic
8251	gentilis *H K*	bushy-red	☽ △	or	1½	jn au	Pu	Britain	pools	D	co	Eng bot. 2118
8252	canadénsis *W*	Canadian	☽ △	or	1	jl	Pu	N Amer	1801	D	co	
8253	dentata *W en*	toothed	☽ △	or	1	jl au	Pu	Germany	1816	D	co	
8254	Pulégium *W*	Pennyroyal	☽ △	m	¼	au s	Pu	Britain	wet co	D	co	Eng bot 1026
8255	cervína *W*	Hyssop-leaved	☽ △	or	3	jn au	W	France	1648	D	co	Mor his 3 t 7 f 7



History, Use, Propagation, Culture,

wounds by sword The plants of the moderns do not possess any such properties Their flowers, however, have frequently a ferruginous color

1253 *Bystropogon.* A name elegantly contrived by L'Heritier, from βυω, to close, and πωγων, a beard, in allusion to the throat of the corolla being closed by hairs.

1254. *Mentha* Μινθα or μινθη, in old Greek. The poets feign that Mintha was a daughter of Cocytus, transformed into the plant which bears her name, an allegorical description of the terrible effects ascribed to their plant by the ancients M viridis not being so hot to the taste as peppermint, and having a more agreeable flavor than most of the others, is generally preferred for culinary and some medicinal purposes The leaves or tops are used in spring salads, and eaten dried as sauce with lamb and in soups.

The medical preparations of spearmint are more pleasant than those of peppermint, but perhaps less efficacious. This herb, as do the other sorts, contains much essential oil, but of an odor less agreeable than that of lavender or marjoram. it is therefore less employed as a cephalic, but it acts very powerfully on parts to which it is immediately applied, and therefore considerably on the stomach It acts especially as an antispasmodic, and therefore relieves pains and cholic arising from spasm It will also stop vomiting dependent on the same cause; but if it arise from an inflammatory irritation in the stomach itself, or in other parts of the body, it aggravates the disease The infusion of mint in warm water agrees better with the stomach than the distilled water. The officinal preparations are an essential oil, a conserve, a simple water, and a spirit The conserve is very grateful, and the distilled waters both simple and spirituous, are generally thought pleasant.

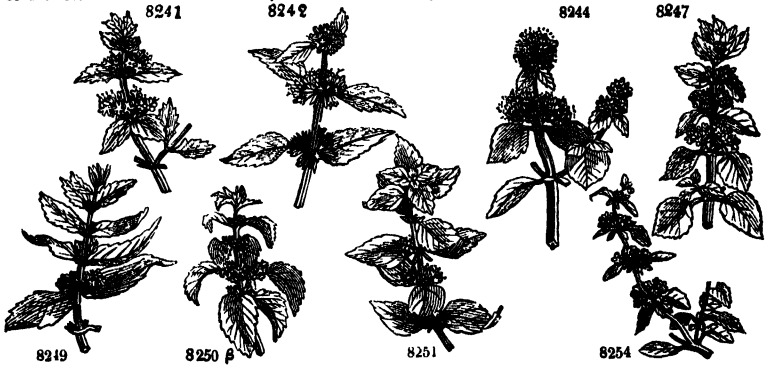
8213 Leaves lanc toothed blunt pilose, Bractes toothed spiny, Stems hirsute decumbent
8214 Hirsute, Lvs obl cuneate toothed wavy downy beneath, Bractes round with spiny teeth, Whorls distant
8215 Shrubby downy, Lvs cord obl crenate stalked downy on each side, Upper lip of cor ovate entire
8216 Like hyssopifolia, but leaves smooth on each side somewhat toothed lanceolate blunt

8217 Panicle dichotomous, Cal feathery, Leaves ovate subserrate downy beneath
8218 Panicle dichotomous, Cal feathery, Leaves ovate entire very white beneath
8219 Panicle dichotomous, Flowers capitate, Leaves ovate crenate most villous beneath
8220 Panicle dichotomous, Flowers capitate, Leaves ovate toothed smooth dotted

8221 Spikes oblong, Leaves oblong serrated hairy sessile, Stamens longer than cor.
8222 Spikes cylindr interrupted, Leaves ovate-obl subsessile remotely serrate and calyxes smooth
8223 Hoary, Spikes oblong interrupted, Leaves roundish rugose crenate sessile

8224 Spikes obl Leaves sessile oval finely and equally serrate acum hoary beneath, Stamens as long as cor
8225 Spikes obl. Lvs ovate stalked serr hoary beneath, Calyxes and peduncles hirsute, Stem much branched
8226 Leaves stalked subcordate slightly pubescent, Spikes middle sized [somewhat hairy
8227 Spikes cylindr interrupted, Lvs lanc. subsess cun at base finely serrated smth on each side, Teeth of cal
8228 Spks. obl Lvs obl comp blunt serrat ses hoary and downy on each side, Cal and ped vill Stem much br
8229 Spikes obl blunt interrupted at base, Lvs ov -obl acute serrat stalked smooth, Cal. quite smooth at base
8230 Flowers racemose whorled, Leaves stalked ovate lanc serrated smooth
8231 Spikes capitate, Leaves cordate cut-toothed wavy sessile, Stamens length of corolla [hirsute
8232 Spikes cylindr interrupt Lvs ov obl subsess cuspid ser waved complicate hoary on each side, Cal and ped.
8233 Spikes cylindr Lvs ovate obl subsess cuspidate serr wavy complicate hoary on each side
8234 Flowers in heads, Lvs ellipt. blunt serrated smooth stalked, Stamens shorter than corolla [at base
8235 Spikes cylindr interrupted, Lvs ovate lanc stalked finely serr entire at base, Ped hirsute, Cal smooth
8236 Spikes obl interrupt at base, Lvs obl lanc subses remotely and finely serrat entire at base hoary beneath
8237 Spikes cylindr contracted, Leaves obl subcor subses equally serrated hoary beneath, Cal and ped hirsute
8238 Spks cylindr interrupt at base, Lvs ov obl subsess finely and unequally serr hoary, Cal and ped hirsute
8239 Spikes cylindr. interrupted, Lvs. ovate-ellipt rounded at end serrated subsessile hoary beneath [calyx villous
8240 Spks cylindr interrupt at base, Lvs lin lanc nearly entire complicate sess hoary on each side, Ped and
8241 Flowers whorled, Lvs ovate stalked serrated entire at base smooth, Teeth of calyx hairy
8242 Fls whorl. Lvs ov -lanc narrowed at each end, Cal tubul ir obl hairy, Hairs of pedicels spreading, of stems
8243 Low pubesc Fl whorled, Lvs stalked with resinous dots acute at each end, Stamens exserted [deflexed
8244 Flowers capitate or whorled, Lvs stalked ovate, Calyx hairy on each side, Pedicels hispid backwards
8245 Whorls spiked oblong, Leaves lanceolate entire downy
8246 Fl whorled, Lvs ovate stalked serrate hairy, Cal hairy, Ped. smooth, Stem erect
8247 Flowers whorled, Lvs ovate acutish serrated, Stamens longer than corolla
8248 Spikes cylindr interrupted at base, Lvs ovate stalked serrate beneath hairy, Cal and peduncle hirsute
8249 Flowers whorled, Lvs lanc subsess Stem much branched erect, Cal at base and pedicels very smooth
8250 Flowers whorled, Lvs ovate stalked serrate hairy, Cal and peduncles hirsute, Stem much branched

8251 Flowers whorled, Lvs. ovate, Stem much branched spreading, Calyxes and pedicels smooth at base
8252 Flowers whorled, Lvs lanc serrate stalked hairy, Stam as long as corolla
8253 Flowers whorled, Lvs ov subsess cuspidate serr wavy nearly smooth, Pedunc and calyx smooth at base
8254 Flowers whorled, Lvs ovate, Stem prostrate, Pedicels and cal downy on each side, Teeth ciliated
8255 Flowers whorled. Lvs lanc nearly entire sessile smooth, Bractes palmate



and Miscellaneous Particulars.

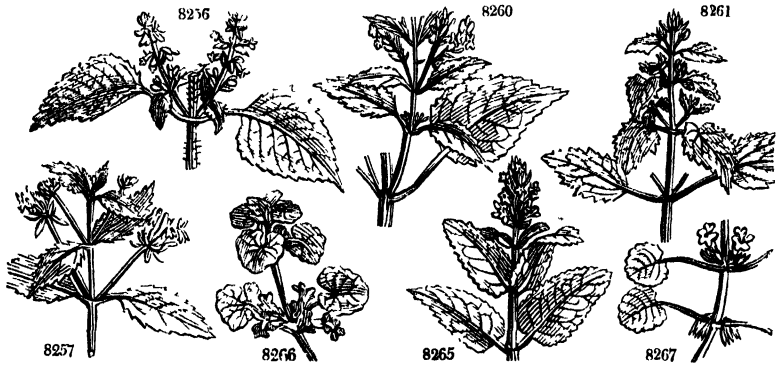
Lewis observes, that mint is said to prevent the coagulation of milk, and hence it has been recommended to be used with milk diets, and even in cataplasms and fomentations for resolving coagulated milk in the breasts: upon experiment, the curd of milk, digested in a strong infusion of mint, could not be perceived to be any otherwise affected than by common water, but milk, in which mint leaves were set to macerate, did not coagulate near so soon as an equal quantity of the same milk kept by itself Dry mint digested in rectified spirits of wine, gives out a tincture which appears by day-light of a fine dark green, but by candle-light of a bright red color The fact is, that a small quantity of this tincture is green, either by day-light or candle-light, but a large quantity seems impervious to common day-light, however, when held between the eye and a candle, or between the eye and the sun, it appears red, so that if put into a flat bottle it appears green, but when viewed edgewise red

For medicinal use spearmint is generally cut just as the flowers appear, but for obtaining the essential oil, the flowering plant is preferred It should be cut in very dry weather. (*London Dispensatory*, 384.)

M piperita has a more penetrating smell than any of the other species, and a much stronger taste, pungent and glowing like pepper, sinking as it where into the tongue, and followed by a sensation of coldness Its stomachic, anti-spasmodic and carminative qualities render it useful in flatulent colics, hysterical affections, retchings, and other dyspeptic symptoms, acting as a cordial, and often producing immediate relief. The officinal preparations are an essential oil, a simple water, and a spirit The essence of peppermint is an elegant medicine, and seems to be the rectified oil dissolved in spirits of wine.

"The cultivators of the plant observe, that to keep up its quality, the roots must be transplanted every three

1255 PERIL'LA *W*	PERILLA					*Labiatæ*	*Sp* 1						
8256 ocymoides *W*	Basil-leaved	○	cu		½	jl au	W	India	1770	S	s l	Bot mag 2395
†1256 HYP'TIS *Pott*	HYPTIS.					*Labiatæ*	*Sp* 8—27						
8257 capitáta *H K*	Jamaica	♀	cu		1½	jn jl	Pa pu	W Indies	1714	S	s l	Pan m 7 t 27 f 1
8258 radiáta *Pott*	Carolina	♀	cu		1	jn jl	Pa pu	Carolina	1690	D	l p	Pan m 7 t 27 f 2
8259 ebracteáta *H K*	small-headed		cu		¾	ja o	Pa pu	W Indies	1778	S	l p	Pan m 7 t 29 f 2
8260 pectináta *Pott*	Balm-leaved	♀	cu		1½	ja d	Pa pu	W Indies	1776	D	l p	Pol an mus 7 30
8261 pérsica *P S*	Persian	♃	cu		1½	jl	Pa pu	Persia	1800	C	l p	Lin trans 6 t 12
8262 stachyóides *Lmk*	long-spiked		cu		1½	jl	W	....	1824	S	co	
8263 recurváta *Pott*	recurved	♀	cu		1	jl	Pa pu	Cayenne	1820	D	co	
8264 brévipes *Pott*	short-stalked		cu		1	jn au	Li	S Amer	1822	S	co	
*1257 HORMI'NUM *Ort*	HORMINUM					*Labiatæ*	*Sp* 1—3						
§8265 caulésens *Ort*	spiked	☿	pr		1	jl au	Pa R	Mexico	1800	C	s p	W h ber t 21
1258 GLE'CHOMA *W*	GROUND IVY					*Labiatæ*	*Sp* 2						
8266 hederácea *W*	common	♃	w		1	mr my	B	Britain	hed b	D	co	Eng bot 853
8267 hirsuta *P S*	hairy	♃	cu		2	mr my	Pk	Hungary	...	D	co	Pl rar hun t 119
†1259 LA'MIUM *W*	ARCHANGEL					*Labiatæ*	*Sp* 11—19						
8268 Orvála *W*	Balm-leaved	☿	or		1¼	my jl	D P	Italy	1596	D	co	Bot mag 172
8269 lævigatum *W*	smooth	☿	w		1	mr o	Pu	Italy	1711	D	co	Pluk al t 198 f 1
8270 rugósum *W*	rough	☿	w		1	jl au	R	Italy	1766	D	co	Bocc mus 5 t 23
8271 garganicum *W*	woolly	☿	w		2	jl au	Pu	Italy	1729	D	co	Exot bot 1 t 48
8272 maculátum *W*	spotted	☿	w		1	jn jl	Pu	Italy	1683	D	co	Col ecph 1 t 185
8273 álbum *W*	white	☿	w		2	ap s	W	Britain	was gr	S	co	Eng bot 768
8274 moschátum *H K*	musk-scented	○	w		1	...	..	Levant	1730	D	co	
8275 molle *W*	Pellitory-leav'd	☿	w		1	ap my	W	..	1683	S	co	
8276 purpureum *W*	purple	○	w		1	my au	Pu	Britain	was gr	S	co	Eng bot 769
β incisum H K	*cut-leaved*	○	w		1	mv jl	Pk	Britain	san fi	S	co	Eng bot 1933
8277 amplexicáule *W*	Henbit	○	w		¾	mr jn	Pk	Britain	san fi	S	co	Eng bot 770
8278 multifidum *W*	multifid-leaved	○	cu		1	ap my	Pu	Levant	1752	S	co	
1260 GALEOP'SIS *W*	HEMP-NETTLE					*Labiatæ*	*Sp* 4						
8279 Ládanum *W*	red	○	w		¾	jl s	Pk	Britain	chal fi	S	co	Eng bot 884
8280 villósa *E B*	downy	○	w		1	jl au	Y	Britain	san fi	S	co	Eng bot 2353
8281 Tetráhit *W*	common	○	w		1½	jl au	W	Britain	corn fi	S	co	Eng bot 207
8282 versicolor *H K*	large-flowered	○	w		1	jl au	Y	Britain	san fi	S	co	Eng bot 667
1261 GALEOB'DOLON *E B*	DEAD-NETTLE					*Labiatæ*	*Sp* 1—2						
8283 lúteum *F B*	yellow	☿	or		1	my jn	Y	Britain	m sh pl	D	co	Eng bot 787
1262 BETO'NICA *W*	BETONY					*Labiatæ*	*Sp* 7—12						
8284 officinális *W*	wood	☿	or		1	jl au	Pu	Britain	woods	D	co	Eng bot 1142
8285 stricta *W*	Danish	☿	or		1½	jn jl	Pu	Denmark	1592	D	co	Par thea 615 f 4
8286 incána *W*	hoary	☿	or		¾	jn jl	F	Italy	1759	D	s p	Bot mag 2125
8287 orientális *W*	oriental	☿	or		1	jn jl	L Pu	Levant	1737	D	co	Lam ill t 507 f 2
8288 alopecúrus *B*	fox-tail	☿	or		1½	jl	L Y	S Europe	1759	D	co	Jac aus 1 t 78
8289 hirsúta *W*	hairy	☿	or		¾	jn jl	Pu	Italy	1710	D	s p	Mur co got 2 t 3
8290 grandiflóra *W*	great-flowered	☿	or		2	jn jl	L R	Siberia	1800	D	co	Bot mag 700



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years, otherwise it degenerates into the flavor of spearmint" (*Linnean Transactions*, v 176) If the plant be cut in wet weather it changes to black, and is little worth (*London Dispensatory*, 385)

M. pulegium (from *pulex*, a louse, which animal it was thought to drive away) smells like spearmint, but less fragrant, the taste aromatic and pungent, with a slight flavor of camphor These qualities reside in a very volatile essential oil, which rises in distillation with water It was formerly regarded as emmenagogue, expectorant, and diaphoretic, and was in repute for promoting the uterine evacuation, and relieving hysteria, hooping-cough, asthma, but it is now justly considered of no value, and seldom used in regular practice (*London Dispensatory*, 386)

1255 *Perilla* A name the meaning of which has not been explained An annual plant with a strong balmy fragrance

1256 *Hyptis* From ὑπτιος, reversed, because the corolla seems inverted, both as to its form and as to the insertion of stamens. Plants with densely whorled flowers, all natives of the western parts of the world, within, or nearly so, the limits of the tropics

1257 *Horminum* From ὁρμαω, to excite, in allusion to its stimulant qualities The Horminum of the ancients was reputed aphrodisiac

1258 *Glechoma* Γληχων was a sort of Thyme among the Greeks Small trailing herbs The leaves of G hederacea are often deformed with red hairy tumours, which are the galls of the Cynips Glechomæ Before

8256 Leaves ovate serrate, Bractes long leafy

8257 Heads stalked in an involucre, Involucre the length of flowers, Leaves ovate toothed
8258 Heads stalked in an involucre, Involucre longer than flowers, Leaves oblong toothed narrowed at base
8259 Heads opp few-fl without bractes, Peduncle shorter than joints, Leaves cord doubly serrate, upper oval
8260 Flowers in spiked 1-sided panicles on a two-parted peduncle, Leaves ovate
8261 Flowers in stalked capitate cymes, Leaves of involucre 2 longer than calyx in fruit, Leaves oblong
8262 Leaves ovate subcordate attenuate acutely crenate pubescent spiked whorled terminal, Cal 5-toothed
8263 Flowers capitate, Involucre filiform hispid shorter than calyx of fruit, Lower leaves cordate
8264 Heads on a short peduncle, Leaves of involucre oblong lanc. Cal pubescent not closed with hairs

8265 Stem leafy, Leaves ovate oblong crenate, Bractes cordate, acuminate, Cal pungent

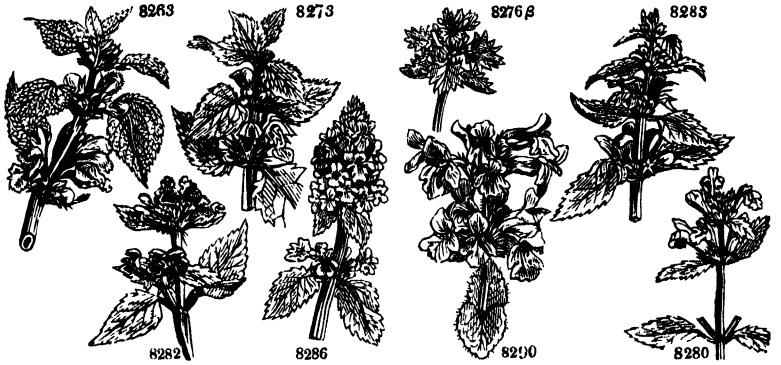
8266 Smooth, Segment of calyx ovate acute
8267 Hirsute, Segment of calyx lanceolate cuspidate

8268 Leaves cord unequally finely serr Orifice of cor inflated, Lower lip 3-toothed on each side, Cal colored
8269 Leaves cord rugose, Stem smooth, Cal smooth the length of tube of corolla
8270 Leaves cord acute rugose and stems hairy, Whorls many-flowered, Tooth of orifice solitary setaceous
8271 Leaves cord concave somewhat hoary, Orifice of cor inflated. Tube straight with two teeth on each side
8272 Leaves cord acuminate, Whorls 10-flowered
8273 Leaves cord acuminate serrate stalked, Whorls 20-flowered
8274 Smooth, Leaves cordate crenate floral subsessile, Teeth of calyx as long as cor
8275 Leaves stalked somewhat toothed lower cordate, upper ovate
8276 Leaves stalked cordate blunt toothed, upper close together, Stem naked below
β Leaves cut-toothed
8277 Floral leaves sessile amplexicaul cut, radical lobed
8278 Leaves many-parted

8279 Joints of stem equal, All the whorls remote, Leaves lanceolate
8280 Joints of stem equal, Leaves ovate lanceolate serrate villous, Helmet crenate cut
8281 Joints of stem thickened upwards, Upper whorls contiguous, Cal pungent, Cor little longer than calyx
8282 Stem hispid, Joints thickened upwards, Cor thrice as long as calyx, Helmet ventricose

8283 All the leaves ovate, Involucre 4-leaved

8284 Spike interrupted, Helmet entire, Middle segm of lower lip emarg Cal smoothish
8285 Spike oblong, Helmet entire, Middle segm of lower lip crenate wavy, Cal hairy, Bractes ciliated
8286 Spike interrupted, Helmet bifid, Middle segm of lower lip crenate, Tube downy incurved
8287 Spike entire, Middle segm of lower lip entire
8288 Spike leafy at base, Helmet bifid
8289 Spike leafy at base, Helmet entire
8290 Spike leafy interrupted, Calyx villous at edge, Teeth subulate, Helmet obcordate



and Miscellaneous Particulars

the use of hops, the leaves were put in ale, and being bitter, aromatic, and having a peculiar and very strong smell, were much used in popular medicine It is now, however, seldom used

1259 *Lamium Lamia* was a celebrated marine monster, the flowers of this genus have a considerable resemblance to the grotesque figure of some beast L. orvala is the only species admitted into the garden The others are mostly ugly weeds L. album, *Ortie blanche*, Fr, *Taube Nessel*, Ger, and *Ortica morta* or *bianca*, Ital, has a disagreeable smell when bruised, and though no cattle whatever will touch it, yet Linnæus says, the leaves are eaten in Sweden as a pot herb in spring

1260. *Galeopsis* From γαλη, a weasel, and ὀψις, appearance. The flower has a grotesque figure, and may be likened to the form of a weasel, or, indeed, of any thing else

1261 *Galeobdolon* A word with the same meaning as Galeopsis, which see.

1262 *Betonica* In Celtic botany is called *Bentonic*, wherefore it appears, that Pliny gave too much way to conjecture, when he wrote that Betonica or Vetonica was so called from the Vetones, a people who dwelt at the foot of the Pyrenees B officinalis was formerly much used in medicine, but it is discarded from modern practice. When fresh it intoxicates The leaves when dry excite sneezing Sheep eat it, but goats refuse it. The roots are bitter and very nauseous, in a small dose they vomit and purge violently This plant dyes wool of a very fine dark yellow color

†*1263. STA'CHYS. *W.*	Hedge-Nettle.					*Labiatæ*	*Sp* 37—55.						
8291	*sylvática W.*	common	△	w	2	jl au	Bd	Britain	hed.	D	co	Eng. bot 416	
8292	*sibírica Link*	Siberian	△	un	1	jl au	Pu	Siberia?	1822.	D	co		
8293	*mollíssima W. en*	soft-leaved	△	w	1½	jl au	Pa pu	Corfu	1806	D	co	W.hort ber t 60	
8294	*corsica Pers*	Corsican	△	un	½	jl.au	Pu	Corsica	1823	D	co		
8295	*palústris W*	Clown's Allheal	△	w	2	au	Pu	Britain	mo m	D	co	Eng bot 1675	
8296	*coccínea W.*	scarlet	△	or	3	jn au	S	S Amer.	1798	C	p l	Bot. mag 666	
8297	*nepetifólia Desf*	Catmint-leav'd	△	w	1½	jn au	Pu	.....	18.5	D	co		
8298	*decúmbens Pers*	decumbent	△	w	2	my jl	Y	.. ...	1816.	D	co		
8299	*germánica W*	downy	△	w	3	jl	Pu	England	chal fi.	D	co	Eng bot. 829	
8300	*intermédia H K.*	oblong-leaved	△	or	2	jn jl	Pu	Carolina	1762	D	co		
8301	*lanáta W.*	woolly	△	or	2	jn s	St	Siberia	1782	D	p l	Jac. ic 1 t 107	
8302	*Heráclea L*	broad-leaved	△	or	3	jn s	Pu	Italy	1822	D	co		
8303	*ambígua Smith*	ambiguous	△	w	1½	jn jl	Pu	Britain	al mo	D	co	Eng bot. 2089	
8304	*tenuifólia Bub*	fine-leaved	△	or	1½	jn jl	Pk	Iberia	1822	D	co		
8305	*salviæfolia Ten*	sage-leaved	△	or	2	jn jl	Pu	S Europe	1824	D	co		
8306	*alpina W*	Alpine	△	w	2	jn au	D P	Germany	1597	D	p l	Lap pyr 1 t 8	
8307	*circumáta W*	blunt-leaved	△	w	1	my jl	Pu	Barbary	1777	D	p l	L'Hle. s nov. t 26	
8308	*Balbisii Link.*	Balbis's	△	or	1½	my jl	Y	Italy	1823	D	co		
8309	*ibérica Bub*	Iberian	△	or		my jl	Pu	Iberia	1822.	D	co		
8310	*fœniculum Psh*	Fennel-scented	△	cu	2	my jn	B	N Amer	1824	D	co		
8311	*arenária Desf*	sand	△	or	1	jl	Pu	Levant	1804	D	p l	Desf atl t. 126	
8312	*crética W*	Cretan	△	w	2	jn au	Pu	Candia	1640	D	co	Wal ho 108 t 19	
8313	*glutinósa W*	clammy	△	or	1	jn jl	Pu	Candia	1729	C	co	M h s 11 t 4 f 17	
8314	*spinósa W*	thorny	⎵	un	1½	jl	Pu	Candia	1640	D	co	M h s 11 t 10 f 2	
8315	*orientális W*	oriental	△	or	1½	jn jl	Pu	Levant	1768	D	s l		
8316	*maritima W*	sea	△	ft	2	jl	Y	S. Europe	1714	D	co	Jac vind. 1 t 70	
8317	*obliqua Pers*	oblique-leaved	△	or	2	jn jl	Y	Hungary	1816	D	co	Pl rar hun t 134	
8318	*betonicæfólia Pers*	Betony-leaved	△	or	1½	jn jl	Y	Rochelle	1812	D	co		
8319	*æthiópica W*	Ethiopian	△	or	1½	ap jl	Pu	C G H	1770	C	p l	Jac obs 4 t 77	
8320	*hirta W.*	procumbent	△	or	1	jn au	Pu	Spain	1725	D	co	All ped 1 t 2 f 3	
8321	*rugósa W*	rough	⎵	or	2	jl au	Pa Y	C G H	1774	C	p l	Jac ic 3 t 493	
8322	*scordifólia W en*	wedge-leaved	△	or	1	jl au	Y	N Amer?	1816	D	co		
8323	*récta W en*	upright	△	or	2	jn au	Y	S Europe	1683	D	co	Jac aust 4 t 359	
8324	*ánnua W*	annual	○	w	1	jn au	w y	S Europe	1713	S	co	Jac aust 4 t 360	
8325	*arvénsis W*	corn	○	w	1	jl au	Pu	Britain	corn fi	C	co	Eng bot. 1154	
8326	*latifólia W*	broad-leaved	△	or	2	jn jl	Pu	.....	1775	D	co		
8327	*phlomoides W en*	Phlomis-leaved	△	or	1½	jn jl	Pu	.....	1816.		co		
†1264	ZIETE'NIA *Pers*	Ziptenia				*Labiatæ*	*Sp* 1						
8328	*lavandulifólia Pers*	lavender-leav'd	△	or	1½	jl au	Pu	Levant	1824	D	co		
†*1265	BALLO'TA *W*	Stinking Horehound				*Labiatæ*	*Sp* 4—7						
8329	*nigra W*	black	△	w	2	jl s	Pu	Britain	hed	D	co	Eng bot 46	
8330	*álba W*	white	△	w	2	jl s	W	Britain	...	D	co		
8331	*lanáta W*	woolly	△	or	2	jn au	Y	Siberia	1752	D	co	Gmel sib 3 t 54	
	Panzéria multífida	Mœnch											
8332	*disticha W*	distichous	△	w	1	jl	B	India	1823	S	co		
*1266	MARRU'BIUM *W*	Horeh nd				*Labiatæ*	*Sp* 16—20						
8333	*Alýssum W*	plaited-leaved	△	or	1½	jl au	Pu	Spain	1597.	C	s l	Ger herb 379 f 1	
8334	*astracánicum W*	Astracan	△	or	1½	jl au	Pa pu	Levant	1816	D	co	Jac ic 1 t 109	
8335	*peregrínum W*	Sicilian	△	or	3	jl s	W	Sicily	1640	D	co	Jac aust 2 t 160	
8336	*créticum W*	Cretan	△	or	1	jl s	W	Levant	1596.	D	co		
8337	*candidíssimum W*	woolly-white	△	or	3	jl s	W	Levant	1732	D	s p	Dil el t 274 f 214	
8338	*supínum W*	procumbent	△	or	½	au o	Pu	S Europe	1714	D	co	Boc mus 2 t 96	
§8339	*africánum W*	African	△	or	1	jl s	Pu	C G H	1710.	D	p l	Com hort 2 t 90	
8340	*vulgáre W*	common-white	△	m	2	jn s	W	Britain	rubble	D	co	Eng bot 410	
8341	*affine Horn*	kindred	△	or	1½	jn s	Pu	Siberia?	1822	D	co		
§8342	*hirsútum W*	hirsute	△	or	1½	jn jl	Pa pu	.....	...	D	co		
§8343	*cinéreum W en*	cinereous	△	or	1½	jn jl	Pa pu	Spain	1823	D	co		
§8344	*crispum W*	curl-leaved	△	or	1	jl au	Pa pu	S. Europe	1714	C	co	Herm. par t 200	
8345	*catariæfólium Lam.*	Catmint-leaved	△	or	1½	jl au	Pu	Levant	1819	D	co		
§8346	*hispánicum W*	Spanish	△	or	1	jl au	Pu	Spain	1714	C	co	Herm par. t 201	
§8347	*Pseu-Dictámnus W*	shrubby-white	⎵	or	1½	jl au	Pu	Candia	1596.	C	p l	Lam ill t.508 f 2	
§8348	*acetabulósum W*	saucer-leaved	△	or	1	jn au	Pu	Candia	1676.	C	p l	Barr ic. 129	



History, Use, Propagation, Culture,

1263. *Stachys* From στάχυς, a spike, the flowers of all the species grow in spikes They are for the most part strong smelling weeds

1264 *Zietenia.* A genus divided by Gleditsch from Stachys, on account of the different structure of the corolla, and the single grain. It is a plant with lanceolate entire lineate leaves, the lower of which are connate, and purple blossoms.

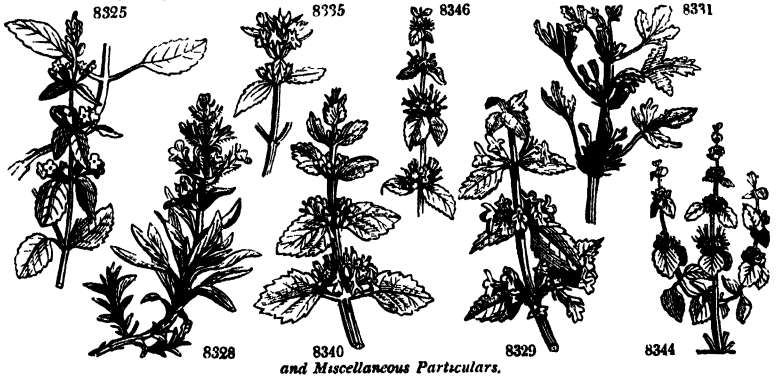
8291 Whorls 6-flowered, Leaves cordate stalked
8292 Leaves ovate obl acum serrated hairy above with soft down beneath, Segm. of cal linear mucronate
8293 Whorls spiked 6-fl Tube of cal shorter than spread teeth, Helm. of cor. emarg. Lvs ov serr with soft down
8294 Small, Stems much branched diffuse, Leaves cordate crenate, Cal campanulate spiny
8295 Whorls about 6-flowered, Leaves linear lanceolate ½ stem-clasping sessile
8296 Whorls 6-flowered, Leaves ovate cordate crenate, Petioles dilated
8297 Leaves cordate cren pubescent, Whorls 4-6-flowered, Stem erect smooth simple
8298 Whorls many-fl approximated, Bractes filiform, Leaves cordate toothed, Stem decumbent villous
8299 Hoary, Whorls many-fl. Leaves ovate, Serratures imbricated, Stem woolly
8300 Whorls many-fl Calyxes subpungent, Leaves oblong subcordate crenate, Stem woolly
8301 Whorls many-fl Leaves woolly oblong, Stems procumbent at base and rooting
8302 Whorls 10-fl Calyxes unarmed, Leaves cordate. floral ovate entire sessile, Stem hairy
8303 Whorls 6-fl Leaves oblong cordate stalked, Stem hollow
8304 Whorls 2-fl Leaves linear naked, lower pinnatifid-toothed
8305 Like S germanica, but downy not woolly, Leaves narrower, Calyxes long spiny
8306 Whorls many-fl. Leaves cordate thin, Serratures cartilaginous at end, Lips of cor. flat
8307 Whorls spiked 6-flowered, Bractes cordate, Leaves cordate stalked blunt crenate toothed
8308 Leaves ovate crenate pubescent upper entire, Whorls 6-fl Cal hairy with filiform segments
8309 Whorls spiked, Lvs oblong attenuated at base serrated hairy · lower blunt, Cal mucronate spiny
8310 Erect pubescent, Leaves cord. ov. toothed above smooth, beneath white with down, Whorls about 6-fl.
8311 Whorls a little spiked hairy 6-fl Cal spiny, Leaves oblong serrate blunt, Helmet bifid
8312 Hairy, Whorls 30-flowered, Calyx pungent, Stem hairy
8313 Smooth much branched, Branches spiny, Pedunc axillary solitary 1-fl with two bractes
8314 Hoary, Branches brachiate terminated by a spine, Flowers axillary in threes
8315 Leaves downy ovate lanceolate floral shorter than the whorl
8316 Whorls 6-flowered, Radical leaves oval crenate upper ovate entire, Cor twice as long as calyx
8317 Leaves obliquely cordate rugose crenate blunt hairy, Bractes entire shorter than calyx
8318 Leaves cordate ellipt the lower on long stalks, Stems and spinulose calyxes covered with wool
8319 Whorls 2-flowered, Leaves cordate deeply serrated rugose, Tube of cor curved
8320 Whorls 6-flowered, Stems prostrate, Upper lip of cor bifid spreading reflexed, Lvs broad cord crenate
8321 Hoary, Whorls 6-fl Leaves linear lanceolate narrowed at base downy rugose serrated, Calyxes pointless
8322 Whorls 6-fl Calyxes rather pungent, Lvs cuneate lanceolate blunt serrate at end sessile, Stem decum.
8323 Whorls subspiked, Leaves cordate ellipt crenate rough, Stems ascending
8324 Whorls 6-fl Leaves ovate lanc rugose 3-nerved stalked, Stem erect
8325 Small, Whorls 6-fl Leaves blunt nearly naked, Corolla the length of calyx, Stem weak
8326 Whorls many-fl spiked, Upper lip bifid, with acute divisions, Leaves broad cordate rugose hairy
8327 Whorls 8-flowered, Leaves lanceolate cordate crenate rugose, Stem very hairy

8328 Whorls 6-flowered very hairy, Leaves lanceolate entire lined

8329 Leaves cordate undivided serrated, Cal acuminate
8330 Leaves cordate undivided serrated, Cal subtruncate
8331 Leaves palmate toothed, Stem woolly

8332 Leaves whorled halved 2-parted half-spiked

8333 Leaves cuneiform 5-toothed plaited, Whorls without involucrum
8334 Leaves elliptical obtuse crenate downy rugose, Calyxes and bractes lanceolate
8335 Leaves oblong hoary rugose toothed, the teeth towards the end largest, Cal with small subulate teeth
8336 Leaves lanceolate hoary rugose toothed at end, Cal with setaceous teeth, Stem branched divaricating
8337 Leaves ovate hoary bluntly toothed rugose, Cal with subulate teeth, Stem branched at base
8338 Leaves roundish subcordate crenate rugose, Cal with straight villous setaceous teeth
8339 Leaves cordate roundish emarginate crenate, Calyx 10-toothed spiny
8340 Leaves roundish ovate toothed rugose, Teeth of calyx 10 setaceous hooked
8341 Leaves cordate crenate downy green above, Teeth of calyx mucronate recurved
8342 Leaves cordate ovate crenate, Teeth of cal 10 spreading lanceolate, Bractes subulate
8343 Leaves roundish cordate unequally crenate, Limb of calyx spreading, Teeth ovate mucronate
8344 Leaves cordate roundish, crenate somewhat toothed, Teeth of calyx 10 unarmed
8345 Leaves ovate greenish deeply crenate, Teeth of calyx subulate smooth spreading
8346 Leaves cordate ovate crenate, Limb of calyx spreading, Teeth ovate mucronate, Bractes oblong
8347 Hoary, Limb of calyx flat villous, Leaves cordate concave, Stem shrubby
8348 Limb of calyx longer than tube membranous, Larger angles rounded



and Miscellaneous Particulars.

1265 *Ballota* So named on account of its offensive odor, from βαλλω, to reject.

1266. *Marrubium* According to Linnæus is derived from an ancient town of Italy called *Maria-urbs*, situated on the borders of the Fucine lake. M vulgare dried, has an aromatic odor, which, however, is soon lost by keeping, and a bitter taste. Both water and alcohol extract its virtues It is tonic, diu etic, and laxative, was formerly much used in pulmonary affections, and is still a popular remedy for asthma and obsti-

1267 LEONU'RUS *R Br* Motherwort — *Labiatæ* *Sp* 6—9

8349	crispus *W*	curl-leaved	☿ △	or	2	jl au	W	Siberia	1658	D	co	Mur c got 8 t 4
8350	cardiaca *W.*	common	☿ △	or	3	jl au	W	Britain	gra.ba	S	co	Eng bot. 286
8351	tatáricus *W.*	Tartarian	☿ ◯	or	2	au o	F	Russia	1756	S	p l	Mill ic 1 t 80
8352	sibíricus *W*	Siberian	☿ ◯	or	2	jn au	R	Siberia	1759	S	p l	Exot bot. 2 t 94
8353	marrubiástrum *W*	small-flowered	◯	or	2	jn au	Pu	Austria	1710.	S	co	Jac aust 5 t 425
8354	supínus *W*	procumbent	☿ △	or	1	jn au	W	Siberia	1816	D	co	

†1268 PHLO'MIS *R Br* Phlomis — *Labiatæ* *Sp* 14—30

8355	fruticósa *W en*	Jerusalem Sage	♃	or	3	jn jl	Y	Spain	1596.	C	co	Bot mag 1843
8356	lanáta *W en*	small-shrubby	♃	or	1½	jn jl	Y	Spain	1596	C	co	
8357	purpúrea *Sm.*	purple	♃	or	2	jn au	Pu	S Europe	1661	C	co	Smith spic 6 t 7
8358	itálica *W*	Italian	♃	or	2	jn au	Pu	Italy	1661	C	co	
8359	Nissólii *W*	Nissole's	☿ △	or	2	jn jl	Y	Levant	1757	D	co	Mill. ic. 2 t 204
8360	Lychnítis *W*	lamp-wick	♃	or	2	jn au	Y Br	S Europe	1658	C	p.l	Bot mag 999
8361	Sámia *W*	Samian	☿ △	or	3	jn jl	Y Br	N Africa	1714	D	p l	Bot mag 1891
8362	Herba-vénti *W*	rough-leaved	☿ △	or	2	jl s	R	S Europe	1596	D	co	Bot mag 2449
8363	alpina *W*	Alpine	☿ △	or	1	jn s	Pu	Siberia	1802	D	s l	Pal ac pet 2 t 13
8364	tuberósa *W*	tuberous	☿ △	or	4	jn o	L P	Siberia	1759	D	co	Bot mag 1555
8365	lacniáta *W*	jagged-leaved	☿ △	or	3	jl	Pu	Levant	1731	D	co	Sweet fl gard 24
8366	pungens *W*	pungent	☿ △	or	3	jl	Br	Armenia	1820	D	co	Sweet fl gard 33
8367	lunariifólia *Sm.*	Honesty-leaved	☿ △	or	3	jn	Br	Levant	1818	D	co	Bot mag. 2542
8368	ferruginea *Tenore*	rusty	♃	or	2	jn jl	Y Br	Naples	1823	C	co	

1269 LEU'CAS *R Br* Leucas — *Labiatæ* *Sp* 5—6

8369	zeylánica *R Br*	Ceylon	◯	un	1½	jn o	Pu	E Indies	1777	S	s l	Jac ic 1 t. 111
8370	martinicensis *R Br*	West Indian	◯	un	1½	jl s	W	W Indies	1781	S	s l	Jac ic 1 t. 110
8371	urticifólia *R Br*	Nettle-leaved	◯	un	1½	jl s	W	E Indies	1810	S	s l	
8372	indica *R Br*	Indian	◯	un	1½	jl au	W	E. Indies	1789	S	s l	
8373	áspera *Lank*	rough-leaved	◯	un	1	jl au	W	Caramania	1818	S	s l	

1270 LEONO'TIS *R Br* Lion's-Tail — *Labiatæ* *Sp* 4

8374	nepetifólia *H K*	Catmint leaved	◯	or	3	s o	Or	E Indies	1778	S	s l	Bot reg 281
8375	Leonurus *H K*	narrow-leaved	♃	or	3	o d	Or	C G H	1712	C	p l	Bot mag 478
8376	Leonitis *H K*	dwarf-shrubby	♃	or	1½	jn jl	Or	C G H	1713	C	p l	Mil ic 2 t 162.f 1
8377	intermédia *Lindl*	intermediate	♃	or	3	s o	Or	C G H	1822	C	p l	Bot reg 850

*1271 MOLUCCE'LLA *W* Moluccа-Balm — *Labiatæ* *Sp* 3—7

§8378	spinósa *W*	prickly	◯	cu	1½	jl au	Pa pu	Levant	1596	S	co	Lam ill t 510
8379	lævis *W*	smooth	◯	cu	1½	jl au	Pa pu	Syria	1570	S	co	Bot mag 1852
8380	tuberósa *W*	tuberous-root	☿ △	cu	2	jl	Pa pu	Tartary	1796	D	l p	Pall it 3 t. T

1272 CLINOPO'DIUM *W* Wild-Basil — *Labiatæ* *Sp* 2—4

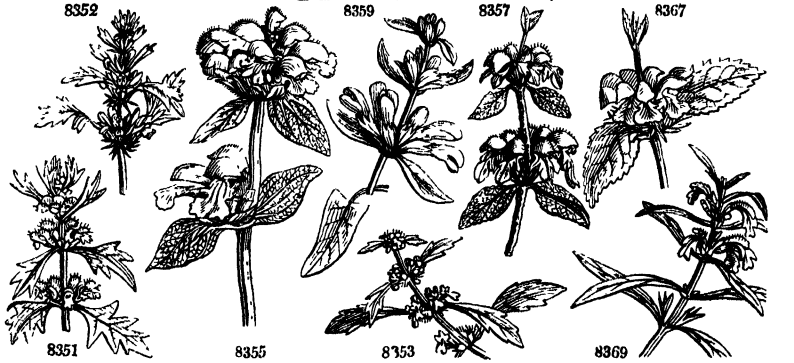
8381	vulgáre *W*	common	☿ △	or	1	jn au	Pk	Britain	gra ba	D	co	Eng bot 1401
8382	ægyptiácum *W*	Egyptian	☿ △	or	1	jn au	Pu	Egypt	1759	D	co	

1273 PYCNAN'THEMUM *Ph* Pycnanthemum — *Labiatæ* *Sp* 4—9

8383	incánum *Ph*	hoary	☿ △		3	jl o	W	N Amer	1732	D	co	Dill elt t 74 f 85
8384	aristátum *Ph*	awned	☿ △		2	au	W	N Amer	1752	D	co	Mich ame 2 t 33
8385	linifólium *Ph*	Flax-leaved	☿ △		1½	jl au	W	N Amer	1739	D	co	Herm par t 218
	Thymus virginicus	W										
8386	lanceolátum *Ph*	spear-leaved	☿ △	or	1	jl au	W	N Amer	1812	D	co	

1274 ORI'GANUM *W* Marjoram — *Labiatæ* *Sp* 14—24

8387	ægyptiacum *W*	Egyptian	♃	ft	1	jn au	Pk	Egypt	1731	C	co	Alp ægypt t 95
8388	Dictámnus *W*	Dittany of Crete	♃	or	1	jn au	Pk	Candia	1561	C	r m	Bot mag 298
8389	sipýleum *W*	Mount Sipylus	♃	or	1	jn s	Pk	Levant	1699	C	r m	Herm lug t 463
8390	Tournefórtii *W*	Tournefort's	♃	or	1	au s	Pk	Amorgos	1788	C	co	Bot rep 537
8391	crético-um *W*	Cretan	☿ △	co	1	jl au	W	S Europe	1596	C	s l	Sck han 2 t. 164



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nate coughs. It loosens the belly when taken in large doses, and was consequently recommended in jaundice, cachexies, menstrual obstructions, and hysteria, but its powers are not found by modern practitioners equal to the account ancients gave of them, and therefore it is very seldom prescribed (*London Dispensatory*, 379)

1267. *Leonurus* From λεων, a lion, and ουρα, tail The spikes of flowers have been compared to the tuft which grows on the end of the lion's tail L Cardiaca was formerly used in medicine, but is now neglected. Tall herbaceous plants with cut leaves and whorls of flowers, of which the corolla is woolly

1268 *Phlomis* Φλομος was the Greek name of the Mullein, and so called from φλοξ, fire, because the thick cottony leaves were used as wicks for lamps At this day, P Lychnitis is so called, because the dried leaves, which are cottony and russet colored, are used in Spain for wicks Fine showy small shrubs or herbaceous plants, with corolla covered with down, and usually of a brownish yellow color

1269 *Leucas* A name used by Burmann, neglected by Linnæus and others, and restored by Mr Brown, derived from λευκος, white, in reference to the usual color of the flowers, which are covered all over with a thick covering of wool

1270 *Leonotis* From λεων, a lion, and ους, an ear A fanciful name applied to the fine scarlet-flowering

8349 Leaves cordate 3-lobed or 5-lobed cut toothed wavy, Cor larger than pungent calyx
8350 Leaves cuneiform ovate 3-lobed toothed, Cor larger than pungent calyx, Middle lobe of lower lip acute
8351 Leaves 3-parted cut, Calyxes villous
8352 Leaves 3-parted multifid linear somewhat blunt
8353 Lvs obl toothed, Cor scarcely longer than somewhat pungent calyx, Middle lobe of lower lip roundish
8354 Leaves about 5-lobed, Lobes blunt toothed at end, Cal sessile spiny

8355 Leaves oblong blunt rugose and branches downy, floral ovate-lanceolate, Bractes ovate acuminate
8356 Leaves elliptical blunt woolly rugose, Branches woolly, Bractes obovate twice as short as calyx
8357 Bractes lanceolate acute pungent Cal 5-cornered acuminate, Leaves densely woolly beneath
8358 Bractes lanceolate blunt unarmed, Cal truncated pointless, Leaves woolly on each side
8359 Lvs downy on each side rad cord sagitt, cauline obl Whorls without bractes, Cal with obl acute teeth
8360 Leaves lanceolate downy floral ovate, Bractes setaceous woolly length of bluntly toothed calyx
8361 Stem hairy, Lvs cordate crenate downy beneath, Bractes 3-parted subulate mucronate as long as calyx
8362 Lvs ovate obl serrate hairy beneath, Teeth of calyx lanc subulate erect, Bractes subul and stem hairy
8363 Radical leaves cordate pubescent, floral lanceolate, Bractes linear subulate villous, Stem pubescent
8364 Radical leaves cordate rough, floral oblong lanceolate, Bractes subulate hispid, Stem smooth
8365 Leaves alternately pinnate, Leaflets lacinate, Calyx woolly
8366 Leaves stalked obl lanc serr at end, rough above downy beneath, Teeth of calyx subulate spreading
8367 Leaves cordate crenate downy beneath, Bractes ovate lanceolate mucronate
8368 Like P fruticosa, but the lower leaves are cordate stalked, Upper ovate

8369 Leaves lanceolate serrate, Heads terminal, Calyxes with 8 teeth
8370 Leaves obl toothed pubes beneath, Whorls many-fl globose, Cal incurv 8-toothed, upper tooth longest
8371 Leaves ovate serrated hoary, Involucre subulate, Cal obliquely truncate membranous 9-toothed
8372 Involucre linear, Cal 1-lipped oblique, Leaves ovate hairy
8373 Lvs lanc smooth serrated at end, Stem 4-cornered rough, Whorls many-fl Lip of cor undivided

8374 Leaves cordate acute serrated somewhat downy, Calyx 7-toothed awned, upper tooth largest
8375 Leaves lanceolate serrate, Calyxes 10-cornered 10-toothed unarmed
8376 Leaves small ovate blunt somewhat downy crenate Cal 7-toothed awned
8377 Leaves stalked ovate cordate acuminate cut-toothed, Cal velvety 10-toothed

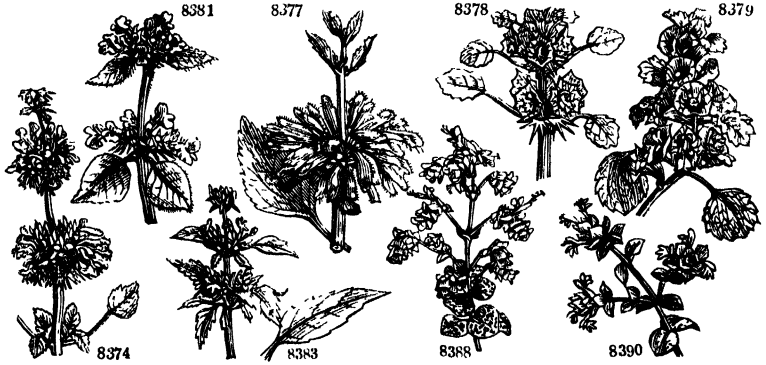
8378 Cal 2-lipp upper lip lanc mucron longest, lower round 7-tooth Teeth spiny, Lvs stalk ov deeply tooth
8379 Cal campanulate 5-toothed, Teeth equal pointless, Leaves stalked roundish ovate toothed
8380 Cal. funnel-shaped 5-toothed teeth equal mucronate, Leaves sessile wedge-shaped oblong toothed

8381 Heads whorled, Bractes setaceous hispid, Leaves hairy above remotely toothed, Stem simple
8382 Heads terminal, Bractes setaceous hispid, Leaves smooth above nearly entire

8383 Leaves oblong-ovate acute subserrate hoary, Heads compound, Bractes setaceous, Stamens exserted
8384 Leaves lanceolate ovate subserrate on short stalks somewhat hoary, Heads sessile, Bractes awned
8385 Stem much branched rather rough, Leaves linear 3-nerved entire, Heads terminal fascicled

8386 Stem much branched roughish, Lvs lin lanceolate veiny entire, Heads terminal fascicled corymbose

8387 Leaves concave downy, Spikes naked
8388 Lower leaves downy, Spikes nodding
8389 Leaves all smooth, Spikes nodding
8390 Spikes 4-cornered, Bractes roundish very large
8391 Spikes aggregate long prismatical upright, Bractes membranous twice as long as calyx



and Miscellaneous Particulars

plants, known at the Cape by the name of lion's tail They require a good greenhouse and plenty of air to secure their appearing in perfection In places badly ventilated their leaves acquire a yellow color, and are apt to fall off

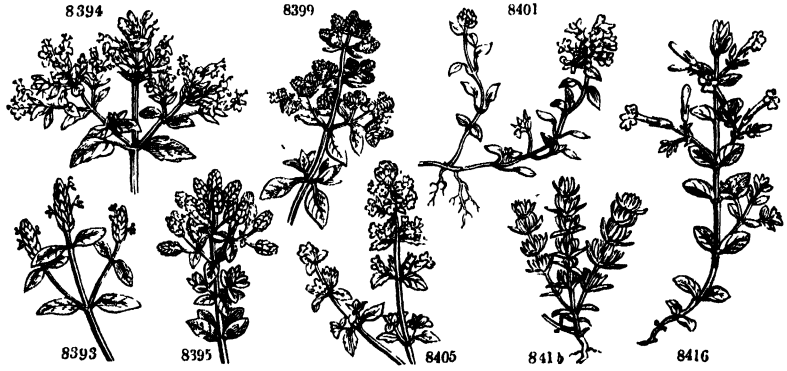
1271 *Moluccella* Brought from the Moluccas Plants remarkable for the enlarged calyx in which the flower is seated

1272 *Clinopodium* From κλινη, bed, and πους, a foot. The tufted close whorls of flowers have been compared to the caster of a bed's foot.

1273 *Pycnanthemum* From πυκνος, dense, and ανθος, a flower The blossoms are in a close head A North American genus of plants, some of which, as P verticillatum and incanum, are occasionally seen in gardens

1274. *Origanum* From ορος, a mountain, and γανος, joy These plants, with their pretty spikes of bracteated flowers and agreeable perfume, may indeed be called the joy of the places where they grow naturally O vulgare is an aromatic and ornamental plant, growing wild in thickets and hedges, chiefly in a calcareous soil The dried leaves used instead of tea, are said to be exceeding grateful, they are also used in fomentations the essential oil is so acrid, that it may be considered as a caustic, and is much used with that intention by

8392	*smyrnæ'um W*	Smyrna	or	1½	jn jl	W	Smyrna	1722.	C	r m	
8393	*heracleóticum W*	winter-sweet	cul	1	jn n	W	S Europe	1640.	D	s l	Lob ic 492
8394	*vulgáre W.*	common	cul	2	jn o	Pk	Britain	ch wo.	D	s l	Eng bot 1143
8395	*onites W*	pot	cul	1	jl n	Pk	Sicily	1759	D	co	Bocc. mus. t. 38
8396	*megastáchyum Link*	large-spiked	un	1½	jl n	Pk	S Europe	1823	D	co	
8397	*hirtum Link*	hairy	un	1½	jl n	Pk	Levant	1823	D	co	
8398	*oblongátum Link*	oblong	un	1½	jl n	W	.....	...	D	co	
8399	*Majorána W*	knotted	cul	1	jn jl	Pk	Portugal	1573.	S	r m	Moris s 11 t.3.f 1
8400	*majoranoides W.*	shrubby-sweet	or	1	jn jl	Pk	.....	...	C	co	Bot mag 2605
†*1275	THY'MUS *L*	Thyme			*Labiatæ*	*Sp*	20—32				
8401	*serpýllum W*	wild	or	½	jn au	Pu	Britain	heaths	C	s p	Eng. bot. 1514
8402	*lanuginósus H*	woolly	or	½	jn au	Pu	.....	...	C	co	
8403	*citriodórus P S*	Lemon	or	½	jn au	Pu	.....	...	C	co	
8404	*angustifólius P S*	narrow-leaved	or	½	jn.au	Pu	... ..	...	C	co	
8405	*vulgáris W.*	garden	cul	1	my au	Pu	S Europe	1548	C	r m	
8406	*pannónicus W en*	Hungarian	or	½	jn au	Pu	Hungary	1817	C	co	
8407	*Marschallinus W*	Marschall's	or	½	jn au	Pu	Crimea	1817	C	co	
8408	*ericæfólius Roth*	Heath-leaved	or	½	jn au	Pu	Spain	1806	C	co	
8409	*aciculáris P S*	needle-leaved	or	½	jn au	Pu	Hungary	1806	C	co	Pl rar hu.2 t.147
8410	*lúcidus W en*	shining-leaved	or	1	jn au	Pu	.....	1816	C	co	
8411	*Mastichina W*	Mastick	or	1	jl s	Pa.pu	Spain	1596	C	co	Blackw t 134
8412	*montánus W*	mountain	or	½	jn jl	St	Hungary	1800	D	s p	Pl rar hu 1 t 71
8413	*nummulárius Bieb*	round-leaved	or	½	jn jl	Pu	Crimea	1822	C	co	Bot. mag 2666
8414	*tomentósus W en*	tomentose	or	1	jn au	W	Spain	1816	C	co	
8415	*Zygis W*	Spanish	or	1	au	Pu	Spain	1771	C	r m	Barrel ic. 777
8416	*croáticus P S*	oval-leaved	or	1	jl au	Pu	Hungary	1802	D	co	Pl rar hu 2 t 156
8417	*cephalótes W*	great-headed	or	½	jl au	Pu	Portugal	1759	C	co	Hof etL lus 1 13
8418	*villósus W*	hairy	or	½	jn jl	Pu	Portugal	1759	C	co	Hof etLus 1 t.14
8419	*Tragorigánum W*	goat's	or	1	mv jn	Pu	Candia	1640	C	co	Alp exot. t. 78
8420	*filifórmis W*	Minorca	or	⅛	jn jl	Pu	Minorca	1770	C	co	
1276	A'CYNOS. *Pers*	Acynos			*Labiatæ*	*Sp*	5—7				
8421	*vulgáris Pers*	Basil-leaved	or	½	jn au	V	Britain	dry h.	S	co	Eng bot. 411
	Thymus A'cinos W										
8422	*villósus Pers*	villous	or		jn au	R	Germany	1817	S	co	
8423	*alpinus Pers*	Alpine	or	½	jn s	R	Austria	1731.	S	s l	Jac aust 1 t 97
8424	*patavinus Pers*	Marjoram-lvd	or	⅔	jn au	F	S Europe	1776	C	s l	Bot mag 2153
8425	*gravéolens Bieb*	strong-scented	or	1	jn au	Pu	Crimea	...	C	co	
†1277	CALAMIN'THA *Ph*	Calamint			*Labiatæ*	*Sp*	7—9				
8426	*grandiflóra Pers*	great-flowered	or	1	jn s	Pu	Italy	1596	D	co	Bot mag 208
8427	*carolinána Sweet*	Carolina	or	1	jn jl	F	Carolina	1804	D	co	Bot mag 997
	Thymus grandiflorus B M										
8428	*vulgáris Sweet*	common	or	2	jl au	V	England	bor fl	D	s l	Eng bot 1676
8429	*Népeta Ph*	lesser	or	1½	jl o	B	England	ch hil	D	co	Eng bot 1414
8430	*marifólia Pers*	Marum-leaved	or	1½	jn jl	Pu	Spain	1788	D	co	Cav ic 6 t 573
8431	*crética Pers.*	Cretan	or	⅛	jn jl	Pu	S Europe	1596	D	r m	Barr. ic. 1166
8432	*fruticósa Pers.*	shrubby	or	⅔	jl s	Pu	Spain	1752	C	r m	
1278.	MELIS'SA *W*	Balm			*Labiatæ*	*Sp*	2.				
8433	*cordifólia Pers.*	heart-leaved	m	1	jn o	W pu	Italy	...	D	co	
8434	*officinális W.*	common	m	1	jn.o	W	S Europe	1573	D	co	
	β romána	*hairy*									



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farriers, a little cotton moistened with it, and put into the hollow of an aching tooth, frequently relieves the pain The country people use the tops to dye woollen cloth purple It also dyes linen of a reddish brown color For this purpose the linen is first macerated in alum water and dried, it is then soaked for two days in a decoction of the bark of the crab-tree, it is then wrung out of this, boiled in a ley of ashes, and then suffered to boil in the decoction According to the Swedish experiments, goats and sheep eat it, horses are not fond of it, and kine refuse it

O onites and marjorana are culinary aromatics, the latter being principally in use under the name of knotted marjoram, from the flower coming in whorls at the joints O vulgare and marjorana are both retained in the Materia Medica as tonics and stomachics, though scarcely ever used In quack medicine, the leaves dried and powdered form an ingredient in cephalic snuff Marjorana is so called from *marjamic* (*máryamych*), its Arabic name, according to Forskahl, p 59

1275 *Thymus* From Θυμος, courage, on account of its balsamic smell, which revives the spirits of animals T serpyllum, from ερπω, to creep, is fragrant, and yields an essential oil that is very heating It has the same sensible qualities as garden thyme, but the flavor is milder, and rather more grateful. Its essential oil is both smaller in quantity and less acrid, and its spirituous extract comes greatly short of the penetrating warmth and pungency of the other It is a common notion that the flesh of sheep that feed upon aromatic plants, particularly wild thyme, is superior in flavor to other mutton. The truth is, that sheep do not crop

8392 Leaves ovate acute serrated, Spikes clustered in umbels
8393 Spikes on long stalks aggregate, Bractes the length of calyx
8394 Spikes roundish panicled clustered, Bractes longer than calyx ovate colored
8395 Spikes oblong aggregate hairy, Leaves cordate downy
8396 Leaves stalked ovate pubesc Spikes clustered prismatical, Bractes imbricate ovate smooth ciliated at edge
8397 Leaves stalked ovate acute subserrate hairy, Spikes prismatical, Bractes dense ovate acute
8398 Leaves subsessile ovate acute subserrate hairy, Spikes oblong bluntish
8399 Spikes roundish thin ccmpact stalked, Leaves stalked ellipt. blunt smoothish
8400 Spikes roundish several clustered stalked, Leaves stalked ellipt blunt downy

8401 Flowers capitate, Stems decumbent, Leaves flat blunt ciliated at base
8402 Flowers capitate, Stems creeping hairy, Leaves blunt villous
8403 Leaves ovate smooth with the smell of common balm
8404 Flowers capitate, Stems procumbent, Leaves cuneate linear ciliated at base
8405 Erect, Leaves revolute ovate, Flowers in whorled spikes
8406 Leaves oblong more ciliated than in T serpyllum, Cor with a more obscure spot in the orifice
8407 Stem shrubby, Flowers in whorled spikes, Lvs linear lanc bluntish flat about 3-nerved ciliated at base
8408 Erect, Leaves revolute linear-lanc hairy, Head few-flowered axillary stalked
8409 Flowers capitate, Stems creeping, Leaves linear nerved and furrowed beneath, Bractes ovate
8410 Fl. whorled somew spiked, Ped 1-fl Stem shrubby erect, Lvs ellipt entire acute smooth shining above
8411 Flowers in whorled spikes, Cal woolly with very long setaceous segments
8412 Flowers in whorled spikes, Spikes oblique, Ped. 1-fl Lvs ov obtuse very entire and calyxes nearly naked
8413 Flowers in whorled heads, Stems filiform, Leaves roundish flat hairy nerved ciliate at base
8414 Flowers in whorled spikes, Cal woolly with setaceous teeth, Lvs ellipt entire downy on each side
8415 Flowers in whorled spikes, Stem erect, Lvs linear very blunt nerveless revolute at edge ciliated at base
8416 Pedun about 3-fl. axillary, Lvs ovate blunt nerved entire sess Cor twice as long as calyx, Stem villous
8417 Heads laxly imbricated, Bractes broad ovate colored not dotted, Leaves linear entire
8418 Heads imbricated large, Bractes toothed, Leaves setaceous hairy
8419 Flowers whorled, Stem half-shrubby erect, Leaves hispid acuminate
8420 Flowers axillary subsolitary stalked, Leaves cordate acute entire, Stems filiform

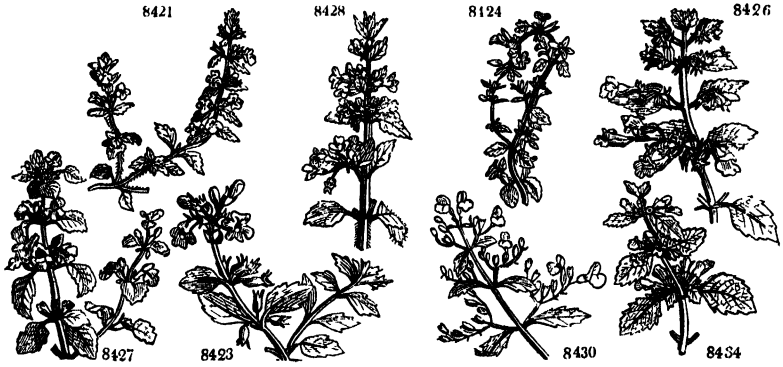
8421 Stem erect branched at base, Leaves ovate acute serrated forwards, Whorls 6-flowered

8422 Hirsute villous larger than the last, Stem much branched, Leaves ovate
8423 Whorls 6-fl Leaves nearly blunt roundish concave subserrated
8424 Nearly smooth, Whorls 6-10-fl Leaves ovate subserrate, Stem ascending
8425 Fls. whorled, Pedunc 1-flow. Stem branched spreading, Leaves roundish acute subserrate at end hairy

8426 Pedun axill 3-4-fl Bractes lanc sessile, Leaves ovate acute finely serrated
8427 Leaves rhomboid oval obsoletely toothed upwards, Whorls somewhat stalked about 10-fl shorter than leaf

8428 Stem weak, Pedun axill many-fl dichotomous, Lvs ovate blunt serrated hairy dotted
8429 Pedunc axill many-fl in dichotomous corymbs, Lvs ovate blunt subserrate smoothish
8430 Leaves ovate somewhat toothed glaucous, Pedunc axill. dichotomous, Segm of calyx equal
8431 Racemes terminal, Peduncles solitary very short
8432 Branches thin twiggy, Leaves downy beneath

8433 Villous, Leaves cordate crenate-toothed, Branches axillary elongated flowering
8434 Whorls halved subsessile, Bractes oblong stalked, Leaves ovate acute serrated



and Miscellaneous Particulars

these aromatic plants, unless now and then by accident, or when they are first turned on hungry to downs, heaths, or commons; but the soil and situations favorable to aromatic plants produce a short sweet pasturage best adapted to feeding sheep, whom nature designed for mountains, and not for turnip grounds and rich meadows The attachment of bees to this and other aromatic plants is well known.

Few plants are subject to more varieties than wild thyme. In its most natural state, on dry exposed downs, it is small and procumbent, but when it grows among furze or other plants, it runs up with a slender stalk to a foot or more in height It differs also very much in the smoothness or hairiness of its leaves. The flowers are sometimes larger than ordinary, and of a paler purple color, or even white

T vulgaris has the aromatic qualities common to lavender, sage, rosemary, and other Verticillatæ. It yields a species of camphor in distillation with water In Spain they infuse it in the pickle with which they preserve their olives Before the oriental spices were common, it was much used in cookery

1276 *Acynos.* The Greek name of a balsamic plant, which probably was related to Thymus. This genus was included in Thymus by Linnæus

1277 *Calamintha* From καλος, beautiful, and μινθη, mint. An ancient Greek name of a plant supposed to chase away serpents

1278. *Melissa* This is the Greek name of the bee, from μελι, honey, which is sought by bees in these flowers with avidity, as indeed it is in all the plants of the order The recent plant has the agreeable odor of

†*1279. DRACOCE'PHALUM *W* Dragon's-Head *Labiatæ* *Sp* 19—25

8435	virginiánum *W*	Virginian		△	or	3	jl s	L B	N Amer.	1683.	D	p.l	Bot. mag. 467
8436	denticulátum *W*	Carolina		△	or	1	au s	St	Carolina	1787	D	p l	Bot. mag 214
8437	variegátum *Ph*	variegated		△	or	1½	au s	Pu	Carolina	1812	D	co	Vent cels t. 44
8438	canarien'se *W*	Balm of Gilead			or	3	jl s	Pa pu	Canaries	1697	S	r m	Com hort.2. t 41
8439	palmátum *W*	palmated		△	or	1½	jn au	Pu	Siberia	1815.	D	co	
8440	peregrínum *W*	prickly-leaved		△	or	½	jl au	B	Siberia	1759	D	p.l	Bot mag 1084
8441	austriácum *W*	Austrian		△	or	1	jn jl	B	Austria	1597	D	p l	Jac. ic 1 t. 112
8442	Ruyschiána *W*	Hyssop-leaved		△	or	2	jn jl	B	N Europe	1699	D	p.l	Fl dan. 121
8443	grandiflórum *W*	great-flowered		△	or	1	jl	B	Siberia	1759	D	p l	Bot mag 1009
8444	altaicum *W*	Betony-leaved		△	or	1	jl au	Pu	Georgia	1787	D	co	N co pet t 29 t 3
8445	sibiricum *W*	Siberian		△	or	1	jn au	L B	Siberia	1760	D	p l	Bot mag 2185
8446	Moldávica *W*	Moldavian		○	or	2	jl au	B	Moldavia	1596.	D	co	Lam ill. t 513 f 1
	β albiflorum	*white-flowered*											
8447	canescens *W*	hoary		○	or	2	jl au	B	Levant	1711.	D	co	Sweet fl gard 38
8448	peltátum *W*	Willow-leaved		○	or	1½	jl au	Pu	Levant	1711	D	co	Lam ill t 513.f.2
8449	argunén·se *Fisch*	rough-flowered		△	or	1½	jl au	B	Siberia	1822	D	co	Bot cab 797
8450	speciosum *Hort*	shewy		△	or	3	jl au	Pk	Siberia	1822	D	co	Sweet fl gard 93
8451	botryoides *Bieb*	cut-leaved		△	or	1½	jl au	Pu	Siberia	1822.	D	co	
8452	nutans *W*	nodding		△	or	1	jl au	B	Siberia	1731	D	co	Bot reg 841
8453	thymiflórum *W*	small-flowered		○	or	½	jn s	Pu	Siberia	1752	S	co	Gmel sib 3 t 50

1280 MELITTIS *W* Bastard-Balm. *Labiatæ* *Sp* 2—4.

8454	Melissophýllum *W*	common		△	or	1	my jn	F	England woods	D	co	Eng bot 577
	β alpina	*Alpine*		△	or	½	my jn	F	Switzerl ...	D	co	
8455	grandiflóra *H K*	great-flowered		△	or	1	my	W Y	England woods	D	co	Eng bot 636

1281 O'CYMUM *W* Basil. *Labiatæ* *Sp* 20—50

8456	thyrsiflórum *W*	thyrse-flowered			un	1½	jl au	W	E. Indies	1806.	C	s l	Jac vind. 3 t 72
8457	suáve *W en*	sweet-scented			un	3	jl s	W	... ..	1816	C	s l	
8458	viride *W en*	green			un	3	jl s	W G	... ..	1816	C	s l	
8459	monachórum *W*	monk's			un	1	jl au	W	E Indies	1796	S	s l	
8460	gratissimum *W*	shrubby			un	2	jl au	W	E. Indies	1752	C	s l	Jac ic 3 t 495
8461	grandiflórum *W*	great-flowered			un	2	s o	W	Abyssima	1802	C	s l	L'He s nov t 43
8462	Basilicum *W*	common-sweet		○	cul	1	jl au	W	India	1548	S	r m	Blackw t 104
8463	minimum *W*	bush		○	cul	1	jl au	W	E Indies	1573	S	r m	Sch han 2 t 166
8464	sánctum *W*	purple-stalked			un	1	jl s	Pu	E. Indies	1758	S	s l	Rhe mal.10 t 92
8465	pilósum *W en*	ciliated			un	1	jl s	W	.....	1816	S	s l	
8466	americánum *W*	American			un	1	jl au	W	India	1789	S	s l	Jac vind 3 t 86
8467	tenuiflórum *W*	slender-spiked			un	1	jl au	Pa pu	E Indies	1703	S	s l	Ru am 5 t 92 f 2
§8468	polystáchyon *W*	many-spiked			un	1	jl au	W	E. Indies	1783	S	s l	Mur co.got.3 t 3
8469	menthoides	Mint-leaved			un	1	jl au	W	E Indies	1783	S	s l	
8470	micránthum *W en*	small-flowered			un	1	jl au	Pa pu	....	1816	S	s l	
8471	mólle *W*	heart-leaved			un	1	s o	V	E Indies	1781	S	s l	
§8472	capitellátum *W*	small-headed		○	ec	1½	jl au	W	China	1806	S	s l	
8473	febrífugum *Lindl*	fever plant			m	3	jn o	W	S Leone	1822	C	co	Bot reg 753
8474	cánum *Sims*	hoary		○	un	1	jl	W	China	1822	S	co	Bot. mag 2452
§8475	polycládum *Link*	many-branched			un	1½	jn o	W	.....	1823	S	co	
	Lumnitzera ocymoides Jacq												

†*1282. PLECTRA'NTHUS *W* Plectranthus *Labiatæ* *Sp* 8—13.

§8476	fruticósus *B*	shrubby			or	3	jn s	B	C G H	1774	C	r m	L'Her st 85 t 41
§8477	Forskohlæ'i *W*	Forskohl's			or	3	o n	B	Abyssima	1806	C	l p	Bot mag 2036
8478	parviflorus *B en*	small-flowered			or	3	jn s	B	S Amer	1805	C	l p	W hort ber 65
9479	scutellarioides *R Br*	skullcap-like			or	2	jl au	B	E Indies	1704	S	l p	Bot mag 1446
	Ocimum scutellarioides H K												
8480	punctátus *W*	dotted			or	2	ja my	B	Africa	1775	S	r m	L'Her st 87 t 41
8481	comósus *Sims*	comose		○	pr	2	au	B	Nepal	1821	S	co	Bot mag 2318
8482	ternátus *Sims.*	Ommie Plant			or	½	au	Pu	Madagasc	1821	D	r m	Bot. mag 2460
8483	incánus *Link*	hoary			or	3	jl au	B	...	1822	D	co	



History, Use, Propagation, Culture

lemons, which is lost in drying, and an austere, slightly aromatic taste In distillation with water, it yields a small portion of a yellow essential oil, on which its odor depends It is stomachic and diuretic, and was formerly prized as a corroborant in hypochondriacal and nervous affections, but it is now used only in the form of tea, as a grateful diluent in fevers For medicinal use the herb should be cut before it flowers, as it is then more odorous (*London Dispensatory*, 383)

1279 *Dracocephalum* From δράκων, a dragon, and κεφαλή, a head A name applied in the same sense as Lamium, Galeopsis, &c See those genera Most of the species are plants of ornament, and cultivated as such in the gardens of the curious D canariense smells of citron, especially when rubbed between the fingers Sown on a hot-bed early in spring, it may be planted out in the borders like other tender annuals. D. austriacum is a handsome plant for a flower border.

8435 Smooth, Flowers spiked close, Leaves linear lanceolate serrated
8436 Flowers spiked remote, Leaves obovate lanceolate toothletted upwards
8437 Spikes short 4-cornered, Corolla variegated, Leaves oblong toothletted upwards
8438 Flowers spiked, Leaves ternate oboing
8439 Fl somewhat spiked, Lvs roundish cuneiform sinuate-toothed, Upper lip of cal undivided mucronate
8440 Fl somewhat spiked, Leaves lanceolate remotely mucronate toothed, Bractes lin lanc toothed spiny
8441 Fls spiked, Lvs sessile linear mucronate, Cauline 3-5-parted at base, Stem branched somewhat villous
8442 Flowers spiked, Leaves and bractes lanceolate undivided pointless, Stem nearly simple smooth
8443 Fls whorled, Lvs obl blunt toothed stalked, Bractes lanc entire, Upper lip of cal ellipt blunt undivided
8444 Fls whorled, Rad lvs cord ov , cauline sessile roundish wedge-shaped acutely toothed, Teeth of cal equal
8445 Flowers whorled, Whorls stalked bifid one-sided, Leaves lanc cordate acum serrated smooth
8446 Flowers whorled, Bractes lanceolate deeply toothed dotted beneath, Lower serratures subciliated

8447 Flowers whorled, Bractes oblong ciliated, Cal striated pubescent, Tube of cor longer than calyx
8448 Flowers whorled, Bractes orbicular serrate ciliate
8449 Stem erect, Leaves linear lanceolate blunt entire at edge rough, Two upper teeth of calyx largest
8450 Leaves broad-lanceolate finely serrated entire at base, Lower teeth of calyx longest
8451 Flowers in spiked heads, Leaves roundish pinnatifid crenate downy on each side
8452 Flowers whorled, Bractes oblong ovate entire, Cor twice as long as calyx nodding
8453 Flowers whorled, Bractes oblong entire, Cor scarcely larger than calyx

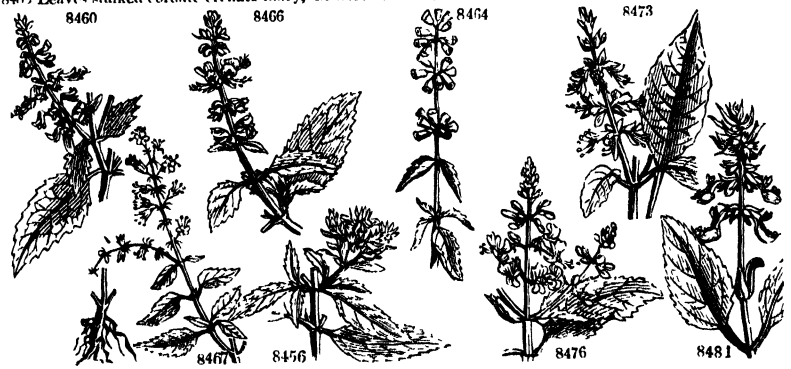
8454 Leaves opposite ovate toothed, Calyx 3-lobed hairy

8455 Cal. 4-lobed smooth, Cor yellowish white, Segment of lower lip violet in the middle

8456 Flowers in panicled fascicles, Stem much branched
8457 Racemes panicled, Leaves ovate oblong cuneate at base acutely serrated hoary beneath
8458 Racemes panicled, Leaves ovate cuneate at base bluntly serrated, Veins hairy above rough beneath
8459 Stamens toothless, every other one bearded at base
8460 Stem ½ shrubby, Leaves lanceolate ovate subtomentose, Racemes rounded
8461 Stem shrubby, Leaves ovate serrate, Stamens very long
8462 Leaves ovate smooth, Calyxes ciliated
8463 Leaves ovate entire
8464 Leaves somewhat oblong blunt serrated wavy, Stem hairy, Bractes cordate
8465 Leaves ovate oblong, Foot-stalks, bractes and calyxes ciliated
8466 Leaves sublanceolate acuminate subserrate, Racemes rounded, Stem nearly herbaceous
8467 Leaves ovate-oblong serrated, Bractes cordate reflexed concave, Spikes filiform
8468 Cor 4-fid, Racemes leafless nodding at end
8469 Leaves linear lanceolate serrate [than calyx
8470 Lvs broad ovate acum at each end serr Bractes shorter than cal winged at edge, Cor scarcely longer
8471 Leaves ovate cordate acute serrated rugose, Recesses closed Bractes roundish wedge-shaped
8472 Leaves ovate, Flowers aggregate, Footstalks lateral
8473 Downy, Lvs ovate lanceolate crenate stalked, Whorls terminal racemose Corolla the length of calyx
8474 Leaves oblong elliptical serrated hoary on long stalks, Stamens twice as long as corolla
8475 Like Ocymum polystachyon, but not having a musky scent as that has

8476 Nectary spurred, Racemes compound Pedunc 2-parted, Stem shrubby polished
8477 Nectary gibbous, Racemes leafless, Stem nearly equal
8478 Nectary gibbous, Racemes compound, Pedunc 1-flowered whorled, Stem half shrubby nearly smooth
8479 Cor falcate, Flower-stalks branched

8480 Nectary gibbous, Flowers spiked, Stem herbaceous hairy rufous dotted
8481 Flowers whorled sessile, Lower lip of calyx 4-parted, Bractes cordate acuminate
8482 Stem 6-angled, Leaves ternate stalked ovate crenate rugose, Roots tuberous
8483 Leaves stalked cordate crenate hairy, Bractes nearly equal to flower ovate



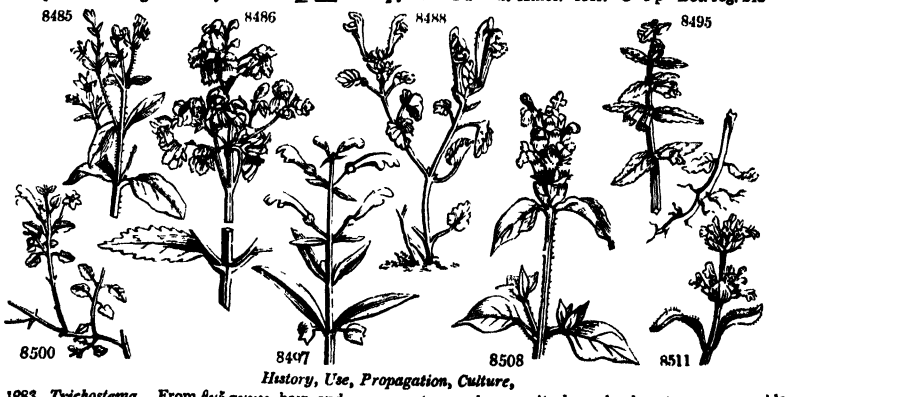
and Miscellaneous Particulars

1280. *Melittis* A name with the same meaning as Melissa
1281 *Ocymum.* Said by Mathiolus to be derived from ὄζω, to smell, on account of the powerful scent of the plants O gratissimum is cultivated in China for culinary purposes. O Basilicum (βασιλικος, royal) and minimum, are culinary aromatics much used in French cookery There are several varieties of the basilicum, which with some other species were formerly used in medicine, but are now neglected
1282 *Plectranthus* From πληκτρον, a cock's spur, and ανθος, a flower, the corolla of the original species of the genus being terminated by a spur-like appendage Half-shrubby plants with purple flowers, all natives of hot climates.

†*1283.	TRICHOSTE'MA. *W.*	Trichostema			*Labiatæ*	*Sp.* 2—4							
8484	dichótoma *W.*	Marjoram-leav.	○	pr	1	jn jl	B		N Amer	1759	S	s l	
§8485	brachiáta *W.*	sessile-leaved	☿ ○	pr	1	jn au	B		N Amer	1732.	C	s.p	Di.el. t.285.f.369
1284.	PROSTANTHE'RA. *R. B.*	Prostanthera			*Labiatæ*	*Sp.* 1—13							
8486	lasiánthos *R Br.*	villous-flower'd	♃	or	2	jn jl	Pu w		N S W.	1808.	C	s.p	Bot. reg. 143
1285.	SCUTELLA'RIA *W*	Skull-Cap			*Labiatæ*	*Sp.* 21—30							
8487	orientális *W*	yellow-flowered	☿ △	or	1	jl s	Y		Levant	1729	D	p.l	Bot. mag. 2120
8488	grandiflóra *P S*	large-flowered	☿ △	or	1½	jl au	P.Y		Siberia	1804	D	s l	Bot. mag. 635
8489	álbida *W.*	hairy	☿ △	or	1½	jn jl	W.pu		Levant	1771	D	s l	Sab. hort. 3 t 29
8490	alpina *W*	Alpine	☿ △	or	½	jn.o	B.w		Hungary	1752	D	p l	Sweet fl gard.90
8491	lupulina *W*	Tartarian	☿ △	or	1	jn.s	Y.w		Tartary	1739	D	p l	Schmidel ic t 73
8492	laterifióra *W*	Virginian	☿ △	or	1	jn s	B		N Amer	1752	D	p l	Pluk. am 442. 2
8493	pilósa *Ph*	pubescent	☿ △	or	1	jl au	B		N Amer	1805	D	p l	
8494	galericuláta *W*	common	☿ △	or	1	jn s	B		Britain	wat pl	D	co	Eng bot. 523
8495	minor *W*	lesser	☿ △	or	½	jl au	Pk		Britain	m.hed	D	co	Eng. bot. 524
8496	hastifólia *Pers*	hastate-leaved	☿ △	or	½	jn jl	Pu		Germany	1798	D	co	
8497	carolinána *Ph*	Carolina	☿ △	or	1½	jn jl	B		Carolina	1811	D	co	Lam ill t.515 f 3
8498	integrifólia *Ph*	entire-leaved	☿ △	or	2	jn s	B		N Amer.	1731	D	p l	Pluk al t 441 f 6
8499	serráta *Ph*	saw-leaved	☿ △	or	4	jn s	B		N Amer.	1800	D	s l	Bot rep 494
8500	havanensis *W*	Havannah	☿ ⧅	or	2	my jn	B		Havannah	1793	D	s l	Jac obs. 2 t 29
8501	peregrina *W*	Florentine	☿ △	or	2	jn o	V		Italy	1683	D	co	Pl rar hu 2 t 125
8502	columnæ *W*	heart-leaved	☿ △	or	1½	jn au	B		Italy	1806	D	co	Sweet fl gard 52
8503	altissima *W*	tall	☿ △	or	1	jl au	D P		Levant	1731	D	p l	Bot. mag 2548
8504	crética *W*	Cretan	♃ └┘	or	1	jn jl	Pu		Crete	1729	C	s l	
8505	parvula *Mich*	least	☿ ○	cu	½	jn jl	B		N Amer	1822	S	p	Hook. ex fl 10
8506	rubicúnda *W en*	pink	☿ △	or	2	jl au	Pk		.....	1823	D	co	
8507	pállida *Bieb*	pale	☿ △	or	2	jl au	W		Crimea	1824	D	co	Gmel sib t. 58
1286	PRUNEL'LA. *W.*	Self-Heal			*Labiatæ*	*Sp* 8—10							
8508	vulgáris *W*	common	☿ △	m	½	jl au	Pk		Britain	me pa	D	co	Eng bot 961
	β álba	*white-flowered*	☿ △	cu	½	jl au	W		Britain	me pa	D	co	
8509	ováta *Pers*	oval-leaved	○	un	½	jl au	Pu		America	...	S	l p	
8510	pensylvánica *W*	Pensylvanian	☿ △	un	½	jl s	Pa B		N Amer.	1801	D	p l	W hort ber t 9
8511	hyssopifólia *W*	Hyssop-leaved	☿ △	un	½	jl s	L B		France	1731	D	p l	Mor s 11 t 5 f 7
8512	grandiflóra *W.*	great-flowered	☿ △	un	½	jl s	L B		Austria	1596	D	p l	Bot mag 2014
8513	laciniáta *P S*	yellow-flowered	○	un	½	jl s	Y		Austria	1713	S	p l	Lam ill t 516 f 2
8514	intermédia *P. S*	various-leaved	☿ △	un	½	jl s	Pk		Portugal	1790	D	s l	Bot. mag. 337
8515	incisa *Link*	cut	☿ △	un	½	jl s	Pk		.....	1823	D	co	
1287	CLEO'NIA *W.*	Cleonia.			*Labiatæ*	*Sp* 1.							
8516	lusitánica *W.*	sweet-scented	○	or	1	jn jl	L.B		Portugal	1710	S	co	Mill. ic. 1. t 70
1288	PRA'SIUM. *W*	Prasium			*Labiatæ*	*Sp* 2							
8517	május *W*	great Spanish	♃ └┘	cu		jn au	Pu		Spain	1699	C	r m	Fl. græca, 584
8518	minus *W*	small Sicilian	♃ └┘	cu		jn au	Pu		Sicily	1752.	C	r m	
1289	PHRY'MA *W*	Phryma			*Labiatæ*	*Sp* 1							
8519	leptostáchya *W.*	slender-spiked	☿ △	cu	1½	au s	W.pu		N. Amer	1802.	D	l p	Pl amal t 380 f 5

ANGIOSPERMIA.

†*1290	GESNE'RIA *W.*	Gesneria			*Gesneriæ*	*Sp* 6—25.							
8520	acaúlis *W*	stemless	♃ □	or	1	...	S		Jamaica	1793	C	l p	Slo ja.1 t 102 f 1
§8521	tomentósa *W*	woolly	♃ □	or	2	jn n	S		S Amer	1752	C	p l	Bot mag 1023
8522	aggregáta *Ker*	aggregate	☾ ⧅	or	2	au	S		Brazils	1816	C	p l	Bot reg 329
8523	bulbósa *Ker*	bulbous	⧅	or	2	my jn	S		Brazils	1816	C	p l	Bot reg. 343
§8524	prasináta *Ker.*	green	♃ □	or	3	my jn	G		Brazils	1818	C	p l	Bot. reg 428
8525	tubiflóra *Cav*	tube-flowered	☿ ⧅	or	2	f mr	S		S Amer	1815.	D	p l	Cav. ic. t. 584
†1291.	GLOXI'NIA. *W.*	Gloxinia.			*Gesneriæ*	*Sp.* 2							
8526	maculáta *W*	spotted-stalked	☾ ⧅	or		jl o	Pu		S Amer	1739.	C	s p	Bot mag. 1191
8527	speciósa *B. Ileg*	many-flowered	☾ ⧅	or		½ jn n	Pu		S. Amer.	1815.	C	s p	Bot. reg. 213



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1283. *Trichostema.* From θριξ τριχος, hair, and στημα, a stamen, because its long slender stamens resemble hairs

1284. *Prostanthera.* Named in allusion to the spurs of the anthers, the word being derived from προσθηκη, an appendage, and ανθηρα, the anther. Strong smelling shrubs, natives of New Holland. Flowers either racemose or terminal.

1285. *Scutellaria.* From *scutula*, a small vessel, on account of the figure of the calyx, which is not unlike a cup with its handle. The calyx inverted, presents the figure of a helmet with visor raised.

1286. *Prunella.* A barbarous name softened down by Linnæus from the Brunella of some authors, and so called from the German *die Braune*, a disorder in the jaws and throat, which this plant is said to cure. Herbaceous plants common by way-sides all over Europe

8484 Stamens very long exserted, Leaves linear
8485 Stamens short included

8486 Leaves lanceolate tooth-serrated smooth, Racemes panicled, Corolla hairy

8487 Leaves cut downy beneath, Spikes rounded 4-cornered
8488 Leaves cordate cut crenate pubescent on each side shorter than footstalk, Spikes short 4-cornered
8489 Leaves subcordate serrate rugose opaque, Spikes 1-sided, Bractes ovate
8490 Leaves cordate cut serrate crenated, Spikes imbricated rounded 4-cornered, Bractes twice as short as fl
8491 Leaves cordate cut serrate acute smooth, Spikes imbricated rounded 4-cornered, Bractes length of flowe
8492 Much branched, Leaves smooth with a scabrous keel, Racemes lateral leafy
8493 Hairy, Leaves ovate rhomboid crenate, Flowers subracemose
8494 Leaves cordate lanceolate crenate, Flowers axillary
8495 Leaves cordate ovate nearly entire, Flowers axillary
8496 Leaves quite entire, lower hastate, upper sagittate, Flowers axillary
8497 Branched very smooth, Leaves stalked linear lanceolate acute entire, Racemes loose leafy, Cal blunt
8498 Simple densely pubes Lvs subsess. obl or linear blunt entire attenuated at base, Racemes loosish leafy
8499 Branched tall pubescent, Leaves ovate acuminate serrate on short stalks, Racemes usually panicled
8500 Leaves cordate ovate crenate, Flowers solitary axillary, Each lip of cor trifid
8501 Leaves cordate serrate, Spikes elongated 1-sided, Bractes stalked ovate longer than calyx
8502 Leaves oblong cordate serrate pubes Spikes elongated 1-sided, Bractes stalked ovate shorter than calyx
8503 Leaves cordate oblong acuminate serrate, Spikes nearly naked
8504 Villous, Leaves cordate blunt and bluntly serrated, Spikes imbricated, Bractes setaceous
8505 Subvillous, Leaves ovate entire all alike, Flowers axillary
8506 Related to S. albida from which it differs in being much less hairy, and in its more slender flower
8507 Lvs. cord cren. serrate bluntish villous, Spikes long 1-sided hispid, Bractes stalked ovate longer than cal

8508 Lvs stalked obl ovate somew toothed, Upper lip of cor crun with 3 awns, Stem ascending, Spike round

8509 Leaves broad ovate toothed, Stem much branched, Spikes ovate
8510 Lvs stalked ovate lanc toothed at base, Lips of cal equal upper truncate with 3 awns, Stem ascending
8511 Leaves sessile lanceolate entire rough, Stem erect
8512 Leaves stalked oblong ovate toothed at base, Upper lip of cor trifid, Stem ascending
8513 Small, Stem nearly simple villous, Leaves pinnatifid lower oblong, Cor pale yellow
8514 Leaves entire and sinuated toothed rugose hairy, Upper lip of cor truncate slightly 3-toothed
8515 Upper leaves linear-lanceolate lower sinuate toothed somewhat hairy

8516 Bractes lacinate

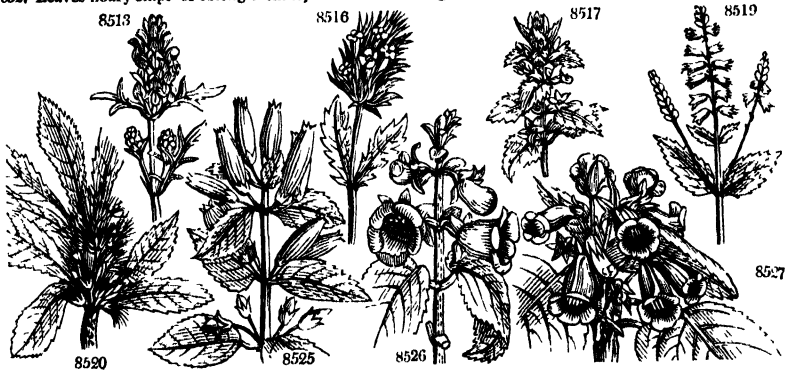
8517 Leaves ovate oblong serrated
8518 Leaves ovate with a double crenature on each side

8519 Leaves stalked ovate serrated, Spikes terminal long

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8520 Leaves lanceolate ovate serrated somewhat stalked terminal, Pedunc 3-fl shorter than leaves
8521 Leaves ovate lanceolate crenate hairy, Peduncles lateral very long bearing corymbs
8522 All vill Branches rounded, Lvs opp obl ovate cren Ped 2-4 axill 1-fl aggregate, Cor clavate cylind
8523 All pubes Lvs opp ovate ellipt cord at base serr cren Panicle numer opp spread dist. Ped corymbose
8524 All pubes. Lvs oval lanc velvety above, Panicle leafy, Fl with a campan inflated orifice, Limb oblique
8525 Leaves opposite ovate crenulate tomentose, Flowers axillary 2-3 together downy

8526 Leaves oblong cordate crenate rugose, Stem spotted
8527 Leaves hoary ellipt or oblong crenate, Peduncle erect longer than flower, Sepals angular acuminate



and Miscellaneous Particulars

1287. *Cleonia.* An ancient Greek name employed by Theophrastus, *lib* 7 *cap* 4 : the Cleonæum of Pliny This is an annual plant six or eight inches high, and nearly related to Prunella, from which some eminent French botanists do not distinguish it.

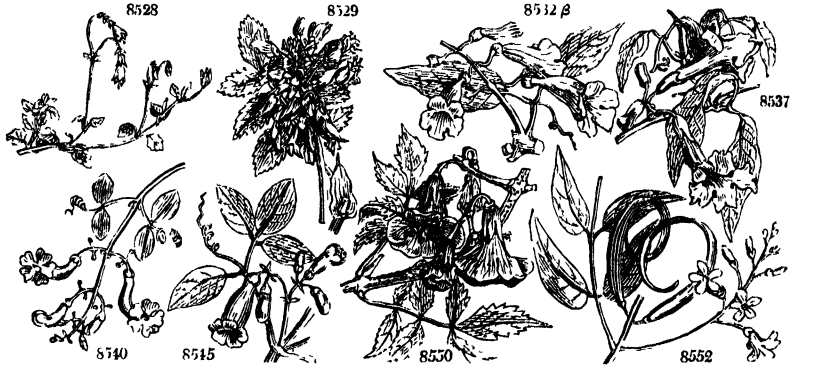
1288. *Prasium.* The Greek name of the horehound, which this plant resembles in some respects.

1289 *Phryma.* A Linnean name, the meaning of which is unknown

1290 *Gesneria* In honor of Conrad Gesner, of Zurich, the famous botanist and natural historian, called the German Pliny Very fine herbaceous or half-shrubby plants, some of which are remarkable for the brilliance of their colors

1291 *Gloxinia.* In memory of Ben Petr Gloxin, of Colmar, author of Observationes Botanicæ, Argent,

1292	LINNÆ'A. *W.*	Linnæa				*Caprifoliaceæ*	*Sp* 1.							
8528	boreâlis *W.*	two-flowered	♀ △	pr	½	my au	F	Scotl.	dry st.c.	D	l	p	Eng. bot. 433	
1293.	MELIAN'THUS	*W* Honey-Flower				*Rutaceæ ?*	*Sp* 2—4							
8529	major *W*	great	♣ □	or	10	my jl		C G H	1688	Sk	s	l	Bot. reg 45	
8530	minor *W*	small	♣ □	or	2	au		C G. H	1696	Sk	s	l	Bot mag 301	
†*1294.	BIGNO'NIA. *W*	Trumpet-Flower				*Bignoniaceæ*	*Sp.* 27—75							
8531	únguis *W.*	Barb idoes	♃ □	or	10	. .	Y	W. Indies	1759	L	s	p	Plum amer t 94	
8532	æquinoctiális *W*	equinoctial	♃ □	cl	40	ap o	Y	Guiana	1768	C	s	l	Plum ic t 55 f 1	
	β *Chamberlaynii*	*Chamberlayne's*	♃ □	cl	40	ap o	Y	Brazil	1820	C	s	l	Bot. reg 741	
8533	alliácea *W*	Garlick-scent	♃ □	cu	10	...	Y	W. Indies	1790.	C	l	p		
8534	laurifólia *W*	Laurel-leaved	♃ □	or	20	...	...	Guiana	1804	C	l	p		
§8535	paniculáta *W*	panicled	♃ □	or	20	...	Pu	W Indies	1738.	C	l	p	Plum ic 56 f 1	
8536	cruciígera *W*	cross-bearing	♃ □	or	20	...	Y s	S Amer	1759	L	s	p	Plum ic t. 58	
§8537	uncáta *B M*	hooked	♃ □	or		jn s	Y	Guiana	1804.	L	s	p	Bot mag 1511	
8538	capreoláta *W*	four-leaved	♃	or	15	jn jl	S	N Amer	1710	C	s	p	Bot mag 864	
8539	pubéscens *W*	downy	♃ □	or	15	jn jl	Y	Campeachy	1759	C	s	p		
8540	rigéscens *Jacq*	stiff	♃ □	or	20	jn jl	Pk	Caraccas	1823	C	s	p	Jac schon t 210	
8541	lactifólia *Lahl*	milk-white	♃ □	or	20	jn jl	W	Santa Cruz	1823	C	s	p	Vah symb t 66	
8542	meonántha *Link.*	small-flowered	♃ □	or	20	jn jl	Pk	N Holl ?	...	C	s	p		
8543	grandiflóra *Jacq*	large-flowered	♃ □	or	60	ap jl	Y	Caraccas	1816	C	p	l	Bot reg 418	
8544	venústa *B Reg*	comely	♃ □	or		s d	Or	S. Amer	1816	C	l	p	Bot reg 249	
8545	echináta *W*	bristly-fruited	♃ □	or	20	...	Pk	Guiana	1804	C	l	p	Aub gui 2 t.264	
8546	triphýlla *W*	three-leaved	♣ □	or	10	...	W	S Amer	1733	R	l	p		
§8547	pentaphýlla *W*	five-leaved	♃ □	or	20	...	...	Jamaica	1733	C	l	p	Marcg bra t 118	
8548	Leucóxylon *W.*	white-wooded	♆ □	or	12	jn jl	Pk	W Indies	1759	C	l	p	Bot. rep 43	
§8549	radicans *W.*	Ash-leaved	♄	or	30	jl au	Or	N Amer	1640	R	s	p		
	α *major*	*great Ash lvd*	♄	or	30	jl au	Or	N Amer	1640	R	s	p	Bot mag 485	
	β *minor*	*small Ash-lvd*	♄	or	20	jl au	S	N Amer	1640	C	s	p	Cates car 1 t 65	
§8550	grandiflóra *W*	large-flowered	♃ □	or	30	jl au	Or	China	1800	C	r	m	Bot mag 1308	
§8551	stans *W*	branching	♆ □	or	12	au	Y	America	1730	S	l	p	Plum ic t 54	
§8552	chelonoides *W*	tree	♆ □	or	30	...	R	E Indies	1808	R	l	p	Rhee mal 6 t.26	
§8553	spathácea *W*	salver-shaped	♆ □	or	30	...	W	E Indies	1794	C	l	p	Rox cor 2 t 144	
	Spathodea longiflóra	P S												
§8554	austrális *H K*	New S Wales	♃ □	or		ap jl		N S W	1793.	C	s	p	Bot. mag 865	
8555	indica *W*	Indian	♆ □	or	40	...	W	India	1775	C	l	p		
8556	prócera *W*	Box-leaved	♆ □	or	80	..	B	Guiana	1793	C	l	p	Aub gui.2 t 265	
§8557	lineáris *Cav*	linear-leaved	♆ □	or	20	...	Pk	Mexico	1825	C	p	l	Cav ic 3 t 269	
1295	JACARAN'DA *Juss*	Jacaranda				*Bignoniaceæ*	*Sp* 2—4							
8558	carolimána *h. Br*	Carolina	♆ □	or	10	jl au	B	Bahamas	1724	C	p	l	Cates car 1 t 42	
8559	ovalifólia *R Br*	oval-leaved	♆ □	or	10	ap my	B	Brazils	1818	C	p	l	Bot reg 631	
1296	SE'SAMUM *W*	Oily-Grain.				*Pedalinæ*	*Sp* 2—4							
8560	orientâle *W*	oriental	⊙	clt	1½	jl	W	E Indies	1731	S	c	o	Rhee mal 9 t 54	
8561	indicum *W*	Indian	⊙	clt	1½	jl	Pa pu	E. Indies	1731	S	c	o	Bot mag 1788	
†1297	PENTSTE'MON. *W*	Pentstemon				*Scrophularineæ*	*Sp* 9—11							
8562	campanuláta *W.*	bell-flowered	♃ □	or	1½	mr o	L Pu	Mexico	1794	D	p	l	Bot mag 1878	
8563	lævigáta *W*	smooth	♃ △	or	2	au s	L Pu	N Amer	1776	D	p	l	Bot mag 1425	
8564	hirsúta *W*	narr -lvd.-hairy	♃ △	or	1	au s	L Pu	N Amer	1758.	D	p	l	M h s II t.21 f 3	



History, Use, Propagation, Culture,

1785, quarto Handsome low herbaceous plants, with fine shewy flowers The Gloxinia speciosa is a favorite in every hothouse, on account of the beauty of its rich purple blossoms

1292 *Linnæa* So named by Gronovius, in honor of the celebrated Carl von Linné, the reformer of natural history, and the father of the modern physical sciences His works are not less numerous than important, it is to be wished that such another man, with equal talent, industry, and judgment, could be found at the present day, to rescue the science of natural history from the confusion to which it is fast approaching

1293 *Melianthus* From μελι, honey, and ανθος, flower A shrub, native of the Cape of Good Hope, the blossoms of which are a great attraction to bees Both the known species are common in collections, but seldom flower

1294. *Bignonia.* In memory of Abbé Bignon, librarian to Louis XIV, born 1662, died in 1743 He was the friend and patron of most of the learned men of his time, and especially of Tournefort, by whom this truly noble genus was named The species are trees or shrubs, inhabitants of hot climates the leaves are opposite, pinnate, ternate, or conjugate the flowers in panicles, large, and handsome, of various colors, red, blue, yellow, or white, and eminently beautiful The stove sorts grow freely in loam and peat, and young cuttings root in sand under a hand-glass The hardy species grow in any soil, but will not flower well unless the situation be warm. They are increased by cuttings of the roots, by layers, or by young cuttings on gentle heat under a hand-glass or frame B radicans is a well known and much admired species, capable of living in the open air in this country against a wall

1295. *Jacaranda* The name of the tree in Brazil Two kinds remarkable for the goodness of their wood, are described by Piso Those in the gardens are lofty stove plants with fern-like, elegant leaves, and panicles of beautiful blue flowers They grow with facility, but flower seldom

8528 The only species

8529 Stipules solitary adhering to stalk, Leaves smooth
8530 Stipules twin distinct, Leaves hoary beneath

8531 Leaves conjugate cirrhose, Leaflets ovate acuminate, Peduncles axillary 1-flowered
8532 Leaves conjugate cirrhose, Leaflets ovate-lanceolate, Pedunc. 2-flowered, Pods linear

8533 Leaves conjugate, Leaflets elliptical entire coriaceous, Pedunc 5-flowered axillary, Calyx entire
8534 Lvs conjugate obl smooth, Racemes term Branches dichotomous, Corollas very soft and downy outside
8535 Leaves conjugate cordate ovate, Flowers racemose, Calyx with a double limb
8536 Leaves conjugate cirrhose lower ternate, Leaflets ovate cord acuminate, Racem axill Stem muricated
8537 Leaves conjugate quite smooth, Tendrils longer than petiole trifid at end hooked
8538 Leaves conjugate cirrhose, Leaflets cordate lanceolate, Lower leaves simple
8539 Leaves conjugate cirrhose, Leaflets cordate ovate downy beneath
8540 Leaves conjugate cirrhose, Leaflets elliptical blunt, Flowers racemose, Pedunc 3-fl Calyxes toothed
8541 Leaves conjugate cordate ovate smooth, Lower racemes leafy, Limb of calyx leafy entire
8542 Leaflets 9-lanceolate subserrate dotted beneath, Corollas ventricose bearded in the orifice
8543 Lvs conjugate cirrhose, Leafl obl acute at each end, Corymb trifid term Ped petioles and branches rough
8544 Climbing, Lvs smooth upper conjugate cirrhose obl ovate acum n Peduncles corymbose many-flowered
8545 Lower leaves ternate, upper conjugate, Petioles dichotomous cirrhose, Fruit echinate
8546 Leaves ternate smooth, Leaflets ovate acuminate, Stem shrubby erect
8547 Leaves digitate, Leaflets entire obovate
8548 Leaves digitate, Leaflets lanceolate acuminate entire smooth, Flowers terminal solitary
8549 Lvs pinnate, Leaflets ovate acuminate toothed, Corymb terminal, Tube of cor thrice as long as calyx

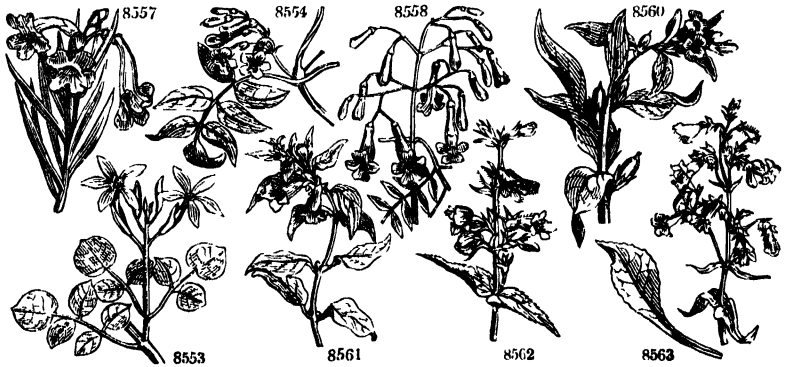
8550 Leaves pinnate, Leaflets ovate acuminate toothed, Panicle terminal, Tube of cor the length of calyx
8551 Leaves pinnate, Leaflets oblong lanceolate serrate, Raceme simple terminal, Stem erect
8552 Leaves pinnate with an odd one, Leaflets ovate entire pubescent, Corollas bearded half pentandrous
8553 Leaves pinnate with an odd one, Leaflets ovate hirsute, Cal. 1-leaved spathaceous, Cor hypocrateriform

8554 Leaves pinnate of four pair, Leaflets elliptical generally entire, Racemes compound
8555 Leaves bipinnate, Leafl roundish ovate cordate acuminate, Fl pentandrous, Calyx tubular, Cor 5-fid
8556 Leaves bipinnate, Leaflets oblong obtuse, Panicle terminal, Peduncles with bractes, Pods oblong blunt
8557 Leaves simple linear acuminate, Flowers terminal subumbellate, Stem erect

8558 Leaves bipinnate, Leaflets lanceolate acute, Panicle terminal, Peduncle naked, Pods long emarginate
8559 Leaves bipinnate oblong villous oval oblong mucronate, Panicle large lax branched, Corollas silky

8560 Leaves ovate oblong entire
8561 Leaves ovate lanceolate lower 3-lobed, upper undivided, Stem erect

8562 Stem smooth, Sterile filament bearded upwards, Leaves lanceolate acuminate all finely serrate
8563 Leaves polished ovate-oblong amplexicaul finely toothletted, lower entire, Flowers panicled
8564 Leaves serrulate lanceolate oblong sessile downy obscurely toothed narrow, Flowers panicled



and Miscellaneous Particulars.

1296. *Sesamum* From the Arabic word *semsem*. Forskahl, p 68 These plants were introduced into Jamaica by the Jews, and are now cultivated in most parts of the island They are called *vangio* or oil-plant. The seeds are frequently used in broths by many of the Europeans, but the Jews make them chiefly into cakes. Many of the oriental nations look upon the seed as a hearty wholesome food, and express an oil from them, not unlike, or inferior to, the oil of almonds. It has been also manufactured for salad oil in this country, but without much success

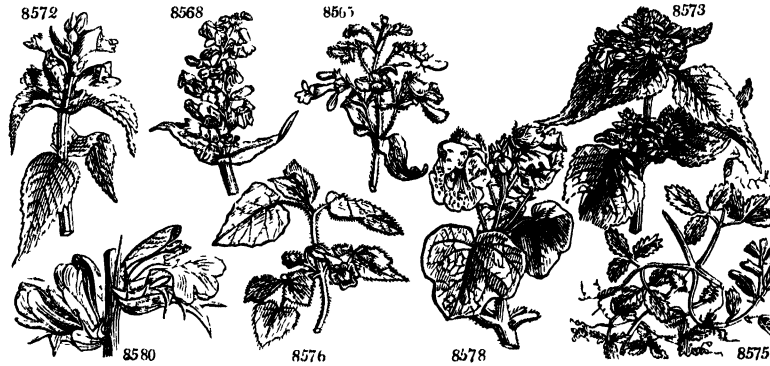
S orientale is frequently cultivated in the Levant, and also in Africa, as a pulse the seeds have been introduced in Carolina by the African negroes An oil is extracted from the seeds which will keep many years, and not acquire any rancid smell or taste, but in two years become quite mild, so that when the warm taste of the seed, which is in the oil when first drawn, is worn off, it is used as salad oil, and for all the purposes of sweet oil

The seeds are also used by the negroes for food they parch them over the fire, then mix them with water, and stew other ingredients with them. A pudding is made with them, in the same manner as with millet or rice

In Japan, China and Cochin-China, where they have no butter, they use the oil for frying fish, and in dressing other dishes; as a varnish; and medicinally as a resolvent and emollient Nine pounds of the seed yield upwards of two pounds of neat oil

1297 *Pentstemon* From πεντε, five, and στημων, a stamen, because of the four perfect and one imperfect stamen of the genus. Beautiful herbaceous plants, deserving a place in every garden.

8565	pubéscens *W.*	broad-lv -hairy	♃ △	or	1½	au s	L.Pu	N Amer	1758.	D	p.l	Bot mag. 1424
8566	erianthéra *Ph*	dwarf	♃ △	or	½	au s	Pu	Louisiana	1811	D	p l	
8567	angustifólia *Ph*	narrow-leaved	♃ △	or	1½	jl s	L.Pu	Louisiana	1811.	D	p l	Bot cab. 1420
8568	glábra *Ph.*	Nuttal's	♃ △	or	1½	jl s	D Pu	Louisiana	1811	D	p.l	Bot mag 1672
8569	Bradbúrii *Ph*	large-flowered	♃ △	or	2	jl s	Pu	Louisiana	1811.	D	p.l	
8570	al'bidum *Nutt.*	whitish	♃ △	or	½	jl s	W	Missouri	1823	D	p l	
†1298	CHELO'NE *W*	CHELONE			*Scrophularineæ* *Sp* 4—6.							
8571	glábra *W*	white-flowered	♃ △	or	4	au o	W	N Amer	1730.	D	p l	Trew ehret t.83
8572	obliqua *W*	red-flowered	♃ △	or	4	au o	Pu	N Amer	1752	D	p l	Bot reg 175
8573	Lyóni *Ph*	Lyon's	♃ △	or	4	jl s	Pu	N Amer	1812	D	p l	Bot. mag 1864
8574	barbáta *W*	scarlet	♃ △	or	3	jn s	O s	Mexico	1794	D	p l	Bot reg. 116
1299	TOURRETTIA *J*	TOURRETTIA			*Scrophularineæ* *Sp* 1							
8575	lappácea *W*	scarlet-flowered	♃ ○	cu	6	jn au	R u	Peru	1788.	S	s l	Salstir 5 t. 3
†*1300	MARTY'NIA *W*	MARTYNIA			*Pedalinæ* *Sp* 4—6.							
8576	dhándra *W*	two-stamened	◎	or	1½	jl au	R	New Spain	1731	S	s l	Bot rep 575
§8577	C ramolária *W*	white-flowered	◎	or	1½	jl au	W	S Amer	1733	S	s l	Jac amer t 110
8578	proboscídea *W*	horn-capsuled	◎	or	¾	jn au	L B	America	1738	S	r m	Bot mag 1056
8579	longiflóra *W*	long-flowered	◎	or	2	jl au	Pa pu	C G H	1781.	S	s l	Meerb ic 1. t. 7
1301	ACAN'THUS *W*	BEAR'S-BREECH			*Acanthaceæ* *Sp* 5—14.							
8580	móllis *W*	smooth	♃ △	or	3	jl s	P w	Italy	1548	D	co	Lam ill t 550
8581	níger *Mill*	shining-leaved	♃ △	or	3	jl s	P w	Portugal	1759	D	co	
8582	spinósus *P S*	prickly-leaved	♃ △	or	3	jl s	P w	Italy	1629.	D	co	Bot. mag. 1808
8583	spinosíssimus *P S*	white-spined	♃ △	or	3	jl.s	P w	S Europe	1629	D	co	
8584	ilicifólius *W.*	Holly-leaved	♃ □	or	2	...	...	E Indies	1759.	D	co	Rhee mal 2 t 48
1302	BARLE'RIA. *W.*	BARLERIA			*Acanthaceæ* *Sp* 8—18							
8585	longifólia *W*	long-leaved	♀ ◎	or	2	jl s	W	E. Indies	1781	S	l p	Pluk al t 133 f 4
8586	Prionítis *W.*	thorny	♃ □	or	3	jl au	Or	E. Indies	1759	C	p l	Rhee mal 9 t 41
8587	buxifólia *W*	Box-leaved	♀ △	cu	2	jn jl	W	E. Indies	1768	D	l p	Rhee mal 2 t 47
8588	purpurea *Lodd*	purple	♃ □	pr	2	s	Pu	E Indies	1814	D	l p	Bot cab 344
8589	álba *Host*	white	♃ □	or	3	jn jl	W	N Holl	1815	C	co	Bot cab 360
8590	cristáta *W.*	crested	♃ □	or	2	jn s	B	E. Indies	1796	C	p l	Bot mag 1615
8591	mítis *B Reg*	yellow-flowered	♃ □	or	3	jn s	Y	E Indies	1816	C	p l	Bot reg 191
8592	longiflóra *W*	long-flowered	♃ □	or	3	jn s	...	E Indies	1816	C	p l	Vah symb 1.t.16
1303	PHAYLOPSIS *Juss*	PHAYLOPSIS			*Acanthaceæ* *Sp* 1—6							
8593	longifólia *Sims*	long-leaved	♃ □	pr	2	ap o	W	S. Leone	1822.	C	co	Bot mag 2433
†*1304	RUEL'LIA. *J.*	RUELLIA			*Acanthaceæ* *Sp* 18—70.							
8594	ováta *W*	oval-leaved	♀ △	pr	2	jl au	D B	Mexico	1800	D	l p	Cav ic 3 t. 254
8595	strépens *W*	whorl-flowered	♀ △	pr	2	jl au	Pa B	N Amer	1726	D	l p	Sch han 2 t 177
8596	ocymoídes *Cav*	Basil-like	♃ □	pr	1½	jl au	B	Mexico	1815.	C	l p	Cav ic 5 t. 456
8597	pátula *W*	spreading	♃ □	pr	1½	jl au	Pa V	E. Indies	1774	C	l p	Jac ic 1 t. 119
8598	lácteа *W*	white	♀ △	pr	2	jn au	Pa V	Mexico	1796	C	l p	Cav ic 3 t 255
8599	clandestína *W.*	three-flowered	♀ △	pr	2	jl au	B	Barbadoes	1728	C	l p	Dil el.t 248 f 320
8600	paniculáta *W*	panicled	♀ △	pr	3	au	Pu	W Indies	1768	C	s p	Slo ja 1 t 100 f 2
8601	tuberósa *L.*	tuberous-rooted	♀ △	pr	2	jl au	B	Jamaica	1752	C	l p	Slo jam 1 t 95.f 1
8602	bifióra *W*	two-flowered	♀ △	pr	1	jl	Pa B	Carolina	1765	C	l p	
8603	formósa *H K*	splendid	♃ □	pr	2	jn s	S	Brazil	1808	C	s p	Bot. mag. 1400



History, Use, Propagation, Culture,

1298. *Chelone* Χελώνη signifies a tortoise, to the back of which the helmet of the present genus has been fancifully compared The species are handsome border flowers, of easy culture in loamy soil, or loam and a little peat.

1299 *Tourrettia* Named in honor of Marc Antoine Louis Claud la Tourrette, to whom some of Rousseau's Letters on Botany are addressed A singular climbing annual plant, producing its flowers sparingly from the tips of the branches Seldom preserved long in a garden, as it produces seed very sparingly

1300. *Martynia* In honor of John Martyn, F R S, professor of botany at Cambridge, author of Historia Plantarum Rariorum, and many other works died in January, 1768 His son is the editor of the last edition of Miller's Dictionary. Handsome tropical annuals, remarkable for the size of their flowers compared with their leaves

1301 *Acanthus* From ακανθα, a spine many of the kinds are very spiny The species are generally large, with a single herbaceous stalk, and great pinnatifid leaves The flowers are produced in terminating spikes. Some of the species are shrubby and thorny, with undivided leaves, toothed, and having a thorn at the end of the teeth.

A. mollis was formerly used in medicine under the name of *Branca ursina*: the root abounds in mucilage, and may be substituted for those of the marsh mallow Virgil has two very different plants under the name of Acanthus: one a tree, supposed to be the Mimosa nilotica, which produces the gum Arabic: the other an

8565 Stem pubescent, Sterile filament bearded from the end to the middle
8566 Leaves oblong acute subhirsute, Flowers racemose, Leaves of calyx linear very hairy
8567 Stem smooth long linear entire, Flowers in racemose panicles, Leaves of calyx smooth
8568 Stem and lvs. smooth, Lvs subamplex ovate obl ent Barren filam naked clav Sepals roundish acuminate
8569 Very smooth, Lvs subamplexicaul ov obl. ent upper roundish, Barren filam with a short beard at end
8570 Leaves ovate lanc subserrulate smooth, Fl fascicled axillary and terminal, Cor. equal 5-cleft spreading

8571 Leaves stalked lanceolate serrate upper opposite
8572 Leaves lanceolate oblique stalked opposite finely serrated at edge
8573 Smooth much branched, Leaves stalked cordate ovate serrated, Spikes terminal dense
8574 Leaves opposite connate lanceolate entire, Lower lip of corolla bearded

8575 The only species. Leaves pinnated cut cirrhose

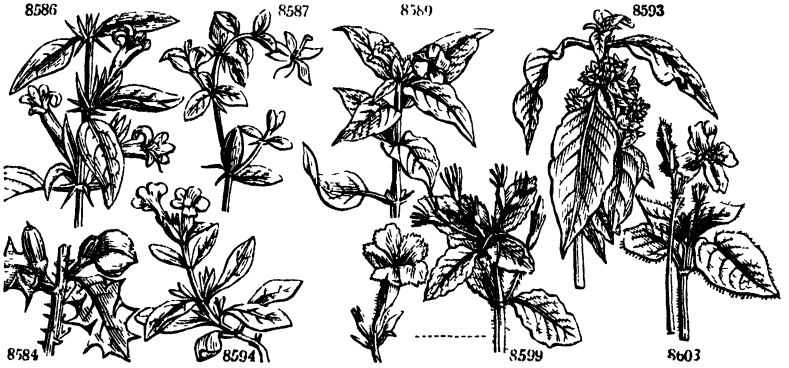
8576 Stem branched, Leaves opposite cordate toothed, Flowers diandrous
8577 Stem branched, Leaves opposite 5-lobed toothed
8578 Stem branched, Leaves alternate cordate entire
8579 Stem simple, Leaves roundish repand, Tube of cor at base gibbous flattened

8580 Leaves sinuated unarmed
8581 Leaves sinuated unarmed glabrous shining green
8582 Leaves pinnated spiny
8583 Leaves laciniate pinnatifid blistered spiny, Spines white
8584 Leaves repand spiny-toothed, Stem shrubby prickly

8585 Spines of whorls 6, Leaves ensiform very long rough
8586 Spines axillary pedate in fours, Leaves quite entire lanceolate ovate
8587 Spines axillary opposite solitary, Leaves roundish entire
8588 Unarmed, Leaves lanceolate, Flowers axillary solitary sessile
8589 Leaves ovate lanceolate rough, Flowers capitate terminal, Bracteæ ciliate
8590 Leaves oblong entire, Two lateral leaves of calyx ciliated wider than the rest, two linear acute
8591 Unarmed, Leaves lanceolate hairy entire, Fl aggregate terminal tubular, Bractes very narrow setose
8592 Unarmed, Leaves ovate silky, Bractes cordate scarious, Corollas very long

8593 Leaves lanceolate on long stalks, Flowers in terminal and axillary heads, Cor small

8594 Leaves sessile oblong entire acute at each end villous, Fl 3-subsessile, Stem ascending
8595 Leaves stalked ovate entire, Peduncles 3-flowered very short, Stem erect
8596 Subvillous, Stem dwart branched erect, Leaves ovate concave entire
8597 Leaves stalked ovate very blunt entire pubescent, Flowers 3 subsessile, Stem erect divaricating
8598 Lvs stalked obl ovate ciliated somewhat toothed, Peduncle very short about 3-fl Stem very villous erect
8599 Leaves stalked oblong blunt attenuated at base somewhat toothed, Peduncle 3-fl shorter than leaf
8600 Leaves entire, Peduncles dichotomous lateral, Calyxes sessile, with the upper segment largest
8601 Leaves cuneate ovate crenated, Peduncles 3-parted, Stem simple
8602 Flowers twin sessile
8603 Leaves stalked entire ovate downy, Peduncle axillary alternate few-flow very long



and Miscellaneous Particulars.

herb, supposed to be this plant Pliny mentions an Acanthus which covered part of his lawn, which some conjecture to be a moss, a thing very improbable in a climate and situation where the musci are seldom seen even in winter

The leaf of Acanthus mollis is supposed to have furnished the ancients with the elegant Acanthus leaf of their architecture.

1302 ***Barleria*** In honor of the Rev James Barrelier, a Dominican, and M D of Paris, who travelled from France into Spain and Italy, and died aged sixty-eight, 1673, author of Icones, 1714, Paris, folio, a useful work, containing, even at the present day, figures of many things which are to be found nowhere else The species flower freely and are of easy culture loam and peat, with a little rotten dung mixed with it, is the best soil for them. Cuttings root freely, they strike best from the young wood, under a hand-glass, in the same kind of soil as the plants grow in (*Bot Cult* 21)

1303. ***Phaylopsis*** Named by Willdenow, from φαυλος, vile or contemptible, and ὀψις, aspect Tropical weeds

1304 ***Ruellia*** In honor of John Ruelle, a native of Soissons, the physician of Francis I He published a work De Natura Plantarum, in 1536, and Commentaries upon Dioscorides, in 1516. The species are pretty plants, free flowers, and of the easiest culture and propagation.

8604 fúlgida *H K*	bright-flowered	▭	pr	2	jl au	Sc	W Indies	1804	C	l.p Bot rep 527
8605 ciliáta *W en*	ciliated	▭	pr	2	jl	Pu	E. Indies	1806	C	l p
§8606 ringens *W*	gaping-flower'd	▭	pr	3	jl au	Pu	E. Indies	1807	C	l p Rhee. mal. 9. 64
8607 pubéscens *Pers*	pubescent	▭	pr	2	jn au	D B	C. G H	1823	C	l p
8608 fœ'tida *W en*	fœtid	▭	un	2	jn au	B	S Amer	..	C	l p
8609 macrophýlla *Vahl*	long-leaved	▭	pr	3	...	R	S Martha	1824	C	l p. Vah.symb 2.t 39
8610 undulàta *Vahl*	wavy	▭	pr	2	..	...	E. Indies	1824	C	l p
8611 tetragóna *Link*	four-cornered	▭	pr	2	jn jl	B	Brazil	1824	C	l p
†1305 BLE'CHUM *R Br* Blechum					*Acanthaceæ*		*Sp* 1—15			
8612 Brównei *H K*	dense-spiked	▭	or	2	jn		W Indies	1780	C	l p Slo ja 1 t 109.f 1
†1306 APHELAN'DRA *R Br* Aphelandra					*Acanthaceæ*		*Sp.* 1			
8613 crist'áta *H K*	dense spiked	▭	spl	3	jn s	S	W Indies	1733	C	l.p Bot mag 1578
1307. CROSSAN'DRA *P L* Crossandra					*Acanthaceæ*		*Sp* 1			
8614 undulæfólia *P S*	wave-leaved	▭	spl	1½	ja jn	Or.s	E Indies	1800	C	p l Bot reg 69
†1308 THUNBER'GIA *W* Thunbergia					*Acanthaceæ*		*Sp* 2—7			
8615 frágrans *W*	twining		or	4	my s	W	E. Indies	1796	S	p l Bot mag 1881
8616 grandiflóra *R*	large-flowered		or	6	my s	B	E Indies	1820.	C	p.l Bot mag 2306
1309 HEBENSTRE'TIA *W* Hebenstretia					*Verbenaceæ*		*Sp* 8—12.			
8617 albiflóra *Lk*	white-flowered	▭	pr	1	my s	W	C G H.	1822	C	p l
8618 chamædrytoha *Link*	saw-leaved	▭	pr	2	my s	W	C G H	1822	C	p l
8619 dentáta *W*	toothed	▭	pr	1	my s	W	C G H	1739	S	p l Bot mag 483
8620 integrifólia *W* *ámœna* B Rep	entire-leaved	▭	pr	1	my jn	W	C G H	1792	C	p l Bot rep 252
8621 ciliáta *W*	ciliated	▭	pr	1	my jl	W	C G. H	1815	C	p l
8622 spicáta *Thunb*	spiked	▭	pr	1	my jl	W	C G H	1815	C	p l
8623 ermoides *Th*	Ermus-leaved	▭	pr	1	my n	W	C G H	1816	C	p l
8624 cordáta *W*	heart-leaved	▭	pr	1	jl au	W	C G H	1774	C	p l
1310 HOS'TA *Jac* Hosta.					*Verbenaceæ*		*Sp* 1			
8625 carúlea *Jac*	blue-flowered	▭	or	4	...	B	S Amer	...	C	l p Jac schœ 1 t.114
1311 GMELI'NA *W* Gmelina					*Verbenaceæ*		*Sp* 2			
8626 asiática *W*	oval-leaved	▭	or	10	..	Y	E Indies	1792	C	l p Lam ill t 542
8627 parviflóra *Rox*	obovate-leaved	▭	or	10	...	O	E Indies	1817	C	l p Roxb cor. t 162
†1312 LANTA'NA *W* Lantana					*Verbenaceæ*		*Sp* 17—35			
8628 mixta *W*	Nettle-leaved	▭	or	5	au o	R s	W Indies	1732	C	p l Bot cab 68
8629 trifólia *W*	three-leaved	▭	or	3	jn s	Pu	W Indies	1733	C	p l Bot. mag 1449
8630 ánnua *W*	annual	▭	or	2	jl au	F	S Amer	1733	C	p l Bot mag 1022
8631 stricta *W*	narrow-leaved	▭	or	3	..	Pa pu	Jamaica	1733	C	p l Slo ja 2 t 195 f 4
8632 Rádula *W*	Rasp-leaved	▭	or	3	..	Pu	W Indies	1803	C	p l
8633 Cámmara *W*	various-colored	▭	or	6	ap s	R o	W. Indies	1691	C	p l Dill elt t 56 f 65
8634 involucráta *W*	round-leaved	▭	or	3	my jl	Pk	W Indies	1690	C	p l Plu alm t 114 f 5
8635 récta *W*	upright	▭	or	2	jn au	Pu	Jamaica	1758	C	p l Jac schœ 3 t 360
8636 odoráta *W*	sweet-scented	▭	or	2	my n	W	W Indies	1758	C	p l Plum ic t 71 f 2
8637 melissifólia *W*	Balm-leaved	▭	or	2	jl s	Y	W Indies	1732	C	p l Dill elt t 57 f 66
8638 scábrida *W*	rough	▭	or	2	s		W Indies	1774	C	p l Bot. cab 1171
8639 nivea *Vent*	white-flowered	▭	or	3	jl s	W	E Indies	..	C	p l Vent malm t 8
8640 aculeáta *W*	changeable-col	▭	or	10	ap n	R	W Indies	1692.	C	p l Bot mag 96
8641 fucáta *Ker*	painted	▭	or	2	ap n	Pk	S Amer	1822	C	p l Bot reg 798
8642 salvifólia *W*	sage-leaved	▭	or	3	ap n	R	C G H	1823	C	p l Jac schœ 3 t 285
8643 brazilénsis *Link*	Brazilian	▭	or	3	ap n	W	Brazil	1823	C	p l
8644 álba *Mill*	white	▭	or	3	ap n	W	S Amer	...	C	p l
1313 ALOYSIA *Fl Per* Aloysia					*Verbenaceæ*		*Sp* 1—2			
8645 citriodóra *Fl Per.* *Verbéna triphýlla* B M	Lemon-scented		or	3	my s	Pa pu	Chili	1784	C	l Bot mag 367



History, Use, Propagation, Culture,

1305. *Blechum* Βληχων, was the Greek name of a plant resembling Marjoram. This genus has also the flowers in a dense bracteated spike It has been separated from Justicia by Jussieu

1306. *Aphelandra* From αφελης, simple, and ανηρ, a male, on account of the single cell of the anthers.

1307 *Crossandra.* From κροσσος, a fringe, and ανηρ, a man; or, in botanical language, an anther, alluding to the fringed anthers A fine shewy shrub with large orange flowers

1308 *Thunbergia* In honor of Charles Peter Thunberg, M. D, knight of the order of Vasa, professor of botany in the university of Upsal, member of several learned societies, author of Travels into Europe, Africa and Asia, Flor Japonica, &c Handsome climbing flowers with a fragrant odor.

1309 *Hebenstretia* John Ernest Hebenstreit, was a professor of botany in the university of Leipsig, and published, in 1728, a dissertation upon plants Small Cape undershrubs, occasionally cultivated for the sake of their neat foliage and simple modest flowers They require an airy greenhouse, and are easily propagated from cuttings

1310. *Hosta* After Dr Nicholas Thomas Host, the author of the superb Gramina Austriaca, in four volumes, folio, and other important works Smith thinks the genus the same as Linnæus's Cornutia pyramidata

8604 Leaves stalked ovate acuminate wavy crenate, Fascicles axillary on long stalks
8605 Leaves ovate somewhat toothletted ciliated at edge on long stalks, Flowers solitary axillary sessile
8606 Leaves oblong entire, Flowers solitary sessile, Stem procumbent
8607 Leaves entire ovate subpubescent, Flowers solitary axillary, Stem erect
8608 Leaves ovate lanceolate entire stalked smooth, Fl solitary axillary sessile, Branches warted
8609 Leaves ovate lanceolate acuminate entire, Peduncles long 2-flowered
8610 Leaves stalked oblong wavy, Heads axillary sessile, Stem erect
8611 Stem erect hairy, Leaves stalked ovate acuminate repand toothed hairy, Spike whorled

8612 Leaves ovate elliptical somewhat toothed, Spikes 4-cornered, Bractes ovate downy

8613 The only species

8614 The only species

8615 Leaves cordate acuminate somewhat angular at base, Stem climbing
8616 Leaves angular cordate, Inner calyx none, Anthers bearded spurred

8617 Leaves linear toothed, Bractes oval linear hairy
8618 Leaves sessile oblong lanceolate blunt serrated hairy at base, Bractes ciliated
8619 Leaves linear toothed, Spikes smooth
8620 Leaves linear quite entire

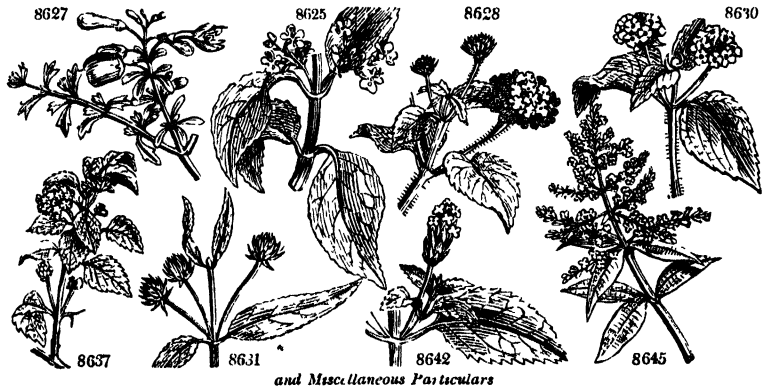
8621 Leaves linear toothed, Calyxes 3-valved ciliated
8622 Leaves linear toothed at end, Bractes ovate villous, Stem herbaceous
8623 Leaves lanceolate oblong serrated pilose, Bractes entire ciliated hispid
8624 Leaves cordate somewhat fleshy sessile

8625 Corymbs axillary trichotomous

8626 Spines opposite, Leaves ovate entire
8627 Leaves obovate subtrifid and simple, Prickles nearly straight, those of the stem alternate

8628 Leaves opp ovate acute hairy, Stem prickly downwards, Heads round, Bractes lanceolate
8629 Leaves 3 or 4-ellipt rugose above villous beneath, Stem unarmed, Spikes oblong imbricated
8630 Leaves opposite, Stem unarmed, Spikes oblong
8631 Leaves opp oblong lanc acute, Stem unarmed, Heads roundish, Bractes ovate-lanceolate and squarrose
8632 Lvs opp ov acute serr rugose rough hairy beh Stem nearly unarm rough, Heads obl Bractes ovate acute
8633 Leaves opposite, Stem unarmed branched, Flowers in leafless capitate umbels
8634 Leaves opp or in 3s rhomboid ovate blunt rugose downy, Stem unarmed, Heads squarrose, Bractes ovate
8635 Leaves opposite oval rugose, Stem unarmed, Heads squarrose, Bractes oblong, Pedunc longer than leaf
8636 Lvs opp or in 3s ellipt rugose, Stem unarmed, Heads squarrose with lanc bractes, Ped shorter than leaf
8637 Leaves opp ovate obl villous soft, Stem prickly, Spikes hemispherical, Bractes half as short as tube
8638 Lvs opp ovate ellipt rough, Stem prickly, Spikes hemispherical, Bractes half as short as tube lanc acute
8639 Leaves ovate lanceolate acuminate crenulate, Stem prickly, Head hemispherical, Bractes linear
8640 Leaves ovate subcordate softish beneath, Stem prickly, Bractes of heads linear cuneiform
8641 Lvs ovate rugose crenate blunt downy running down the foot-stalk, Head depressed shorter than leaf
8642 Leaves opposite ovate rough above hoary beneath, Heads conical, Bractes squarrose ovate acute nerved
8643 Leaves narrowed from an ovate base sessile serrate pubescent, Bractes lanceolate concave
8644 Leaves ovate narrowed into the stalk acuminate acutely crenate pubescent, Outer bractes cordate

8645 Leaves linear lanceolate ternate, Stem shrubby



and Miscellaneous Particulars

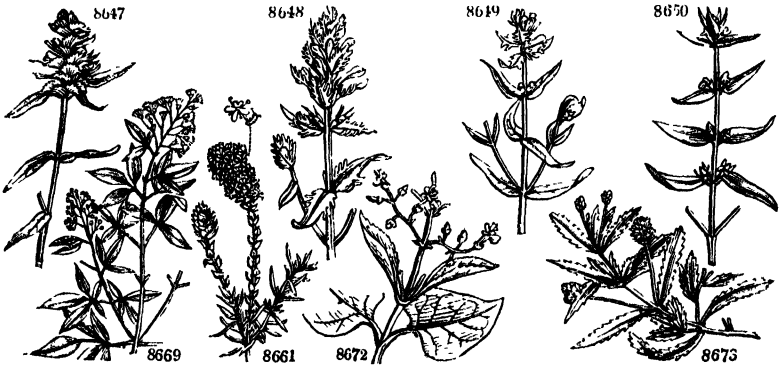
A small shrub rising to the height of four feet Leaves opposite, ovate, acuminate, somewhat toothed, smooth. Flowers blue, in axillary corymbs, which are shorter than the leaves, they are dotted all over with minute white glandular spots.

1311 *Gmelina.* In honor of John George Gmelin, a German naturalist, professor of medicine and botany at Tubingen, who travelled in Siberia and Kamtchatka, by order of the Empress Anne of Russia His Flora Sibirica, in four quarto volumes, is a book of continual reference These are fine arborescent Indian plants with beautiful flowers, which are seldom produced in this country They require the utmost heat of the stove

1312 *Lantana* One of the ancient names of the Viburnum, which this resembles a little in foliage The species are rapid growers and free-flowerers, and readily increased by cuttings They form small bushes with pink, yellow, orange, or changeable heads of flowers, and a peculiar aromatic odor.

1313 *Aloysia* Named by Don Antonio Palau, professor of botany at Madrid, and author of an excellent translation of the Linnæus's Species Plantarum into Spanish, after her majesty Maria Louisa, queen of Spain, and mother of the reigning king, Ferdinand.

†1314. LIP'PIA *L*	LIPPIA					*Verbenaceæ*	*Sp* 1—5							
8646 purpúrea *Jacq*	purple	♃	□	or	3	jn jl	R	Mexico	1823.	C	p l	Jacq ecl t 85		
1315. MELAMPY'RUM *W*	COW-WHEAT					*Scrophularineæ*	*Sp* 4—7							
8647 cristátum *W*	crested		○	w	3	jl au	Y	England corn fi		S	co	Eng bot 41		
8648 arvénse *W*	purple		○	w	3	jn jl	Y	England corn fi		S	co	Eng bot 53		
8649 praténse *W*	common		○	w	3	jl au	Y	Britain woods		S	co	Eng bot. 113		
8650 sylváticum *W*	wood		○	w	3	jl au	Y	Britain m wo		S	co	Eng bot. 804		
1316. SELA'GO *W*	SELAGO					*Verbenaceæ.*	*Sp* 13—40.							
8651 spínea *Lank*	spiny	♃	□	pr	3	...	Pu	C G H	1824	C	p l			
8652 diffúsa *Th*	spreading	♃	□	pr	1½	jl au	Pu	C G H	1807.	C	p l			
8653 fulvo maculáta *Lank*	spotted	♃	□	pr	2	...	V	C G H	1824	C	p l			
8654 polygalóides *L*	Milkwort-like	♃	□	pr	¾	jl o	Pu	C G H	1807.	C	p l			
8655 spicáta *Lank*	spiked	♃	□	pr	¾	jl o	Pu	C G H.	1824	C	p l			
8656 spúria *W*	linear-leaved	♃	◯	pr	1	jl o	V	C G H.	1779	S	p l	Bur afr. t 42. f 3		
8657 fasciculáta *W*	cluster-flower'd	♃	□	pr	1½	jn jl	Pu	C G H	1774	S	p l	Bot reg 184		
8658 lúcida *Lank*	shining-leaved	♃	□	pr	1½	jn jl	Pu	C G H	1812	C	l p	Vent malm. t. 26		
8659 ramulósa *Lank*	branchy	♃	□	pr	1½	...	W	C G H	1824	C	p l			
8660 teretifólia *Lank*	round-leaved	♃	□	pr	1½	jl au	W	C G H	1823	C	p l			
8661 ováta *W*	oval-headed	♃	□	pr	1	jn jl	D Pu	C G H	1774	C	p l	Bot mag 186		
8662 canéscens *W*	canescent	♃	□	pr	1½	jl n	Pa pu	C G H	1812	C	p l			
8663 corymbósa *W.*	fine-leaved	♃	□	pr	2	jl au	Pu	C G H	1699.	C	p l	Com hort 2 t.40		
†1317 VI'TEX *W*	CHASTE-TREE					*Verbenaceæ.*	*Sp* 8—15							
8664 ováta *W*	oval-leaved	♣	□	or	4	jl au	Pu	China	1796.	C	l p			
8665 altíssima *W*	tall	♣	□	or	8	...	Pu	Ceylon	1802	C	l p			
8666 A'gnus-Cástus *W*	common	♣	□	or	6	s	W B	Sicily	1570	C	co	Woodville t 222		
β latifólia	*broad-leaved*	♣	□	or	6	s	W B	Sicily	1570	C	co			
8667 incísa *W*	cut-leaved	♣	□	or	4	jl s	Pu	China	1758	C	p l	Bot mag 364		
8668 Leucóxylon *W*	white-wooded	♣	□	or	4	...	Pu	Ceylon	1793	C	l p			
8669 Negundo *W*	quadrangular	♣	□	or	4	...	Pu	E Indies	1812	C	l p	Rumph am 4 t 19		
8670 bicolor *W en*	two-colored	♣	□	or	4	...	Pu	E Indies	1810	C	l p			
8671 trifólia *W*	three-leaved	♣	□	or	4	...	Pu	E Indies	1759	C	p l	Bot mag 2187		
1318 CORNU'TIA *W.*	CORNUTIA					*Verbenaceæ*	*Sp* 1—2							
8672 pyramidáta *W*	pyramidal	♣	□	cu	4	...	B	W Indies	1733.	C	l p	Lam ill t 541		
1319 ZAPA'NIA *J*	ZAPANIA					*Verbenaceæ*	*Sp* 2—10							
8673 stachadifólia *P S*	oval-spiked	♌	△	un	1	au s	Pu	W Indies	1732	C	l p	Brow jam t 3 f 1		
8674 nodiflóra *Ph.*	knot-flowered	♌	△	un	1	jl au	Pu	America	1664	C	l p	Fl græc 553		
*1320 PRI'VA *P S*	PRIVA					*Verbenaceæ*	*Sp* 2—6							
8675 mexicána *P. S*	Mexican	♐	△	pr	2	au s	V	Mexico	1726	C	l p	Dil el t 302 f 389		
Verbéna mexicána W														
§8676 leptostáchya *P S.*	rough	♐	△	pr	2	jl au	V	E Indies	1799	C	l p	Rox. cor 2 t 146		
Tortula aspera W														
1321 SPIELMAN'NIA. *W*	SPIELMANNIA					*Verbenaceæ*	*Sp* 1							
8677 africána *W*	Ilex-leaved	♃	□	or	3	t n	W	C G H	1710	C	r m	Bot mag 1899		
†1322 VERBE'NA *L*	VERVAIN					*Verbenaceæ*	*Sp* 14—36							
8678 bonariénsis *W*	cluster-flower'd	♅	○	un	6	jl o	B	B Ayres	1732	B	co	Dil el t 300 f 387		
8679 hastáta *W*	halberd-leaved	♅	△	un	5	jn au	V	Canada	1710	D	co	Her parad t 242		
8680 paniculáta *P S.*	panicled	♅	△	un	3	jl au	B	N Amer	1800	D	co	Bot reg 1102		



History, Use, Propagation, Culture,

A deciduous under shrub with a most agreeable odor of citrons, and of the easiest culture in any soil. In Jersey and Guernsey, it stands the winter in warm situations

1314. *Lippia.* Named in honor of Augustine Lippi, a French physician, born in Paris of an Italian family He accompanied the ill-fated embassy of Lenoir Duroule to the king of Abyssinia, in the beginning of the eighteenth century, and was assassinated along with the ambassador at Sennaar His merits entitled him to a more interesting genus than this, which consists of obscure weedy shrubs of South America

1315. *Melampyrum* From μελας, black, and πυρος, wheat Its grain resembles a grain of wheat, and gives a singularly black color to bread in which it is mixed. Smooth narrow-leaved weeds, not uncommon in corn fields and copses M pratense is considered nutritive, and was formerly cultivated by the Dutch and Flemish in the manner of [illegible] rey

1316 *Selago* Others Anothing beyond its name in common with the Selago of the ancients; nor is it possible to imagine Induced Linnæus to apply it to the present plants, which are pretty half-shrubby Cape plants, with [illegible] universit corymbs or spikes of flowers. Hardy greenhouse plants, propagated with facility by cuttings. Flor. J

1317 *Vitex.* A [illegible] tia. Jname applied to some plant of the osier tribe. V Agnus Castus is an autumn shrub, with whorled spik [illegible] lissene and white flowers from seven to fifteen inches long The dried leaves have a powerfully aromatic [illegible] r The seeds, from the time of Dioscorides and Pliny, have been highly celebrated for securing chastity hence the absurd officinal name of the shrub, Agnus castus, αγνος, in Greek, being the same with *castus* in Latin. and hence the Athenian matrons, in the sacred rites of Ceres, used to strew their

8646 Leaves oblong acute serrate rough above pubescent beneath, Heads globose, Bractes obl lowest longest

8647 Spikes quadrangular, Bractes cordate compact toothletted imbricated
8648 Spikes conical lax, Bractes toothed setaceous colored, Teeth of calyx rough, Corolla closed
8649 Flowers axillary 1-sided, Corollas closed, Leaves lanceolate, floral hastate
8650 Flowers axillary 1-sided, Corollas gaping, All the leaves lanceolate

8651 Leaves linear acute entire reflexed rigid fleshy smooth, Spikes terminal
8652 Leaves linear smooth, Spikes terminal, Branches diffuse
8653 Leaves linear serrate toothed subciliated fleshy, Spikes corymbose
8654 Spikes terminal, Bractes and calyxes keeled rough, Leaves linear smooth reflexed at edge
8655 Leaves sessile linear lanceolate acute entire smooth, Spikes terminal solitary
8656 Spikes corymbose, Leaves linear toothletted
8657 Corymb multiplex, Leaves obovate smooth serrated
8658 Leaves obovate entire shining, Spikes rounded terminal, Stem shrubby
8659 Stem diffuse pubescent upwards, Lvs lanceolate blunt finely serrate smooth, Spikes terminal subsolitary
8660 Lvs rounded with a furrow on each side acutish somewhat toothed smooth fleshy, Spikes term aggregate
8661 Spikes cone-like ovate terminal, Leaves scattered linear, Stem shrubby
8662 Spikes terminal, Leaves filiform fascicled smooth
8663 Leaves filiform fascicled smooth, Panicle compound

8664 Leaves simple ovate
8665 Leaves ternate entire, Panicle whorled, Berry 3-seeded
8666 Leaves digitate 7 or 5 lanceolate nearly entire, Spikes whorled panicled

8667 Leaves digitate 5, Leaflets cut pinnatifid, Spikes somewhat whorled
8668 Leaves digitate 5, Leaflets stalked oblong entire, Panicle dichotomous, Berry 1-seeded
8669 Leaves quinate and ternate serrate, Flowers in panicled racemes
8670 Lvs ternate and quinate, Leafl lanc acum ent beneath white with down, Branches of pan dichotom
8671 Leaves ternate and quinate, Leaflets ovate acute entire hoary beneath, Panicle with a straight rachis

8672 Panicle terminal naked elongated

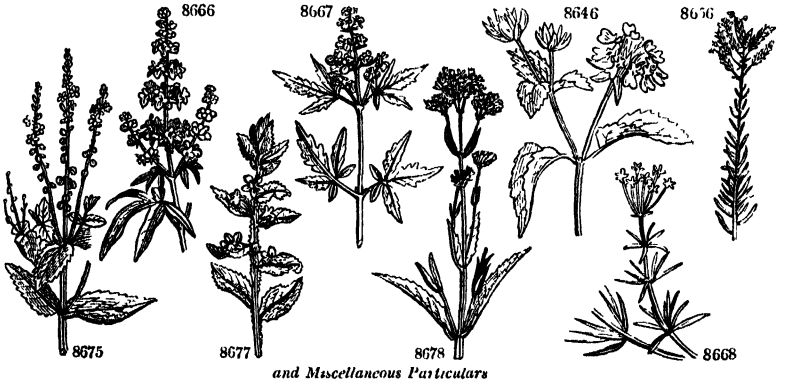
8673 Spikes ovate, Leaves lanceolate serrated plaited, Stem truticose
8674 Spikes roundish conical, Leaves cuneiform toothed, Stem creeping

8675 Spikes lax, Cal. of fruit reflexed roundish didymous hispid

8676 Spikes filiform very long, Cal of fruit reflexed hispid, Tube of corolla spiral

8677 The only species

8678 Spikes fascicled, Leaves oblong lanceolate stem-clasping, Stem very tall trichotomous at end
8679 Spikes long acuminate, Leaves hastate
8680 Spikes filiform panicled, Leaves lanceolate coarsely serrated



and Miscellaneous Particulars

couches with the leaves Hence also it has had the affected name of Piper eunuchorum and monachorum. The seeds of the chaste-tree are, however, so far from being thought antiaphrodisiac, that writers of later times have ascribed to them an opposite quality, their aromatic pungency seems to favor this opinion, and Bergius states them to be carminative and emmenagogue (*Woodville*)

The fruit of V trifolia is reputed in the eastern countries to be warm, discutient, nervine, cephalic, and emmenagogue, and to be of service in paralysis, weakness, and pains of the limbs. It is in great use among the Indian practitioners, both internally and externally The plant has a bitter taste, and a strong somewhat aromatic smell.

1318 *Cornutia* So named after Jacques Cornut, a French physician, who travelled into Canada, and published an account of the plants of that country in 1635 Cornutia pyramidata is a shrub with square branches, elliptical ovate entire hoary leaves, and naked pyramidal terminal branches of flowers.

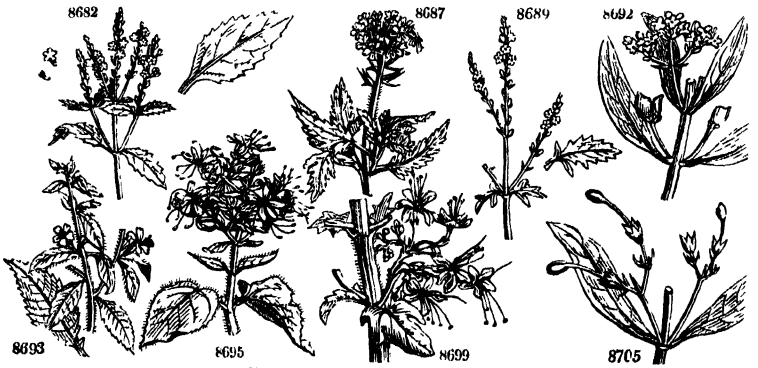
1319. *Zapania* Named by Scopoli, after Paul Anthony Zappa, an Italian botanist

1320. *Priva* A genus of small Verbena-like herbaceous plants, with little blue flowers. The derivation of the name is unknown

1321 *Spielmannia.* In honor of James Reinhold Spielmann, professor of medicine and botany at Strasburg, author of Prodromus Florae Argentoratensis, Pharmacopoeia Generalis, &c. A shrub of easy culture in any light soil, and cuttings root freely under a glass

1322 *Verbena.* Said by De Theis, to be derived from *ferfaen*, its name in Celtic. A genus of weedy plants,

8681 angustifólia *H. K.*	narrow-leaved	♑	△	un	3	jn au	B	N Amer	1802.	D	co	
8682 carolinìana *W*	Carolina	♑	△	un	6	jn s	W	N Amer	17.2	D	co	Dil el t.301.f 388
8683 urticifólia *W*	Nettle-leaved	♑	△	un	3	jl s	W	N Amer	1683	C	co	Rob ic 26
8684 stricta *Ph*	upright	♑	△	un	3	jl au	B	N. Amer	1802	D	co	Bot. mag 1076
8685 Aubliétia *W*	Rose	♑	◯	or	1	jn au	Pu	N. Amer.	1774	S	r m	Bot mag 308
8686 bracteósa *Ph*	long-bracted	♑	△	pr	½	jl	Pu	N. Amer	1812	D	co	Bot mag 2910
8687 Lambérti *B M*	Lambert's	♑	△	or	1½	jl	Pu	S Amer	...	D	co	Bot mag 2200
8688 spúria *Ph*	jagged-leaved	♑	◯	un	2	jl au	B	N Amer	1791	C	p l	
8689 officinális *W*	common	♑	△	un	2	jn s	Pu	Britain ro sid		D	co	Eng bot 769
8690 supína *W*	trailing	♑	○	un	¼	jn jl	B	Spain	1640	S	co	Park the 675 f 2
8691 prostráta *H K*	prostrate	♑	△	un	½	jn jl	B	N. Amer	1794	D	co	
1323 AVICE'NNIA *L*	Avicennia					*Myoporinæ.*		*Sp* 1—3				
8692 tomentósa *L*	downy-leaved	♀	▭	un	20	...	Pk	India	1793	C	l p	Fl d'Owar t 47
1324 CALDA'SIA *W*	Caldasia					*Verbenaceæ*		*Sp* 1				
8693 heterophýlla *W*	blue	♐	⧄	pr	2	my d	B	New Spain	1813	S	co	Bot. reg 96
1325 CLERODE'NDRUM *B P*	Clerodendrum					*Verbenaceæ*		*Sp* 15—27				
8694 frágrans *H K*	fragrant	♚	▭	or	6	au d	W	China	1790	R	s p	Vent malm 70
β flore pleno	*double-flowered*	♚	▭	or	6	au d	W	China	1790.	R	s p	Bot mag 1834
8695 viscósum *H K*	clammy	♚	▭	or	6	my au	W	E Indies	1796	C	s p	Bot mag 1805
8696 infortunátum *P. S*	long-flowered	♚	▭	or	6	...	...	E. Indies	.	C	l p	
8697 fortunátum *W*	spear-leaved	♚	▭	or	6	jl	W	E Indies	1784	C	l p	Osb it t 11
8698 squamátum *H K*	scarlet	♚	▭	or	10	jn s	S	China	1790	R	s p	Bot reg 649
8699 paniculátum *W*	panicled	♚	▭	or	6	jl o	W	Java	1809	C	s p	Bot reg 906
8700 trichótomum *W*	three-forked	♚	▭	or	6	...	...	Japan	1800	C	l p	Kæm ic 22
8701 tomentósum *R Br*	downy	♚	▭	or	5	mr ap	W	N S W	1794	S	s p	Bot mag 1518
8702 ligustrinum *H K*	Privet-leaved	♚	▭	or	3	au n	W	Mauritius	1789.	C	p l	Jac co sup t5 f 1
8703 heterophýllum *H K*	various-leaved	♚	▭	or	3	au s	W	Mauritius	1805	C	l p	Bot rep 554
8704 mérme *H K*	smooth	♚	▭	or	4	au n	W	E Indies	1692	C	p l	Jac co sup t4 f 1
8705 Siphonánthus *H K*	whorl-leaved	♚	▭	or	6	...	W	E Indies	1796	C	p l	Bur ind t 43 f 1
8706 macrophýllum *B M*	large-leaved	♚	▭	or	8	jl	W n	E. Indie.	1815	C	p l	Bot mag 2536
8707 phlomoides *L*	Phlomis-like	♚	▭	or	4	au s	W	E Indies	1820	C	p l	Bur ind t 45 f 1
8708 costátum *R Br*	ribbed	♚	▭	or	6	...	...	N Holl	1823	C	l p	
1326. VOLKAME'RIA *H K*	Volkameria					*Verbenaceæ*		*Sp* 3—5				
8709 aculeáta *H K*	prickly	♚	▭	or	4	au o	W	W Indies	1739	C	p l	Bro jam t 20 f 2
8710 buxifólia *W en*	box-leaved	♚	▭	or	4	au	W	. ...	1820	C	p l	
8711 japónica *Thunb*	Japan	♀	▭	or	50	...	Pu w	Japan	1820	C	p l	Vent. mal 70
1327 HOLMSKIOL'DIA *H K*	Holmskiodia					*Verbenaceæ*		*Sp* 1				
8712 sanguínea *W*	scarlet	♚	▭	or	4	...	S	India	1796.	C	p l	Bot reg 692
1328 PETRE'A *W*	Petrea					*Verbenaceæ*		*Sp* 1				
8713 volúbilis *W*	climbing	♃	▭	or	20	jl au	Pu	VeraCruz	1733	C	r m	Bot mag 668
1329 CITHAREX'YLUM *W*	Fiddle-Wood					*Verbenaceæ*		*Sp* 5—9				
8714 cinéreum *W*	ash-colored	♀	▭	or	15	. .	W	W Indies	1739.	C	p l	Jac amer t 118
8715 caudátum *W*	oval-leaved	♀	▭	or	20	..	W	Jamaica	1763	C	l p	Jac ic 3 t 501
8716 villósum *W*	hairy-leaved	♀	▭	or	10	. .	...	S Domin	1784	C	p l	Jac ic 1 t 118
8717 pentándrum *Vent*	pentandrous	♚	▭	or	6	...	W	Porto Rico	1815	C	l p	Vent. cels t 47
8718 quadranguláre *W*	square-stalked	♀	▭	tm	50	.	W	Jamaica	1759	C	p l	Jac vind 1 t 22
1330 DURAN'TA *W*	Duranta					*Verbenaceæ*		*Sp* 3—4				
8719 Plumiéri *W*	smooth	♚	▭	or	15	o	B	S Amer	1793	C	p l	Bot reg 244
8720 Ellísia *W*	prickly	♚	▭	or	6	au	B	W Indies	1739	C	p l	Bot mag 1759
8721 microphýlla *W en*	small-leaved	♚	▭	or	3	...	B	.....	1820	C	p l	



History, Use, Propagation, Culture,

with the exception of Verbena Aubletia and Lamberti V officinalis was held sacred among the ancients, and used in making leagues by ambassadors, sacrificial rites, incantations, &c ; and by the moderns as an amulet, and for medical purposes it is now, however, entirely out of use

1323 *Avicennia* Named after Abu Vah Ibn Tain, commonly called Avicennes, a Persian physician, born in 980, died in 1036 His Rules of Medicine were formerly the text-book of physicians, and have occupied the learning and time of many commentators

1324 *Caldasia* Named by Willdenow in compliment to Don Josef Caldas, an eminent botanist, native of Popayan, in New Grenada

1325 *Clerodendrum.* From κλῆρος, accident, and δενδρον, a tree, in allusion to the various effects in medicine by its various species Clerodendrum fortunatum is useful, C calamitosum and infortunatum, dangerous The species grow freely in light rich soil, composed of half loam, one-fourth of rotten dung, and one-fourth peat. They require a large pot to flower freely, and cuttings root readily under a hand-glass · the younger the shoots the better. The handsomest species are C paniculatum and C squamatum (*Bot Cult* 41)

C inerme is hardy enough to live in the open air against a wall, but it must have the protection of a mat in winter.

1326 *Volkameria.* Named after John Christopher Volkamer, a German botanist, who died in 1720 John

8681 Spikes filiform, Leaves linear lanceolate subserrate
8682 Spikes filiform, Leaves lanceolate serrate bluntish subsessile
8683 Spikes filiform paniced, Leaves ovate serrate acute stalked
8684 Hoary, Spikes cylindrical upright, Leaves ovate serrate subsessile, Stem erect round
8685 Spikes solitary stalked, Leaves trifid cut
8686 Decumbent hirsute, Leaves cut, Flowers spiked, Bractes linear very long squarrose
8687 Spikes lax solitary, Stem hispid decumbent rooting, Leaves oblong cut-toothed entire at end
8688 Spikes filiform, Leaves multifid cut, Stems numerous
8689 Spikes filiform paniced, Leaves multifid cut, Stem subsolitary
8690 Spikes filiform solitary, Leaves bipinnatifid
8691 Hirsute, Spikes filiform solitary, Leaves serrate cut, Calyxes twice as long as fruit

8692 Leaves oblong blunt downy beneath

8693 The only species

8694 Leaves subcordate tooth-serrate pubesc with 2 glands at base, Corymb terminal hemispherical compact

8695 Somewhat downy, Leaves cordate toothed, Cal large 5-cornered viscid, Segm of cor on one side
8696 Leaves subcordate entire, Cor thrice as long as tube of calyx, Limb bilabiate
8697 Leaves lanceolate quite entire
8698 Leaves cordate obscurely angular, Panicles of branches dichotomous smooth
8699 Leaves 5-lobed toothletted smooth, Panicle brachiate, Axillæ woolly
8700 Leaves lobed and undivided broad ovate entire, Panicle trichotomous
8701 Leaves elliptical acute entire and calyxes downy, The calyx in fruit thickened colored, Corymbs clustered
8702 Leaves oblong lanceolate entire, Petioles peduncles and calyx hairy
8703 Leaves lanc or lin lanc entire quite smooth, Corymbs axill. and term Cal 5-toothed and pedunc smooth
8704 Leaves ovate entire shining, Petioles peduncles and calyxes smooth
8705 Leaves whorled long lanceolate entire smooth, Corymbs axillary few-flowered, Corollas very long
8706 Leaves broad-ovate acuminate serrate subsessile downy beneath, Cal 5-toothed, Cor labiate
8707 Leaves ovate entire toothed and angular, Peduncles axillary about 2-flowered
8708 Leaves ovate blunt downy beneath ribbed rugose, Corymb trichotomous

8709 Leaves oblong acute entire, Spines from the rudiments of petioles
8710 Leaves obovate entire retuse shining, Peduncles axillary about 1-flowered
8711 Unarmed, Leaves cordate ovate acute toothed, Racemes 1-sided

8712 Leaves stalked cordate crenate smooth

8713 Leaves ovate, Flowers thirsoid

8714 Branches round, Leaves oblong acuminate entire, Racemes pendulous, Calyxes toothed
8715 Branches round, Leaves elliptical emarginate blunt entire, Racemes erect, Calyxes somewhat toothed
8716 Branches square, Leaves obovate pubescent beneath somewhat toothed at end, Racemes nodding
8717 Branches bluntly 4-cornered, Leaves ovate obl toothed upwards pubesc beneath Fl bracteate pendulous
8718 Branches square, Leaves ovate acuminate entire, Racemes nodding

8719 Calyxes in fruit twisted, Leaves obovate oblong
8720 Calyxes in fruit erect, Leaves oblong lanceolate acuminate
8721 Spiny, Leaves 9 lines long 3 lines broad subserrate attenuated at each end, Teeth of cal shorter obtuse



and Miscellaneous Particulars.

George Volkamer, his brother, born 1616, died in 1693, wrote many academical dissertations, and a Flora o Nuremberg, which was not published till after his death The species are ornamental plants with the habit of the last genus

1327 *Holmskioldia* A Theodore Holmskiold, a Dane, published some obscure works upon Cryptogamous plants. A handsome herbaceous stove plant, remarkable for the large calyxes of a bright red color

1328 *Petrea* So called by Houstoun, in honor of Robert James Lord Petre, born in 1710, died in 1742 The famous Peter Collinson, in a letter to Linnæus, speaks of his death as the greatest loss that botany or gardening ever felt in this island A climbing plant with blue flowers.

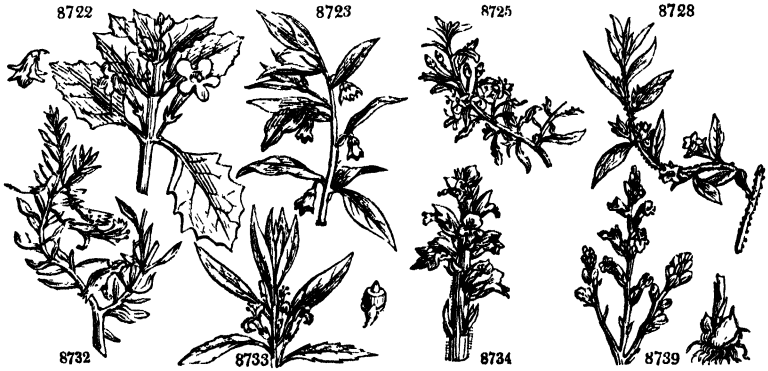
1329. *Cithaexylum* From κιθαρα, a lyre (hence guitar), and ξυλον, wood This tree produces a wood which in America is very useful for carpenters' work It is very hard, and has been supposed applicable to making musical instruments, a mistake which arose thus, C melanocardium is called by the French *fidèle*, from its faithfulness or durability in building, the English have corrupted the name to fiddle-wood, as if it were used for making musical instruments, which is a mistake. (*Muller.*)

Cuttings root in sand under a hand-glass.

1330 *Duranta* After Castor Durantes, physician to Pope Sixtus V, author of Herbarium, 1585 died in 1590. The species grow and flower freely in loam and peat, and cuttings root in sand under a hand-glass.

1331 PEDA'LIUM *W*	Pedalium.				*Pedalinæ* *Sp* 1.									
8722 Mórex *W.*	prickly-fruited	▢	cu	1½	au s	W pu	E Indies	1778	C	l p	Lam Ill. t. 538			
1332. MYOPO'RUM *Forst*	Myoporum				*Myoporinæ.* *Sp.* 8.									
8723 ellípticum *R Br*	smooth-leaved	●	⌴	pr	2	jn mr	W	N S W	1789	C	l p	Bot. rep. 283		
8724 acuminátum *R Br*	acuminate	●	⌴	pr	3	...	W	N S W.	1812	C	l p			
8725 parvifólium *R Br*	small-leaved	●	⌴	pr	3	ja d	W	N Holl	1803	C	l p	Bot. mag. 1693		
8726 tuberculátum *R Br*	tubercled	●	⌴	pr	3	...	W	N Holl	1803.	C	l p			
8727 viscósum *R Br*	viscid	●	⌴	pr	3	.	W	N Holl	1803	C	l p			
8728 débile *R Br*	procumbent	●	⌴	pr	1½	my au	W	N S W	1793	C	l p	Bot mag 1830		
8729 diffúsum *R. Br*	diffuse	●	⌴	pr	3	f au	W	N Holl	.	C	l p			
8730 oppositifólium *R Br*	opposite-leav'd	●	⌴	pr	3	ja d	W	N Holl	1803	C	l p			
1333 STI NOCHI'LUS. *R Br*	Stenochilus.				*Myoporinæ* *Sp* 2—3									
8731 gláber *R. Br*	smooth-leaved	●	⌴	or	2	ja d	R	N Holl	1803	C	s p	Bot mag 1942		
8732 maculátus *Act*	spotted	●	⌴	or	3	ap my	S	N Holl	1820.	C	s p	Bot reg 647		
1334 BON'TIA *R Br*	Bontia				*Myoporinæ* *Sp* 1									
8733 daphnoides *W*	Barbadoes	●	▢	or	6	jn	Y Pu	W Indies	1690	C	p l	Dill.elt t 49.f.57		
1335 OROBAN'CHE. *W*	Broom-Rape				*Orobancheæ* *Sp* 6—20									
8734 major *W*	greater	✱	△	w	1½	jn jl	Br	Britain	unc pl	S	s l	Eng bot. 421		
8735 elátior *W*	taller	✱	△	cu	1½	jl au	Y	Britain	clov fi	S	s l	Eng bot 568		
8736 minor *W*	smaller	✱	△	cu	½	jl au	Y w	Britain	clov fi	S	s l	Eng bot. 422		
8737 rúbra *E B*	red	✱	△	cu	½	au	Pu	Britain	ir roc	S	s l	Eng bot 1786		
8738 cærúlea *W*	blue	✱	△	cu	½	jl	V	Britain	sea co	S	s l	Eng bot 423		
8739 ramósa *W*	branching	✱	△	cu	1	au s	Br pu	Britain	hemp fi	S	s l	Eng bot 184		
1336 CRESCEN'TIA. *W*	Calabash-Tree				*Solanæ* *Sp* 2									
8740 Cujéte *W*	oval-fruited	●	▢	cu	10	...	W	Jamaica	1690	C	r m	Jac amer t 111		
8741 cucurbitína *W*	round-fruited	●	▢	cu	10	...	W	W Indies	1733	C	r m	Plum ic t 109		
1337 CASTILLE'JA *Sm*	Castilleia				*Scrophularineæ* *Sp* 1—10									
8742 sessiliflóra *Ph*	sessile-flowered	☿	△	or	½	jl au	Pa Y	Louisiana	1811	D	l p			
1338 HALLE'RIA *W*	Halleria				*Scrophularineæ* *Sp* 1—2									
8743 lúcida *W*	shining leaved	●	⌴	or	6	jn au	S	C G H	1752	C	p l	Bot mag. 1744		
1339 LATHRÆ'A *W*	Toothwort				*Orobancheæ* *Sp* 1—3									
8744 squamária *W*	scaly	✱	△	cu	1	ap	Gr	Britain	dry wo.	D	co	Eng bot 50		
1340 RHINAN'THUS *W*	Yellow-Rattle				*Scrophularineæ* *Sp* 5—10									
8745 crista-gálli *W*	Cock's-comb		○	w	1	jn au	Y	Britain	mea pa	S	co	Eng bot 65		
8746 alectorolóphus *Poll*	wattled		○	pr	1½	jn au	Y	Europe	1820	S	co			
8747 Trixágo *L.*	inflated		○	pr	1	jn au	Y	Europe	...	S	co	Mor h 3 t 24 f 8		
*1341 BARTSIA *W*	Bartsia				*Scrophularineæ* *Sp* 5—10									
§8748 coccínea *W*	scarlet	☿	△	or	½	jl	R y	N Amer	1787	D	s p	Pluk al t 102 f 5		
8749 pállida *W*	pale-flowered	☿	△	or	½	jn s	L P	Siberia	1782	D	s p	Gmel sib 3. t 24		
8750 viscósa *W*	yellow		○	or	½	jl au	Y	Britain	mar	S	m s	Eng bot 1045		
8751 Odontites *H K*	red		○	or	½	jl s	Pk	Britain	mea pa	S	co	Eng bot 1415		
8752 alpina *W*	Alpine		○	or	½	jl au	Pu	Britain	alp riv	S	m s	Eng bot 361		

8722 8723 8725 8728



8732 8733 8734 8739

History, Use, Propagation, Culture,

1331 *Pedalium* Πηδάλιον, a Greek word signifying a nail or point. This plant produces a hard and nut-like fruit with four sharp points or horns

1332 *Myoporum* From μυω, to shut up, and πορος, a pore, the spots which cover the leaves being, as it were, pores closed with some semi-transparent substance.

1333. *Stenochilus* From στενος, narrow, and χειλος, a lip, the narrow lip distinguishing this genus from some of its kindred Very pretty New Holland small shrubs, with fine red flowers

1334 *Bontia* James Bont or Bontius was a Dutch physician, born at Batavia, published in 1658, a natural history of the East Indies, in the manner of Piso A South American plant, with the appearance of a Daphne. The leaves are alternate, fleshy, and crenated, and the flowers axillary

1335 *Orobanche* So called from ορος, a vetch, or other leguminous plant, and αγχω, to strangle, in allusion to the well known effect of these parasites in destroying the plants upon which they grow The species are fleshy herbs of a russet color, fastening themselves to the roots of other plants, and chiefly to Leguminosæ The root is tuberous, imbricate with scales, and sends out fibres into the soil, the stem is without leaves, scaly, and generally simple the flowers are in terminating spikes The whole plant is acrid and astringent, and rejected by all animals, excepting the minuter tribes of Cimices and Thripses

O major adheres to the root of broom, furze, and clover, and is particularly destructive to the latter, especially in Flanders, where in some places it deters the farmer altogether from the culture of clover. It has a large, thick, fleshy, oval, scaly root, sometimes bulbous, and sending out fibres which are very brittle. The bulb adheres to the woody roots of furze or broom, and the fleshy root of clover, and the fibres clasp round them

O. elatior is commonly found adhering to the roots of Centaurea scabiosa and Trifolium pratense It does

8722 Leaves truncate, Flowers with a strong smell of musk

8723 Leaves elliptical bluntish mucronate and branches smooth, Sepals lanc very acute, Orifice of cor villo is
8724 Leaves broadish lanc. acumin very acute and branches smooth, Sepals ovate lanc Limb of cor bearded
8725 Lvs lin bluntish sometimes toothed at end with the branches glandular, Peduncles occasionally 2-parted
8726 Leaves lanceolate acute serrated and branches warted with glands
8727 Leaves elliptical acute serrated reflexed and branches viscid with glands
8728 Leaves lanc toothed at end entire at base, Drupes compressed shorter than calyx, Stem prostrate
8729 Leaves lanceolate at base with recurved teeth, Stems diffuse glandular, Peduncles solitary
8730 Leaves serrate cordate sessile

8731 Leaves lanceolate or elliptical entire sometimes toothed at end, Branches downy, Stem diffuse
8732 Stem silky, Leaves spatulate lanceolate much shorter than flower, Stamens a little protruded

8733 Leaves alternate, Peduncles 1-flowered

8734 Stem simple, Cor 4-fid inflat Stam naked downw Stigma 2 lobed, Lobes distant, Style pubesc upwards
8735 Stem simple, Cor 4-fid, Stamens hairy downwards, Stigma obcordate, Style smooth upwards
8736 Stem simple, Cor 4-fid, Stamens hairy downwards, Stigma retuse, Style smooth upwards
8737 Stem simple, Corolla tubular, Segm of lip blunt equal, Stamens fringed on one side at base
8738 Stem nearly simple, Cor 5-fid, Bractes 3, Calyx tubular half 4 cleft
8739 Stem branched, Cor 5-fid, Bractes 3, Calyx short deeply 4-cleft

8740 Leaves cuneate lanceolate close together
8741 Leaves ovate subcoriaceous separate, Fruit ovate acuminate

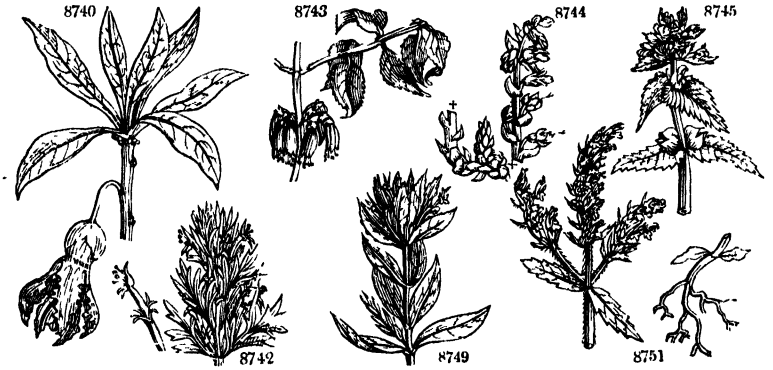
8742 Leaves at end palmate-cut, Flowers sessile

8743 Leaves ovate acuminate serrate, Corollas 2-lipped, Calyx 3-leaved, Stamens exserted

8744 Stem quite simple, Corollas pendulous with the lower lip trifid

8745 Upper lip of corolla emarginate 2-toothed, Middle segment of lower lip very short
8746 Upper lip of corolla compressed shorter, Calyxes villous
8747 Lower lip of cor longer than upper, Middle segm blunt longer than lateral, Cal vill Lvs deeply toothed

8748 Leaves alternate linear 2-toothed on each side
8749 Leaves alternate lanceolate entire, Floral oval toothed
8750 Upper leaves alternate serrated, Flowers distant lateral
8751 Leaves linear lanceolate serrated, Segm of lower lip of corolla blunt
8752 Leaves opposite cordate bluntly serrated



and Miscellaneous Particulars

not appear among clover till the second year On the borders of corn-fields it is found on Centaurea scabiosa and nigra, Scabiosa arvensis, &c

O minor also adheres to common red clover and to Hypochæris radicata. O ramosa is found on Galeopsis tetrahit. Any of the species may be removed to the garden and planted by the whin or broom

1336 *Crescentia* In memory of Pietro Crescenti, of Bologna, author of various agricultural works in the thirteenth century The fruits after the inside has been scooped out, are dried by the natives of the countries where they grow, and serve for containing water or other fluids.

1337 *Castilleja.* Named after one Castillejo, a Spanish botanist and friend of Mutis Some of the species of this genus which have not yet been introduced, are very beautiful plants, and would amply repay a collector for his trouble in procuring them.

1338 *Halleria* After the famous Albert Haller, author of Stirpes Helveticæ, and other considerable works on botany and medicine. A pretty stove plant, with long branches of red flowers. Surely so eminent an investigator of alpine vegetation as Haller was, should have had an alpine genus consecrated to him

1339 *Lathræa* Λαθραιος, concealed The plant is only found in the most hidden recesses of the grove A curious humble parasite without leaves, in the room of which it is covered with abundance of white fleshy scales

1340 *Rhinanthus* From ῥις, a nose, and ανθος, a flower, because of its ringent corolla compressed, at the upper lip so as to resemble the snout of some animal

1341 *Bartsia* Named by Linnæus, in honor of his beloved friend John Batsch, M D, of whom he gives an interesting and melancholy account in his Flora Suecica. Curious herbaceous plants of very difficult cultivation.

1342. EUPHRA'SIA *W* Eye-bright. *Scrophularineæ Sp* 3—12

8753	officinális *W.*	common	○	w	¼	jl	s	W	Britain	past.	S	co	Eng bot. 1416
8754	lútea *W.*	yellow	○	or	1½	jl	s	Y	S Europe	1816.	S	co	Jac. aust. t 398
8755	latifólia *L*	broad-leaved	○	or	1	jl	s	Pu	S. Europe	...	S	co	

†1343 ANTIRRHI'NUM. *J* Snap-Dragon *Scrophularineæ. Sp.* 5—9

8756	május *W.*	great	♀	△	or	3	jn au	Pk	England	old w	S	co	Eng bot. 129
	β coccineum	*scarlet-flower'd*	♀	△	or	3	jn au	S	England	old w.	S	co	
	γ bicolor	*two-colour'd*	♀	△	or	3	jn au	S w	England	old w	S	co	
	δ flore pléno	*double-flowered*	♀	△	or	2	jn au	F	England	old w	C	co	
8757	siculum *W.*	Sicilian	♀	△	or	1½	jl au	W	Sicily	1804	D	l p	
8758	orontium *W*	lesser		○	or	1	jl s	F	Britain	sand fi	S	s l	Eng. bot. 1155
8759	Asarina *W.*	heart-leaved	♀	△	or	½	jl	W	Italy	1699.	S	r m	Bot mag 902
8760	mólle *L*	soft-leaved	♀	▭	or	½	jl o	W	Spain	1752	C	s l	

1344 LINA'RIA *J* Toad-Flax. *Scrophularineæ Sp* 37—75.

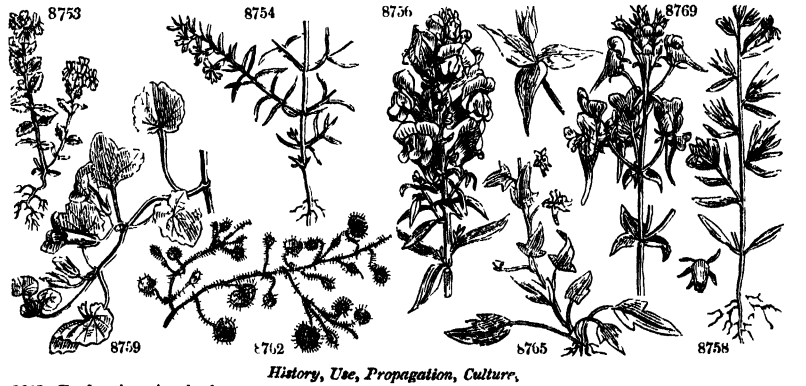
8761	Cymbalária *H K*	Ivy-leaved	♀	△	or	¼	my n	V	England	old w	D	s l	Eng bot 502
8762	pilósa *H K*	hairy-leaved	♀	△	or	½	jn s	Pu	Pyrenees	1800	D	s l	Jac obs 2 t 48
8763	Elátine *H K.*	sharp-pointed	☿	○	or	½	jl n	Y	England	corn fi	S	co	Eng bot 692
8764	spúria *H K*	round-leaved	☿	○	or	½	jl s	Y	England	corn fi	S	co	Eng bot 691
8765	cirrhósa *H K*	tendrilled	☿	○	or	½	jl	Pa B	Egypt	1771	S	co	Jac. vind 1 t 82
8766	ægyptiaca *H K.*	Egyptian		○	or	1½	jl	Y Pu	Egypt	1771	S	co	
8767	triphýlla *H K*	three-leaved		○	or	1	jn s	Y Pu	Sicily	1596	S	s l	Bot mag 324
8768	latifólia *H K*	broad-leaved		○	or	1	jn jl	Y	N Amer	1800	S	co	Desf atl 2. t 134
8769	triornithóphora *H K*	three-bird	♀	△	or	½	jn s	Pu	Portugal	1710	C	s p	Bot mag 525
8770	bipartita *P S*	two-parted	♀	△	or	¼	jn s	Pu	Barbary	1815	D	l p	Sweet fl gard 30
8771	purpurea *H K*	purple	♀	△	or	½	jl s	Pu	S Europe	1648	S	co	Bot mag 99
8772	versicolor *H K*	various-colored		○	or	1	jl s	P Y	France	1777	D	s l	Jac ic 1 t 116
8773	répens *H K*	creeping-rooted	✱	△	or	½	jl o	G	England	ch hil	S	co	Eng bot 1253
8774	Spártea *H K*	branching		○	or	1	jn o	Y	Spain	1772	S	s l	Bot mag 200
8775	bipunctáta *H K*	two-spotted		○	or	1	jn au	Y	Spain	1749	S	co	
8776	Hælava *W*	hairy-calyxed		○	or	1	jl	Pu	Egypt	1803	D	co	
8777	tristis *H K*	brown	♀	△	or	1	jl au	Br	Spain	1727	S	s l	Bot mag 74
8778	supina *H K.*	trailing	☿	○	or	½	jl	Y	Spain	1728	S	s l	
8779	símplex *P S*	upright		○	or	1	jl au	P B	S Europe	1816	S	s l	Jac ic 3. t. 499
8780	arvénsis *P S*	corn		○	or	1	jl au	P B	S Europe	...	S	co	
8781	Pelisseriána *H K*	violet-colored		○	or	1	jn s	V	S. Europe	1640.	S	s l	Barrel ic 1162
8782	viscósa *H K*	clammy		○	or	1	jl	Br	Spain	1786	S	s l	Bot mag. 368
8783	multicaúlis *H K*	many-stalked		○	or	1½	my jl	W	Levant	1728.	S	s l	Boc sic t 19 f 1
8784	reticuláta *H K*	net-flowered	♀	△	or	1½	my jl	Pu	Algiers	1788	D	l p	Smith ic pict 2
8785	glauca *H K*	glaucous-leav'd		○	or	1	jn au	Pu Y	S Europe	1800	S	co	Buxb cen 4 t 37
8786	alpina *H K*	Alpine	✱	△	or	1	jl n	B	Austria	1570	C	s l	Bot mag 205
8787	villósa *H K.*	villous	♀	△	or	1	jl au	B	Spain	1786	D	l p	Barrel ic 597
8788	origanifólia *H K*	Marjoram-lvd	♀	△	or	1	jn s	B	S Europe	1785	D	l p	Barrel ic 598
8789	minor *H K*	least erect		○	w	¼	jn n	V	England	sand fi	S	s l	Eng bot 2014
8790	dalmática *H K*	Dalmatian	♃	▭	cu	1½	jn jl	Y	Levant	1731	S	s l	Buxb cen 1 t 24
8791	hírta *H K*	shaggy-leaved		○	or	1	jn s	Pu	Spain	1759	S	co	Jac ic 1 t 117
8792	macroura *Bieb*	long-horned	♀	△	or	1	jn s		Crimea	1822	D	co	
8793	genistifólia *H K*	Broom-leaved	♀	△	or	2	jl au	Y	Austria	1704	D	co	Bot mag 2183
8794	júncea *H K*	Rush-stalked		○	or	1½	jl au	Y Br	Spain	1780	S	co	
8795	vulgáris *H. K*	yellow	♀	△	w	1	jn s	Y	Britain	hed.	D	co	Eng bot. 658
	β Peloria	*regular-flower'd*	♀	△	cu	1	jn s	Y	Britain	...	D	co	Eng bot 280
8796	canadénsis *P S*	Canada		○	or	1	jn au	V	N Amer	1812	S	co	Vent cels 49
8797	chalepénsis *H K*	white-flowered		○	or	1	jn jl	W	Levant	1680	S	co	Mor s 5 t 35 f 9

1345 ANARRHI'NUM. *Desf* Anarrhinum *Scrophularineæ Sp* 1—6.

8798	bellidifólium *W*	Daisy-leaved	♀	○	pr	1½	jn au	B	France	1629	S	s l	Bauh.prod t 106

†1346 NEME'SIA *Vent* Nemesia *Scrophularineæ Sp* 3—5

8799	chamædrifólia *V*	Chamædrys-lv	♀	△	or	2	ap s	Pu	C G H	1787	D	co	
8800	fœ'tens *V*	fœtid	♀	△	or	2	ap s	Pu	C G H	1798	D	co	Vent malm t.41
8801	bicórne *P S*	horned		○	or	2	jl au	Pu	C G H	1774	S	s l	Bur afr t 75 f 3



History, Use, Propagation, Culture,

1342. *Euphrasia* An abridgment of *Euphrosine*, the name of a woman, expressing joy or pleasure This has been so called from the joyful effects of E officinalis in disorders of the eyes, but it is now thought to be injurious rather than otherwise Lightfoot states, that the Scotch Highlanders make an infusion of it in milk, and anoint the patient's eyes with a feather dipped in it

1343. *Antirrhinum.* From *αντι*, similar, and *ρις*, a nose, because the flowers of most of the species bear a perfect resemblance to the snout of some animal A majus and its varieties are popular border flowers of the easiest culture in any dry soil, the other species are also pretty little plants

1344 *Linaria.* The plant out of flower is very similar to Linum, Flax The species are for the most part pretty annual plants; and some of them, as L Cymbalaria, well adapted for growing in pots or for rock-work.

8753 Leaves ovate bluntly toothed, Segm of lower lip of corolla emarginate
8754 Leaves linear serrated upper entire, Lateral segments of lower lip of corolla toothletted
8755 Leaves ovate toothed palmate, Flowers spiked, Cor tubular, Segm of lower lip blunt

8756 Leaves lanceolate opposite, Flowers racemose, Sepals glandular hairy ovate blunt

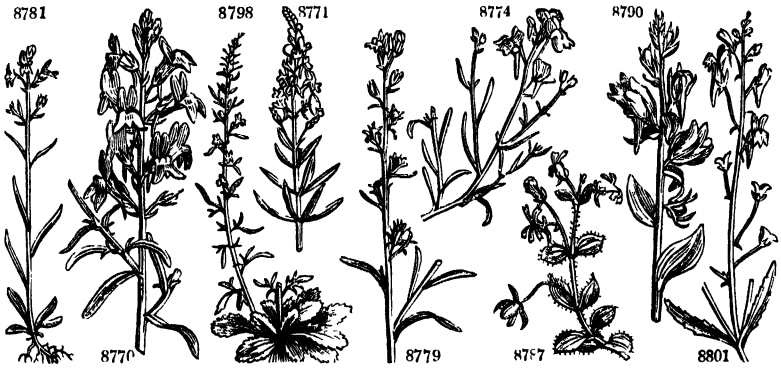
8757 Leaves linear lanceolate ternate, Flowers racemose, Sepals glandular hairy lanceolate acute
8758 Leaves lanceolate upper alternate, Flowers subsessile, Calyxes longer than corolla
8759 Leaves opposite cordate unequally crenate somewhat lobed hairy, Stems procumbent
8760 Leaves opposite ovate downy, Stems procumbent

8761 Leaves cordate 5-lobed alternate smooth, Stems procumbent
8762 Small, Leaves reniform repand very hairy alternate, Stems procumbent
8763 Leaves hastate alternate, Stems procumbent
8764 Leaves hairy alternate roundish ovate, lower obsoletely toothed upper subsessile entire, Stem procumb.
8765 Leaves hastate alternate, Stems spreading, Petioles occasionally producing tendrils
8766 Leaves hastate alternate, Stem erect much branched, Peduncles staff
8767 Leaves ternate ovate blunt 3-nerved rough at edge, Spike terminal, Flowers stalked
8768 Leaves ternate ovate lanceolate 3-nerved, Spike terminal, Flowers sessile
8769 Ivs whorled lanc 3-nerved, Stems decumbent, Raceme terminal few-flowered, Cor very large stalked
8770 Leaves linear lanceolate lower opposite, upper alternate, Racemes lax, Helmet erect 2-parted
8771 Leaves 4 linear lanceolate, Flower-stem erect spiked
8772 Leaves linear lanceolate lower ternate, Stem erect spiked
8773 Root creeping, Leaves linear close lower 4, Calyx as long as capsule
8774 Leaves subulate channelled fleshy lower 3, Stem panicled and corolla quite smooth
8775 Leaves linear smooth lower 4, Stem erect panicled, Flowers in capitate spikes
8776 Leaves linear lanceolate lower about 4 smooth, Flowers capitate, Calyxes hairy, Stem nearly simple
8777 Leaves linear scattered lower opposite, Spur subulate, Flowers subsessile
8778 Leaves about 4 linear, Stem diffuse, Flowers racemose, Spur straight
8779 Leaves nearly linear · lower in fours, Calyxes pilose viscid, Fl racemose, Spur straight, Stem erect
8780 Leaves nearly linear lower in fours, Calyxes pilose viscid, Fl racemose, Spur recurved, Stem erect
8781 Cauline leaves linear alternate radical ovate lanceolate 3-5, Flowers corymbose
8782 Cauline leaves linear alternate radical lanceolate 4, Cal villous close to stem
8783 Leaves 5 linear fleshy, Flowers capitate
8784 Leaves linear channelled scattered upon the rootshoots in 5s, Calyx hairy, Pedunc shorter than bractes
8785 Leaves 4 subulate fleshy, Stems erect, Flowers spiked
8786 Leaves 4 linear lanceolate glaucous, Stem diffuse, Flowers racemose, Spur straight
8787 Leaves all opposite villous, Stem simple, Flowers opposite lateral
8788 Leaves obovate opposite floral alternate, Stem ascending pubescent, Spur straight
8789 Leaves mostly alternate lanceolate blunt, Stem much branched diffuse
8790 Leaves somewhat stem-clasping lanceolate scattered, Bractes longer than calyx, Stem ½ shrubby
8791 Leaves lanceolate hairy alternate, Flowers spiked upper sepal very large
8792 Leaves alternate linear-subulate somewhat fleshy, Stem erect simple, Spike term stalked
8793 Leaves lanceolate acuminate, Panicle twiggy flexuose
8794 Leaves linear alternate, Stem panicled twiggy, Flowers racemose
8795 Leaves lanceolate linear close, Stem erect, Spikes terminal sessile, Flowers imbricated

8796 Leaves alternate linear remote sinoote, Flowers racemose, Stem simple, Runners procumbent
8797 Leaves linear lanceolate alternate, Flowers racemose, Cal longer than cor. Stem erect

8798 Very smooth, Radical leaves obovate lanceolate blunt serrate. cauline divided entire

8799 Leaves ovate serrated stalked, Peduncles axillary 1-flowered
8800 Leaves 4 linear lanceolate acute about 3-nerved smooth, Flowers racemose terminal with bractes
8801 Leaves oblong serrated, Stem erect herbaceous, Capsules 2-horned spreading



and Miscellaneous Particulars.

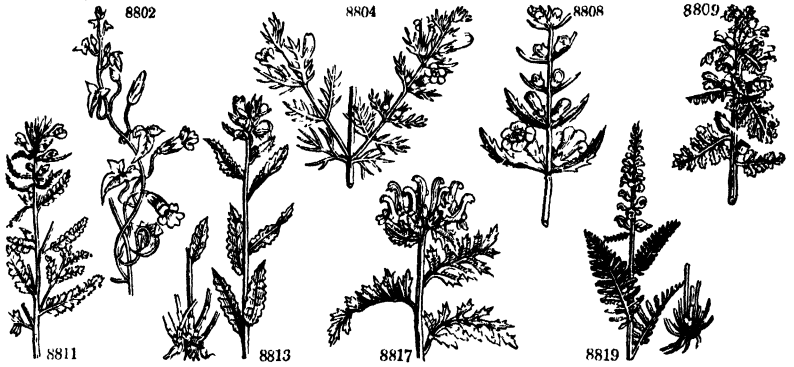
L. triphylla is a popular border annual. L. triornithophora is remarkable for the form of its flowers, which resemble three little birds seated in the ajar.

L. vulgaris is a very showy plant, but also a bad weed in sandy pastures.

1345 *Anarrhinum* Named by Desfontaines, from *α*, privative, and *ῥὶν*, nose, in contradistinction to Antirrhinum, because the plants of this genus have not the snout-like flowers of the latter. Plants resembling Linaria in habit.

1346. *Nemesia* A name used by Dioscorides to designate a kind of Antirrhinum, to which genus this is nearly related.

	†1347. MAURAN'DYA *W* MAURANDYA					*Scrophularineæ* *Sp* 2									
8802	semperflórens *W*	red-flowered	♀	⊔	or	10	ja d	Pu	Mexico	1796.	C	l p	Bot mag. 460		
8803	antirrhiniflóra *W en*	blue-flowered	♀	⊔	or	10	ja d	Pu	Mexico	1814	C	l p	Bot. mag. 1643		
	†1348 GERAR'DIA *W* GERARDIA					*Scrophularineæ* *Sp* 5—16									
8804	delphiniifólia *W.*	Larkspur-leav'd		△	or	2	jn jl	Pk	E. Indies	1800	C	l p	Rox cor. 1 t 90		
8805	purpúrea *Ph*	purple		○	or	1½	jl.au	Pu	N Amer	1772.	S	s l	Bot. mag 2048		
8806	tenuifólia *Ph*	slender-leaved		◯	or	1	jl au	Pu	N Amer	1812	S	s l	Pluk al t 12. f 4		
8807	flàva *Ph*	yellow		△	or	1½	jl au	Y	N Amer.	1796	C	l p	Plu am t 389 f 1		
8808	quercifólia *Ph*	Oak-leaved		△	or	4	jl au	Y	N. Amer.	1812.	C	l.p	Pursh amer t.19		
	1349 PEDICULA'RIS *W* LOUSEWORT					*Scrophularineæ* *Sp* 16—40									
8809	palustris *W*	marsh	♃	△	pr	2	jn jl	Pu	Britain	bog m	D	co	Eng bot. 399		
8810	sylvática *W*	common	♃	△	pr	1	my jl	Pk	Britain	m.hea	D	co	Eng bot 400		
8811	euphrasioides *W*	Eyebright-lvd	♃	△	pr	1½	...	Pu	Siberia		1816	S	p l	Gmel sib 3 t 43	
8812	myriophýlla *W*	Milfoil-leaved	♃	△	pr	1	my jl	Y	Dauria		1816.	S	p l	Pa it 3 ap t.8 f 1	
8813	resupináta *W*	resupinate	♃	△	pr	1	my jl	Pu	Siberia		1816	S	p l	Gmel sib 3 t 44	
8814	Sceptrum Carolinum *W*	sceptred	♃	△	spl	5	au	Y	Sweden		1793	S	p l	Flor dan t. 26	
8815	recutita *W*	jagged-leaved	♃	△	pr	¾	jl au	Pu	Austria		1787	S	p l	Jac aust 3 t 258	
8816	foliósa *W*	leafy	♃	△	pr	1	jl	Y	Austria		1786.	S	p l	Jac aust 2 t 139	
8817	canadénsis *W*	Canadian	♃	△	pr	½	jl au	Y	N Amer		1800	S	p l	Sweet fl gard 67	
8818	incarnáta *W*	flesh-colored		○	pr	¾	jn jl	Pk	Austria		1796	S	p l	Jac aust 2 t 140	
8819	uncináta *W*	hooked-flower	♃	△	pr	1	jl au	Y	Siberia		1815	S	p l	Gmel sib 3 t 45	
8820	verticillata *W*	whorled	♃	△	pr	1	my jn	Y	Austria		1790	S	p l	Jac aust 3 t 206	
8821	flámmea *W*	upright	♃	△	pr	1	jl	Y s	Switzerl		1775	S	p.l	Hall helv t 8 f 3	
8822	tuberósa *W*	tuberous	♃	△	pr	1	jl au	Y	Switzerl		1799	S	p l	H.hel n 325 t 10	
8823	compácta *W*	close-headed	♃	△	pr	1	jl au	Y	Siberia		1815	S	p l		
8824	comósa *W*	spiked	♃	△	pr	1	jl.au	Y	Italy		1775	S	p l	All ped 1 t.4. f.1	
	*1350 ERI'NUS *W* ERINUS.					*Scrophularineæ* *Sp* 4—12									
8825	alpínus *P S*	smooth-leaved	♃	△	or	¼	mr ap	B	Pyrenees		1739	C	s l	Bot cab 969	
8826	hispánicus *P S*	hairy-leaved	♃	△	or	¼	mr ap	R	Spain		1739	D	s l		
§8827	frágrans *W*	fragrant	♃	⊔	or	½	my jn	Y	C G H		1776	C	s l	Bur afr t 49 f 4	
§8828	Lychnídea *Thunb*	pale	♃	⊔	or	½	my jn	Y	C G H		...	C	s l	Bot. reg 713	
	†1351 MI'MULUS *W* MONKEY-FLOWER					*Scrophularineæ* *Sp* 5—12									
8829	ringens *B*	gaping		△	or	1	jl au	L P	N Amer		1759	C	p l	Bot mag 283	
8830	glutinósus *W*	Orange-flower		⊔	or	½	ja d	Or	California		1794	C	r m	Bot. mag 354	
8831	parviflórus *Lindl*	small-flowered		○	or	¼	ja d	Y	Chili		1824	S	co	Bot reg 874	
8832	alátus *W*	oval-leaved		△		1	jl au	L P	N Amer		1783	D	p l	Bot. cab 410	
8833	luteus *W.*	yellow-flowered		△		2	jn s	Y	America		1812.	D	p l	Bot. mag 1501	
	1352 HORNEMAN'NIA *W en* HORNEMANNIA					*Scrophularineæ* *Sp* 1—2									
8834	bicolor *W en*	two-colored		⊡	pr	½	jn s	B	E. Indies		1816.	S	s l	Rox 2 t 155	
	†1353 MA'ZUS *Lour* MAZUS					*Scrophularineæ* *Sp* 1									
8835	rugósus *H K*	China		○	pr	½	my s	Y Pu	China		1780	S	s l	Sweet fl gard 36	
	1354 ISOPLEX'IS *Lindl* ISOPLEXIS					*Scrophularineæ* *Sp* 2									
8836	canariénsis *Lind* *D canariensis* L	Canary	♃	⊔	or	4	jn jl	Br o	Canaries		1698	S	p l	Lind dig 27	
8837	sceptrum *Lind.* *D sceptrum* L	Madeira	♃	⊔	or	4	jl au	Br o	Madeira		1777	S	p l	Lind. dig 28	



History, Use, Propagation, Culture,

1347 *Maurandya* Named in honor of the lady of Dr Maurandy, the botanical professor at Carthagena. An elegant greenhouse plant, native of Mexico, and flowering for months together in the summer

1348 *Gerardia.* In honor of John Gerarde, our old English botanist, author of the Herbal, 1597, folio, and a great cultivator of exotic plants, of which he published a catalogue in 1596 These are handsome North American herbaceous plants, of such very difficult culture, that few persons have seen them in gardens They deserve any pains which may be necessary to their successful cultivation

1349 *Pedicularis*, of which the English word *lousewort* is a translation and explanation The term lousewort is applied from a supposition that sheep which feed much on the plant become lousy; probably because the plants grow in very bad pastures, which may occasion the sheep to be in bad condition and to breed vermin The species have their leaves very much cut, and that in a very regular manner Their flowers are red, white, or yellow, and the mixture or shades of these three colors sometimes give the corolla the colour of fire They grow in general at a considerable elevation, namely, more than a thousand toises above the level of the sea

P sceptrum Carolinum was so named by Rudbeck, in honor of Charles XII It abounds in the north of Sweden and Lapland, where it was greatly admired by the traveller Dr Clarke, who sent seeds of it to the Cambridge botanic garden, but they never came to any thing The flowers grow in long whorled spikes, and

8802 Orifice of corolla pervious
8803 Orifice of corolla closed

8804 Leaves linear pinnatifid, Stem somewhat branching
8805 Stem oppositely much branched, Leaves linear, Flowers axillary opposite subsessile
8806 Branches panicled, Leaves linear, Peduncles axillary opposite longer than flower
8807 Pubescent, Stems nearly simple, Leaves subsessile lanceolate entire or toothed lower pinnatifid cut
8808 Smooth, Stem panicled, Leaves stalked pinnatifid, Flowers axillary opposite stalked

8809 Stem branched, Lvs pinnat. Pinnæ pinnatif cut, Cal inflated ovate 2-parted crest Helmet blunt truncate
8810 Low tufted, Stem branch. at base, Lvs pinnat Pinnæ acute. cut, Cal obl. infl smooth uneq 5-cleft crested
8811 Stem branched, Leaves pinnatifid toothed, Cal tubular 2-parted truncate, Helmet 2-toothed
8812 Stem somewhat branched, Leaves pinnated, Pinnæ in 4s acutely pinnatifid, Helmet acute 2-toothed
8813 Stem nearly simple, Leaves lanc toothed crenate, Cal 2-fid truncate, Helmet acute
8814 Stem simple, Leaves pinnatifid, Pinnæ repand crenulate, Cal 5-fid crested, Cor closed
8815 Stem simple, Lvs deeply pinnatifid, Pinnæ lanc pinnatifid toothed, Spike compact leafy
8816 Stem simple, Cauline leaves deeply pinnatifid, Pinnæ lanc acuminate pinnatifid toothed, Spike leafy
8817 Stem simple, Spike somewhat leafy, Helmet setaceous 2-toothed, Cal truncate downwards
8818 Stem simple, Leaves deeply pinnatifid, Pinnæ unequally toothed linear-lanc Calyxes villous 5-cleft
8819 Stem simple, Cauline lvs deeply pinnatifid, Pinnæ lin lanc doubly toothed, Cal round smooth 5-toothed
8820 Stem simple, Cauline leaves pinnatifid in fours, Pinnæ oblong blunt toothed, Spike capitate, Cal hairy
8821 Stem simple, Lvs. pinnated, Pinnæ imbricated ovate blunt doubly toothed, Cal 5-toothed, Helmet blunt
8822 Stem simple, Lvs pinnated, Pinnæ deeply pinnatifid tooth Cal 5-fid somew crested, Helmet uncinate
8823 Stem simple, Lvs pinn Pinnæ lanc. pinnatifid confluent at end, Spike capitate naked Calyx emargi.
8824 Stem simple, Lvs. pinnate, Pinnæ pinnatifid somewhat toothed, Spike leafy, Helmet two-toothed

8825 Leaves cæspitose spatulate deeply serrated smoothish, Peduncles terminal subcorymbose
8826 Smaller branched villous, Leaves bluntly serrated, Flowers racemose
8827 Leaves lanceolate oblong toothed, Segm of limb entire
8828 Leaves lanceolate smooth serrated at end, Stem herbaceous, Segm of limb bifid

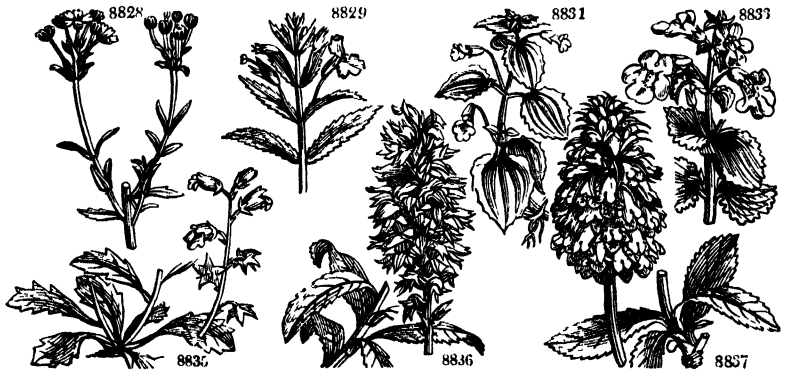
8829 Leaves lanceolate acuminate smooth sessile, Pedunc longer than flower
8830 Leaves oblong bluntish clammy sessile, Peduncles shorter than flower
8831 Procumb. Stem round rooting hairy, Lvs cord-ovate toothed 5-nerved, Pedunc shorter than petioles
8832 Leaves ovate stalked, Stem square winged
8833 Leaves roundish ovate nerved, lower stalked, Stem creeping

8834 Leaves obovate entire at base, Calyxes spreading and peduncles smooth

8835 Raceme lax longer than the few-leaved stem, Calyxes pubescent in fruit increased in size

8836 Segments of cor acute

8837 Segments of corolla blunt, Raceme comose



and Miscellaneous Particulars

each represents a lion couchant All the species are extremely difficult to keep in gardens According to Sweet, they succeed best in peat soil and moist situations, the more tender species must be grown in pots in the same kind of soil, and should be protected under frames in severe weather: the best way of increasing them is by seed (*Bot Cult* 404)

1350 *Erinus* A name under which Dioscorides describes an aquatic plant with a white flower, black seeds, and a milky stem. From the last circumstance it has derived its name, ερινεος signifying a wild fig tree. The plant of the ancients had no resemblance to that called Erinus by the moderns Beautiful little alpine herbaceous plants, well adapted to rock-work in warm damp situations

1351. *Mimulus.* From μιμεω, an ape The flower seeds in front resemble the face of a grinning monkey The species are showy plants of the easiest culture in almost any soil or situation.

1352 *Hornemannia* Named after Professor Hornemann, of Copenhagen, an eminent botanist, and the present editor of the Flora Danica. Little, inconspicuous, but curious annual plants

1352 *Mazus* From μαζος, a teat, on account of the little protuberances which close the mouth of the corolla. East Indian herbaceous plants, not unlike some kinds of Antirrhinum

1354. *Isoplexis.* From ισος, equal, and πλεξις, segment, in allusion to the equal-sized divisions of the corolla.

†1347 MAURAN'DYA *W* Maurandya. *Scrophularineæ Sp 2*

8802	semperflórens *W*	red-flowered	♃	or	10	ja d	Pu	Mexico	1796.	C	l p	Bot mag. 460
8803	antirrhiniflóra *W en*	blue-flowered	♃	or	10	ja d	Pu	Mexico	1814	C	l p	Bot. mag. 1643

†1348 GERAR'DIA *W* Gerardia *Scrophularineæ. Sp* 5—16

8804	delphiniifólia *W*	Larkspur-leav'd	☒	or	2	jn jl	Pk	E. Indies	1800	C	l p	Rox cor. 1 t. 90
8805	purpúrea *Ph*	purple	○	or	1½	jl.au	Pu	N Amer	1772	S	s l	Bot. mag 2048
8806	tenuifólia *Ph*	slender-leaved	○	or	1	jl au	Pu	N Amer	1812	S	s l	Pluk al t 12 f 4
8807	flava *Ph*	yellow	△	or	1½	jl au	Y	N Amer	1796	C	l p	Plu am t 389 f 1
8808	quercifólia *Ph*	Oak-leaved	△	or	4	jl au	Y	N. Amer	1812.	C	l p	Pursh amer t.19

1349 PEDICULA'RIS *W* Lousewort *Scrophularineæ Sp* 16—40.

8809	palústris *H*	marsh	♃	△	pr	2	jn jl	Pu	Britain	bog m	D	co Eng bot. 399
8810	sylvática *W*	common	♃	△	pr	1	my jl	Pk	Britain	m.hea	D	co Eng bot 400
8811	euphrasioides *W*	Eyebright-lvd	♃	△	pr	1½	...	Pu	Siberia	1816	S	p l Gmel sib 3 t 43
8812	myriophýlla *W*	Milfoil-leaved	♃	△	pr	1	my jl	Y	Dauria	1816.	S	p l Pa it 3 ap t.8 f 1
8813	resupinata *W*	resupinate	♃	△	pr	1	my jl	Pu	Siberia	1816	S	p l Gmel sib 3 t 44
8814	Sceptrum Carolinum *W*	sceptred	♃	△	spl	5	au	Y	Sweden	1793	S	p l Flor dan t 26
8815	recutita *W*	jagged-leaved	♃	△	pr	½	jl au	Pu	Austria	1787	S	p l Jac aust 3 t 258
8816	foliósa *W*	leafy	♃	△	pr	1	jl	Y	Austria	1786.	S	p l Jac aust 2 t 139
8817	canadénsis *W*	Canadian	♃	△	pr	¼	jl au	Y	N Amer	1800	S	p l Sweet fl gard 67
8818	incarnáta *W*	flesh-colored		○	pr	½	jn jl	Pk	Austria	1796.	S	p l Jac aust 2 t 140
8819	uncináta *W*	hooked-flower	♃	△	pr	1	jl au	Y	Siberia	1815	S	p l Gmel sib 3 t 45
8820	verticillata *W*	whorled	♃	△	pr	1	my jn	Y	Austria	1790	S	p l Jac aust 3 t 206
8821	flámmea *W*	upright	♃	△	pr	1	jl	Y s	Switzerl	1775	S	p l Hall helv t 8 f 3
8822	tuberósa *W*	tuberous	♃	△	pr	1	jl au	Y	Switzerl	1799	S	p l H hel n 325 t 10
8823	compácta *W*	close-headed	♃	△	pr	1	jl au	Y	Siberia	1815	S	p l
8824	comósa *W*	spiked	♃	△	pr	1	jl au	Y	Italy	1775.	S	p l All ped 1 t.4. f 1

*1350 ERI'NUS *W* Erinus *Scrophularineæ Sp* 4—12

8825	alpinus *P S*	smooth-leaved	♃	△	or	¼	mr ap	B	Pyrenees	1739	C	s l Bot cab 969
8826	hispánicus *P S*	hairy-leaved	♃	△	or	¼	mr ap	R	Spain	1739	D	s l
§8827	frágrans *W*	fragrant	♃		or	½	my jn	Y	C G H	1776	C	s l Bur afr t 49 f.4
§8828	Lychnidea *Thunb*	pale	♃		or	½	my jn	Y	C G H	..	C	s l Bot. reg 743

†1351 MI'MULUS *W* Monkey-Flower *Scrophularineæ Sp* 5—12

8829	ringens *W*	gaping		△	or	1	jl au	L P	N Amer	1759	C	p l Bot mag 283
8830	glutinósus *W*	Orange-flower			or	½	ja d	Or	California	1794	C	r m Bot mag 354
8831	parviflórus *Lindl*	small-flowered		○	or	¼	ja d	Y	Chili	1824	S	co Bot reg 874
8832	alátus *W*	oval-leaved		△		1	jl au	L P	N Amer	1783	D	p l Bot cab 410
8833	lúteus *W*	yellow-flowered				2	jn s	Y	America	1812.	D	p l Bot. mag 1501

1352 HORNEMAN'NIA *W en* Hornemannia *Scrophularineæ Sp* 1—2

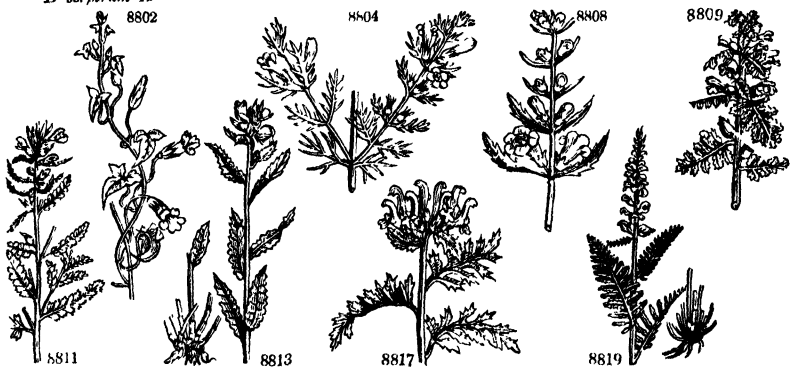
8834	bicolor *W en*	two-colored			pr	¼	jn s	B	E. Indies	1816.	S	s l Rox 2 t. 155

†1353 MA'ZUS *Lour* Mazus *Scrophularineæ Sp* 1

8835	rugósus *H K*	China			pr	¼	my s	Y Pu	China	1780	S	s l Sweet fl gard 36

1354 ISOPLE'XIS *Lindl* Isoplexis *Scrophularineæ Sp* 2

8836	canariénsis *Lind* *D canariensis* L	Canary	♃		or	4	jn jl	Br o	Canaries	1698	S	p l Lind dig 27
8837	sceptrum *Lind* *D sceptrum* L.	Madeira	♃		or	4	jl au	Br o	Madeira	1777	S	p l Lind dig 28



History, Use, Propagation, Culture,

1347 *Maurandya.* Named in honor of the lady of Dr Maurandy, the botanical professor at Carthagena. An elegant greenhouse plant, native of Mexico, and flowering for months together in the summer

1348 *Gerardia.* In honor of John Gerarde, our old English botanist, author of the Herbal, 1597, folio, and a great cultivator of exotic plants, of which he published a catalogue in 1596 These are handsome North American herbaceous plants, of such very difficult culture, that few persons have seen them in gardens They deserve any pains which may be necessary to their successful cultivation

1349 *Pedicularis*, of which the English word *lousewort* is a translation and explanation The term lousewort is applied from a supposition that sheep which feed much on the plant become lousy; probably because the plants grow in very bad pastures, which may occasion the sheep to be in bad condition and to breed vermin The species have their leaves very much cut, and that in a very regular manner. Their flowers are red, white, or yellow, and the mixture or shades of these three colors sometimes give the corolla the colour of fire They grow in general at a considerable elevation; namely, more than a thousand toises above the level of the sea

P sceptrum Carolinum was so named by Rudbeck, in honor of Charles XII It abounds in the north o Sweden and Lapland, where it was greatly admired by the traveller Dr. Clarke, who sent seeds of it to the Cambridge botanic garden, but they never came to any thing The flowers grow in long whorled spikes, and

8802 Orifice of corolla pervious
8803 Orifice of corolla closed

8804 Leaves linear pinnatifid, Stem somewhat branching
8805 Stem oppositely much branched, Leaves linear, Flowers axillary opposite subsessile
8806 Branches panicled, Leaves linear, Peduncles axillary opposite longer than flower
8807 Pubescent, Stems nearly simple, Leaves subsessile lanceolate entire or toothed lower pinnatifid etc.
8808 Smooth, Stem panicled, Leaves stalked pinnatifid, Flowers axillary opposite stalked

8809 Stem branched, Lvs pinnat. Pinnæ pinnatif cut, Cal inflated ovate 2-parted crest Helmet blunt truncate
8810 Low tufted, Stem branch. at base, Lvs pinnat Pinnæ acute. cut, Cal obl. infl. smooth uneq 5-cleft crested
8811 Stem branched, Leaves pinnatifid toothed, Cal tubular 2-parted truncate, Helmet 2-toothed
8812 Stem somewhat branched, Leaves pinnated, Pinnæ in 4s acutely pinnatifid, Helmet acute 2-toothed
8813 Stem nearly simple, Leaves lanc toothed crenate, Cal 2-fid truncate, Helmet acute
8814 Stem simple, Leaves pinnatifid, Pinnæ repand crenulate, Cal 5-fid crested, Cor closed
8815 Stem simple, Lvs deeply pinnatifid, Pinnæ lanc pinnatifid toothed, Spike compact leafy
8816 Stem simple, Cauline leaves deeply pinnatifid, Pinnæ lanc acuminate pinnatifid toothed, Spike leafy
8817 Stem simple, Spike somewhat leafy, Helmet setaceous 2-toothed, Cal truncate downwards
8818 Stem simple, Leaves deeply pinnatifid, Pinnæ unequally toothed in ear-lanc Calyxes villous 5-cleft
8819 Stem simple, Cauline lvs deeply pinnatifid, Pinnæ lin lanc doubly toothed, Cal round smooth 5-toothed
8820 Stem simple, Cauline leaves pinnatifid in fours, Pinnæ oblong blunt toothed, Spike capitate, Cal hairy
8821 Stem simple, Lvs. pinnated, Pinnæ imbricated ovate blunt doubly toothed, Cal. 5-toothed, Helmet blunt
8822 Stem simple, Lvs. pinnated, Pinnæ deeply pinnatifid tooth Cal 5-fid somew crested, Helmet uncinate
8823 Stem simple, Lvs pinn Pinnæ lanc. pinnatifid confluent at end, Spike capitate naked [acum emargi.
8824 Stem simple, Lvs pinnate, Pinnæ pinnatifid somewhat toothed, Spike leafy, Helmet two-toothed

8825 Leaves cæspitose spatulate deeply serrated smoothish, Peduncles terminal subcorymbose
8826 Smaller branched villous, Leaves bluntly serrated, Flowers racemose
8827 Leaves lanceolate oblong toothed, Segm of limb entire
8828 Leaves lanceolate smooth serrated at end, Stem herbaceous, Segm. of limb bifid

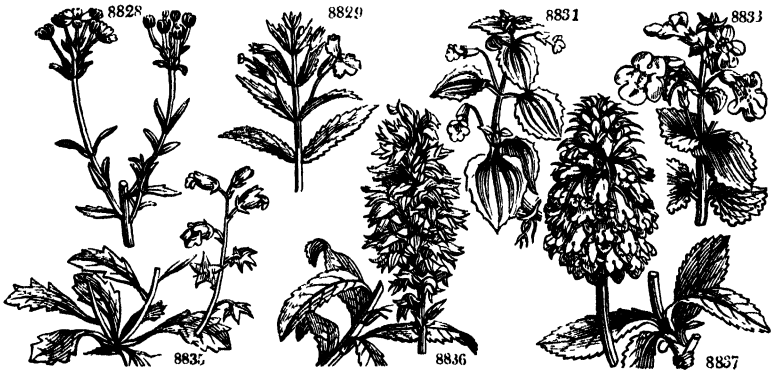
8829 Leaves lanceolate acuminate smooth sessile, Pedunc longer than flower
8830 Leaves oblong bluntish clammy sessile, Peduncles shorter than flower
8831 Procumb Stem round rooting hairy, Lvs cord-ovate toothed 5-nerved, Pedunc shorter than petioles
8832 Leaves ovate stalked, Stem square winged
8833 Leaves roundish ovate nerved, lower stalked, Stem creeping

8834 Leaves obovate entire at base, Calyxes spreading and peduncles smooth

8835 Raceme lax longer than the few-leaved stem, Calyxes pubescent in fruit increased in size

8836 Segments of cor acute

8837 Segments of corolla blunt, Raceme comose



and Miscellaneous Particulars

each represents a lion couchant All the species are extremely difficult to keep in gardens According to Sweet, they succeed best in peat soil and moist situations, the more tender species must be grown in pots in the same kind of soil, and should be protected under frames in severe weather: the best way of increasing them is by seed (*Bot Cult* 404)

1350 *Erinus* A name under which Dioscorides describes an aquatic plant with a white flower, black seeds, and a milky stem. From the last circumstance it has derived its name, ερινος signifying a wild fig tree. The plant of the ancients had no resemblance to that called Erinus by the moderns Beautiful little alpine herbaceous plants, well adapted to rock-work in warm damp situations.

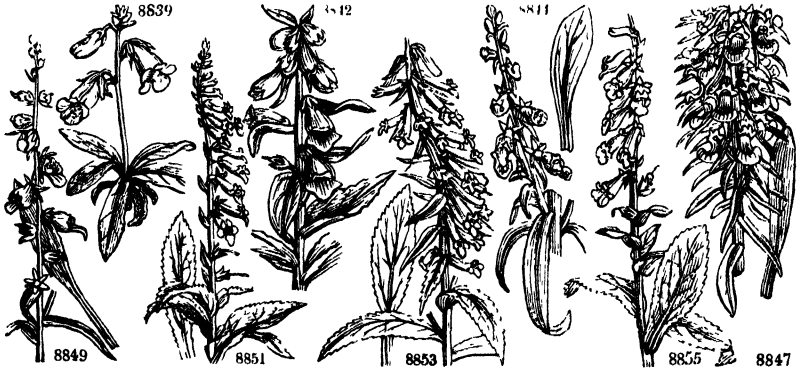
1351 *Mimulus* From μιμος, an ape The flower seeds in front resemble the face of a grinning monkey The species are showy plants of the easiest culture in almost any soil or situation.

1352 *Hornemannia* Named after Professor Hornemann, of Copenhagen, an eminent botanist, and the present editor of the Flora Danica. Little, inconspicuous, but curious annual plants

1352. *Mazus* From μαζος, a teat, on account of the little protuberances which close the mouth of the corolla. East Indian herbaceous plants, not unlike some kinds of Antirrhinum

1354. *Isoplexis* From ισος, equal, and πλεξις, segment, in allusion to the equal-sized divisions of the corolla.

1355 DIGITA'LIS *W*	FOX-GLOVE.				*Scrophularineæ* *Sp.* 19—21						
8838 purpúrea *L*	purple		or	4	jn s	Pu	Britain	hed b	S	co	Lindl. dig 2
ß alba	*white*		or	4	jl	W	Britain	hed b	S	co	
8839 minor *L*	dwarf		or	½	jn jl	Pu	Spain	1789	D	s l	Lindl dig 6
8840 Thápsi *L*	Mullein		or	1½	my au	Pu	Spain	1752	D	co	Lindl dig. 3
8841 ambígua *Murr.*	ambiguous		or	3	jl au	L Y	Switzerl	1596	D	co	Lindl dig 7
8842 ochroleúca *Jacq*	great-yellow		or	4	jl au	L Y	Europe	...	D	co	Lindl dig 8
8843 fúlva *Lindl*	fulvous		or	3	jl au	Br	. ....	...	D	co	Lindl dig 9
8844 lævigáta *W & K.*	shining-leaved		or	2	jl au	Y	Hungary	1816	D	co	Lindl dig 10
8845 ferrugínea *L*	Iron-colored		or	4	jl au	Br	Italy	1597	D	co	Lindl dig 12
8846 aúrea *Lindl*	golden		or	3	jl au	Br	Greece	1816	D	co	Lindl dig 13
8847 leucophæ'a *Sibth*	broad-lipped		or	2	jn o	W Br	Greece	1788	D	co	Lindl dig 14
8848 lanáta *Ehr*	woolly		or	2	jn jl	W Br	Hungary	1789	D	co	Lindl dig 15
8849 orientális *Lam*	eastern		or	1½	jn jl	W	Levant	1820	D	co	Lindl dig 16
8850 parviflóra *Jacq*	small-flowered		or	1½	jn au	Br	.....	1798	D	co	Lindl dig 17
8851 rígida *Lindl*	rigid		or	1½	jn au	Y R	..	...	D	co	Lindl dig 19
8852 purpurásceus *Roth*	purple		or	2	jn au	Pk	Germany	1776	D	co	Lindl. dig 20
8853 tubiflóra *Lindl*	tube-flowered		or	2	jn au	Y	.. ..	..	D	co	Lindl. dig 22
8854 lútea *L*	small-yellow		or	2	jl au	L Y	France	1629	D	co	Lindl dig 23
8855 lutes'cens *Lindl*	pale-yellow		or	2	jl au	Y	.	...	D	co	Lindl. dig 21
8856 obscúra *L*	Willow-leaved		or	1	jl au	Or	Spain	1778	C	p l	Lindl dig 26
1356 SCROPHULA RIA *W*	FIGWORT				*Scrophularineæ* *Sp* 29—35.						
8857 marilándica *W*	Maryland		un	4	my jl	G Br	N Amer	1759	D	l p	
8858 nodósa *W*	knotty-rooted		un	2	my jl	Bd	Britain	woods.	D	co	Eng bot 1544
8859 aquática *W*	water		un	4	my jl	Bd	Britain	wat pl	D	co	Eng bot 854
8860 appendiculáta *W en*	heart-leaved		un	3	jl	D Pu	Morocco	1805	D	co	Jac ech 3 t 286
8861 auriculáta *W*	ear-leaved		un	2	jl au	Br	Spain	1772	D	co	Lob ic 533
8862 Scorodónia *W*	Balm-leaved		un	3	jl au	Pu	Britain	wat pl	D	co	Eng bot 2209
8863 glabráta *W*	spear-leaved		un	2	ap my	Pu	Canaries	1779	S	l p	Jac schœ 2 t 209
8864 betonicifólia *W*	Betony-leaved		un	2	jn au	Pu	Spain	1752	D	co	Barr ic 274
8865 biserráta *W en*	doubly-sawed		un	2	jn au	Br	. . .	1816	D	co	
8866 Scopóli *Hoppe*	Scopoli's		un	2	jn au	Br	Austria	1823.	D	co	Scop carn t 32
8867 glandulósa *W en.*	glandular		un	2	jn s	Br pu	Hungary	1806	D	co	Pl rar hun t 214
8868 orientális *W*	Hemp-leaved		or	2	jl au	Br	Levant	1710	D	co	
8869 adscéndens *W en*	ascending		un	2	. .	Br	.....	1816	D	co	
9870 frutéscens *W*	shrubby		um	2	jn au	D Pu	Portugal	1768	D	co	Herm lug t 547
8871 altáica *W*	white-flowered		un	½	my jn	Pa Y	Siberia	1786	C	co	Mur co got 4 t 2
8872 vernális *W*	yellow		or	2	mr my	Y	Britain	m sh pl	S	co	Eng bot 567
8873 argúta *W.*	slender-upright		un	1½	my jn	R	Canaries	1778	S	co	
8874 trifoliáta *W*	three-leaved		un	2	my s	R Y	Africa	1731	C	co	Pluk al t.313 f 6
8875 sambucifólia *W*	Elder-leaved		un	3	jl s	R G	Spain	1640	D	co	Mill ic 2 t 231
8876 lacinióta *W en*	jag-leaved		un	3	jl	Br pu	Hungary	1806	D	co	Pl rar hu 2 t 170
8877 lyráta *W en*	lyrate-leaved		un	3	jl au	Br pu	Portugal	1816	D	co	W ho ber 1 t 55
8878 tanacetifólia *W en*	Tansy-leaved		un	3	jl s	Br pu	Tauria	1804	D	co	W ho ber 1 t.56
8879 mellífera *W*	Barbary		un	3	jl au	Br pu	Barbary	1786	D	co	Desf atl 2 t 143
8880 canína *W*	wing-leaved		un	3	jn au	Br pu	S Europe	1683	D	co	Lob ic. 2. p 55
8881 lúcida *W*	shining-leaved		un	2	jn au	Br pu	Levant	1596	D	co	W hort. ber. 57
8882 variegáta *M B*	variegated		un	2	jn au	Br pu	Casp sho	1816	D	co	
8883 multífida *W en*	multifid-leaved		un	3	jn au	Br pu	.. ...	1816	D	co	W ho ber 1 t 58
8884 chrysánthemifólia *W en*	Chrysant.-leaved		un	3	jn au	Br pu	Tauria	1816	D	co	W ho ber 1 t 59
8885 peregrina *W*	Nettle-leaved		un	2	jn au	Pu	Italy	1640	S	co	Camer hort t 43
1357 VANDEL'LIA *L*	VANDELLIA				*Scrophularineæ* *Sp* 1—2						
8886 diffusa *L*	diffuse		cu	1	jl au	W	S Cruz	1824	S	s l	Marc bras 32.f 1



History, Use, Propagation, Culture,

1355 *Digitalis* Named by Fuchs, from *digitabulum*, a thimble, in allusion to the form of the flowers The species are for the most part showy border flowers of easy culture D purpurea, found both with purple and white flowers, is one of the most ornamental of native plants in rocky copses, neglected hedges, and by road sides Its large tall spike attracts not only the botanist and florist, but is even conspicuous enough to be introduced in the painter's landscape of such scenery It is a violent poison, but also a valuable plant in medicine The leaves are the parts of the plant used They should be gathered when the plant is in flower, and those only which are fresh selected The leaf-stalks and midrib should be rejected, and the remaining part be dried either in the sunshine, or on a tin-pan or pewter dish before the fire, or the plant be hung up, each leaf separate, in a warm kitchen Practitioners ought annually to obtain a supply of the recent leaves in the month of July, and dry them themselves, as in the herb-shops they are often so ill dried as to appear black, in which state they are useless The powder should be kept in closely stopped opaque phials

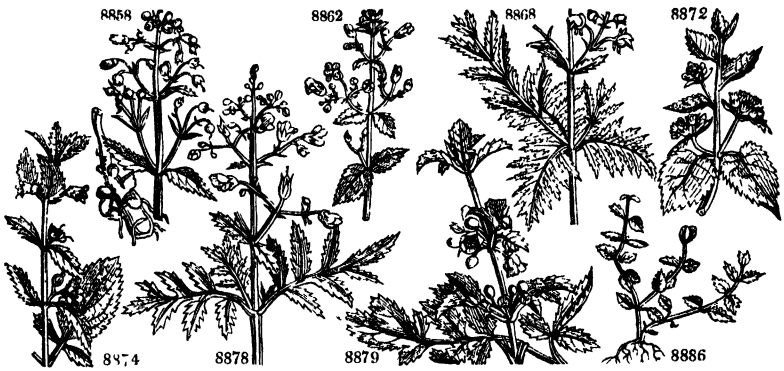
Digitalis is directly sedative and diuretic It weakens the force of all the vital functions, and by a proper exhibition of it, the frequency of the pulse may be diminished any number of pulsations, and regulated at the pleasure of the practitioner, whilst at the same time it admits, to a certain extent, of the employment of such medicines as increase the firmness of the arterial action, and give tone to the habit. When given to the

8838 Lvs obl. rugose crenate, Sepals ovate obl. Segm of cor transverse acute, Pedunc straight as long calyx

8839 Lvs obl rugose crenate wavy decurrent, Sepals ovate, Segm of cor ovate rounded [as calyx
8840 Lvs. radical flat on the ground, Racemes few-fl Segm of cor ov round smooth, Pedun three times as long
8841 Lvs ov lanc tooth sess nerved, Lower bractes as long as fl Cor down netted, Segm ov transverse blunt
8842 Lvs ov lanc. acum toothed and stem villous, Bractes twice as long as lower flowers, Cor villous netted
8843 Lvs. lanc ciliated, Bractes twice as short as flowers, Cor downy netted, Segm ov acute, Lip bearded,
8844 Very smooth branched, Lvs. lin lanc Flowers scattered not downy [Stamens as long as tube
8845 Raceme dense pyramidal, Sepals edged, Lip of corolla ovate entire bearded
8846 Raceme many-flowered, Sepals edged, Corolla bowed, Lip ovate 3-toothed
8847 Raceme dense cylindrical many-fl Lip of cor crawed lunate, Bractes linear longer than flower
8848 Leaves oblong, Rachis woolly, Lip of cor ovate
8849 Very smooth, Leaves linear, Flowers scattered, Lips of cor oblong
8850 Lvs obl lanc wavy deflexed ciliated entire, Raceme dense cylindrical, Segm and sepals of cor rounded
8851 Glandul hairy, Lvs. obl lanc rugose wavy tooth Raceme 1-sided many-fl Cor pubesc Segm. ov glandul.
8852 Lvs linear lanc serrated smooth, Raceme 1-sided, Cor smooth, Segments rounded
8853 Segm. of cor. ovate obtuse, Flowers of distinct sexes [flowers
8854 Lvs lanc toothed smooth, Raceme 1-sided, Cor smooth segm ov bearded, Lower bractes longer than
8855 Lvs cordate oblong flat crenate not downy, Raceme 1-sided, Cor smooth, Segm. very blunt
8856 Half shrubby, Leaves linear lanc. entire smooth, Corollas ventricose

8857 Leaves cordate serrate acute rounded at base, Stem with blunt angles
8858 Leaves cordate 3-nerved, Stem with blunt angles
8859 Leaves cordate stalked decurrent blunt, Stem with membranous angles, Racemes terminal
8860 Lvs ovate cord. smooth cut serrate with appendages at base, Petioles dilated, Racemes term compound
8861 Lvs obl. cord hairy beneath doubly toothed with an appendage at base, Petioles equal, Racemes terminal
8862 Leaves cordate doubly serrate pubescent, Panicles terminal trichotomous with leaves between
8863 Lvs obl lanc cord doubly serrated smooth, Panicles racemose terminal 3-chotomous, Stem ½ shrubby
8864 Leaves cordate obl. toothed teeth entire those at base deepest
8865 Leaves obl lanc deeply cordate finely and doubly serrated smooth, Pan racem term Ped 3-chotomous
8866 Lower lvs tern cord cren toothed, upper entire, Fl racemose paniced, Bractes ovate lanc. entire at end
8867 Leaves cordate 3-nerved pubesc on each side, Petioles ciliated, Pedunc and bractes with glandular hairs
8868 Leaves lanceolate serrated stalked cauline in 3s, and the branches opposite
8869 Lvs lanc narrowed at each end deeply unequally and doubly toothed smooth, Racemes terminal
8870 Lvs somew fleshy upper sessile toothed smooth recurved at end, Pan racem Pedunc bifid many-flow
8871 Lvs cord doubly toothed lower teeth bent backwards, Raceme terminal compound, Ped 2-3-fl altern.
8872 Leaves cordate pubescent doubly serrated, Panic axillary dichotomous, Bractes ovate serrate
8873 Leaves cordate smooth doubly serrated, Panic axillary dichotomous, Capsules acuminate
8874 Leaves smooth lower ternate pinnate blunt, upper simple, Pedunc about 3-fl axillary
8875 Leaves interruptedly pinnate cordate unequal, Raceme terminal, Pedunc axillary twin dichotomous
8876 Lvs obl cord lobed at edge naked as long as pet Rac term comp Branch and ped with glandular hairs
8877 Lvs interruptedly pinnate oblong subcordate unequal at base, Panicle terminal, Pedunes dichotomous
8878 Leaves pinnated, Leaflets oblong cut toothed, Panicle terminal, Peduncles dichotomous
8879 Leaves smooth lower interruptedly pinnate, upper ternate, Leaflets oblong, Flowers axillary
8880 Leaves pinnated, Raceme terminal naked, Peduncles bifid, Calyxes scarious
8881 Lower leaves bipinnate somewhat fleshy very smooth, Racemes bipartite
8882 Stems woody at base, Leaves bipinnatifid pubescent, Racemes long, Pedicels short villous
8883 Leaves bipinnate, Pinnæ acutely cut toothed, Panicle terminal, Pedunele dichotomous
8884 Lvs smooth rad bipinnat caul pinnate, Panicle leafy, Ped dichotomons, Lat seg of lower lip emargin
8885 Leaves cordate lined shining, Pedunc axillary 2-flowered, Stem hexangular

8886 Leaves roundish subsessile



and Miscellaneous Particulars

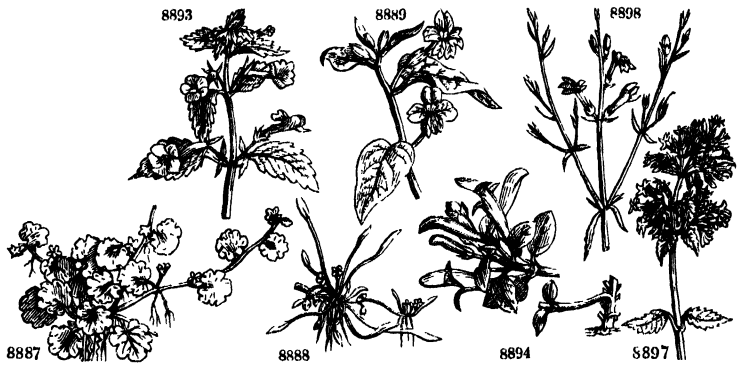
full extent of which the system can admit, the pulse intermits, and vertigo, indistinct vision, and nausea, with vomiting or purging, occur, and if, after these indications, the quantity be still increased, or if any considerable portion of the recent herb be inconsiderately swallowed, it produces delirium, hiccough, cold sweats, convulsions, syncope, and death (*London Dispensatory*, 287)

1356 *Scrophularia*. So named from the roots having a resemblance to *scrophulous* tumours, which they were, by the peculiar mode of induction of the dark ages, therefore supposed to cure S nodosa has the name of figwort from its knobbed roots it has a rank smell like elder, and a bitter taste, swine that have the scab are cured by washing them with a decoction of the leaves Wasps resort greatly to the flowers Goats eat the plant, but cows, horses, sheep and swine refuse it

The same observations apply to S aquatica, which in French is called *Herbe du Siege*, because at the celebrated siege of Rochelle by Cardinal Richelieu in 1628, the garrison was reduced to the necessity of supporting life upon the roots of the plant.

1357 *Vandellia* Louis Vandelli, a Portuguese, was professor of botany in the garden of Coimbra He published in 1788, an essay on the plants of Portugal and Brazil, a work which is little known, on account of its extreme rarity.

1358	SIBTHOR'PIA. *W*	Sibthorpia				*Scrophularineæ*	*Sp* 1—2.						
8887	europæ'a *W.*	Cornish	✱	△	el	½	jl au	Y	England w sh p		D	s l	Eng. bot. 649
1359	LIMOSEL'LA. *W*	Mudwort				*Scrophularineæ*	*Sp* 1—5						
8888	aquática *W*	water	≛	○	pr	½	jl s	F	Britain mud.pl.		S	s l	Eng bot. 357
1360	BROWAL'LIA *B*	Browallia				*Scrophularineæ*	*Sp* 2						
8889	demissa *W.*	spreading	✱	◯	or	¾	jn s	B	S. Amer.	1735	S	s l	Bot. mag 1136
8890	eláta *W.*	upright		◯	or	1½	jn s	B	Peru	1768	S	s l	Bot mag 34
1361	STEMO'DIA *W*	Stemodia				*Scrophularineæ*	*Sp* 2—8						
8891	parviflóra *H K*	small-flowered		◯	cu	½	jl au	W	S Amer	1759	S	p l	
8892	verticillàris *Link*	whorled		◯	cu	½	jl au	Pu	Brazil	1825	S	p l	
1362	TREVIRA'NA *W en*	Trevirana				*Scrophularineæ*	*Sp.* 1						
8893	coccínea *W en*	scarlet	✱	△	spl	1½	au o	Sc	Jamaica	1778	C	l p	Bot. mag. 374
	Cyrilla pulchella B M.												
1363	COLUM'NEA *W*	Columnea				*Scrophularineæ*	*Sp* 3—8						
8894	scándens *H K*	climbing	♿	□	or	6	au s	Sc	W. Indies	1759	C	s p	Bot. reg 805
8895	hirsuta *W*	hairy	♿	□	or	4	au n	Pa pu	Jamaica	1780	C	s p	Bro jam t 30 f.3
8896	trifoliáta *Link*	three-leaved	♿	□	or	3	au n	B	... ..	1823.	C	s p	
†1364	RUSSE'LIA *B*	Russelia				*Scrophularineæ*	*Sp* 1—4						
8897	multiflóra *B M*	many-flowered		□	or	4	jn au	R	S Amer	1812	C	s p	Bot mag. 1528
1365	DODAR'TIA *W*	Dodartia				*Scrophularineæ*	*Sp* 1—2						
8898	orientális *W*	oriental	⅄	△	un	1½	jl au	Pu	Levant	1752	C	s p	Lam ill t 530
1366	LINDER'NIA *R Br*	Lindernia				*Scrophularineæ*	*Sp* 1—3						
8899	Pyxidária *W*	European		○	un	1	jn au	B	S Europe	1789	S	s l	Lam ill t. 522
1367	HERPES'TIS *R Br.*	Herpestis.				*Scrophularineæ*	*Sp* 3—7						
8900	Monnie'ria *R B*	Thyme-leaved	≛	△	pr	½	jl s	L B	India	1772	D	l p	Rox cor 2 t.178
8901	cuneifólia *Ph*	wedge-leaved	≛	△	pr	½	au	B	N Amer	1812	D	l p	
8902	stricta *Schrad*	upright	≛	△	pr	1	au	B	... ..	1824.	D	l p	
†1368	CAPRA'RIA *P S*	Capraria				*Scrophularineæ*	*Sp* 5—9						
8903	biflóra *W*	shrubby Goatw	♿	□	un	2	jl au	W	S Amer	1752	C	l p	Lam ill t.534 f.2
8904	cuneáta *H K*	wedge leaved	♿	□	un	2	...	W	S Amer	1759	C	p l	
8905	lanceoláta *W*	spear-leaved	♿	□	un	2	...	W	C G H	1774	C	p l	
8906	undulàta *W*	wave-leaved	♿	□	un	2	mr jl	W	C G H	1774	C	p l	Bot mag 1556
8907	húmilis *W.*	dwarf		◯	un	1	jl au	W	E Indies	1781	C	p l	
1369	BUCHNE'RA *B P*	Buchnera				*Scrophularineæ*	*Sp* 1—13						
8908	americána *W*	American	⅄	△	cu	1½	jn au	B	N Amer	1733	D	l p	
1370	MANU'LEA *W en*	Manulea				*Scrophularineæ*	*Sp* 10—40						
8909	fœ'tida *Thunb*	stinking		◯	pr	1½	jn s	W	C G H.	1794	S	s p	Bot rep 80
8910	villósa *Thunb*	villous		◯	pr	1	jn jl	W	C G H.	1783	S	s p	Bur afr t 50 f 2
	Buchnéra capénsis W												
8911	pedunculáta *Thunb*	solitary-flower	♿	□	pr	1½	jn n	W	C G H	1790	C	p l	Bot rep 84
8912	viscósa *W en*	clammy	♿	□	pr	1	jn n	Pk	C G H	1774	C	p l	Bot mag 217
8913	rúbra *Thunb*	red	♿	□	el	1½	ap.s	R	C G H	1790	C	p l	
8914	tomentósa *Thunb*	woolly	♿	□	el	1	my n	Y	C G H	1774	C	s p	Bot mag 322
8915	Cheiránthus *Thunb*	Wall-flower	✱	◯	el	1	jn au	Or	C. G H.	1795	S	s p	Com. hort 2 t.42
8916	argéntea *Thunb*	silvery		◯	el	1½	jl n	Y	C G H	1801	S	s p	
8917	rhynchan'tha *Link*	tail-flowered	✱	△	el	1	jl n	Y	C G H	1823	C	s p	
8918	violácea *Link*	Violet	✱	△	el	2	jl n	V	.....	1824	C	s p	



History, Use, Propagation, Culture,

1358. *Sibthorpia* In honor of Humphry Sibthorp, M D, professor of botany at Oxford, who travelled into Greece, for the purpose of collecting materials for a classical Flora Græca, in which he succeeded even beyond his own hopes After his death the publication of his materials was confided to Sir James Edward Smith, under whose care the work has reached to five hundred figures in folio, of the most magnificent kind, five hundred more have yet to be published A little trailing plant

1359 *Limosella.* From *limus*, mud The plant grows by the edge of puddles and in muddy places

1360 *Browallia.* Named by Linnæus, in honor of John Browallius, bishop of Aboa, who defended the sexual system against Siegesbeck, in a book entitled Examen epicriseos, &c, Aboa, 1739, octavo Handsome plants with blue flowers, often cultivated as tender annuals

1361 *Stemodia* From στημων, a stamen, and δις, double Each of the stamens supports two anthers.

1362 *Trevirana* Named after Dr Treviranus, a German botanist. This beautiful plant, which is commonly called Cyrilla pulchella, is one of the prettiest of the old inhabitants of the stove

1363 *Columnea.* In honor of Fabius Columna, or Fabio Colonna, of the noble family of Colonna in Italy, born in 1567 He published his Phytobazanos in 1592, and his Ecphrasis in 1606, both works of high reputation in their day One species, C scandens, is common in hothouses, where it is cultivated for the neatness of its foliage and the beauty of its scarlet blossoms

8887 Leaves reniform subpeltate crenate

8888 Leaves lanceolate spatulate, Scapes shorter than leaf

8889 Peduncles 1-flowered
8890 Peduncles 1 many-flowered

8891 Leaves opposite and ternate stalked
8892 Leaves opposite and ternate stem-clasping

8893 Leaves ternate ovate hairy

8894 Leaves ovate acute entire subvillous, Sepals entire and corollas pubescent, Upper lip undivided
8895 Leaves ovate acuminate serrate hairy above, Sepals toothletted and corollas hairy
8896 Leaves 3 subsessile oblong acutely crenate pubescent, Cor hairy, Galea dilated reflexed

8897 Leaves ovate acuminate stalked, Raceme terminal whorled, Peduncles cymose

8898 Leaves linear smooth entire, Stem nearly naked

8899 Leaves oblong ovate entire 3-nerved sessile, Pedunc axillary 1 flowered, Stem procumbent

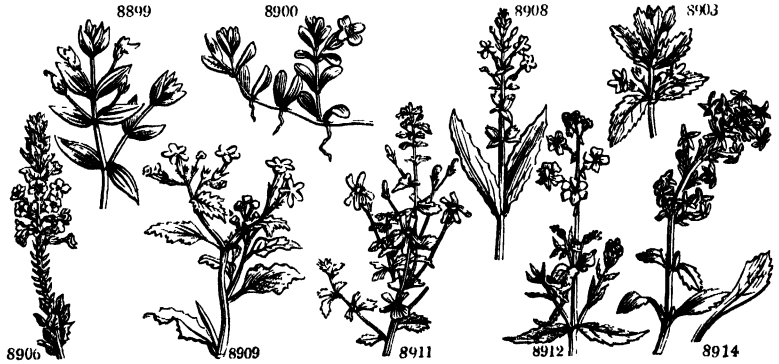
8900 Leaves oblong entire, Peduncles longer than leaf, Stem declinate
8901 Very smooth, Leaves cuneate oblong upwards obsoletely crenate, Pedunc nearly as long as leaf
8902 Stem erect, Leaves lanceolate acute doubly serrated smooth, Flowers whorled

8903 Leaves ovate serrated alternate, Flowers twin
8904 Hairy, Leaves alternate rhomboid cuneiform cut serrate, Flowers twin, Sepals linear
8905 Leaves opposite linear entire, Racemes compound terminal
8906 Leaves opposite ovate-oblong entire wavy upper subcordate whorled, Racemes spiked
8907 Pubescent, Leaves opposite and ternate ovate serrate stalked, Pedunc axillary shorter than petiole

8908 Leaves toothed lanceolate 3-nerved

8909 Leaves opposite ovate jagged, Flowers somewhat umbelled terminal
8910 Leaves linear toothed villous, Cal hairy, Branches subfastigiate

8911 Upper leaves opposite sessile tooth-sinuated, Flowers solitary on long stalks
8912 Leaves opp lin lanc acute at each end toothletted, Raceme terminal, Stamens exserted
8913 Leaves lanc toothed villous, Racemes of flowers remote
8914 Leaves obovate crenate downy, Stem decumbent
8915 Leaves obl serrated hairy, Stem nearly leafless, Flowers alternate remote
8916 Leaves ovate toothed silky beneath dotted with silver, Flowers axillary stalked
8917 Leaves wedge-shaped serrated pubescent, Segm of cor with very long points
8918 Leaves opp stalked oblong blunt tooth-serrated when old smooth, Segm of cor rounded



and Miscellaneous Particulars

1364 ***Russelia.*** In honor of Alexander Russel, M D F R S, born in Scotland, died 1768, author of the natural history of Aleppo, London, 1756 His brother Patrick, published a second edition in 1794, and a work on serpents in 1796, folio

1365 ***Dodartia,*** by Tournefort, after M Dodart, member of the academy of sciences at Paris, and an eminent physician An ugly, leafless, almost flowerless plant, of much rarity and little beauty

1366 ***Lindernia*** Named after Francis Lindern, an obscure Swiss botanist Pyxidaria is so called from πυξος, the box, which it resembles in foliage

1367 ***Herpestis*** From ἑρπης, any thing which creeps. An exotic genus of herbs, with opposite leaves and axillary flowers, each of whose stalks bears a pair of bracteæ Herpestis Monnieria is a beautiful aquatic

1368 ***Capraria*** So named from *capra*, a goat, the leaves being much liked by that animal

1369. ***Buchnera*** Named after John Godfrey Buchner, a German botanist, who published in 1743, his Observations upon the Plants of Saxony Small Cape shrubs of little interest or beauty Their leaves are generally small, and their flowers white

1370 ***Manulea*** Derived from *manus*, the hand The five divisions of the flower, *in some species*, from their form and relative position, resemble an open hand Handsome Cape shrubs of humble growth They are rare in collections, but deserving of being very generally cultivated

1371 ANGELO'NIA *Kunth*	Angelonia					*Scrophularineæ Sp* 1								
8919 salicariæfólia *Kunth*	violet	♃	△	el	3	au	L.B	S. Amer.	1818	C	co	Bot. reg 415		
1372 SCHIZAN'THUS *R. & P*	Schizanthus.					*Scrophularineæ Sp* 1								
8920 pinnátus *R & P*	pinnated		☊	el	2	f n	L.B	Chili	1822.	S	co	Hook. ex. fl t.73		
β porrigens Hook ex fl t 86.														
*1373 BESLE'RIA *W*	Besleria					*Scrophularineæ Sp.* 5—10								
8921 melittifólia *W*	Balm-leaved	♃	□	or	3	jn jl	Or	Guiana	1739	C	s p	Exot bot 1 t.54		
8922 lutea *W*	yellow-flowered	♃	□	or	3	jl au	Y	Guiana	1739	C	l p	Plum ic 49 f 1		
§8923 serrulata *W*	saw-leaved	♃	□	or	6	...	P Y	W Indies	1806	C	l p	Jac sch 3 t 290		
8924 pulchélla *H K*	striped-flower'd	♃	□	or	3	jl au	Y	Trinidad	1806	C	l p	Bot mag 1146		
8925 cristáta *W*	crested	♃	□	or	3	jn au	Y	W Indies	1739.	C	l p	Jac amer t 119		
1374 TLE'DIA *P S*	Tledia					*Scrophularineæ Sp* 2.								
8926 lúcida *P S*	shining	♆	◎	or	2	ap jl	Pu	C G H	1774.	C	p l	Bot reg 209		
8927 pubescens *B reg*	pubescent	♆	◎	or	2	my o	Pu	C. G H	1816	C	p l	Bot. reg 214		
†1375 BRUNSFEL'SIA *W*	Brunsfelsia					*Solaneæ Sp* 3								
8928 undulata *W*	wave-flowered	♚	□	or	4	jn jl	W	Jamaica	1780	C	r m	Bot reg 228		
8929 americána *W.*	American	♚	□	or	4	jn jl	Pa Y	W Indies	1735.	C	r m	Bot mag 393		
α latifólia	*broad-leaved*													
β angustifólia	*narrow-leaved*													
8930 violácea *Lodd*	violet	♚	□	cu	3	jl au	Ld	W Indies	1815.	C	r m	Bot. cab 792		
1376 CELSIA *W*	Celsia					*Solaneæ Sp* 7—10								
8931 orientális *W*	oriental		○	or	2	jl au	Br Y	Levant	1713	S	co	Lam ill t 532		
8932 Arctúrus *W*	scallop-leaved	♆	◎	or	4	jl s	Y	Candia	1780	S	p l	Bot mag 1962		
8933 coromandeliana *W*	Coromandel		◎	or	4	jl au	Y	E Indies	1783	S	p l			
8934 viscósa *W en*	clammy		◎	or	3	jl au	Y	..	1816	S	p l			
8935 crética *W*	great-flowered	♆	◎	or	6	jl s	Y	Crete	1752	S	p l	Bot mag 964		
8936 lanceolata *P S*	spear-leaved	♆	◎	or	3	jl s	Y	Levant	1816	S	p l	Vent cels t 27		
8937 sublanáta *Jacq*	woolly	♆	△	or	2	jl s	Y	. ....	1818	S	p l	Bot reg 438		
1377 ALONSO'A *H K*	Alonsoa					*Solanea Sp* 4—8								
8938 acutifólia *P S*	acute-leaved	♃	⌴	or	3	my o	Sc	Peru	1790	C	l p			
8939 incisifólia *H K*	Nettle-leaved	♃	⌴	or	2	my o	Sc	Chili	1795	S	s p	Bot mag 417		
Hemmeris urticifólia W														
8940 linearis *H K*	linear-leaved	♃	⌴	or	2	my o	S	Peru	1790	C	s p	Bot mag 210		
8941 caulialáta *R & P*	wing-stemmed	♆	△	or	3	my o	S	Chili	1823	C	co			
1378 ANTHOCER'CIS *R Br*	Anthocercis					*Solaneæ Sp* 2—3								
8942 littórea *R Br*	yellow	♚	⌴	or	3	my au	Pa Y	N Holl	1803	C	s p	Bot reg 212		
8943 viscósa *R Br*	viscid	♚	⌴	or	3	...	Pa Y	N Holl.	1822.	C	s p	Bot. mag 2961		
1379 CYMBA'RIA *W*	Cymbaria					*Scrophularineæ Sp* 1								
8944 daurica *W*	Daurian		△			jn jl	Y	Dauria	1796	D	co	Amm rut. t.1 f 2		



History, Use, Propagation, Culture,

1371 *Angelonia* *Angelon* is the name of the plant among the Spanish colonists of Caraccas, where it grows. A very beautiful stove herbaceous plant, with large light-blue flowers

1372 *Schizanthus* From σχίζω, to cut, and ἄνθος, a flower, in allusion to the numerous divisions of the beautiful purple and yellow flowers Tender annual plants, with finely cut pale green leaves, and terminal panicles of elegant flowers

1373 *Besleria* After Basil Besler, an apothecary at Nuremberg, joint editor with Jungermann, of a sumptuous work entitled Hortus Evstettensis, 1613. The garden belonged to Bishop Conrad, of Eichstedt, and the plates were engraved at his expense

1374 *Tledia* So named by Persoon, but the meaning is unknown Pretty herbaceous plants, with bright purple flowers and dark berries

1375 *Brunsfelsia* In memory of Otho Brunsfels, of Mentz, a Carthusian monk, and afterwards a physician, author of Figures of Plants in 1530 He died in 1534 The species are handsome tropical shrubs, with neat foliage and showy white or purple flowers Cuttings with a little ripened wood strike root freely in heat

8919 The only species

8920 The only species

8921 Peduncles branched, Leaves ovate
8922 Peduncles simple clustered, Leaves ovate-lanceolate serrated
8923 Peduncles simple solitary, Calyxes serrated, Cor smooth with a serrulated limb
8924 Leaves obl ovate rugose crenate decurrent down the petiole, Cal serrulate colored
8925 Peduncles simple solitary, Calyxes colored serrated, Cor. hairy with an entire limb, Leaves ovate

8926 Leaves opp obl finely serrulate smooth
8927 Leaves downy

8928 Leaves ovate-lanceolate narrowed at each end, Tube of cor curved, Limb wavy
8929 Leaves obovate acuminate longer than petiole, Tube of cor straight, Limb entire

8930 Leaves and leafstalks deeply stained with purple

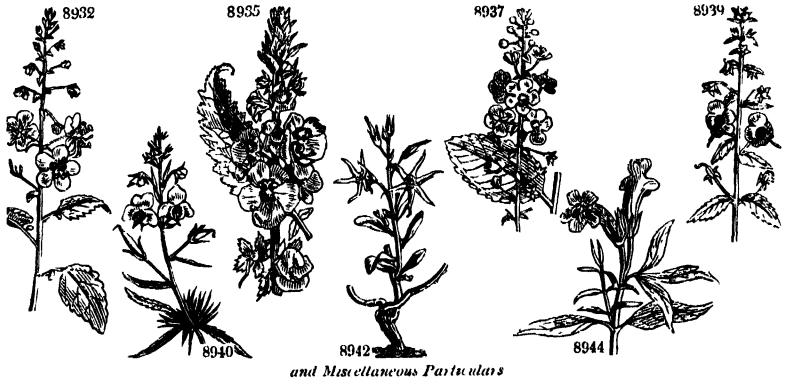
8931 Cauline leaves bipinnate
8932 Rad leaves lyrate upper oblong, Pedicels longer than bractes, Sepals linear entire
8933 Radical leaves lyrate upper ovate, Bractes longer than pedicels, Sepals linear oblong entire
8934 Radical leaves lyrate floral cordate half stem-clasping, Peduncles as long as flower
8935 Radical leaves lyrate upper oblong, Flowers subsessile the length of bractes, Cal ovate serrated
8936 Somewhat downy, Leaves lanceolate, Flowers axillary solitary
8637 All over wool, Leaves oval oblong blunt crenate, Stamens bearded with capitate hairs

8938 Leaves ovate lanceolate deeply serrated
8939 Leaves ovate acute cut serrated

8940 Leaves ternate remotely toothletted
8941 Leaves ovate acute serrated, Stem winged at angles

8942 Leaves obovate smooth, Segments of cor length of tube
8943 Leaves obovate dotted with glands downy

8944 Flowers large yellow spotted



and Miscellaneous Particulars

1376. *Celsia* In honor of Olaus Celsius, D D, surnamed the northern Pliny, professor of the oriental languages in the university of Upsal His Hierobotanicon, or History of the Plants of Scripture, appeared in 1745 There was also another Swedish botanist called Magnus Nicolaus Celsus, who died in 1679. Besides these moderns, the name is rendered familiar to classical scholars by the recollection of the famous Aurelius Cornelius Celsus, who wrote upon agriculture and medicine, and whose purity of style procured him the name of the Cicero of medicine

1377 *Alonsoa* Named by the authors of the Flora Peruviana, after Zanoni Alonso, at the time of the publication of that work, Spanish secretary for the kingdom of Santa Fé, and a great patron of objects connected with natural history Sir James Smith considers the genus the same as Hemimeris

1378 *Anthocercis* From ἀνθος, a flower, and κερκις, a ray, the narrow divisions of the corolla spreading in a radiant manner, like the spokes of a wheel

1379 *Cymbaria* From κυμβη, a boat, in allusion to the shape of the fruit A small pubescent hoary plant native of mountainous rocky places in Siberia.



Class XV. — TETRADYNAMIA. Stamens 6, of which four are longer than the rest.

This class consists, with the exception of Cleome, entirely of the natural order Cruciferæ, and has lately been the subject of the most acute and successful investigation of many botanists of celebrity. Our countryman, Mr Brown, led the way to the improvements which have been made in the genera, in the second edition of the Hortus Kewensis, in which, discarding the uncertain and unnatural characters derived from variations in the floral envelopes, he took a new course, and by indicating with great precision the curious modifications of the seeds and seed-vessels, led the way to an entirely new arrangement of the class The principles thus developed have been adopted by M Decandolle, whose learned treatise upon Cruciferæ is here followed without variation

The difference between the genera with a long pod (*Siliquosæ*), and those with a short one (*Siliculosæ*), has given rise to two orders in the Linnean system But these are not only ambiguous, but interfere so much with a distribution of the genera according to their natural affinities, that they have been rejected here, and the divisions of M Decandolle, depending upon variation in the relative position of the various parts of the seed, have been substituted

The plants of this class have always been celebrated for their antiscorbutic qualities These seem to reside in an acrid, oily, volatile principle, not yet determined by chemists, and varying in the degree of abundance in which it is found in different species It is particularly abundant in the seeds of mustard and garden rocket, in the roots of the horse radish, and in the foliage of the Lepidium latifolium, which, administered inwardly, act powerfully upon the gastric organs, or, applied externally, inflame the skin and operate nearly as severely as blisters A slighter degree of acrimony is found in the foliage of the scurvy grass, the roots of the garden radish, &c , and these, therefore, operate more gently, and perhaps more safely, when eaten, scarcely at all when applied outwardly Whatever the degree of acrimony may be in these plants, they all appear, when eaten, to produce some specific action upon the digestive organs, and thence upon scorbutic humours, for which reason, the horse radish, water-cress, radishes, and even cabbages are eminently antiscorbutic They are also admitted by physicians as diuretic, sialagogue, and diaphoretic It is only when the acrid principle is diffused over a considerable quantity of fleshy and watery substance, that cruciferous plants become eatable, as in the leaves and stems of cabbages and sea-kail, and in the roots of radishes and turnips Even in these plants, the proportion of acrid principle is much diminished by exclusion from light Plants of this class are also remarkable for containing a larger quantity of azote than most vegetables, for which reason ammonia is generally evolved in their fermentation or putrefaction to which circumstance it is possible that the two remarkable phænomena are to be attributed, viz , that cruciferous plants contain a greater portion of nutritive matter than most herbaceous plants, and that they require either a very rich soil manured with animal substances, or at least a situation near the habitations of men The embryos of all these plants are filled with oil, and the seeds of Camelina sativa, Brassica campestris, some species of Rocket, &c are cultivated in many parts of Europe for the sake of their expressed oil, which is used either for culinary purposes or for lamps

Cruciferous plants are chiefly natives of temperate climates, those which are found within the tropics being in all cases mountain plants, and are nearly all cultivable in the open air, they are mostly found in open sandy plains, some on the tops of the highest mountains at the utmost limits of vegetation Nine hundred species are now described, of which not more than twenty-two are to be found in the works of Hippocrates, Theophrastus, Dioscorides, or Pliny

A *Cotyledons four, spirally twisted Petals* 4, *cruciate*

1380 *Schizopetalon* Petals pinnatifid

B *Cotyledons two. Petals* 4, *cruciate*

1 *Cotyledons flat, accumbent Radicle lateral Seeds compressed* (O=) Pleurorhizæ, *Dec*

* *Silique opening, with a linear dissepiment more or less wide than seeds Seeds oval, compressed, often margined Cotyledons flat, accumbent, parallel with the dissepiment* Arabideæ, *Dec*

1381 *Mathiola.* Silique roundish Stigmas connivent, thickened or cornute at back Calyx bisaccate at base

1382 *Cheiranthus* Silique round or compressed Stigmas 2-lobed or capitate Calyx bisaccate at base

1383 *Nasturtium* Silique roundish, shortened or declinate Stigma nearly 2-lobed Calyx equal at base, spreading

1384 *Leptocarpæa* Silique roundish, very slender Stigmas sessile, 2-lobed Calyx spreading, equal

1385 *Notoceras* Silique 4-cornered, 2-edged, the valves elongated at end into a horn or mucro

1386 *Barbarea* Silique 4-cornered, 2-edged, the valves not elongated at end Calyx equal at base

1387 *Braya* Silique oblong, subcylindrical, with flattish valves and a sessile stigma Seeds few, ovate Calyx equal at base

1388 *Parrya* Silique linear with veiny valves Seeds in two rows, with a loose wrinkled skin Stigmas approximating Filaments not toothed

1389 *Turritis* Silique linear with flat valves Seeds in two rows in each cell

1390 *Arabis* Silique linear with flat valves, 1-nerved in the middle Seeds in one row in each cell.

1391 *Macropodium* Silique pedicellate, linear, with five valves, 1-nerved in middle

1392 *Cardamine* Silique linear with flat nerveless valves, often opening with elasticity Funicles of the hilum slender

1393 *Pteroneuron* Silique lanceolate with flat nerveless valves, often opening with elasticity placentas with winged nerves Funicles dilated

1394 *Dentaria* Silique lanceolate with flat nerveless valves, often opening with elasticity · placentas not winged. Funicles dilated

** *Silicle opening lengthwise, with a broad oval membranous dissepiment, and flat or concave valves. Seeds compressed, frequently margined Cotyledons flat, accumbent, parallel with the dissepiment* Alyssineæ, *Dec.*

1395 *Lunaria* Silicle pedicellate, elliptical or lanceolate with flat valves Funicles long, adhering to the dissepiment Calyx somewhat bisaccate Petals nearly entire. Stamens not toothed

1396 *Ricotia.* Silicle sessile, oblong, when ripe losing its dissepiment and becoming 1-celled: valves flat. Calyx with two prominences at base Petals emarginate Stamens not toothed.

1397 *Farsetia.* Silicle sessile, oval or orbicular, with flat valves. Seeds winged Calyx bisaccate at base. Petals entire

1398 *Berteroa* Silicle sessile, elliptical or obovate, with flat or concave valves. Calyx equal at base. Petals 2-parted The small stamens toothed

1399. *Aubrietia* Silicle oblong with convex valves Seeds not edged. Calyx bisaccate at base. Petals entire Smaller stamens toothed.

1400. *Vesicaria* Silicle globose inflated with hemispherical valves Seeds more than 8. Petals entire.

1401. *Alyssum.* Silicle orbicular or elliptical, with valves flat or convex in centre Seeds 2-4 in each cell. Calyx equal at base. Petals entire Some the stamens toothed.
1402 *Clypeola.* Silicle orbicular, 1-celled, 1-seeded, with flat valves Calyx equal. Petals entire Stamens toothed.
1403 *Peltaria.* Silicle orbicular, 1-celled, 1-4-seeded, with flat valves Seeds two in each cell. funicles adhering to the dissepiment.
1404. *Petrocallis* Silicle sessile, oval, with flattish valves. Seeds two in each cell funicles adhering to the dissepiment
1405 *Draba.* Silicle sessile, oval or oblong, with flat or convex valves. Seeds many, not edged. Calyx equal Petals entire All the stamens without teeth.
1406 *Erophila* Silicle oval or oblong, with flat valves. Seeds many, not edged Calyx equal Petals 2-parted Stamens without teeth
1407. *Cochlearia* Silicle sessile, ovate-globose or oblong, with ventricose valves Seeds many, not edged. Petals entire Stamens without teeth

**** Silicle opening, with a very narrow dissepiment, and keeled navicular valves. Seeds oval, sometimes margined. Cotyledons flat, accumbent, contrary to the dissepiment* THLASPIDEÆ, *Dec.*

† *Cells of silicle 2-many-seeded*

1408 *Thlaspi.* Silicle emarginate at end, with navicular valves, winged at back. Cells two, many-seeded
1409 *Capsella* Silicle triangular, cuneate at base, with navicular valves, not winged Cells many-seeded
1410 *Hutchinsia.* Silicle elliptical, with navicular valves, not winged. Cells 2-seeded, rarely many-seeded
1411 *Teesdalia* Silicle oval, emarginate at end, with navicular valves and 2-seeded cells. Stamens having a scale inside at their base

†† *Cells of silicle 1-seeded*

1412 *Iberis* Two outer petals largest. Silicle compressed, truncate, emarginate
1413 *Biscutella* Silicle flat, biscutate, with the cells laterally united to the axis Style long, persistent. Embryo inverted

***** Silicle not opening, with concave indistinct valves, and sometimes with scarcely any trace of a dissepiment. Seeds oval, very few Cotyledons flat, accumbent, parallel with dissepiment* ECLIDIEÆ, *Dec*

1414 *Euclidium* Silicle drupaceous, ovate, with manifest sutures Style subulate Cells 1-seeded
1415 *Ochthodium* Silicle coriaceous, subglobose Stigma sessile Dissepiment thick. Cells 1-seeded.

****** Silicle opening lengthwise, with concave valves, bearing internally transverse horizontal dissepiments separating the seeds Seeds not margined Cotyledons flat, accumbent, parallel with the dissepiment* ANASTATICÆ, *Dec*

1416 *Anastatica* Silicle ventricose, with valves bearing an appendage outside at the end

******* Silique or silicle separating across into 1-2-celled, 1-2-seeded joints Seeds not edged Cotyledons flat, accumbent, parallel with the dissepiment when there is any* CAKILINEÆ, *Dec*

1417 *Cakile* Silicle 2-jointed, compressed the upper joint ensiform. Seeds solitary in the cells. upper erect, lower pendulous.
1418 *Rapistrum* Silicle 2-jointed the upper joint ovate, rugose Seeds solitary in the cells upper erect, lower pendulous
1419 *Chorispora* Silique roundish, with many equal joints Seeds all pendulous

2 *Cotyledons flat, incumbent Radicle dorsal Seeds ovate, not margined* (O‖) NOTORHIZEÆ, *Dec*

** Silicle 2-celled, opening lengthwise, with concave or keeled valves Seeds ovate or oblong, not margined. Cotyledons flat, incumbent, contrary to the dissepiment* SISYMBRIEÆ, *Dec*

1420 *Malcomia* Silique roundish Stigma simple much pointed
1421 *Hesperis* Silique roundish, or about 4-cornered Stigmas 2, erect, conniving. Calyx bisaccate at base
1422. *Sisymbrium* Silique roundish, sessile upon the torus Stigmas 2, somewhat distinct or connate in a head Calyx equal at base
1423 *Alliaria* Silique roundish, 4-cornered, with prominent nerves Calyx lax
1424 *Erysimum* Silique 4-cornered Calyx closed

*** Silicle with concave valves, and with a dissepiment elliptical in its greatest diameter Seeds ovate Cotyledons flat, incumbent, contrary to dissepiment* CAMELINEÆ, *Dec*

1425 *Camelina* Silicle obovate or subglobose, with ventricose valves and many-seeded cells Style filiform
1426 *Neslia* Silicle subglobose, with concave valves, 1-celled, 1-seeded, indehiscent

**** Silicle with a very narrow dissepiment, and with keeled or very convex valves Seeds solitary or few in the cells, ovate, not margined Cotyledons flat, incumbent, parallel with the dissepiment* LEPIDINEÆ, *Dec.*

1427. *Coronopus* Silicle twin Valves ventricose or subcarinate, scarcely dehiscent, 1-seeded.
1428 *Lepidium.* Silicle ovate or subcordate, with carinate or rarely ventricose valves, opening with 1-seeded cells
1429 *Æthionema* Silicle oval, generally emarginate, with navicular valves, and 1-2-seeded cells. Larger stamens either united or toothed

***** Silicle with indistinct or indehiscent keeled valves, 1-celled, 1-seeded, with an obliterated dissepiment. Seeds ovate, oblong Cotyledons flat, incumbent, apparently in the same direction as the dissepiment should be.* ISATIDEÆ, *Dec*

1430 *Isatis* Silicle elliptical, flat, 1-celled, 1-seeded, with carinate navicular valves, which are scarcely dehiscent
1431. *Myagrum* Silicle compressed, almost cuneate, with two empty hollows at end, and at base 1-celled, 1-seeded.

3 *Cotyledons incumbent, folded together, or plaited lengthwise through their middle, and enwrapping the radicula Style generally enlarged, with a cell and seed at its base Seeds generally globose, never margined* (O>>) ORTHOPLOCEÆ, *Dec*

** Silique with valves opening lengthwise, and a linear dissepiment Cotyledons folded together* BRASSICEÆ, *Dec*

1432. *Brassica* Silique roundish. Style small, short, obtuse Seeds in one row Calyx closed
1433 *Sinapis.* Silique roundish, with nerved valves Style small, short, acute Seeds in one row Calyx spreading
1434 *Moricandia.* Silique 4-cornered, sowewhat 2-edged Seeds in two rows. Calyx bisaccate at base
1435. *Diplotaxis* Silique compressed, linear. Seeds in two rows Calyx equal at base
1436 *Eruca* Silique roundish Style large, ensiform or conical Seeds in one row Calyx equal at base.

** *Silicle with concave valves, opening lengthwise, with an elliptical dissepiment Cotyledons folded together.* Vellæ, *Dec*

1437. *Vella.* Larger stamens connate. Style ovate, flat, at the end of a tongue-shaped silicle.
1438 *Carrichtera* Stamens all free Style ovate, flat, foliaceous
1439 *Succowia* Stamens all free Style slender, conical. Valves of the silicle echinate.

*** *Silicle indehiscent, ovate or globose, 1-celled, 1-seeded, with indistinct valves Seeds globose Cotyledons folded together* Zillæ, *Dec*

1440 *Zilla* Silicle 2-celled Cells 1-seeded
1441 *Calepina.* Silicle 1-celled, 1-seed. Seed pendulous. Outer petals rather the largest.

**** *Silicle or silique dividing across into one or few-seeded joints or cells. Seeds globose. Cotyledons folded together.* Raphaneæ, *Dec*

1442 *Crambe* Silicle with two joints, of which the lower is abortive, the upper globose 1-seeded.

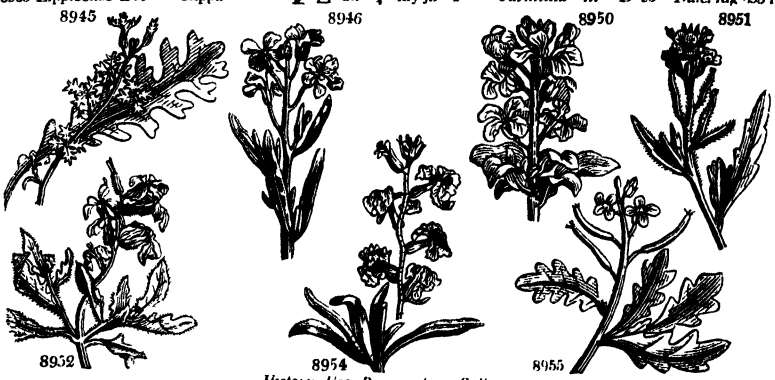
1380 SCHIZOPE'TALON *Sms* Schizopetalon *Cruciferæ* *Sp.* 1.
8945 Walkéri *Sms* Walker's ♃ cu 2 my jl W Chili 1822 S p l Bot. mag. 2379

1381 MATHI'OLA *R. Br.* Stock. *Cruciferæ* *Sp* 11—26
8946 incána *R Br* Pu Gilly Flow ♃ or 2 my n Pu England cliffs. C l.p Eng. bot. 1935
multiplex *double*
β coccínea *Brompton*
γ álba *white-branching*
8947 ánnua *Sweet* ten weeks ○ or 2 my n St S Europe 1731 S l p Dalec lug 802 t1
8948 glábra *Dec* smooth ♃ or 2 my n W ... . C l p Mo ox.s 3 t.8 f 2
8949 græ'ca *Sweet* Wall-fl -leav'd ○ or 2 my n W S Europe ... S l p
8950 fenestrális *R Br* window ♀ ◎ or 1 jl au Pu ..... 1759 S l p Jac vind 2 t 179
8951 sinuáta *R Br* greater sea ♀ ◎ or 1 my au V England sea sh S l p Eng bot 462
8952 odoratíssima *R Br* Persian ♃ or 2 jn jl Ld Persia 1797 C r.m Bot. mag 1711
β frágrans Fisch. *short-podded* ♃ or 2 jn jl Ld Crimea 1823 C r m
8953 vária *Dec* variable ♀ or ½ jn jl Ld Levant 1820 C r m Fl græc t 636
8954 tristis *R Br* dark-flowered ♃ or 1½ my jl Ld S Europe 1768 S s l Bot mag 729
8955 tricuspidáta *R Br* three-forked ○ pr 1 jl Pu Barbary 1739 S s l Lam ill t.564 f 2
8956 parviflóra *R Br* small-flowered ○ pr ½ jl au Pu Morocco 1799 S s.l

1382 CHEIRAN'THUS *L* Wall-Flower. *Cruciferæ* *Sp* 7—17
8957 cheiri *L* garden ♃ or 2 ap jl Or S Europe 1573 S r m Bull herb t 349
β fruticulósus L *wild* ♃ or 1½ ap jl Y Britain old wa. S co Eng bot 1934
8958 ochroleúcus *Hall* pale yellow ♀ △ or ½ ap jl Pa Y Switzerl. 1820 D co Hal hel 449 t 14
8959 tenuifólius *Lher* fine-leaved ♃ or 2 my jn Y Madeira 1777 C l p
8960 mutábilis *Lher* changeable ♃ or 3 mr my Y Pu Madeira 1777 C l p Bot. mag 195
β longifólius Vent *long-leaved* ♃ or 3 s d W pu Madeira 1815 C co Vent malm t 83
8961 scopárius *W* rock ♃ or 3 my o W pu Teneriffe 1812 C r m
β chamæleo Ker *Chamæleon* ♃ or 3 my o Y Pu Teneriffe 1812 C r m Bot reg t 219
8962 semperflórens *Schon* ever-blowing ♃ or 2 ja d W Barbary 1815 C s l
β fruticéscens Pers *entire-leaved* ♃ or 2 mr jl W Teneriffe 1815 C co
8963 linifolius *Pers* Flax-leaved ♃ or 2 mr au Pu Spain 1815. C s l

1383 NASTURTIUM *R Br* Nasturtium. *Cruciferæ* *Sp* 10—24
8964 officinále *R Br* Water Cress ≋ △ cul 1 my jl W Britain rivul D co Eng bot. 855
8965 sylvéstre *R Br* creeping ≋ △ w 1 jn s Y Britain wat pl. D co Eng bot 2 12½
8966 terréstre *R Br* marsh ≋ ○ w 1 jn s Y Britain wat pl S co Eng bot 1747
8967 sagittátum *R Br.* arrow-leaved ♀ △ un ½ my jn Pa Y Siberia 1780. D co Jac ic l. t 122
8968 Lippiénse *Dec* Lippa ♀ △ un ¾ my jn Y Carinthia ... D co Dalc. lug 653 f 3

8945 8946 8950 8951



8952 8954 8955

History, Use, Propagation, Culture,

1380. *Schizopetalon* A curious genus of Chilian plants, with pinnatifid petals, whence the name has been formed, from σχίζω, to divide A plant of difficult cultivation It is raised from seeds, which it produces sparingly, and only in a well-aired cool greenhouse

1381 *Mathiola.* Named after Peter Andrew Matthioli, an Italian physician, born in 1500, died in 1577. He was first physician to Ferdinand of Austria, and author of a laborious commentary upon Dioscorides Herbs, or rarely shrubs, nearly all covered with a white stellate soft down M incana, annua, græca, and fenestralis are popular border flowers, especially the first, the leaves of all the species, and also of Cheiranthus, and many other plants of this class, may be used as potherbs or salads

1382. *Cheiranthus.* So called from the Arabic *kheyry*, the name of a plant with red sweet-scented flowers Herbs, or occasionally shrubs, with entire or toothed leaves, and flowers of various colors. C Cheiri is a

1443 *Raphanus.* Silique transversely many-celled or dividing into several joints.

4. Cotyledons incumbent, linear, spirally or rather circinately twisted. (O|||) SPIROLOBEÆ, *Dec.*

1444 *Bunias* Silicle nucamentaceous, indehiscent, 2-4-celled Cotyledons twisted spirally
1445 *Erucaria.* Silique lomentaceous, 2-jointed, the lower joint having two cells, the upper being ensiform. Cotyledons replicate, somewhat spiral.

5. Cotyledons incumbent, linear, with two legs, or a double plait, that is to say, plaited twice crosswise. Seeds depressed (O,||||) DIPLECOLOBEÆ, *Dec.*

1446 *Helsophila* Silique elongate or rarely oblong or oval. Dissepiment linear or oval. Valves flat, or in the long siliques somewhat convex Calyx equal at base
1447 *Subularia* Silicle oval. Dissepiment elliptical Valves convex Cells many-seeded Stigma sessile

C *Cotyledons 2. Petals 4, not cruciate Thalamus large, hemispherical or elongated Stamens 4-6-00*

1448 *Cleome* A honey gland at each division of the calyx, except the lowest. Calyx 4-leaved. Petals ascending.

8945 Stem weak cæsious, Petals pinnatifid quickly perishable

8946 Stem shrubby at base erect branched, Leaves lanceolate entire hoary, Pods subcylind. without glands

8947 Stem herbaceous erect branched, Leaves lanceolate blunt hoary, Pods subcylindrical without glands
8948 Stem half shrubby erect branched, Leaves lanceolate smooth, Pods somewh it compressed without glands
8949 Stem herbaceous erect branched, Leaves lanceol ite smooth, Pods somewhat compressed without glands
8950 Stem ½ shrubby erect simple, Leaves close obovate downy, Pods downy without glands broadest at base
8951 Stem somewhat erect herbaceous branch Lvs obl downy, lower sinuated, Pods comp velvety and gland.
8952 Stem erect branched, Leaves downy or pubescent toothed or pinnatifid, Pods compressed downy
β Pods twice as short as α
8953 Stem erect nearly simple naked, Leaves linear blunt hoary entire, Flowers subsessile, Pods compressed
8954 Stem ½ shrubby at base branched erect, Leaves downy linear entire or toothed, Fl subsess Pods roundish
8955 Stem suberect branched, Leaves sinuate pinnatifid, Pods with three acute nearly equal points
8956 Stem suberect branched, Leaves downy lanceolate repand toothed, Fl sessile, Middle point of pod longest

8957 Leaves lanc entire, Hairs 2-parted appressed or none, Pods linear, Stigmas with recurved lobes

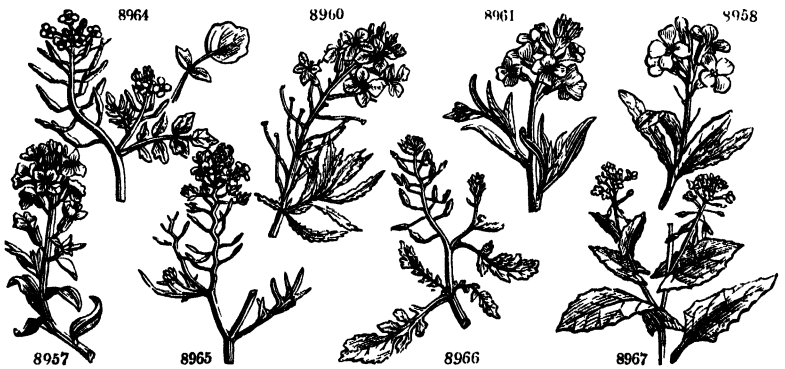
8958 Lvs obl lanc somew toothed, Hairs 2-parted or none, Stem decum branch. Pet obov Pods erect pointed
8959 Leaves linear entire somewhat silky, Stem half shrubby
8960 Leaves linear-lanceolate acuminate finely serrated downy with 2-parted hairs, Stem shrubby branched

8961 Leaves linear-lanceolate acuminate entire downy with appressed 2-parted hairs, Stem shrubby branched

8962 Leaves lin lanc entire roughish, Stem shrubby branched, Pods compressed, Pedic half as short as calyx

8963 Leaves linear entire rough clustered, Stem shrubby branched, Pods roundish 3 times as long as calyx

8964 Leaves pinnatifid, Segments ovate subcordate repand
8965 Leaves pinnatifid, Segments lanceolate serrate or cut
8966 Leaves pinnated-lobed, lobes confluent toothed smooth, Root fusiform, Petals as long as calyx
8967 Downy, Rad lvs toothed backwards, cauline sagittate oblong blunt, Stems erect branched from the base
8968 Radical leaves stalked obovate toothed or lyrate upper pinnatifid, Lobes linear entire

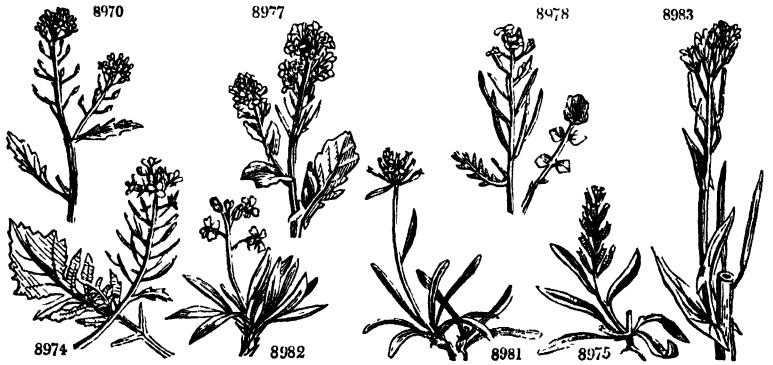


and Miscellaneous Particulars

popular flower of long standing, admired for its various colors and agreeable odor Being an acrid and hardy evergreen, it is sometimes sown in pastures, along with parsley, thyme, &c. as a preventative of the rot in sheep

1383. *Nasturtium*, is said to have been so called from the effect its acrimony produces upon the muscles of the nose, *nasus tortus* signifying a convulsed nose *Pliny* N. officinale is a well known popular salad, gathered wild in most parts where it is found, and since 1808, cultivated to a considerable extent in the neighbourhood of London A running stream of clear water is essential to its cultivation, in the bed of this stream the plants are inserted in rows in the direction of the current, and all that is necessary is to take up and replant occasionally, and to keep up the plants free of mud or any accumulation of extraneous matters, and to see that other plants, especially the Sium nodiflorum, a poisonous plant resembling the watercress, do

8969 **pyrenáicum** *R. Br.*	Pyrenean	¥	△	un	½	my	jn	Y	Pyrenees 1775	D	co	Act. helv. 4. t.15
8970 **amphíbium** *R Br.*	amphibious	≜	△	w	1½	jn	au	Y	Britain riv ba.	D	co	Eng. bot. 1840
8971 **benghalénse** *Dec*	Bengal		○	un	2	jn	au	Y	E. Indies ...	S	co	
8972 **microspérmum** *Dec*	Chinese		○	un	¾	jn	au	W	China 1820	S	co	
8973 **índicum** *Dec*	doubtful		○	un	½	jn	au	Ap	China ...	S	co	
1384. LEPTOCARPÆA *Dec* Leptocarpæa						*Cruciferæ.*		*Sp* 1				
8974 **Loeselii** *Dec*	Loesel's		○	w	1½	au		Y	Germany 1683.	S	co	Jac. aust 4. t.324
Turritis Loselii R Br												
1385. NOTO'CERAS *R Br* Notocras						*Cruciferæ*		*Sp.* 2—4.				
8975 **canariénse** *R Br*	Canary		◯	un	½	au	s	Y	Canaries 1779.	S	co	Jacq ecl. t. 111
8976 **hispánicum** *Dec*	Spanish		◯	un	½	au	s	Y	Spain 1821.	S	co	
1386 BARBARE'A *R Br* Winter Cress						*Cruciferæ*		*Sp* 4—6				
8977 **vulgáris** *R Br*	common	¥	△	cul	1½	my	au	Y	Britain rub	D	co	Eng bot 443
8978 **præ'cox** *R Br*	Belleisle Cress	¥	△	cul	1	ap	o	Y	England brooks	D	co	Eng. bot 1129
8979 **ibérica** *Dec*	Barbarea-lvd	¥	△	un	1	my	au	Y	Iberia 1816	C	lp	
8980 **plantagínea** *Dec*	Winter cress-lv	¥	△	un	½	jl	s	Y	Levant 1799.	D	co	
Sisymb barbareæ L												
1387 BRAY'A *Stern*	Braya.					*Cruciferæ*		*Sp* 1				
8981 **alpina** *Stern*	alpine		○	cu	½	jn		Pu	Carinthia 1823	S	pl	Hook fl ex t 121
1388 PAR'RYA *R Br.*	Parrya					*Cruciferæ*		*Sp.* 1				
8982 **árctica** *R Br*	northern		◯	cu	½	...		Pu	Melville I 1820	S	pl	Parry's append.
1389 TURRI'TIS *R Br*	Tower Mustard					*Cruciferæ.*		*Sp* 1—3.				
8983 **glábra** *L.*	long-podded		○	w	1½	my	jn	W	England gr pa.	S	co	Eng bot. 777
†1390 AR'ABIS *L*	Wall Cress.					*Cruciferæ.*		*Sp* 32—65				
8984 **vérna** *R Br*	vernal		○	w	1	my	jn	Pu	France 1710	S	sl	Barr ic 476
8985 **alpina** *L*	Alpine	¥	△	pr	¾	mr	my	W Y	Switzerl 1596	D	pl	Bot mag 226
8986 **álbida** *Sted*	early-flowering	¥	△	pr	¾	ja	o	W	Caucasus 1798	D	sl	Jacq ecl t 71
A caucásica W												
8987 **toxophylla** *Bieb*	bow-leaved	¥	◯	pr	1	jl	au	W	Volga 1823	S	co	
8988 **auriculáta** *Lam*	auricled		○	un	⅝	my		W	S Europe ...	S	co	W & Kit 1 t 59
8989 **saxátilis** *All*	stone	¥	◯	un	¾	my		W	Switzerl ...	S	co	Vill daup 3 t 37
8990 **crispáta** *W*	crisp	¥	△	pr	1	my		W	Carniola 1816	D	co	
8991 **sagittáta** *Dec*	sagittate	¥	◯	un	1	my	jl	W	S France .	S	co	
8992 **hirsuta** *Scop*	hairy	¥	△	w	1	my	jl	W	Britain rocks	D	sl	Eng bot 587
8993 **Allióni** *Dec*	upright	¥	△	w	2	my	jn	W	Italy 1804.	D	co	
Turritis stricta W												
8994 **murális** *Bert*	wall	¥	△	un	½	my	jn	W	Italy 1824	D	co	
8995 **stricta** *Huds.*	Bristol	¥	△	pr	⅜	my		Cr	England rocks	D	sl	Eng bot 614
8996 **ciliáta** *R Br*	ciliated	¥	◯	pr	½	jn	jl	W	Ireland ir sh	S	sl	Eng bot 1746
8997 **incána** *Roth*	hispid-stalked	¥	◯	un	½	my	jn	W	Switzerl 1816	S	sl	
8998 **Thaliána** *L*	common		○	w	1	ap	my	W	Britain walls	S	sl	Eng bot 901
8999 **serpyllifólia** *Vill*	thyme-leaved	¥	◯	un	½	jn	jl	W	S France 1823	S	co	Vil dauph 3 t 37
9000 **pubéscens** *Desf*	pubescent	¥	◯	un	1½	ap	my	W	Barbary 1825	S	co	Desf atl t 163
9001 **præ'cox** *W & K*	early	¥	△	un	⅔	jn	jl	W	Hungary 1820	D	co	
9002 **hispida** *L*	short-podded	¥	△	w	½	my	jl	Pu	Britain al roc.	D	sl	Eng bot 469
9003 **lyráta** *L*	lyrate		○	un	⅔	my	jl	W	N Amer ..	S	co	
9004 **arenósa** *Scop*	purple		○	pr	½	jn	jl	Pk	Germany 1798	S	sl	Scop carn t 40



History, Use, Propagation, Culture,

not find their way into the plantation Near Rickmansworth, in Hertfordshire, there is a fine stream of water on a chalky bottom, in which one cultivator grows five acres, and sends a supply to London every day in the year, Sundays excepted There are also large plantations at Uxbridge, Gravesend, and other places.

Some market-gardeners, who can command a small stream of water, grow the water-cress in beds sunk about a foot in a retentive soil, with a very gentle slope from one end to the other Along the bottom of this bed, which may be of any convenient length and breadth, chalk or gravel is deposited, and the plants are inserted about six inches distance every way Then, according to the slope and length of the bed, dams are made six inches high across it, at intervals, so that when these dams are full, the water may rise not less than three inches on all the plants included in each The water, being turned on, will circulate from dam to dam; and the plants, if not allowed to run to flower, will afford abundance of young tops in all but the winter months A stream of water no larger than what will fill a pipe of an inch bore, will, if not absorbed by the soil, suffice to irrigate in this way an eighth of an acre As some of the plants are apt to rot off in winter, the plantation should be laid dry two or three times a year, and all weeds and decayed parts removed, and vacancies filled up Cress grown in this way, however, is far inferior to that grown in a living stream flowing over gravel or chalk

The water-cress has lately been cultivated in the neighbourhood of Paris, and also near Edinburgh.

1384 *Leptocarpæa* From λεπτος, slender, and καρπος, fruit A genus distinguished from Sisymbrium by its accumbent cotyledons

8969 Radical leaves stalked obovate or lyrate, Cauline amplexicaul pinnatifid, Lobes linear entire
8970 Leaves obl lanc pinnatifid or serrated, Root fibrous, Petals larger than calyx, Silicules ellipsoid
8971 Leaves obovate cuneate toothed at end, Pods roundish subturgid, Bractes a little shorter than pods
8972 Lvs smooth rad stalked pinnatif, caul stem-clasping cut serr Pods roundish, Pedic bracteate very short
8973 Lvs ovate lanc. toothed backwards acuminate at each end smooth, Pods roundish 4 times as long as stalk

8974 The only species Leaves stalked pinnatifid sublyrate with cut toothed acuminate lobes

8975 Pods 2-horned, Petals equal, Leaves entire, Hairs strigose fixed by their middle 2-parted appr scattered
8976 Pods 2-horned, Petals unequal, Leaves ent. Hairs strigose fixed by their middle 2-parted very numerous

8977 Lower leaves lyrate terminal lobe roundish, upper obovate toothed
8978 Lower leaves lyrate · terminal lobe ovate, upper pinnatifid with linear oblong entire lobes
8979 Radical and lower leaves pinnatifid-lyrate lateral lobes ovate, terminal cordate entire
8980 Lower leaves toothed lyrate lateral lobes dentiform, terminal very large subcordate, upper ovate

8981 Leaves linear narrowed at base smooth acute

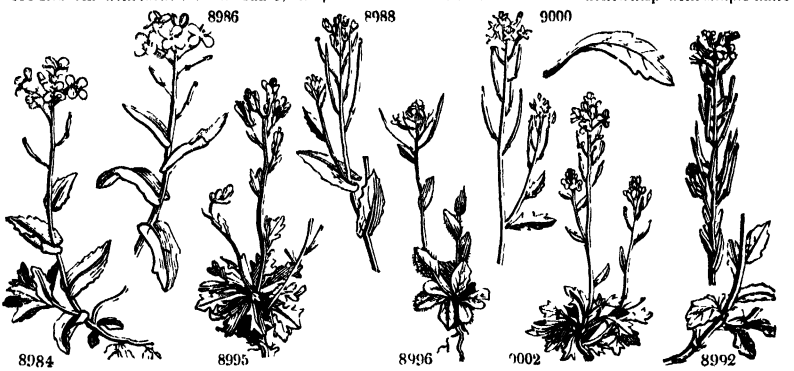
8982 Pods lin.-oblong, Anthers oval, Leaves entire, Peduncles smooth

8983 Rad. leaves toothed hairy cauline stem-clasping entire smooth, Pods erect 6 times as long as stalk

8984 Cauline lvs cord. stem-clasping rough with 3-parted down, Pedicels shorter than cal Stigma somew emarg
8985 Leaves many-toothed villous with branched hair lanc acute rad somew stalked, caul cord stem-clasp
8986 Leaves few-toothed hoary with branched hairs rad obov oblong, cauline cordate sagitt stem-clasping

8987 Lvs pubesc with minute stellate down rad obl stalked sinuate toothed, cauline sagittate lanceol entire
8988 Lvs somew toothed rough with branch hair lower oval narr into a stalk, cauline bluntly cord.-auricled
8989 Lvs somew toothed rough with branch hair lower oval narr into a stalk, cauline acutely cord.-auricled
8990 Lvs. acutely toothed lanc stem-clasping wavy rough with branching hairs rad narrowed into the stalk
8991 Lvs somew toothed rough rad ovate or obl narrowed into the stalk, cauline lanceol sagittate cordate
8992 Lvs toothed rough with generally branched hairs radical obov obl narr into the stalk, caul ovate lanc
8993 Lvs smooth radical ovate-oblong somewhat toothed narrowed at base, cauline sessile ovate serrated

8994 Leaves hairy with branched pubescence radical spatulate bluntly toothed, cauline ovate acutely toothed
8995 Leaves rough with scattered bifid down radical obov toothed, cauline obl nearly entire, Raceme erect
8996 Leaves somewhat toothed smooth ciliated radical subsessile oval oblong, cauline oblong, Raceme erect
8997 All the lvs sessile somew toothed hoary with branched hairs radical obov obl, cauline obl Rac erect
8998 Leaves hairy somewhat toothed radical stalked ovate oblong, Stem branched, Pods ascending
8999 Leaves nearly entire rough with branched hairs radical and caul oval narrowed at base, Raceme lax
9000 Lvs pubesc coarsely toothed rad spatulate lanc narrowed into the stalk, caul lanc Pods pubescent
9001 Leaves oblong acute sessile entire smooth, Stems strigose, Runners creeping, Pods spreading
9002 Leaves nearly smooth radical cut, cauline oblong linear entire, Stem generally branched
9003 Rad leaves lyrate pinnatifid smooth or ciliated cauline linear, Stem hispid at base somewhat branched
9004 Lvs vill with forked down rad lyrate pinnat caul cut toothed Stem branched hisp with simple hairs



and Miscellaneous Particulars

1385 *Notoceras* From νωτος, the back, and κερας, a horn The structure of the pod of this genus is intermediate between Erysimum and Capsella The species are small annuals, with very minute flowers, which are sometimes apetalous

1386 *Barbarea* A name used by Dodoens, because the plant had been called the herb of St. Barbara by some preceding botanists B vulgaris is sometimes cultivated as a spring salad, but is much less delicate than the common cress, and has nothing in flavor to recommend it B præcox, the American or Bellevue cress of gardeners, is preferred to the other, and cultivated in a number of gardens

1387 *Braya* A curious little plant, with the habit of Arabis cærulea Leaves are linear, racemes terminal, flowers purple The genus is not completely known, but it appears to be intermediate between Siliquosæ and Siliculosæ, related to Draba on one hand, and Arabis on the other It is a native of the Carinthian alps, where it was found by Dr Hoppe, who named it after Count Bray, a German nobleman

1388 *Parrya* Named by Mr R Brown, after Captain Edward Parry, the commander of the British expeditions to discover the north-west passage round America It was found upon Melville island, and once was raised from seeds brought home by some of the officers, but it never flowered, and is now lost

1389 *Turritis.* From *turris*, a tower, the leaves and seeds giving the stem a pyramidal form This genus is principally distinguished from Arabis by its seeds being in two rows, and by its habit

1390 *Arabis* Native of *Arabia*, according to De Theis, but this is a forced explanation, and scarcely the true root of the word. Distinguished from all the neighbouring genera by its linear compressed siliques, and flat valves.

9005 Halléri *L*	Haller's	£	◯	un	1	jn jl	W	Switzerl. ...		S	co	Wal.&Kit. t.120
9006 cebennénsis *Dec.*	Montpellier	£	◯	un	1½	jn jl	Pa,pu	S. France	1820	S	co	
9007 Turrita *L.*	tower Mustard	£	◯	w	1½	ap my	Sul	England walls.		S	s l	Eng bot. 178
9008 péndula *L*	pendulous		○	un	1	my jl	W	Siberia	1759	S	s l	Jac. vind. 3. t 34
9009 lævigáta *Dec*	polished	£	△	un	2	my jl	W	N Amer	1821	D	co	
9010 canadénsis *L*	sickle-podded	£	△	un		my jn	W	N Amer.	1768	D	s l	Plu. alm t 86 f 8
9011 nútans *W*	nodding	£	△	pr	½	mr ap	W	Switzerl	1658	D	co	Jac. aust.3 t.281
9012 bellidifólia *Jacq*	Daisy-leaved	£	△	pr	½	my jn	W ν	Switzerl	1773	D	p l	Jac aust 3 t 280
9013 cærúlea *Wulf*	blue	£	△	pr	½	jn jl	Pa B	Switzerl	1793	D	co	Al ped 1. t 40 f 2
9014 collína *Ten*	hill	£	△	un	½	jn jl	W	Naples	1824	D	co	Bot. mag. 3021
9015 lúcida *L*	shining-leaved	£	△	pr	½	jn jl	W	Hungary	1790	D	p l	

1391 MACROPO'DIUM *R Br* Macropodium

						Cruciferæ	*Sp* 1					
9016 nivále *R Br*	Siberian	£	△	pr	1	jn s	W	Siberia	1796	D	co	Pall it 2 ap t U

1392 CARDA'MINE *L* Lady's Smock

						Cruciferæ	*Sp* 16—55					
9017 asarifólia *L*	Kidney-leaved	£	△	pr	½	jn jl	W	Italy	1710	D	p l	Bot mag 1735
9018 bellidifólia *Crantz*	Daisy-leaved	£	△	pr	½	ap jn	W	Scotland sc al		D	s l	Eng bot. 2355
9019 resedifólia *L*	Rocket-leaved		○	un	½	jl	W	Germany	1658	S	co	Al ped 1 t 57 f 2
9020 africána *L*	African	£	△	un	1	my jn	W	C G H	1691	D	co	Her parad. 202
9021 trifólia *L*	three-leaved	£	△	pr	1½	mr ap	W	Switzerl	1629	D	p l	Bot. mag 452
9022 chilénsis *Dec*	Chili	£	△	un	½	mr ap	W	Chile	1825	D	co	
9023 granulosa *All*	granular	£	△	un	1	ap my	W	Italy	1820	D	co	
9024 amára *L*	bitter	£	△	pr	¼	ap my	W	Britain wat pl		D	p l	Eng bot. 100
9025 prórepens *Fisch*	creeping	£	△	un	½	ap my	W	Siberia	1821.	D	co	
9026 praténsis *L*	Cuckoo-flower	£	△	pr	1	ap my	Pu	Britain me pa.		D	m s	Eng bot 776
β plena	*double-flowered*	£	△	pr	1	ap my	L P	.. ..	..	D	co	
9027 pennsylvánica *L*	Pennsylvanian	£	△	un	1	my jn	W	N Amer	1818	D	co	
9028 hirsúta *L*	hairy		○	un	1	jn d	W	Britain mo s p		S	m.s	Eng bot 492
9029 parviflóra *L*	small-flowered		○	un	1	ap my	W	France ...		S	co	Gmel sib t 64
9030 impátiens *L*	impatient		○	un	1	ap jn	W	Britain al roc		S	co	Eng bot 80
9031 latifólia *Vahl*	broad-leaved		◯	or	1½	jn au	Pu	Spain	1710	S	co	Her parad 203
9032 chelidónia *L*	Celandine-lvd	£	△	or	1	jn au	Pu	Italy	1739	D	co	Pl rar hu 2 t 140

1393 PTERONEU'RON *Dec* Pteroneuron

						Cruciferæ	*Sp* 1—2					
9033 græ'cum *Dec* *Cardámine græ'ca* *L*	Grecian		○	un		jn jl	Pa	S Europe	1710.	S	co	Boc sic t. 44 f 2

1394 DENTA'RIA *L* Dentaria

						Cruciferæ	*Sp* 7—16					
9034 enneaphýlla *L*	nine-leaved	✱	△	el	1	my jn	Pa Y	Austria	1656	D	s p	Jac aust 4 t 316
9035 diphýlla *Mich*	two-leaved	✱	△	el	½	my jn	W pu	N Amer		D	s p	Bot mag t 1465
9036 máxima *Nutt*	large	✱	△	el	2	my jn	Pa pu	N Amer	1823	D	s p	
9037 trifólia *W & K*	three-leaved	✱	△	el	1	my jn	W	Hungary	1824	D	s p	Wal &Kit t 139
9038 pentaphýlla *Scop*	five-leaved	✱	△	el	1½	my jn	Pa pu	Switzerl	1656	D	s p	Garid prov t 29
9039 pinnáta *Lam*	seven-leaved	✱	△	el	1	my jn	Pa pu	Switzerl	1683	D	s p	Garid prov t 28
9040 bulbífera *L*	bulbiferous	✱	△	el	1½	ap my	Pu	England sha pl		D	s p	Eng bot 309

1395 LUNA'RIA *L* Honesty

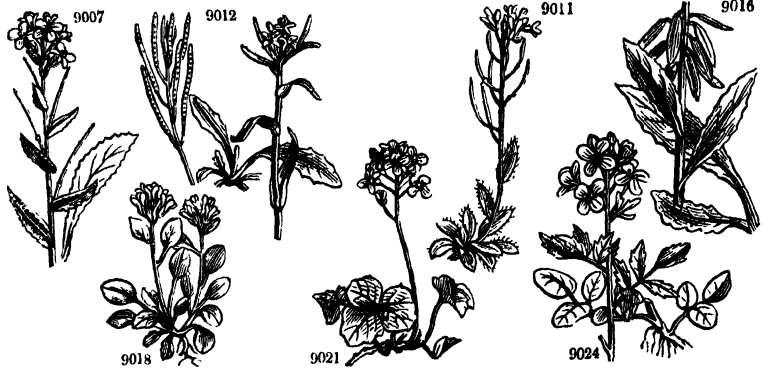
						Cruciferæ	*Sp* 2					
9041 rediviva *L*	perennial	£	△	or	3	my jn	L P	Germany	1596	D	co	Lam ill t.561 f 1
9042 biénnis *Dec* *ánnua* *L*	annual	£	◯	or	4	my jn	L P	Germany	1570	S	co	Lam ill t 561 f 2

1396 RICO'TIA *L* Ricotia

						Cruciferæ	*Sp* 1					
9043 ægyptiaca *L*	Egyptian		○	cu	½	jn jl	L P	Egypt	1757	S	s p	Bot reg 49

1397 FARSE'TIA *Turr* Farsetia

						Cruciferæ	*Sp* 4—7					
9044 cheiranthoides *R Br*	stock	♃	⌴	cu	1	jn jl	W pu	Levant	1788	C	co	Desf atl 2 t 160
9045 suffruticosa *Dec*	half-shrubby	£	△	or	1	ap	V	Persia	1823	C	co	Vent cels t 19
9046 lunarioides *R Br*	oriental	♃	⌴	or	1	jn jl	Y	Archipel	1731	D	co	Tour. it 1 p 242
9047 clypeáta *R Br*	buckler-podded		○	or	1½	jn jl	Y	S Europe	1596	S	co	Dal lug 1141 f 1



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1391 *Macropodium* So named because the pod is elevated above the receptacle upon a stalk, μακρος, long, and πους, a foot or stalk A genus differing from Arabis chiefly in its stalked pod, and its calyx being a little thickened at the base A little, smooth, erect, simple herb, with ovate, lanceolate, acuminate leaves, and white flowers

1392 *Cardamine* From καρδια, the heart, and δαμαω, to strengthen, in allusion to its supposed stomachic qualities The leaves of C pratensis were formerly used in salads C impatiens is so named from the sudden bursting of the seed pods, being ripe and pressed between the fingers C. pratensis frequently has double flowers. C hirsuta and, it is said, other species, produce young plants from the leaves All that is necessary is to lay the leaf on a moist grassy surface, or on moss kept moist. The plant propagates itself extensively in this way in moist soils

1393. *Pteroneuron* From πτερον, a wing, and νευρον, a nerve, in allusion to the winged nerves of the pods, by which it is distinguished from Dentaria and Cardamine

9005 Lower lvs stalked lyrate · terminal lobe ovate, upper lanceolate cut, Stem branched weak softly villous
9006 Leaves all stalked ovate acumin coarsely toothed velvety with very fine down, Pedic and pods spreading
9007 Lvs. stem-clasping acum somewhat toothed pubescent, Pedicels length of calyx, Pods 1-sided decurved
9008 Leaves stem-clasping toothed oblong dilated and cordate at base, Stem furrowed hispid, Pods pendulous
9009 Cauline leaves linear sessile smooth lower somewhat toothed, radical obovate, Pods erect
9010 Cauline leaves sessile oblong lanceolate acuminate somewhat toothed, Pods pendulous falcate [stalk
9011 Lvs roughish nearly ent rad obov, caul ov. or obl Rac nodding, Pods erect 3 times as long as their
9012 Lvs smooth nearly entire rad obovate, cauline ovate, Raceme erect, Pods 4 times as long as their stalk
9013 Leaves smooth nearly entire rad oblong obovate, cauline few oblong, Raceme nodding, Pods erect
9014 Lvs hoary with stellated down obl sinuate toothed rad. stalked, caul sess. Pods 8 times as long as their
9015 Leaves stem-clasping shining [stalk

9016 Leaves ovate lanceolate acuminate subserrate, Raceme terminal long

9017 Lvs smooth stalked cordate roundish subsinuate toothed, Stem erect, Pods erect twice as long as stalk
9018 Leaves smooth thickish radical stalked ovate entire, cauline few entire or 3-lobed, Pods erect
9019 Leaves smooth membranous stalked radical undivided, lower cauline 3-fid, upper 5-lobed, Pods erect
9020 Leaves smooth 3-fid, Segments stalked ovate acuminate toothed, Pods spreading
9021 Lvs smoothish 3-fid, Segm sess rhomb roundish tooth Scape naked, Lower branches root-like creeping
9022 Leaves above downy trifid, Segments somewhat stalked ovate lanceolate crenate, Stem ascending
9023 Radical leaves stalked ovate subcordate cauline pinnatifid with oblong entire lobes, Root granular
9024 Leaves pinnatifid, Segments of radical roundish, of cauline toothed angular, Stem rooting at base
9025 Lvs pinnatifid, Segm ovate nearly entire term round 3-lobed, Runners creeping, Stem ascend pubesc
9026 Lvs pinnatifid, Segm of rad. roundish of cauline linear or lanc entire, Style very short, Stigma capitate

9027 Leaves pinnatifid or lyrate, Lobes oval angular toothed blunt, Stem erect, Petals oblong linear
9028 Leaves pinnatifid, Segm of radical roundish mucronate stalked, of the upper oblong subsess Petals obl
9029 Leaves pinnatifid, Lobes sessile obl linear entire the lowest distant from the stem, Petals oblong linear
9030 Leaves pinnatifid, Segm oval oblong somewhat toothed, lowest close to the stem acute stipule-like
9031 Leaves pinnatifid smooth, Segm 3-7 roundish toothed angular, Pods erect a little longer than stalk,
9033 Leaves pinnatifid nearly smooth, Segm stalked ovate toothed lower pinnatifid, Segm. 3-4

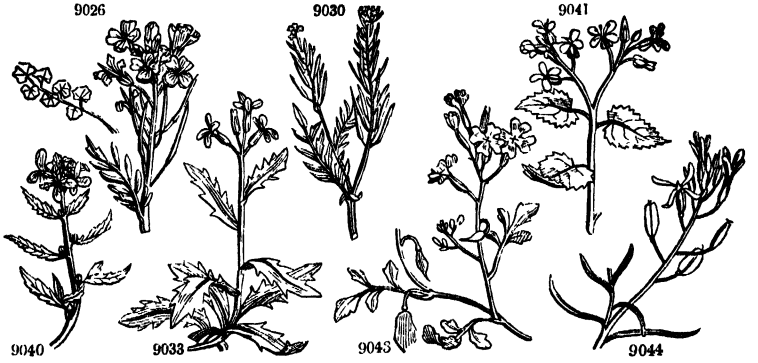
9033 Segm. of leaves somewhat stalked roundish tooth-lobed nearly equal

9034 Leaves 3 whorled stalked trifid, Segm. oval lanceolate acuminate serrated, Stamens length of petals
9035 Leaves 1-2 alternately shortly stalked 3-fid, Segm ovate lanceolate coarsely and unequally serrate lobed
9036 Leaves many alternate stalked trifid, Segm broad oval cut toothed, Axillæ without glands
9037 Leaves many alternate stalked trifid, Segm ovate-lanceolate remotely toothed, Axillæ with glands
9038 Caul lvs many alternate stalked palmate 5-lobed, Segm oblong lanceolate acuminate coarsely serrated
9039 Cauline leaves alternate stalked pinnatifid, Segm oblong acuminate serrate toothed
9040 Cauline leaves alternate pinnatifid upper undivided mostly bearing bulbs in the axillæ

9041 Pods lanceolate narrowed at each end
9042 Pods elliptical blunt at each end

9043 Leaves sub bipinnatifid, Lobes oblong sinuate angular

9044 Stem shrubby erect, Leaves linear with close hairs
9045 Stem half-shrubby at base erect, Leaves lanceolate downy
9046 Stems half-shrubby ascending, Leaves oblong obovate stalked and pods hoary with down
9047 Stems herbaceous erect, Leaves oblong rep und, Pods velvety with short down, Stigma capitate



and Miscellaneous Particulars

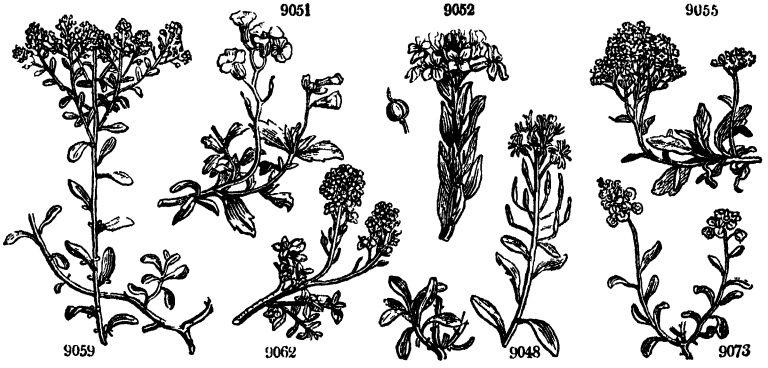
1394 *Dentaria* From *dens*, a tooth, its roots are furnished with projecting angles, which resemble the molar teeth of quadrupeds Plants with broad palmate or pinnate leaves, and shewy white, yellowish, or purple flowers The dried root of D diphylla is used instead of mustard by the Americans, under the name of *pepper root*

1395 *Lunaria.* Derived from *luna*, the moon, in allusion to the broad round silvery silicles Large hairy plants, with alternate or opposite cordate leaves, and large lilac flowers

1396 *Ricotia.* A word, the meaning of which is no where explained It was probably formed after some obscure botanist Small weak branched annual plants, with variously lobed foliage, and pale lilac flowers

1397 *Farsetia* In memory of Philip Farseti, a noble Venetian, celebrated for his botanical erudition. A small genus, with hoary entire leaves, and yellow or dirty-white flowers

1398	**BERTERO'A** *Dec* Berteroa					*Cruciferæ*	*Sp* 3—5.							
9048	incána *Dec.*	hoary	¥	◯	or	1½	jl s	W	Europe	1640	S	s l	Dal lug 1181 f 2
	Farsétia incána R Br.													
9049	mutábilis *Dec*	changeable	¥	△	or	1½	jl.au	W pk	Levant	1802	D	co	Vent cels. 85
	Farsétia mutábilis	R. Br												
9050	obliqua *Dec.*	oblique	⊼	⎯	or	1	jl	W	Sicily	1823	C	co	Flora Græca, 823
†1399	**AUBRIE'TIA** *Adans* Aubrietia					*Cruciferæ.*	*Sp* 1—2.							
9051	deltoidea *Dec*	purple	¥	△	or	¼	mr.my	Pu	Levant	1710	C	p l	Bot. mag 126	
	Farsetia deltoidea	R. Br												
†1400	**VESICA'RIA** *Lam* Vesicaria					*Cruciferæ*	*Sp* 3—10.							
9052	utriculáta *Lam*	smooth	¥	△	or	1	ap jn	L Y	Levant	1739.	D	s l	Bot mag 130	
9053	sinuáta *Poir*	sinuate-leaved	¥	◯	or	1	ap jn	L Y	Spain	1596.	C	s l	Clu. his 2 134 f 1	
9054	crética *Poir*	Cretan	⊼	⎯	or	½	my au	Y	Crete	1739	D	s l	Alp exot. t. 118	
*1401	**ALYSSUM** *L*	Madwort				*Cruciferæ.*	*Sp* 18—52.							
9055	saxátile *L*	rock	⊼		or	1	ap my	Y	Candia	1710.	C	s l	Bot. mag 159	
9056	Gemonénse *L*	Austrian	⊼		or	1	ap my	Y	Europe	...	C	co	Jac. ic 3 t 508	
9057	argénteum *W*	silvery	¥	△	or	1	ap my	Y	Switzerl	...	D	co	All ped. t 54. f 3	
9058	Bertolóni *Desv*	Bertoloni's	¥	△	or	1	ap my	Y	Switzerl	1823	D	co		
9059	murále *W & K*	wall	¥	△	or	1	ap my	Y	Hungary	1820	D	co	Wal & Kit 1 t.6	
9060	tortuósum *W & K*	twisted	¥	△	cu	1	jn jl	Y	Hungary	1804.	D	s l	Wal & Kit t 91	
9061	alpéstre *L*	alpine	¥	△	cu	1	jn jl	Y	S Europe	1825	D	co	All ped t 18 f 2	
9062	montánum *L*	mountain	¥	△	or	½	jl au	Y	Germany	1713	D	s l	Bot. mag 419	
9063	rostrátum *Stev*	beaked		◯	un	⅔	my jl	Y	Crimea	1823	S	co	St ac p.3.t.15. f.1	
9064	micropétalum *Fisch*	small-petaled		◯	un	1	my jl	Y	Siberia	1823	S	co		
9065	campéstre *L*	field		◯	un	1	jl au	L Y	France	1768	S	s p	Barr ic t.912 f 2	
9066	calycínum *L*	calycine		◯	un	1	jl au	L Y	Austria	1740.	S	s p	Jac. aust t. 338	
9067	minimum *W*	small		◯	un	½	jl	L Y	Spain	1791	C	s l	Tratt thes t. 35	
§9068	edéntulum *W & K*	toothless	¥	◯	un	1	jl	Y	Hungary	1820	S	co	Wal & Kit 1 t.92	
9069	maritimum *Lam*	sweet	⊼		un	1	jn s	W	England	sea co	C	s l	Eng bot 1729	
§9070	rupéstre *Tenore*	rock	⊼	⎯	un	½	jn s	W	Naples	1825.	C	co	Tenore nap t 60	
§9071	halimifólium *W*	purslane-leav'd	⊼	⎯	un	⅔	jn s	W	S Europe	1820	C	co	Bocc mus t 39	
§9072	spinósum *L*	thorny	⊼	⎯	un	½	jn au	W	S. Europe	1683.	C	s l	Barr. ic 808	
1402	**CLYPE'OLA** *W*	Treacle Mustard				*Cruciferæ*	*Sp* 1—3							
9073	Ion Thlaspi *L*	annual		◯	cu	½	my jl	Y	S Europe	1710.	S	co	Cav. ic 1 t 34 f 2	
1403	**PELTA'RIA** *L*	Peltaria				*Cruciferæ*	*Sp* 1—3							
9074	alliácea *L*	Garlic-scented	¥	△	pr	1	my jl	W	Austria	1601	D	s l	Jac. aust.2 t.123	
1404	**PETROCALLIS** *R Br*	Petrocallis				*Cruciferæ*	*Sp* 1							
9075	pyrenáica *R Br*	Pyrenean	¥	△	cu	½	my jn	Pk	Pyrenees	1759	D	s l	Bot. mag 713	
1405	**DRA'BA** *L*	Whitlow Grass				*Cruciferæ.*	*Sp* 11—60							
9076	aizoides *L*	sea-green	¥	△	pr	¼	f ap	Y	Wales	rocks	D	s l	Eng bot 1271	
9077	ciliáris *L*	ciliate-leaved	¥	△	pr	¼	f ap	W	Switzerl	1731	D	s l	Ger gal. 1311	
9078	aizóon *Wahl*	evergreen	¥	△	pr	¼	my	Y	Carinthia	1823.	D	co		
9079	alpina *L*	alpine	¥	△	pr	⅛	ap my	Y	Lapland	1820	D	co	Wah lap t 11 f 4	
9080	hirta *L*	hairy	¥	△	pr	¾	my jl	W	N Europe	1823	D	co	Wah lap t 11 f 3	
9081	rupéstris *R Br*	rock	¥	△	pr	¼	my jl	W	Scotland	al roc.	D	s l	Eng bot 1338	
9082	stellata *Jacq*	stellate	¥	△	pr	½	my jl	W	Pyrenees	1820	D	co		
9083	incána *L*	twisted-podded	¥	◯	pr	3/32	my jn	W	Britain	al roc	S	s l	Eng bot 388	
9084	confúsa *Ehr*	confused	¥	◯	pr	3/32	my jn	W	N Europe	.	S	co	Flora Dan t 130	
9085	nemorális *Ehr*	wood		◯	pr	⅛	my jn	Y	Europe	1759	S	s l	Ho sys 4 t 60 f 1	
9086	muráhs *L*	Speedwell-lvd		◯	pr	3/16	my	W	England	moun	S	s l	Eng bot 912	
1406	**ERO'PHILA** *Dec*	Erophila				*Cruciferæ*	*Sp* 1—5							
9087	vulgáris *Dec*	common		◯	w	¼	mr ap	W	Britain	walls	S	s l	Eng bot 586	
	Draba verna L													



History, Use, Propagation, Culture,

1398 *Berteroa.* Named after Charles Joseph Bertero, a pupil of Balbis, and a friend of M Decandolle, who speaks in high terms of his merits A genus distinguished from its allies by its bifid petals and peculiar habit.

1399 *Aubrietia* Named by Adanson, after Aubriet, the famous French botanical draughtsman. A genus very distinct in habit, and sufficiently different from Berteroa in its entire petals, and from Alyssum in its bisaccate calyx and oblong fruit

1400 *Vesicaria* From *vesica*, a blister or bladder The silicles of this genus are inflated like small bladders This is a genus which combines species with bisaccate and an equal calyx, with entire and toothed stamens, with edged or not edged seeds, and with a deciduous or persistent calyx. It will, therefore, require division hereafter

1401 *Alyssum.* From α, privative, and λυσσα, rage, the Alyssum passed among the ancients for a plant which possessed the properties of allaying anger The αλυσσον of Dioscorides is referred by Sprengel to A. alpestre. The species are shewy plants, of easy culture A saxatile is very ornamental early in the season.

9048 Silicles pubescent somewhat ventricose

9049 Silicles compressed flat elliptical smooth

9050 Silicles flat elliptical downy

9051 Pedicels longer than calyx

9052 Calyx bisaccate, Leaves oblong entire smooth, lower ciliate subspatulate
9053 Calyx equal somewhat spreading and leaves velvety oblong entire or sinuate toothed, Stem herbaceous
9054 Calyx deciduous, Leaves oblong entire or repand wavy hoary with down

9055 Stems ½ shrubby at base subcorymbose, Leaves lanc entire downy, Pods obov orb 2-seeded, Seeds edged
9056 Stems ½ shrubby at base panic Leaves lanc nearly entire velvety, Pods roundish 2-4-seeded, Seeds edged
9057 Stems ½ shrubby at base hoary with stellate down, Lvs obl spatul silvery beneath, Pods ovate roundish
9058 Stems ½ shrubby at base hoary with stellate down, Leaves obl obov silvery beneath, Pods elliptical
9059 Stems ½ shrubby at base hoary with stellate down, Leaves obl nearly acute whitish beneath, Pods ovate
9060 Stems ½ shrubby at base twisted diffuse hoary, Leaves hoary sublanceolate, Racemes corymbose
9061 Stems ½ shrubby at base diffuse hoary, Leaves obovate hoary, Racemes simple, Pods ovate oblong
9062 Stems diffuse pubescent, Leaves hoary lower obovate, upper oblong, Racemes simple
9063 Stem erect, Flowering branches panic Lvs lanceol downy, Pods roundish elliptic little longer than style
9064 Stem erect, Leaves lanceolate, Pods hirsute in long racemes twice as long as style
9065 Stems diffuse, Leaves lanceolate or somewhat linear hairy, Pods roundish rough 6 times as long as style
9066 Stems diffuse, Leaves linear lanceolate hoary, Cal persistent, Pods four times as long as style
9067 Stems diffuse, Leaves linear lanceolate hoary, Pods roundish emarginate smooth
9068 Stem erect, Leaves velvety oblong sinuated upper linear, Cal spreading, Petals bifid
9069 Stems half shrubby at base procumbent, Leaves lin lanceol acute somewhat hoary, Pods oval smooth
9070 Stems half shrubby at base somewhat erect, Rad lvs obl-lanc acute silvery caul few lin Pods woolly
9071 Stems ½ shrubby ascend Lvs obl obt narrowed at base scaly, Pods roundish smooth twice as long as style
9072 Stem shrubby, Branches and old peduncles spiny, Leaves obl linear silvery, Pods round smooth

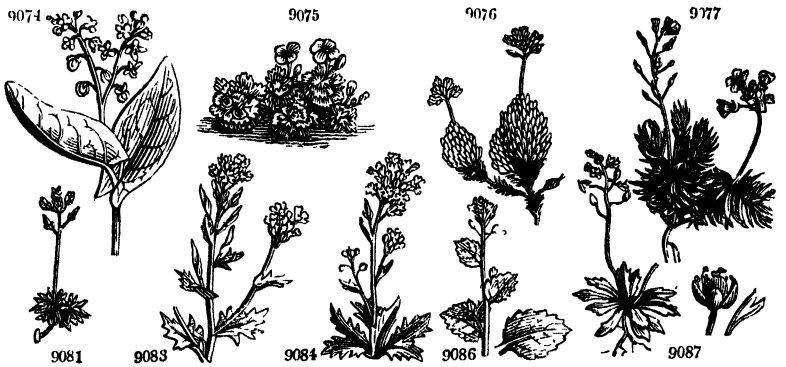
9073 Stems diffuse or ascending

9074 Cauline leaves sagittate stem-clasping, Pods flat smooth

9075 Leaves sessile 3-5-fid at end cuneate at base

9076 Scapes naked smooth, Leaves rigid linear lanceolate keeled ciliated, Stamens as long as petals
9077 Scapes naked smooth, Leaves long linear keeled ciliated, Stamens scarcely as long as calyx
9078 Scapes naked smooth, Leaves linear keeled rigid ciliated, Style as broad as hairy pod but twice as short
9079 Scapes naked downy, Leaves lanceolate flat hairy, Hairs branched, Pods oblong, Style very short
9080 Scapess downy with 2 toothletted leaves, Rad leaves obl nearly entire downy, Pods smooth
9081 Scapes naked or 1-leaved downy, Leaves lanc hairy nearly entire, Pods lanceol pubescent
9082 Scapes 1-leaved pubescent, Leaves ovate obl with a short starry down, Pedicels downy, Pods oblong
9083 Stem leafy branched velvety with starry down, Leaves ovate toothed, Pod obl smooth somewhat twisted
9084 Stem leafy branched velvety with starry down, Leaves obl somewhat toothed, Pods obl pubescent
9085 Stem branched leafy downy, Leaves ovate toothed downy, Pods ellipt obl many-seeded (32-36) velvety
9086 Stem branched leafy downy, Lvs ovate toothed subcord. stem-clasping somewhat hairy, Pods smooth few-[seeded (12-16)

9087 Pods elliptical shorter than stalk, Scapes 5-15-flowered



and Miscellaneous Particulars

1402 *Clypeola* From *clypeus*, a buckler, in allusion to the form of its silicle. A little annual plant, hoary, with stellate pubescence.

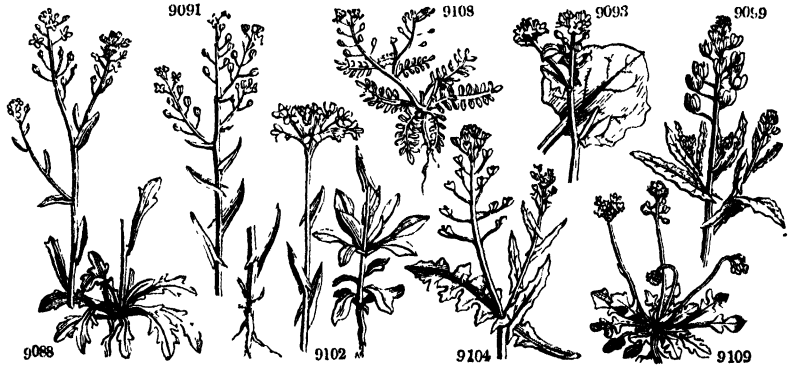
1403 *Peltaria.* A name with the same meaning and application as the last; πελτη signifies in Greek a small buckler

1404. *Petrocallis* From πετρος, a rock, and καλος, beautiful, in allusion to the rocky places where it grows, and which it enlivens with its elegant tufts of rose-colored flowers

1405 *Draba* From δραβη, acrid, biting, according to Linnæus Little annual or perennial plants, found, for the most part, in the cold mountainous countries of Europe, a few are also found in America Some of the species have siliques, others silicles

1406 *Erophila* A genus divided from Draba, on account of its bifid petals, and deriving its name from ηρ, the spring, and φιλεω, to love, in allusion to the time of the year when it appears

1407	**COCHLEA'RIA** *L.* Scurvy Grass.					*Cruciferæ.*	*Sp* 9—30								
9088	*saxátilis R. Br.*	rock	♃	△	un	½	jn jl	W		Austria	1775	D	s l	Jac aust 2. t 128
9089	*Armorácia L*	Horse-radish	♃	△	cul	3	my	W		England wat pl		D	s l	Eng bot 2223
9090	*macrocárpa W &K*	large-capsuled	♃	△	un	3	jl	W		Hungary	1806	D	s.l	Wal.&Kit t.184
9091	*glastifólia L.*	Woad-leaved	♃	◯	un	1½	my jl	W		Germany	1048.	S	co	Mo his 2 t 21 f.3
9092	*ánglica L.*	English		○	ec	½	my	W		Britain	sea sh	S	co	Eng. bot. 552
9093	*officinális L*	common		○	ec	½	ap my	W		Britain	sea sh	S	co	Eng. bot 55
9094	*gronlándica L*	Greenland	♃	△	ec	½	my jn	F		Scotland	sc al.	D	co	Eng bot 2403
9095	*dánica L*	Danish		○	ec	½	my jn	W		Britain	sea sh.	S	co	Eng bot 696
9096	*acáulis Desf*	stemless	♃	△	un	½	ja ap	W		Portugal	1824	D	co	Jacq ecl t. 132
1408	**THLASPI** *L*	Shepherd's Purse				*Cruciferæ*	*Sp* 7—17								
9097	*latifólium Bab*	broad-leaved	♃	△	un	1	mr ap	W		Crimea	1822	D	co		
9098	*ceratocárpon L*	Siberian		○	w	1½	jl	W		Siberia	1779	S	co	Scop ins 1 t 4
9099	*arvénse L*	Penny-Cress		○	w	½	jn jl	W		Britain	corn fi	S	co	Eng bot 1659
9100	*alliáceum L*	Garlic-scented		○	w	½	my jl	W		S Europe	1714	S	co	Jac ic 1 t 121
9101	*perfoliátum L*	perfoliate	♃	△	w	½	ap jl	W		England	sto pa	D	s l	Eng bot 2354
9102	*montánum L*	mountain	♃	◯	w	½	jl	W		Austria	..	S	s l	Jac aust 3 t 237
9103	*alpestre L*	alpine	♃	△	w	½	my jl	W		England	m pas	D	s l	Eng bot 81
1409	**CAPSELLA** *Moench* Shepherd's Purse					*Cruciferæ*	*Sp* 1								
9104	*búrsa pastóris Mon*	common		○	w	1½	f n	W		Britain	road si	S	co	Eng. bot 1485	
1410	**HUTCHINSIA** *R Br* Hutchinsia					*Cruciferæ*	*Sp.* 4—11								
9105	*rotundifólia R Br*	round-leaved	♃	△	pr	½	my jl	W	pu	Switzerl	1759	D	co	All ped.1 t 55 f 2	
9106	*stylósa Dec*	long-styled	♃	◯	pr	1m	my jl	W		S Europe	1824	D	co	Bot. mag 2772	
9107	*alpina R Br*	Alpine	♃	△	pr	½	ap jn	W		Germany	1775	D	co	Jac. aust 2 t 137	
9108	*petræ'a R Br*	rock		○	pr	½	mr my	W		England	rocks	S	co	Eng bot 111	
1411	**TEESDA'LIA** *R Br* Teesdalia					*Cruciferæ*	*Sp* 2								
9109	*nudicaulis R Br*	naked-stalked		○	pr	½	my jl	W		Britain	gra pa	S	co	Eng. bot 327	
9110	*reguláris Sm*	regular		○	pr	½	f my	W		S Europe	1824	S	co		
†1412	**IBE'RIS** *L*	Candy-Tuft				*Cruciferæ*	*Sp* 16—24								
9111	*semperflórens L*	broad-leaved	♃	⌴	ft	1½	jad	W		Sicily	1679	C	r m	Zanon hist t 165	
9112	*gibraltárica L*	Gibraltar	♃	⌴	or	1	my jn	W	pk	Spain	1732	C	co	Bot mag 124	
9113	*saxátilis L*	rock	♃		or	½	ap jn	W		S Europe	1739	C	co	Garid.prov t.101	
9114	*pubéscens W*	pubescent	♃		or	½	ap jn	Pa	V	.. ..	..	C	co		
9115	*sempervirens L*	narrow-leaved	♃		or	½	ap jn	W		Candia	1731	C	co	Riv. tetr 224. f 2	
9116	*amára L.*	bitter		○	or	1	jn jl	W		England	chal fi	S	co	Eng bot 52	
9117	*intermédia Dec*	intermediate	♃	◯	or	1	jn jl	W		France	1823	S	co	Bul ph n 82 t 21	
9118	*pinnáta L*	wing-leaved		○	ft	1	jn au	W		S Europe	1596	S	co	Lob ic 218	
9119	*odoráta L*	sweet-scented		○	ft	1	jl au	W		Geneva	1806	S	co	Clu his p 132 f 1	
9120	*umbellata L*	purple		○	or	1	jn jl	Pu		S Europe	1596	S	co	Bot mag 106	
9121	*linifólia L*	Flax-leaved	♃	◯	or	1½	jl au	Pu		S Europe	1759	C	p l	Garid pro t 105	
9122	*ciliáta All*	ciliate-leaved	♃	△	or	¾	jn jl	W		Caucasus	1802	C	co	Bot mag 1030	
9123	*taurica Dec*	Taurian	♃	◯	or	¾	jn jl	W		Caucasus	1823	S	co		
9124	*violácea R Br*	blunt-lvd -purp		○	or	½	jn jl	Pu		,	1782	S	co		
9125	*nána All*	dwarf		○	or	¼	jn jl	Pu		Dauphiny	1822	S	co	All auct t 2 f 1	
9126	*Tenoreána Dec*	Tenore s	♃	△	or	½	jn jl	Pa	pu	Naples	1823	D	co	Swt fl gar. 88	
1413	**BISCUTELLA** *L.* Buckler Mustard					*Cruciferæ*	*Sp* 14—25								
9127	*auriculata L*	ear-podded		○	un	1½	jn jl	Pa	Y	S Europe	1683	S	co	Lam ill t 560 f 2	
9128	*erigeritólia Dec*	Erigeron-leav'd		○	un	1½	jn jl	Pa	Y	S Europe	...	S	co		
9129	*hispida Dec*	hispid		○	un	1½	jn jl	Y		S Europe	1824	S	co	Barr ic t. 230	
9130	*lyráta L*	lyre-leaved		○	un	1½	jn jl	Y		Spain	1799	S	co		
9131	*raphanifólia Poir*	radish-leaved		○	un	1½	jn jl	Y		Sicily	1822	S	co		



History, Use, Propagation, &uture,

1407. *Cochlearia* From *cochlear*, a spoon The leaves are hollowed and concave like the bowl of a spoon. The annual species were formerly used as spring salads and antiscorbutics, but are now generally neglected.

C armoracia, the horse radish, is cultivated as a condiment to roast beef It is called upon the continent *Cran, Cran de Bretagne, Rafort, Rerredych*, &c &c Two excellent modes of cultivating it have lately been described in the Horticultural Transactions, by Knight, a nurseryman, and Judd, a gardener. Both agree in trenching the soil to a considerable depth, and putting the manure at the bottom of the trench, but Knight plants the sets on the surface, and calculates on the root that strikes down to the dung for produce Judd, on the other hand, makes holes quite to the bottom of his trenched soil, and in each drops a set, filling up the hole with wood ashes, rotten tan, or sand, calculating for produce on the shoot made from the set at the bottom of the hole, up through the sand or ashes to the surface Judd's mode is the most ingenious, and appears the best, but either will do extremely well A moist soil increases the bitter and alkaline flavor of this and all the Cruciferæ

Common scurvy-grass has powerful medical properties, as antiscorbutic and sialagogue, and stimulating the digestive organs For ample details respecting its qualities, consult *Wier Cochl Descr* lib 1, Basileæ. 1567. *Mœllenoroch Cochl Cur*, Lipsiæ. 1674 *Murr App Med* 2 p 420, &c

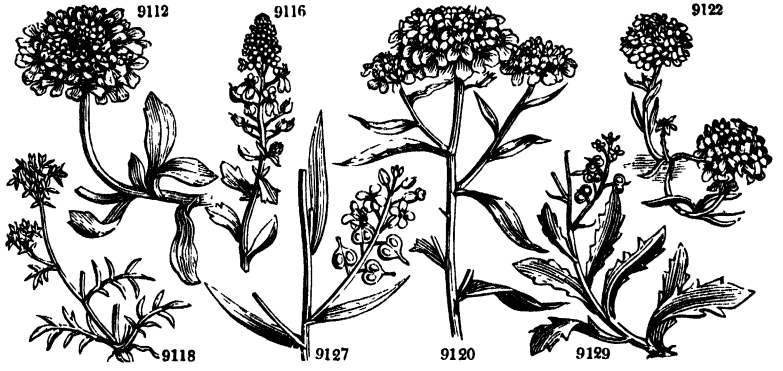
9088 Pods lentiform smooth, Rad leaves obl toothed hairy, cauline linear oblong
9089 Pods ellipsoid, Rad leaves obl crenate, cauline long lanceolate toothed or cut, Root large fleshy
9090 Pods ellipsoid, Rad. lvs obl crenate, cauline lanc toothed, Teeth cartilaginous, Root fleshy, Sepals erect
9091 Pods roundish, Cauline leaves cordate sagittate stem-clasping acuminate entire
9092 Pods ovate roundish with netted veins twice as short as stalk, Rad leaves stalked ovate entire, caul. obl.
9093 Pods ovate globose twice as short as stalk, Rad leaves stalked cordate, cauline ovate toothed angular
9094 Pods ovate the length of stalk, Rad leaves stalked reniform entire, cauline scarcely any
9095 Silicles ellipsoid the length of pedicel, Leaves all stalked subdeltoid
9096 Silicles roundish emarginate, Pedicels and petioles radical long, Leaves ovate rounded entire

9097 Radical leaves on long stalks cordate repand-toothed, cauline ovate cordate on short stalks
9098 Rad. lvs somewhat stalked obovate-obl, cauline oblong at the base hastate stem-clasp. with acute auricles
9099 Leaves oblong toothed, Stems erect, Silicles obovate orbicular shorter than pedicel
9100 Lvs. obl tooth blunt, lower stalked, upper sagit stem-clasp with acute auricles, Silicles subov ventricose
9101 Lvs. somew tooth rad stalk, caul cord stem-clasp Stem branch Pet length of cal Silicles obcordate
9102 Lvs somew fleshy ent. rad obov stalk, caul obl sagitt stem-clasp Pet larg than cal Silic obc 4-seeded
9103 Lvs. nearly entire rad. ovate stalked, caul obl stem-clasp Pet. as long as cal. Silic. obcord. 8-12-seeded

9104 Radical leaves pinnatifid, Silicles obcordate
[twice as short as silicle
9105 Lvs somew fleshy entire lower stalk obov, caul ovate obl somewhat stem-clasp Stam petals and style
9106 Lvs somew fleshy lower stalk obov obl entire, caul obl Stamens petals and style about length of silicle
9107 Lvs pinnated smooth, Pet twice as long as decid cal Silicles acute at each end, Style very short exserted
9108 Lvs. pinnated, smooth, Pet scarcely longer than calyx, Silicles blunt at each end 4-seeded, Stigmas sessile

9109 Petals unequal outer largest
9110 Petals equal

9111 Shrubby, Lvs cuneate or spatul blunt ent smooth, Flowers corymbose, Silicles truncate subemarg at end
9112 Shrubby, Leaves cuneiform obtuse somewhat toothed at end a little ciliated, Flowers corymbose
9113 Shrubby, Leaves linear entire somewhat fleshy rather acute smooth or ciliated, Flowers corymbose
9114 Shrubby, Leaves ciliated blunt linear spatulate, lower somewhat toothed at end, Flowers corymbose
9115 Shrubby, Lvs obl blunt narrowed at base smooth, Fls in long racemes, Silic emarg with a narrow recess
9116 Herbaceous, Lvs lanc acute somew toothed, Fls corym becoming racem Silic obcord narrowly emarg.
9117 Herbaceous, Lvs lanc blunt smooth entire or the rad somew toothed, Fls finally racem Silic ovate trun
9118 Herbaceous smooth, Leaves pinnatifid, Racemes corymbose but little elongated after flowering [style
9119 Herb smooth, Lv lin tooth ciliat at base dilat at end, Silic round Lobes of end acute spread short than
9120 Herbaceous smooth, Leaves lanc acuminate lower serrate, upper entire, Silicles umb acutely 2-lobed
9121 Herbaceous smooth, Leaves linear entire radical somewhat toothed, Silicles corymbose 2-toothed
9122 Herb smoothish, Lvs lin entire ciliated at base, Silic corymb emargin with blunt lobes as long as styles
9123 Herb smoothish, Leaves ciliat somew fleshy lower spatul 2-tooth at end, upp lin Silic corymb emarg
9124 Herb smoothish, Lvs stalked spat blunt toothed and ent ciliat Corymb somew umbel Cal hairy at back
9125 Herbaceous smooth, Lvs round spatul ent rather fleshy, Silic corymb emarg with a broad blunt recess
9126 Half-shrubby at base pub Lvs rather fleshy cren lower ob narr at base, upper obl lin Sil somew corymb
[emarginate
9127 Cal bluntly 2-spurred, Silicles smooth rough with elevated dots in centre, Lobes of end meeting over style
9128 Cal bluntly 2 spurred, Silicles smooth even, Lobes at the end somewhat meeting over the style
9129 Cal acutely 2-spur Silic smooth with elevat rough points on disk, not overhang style at end, Stem hispid
9130 Silicles hispid on each disk, Radical leaves lyrate
9131 Silicles smooth even, Radical leaves lyrate



and Miscellaneous Particulars.

1408 *Thlaspi* From θλάω, to compress The Thlaspi, says Pliny, bears seeds like the lentil, and compressed, whence its name. T arvense, when rubbed, has the smell of garlic

1409 *Capsella* A diminutive of *capsula* This, which is the common shepherd's-purse, has been separated from Thlaspi on account of its valves not being winged at back

1410 *Hutchinsia* Named after Miss Hutchins, to whom Sir James Smith was indebted for many communications of submarine algæ during the progress of his English Botany.

1411 *Teesdalia* Named after Mr Robert Teesdale, author of a Catalogue of the Plants growing about Castle Howard, in the North Riding of Yorkshire, published in the Transactions of the Linnean Society Small annual smooth herbs, with revolute leaves, and simple scapes of small white flowers

1412. *Iberis* From the country called *Iberia*, now Spain. Most of the species grow in such countries. They are generally pretty plants, and some of them are commonly cultivated in gardens as hardy annuals, under the name of Candy-tuft, a name which was originally applied to the I umbellata only, which was first discovered in Candia, and called Thlaspi Candiæ by Lobel and Dodonæus

1413 *Biscutella* From *bis scutella*, a double shield, in allusion to the form of its seed-vessel when bursting Small annual or perennial hispid plants, with small bright yellow flowers The species are nearly related to each other, and difficult to distinguish.

9132	**maritima** *Tenore*	sea-coast	○	un	1½	jn jl	Y	Naples	1824	S	co	Ten nap t. 61
9133	ciliáta *Dec*	ciliated	○	un	1	jn jl	Y	S France	1820	S	co	Dec. ic. gall t 99
9134	Colum'næ *Tenore*	Columna's	○	un	1	jn jl	Y	S Italy	1823	S	co	Col ecp t 284 f 1
9135	A'pula *L.*	spear-leaved	○	un	1	jn jl	Y	Italy	1710	S	co	Lam ill t 560 f 1
9136	lævigáta *L*	smooth-podded	△	un	1	jn jl	Y	Italy	1777	D	co	Jac aust 4 t 339
	β alpéstris W & K	*Hungarian*	△	un	1	jn jl	Y	Hungary	1816	D	co	Pl rar l u 3.t 228
9137	coronopifólia *All*	buck's-horn-lv	△	un	½	jn jl	Y	Italy	1790	D	co	Dec diss t 18
9138	ambígua *Dec*	doubtful	△	un	½	jn jl	Y	S. Italy	1820	D	co	Dec diss t 11 f 1
9139	saxátilis *Dec*	stone	△	un	¼	jn jl	Y	S Europe	1821	D	co	
9140	sempervirens *L*	downy-leaved	△	un	½	jn jl	Y	Spain	1784.	C	s l	Barr. ic t 841

1414. EUCLI'DIUM *R Br* Euclidium. *Cruciferæ* *Sp* 1—2

9141	syriacum *R Br*	Syrian	○	cu	⅝	jl au	W	Levant	1778	S	co	Jac aus 1 t. 6

1415. OCHTHO'DIUM. *Dec* Ochthodium. *Cruciferæ.* *Sp* 1

9142	ægyptiacum *Dec*	Egyptian	○	cu	⅝	au	Y	Egypt	1787	S	co	Jac.vind.2 t.145
	Bunias ægyptiaca L											

1416. ANASTA'TICA *L* Rose of Jericho *Cruciferæ* *Sp* 1

9143	Hierochun'tica *L*	common	△	cu	½	jn au	W	Levant	1597.	D	co	Jac vind. l. t. 58

1417. CAKI'LE. *Tourn.* Cakile *Cruciferæ* *Sp* 1—3

9144	maritima *Scop*	Sea Rocket	○	un	⅝	jn s	Pu	Britain	sea sh	S	s l	Eng bot 231

1418. RAPIS'TRUM *Desv* Rapistrum *Cruciferæ* *Sp* 3—5

9145	perénne *Dec*	perennial	£	△	un	1½ jl	Y	Germany	1789	D	s l	Jac aust 5. t 414
	Cakile perennis Lher											
9146	rugósum *All*	wrinkled		○	un	1½ jn jl	Y	S. Europe	1739	S	s l	All ped 1 t 78
	Cakile rugosa Lher											
9147	orientále *Dec*	oriental		○	un	1 jl	Y	Levant	1795	S	co	Flo Græca,t.612
	Myagrum orientale L.											

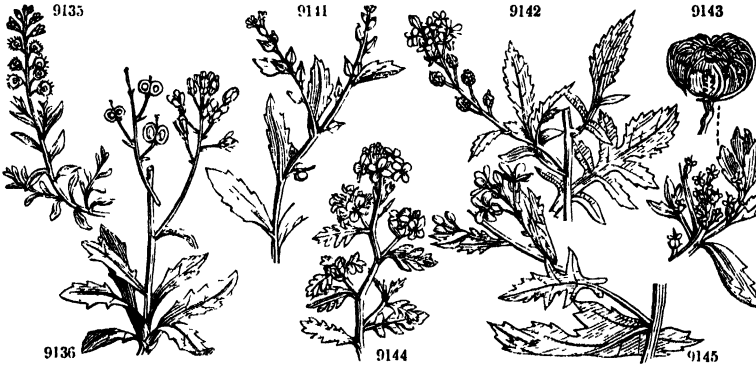
1419 CHORISPO'RA *Dec* Chorispora *Cruciferæ* *Sp* 2—4

9148	tenélla *Dec*	purple		○	un	½ jn jl	Pu	Siberia	1780	S	co	Pall. it 3. t. L. f 3
	γ arcuáta	*bowed*		○	un	½ jn jl	Pu	Siberia	...	S	co	
	Raphanus arcuatus W											
9149	sibírica *L.*	Siberian		○	un	½ jn jl	Y	Altai	1823.	S	co	Mur 1775. 48 11

1420 MALCO'MIA *R Br* Malcomia *Cruciferæ* *Sp* 9—15.

9150	africána *R Br*	African	○	or	⅝	jn jl	Pu	Africa	1747	S	s l	Bocc sic t 42. f 1
9151	taráxacifólia *Dec*	Dandelion-lvd	◑	or	⅝	jn	Pu	Siberia	1795	S	l p	
9152	láxa *Dec*	lax	○	or	2	jn	Pu	Siberia	1820	S	co	
9153	Chia *Dec*	dwarf branching	○	or	1	jn	Pu	Chio	1732	♀	s l	Dil el t 148 f 178
9154	maritima *R Br*	dwarf annual	○	or	⅝	my jn	V	S Europe	1713	S	s l	Bot mag 166
9155	arenária *Dec*	sand	○	or	¾	jn jl	V	Algiers	1804	S	s l	Dest atl 2 t 162
9156	parviflóra *Dec*	small-flowered	○	or	½	jn jl	V	S Europe	1823	S	co	Dec ic gall t 35
9157	lyráta *Dec*	lyrate	○	or	½	jn jl	Pu	Cyprus	1820	S	co	Flor Græc. t. 635
9158	littórea *R Br.*	small sea	○	or	1	jn n	W Y	S Europe	1683	S	s l	Lob ic t 331 f 1

*1421	HES'PERIS. *L.*	Rocket				*Cruciferæ*	*Sp* 6—20					
9159	tristis *L*	night-smelling	£	◑	or	1 ap jn	D Pu	Austria	1629	S	s l	Bot mag 730
9160	laciniáta *All*	jagged	£	◑	or	1½ my jn	Pu	S France	...	S	co	All ped t 82 f 1
9161	runcináta *W & K*	runcinate	£	◑	or	1½ jn jl	W pu	Hungary	1804	S	s l	Pl rar h 2 t 200
	β bituminósa Savi	*clammy*	£	◑	or	1½ jn jl	W pu	.....	1816	S	s l	
9162	matronális *L*	common	£	△	or	4 my au	Pu	Italy	1597.	D	p l	Lam ill. t 564 f 1
	β inodóra L	*scentless*	£	△	or	4 my jn	Pk	Britain	past	S	s l	Eng bot 731
9163	aprica *Poir*	exposed	£	△	or	½ my jn	Pu	Siberia	1822	S	co	
§9164	arabidiflóra *Dec*	naked-stalked	£	△	or	¼ mr my	Pu	Siberia	1798	D	s l	Amæ ac t 4 f 20
	Arabis grandiflóra L.											



History, Use, Propagation, Culture,

1414 *Euclidium.* From ω, well, and κλειδω, to shut up, because of the firmly closed seed vessel.

1415. *Ochthodium* So called from οχθωδης, warted, in allusion to the surface of the pods

1416. *Anastatica* Derived from αναστασις, resurrection This plant has been so called because it has the curious property of recovering its original form, however dry it may be, upon immersion in water The common people believe that if you put this in water at the time when a woman first experences the pains of childbirth, it will expand at the precise moment when the infant is brought into the world. Commonly called Rose of Jericho It grows in the arid wastes of Arabia and Palestine, where it is called *kaf maryam*, that is to say, Mary's hand

1417. *Cakile* An Arabic word employed by Serapio Smooth fleshy annual plants, with pinnatifid leaves, and white or purple flowers They all grow upon the sandy coasts of the northern hemisphere C maritima is said by Angullara to be a powerful cathartic

9132 Silicles even ciliated at edge, Radical leaves lyrate
9133 Silicles even ciliated at edge, Stem erect elongated leafy, Leaves sessile oblong remotely toothed [at base
9134 Sil rough on edge and disk with a very fine down, Rad. lvs obov cun acute tooth Stem somew nak hisp
9135 Silicles rough on the edge and disk with a very fine down, Leaves lanc serrate, Stem leafy branched hairy
9136 Silicles smooth even, Rad leaves rough with hair oblong narrowed into stalk . cauline linear few entire

9137 Silicles smooth even, Leaves rough with hairs, generally radical pinnatifid with 2-3 rem lobes on each side
9138 Sil. smth even, Lvs rough with hairs rad sin.-tooth nar at base, caul very few cord at base ½ stem-clasp
9139 Silicles smooth rough with elevated dots on the disk, Leaves hairy generally radical oblong
9140 Silicles smooth rough with elevated dots on disk, Lvs. mostly radical erect linear lanc. hoary nearly entire

9141 Silicles scabrous with a persistent subulate style, Cauline leaves stalked lanceolate

9142 The only species

9143 The only species

9144 Upper joint of the silicle ensiform

9145 Silicles smooth . upper joint ovate longer than style, Leaves pinnatifid, Lobes toothed cut acute

9146 Silicles downy upper joint round rugose shorter than style, Leaves blunt toothed, radical sublyrate

9147 Silicles furrowed smooth, Leaves oblong toothed sinuated

9148 Silique and leaves smooth upper lanceolate toothed, lower pinnatifid

9149 Siliques and leaves nearly smooth, Leaves all sinuate pinnatifid

9150 Stem branched diff Lvs lanc somew toothed, Down 2-4-parted, Pedi shorter than persist cal Silq rough
9151 Stem erect simple, Lvs obl cut tooth Down 3-parted, Pedi shorter than decid cal Silq smth about 4-cor
9152 Stem branched somew hairy at base, Lvs ov acute toothed angul and silq smooth, Pedi shorter than cal.
9153 Stem erect branch Lvs obov ent Down 2-parted app Pedi length of cal Silq round pub Style very short
9154 Stem erect branched, Lvs ellipt blunt ent narr at base, Down appr 2-4-parted, Pedicels shorter than cal
9155 Stem erect branched, Lvs lanc acute lower toothed sess Down stel Pedi very short, Pods torulose subul
9156 Stem erect branched, Lvs obl blunt nearly ent Down tom stel Pedicels finally as long as cal Pods pubesc.
9157 Stem erect branched, Lower lvs lyrate stalked blunt, Down app 2-part Pedicels length of cal Pods pubesc.
9158 Stem compound erect, Leaves lanceolate linear nearly entire hoary, Pedicels length of cal Pods hoary

9159 Pedicels very long spreading stiff as broad as silique which is thickened at each edge, Petals obl oblique
9160 Pedicels shorter than cal Petals obovate oblong, Leaves obovate cut-toothed, Stem hispid
9161 Pedic longer than cal Petals obov. somew pointed, Lvs downy lower lyrate runcinate, upper lanc acum.

9162 Pedicels length of cal Petals obov Silq erect torose smooth not thickened at edge, Lvs ovate lanc toothed

9163 Pedicels glandular hairy length of cal Petals obovate, Leaves oblong blunt and stem simple ciliate hispid
9164 Pedic scarcely so long as cal. Petals obovate, Leaves somewhat radical somewhat fleshy lanc Scape simple



and Miscellaneous Particulars.

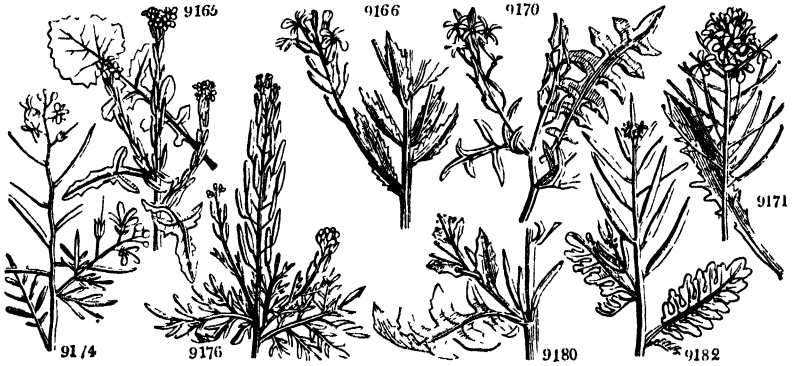
1418 *Rapistrum*, that is to say, resembling *Rapa* A genus very near Cakile, from which it differs in having yellow flowers, and leaves not fleshy, and more or less hairy

1419 *Chorispora* From χωρις, separately, and σπορα, seed, each seed being enclosed separately in the pod. This differs from Raphanus in having flat decumbent cotyledons, not folded incumbent ones Little annual plants

1420. *Malcomia* Named after Mr William Malcolm, an eminent nurseryman in the neighbourhood of London, and a person of some botanical acquirements M maritima is a common annual, which, sown at different times, or left to sow itself, will be in flower nearly all the year

1421 *Hesperis* From ἑσπερις, the evening. The flower is more fragrant towards evening than at other periods of the day H matronalis, in its double varieties, is rather difficult to keep, and requires to be yearly renewed by cuttings It prefers a strong loamy soil, and it has been remarked, that it neither thrives in the neighbourhood of London or Paris.

1422. SISYM'BRIUM *L*	Sisymbrium					*Cruciferæ*		*Sp* 20—58						
9165 officinále *Scop*	Hedge-Mustard		○	w	1½	my jl	Y	Britain	was gr	S	co	Eng bot 735
9166 strictissimum *L.*	spear-leaved	¥	△	un	3	jn au	Y	Switzerl.	1658	D	co	Jac aust.2 t.194
9167 júnceum *Bieb*	rushy	¥	◑	un	2	my jn	Y	Hungary	1820	S	co	Wal &Kit t 234
9168 hispánicum *Jacq.*	Spanish	¥	◑	un	1½	my jn	Y	Spain	...	S	co	Jac ic ra 1 t 124
9169 obtusan'gulum *W*	obtuse-angled		○	un	1½	my au	Y	Switzerl	1823	S	co	Mor. s 3 t 5 f 10
9170 sinapoides *R Br*	Pyrenean	¥	◑	un	1½	jn jl	Y	Pyrenees	1791	S	co	Jac vind 3 t. 97
9171 austriacum *Jacq*	Austrian		○	un	1½	jn au	Y	Austria	1799	S	co	Jac. aust 3 t.262
β Eckartsbergénse W	*Austrian*	¥	◑	un	1½	jn jl	Y	Austria	1799	S	co	
9172 I'rio *L*	London Rocket		○	w	1½	my au	Y	England	walls	S	co	Eng bot 1631
9173 Colum'næ *Jacq*	Columna's		○	un	2	jn jl	Y	Italy	1796	S	co	Jac aust 4 t 323
β altissimum L.	*tall*		○	un	2	au	Y	Siberia	1759	S	co	Walth hort t 22
γ orientále L.	*oriental*		○	un	2	jl au	Y	Levant	1739	S	co	
9174 pannónicum *Jacq*	Hungarian		○	un	2	jl au	Pa Y	Hungary	1787	S	co	Jac ic 1 t 123
9175 ásperum *L*	rough-podded		○	un	¾	my jn	Y	S France	1778	S	co	Bauh his 2858 3
9176 Sophia *L*	Flix-weed		○	un	1	jl	Y	Britain	was gr	S	co	Eng bot 963
9177 millefólium *H K.*	Milfoil-leaved	♃	▭	pr	1½	my s	Y	Canaries	1779	C	co	Jac ic 1 t 127
9178 tanacetifólium *L*	Tansy-leaved	¥	△	un	3	jn jl	Y	Italy	1731	D	co	Zanon hist t 72
9179 supinum *L*	dwarf		○	un	½	jn jl	W	S Europe	1778	S	co	Isn act par t.18
9180 polyceratium *L*	Dandelion-lvd		○	un	¾	jn jl	Y	S Europe	1633	S	co	Jac vind 1 t 79
9181 rígidum *Bieb*	stiff		○	un	¼	jn jl	W	Crimea	1824	S	co	
9182 bursifólium *L*	various-leaved		○	un	¾	jn jl	W	S Europe	1732	S	co	Dil el t 148 f 177
9183 pinnatifidum *Dec*	pinnatifid	¥	△	un	½	jn jl	W	S Europe	1820	D	co	All ped t 57 t 3
9184 integrifólium *L*	entire-leaved	¥	◑	un	½	jn	W pu	Siberia	1822	S	co	
1423 ALLIA'RIA *Adans*	Hedge Garlic					*Cruciferæ*		*Sp* 2				
9185 officinális *Andrz*	common	¥	△	w	3	my	W	Britain	hed	D	co	Eng. bot 796
Erysimum Alliaria L.												
9186 brachycárpa *Bieb*	short-fruited	¥	△	un	1	jl.au	W	Iberia	1824	D	co	
†1424 ERY'SIMUM *L*	Hedge-Mustard					*Cruciferæ*		*Sp* 15—41				
9187 sessiliflórum *R Br*	sessile-flowered	¥	△	un	2	jn jl	Y	Siberia	1794	D	co	L'He stir 1 t 44
9188 angustifólium *Ehr*	narrow-leaved		○	un	2	jl au	Y	Hungary	1800	S	co	Pl rar hung t 98
9189 cuspidátum *Dec*	cuspidate	¥	◑	un	2	my jn	Y	Hungary	1822	S	co	Bux cen t 33 f 1
9190 odorátum *R Br*	fragrant		○	un	1½	jl au	Y	Austria	1795	D	co	
9191 virgátum *Roth*	twiggy	¥	◑	un	1½	jl	Y	Portugal	1807	D	co	
9192 ibéricum *Dec.*	Armenian	¥	△	or	1	my	Y	Armenia	1803.	C	l p	Bot mag 835
Cheir armeniacus Sims												
9193 cheiranthoides *L*	treacle		○	un	1½	jl au	Y	Britain	fields	S	co	Eng bot 942
9194 repándum *L*	small-flowered		○	un	1	my jn	Y	Spain	1772	S	co	Jac aust 1 t 22
9195 helvéticum *Dec*	Swiss	¥	◑	un	1½	my jn	Y	Switzerl	1793	S	s p	Jac vind 3 t. 9
9196 diffúsum *Ehr*	Alpine	¥	△	un	1½	my jl	Y	S Europe	1731	D	co	Jac aust 1 t 75
9197 lanceolátum *R Br*	spear-leaved	¥	○	un	1	my jl	P Y	S Europe	1597	S	co	Jac aust 1 t 74
9198 dúbium *Dec*	doubtful	¥	○	un	1½	my jl	Y	... ..	1823	S	co	
9199 ásperum *Dec*	rough	¥	○	un	1½	my jn	Y	N Amer	1822	S	co	
9200 alpinum *Baumg*	Alpine	¥	△	un	1½	my jn	W	Germany	1793	D	s l	Vil dauph 3 t 36
Brassica alpina L.												
9201 orientále *R Br*	Hare's Ear		○	un	1	jn	W	England	cliffs.	S	co	Eng bot 1804
austriacum Baumg												
1425 CAMELI'NA *Crantz*	Gold of Pleasure					*Cruciferæ*		*Sp* 3—6				
9202 sativa *Crantz*	cultivated		○	ec	1	my jl	Y	Britain	corn fi	S	s l	Eng bot 1254
9203 dentáta *Pers*	tooth-leaved		○	un	1	my jl	Y	Europe	1806	S	s l	Bauh his 2 893
9204 austriaca *R Br*	Austrian		○	un	1	jn jl	Y	Austria	1795	S	s l	Jac aust 2 t 111
1426 NES'LIA *Desv*	Neslia					*Cruciferæ*		*Sp* 1				
9205 paniculáta *Desv*	panicled		○	un	1½	jl au	Y	Europe	1683	S	co	Gært se 2 t 141
Myagrum paniculatum L												
***1427 CORO'NOPUS** *Smith*	Wart Cress.					*Cruciferæ*		*Sp* 2				
9206 didyma *Sm*	lesser		○	w	¼	jl au	W	England	rubbish	S	co	Eng bot 248
§9207 Ruel'lii *All*	Star of the Earth		○	w	¼	jn au	W	Britain	ro si	S	co	Eng bot 1660



History, Use, Propagation, Culture,

1422 *Sisymbrium* Σισυμβριον was the name given by the Greeks to some aquatic plant not now recognized. It appears to have had an agreeable smell Ovid advises that Venus should be propitiated with garlands of myrtle, of roses, and of Sisymbrium S officinale is a celebrated medicinal plant, and esteemed diuretic, detersive, and expectorant, and prescribed in asthma and hoarseness, whence the French call it *Herbe aux chantres*

1423 *Alliaria* From *allium*, garlic, in allusion to the smell of the leaves of this plant, for the sake of which it was formerly used in salads

1424. *Erysimum* From ερυω, to cure, on account of the salutary effects of this plant in medicine It is even now reckoned a powerful cure for the sore throat The plant of the ancients appears to have been our garden cress, for Pliny says the Gauls called his Erysimum *velar*, and the garden cress is to this day called *velhar* in

9165 Leaves runcinate hairy, Stem hairy, Siliques subulate appressed to the rachis
9166 Leaves lanceolate stalked toothed pubescent
9167 Leaves smooth glaucous lower stalked runcinate pinnatifid, upper linear lanceolate entire
9168 Leaves lanc toothed sessile smooth, Stem branched divaricating, Siliques erect roundish smooth [base
9169 Leaves pinnated, Lobes oval oblong blunt sinuate-toothed with rounded recesses, Stem hispid backward at
9170 Stem and lvs smth rad runcin, caul pinnatifid, Lobes and recesses acute, Cal much spread Pods rough
9171 Stem pods and lvs smooth · rad runcin, cauline cut or pinnatifid, Lobes and recesses acute, Cal. spreading

9172 Stem and leaves smooth runcinate pinnate, Lobes toothed terminal elongated, Cal and pods spreading erect
9173 Stem villous somew hoary, Leaves runcinate pubes Lobes toothed or ent acute, Pods nearly erect, Cal lax

9174 Lower leaves runcin hispid with toothed lobes upper pinnated smooth with lin ent lobes, Pods spreading
9175 Lvs smth pinnat. with obl blunt somew tooth lobes, Pedic very sh Pods muric rough point with sh style
9176 Leaves bipinnate with oblong linear cut lobes, Pedicels 4 times as long as calyx, Petals smaller than calyx
9177 Leaves about 3-pinnate hoary with very small blunt lobes, Stem ½ shrubby, Petals larger than calyx
9178 Lvs pinnated, Segm lanc cut serrated outer confluent, Petals larger than calyx, Pods shorter than stalk
9179 Pedic axillary very short solitary, Pods erect downy, Leaves sinuate pinnatifid, Stem downy backwards
9180 Pedic about 3 axill very short, Pods erect smooth, Lvs sinuate runcin Lobes acute toothed lowest largest
9181 Pedic very short axill or naked, Pods and stems erect hispid, Leaves smoothish obl acutely runcin-pectin
9182 Leaves lyrate pinnatifid smooth, Stem erect leafy, Pedicels thick shorter than calyx
9183 Rad leaves lyrate cauline pinnat. Lobes linear ent term largest, Pedic slender almost shorter than calyx
9184 Leaves linear entire, Branches and pedicels glandular and hairy, Pods glandular

9185 Leaves cordate, Pods prismatical much longer than pedicel

9186 Leaves ovate roundish, Pods lanceolate the length of their stalk

9187 Pods length of style · when young covered by the persistent calyx, Fl sessile, Leaves linear entire
9188 Pods much longer than style when young having a persistent calyx, Fl subsessile, Leaves linear entire
9189 Pods thrice as long as style 2-edged naked, Fl on short stalks, Leaves oblong lanceolate sinuate toothed
9190 Leaves lanc toothed pubescent with a 3-parted down, Stem branched, Pods lax, Stigma 2-lobed [of pod
9191 Lvs obl lanc somew tooth pub with 3-part down, Stem straight round, Length of style great than breadth
9192 Lower leaves runcinate toothed · upper lanc undivided, Fl branches and pods comp. 4 cor erect spreading

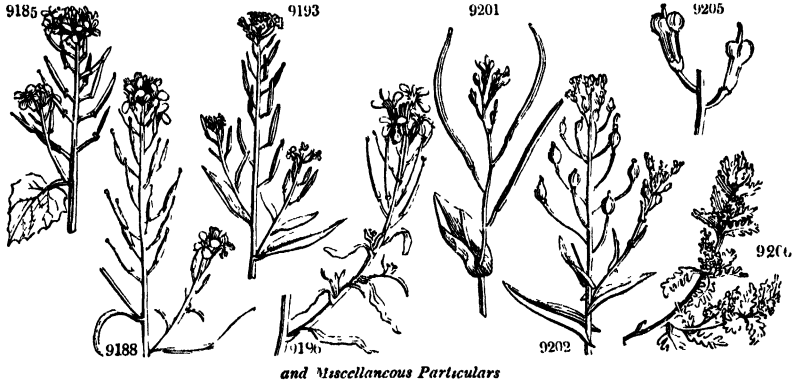
9193 Lvs lanc somew toothlet roughish green, Pods erect spread twice as long as stalk, Stigma small subsessile
9194 Leaves linear lanc repand-toothed, subpubes Pods spreading torulose scarcely thicker than short pedicel
9195 Lvs lin entire and stem cinereous with appressed 2-parted hair, Pods somew erect, Stigma stalked emarg
9196 Lvs lin ent or somew tooth somew hoary with 2-part hair, Claws long than cal Pods erect, Stig near sess
9197 Lower lvs lanc toothed upper somewhat linear entire, Petals roundish obovate, Claws longer than calyx
9198 Leaves lanceolate toothed narrowed at base, Petals obovate oblong, Pods spreading, Style scarcely any
9199 Leaves lin obl lower toothed runcin and stem pubesc rough, Pods spreading, Style very short and thick
9200 Leaves membranous smoothed cauline cordate sagittate stem-clasping oblong, radical stalked ovate

9201 Rad lvs obov cauline cordate stem-clasping, all blunt smooth glauc Sides of square stalk without nerves

9202 Pods cuneate pyriform with 4 ribs and a longish style, Leaves lanceolate nearly entire
9203 Pods roundish pyriform with 4 ribs and a longish style, Leaves repand toothed
9204 Pods globose, Leaves oblong serrate toothed bluntly stem-clasping at base, Stem smooth

9205 The only species

9206 Leaves pinnatifid, Lobes oblong toothed or cut, Pods compressed twin netted
9207 Lvs pinnatifid, Lobes ent toothed or pinnatifid, Pods somew acute compressed with crested rugose valves



and Miscellaneous Particulars

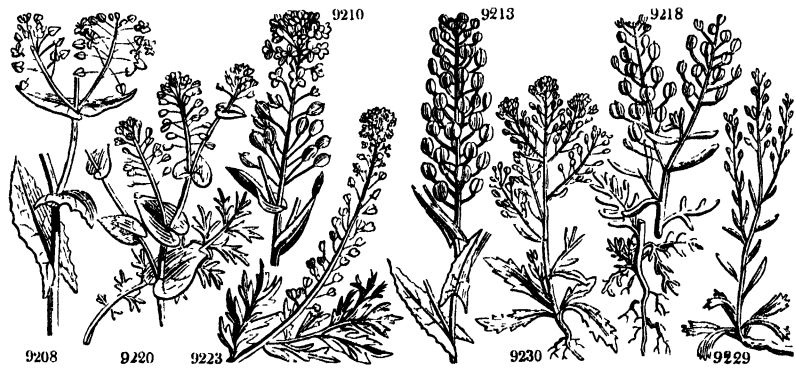
the Basque tongue, and in other dialects of France *beler* or *veler* From the seeds of E. perfoliatum, a plant not known in this country, oil for lamps is expressed in Japan

1425 *Camelina*; that is to say, *chamæ-linum*, dwarf flax C sativa is cultivated in many parts of Europe for the seeds, from which oil is obtained For the method of its culture see Parmentier, in Roz *Cours d'Agric*, *v* xi. *p* 291 Bosc *Dict d'Agr* 3 *p* 45 Gallız *Bot Ag*ı 3 *p* 170

1426 *Neslia* A name first employed by M Desvaux, but not explained by him A genus allied to Camelina, but well distinguished by its one-seeded indehiscent silicles

1427 *Coronopus* From κορωνη, a crow, and πους, a foot The leaves are deeply cut, and resemble the feet of a bird Coronopus Ruellii was formerly gathered and used as a salad, but has long since been deservedly neglected. C. niloticus is said, by Delile, to be used in Egypt for the same purpose.

1428. LEPI'DIUM *L*	**Pepperwort**					*Cruciferæ*	*Sp* 23—56.						
9208	**Drába** *L.*	Whitlow	☿	△	un	1	my jn	W	Europe	1596	D	co	Jac. aust. 4.t.315
9209	**chalepénse** *L*	Aleppo		○	un	1	my jl	W	Aleppo	1798	S	co	
9210	**glastifólium** *Desf*	woad-leaved		○	un	1½	my jl	W	Barbary	1823	S	co	Desf atl t. 147
9211	**coronopifólium** *Fisch*	Buckshorn-lv	☿	△	un	¾	my jl	W	Siberia	1824	D	co	
9212	**sativum** *L*	common Cress		○	cul	1½	jn jl	W	.....	1548	S	co	Zorn ic 16
9213	**campéstre** *R Br*	hoary field		○	un	¾	jn jl	W	Britain fields		S	co	Eng. bot. 1385
9214	**hirtum** *Smith*	hairy	☿	◯	w	1	jn jl	W	Britain fields		S	co	Eng bot 1803
9215	**spinósum** *L*	prickly		○	un	1	s	W	Levant	1787	S	co	
9216	**virginicum** *L*	Virginian		○	un	1	jn jl	W	America	1713	S	co	Sch han 2 t 180
9217	**subulátum** *L.*	awl-leaved	♃	⎽	un	¾	jl au	W	Spain	1739	S	pl	D Asso ar t 6 f 3
9218	**ruderále** *L*	narrow-leaved		○	un	1	jn jl	W	Britain	sea co	S	co	Eng bot 1595
9219	**vesicárium** *L*	bladdery		○	un	1½	ap au	W	Crimea	1820	S	co	Bux cent 1 t 26
9220	**perfoliátum** *L*	various-leaved		○	un	¾	jl	W	Austria	1640	S	co	Jac aust 4 t 346
9221	**Cardámines** *L*	Spanish Cress	☿	◯	un	½	jn jl	W	Spain	1789	C	co	Ardum sp 1 t 18
9222	**divaric. tum** *H K*	close-spiked	♃	⎽	un	1½	my au	W	C G H	1774	C	pl	
9223	**bonariénse** *L*	Buenos Ayres		○	un	2½	my jn	W	S Amer	1732	S	co	Dil el t 286 f 370
9224	**piscidium** *Forst*	Fish-poison		○	ec	1	s	W	Society Isl	1779	S	co	
9225	**oleráceum** *Forst*	eatable		○	cul	3	s	W	N Zeal	1824	S	co	
9226	**lyrátum** *L*	lyrate		○	un	2½	jn jl	W	Levant		S	co	
9227	**latifólium** *L*	broad-leaved	☿	△	un	2	jn jl	W	Britain	sea co	D	co	Eng bot 182
9228	**crassifólium** *W & K*	thick-leaved	☿	△	un	¾	my jn	W	Hungary	1820	D	co	W et kit 1 t 4
9229	**gramminifólium** *Cav.*	bushy	☿	△	un	2	au s	W	Europe	1683	D	co	Cav ic 151 f 2
9230	**Iberis** *I*	diandrous		○	un	1½	jl au	W	Germany	1793	S	co	Lob ic 223
1429 ÆTHIONE'MA	*R Br*	**Æthionema**				*Cruciferæ*	*Sp* 3—6						
9231	**saxátile** *R Br*	rock		○	cu	½	jn jl	F	S Europe	1759	S	co	Jac.aust 3 t 236
9232	**Buxbaúmii** *Dec*	Buxbaum's		○	cu	½	jn jl	Pa pu	Levant	1823	S	co	Bu cen 1 t 5 f 1
9233	**monospérmum** *R Br*	one-seeded	☿	◯	cu	½	jl au	Pa pu	Spain	1778	S	co	
1430 ISA'TIS *L*	**Woad**					*Cruciferæ*	*Sp* 9—17						
9234	**arménа** *L*	Armenian		○	or	1½	jl au	Y	Levant	1825	S	co	Desv 3 t 25 f 6
9235	**lusitánica** *Brot*	Portugal		○	or	1	my	Y	Portugal	1822	S	co	
9236	**alpina** *All*	Alpine	☿	△	or	¾	jn jl	Y	Italy	1800	D	sl	All ped t 86 f 2
9237	**præcox** *Kit*	early	☿	◯	or	1½	my jn	Y	Hungary	1822	S	co	
9238	**littorális** *Stev*	sea side	☿	△	or	1½	my jn	Y	Tauria	1823	D	co	
9239	**tinctória** *L*	common dyer's	☿	◯	ag	4	my jl	Y	England corn fi		S	sl	Eng bot 97
9240	**campéstris** *Stev*	field	☿	△	or	1½	my jn	Y	Persia	1824	D	co	
9241	**canéscens** *D C*	hoary	☿	◯	or	1	my jn	Y	S Europe	1822	S	co	Buxb cent 1 t 5
	β ibérica Stev	*Iberian*	☿	◯	or	1	my jn	Y	Iberia	1823	S	co	
9242	**aléppica** *Scop*	oriental		○	or	1	jn jl	Y	Levant	1739	S	sl	Scop ins 2 t 16
1431 MYA'GRUM *I*	**Myagrum**					*Cruciferæ*	*Sp* 1						
9243	**perfoliátum** *L*	perfoliate		○	pr	½	jn jl	Pa Y	France	1648	S	co	Sch han 2 t 178
1432 BRAS'SICA *L*	**Cabbage**					*Cruciferæ*	*Sp* 12—34						
9244	**oleácea** *L*	common	☿	◯	cu	2	ap jn	Y	England	cliffs	S	rm	Eng bot 637



History, Use, Propagation, Culture,

1428 *Lepidium* From λεπις, a scale The form of the silicles is that of little scales L piscidium is used by the natives of the Society Islands for the purpose of catching fish by inebriating them It was used by the English voyagers as a salad, but it was very pungent L. oleraceum is a powerful antiscorbutic, and is found of great service to the crews of ships visiting New Zealand, it resembles lettuce in taste, and acts as a moderate aperient L sativum, the common garden cress, is a salad-plant known to every one, and which even the cook can cultivate on moistened cloth or wool in a moist heat Watering with water, impregnated with muriatic acid gas, or electrifying, will facilitate the germination and developement of the seeds

1429 *Æthionema* So named by Mr R Brown, apparently in allusion to some tawny or sunburnt tinge in the stamens From αιθω, to scorch, and νημα, a stamen *Smith*

1430 *Isatis* From ισαζω, to render equal The plant was believed to destroy, by its simple application, all roughness and inequalities of the skin It was formerly called *glastum*, from the Celtic *glas*, blue, whence *Glastonbury* derived its name The ancient Britons colored themselves with the blue preparation obtained from this plant, whence they received their appellation, *Britho* being the Celtic word for to paint The Picts were so named by the Romans for the same reason On account of the brightness of its manufactured colors the Celts called it *gwed* (*guesde*, French, at this day), whence the Anglo-Saxons obtained their name of *waad* or *wad*, and the English the word *woad* I tinctoria is in occasional cultivation for its leaves, from which a dye, as a substitute for indigo, is obtained The seeds are sown on well prepared land in good heart; fresh broken old pasture land is preferred, and the great object is to have large leaves, for which purpose, as Miller observes, the culture given by the best gardeners to spinage should be imitated, that of sowing on a very rich well pulverised soil, thinning the plants so as they may not touch each other, keeping them perfectly clear of weeds, and frequently stirring the soil between the plants The culture applied to the turnip in Northumberland would succeed well with woad The seeds are sown in July, and the plants, when they come up, weeded and thinned, next July, or earlier, the first crop of leaves may be gathered, and two or three others will be ob-

9208 Pods cordate somewhat turgid entire at the end exceeded by the style, Leaves stem-clasping lanc toothed
9209 Pods elliptical twice as long as stalk, Style filiform, Leaves with acute stem-clasping lanceolate auricles
9210 Pods ellipt smooth shorter than stalk, Style filif Leaves with blunt stem-clasping obl bluntly toothed auric
9211 Pods ellipt ent somew. downy pointed with style, Cal somew persistent, Rad lvs pinnat. : caul. lin. ent.
9212 Pods orbicular winged, Leaves variously divided and cut, Branches not spiny
9213 Pods ovate winged emarginate scaly, Cauline leaves sagittate toothed
9214 Pods ovate winged emarginate hairy, Cauline leaves sagittate villous nearly entire
9215 Pods oblong winged emarginate about 2-horned smooth, Radical leaves pinnatifid with cut lobes
9216 Pods orbic emarg shorter than stalk, Flowers with 2-4-stamens, Caul. lvs lin. lanceol cut-serrate smooth
9217 Pods ovate somewhat emarginate, Leaves subulate entire, Stem ♃ shrubby
9218 Pods ovate emarg spreading shorter than stalk, Leaves smooth radical pinnatifid, Fls diandrous apetal.
9219 Pods elliptical slightly emarginate, Leaves pinnatifid, Lobes linear, Joints of stem inflated
9220 Pods ellipt slightly emarg Lower lvs stalked pinnatifid with multifid lobes upper cord. amplexicaul entire
9221 Pods oval somewhat emarginate, Leaves pinnatifid with oval entire lobes terminal large roundish
9222 Pods oval somew emarg approximat Lower leaves pinnati with spread acute lobes, Stem much branched
9223 Pods orbicular emarginate, Flowers diandrous, Leaves all pinnately multifid minutely ciliated
9224 Pods oblong obovate emarginate, Stigma exserted, Leaves oval-oblong toothed outwardly or entire
9225 Pods ovate acutish, Leaves smooth ellipt-oblong deeply serrated upper entire somewhat serrated at end
9226 Pods ovate pointed with stigma, Lower lvs stalked lyrate pinnatifid, Lobes cut toothed · term very large
9227 Pods ovate pointed with the stigma, Leaves ovate lanceolate undivided subserrate, lowest on long stalks
9228 Pods ovate pointed with stigma, Leaves smooth somew fleshy entire, Rad stalked ovate caul sess sagitt
9229 Pods elliptical pointed with stigma, Stems ♃ shrubby, Radical lvs obov obl toothed cauline linear entire
9230 Pods ovate pointed with stigma, Rad leaves cut or pinnatifid cauline linear entire, Stem much branched

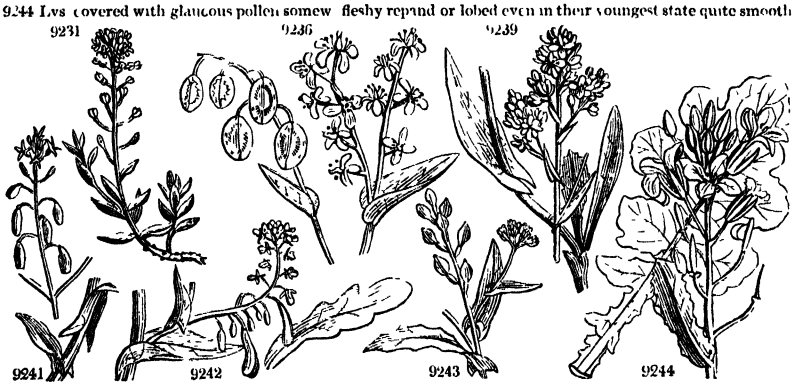
9231 Silicles 2-celled many-seeded obcordate, Valves winged at back and entire, Racemes in fruit lax
9232 Silicles 2-celled 2-seeded round emarg at base and end, Racemes very close, Valves winged at back and ent.
9233 Silicles 1-celled 1-seeded not opening emarginate at end, Leaves oval or obovate

9234 Silicles round cordate at base with a wide margin pointed with the style
9235 Silicles obov with a broad edge cuneate at base very blunt and emarginate at end, Stem and leaves smooth
9236 Silicles oval-oblong blunt at each end with a leafy winged margin 3 times as long as broad
9237 Silicles elliptical blunt at each end with a coriaceous winged edge three times as long as broad
9238 Silicles obl cuneate very blunt truncate emarginate narrowed at base, three times as long as broad
9239 Silicles cuneate accuminate at base somewhat spatulate at end very blunt three times as long as broad
9240 Silicles oblong narrowed at base bluntish at end four times as long as broad [at end
9241 Silicles elongate-cuneate downy four times as long as broad and twice as long as the stalk which is obconical

9242 Silicles lin blunt villi with reversed down eight times as long as broad and three times as long as their stalk

9243 The only species

9244 Lvs covered with glaucous pollen somew fleshy repand or lobed even in their youngest state quite smooth



and Miscellaneous Particulars

tained during the season The end of the second year the plants may be ploughed down, as the third year they will run to seed, and yield but small leaves The leaves are pressed, and the juice treated as in making indigo (see *Indigofera*), but such is the cheapness of the latter article, that no British farmer can affbrd to raise any sort of substitute

1431 *Myagrum* An ancient plant, so named from its properties of catching flies, which the modern plant does not possess, μυια, a fly, αγρα, capture

1432 *Brassica* The etymology of this word has been explained with great learning and ingenuity by Vossius, Ray, Dalechamp, and others It comes, however, from the Celtic *bres*, which signifies a cabbage This genus affords the well known pot herbs and roots, and also the oil plant rape, extensively cultivated in agriculture There is scarcely an instance in the vegetable kingdom of a plant that produces varieties so different in appearance and qualities as the B oleracea, comparing the original plant as it is found on our shores, with wavy sea-green leaves, no appearance of a head, and flowering like wild mustard or charlock, with the red cabbage or cauliflower, the difference is astonishing A new arrangement of the cultivated species of Brassica has been made by Professor Decandolle (*Hort Trans* vol 1, and in his *Reg Veg*), whose varieties, or races of B oleracea, are stated above

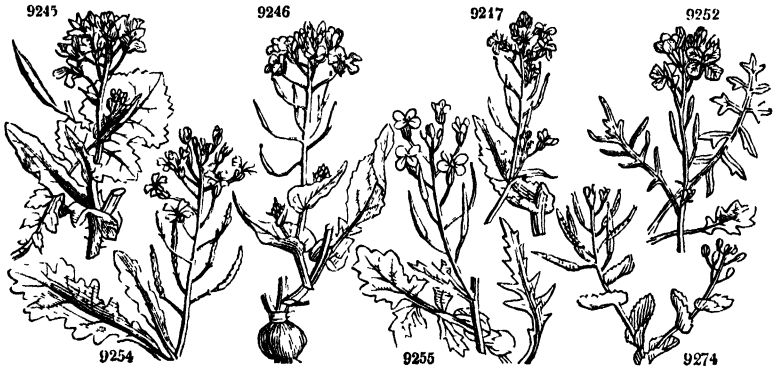
The *colza* of the Dutch he makes a distinct species (B campestris), and also the turnip (B rapa), the rape (B napus), and the summer rape of the Germans (B præcox)

In Hungary, in the territory of Alba, the B elongata is cultivated for its oil, for which purpose it is said to be better adapted than any other species

The culture of all the Brassica tribe is so universally known that it would be a waste of space in a work of this sort to enlarge on it They all prefer a loamy soil, well enriched with manure, and manures of the strongest kind, as nightsoil, offals from the shambles, blood, &c are not found too powerful for common cabbage or cauliflower. The turnip prefers a lighter soil than the cabbage tribe, but it must be well manured, and if the

Garden Varieties.

β acephala Dec. Cavalier Cabbage Thousand-headed Cabbage Chou moellier	Borecole Chou de Milan Chou Palmier, &c &c					*γ costata* Dec. Chou à grosses côtes Cove tronchuda					*δ bullata* Dec. Savoy Cabbage Brussels Sprouts, &c. &c		
9245 campéstris *L*	field	○	ag	2	jn	Y	England fields		S	s.l	Eng. bot. 2234		
β rutabága Dec.	*Swedish Turnip*	○	ag	1½	jn	Y	Sweden ...		S	co			
9246 Rápa *L*	Turnip	◑	cul	2	ap	Y	England corn fi		S	r.m	Eng bot 2176		
9247 Nápus *L*	Rape	◑	ag	2	my	Y	Britain dit. ba		S	co	Eng. bot. 2146		
9248 præ'cox *W & K.*	Kohl-reps	○	ag	2	my	Y	Europe	1812	S	co			
9249 chinénsis *L*	Chinese	○	cul	4	jl	Y	China	1770	S	s l			
9250 repánda *Dec*	repand	△	un	¾	jn au	Y	S. Europe ...		D	co	Vil dauph 3 39		
9251 Richérn *Vill*	Richer's	△	un	1	jl	Y	S Europe ...		D	co	Vil dauph 3 t 36		
9252 monénsis *Huds.*	Isle of Man	○	un	½	jn au	Y	Britain sea sh		S	s l	Eng bot 902		
9253 erucástrum *L*	runcinate-leav'd	○	un	1	jn au	Y	S Europe	1790	S	s l	Bull herb 331		
9254 elongáta *Ehr*	stalk-leaved	◑	un	3	my jn	Y	Hungary	1801	S	s l	Pl rar hu 1 t 28		
9255 cheiranthifólra *Dec* *Raphanus cheir* W.	stock-leaved	◑	un	1	jn au	Y	Spain	1806	S	co	W hort ber t 19		
1433 SINA'PIS *L*	Mustard					*Cruciferæ*	*Sp* 18—51.						
9256 nigra *L*	common	○	ag	4	my jn	Y	Britain corn fi		S	r m	Eng bot 969		
β túrgida Pers	*turgid*	○	ag	4	my jn	Y	Britain corn fi		S	r m			
9257 lævigáta *I*	smooth	◑	un	2	jn jl	Y	Spain	1769	S	co			
9258 integrifólia *W*	entire-leaved	○	un	1¼	jl.au	Y	E Indies	1804	S	co	Wil hor ber t 14		
9259 júncea *L*	fine-leaved	○	un	1½	jn jl	Y	China	1710	S	co	Jac vind 2 t 171		
9260 chinénsis *L*	Chinese	○	cul	1½	jl	Y	China	1782	S	co	Ard spec 1 t 10		
9261 brassicáta *L.*	cabbage-leaved	○	un	1½	jn jl	Y	China	1801	S	co			
9262 pubéscens *L.*	downy	△	un	2	jn jl	Y	Sicily	1789	D	r m	Ardu spec 1 t 9		
9263 arvénsis *L*	Charlock	○	w	1½	my jl	Y	Britain corn fi		S	s l	Eng bot 1748		
9264 orientális *L*	oriental	○	un	1¼	jn jl	Y	Levant	1778	S	s l	Sch han 1 t 186		
9265 Káber *Dec*	Persian	○	un	1	jn jl	Y	Persia	-	S	co			
9266 Allióni *Jacq*	Allioni's	○	un	2	jn jl	Y	.....	1789	S	co	Jac vind 2 t 168		
9267 incána *L*	hoary-jointed	◑	un	3	jl	Y	S Europe	1771	S	co	Jac vind 2 t 169		
9268 heterophýlla *Lag.*	various-leaved	○	un	1½	my jn	Y	Spain	1822	S	co			
9269 álba *L*	white	○	ag	3	jn jl	Y	Britain corn fi		S	r m	Eng bot 1677		
9270 hispida *W*	hispid	○	un	2	jl	Y	Morocco	1804	S	r m	Scho Maroc t 4		
9271 dissécta *Lag*	cut	○	un	1	mr ap	Y	Spain	...	S	co			
9272 folíosa *W*	leafy	○	un	1	ap my	Y	Levant	1820	S	co			
9273 frutéscens *H K*	shrubby	⊔	cu	1½	jn d	Y	Madeira	1777	C	s l			
1434 MORICAN'DIA *Dec*	Moricandia					*Crucifiræ*	*Sp* 1—3						
9274 arvénsis *Dec* *Brássica arvénsis L*	cabbage-flower	△	w	1½	jn	V	S Europe	1739		co	Boc sic t 25 f 3,4		
1435 DIPLOTAX'IS *Dec*	Diplotaxis					*Cruciferæ*	*Sp* 9—13						
9275 pendula *Dec*	pendulous	○	un	1½	f mr	Y	Barbary	1823.	S	co	Desf atl t 156		
9276 hispida *Dec*	hispid	○	un	¾	ap my	Y	Egypt	...		co	Deles 89		
9277 erucoides *Dec* *Sinápis erucoides* L.	dwarf	○	un	1	jn jl	W pu	S Europe	1736		r m	Jac vind 2 t.170		



History, Use, Propagation, Culture,

manure be well fermented, so much the better for the garden turnip, in the fields, where it is buried in rows or drills, more littery dung will succeed

The field culture of the turnip is become an important part of the agriculture of light soils, the best mode is by drills, as in Berwickshire and Northumberland, where are produced crops of treble the weight of those grown in the broad-cast manner in Norfolk In the latter county a crop weighs from five to fifteen tons per acre, in Northumberland from twenty-five to thirty tons, and in Ayrshire as many as sixty tons have been raised on the statute acre (*Encyc of Agric*)

The cabbage has been tried as a field plant, but, though it has been said by Sinclair (*Hortus Gram Wob*) to produce more nutritive matter than either turnips or field beet, professional farmers have not found it to answer

Of all the Brassica tribe it may be observed, that they attain to much the greatest perfection in temperate climates, such as those of Britain and Holland Without constant and liberal supplies of water, they are small in size, and rigid or stringy in texture In France and in Italy, and warm climates, it is only the cauliflower and broccoli that attain a large size, and that, in Italy at least, is during the coldest months of the year, and aided by liberal waterings But in Tarragona the cauliflower is said to reach the enormous weight of 40 lbs

1433 *Sinapis* In Greek σινάπι, said to be derived from *nap*, the Celtic designation of all plants resembling the turnip or cabbage. Our English word *mustard*, and the French *moutarde*, are modernizations of *mustum ardens*, hot must, the sweet must of new wine being one of the ingredients of the French mustard for the table The seeds of all the species are hot, acrid, and will afford an oil by expression, and a powder or meal by drying and grinding, which might serve as the condiment mustard S nigra is more particularly adapted for the latter purpose, though it is often mixed with the seeds of S alba and arvensis, and often with those of the

Garden Varieties

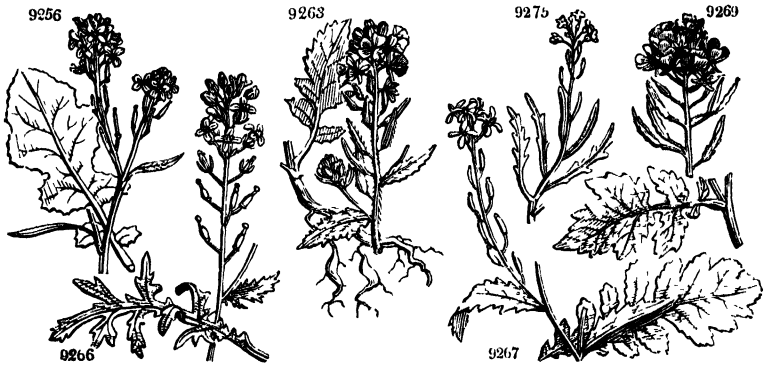
ε *capitata* Dec	Sugar-loaf Cabbage	ζ *caulo-rapa* Dec	η *botrytis* Dec
Battersea Cabbage	Penton Cabbage	Chou-rave, or	Cauliflower
Early York Cabbage	Red Cabbage, &c. &c	Kohl Rabi	Brocoli, &c &c.
Early Dwarf Cabbage		Chou-rave crêpue, &c &c	

9245 Lvs. fleshy with glaucous bloom · the lower when young somew. hispid or ciliat. lyrate toothed ; the others [cordate amplexicaul acum.
9246 Rad leaves lyrate without glauc bloom rough, cauline cut : upper entire
9247 Lvs. smooth cæsious radical lyrate, cauline pinnatifid and cren cord , upper lanc stem-clasping
9248 Lvs. smooth cæsious radic and lower cauline lyrate, upper cord lanc stem-clasping cren Pods erect
9249 Lvs oval nearly entire floral amplexicaul lanc Cal longer than the claw of the petals
9250 Radic leaves fleshy smooth repand toothed, Scapes naked, Style slender distinct from silique
9251 Leaves smooth , lower stalked obl somewhat toothed , upper linear lanc few
9252 Leaves smooth somewhat fleshy glauc pinnated with linear distant somewhat toothed lobes
9253 Leaves runcinate somewhat smooth, Lobes unequal bluntly sinuated, Stem hispid at base
9254 Leaves stalked lower sinuate pinnatifid hispid, upper smooth toothed, Stem smooth
9255 Rad leaves stalked lyrate pinnatifid somewhat hispid cauline few with entire acute lobes

9256 Pods smooth about 4-cornered pressed to the peduncles, Lower lvs lyrate upper lanc entire
β Pods turgid veiny diverging with a conical striated beak
9257 Smooth, Lvs stalked lyrate pinnatifid with acute lobes, Petiole not auricled at base
9258 Smooth, Lvs ovate lanc undivided acutely toothed, Pods erect torose with a subulate style
9259 Smooth, Lower leaves ovate lanc coarsely serrated · upper lanc entire, Branches fascicled
9260 At the base and nerves hairy, Lvs blunt cut pinnatifid, Lobes toothed, Pods erect pointed with the style
9261 Smooth, Caul lvs. cord amplexicaul obl entire lower lyrate pinnatifid toothed, Pods spreading with a
9262 Lvs pubesc villous lyrate pinnatifid, Terminal lobe large ovate, Pod hairy [conical beak
9263 Pods smooth with many angles torulose three times as long as their slender two-edged beak, Stem and lvs
9264 Pods hairy backwards about 4-cornered torulose shorter than the slender beak [hairy
9265 Pods smooth round with smooth valves twice as long as the conical beak
9266 Pods smooth ovate-oblong, Valves smooth scarcely longer than conical beak
9267 Pods smooth appressed to the raceme somew torose, Stem branch rough at base, Lvs lyrate rough
9268 Pods downy appressed to raceme somew torose, Stem bran rough at base, Lvs lyrate pinn hispid on nerves
9269 Pods hispid spreading a little narrower than the ensiform beak, Lvs lyrate and stem nearly smooth
9270 Pods hispid spreading a little narrower than the ensiform beak, Lvs lyrate rough, Stem hispid backwards
9271 Pods suberect torulose shorter than the ensiform beak, Lvs pinnat Lobes narr cut-toothed or pinnatifid
9272 Beak compressed very rough longer than the hispid pod, Lvs lyrate repand angular smooth
9273 Calyx bisaccate, Lvs coriaceous lower oblong lanc. narrowed at base somewhat toothed

9274 Pods about 4 cornered, Cauline leaves cordate amplexicaul entire

9275 Pods pendulous stalked Cauline leaves oblong hispid coarsely cut-toothed
9276 Pods pendulous sessile, Leaves obovate coarsely toothed hispid
9277 Pods sessile nearly erect, Style ensiform, Leaves sessile runcinate lyrate toothed



and Miscellaneous Particulars

Brassica and Raphanus genera Both S alba and nigra are grown as small salads to be eaten with cress, they are sown as thick as the seeds will lie, in pots or boxes, or in the area of forcing-houses, in the winter season, and forced, or in beds in the open air, and cut as soon as the seed leaf is fully expanded For flower of mustard, or for the seed for oil or medical purposes, both white and black sorts are sown in the fields in rich well pulverized soil, in March or April, and kept free of weeds The crop ripens in July and August, and is either threshed immediately or stacked like other grain It is like other oleiferous seeds, exhausting for the soil, and such seeds as drop and are buried, will retain their vegetative qualities for an unknown length of time, so that where mustard has once been grown, it will come up occasionally for a century or more afterwards

It the seeds, Dr Cullen observes, be taken fresh from the plant and ground, the powder has little pungency, but is very bitter, by steeping in vinegar, however, the essential oil is cooled, and the powder becomes extremely pungent In moistening mustard-powder for the table, it may be remarked, that it makes the best appearance when rich milk is used, but the mixture in this case does not keep good for more than two days The seeds of both the black and white mustard are often used in an entire state medicinally Half or a quarter of a wine glass of mustard seeds, swallowed fasting, about five in the morning, is the most powerful tonic and strengthener of the digestive organs which is known

1434 *Moricandia* Named by Decandolle, after his friend Stephen Moricand, author of the Flora Veneta, and an excellent Italian botanist M hesperidiflora is a favourite food of the camel, notwithstanding its intense acridity

1435 *Diplotaxis.* From διπλοος, double, and ταξις, arrangement, on account of the double rows of seeds in each cell.

9278	cathólica *Dec.*	Spanish		○	un	1	ap my	Y	Spain	1822.	S	co	
9279	tenuifólia *Dec*	fine-leaved	♆	△	un	1½	jl o	Y	England	walls	D	s l	Eng bot 525
	Sisym'brium tenuifólium L												
9280	murália *Dec*	sand		○	un	1½	jl s	Y	England	san pl	S	co	Eng bot. 1090
	Sisym'brium murale L												
9281	Barrelièri *Dec*	small		○	un	⅛	jn jl	Pa Y	S Europe	1770	S	co	Barr ic 1016
9282	viminea *Dec*	twiggy		○	un	¼	my	Y	S Europe	...	S	co	Bocc sic. 10
9283	saxátilis *Dec*	rock	♆	△	un	⅛	jn	Y	S Europe	...	D	co	

Cruciferæ. Sp 2—3

1436	ERU'CA *Tourn*	Rocket											
9284	sativa *Lam*	stripe-flowered		○	cul	1½	jl	Pa Y	S Europe	1573	S	s l	Sch han. 2. t.186
9285	vesicária *Cav*	bladdery		○	un	1½	jl	Pa. Y	Spain	1820	S	co	Asso arr. t. 4

Cruciferæ. Sp 1

1437	VEI'LA *L*	Cress-Rocket											
9286	pseudocytisus *L*	shrubby	♇	⎽	or	3	ap my	Y	Spain	1759.	C	co	Cav ic. 1. t 42

Cruciferæ Sp 1

1438	CARRICHTE'RA *Adans*	Carrichtera											
9287	Vellæ *Dec*	annual		○	w	¾	jn jl	Pa. Y	England	san fi	S	s l	Eng bot 1442
	Vella annua L												

Cruciferæ Sp 1

1439	SUCCO'WIA *Monch*	Succowia											
9288	balearica *R Br*	Minorca		○	pr	⅔	jn jl	Y	Minorca	1781	S	s l	Jac vind 2 t.144

Cruciferæ Sp 1

1440	ZIL'LA *Forsk*	Zilla											
9289	myagroides *Forsk*	spiny	♇	⎽	cu	2	mr	Li	Egypt	1822	C	co	Vent malm t 16

Cruciferæ Sp 1.

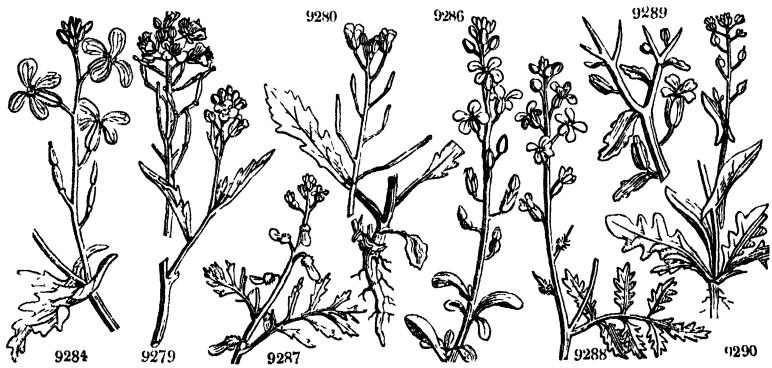
1441	CALEPI'NA *Adans*	Calepina											
9290	Corvini *Desv*	rugose		○	cu	1½	ap jn	W	S. Europe	...	S	co	Brot phyt t. 42

Cruciferæ Sp 10—13.

1442	CRAMBE *W*	Sea Kail.											
9291	maritima *L*	common	⁂	△	cul	1½	my jn	W	Britain	sea sh	D	r.m	Eng bot 924
9292	pinnatifida *R Br.*	smooth-winged	⁂	△	un	1	jn jl	W	Siberia	1759	D	s l	Jac ic 1 t. 128
9293	orientalis *L*	oriental	⁂	△	un	1	jn jl	W	Levant	1752	D	s l	
9294	Tatárica *Jacq*	Tartarian	⁂	△	cul	3	jn jl	W	Siberia	1789	D	s l	Jac ic 1. t 129
9295	áspera *Bieb*	rough	⁂	△	un	1	my	W	Tauria	1820	D	co	
9296	cordáta *W.*	gigantic	⁂	△	or	6	my	W	Caucasus	1822.	D	co	
9297	hispánica *L*	Spanish		○	un	1½	jn jl	W	Spain	1683	S	s l	Sch han 2 t.189
9298	filiformis *Jacq*	Patagonian	♆	△	un	1½	jl au	W	Patagonia	1796	D	s l	Jac ic. 3 t 504
9299	fruticósa *L*	Madeira	♇	⎽	un	2	my n	W	Madeira	1777	C	s l	
9300	strigósa *Lher*	Canary	♇	⎽	un	1½	my jn	W	Canaries	1779	C	s l	Jac ic 1 t 120

Cruciferæ Sp 5—9

1443	RA'PHANUS *L.*	Radish											
9301	sativus *L*	common	⁑	○	cu	3	my jn	W pu	China	1548	S	r m	Lam. ill t 566
	α *radicula* Dec	*long*	⁑	○	cu	3	my jn	W pu	China	1548	S	r m	
	β *oblongus* Dec.	*Turnip*	⁑	○	cul	3	my jn	W pu	China	1548.	S	r m	
	γ *oleifera* Dec	*Oil-seed*		○	ec	3	my jn	W pu	China	1548	S	r m	
	δ *niger* Dec	*Black Spanish*	⁑	○	cul	3	my jn	W pu	China	1548	S	r m	
9302	caudátus *L*	long-podded	⁑	○	cu	1½	my au	Pa pu	Java	1815	S	co	Linn dec 3 t 10
9303	Raphanistrum *L*	wild		○	w	1½	jn jl	Y	Britain	corn fi	S	co	Eng bot 856
9304	Landra *Morett*	yellow-flowered	⁑	◑	cu	3	jn jl	Y	Italy	1820	S	co	
9305	maritimus *Sm*	sea	⁑	△	w	3	my jl	Y	Britain	sea co	D	co	Eng bot 1643



History, Use, Propagation, Culture,

1436. *Eruca* The meaning of this word is involved in obscurity According to Isidore, of Seville, a learned Spaniard, who died in 636, and left a book of etymologies, *eruca* is an alteration of *urica*, derived from *uro*, to burn From *eruca*, the Italians formed *ruchetta*, the French *roquetta*, and the English *rocket* E sativa is very pungent in the foliage, and is used as a salad in the South of Europe for its aphrodisiacal powers.

" *Excitat ad venerem tardos Eruca maritos* "

1437 *Vella* Latinized from *valer*, the Gallic name of the cress A pretty low shrub, with beautiful yellow flowers appearing in the early spring It is hardy enough to live through the winter in a dry warm south border

1438 *Carrichtera* An unexplained name, first used by Adanson A small annual plant, with pinnated leaves, and long erect racemes opposite to the leaves Flowers small, pale yellow.

1439 *Succowia* In honor of Professor Suckow, a learned botanist of Heidelberg An annual, with the habit of the last, from which it differs in its subulate style and solitary seeds

1440 *Zilla* The Egyptian name of the plant, which is a large glabrous herb, with round white branches and oblong toothed leaves, which are boiled and eaten by the Arabs like those of cabbage

1441. *Calepina* A name used by Adanson, the meaning of which is unknown This plant has been transferred by one author or another to almost every genus of Siliculosæ, but appears to be really akin to Crambe only, from which it differs in its sessile and purely unilocular silicle, in its stamens having no teeth, and in the outer petals being larger than the others

1442 *Crambe.* One of the names applied by the Greeks to the cabbage, and especially to the marine cabbage. C maritima grows on sandy shores in the west of England, and there the common people have from time immemorial been in the practice of watching when the shoots and leafstalks begin to push up the sand

9278 Pods sess nearly erect, Style roundish 1-2-sced Lvs pinnatif with cut lobes and lin. sinuate toothed segm.
9279 Pods somewhat stalked erect, Style filif short without seeds, Upper lvs entire lower pinnatifid compound

9280 Pods sess erect, Style short somew. filif Rad lvs toothed or lyrate smooth, Stems nearly naked ascending

9281 Pods sess erect, Style short somew filif Rad. lvs runcinate toothed hispid, Stems naked erect
9282 Pods sess. erect, Style short somew filif Rad lvs lyrate very blunt smooth, Stems naked decumbent
9283 Pods sess erect narrowed at base, Style short conical, Rad. lvs pinnatifid thickish with entire lobes

9284 Lvs lyrate pinnated with toothed acute lobes, Stem hirsute, Pedicels shorter than deciduous calyx
9285 Lvs pinnatifid, Lobes acute nearly entire, Stem hirsute, Calyx persistent somewhat bladdery

9286 The only species

9287 The only species

9288 The only species

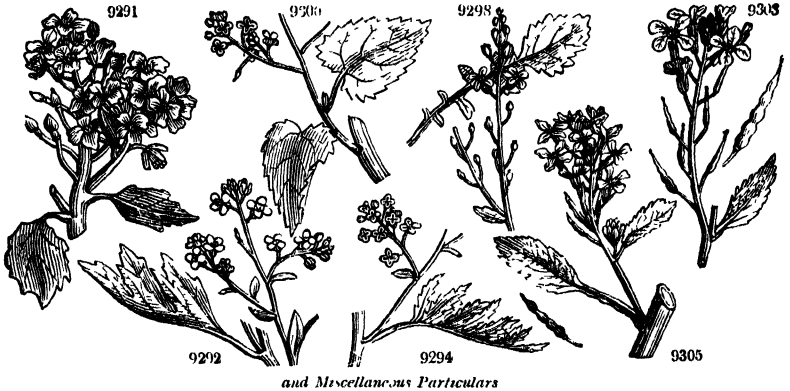
9289 The only species

9290 The only species

9291 Long filaments forked, Pod blunt, Leaves roundish sinuated wavy toothed glauc and stem quite smooth
9292 Long filaments forked, Pod blunt, Leaves pinnatifid with obl acute toothed lobes, Stem smooth
9293 Long filaments forked, Pod blunt smooth, Leaves pinnatind toothed rough, Stem smooth [smoothish
9294 Long filam forked, Pod blunt, Rad lvs decompound, Pinnae cut toothed younger rough, old and stem
9295 Long filam forked, Pod blunt rugose, Lvs pinnated with obl lin toothed lobes and stem rough
9296 Long filam forked, Pod nearly blunt, Lvs stalked toothed lower cord, upper ov and stem nearly smooth
9297 Long filam toothed, Pod blunt, Lvs lyrate rough, Termin al lobe cord orbicular
9298 Long filam scarcely toothed, Pod blunt, Lvs pinnate-lyrate hairy, Termnal lobe ovate
9299 Long filam toothed on one side, Pod mucronate, Lvs lyrate pinnatifid toothed hoary
9300 Filam not toothed, Pod mucronate, Lvs ov toothed unequal and somew. auricled at base and stem hispid

9301 Pods round torose acuminate scarcely longer than stalk

9302 Pods depressed acuminate decumbent longer than the whole plant
9303 Pods 1-celled jointed striated 8-seeded longer than the style, Lvs simply lyrate
9304 Pods 1-celled jointed substriated 2-6-seeded longer than the subulate style, Lvs interruptedly lyrate
9305 Pods 1-celled jointed striated 2-6-seeded, Style conical shorter than the last joint, Lvs interrupted lyrate



and Miscellaneous Particulars

and gravel, in March and April, when they cut them off under ground, as is done in gathering asparagus, and boil them as greens About the middle of the last century the plant was first introduced into gardens, grown on deep sandy soil, and blanched either by sand, ashes, litter, or by covering with flower pots, earthen pots made on purpose, or any opaque cover It is now almost as universal in good gardens as asparagus, and like it is forced either by taking up the roots and planting them on a hotbed, or in the border of a forcing house, or by covering or surrounding them with litter in the open garden Before covering a bed with warm litter, each plant or stool of plants is covered with an earthenware blanching pot or a wicker case, to keep off the dung from the young shoots, and to ensure their being blanched No plant is so easily forced, and, unlike asparagus, it yields produce the first spring after raising from seed

C tataria is called by the Hungarians *Tatar-Kenyer* or Tartarian bread, and its root, stripped of the bark and sliced, is eaten with oil, vinegar, and salt The boiled root is sweet, and eaten by children The young shoots are boiled like those of sea kail, and have an excellent taste, but are stringy, which they would not be if well cultivated, which the plant appears to deserve

1443 *Raphanus* From $\rho\alpha$, quickly, and $\phi\alpha\iota\nu o\mu\alpha\iota$, to appear, on account of the rapidity of its germination and arriving at perfection R sativus is a well known salad root, requiring a deep sandy soil to attain a large size There are several varieties both of the spindle-shaped and globular rooted kinds, and a very distinct sort known as the black or Spanish radish In the Horticultural Transactions, sixteen varieties are mentioned besides subvarieties, arranged as spring, summer, turnip, autumn, and winter radishes They are all of easy culture, and the spring, summer, and turnip sorts force well on hot-beds, or on dung-beds covered with mats

R caudatus, or tree radish, is remarkable for the length of its pod, which is greater than the whole height of the plant The young leaves of R Landra are eaten by the inhabitants of Insubria as salad.

1444. BU'NIAS. *L.* Bunias. *Cruciferæ. Sp.* 3.

9306	Erucágo *L*	prickly-podded	○	un	1½	jn jl	Y	Austria	1640.	S	co	Jac. aust 4 t 340
9307	áspera *Retz.*	rough	○	un	1½	jn	Y	Portugal	...	S	co	
9308	orientális *L*	oriental	△	un	1½	my jl	Y	Levant	1731.	D	co	Gmel sib. 3. t.57

1445 ERUCA'RIA *Gærtn* Eucaria *Cruciferæ. Sp.* 2—5

9309	alep'pica *Gærtn*	Aleppo	○	un	1	jl au	W.pu	Levant	1680	S	s.l	Græ se 2 t 143 f 9
9310	crassifólia *Del*	thick-leaved	○	un	¾	jn d	W pu	Egypt	1823.	S	co	Del egyp.t.34 f 1

1446. HELIO'PHILA *L* Heliophila *Cruciferæ Sp* 11—47

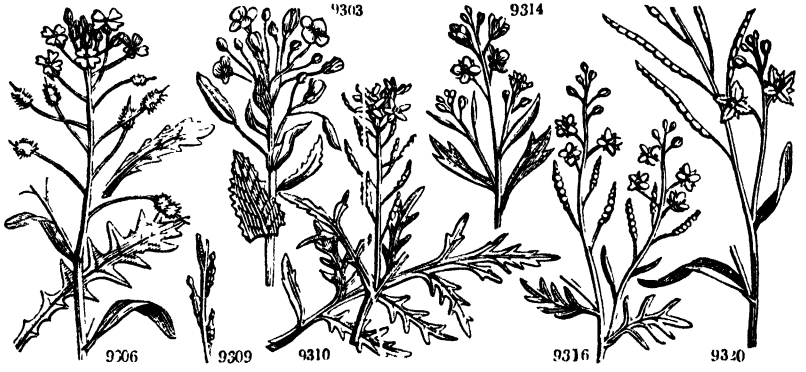
9311	filiformis *L*	awl-podded	◇	pr	1½	jl au	Pa pu	C G H.	1786	S	s p	Lam ill. 563. 3
9312	amplexicaúlis *L*	opposite-leaved	○	pr	¾	jn s	W pu	C G H.	1774	S	s p	Jac fr 46. 2
9313	pinnáta *Vahl*	wing-leaved	○	pr	1½	jn s	Y Br	C G H	1792	S	s p	Ven.malm t 113
9314	pilósa *Lam*	hairy	○	pr	1	my s	B	C. G. H	1768.	S	s p	Jac ic 3 t. 506
9315	digitáta *L*	digitate	○	pr	1	my s	B	C G H	...	S	s p	
9316	coronopifólia *L*	Buck's-horn-lv	◇	pr	1½	jn jl	V	C. G H	1778	S	s p	Her lugd t 367
9317	fœniculácea *R Br*	Fennel-leaved	○	pr	1½	jn s	Pu	C G H	1774	S	s p	
9318	crithmifólia *W*	Samphire-leav	○	pr	½	jn s	V	C G. H	1816	S	s p	
9319	platysiliqua *R Br*	broad-podded	▭	pr	1	jl au	Pu	C G H.	1774	C	s p	
9320	incána *H K*	hoary	▭	pr	2	my au	Pu	C G H.	1774	C	s p	
9321	cleomoides *D c*	upright	▭	pr	1	jl	Y	C. G H	1802.	S	co	
	Cheiranthus strictus L.											

1447. SUBULA'RIA *L* Awlwort. *Cruciferæ Sp* 1

9322	aquática *L.*	water	≋	○	cu	¼	jl	W	Britain	al lak	S	m s Eng. bot 732

†¶1448. **CLEO'ME.** *W* Cleome *Capparideæ. Sp* 15—53

§9323	Chelidónii *W*	Celandine-flow	◇	pr	1½	jn jl	R	E Indies	1790	S	s p	
§9324	viscósa *W*	viscid	◇	pr	2	jn jl	F	Ceylon	1730	S	s p	Rhee mal 9 t.23
§9325	dodecándra *W*	three-leaved	◇	pr	1½	jn jl	W	India	1795	S	s p	Bur zey t 100 f 1
§9326	pentaphylla *W*	five-leaved	◇	pr	2	jn jl	W	India	1640	S	s p	Jac vind 1 t. 21
9327	gigantéa *W.*	gigantic	▭	pr	6	jn jl	G	S Amer	1774	C	s p	Jac obs 4 t. 76
9328	spinósa *W*	white-fl prickly	◇	pr	2	jn jl	W	W Indies	1731	S	s p	Mareg bras t 34
9329	púngens *W.*	red-fl prickly	◇	pr	2	jl au	R	W Indies	1812.	S	s l	W.ho ber 1. t.18
	spinósa B M 1640											
9330	Houstóni *H K*	Houstoun's	◇	pr		jl		W Indies	1730	S	s l	
9331	violácea *W.*	violet-colored	○	pr	1	jn jl	Pu	Portugal	1776	S	s l	Sc han 2 t 189.b
9332	rósea *Dec*	rose-colored	◇	pr	1½	jn jl	Pk	Brazil	1825	S	co	Bot. reg 960
9333	ornithopodioides *W*	bird's-foot	○	pr	1	jn jl	W Y	Levant	1732	S	s l	Dil el t 266 f 345
9334	arábica *W*	Arabian	○	pr	2	jn jl	Y	Arabia	1794	S	s l	Lin fil fasc t 8
9335	monophylla *W*	simple-leaved	◇	pr	½	jn jl	Y	E Indies	1759	S	s l	Bur zey t 100 f 2
9336	procúmbens *W*	procumbent	◇	pr	½	jn jl	Y	W Indies	1798	D	s l	Jac amer t 120
9337	pubéscens *B M*	pubescent	○	pr	1½	jl	W	.....	1815	S	s.l	Bot mag 1857



History, Use, Propagation, Culture,

1444 *Bunias* From βουνος, a hill, because the plants grow upon exposed open situations *Linn.*

1445 *Erucaria* See Eruca, No 1437 Plants with the habit of Cakile

1446. *Heliophila* From ἡλιος, the sun, and φιλεω, to love, a plant loving heat All the species grow upon dry hot plains at the Cape of Good Hope These are mostly beautiful annual or perennial plants.

9306 Pods 4-cornered. angles crested, Radical leaves runcinate
9307 Pods 4-cornered angles crested, Leaves all lanceolate
9308 Pods ovate 2-celled not crested somewhat warted

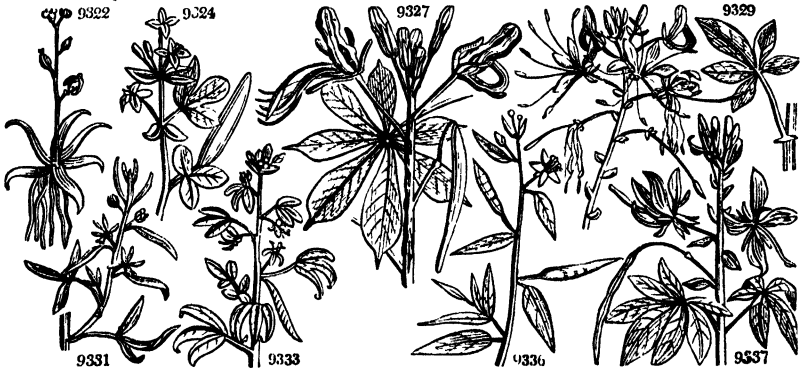
9309 Pod style-bearing, Lvs pinnated, Lobes linear of the lower pinnatifid, of the upper entire
9310 Stigma sessile, Beak longer than pod, Lvs. pinnated thick, Lobes linear

9311 Smooth, Pods rounded narrowed at each end, Leaves linear subulate
9312 Smooth, Pods moniliform, Lower lvs opp upper altern cord stem-clasping obl entire
9313 Smooth, Pods moniliform pendulous, Lvs pinnated in 3-5-pairs, Lobes linear entire
9314 Hispid, Pods linear, Lvs hairy either linear entire or trifid at end and cuneate at base
9315 Hispid, Pods linear, Lvs oval entire or here and there coarsely cut-toothed
9316 Smooth, Pods linear, Leaves pinnated, Lobes and rachis linear entire
9317 Downy, Pods linear spreading, Lvs pinnated or bipinnated lobes filiform
9318 Velvety, Pods linear nodding, Lvs pinnated somewhat fleshy lobes subfiliform furrowed above
9319 Smooth, Pods linear erect or pendulous, Lvs fleshy half round
9320 Pods linear compressed velvety, Style thick conical smooth, Leaves oblong
9321 Pods compressed stalked, Leaves linear lanceolate

9322 The only species

9323 Polyandrous hairy, Lvs 5-7 cuneiform rough, Racemes term Pods filiform
9324 Flowers dodecandrous, Leaves quinate and ternate
9325 Flowers dodecandrous, Leaves ternate
9326 Flowers gynandrous, Leaves quinate, Stem unarmed
9327 Flowers hexandrous, Leaves 7, Stem unarmed
9328 Flowers hexandrous, Leaves 7-5, Stem spiny
9329 Flowers hexandrous, Leaves quinate viscid, Stem spiny

9330 Prickly hexandrous, Leaves quinate and ternate floral simple, Stigma dilated
9331 Flowers hexandrous, Leaves ternate and solitary, Leaflets lanc lin entire
9332 Unarmed, Lvs 5 lower and floral 3, upper sessile ovate, Pod smooth as long as its stalk
9333 Flowers hexandrous, Leaves ternate, Leaflets oval lanceolate
9334 Flowers hexandrous, Leaves ternate lanceolate blunt, Pods fusiform viscid
9335 Flowers hexandrous, Leaves simple ovate-lanceolate stalked
9336 Flowers hexandrous, Leaves simple lanceolate stalked, Stems procumbent
9337 Unarmed pubescent, Leaves 5-7 floral simple cordate, Pod the length of the stalk



and Miscellaneous Particulars

1447 *Subularia* From *subula*, an awl, on account of the form of the leaves. A curious little aquatic, not of common occurrence

1448 *Cleome.* A name employed by Octavius Horatius, a Latin physician, who lived in the fourth century, to designate a plant resembling Sinapis, and growing in humid places. It appears to have had no relation to the modern plant.



CLASS XVI. — MONADELPHIA.

THIS class is distinctly characterized by the filaments being united together throughout the whole or a part of their length, and for the most part consists of plants belonging to the natural orders of Malvaceæ and Geraniaceæ. Of the former, the major part are of little moment, consisting, in a great measure, of weeds or worthless shrubs of various parts of the world. Among them, however, are some plants both of interest and ornament, especially the beautiful Astrapæa, and the various species of Bombax and Hibiscus. The Gossypium, so important as producing the material of cotton, and the Adansonia or Baobab tree of Africa, remarkable for its immense size and use as an article of food, are found in this class. The Geranium, Camellia and Passion flower are also genera of much beauty, the latter yielding the well known West Indian fruit called the Grenadilla. The common Tamarind, with which this class commences, would more properly be placed in the next, and the succeeding genera of Patersonia, Tigridia, Ferraria, and Galaxia, are in every respect, except the union of their filaments, referable to the third class.

Order 1. TRIANDRIA  Stamens 3

1449 *Tamarindus* Petals 3, ascending. Three filaments longer than the others and fertile. Legumen 1-5-celled, pulpy inside.
1450 *Patersonia.* Cor tubular. Limb 6-parted, with 3 small segments. Caps 3-celled, inferior.
1451 *Ferraria.* Spatha 2-leaved. Cal. 0. Petals 6, wavy, curled. Filaments united at base. Style 1. Caps. 3-celled, interior.
1452 *Tigridia.* Spatha 2-leaved. Cal. 0. Petals 6, the 3 outer large. Filaments united into a very long tube.
1453 *Galaxia.* Spatha 1-leaved. Cal. 0. Corolla monopetalous, 6-cleft, with a long tube. Style 1. Capsule 3-celled, interior.

Order 2. PENTANDRIA.  Stamens 5.

1454 *Waltheria.* Cal. 5-fid, with a lateral deciduous 3-leaved involucre. Petals 5. Style 1. Stigma pencilled. Caps. 1-celled, 2-valved, 1-seeded.
1455 *Hermannia.* Cal. nearly naked, campanulate, 5-fid. Pet. 5. Stamens 5. Filaments united at base, lanceolate, frequently winged. Styles 5, cohering in one. Caps. 5-celled, 5-valved, many-seeded.
1456 *Melochia.* Cal. 5-fid, naked, or with 1-5 bracteæ. Petals 5, spreading. Stam. 5, monadelphous at base. Styles 5. Caps. 5-celled. Seeds 1-2 in each cell.
1457 *Melhania.* Cal. 5-parted, persistent, with a 3-leaved involucre on one side. Pet. 5. Stam. 10, alternately sterile the fertile ones bearing from 1-2 anthers each.
1458 *Ochroma.* Cal. double, outer 3-leaved. Petals 5. Anthers anfractuose. Capsule 5-celled, many-seeded. Seeds involved in wool.
1459 *Passiflora.* Cal. 5-parted, colored. Petals 5 or 0, inserted in the calyx. Crown of many filiform rays. Fruit stalked, fleshy.
1460 *Erodium.* Cal. 5-leaved. Petals 5. Scales 5, alternate, with filaments and honey glands at the base of the stamens. Cocci 5, 1-seeded, awned, at the base of a rostrate receptacle.

Order 3. HEPTANDRIA  Stamens 7.

1461 *Pelargonium.* Cal. 5-parted, the upper segment ending in a nectariferous tube running down the peduncle. Cor. 5-petalous, irregular.

Order 4. OCTANDRIA  Stamens 8

1462 *Antonia.* Cal. 4-parted. Cor. 4 petals. Style 1. Berry dry, quadrangular, 1-celled, many-seeded.

Order 5. DECANDRIA.  Stamens 10

1463 *Geranium.* Cal. 5-leaved. Petals 5, regular. Glands 5, honey-bearing, united to the base of the longer filaments. Cocci 5, 1-seeded, awned, at the base of a beaked receptacle.

Order 6. DODECANDRIA  Stamens 12

1464 *Brownea.* Cal. tubular, bifid. Cor. double, outer 5-fid, inner of 5 petals. Legumen 1-celled.
1465 *Monsonia.* Sepals 5. Pet. 5. Stamens 15, united, their cup 5-fid. Style 5-fid. Cocci 5, 1-seeded awned, at the base of a beaked receptacle.
1466 *Helicteres.* Cal. tubular, obliquely 5-fid. Petals 5. Germen on a long stalk. Style about 5-fid. Caps 5, 1-celled, many-seeded, spirally twisted.
1467 *Dombeya.* Cal. double, outer 3-leaved, deciduous. Petals 5. Stamens 20, of which 5 are sterile. Style 5-fid. Caps 5, united, 1-celled, 1-many-seeded.
1468 *Pentapetes.* Cal. double, outer 3-leaved, deciduous. Petals 5. Stamens 20, of which 5 are barren. Style obsoletely 5-toothed. Caps 5-celled, many-seeded, with contrary dissepiments.
1469 *Astrapæa.* Flowers umbellate, with an involucre. Involucre many-leaved, unequal. Cal. simple, 5-leaved, with 1 bract. Petals 5, convolute-closed. Stamens 25, united into a tube bearing the corolla. 5-sterile.
1470. *Pterospermum.* Cal. simple, 5-parted. Petals 5. Stamens 20, of which 5 are sterile. Style cylindrical, Stigma thickish. Caps woody, 5-celled. Seeds winged.

Order 7. POLYANDRIA.  Stamens indefinite in number.

1471. *Malope.* Cal double, outer 3-leaved. Capsules heaped without order, 1-seeded.
1472 *Malva* Cal double, outer 3-leaved Capsules many, 1-seeded
1473. *Kitaibelia* Cal. double, outer 7-9-fid Caps. clustered in a 5-lobed head, 1-seeded
1474 *Althæa* Cal double, outer 6-9-fid Capsules many, 1-seeded
1475 *Lavatera.* Cal double, outer 3-fid Capsules many, 1-seeded
1476 *Malachra* Common calyx 3-leaved, many-flowered, large Caps. 5, 1-seeded.
1477. *Urena* Cal double, outer 5-fid Capsule 5-celled, 5-partible, with close 1-seeded cells
1478. *Pavonia* Cal double, outer many-leaved Stigmas 10 Capsules 5, 2-valved, 1-seeded
1479. *Achania.* Cal double, outer many-leaved Cor convolute, closed. Stigmas 10. Berry 5 celled, 5-seeded.
1480. *Hibiscus* Cal double, outer many-leaved. Stigmas 5 Capsule 5-celled, many-seeded
1481 *Gossypium* Cal. double, outer 3-fid. Caps 5 celled Seeds enwrapped in wool
1482 *Redoutea* Cal. 5-parted, surrounded by a 10-12-leaved involucre Stigmas 3 Capsules 3-celled, 3-valved, many-seeded, with three placentas alternate with the valves, and bearing on each side woolly seeds
1483 *Palavia* Cal naked, 5-fid. Capsules many, 1-seeded, united in a head without order
1484 *Cristaria* Cal naked, 5-fid Fruit orbicular, depressed, covered with a skin, and consisting of several carpella, 2-winged in the centre, and many-seeded.
1485 *Anoda* Cal naked, 5-fid Lobes acuminate, much spreading in fruit Caps. hemispherical beneath, depressed and stellate above, many-celled, with 1-celled, 1-seeded divisions
1486 *Peraptera* Cal naked, 5-fid Petals erect, spirally twisted in the tube, at length distinct. Capsule stellate, many-celled, with 1-seeded cells
1487 *Sida.* Cal. simple, angular Style many-parted Capsules several, 1 or 3-seeded
1488 *Lagunæa* Cal. simple, 5-fid Style 5-fid Capsule 5-celled, with contrary dissepiments
1489 *Ruizia* Cal double, outer 3-leaved Styles 10 Caps 10, 1-celled, 2-seeded, closely cohering
1490 *Carolinea.* Cal simple, subtruncate Filaments branched Style very long Stigmas 6 Caps woody, 1-celled, many-seeded
1491. *Adansonia.* Cal simple, deciduous Style very long Stigmas many Caps woody, 10-celled, many-seeded, with a farinaceous pulp
1492 *Bombax.* Cal 5-fid. Stamens 5, or many Caps woody, 5-celled, 5-valved. Seeds woolly Receptacle 5-cornered.
1493 *Myrodia* Cal. naked, tubular, 4-5-toothed, bursting laterally Petals oblong, linear Stamens with a long column Anthers 10-15 Capsule drupaceous, 2-3-celled, with 1-seeded cells
1494 *Gordonia.* Cal simple Style 5-cornered, with a 5-fid stigma Caps 5-celled Seeds twin, with a leafy wing
1495 *Stuartia* Cal simple, rotate Petals 5 Styles 5, united or distinct Caps 5-celled, 5 valved. Seeds solitary or twin
1496. *Camellia* Cal imbricated, many-leaved, the inner leaflets largest.
1497. *Barringtonia* Cal 4-leaved, superior Petals 4. Drupe dry, large, quadrangular, with a 4-celled nut.
1498. *Gustavia* Cal 4-6-fid Petals 4-6 Berry dry, 4-5-celled
1499. *Carcya.* Cal. superior, 4-fid Petals 4 Berry many-seeded. Seeds nestling in pulp.

TRIANDRIA.

1449 TAMARIN'DUS. *W* Tamarind Tree. *Leguminosæ* *Sp* 1.
9338 indica *W* common ▭ fr 60 jn jl Y India 1633 C r m Jac. amer. t 10

†1450 PATERSO'NIA *R Br* Patersonia *Irideæ* *Sp* 2—7.
9339 sericea *R Br* silky △ or 1½ my jl B N S W 1803. R s p Bot. mag 1041
9340 glabráta *R Br* smooth △ or 1½ my jl Pu N S. W 1814 C s p Bot reg 51

†1451 FERRA'RIA *Ker* Ferraria. *Irideæ* *Sp* 2—4.
9341 undulàta *W* curled ☿ △ or mr ap G Br C G H 1755 O s p Bot. mag 144
9342 antherósa *Ker.* variegated ☿ △ or mr jl G Br C G. H. 1800 O s.p Bot mag 751

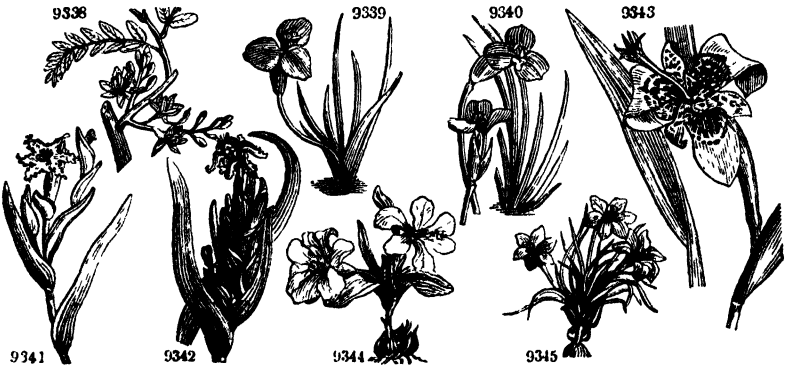
†*1452 TIGRI'DIA. *J* Tiger Flower. *Irideæ* *Sp* 1—2
9343 Pavónia *P S* Mexican ☿ △ or my s O R Mexico 1796. O s p Bot mag 532
β *concha* Hort. *whole-colored* ☿ △ or my s O R Mexico 1823. O s.p

†1453 GALAXI'A. *W* Galaxia *Irideæ* *Sp* 2—3
9344 ovàta *W* oval-leaved △ or my s D Y C G H 1799 s p Bot rep 94
β *grandiflóra* B R *great-flowered* △ or my s D Y C G H 1799 s p Bot rep 104
γ *mucronulàta* Sal *mucronated* △ or my s Pu C G H 1799 s.p J ic t 291 f m si.
δ *versicolor* Sal *various-colored* △ or my s Pu C G H 1799 s p Jac f inf dextr.
9345 graminea *W.* narrow-leaved △ or jl.au L Y C G. H. 1795. s p Bot mag. 1292

PENTANDRIA.

1454 WALTHE'RIA. *W* Waltheria *Byttneriaceæ.* *Sp* 4—12
9346 americána *W* American ▭ un 2 my o Y S Amer 1691. C l p Jac ic 1 t 190
9347 indica *W* Indian ▭ un 9 jn au Y E Indies 1799 L p l Burm zeyl. t 68
9348 elíptica *W* woolly ▭ un 3 ... Y E Indies 1812 C s p Ca dis 6 t 171 f 2
9349 lævis *Schrank* smooth ▭ un 3 jl Y Guadalou 1823 C s p Schrank mon 55

†*1455 HERMAN'NIA *W* Hermannia *Byttneriaceæ* *Sp* 34—42.
9350 althæifólia *W* Althæa-leaved ▭ or 2½ mr jl Y C G H 1728 C l p Bot. mag 307
9351 plicáta *W* plaited-leaved ▭ or 2 n.d Y C G H 1774 C l p Jac.schœ 2 t 213
9352 glandulósa *Link* glandular ▭ or 2 . C G H 1822 C l p
9353 cándicans *W* white ▭ or 2 ap jn Y C G H 1774 C l p Jac schœ 1 t 117
9354 distícha *W* round-leaved ▭ or 2 my au Y C G H 1780 C l p Jac schœ 1 t 118
9355 salvifolia *W* Sage-leaved ▭ or 2 ap jn Y C G H 1795 C l p Ca dis 6 t 180 f 2
9356 micans *W* glittering ▭ or 2 my au Y C G H 1790 C l p Jac schœ 1 t 119



History, Use, Propagation, Culture,

1449 *Tamarindus* Latinized from the Arabic name *Tamr-hindy*, or Indian date This tree is a native of the East and West Indies, of Arabia, and Egypt It is a large beautiful spreading tree. The leaves are abruptly pinnate, composed of sixteen or eighteen pairs of sessile leaflets, half an inch only in length, and one sixth of an inch broad, of a bright green color, downy, oblong, entire, and obtuse the flowers are in loose bunches of five or six, which come out from the sides of the branches the calyx is of a straw yellow color, and deciduous the petals also yellowish, and beautifully variegated with red veins, ovate, concave, acute, indented, and plaited at the edge, and the filaments purplish, bearing incumbent brownish anthers the pods are thick, compressed, and of a dull brown color when ripe those from the West Indies from two to five inches long, with two, three, or four seeds those from the East Indies are twice as long, and contain five, six, or seven seeds the seeds in both are flat, angular, shining, and lodged in a dark pulpy matter

In the West Indies, the pods are gathered in June, July, and August, when fully ripe, and the fruit being freed from the shelly fragments, is placed in layers in a cask, and boiling syrup poured over it, till the cask is filled, the syrup pervades every part quite down to the bottom, and when cool the cask is headed for sale (*Long's Jamaica*, iii 729) The East India tamarinds are darker colored and drier, and are said to be preserved without sugar Tamarinds are inodorous, and have an agreeable acid sweetish taste The acid taste chiefly depends on the citric acid, the quantity of that being greater than of the other. The pulp is refrigerant, and gently laxative The simple infusion of the pulp in warm water, or a whey made by boiling it in milk, forms a very grateful refrigerant beverage, which is advantageously used in febrile diseases The dose of the simple fruit required to act upon the bowels is so large, that it is seldom given alone as a purgative, but is generally combined with cassia or manna, the action of which it augments, or with such of the neutral purgative salts as are not decomposed by it, which is the case with those that have potass for their base, and are therefore incompatible in mixtures with this fruit. (*Thompson's London Dispensatory*, 534)

The plants thrive in loam and peat, and root under a glass in sand They form handsome objects, but in our stoves are seldom allowed sufficient room to flower Miller says, he had several plants twenty years old, and upwards, of fifteen feet high, which never had shewed blossoms.

TRIANDRIA.

9338 The only species

9339 Stigma deflexed, Scape and spathes silky, Leaves ensiform straight striated
9340 Stigma deflexed, Scape and spathes smooth shining, Keel of leaves woolly at base

9341 Stem branched, Leaves equitant ensiform equal wavy, inner twice as narrow as the outer
9342 Stem simple, Leaves equitant ensiform; lower narrow

9343 Stem simple wavy, Leaves ensiform nerved, Petals flat, inner small panduriform

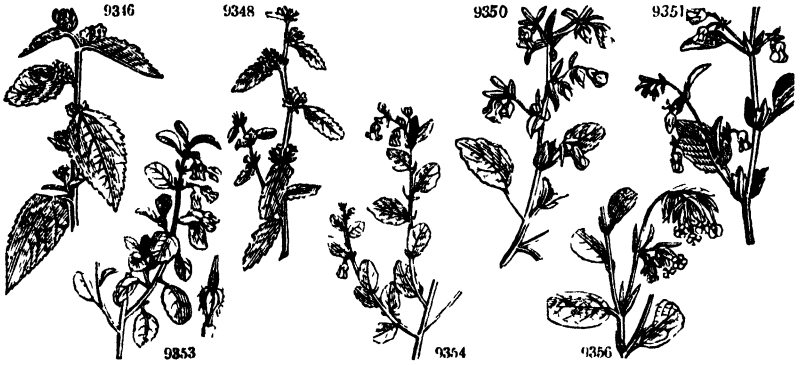
9344 Almost stemless, Leaves oblong, Spathe 1-valved 1-flowered

9345 Almost stemless, Leaves linear filiform dilated at base, Spathe 1-valved 1-flowered

PENTANDRIA.

9346 Leaves oval plicate acutely and unequally toothed downy, Heads stalked
9347 Leaves oval plicate bluntly toothed downy, Heads sessile
9348 Leaves lanceolate oblong blunt plicate toothed downy, Heads sessile
9349 Leaves ovate mucronate serrate and stem quite smooth, Heads stalked, Calyxes ciliated

9350 Leaves ovate downy plicate crenate, Lower stipules ovate, upper broad lanceolate, Cal angular
9351 Lvs downy hairy ovate subcord. rugose denticulate, Stipules ovate acute, Cal in fl cylind finally inflated
9352 Leaves oval unequally crenate subpubescent, Stipules ovate acute often cut, Stem glandular pubescent
9353 Leaves whitish downy round ovate crenate, Stipules lanceolate subulate, Cal. campanulate spreading
9354 Leaves hispid-villous roundish-ovate blunt toothed, Stipules subovate acuminate, Cal angular
9355 Leaves downy hispid rugose oblong blunt entire subsessile, Stipules long lanceolate subulate, Fls naked
9356 Lvs downy hispid somew rugose obl very blunt a little toothed at end with short stalks Stip lanc subul



and Miscellaneous Particulars

1450 *Patersonia* Named after Colonel William Paterson, a gentleman whose remarks on the Cape of Good Hope, New Holland, and Norfolk Island, have been of much service to botany Handsome plants, which grow readily in loam and peat, and are increased like other herbaceous vegetables.

1451 *Ferraria* Named after Jean Baptiste Ferrari, an Italian botanist, author of a work on the culture of flowers, published in 1633, &c According to Sweet, "a mixture of sandy loam and peat is the best soil for the species, and they should be kept without water, after they have done growing, till they begin to grow again, when they may be planted in fresh pots and regularly watered: they are increased by offsets from the bulbs, or by seeds." (*Bot Cult* 192.)

1452 *Tigridia.* In allusion to the spotted flowers, which are marked something like the skin of a tiger Splendid plants, and tolerably hardy They do best when planted in the soil and protected by a frame or hand-glass; but will also thrive in sheltered borders, provided they are protected from the winter's frost. They ripen seeds, from which, or from offsets, they may be readily increased.

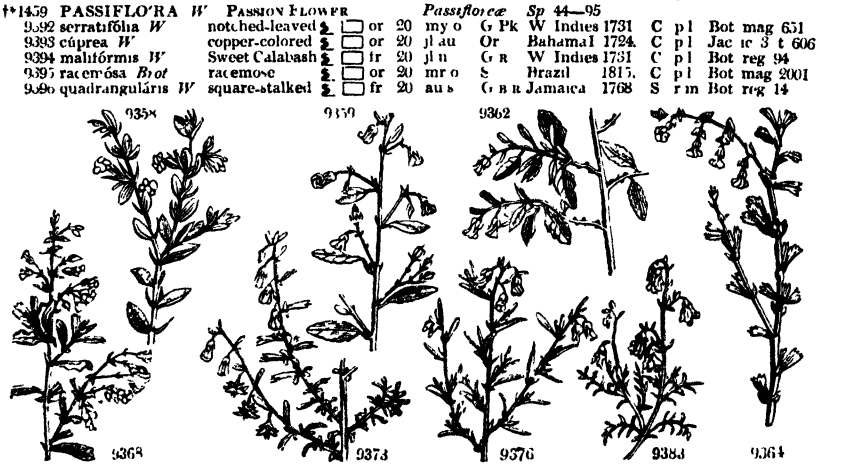
1453 *Galaxia.* Thunberg, the author of the name, has not explained its meaning Like other plants of the bulbous kind, these should be kept dry after flowering and seeding. At the return of the growing season, they should be fresh potted, and kept in a cool part of the greenhouse till they are well rooted, when they may be put into a warmer situation and regularly watered. They seed freely

1454 *Waltheria* In memory of Augustin Frider Walther, professor of medicine at Leipsic; author of Hortus Proprius, 1735 The species grow in any light rich soil, and are readily propagated. They are of no importance

1455 *Hermannia.* In memory of Paul Hermann, who practised physic in Ceylon, and at the Cape of Good Hope, and was afterwards professor of botany at Leyden He was born in 1640, at Halle, in Saxony, and died in 1695. The species are low shrubs, for the most part, with wrinkled leaves and yellow flowers, which they produce in abundance They grow freely in any light rich soil, and are readily increased in the same soil.

9357	**frágrans** *Link*	fragrant	♃	☐	or	2	...	...	C	G. H.	1822	C	l p	
9358	involucráta *W.*	involucred	♃	☐	or	2	my jn	Y	C.	G H.	1794.	C	l p	Ca dis 6 t 177. f 1
9359	scordifólia *W.*	Germander-lv	♃	☐	or	2	ap n	Y	C.	G H.	1794	C	l p	Jac schœ 1 t.120
9360	mol'lis *W*	soft-leaved	♃	☐	or	2	my jn	Y	C	G H.	1814.	C	l p	
9361	denudáta *W*	smooth	♃	☐	or	2	my jl	Y	C.	G H.	1774	C	l p	Jac schœ 1 t 122
9362	disermæfólia *W*	simple-flower'd	♃	☐	or	2	mr ap	Y	C	G H.	1795.	C	l p	Jac.schœ.1 t 121
9363	alnifólia *W*	Alder-leaved	♃	☐	or	7	f my	Y	C	G H	1728	C	l p	Bot mag. 299
9364	cuneifólia *W*	wedge-leaved	♃	☐	or	2	au s	Y	C	G H	1791.	C	l p	Jac schœ 1 t 124
9365	holosericea *H*	velvet-leaved	♃	☐	or	2	my jn	Y	C	G H.	1792	C	l p	Jac schœ.3.t 292
9366	decúmbens *W en*	decumbent	♃	☐	or	1	my jn	Y	C	G H.	1821.	C	l p	
9367	hirsúta *W*	hairy-branched	♃	☐	or	2	my jn	Y	C	G. H.	1790	C	l p	Schr. s han 1 t 4
9368	scábra *W*	rough-leaved	♃	☐	or	3	mr ap	Y	C	G H	1789	C	l p	Jac schœ 1 t 127
9369	multiflóra *W*	many-flowered	♃	☐	or	3	mr my	Y	C	G H.	1791	C	l p	Jac schœ 1.t 128
9370	flámmea *W.*	flame-flowered	♃	☐	or	3	ja.d	Or	C.	G H.	1794	C	l p	Bot mag. 1349
9371	angularis *H*	angular	♃	☐	or	3	ap my	Y	C	G. H	1791	C	l p	Jac schœ 1 t 126
9372	hyssopifólia *W*	Hyssop-leaved	♃	☐	or	7	ap jn	Str	C.	G H	1725.	C	l p	Ca.dis 6 t 181 f 3
9373	trifurcáta *W*	three-forked	♃	☐	or	3	ap jl	B	C	G H	1789.	C	l p	Jac schœ 1 t 125
9374	odoráta *W*	sweet-scented	♃	☐	or	3	f o	Y	C	G H.	1780	C	l p	
9375	lavanduliifólia *W*	Lavender-leav	♃	☐	or	1½	my s	Y	C	G H	1732	C	l p	Bot mag 304
9376	filifólia *W*	thread-leaved	♃	☐	or	1½	my au	Y	C	G H	1816	C	l p	Jac schœ 1 t 123
9377	trifoliáta *W*	three-leaved	♃	☐	or	2	my au	Y	C	G H	1752	C	l p	Ca.dis 6 t 182 f 1
9378	procúmbens *W*	procumbent	♃	☐	or	1½	my jn	Y	C	G H	1792	C	l p	Ca dis 6 t 177 f 2
§9379	grossulariifólia *W*	gooseberry-lvd	♃	☐	or	2	ap my	Y	C	G H.	1731	C	l p	Cav dis 6 178 1
9380	pulveruléntа *B R*	powdered	♃	☐	or	2	my au	Y	C	G. H.	1800	C	l p	Bot. rep 161
§9381	incísa *W*	cut-leaved	♃	☐	or	2	jn jl	Y	C	G. H	1806	C	l p	
9382	coronopifólia *Link*	buckshorn-lvd	♃	☐	or	2	jn jl	Y	C	G. H	1823	C	l p	
9383	tenuifólia *B M*	slender-leaved	♃	☐	or	2	jn jl	Y	C	G H	...	C	l p	Bot mag 1348

*1456	MELO'CHIA *W*	MELOCHIA					*Byttneriaceæ*	*Sp* 4—28						
9384	pyramidáta *W*	pyramidal	♃	☐	or	1	jl au	Pu	Brazil		1768	C	p l	Jac vind. l. t 30
9385	tomentósa *W*	downy	♃	☐	or	2	my jn	Pu	W Indies		1768	C	p l	Ca dis 6 t 172 f 2
§9386	caracásana *Jacq*	Caracas	♃	☐	or	2	my jn	Y	Caracas		1820	C	p l	Jacq ic 507
§9387	corchorifólia *W*	Corchorus-lvd.		◯	or	1	jl au	Y	E Indies		1732	S	l p	Dil el t 176 f 217
1457	MELHA'NIA *J*	MELHANIA					*Byttneriaceæ*	*Sp* 2—6						
9388	Erythróxylon *H K*	red-wood	♀	☐	or	20	my au	W	St. Helena		1772	C	s l	Bot mag 1000
9389	Melanóxylon *H A*	black-wood	♀	☐	or	20	jl au	W	St Helena		1800	C	s l	Plu ma t 333 f 5
1458	OCHRO'MA *W*	OCHROMA					*Bombaceæ*	*Sp* 2						
9390	tomentósa *W en*	woolly-leaved	♀	☐	or	20	. .	W	S Amer		1816	C	l p	
9391	Lagópus *W en*	downy-leaved	♀	☐	or	20	...	W	Jamaica		1802	C	p l	Cav dis 5 t 153
†*1459	PASSIFLO'RA *W*	PASSION FLOWER					*Passifloreæ*	*Sp* 44—95						
9392	serratifólia *W*	notched-leaved	♄	☐	or	20	my o	G Pk	W Indies		1731	C	p l	Bot mag 651
9393	cúprea *W*	copper-colored	♄	☐	or	20	jl au	Or	Bahama I		1724.	C	p l	Jac ic 3 t 606
9394	maliformis *W*	Sweet Calabash	♄	☐	fr	20	jl n	G R	W Indies		1731	C	p l	Bot reg 94
9395	racemósa *W*	racemose	♄	☐	or	20	mr o	S	Brazil		1815.	C	p l	Bot mag 2001
9396	quadrangulàris *W*	square-stalked	♄	☐	fr	20	au s	G B R	Jamaica		1768	S	r m	Bot reg 14



History, Use, Propagation, Culture,

1456 *Melochia* According to Forskahl, it is an alteration of the Arabic name *melochuch*, or *melokhiah*. Light rich soil suits all the species, and they strike readily in moist heat

1457 *Melhania* A plant which grows upon Mount *Melham*, in Arabia Pretty plants, which grow in sandy loam, and root in sand under cover Sweet observes, that "they are very apt to become covered with insects"

1458 *Ochroma* From ωχρος, yellow, the flowers being of that color, according to Schreber O Lagopus is a very large tree, with divaricating branches, and leaves more than a foot long The wood is white, tender, and so light, that it is used instead of corks to nets The capsules contain a very soft fine rufous down, in which the seeds are involved, and which down is said to be used in the manufacture of English beavers (*Desportes Plantes de S Domingue*, iii 16)

1459 *Passiflora* This genus has been so named, on account of its being supposed to represent, in the appendages of its flower, the passion of Jesus Christ A beautiful genus of climbers, partly herbaceous, but chiefly suffrutescent or woody, and all of them exotics and very ornamental. Some species are odoriferous, others bear edible fruits, fleshy juicy berries of considerable size, though not rich in flavor Of late, a number of hybrid sorts have been raised, some of which, as P. cæruleo-racemosa, are considered more beautiful than almost any of the natural species.

P maliformis, the sweet calabash of the West Indies, produces large flowers, red, white, and blue, but of short duration They are succeeded by fruit, roundish, the size of a large apple, yellow when ripe, having a thicker rind than any of the other sorts, inclosing a sweetish pulp, in which are lodged many oblong black seeds, of a brownish color, a little rough to the touch. It grows naturally in the West Indies, where the inhabitants call it Granadilla. The fruit is served up there in desserts. It has borne fruit in the garden of the Bishop of Durham in Oxfordshire, and at Vere's, Kensington Gore (*Hort. Trans.* iii. 101.)

P. quadrangularis, the Granadilla vine of the French, has leaves five or six inches long, and luxuriant four-

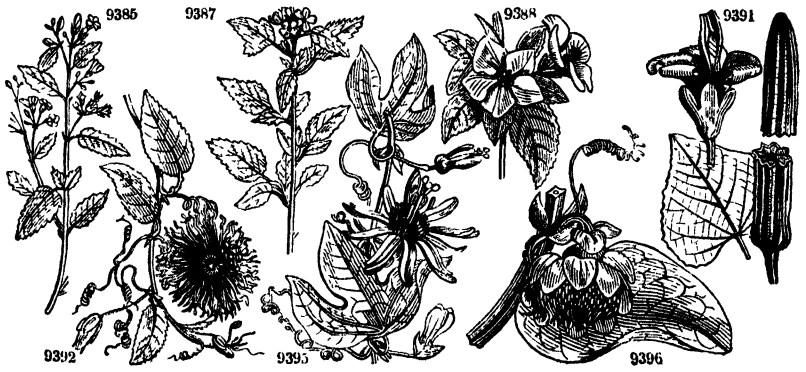
9357 Leaves stalkd oval blunt wavy crenate and stem hairy, Stipules lanceolate
9358 Leaves downy hispid oblong acutish entire subsessile, Stipules lanceolate subulate, Flowers aggregate
9359 Leaves downy beneath oblong blunt crenate stalked, Stipules subulate, Pedic. 1-2-fl Calyxes spreading
9360 Leaves soft with down whitish obl blunt toothed cuneate at base entire, Pedunc. 2-fl Cal campan velvety
9361 Leaves smooth lanceolate serrate at end acute, Stipules ovate acuminate, Pedic. 2-4-flowered
9362 Leaves white with down lanceolate serrate bluntish wavy at edge, Stipules subul Pedunc 1-fl very short
9363 Leaves smooth broadly obovate cuneiform very blunt crenate emarginate plicate, Stip lanc. subulate
9364 Leaves pubescent obovate cuneiform truncate emarginate toothed, Stipules ovate acute
9365 Leaves soft white with down oblong cuneiform rounded at end toothed, Stipules lanceolate
9366 Leaves pubescent downy oblong unequally toothed rounded at each end, Stipules ovate somew toothed
9367 Leaves beneath white with down oblong obov cuneiform unequally toothed at end, Stip ½ cord acum
9368 Leaves rough above downy beneath cuneif obl unq toothed entire at base, Stip half cordate acuminate
9369 Leaves smoothish cuneiform oblong truncate toothed at end, Stipules oblong acute, Racemes few-flow.
9370 Leaves smooth cuneiform lanceolate truncate toothed at end, Calyxes reflexed
9371 Leaves smooth above hairy beneath cuneiform lanceolate truncate toothed at end
9372 Leaves pubescent cuneiform lanceolate blunt toothed at end, Calyx inflated downy
9373 Leaves velvety cuneiform linear blunt entire or 3-toothed at end, Cal campanulate
9374 Leaves velvety cuneiform lanceolate blunt upper entire, lower 3-5-toothed at end, Stipules lin. subul.
9375 Leaves velvety lanceolate blunt entire, Stipules linear subulate, Calyxes angular
9376 Leaves smooth rough at edge linear 3-cornered entire, Stipules large lanceolate
9377 Leaves white with down sess. cuneate obcord somew crenate at end, Stip obl blunt resembling lat lvs.
9378 Leaves smoothish oblong toothed pinnatifid lower ovate, upper elongate, Stem procumbent
9379 Leaves rough with scattered down linear-cuneiform coarsely toothed, Stipules linear entire
9380 Leaves roughish white bipinnatifid, Pedunc 2-flowered very long
9381 Leaves pinnatifid with linear lanceolate entire segments, Petals cut-toothed
9382 Leaves linear pinnatifid fleshy smoothish, Stem pubescent
9383 Leaves pinnatifid with linear entire acute lobes

9384 Leaves ovate lanc toothed smooth, Pedunc 5-6-fl longer than petiole, Branches downy in decurrent lines
9385 Lvs uneq sided ovate obl acutely crenate plaited hoary on each side, Umbels 5-8-fl longer than petiole
9386 Leaves cordate crenate downy beneath, Fl capitate subsessile axillary and opposite the leaves
9387 Leaves ovate somewhat lobed serrated smooth, Flowers subterminal capitate sessile

9388 Leaves ovate cordate subpeltate acuminate crenulate beneath downy and reticulated
9389 Leaves cordate entire downy on each side

9390 Leaves cordate somewhat 3-lobed repand subtomentose
9391 Leaves cordate 5-angled somewhat lobed toothletted pubescent beneath

9392 Leaves ovate veiny subserrulate, Petioles with 2 glands, Invol 3-leaved
9393 Leaves elliptical entire blunt 3-nerved, Petioles without glands, Invol 0
9394 Leaves oblong ovate cordate 3-nerved veiny entire, Petioles with 2 glands, Invol 3-leaved larger than fl.
9395 Leaves 3-lobed peltate, Petioles with 4 glands, Flowers terminal racemose
9396 Leaves obl ovate subcord entire veiny, Petioles with 6 glands, Stipules roundish ovate, Invol 3-leaved



and Miscellaneous Particulars

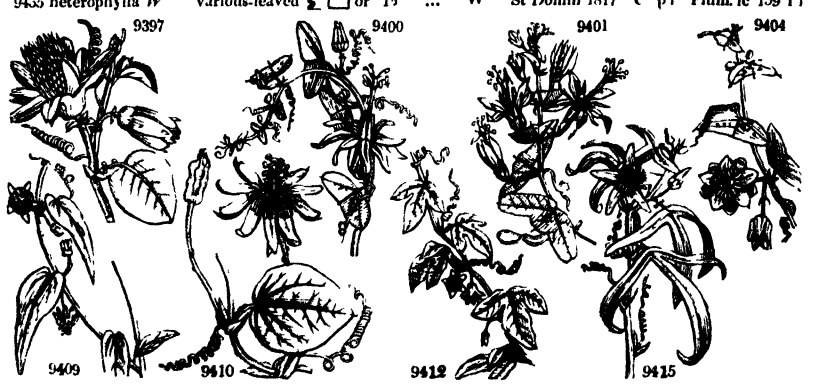
cornered ligneous stems The flowers are red within, and white outside, they are odoriferous, and generally the plant is covered with fruits and flowers at the same time, which makes a fine appearance. The fruit, Sabine describes (*Hort Trans* iii 100) as very large, of an oblong shape, about six inches in diameter, from the stalk to the eye, and fifteen inches in circumference It is externally of a greenish-yellow when ripe, soft and leathery to the touch, and quite smooth, the rind is very thick, and contains a succulent pulp of a purple color (which is the edible part), mixed with the seeds in a sort of sack, from which it is readily separated Wine and sugar are commonly added to it when used The flavor is sweet and slightly acid, and it is very grateful to the taste, and cooling in a hot climate It has been successfully cultivated for its fruit in a few places, as at Lord Harewood's, Farnley Hall, &c (*Hort Trans* iv 60)

P hurifolia, the water lemon, *Pomme de Liane*, Fr, has a suffrutescent stem, with divaricating filiform branches, oval smooth leaves, and very long tendrils Flowers red and violet, sweet-scented, the fruit about the size of a hen's egg, but rather more elongated, and tapering equally at both ends, when ripe, it is yellow and dotted over with white spots, it contains a whitish watery pulp, which, in the West Indies, is usually sucked through a small hole made in the rind, the rind is tough, soft, and thin, the juice has a peculiar aromatic flavor, is delicately acid, and allays thirst agreeably It is grown in our stoves, but has not yet been cultivated for its fruit

P normalis has berries about the size of small grapes. The root has been extolled as a counterpoison and diuretic

P Murucuja produces fruit of an oblong oval form, about the size of a large olive, and flesh-colored when ripe Both the syrup and decoction of the plant are much used in the leeward parts of Jamaica, where it is frequent, and they are said to answer effectually all the purposes for which syrup of poppies and liquid laudanum are generally administered. The flowers are most in use they are commonly infused in, or pounded and

9397	aláta *W.*	wing-stalked	♄	☐	fr	20	ap au	G B R	W Indies	1772	C	p.l	Bot mag. 66
9398	laurifólia *W*	laurel-leaved	♄	☐	fr	20	jn jl	G.Pu	W. Indies	1690.	C	p l	Bot. reg 13
9399	multiflóra *W*	*many-flowered*	♄	☐	or	20	jn s	...	VeraCruz	1731.	C	p l	Plum.amer t 90
§9400	Muructya *W.*	purple	♄	☐	fr	12	jl au	S	W. Indies	1739	C	p l	Bot. reg. 574
9401	perfoliáta *W.*	perfoliate-leav.	♄	☐	or	15	jl au	Pu	W Indies	1806	C	p l	Bot reg 78
9402	rúbra *W*	red-fruited	♄	☐	or	15	ap s	R	W. Indies	1731	C	p l	Bot reg. 96
9403	normáhs *W.*	linear-lobed	♄	☐	or	15	my jn	...	VeraCruz	1771.	C	p.l	
9404	lunáta *W*	crescent-leaved	♄	☐	cu	10	jn au	W	Jamaica	1733	C	p l	Bot mag 2354
9405	Vespertílio *W*	bat-winged	♄	☐	cu	8	my jn	W	W. Indies	1732	C	p l	Bot. reg 597
9406	rotundifólia *W.*	round-leaved	♄	☐	cu	8	my au	W	W Indies	1779	C	p l	Cav. dis 10 t.290
9407	punctáta *W*	dotted-leaved	♄	☐	cu	6	my jn	W Y	Peru	1784	C	p l	Bot. cab. 101
9408	lutea *W*	yellow	♄	☐	cu	4	my jn	Y w	America	1714.	R	p l	Bot reg 79
9409	angustifólia *W*	narrow-leaved	♄	☐	cu	6	jn s	W	W Indies	1773	C	l p	Bot. reg 188
9410	alíbida *Ker.*	long-stalked	♄	☐	or	15	au s	W	Brazil	1816	C	l p	Bot reg 677
9411	pállida *W*	pale	♄	☐	cu	20	au s	Y G	St Domin	...	C	l.p	Bot reg 660
9412	minima *W*	small	♄	☐	cu	6	jl.au	W	Curassao	1690	C	l p	Bot reg 144
9413	grácilis *Link*	slender		◐	cu	6	au	W	.....	1823	O	co	Bot reg. 870
9414	suberósa *W.*	Cork-barked	♄	☐	cu	6	jn s	W	W Indies	1759	C	p l	Exot bot 1. t. 28
9415	peltáta *W*	peltate	♄	☐	cu	6	au s	G	W Indies	1778	C	l p	Bot. reg 507
9416	hederácea *W.*	Ivy-leaved	♄	☐	un	3	jn jl	W	W Indies	...	C	l p	Plum amer t.84
9417	glauca *W* *stipulâta* Aublet.	glaucous-leav'd	♄	☐	un	6	au s	W	Cayenne	1779.	C	l p	Bot reg. 88
9418	picturáta *Ker*	Newman's	♄	☐	or	15	s	Pu	Brazils	1820	C	l p	Bot. reg 673
9419	holosericea *W*	silky-leaved	♄	☐	or	10	my.au	W pu	VeraCruz	1733	C	p.l	Bot reg 59
9420	hirsuta *W*	hairy	♄	☐	or	8	s	W	W Indies	1778	C	l p	Bot cab 138
9421	tuberósa *W*	tuberous	♄	☐	or	12	jn o	G	W Indies	1810	C	l p	Bot reg 432
9422	palmáta *Link*	palmate	♄	☐	or	12	...	W	Brazil	1818	C	l p	
9423	foetida *W*	stinking	♄	☐	or	10	jl au	W G	W Indies	1731	S	p.l	Bot reg 321
9424	rubricaúlis *Jacq*	red-stalked	♄	☐	pr	6	jl au	R	S Amer	1821	S	co	
9425	ciliáta *W*	ciliated	♄	☐	or	6	jl s	Pk	Jamaica	1783	C	p l	Bot mag 288
§9426	Herbertiána *Ker*	Lord Caernarv	♄	☐	or	30	jl s	G	N Holl	1821	C	p l	Bot. reg 737
§9427	adiantifólia *B Reg*	Adiantum-lvd	♄	☐	or	20	jn au	Or	Norfolk I	1792	C	l p	Bot reg 233
§9428	pedunculáris *Cav*	long-peduncled	♄	☐	or	10	.	...	Peru	1815	C	l p	Cav ic 5 t 426
9429	édulis *B M*	eatable	♄		fr	30	jl au	W	W Indies	...	C	l p	Bot mag 1989
9430	incarnáta *W*	Rose-colored	♄	☐	or	30	jl au	Pk	America	1629	C	r m	Miss Lawr pass
9431	cærulea *W*	common	♃		or	30	jn o	W B	Brazil	1699	C	s p	Bot mag 28
	β cærúleo-racemósa	*Milne's hybrid*	♄	☐	or	30	jn o	Pu	.....	1820	C	co	Bot. cab. 573
	γ angustifólia	*narrow-leaved*	♄		or	30	jn o	W B	. ....	. .	C	co	
	δ chinénsis	*Chinese*	♃		or	30	jn o	W B	China	...	C	co	
9432	filamentósa *W*	thready	♄	☐	or	20	jn o	W B	America	1817			Bot reg. 584
9433	serráta *W*	saw-leaved	♄	☐	or	20	. .	W G	Martinq	1800	C	l p	Plum amer t 79
9434	pedáta *W*	curl-flowered	♄	☐	or	15	...	W G	W. Indies	1781	C	p l	Plum amer t 81
9435	heterophýlla *W*	various-leaved	♄	☐	or	15	...	W	St Domin	1817	C	p l	Plum. ic 139 f 1



History, Use, Propagation, Culture,

mixed immediately with wine or spirits, and the composition is generally thought a very effectual and easy narcotic.

P incarnata, the May apple, has a perennial root, herbaceous shoots, and sweet-scented flowers, variegated with purple. The fruit is about the size of an apple, orange-colored, with a sweetish yellow pulp, but it requires the heat of the stove to bring it forward.

P cærulea is the tallest and most ligneous of the species. The stem will grow almost as large as a man's arm, and the shoots will often grow the length of fifteen feet in one summer. The leaves are the most elegant of the genus. The flowers are blue outside, and purple and white within: they have a faint scent, and continue but for one day. The fruit is egg-shaped, of the size and color of the Mogul plum, the yellow skin of which encloses a sweetish disagreeable pulp and black seeds.

Besides the species thus enumerated, some varieties have been procured by cross impregnation, which are very remarkable for their beauty, and for having acquired the hardihood of their parent. The most valuable of these artificial productions, is the P cæruleo racemosa, raised by Mr Milne, of Fulham, from seed of P racemosa impregnated by P cærulea, and figured in the Transactions of the Horticultural Society, vol. 3 tab. 3, and the P alato-cærulea, obtained by Mr J. H. Masters of Canterbury, between P alata of the West Indies, and P cærulea.

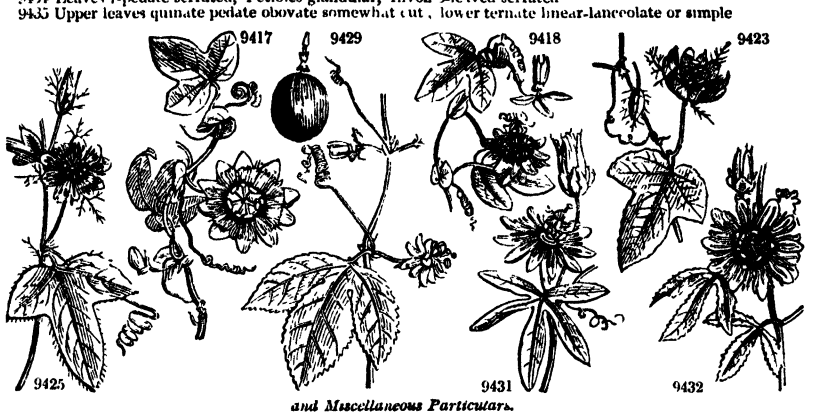
All the species grow and flower freely in a mixture of loam, and light rich earth or peat, with plenty of room. Most of them fruit in the stove, but the P cærulea seldom fruits in the greenhouse. They are all easily increased either by seeds or very young cuttings, in a close moist heat.

As fruit-bearing plants the Passifloras are thus treated:—"Having procured plants with good roots, plant such as are intended to fruit in a border in the stove, and train them to a trellis near the glass; they will in general produce fruit the second year. The seedlings of the P incarnata, will produce fruit the first year. All the species will fruit even in large pots, but Salme says, the "best method is to plant them in an angle of the bark-bed, which has been parted off, either by boards or brick-work, as low as the pit goes. At the bottom of

9397 Leaves obl. ovate subcord ent. veiny, Petioles with 4 glands, Stip lanc. falcate subserrate, Invol 3-leaved
9398 Leaves oblong entire veiny, Petioles with 2 glands, Invol 3-leaved toothed at end
9399 Leaves obl ent acute 3-nerved veiny, Petioles with 2 glands, Ped aggregate axill Fl apetalous, Invol O.
9400 Leaves 2-lobed bluntly emarginate, Petioles without glands, Corona campanulate truncate entire
9401 Lvs cord 2-lobed blunt mucron, up somew stem-clasp Petiol without glands, Pet twice as long as cal.
9402 Leaves cordate 2-lobed acute mucronate pubescent beneath, Petioles without glands, Fruit obovate
9403 Lvs. 2-lobed emarginate at base, Lobes linear blunt divaricating, the intermediate obsolete mucronate
9404 Lvs cord 2-lobed blunt smooth, Petioles without glands, Pedunc. axillary twin, Threads of corona clav.
9405 Leaves cuneiform acuminate divaricating with 2 glands at base, Petioles without glands, Invol O
9406 Lvs. round shortly and bluntly 3-lobed dott downy ben Petiol without glands, Pet twice as short as cal
9407 Lvs round subcord blunt obsoletely 3-lobed smooth dott Petioles without glands, Pet twice as short as cal
9408 Lvs. cord 3-lobed blunt smooth, Petioles without glands, Pedunc axill twin, Pet twice as narrow as cal
9409 Lower leaves 3 lobed acuminate, upper undivided lanceolate, Petioles with 2 glands, Flowers apetalous
9410 Leaves roundish cordate, Petioles with 2 glands, Flowers solitary long-stalked, Cal keeled, Stam 1-sided
9411 Leaves ovate entire 3-nerved veiny, Petioles with 2 glands, Flowers apetalous, Involucrum O
9412 Lvs 3-lobed smooth, Lobes lanc, middle one longest, Petioles with 2 glands, Fl apetal Stem corky at base
9413 Leaves subcordate 3-lobed, Lobes rounded with 2 glands, Pedunc axillary solitary, Flower apetalous
9414 Lvs 3-lobed smooth, Lobes oblong, lat very short, Petioles with 2 glands, Fl apetal Stem corky at base
9415 Lvs peltate deeply 3-lobed smooth, Lobes lin lanc divaricating, Petioles with 2 glands, Flow apetalous
9416 Leaves peltate half 3 lobed smooth, Lobes ovate blunt, Petioles with 2 glands, Fl apetalous
9417 Leaves peltate cordate 3-lobed, Lobes equal oblong blunt, Petioles with 4 glands, Petals length of calyx

9418 Leaves discolored peltate
9419 Leaves 3-lobed downy with a reflexed tooth on each side at the base
9420 Leaves 3-lobed vill, lower smooth above, Lobes obl entire, intermediate longest, Petioles with 2 glands
9421 Leaves 2-lobed glandular beneath, Lobes oblong erect, Peduncles twin
9422 Leaves palmate about 5-parted subserrulate, Involucre 3-leaved entire, Rays a little shorter than corolla
9423 Leaves 3-lobed cordate hairy, Involucres multifid capillary
9424 Leaves and stems all fringed with red hairs
9425 Leaves 3-lobed cordate smooth cili ted serrated, Involucres multifid capillary
9426 Downy, Leaves cord ate 3-lobed, Peduncles twice as short as petiole, Corona much shorter than corolla
9427 Lvs rounded trun at base slightly 3-5-lobed, Lobes blunt, Petioles without glands, Pet shorter than cal.
9428 Stem square, Leaves 3-lobed lobes nearly equal serrated, Pedunc long 1-flowered
9429 Leaves 3-lobed serrated smooth, Invol glandular serrulate caducous, Ovary naked
9430 Lvs 3-lobed serr Lobes obl acute, Petioles with 2 glands, Inv 3-leaved, Threads of corona longer than cor.
9431 Lvs palmate 5-parted entire, Petioles gland Invol 3-leaved entire, Threads of corona shorter than corolla

9432 Leaves palmate 5-parted serr Petioles gland Invol 3-leaved serrate, Threads of corona longer than cor.
9433 Leaves palmate 7-parted serrated, Petioles glandular, Invol 3-fid entire
9434 Leaves 7-pedate serrated, Petioles glandular, Invol 3-leaved serrated
9435 Upper leaves quinate pedate obovate somewhat cut, lower ternate linear-lanceolate or simple



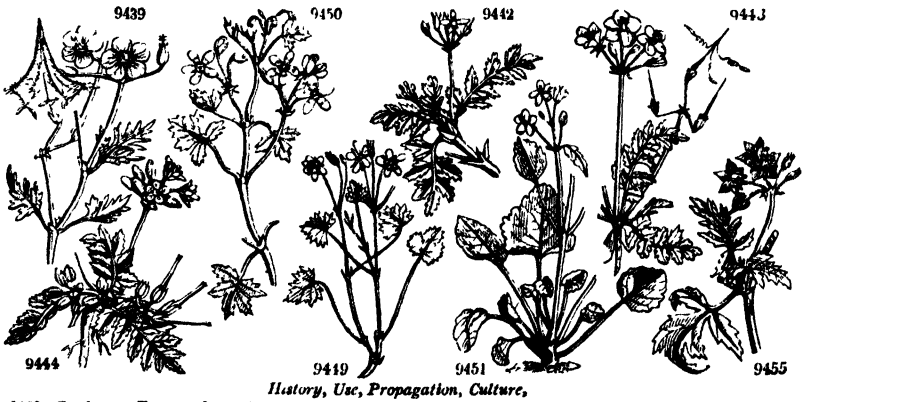
and Miscellaneous Particulars.

the cavity formed by this division, should be laid some brick-rubbish, over which may be thrown a little dead tan, and the whole be then filled with equal parts of very old tan, and a compost of leaf-mould and rotten dung Herein the roots will strike freely, and will even spread through the partition into the pit, growing into the fresh tan Such roots may be trimmed and reduced whenever the tan is changed, but should the plant have been some time in its station, it will be as well to leave part of the old tan in the bottom of the pit, in which the protruded roots may remain undisturbed They do not require the full heat of the pine stove, for they flourish best in a temperature of from sixty-five to seventy degrees, but they do not bring their fruit to perfection if kept in a common greenhouse or conservatory, though they will grow and flower in it. The shoots, as they advance, must be trained near to and under the inclined glass of the stove the flowers will appear in May, and the blooming will continue until September, the fruit setting the whole time, but if it does not set well, it will be advisable to impregnate the stigmas by applying the pollen with a feather As they grow, the very strong shoots should be cut out from their origin, for these do not bear fruit so abundantly as those which are less vigorous, but the fruiting branches must not be shortened on any account. The temperature must be kept up equally during the time of flowering and fruiting. The crop will begin to come in in August, and will continue until January, but the earlier produce is the best. When the crop is all off, which will be early in January, the heat must be reduced to about fifty degrees, so as to check or stop the growth, this being effected, the shoots must be well cut in As little old wood as possible, besides the main stem, which rises from the pit to the glass, and a few pieces (about two or three feet of each of the old branches should be retained, for all that is to be trained under the glass to bear in each year, ought to be the growth of the same season It is found that the shoots break better, and in greater quantity, from the older wood than from that of two years' standing. In this dormant and reduced state it is to be kept during January and February, after which the necessary heat may be applied to cause it to resume its functions for the ensuing season." (*Hort Trans.* III. and IV)

†1460 ERO'DIUM *W.*	Heron's Bill				*Geraniaceæ*	*Sp* 20—45.							
9436 petræ'um *W.*	rock		△	pr	½ jn jl	Pu	S. Europe	1640	D	co	Gouan.ll t 21 f 1		
9437 glandulósum *W.*	glandulr		△	pr	½ jn jl	Pu	Spain	1798	C	l p	Lapey. pyr 1. t 1		
9438 alpínum *W*	Alpine		△	pr	½ my au	R	Italy	1814.	D	co	L'Her ger t. 3		
9439 crassifólium *W*	thick-leaved		△	or	½ mr au	S	Cyprus	1788	R	r m	Sweet ger 111		
9440 laciniátum *W*	laciniated		△	or	½ my.au	R	Crete	1794	R	r m	Ca dis 4 t 113 f 3		
9441 cicónium *W*	long-beaked		○	un	½ jn jl	Pu	S. Europe	1711.	S	co	Jac vind 1 t. 18		
9442 cicutárium *W*	Hemlock-leav'd		○	w	½ ap s	Pu	Britain	ro sid	S	co	Eng bot 1768		
β bipinnátum W	*Numidian*		○	un	½ my jn	Pu	Numidia	1803	C	s l	Ca dis 5 t.126 f 3		
9443 románum *W*	Roman		○	pr	½ my jn	Pu	Rome	1724	S	co	Bot mag 377		
ε caucalifolium Sweet	*Caucalis-leaved*		○	pr	1 my au	Pu	France	1816	S	co	Sweet ger 6		
9444 moschátum *W*	musky		○	pr	1 my jl	Pu	England	m pas.	S	s l	Eng bot 902		
9445 gruinum *W*	broad-leaved		○	un	½ jn jl	R	Crete	1596	S	s l	Cav dis.4 t 88 f 2		
9446 chium *W*	Chian		○	un	1 jn jl	R	Levant	1724	S	co	Cav dis 4 t 92 f 1		
9447 hymenódes *W*	three-leaved		△	pr	½ ja d	Pk	Barbary	1789	S	r m	Sweet ger 23		
9448 Gussóni *Tenore*	Gousson's		△	or	1 ja d	Pa pu	Naples	1821	D	co	Bot. mag. 2445		
9449 malacoides *W*	mallow-leaved		○	or	½ my jl	B	S Europe	1596	S	co	Cav dis 4 t 91 f 2		
9450 incarnátum *W*	flesh-colored		□	or	½ my jl	Fl	C G H.	1787	C	r m	Sweet ger 94		
9451 glaucophýllum *W*	glaucous-leaved		○	un	½ jl au	R	Egypt	1732	S	co	Dil el t.124 f 150		
9452 maritimum *W*	sea		△	w	½ my s	Fl	England	san sh	D	co	Eng bot. 646		
9453 Reichárdi *Dec*	dwarf		△	pr	1 ap s	W	Minorca	1783	C	s l	Bot. mag. 18		
9454 littóreum *Dec*	shore		△	un	½ ap s	R	S Europe	1821	D	co			
9455 serotínum *Stev*	late		△	pr	½ jl s	B	Siberia	1821	D	co	Sweet ger. 137		
multicaúle Link													

HEPTANDRIA.

1461 PELARGO'NIUM *W*	Stork's Bill.				*Geraniaceæ*	*Sp* 186—*uncertain*							
9456 longifólium *Jacq*	long-leaved		△	pr	½ my jn	Pk	C G H	1812	R	r m	Jac ic 3. t 518		
9457 longiflórum *Jacq*	long-flowered		△	pr	½ my jn	Y	C G H	1812	R	r m	Jac ic 3 t 521		
9458 ovalifólium *Sweet*	oval-leaved		△	pr	½ my jn	W	C G H	1820	R	r m	Sweet ger t 106		
9459 reticulátum *Sweet*	netted		△	pr	½ my jn	Pk	C G H	1820	R	r m	Sweet ger t 91		
9460 ciliátum *L'Her*	ciliated		△	pr	½ ap jn	F	C G H	1795	R	r m	Bot. rep 247		
9461 punctátum *W*	dotted-flower'd		△	pr	½ ap my	Y	C G H.	1794	R	r m	Bot. rep 60		
9462 radicátum *Vent*	fleshy fringe-lv		△	pr	½ jn jl	Y	C G H	1802	R	r m	Bot. mag 1718		
9463 spatulátum *Andr*	spatula-leaved		△	pr	½ ap my	Y	C G H.	1795	R	r m	Bot rep 152		
β affine Andr	*fring-spatul lv*		△	pr	½ ap my	Y	C G H	1795	R	r m	Bot. rep 282		
9464 radiátum *Pers*	ray-leaved		△	pr	½ jn au	Y	C G H	1801	R	r m	Bot rep 222		
9465 virgíneum *Pers*	virgin		△	pr	½ my jl	Y	C G H	1795	R	r m	Bot rep 317		
9466 undulátum *Ait*	wave-flowered		△	pr	½ my jl	Y	C G H	1795	R	r m	Bot rep. 292		
9467 lineáre *Pers*	linear-petalled		△	pr	½ jn jl	Y	C G H	1800	R	r m	Bot rep 193		
9468 niveum *Sweet*	snow-white		△	pr	½ jn jl	W	... .	1821	R	r m	Sweet ger 182		
9469 revolútum *Pers*	revolute		△	pr	½ jl au	Pu	C G H	1800	R	r m	Bot rep 354		
9470 uniculatum *W*	ear-leaved		△	pr	½ ap jn	Pk	C G H	...	R	r m	Jac ic 3 t 519		
9471 laciniátum *Pers*	jag-leaved		△	pr	½ my jn		C G H	1800	R	r m	Bot rep 131		
9472 oxalidifólium *Pers*	Wood-sorrel-lv		△	pr	½ my au	Y	C G H	1801	R	r m	Bot rep 300		
9473 nervifólium *Jacq*	nerved-leaved		△	pr	½ my au	Va	C G H	1812	R	r m	Jac ic 3 t 517		
9474 triphýllum *Jacq*	three-leaved		△	pr	½ ap my	F	C G H	1812	R	r m	Jac ic 3 t. 515		
9475 reflexum *Pers*	reflex-leaved		△	pr	½ jn jl	W	C G H	1800	R	r m	Bot rep 224		
9476 roseum *W*	Rose-colored		△	pr	½ mr my	Pk	C G H	1792	R	r m	Bot rep 173		



History, Use, Propagation, Culture,

1460 *Erodium* From ἠρώδιος, a heron, because the fruit resembles the head and breast of that bird. The species are hardy plants, of common treatment, and no great beauty

1461 *Pelargonium* So called from πελαργος, a stork, in allusion to the beak of the fruit, which resembles the bill of that bird, as well as to preserve an analogy with the Geranium or Crane's-bill It was detached by the late learned botanist Mons L'Heritier, along with Erodium, from the Linnean genus Geranium, and distinguished by its seven fertile stamens, irregular flower, tubular nectary, and spiral-leaved awns, or beaks to the capsule

"This vast and favorite genus, for which we are almost entirely indebted to the Cape of Good Hope, consists of a number of well marked species. But that number is greatly augmented in almost every book, by the admission of spurious hybrid species or varieties, which continually start up from seed, wherever many of the primary ones are cultivated, and are for a while propagated by cuttings, and even by seed Sooner or later,

9436 Stemless, Peduncles many-fl. Lvs smoothish pinnat Segm pinnatifid, Petals retuse twice as long as calyx
9437 Stemless, Peduncles many-fl Lvs downy gland pinnat. Segm pinnatif. Petals acute twice as long as calyx
9438 Stem smooth branch. Ped. many-fl Lvs smooth bipinnatif Lobes lin Pet. blunt long than long-point cal
9439 Stem branched diffuse downy, Lvs thick pinnatif cut, Lobes linear, Peduncs many-fl Bractes ovate scariose
9440 Stem prostrate, Leaves bipinnate with linear acute lobes, Stipules and bractes ovate scariose, Ped many-fl
9441 Stem ascend and lvs somew villous pinnated, Seg blunt pinnatif tooth Ped many-fl Pet. length of calyx
9442 Stem prostrate or diffuse hairy, Leaves pinnated, Segm sess pinnatifid cut, Peduncs many-fl Pet. unequal
β Caulescent diffuse, Segments pinnated with linear lobes
9443 Nearly stemless, Leaves pinnate with ovate pinnatifid segments, Petals equal larger than calyx
β Plant of larger size
9444 Stem procumbent, Leaves pinnated with stalked ovate unequally serrated segm. Peduncs downy glandular
9445 Stem erect nearly smooth, Leaves 3-cut, Segments cut-toothed, Peduncs many-fl Calyx striated nerved
9446 Stem erect somewhat diffuse, Leaves smooth subcordate, upper 5-parted with cut toothed lobes
9447 Stem erect branch shrubby at base, Lvs 3-lobed or 5-parted very blunt, Stipules and bractes scariose ovate
9448 Stem erect soft, Peduncs many-fl Leaves cordate blunt bluntly toothed undivided or 3-lobed
9449 Stem branched hairy, Leaves cordate undivided or 3-lobed blunt toothed, Petals length of calyx
9450 Stem ½ shrubby and leaves nearly smooth, lower cord undivided toothed, Lobes cuneate 3-toothed at end
9451 Stem erect and leaves smooth oblong lobed crenate fleshy, Awns feathery from middle to end
9452 Caulescent diffuse smooth, Leaves cordate ovate cut-crenate pubescent, Awns beardless
9453 Stemless, Leaves cordate crenate blunt smoothish, Peduncs 1-fl Petals larger than calyx
9454 Caulescent diffuse smoothish, Leaves cordate roundish 3-lobed unequally crenate, Awns bearded
9455 Stems diffuse, Leaves opposite 3-cut · segm lateral cut-toothed divaricating, Peduncles many-flowered

HEPTANDRIA.

§ 1 HOAREA Sweet. *Petals* 5, *rarely* 2 *or* 4 *obl lin*, 2 *upper parallel, with long claws abruptly reflexed in the middle Stamens in a long tube, length of lower petals, bearing* 5 *or rarely* 2-4 *anthers, the others sterile, straight or incurved at end, the* 3 *lower shorter than the fertile ones Stemless herbs, with tuberous turnip-like roots, and radical stalked leaves*

* *Leaves oblong, entire or lobed Lobes entire or scarcely toothed*

9456 Stemless, Leaves lanceolate entire acute smooth, older pinnatifid linear, Umb comp Fl tetrandrous
9457 Stemless, Leaves lanceolate entire acute smooth, Umb comp 4-fl Fl tetrandrous, Petals linear
9458 Leaves oval or oval-oblong blunt flat or involute at edge entire hairy, Petals linear wavy twisted
9459 Stemless, Leaves ellipt lanc or obl ent hairy revol. at edge, Fl pentandr Pet lin spatul wavy reflexed
9460 Stemless, Leaves ovate acute entire subciliated, Umb compound, Fl pentandrous, Petals linear spatulate
9461 Stemless, Leaves ovate toothed smooth, Umb compound, Fl diandrous, Pet linear, 3 lower shortest
9462 Stemless, Leaves oval obl entire acute at each end smooth ciliated, Umb simple, Flowers pentandrous
9463 Stemless, Lvs obl subspatul blunt smooth, Umb comp Fl pentandrous, Petals lin blunt subrevolute

9464 Stemless, Leaves elliptical spatulate entire smooth, Umb compound, Fl pentandrous, Petals cuneiform
9465 Stemless, Lvs ellipt ovate acute at each end smooth, Umb subcomp Fl pentandrous, Pet lanc cuneate
9466 Stemless, Leaves lin lanc entire ciliated, Umb simple, Flowers pentandrous, Petals wavy nearly equal
9467 Stemless, Leaves linear lanceolate repand, Umbel nearly simple, Flowers pentandrous, Petals linear
9468 Stemless, Lvs smooth lower ovate ent, upper pinnatif Petals reflexed, lower ones much the smallest

** *Leaves sagittate, cordate, 3-lobed, or with an appendage at base*

9469 Stemless, Leaves cordate blunt nerved entire, generally with two ears at base, Leaves of involucre revolute
9470 Stemless, Lvs obl lanc acum at each end hairy ciliat at edge, generally ent somet with 2 obl lin append
9471 Stemless, Leaves entire and cut-lobed at end, Scape flexuose, Umbel compound
9472 Stemless, Leaves ciliated 3-cut segm ovate blunt, Umbel compound
9473 Stemless, Leaves smooth 3-cut · segm blunt lobed nerved glauc beneath, Scapes hispid, Umbel compound
9474 Stemless, Leaves smooth 3-cut segm blunt crenated, Scapes and petioles downy
9475 Stemless, Leaves smooth 3-cut segm lobed cut recurved, Two upper filaments and stigmas reflexed
9476 Stemless, Leaves cut-lobed downy, Umb simple close, Three lower petals much the smallest

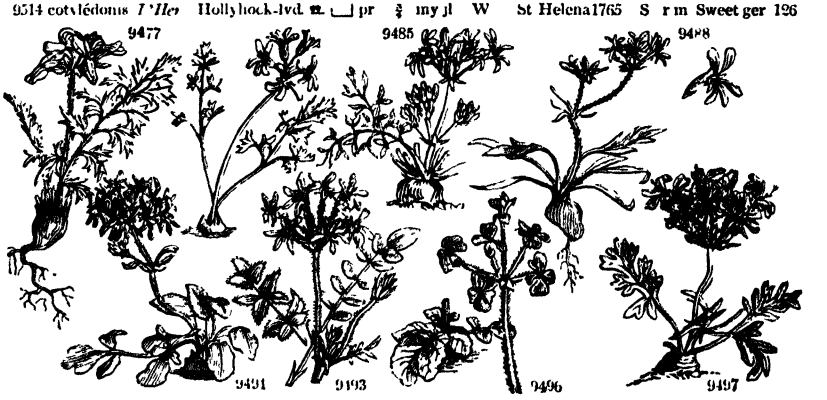


and Miscellaneous Particulars

however, they for the most part vanish, even before the eyes of those who witnessed their origin" (*Smith*)

The greater part of the species being of the easiest cultivation, and many bearing the confined air of a sitting room better than most plants, it has happened that they have become objects of universal cultivation and attention, of which, indeed, they are in many cases deserving, for their neatness and beauty alone There is, however, an uniformity in their form, coloring, and foliage, for which the liveliest colors will scarcely compensate The popular taste for the Pelargonium tribe, or for Geraniums, as they are commonly called, has been much aided by several splendid publications both in this country and abroad, and especially by the Geraniaceæ of Mr Sweet, in which it is proposed to figure not only all the species formed by the hand of nature, but the multitudes of hybrid creations produced by the assistance of modern ingenuity It is very doubtful whether any permanent advantage is derived from the obtaining such of these productions as are truly

9477	rapáceum *Jacq*	Fumitory-flow	⁂	△	pr	½	ap jn	Pk	C. G. H	1788.	R	r m	Bot. rep 239
9478	nútans *Dec*	nodding	⁂	△	pr	½	ap jn	Y	C G H	1788.	R	r m	Bot. mag. 1877
9479	corydalifólrum *Sw*	fine-cut	⁂	△	pr	½	ap jn	Pa Y	C G H.	1821	R	r m	Sweet ger. t 18
9480	barbátum *Jacq*	bearded	⁂	△	pr	½	jl au	Pk	C G. H.	1790.	R	r m	Bot. rep. 323
9481	fissifólium *Pers*	cloven-leaved	⁂	△	pr	½	ap.au	Pk	C. G H	1795	R	r m	Bot rep 578
9482	setósum *Sweet*	setose	⁂	△	pr	½	ap au	Pk	C G H.	1821	R	r m	Sweet ger. 38
9483	bubonifólium *Pers*	Bubon-leaved	⁂	△	pr	½	mr jl	W pu	C G H	1800	R	r m	Bot rep. 328
9484	violæflórum *Swet*	violet-flowered	⁂	△	pr	½	mr jl	W	C. G H		R	r m	Sweet ger 123
9485	floribundum *Ait*	many-flowered	⁂	△	pr	½	mr my	Pk	C G H.	1795	R	r.m	Bot. rep 420
9486	pilósum *Pers*	hairy	⁂	△	pr	½	my jl	Pk	C G H	1801	R	r.m	Bot rep 259
9487	pennifórme *Pers*	winged	⁂	△	pr	½	mv jn	Y	C G H.	1800.	R	r m	Bot. rep 269
9488	purpurásceus *Pers.*	purple-flowered	⁂	△	pr	½	my jn	Pu	C G H	1800	C	r m	Bot rep. 204
9489	hirsútum *Jacq*	various-leaved	⁂	△	pr	½	mr	Pk	C G H	1788	R	r m	Bot. rep. 317
9490	melanánthum *Jacq*	black-flowered	⁂	△	pr	½	my jn	D Br	C G H	1790	R	r m	Sweet ger. 73
9491	dioicum *Ait.*	dioecious	⁂	△	pr	½	jn jl	D Br	C. G H	1795	R	r m	Bot rep 209
9492	átrum *L'Her*	dark-brown	⁂	△	pr	½	my jl	D Br	C G H	1793	R	r m	Sweet. ger. 72
9493	vicifólium *L'Her*	wing-leaved	⁂	△	pr	½	ap jn	Pk	C G H	1779	R	r m	Bot mag 579
9494	astragalifólium *Pers*	Astragalus-lvd	⁂	△	pr	½	jl	W pu	C G H	1788	R	r m	Bot rep 190
9495	coronillæfólium *Pers*	Coronilla-lvd	⁂	△	pr	½	jn jl	Br	C G H	1795	R	r m	Bot. rep 306
9496	heracleifólium *Lodd*	Cow-parsnip-lv	⁂	△	pr	½	jn jl	D Br	C G H	1818	R	r m	Bot cab. 437
9497	incrassátum *B M.*	fleshy-leaved	⁂	△	pr	½	jn jl	Pk	C G H	1801	R	r m	Bot. mag 761
9498	cárneum *Jacq*	flesh-colored	⁂	△	pr	½	ap jn	Pk	C. G H	1812	R	r.m	Jac ic 3 t. 512
9499	lateritium *W*	brick-colored	⁂	□	or	1½	jn au	R	C G. H.	1800	C	r m	Jac ecl. 1 57
9500	cynosbatifólium *W*	Currant-leaved	⁂	□	or	1½	ap jl	D R	.....	..	C	r m	W.ho ber.2 t.78
9501	columbínum *W*	Dove's-foot	☿	△	pr	½	jn o	Pu	C G H	1795.	R	r m	Jac schœ 2 t 133
9502	procúmbens *Pers*	procumbent	☿	△	pr	½	ap my	Pu	C G H	1801	S	r m	Bot rep 234
9503	humifúsum *W*	trailing	☿	◯	pr	½	my jl	R	C. G H	1801	S	r m	Sweet ger 42
9504	chamædryfólium *J*	Chamædrys-lv	☿	△	pr	½	my jn	R	C G H	1812	R	r m	Jac ic 3 t 528
9505	austrále *W*	Botany Bay	⁂	□	pr	½	my au	R	N S. W	1792	S	r m	Jac. ecl 1. 100
9506	althæoides *L'her*	Althæa-leaved	☿	◯	pr	½	ap jn	W	C G H	1724	S	r m	Jac col 4 t.21 f 2
9507	láxum *Sweet*	loose-panicled	⁂		pr	1	ap jn	W pk	C G H	1821	S	p l	Sweet ger 196
9508	ceratophýllum *L'her*	horn-leaved	⁂	□	or	1	my jn	W pu	Africa	1786	C	r m	Bot mag 315
9509	dasycaúlon *Sims*	thick-stemmed	⁂	□	or	1	jl d	W pu	C G H	1795	C	r m	Bot mag. 2029
9510	crithmifólium *Sm*	Samphire-leav	⁂	□	or	1	my jn	W pu	C G H	1790	C	r m	Smith ic pict 13
9511	alterifnans *Wendl*	Parsley-leaved	⁂	□	or	1	mv au	W pu	C G H	1791	C	r m	Wendl her 2 t.9
9512	carnósum *Ait*	fleshy-stalked	⁂	□	or	1	jn au	W pu	C. G H	1724	C	r m	Sweet ger. 98
9513	multiradiátum *Wen*	many-rayed	⁂	△	pr	1	my jn	D Br	C G H	1820	R	r m	Sweet ger 145
9514	cotyledónis *L'Her*	Hollyhock-lvd	⁂	□	pr	¾	my jl	W	St Helena	1765	S	r m	Sweet ger 126



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hybrid, but it is quite certain, that to admit them into works of science, is replete with the greatest inconvenience, and can lead to no useful end In the arrangement here adopted, all those kinds which are manifestly or avowedly artificial productions, are therefore placed at the end of the legitimate species in alphabetical order, an order much more commensurate with their importance, than an arrangement upon scientific principles

**** Leaves pinnatifid. Segments cut or multifid*

9477 Stemless, Leaves hairy bipinnated, Lobes linear somewhat blunt, Upper petals reflexed · lower connivent
9478 Nearly stemless, Lvs. bipinnated hairy, Lobes pinnati. cut multifid linear somewhat toothed, Fl. nodding
9479 Stemless, Lvs hairy pinnated : segm pinnatifid or trifid, Lobes linear acute
9480 Stemless, Lvs. pinnated · segm trifid, Lobes linear acum bearded at end, Pet lin blunt
9481 Stemless, Lvs pinnated : segm trifid cut at end naked, Pet. blunt all with an oblong spot
9482 Stemless, Lvs pinnated pubesc : segm. cuneate 3-5-toothed at end, Teeth setose at end, Umb. compound
9483 Stemless, Lvs pinnated smooth segm. cut-lobed acute, Umb simple, Petals emarginate
9484 Subcaulescent, Leaves pinnated or 3-cut segm obl lanc smooth entire ciliated at edge acum at end
9485 Stemless, Lvs pinnated. segments bipartite, Umbel compound
9486 Stemless, Lvs pinnated hairy : segm cut multifid, Umbel simple 4-6-fl. Petals linear
9487 Stemless, Lvs pinnated segm lanc linear, Umbel compound
9488 Stemless, Lvs lanc linear entire and pinnatifid, Umb compound
9489 Stemless, Lvs hairy ciliated obovate or lanc. entire or pinnatifid, Stipules adhering to petiole
9490 Nearly stemless, Lvs hairy pinnated · segm. oval-obl blunt subpinnatifid or toothed, Petals lin blunt
9491 Stemless, Lvs hispid entire or 3 cut, Umbel compound, Flowers dioecious [at end
9492 Stemless, Lvs. downy : some obl. and entire, others pinnated, Upper sepal erect, Barren filam. incurved

§ 2 DIMACRIA Lindl *Petals 5 unequal, two upper connivent spreading at end Stamens shorter than sepals, 5 fertile, two lowermost twice as long as the rest, upper very short, 5 sterile, very small, nearly equal Stemless herbs, with a tuberous turnip-like root, leaves stalked pinnatifid*

** Leaves pinnated, with an odd segment. Segments entire*

9493 Stemless, Lvs pinnated villous segm ovate in 2 or 4 pairs, Petals nearly entire flat
9494 Stemless, Lvs pinnated hairy segm elliptical in many pairs, Petals wavy twisted at base
9495 Stemless, Lvs pinnated smooth. segm of 1 or 2 pairs obovate or oblong
9496 Stemless, Lvs pinnated smooth segm of 2 or 3 pair obovate the terminal ones confluent

*** Leaves pinnate, with an odd one. Segments lobed or multifid*

9497 Nearly stemless, Leaves smooth pinnated · segments lobed blunt, Upper petals obcordate
9498 Stemless, Lvs smooth bipinnated, Lobes trifid linear blunt, Scape simple

§ 3 CINOSBATA Dec *Petals oval, nearly equal, almost twice as long as calyx Stamens 10 erect, the 5 alternate ones bearing the anthers Stems shrubby, erect*

9499 Stem shrubby at base, Lvs cordate 5-lobed hairy zoned, Lobes acutely toothed at end
9500 Stem shrubby branched, Lvs cordate 3-lobed toothed hairy middle lobe 3-lobed, Pedunc 2-floweerd

§ 4 PERISTERA. Dec. *Petals nearly equal, as long as calyx, or a little larger Stamens 10, 5 longer, nearly equal, or one only occasionally abortive, 5 alternate, very short, sterile, tooth like Herbs with stems, and with the appearance of Erodium or Geranium*

9501 Stems many diffuse, Lvs cordate roundish many-parted, Lobes trifid, Lobelets linear blunt
9502 Caulescent procumbent, Lvs cord somewhat lobed crenate-toothed, Pedunc 2-flowered
9503 Stems many procumbent, Lvs cord. usually 3-parted or 5-lobed toothed, Pedunc 3-5-flowered
9504 Much branched procumbent, Leaves ellipt blunt hoary toothed, Pedunc 2-flowered, Anthers 5
9505 Diffuse procumbent, Lvs cordate somewhat lobed villous beneath, Peduncles many-flowered
9506 Diffuse procumbent, Lvs cordate ovate villous 3-lobed toothed upper sinuated, Umbel many-flowered

§ 5 OTIDIA Lindl. *Petals oblong-linear, nearly equal, about twice as long as calyx, the two upper auricled at the base on the upper side Stamens 10, erect, 5 fertile, 2 upper spatulate or subulate, 3 lower shorter Stems shrubby, fleshy Leaves alternate pinnated, fleshy Flowers whitish*

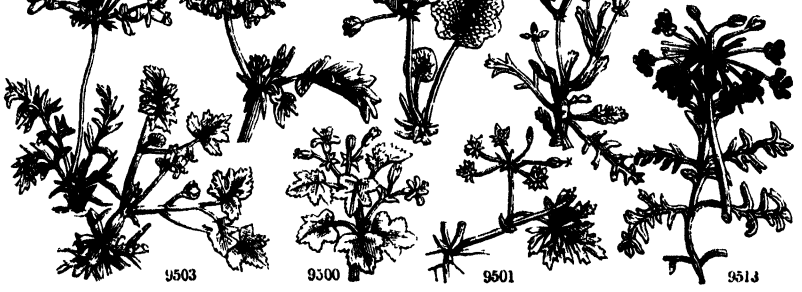
9507 Stem shrubby fleshy, Umb many-flowered loosely panicled, Lvs pinnated smooth, Petals somew toothed
9508 Stem shrubby fleshy branched, Lvs fleshy pinnated lobes lin round channelled entire or 3-toothed at end
9509 Stem shrubby fleshy warted, Lvs fleshy pinnated segm cut pinnatifid subtrifid at end [at base
9510 Stem shrubby fleshy, Lvs fleshy bipinnated lobes dilated and cut at end, Pedunc panicl Upper pet crisp
9511 Stem shrubby fleshy, Branches hairy, Lvs pinnat segm stalked subalternate wedge-shaped toothed at end
9512 Stem fleshy thick suffruticose at base, Lvs smooth thick sinuate-pinnat segm obl blunt cut toothed at end

§ 6. POLYACTIUM Dec *Sepals nearly equal, revolute Petals 5, nearly equal, obovate Stamens 10, 5 fertile the four lower long, subulate, upper broad, spatulate, reflexed at end, the fertile ones shorter, incurved at end Petals with a very large dark brown spot which is scarcely edged with yellow*

9513 Subcaulesc Lower lvs pinnat hairy segm pinnati, lobes obl blunt cut-toothed, upper smoothish bipinn

§ 7 ISOPETALUM Sweet *Upper sepal ending in a honey pore and not in a tube Petals 5, equal Stamens 10, united in a very short cup, 5-6 fertile, spreading incurved at end, sterile unequal, subulate incurved Shrub with a fleshy stem.*

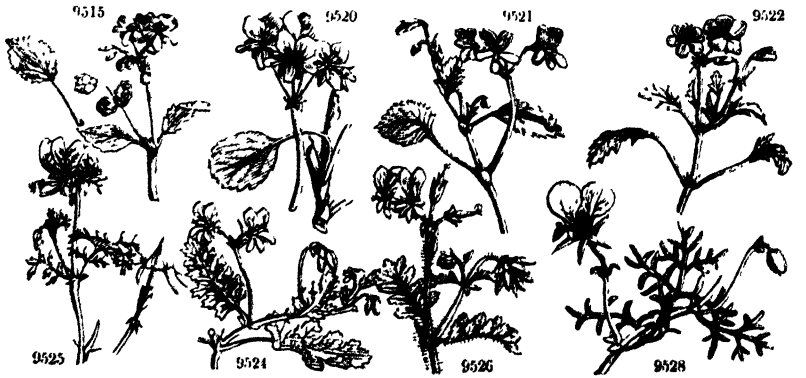
9514 Stem thick fleshy branched naked, Lvs cord subpeltate rugose pubesc netted with downy veins beneath



and Miscellaneous Particulars

The bulbous or fleshy stemmed species are generally very rare in collections, and are far more interesting than the common or vulgar kinds They are distinguished by so peculiar a habit and constitution, that there can be little doubt of the propriety of separating them into one or more distinct genera, as has been done already by the authors quoted above, especially as the characters upon which they are founded, are generally more certain than those by which Erodium and Geranium are defined. Here, however, they are placed as

9515 blattárium *Jacq*	downy-leaved	♃	⊔	or	1½	jn au	V	C	G	H.	1790	S	r m Sweet ger. 88
9516 eriostémon *Jacq*	velvet-leaved	♃	⊔	or	1½	mr jn	W	C	G	H	1794	C	r.m Jac. echo 2 t 132
9517 holosericeum *Sweet*	silky	♃	⊔	or	1½	mr jn	D.Pu	C	G	H	1820	C	r m Sweet ger. t 75
9518 Œnothéræ *Jacq*	Œnothera-like	☿	△	or	1	mr jn	Pk	C	G	H	1812	S	r m Jac ic 3. t 525
9519 coronopifolium *Jacq*	Buckshorn-lvd	♃	⊔	or	1½	jn o	P.v	C	G.	H.	1791	S	r.m Bot. rep 338
9520 cánum *Pers*	hoary	♃	⊔	or	1½	jn.o	Pk	C	G	H.	1820	S	r m Sweet ger 114
9521 carinátum *Sweet*	carinate	♃	⊔	or	1½	jn o	W.pu	C.	G	H.	1820	S	r.m Sweet ger. 21
9522 tricolor *B M*	three-colored	♃	⊔	pr	1½	ja.d	W pu	C.	G	H.	1791.	C	r m Bot. mag. 240
9523 canariénse *W.*	Canary	♃	⊔	pr	1½	jl s	W R	Canaries			1802.	C	r m W hort ber t 17
9524 myrrhifolium *Ait*	Myrrh-leaved	♃	⊔	pr	1½	my au	W R	C	G	H	1696	R	r m Jac. ic 3 t 531
9525 coriandrifólium *Jac*	Coriander-lvd	☿	◯	pr	1	mr s	W R	C	G	H	1724	S	r m Sweet ger t. 34
9526 lácerum *Jacq*	torn-leaved	☿	△	or	1½	jn au	Pk	C	G	H	1731	S	r m Jacq ic 3. t. 532
9527 anemonifólium *Jacq*	Anemone-lvd	☿	◯	or	1½	jn au	Pk	C	G	H	...	S	r m Jacq ic t 535
9528 cucalifólium *Jacq*	Cucalis-leaved	☿	◯	pr	¾	mr s	Pk	C	G	H	1812	S	r m Jac ic 3 t 529
9529 multicaúle *Jacq*	many-stalked	☿	◯	pr	¾	jn au	Pa V	C	G.	H	1802	S	r m Jac ic 3 t 534
9530 asarifólium *Sweet*	Asarum-leaved	⁂	△	el	½	d	D Pu	C	G	H	1821	D	l p Sweet ger 206
9531 dipetalum *L'Her*	two-petalled	⁂	△	el	½	ap my	Pa pu	C	G	H	1795	D	l p L'her. ger t 43
9532 péndulum *Sweet*	pendulous	♀	⊔	el	½	mr jl	R	C	G	H		C	r m Sweet ger 188
9533 quinátum *B M.*	five-fingered	♃	⊔	or	1	mr jl	Pa Y	C	G	H	1793	C	r m Bot. mag 547
9534 tetragónum *L'Her*	square-stalked	♃	⊔	el	2	jn au	Pk	C	G	H	1774	C	r m Sweet ger 99
β variegatum	*variegated*	♃	⊔	el	2	jn au	Pk	C	G	H	1774	C	r m Bot mag 136
9535 acetósum *Ait*	Sorrel-leaved	♃	⊔	or	3	my s	Pk	C	G	H	1710	C	r m Bot mag 103
9536 scándens *Ehr*	climbing	♃	⊔	or	3	jn au	Pk	C	G	H	1800	C	r m
9537 pumilum *W*	dwart	♃	⊔	or	1½	jn jl	Pk	C	G	H	1800	C	r m
9538 stenopétalum *Ehr*	narrow-petalled	♃	⊔	or	1½	jn jl	S	C	G	H	1800	C	r m
9539 hybridum *Ait*	bastard	♃	⊔	or	2	my s	S	C	G	H	1732	C	r m Sweet ger 63
9540 zonále *B*	corn horse shoe	♃	⊔	or	2	ap d	S	C	G	H	1710	C	r m Cav dis 4 t 98 f 2
β marginatum	*white-margined*	♃	⊔	or	2	ap d	S		..	..	...	C	r m
9541 Tothergillii *Sweet*	Fothergill's	♃	⊔	or	2	ap d	S	C	G	H	...	C	r m Sweet ger 226
9542 inquinans *Ait*	scarlet-flowered	♃	⊔	or	2	my s	S	C	G	H	1714	C	r m Ca dis 4 t 106.f 2
9543 heterógynum *L'Her*	six-stamened	♃	⊔	or	2	my s	Pk		.....		1786	C	r m L'her ger t 18
9544 mónstrum *Ait*	cluster-leaved	♃	⊔	or	2	jl au	R		.....		1784	C	r m Sweet ger 13
9545 inodórum *W*	scentless	♀	△	pr	½	my o	Pa pu	N	Holl		1796	C	r m W ho ber.1 t.34



History, Use, Propagation, Culture,

sectional names, so as to present a double arrangement, in which the purposes of combination and analysis are both combined.

As the cultivation of Pelargonium generally is of the easiest kind, so is that of the bulbous rooted species of the most difficult nature. They require plenty of air and light, not to be over-watered, and a great deal of

§ 8. CAMPYLIA Lindl. *Petals 5, unequal, two upper larger, with an auricled claw. Stamens* 10, *hairy or pubescent, 5 fertile, erect, 5 alternate sterile, of which the two upper are longer and hooked back Herbs at the base a little shrubby, branched Leaves stalked, ovate or oblong, toothed or cut*

* *Petals with an appendage to the claw · 5 stamens fertile, erect ; 5 sterile, of which the two uppermost are hooked backwards* TRUE CAMPYLIA

9515 Stem suffruticose erect, Lvs ovate round blunt hoary silky toothed, Upper petals roundish · lower oblong
9516 Stem suffruticose erect, Lvs ellipt roundish blunt crenate silky, Upper pet obovate sharply emarginate
9517 Stem suffruticose erect, Lvs roundish ovate blunt doubly toothed silky, Upper petals round dark purple
9518 Stem herbaceous ascending, Lvs obl lanc blunt toothed hoary, Pedunc 1-3-fl Upper petals obovate
9519 Stem suffruticose ascending, Lvs lin lanc cut-toothed at end hoary beneath, Upper petals obov oblong
9520 Stem suffruticose, Lvs ovate plaited serrated downy, 3 upper petals very broad ovate
9521 Stem suffruticose ascending, Lvs ovate unequally toothed or cut, Stipules carinate, Upper pet oval wavy

** *Upper petals warted above the claw Tube of stamens very short, 5 fertile recurved, spreading, 5 sterile straight* PHYMALANTHUS Lindl

9522 Stem suffruticose erect, Lvs lanc villous cut-toothed trifid, Upper petals blistered at base

§ 9. MYRRHIDIUM Dec *Petals 4, or rarely 5, the two upper very large, obovate, cuneate, usually marked with branching lines, the two or three lower much smaller, oblong-linear Stamens* 10, *with their tube and filaments straight, generally with 5 anthers, and 5 alternately barren, rarely 7 fertile Biennial or perennial herbs rarely shrubby Stems round Leaves pinnate or ternate, often multifid.*

* *Anthers 5 Petals 4*

9523 Stem suffruticose, Lvs 3-parted, Lobes toothed at end blunt · lower obovate, middle ovate often trifid
9524 Stem herbaceous strigose ascending, Lvs hispid on each side rigid pinnated, Lobes cut-toothed
9525 Stem herbaceous biennial somewhat downy, Lvs bipinnate smooth, Lobes linear subpinnatifid

** *Anthers 5 Petals 5*

9526 Stem herbaceous hairy suberect, Lvs bipinnatifid, Segm. lanc blunt toothed at end

*** *Anthers 7 Petals 4*

9527 Stem herbaceous biennial hairy erect, Lvs pinnated hairy beneath smooth above, Lobes toothed
9528 Stem herbaceous hairy, Lvs bipinnate, Lobes linear smoothish, Pedunc. 1-fl
9529 Stem herbaceous procumbent smooth, Lvs subbipinnatifid toothed, Pedunc many-fl capitate

§ 10 SEYMOURIA Sweet *Petals 2, distinct at base, abruptly reflexed in the middle Stamens 5, nearly equal, in a long straight tube, all fertile*

9530 Lvs. roundish cordate bluntish entire ciliated shining on the upper side
9431 Leaves ovate entire acute smooth, Umb simple, Flowers pentandrous

§ 11 JENKINSONIA Sweet *Petals 5, the two upper much larger than the rest, emarginate at end, striated with colored lines, the 3 lower much smaller Stamens 10, ascending, spreading at end, hairy at base, 7 fertile, of which the three upper are shorter, the three sterile shortened, subulate, of equal length. Stems shrubby Flowers large*

9532 Lvs bipinnatifid hairy, Stem procumb hairy, Flowers heptandrous Petals 4
9533 Stem shrubby flexuose, Lvs pubescent palmate 5-fid, Lobes cuneate 3-toothed at end

§ 12 CHORISMA, Lindl *Petals 4, rarely 5, the two upper with long claws largest, two lower much smaller Stamens declinate, in a very long tube, jointed in middle, connate, 7 fertile, of which the two lower are loose, the 3 sterile shortened, subulate of equal length*

9534 Branches 4-cornered fleshy, Leaves cordate bluntly lobed somewhat toothed

§ 13 PELARGONIUM. Lindl *Petals 5, unequal, the two upper approximating Stamens* 10, *unequal, 7 fertile, 3 sterile, subulate*

* *Petals whole colored, the two upper shorter and narrower Stamens short, erect, the two lowest very short with nearly sessile anthers Stem shrubby, fleshy* CRONIUM, Sweet

9535 Leaves very smooth obovate crenate somewhat fleshy, Pedunc few-fl Petals linear
9536 Leaves roundish obsoletely lobed crenate smooth zoned, Petals linear breadth of sepals
9537 Leaves roundish obseletely lobed crenate younger somewhat zoned, Pedunc 4-fl Petals linear
9538 Leaves roundish obsoletely lobed crenate downy zoned, Petals linear narrower than sepals
9539 Leaves roundish obsoletely lobed crenate smooth not spotted, Petals linear cuneiform
9540 Leaves cordate-orbicular obsoletely lobed toothed zoned upwards, Pedunc many-fl Petals cuneate

9541 Leaves reniform 5-lobed crenate zoned, Stipules cordate obl acute ciliated, Umbels many-fl crowded
9542 Leaves round reniform scarcely divided crenate viscid, Petals obovate cuneate
9543 Leaves cordate orbicular cut-lobed toothed pubescent on each side, Petals obl cuneate
9544 Leaves roundish reniform obsoletely lobed somewhat zoned complicate crisp downy on each side

** *Petals nearly equal in size*

§ A *Stems herbaceous Leaves cordate, palmate, lobed Petals small*

9545 Stem diffuse, Lvs cord ov obsoletely lobed bluntly toothed ciliated Pet equal to the cal and one another



and Miscellaneous Particulars.

attention at all periods. If well managed, they flower beautifully, and are incomparably superior in all points to the commoner races. They are no where in this country managed with so much success as by Sweet, who seems to hold the reins of nature in his hands in a more steady manner than any cultivator of the age.

9546	glomerátum *Jacq*	heaped	♀ △	pr	½	my.o	W	N Holl	...	C	r m	Sweet ger 68
	P austr dir Sweet,	not of Willd										
9547	odoratissimum *Ait*	sweet-scented	☿ □	or	2	my.o	Pk	C. G H	1794.	S	r.m	Ca dis.4.t 103 f 1
9548	frágrans *W*	Nutmeg-scent	☿ □	or	2	my o	Va	C G H	...	C	r m	Sweet ger. 172
9549	grossularioides *Ait*	Gooseberry lvd	☿ □	or	2	ap au	Pk	C G H	1731.	S	r m	Ca.dis 4 t.119 f 2
9550	áuceps *Ait*	flat-stalked	♀ △	pr	½	my jl	Pk	C. G. H.	1788	S	r m	Jac col.4 t 22 f 3
9551	tabuláre *L'Her*	rough-stalked	☤ △	pr	½	my au	Pa Y	C G H	1775.	S	r m	L'Her ger t 9
9552	alchemilloides *Ast.*	mantle-leaved	☤ △	pr	½	my o	Pk	C. G H	1693	C	r m	Cav dis 4.t 98 f.1
9553	senecioides *L'Her*	small white-fl.	○	cu	½	jn jl	W	C. G. H	1775.	S	r.m	L'Her. ger t. 11
9554	abrotanifólium *Jacq*	Southernw -lv.	☿ □	or	3	my jl	R	C G H	1791	S	r.m	Jac schœ 2 t 136
9555	incisum *W*	cut-leaved	☿ □	or	3	my au	W R	C G. H.	1791.	C	r m	Bot. rep 67
9556	tenuifólium *L'Her*	fine-leaved	☿ □	or	3	my jl	Pu	C G. H	1768	S	r.m	L'Her ger t 12
9557	tripartitum *Sweet*	trifid-leaved	☿ □	or	3	ap au	Pa.Y	C G H	1794	C	r.m	Sweet ger 115
9558	spinósum *W.*	thorny	☿ □	or	3	my jn	Pk	C G H	1795	C	r m	Pater. it t p 67
9559	gibbósum *W*	gouty	☿ □	ft	1½	my jl	G	C. G. H	1712	C	r.m	Sweet ger 61
9560	flávum *Ait*	carrot-leaved	⁂ △	ft	½	jl s	G Br	C G H	1724	R	r.m	Jac ic 3 t 592
9561	filipendulifólium *Sw*	Dropwort-lvd	⁂ △	cu	½	my o	G Br	C G H	1812	R	r m	Bot mag 1641
9562	pedunculátum *Sweet*	long-stalked	⁂ △	cu	1	my o	G Br	C G H	1822	R	r m	Sweet ger 250
9563	tris'te *Ait*	night-smelling	⁂ △	ft	1	my o	G Br	C G H	1632	R	r m	Ca.dis 4 t.107 f 1
9564	sch.zopétalum *Sweet*	cut-petalled	⁂ △	el	1	jn	Y Br	C G H	1821	R	r m	Sweet ger 232
9565	lobátum *W*	Cow Parsnep-lv	⁂ △	cu	1	jl au	Y Br	C G H	1710	R	r m	Sweet ger 51
9566	millefoliátum *Sweet*	Milfoil-leaved	⁂ △	cu	½	jl au	Y Br	C. G H	...	R	r.m	Sweet ger 230
9567	sanguíneum *Wendl*	bloody	☤ △	or	1	jl au	S	C G H	....	S	r m	Sweet ger 76
9568	tulgidum *Ait*	Celandine-lvd	☿ □	or	1½	ap jl	S	C G H	1723.	C	r m	Ca dis 4 t 116 f 2
9569	ignéscens *Sweet*	fiery	☿ □	or	1½	mr jn	S	... ..	1812	C	r m	Sweet ger 2 55
9570	quinquevulnerum *W*	dark-flowered	☿ □	or	1½	my o	D Pu	C G H	1796	C	r m	Bot rep t 114
9571	bicolor *Ait*	two-colored	☿ □	or	1½	jl au	Pa pu	.....	1778	R	r m	Bot mag 201
9572	pállens *Sweet*	pallid	⁂ △	pr	¾	mr jl	Pa.Y	C G H	..	S	r m	Sweet ger 148
9573	pulchéllum *B M*	nonesuch	⁂ △	pr	¾	mr my	W	C G H	1795	S	r m	Bot mag 524
9574	pictum *Pers*	painted	⁂ △	pr	½	ap my	W R	C G H	1800	R	r m	Bot. rep 168
9575	echinátum *B M*	prickly-stalked	⁂ △	pr	1	my au	W R	C G H	1789	R	r m	Bot mag 369
9576	crassicaúle *L'Her*	thick-stalked	⁂ △	pr	¾	jl au	Pa.Y	S. Africa	1786	S	r m	Sweet ger 192
9577	primulinum *Sweet*	primrose-flow	☿	or	1½	jl au	V	C G H	....	C	r m	Bot mag 477
9578	cortusæfólium *L'Her*	cortusa-leaved	☿ □	or	½	jl au	Pk	Africa	1786	C	r m	Bot rep 121
9579	reniförme *B M.*	Kidney-leaved	☿ □	or	2	ja.d	Pu	C. G H.	1791	C	r m	Bot mag 493
9580	láteripes *L'Her.*	Ivy-leaved	☿ □	or	2	jn au	Pa pu	C G H	1787	C	r m	L'Her ger t. 24
9581	peltátum *Ait*	peltated	☿ □	or	2	jn au	Pu	C G H	1701	C	r m	Bot mag 20
9582	ovále *L'Her*	oval-leaved	☿ □	or	1½	my jl	Pu	C G H	1774	S	r m	L'Her ger t. 28
9583	élegans *W*	elegant	☿ □	or	3	mr jn	W	C. G H	1795	C	r m	Bot rep 28
9584	glaúcum *L'Her*	glaucous-leav'd	☿ □	or	3	jn au	W vy	C G H.	1775	C	r m	Sweet ger 225
9585	diversifólium *Wendl*	different-leav'd	☿ □	or	3	jn au	W vy	C G H	1794	C	r m	
9586	cuspidátum *W*	sharp-pointed	☿ □	or	3	jn au	W vy	C G H	...	C	r m	
9587	sorórium *W*	sister	☿ □	or	3	ap jl	W vy	... .	...	C	r m	
9588	lævigátum *W*	glaucous-lvd	☿ □	or	3	my au	W vy	C G H	...	C	r m	Ca dis 4 t 121 f 1
9589	grandiflórum *W*	great-flowered	☿ □	or	3	ap jl	W vy	C G H	1794	C	r m	Sweet ger 29
9590	variegátum *W*	variegated-flow	☿ □	or	3	ap jl	W vy	C G H	1812	C	r m	Ca dis 4 t 118 f 2
9591	pátulum *Jacq*	spreading	☿ □	or	3	ap jl	Pk vy	C G H	1812	C	r.m	Jac ic 3 t 541
9592	sanculæfólium *W*	Sanicle-leaved	☿ □	cl	3	jn au	Pu vy	C G H	1800	C	r m	Jac ic t 540
9593	tuscátum *Jacq*	dark marked	☿ □	cl	3	ap jl	Pu.vy	C G H	1812	C	r m	Jac ic 3 t 540



History, Use, Propagation, Culture,

The most common free-growing kinds will thrive well in any rich light soil, or a mixture of loam and decayed leaves will suit them very well the dwarfer woody kinds, as P tricolor, elegans, Blattarium, ovale,

9546 Stem diffuse, Lvs. cord somewhat lobed bluntly crenate villous beneath, Pet. larger than calyx

9547 Stem fleshy very short, Branches herbaceous long diffuse, Lvs roundish cordate very soft
9548 Branches spreading soft with down, Lvs roundish cordate about 3-lobed bluntly toothed very soft
9549 Stems square very smooth, Lvs cordate roundish cut toothed, Pedunc. about 2-fl.
9550 Stems 3-cornered 2-edged smooth, Lvs cordate roundish obsoletely lobed toothed, Umb many-fl.
9551 Stem hispid, Lvs reniform 3-5-lobed blunt toothed at end smoothish, Pedunc. long 2-4-fl.
9552 Stem villous, Lvs cordate 5-lobed palmate villous, Pedunc few-fl Stigma sessile
9553 Stem erect, Lvs. bipinnatifid laciniate smooth, Involucres and calyxes blunt

§ B *Stem half shrubby. Leaves pinnate. Lobes multifid*
9554 Leaves cinereous velvety palmately 3-cut, Lobes linear trifid, Calyxes somewhat hispid
9555 Leaves 3-cut dark-green, Lobes distant 3-parted laciniated, Petals linear flaccid
9556 Stem fleshy naked erect, Leaves hairy bipinnate decompound, Lobes linear subulate
9557 Leaves 3-parted fleshy cut-toothed glaucous, Segments subsessile cuneiform, Honey spur very long
9558 Leaves cuneiform trifid toothed, Petioles and stipules persistent spiny, Umb comp few-fl

§ C *Stem half-shrubby, fleshy Leaves trifid or pinnate, fleshy, Petals yellowish brown.*
9559 Stem with tumid articulations, Leaves pinnate of 1 or 2 pairs with an odd one blunt cuneate cut-toothed

§ D. *Nearly stemless Root fascicled, tuberous Leaves decompound, laciniated Petals yellowish brown.*
9560 Leaves decompound laciniate hairy, Segm linear, Umb many-fl
9561 Leaves hairy pinnate, Segm bipinnate, divisions ovate toothed somewhat acute
9562 Leaves smooth ciliated fleshy 5-7-lobed toothed reflexed at end, Umb many-flow Fls on very long stalks
9563 Leaves hairy pinnate, Segm bipinnatifid, divisions linear acute
9564 Leaves ternate oblong blunt wavy hairy on each side and revolute at end, Petals 2-parted multifid
9565 Leaves cordate downy beneath bluntly 3-5-lobed sinuate-toothed, Scape divided
9566 Leaves decompound smooth, Leaflets cut, Segments channelled linear, Calyx reflexed

§ E. *Stem short, or somewhat fleshy Leaves divided, cut or toothed Petals scarlet or crimson.*
9567 Leaves hairy pinnated, Segments laciniate pinnatifid decurrent, Lobes linear lanceolate
9568 Leaves 3-parted, Segm sessile cuneate cut toothed, Middle lobe larger pinnatifid
9569 Leaves cord. 3-lobed, Segm toothed lateral bifid, middle 3-lobed, Stipules cord. acum somew toothed

§ F *Stem half shrubby Leaves lobed, hairy Petals with a broad purple spot in the middle.*
9570 Leaves hispid 3-parted, Segm multifid, Lobes linear-lanceolate serrated
9571 Leaves cordate 3-fid wavy hairy blunt toothed lateral segments 3-lobed, upper 5-lobed

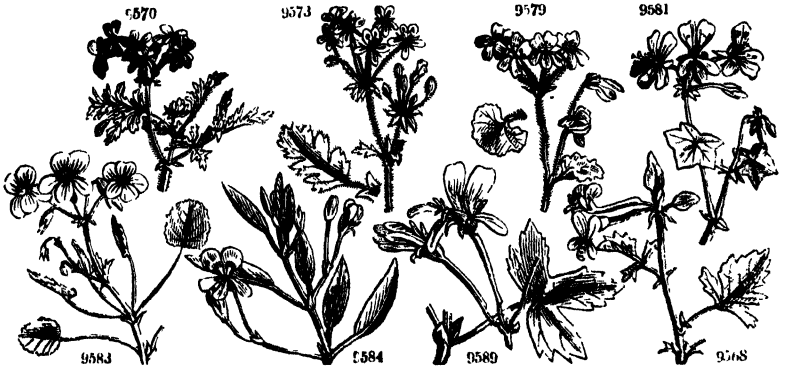
§ G. *Stem fleshy, half shrubby Leaves oblong, or oftener cordate, somewhat cut Stipules lanceolate, spreading, acute Roots tuberous, fascicled*
9572 Leaves 3-parted hairy, Lateral segments smaller lobed toothed, term long cut-toothed, Pet spreading
9573 Leaves oblong lobed pinnatifid, Petioles united at base, Umb many-flowered
9574 Leaves cord obl subruncinate toothed downy, Scape branched, Umb many-fl Involucre leafy
9575 Leaves ovate cordate somewhat lobed crenate villous beneath, Stipules persistent spiny
9576 Leaves reniform obacuminate toothed silky on each side, Bractes 4 times shorter than pedicel
9577 Leaves reniform obacuminate toothed silky on each side, Bractes twice as short as peduncels
9578 Leaves cordate cut-lobed wavy bluntly toothed downy, Honey-tube 4 times as long as calyx
9579 Leaves reniform crenate-toothed downy beneath, Stipules persistent dilated at base

§ H *Stem shrubby, fleshy Leaves peltate, or cordate 5-lobed, fleshy Honey-tube as long as stalk Stipules broad ovate*
9580 Branches fleshy round, Leaves cordate 5-lobed somewhat toothed fleshy smooth, Umb many-fl.
9581 Branches fleshy angular, Leaves peltate 5-lobed entire fleshy, Umb few-fl

**** Two upper petals broader, shorter, very blunt*
9582 Stem weak prostrate, Branches petioles and peduncles softly hairy, Leaves oval acute toothed hairy
9583 Leaves elliptical roundish finely serrate blunt rigid smooth, Petals all obovate

***** Two upper petals longer and broader Stems shrubby*
§ A *Leaves smooth, or nearly smooth, more or less glaucous*
1. *Petals white, the upper generally lined with red, or spotted.*
9584 Very smooth and glaucous, Leaves lanceolate entire acuminate, Peduncles 1-2-fl
9585 Smooth glaucous, Leaves lanceolate entire or 3-parted, lower toothed, Pedunc about 1-fl panicled
9586 Very smooth somewhat glaucous, Leaves ovate acute glaucous somewhat cut remotely serrate
9587 Very smooth, Leaves deeply 3-parted, Segm. acinaciform cut serrate, Peduncles 3-flowered
9588 Very smooth glaucous, Leaves 3-parted, Segm trifid cuneate, divisions linear lanc Pedunc about 2-fl
9589 Smooth glauc Lvs 5-lobed palmati cord at base, Lobes toothed tow the end, Pet 3 times as long as cal
9590 Smooth glaucous, Leaves 3-5-lobed palmate-parted, Segments trifid toothed, Stipules ovate cordate acute

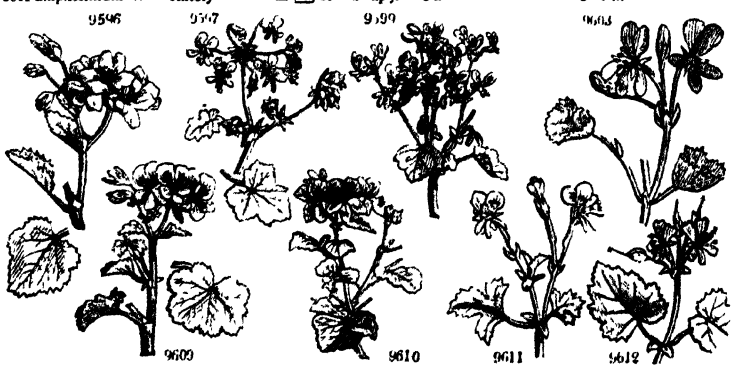
2 *Petals rosy or violet, upper generally striped with purple*
9591 Smooth glaucous, Leaves long-stalked cordate reniform 5-fid toothed, Petals lanceolate-cuneate
9592 Smooth glaucous, Leaves on long stalks cordate roundish 5-fid toothed zoned above
9593 Smooth glaucous, Leaves cord. 5-lobed toothed glaucous beneath younger zoned above, upper 5-parted



and Miscellaneous Particulars.

&c thrive best in an equal mixture of sandy loam and peat, and require their pots to be well drained the succulent kinds like a light sandy loam, and require scarcely any water when not in vigorous growth the

9594 penicillátum *W*	pencilled	♃	◡	el	3	jn au	W vy	C. G	H	1794	C	r.m	W hor be 1 t 32
9595 betulínum *Ait.*	Birch-leaved	♃	◡	el	3	jn au	W vy	C G.	H.	1759	C	r m	Bot mag 148
9596 formosis'simum *Pers*	superb white	♃	◡	el	2	jn au	W.vy	C. G.	H.	...	C	r m	Sweet ger. 215
9597 tomentósum *Jacq*	Pennyroyal	♃	◡	or	3	jn jl	W	C. G	H	1790	S	r m	Bot. mag 518
9598 ribifólium *Jacq*	currant-leaved	♃	◡	or	3	my.jn	W	C. G.	H.	1798.	C	r.m	Jac. ic. 3. t. 538
9599 papilionáceum *Ait*	Butterfly	♃	◡	or	3	ap jl	Pu	C	G. H.	1724	C	r m	Sweet ger 27
9600 cordátum *Ait*	heart-leaved	♃	◡	or	3	mr jl	Pu	C	G H	1774	C	r m	Bot. mag 165
9601 rubrocinctum *Link*	red-edged	♃	◡	or	3	mr jl	Pu	C.	G H	1774	C	r m	
9602 conduplicátum *W*	curled-heart-lv	♃	◡	or	3	mr jl	Pu		.....	1774	C	r m	
9603 cucullátum *Ait*	hooded-leaved	♃	◡	or	3	mr jl	Pu	C.	G H	1690	C	r.m	Ca.dis 4 t 106.f.1
9604 speciósum *W*	specious	♃	◡	or	3	ap jl	Pu	C.	G. H.	1794	C	r m	
9605 cochleátum *W*	concave-leaved	♃	◡	or	3	mr jl	Pu		.....	...	C	r m	
9606 acerifólium *L'Her*	Maple-leaved	♃	◡	or	3	ap my	Pu	C	G H	1784	C	r m	L'Her ger t 21
9607 angulósum *Ait*	Marsh mallow-lv	♃	◡	or	3	jl s	Pu	C	G H	1724	C	r m	Ca dis 4 t.112,f 2
9608 Barringtónii *W*	Barrington's	♃	◡	or	3	mr jl	Pu	C.	G. H	...	C	r m	
9609 Watsónii *Link*	Watson's	♃	◡	or	3	mr jl	Pu		.....	...	C	r.m	Sweet ger. 130
9610 adulterinum *L'Her*	hoary trifid-lv.	♃	◡	or	3	ap jn	Pu	C	G H	1785	C	r m	Sweet ger 22
9611 semitrilobum *Jacq*	three-lobed	♃	◡	or	3	ap jl	Pu	C	G H	1800	C	r m	Jac sche 2 t 136
9612 vitifólium *Ait.*	Vine-leaved	♃	◡	or	3	ap au	Pu	C	G H	1724	C	r m	Ca dis 4 t 111 f 2
9613 capitátum *Ait*	Rose-scented	♃	◡	or	3	ap au	Pu	C.	G H.	1690	S	r m	And ger c ic
9614 rubens *W*	red-flowered	♃	◡	or	3	my jl	Pu		.....	...	C	r m	
9615 obtusifólium *Ait*	blunt-lobed	♃	◡	or	3	ap au	Pu		.....	...	C	r m	Sweet ger t. 8
9616 tricuspidátum *L'her*	three-pointed	♃	◡	or	3	my au	W pu	C	G H	1780	C	r m	L'Her. ger t 30
9617 scábrum *Ait*	rough wedge-lv	♃	◡	or	3	ap au	W vy	C	G H	1775	C	r m	Jac ic 3 t 542
9618 hermannifólium *Jac*	Hermannia-lv	♃	◡	or	3	ap jn	Pk vy	C	G H	...	S	r m	Jac ic. 3 t. 545
9619 crispum *Ait*	curl-leaved	♃	◡	or	3	jl n	Pu	C	G H	1774	C	r m	L'he ger t 32,33
9620 exstipulátum *Ait*	soft trifid-leaved	♃	◡	or	3	my au	W vv	C	G H	1779	C	r m	L'Her ger t 35
9621 pustulósum *Sweet*	pimpled	♃	◡	or	3	my au	W	C	G H	1820	C	r m	Sweet ger t. 11
9622 pállidum *W*	pale-flowered	♃	◡	or	3	ap au	Pk		.....	...	C	r m	
9623 ternátum *Jacq*	ternate	♃	◡	or	3	ap au	Pk vy	C	G H	1820.	C	r m	Sweet ger 165
9624 quercifólium *Ait*	Oak-leaved	♃	◡	or	3	mr au	Pu	C	G H	1774	C	r m	L'Her ger t 14
9625 gravéolens *Ait*	Odor of Rose	♃	◡	or	3	mr jl	Pu	C	G H	1774	C	r m	L'Her ger t. 17
9626 glutinósum *Ait.*	clammy	♃	◡	or	3	my jn	Pk vy	C	G H	1777	C	r m	Bot mag 143
9627 hispidum *W*	hispid	♃	◡	or	3	my jl	Pu	C	G H	1790	C	r m	Ca dis 4 t 110 f 1
9628 rádula *Ait*	Rasp-leaved	♃	◡	or	3	mr jl	Pu	C	G H.	1774	C	r m	Bot. mag 95
9629 balsámeum *Jacq*	balsamic	♃	◡	or	3	jl s	Pk	C	G H	1790	C	r m	Jac ic 3 t 543
9630 ásperum *W*	rough multifid	♃	◡	or	3	jl s	Pk	C	G H	1795	C	r m	Roth abhan t 10
9631 denticulátum *Jacq*	tooth-leaved	♃	◡	or	3	jn jl	Pk	C.	G H	1789	C	r m	Sweet ger 109
9632 delphinifólium *W*	Larkspur-leav	♃	◡	or	3	ap jl	Pk		.....	...	C	r m	
9633 dis'cipes *Haw*	central-stalked	♃	◡	cu	5			Africa		1808	C	r m	
9634 spurium *W*	spurious	♃	◡	or	2	ap jl	V		. ..	..	C	r m	
9635 gratum *W*	Citron-scented	♃	◡	or	2	ap au	Pk vy		.	..	C	r m	
9636 nóthum *W*	mixed	♃	◡	or	2	ap jl	Pk		. .	.	C	r.m	
9637 consanguíneum *W*	kindred	♃	◡	or	2	ap au	Pk		.	.	C	r m	
9638 Willdenowii *Link*	Willdenow's	♃	◡	or	2	my au	W vy	C	G H	...	C	r m	
9639 unicolórum *W*	self-colored	♃	◡	or	2	my au	C	C	G H	.	C	r m	
9640 alnifólium *W*	Alder-leaved	♃	◡	or	2	ap jl	Pk vy		. . .		C	r m	
9641 amplissimum *W*	stately	♃	◡	or	2	ap jl	Pu				C	r m	



History, Use, Propagation, Culture.

tuberous rooted kinds thrive best in very sandy loam and peat, and require no water after they have flowered, till they begin to grow afresh. Cuttings of the shrubby kinds strike root freely under hand-glasses in the same

§ B. *Flowers white, or scarcely rose-colored; two upper petals deep-red, lined. Leaves ovate, cordate, or reniform toothed, undivided.*

9594 Lvs. ovate cut serr. the younger scabrous backwards, adult nearly smooth, Stipules ovate acuminate
9595 Leaves ovate unequally serrate smoothish, Stipules ovate-lanceolate, Peduncles 2-4-flowered
9596 Umb. many-fl. Leaves ovate acute concave rigid somew. lobed uneq tooth. truncate at base many-nerved

§ C. *Petals white, narrow Leaves cordate, soft with down. Stipules spreading much.*

9597 Stem shrubby fleshy, Branches peduncles and leaves hirsute, Leaves cordate hastate 5-lobed very soft
9598 Stem shrubby fleshy, Branches and pedunc. subhirsute, Lvs cord hastate 5-lobed rough, Umb. many-fl.

§ D *Leaves cordate, flat, toothed Lower petals linear, upper purple, lined*

9599 Branches leaves and peduncs hairy, Leaves cordate roundish angular toothed, Umbels panicled many-fl.
9600 Lvs cord. acute toothed flat hoary beneath and downy, Branches and peduncles villose, Lower petals subulate-lin
9601 Leaves cordate acutely crenulate quite smooth, Stipules linear reflexed, Umbels many-flowered
9602 Leaves roundish ovate truncate subcordate at base cut-toothed wavy beneath hoary pubescent

§ E. *Leaves cordate, or cuneate, toothed, undivided, or lobed Lobes blunt, not divided down to the middle. Flowers purple. Lower petals oblong or obovate*

1 *Leaves undivided, cucullate*

9603 Leaves reniform cucullate toothed pubescent, Branches and peduncles softly hispid, Lower petals oblong
9604 Leaves roundish truncate reniform with acute cartilaginous teeth many-nerved subpubescent
9605 Leaves roundish ovate subcord concave somewhat angular serr pubesc Honey-tube the length of calyx
9606 Leaves cun at base entire at end palmately 5-lobed toothed many-nerved rather villous, Stip cordate ovate
9607 Leaves truncate at base subcucul roundish bluntly 5-lobed toothed pubesc Stipules cord ovate acuminate
9608 Leaves reniform blunt cucullate toothletted hairy on each side, Umbels many-flowered
9609 Leaves cord. roundish somewhat lobed tooth-crenate wavy at edge, Stipules cord acute somew toothed

2 *Leaves lobed, flattish*

9610 Leaves cordate bluntly 3-lobed wavy villous soft, Pedunc about 2-flowered
9611 Leaves truncate at base subcuneate 3-fid flat hairy, Lobes divaricating serrated at end, Lower petals lin
9612 Leaves cordate 3-lobed roughish blunt toothed, Stipules broad cordate, Stem erect
9613 Leaves cordate lobed wavy softly villous toothed, Stipules broad cordate, Stems diffuse
9614 Lvs subcord. acute slightly 5-lobed serrated, Umb 5-fl subcapitate, Ped scarcely longer than involucrum

3 *Leaves lobed Lobes acutely cut at end*

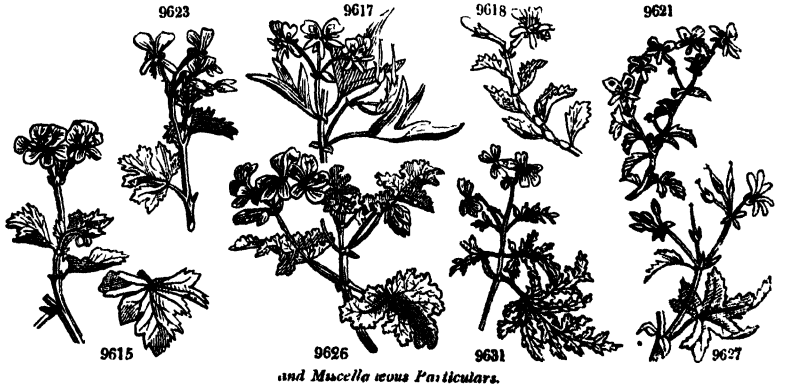
9615 Lvs. deeply 3-lobed, Lobes round blunt unequally toothlett. Veins beneath and calyx roughish, Stipules cord
9616 Leaves cuneate at base trifid, Lobes acute middle longer subserrate with a midrib muricated beneath
9617 Leaves cuneate at base trifid rough, Lobes lanc loosely serrated, Pedun 1-4-flowered
9618 Leaves cuneiform distichous rough plaited truncate at end cut-toothed, Peduncles 2-flowered short
9619 Leaves distichous roundish fleshy subcuneate at base trifid wavy plaited rough toothed, Pedun about 2-fl
9620 Leaves truncate cord 3-lobed toothed hoary, Stipules scarcely any, Peduncles 3-4-flowered
9621 Lower lvs deeply 3-lobed beneath pustular, Lateral lobes spreading unequally and acutely toothed
9622 Leaves deeply 3-lobed, Lobes spreading unequally and acutely toothed at end beneath and at edge rough
9623 Leaves 3-parted cucullate rough, Lobes cuneiform cut-serrate at end the middle one trifid

§ F *Leaves divided beyond the middle Lobes toothed, cut, or pinnatifid Flowers purplish or pale*

9624 Leaves cord pinnatifid with rounded recesses, Lobes blunt crenate, Branches and petioles hispid
9625 Leaves palmately 7-lobed, Lobes oblong blunt toothed revolute at edge, Umb many-fl capitate
9626 Leaves cord hastate 5-angled toothed viscid smoothish, Umb 2-4-fl Honey tube a little longer than calyx
9627 Leaves palmatifid downy hispid, Lobes acuminate cut toothed, Umb panicled many-fl
9628 Leaves palmated rough, Lobes narrow pinnatifid revolute at edge, Segm linear, Umb few-fl
9629 Leaves palmated roughish cuneate at base, Lobes lanc remotely toothed, Umb few-fl
9630 Leaves somewhat palmated rough, Lobes 5-7-oblong blunt crisply toothletted at edge, Umb 5-fl in heads
9631 Leaves palmated viscid smooth, Lobes linear pinnatifid repand toothed flattish, Umb few-fl
9632 Leaves rough palmate 5-lobed, Lobes oblong serrated middle 3-lobed, Umbels few-fl compound

‡ *Uncertain species*

9633 Stem fleshy branched arboreous, Lvs. cord peltate pubesc variably glauc Petioles villous without stipules
9634 Leaves reniform distichous slightly 3-lobed blunt unequally toothed wavy
9635 Leaves slightly trifid unequally and acutely toothed wavy hairy, Peduncles 2-4-fl
9636 Leaves roundish ovate blunt subtrifid folded together wavy toothed hairy beneath, Sepals erect
9637 Leaves slightly 3-lobed flat blunt, Lobes divaricating unequally and finely toothed, Pedunc. 3-fl
9638 Leaves roundish cuneate slightly 3-lobed wavy toothletted, Branches petioles and peduncles villous
9639 Leaves roundish cuneate slightly 3-lobed wavy toothletted, Honey tube twice as short as reflexed calyx
9640 Leaves ellipt blunt floral obsoletely subtrifid unequally toothed somew cuneate and entire at the base
9641 Leaves flat very smooth half round 7-lobed serrated slightly cordate at base, Pedunc 2-5-flowered



and Miscellaneous Particulars.

kind of soil, or in pots, without being covered by glass, and placed in a shady situation. Many of the kinds may also be increased by pieces of their roots, or from seeds. The tuberous-rooted kinds may be propagated

Garden Varieties.

1 **Aceroides** *Sweet ger.* 242
2 acutilóbum *Do* 184
3 afflúens *Do* 194
4 ácidum *Do* 261
5 Allénii *Do* 229
6 amœ'num *Do* 121
7 æ'mulum *Do* 160
8 anthriscifólium *Do* 233
9 árdens *Do* 45
10 ardéscens *Do* 231
11 armátum *Do* 214
12 asperifólium *Do* 169
13 atrofuscum *Do* 82
14 atropurpúreum *Do* 152
15 atrosanguíneum *Do* 151
16 aurantiácum *Do* 198
17 Bailevánum *Do* 87
18 Bakerianum *Do* 240
19 Barnardiánum *Do.* 127
20 Beadónæ *Do* 191
21 Beautortiánum *Do* 138
22 bel'lulum *Do* 60
23 bipartitum *Do* 142
24 Blandfordiánum *Do* 101
25 blándum *Do* 4
26 Boyleæ *Do* 50
27 Brightiánum *Do* 227
28 Broughtonæ *Do* 181
29 Brównii *Do* 146
30 Breestánum *Do* 64
31 calocéphalon *Sweet ger.* 201
32 calycínum *Do* 81
33 Campyliæflórum *Do* 251
34 cándidum *Do* 128
35 cardifólium *Do* 15
36 cerinum *Do* 176
37 chærophýllum *Do* 257
38 chrysanthemifólium *Do* 124
39 coaretátum *Do* 70
40 Colvillánum *Do* 200
41 Colvillii *Do* 86
42 Comptoniæ *Do* 122
43 cómptum *Do* 255
44 concávum *Do* 237
45 conclinnum *Do* 108
46 cóncolor *Do* 140
47 coriáceans *Do* 173
48 Cosmiánum *Do* 189
49 crenátum *And ger*
50 crenulátum *Sweet ger* 162
51 cruéntum *Do* 170
52 Daveyánum *Do* 32
53 Denniánum *Do* 20
54 dentátum *And. ger*
55 dependens *Sweet ger* 195
56 diffor'me *Do* 105
57 Dimacriflórum *Do* 220
58 dissectum *Do* 247
59 Dobreeánum *Do* 253
60 dumósum *Do.* 19
61 elátum *Sweet ger* 96
62 eléctum *Do* 238
63 élegans (Hoarea) *Do* 132
64 élegans (Dimacria) *Do* 202
65 élegans (Campylia) *Do* 222
66 erérctum *Do* 187
67 eriophýllum *Do* 141
68 eximium *Do* 26
69 Fair'liæ *Do* 178
70 flexuósum *Do* 180
71 floccósum *Do* 129
72 flóridum *Do* 41
73 formósum *Do* 120
74 fuscátum *Do* 210
75 glaucifólium *Do* 179
76 grandidentátum *Do* 217
77 Grenvilliánum *And ger*
78 Hammersléiæ *Sweet ger* 225
79 Hoareæflórum *Do* 133
80 Hoareánum *Do* 80
81 Husseyánum *Do* 92
82 imbricátum *Do* 65
83 incanéscens *Do* 203
84 incúrvum *Do* 249
85 inscriptum *Do* 193
86 intertéxtum *Do* 185
87 involucrátum máximum *Do* 33
88 Jenkinsóni *Do* 154
89 jonquillinum *Do* 241
90 Kin'gii *Do* 248

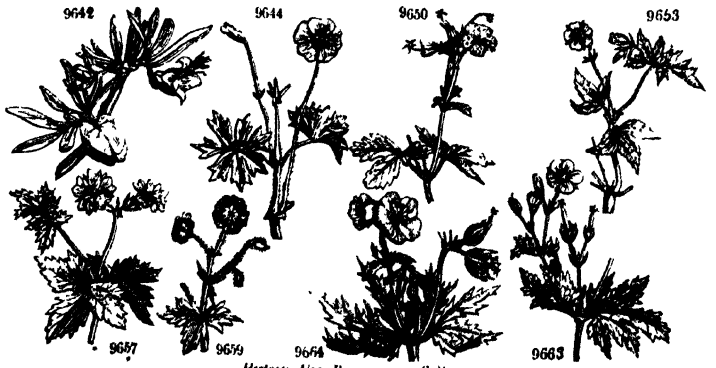
OCTANDRIA.

1462 AITO'NIA. *W* AITONIA *Meliàceæ. Sp* 1
9642 capénsis *W* Cape ħ ⊔ or 2 ap s Pk C G H. 1774. C r m Bot mag. 173

DECANDRIA.

†1463. GERA'NIUM. *W* CRANE'S-BILL *Geraniaceæ Sp* 45—66

9643	sibíricum *W.*	Siberian	☿ △ pr	1	jn jl	B	Siberia	1758	D s l	Jac vind 1 t 19
9644	sanguíneum *W*	bloody	☿ △ pr	¾	jn s	Bd	Britain	rocks	D s l	Eng bot 272
9645	incánum *W*	hoary multifid	☿ △ pr	½	my jl	Pk	C G H	1701.	S r m	Cav dis 4 t 82 f 2
9646	canéscens *W*	silky-leaved	☿ △ pr	½	my jn	Pk	C G H	1787	S r m	L'Her ger t 38
9647	argenteum *W.*	silvery-leaved	☿ △ pr	½	jn jl	St	S Europe	1699	D s l	Sweet ger 59
9648	várium *W*	grey	☿ △ pr	1	jn au	R	Pyrenees	...	D s l	L'Her ger t 37
9649	anemonefólium *W*	Anemone-lvd.	ħ ⊔ or	3	my au	R	Madeira	1788	S r m	Sweet ger 244
9650	macrorhízum *W*	long-rooted	☿ △ pr	1½	my jn	Pu	Italy	1776	D s l	Bot mag 2420
9651	tuberósum *W.*	tuberous-root	☿ △ pr	1	my au	Pk	Italy	1596	R r m	Sweet ger 155
9652	ibéricum *W*	Iberian	☿ △ el	1½	jn s	B	Levant	1802	D s l	Sweet ger 84
9653	nodósum *W*	knotty	☿ △ pr	1	my o	Pu	England	moun	D s.l	Eng bot 1091
9654	angulátum *W*	angular-stalked	☿ △ pr	1	my jn	B	. ..	1789	D s l	Bot mag 203
9655	Wallichiánum *Sw*	Wallich's	☿ △ un	¾	my au	R	Nepal	1819	D s l	Sweet ger 90
9656	vlassoviánum *Fisch*	Russian	☿ △ pr	1	my au	Pu	Crimea	1821	D s l	Sweet ger 228
9657	striátum *W*	streaked	☿ △ pr	1	my o	St	Italy	1629	D s l	Bot mag 55
9658	reflexum *W*	reflex-flowered	☿ △ or	1½	my jn	B	Italy	1778	D s l	Cav dis 4 t 81 f 1
9659	phæ'um *W*	dusky	☿ △ or	½	ap jn	Bd	England	m tha	D s l	Eng bot 322
9660	fuscum *W*	brown	☿ △ or	1½	jl	Br	S Europe	1759	D co	
9661	lividum *W*	wrinkled-leav'd	☿ △ or	1½	jn jl	Pu	Switzerl	1775	D s l	L'Her. ger t 39
9662	eriostémon *Fisch.*	woolly-stamen	☿ △ pr	1½	jn jl	B	Siberia	1822	D co	Sweet ger 197
9663	sylvátium *W*	wood	☿ △ el	1½	my jn	Pu	Britain	m tha	D s l	Eng bot 121
9664	praténse *W*	Crowfoot-lvd.	☿ △ el	1½	my jl	B	Britain	me pa.	D s l	Eng bot 404
9665	lon'gipes *Dec* *Londésii* Fisch.	long-stalked	☿ △ ur	1	my jl	La	... ..	1823	D co	



History, Use, Propagation, Culture.

by the little tubercles of the roots, or by seeds For the general treatment of each species, see Sweet's Geraniaceæ. (*Bot. Cult.* 237.)

1462. *Aitonia.* In honor of the late Mr William Aiton, the King's gardener at Kew "A pretty genus," Sweet observes, "which thrives well in an equal mixture of sandy loam and peat young cuttings will root in

Garden Varieties.

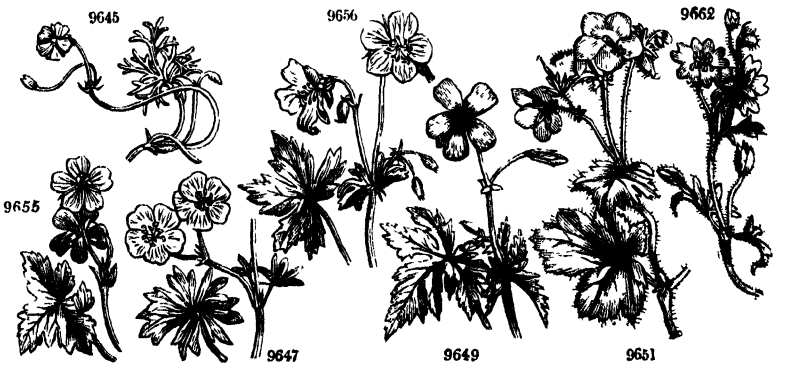
91 Lambérti *Sweet ger.* 104
92 lanceolátum *And ger*
93 latilóbum *Sweet ger* 236
94 laxiflórum *Do* 216
95 lépidum *Do* 156
96 lineátum *Do* 116
97 Lousadiánum *Do* 44
98 lúteum *Bot rep* 328
99 macránthon *Sweet ger* 83
100 Mattocksiánum *Do* 234
101 melissinum *Do* 5
102 mixtum *Do* 71
103 modéstum *Do* 204
104 Mostýnæ *Do* 10
105 multinérve *Do* 17
106 Murrayánum *Do* 164
107 mutábile *Do* 213
108 nánum *Do* 102
109 nervósum *Do* 47
110 Newshamiánum *Do* 144
111 notátum *Do* 208
112 nummulariifólium *Bot rep* 123
113 oblátum *Sweet ger* 35
114 obscúrum *Do* 89
115 obtusifólium *Do.* 25
116 optábile *Do* 62
117 opulifólium *Do* 53
118 ornátum *Do* 39
119 Pálku *Do* 224
120 pannifólium *Do.* 9
121 párticeps *Sweet ger* 49
122 pátens *Do* 125
123 paucidentátum *Do* 186
124 pavoninum *Do* 40
125 pectinifólium *Do.* 66
126 phœniceum *Do* 207
127 pinguifólium *Do.* 52
128 planifólium *Do* 219
129 platypétalon *Do.* 116
130 Pottéri *Do.* 147
131 Principissæ *Do* 139
132 pubéscens *And ger.*
133 pulchérrimum *Sweet ger* 134
134 púlchrum *Do* 107
135 pulveruléntum *Do* 218
136 pyrethrifólium *Do* 153
137 ramulósum *Do* 177
138 recurvátum *Do* 223
139 reticulátum *Do* 143
140 rigéscens *Do* 112
141 ringens *Do* 256
142 Robinsóni *Do* 150
143 rotundilóbum *Do* 252
144 rubéscens *Do* 90
145 rugósum *And ger*
146 sæpeflórens *Sweet ger* 58
147 Saundérsii *Do* 205
148 Scarboróviæ *Do* 117
149 scintillans *Do* 28
150 Scóttii *Do* 204
151 scutátum *Sweet ger.* 95
152 selectum *Do* 190
153 selenifólium *Do* 159
154 serratifólium *Do.* 221
155 Seymouriæ *Do* 37
156 Smithii *Do* 110
157 solúbile *Do* 24
158 spectábile *Do* 136
159 sphondylifólium *Do* 246
160 Stapeltóni *Do* 212
161 striátum *Do* 1
162 sulphúreum *Do* 163
163 Thyn'neæ *Do* 74
164 Tibbitsiánum *Do* 158
165 torrefáctum *Do* 243
166 tyrianthinum *Do* 183
167 Vandésiæ *Do* 7
168 várium *Do* 166
169 venifórum *Do* 258
170 venósum *Do* 209
171 venústum *Do.* 167
172 verbascifórum *Do* 157
173 verbenæfólium *Do* 149
174 versicolor *Do* 78
175 vespertinum *Do* 239
176 villósum *Do* 100
177 viscosissimum *Do* 118
178 Wellsiánum *Do* 175
179 Youngii *Do* 131

OCTANDRIA.

9642 The only species

DECANDRIA.

9643 Stem erect diffuse branched, Peduncles longer than petiole, Leaves 5-parted, Lobes oblong cut-toothed
9644 Stem erect diffuse branched, Ped longer than petiole, Leaves opp 5-parted, Lobes trifid, Lobelets linear
9645 Stem diffuse, Leaves hoary beneath 7-part. Lobes multifid linear, Peduncle elongated, Calyxes silky villous
9646 Stem diffuse, Leaves hoary beneath 5-parted, Lobes obl cut-toothed, Ped very long and cal gland. hairy
9647 Stem very short, Radical leaves on long stalks silky on each side 5-7-parted, Lobes 3-fid, Lobelets linear
9648 Stem very short, Rad leaves stalked glaucous pubescent 5-parted, Lobes cuneiform trifid, Peduncle radical
9649 Stem shrubby, Leaves smooth palmate 5-cut, Segments bipinnatifid, Peduncles opposite erect hairy
9650 Stem suffruticose at base dichot at end, Lvs smooth 5-parted, Lobes toothed at end, Cal globose inflat
9651 Root subglobose, Stem naked from base to the branches, Leaves 5-parted, Lobes bipinnately cut serrate
9652 Stem villous dichotomous, Leaves 5-7-parted, Lobes pinnately cut, Calyxes ciliate villous
9653 Stem 4-cornered, Lower leaves 5-lobed, upper 3-lobed, Lobes oblong acuminate serrate, Pet emarginate
9654 Stem angular, Rad leaves 7-lobed, cauline 5-lobed, Lobes oblong acuminate toothed, Petals emarginate
9655 Stem erect somewhat angular, Leaves opposite 5-lobed, Lobes cuneate ovate lobed-toothed, Stip connate
9656 Stem round, Leaves 5-lobed, Lobes oval acuminate cut-toothed, Stipules connate bifid
9657 Stem round, Lower leaves 5-lobed, upper 3-lobed, Lobes ovate acute cut toothed, Stipules distinct
9658 Stem round, Leaves altern 5-7-lobed cut-toothed, upper sessile, Petals reflexed tootned at end
9659 Stem round, Leaves 5-lobed cut-toothed, upper sessile, Petals spreading entire, Filaments hairy at base
9660 Like the last, but with dark fuscous petals
9661 Like Phæum, but the petals are rose-colored and emarginate
9662 Stem round simple, Lvs 5-lobed, Lobes ovate coarsely toothed lower on long stalks altern.; upp sess opp
9663 Stem round erect smooth, Lvs about 7-lobed, Lobes obl cut serr Ped corymbose, Pet somew emarginate
9664 Stem round erect downy, Lvs about 7-lobed, Lobes linear obl cut serrate, Ped somew corymb Pet entire
9665 Stem round erect smooth, Leaves palmate subpeltate 5-7-lobed, Lobes oblong coarsely cut, Ped very long



and Miscellaneous Particulars.

sand, under a bell-glass, plunged in heat. The cuttings must not be put in very close together, and the glass must be wiped frequently, as they are apt to damp off" (*Bot Cult.* 129.)

1463. *Geranium* Γέρανον of the ancient Greeks, so called from γέρανος, a crane, the capsule and its beak resembling the head of that bird These are chiefly European plants, in many cases being mere weeds, of no

9666 maculátum *W.*	spotted	△	pr	½	my au	Pu	N. Amer	1732.	D	s	l	Cav.dis.4.t.86.f.2
9667 collínum *W.*	hill	△	pr	1	my au	Pu	Siberia	1815.	D	co		
9668 palústre *W.*	marsh	△	or	2	jn au	Pu	Germany	1732.	D	s	l	Sweet ger. 3
9669 aconitifólium *W.*	Aconite-leaved	△	pr	1½	my.jn	B	Switzerl	1775.	D	s.l		L'Her. ger. t. 40
9670 dahúricum *Dec*	Dahurian	△	un	1	my jn	Pu	Dahuria	1820.	D	co		
9671 pilósum *Forst*	pilose	△	un	¾	my.au	Pu	N Zeal	1821	D	co		Sweet ger. 119
9672 parviflórum *W en*	small-flowered	△	un	½	my jn	Pu	V Di. L.	1816.	D	co		
9673 nepalénse *Sweet*	Nepal	△	pr	½	my au	R	Nepal	1818	D	co		Sweet ger 12
9674 pyronáicum *W*	mountain	△	pr	1	my.au	Pu	Britain me pa		D	s	l	Eng bot. 405
9675 umbrósum *P S*	naked-stalked	△	pr	1	jn s	Pu	Hungary	1804	D	co		Pl. rar h 2 t 144
9676 mólle *W*	Dove's-foot	○	w	¼	ap.au	Pu	Britain was gr.		S	co		Eng bot. 778
9677 pusillum *W*	small-flowered	○	w	½	jn s	Pu	England was gr		S	co		Eng bot 385
9678 rotundifólium *W*	round-leaved	○	w	¼	jn jl	Pk	England gra ba.		S	co		Eng. bot. 157
9679 columbínum *W*	long-stalked	○	w	½	jn jl	Pk	Britain cha ba		S	co		Eng. bot 259
9680 dissectum *W*	jagged-leaved	○	w	½	my jl	Pu	Britain was gr		S	co		Eng bot 753
9681 carolinianum *Ph*	spreading	○	un	½	jl au	W vy	N Amer	1725	S	co		Cav.dis 4 t 84 f 1
9682 bohémicum *W*	Bohemian	○	un	¾	jn au	Pu	Bohemia	1683	S	co		Cav.dis 4 t 81 f 2
9683 divaricátum *W.*	straddling	○	un	¾	jl au	Pu	Hungary	1799	S	co		Pl rar h 2 t 123
9684 lúcidum *W*	shining	○	w	½	my au	Pk	Britain ston pl		S	co		Eng bot 75
9685 Robertiánum *W.*	Herb-Robert	○	w	1	ap o	R	Britain ston pl.		S	co		Eng bot. 1486
9686 purpúreum *W*	purple	○	w	1	ap o	Pu	Britain	...	S	co		Vill delph 3 t 40
9687 Lancastriénse *With*	Lancash're	△	pr	¾	jn.s	St	Britain	...	D	s	l	Cav dis 4 t 76 f 3

†1464 BROW'NEA *W* BROWNEA. — *Legumnosæ* *Sp* 1—3.

9688 coccínea *W*	scarlet	▭	spl	18	jl.au	Sc	W. Indies	1793	C	r	l	Jac. amer. t. 121

DODECANDRIA.

†*1465 MONSO'NIA *W* MONSONIA. *Geraniaceæ* *Sp* 5—8

9689 speciósa *W.*	large-flowered	△	or	1	ap my	Pu	C G H	1774	R	r	m	Sweet ger 77
9690 pilósa *W*	hairy	△	or	1	jl au	Pu	C G H	1778	R	r	m	Sweet ger 199
9691 lobáta *W*	broad-leaved	△	or	1	ap my	Pu	C G H	1774	R	r	m	Bot mag 385
9692 ováta *W*	oval-leaved	◫	or	1	au	Pu	C G H	1774	R	r	m	L'Her ger t 40
§9693 spinósa *W*	thorny	▭	or	1	my jn	Pu	C G H	1790	R	r	m	L'Her ger. t 42

1466 HELICTERES *W* SCREW-TREE *Bombaceæ* *Sp* 5—17

9694 barunénsis *W*	small-fruited	▭	or	12	s o	Pu	W Indies	1739	C	p	l	Jac amer t 149
9695 jamaicénsis *W.*	great-fruited	▭	or	8	jn jl	Pu	Jamaica	1739	C	l	p	Jac vind 2 t 143
9696 Isóra *W*	East Indian	▭	or	12	jn jl	Pu	E. Indies	1733	C	p	l	Bot mag 2061
9697 verbascifólia *Cels*	Mullein-leaved	▭	or	8	jn jl	Br	Brazil	1820	C	p	l	Bot. reg 903
9698 ferrugináta *Link*	rusty	▭	or	8	jn.jl	Y	Brazil	1823	C	p	l	

†1467. DOMBE'YA *J* DOMBEYA *Byttneriaceæ* *Sp* 2—10

9699 tiliæfólia *Cav*	lime-leaved	▭	or	15	...	W	Bourbon	1820	C	s	l	Cav dis 3 t 39 f 2
9700 ferruginea *W*	ferruginous	▭	or	15	..	W	Mauritius	1815	C	s	l	Cav.dis.3 t 42 f.2

1468. PENTAPE'TES *W* PENTAPETES *Byttneriaceæ* *Sp* 2.

9701 phœnícea *W*	scarlet-flower'd	△	or	2	jl au	S	India	1690	C	s	p	Mill ic. t 201
9702 ováta *P S*	oval-leaved	▭	or	2	jn s	S	N Spain	1805	C	s.p		Cav ic t. 433

1469. ASTRAPÆ'A *Lindl* ASTRAPÆA *Byttneriaceæ* *Sp* 1—3.

9703 Wallichii *Lindl*	Wallich's	▭	spl	20	jl au	Pk	Madagasc	1820	C	s.p		Bot. mag. 2503

†1470 PTEROSPER'MUM *W* PTEROSPERMUM *Byttneriaceæ* *Sp* 3—4

9704 suberifólium *W*	various-leaved	▭	or	10	s o	W	E Indies	1783	C	p	l	Bot. mag 1526
9705 acerifólium *W*	Maple-leaved	▭	or	10	jl s	W	E. Indies	1790	C	p	l	Bot. mag 620
9706 semisagittátum *Rox*	half-sagittate	▭	or	10	..	W	E Indies	1820	C	p.l		



History, Use, Propagation, Culture

interest, and in others, being extremely shewy border-flowers The G Lancastriense is the most elegant, and G. sanguineum the most ornamental of our British kinds G. anemonifolium, a Cape species, is singularly beautiful, on account of its fine caulescent stem, loaded with large fern-like glossy leaves of the most delicate green, and its fine red rich blossoms broader than half a crown

1464. *Brownea.* Named after Dr Patrick Browne, an English physician, who published a Natural History of Jamaica, in 1756, illustrated with figures from the pencil of Ehret A splendid genus, as yet rare in British gardens. Loamy soil best suits rooted plants, and ripened cuttings root in sand in close moist heat.

1465. *Monsonia* In memory of Lady Ann Monson, a lady of eminent botanical acquirements, who resided for many years in the East Indies, and is said to have assisted in compiling Lee's Introduction to Botany. The species are curious and beautiful plants: they grow well in turfy loam and rotten leaves, and are increased by cuttings of the shoots or roots.

9666 Stem somew angul. erect dichotomous pubesc backw Lvs 3-5-part cut-toothed: radic on very long stalks
9667 Stem angular diffuse pubesc backw Lvs palmate 5-part · lobes 3-lobed cut serrate, Ped and cal vill viscid
9668 Stem decumbent villous with spreading hairs, Leaves 5-7-lobed lobes cut-toothed, Ped very long hairy
9669 Stem ascending smoothish, Leaves peltate 7-parted lobes cut, Peduncles and calyx villous
9670 Stem naked at base erect smooth, Caul lvs opposite 3-5 part lobes cut acute, Ped 3 times as long as leaf
9671 Stems decumbent branched, Petioles and peduncles hispid, Leaves 3-5-parted lobes linear blunt trifid
9672 Stems decumbent, Petioles pedunc and calyx smoothish, Caul lvs. opp 3-5-parted: lobes trifid toothed
9673 Stem prostrate compressed, Lvs opp 5-lobed · lobes oblong unequally toothed, Ped elong and cal hairy
9674 Stem erect branched, Leaves reniform 7-lobed. segm. oblong obtuse trifid, lobes 3-toothed
9675 Stem more flaccid and nearly naked, Grains nearly smooth Otherwise like the last
9676 Leaves ren. rad 9-lobed, caul 7-lobed lobes 3-fid, Pet. bifid length of pointless cal Fruit smooth rugose
9677 Leaves subreniform 7-lobed lobes 3-fid, Petals emarg. length of pointless cal Fruit downy not rugose
9678 Radic lvs reniform 7-lobed, caul roundish trunc at base 5-lobed lobes trifid, Pet length of awned cal.
9679 Leaves 5-parted lobes multifid linear, Petals emarginate length of awned calyx, Fruit smooth
9680 Leaves 5-parted lobes trifid linear, Petals emarginate length of awned calyx, Fruit hairy
9681 Lvs 5-lob beyond middle: lobes cut 3 5-fid, Ped clustered at end, Petals emargin length of awned calyx
9682 Lvs 5-lobed. lobes cuneate ovate cut-tooth Hair of stem spread hispid, Pet emarg length of awned calyx
9683 Lvs 5-lob. upp 3-lob lobes obl coarsely and irreg tooth Hair of stem spread hisp Pet shorter than cal
9684 Very smooth, Leaves rounded 5-lobed, Calyx pyramidal angular transversely wrinked, Fruit muricate
9685 Leaves 3-5-parted: lobes trifid pinnatifid, Petals entire twice as long as the angular awned calyx
9686 Like the last, but the petals only a little longer than calyx
9687 Stem prostrate nodose, Leaves opposite deeply 5-lobed

9688 Stamens length of cor Pedunc aggregate, Branches smooth

DODECANDRIA.

9689 Leaves palmate 5-parted, Segm finely bipinnatifid, Petioles and calyxes smooth
9690 Leaves palmate 5-parted, Segm 3-parted pinnatifid, beneath calyxes and petioles hairy
9691 Leaves cordate 5-7-fid · lobes blunt serrated, beneath petioles and calyxes somewhat hairy
9692 Leaves ovate oblong subcordate crenate wavy, Stipules rigid, Pedunc 1-fl with 2 bractes
9693 Leaves ovate mucronate entire, some subsessile, some on long stalks

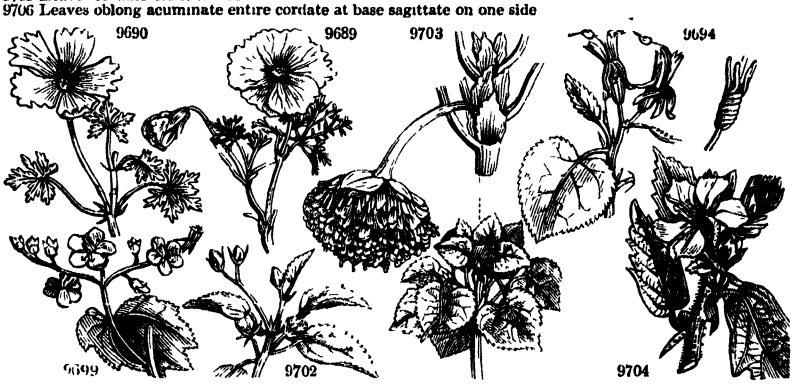
9694 Decandrous, Leaves cordate finely serrate downy beneath, Peduncles 2-flowered, Calyxes sub-bilabiate
9695 Decandrous, Leaves cordate crenate velvety with down on each side, Flowers subterminal few corymbose
9696 Decandrous, Leaves cordate ovate tooth-serrate acuminate rough, Flowers axillary
9697 Leaves cordate acuminate serrate downy green, Peduncles axillary few-flowered, Fruit-stalk very long
9698 Leaves cordate lanceolate crenulate downy beneath rusty, Fl terminal subracemose

9699 Young leaves downy, adult smoothish cordate 7-nerved crenate, Corymb bifid
9700 Leaves downy beneath smooth above ovate oblong 7-nerved subcordate-peltate toothed

9701 Leaves hastate lanceolate serrate
9702 Leaves ovate serrated

9703 Leaves roundish cordate acuminate very large, Stipules large persistent ovate wavy

9704 Leaves oblong acuminate coarsely somewhat toothed at end, Pedicels scarcely longer than petiole
9705 Leaves cordate blunt toothed
9706 Leaves oblong acuminate entire cordate at base sagittate on one side

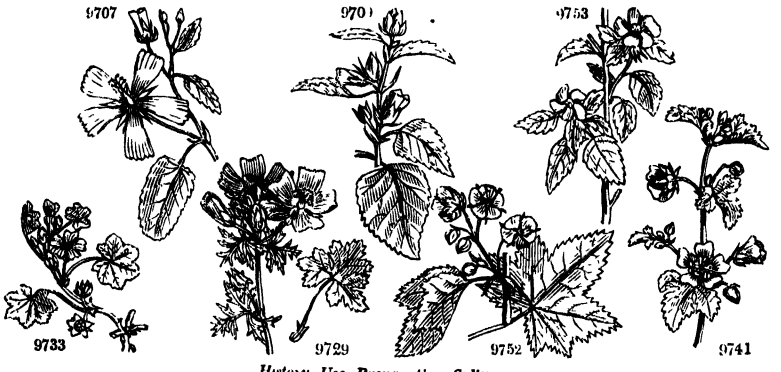


and Miscellaneous Particulars.

1466. *Helicteres.* Derived from ἑλιξ, a screw, in allusion to the manner in which the fruit is twisted. Free-flowering plants of easy culture, and increased in sand closely covered They have little or no merit.
1467 *Dombeya* Named after Joseph Dombey, a famous French botanist, who travelled in Peru with Ruiz and Pavon, in 1777 Ripened cuttings root in sand in moist heat.
1468. *Pentapetes* One of the names given by the Greeks to the Cinquefoil, but having no reference to the present genus, except that the calyx and capsules are in five. The species are of easy culture in any rich light soil, and are readily increased by cuttings in sand
1469. *Astrapæa* So called from ἀστραπη, lightning, in allusion to the splendid colors of the flowers. A noble genus, remarkable for the large heads of flowers, and the great dilated stipules at the base of the leaves.
1470. *Pterospermum.* From πτερον, a wing, and σπερμα, a seed. Light soil suits the plants, and cuttings with their leaves on root in sand covered close.

POLYANDRIA.

†*1471	**MA'LOPE.** *W*	Malope					*Malvaceæ*	*Sp 2—4*					
9707	**malacoides** *W*	Barbary	£	◯	un	1	jn jl	Pu	Barbary	1710	C	s l	Cav dis 2 t 27 f 1
9708	**trifida** *W*	trifid		○	un	1	jl	Pu	Barbary	1808	S	s l	Cav.dis 2 t 27 f 2
†*1472	**MAL'VA** *W*	Mallow					*Malvaceæ*	*Sp 5—82.*					
9709	**tricuspidáta** *H K*	Jamaica	£	◯	pr	1	jl au	Y	W Indies	1726	C	co	Cav.dis.2 t 22 f 2
9710	**americána** *W.*	American		○	pr	1	jn jl	Y	W Indies	1756	S	co	
9711	**scábra** *W*	rough stemmed	♃	□	pr	4	jn jl	Y	Peru	1798	C	co	Ca.dis 5 t. 138 f 1
9712	**scopária** *W*	Birch-leaved	♃	□	pr	6	au s	Y	Peru	1782	C	co	Jac ic 1 t. 139
9713	**borbónica** *W en.*	Bourbon	♃	□	pr	4	jl au	Y	Mauritius	1816.	C	co	
9714	**polystáchya** *W*	many-spiked	♃	□	pr	6	jl au	Y	Peru	1798	C	co	Ca.dis 5 t 138.f.3
9715	**spicáta** *W*	simple-spiked	♃	□	pr	2	s o	O	Jamaica	1726	C	co	Cav dis 2 t 20 f 4
9716	**tomentósa** *L*	downy	♃	□	pr	3	s o	Y	E Indies	1820	C	co	Pluk t 356. f 1
9717	**Waltheriifólia** *Link*	soft-leaved	£	△	pr	1½	...	Y	Java	1824	D	co	
9718	**trachélifólia** *Link*	pointed		○	un	1½	jl au	Y	.....	1821	S	co	
9719	**gangetica** *L*	Ganges		○	un	1	jl au	Y	E Indies	1823	S	co	Plu alm t 74 f 6
9720	**domingénsis** *Spr*	Domingo	£	△	pr	2	jl au	Y	St Domin	1824	S	co	
9721	**leprósa** *W en*	leprous	£	△	un	2	my jl	Pu	Cuba	1815	C	co	
9722	**cretica** *Cav*	Candian		○	un	1	my jl	Pu	Candia	1825	S	co	Ca dis 5 t 138 f 2
9723	**hispánica** *W*	Spanish		○	un	1	jl	F	Spain	1710	S	co	Desf atl 2 t 170
9724	**stipulácea** *W*	long-stipuled		○	un	1	jn au	Pu	Spain	1815	S	co	Cav dis 2 t 15 t 2
9725	**ægyptia** *W*	Egyptian		○	un	1	jn jl	L.B	Egypt	1739	S	co	Cav dis 2 t 17 f 1
9726	**trifida** *W*	large-flowered		○	un	1½	jn jl	Pu	Spain	1815	S	co	Ca dis 5 t 137 f 2
9727	**Tournefortiána** *W*	Tournefort's		○	un	1	jl au	B	Spain	1759	S	co	Cav dis.2 t 17 f 3
9728	**Alcéa** *W*	Vervain	☿	△	un	3	jl o	Pu	Germany	1597	D	co	Bot mag 2297
9729	**moschata** *L*	musk	☿	△	pr	2	jl au	F	Britain	bor fi	D	co	Eng bot 754
	β undulata Sims	*wavy*	☿	△	pr	2	jl au	W	.....	...	D	co	Bot mag 2298
9730	**althæoides** *Cav*	Althæa-like		○	un	2	jl au	Pu	Spain	1822	S	co	Cav dis 2 t 135
9731	**mauritiána** *W*	Ivy-leaved		○	or	6	jn jl	Pk	S Europe	1768	S	co	Sweet fl gard 81
9732	**sylvéstris** *W*	common	☿	△	m	4	my o	Pu	Britain	was pl	D	co	Eng bot 671
9733	**rotundifólia** *W*	round-leaved		○	w	1½	jn s	F	Britain	ro sid	S	co	Eng bot 1092
	β pusilla Sm	*dwarf*		○	w	¾	jn s	Pu	Britain	ro sid	S	co	Eng bot 241
9734	**brasiliénsis** *Dec*	Brazil		○	un	¾	jn s	Pu	R Janeiro	1824	S	co	
9735	**microcárpa** *Desf*	small-fruited	☿	△	un	2	jn s	Pu	Egypt	1823	D	co	
9736	**parviflóra** *B*	small-flowered		○	un	2	jn jl	Pu	Barbary	1779	C	co	Cav dis 2 t 26 t 1
9737	**verticillata** *W*	whorl-flowered		○	un	2	jn jl	Pu	China	1683	S	co	Cav dis 2 t 25 f 3
9738	**crispa** *W*	curled		○	or	5	jn au	W	Syria	1573	S	co	Cav dis 2 t 23 f 1
9739	**amœ'na** *Sims*	pleasant	♚	□	or	3	ap my	Pu	C G H	1796			Bot mag 1998
9740	**virgáta** *W*	twiggy	♚	□	or	6	my jl	Pu	C G H	1727	C	co	Cav dis 2 t 18 t 2
9741	**capénsis** *W*	Cape	♚	□	or	10	ja d	R	C G H	1713	C	p l	Bot reg 295
9742	**balsámica** *W*	balsamic	♚	□	or	4	my s	Pu	C G H	1800	C	co	Jac. ic 1 t 140
9743	**tridactýlites** *W*	reflex-flowered	♚	□	or	3	jn au	Pk	C G H	1791	C	p l	Bot rep 135
9744	**divaricáta** *H K*	straddling	♚	□	or	3	jn s	W vy	C G H	1792	C	co	Bot reg 182
9745	**retúsa** *W*	blunt-leaved	♚	□	or	4	mr my	Pk	C G H	1803	C	p l	Cav dis 2 t 21 f 1
9746	**calycína** *W*	large-calyxed	♚	□	or	4	my au	R	C G H	1812	S	co	Bot reg 297
9747	**frágrans** *W*	fragrant	♚	□	or	3	my jl	Sc	C G H	1759	C	co	Bot reg 296
9748	**stricta** *W*	upright	♚	□	or	3	my au	W vy	C G H	1805	C	co	Jac schœ 3 t 294
9749	**bryoniifólia** *W*	Bryony-leaved	♚	□	or	4	jl au	Pu	C G H	1731	C	co	W hor ber 1 t 4
9750	**grossulárifolia** *W*	Gooseberry-lv	♚	□	or	3	my s	Pk	C G H	1732	C	p l	Bot reg 561
9751	**aspérrima** *W en*	roughest	♚	□	or	3	jn s	R	C G H	1796	C	co	Jac schœn 2 t 39
9752	**láctea** *W*	painted white	♚	□	or	4	ja f	W	Mexico	1780	C	co	Cav ic 1 t 20
9753	**miniáta** *W*	painted	♚	□	or	4	my jl	Ve	S Amer	1798	C	p l	Cav ic 3 t 278
9754	**operculáta** *W*	lid-capsuled	♚	□	or	3	jl au	R	Peru	1795	C	co	Cav dis 2 t 35 t 1
9755	**peruviána** *W*	Peruvian		○	un	2	jn au	Pu	Peru	1759	S	co	Jac vind 2 t 156
9756	**hmenósa** *W*	blue-flowered		○	un	4	jl	B	Peru	1768	S	co	Jac vind 2 t 141
9757	**capitáta** *W*	various-leaved	♚	□	or		n d	R	Peru	1798	S	co	Ca dis 5 t 137 f 1
§9758	**umbellata** *Cav*	umbelled	♚	□	or	4	ja mr	Cr	S Amer	1814	C	co	Bot cab 222
§9759	**abutiloides** *W*	Bahama	♚	□	or	4	jn s	W	Bahama I	1725	C	co	Bot mag 2544
§9760	**élegans** *W*	elegant	♚	□	or	3	my au	R	C G H	1791	C	co	Jac col 4 t 6 f 1
§9761	**angustifólia** *W*	narrow-leaved	♚	□	or	3	au	St	Mexico	1780	C	p l	Cav ic 1 t 68
9762	**carolinána** *W*	creeping		○	un	1	jn jl	R	Carolina	1723	C	co	Cav dis 2 t 15 t 1
9763	**prostráta** *W*	trailing	♚	□	un	1	jn au	Pk	Brazil	1806	S	co	Bot mag 2515
9764	**decúmbens** *W en*	procumbent	£	△	un	1	jn s	Pk	S Amer.	1815.	D	co	



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1471. *Malope.* A name given by the Greeks to the Tree Mallow

1472 *Malva* Altered by the Latins from the Greek word, μαλαχη, soft, in allusion to the soft mucilaginous qualities of the species Some of the species are shewy plants, and M capensis is valued in small greenhouses as flowering all the year M sylvestris, *Mauve*, Fr., has still a place in the Materia Medica, on account of its

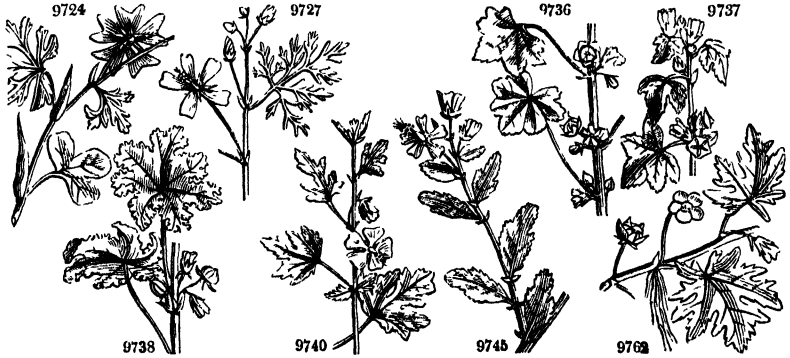
POLYANDRIA.

9707 Leaves ovate crenate, Stipules oblong-linear
9708 Leaves 3-nerved trifid toothed smooth. lobes acuminate

9709 Leaves oblong or ovate acute serrate, Flowers axillary clustered
9710 Leaves ovate acute crenate serrate hairy, Fl axillary subsolitary
9711 Leaves ovate-lanceolate doubly toothed obsoletely 3-lobed beneath rough, Peduncles axillary 2-flowered
9712 Leaves ovate crenate-serrate beneath velvety, Fl axillary clustered
9713 Leaves ovate acute coarsely toothed pubescent, upper cuneate at base, Fl. axillary and terminal spiked
9714 Leaves ovate acuminate serrate rough, Fl axillary and terminal spiked
9715 Leaves ovate or subcordate rough above downy beneath, Flowers in ovate spikes
9716 Leaves cordate crenate blunt and branches downy, Flowers lateral heaped
9717 Leaves subcordate acute toothed downy beneath, Fl sessile, Lobes of calyx ovate
9718 Leaves cordate acuminate serrated rough, lower lobed, Pedunc axillary, Flowers in heads
9719 Leaves cordate blunt smooth, Flowers sessile heaped
9720 Dwarfs, Leaves ovate toothed adult smoothish, younger hairy, Fl axillary solitary on short stalks
9721 Leaves reniform broadly crenate and branches leprous, Stems prostrate
9722 Leaves cordate roundish 5-angled crenate villous, Pedicels longer than petiole
9723 Leaves half orbicular crenate, upper rhomboid, Stem erect hairy
9724 Lower leaves 3-lobed entire, upper multifid, Segm trifid toothed at end
9725 Leaves 3-parted, Segm trifid ciliated toothed at end, Cor less than calyx
9726 Leaves 3-parted, Segm trifid linear blunt, Cor 3 times as large as calyx
9727 Leaves many-parted lobes trifid linear, Stem decumbent, Hairs stellated
9728 Lower leaves angular, upper 5-parted cut, Stems and calyxes velvety
9729 Lower leaves reniform cut, cauline many-parted, Segments linear, Stems and calyxes hairy

9730 Leaves palmated lobes lanceolate toothed, Hairs simple, Pedicels longer than leaf
9731 Stem erect, Leaves 5-lobed blunt, Pedicels and petioles smoothish or downy on the upper side
9732 Stem erect, Leaves 5-7-lobed acute, Pedicels and petioles hairy
9733 Stem prostrate, Leaves cord orbic bluntly 5-lobed, Pedicels in fruit drooping and petioles downy

9734 Stem diffuse, Lvs cord orbicular 7-lobed soft lobes acute, Fls aggreg stalked, Leaves of involucre bristly
9735 Stem erect, Leaves cordate roundish about 9-lobed crenate smooth, Fl axillary sessile clustered
9736 Stem spreading, Leaves roundish bluntly angular crenate smoothish, Fl axillary sessile clustered
9737 Stem erect, Leaves cordate roundish bluntly angular, Fls axill clustered sess Cal rough somew inflated
9738 Stem erect, Leaves angular toothed crisp smooth, Flowers axillary sessile
9739 Pedicels 1-flowered aggregate shorter than leaf, Involucre ovate acuminate, Leaves 5-lobed hairy rugose
9740 Pedicels 1-flowered solitary or twin longer than petiole, Involucre linear, Leaves cut crenate smooth rigid
9741 Pedicels 1-fl solitary or twin longer than petiole, Involucre lanc Lvs 5-lobed or 3-lobed cren toothed glutin.
9742 Pedicels 1-fl solitary longer than petiole, Involucre obl linear, Lvs sub-three-lobed acute unequally toothed
9743 Pedicels 1-flowered solitary length of leaves, Leaves subsessile cuneiform trifid entire
9744 Pedicels solitary longer than petiole, Leaves lobate plaited toothed roughish, Branches divaricating
9745 Pedicels solitary longer than petiole, Involucre lanceolate, Leaves oblong very blunt 3-lobed toothed
9746 Pedicels solitary 1-fl twice as long as petiole, Involucre ovate acute very large, Leaves cordate crenate hairy
9747 Pedicels solitary 1-fl length of petiole, Involucre lanc Leaves cordate 5-lobed toothed, Branches glutinous
9748 Pedicels solitary 1-fl length of petiole, Involucre nearly linear, Leaves ovate about 3-lobed toothed hairy
9749 Pedicels solitary 1 or 2-fl shorter than petiole, Leaves cordate about 5-lobed blunt rough with stellat hair
9750 Pedicels solitary 1-3-fl length of petiole, Involucre obl linear, Leaves sinuate lobed serrate rugose hairy
9751 Pedicels 1-2-fl solitary longer than petiole, Involucre linear, Leaves 5-lobed blunt rugose very rough
9752 Leaves angular acute cordate villous, Petals obcordate shorter than calyx, Pedunc panicled
9753 Leaves ovate 3-lobed toothed downy, Pedunc axillary racemose few-flowered
9754 Leaves angular 5-lobed, middle lobe largest, Pedunc axillary racemose, Flowers 1-sided
9755 Leaves palmate, Spikes axillary 1-sided, Fruit toothletted
9756 Leaves 7-lobed rugose, Spikes axillary 1-sided, Fruit smooth
9757 Leaves 5-lobed lobes pinnatifid sinuate toothed, Pedunc corymbose capitate, Fruit with two beaks
9758 Leaves subpeltate 5-lobed blunt, Pedunc axillary umbelled, Involucre obovate stipitate deciduous
9759 Leaves 5 angular downy, Pedunc axillary bifid few-flowered, Involucre oblong small
9760 Leaves 3-parted hoary, Segm toothed at end, middle trifid, Pedunc axillary 1-flowered
9761 *Leaves lanceolate toothed downy, Pedunc axillary 2 few-fl Involucre setaceous deciduous*
9762 Leaves palmate 5-lobed cut toothed, Pedicels solitary longer than petiole, Fruit villous
9763 Leaves palmate 5-lobed cut toothed, Pedicels solitary longer than petiole, Fruit smooth, Petals entire
9764 Leaves ovate cut toothed lobed, Pedicels longer than petiole, Fruit villous, Petals entire



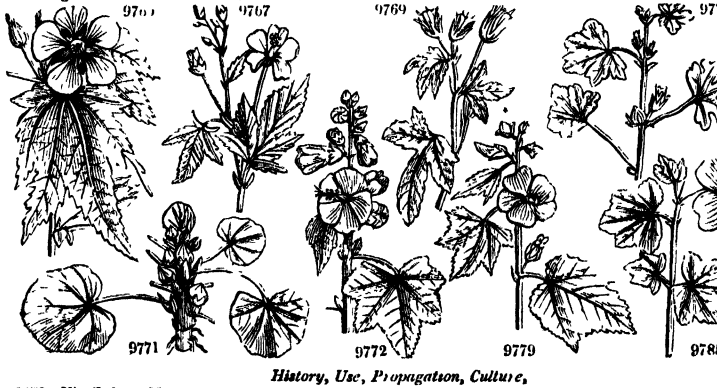
and Miscellaneous Particulars

demulcent properties, but it is greatly inferior to Althæa, and therefore little used Malva was an excellent vegetable among the Romans, but what species is uncertain A tree of the mallow kind is said, by Prosper Alpinus, to afford food to the Egyptians, and the Chinese use some sort of mallow as food.

All the species are of the easiest culture and propagation

1473. KITAIBE'LIA *W.* KITAIBELIA.							*Malvaceæ*	*Sp.* 1					
9765 vitifólia *W.*	Vine-leaved	♃	△	or	5	jl s	W	Hungary	1801	D	p.l	Bot. mag 821	
†1474. ALTHÆ'A *W.*	MARSH MALLOW						*Malvaceæ.*	*Sp.* 11—20.					
9766 officinális *W.*	common	♃	△	m	6	jl s	F	Britain salt m		D	co	Eng. bot 147	
9767 narbonen'sis *W*	Narbonne	♃	△	or	6	au s	Pk	S. Europe	1780	D	co	Cav d s 2 t.29 f 2	
9768 cannabina *W*	Hemp-leaved	♃	△	or	6	jn jl	Pu	S. Europe	1597	D	co	Cav.dis 2 t.30 f 1	
9769 hirsúta *W*	hairy		○	or	6	jn jl	Pu	S Europe	1683.	S	co	Cav dis 2 t 29 f.1	
9770 Ludwígii *W.*	Ludwig's		○	or	6	jn jl	Pk	Sicily	1791	S	co	Cav dis 2 t.30 f.3	
9771 acaúlis *W*	stemless		○	or	1½	jn jl	Pu	Aleppo	1680	S	co	Cav.dis 2 t.27.f 3	
9772 rósea *W*	Hollyhock	♃	○	or	8	jl s	R	China	1573	S	co	Cav dis.2 t 28 f.1	
9773 pállida *W*	pale-flowered	♃	○	or	6	jl au	W	Hungary	1805	S	co		
9774 caribæ'a *B M*	West Indian	♃	⊠	or	3	mr ap	Pk	W Indies	1816	S	co	Bot mag 1916	
9775 flexuósa *B M*	Scringapatam	♃	⊠	or	3	jn au	Pk	E. Indies	1803.	D	co	Bot. mag 892	
9776 ficifólia *H*	Antwerp Hollyh	♃	○	or	6	jn s	O	Levant	1597	S	co	Cav.dis 2.t.28.f.2	
*1475 LAVATE'RA. *W*	LAVATERA						*Malvaceæ.*	*Sp* 13—26					
9777 arbórea *W*	Tree Mallow	♃	○	or	6	jl o	Pu	Britain	sea cl	S	co	Eng bot 1841	
9778 micans *W*	glittering	♣	□	or	3	jn jl	Pu	Spain	1796	C	co	Mo his 1 t 17 f 9	
9779 O'lbia *W*	downy-leaved	♣	□	or	3	jn o	R Pu	France	1570	C	s l	Cav dis 2.t 32.f 2	
9780 unguiculáta *P S*	clawed	♣	□	or	6	jl s	Li	.....	1807	C	co		
9781 hispida *P S*	hispid	♣	□	or	6	jn jl	Pk	Algiers	1804	C	co	Bot. mag 2541	
9782 triloba *W*	three-lobed	♣	□	or	3	jn jl	L.Pu	Spain	1759	C	s l	Bot. mag 2226	
9783 lusitánica *W*	Portugal	♣	□	or	3	au s	Pu	Portugal	1731	C	s l		
9784 plebéia *Sims*	vulgar	♣	△	or	2	s	Pa	N Holl	1820	D	co	Bot mag 2269	
9785 maritima *W*	sea-side	♣	□	or	2	ap jn	W	S Europe	1597.	S	s l	Cav dis.2 t 32 f 3	
9786 thuringiaca *W*	large-flowered	♃	△	or	4	jl s	L.B	Germany	1731	D	co	Bot mag 317	
9787 crética *W*	Cretan		○	or	1	jl s	L B	Candia	1723	S	co	Jac vind 1 t 41	
9788 punctáta *W*	spotted-stalked		○	or	2	jl s	Pa	Italy	1800	S	co		
9789 trimestris *W*	common annual		○	or	2	jl s	F	S Europe	1633	S	co	Bot mag 109	
*1476 MALA'CHRA *W*	MALACHRA						*Malvaceæ*	*Sp* 3—14					
9790 capitáta *W*	headed		⊠	un	1	au s	W	W Indies	1759	S	lt l	C dis 2 t 33 f 1,2	
9791 alceæfólia *W*	Hollyhock-lvd		⊠	un	1	au s	Y	Caraccas	1805	S	lt l	Jac ic 3 t 549	
9792 radiáta *W*	rayed	♣	⊠	un	1	jl au	W	St Domin	1794	S	lt l	Cav dis 2 t 33.f 3	
†1477 URE'NA *W*	URENA						*Malvaceæ*	*Sp* 4—21.					
9793 lobáta *W*	angular-leaved	♣	□	un	2	jn jl	F	China	1731	C	p l	Ca.dis 6.t 185 f 1	
9794 americána *W*	American	♣	□	un	2	...	W	Surinam	1816	C	p l	Sloane 1 t 11 f 2	
9795 sinuáta *W*	cut-leaved	♣	□	un	3	jl au	F	E. Indies	1759	C	p l	Ca dis 6 t 185 f 2	
9796 multifida *W*	multifid	♣	□	un	2	ja o	Pu	E Indies	1817	C	p l	Ca dis 6 t 184 f 2	
1478 PAVO'NIA *W.*	PAVONIA						*Malvaceæ*	*Sp* 7—24					
9797 præmórsa *W*	bitten-leaved	♣	□	un	½	jn au	W	C G H	1774	C	s l	Bot mag 436	
9798 spinifex *W*	prickly-seeded	♣	□	un	2	jl au	W	W Indies	1778	C	s l	Jac.vind.2 t.103	
9799 odoráta *W*	fragrant	♣	□	un	2	...	R	E Indies	1807	C	s l		
9800 coccínea *W*	scarlet	♣	□	un	2	. .	St	St Domin.	1816	C	s l	Cav.dis 3 t 47 f 1	
9801 columélla *W*	angular-leaved	♣	□	un	2	jl	W pu	Bourbon	1807.	C	s l	Cav dis 3 t 48 f 3	
9802 úrens *W*	stinging	♣	□	un	2	...	W	Mauritius	1801	C	s.l	Jac ic 3 t 522	
9803 zeylánica *W*	Ceylon		⊠	un	3	jl s	W	E. Indies	1790	S	s l	Cav dis 3 t 48 f 2	
†*1479 ACHA'NIA *B*	ACHANIA						*Malvaceæ*	*Sp* 3—15					
§9804 Malvaviscus *W*	scarlet	♣	□	or	12	ja d	S	Jamaica	1714	C	p l	Bot mag 2305	
9805 móllis *W*	woolly	♣	□	or	12	au s	S	America	1780.	C	p l	Bot. reg 11	
9806 pilósa *W*	hairy	♣	□	or	12	o n	R	Jamaica	1780	C	p l	Bot cab 829	
†*1480 HIBIS'CUS *W*	HIBISCUS						*Malvaceæ*	*Sp* 46—125					
9807 Moscheútos *Ph.*	swamp	♃	△	or	2	au o	Pu	N Amer	...	D	p l	Cav dis 3 t 65 f 1	
9808 palústris *L.*	marsh	♃	△	or	3	jl s	Pk	N Amer	1759	D	p l	Cav dis 3 t 65 f 2	
9809 Patersónn *H K*	Norfolk Island	♀		or	15	jn au	Pu	Norfolk I	1792	C	s.p	Bot rep 286	

Lagunæ'a-Patersonia B M 769



History, Use, Propagation, Culture,

1473 *Kitaibelia.* Named after Dr Paul Kitaibel, professor of botany at Pest, in Hungary, and author, in conjunction with Count Waldstein, of a noble work upon the plants of that country A tall mallow-like plant with vine-like leaves, and white flowers

1474 *Althæa* From ἀλθω, to cure The salutary effects of the mucilaginous root, are well known in medicine *Guimauve*, Fr A officinalis has long been in repute as a demulcent Its roots are sometimes used as an emollient suppurative cataplasm, and a decoction of the leaves forms a useful fomentation in external abrasions, and in cutaneous eruptions, accompanied with a sharp ichorous discharge

A rosea is the parent of nearly twenty splendid varieties of border flowers, which seed readily, and the offspring generally resembles the parent variety All the species are of the easiest culture in common garden soil

1475 *Lavatera* In memory of two Lavaters, physicians of Zurich, neither the physiognomist, but two friends of Tournefort The species resemble those of Malva, in general appearance and culture much the handsomest is L arborea, which is a magnificent plant in shrubberies, or in the back of wide borders.

9765 Leaves 5-lobed acute toothed

9766 Leaves soft on each side cordate or ovate toothed undivided or 3-lobed, Pedunc axillary many-fl.
9767 Leaves pubescent lower 5-7-parted; upper trifid, Peduncles many-fl longer than leaf
9768 Leaves downy hoary beneath. lower palmate, upper 3-parted lobes narrow coarsely toothed
9769 Leaves cordate rough with hairs smooth above lower blunt, upper 5-lobed, Stem hispid
9770 Leaves smooth cordate roundish lobed toothed, Pedicels axillary clustered 1-flowered
9771 Leaves roundish cordate 5-angled crenate, Pedicels 1-fl much shorter than petiole
9772 Stem upright hairy, Leaves cordate 5-7-angled crenate rugose, Flowers axillary sessile
9773 Stem erect hispid, Leaves roundish cordate, Involucel as long as calyx
9774 Stem upright smoothish, Leaves rounded lobed crenulate serrate, Flowers solitary subsessile
9775 Stem subflexuose hispid, Leaves cordate about 7-lobed blunt on long stalks, Flowers axillary solitary
9776 Stem erect hairy, Leaves palmate 7-lobed beyond the middle lobes oblong blunt irregularly toothed

9777 Leaves 7-angled downy plicate, Pedicels axillary 1-fl clustered much shorter than petiole
9778 Leaves 7-angled acute crenate plaited downy, Racemes terminal
9779 Leaves soft hoary 5-lobed, upper 3-lobed middle lobe elongated, upper oblong undivided
9780 Leaves downy on each side acutely 5-lobed, upper 3-lobed, Flowers solitary on short stalks
9781 Stem hispid, Leaves hoary 5-lobed, upper 3-lobed or undivided, Flowers subsessile
9782 Stem and leaves downy subcordate sub-three-lobed round crenate, Pedicels aggregate, Calyxes acuminate
9783 Leaves 7-angular downy plaited, Racemes terminal
9784 Stem rough, Leaves 5-lobed downy beneath, Peduncles axillary aggregate, Petals emarginate
9785 Stem and leaves downy roundish bluntly angular crenate, Pedicels axillary solitary
9786 Leaves somewhat downy · lower angular, upper 3-lobed middle lobe longer than the rest
9787 Stem herbaceous hispid, Leaves 5-lobed acute, Pedicels axillary 1-flowered aggregate
9788 Stem rough, Leaves somewhat downy lower round cordate, upper 3-lobed, Pedicels solitary 1-fl
9789 Stem herbaceous, Leaves smoothish roundish cordate, upper angular, Pedicels solitary

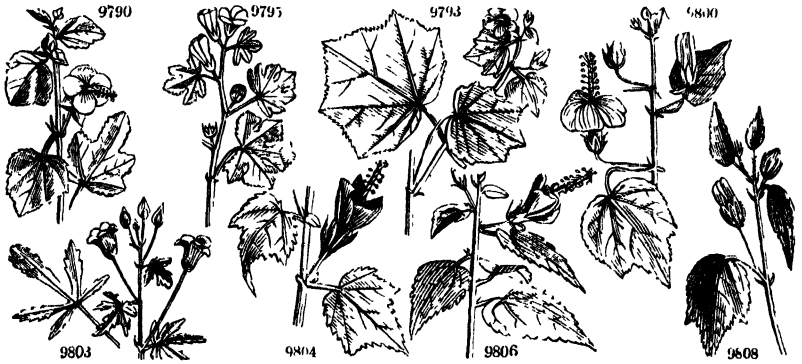
9790 Leaves cordate roundish bluntly angular toothletted, Involucel stalked 3-leaved 7-flowered, Stem rough
9791 Leaves cordate palmate 5-lobed, Heads stalked 5-leaved 10-flowered, Stem with scattered hairs
9792 Leaves palmate-lobed, Heads stalked 5-leaved many-flowered, Involucel acuminate, Calyxes and stems hairy

9793 Leaves roundish very bluntly 3-lobed velvety on each side 7-nerved 1-glanded, Cal oblong lanceolate
9794 Lower leaves 3 lobed, upper lanceolate panduriform beneath hoary netted with one gland
9795 Leaves trifid downy pale beneath with 3 glands · lobes angular toothletted blunt
9796 Leaves broad ovate cut lobed with narrow recesses lobes acute coarsely and unequally toothed

9797 Leaves broadly obovate truncate crenate at end, Pedic axillary 1-fl longer than leaf
9798 Leaves ovate acuminate subcordate doubly toothed, Pedicels axillary 1-fl
9799 Leaves ovate subcordate 3-pointed somewhat toothed and branches covered with viscid hairs
9800 Leaves cordate 3-lobed serrate, Pedicels axillary 1-fl ascending, Involucre 3-leaved
9801 Leaves 5-angular lobes toothed acuminate, Pedic axillary 1-fl much shorter than petiole
9802 Leaves 7-angular acuminate toothed hairy, Fl axillary subsessile clustered
9803 Lower leaves roundish cord crenate others 3-5-lob Pedicels axillary 1-fl Inv 10-leaved setaceous ciliated

9804 Leaves cordate 3-5-lobed acuminate roughish, Leaflets of involucel erect
9805 Leaves cordate about 3-lobed acuminate soft downy, Leafl of involucel somewhat spreading
9806 Leaves cordate crenate blunt or acuminate, Branches and petioles hairy

9807 Leaves ovate acuminate serrate downy beneath, Involucel and calyx downy
9808 Leaves ovate toothed somewhat 3-lobed hoary with down beneath
9809 Leaves lanceolate oblong entire white with scales beneath



and Miscellaneous Particulars

1476. *Malachra* A name under which Pliny speaks of a tree from the north of Persia, producing a certain gum It had no reference to the plant called Malachra by the moderns. Sow in light rich soil, and transplant as with other stove annuals

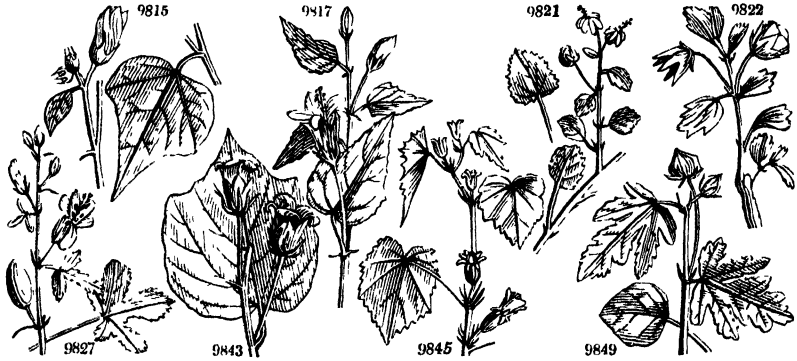
1477 *Urena*, the vernacular name in Malabar The species are of easy culture, seed freely, or may be propagated by cuttings in sand under a hand-glass

1478. *Pavonia.* In honor of Don José Pavon, the companion of Dombey, in his voyage to Peru, and one of the authors of Flora Peruviana. The species are free-growers, and seed readily. they are also increased by cuttings in sand under a hand-glass.

1479. *Achania.* From *αχαινης*, closed, so called because the corolla does not open out as in most Malvaceous plants, but remains always rolled together

1480 *Hibiscus.* One of the Greek names of the mallow The species are for the most part shewy plants, and not difficult of culture. All of them abound in mucilage, like many of the same natural family, and the

9810	incánus *Ph*	hoary		or	3	s	Y	Carolina	1806.	D	s p	W hort ber t 24
9811	mihitárix *Ph*	smooth		or	3	au s	Pu	Louisiana	1804.	D	s p	Bot. mag 2385
§9812	popúlneus *W*	Poplar-leaved		or	15	...	W	E. Indies	1770	C	p l	Rhee mal 1 t.29
9813	tiliáceus *W*	Lime-tree-lvd		or	20	jl au	Pu	E Indies	1739	C	p l	Bot reg. 232
9814	elátus *Sw*	tall		or	20	...	Pu	Jamaica	1790	C	p l	
9815	Lámpas *W*	three-pointed		or	10	...	Pk	E Indies	1806	C	p l	Cav.dis 3 t.56.f 2
9816	Rósa Malabárica *Ker*	Malabar		or	2	au s	Sc	E. Indies	1818	C	p l	Bot reg 337
9817	membranáceus *W*	leafy-calyxed		or	10	...	Pk	.....	1816.	C	s l	Cav dis 3 t.57 f 2
9818	lunariifólius *W*	Lunaria-leaved		or	10	...	Pu	E Indies	...	C	s l	
9819	Rósa-sinénsis *W*	Chinese		or	10	jl au	D R	E Indies	1731	C	p l	Bot. mag 158
	β rubro-plenus	*double red*		or	10	jl au	D R	E Indies	...	C	p l	Bot cab 513
	γ flavo-plenus	*double buff*		or	10	jl au	Y	E Indies	...	C	p l	
	δ variegátus plénus	*double striped*		or	10	jl au	St	E Indies	...	C	p l	Bot cab 963
	ε lúteus	*double yellow*		or	10	jl au	Y	E. Indies	1823.	C	p l	Bot. cab 932
9820	phœníceus *W*	purple-flowered		or	8	jl au	Pu	E. Indies	1796	C	p l	Bot reg 230
9821	micranthus *H K*	small-flowered		or	6	...	Pu	E Indies	1794	C	p l	Cav dis 3 t.66 f 1
9822	æthiopicus *H*	dwarf wedge-lv		or	6	au	Pu	C G H	1774	C	p l	Cav dis 3 t.61.f 1
9823	mutábilis *W*	changeable		or	15	o d	W	E Indies	1690	C	p l	Bot. rep 228
	β flore pléno	*double-flowered*		or	15	o d	W	E Indies	...	C	p l	
9824	syriacus *W*	Althæa frutex		or	8	au s	Pu	Syria	1596.	L	co	Bot. mag. 83
	α purpúreus	*purple-flowered*		or	8	au s	Pu	.....	...	L	co	
	β rúber	*red-flowered*		or	8	au s	R	.....	...	L	co	
	γ albus	*white-flowered*		or	8	au s	W	.....	...	L	co	
	δ variegátus	*striped-flowered*		or	8	au s	St	.....	...	L	co	
	ε albo-plenus	*double white*		or	8	au s	W	.....	...	L	co	
	ς purpúreo-plénus	*double purple*		or	8	au s	Pu	.....	...	L	co	
9825	acerifólius *P L*	Maple-leaved		or	5	mr jn	Pk	China	1798	C	s l	Par lond c. ic
9826	diversifólius *W*	different-leaved		or	6	jn jl	Y	E Indies	1798	C	s l	Bot. reg 381
9827	ficúlneus *W*	Fig-leaved		or	4	jn jl	W	Ceylon	1732	C	p l	Cav dis 3 t 52 f 2
9828	Sabdariffa *W*	Indian		or	2	jn s	Y	E Indies	1596	C	p l	Cav.dis 6 t 198 f 1
9829	speciósus *W*	superb		or	2	jn au	S	Carolina	1778	C	s l	Bot mag 360
9830	pruriens *B R*	stinging		or	3	jl s	Y	E Indies	1804	C	s l	Bot rep 498
9831	heterophýllus *H K*	various-leaved		or	6	au s	W R	N S W	1803	C	s p	Bot reg 29
9832	cannabinus *W*	Hemp-leaved		or	5	jn jl	Y	E Indies	1759	C	s l	Rox cor 2 t 190
9833	suratténsis *W*	prickly-stalked		or	2	jl s	Y	E Indies	1731	S	s l	Bot mag. 1356
9834	radiátus *W*	rayed		or	2	jn au	Y	E. Indies	1790	S	s l	Bot mag 1911
9835	Mánihot *W*	palmated		or	3	jl s	Y	China	1712	C	p l	Bot mag 1702
9836	scáber *Ph*	scabrous		or	2	jl s	Y	Carolina	1810	D	s l	
9837	furcátus *W cn*	forked-calyxed		or	2	jl s	Y	E. Indies	1816	C	s l	
9838	digitátus *Cav*	digitate		or	2	jl s	W R	Brazil	1816	S	co	Bot reg 668
9839	Abelmóschus *B*	Musk Okro		or	3	jl s	Y	India	1640	C	r m	Rhee mal 2 t 38
9840	pedunculátus *W*	long-pedunculed		or	2	my d	R	C G H	1812	C	s l	Bot reg 231
9841	esculéntus *W*	eatable		cu	4	jn jl	Y	W Indies	1692	S	r m	Cav dis 3 t 61 f 2
9842	strigósus *Lindl*	strigose		or	6	jn jl	Pk	Peru	1820	C	s l	Bot reg 860
9843	clypeátus *W*	shield-capsuled		or	6	jl au	Y	Jamaica	1759	C	p l	Cav dis 3 t 58 f
9844	únidens *Lindl*	one-toothed		or	3	jl	Y	Brazil	1822	C	co	Bot reg 878
9845	tubulósus *W*	tubular		or	2	jl o	Y	E Indies	1796	C	s l	Cav dis 3 t 58 f 2
9846	vitifólius *W*	Vine leaved		or	2	jl o	Y	E. Indies	1690	C	p l	Rhee mal 6 t 46
9847	virgínicus *W*	Virginian		or	2	jl s	Y	Virginia	1798	D	s l	Jac ic 1 t 142
9848	pentacarpos *W*	angular-fruited		or	3	jl s	L R	Vemce	1752	S	s l	Jac ic. 1 t. 143
9849	vesicárius *W*	African		or	1½	jl au	Y Br	Africa	1713	S	co	Cav dis 3 t 64 f 2
9850	Triónum *W*	Bladder Ketmia		or	2	jn s	Y Br	Italy	1596	S	co	Bot mag 209
9851	hispidus *Mill*	hispid		or	1½	jn s	Y Br	C G H	..	S	co	Bot reg 806
9852	Richardsónii *Lindl*	rough-leaved		or	3	jn s	Y	N Holl	1820	S	co	Bot reg 875



History, Use, Propagation, Culture,

bark of the ligneous sorts may be manufactured into mats or cordage Of H tiliaceus, in the island of Otaheite, they make matting of the bark, as fine as our coarse cloth, also ropes and lines, from the size of an inch to that of a small packthread, and fishing nets (*Hawks Voy* ii. 217) Forster informs us, they also suck this bark for food, when the bread-fruit fails them and in New Caledonia, the inhabitants frequently subsist on it, though it is an insipid food, affording very little nourishment

H. Rosa-sinensis is extremely common in the gardens of China, and the East Indies, but its native country is unknown Loureiro, however, affirms, that it is spontaneous as well as cultivated both in China and Cochin-China; and that it is so common in the latter, that they have entire hedges of it to their gardens It has been long known from its appearance on Chinese screens and paper hangings The variety with double flowers is most frequently cultivated, both in the East and in European hothouses: the plant is, indeed, rarely seen with single flowers (*Smith, spicil*)

H. syriacus is one of our most beautiful hardy shrubs, the more valuable as it is a free-flowerer, will grow in common garden soil, and propagates freely by seeds, layers, and even by cuttings.

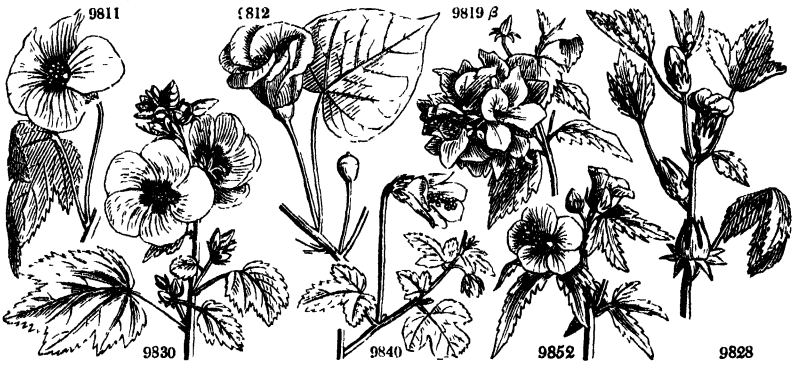
H. Sabdariffa (the Turkish name) in the West Indies is called Red Sorrel The calyxes and capsules, freed

9810 Leaves ovate acuminate bluntly serrate hoary on each side, Pedicels axillary 1-fl
9811 Leaves 3-lobed hastate acuminate serrate smooth on each side, Pedicels jointed in the middle
9812 Leaves roundish cordate acuminate (*Thespesia* Dec.)
9813 Leaves roundish cordate acuminate crenate hoary beneath, Involucre 10-toothed
9814 Leaves roundish cordate entire hoary beneath, Peduncle very short 1-flowered
9815 Leaves cordate 3-pointed smooth dotted beneath, Pedicels solitary 1-fl. longer than petiole
9816 Leaves cordate acutely serrate, Branches somewhat hairy
9817 Leaves cordate ovate-lanceolate acuminate toothed, Pedicels twice as long as petiole
9818 Leaves roundish cordate acuminate finely toothed hairy beneath, Pedicels thick villous
9819 Leaves ovate acuminate smooth entire at base coarsely toothed at end, Pedicels length of leaf

9820 Leaves ovate acuminate serrate, lower subcordate 3-pointed, Pedicels jointed at end
9821 Leaves ovate or roundish undivided serrated rough, Pedicels longer than leaf, Cor reflexed
9822 Leaves cuneiform about 5-toothed hairy, Pedicels longer than leaf, Involucre 8-10-leaved hispid
9823 Leaves cordate angular 5-lobed acuminate toothed downy, Pedicels nearly as long as leaf

9824 Leaves cuneiform ovate 3-lobed toothed, Peduncle scarcely longer than petiole, Involucre 6-7-leaved

9825 Leaves cordate 5-lobed hairy. lobes acuminate subrepand, Involucre 6-7-leaved setaceous [undivided
9826 Stem and petiole prickly, Pedicels short unarmed very hairy, Leaves 3-5 lobed blunt toothed, upper oblong lanceolate
9827 Stem prickly, Leaves palmate 5-lobed, upper 3-lobed lobes blunt unequally toothed narrowed at base
9828 Leaves toothed lower ovate undivided, upper 3-lobed cuneate at base, Flowers subsess Involucre 12-toothed
9829 Leaves palmate 5-parted lobes lanceolate acuminate subserrate at end, Pedicels jointed under the end
9830 Stem hairy, Leaves on long stalks ovate about 3-lobed serrate membranous smoothish, Peduncle very short
9831 Stem prickly, Leaves linear lanceolate acuminate usually lobed prickly-serrate, Involucre 10-leaved
9832 Stem prickly, Leaves palmate 5-parted with 1 gland beneath, Fl subsess Calyx covered with glandular hairs
9833 Stem rough with recurved prickles, Stipules 4-cord Leaves palmate 5-lobed, Pedicels length of petiole
9834 Stem rough with recurved prickles, Stipules lanceolate Leaves 5-7-parted with lanceolate acuminate serrated lobes
9835 Leaves smoothish palmate lobes 5-7-acuminate coarsely toothed, Involucre hispid 4-6-leaved, Fls declinate
9836 Stem rough, Leaves rough roundish truncate at base, upper palmate-lobed lobes dilat crenate upwards
9837 Stem petioles and calyx muricate, Leaves ovate at base trifid, lower 5-fid lobes acuminate serrate
9838 Leaves palmated lobes lanceolate serrate, Petioles muricate, Fl subsessile solitary, Involucre 7-fid
9839 Leaves subpeltate cordate 7-angular acuminate serrate, Stem hispid, Pedicels longer than petiole
9840 Leaves 3-5-lobed blunt crenate hairy, Pedicels twice as long as leaf, Involucre many-leaved, Cor campanulate
9841 Leaves cordate 5-lobed blunt toothed, Petioles longer than fl Involucre 10-leaved deciduous Calyx bursting lengthwise
9842 Stem strigose, Leaves 3-lobed angular cordate toothed downy, Peduncle longer than petiole
9843 Leaves cordate angular sparingly toothed nearly smooth, Branches velvety, Caps turbinate truncate hispid
9844 Stem prickly, Leaves smoothish coarsely toothed without glands, Leaves of the involucre with a tooth inside
9845 Leaves cordate unequally toothed beneath hoary lower about 5-lobed, upper acuminate Pedicels 1-fl very short
9846 Stem somewhat prickly, Leaves smoothish toothed 5-angular acuminate, Fls cernuous, Caps 5-winged hairy
9847 Leaves acuminate unequally toothed subvillous lower undivided cordate, upper ovate-cordate 3-lobed
9848 Leaves cordate oblong toothed bluntish angular slightly 3-lobed smooth, Pedicels longer than petiole
9849 Lvs toothed lower undivided, upper 5-fid lobes oblong nearly equal blunt, Cal inflat membranous nerved
9850 Lvs toothed lower undivided, upper 3-parted lobes lanceolate middle one very long, Cal infl membranous nerved
9851 Leaves toothed lower leaves 3-lobed, upper 5-parted blunt, Stem hispid
9852 Leaves hairy 5-lobed lobes linear oblong coarsely toothed, Cal very villous longer than involucrum



and Miscellaneous Particulars

from the seeds, make very agreeable tarts, and a decoction of them, sweetened and fermented, is commonly called sorrel cool drink. It is a small diluting liquor, much used in our sugar colonies, and reckoned very refreshing in those sultry climates. (*Browne's Jam*.) The bark of this species, and also of H cannabinus, is full of strong fibres, which the inhabitants of the Malabar coast prepare and make into cordage, and it seems as if it might be wrought into fine strong thread of any size

The leaves of H surattensis are gratefully acid, and eaten in salads. The mucilage of the root of H manihot is used in Japan for giving consistence to paper

H. Abelmoschus, from the Arabic *Ab-el-Mosch*, grain or seed of musk, has large seeds of a very musky odor, and are frequently used as a substitute for animal musk in scenting powders and pomatums In Arabia and Egypt they are ground and mixed with coffee, to render it more agreeable to the head and stomach

H. esculentus, the Okro of the West Indies, is cultivated there, and in some parts of France, for the pods, which are gathered green and used in soups, or pickled like capers. They are full of a nutritive mucilage, and buttered and spiced make a very rich dish.

1481	**GOSSY'PIUM** *W*	Cotton				*Malvaceæ.*		*Sp* 6—16						
9853	herbáceum *W*	common	▯	ag	3	jl	Y	E. Indies	1594.	S	s l	Ca dis 6 t.164.f 2		
9854	arbóreum *W*	tree	♀ ▯	or	12	jl au	Y	E. Indies	1694	C	s.p	Cav. dis 6. t 193		
9855	vitifólium *W*	Vine-leaved	▯	ag	3	...	Y	E. Indies	1805.	C	s p	Cav. dis. 6 t. 166		
9856	hirsútum *W*	hairy	♿ ▯	ag	3	jl au	Y	S Amer	1731.	C	s p	Cav dis. 6 t. 167		
9857	religiósum *W*	spotted-barked	♿ ▯	ag	3	jl	Y	India	1777	C	s p	Ca dis 6.t 164.f 1		
9858	barbadénse *W.*	Barbadoes	♿ ▯	ag	5	s	Y	Barbadoes	1759.	C	s p	Bot. reg 84		
1482	**REDOUTE'A** *Vent*	Redoutea				*Malvaceæ.*		*Sp.* 1—2.						
9859	heterophýlla *Vent*	various-leaved	▯	or	3	jn	Y	S. Amer	1822.	S	co	Vent cels t. 11		
1483	**PALA'VIA** *W*	Palavia				*Malvaceæ.*		*Sp.* 1—2						
9860	malvifólia *W*	Mallow-leaved	○	un	1½	jn au	Pu	Peru	1794.	C	co	Cav dis 1 t.11 f 4		
1484	**CRISTA'RIA** *Cav*	Cristaria				*Malvaceæ*		*Sp* 1—4						
9861	coccínea *Ph*	scarlet	♃ △	pr	½	jl s	S	Missouri	1811.	D	p	Bot. mag 1673		
1485	**ANO'DA** *Cav*	Anoda				*Malvaceæ*		*Sp* 3—7						
9862	hastáta *W*	halberd-leaved	▯	un	1½	jn jl	B	Mexico	1799	S	s p	Bot mag 1541		
9863	cristáta *W*	crested	▯	un	1½	jl s	Pu	Mexico	1720	S	s p	Cav dis 1 t.10 f 3		
9864	Dillenána *W*	Dillenius's	▯	un	1½	jn n	B	Mexico	1725	C	co	Bot. mag t 330		
1486	**PERIPTERA** *Dc*	Periptera				*Malvaceæ*		*Sp* 1						
9865	punctea *Dec*	Shuttlecock	♚ ▭	pr	3	my jn	Cr	N. Spain	1814.	C	co	Bot. mag. 1644		
†*1487	**SI'DA** *W*	Sida				*Malvaceæ.*		*Sp* 69—195.						
9866	linifólia *Cav*	flax-leaved	♚ ▭	un	3	jl	Pk	Guiana	1822.	C	co			
9867	angustifólia *W*	narrow-leaved	♿ ▭	un	1½	jl s	Y	Brazil	1726	C	co	L'Her. stirp.t 52		
9868	spinósa *W*	prickly	♿ ▯	un	1½	jl s	Y	E. Indies	1680	C	co	Cav diss 1 t 1 f 9		
9869	álba *W*	white-flowered	▯	un	2	jn jl	W	E Indies	1732	S	co	Dil el t 171 f 210		
9870	bracteoláta *Dec*	bracteolate	♚ ▭	un	2	jn jl	Y	Chili	1824	C	co			
9871	carpinifólia *W*	Hornbeam-lvd	♚ ▭	un	3	jl s	Y	Canaries	1774	C	co	Jac ic 1 t 135		
9872	erósa *Lmk*	bitten	♿ ▭	un	2	jl s	Y	Brazil	1824	C	co			
9873	ciliáris *W*	ciliated	♿ ▯	un	1½	jn s	Y	Jamaica	1759	C	co	Cav diss 1 t 3 f 9		
9874	alnifólia *W*	Alder-leaved	▯	un	2	jl s	Y	E Indies	1732.	C	co	Dil el t.172.f 211		
9875	compréssa *Dec*	compressed	▯	un	2	jn s	Y	Nepal	1823	S	co			
9876	canariénsis *W*	Canary	▯	un	2	jn s	W	E Indies	1820	S	co			
9877	rhombifólia *W*	rhomboid-lvd	♚ ▭	un	2	jn au	Y	India	1732	C	co	Cav dis 1 t 3.f 12		
9878	recísa *Lmk*	cut	♿ ▭	un	2	jn au	Y	Brazil	1823	C	co			
9879	micans *Cav*	glittering	♿ △	un	1½	jn au	Y	E Indies	1820.	C	co	Cav.diss 1 t. 3.f 1		
9880	pilósa *W*	pilose	♿ ▯	un	1	jl s	Y	St Domin	1793.	C	co	Cav diss 1.t.1 f 8		



History, Use, Propagation, Culture.

1481 *Gossypium* Pliny says, that in Upper Egypt, on the borders of Arabia, grew a shrub called *gossypion* or *xylon* Its fruit enclosed a sort of soft white wool, of which the garments of the Egyptian priests were manufactured Golius remarks, that *goz*, which expresses in Arabia, a silky substance, may be the root of the word An important genus, as furnishing the down used in the cotton manufacture This down is found lining the capsules which contain the seeds There are several species cultivated for this purpose in different parts of the world G herbaceum is the only species cultivated in Europe, especially in the Levant, and in Malta, Sicily, and Naples it is also grown in many parts of Asia

G hirsutum is occasionally grown in the West Indies, but G barbadense is the prevailing species there. In the East Indies and China, G herbaceum and arboreum are cultivated, and some other species, especially that which produces the nankeen-colored down, not yet introduced to Europe An oil is obtained from the seeds of all the species, while those of the G herbaceum are eaten in the Levant, and esteemed wholesome and nutritive

In the Levant, the herbaceous cotton is sown in well prepared land in March, in lines at three feet distance, and the patches of seeds two feet apart in the lines The plants are thinned out to two or three in a place, and the earth is stirred by a one-horse plough, or by manual labor with hoes, and irrigated once or twice a week by directing the water along the furrows between the rows The flowering season is generally over about the middle of September, and then the ends of the shoots are pinched off to determine the sap to the capsules The capsules are collected by hand as they ripen, a tedious process, which lasts till the end of November. The cotton and the seeds are then separated by manual labor, and the former packed in bales or bags for sale The seeds are bruised for oil or eaten, and a portion kept for sowing

The Barbadoes cotton plant is sown in the West Indies in rows, about five feet asunder, at the end of September, or the beginning of October, at first but slightly covered, but after it is grown up, the root is well moulded. The soil should not be stiff nor shallow, as this plant has a tap-root The ground is hoed frequently, and kept very clean about the young plants, until they rise to a moderate height It grows from four to six feet high, and produces two crops annually, the first in eight months from the time of sowing the seed, the second, within four months after the first, and the produce of each plant is reckoned about one pound weight. The branches are pruned or trimmed after the first gathering, and if the growth is over luxuriant,

9843 Leaves 5-lobed 1-glandular beneath: lobes round mucronate, Invol. serrate, Stem smooth
9854 Leaves 5-lobed palmate · lobes lanceolate blunt mucronate with 1 gland beneath, Invol. nearly entire
9855 Lower leaves 5-lobed palmate, upper 3-lobed with 1 gland beneath, Inv tern Cal. with 3 glands at base
9856 Upper leaves undivided cordate, lower 3-5-lobed with 1 gland beneath, Branches and petioles hirsute
9857 Upper leaves 3-lobed, lower 5-lobed with 1 gland beneath, Branches and petioles spotted with black
9858 Upper leaves 3-lobed, lower 5-lobed with 3 glands beneath, Stem smoothish

9859 Leaves ciliated elliptical entire rarely trifid

9860 Smoothish prostrate, Peduncles nearly as long as petiole

9861 Leaves very ca-sious, Stem very short

9862 Lower leaves cordate acuminate 5-angled somewhat toothed blunt, upper hastate acuminate
9863 Leaves all crenate lower roundish cordate blunt 5-angled, upper round hastate acuminate
9864 Lower leaves triangular hastate crenate, upper ovate lanc nearly entire, Ped sol axill length of leaves

9865 Lower leaves cord about 5-lobed hastate upper hastate, Petals erect spatulate somewhat toothed at end

1 *Capsules 5-12, 1-seeded, not bladdery*

* *Flower-stalks not longer than the leafstalk Leaves oblong or ovate*

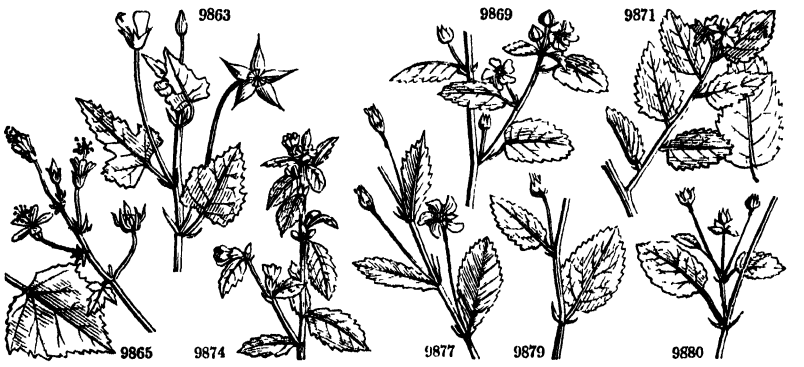
9866 Leaves linear entire much longer than the diameter of the flower, Racemes terminal
9867 Leaves linear-lanceolate toothed, A spiny tubercle at the base of the leaves, Pedic axill subsolitary
9868 Leaves ovate-lanceolate toothed, A spiny tubercle at the base of the leaves, Pedic axillary solitary
9869 Leaves oblong ovate subcordate blunt tooth, Pedicels as long as petiole
9870 Leaves ovate-lanceolate acuminate toothed smooth, Branches round downy, Rac very short bracteolate
9871 Leaves ovate-oblong doubly serrate, Pedunc axillary very short about 4-flowered, Branches flattened
9872 Leaves rhomboid narrowed at base serrate-toothed forwards beneath downy, Pedicels shorter than petiole
9873 Lvs ellipt. subov blunt toothed at end, Pedic axill solitary very short, Stipules ciliated longer than flow
9874 Lower lvs roundish ov., upp obl toothed cun and nearly ent. at base, Pedic axill many shorter than pet.

** *Flower stalks elongated, distinctly jointed Leaves oblong or ovate*

9875 Lvs ovate lanc acumin toothed hoary beneath, Branches compr dotted, Pedic thrice as long as petiole
9876 Leaves lanceolate toothed smooth, Pedic axillary 1-fl length of leaf
9876 Leaves oblong-lanceolate toothed cuneate at base hoary beneath, Pedic axillary 1fl shorter than leaf
9878 Leaves somewhat rhomboid retuse crenate towards the end hoary beneath, Pedic longer than petiole
9879 Leaves ovate blunt serrated downy shining, Pedic axillary solitary much longer than petiole

*** *Flower-stalks elongated Leaves cordate at base, toothed, not lobed*

9880 Leaves ovate cordate blunt toothed, Pedicels solitary 1-flowered longer than petiole



and Miscellaneous Particulars

this should be done sooner When great part of the pods are expanded, the wool is picked, and afterwards cleared from the seeds by a machine called a gin, composed of two or three smooth wooden rollers of about one inch diameter, ranged horizontally, close and parallel to each other, in a frame, at each extremity they are toothed or channelled longitudinally, corresponding one with the other, and the central roller being moved with a treaddle or foot-lath, resembling that of a knife-grinder, makes the other two revolve in contrary directions The cotton is laid in small quantities at a time upon these rollers, whilst they are in motion, and readily passing between them, drops into a sack placed underneath to receive it, leaving the seeds, which are too large to pass with it, behind The cotton thus separated from the seeds, is afterwards hand-picked and cleansed thoroughly from any little particles of the pods or other substances which may be adhering to it. It is then stowed in large bags, where it is well trod down, that it may be close and compact; and the better to answer this purpose, some water is every now and then sprinkled upon the outside of the bag, the marketable weight of which is usually three hundred pounds. An acre may be expected to produce from two hundred and forty pounds to that quantity, or two hundred and seventy pounds on an average. (*Long's Jam.* vol iii p 686. *&c* and *Browne*)

1482. *Redoutea* Named after P J Redouté, a celebrated French botanical draughtsman, still living His drawings are inferior to those of the Bauers as accurate representations of nature; but they are generally tastefully arranged and please the eye, notwithstanding a coldness of coloring which often injures their effect

1483. *Palavia* In honor of Don Antonio Palau y Verdera, second professor of botany at Madrid, and author of an excellent translation of the Species Plantarum of Linnæus in Spanish

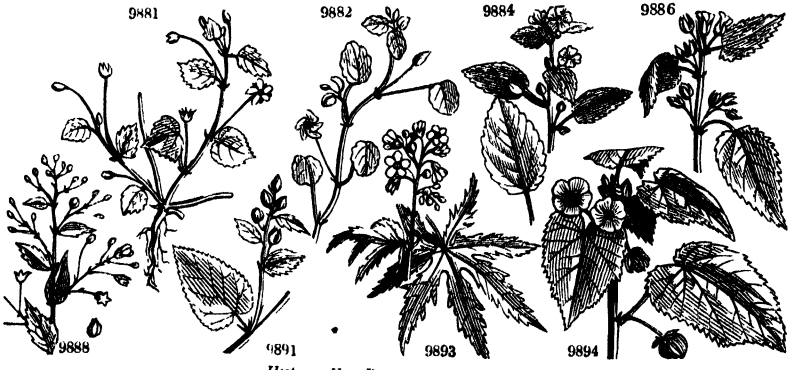
1484 *Cristaria.* From *crista*, a crest, in allusion to the crested form of the capsules. A pretty plant, not very easily preserved It answers better in a peat border than a pot, and is increased by division or seed.

1485 *Anoda* Named by Cavanilles, from *α*, privative, and *nodus*, an articulation, because the peduncles do not possess the joints which are found in Sida, from which the plants of this genus have been extracted

1486. *Periptera* So named from the resemblance of the flowers in form to a shuttlecock, *περιπτερα*.

1487 *Sida* A name of Theophrastus, said by some to have been applied to a Malvaceous plant, but

9881	húmilis *W*	dwarf		un	½	jl.au	Y	E. Indies	1800	S	co	Cav dis 5 t 134 f 2
9882	supína *L'Her*	procumbent		unj	½	jl au	Y	Jamaica	1821	S	co	Ca.dis 6 t 196 f.2
9883	argúta *W*	smth sharp-lvd.		un	3	jl au	Y	W. Indies	1732	C	co	
9884	cordifólia *W*	heart-leaved		un	1½	jn s	Y	C G H	1732.	S	co	Dil el t 171 f 209
9885	althæ'ifólia *Swz.*	Althæa-leaved		un	3	jn s	Or	Jamaica	1820	C	co	Sloane 1 t.136 f 2
9886	úrens *W*	stinging		un	1½	jl s	Y	Jamaica	1781	C	co	Cav.diss 1 t 2 f 7
9887	dumósa *Swz*	bushy		un	2	jl s	Y	Jamaica	1818.	C	co	
9888	paniculáta *W.*	panicled		un	1½	jl.s	Pu	Jamaica	1795.	C	co	Cav.dis.1.t.12 f 5
9889	tríloba *W*	three-lobed		un	3	jl s	W	C. G H	1794	C	co	Jac schœ 2 t 142
9890	jatrophoides *W*	Physic-nut-like		un	4	au	V	S. Amer	1787	S	co	L'Her stir 1 t 56
9891	ricinoides *L'Her*	Ricinus-like		un	4	au	W	Peru	1818	S	co	Cav diss 1 t 3 f 3
9892	Napæ'a *Cav*	smooth		un	4	au.s	W	Virginia	1748	D	co	Bot mag 2193
9893	dioi a *Cav*	rough		un	6	au s	W	Virginia	1759	D	co	Ca dis 5 t 132 f 2
9894	occidentális *W*	downy		un	1½	jl au	Y	America	1732.	S	co	Dill elt 7 t 6 f 6
9895	fœ'tida *W*	stinking		un	1½	jl au	Y	Peru	1795	S	co	L'Her stir 1 t 53
9896	brévipes *Dec*	short-stalked		un	1	jl au	Y	St Martha	1822	S	co	
9897	periplocifólia *W*	Periploca-lvd		un	2	jl au	Y	India	1691	S	co	Dill elt 4 t 3 f 2
	β *zeylánica*	*Ceylon*		un	2	jl au	Y	Ceylon	...	S	co	Pluk t 74 f 7
	γ *caribæ'a*	*Caribbee*		un	2	jl au	Y	W Indies	.	S	co	Sloane t 139 f 3
9898	hernandioides *W*	Hernandia-lvd		un	6	..	Y	Hispanio	1798	C	co	L'Her stir 1 t 58
9899	nudiflóra *W*	naked-flowered		un	3	my jn	Y	Peru	1731	C	co	L'Her stir 1 t 59
9900	polyántha *Lmk*	many-flowered		un	3	my jn	Y	... ..	1821	C	co	
9901	aurita *Wall*	eared		un	3	my jn	Y	Bengal	1823	C	co	Bot mag 2495
9902	triquetra *W.*	triangular		un	2	jl au	Y P	W Indies	1775	C	co	Jac vind 2 t 118
9903	incána *Lmk*	hoary		un	3	jl au	Y	Sandw Is	1818	C	co	
9904	umbellata *W*	umbelled		un	1½	jl s	Y	Jamaica	1788	S	co	Jac vind 1 t 16
9905	reflexa *W*	reflex-flowered		un	3	jl au	R	Peru	1799	C	co	L'Her stir 1 t.64
9906	crispa *W*	curled		un	1	jl au	Y	Carolina	1726	S	co	Ca dis 5 t 135 f 2
9907	arbórea *W*	great-flowered		un	6	jl au	Y	Peru	1772	C	co	L'Her stir 1 t.63
9908	mauritiána *W*	Mauritius		un	2	jl s	Y	Mauritius	1789	S	co	Jac. ic 1 t 137
9909	grandifólia *W*	large-leaved		un	20	n d	Y	. . ..	1816	C	co	Bot reg 360
9910	tiliæfólia *Fisch*	lime-leaved		un	2	jl au	Y	China	1821	S	co	
9911	americána *W*	woolly		un	1½	jl au	Y	Jamaica	1730	S	co	
9912	Abútilon *W.*	broad-leaved		un	1½	jn au	Y	India	1596	S	co	Houtt syst t 61
9913	asiática *W*	small-flowered		un	1½	jl au	Y	E Indies	1768	S	co	Cav diss 1 t 7 f 2
9914	Sonneratiana *W*	Sonnerat's		un	2	jn jl	Y	C G H	1806	C	co	Cav diss 1 t 6 f 4
9915	populifólia *W*	Poplar-leaved		un	1	jl au	Y	E Indies	1796	S	co	Cav dis 1 t 7 f 9
9916	mollíssima *W*	soft-leaved		un	2	jn jl	Y	Peru	1789	C	co	Cav dis 2 t 14 f 1
9917	orbiculata *Dec*	orbicular		un	3	jn jl	Y	China	1820	C	co	
9918	índica *W*	rough-capsuled		un	1½	jl au	Y	India	1731	S	co	Cav dis 1 t 7 f 10
9919	vesicária *W*	bladdery		un	3	jl au	Y	Mexico	1822	C	co	Cav dis.2 t 14 f 3
9920	álbida *W*	whitish		un	3	jl au	W Y	Canaries	1822	C	co	
9921	acerifólia *Lag*	Maple-leaved		un	3	jl au	B	N Spain	1822	C	co	
9922	Milléri *Dec*	Miller's		un	1½	jl au	Y	.. ...	1749	S	co	
9923	viminea *Fisch*	twiggy		un	2	jn	Or	Brazil	1821	C	co	
9924	semi renáta *Lmk*	half crenate		un	2	jl s	Y	Manilla	1823	C	co	
9925	acrántha *Lmk*	pointed		un	3	jl	Y	Brazil	1820	C	co	
9926	spiræifólia *Lmk*	Spiræa-leaved		un	3	au s	Y	.....	1824	C	co	
9927	brasiliénsis *Cav*	Brazilian		un	2	jl s	Y	Brazil	1818.	C	co	Cav dis 1 t 34 f 1
9928	villósa *Mill*	villous		un	3	jl au	Pa Y	S Amer.	1739.	C	co	
9929	verruculáta *Dec*	warted		un	4	jl au	Y	Brazil	1822	C	co	
9930	purpurascens *Lmk*	purplish		un	3	jl au	Pk	Brazil	1822	C	co	
9931	pátens *H K*	spreading		un	3	jl s	Y	Abyssinia	1806	C	co	Bot rep 571
9932	contrácta *Lmk*	contracted		un	3	jl s	Y	Madagas	1823.	C	co	
9933	conférta *Lmk*	clustered		un	4	au s	Y	Brazil	1822	C	co	
9934	lasiostéga *Lmk*	woolly		un	3	au s	Y	Brazil	1824	C	co	



History, Use, Propagation, Culture,

Adanson is of opinion, that our Nymphæa was the Sida of Theophrastus. The species are free-flowerers of no

9881 Leaves roundish cordate hairy above serrated, Pedicels subsolitary longer than petiole
9882 Leaves roundish cordate bluntish crenate softly velvety, Pedic solitary 1-fl longer than petiole
9883 Leaves cordate serrate attenuated at end downy on the edge of the petiole and the nerves beneath
9884 Leaves ovate cordate toothed somew angular bluntish downy, Pedic sol 1-fl. a little shorter than petiole
9885 Leaves cord. somewhat angular blunt serrate cren downy on each side, Pedic shorter than petiole 1-5-fl
9886 Leaves ovate cordate acuminate toothed, Peduncs 3-4-flowered very short
9887 Leaves cordate ovate acuminate serrate smooth on each side, Peduncles many-fl
9888 Leaves ovate cordate toothed acuminate downy, Peduncs loosely paniculed capillary

**** *Leaves palmate, divided into 3-5-7-9 lobes*

9889 Leaves cordate toothed 3-lobed, middle lobe acute long, Pedicels solitary nearly equal to the leaf
9890 Leaves subpeltate 7-lobed lobes lanceolate acuminate pinnatifid toothed, Peduncles many-fl
9891 Leaves subpeltate 5-lobed lobes ovate acute toothed undivided, Peduncles about 1-flowered
9892 Leaves palmate 5-lobed smooth lobes oblong acuminate toothed, Peduncles many-fl
9893 Leaves palmate 7-lobed rough lobes lanceolate cut-toothed, Peduncs many-fl bracteate corymbose

2 *Capsules* 15-40, *1-seeded, bladdery*

9894 Leaves oblong cordate toothed somewhat lobed, Peduncels solitary shorter than petiole
9895 Lvs cord ovate acute toothed downy on each side, Petioles and pedicels hairy, Stip setaceous spreading
9896 Lvs. cord roundish acumin tooth velvety, Petioles and branches with spreading hairs, Peduncs very short

3. *Capsules* 5-10, *many-seeded, often bladdery*

* *Capsules* 5-8

9897 Leaves cord lanc. acuminate entire downy beneath, Pedicels divided slender longer than petiole
β Leaves narrow rough above
γ Leaves more cordate smooth and a little rugose above
9898 Leaves subpeltate cordate ovate acuminate entire downy, Peduncs 1-fl shorter than petiole
9899 Leaves roundish cordate acuminate entire downy beneath, Panicle terminal racemose
9900 Leaves cordate shortly acuminate subcrenate slightly downy and green on each side, Panicle leafless
9901 Lvs deeply cord with a narr base acumin serrul hairy above hoary beneath, Stips broad-eared acumin
9902 Leaves cordate acuminate serrulate velvety on each side, Pedicels solitary 1-flowered
9903 Leaves hoary cordate acuminate acutely crenate, Pedicels 1-fl longer than petiole
9904 Leaves roundish cordate toothed angular acuminate, Pedicels 4-fl umbelled axillary

** *Capsules 9 or more*

9905 Leaves roundish cordate acuminate crenate downy, Pedicels sol longer than petiole
9906 Leaves cordate acuminate crenate velvety, upper sessile, Pedicels sol longer than petiole
9907 Leaves round cordate acuminate crenate downy, Pedicels longer than petiole
9908 Leaves roundish cordate acuminate toothed downy beneath, Pedicels longer than petiole
9909 Leaves roundish cordate unequally toothed soft, Peduncs 2-3 fl shorter than petiole, Capsules acuminate
9910 Leaves roundish cordate with a broad sinus acuminate toothed soft, Pedicels shorter than petiole
9911 Leaves cordate oblong undivided downy, Pedicels shorter than leaf
9912 Leaves roundish cordate acuminate toothed downy, Peduncles shorter than petiole
9913 Leaves cordate ovate oblong toothed velvety on each side, Pedicels longer than petiole
9914 Leaves roundish cordate acuminate toothed downy, Peduncles longer than leaves
9915 Leaves roundish cordate acuminate unequally repand toothed downy, Peduncles longer than petiole
9916 Leaves roundish cordate acuminate toothed velvety, Peduncles 2-flowered shorter than petiole
9917 Leaves ovate orbicular reniform toothed hoary beneath, Pedicels longer than petiole
9918 Leaves cordate somewhat lobed soft, Stipules reflexed, Pedicels erect 3 times as long as petiole
9919 Leaves ovate cordate toothed tricuspidate, Pedicels twice as long as petiole
9920 Leaves roundish cordate acuminate toothed hoary on each side, Pedicels length of petiole
9921 Leaves cordate subpeltate 3-5-lobed unequally toothed villous, Pedicels 1 flowered longer than petiole

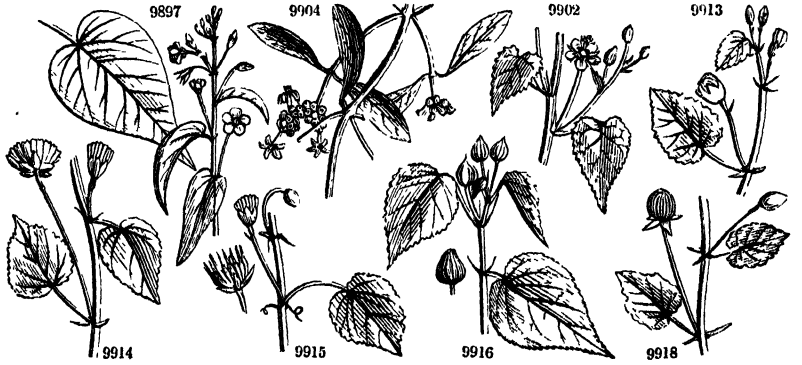
4 *Uncertain species*

* *Leaves linear, oblong, ovate, or lanceolate*

9922 Leaves linear lanceolate toothed villous beneath, Pedicels axillary 1-fl
9923 Leaves lanceolate very long entire hairy, Racemes terminal very short
9924 Leaves broad lanceolate obtuse crenate entire at base 3-nerved, younger downy beneath
9925 Middle leaves oblong blunt acutely crenate in front, upper lanceolate acute serrated in front
9926 Leaves oblong lanceolate serrated entire at base smooth, Peduncs axillary solitary longer than petiole
9927 Leaves ovate acuminate 5-nerved scarcely toothletted, beneath and branches downy, Stipules filiform

** *Leaves cordate, undivided*

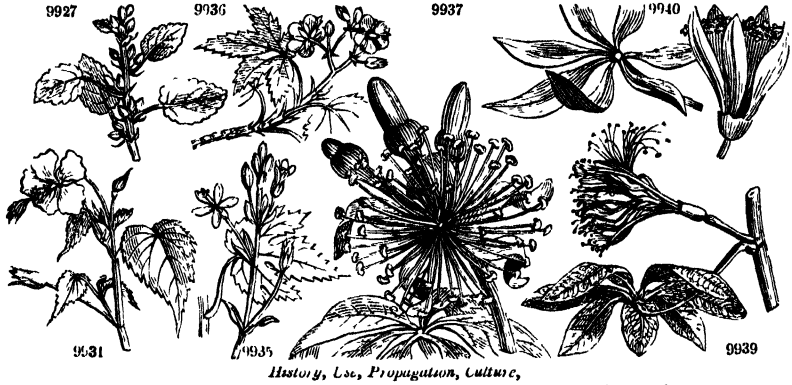
9928 Leaves subcordate sessile serrate subvillous, Flowers axillary clustered
9929 Stem warted, Leaves cordate lanceolate acuminate acutely crenate downy
9930 Leaves cordate acuminate crenate toothletted, and stems green and downy, Pedic axillary 1-fl
9931 Leaves cordate acuminate cut serrate, Peduncles solitary longer than petiole
9932 Leaves cordate acuminate repand rarely crenate hoary, Panicle contracted bracteate
9933 Leaves cordate acute crenate rugose and stems yellow with down, Flowers subsessile aggregate
9934 Leaves cordate acuminate hoary beneath, Pedicels axillary 1-flowered longer than petiole



and miscellaneous Particulars.

great beauty They are increased by seeds, which they produce freely, or by cuttings in sand under a hand-glass.

1488. LAGUNE'A. *W.*	Lagunea					*Malvaceæ* *Sp.* 1—4							
9935 lobáta *W.*	Mapel-leaved	▯	un	3	jl au	W	Bourbon	1787.	S	co	Ca dis.5.t.136.f.1		
†1489. RUI'ZIA *W*	Ruizia					*Byttneriaceæ* *Sp* 1—3.							
9936 variábilis *W*	various-leaved	▭	or	6	my	W	Bourbon	1792.	C	p l	Jac schœ. 3 t.295		
1490. CAROLI'NEA *W.*	Carolinea					*Bombaceæ.* *Sp* 4—5.							
9937 álba *Lodd*	white	▭	spl	20	jl.au	W	Brazil	1817	C	p l	Bot cab 752		
9938 princeps *W*	digitated	▭	spl	20	...	W	W. Indies	1787	C	p l	Aub gui t 291 2		
9939 minor *H K.*	lesser	▭	spl	20	jl au	W	Guiana	1798.	C	p l	Bot. mag 1412		
9940 insígnis *W*	great-flowered	▭	spl	20	...	R	W Indies	1796.	C	p l	Cav diss. 5 t. 154		
1491 ADANSO'NIA *W*	Adansonia					*Bombaceæ* *Sp* 1							
9941 digitáta *W.*	Sour Gourd		ec	60	...	W	Senegal	1724	C	p l	Cav diss. 5 t.157		
1492 BOM'BAX. *W.*	Silk-Cotton-Tree					*Bombaceæ* *Sp* 4—7							
§9942 eriánthos *Cav.*	woolly-fl	▭	tm	60	...	W	Brazil	1818	C	p l	Ca dis 5 t 152 f 1		
§9943 pentándrum *W*	five-stamened	▭	tm	60	...	Y w	E Indies	1739	C	p l	Jac.am pic t 176		
9944 Ceiba *W*	five-leaved	▭	tm	100	...	W	India	1692.	C	p l	Ca dis 5 t 152 f 2		
9945 heptaphýllum *W*	seven leaved	▭	tm	50	...	W	America	1699.	C	p.l	Plu alm t 188.f 1		
1493 MYRO'DIA *W*	Myrodia					*Bombaceæ.* *Sp* 1—3							
9946 turbinata *W*	short-flowered	▭	or	6	...	W	W Indies	1793	C	p l			
1494 GORDO'NIA *W*	Gordonia					*Ternstromiaceæ* *Sp* 2—4							
9947 Lasiánthus *W*	smooth		or	6	au n	Y	N. Amer	1739	L	p l	Bot mag 608		
9948 pubéscens *W*	pubescent		or	4	au n	W	Carolina	1774	L	s p	Vent. malm t 1		
Lacathéa flórida P L 56													
1495 STUAR'TIA *W*	Stuartia					*Ternstromiaceæ* *Sp* 2							
§9949 Malachodéndron *W.*	Common		or	10	my au	W	N. Amer	1742	L	l.p	Bot. rep 397		
§9950 pentágyna *W*	curled		or	9	jl au	W	N Amer	1785	L	l p	Ex ot.bot.2. t.110		
Malachodéndron ovátum Cav.													
†1496. CAMEL'LIA *Ker.*	Camellia					*Camelliæ* *Sp* 6—8							
§9951 Bohéa	Bohea Tea	▭	clt	4	au d	W	China	1768	C	l.p	Bot. cab 226		
§9952 viridis	Green Tea	▭	clt	4	f n	W	China	1768	C	l p	Bot cab. 227		



History, Use, Propagation, Culture,

1488 *Lagunea* Named after Andreas Laguna, a Spanish naturalist, who published, in 1543, a work upon plants. It may be treated like other tender annuals.

1489 *Ruizia* In honor of Don Hippolito Ruiz, author of Quinologia, Madrid, 1792, and other works, and, in conjunction with Pavon, of the famous Flora Peruviana A plant of easy culture, but of little merit.

1490. *Carolinea.* Named by the younger Linnæus, in honor of the Princess Sophia Caroline, of Baden, a name which, he says, will always be cherished by botanists A splendid family, which thrive in loam, and large cuttings, well clothed with leaves, root in sand under a hand-glass

1491 *Adansonia* In honor of Michel Adanson, a famous French botanist, born in 1727, and author of various works, of which his voyage into Senegal, and Familles des Plantes, are the most remarkable He was an eccentric man, but certainly far more learned for his time than many of his modern detractors Monkies'-bread, or Boabab, is considered the largest or rather broadest tree in the world Several measured by Adanson were from sixty-five to seventy-eight feet in circumference, but not extraordinarily high. The trunks were from twelve to fifteen feet high, before they divided into many horizontal branches, which touched the ground at their extremities, these were from forty-five to fifty-five feet long, and were so large, that each branch was equal to a monstrous tree, and where the water of a neighbouring river had washed away the earth, so as to leave the roots of one of these trees bare and open to the sight, they measured one hundred and ten feet long, without including those parts of the roots which remained covered It yields a fruit which resembles a gourd, and which serves for vessels of various uses, the bark furnishes a coarse thread, which they form into ropes, and into a cloth, with which the natives cover their middle from the girdle to the knees, the small leaves supply them with food in a time of scarcity, while the large ones are used for covering their houses, or, by burning, for the manufacture of good soap. At Sierra Leone this tree does not grow larger than an orchard apple-tree

The ligneous part of this tree appears to be of little or no use as timber. In our stoves it grows in rich soil in heat, and cuttings root in sand, covered and plunged.

1492 *Bombax* From βομβυξ, one of the Greek names of the cotton, the seeds of the plants now so called are enveloped in a cottony substance B pentandrum bears oval fruit larger than a swan's egg, having a thick woody cover, which, when ripe, opens in five parts, and is full of a short dark cotton, inclosing many roundish seeds as large as small peas

B. Ceiba has a spiny trunk, and is one of the tallest trees of both Indies; but the wood is very light, and not much valued, except for canoes Their trunks are so large as, when hollowed, to make very large ones In the West Indies they frequently carry from fifteen to twenty hogsheads of sugar, and from six to twelve hundred weight each When sawn into boards, and then well saturated with lime-water, the wood bears exposure to the weather many years, it is also formed into laths for roofs, curing-pots, and hogshead-heading. When the tree decays, it becomes a nest for the Macaca beetle, the caterpillar of which, gutted and fried, is esteemed by many persons one of the greatest delicacies The down which is enclosed in the seed-vessels is seldom used, except by the poorer inhabitants to stuff pillows or chairs, and it is generally thought unwholesome to lie upon

9935 Leaves cordate 3-lobed · lobes oval oblong acuminate toothed with a very narrow base

9936 Leaves of the flowering branches palmatifid, of the sterile palmate

9937 Leaves digitate, Filaments numerous forked united at base into a tube
9938 Leaflets 5-8 ovate-lanceolate acuminate
9939 Leaflets 7 elliptical-oblong acute at each end, Calyx truncate, Petals erect
9940 Leaflets 5-7 obovate oblong, Calyx sinuated, Petals erect spreading at end

9941 A tree with a very thick trunk with a diameter of 25 feet

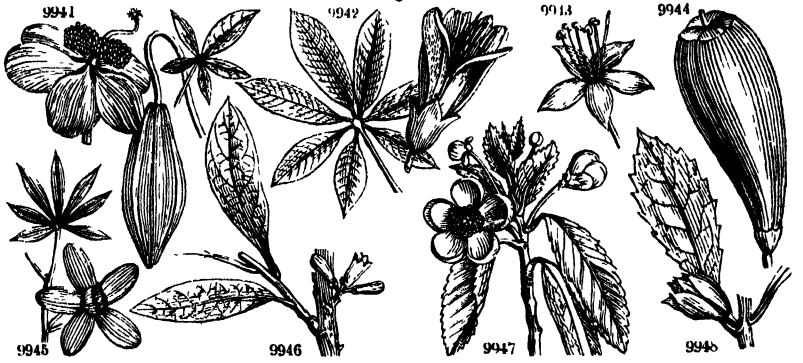
9942 Anthers rectilinear, Leaflets 7, Corolla large woolly outside, Trunk prickly
9943 Anthers antractuose, Leaflets entire, Trunk generally prickly
9944 Stem prickly, Leaves palmate, Leaflets 5, Fruit turbinate concave at end
9945 Stem prickly, Leaves palmate, Leaflets 7 entire acuminate, Fruit oblong blunt

9946 Leaves ovate-oblong, Calyxes turbinate, Column of stamens shorter than petals

9947 Pedicels axillary half as short as leaves, Leaves oblong coriaceous smooth serrated
9948 Fls. subsessile, Leaves obovlanc downy beneath subserrate membranous, Petals and sepals silky outside

9949 Flowers large white, Filaments purple, Anthers blue
9950 Leaves ovate acute, Flowers solitary subsessile

9951 Leaves elliptical oblong subrugose twice as broad as long
9952 Leaves lanceolate flat three times as broad as long



and Miscellaneous Particulars

1493 *Myrodia* From μυρον, myrrh, and οσμη, smell A tree which emits an odor similar to myrrh. (*Linn*)

1494 *Gordonia* In memory of James Gordon, an eminent nurseryman at Mile-End, near London, a correspondent of Linnæus and other eminent botanists, and the introducer and successful cultivator of many new plants G Lasianthus (woolly flower, from λασιος and ανθος), the loblolly-bay, is said to grow naturally in water or very moist situations Miller, on that account, was unsuccessful in keeping the plant Gordon and Lee, who, as Ellis relates, (*Corres with Linnæus*) were better cultivators than Miller, were probably more successful Sweet says, the species are hardy enough to bear our winters in the open air, but the young shoots often get injured, and the summer is not long enough to flower them in perfection, it is therefore better to treat them as greenhouse plants Peat soil suits them best, and a little loam mixed with it: they are readily propagated by layers, or ripened cuttings may be struck in sand under a hand-glass. (*Bot Cult.* 199)

1495 *Stuartia* So named by Linnæus, in honor of the Marquis of Bute, in memory of whom there also exists another genus named Butea, by Roxburgh The species are handsome shrubs, grow in peat soil, and are most readily increased by layers

1496 *Camellia* In honor of George Joseph Kamel, (or Camellus) a Jesuit His Syllabus Stirpium in Insula Luzone Philippinarum, forms the appendix to the third volume of Ray's History This is a remarkable genus, as at once furnishing the domestic drug tea, in universal use, and flowering trees and shrubs as universally admired. The seeds of all the species are crushed for oil, which is used like that of hemp or poppy in cookery

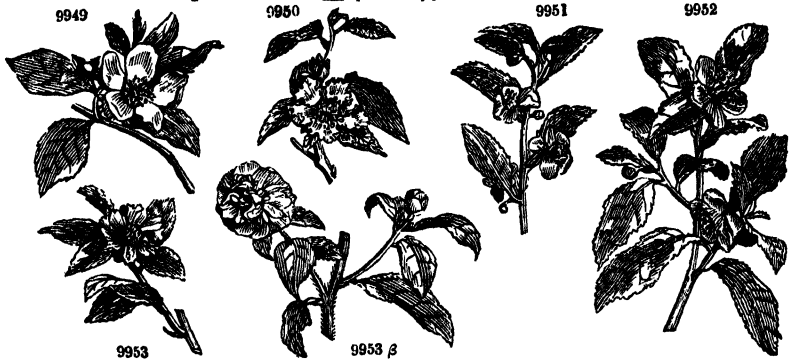
C Bohea and viridis are the species which chiefly furnish the tea, but C Sasanqua is also used, and sometimes the leaves of the other species are taken, though that practice is rather to be considered in the light of adulteration The tea districts of China extend from the twenty-seventh to the thirty-first degree of north latitude. According to the missionaries, it thrives in the more northern provinces, and from Kæmpfer, it appears to be cultivated in Japan as far north as latitude 45° It seems, according to Dr Abel's observation, to succeed best on the sides of mountains, where there can be but little accumulation of vegetable mould The soils from which he collected the best specimens consisted chiefly of sandstone, schistus, or granite The plants are raised from seeds sown where they are to remain Three or more are dropped into a hole four or five inches deep, these come up without further trouble, and require little culture, except that of removing weeds, till the plants are three years old. The more careful stir the soil, and some manure it, but the latter practice is seldom adopted The third year the leaves are gathered, at three successive gatherings, in February, April and June, and so on till the bushes become stinted or tardy in their growth, which generally happens in from six to ten years. They are then cut in to encourage the production of fresh roots

The gathering of the leaves is performed with care and selection The leaves are plucked off one by one. at the first gathering only the unexpanded and tender are taken; at the second those that are full grown; and at the third the coarsest. The first forms what is called in Europe imperial tea; but as to the other

9953 Sasánqua *W.*	Lady Banks's	pr	4	f n	W	China	1811.	I	p.l	Bot. reg 12
β plēna	*double*	pr	4	f n	Pk	China	1818.	I	p.l	Bot. reg. 547
9954 Japónica *W.*	common	spl	10	my jl	R	China	1739	C	p.l	

Garden Varieties.

1 single red	spl	10	my jl	R	China	1739.	C	p.l	Bot. mag 42
2 single white	spl	10	my jl	W	China	...	I	p l	Bot. cab 636
3 semi-double red	spl	10	my jl	R	China	...	I	p l	Bot. rep 559
4 double red	spl	10	my jl	R	China	...	I	p.l	Bot rep 109
5 Middlemist's red	spl	10	my jl	R	China	...	I	p l	Bot. cab. 455
6 Myrtle-leaved	spl	10	my jl	R	China	...	I	p l	Bot mag 1670
7 Loddiges' red	spl	10	my jl	R	China	...	I	p l	
8 Waratah	spl	10	my jl	R	China	...	I	p l	Bot cab 537
9 variegated Waratah	spl	10	my jl	St	China	...	I	p.l	Bot. reg 887
10 Pæony-flowered	spl	10	my jl	Bl	China	...	I	p l	Bot. cab 238
11 double-striped	spl	10	my jl	Bl	China	...	I	p l	Bot rep. 91
12 Kew blush	spl	10	my jl	Bl	China	...	I	p l	Bot reg 22
13 Hume's blush or buff	spl	10	my jl	W	China	...	I	p l	Bot reg 112
14 double white	spl	10	my jl	W	China	...	I	p l	Bot rep. 25
15 Welbank's	spl	10	my jl	W	China	...	I	p l	Bot. reg 708
16 Lady Long's	spl	10	my jl	R	China	...	I	p l	Bot reg 633
17 Pompone	spl	10	my jl	R	China	...	I	p l	Bot cab. 506
18 hexangular	spl	10	my jl	R	China	...	I	p l	



History, Use, Propagation, Culture,

names by which tea is known, the Chinese know nothing, and the compounds and names are supposed to be made and given by the merchants at Canton, who, from the great number of varieties brought to them, have an ample opportunity of doing so Formerly it was thought that green tea was gathered exclusively from C viridis, but that is now doubtful though it is certain there is what is called the green tea district, and the black tea district, and the varieties grown in the one district differ from those grown in the other Dr Abel was told by competent persons, that either of the two plants will afford the black or green tea of the shops, but that the broad thin-leaved plant (C viridis) is preferred for making the green tea

The tea leaves being gathered, are cured in houses which contain from five to ten or twenty small furnaces, about three feet high, each having at the top a large flat iron pan. There is also a long low table covered with mats, on which the leaves are laid, and rolled by workmen, who sit round it the iron pan being heated to a certain degree by a little fire made in the furnace underneath, a few pounds of the fresh-gathered leaves are put upon the pan, the fresh and juicy leaves crack when they touch the pan, and it is the business of the operator to shift them as quick as possible with his bare hands, till they become too hot to be easily endured. At this instant he takes off the leaves with a kind of shovel resembling a fan, and pours them on the mats before the rollers, who, taking small quantities at a time, roll them in the palm of their hands in one direction, while others are fanning them, that they may cool the more speedily, and retain their curl the longer This process is repeated two or three times, or oftener, before the tea is put into the stores, in order that all the moisture of the leaves may be thoroughly dissipated, and their curl more completely preserved. On every repetition the pan is less heated, and the operation performed more closely and cautiously The tea is then separated into the different kinds, and deposited in the store for domestic use or exportation

The different sorts of black and green arise not merely from soil, situation, or the age of the leaf, but after winnowing the tea, the leaves are taken up in succession as they fall, those nearest the machine being the heaviest, are the gunpowder tea, the light dust the worst, being chiefly used by the lower classes. That which is brought down to Canton then undergoes a second roasting, winnowing, packing, &c., and many hundred women are employed for these purposes

As more select sorts of tea, the blossoms of the C sasanqua appear to be collected, the buds also appear to be gathered in some cases By far the strongest tea which Dr Abel tasted in China, was that called *yutsen*, used on occasions of ceremony It scarcely colored the water, and on examination was found to consist of buds and half expanded leaves of the plant

As substitutes for tea used by the Chinese, may be mentioned a species of moss common to the mountains of Shan-tung, an infusion of ferns of different sorts, and Dr Abel thinks the leaves of the common camellia and oil camellia may be added Du Halde observes, that all the plants called tea by the Chinese, are not to be considered as the true tea plant, and Kæmpfer asserts, that in Japan a species of Camellia, as well as the Olea fragrans, is used to give it a high flavor

The oil-bearing Camellia, C oleifera, is cultivated for its seeds, from which an oil is expressed, in very general use in the domestic economy of China It grows best in a red sandy soil, attaining the height of six or eight feet, and producing a profusion of white blossoms and seeds These seeds, as well as those of any of the other species, are reduced to a coarse powder, which is stewed or boiled in bags and then pressed, when the oil is yielded. (*Dr Abel's Nar* 176)

The culture of the tea Camellias in our greenhouses is very simple The plants are very hardy, and may be preserved in a pit without fire-heat, they grow in loamy soil, or loam and peat well drained, and increase freely by layers, or cuttings of the young wood taken off when it begins to ripen, planted in sand, and covered with a hand-glass in a cool frame or pit.

C. japonica, in the groves and gardens of Japan, is a lofty tree, much admired for its fine form, rich clothing of shining deep green foliage, and elegant red or white flowers, single or double. It is equally admired in

9953 Leaves ovate-oblong bluntly serrated, Flowers terminal subsolitary, Petals obcordate

9954 Leaves ovate acuminate acutely serrate Flowers terminal subsolitary



and Miscellaneous Particulars

China as in Japan, and much cultivated in both countries It is of frequent occurrence in Chinese paintings, with Hibiscus and Chrysanthemum, two of their great favorites There are several varieties of C japonica in China, most of which have been imported here, and their number considerably increased, and daily increasing, from seedlings raised in this country The double white, double striped, and double Waratah, (from the central petals resembling those of the Waratah plant of New Holland, Telopea speciosissima,) are considered the grandest and most marked varieties, and are also free-growers and flowerers, the pæony-flowered and fringed white, are also standard beauties, but all are much admired

The single red Camellia is propagated by cuttings, layers, and seeds, for stocks, and on these the other sorts are generally inarched, and sometimes budded or grafted The cuttings are formed of ripened or ripening shoots, taken off in August, cut smoothly across at a joint or bud, two or three of the lower leaves only taken off, and the cuttings then planted and made firm with a small dibber, in pans of sand or loam, or, by some cultivators, sand and peat, or sand alone The pans are kept in a pit or cold frame, without being covered with glass, but shaded during powerful sunshine, and in the following spring such as are struck will begin to push, when they are to be placed in a gentle heat In September or October following, the rooted plants will be fit to pot off, and in the second or third spring they may be used as stocks Such is the practice in the London nurseries Henderson, of Woodhall, near Edinburgh, puts in Camellia cuttings at any time of the year, excepting when they are making young wood He puts fifty cuttings in a pot of sand eight inches in diameter, sets them in a cool place in the back of a vinery or peach-house for a month or six weeks, and then plunges them to the brim in a hot-bed where is a little bottom heat. A speedy mode of obtaining stocks is by planting stools in a pit devoted to that purpose, and laying them in autumn, the following autumn most of the layers will have produced roots, when they may be taken off and potted, and used as stocks in the succeeding spring Inarching or grafting is performed early in spring, when the plants begin to grow, the chief care requisite is so to place and fix the pot containing the stock, as that it may not be disturbed during the connection of the scion with the parent plant The graft being clayed over, is then covered with moss to prevent its cracking When independent grafting is resorted to, the mode called side grafting is often used, but the operation of tongueing is generally omitted, as weakening the stock and unnecessary, with a view to prevent the scion from being blown off A few seeds are sometimes obtained from the single red and semi-double Camellias, and from the single Waratah, these require two years to come up, but make the best stocks of any

Before they are grafted they are often allowed to come into flower, in case some new variety should be produced, but the best cultivators, as Messrs Loddiges, Sweet, and Mackay, regularly cross-impregnate the blossoms in Knight's manner, by cutting out the stamens before the anthers are mature, and when the stigma is in a proper state, dusting it with the pollen of the species or variety intended as the male parent.

C Sasanqua seeds most readily, and is mostly employed as the female parent for raising new varieties The plants, if well treated, flower in four or five years, and if nothing new is produced they still make excellent stocks

Some cultivators grow the Camellias chiefly in peat Messrs Loddiges, who have the most numerous collection of this genus, formerly used loam, with a little sand and peat, and they are grown in a similar soil in Hammersmith nursery Of late, Messrs Loddiges find light loam alone to answer as well or better In the Comte de Vandes garden at Bayswater, rotten dung is mixed with loam and peat. Sweet recommends sandy loam and peat Henderson of Woodhall is one of the most successful growers of the Camellia in Scotland his compost is as follows take one part of light-brown mould, one part of river-sand, one part of peat-earth, one half part rotten leaves, mix them all well together, and when the Camellias require shifting, put some broken coal-char in the bottom of the pots, and some dry moss or hypnum over it. (*Caled Mem* iii. 316)

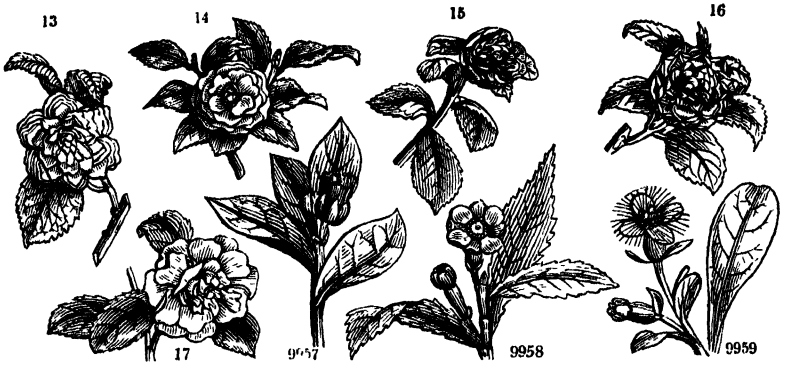
Camellias have the best effect, and are grown to most advantage in a house entirely devoted to them Such

9955 oleífera *Abel* oil-seed ... W China 1820. C r m Bot. cab. 1065
§9956 axillàris *Sims* axillary ... W E. Indies 1818. C r m

1497 BARRINGTO'NIA *W* Barringtonia
9957 speciósa *W* Laurel-leaved spl 20 *Myrtaceæ* ... S *Sp.* 1. E. Indies 1786. S r.m Rum.am.3.t. 114

1498. GUSTA'VIA *W.* Gustavia.
9958 augústa *W* august spl 30 *Myrtaceæ* ... W *Sp* 1—2. Guiana 1794. C r m Aub. gui. 1 t 192

1499 CA'REYA *Roxb* Careya
9959 herbácea *Roxb* herbaceous spl *Myrtaceæ* jl au R *Sp* 1—2 E. Indies 1808. D l.p Rox cor. 3 t 217



History, Use, Propagation, Culture

a house should be rather lofty, as the plants never look so well as when six or eight feet high, trained in a conic form, and clothed with branches from the root upwards. The plants should be raised near to the glass by means of a stage, which should be so contrived, that, as they advance in height, it may be lowered in proportion only the very best crown or patent glass should be used, because it is found from experience, that the least inequality of surface or thickness of material, so operates on the sun's rays, as to concentrate them, and burn or produce blotches on the leaves of the plants. Every cultivator must have observed that leathery shining leaves, like those of the orange, myrtle, &c are more or less subject to this solar injury, but the leaves of the Camellia are particularly so. Some nurserymen recommend a roof which will not admit much light, others the use of green glass, of an opaque roof, with glass in front only, or of a house facing the north Our opinion is, that a light house facing the south, or, better still, glass on all sides, is essential to the perfect growth of the plants, and that all solar accidents may be avoided, or at least rendered of no consequence, by using the best glass, and placing the plants as near it as possible.

To grow the Camellia to a high degree of perfection, considerable care is requisite The roots are very apt to get matted in the pot, and, by the space they occupy, so to compress the ball of mould, as after a time to render it impervious to water. Hence frequent attention should be had, to see that the water poured on the pots moistens all the earth, and does not escape by the sides of the pot, moistening only the web of fibres When the plants are in flower and in a growing state, they require to be liberally watered, and also a degree of heat somewhat greater than is usually given to greenhouse plants If this heat is not given in November and December, the plants will not expand their blossoms freely, and if both water and heat are not regularly applied after the blossoming season, vigorous shoots and flower-buds will not be produced. To form handsome plants, they should be trained with single stems to rods, and pruned so as to make them throw out side branches from every part of the stem to encourage these, the plants should not be set close together on the stage In summer they may either be set out of doors on a stratum of scoriæ, or on a pavement, in a sheltered but open situation, or the glass roof may be taken off The hardier sorts, as the double red, blush, pæony-flowered, &c answer very well when planted in the bed or border of a conservatory, provided the root or entire superstructure can be removed in summer to admit the full influence of the weather When this cannot be done, the Camellia and most other plants are better in portable utensils, which admit both of examining their roots, and placing them in the open air, or in a greater degree of heat at pleasure The single and double red Camellia will endure the open air when trained against a south wall, and protected by mats in winter, and there can be no doubt that in time these and other species will be more perfectly inured to our climate

Henderson of Woodhall gives the following account of his mode of treating the Camellia "The best time for a regular shifting of the Camellias is the month of February or beginning of March After shifting all those that require it, put them into the peach-house or vinery, when there is a little heat, if there be no peach-house, vinery, nor pinery, set them in the warmest part of the greenhouse. They will soon begin to make young wood From the time they begin to make their young shoots, till they have finished their growth, give them plenty of water They may be kept in the vinery or peach-house till they have formed their flower-buds at the extremity and sides of the young growths, when a few of them may be removed to a colder place, say behind the stage of the greenhouse, for the Camellias are fond of being shaded during

9955 Leaves thin ovate finely serrate pale-green, Branches slender twiggy
9956 Leaves obovate oblong serrulate, upper entire, Flowers solitary subsessile subaxillary

9957 Leaves oblong blunt large fleshy stalked shining tinged with red

9958 Sepals 4 roundish petaloid, Petals 4, Leaves oblong acuminate toothed

9959 Flowers stalked, Outer stamens longest sterile



9954



9956

and Miscellaneous Particulars

strong sunshine. In three or four weeks after, a few more of the Camellias may be brought from the vinery or peach-house, and put into a cooler situation This may be repeated three or four times, which will make as many different successions of flowering Those that are wanted to come into flower early, may remain in the warm house till they are beginning to flower, when they should be taken to a cold place, say the coldest place of the greenhouse, then give them plenty of light only, and they will open their flowers well, and stand long A Camellia cannot stand heat when in flower, indeed they seldom open their flowers fine when in heat, and, at all events, the flowers soon fall off Those that are kept all the summer in the vinery, will come into flower by the first or middle of October, and a pretty large plant, having perhaps fifty or a hundred flower-buds, will continue in flower till the month of January Those plants that are removed early from the vinery, will now be in flower, to succeed those that were in flower in October, and have now done flowering These last should be immediately taken into the heat They will make their young wood early, and they may remain in heat till they come into flower, which will perhaps be a month earlier next year By attending to shifting the Camellia plants from the warm-house to the cold, a regular succession of flowers may thus be had from the first of October to the middle of July I have even had them all the summer, but the flowers are best in the winter Those produced in summer are far from being so fine, and do not stand half the time of those that come into flower in November, December, January, February, March and April. Camellias delight to be kept damp all the summer months, and a little shaded from the strong sun Give them plenty of water while they are making their young shoots, they may also get a gentle sprinkling over the leaves once every week during the summer season, except when they are in flower Camellias will stand a great deal of cold without being much injured, but they will not form many flower-buds without some artificial heat" (*Caled Mem* in 316.)

1497 *Barringtonia* In memory of the Hon Dames Barrington, F. R S, an active Fellow of the Society of Antiquaries, and author of several papers in their Transactions A lofty tree, the handsomest in the equinoctial flora. It has thick shady bunches of long wedge-shaped coriaceous leaves, and large handsome purple and white flowers, which open at night, and fall at sunrise They are succeeded by a reddish brown drupe, the seed of which mixed with the bait, inebriates fish in the same manner as Cocculus indicus It grows on the sea shore and at the mouths of rivers, and is cultivated in the governor's garden at St. Helena It is very rare in our stoves, though not difficult to manage Sweet says, "a mixture of two-thirds loam and one-third peat, is a good soil for it Cuttings taken off at a joint, when the wood is ripe, and put in a pot of sand under a hand-glass in moist heat, will strike root readily. none of the leaves should be taken off or shortened" (*Bot Cult* 21)

1498 *Gustavia* In memory of Gustavus III, king of Sweden, who presented a great collection of Indian plants to the elder Linnæus A tree remarkable for its large white flowers, larger than those of the waterlily, but with a large naked bald receptacle between the corolla and the style The flowers smell sweet, but the wood is extremely fetid In Surinam it is used for hoops In the stove it grows in sand and loam, and roots in sand under a hand-glass

1499 *Careya* Named after Dr William Carey, the editor of Roxburgh's Flora Indica, and an English physician and botanist residing at Serampore Beautiful Indian plants, with long red stamens



Class XVII. — DIADELPHIA. Stamens united in two separate parcels.

This class essentially requires, as its name implies, that the stamens should be united in two separate parcels. These may either be equal, each bearing more anthers than one, as in Smithia, Æschynomene, Fumaria, and others, or unequal, one parcel being reduced to a single stamen, and the other bearing several anthers, as in the greater number of genera included in the class But besides the plants whose stamens are thus disposed, it has been the practice to admit other genera having papilionaceous flowers, but with their stamens united in one parcel only, such as Platylobium, Bossiæa, Arachis, and others The propriety of this measure is extremely questionable It has been before remarked in this work, that the value of an artificial arrangement of objects depends wholly upon the precision with which they are referred to those heads or divisions with the characters of which they agree If this does not obtain, an artificial system ceases to be useful, and its only merit, that of facilitating the discovery of the name of a given object, cannot be said to exist. This principle is particularly applicable to the genera just mentioned Their artificial character refers them to Monadelphia, but they are retained in Diadelphia, to which their artificial character does *not* refer them, *because*, as is alleged, of the natural relation which they bear to other genera in Diadelphia If this reasoning, which is only applicable to an arrangement of plants according to their natural affinities, and which has no allowable reference to an artificial system, were to be admitted, it would follow that Tamarindus, actually included in Monadelphia by the most eminent Linnean botanists, and all the papilionaceous genera stationed in Decandria, should be referred hither also With such objections attaching to the contrivance of this class, it is not easy to understand in what way it "does honor to the comprehensive powers of Linnæus's mind," as has been somewhere remarked by one of his most distinguished panegyrists

The structure of the corolla of plants of this class is, for the most part, with the exception of Fumaria and its allies, what has been popularly termed papilionaceous, that is to say, it consists of five petals of different forms and direction, of which the *upper*, called the *vexillum* or standard, is larger than the rest, upon which it is incumbent, the *two lateral*, called the *alæ* or wings, are oblong, distinct, and parallel with the ovarium, and the *two lower*, called the *carina* or keel, are enclosed within the alæ, are also parallel with the ovarium, and cohere by their lower edges, so as together to form, as it were, one boat-shaped petal To this common form of corolla there are, however, some exceptions, as in Amorpha, where the alæ and carina are absent, and in Erythrina, where the alæ are in some cases almost obliterated In Trifolium the petals all cohere by their claws into an undivided tube

With regard to the importance of Diadelphous plants as applicable to the purposes of mankind, they may be said to hold the very highest rank All the numerous varieties of pulse, whether eaten by men or cattle, peas, beans, haricots, caravances, lentils, and others, are all produced by Diadelphous plants The best of our artificial grasses, such as clover, nonesuch, cow-grass, lucerne, saintfoin, serradilla, &c &c, belong to various Diadelphous genera. A large proportion of the class also consists of useful and ornamental trees and herbs, which will be noticed in their respective places

Order 1 PENTANDRIA  Stamens 5.

1500 *Monnieria* Cal 5-parted, with the upper segment long Cor ringent Stamens 2, upper with two anthers, lower with three Caps 5, 1-seeded
1501 *Petalostemum* Petals 4, between the stamens, all united into a slit tube Vexillum none, but in its place a fifth petal Legume surrounded by calyx, 1-seeded

Order 2 HEXANDRIA.  Stamens 6

1502. *Corydalis.* Pet 4, 1-spurred at base Pod 2-valved, compressed, many-seeded.
1503 *Cysticapnos* Petals 4, one gibbous at base Capsule bladdery, many-seeded, the placentas connected by a membranous net work.
1504 *Dicentra* Petals 4, two outer equally spurred or gibbous at base Pod 2-valved, many-seeded
1505 *Adlumia* Petals 4, united in a fungous monopetalous corolla, persistent, and with two protuberances at base Pod 2-valved, many-seeded
1506 *Sarcocapnos* Petals 4, 1-spurred at base Caps 2-valved, not opening, 2-seeded Valves 3-nerved, flattish
1507. *Fumaria* One petal gibbous or spurred at base Cariopsis indehiscent, 1-seeded, not pointed with a style

Order 3. OCTANDRIA.  Stamens 8.

1508 *Polygala* Cal of 5 leaves, two of them wing-shaped and colored. Caps compressed, obcordate
1509 *Muraltia* Sepals 5, glumaceous, nearly equal. Petals 3, united, the middle bifid with blunt lobes. Ovary with 4 horns or tubercles, 2-valved, 2-celled.
1510 *Mundia* Sepals 5, glumaceous, persistent, the two inner wing-shaped. Petals 3, scarcely united at base, the middle one cuculiate, beardless. Stamens 7-8, somewhat villous, monadelphous at base, with a tube divided in front
1511 *Securidaca* Sepals 5, the two inner petaloid. Petals 5, united at base: three united into a 3-lobed keel, two oblong Stamens 8, diadelphous

Order 4 DECANDRIA.  Stamens 10.

1512 *Nissolia.* Cal 5-toothed Legume 1-seeded, ending in a ligulate wing
1513 *Dalbergia* Cal obsoletely 5-toothed Legume leafy, flat, not opening Seeds solitary or twin.
1514 *Pongamia* Cal colored, cyathiform, obliquely truncate, 5-toothed Petals clawed. Vexillum spreading Alæ and carina conniving. Legume substipitate, compressed, flat, rostrate, valveless, 1-2-seeded. Anthers ciliate, glandular at end.
1515. *Pterocarpus.* Cal 5-toothed. Legume falcate, foliaceous, varicose, indehiscent, encompassed by a wing Seeds a few, solitary.
1516 *Ecastaphyllum.* Cal. campanulate, sub-bilabiate: upper segment emarginate, lower trifid. Filaments equally diadelphous. Legume roundish, valveless, 1-seeded.

1517 *Geoffroya* Cal 5-fid. Drupe ovate. Kernel compressed.
1518 *Dipteris.* Segm of cal. 2, wing-shaped. Legume 1-celled, 1-seeded, coriaceous, 2-valved.
1519. *Parivoa.* Cal 3-4-fid. Vexillum ample. Alæ and carina O. Legume compressed, 1-seeded
1520. *Amerimnum.* Cal. sub-bilabiate. Legume compressed, leafy, 2-valved, dehiscent. Some seeds, solitary.
1521 *Erythrina* Cal. bilabiate, ‡. Vexillum very long, lanceolate. Legume torulose.
1522 *Butea.* Cal. sub-bilabiate. Vexillum very long, lanceolate. Legume compressed, membranous, one-seeded at end.
1523. *Viborgia.* Cal 5-toothed, with rounded recesses. Legume turgid, sulcate, winged.
1524 *Piscidia* Stigma acute. Legume with four wings.
1525. *Platylobium* Cal. bracteate, 2-lipped, upper lip round, large, bifid Stam. all united. Legume stalked, compressed, winged at back, many-seeded.
1526 *Borbonia* Stigma emarginate. Calyx acuminate, spiny. Legume mucronate.
1527. *Rafnia.* Cal. ringent. upper lip bifid, lower spreading trifid, the middle tooth narrowest. Legume lanceolate, compressed.
1528 *Aspalathus.* Cal. 5-fid, upper segment largest. Legume ovate, blunt, about 2-seeded.
1529. *Sarcophyllum.* Cal. campanulate, 5-parted, regular. Legume acinaciform, acute.
1530. *Crotalaria.* Legume turgid, inflated, stalked. Filaments united with a dorsal fissure.
1531. *Bossiæa.* Cal. 2-lipped, upper lip largest, half bifid, obtuse Stam all united. Legume plano-compressed, stalked, many-seeded, thickened at each edge Seeds strophiolate
1532 *Scottia.* Cal. imbricated with bractes, 5-toothed, with nearly equal teeth Vexillum complicate, shorter than alæ, which are as long as carina. Stam all united, Legume stalked, compressed, thickened at each edge. Seeds 3-4, strophiolate.
1533. *Templetonia* Cal. ebracteate, with 5 nearly equal teeth. Carina oblong. Stamens all united, with uniform anthers Legume pedicellate, plano-compressed, many-seeded Seeds strophiolate
1534 *Goodia* Cal with 2 nearly equal lips, upper half bifid, acute Vexillum unfurled, large. Stamens all united Legume stalked, compressed, about 2-seeded Seeds strophiolate
1535 *Loddigesia* Vexillum much shorter than alæ or carina.
1536 *Hovea* Cal bilabiate, the upper lip half bifid, retuse Stamens all united. Carina blunt. Legume sessile, roundish, ventricose, 2-seeded Seeds strophiolate
1537 *Spartium.* Stigma longitudinal, villous above Filaments adhering to ovary. Cal lengthened at the base
1538. *Genista* Cal 2-lipped. upper one with 2, lower one with 3 teeth Vexillum bent backwards from the rest of the flower.
1539 *Lebeckia.* Cal 5-parted, with acute segments and rounded recesses Legume cylindrical, many-seeded
1540. *Ulex* Cal of 2 leaves, with a small scale at the base on each side Legume turgid, scarcely longer than the calyx
1541. *Ononis* Cal. 5-cleft, its divisions linear. Vexillum striated Legume turgid, sessile Filaments in one undivided set.
1542 *Anthyllis.* Cal inflated, 5-toothed, inclosing the small roundish 1-3-seeded legume
1543. *Arachis* Cal 2-lipped. Cor. resupinate Filaments united Legume gibbous, torulose, veiny, coriaceous.
1544. *Lupinus* Cal 2-lipped Anthers, 5 oblong, 5 round. Legume coriaceous, torulose, compressed.
1545. *Amorpha* Cal. campanulate, 5-fid. Vexillum ovate, concave Alæ O. Carina O Legume 2-seeded, falcate.
1546 *Abrus.* Cal. obsoletely 4-lobed, the upper broader Filaments 9, united at base, opening at back. Stigma blunt Seed spherical
1547. *Phaseolus* Carina with the stamens and style twisted spirally.
1548. *Teramnus* Carina very small, inclosed in the calyx Five alternate stamens fertile. Stigma sessile, capitate.
1549. *Carpopogon.* Vexillum not callous Flowers capitate Pods short, broad, 1-seeded
1550. *Dolichos* Vexillum with two calli at base, parallel, oblong, compressing the wings beneath.
1551 *Stizolobium* Cal campanulate, 2-lipped upper lip entire, erect, lower trifid, with the middle segment longest Vexillum ascending Alæ dolabriform, lunate at base, the length of carina. Anthers 2-formed hairy Legume torose, 1-celled, with partitions Seeds round, with a crested hilum.
1552 *Glycine.* Cal 2-lipped Carina pushing back the vexillum with its end.
1553 *Kennedia* Cal 2-lipped upper emarginate, lower trifid, equal. Vexillum reflexed, recurved. Alæ pressed to the carina. Carina remote. Stigma blunt. Legume oblong
1554 *Cytisus* Cal 4-fid, larger than cor. upper segment bifid at end, or emarginate, lower very large. Cor persistent Legume about 2-seeded
1555 *Galactia* Cal 4-toothed, with 2 bractes. Petals all oblong; the vexillum broadest and incumbent upon the others Stigma obtuse Legume round Seeds roundish.
1556. *Clitoria* Cor resupinate, with a large spreading vexillum overshadowing the wings
1557 *Orobus* Style linear, cylindrical, downy above Cal obtuse at the base, its upper segments deeper and shorter
1558 *Lathyrus.* Style plane, downy above, broader upwards Cal with its two upper segments shortest.
1559 *Ochrus* Cal with the two upper segments conniving Vexillum with two teeth at the sides. Style flat, villous above Legume having a membranous wing upon the seed-bearing suture
1560 *Pisum* Style triangular, keeled above, downy Two upper segments of calyx shorter than the rest.
1561 *Vicia* Style bearded beneath the stigma.
1562 *Ervum* Stigma capitate, hairy all over on the outside
1563 *Ervilia* Like Vicia, but the ovary is plaited in folds.
1564 *Cicer.* Cal 5-parted, length of cor, four upper segments incumbent on the vexillum. Legume turgid, 2-seeded
1565. *Isparta.* Cal 5-fid, with the lower segment long Ala 2-lobed below. Three teeth of the larger stamen shorter than the rest Legume ovate.
1566 *Cytisus* Cal 2-labiate, 2-3 Legume attenuated at base
1567 *Mullera* Cal. 4-toothed. Loment moniliform, with fleshy 1-seeded globules cohering by a thread.
1568 *Robinia.* Cal 4-fid; upper segment 2-parted. Legume gibbous, long Leaves unequally pinnate
1569 *Caragana.* Cal. subcampanulate Stigma smooth, truncate Legume cylindrical Leaves abruptly pinnated.
1570 *Swainsonia.* Cal 5-toothed Vexillum unfurled, larger than the blunt carina. Stigma terminal. Style bearded lengthwise in front, not bearded at back Legume turgid, not bladdery
1571 *Sutherlandia* Cal 5-toothed Vexillum without callosities, folded back at edge, shorter than oblong carina Stigma terminal. Style with a longitudinal beard behind, a transverse one before. Legume inflated, scarious
1572 *Lessertia.* Cal. half 5-fid. Vexillum unfurled Carina blunt. Stigma capitate Style bearded transversely at end in front, beardless behind. Legume scarious without valves (compressed or inflated)
1573 *Colutea* Cal. 5-toothed Vexillum with two callosities, unfurled, larger than the blunt carina. Stigma lateral under the hooked end of the style, which is longitudinally bearded behind. Legume inflated, scarious.
1574. *Glycyrrhiza* Cal. bilabiate, 3-1. Legume ovate, compressed.
1575. *Laquorstia.* Cal. tubular, equal, 5-parted. Vexillum erect, reflexed at sides. Alæ spreading Carina bifid Legume oblong, smooth, 3-4-seeded.

1576. *Coronilla.* Cal. 2-lipped, 2-3. Upper teeth connate. Vexillum scarcely longer than alæ. Loment round, jointed, straight.
1577. *Hippocrepis.* Loment compressed, with many notches on one edge, curved.
1578 *Ornithopus.* Legume jointed, curved, cylindrical.
1579 *Scorpiurus.* Loment intercepted by divisions, revolute, round.
1580. *Smithia* Stamens divided into two equal bundles. Legume jointed, plaited, included in the bifid calyx.
1581 *Sesbania.* Cal. 5-toothed. Legume long (round or linear), 2-valved, many-celled, with transverse partitions.
1582. *Æschynomene* Stamens divided into two equal bundles Legume jointed, straight, exserted. Cal. 2-parted, with toothed lips
1583 *Stylosanthes.* Cal tubular, very long, bearing the corolla. Ovarium below the corolla. Loment one or two-jointed, hooked
1584 *Hallia* Cal. 5-parted, regular Legume 1-seeded, 2-valved.
1585 *Lespedeza.* Cal 5-parted, nearly equal. Carina transversely blunt. Legume lenticular, unarmed, 1-seeded.
1586 *Flemingia.* Cal. 5-fid Vexillum striated. Legume sessile, oval, turgid, 2-valved, 2-seeded. Seeds spherical
1587 *Zornia* Cal campanulate, 2-lipped. Cor. inferior. Vexillum cordate, revolute. Anthers alternately oblong and round. Legume jointed, hispid
1588 *Hedysarum.* Cal 5-fid Carina transversely blunt Loment with 1-seeded compressed joints.
1589. *Indigofera.* Cal spreading Carina with a spreading subulate spur on each side.
1590. *Tephrosia.* Cal. with subulate nearly equal teeth Stamens monadelphous. Legume compressed, subcoriaceous.

PENTANDRIA.

1500 MONNIE'RIA *W.* MONNIERIA					*Rutaceæ. Sp* 1.							
9959 trifólia *W.*	three-leaved	☐	un		1½	jl.au	W	Guiana	1792.	S	s.l	Aub. gui.2 t 293
1501 PETALOSTE'MUM *Ms* PETALOSTEMUM					*Leguminosæ Sp* 4—5							
9960 cándidum *Ph*	white	✱	△	pr	1	jl au	W	N Amer	1811	D	l p	Mi. am 2 t 37 f 1
9961 cárneum *Ph*	flesh-colored	✱	△	pr	½	jl au	Pk	N Amer	1811.	D	l p	
9962 violáceum *Ph*	purple	✱	△	pr	1	jl s	V	N Amer	1811.	D	l p	Bot. mag 1707
9963 corymbósum *Ph*	corymbose	✱	△	pr	1½	jl s	W	N. Amer.	1811.	D	l p	
Dalea Kuhnistéra W.												

HEXANDRIA.

1502 CORY'DALIS *Vent* CORYDALIS					*Fumariaceæ Sp* 10—31							
9964 nóbilis *P S.*	great-flowered	✱	△	or	1	my	L Y	Siberia	1783.	D	p.l	Bot mag 1953
9965 tuberósa *Dec*	hollow-rooted	✱	△	or	¼	f ap	Pu W	Europe	1596	D	co	Bot m 232 2340
9966 fabácea *W en*	Bean-leaved	✱	△	or	⅛	f ap	Pu	Germany	1815.	D	co	Fl dan 1394
9967 sólida *Smith*	solid-rooted	✱	△	or	¼	f my	Pk	Britain groves		D	co	Eng bot 1471
9968 sempervirens *P. S*	glaucous		○	or	2	jl au	Y Pu	N Amer	1683	D	co	Bot mag 179
9969 aúrea *W en.*	golden	✱	◯	or	1	my jl	Y	N Amer	1812	D	co	Bot. reg 66
9970 lútea *P S*	yellow	✱	△	or	1½	ap o	Y	England old w		D	co	Eng bot 588
9971 uralénsis *Fisch*	Ural	✱	◯	or	1	au	Pa Y	Altai	1824	S	co	
9972 capnoides *P. S*	white-flowered	✱	◯	or	2	my o	R Y	S Europe	1596	S	co	Plu alm t 90 t 2
9973 claviculáta *W.*	climbing	⅄	○	or	6	jn jl	W Y	Britain thick		S	co	Eng bot 103
1503. CYSTICAP'NOS *W en* CYSTICAPNOS					*Fumariaceæ Sp* 1							
9974 africána *W en*	African	⅄	○	or	4	jn jl	Y	C. G H	1696.	S	s l	Boer lug 1 t.300
Fumária vesicária H K												
1504 DICLY'TRA *Dec* DICLYTRA					*Fumariaceæ. Sp* 4—8							
9975 Cucullária *Dec.*	naked-stalked	✱	△	or	⅔	jn jl	W	N. Amer	1731	D	s p	Bot mag. 1127
9976 formósa *Dec.*	blush	✱	△	or	1	jn jl	F	N Amer	1796	D	p l	Bot mag 1335
9977 eximia *Dec*	choice	✱	△	or	1½	jn jl	F	N Amer	1812	D	p l	Bot. reg. 51
9978 canadénsis *Dec*	Canadian	✱	△	or	⅔	jn jl	Pk	N Amer.	1819	D	co	Bot. mag. 3031
1505 ADLU'MIA *Raf.* ADLUMIA					*Fumariaceæ Sp* 1							
9979 cirrhósa *Raf.*	spongy-flower'd	⅄	◯	or	15	jn s	W pu	N Amer.	1778.	D	s l	Swt.fl.gard. 189



History, Use, Propagation, Culture,

1500 *Monnieria* In memory of Monsieur Le Monnier, professor of botany in the garden of plants at Paris. He published, in 1745, "Observations sur les Plantes dangereuses des Pyrénées et du Roussillon"
1501 *Petalostemum.* From πεταλον, a petal, and στημων, a stamen; in allusion to the union of these two parts into a tube.
1502 *Corydalis* Κορυδαλις is an ancient Greek name for the Fumitory, from which genus this has been separated. Pretty little plants, well adapted for rock-work or growing on pots. They are easily cultivated and increased.

1591 *Galega.* Cal. with subulate nearly equal teeth. Legume with oblique streaks between the seeds.
1592. *Phaca.* Cal. 5-toothed, two upper teeth most distant Legume half 2-celled, inflated.
1593 *Oxytropis.* Carina ending in a mucro Legume 2-celled or half-2-celled, with the upper suture turned inwards.
1594. *Astragalus.* Legume 2-celled, more or less gibbous, with the lower suture turned inwards. Carina blunt.
1595. *Biserrula.* Legume 2-colled, flat, with a contrary dissepiment serrated on each edge
1596. *Dalea* Alæ and carina adhering to the column of stamens Stamens 5-10, united, without a separate filament Legume 1-seeded
1597 *Psoralea.* Cal the length of pod Stamens diadelphous Legume 1-seeded, subrostrate, valveless
1598 *Melilotus.* Cal. tubular, 5-toothed Carina simple, shorter than alæ and vexillum. Legume longer than calyx, rugose.
1599 *Lupinaster* Cal campanulate, 5-toothed, with setaceous teeth Stigma uncinate. Legume not knotted, round, many-seeded
1600 *Trifolium.* Legume (in general) shorter than the cal, 1 or many-seeded, indehiscent, deciduous. Flowers more or less capitate
1601. *Lotus* Legume cylindrical, straight. Alæ of the cor cohering by their upper edge. Filaments dilated upwards.
1602. *Tetragonolobus* The characters of Lotus, but the pod square with 4 wings
1603. *Trigonella* Vexillum and alæ nearly equal, spreading, in the form of a tripetalous corolla
1604 *Dorycnium.* Cal. 5-toothed, 2-lipped Filaments subulate Stigma capitate Legume turgid, 1 or 2-seeded
1605. *Medicago* Legume falcate or spirally twisted, compressed, membranaceous.
1606. *Hymenocarpus.* Like Medicago, but the legumes reniform winged at edge

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PENTANDRIA.

9959 Stem dichotomous, Leaves ternate, Spike bifid

9960 Spike cylindrical stalked, Bractes longer than flower, Leaves in 3 pairs lanceolate
9961 Spike cylindrical stalked, Bractes subulate length of calyx, Leaflets lanceolate
9962 Spike cylindrical stalked, Bractes nearly as long as calyx, Leaves in 2 pairs linear
9963 Heads with a scaly involucre, Calyxes plumose, Leaflets linear pointless

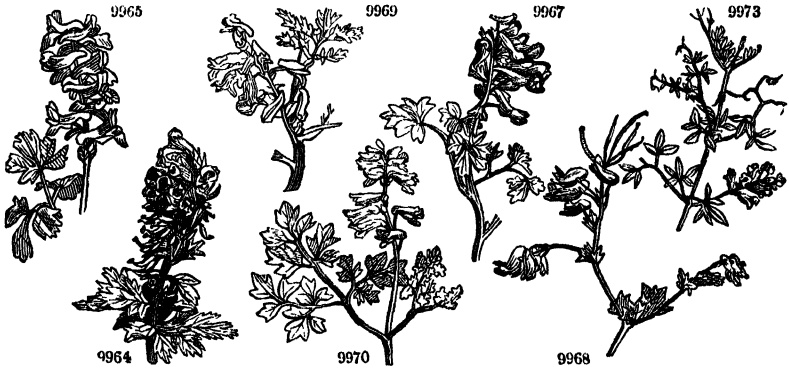
HEXANDRIA.

9964 Stem erect simple without scales, Leaves bipinnate, Lobes cuneate cut at end, Bractes acute
9965 Stem simple without scales, Lvs 2 biternate, Segm cuneate multifid, Bractes ovate entire, Roots hollow
9966 Stem subsimple erect with scales below the lowest leaf, Leaves 3-4-stalked biternate, Segments obl. blunt
9967 Stem subsimple erect with scales below the lowest leaf, Lvs 3-4-stalk bitern cut, Segm cuneate or oblong
9968 Stem erect branched, Leaves glaucous decompound, Segm stalked cuneate trifid, Pods linear
9969 Stem branched diffuse, Leaves glaucous bipinnate, Lobes obl linear, Bractes lanceol linear acuminate
9970 Pods roundish shorter than peduncle, Stems angular, Bractes minute, Spur very short and round
9971 Stem erect somewhat branched scarcely longer than radical lvs Lvs on long stalks 3-cut, Raceme few-fl
9972 Stem branched diffuse, Lvs bipinnate, Segm obov cuneate trifid, Pods hn scarcely longer than pedicel
9973 Stem branched climbing, Leaves bipinnate, Petioles cirrhose, Segm oval entire

9974 The only species

9975 Spurs 2 straight acute, Scape naked, Raceme simple
9976 Spurs 2 incurved blunt, Scape naked, Raceme compound, Stigma with 2 angles
9977 Spurs 2 incurved blunt, Scape naked, Raceme compound, Stigma with 4 angles
9978 Spurs 2 short blunt, Scape naked simple few-fl Leaves multifid

9979 The only species — Fumaria fungosa, *Hort*



and Miscellaneous Particulars.

1503 *Cystiscapnos* From κυστις, a bladder, and καπνος, fumitory. A genus divided from Fumaria on account of its bladdery fruit

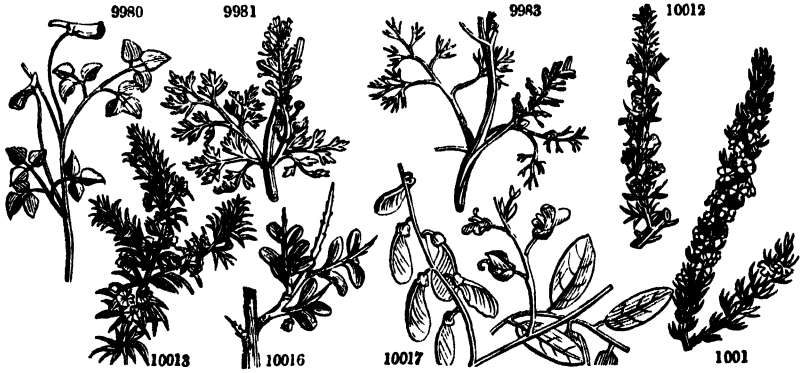
1504 *Diclytra* So named by Borckhausen, a German botanist, on account of the two spurs or pouches of the flower. Handsome herbaceous plants, frequently cultivated among choice collections of rare flowers Their roots are impatient of cold and wet, and should therefore be planted in a warm dry border well exposed to the southern sun.

1505 *Adlumia* A name unexplained by its author, M. Rafinesque Schmalz A tall climbing annual plant of little beauty in its flowers, but covering a large space in the course of a summer.

1506. SARCOCAPNOS	*Dec.*	SARCOCAPNOS.					*Fumariaceæ.*	*Sp.* 1—2							
9980 enneaphýlla	*Dec.*	nine-leaved	♃	△	or	1	my jl	P Y	Spain		1714.	D	co	Bocc. 2. t. 73. f. 1
1507. FUMA'RIA	*P. S.*	FUMITORY.					*Fumariaceæ.*	*Sp* 4—10							
9981 officinális	*P S*	common		○	w	2	my au	Pk	Britain	cul.gr.	S	co	Eng bot. 589		
9982 capreoláta	*P S.*	ramping	⅃	○	w	4	my s	F	Britain	corn fi	S	co	Eng. bot. 943		
9983 parviflóra	*P S.*	small-flowered		○	w	2	au s	Pk	England	corn fi.	S	co	Eng. bot. 590		
9984 spicáta	*P S*	narrow-leaved		○	w	8	jl.au	F	S. Europe	1714	S	co	M.his.3. t.12.f.11		

OCTANDRIA.

†1508 POLY'GALA.	*W.*	MILKWORT.					*Polygaleæ.*	*Sp.* 27—163.							
9985 incarnáta	*W.*	flesh-colored		○	or	1	jn jl	Pk	N Amer	1812.	S	co	Pluk. t. 438 f. 5		
9986 amára	*W*	bitter	♃	△	or	½	jn	B	Europe	1775	D	l.p	Bot. mag. 2437		
9987 vulgáris	*W.*	common	♃	△	or	½	my jn	B	Britain	dry pa.	D	s l	Eng bot. 76		
9988 májor	*W*	large Austrian	♃	△	or	1	jl au	R	Austria		1739.	D	s l	Jac aust 5 t.413	
9989 paucifólia	*W*	naked-stalked	♃	△	or	½	my au	Pu	N. Amer		1812	D	s l	Bot. mag. 2852	
9990 bracteoláta	*W.*	spear-leaved			or	6	my o	Pu	C. G H		1713.	S	s p	Bot. mag 345	
9991 speciósa	*B M*	showy			or	6	my.o	Pu	C G. H.		1814.	C	s p	Bot. reg. 150	
9992 teretifólia	*W.*	columnar-lvd.			or	3	my au	Pu	C. G H		1791	S	s.p	Bot. rep. 370	
9993 purpúrea	*H. K.*	purple			or	1	my jn	Pu	N. Amer		1791.	C	s p		
§9994 virgáta	*Th.*	twiggy			or	3	my au	Pu	C. G H		1812	C	s p		
9995 myrtifólia	*W*	Myrtle-leaved			or	3	my.au	Pu	C. G H		1707	S	p l	Bot. reg. 669	
9996 oppositifólia	*W*	opposite-leaved			or	2	my au	R	C G H		1790	C	s p	Bot. mag. 492	
9997 cordifólia	*W*	heart-leaved			or	3	mr au	Pu	C. G H		1791	C	s p	Bot. mag 2438	
9998 tomentósa	*W*	woolly-leaved			or	2	mr au	Pu	C. G H		1812	C	s.p		
9999 Chamæbúxus	*W.*	Box-leaved			or	¼	my jn	Y	Austria		1658	Sk	s.l	Bot mag 316	
10000 latifólia	*Ker*	broad-leaved			or	1½	my jn	Pu	C G H		1820	C	s.l	Bot. reg 645	
10001 liguláris	*Ker*	strap-leaved			or	1½	my au	Pu	C. G H		1820.	C	s p	Bot. reg. 637	
§10002 filiformis	*W*	filiform			or	1½	my d	Pu	C G. H		1812.	C	s p		
§10003 micrántha	*W*	small-flowered			or	1½	ja d	Pu	C G H		1800	S	s p	Bot rep 424	
10004 paniculáta	*W.*	panicled		⊡	pr	¾	jl au	Pa pu	S Amer		1822	S	co	Bot. reg 761	
10005 Sénega	*W.*	Rattlesnake root	♃	△	or	¾	jl	W	N Amer		1739	S	co	Bot mag. 1051	
10006 lútea	*W*	golden		○	or	¾	jn jl	Y	N Amer		1739	S	co	Plu am t.438 f 6	
10007 viridéscens	*W.*	greenish-flower		○	or	1	jl au	G Pu	N Amer.		1815	S	co		
10008 húmilis	*Lodd*	dwarf			pr	¼	my	Pk	C G H		1817	C	s p	Bot. cab 490	
10009 sanguínea	*W*	purple-spiked		○	or	1	jl s	Pu	N Amer		1739.	S	co	Pluk t. 438 f 5	
10010 verticillata	*W.*	whorl-leaved		○	or	¼	jl au	W	N. Amer.		1739	S	co	Pluk t. 438 f 4	
10011 cruciáta	*W*	four-leaved		○	or	½	jn jl	G Pu	N Amer		1739	S	co		
1509 MURAL'TIA	*Neck*	MURALTIA					*Polygaleæ*	*Sp* 4—37							
10012 Heistéria	*W.*	Furze-leaved			or	6	ja d	Pu	C G H		1787.	C	s.p	Bot mag. 340	
10013 alopecuroides	*W.*	Foxtail			or	3	my au	Pu	C G H		1800.	S	s p	Bot mag 1006	
10014 stipulácea	*W.*	stipuled			or	3	ap s	R	C. G H		1801	C	s p	Bot mag 1715	
10015 mixta	*W.*	Heath-leaved			or	3	ja d	Pu	C G H		1791	C	s p	Bot. mag 1714	
†1510. MUN'DIA.	*Kunth*	MUNDIA					*Polygaleæ*	*Sp* 1							
10016 spinósa	*W*	spiny			or	3	ja my	Pu	C G H		1780	C	s p		
1511 SECURIDA'CA	*W*	SECURIDACA					*Polygaleæ*	*Sp.* 1—8							
10017 volúbilis	*W*	climbing	⅄		ft	10	...	W	W Indies		1739.	C	p l	Ja am t 183 f 38	



History, Use, Propagation, Culture,

1506 *Sarcocapnos* From σαρξ, flesh, and καπνος, fumitory So named by Decandolle on account of the fleshy substance of the leaves of the plants contrasted with those of other allied genera.

1507. *Fumaria* From *fumus*, smoke, in allusion to the disagreeable smell of the plant. The French, with the same meaning, call it *Fumeterre*, whence our English word *Fumitory* The species are handsome weeds F officinalis was formerly considered a valuable antiscorbutic, and much used in obstructions of the viscera

1508. *Polygala* From πολυ, much, and γαλα, milk. Dioscorides says, that the plant was believed to excite the lacteal secretions in women The species are handsome free-flowering plants. The greenhouse kinds are highly ornamental, and some of them continue in bloom all the winter: P. stipulacea all the year They grow freely in sandy loam, or loam and peat, and are readily increased by cuttings of the young wood, in sand, under a bell-glass

P vulgaris was thought to possess something of the properties of P Senega. Sir J E. Smith found that an infusion of the herb taken in a morning, fasting, about a quarter of a pint daily, promoted expectoration, and was good in a catarrhous cough He tried it at Montpelier by the advice of Professor Gouan with success, and has since known it useful. Foreign writers celebrate it as a grateful and nutritious food for cattle. According to the Swedish experiments, kine, sheep, and goats eat it, but swine refuse it.

P. Senega has a woody, branched, contorted root,-about half an inch thick, and covered with ash-colored

9980 Leaves with a branched stalk triternate, Segments ovate angular

9981 Pods round retuse, Pedicels of fruit erect twice as long as bractes, Racemes lax
9982 Pods globose, Pedicels of fruit recurved longer than bract, Racemes oblong
9983 Pods globose with a little point, Pedicels of fruit erect longer than bract
9984 Pods compressed oval smooth, Raceme spiked, Pedicels much shorter than bract

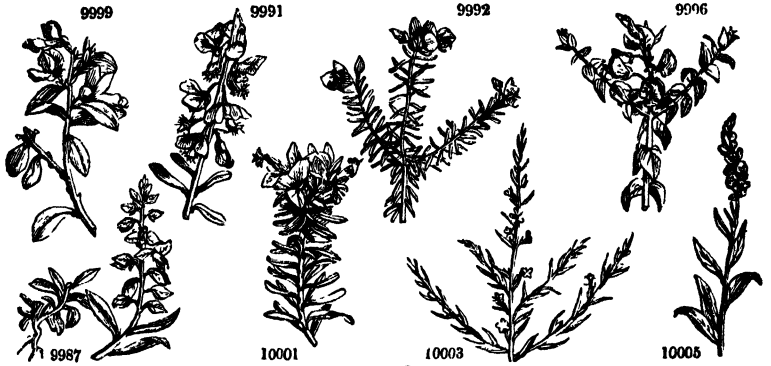
OCTANDRIA.

9985 Flowers crested spiked, Stem herbaceous branched erect, Leaves alternate subulate
9986 Fl crested racem Wings of cal 3-nerved blunt longer than cor Stems erect, Lvs blunt · radic obovate
9987 Fl crested racem. Wings of cal. 3-nerved blunt length of cor Stems procumb Leaves linear-lanc acute
9988 Fl crest racem Wings of cal. many-nerv blunt mucron short than cor Stems erect, Lvs. lin lanc. acute
9989 Fl crested term. in threes, Stems quite simple erect naked beneath, Leaves ovate
9990 Fl. crested, Raceme term Wings of cal cuspidate many-nerv Stem erect shrubby, Lvs lin lanc. smooth
9991 Fl crest Appendage double, Racemes without bractes subterm many-fl Lvs altern obl. cuneate smooth
9992 Fl. crest Raceme term few-fl Wings of cal. ovate acute many-nerved, Stem shrubby, Lvs linear subulate
9993 Fl crested somewhat umbelled, Leaves ovate fleshy
9994 Fl crested racemose, Bractes 3-leaved, Leaves obovate oblong
9995 Fl crested, Racemes few-fl term Keel falcate, Stem shrubby, Leaves obl bluntish smooth
9996 Fl crested, Stem shrubby, Leaves opposite ovate acute
9997 Fl crested, Raceme terminal, Stem shrubby, Branches downy, Leaves cordate mucronate opposite
9998 Fl crested whorled, Leaves cordate downy beneath
9999 Fl beardless, Pedunc terminal and axill about 2-fl Stem shrubby, Leaves obl lanceolate acute
10000 Fl. crested, Branches downy, Leaves decussating coriaceous glaucous ovate downy beneath
10001 Fl. crest Branches vill Lvs scattered lingulate smooth, Outer lobe of the petals of vexillum very short
10002 Fl beardless lateral, Leaves solitary 3-cornered mucronate
10003 Fl beardless axillary sessile, Leaves linear mucronate
10004 Fl crested, Racemes axillary on long stalks, Stems erect branched upwards, Leaves linear acute
10005 Fl beardless, Spike terminal filiform, Stem erect herbaceous quite simple, Leaves oblong lanceolate
10006 Fl beardless, Raceme cylindr capitate terminal, Stem simple, Leaves obl lanc acute
10007 Fl beardless globose capitate terminal, Stem erect simple, Leaves linear bluntish
10008 Leaves ovate-lanceolate imbricated, Stem branched decumbent
10009 Flowers beardless, Pedunc. squarrose, Stem branched erect
10010 Flowers beardless distant, Leaves linear whorled, Stem branched
10011 Flowers beardless in headed spikes, Leaves in fours linear-lanceolate, Stem somewhat branched erect

10012 Fl beardless lateral, Stem arborescent, Leaves 3-cornered mucronate spiny
10013 Fl beardless, Peduncles solitary axillary, Leaves fascicled ovate mucronate ciliated at edge
10014 Fl beardless lateral, Leaves in threes linear acute
10015 Fl beardless sessile, Leaves round mucronate very close

10016 Leaves obovate or oval, Branches short spiny

10017 Branches a little downy, Leaves oval-obl acute, Racemes lateral



and Miscellaneous Particulars.

bark It is inodorous, the taste is at first sweetish and nauseous, but after being chewed for less than a minute, becomes pungent and hot, producing a very peculiar tingling sensation in the fauces. Medically, it is considered stimulating, expectorant, and diuretic, and in large doses emetic and cathartic · it increases absorption, and consequently augments the natural excretions, particularly that of urine, and frequently occasions a copious ptyalism It was introduced to the notice of physicians by Dr. Tennant, who, having discovered that it was the antidote employed by the Senegare Indians against the bite of the rattle-snake, and reasoning from the effects of the poison, and of the remedy in removing these, was induced to try it in pneumonic affections, and found it useful On account of its stimulant properties, however, it can be employed in these complaints only after the resolution of the inflammation by bleeding and evacuations. It proves more directly useful in humoral asthma, chronic catarrh, and some kinds of dropsy. (*Thomson's London Dispensatory*, p 450)

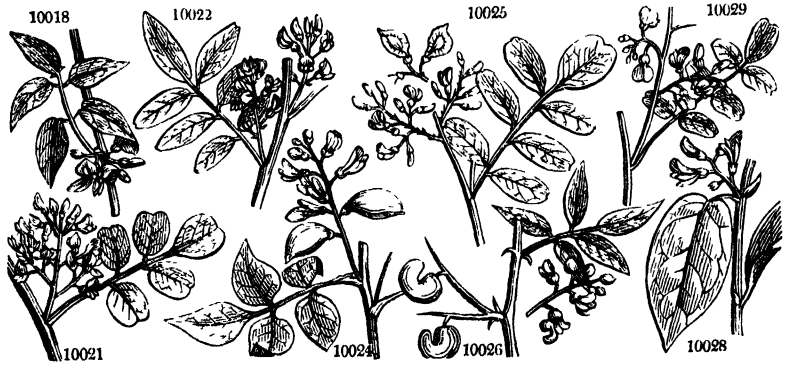
1509 *Murallia* Named after John Von Muralt, a Swiss botanist, who lived in the commencement of the eighteenth century. Handsome bushes, of easy cultivation in a greenhouse, or even in a good pit

1510 *Mundia.* So named, in allusion, we presume, to the neatness (*munditia*) of its appearance No explanation of the word is given by its author Pretty little Cape bushes, easily cultivated in a good pit.

1511. *Securidaca* From *securis*, a hatchet, in allusion to the form of the end of the pod. It grows freely in light loam, or loam and peat; and cuttings root in sand covered with a glass.

DECANDRIA.

1512 NISSO'LIA *W*	NISSOLIA.				*Leguminosæ*	*Sp* 3—6.							
10018 frutícósa *W*	shrubby	♃	▭	or 15	jl n	Y	S Amer.	1766.	S	p l	Jac. vind 2. t.167		
10019 retúsa *W cn*	blunt	♃	▭	or 6	...	...	S. Amer.	1819	C	s.l			
10020 glabráta *Link*	polished	♃	▭	or 12	..	W	.....	1823	C	s.l			
1513 DALBER'GIA *W*	DALBERGIA				*Leguminosæ.*	*Sp* 4—9.							
10021 latifólia *W*	broad-leaved	♀	▭	or 30	...	W	E. Indies	1811.	C	s.l	Rox cor 2 t.113		
10022 rubiginósa *W*	climbing	♃	▭	or 10	...	W	E Indies	1811	C	s l	Rox cor 2 t 115		
10023 paniculáta *W.*	panicled	♀	▭	or 30	...	W	E. Indies	1811	C	s l	Rox cor 2. t.114		
1514 PONGA'MIA *Vent*	PONGAMIA				*Leguminosæ.*	*Sp* 1—3							
10024 glábra *P S*	smooth-leaved	♀	▭	or 30	...	W	E. Indies	1699	C	s l	Vent.malm. t.28		
*1515 PTE'ROCAR'PUS *W*	PTEROCARPUS.				*Leguminosæ*	*Sp* 3—9							
10025 Marsúpium *W*	emarginate-lvd	♀	▭	or 40	...	W	E Indies	1811	C	s l	Rox. cor 2. t 116		
§10026 lunátus *W*	crescent podded	♚	▭	or 6	...	W	S Amer	1792.	C	s l	Lam ill. t.602 f.5		
10027 santalínus *W*	Red Saunders Wood	♀	▭	ec 60	...	Y	E. Indies	1800	C	s l			
1516 ECASTAPHYL'LUM *Rich*	ECASTAPHYLLUM				*Leguminosæ*	*Sp* 1—4							
10028 Brow'nei *Rich*	oval-leaved	♃	▭	or 10	...	W	W Indies	1733	C	r m	Br. jam t. 32 f.1		
*1517 GEOFFRO'YA *W*	BASTARD CABBAGE-TREE				*Leguminosæ*	*Sp* 1—5							
§10029 mérmis *W.*	smooth	♀	▭	or 8	...		Jamaica	1778	C	p l	Ph tran 1777.t.10		
1518. DIP'TERIX *W*	TONQUIN BEAN				*Leguminosæ.*	*Sp* 1—2							
10030 odoráta *W*	sweet-scented	♀	▭	ec 60	...	Pu	Guiana	1793	C	l p	Aub. gui 2 t.296		
1519 PARIVO'A *Aubl*	PARIVOA				*Leguminosæ.*	*Sp* 1							
10031 grandiflóra *Aubl*	large-flowered	♀	▭	or 30	...	Pu	Guiana	1821	C	r.m	Aub gui. t 303		
†*1520 AMERIM'NUM *W*	AMERIMNUM				*Leguminosæ*	*Sp* 3—5.							
10032 Brównei *W*	Browne's	♚	▭	or 10	...	W	W Indies	1793	C	r m	Ja am t 180 f 58		
§10033 latifólium *W*	broad-leaved	♚	▭	or 12	...	Y	S Amer	1814.	C	l p	Ja am t 177 f 50		
§10034 E'benus *W*	Jamaica Ebony	♚	▭	or 12	jl au	Y	W Indies	1713.	C	r m	Br jam t. 31 f.2		
†1521 ERYTHRI'NA *W.*	CORAL TREE				*Leguminosæ.*	*Sp* 10—21							
10035 herbácea *W*	herbaceous	♐	▭	or 3	jn s	S	Carolina	1724	C	l p	Bot mag 877		
10036 cárnea *W*	flesh-colored	♀	▭	or 12	my	Pk	Vera Cruz	1733	S	r m	Trew ehret. t. 8		
10037 Corállodéndrum *W*	smooth-leaved	♀	▭	or 20	my jn	S	W Indies	1690	S	r m	Com hor 1 t 108		
10038 índica *W*	Indian	♀	▭	or 20	...	S	E. Indies	1814	S	r m	Rheed mal 6. t 7		
10039 fúsca *W*	brown-flowered	♀	▭	or 20	...	S	E Indies	1800	C	l p	Rum amb 2 t 78		
10040 cáffra *W.*	Cape	♚	▭	or 6	...	S	C G H.	1816	C	l p	Bot reg 736		
10041 pícta *W*	prickly-leaved	♚	▭	or 6	...	S	E Indies	1696	S	r m	Rum amb 2 t 77		
10042 speciósa *H K*	large-flowered	♀	▭	or 10	au o	S	W Indies	1805	S	r m	Bot. rep 443		



History, Use, Propagation, Culture,

1519 *Nissolia* In honor of William Nissole, an industrious French botanist He was a member of the academy of Montpellier, and author of some papers in its Transactions. He was born in 1647, and died in 1735 Cuttings root in sand, but not very readily

1513 *Dalbergia* Nicholas Dalberg was surgeon in ordinary to the king of Sweden, and published in 1755 a work upon the Metamorphoses of Plants Another Dalberg, a pupil of Linnæus, travelled in Dutch Guiana, whence he communicated specimens to his preceptor Ripened cuttings root in sand

1514. *Pongamia* An alteration of the vernacular name of the plant in India

1515 *Pterocarpus* From πτερον, a wing, and καρπος, fruit Its pods have membranous wings P santalinus is a lofty tree, with alternate branches, and a bark resembling that of the common alder, it yields the true officinal red saunders wood, first detected by Kœnig in India It is brought home in billets, which are very heavy, and sink in water Red saunders wood has an aromatic odor, and is nearly insipid It is extremely hard, of a fine grain, takes a high polish, and a bright garnet red color, which deepens on exposure to the air. It yields its coloring matter, which appears to be of a resinous nature, to ether and alcohol, but not to water. (*Thomson's London Dispensatory*, 458)

The sap yields one sort of Sanguis draconis Many of the red Indian woods trasude a blood red juice through the clefts of the bark, which hardens into a red resin, not differing from Sanguis draconis, which, therefore, is collected from several trees, and from this among others (*Linn Suppl*) This drug, however, is chiefly obtained from the P Draco, and the fruit of Calamus Rotang.

In our stoves these plants thrive in light loamy soil, and cuttings, with their leaves untouched, will root in sand under a common hand-glass

1516 *Ecastaphyllum* From εκαστος, every one, and φυλλον, a leaf, that is to say, a leaf which is always simple, and not compounded of several others, as those of neighbouring genera

1517. *Geoffroya* In honor of Etienne Francois Geoffroi, Memb Acad Par, Professor of botany at the Jardin du Roi, and a foreign member of the Royal Society of London He was the author of several medical botanical works, especially of a Materia Medica He was born in 1672, and died in 1731 A tree, branchy at top, with a smooth grey bark and pinnate leaves, and, what is remarkable in papilionaceous plants, a drupe for a fruit.

DECANDRIA.

10018 Stem shrubby twining, Leaves pinnated, Leaflets ovate acute smoothish
10019 Leaves pinnated, Leaflets ovate-oblong emarginate
10020 Leaves ternate and quinate, Leaflets oval acuminate smooth, Fl racemose

10021 Leaves pinnated, Leaflets roundish emarginate, Fruit lanceolate
10022 Leaves pinnated, Leaflets obl. obtuse, Branches and petioles downy
10023 Leaves pinnated, Leaflets ellipt emarginate smooth, Panicle terminal, Fruit lanceolate

10024 Leaves pinnated, Leaflets ovate acuminate smooth, Fruit ovate acute veinless

10025 Leaves pinnated, Leaflets elliptical emarginate, Stipules none, Panicle termin
10026 Leaves pinnated, Spines stipulary, Fruit lunate
10027 Leaves ternate roundish blunt quite smooth, Petals crenate wavy

10028 Leaves simple cordate-ovate downy beneath

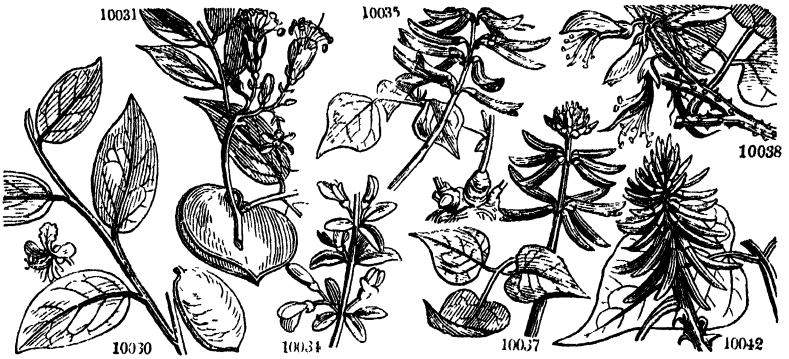
10029 Unarmed, Leaflets ovate-lanceolate

10030 Leaves alternate, Raceme terminal

10031 Leaves pinnated, Flowers smooth

10032 Unarmed, Leaves simple stalked alternate subcordate ovate, Racemes compound axillary and lateral
10033 Leaves pinnated, Leaflets ovate acuminate, Stem arboreous
10034 Spiny, Leaves subsessile aggregate obovate oblong, Peduncles 2-flowered

10035 Leaves ternate rhomboid smooth, Stem herbaceous unarmed, Calyxes truncate
10036 Leaves ternate smooth, Stem arboreous prickly, Calyxes campanulate truncate
10037 Leaves ternate unarmed, Stem arboreous prickly, Calyxes truncate 5-toothed
10038 Leaves ternate unarmed, Stem arboreous prickly, Calyxes spathaceous
10039 Leaves ternate unarmed lanceolate, Stem arboreous prickly, Calyxes bifid
10040 Leaves ternate unarmed, Leaflets blunt, Stem arboreous prickly
10041 Leaves ternate prickly, Stem arboreous prickly
10042 Leaves ternate prickly beneath, Petioles unarmed, Stem prickly



and Miscellaneous Particulars

This drupe is large, subovate, and incloses a woody nut. The bark, which has a mucilaginous sweetish taste and a disagreeable smell, was first noticed as a vermifuge by Peter Dugnid, but Dr Wright, who resided a long time at Jamaica, has communicated the fullest information concerning this tree According to him, the bark is powerfully medicinal, and its anthelmintic effects have been established at Jamaica by long experience.

1518 *Dipterix* From δις, double, and πτερυξ, a wing, in allusion to the two appendages of the calyx A tree much branched at top, with large alternate pinnate leaves, and racemes of flowers succeeded by almond-like fruits. The kernels of these are very fragrant, and are put by the Creoles into chests of clothes, in order to drive away insects, and communicate a grateful odor. They are in their own country called *Tonga*, and are the sweet-scented seed sold in shops under the corrupted name of *Tonquin* bean, for perfuming snuff and other substances. Ripened cuttings root in sand in moist heat

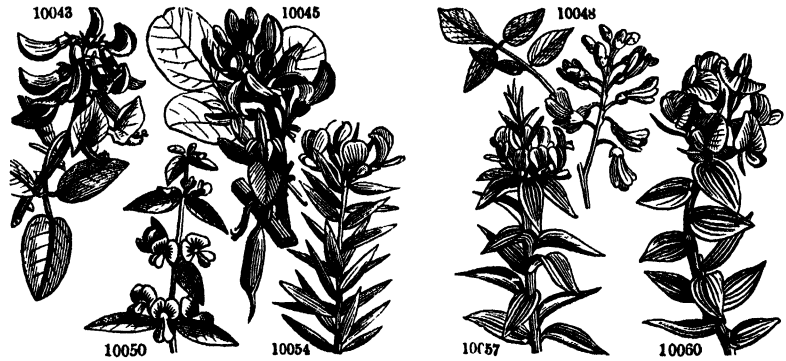
1519 *Parivoa*. The name of the tree in Guiana. A very handsome tree.

1520. *Amerimnum* One of the names given to the Houseleek by the Greeks It is derived from α, privative, and μεριμνα, care, because the plants require no attention It is not easy to tell why the name was applied to this genus, which has nothing in common either with the Houseleek or its ancient name. A Ebenus is common in the West Indies, and the wood is sent to Europe under the name of American Ebony Though not the true ebony, yet being of a fine greenish-brown color, and polishing well, it is much coveted by the instrument makers, and is of a very hard durable nature The flowers of Amerimnum latifolium are yellow, and smell like new hay In our stoves the species may be treated like Pterocarpus

1521 *Erythrina* From ερυθρος, red, nearly all the species being remarkable for the brilliant scarlet color of their flowers The species are small trees, prickly or unarmed, or else shrubs, sometimes almost herbaceous, leaves, as in Dolichos, ternate, stipulaceous, the petiolules jointed and awned, or glandular, very seldom simple; *flowers in fascicles from the axils, or in spikes at the end of the stem and branches, often scarlet (Jussieu).*

In our stoves they thrive well in a light loamy soil. "The best way to flower them," Sweet observes, "is to place them on a dry shelf in winter, when they have no leaves, and give them scarcely any water, when they show flower-buds, they may be plunged in a moist heat, which will make the flowers finer than they

10043	Crista-galli *W.*	Cock's-Comb	♀	or	40	my.jl	S	Brasil	1771.	S	r.m Exot. bot. 2. t. 95
10044	ovàlis *Wall.*	oval	♂	or	6	...	S	Nepal	1820.	C	l p
	1522. BU'TEA. *W.*	Butea.				*Leguminosæ.*	*Sp* 2.				
10045	frondòsa *W.*	downy-branch.	♀	spl	30	...	S	E. Indies	1796	C	r l Roxb. cor. l. t. 21
10046	supérba *W.*	smooth-branch.	☿	spl	30	...	S	E. Indies	1798.	C	r.l Roxb. cor. l. t. 22
	1523. VIBOR'GIA *W*	Viborgia.				*Leguminosæ.*	*Sp.* 1—4				
10047	sericea *W*	silky	♂	or	3	jl.au		C. G. H.	1780.	C	l.p
	1524. PISCI'DIA. *W*	Piscidia				*Leguminosæ*	*Sp* 1—5.				
10048	Erythrina *W.*	Jamaica Dogw	☿	tm	25	...	W	W Indies	1690.	S	p l Lam. ill. t. 605
†1525	PLATYLO'BIUM. *Sm*	Flat-Pea				*Leguminosæ*	*Sp.* 3—5.				
10049	formósum *H K*	large-flowered	♂	or	4	jn.au	Or	N. S. W	1790.	S	s p Bot. mag. 469
10050	parviflórum *H K*	small-flowered	♂	or	4	my s	Or	N. S. W	1792.	S	s.p Bot mag 1520
10051	triangulàre *H K*	triangular-lvd.	♂	or	4	jn.s	Or	V Di. L.	1805	S	s.p Bot. mag. 1508
*1526.	BORBO'NIA. *W.*	Borbonia				*Leguminosæ.*	*Sp* 9—11.				
10052	ericifólia *W*	Heath-leaved	♂	or	4	jl.au	Y	C. G H.	1812.	C	l p
10053	trinérvia *W*	three-nerved	♂	or	6	jl au	Y	C. G. H.	1759.	S	p l Plu.alm.t.297 f 4
10054	lanceolàta *W*	many-nerved	♂	or	5	jl au	Y	C. G. H.	1752	C	p l Jac schœ.2.t 217
§10055	perfoliàta *W.*	perfoliate	♂	or	6	jl au	Y	C. G H	1812	C	p.l
10056	undulàta *W.*	wave-leaved	♂	or	4	jl.au	Y	C. G H	1812.	C	p l
10057	cordàta *W*	heart-leaved	♂	or	6	jl.s	Y	C G H.	1759.	S	p l Jac.schœ 2.t 218
10058	crenàta *W.*	notch-leaved	♂	or	6	jn au	Y	C. G H	1774	S	p l Bot mag 274
10059	lævigàta *B C*	polished	♂	or	3	jl au	Y	C. G. H.	1799	S	p l Bot. cab 247
10060	ruscifólia *B M.*	Butcher's Broom	♂	or	3	jl	Y	C G. H	1790	S	p l Bot mag 2128
	1527. RAFNIA. *Th*	Rafnia				*Leguminosæ.*	*Sp* 1—4.				
10061	triflóra *W*	three-flowered	♿	or	3	jn jl	Pu	C G H	1786.	S	s l Bot mag 482
	1528 ASPA'LATHUS *W*	Aspalathus				*Leguminosæ*	*Sp* 18—75				
10062	Chenopóda *W*	Goosefoot	♂	pr	3	jl au	Y	C. G. H	1759	C	p l Breyn cent t 11
10063	álbens *W*	silky	♂	pr	4	jl au	W	C G H.	1774	C	p l
10064	pedunculàta *H K.*	small-leaved	♂	pr	6	jl au	Y	C G H.	1775	S	p l Bot mag 344
10065	ericifólia *W.*	Heath-leaved	♂	pr	2	jl au	Y	C G. H.	1789	C	p l Pl man t 413 f 6
10066	asparagoìdes *W.*	Asparagus-lvd.	♂	pr	3	jl au	Y	C G H	1812.	C	p l Pluk am 425 1
10067	carnósa *W*	fleshy-leaved	♂	pr	3	my jn	Y	C G. H.	1795.	C	p l Bot. mag 1289
10068	crassifólia *B Rcp.*	bristle-pointed	♂	pr	2	jl.au	Y	C G. H	1800	S	p l Bot. rep 353
10069	ciliàris *W*	ciliated	♂	pr	2	jl au	Y	C G H	1798.	C	p l Bot. mag 2233
10070	unifl6ra *W*	single-flowered	♂	pr	3	jl au	Y	C. G H	1812	C	p l Pl man t.414 f.7
10071	subulàta *W.*	awl-leaved	♂	pr	1½	jl au	Y	C G H	1789	C	p l
10072	globósa *B Rep*	globular	♂	pr	3	jn jl	Or	C G H.	1802.	S	p l Bot rep 510
10073	araneósa *W*	cobweb	♂	pr	3	jn jl	Y	C G H.	1795	S	p l Bot mag 829
10074	indica *W.*	Indian	♂	pr	3	jl au	R	E. Indies	1759	S	p l Rhee mal 9. t 37
10075	argéntea *W*	silver-leaved	♂	pr	2	jl au	Y	C. G H	1759.	C	p.l
10076	cándicans *H K*	white	♂	pr	2	jn jl	Y	C G. H.	1774	C	l p
10077	callósa *W.*	oval-spiked	♂	pr	3	jl au	Y	C G. H	1812	C	l p Bot mag 2329
10078	mucronàta *W.*	thorny-branch	♂	pr	3	jn jl	Y	C G H.	1796.	C	l p
10079	affìnis *Thunb.*	kindred	♂	pr	3	jn jl	Y	C. G H	1822	C	l p



History, Use, Propagation, Culture,

would be, if the plants stay out till they are in bloom. Cuttings taken off at a joint, and planted in sand, without being deprived of any of their leaves, strike root readily under a hand-glass in moist heat." (*Bot. Cult* 54)

1522. *Butea.* Named in honor of the late Earl of Bute, a munificent patron of botanical science. This splendid genus, though of free growth and easy propagation, is yet rare in British collections. From B frondosa is obtained the *Gum lac* of commerce Infusions of the flowers dye cotton cloth, previously impregnated with a solution of alum, or of alum and tartar, of a beautiful yellow color The plant grows in loam and peat, and "cuttings should be taken off at a joint, and planted in a pot of sand, without being deprived of any of their leaves: one pot is enough under a hand-glass, as the leaves take up much room, and, if too confined, are apt to damp off They should be plunged in a moist heat" (*Bot Cult* 30)

1523. *Viborgia*, usually written *Wiborgia*, received its name after M. Eric Viborg, a learned and acute Danish botanist, author of several botanical treatises in his own language in the end of the eighteenth century. The species, like those of the four preceding genera, may be treated as Scottia.

1524 *Piscidia.* From *piscis*, a fish, the inhabitants of America use the bark as a fish poison This tree has spreading branches and pinnate leaves, and is very common in Jamaica, where it is reckoned one of the best timber-trees in the island. The wood is very hard and resinous, and lasts almost equally in or out of water It is of a light-brown color, coarse, cross-grained, and heavy. (*Browne.*) It makes excellent piles for wharfs The stakes soon form a good live fence The bark of the trunk is very astringent, a decoction of it stops the immoderate discharge of ulcers, especially when it is combined with the mangrove bark, it cures the mange in dogs, and would probably answer well for tanning leather (*Long*, 824) The bark of the root is used for the same purposes and with the same effects as the leaves and branches of Surinam poison, it is pounded and mixed with the water in some deep and convenient part of a river or creek, when ce it may spread itself,

10043 Leaves ternate, Petioles prickly glandular, Stem arboreous unarmed
10044 Leaves ternate oblong oval blunt

10045 Branches downy, Leaflets roundish emarginate
10046 Branches smooth, Leaflets obovate roundish blunt

10047 Leaflets and twiggy branches pubescent

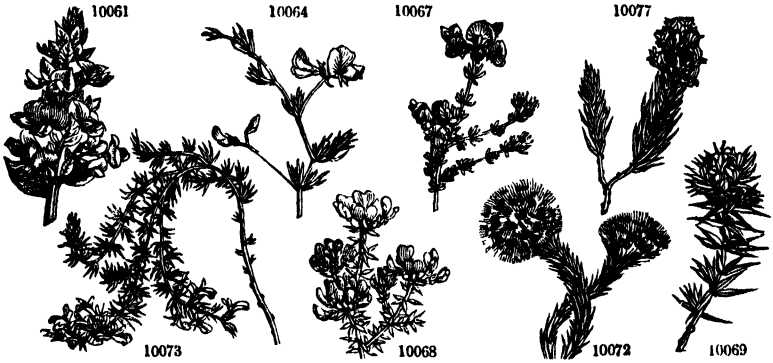
10048 Leaves unequally pinnate, Leaflets ovate

10049 Leaves cordate ovate, Ovary hairy
10050 Leaves lanceolate ovate, Ovary smooth
10051 Leaves deltoid or hastate with spiny angles

10052 Leaves sublinear acute villous beneath, Heads terminal
10053 Leaves lanceolate 3-nerved entire
10054 Leaves lanceolate many-nerved entire
10055 Leaves amplexicaul entire netted
10056 Leaves amplexicaul wavy with a reflexed mucro
10057 Leaves cordate many-nerved entire
10058 Leaves cordate many-nerved toothletted
10059 Leaves ovate cordate acuminate pungent, Stem hirsute
10060 Leaves rigid pointed pungent oblong dense

10061 Leaves ovate smooth, Branches angular, Peduncles 3 lateral 1-flowered

10062 Leaves fascicled 3-angular mucronate stiff hairy, Heads hairy
10063 Leaves fascicled filiform silvery blunt, Racemes leafy, Flowers not hairy
10064 Leaves fascicled subulate smooth, Peduncle filiform twice as long as leaf
10065 Leaves fascicled filiform blunt hairy, Flowers somewhat racemose
10066 Leaves fascicled 3-cornered mucronate hairy, Flowers lateral
10067 Leaves fascicled fleshy round smooth, Fl lateral and terminal, Flowers smooth
10068 Leaves fascicled fleshy round smooth setaceous at end, Fl capitate terminal
10069 Leaves fascicled scabrous somewhat hairy, Heads terminal
10070 Leaves fascicled filiform mucronate smooth, Flowers lateral
10071 Leaves fascicled 3-cornered mucronate smooth
10072 Leaves linear downy imbricated, Heads terminal crowded
10073 Leaves fascicled filiform lax hairy, Heads hairy
10074 Leaves quinate sessile, Peduncles 1-flowered
10075 Leaves ternate and fascicled ovate silky, Heads downy, Stem dichotomous
10076 Leaves ternate and fascicled filiform silky, Fl somewhat lateral, Vexillum naked
10077 Leaves three 3-cornered smooth, Spikes ovate
10078 Leaves ternate, Leaflets blunt, Branches spiny
10079 Leaves fascicled fleshy round smooth, Flowers lateral without bractes, Branches twiggy



and Miscellaneous Particulars.

in a few minutes the fish that lie hid under the rocks or banks rise to the surface, where they float as if they were dead, most of the large ones recover after a time, but the smaller fry are destroyed The eel is not intoxicated with common doses, though it is affected very sensibly, for the moment the particles spread where it lies, it moves off with great agility Jacquin observes that this quality of intoxicating fish is found in many other American plants

It is a very free grower in our stoves, but is seldom allowed to grow large enough to flower Cuttings root in sand under a hand-glass

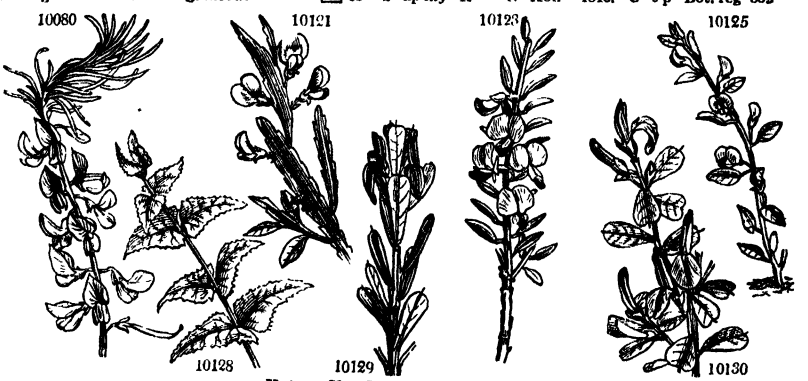
1525. *Platylobium.* From πλατυς, broad, and λοβος, a pod, in allusion to the form of the pod. Handsome free-flowering plants, which grow in sandy loam and peat, and are increased by cuttings in sand under a hand-glass, or by seeds.

1526. *Borbonia* In memory of Gaston Bourbon, Duke of Orleans, son of Henry IV of France, a great lover and patron of botany See Gastonia. Shrubs of easy culture and propagation

1527 *Rafnia* Named, according to Sir James Smith, after Mr C. G Rafn of Copenhagen, author of a Flora of Denmark and Holstein, published in 1796 and 1800, in two octavo volumes. A genus of Cape plants, separated from the Linnean Crotalaria and Liparia.

1528 *Aspalathus* A native of the island *Aspalathus* on the coast of Lycia. It was a common practice with the ancients to fix the names of places upon certain plants, as Cytisus, Lycium, and others It is not certain what plant the ancients intended by their Aspalathus Shrubs and under-shrubs, with fasciculate linear leaves, and yellow flowers, all of which grow freely in a mixture of sandy loam and peat, and young cuttings, planted in sand under bell-glasses will strike root freely, if the glasses are wiped occasionally, otherwise they are liable to damp off Some species ripen seeds freely, by which young plants are readily produced (*Bot. Cult* 140.)

1529	**SARCOPHYL'LUM** *Th*	Sarcophyllum				*Leguminosæ.*	*Sp.* 1.							
10080	carnósum *Th*	jointed-leaved		cu	3	my au	Y	C G H	1812.	C	s.l	Bot. mag. 2502		
†*1530	**CROTALA'RIA.** *W*	Crotalaria				*Leguminosæ.*	*Sp.* 40—87.							
10081	sagittális *W*	Virginian		un	1	jn jl	Y	America	1731.	S	co	Plu.sm t.169 f.6		
10082	prostráta *W en.*	prostrate		un	½	jl	Y	E Indies	1804	S	co			
§10083	floribunda *B C*	many-flowered		pr	2	jl.au	Y	C G H	1810.	C	co	Bot. cab. 509		
10084	rubiginósa *W*	ferrugineous		un	½	jl	Or	E Indies	1807	S	co			
10085	platycárpa *Link*	flat-podded		un	1	jl	Y	N Amer	1823	S	co			
10086	anthylloides *H K*	large-fl.-cupped		or	¼	au s	Y	E. Indies	1789	C	s.l			
10087	tetragóna *H K.*	square-stalked		un	2	o n	Y	E. Indies	1806	S	s.l	Bot. rep. 593		
10088	paulina *Schranck*	St Pauls		un	2	au s	Y	Brazil	1823.	S	co			
10089	parviflóra *Roth*	small-flowered		un	2	au s	Y	E Indies	1817.	S	co			
10090	benghalénsis *P S*	Bengal		un	2	jn jl	Y	E. Indies	1806	S	s l	Plu.sm t 169 f 5		
10091	júncea *W*	striated-stalked		un	1	jn jl	Y	E. Indies	1700	S	p.l	Bot. rep. 422		
10092	diffúsa *Link*	diffuse		un	¾	jn jl	Y	.....	...	S	co			
10093	nepalénsis *Link*	Nepal		un	1	jn jl	B	Nepal	1823.	S	co			
10094	fenestráta *B M.*	window-calyxed		un	2	jn jl	Y	E. Indies	1815	S	p l	Bot mag. 1933		
10095	sericea *W.*	silky		un	1½	jn jl	Y	E Indies	1807.	S	p l			
10096	retúsa *W*	wedge-leaved		un	1	jn jl	Y Pu	E Indies	1731.	S	p l	Bot reg 253		
10097	verrucósa *W*	blue-flowered		un	1	jl au	B	E Indies	1731	C	r m	Bot rep 308		
10098	micans *Link*	glittering		un	2	jl au	Pa Y	.....	1820	C	co			
10099	curtáta *Link.*	short-keeled		un	1	ap my	Y	. ....	...	S	co			
10100	púlchra *H K*	short-podded		un	2	mr my	Y	E Indies	1800	S	p l	Bot. rep 601		
10101	semperflórens *P S*	ever-blowing		un	3	mr s	Y	E Indies	1816.	S	p l	Vent cels t 17		
10102	hírta *W en*	hairy		un	1½	jn au	Y	E Indies	1816	S	p l			
10103	bifióra *W*	two-flowered		un	½	jl au	Y	E Indies	1790	S	p.l	Bur ind t 48 f 2		
10104	micrántha *Link.*	small-flowered		un	1	jl au	Y	Ceylon	1823	S	co			
10105	vitellina *Ker*	Yolk of egg		un	2	my jn	Y	Brazil	1819	C	co	Bot. reg 447		
10106	pulchérrima *B. M*	Mysore		un	2	jn jl	Y	Mysore	1814	C	co	Bot mag 2027		
10107	paniculáta *W.*	panicled		or	3	...	Y	E Indies	1807	C	l p			
10108	lotifólia *W*	Lotus-leaved		un	3	jn jl	Y a	Jamaica	1732	S	co	Dil el t 102 f 121		
10109	laburnifólia *W.*	Laburnum-lvd		un	5	jl s	Y	E Indies	1739	S	co	Rhee mal 9 t 27		
§10110	cordifólia *W*	heart-leaved		un	8	ap jn	D Pu	C G H	1790	C	p l	Bot. cab 1158		
10111	purpúrea *H K.*	dark-purple		un	4	mr my	Pu	C G H	1790	C	p l	Bot reg 128		
10112	pulchélla *H K.*	large-flowered		un	3	jl au	Y	C G H	1800	C	p l	Bot mag 1699		
10113	Saltiána *B Rep*	Salt's		un	3	jn jl	Y	Abyssinia	1810	C	p l	Bot. rep 648		
10114	axillàris *W*	axil-flowered		un	1½	jl au	Y	Guinea	1781	S	p l			
10115	orixénsis *W en.*	strigose		un	1½	jl au	Y	E Indies	1816	S	p l			
10116	incanéscens *W*	spreading		un	6	jn o	Y	C G H	1774	S	s p	Jac vind 3 t 64		
10117	incána *W*	hoary		un	2	jn jl	G Y	W Indies	1714	S	s p	Bot reg. 377		
10118	pállida *W*	pale-flowered		un	2	jn jl	Pa Y	Africa	1775	S	s p			
10119	angustifólia *W*	narrow-leaved		un	1½	my s	Pa Y	C G H	1815	S	s p	Jac schœ 2 t 219		
10120	quinquefólia *W.*	five-leaved		un	1	jn jl	Y	E. Indies	1792	C	s p	Rhee mal 9 t 28		
1531	**BOSSIÆ'A** *Sm*	Bossiæa.				*Leguminosæ*	*Sp.* 8—12							
10121	Scolopéndrium *H K*	Plank-plant		or	10	my jl	Y	N S W	1792	C	s l.p	Bot rep 1 1		
10122	rúfa *H K*	red-flowered		or	6	jn s	R	N Holl	1803	C	s l p	Bot cab 1119		
10123	heterophylla *V*	various-leaved		or	3	my d	Y	N S W	1792	C	s l p	Bot mag 1144		
10124	linophýlla *H K*	narrow-leaved		or	3	jl s	Or	N Holl	1803	C	s l p	Bot mag 2491		
10125	prostráta *H K*	procumbent		or	¼	jl s	Y	N S W	1803	C	s l p	Bot mag. 1493		
10126	cinérea *H K*	downy sharp-lv		or	3	my jl	Y	V Di Isl	1803	C	s l p	Bot reg 306		
10127	microphýlla *H K*	small-leaved		or	3	my au	Y	N. S. W	1803	C	s l.p	Bot cab. 656		
†1532	**SCOTTIA.** *R Br*	Scottia				*Legu.inosæ.*	*Sp* 1							
10128	dentáta *R Br*	tooth-leaved		or	3	jn s		N Holl	1803	C	s p	Bot. cab. 1458		
1533	**TEMPLETO'NIA** *H K*	Templetonia				*Leguminosæ.*	*Sp* 2							
10129	retúsa *H K*	wedge-leaved		or	2	mr jn	R	N Holl	1803	C	s p	Bot. mag 2334		
10130	glaúca *B M.*	glaucous		or	2	ap my	R	N Holl	1818.	C	s p	Bot. reg 859		



History, Use, Propagation, Culture,

1529. *Sarcophyllum* From σαρξ, flesh, and φυλλον, a leaf The leaves are thick and fleshy. A somewhat succulent plant, easily injured by over-watering, but otherwise not difficult to preserve or increase

1530 *Crotalaria* Κροταλον was the name of a noisy Greek musical instrument, similar to the cymbals of the present day The pods of this genus are inflated, and rattle, when shaken, in a similar manner. The species are all of easy culture, mostly free-flowerers; but they are shabby plants under cultivation, and possess no good quality which can render them objects of interest or beauty

1531. *Bossiæa.* Named by Ventenat, after M Bossieu-Lamartinière, who accompanied the unfortunate La Pérouse in his voyage round the world This beautiful genus, according to Sweet, "thrives best in an equal mixture of sandy loam and peat, if not very sandy, some sand must be added to it to have the plants in health. The pots must be well drained with broken potsherds, as nothing injures them more than too much

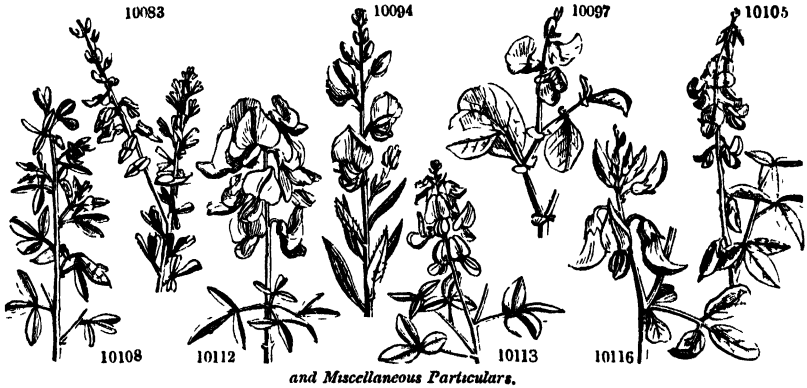
10080 The only species

10081 Leaves simple obl. lanceolate, Stipules lanceolate acuminate decurrent, Racemes opposite the leaves
10082 Leaves simple lanc. elipt. blunt downy beneath, Racemes opposite the leaves
10083 Leaves very small ternate glaucous, Racemes few-flowered, Vexillum reflexed
10084 Leaves simple lanc villous, Upper stipules lanc. decurrent, Racemes opposite the leaves, Cal villous
10085 Branches winged upwards, Lower leaves obl upper lanc acute hairy, Racemes lateral
10086 Leaves simple lin lanc acute villous beneath, Flowers and pods inclosed in hairy calyx
10087 Leaves simple long-lanc Pods downy, Raceme terminal, Stem square
10088 Leaves obl lanceolate silky beneath, Fl racemose, Bractes linear much shorter than pedicel
10089 Leaves simple lanc Upper stipules decurrent with 2 short teeth, Racemes opposite the leaves
10090 Leaves lanceolate subsessile. Lower lip of cal 3-parted beyond the middle, Stem virgate simple
10091 Leaves simple lanc subsessile, Pods smooth, Raceme terminal, Stem furrowed
10092 Leaves lanceolate blunt hairy, Fl terminal, Calyx hairy as long as corolla
10093 Leaves lanceolate, Raceme terminal, Cal very villous as long as corolla
10094 Leaves simple ov. lanceolate silky ciliated, Standard large erect pointed
10095 Leaves simple lanc beneath, Pods silky, Raceme terminal, Stem furrowed
10096 Leaves simple obl cuneiform retuse, Raceme terminal
10097 Leaves simple ovate retuse, Stipules lunate declinate, Raceme term Branches square
10098 Leaflets 3 oval acute, Hairs shining scattered, Racemes opposite the leaves
10099 Leaflets 3 oval blunt with scattered hairs, Raceme terminal long, Keel shorter than vexillum
10100 Leaves simple obovate oblong silky on each side, Pod 4-seeded length of calyx
10101 Stems round striated, Leaves oval emarginate mucronate, Stipules lunate amplexicaul
10102 Leaves simple lin-lanceolate blunt hairy, Pedunc terminal subsolitary, Stem branched diffuse
10103 Leaves simple obl blunt hairy, Stems prostrate herbaceous, Pedunc 2-3-fl axillary
10104 Leaflets 3 oblong blunt mucronate with scattered hairs beneath, Raceme terminal, Calyxes silky
10105 Leaves ternate, Leaflets oval-lanc acute twice as long as villous petiole, Pods pendulous
10106 Leaves obovate cuneate silky, Racemes term Bractes and calyx colored
10107 Leaves obl blunt silky villous, Stipules linear subulate reflexed, Panic terminal bracteate
10108 Leaves ternate, Leaflets cuneiform emarginate silky beneath, Peduncles axillary solitary 1-flowered
10109 Leaves ternate ovate acuminate smooth, Stipules none, Raceme terminal, Pods stalked pendulous
10110 Leaves ternate obcordate mucronate, Flowers corymbose, Stem shrubby
10111 Leaves ternate, Leaflets obovate retuse, Racemes terminal
10112 Leaves ternate, Leaflets linear lanceolate acute half as long again as petiole downy beneath
10113 Leaves ternate on long stalks, Leaflets oval downy, Racemes axillary lax, Standard blunt
10114 Leaves ternate obl lanceolate acute silky beneath, Stipules lanceolate subulate, Pedunc axill 1-flowered
10115 Leaves ternate obovate strigose beneath, Stipules lanceol and bractes ovate reflexed, Racemes terminal
10116 Leaves ternate obovate, Stipules leaf-like stalked, Racemes terminal, Pods stalked
10117 Leaves ternate oval villous beneath, Racemes spiked, Keel downy at edge, Pods sessile hairy
10118 Leaves ternate lanceolate smooth, Racemes terminal spiked
10119 Leaves ternate lanc. hoary silky shorter than petiole, Raceme terminal
10120 Leaves quinate

10121 Branches flat linear leafless, Denticulations flower-bearing, Keel naked, Calyx smooth
10122 Branches flat linear leafless, Denticulations flower-bearing, Keel fringed, Calyx smooth
10123 Branches leafy compressed, Leaves obovate and linear flat, Pod many-celled with spongy septa
10124 Branches leafy compressed, Leaves linear with recurved edges, Pod 1-celled
10125 Branches leafy filiform, Leaves oval smooth, Stipules shorter than petiole, Pod 1-celled
10126 Branches leafy round, Stem erect much branched, Leaves ovate-lanc rough above
10127 Branches leafy spiny round, Leaves obcordate cuneiform

10128 The only species

10129 Leaves green retuse
10130 Leaves glaucous blunt



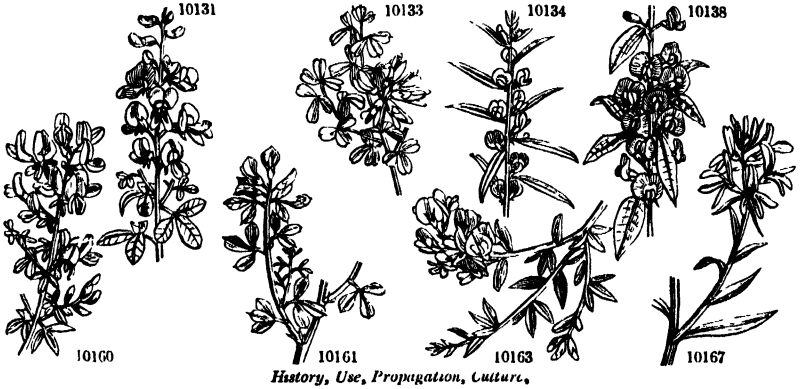
and Miscellaneous Particulars.

water. Cuttings, not too ripe, will strike root if planted in sand under a bell-glass, not too close together, as they are apt to damp, when rooted, they must be potted off in little pots and kept in a close frame, and hardened to the air by degrees." (*Bot. Cult* 151)

1532. *Scottia.* Named in memory of Robert Scott, M. D, formerly professor of botany at Dublin. A shrub found by Mr Brown upon the south-west coast of New Holland. Young cuttings root in sand under a bell-glass.

1533. *Templetonia.* Named after John Templeton, Esq., of Orange Grove, near Belfast, a gentleman to whom the editor of the English Botany was under frequent obligations for Irish plants during the progress of that work.

1534 GOOD'IA. *R. Br*	Goodia				*Leguminosæ*		*Sp* 2.						
10131 lotifólia *H. K.*	smooth		or	3	ap jl	Y	V Di	Isl. 1793.	S	s.p	Bot. mag. 958		
10132 pubéscens *H K.*	downy		or	3	ap jl	Y	V Di.	Isl. 1805	S	s.p	Bot. mag. 1310		
1535. LODDIGE'SIA *B M*	Loddigesia.				*Leguminosæ*. *Sp.* 1.								
10133 oxálidifólia *B M*	Oxalis-leaved		pr	1½	my s	Pa pu	C	G. H.	1802.	C	p.l	Bot. mag. 965	
†1536 HO'VEA *H K*	Hovea				*Leguminosæ*		*Sp.* 5						
10134 lineáris *H K*	linear-leaved		or	3	mr jl	Pu	N	S W.	1796	S	s.p	Bot. reg 463	
10135 longifólia *H K*	long-leaved		or	3	jn s	Pu	N	S. W.	1805.	S	s p	Bot. reg. 614	
10136 lanceoláta *B M*	spear-leaved		or	3	mr jl	Pu	N	Holl	1805	S	s p	Bot. mag 1624	
10137 ellip'tica	oval-leaved		or	3	mr.jl	Pu	N	Holl.	1817	C	s p	Bot. cab. 1450	
10138 Cel'si *Bonpl.*	Cels's		or	4	mr jl	B	N	Holl.	1818.	C	s p	Bot. reg 280	
†1537 SPAR'TIUM *W*	Broom				*Leguminosæ*.		*Sp* 21—37						
10139 junceum *W*	Spanish		ec	6	jl s	Y	S	Europe	1548	S	co	Bot. mag 85	
β flore-pl. no	*double-flowered*		or	6	jl s	Y	S	Europe	1548	S	co		
10140 monospermum *W*	white single-seed		or	4	jn jl	W	S	Europe	1690	S	p l	Bot mag 683	
10141 sphærocárpon *W*	yellow single-seed.		or	4	jn jl	Y	S	Europe	1731	S	p.l	Reneal spec. t 33	
10142 prócerum *W en*	tall		or	8	jn jl	Y	Portugal		1816.	C	s l		
10143 congéstum *W en*	close-branched		or	4	ap jl	Y	Teneriffe		...	C	s l		
10144 virgátum *W*	long-twigged		or	5	mr jn	Y	Madeira		1777.	C	p l	Jac ic 1 t 147	
10145 púrgans *W*	purging		or	4	jn jl	Pa Y	S	France	1768.	S	p l	Bull herb t.115	
10146 umbellátum *W*	umbelled		or	3	ap jn	Y	Barbary		1799	C	p l	Desf atl 2 t 180	
10147 Scórpius *W*	Scorpion		or	4	mr ap	Y	S	Europe	1570	S	p l	Dend brit. 78	
10148 sericeum *Vent*	silky		or	3	my au	Y	Mogadore		1812	C	p l	Vent choix t 17	
10149 multiflórum *W*	white Portugal		or	6	my	W	Portugal		1752	S	co	Duham arb 2 23	
10150 angulátum *W*	small-flowered		or	3	my jn	Y	Levant		1739	C	p l	Vent. cels 87	
10151 pátens *W*	woolly-podded		or	4	jn jl	Y	Portugal		1752	S	p l	Cav ic. 2. t. 176	
10152 pilocárpum *Link*	hairy-fruited		or	4	jn jl	Y	.....		1823	S	p l		
10153 cinéreum *W*	cinereous		or	4	jn jl	Y	S	Europe	...	S	co	Dend brit 76	
10154 nubigenum *W*	cluster-flower'd.		ft	6	my au	W	Teneriffe		1779	C	p l		
10155 linifólium *W*	Flax-leaved		or	3	ja jn	Y	Spain		1739	C	p l	Bot. mag 442	
10156 scopárium *W*	common		ec	6	ap jn	Y	Britain	dry hil	S	co	Eng bot 1339		
10157 radiátum *W.*	starry		or	1½	jn jl	Y	Italy		1758	S	s p	Bot mag 2260	
10158 férox *W*	fierce		or	1½	jn jl	Y	Barbary		1800	C	p.l	Bot reg 368	
10159 spinósum *W*	prickly		or	2	jn jl	Y	S	Europe	1596	C	p l	Lob ic. 2 p. 95	
1538 GENIS'TA *W*	Genista.				*Leguminosæ*		*Sp* 21—42						
10160 canariénsis *W*	Canary		ft	2	my s	Y	Canaries		1656	S	s l	Bot. reg 217	
10161 cándicans *W.*	hoary		or	2	ap jl	Y	Spain		1735	C	s l	Dend. brit. 80	
10162 viscósa *W*	clammy		or	2	ap jl	Y	Canaries		1815	C	s.l		
10163 triquetra *W.*	triangular		or	3	my jn	Y	Corsica		1770	C	s p	Bot. mag 314	
10164 sagittális *W*	jointed		or	½	my jn	Y	Germany		1570	L	co	Jac. aust.3 t 209	
10165 trianguláris *W*	three-sided		or	2	my jn	Y	Hungary		1815	C	co	Pl rar hu 2.t 153	
10166 tinctória *W.*	Green-weed		or	3	jn au	Y	Britain	dry pa	S	co	Eng bot 44		
10167 sibírica *W*	Siberian		or	2	jn au	Y	Siberia		1785	L	co	Jac vind 2 t.190	
10168 ováta *W*	oval-leaved		or	3	jn au	Y	Hungary		1816	C	co	Pl.rar hung t.83	
10169 scariósa *Viviani*	scariose		or	6	jn jl	Y	Italy		1821	C	co	Bot. cab 1135	



History, Use, Propagation, Culture,

1534 *Goodia* In memory of Peter Good, an industrious gardener employed by the Kew garden in collecting seeds in New Holland, where he died.

1535 *Loddigesia* Named in compliment to Mr Conrad Loddiges, a successful cultivator of plants, an assiduous collector, and a most worthy man, whose virtues are inherited by his sons

1536 *Hovea* In honor of Mr Antony Pantaleon Hove, a Polish botanist, who travelled in the Crimea and Persia, whence many plants were sent to Kew garden He is still alive, and naturalized in England. Pretty plants, easily cultivated in sandy loam and peat, and rooted in sand under a hand-glass

1537. *Spartium* From *σπαρτον*, cordage; the earliest ropes were made of this and similar tough plants The species are shrubs thick-set with verdant flexible rush-like twigs, which are very ornamental in winter, and generally profusely covered with shewy white or yellow odoriferous and mellifluous blossoms in summer. S junceum is grown as a green food for sheep in the south of France, and there and in Spain it affords a thread from its fibres, which is sometimes wove into cloth, but more generally twisted into cordage. Bees are very fond of the flowers, as they are of those of most of the species.

S monospermum, is a very handsome shrub, remarkable for its numerous snow-white flowers Osbeck remarks, that it grows like willow-bushes along the shore of Spain, as far as the flying sands reach, where scarcely any other plant exists except the Ononis repens, or creeping Restharrow. The use of this shrub is very great in stopping the sand The leaves and young branches are delicious food for goats It converts the most barren spot into a fine odoriferous garden by its flowers, which continue a long time It serves to shelter hogs and goats against the scorching heat of the sun The twigs are used for tying bundles, and all kinds of herbs that are brought to market are fastened together with them Forskahl found it in Arabia; and Desfontaines in Barbary, on the sandy coast. The Spaniards call it *Retamas*, from the Arabic name *Rætam.*

10131 Leaflets obovate and calyxes smooth, Pod varicose
10132 Leaflets obovate cuneate and calyxes downy, Pod smooth

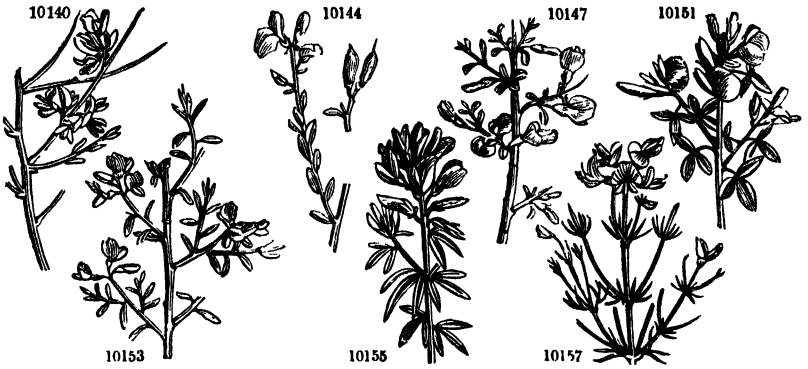
10133 The only species

10134 Leaves linear hairy beneath, Pods smooth
10135 Leaves long linear, beneath veiny, Pods downy
10136 Branches twiggy, Leaves lanc mucronate downy beneath, Fl. axill twin
10137 Leaves elliptic oblong
10138 Leaves lanc somewhat rhomboid blunt at end mucronate, Peduncles axillary many-flowered

10139 Branches opposite round flowering at end, Leaves lanceolate

10140 Branches round striated, Racemes lateral few-fl Flowers subaggregate, Leaves lanceolate silky
10141 Branches round striated, Racemes lateral many-fl Flowers remote, Leaves lanc sessile a little hairy
10142 Branches round striated, Fl solitary axillary, Pods villous, Leaves lanceolate hairy
10143 Branches round striated very close, Fl terminal racemose, Vexillum smooth, Leaves lanc silky
10144 Branches round striated, Fl axill solitary subracemose, Standard and keel downy, Lvs obl lanc. silky
10145 Branches round striated, Fl axillary solitary, Leaves lanc silky subsessile
10146 Branches round striated, Fl term capitate, Leaves lin lanc silky
10147 Branches round striated spreading spiny, Pedunc axill many-fl Leaves obl acute silky
10148 Leaves lanc silky beneath, Corolla silky, Branches erect round
10149 Leaves ternate and simple silky, Twigs straight striated flowering on all sides
10150 Leaves solitary and ternate linear lanceolate hoary, Branches hexangular flowering at the ends
10151 Leaves ternate stalked obovate, Branches round striated, Lateral flowers twin nodding
10152 Branches angular, Leaves simple lanceolate silky beneath, Fl racemose, Pods hairy
10153 Branches round with ten furrows, Flowers axillary solitary downy
10154 Leaves ternate lanc hairy stalked, Fl lateral fascicled, Pods smooth, Branches round striated
10155 Leaves ternate sessile linear silky beneath, Raceme terminal, Branches round furrowed
10156 Leaves ternate and solitary oblong, Fl axillary, Pods hairy at edge, Branches angular
10157 Leaves ternate linear, Petioles dilated persistent, Racemes capitate term Branches angul opp clustered
10158 Leaves ternate and simple oblong mucronate, Raceme terminal, Branches striated round spiny
10159 Leaves ternate obovate, Peduncles axillary, Cal. and pods smooth, Branches angular spiny

10160 Leaves tern obl downy beneath with spreading hairs, Pedunc many-fl terminal, Branches angular
10161 Leaves ternate obovate downy with closely pressed hairs, Pedunc many-fl terminal, Branches angular
10162 Leaves ternate obl smooth, Racemes terminal, Cal and pods glandular viscid, Branches round striated
10163 Leaves ternate upper simple, Branches triquetrous procumbent
10164 Branches 2-edged membranous jointed, Leaves ovate lanceolate
10165 Leaves lanceolate mucronate smooth, Branches 3-cornered ascending, Pods smooth
10166 Leaves lanceolate smooth, Branches round striated erect, Pods smooth
10167 Leaves lanceolate smooth, Branches equal round erect
10168 Leaves oblong ovate and pods hairy, Branches round striated
10169 Quite smooth, Leaves not ciliated, Cor 5 lines long, Calyx smooth

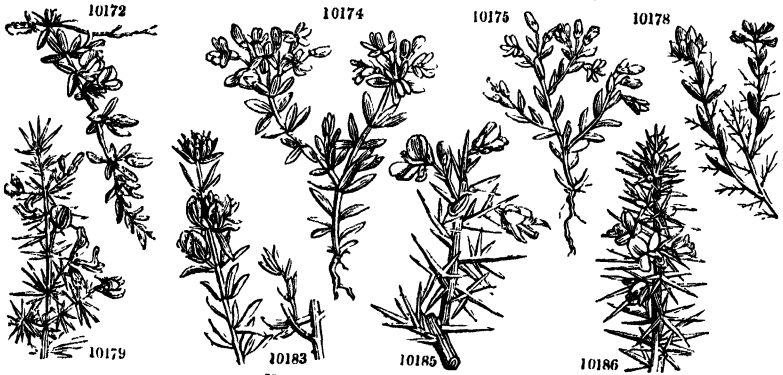


and Miscellaneous Particulars

S scoparium, though in some places a troublesome weed in old pastures, is a very ornamental shrub in garden scenery it is also useful in agriculture, domestic economy, and medicine It is sometimes used as winter food for sheep, frequently for thatching cottages and ricks, and as litter Bees are fond of the flowers the flower-buds, just before they become yellow, are pickled in the manner of capers · the branches are said to be capable of tanning leather, and of being manufactured into coarse cloth; when tender, they are mixed with hops in brewing the old wood furnishes the cabinet-maker with a beautiful material for veneering The twigs, when bruised, smell disagreeably, which perhaps may be one reason why our broom is generally rejected by cattle (*Curtis*), but they have also a nauseous bitter taste The plant when burnt affords a tolerably pure alkaline salt Broom tops are diuretic and cathartic, the seeds are said to be emetic The effects of this plant have been very long known to the common people, and both Mead and Cullen found them useful in dropsy The usual mode of exhibiting them is in the form of decoction, made by boiling the green tops in water Speaking of this decoction, of which two table spoonfuls were given every hour till it operated by stool, Cullen says, "it seldom fails to operate both by stool and urine, and by repeated exhibition every day, or every second day, some dropsies have been cured. (*Thompson's London Dispensatory*, 514)

1338 *Genista Gen*, signifies, in Celtic, a small bush, whence also *Genet*, French The species are shrubs or undershrubs, some of them evergreen, and many with numerous flexible rush-like green twigs like the brooms. They are of easy culture and free flowerers. G. tinctoria is common in most parts of Europe, in unimproved pastures on dry gravelly soils. When cows feed on it, their milk, and the butter or cheese made from it, are said to be very bitter A bright yellow color may be prepared from the flowers, and for wool that is to be dyed green with woad, the dyers prefer it to all others. A dram and a half of the powdered seeds operates as a mild purgative. A decoction of the plant is sometimes diuretic, and therefore

10170 **flórida** *W.*	Spanish		or	6	jn au	Y	Spain	1752	S	co		
10171 **procúmbens** *W.*	procumbent		or	1½	jn au	Y	Hungary	1816.	C	co		
10172 **decúmbens** *W.*	trailing		or	½	my jn	Y	France	1775.	L	p l	Bot cab 718	
10173 **pilósa** *W*	hairy green-weed		or	6	my jn	Y	England san he		S	co	Eng. bot. 908	
10174 **diffúsa** *W.*	diffuse		or	3	my jn	Y	Italy	1816	C	co	Jac ic 3. t. 555	
10175 **sericea** *W*	silky		or	3	my.jn	Y	Austria	1812.	S	s l	Jac ic 3 t 556	
10176 **anglica** *W.*	Petty whin		or	2	my jn	Y	Britain mou he		S	co	Eng bot 132	
10177 **germánica** *W*	German		or	2	jn au	Y	Germany	1773	L	co		
10178 **hispánica** *W*	dwarf-prickly		or	2	jn jl	Y	Spain	1759	C	co	Cav ic 3, t 211	
10179 **lusitánica** *W*	Portugal		or	2	mr.my	Y	Portugal	1771	C	co	Bot. rep 419	
10180 **bracteoláta** *Link*	bracteolate		or	2	mr.my	Y	.....	1822.	C	co		
1539 **LEBECK'IA** *W*	Lebeckia				*Leguminosæ.*		*Sp* 4—12					
10181 **contaminàta** *W.*	narrow-leaved		or	5	ap my	Br	C G H	1787	S	p l	Pluk. am. 412.5	
10182 **sericea** *W*	silky		or	2	ap	Y	C G H.	1774	S	p l		
10183 **cytisoides** *W*	Cytisus-leaved		or	3	ap	Pk	C G H	1774	S	p l	Com.hor.2 t 107	
10184 **subternàta** *Link*	yellow-flowered		or	3	jn jl	Y	C G H.	1824.	C	co		
†1540 **U'LEX** *W.*	Furze				*Leguminosæ*		*Sp* 2					
10185 **europæ'us** *W*	common		ag	6	ap au	Y	Britain san he.		S	co	Eng. bot 742	
10186 **nánus** *W*	dwarf		or	2	au d	Y	Britain dry he.		S	co	Eng bot 743	
1541 **ONO'NIS.** *W*	Rest-Harrow.				*Leguminosæ.*		*Sp* 24—73					
10187 **antiquórum** *W.*	tall	△	un	1	jn jl	Pu	S. Europe	1790	D	co	Lob. ic 28	
10188 **spinósa** *W*	common	△	un	1	jn au	F	Britain	...	D	co	Eng bot 682	
10189 **hircína** *W.*	stinking	△	un	1½	my au	R	Italy	1596.	D	co	Jac vind 1 t 93	
10190 **répens** *W*	creeping	△	un	1	jn au	Pk	Europe	...	D	co	Dill elt t 25 f 28	
10191 **Colúmnæ** *W*	small-flowered	△	un	1	jn jl	Y	S. Europe	1732	D	co	Jac aust 3 t 240	
10192 **mitissima** *W*	cluster-flowered	○	un	1	jn jl	Pu	Portugal	1732	S	co	Dill elt t 24 f 27	
10193 **alopecuroides** *W.*	Fox-tail	○	un	¾	jl au	Pu	Portugal	1696	S	co	Lap pyr 1 t 9	
10194 **variegáta** *W*	variegated	○	un	½	jl au	Y	Spain	1784	S	co	Dest atl 2 t 185	
10195 **pubéscens** *W*	downy	○	un	1	jn au	Pu	S Europe	1680	S	co		
10196 **cérnua** *W*	hanging podded		un	2	jl s	Y	C G H	1774	C	co	Com hort 2 t 82	
10197 **geminàta** *W*	two-flowered		un	1½	jl s	Pk	C G H	1787.	S	p l		
10198 **reclinàta** *W*	spreading	○	un	½	jn au	St	S Europe	1800	S	co		
10199 **cenisia** *W*	narrow-leaved	△	un	½	jn au	Pk	Italy	1759.	D	co	Al ped 1 t 10 f 2	
10200 **vaginàta** *P S*	sheathed		un	2	jn au	Y	Egypt	1815	C	co	Vent cels t 32	
10201 **Cherléri** *W*	dwarf	△	un	½	jn jl	Pu	S Europe	1771	D	l p	Bau h. 2. 394 1	
10202 **viscósa** *W*	clammy	○	un	1	jl au	Y	S Europe	1739	S	s l	Barr ic 1299	
10203 **ornithopodioides** *W*	Bird's-foot	○	un	1½	jl au	Y	Sicily	1713	S	co	Cav. ic. 2. t 192	
10204 **pínguis** *W*	greasy		un	1½	jl	Y	S Europe	1739	C	co		
10205 **Nátrix** *W*	yellow-shrubby		un	1½	my s	Y	S Europe	1683.	S	p l	Bot. mag 329	
10206 **hispánica** *W*	Spanish		or	1½	my s	Y	Spain	1799	C	p l		
β oligophýlla Tenore	few-leaved		or	1½	my.s	Y	Naples	1823	C	p l	Bot mag 2450	
10207 **tridentáta** *W.*	three-toothed		or	1½	jn au	Pu	Spain	1752	C	p l	Cav ic 2 t 152	
10208 **crispa** *W*	curl-leaved		un	2	jn au	Y	Spain	1739.	S	p l	Magn mons t 17	
10209 **fruticósa** *W*	shrubby		pr	2	my jn	Pk	S France	1680.	S	s l	Bot mag 317	
10210 **rotundifólia** *W*	round-leaved		un	1	my jl	Pk	Switzerl	1570.	C	s.l	Bot mag 335	
*1542 **ANTHYL'LIS** *W*	Kidney Vetch				*Leguminosæ*		*Sp* 14—35					
10211 **tetraphýlla** *W*	four-leaved	○	or	1	jl au	W	S Europe	1640	S	co	Bot mag 108	
10212 **Vulnerária** *W*	common	△	or	½	my au	Y	Britain ch pas		D	s l	Eng bot 104	
β rúbra	red-flowered	△	or	½	my au	R	.....	...	D	s l		



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has proved serviceable in dropsical cases A salt prepared from the ashes is recommended in the same disorder.

G. *triquetra* is the handsomest hardy species it is evergreen, and produces a vast profusion of bloom freely in sand under close cover

1539. *Lebeckia* Named by Thunberg possibly in honor of some forgotten botanist Young cuttings root

1540. *Ulex.* A word of very obscure meaning De Theis derives it from *ac*, a point in Celtic. U europæus, *Jonc-marin*, Fr., is a beautiful evergreen shrub, which flowers freely, both when wild and cultivated, the greater part of the year. It abounds in some places, and there it is despised by the common people, but the greatest botanists have admired its deep green shoots and leaves, brilliant yellow flowers, and tufted picturesque shape About Petersburg, it forms one of their most valuable greenhouse plants, flowering in winter. Linnæus lamented that he could hardly preserve it alive in a greenhouse. Many parts of Germany are wholly destitute of the furze bush, insomuch that Dillenius was in a perfect extasy when he first saw our commons covered with its golden flowers And Gerard relates, that about Dantzic, Brunswick, and in Poland, there was not a branch of it growing, except some few plants and seeds that he sent, which were most curiously kept in their fairest gardens As an agricultural plant the furze has been sown in several parts of the island as hedges, but excepting where it occupies a breadth of ten or twelve feet on a raised mound, it does not last long, getting naked below. Sown on a mound the sides may be cut, and the prunings used as fuel or as green food, and the fence thus rendered close at bottom and durable. It is sown in fields, and

10170 Leaves lanceolate silky, Branches striated round, Racemes 1-sided
10171 Leaves lanceolate acute, Pedunc. axill 3 longer than leaves, Cor smooth, Branches striated round
10172 Leaves lanceolate blunt silky beneath, Pedunc. axillary as long as leaf, Cor silky, Branches angular
10173 Leaves lanceolate complicate, Pedunc. axill very short, Cor. hairy, Stem warted striated procumbent
10174 Leaves lanceolate smooth subciliate, Pedunc axillary, Cor smooth, Branches 3-cornered procumbent
10175 Leaves lanceolate silky beneath, Fl terminal somewhat racemose, Cor silky, Branches erect round
10176 Spines simple or compound, Flowering branches unarmed, Leaves oblong smooth, Racemes leafy term
10177 Spines warted compound, Fl branches unarmed, Lvs lanc hairy, Racemes term naked, Keel pubesc.
10178 Spines compound pungent, Leaves lanceolate villous, Racemes terminal subcapitate
10179 Stem leafless, Spines crossing each other
10180 Leaflets ternate obovate, Racemes short, Bractes linear under the flower

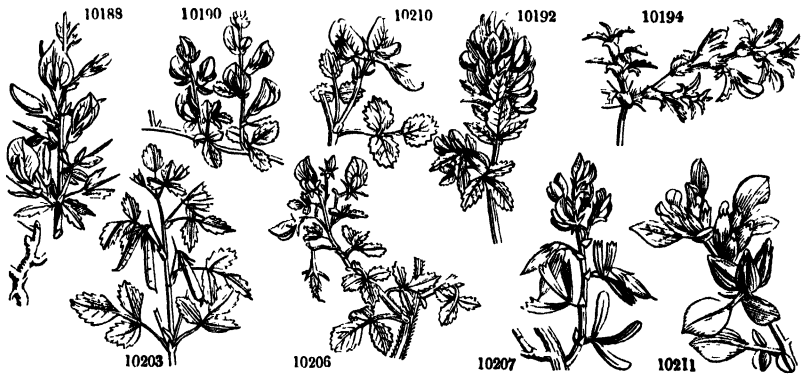
10181 Leaves simple linear filiform smooth, Flowers umbelled
10182 Leaves ternate silky, Leaves linear, Flowers racemose
10183 Leaves ternate villous, Raceme long terminal
10184 Leaves simple binate or ternate sessile lanceolate acute rough

10185 Teeth of cal conniving, Bractes ovate loose
10186 Teeth of cal distant, Bractes minute appressed

10187 Fl solitary larger than leaflet, Lower leaves ternate lanceolate toothed at end, Branches spiny smooth
10188 Fl twin axillary, Lower leaves ternate lanc serrate, Branches spiny villous
10189 Fl twin, Lower leaves ternate ellipt serrate pubescent, Stem unarmed villous viscid
10190 Fl solitary axill. Lower leaves ternate roundish serrate, Branches ascending spiny villous
10191 Fl subsess lateral, Leaves ternate obl pubes. Stipules lanc toothletted, Cal scarious longer than cor.
10192 Fl sessile spiked, Bractes stipular ovate ventricose scarious imbricated
10193 Fl subsess lateral spiked, Leaves simple ovate blunt, Stipules dilated, Cal larger than smooth corolla
10194 Fl somewhat stalked axill Lvs simple obov striated serrated, Stipules ovate toothed, Stem procumbent
10195 Pedunc unarmed very short, Upper leaves simple, Stipules ovate lanc entire
10196 Racemes straight, Leaves cuneiform, Pods nodding linear recurved
10197 Leaves ternate obovate, Pedunc lateral 2-flowered
10198 Pedunc unarmed 1-fl Leaves ternate roundish crenate, Pods cernuous
10199 Pedunc unarmed 1-fl Leaves ternate cuneate, Stipules serrate, Stems prostrate
10200 Pedunc 1-fl awned, Leaves sessile ternate, Stipules sheathing toothed
10201 Pedunc 1-fl awned, Leaves tern cuneate toothed at end villous viscid, Cal larger than corolla
10202 Pedunc 1-fl awned length of leaves, Leaves simple oblong serrated viscid lower ternate
10203 Pedunc 2-fl awned shorter than petiole, Leaves tern oblong, Pods linear cernuous
10204 Pedunc 1-fl awned longer than leaf, Awns length of cor Leaves ternate lanc serrated at end
10225 Pedunc 1-fl awned longer than leaf, Leaves ternate viscid obl toothed at end
10206 Pedunc awned about 1-fl. Leaves all ternate channelled recurved wholly serrated

10207 Shrubby, Leaves tern linear fleshy 3-toothed, Pedunc 2-flowered
10208 Shrubby, Leaves tern roundish wavy toothed viscid, Pedunc 1-flower unarmed
10209 Shrubby, Leaves sessile ternate lanceolate serrated, Stipules sheathing, Pedunc 3-flowered
10210 Shrubby, Leaves tern ovate toothed, Cal with 3 bractes, Pedunc 3-flowered

10211 Herbaceous, Leaves quaternate-pinnate, Flowers lateral
10212 Herbaceous, Leaves pinnated unequal, Head double



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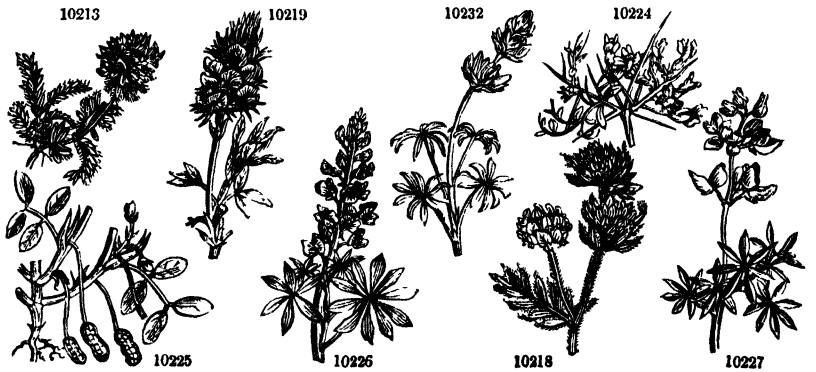
allowed to grow three or four years, and then it is cut down for fuel or for heating ovens; but the most profitable application of furze, whether sown or grown wild, is that of using it as green food for cattle. For this purpose, the shoots should not be more than two years old, and they require to be passed between rollers to bruise the ligneous parts and the thorns It has been tried in this way by a number of agriculturists, and found a highly nutritive food for horses, oxen, and kine Though a hardy plant and enduring the sea breeze, yet it is frequently killed by severe winters It is never found on wet-bottomed clays, but generally on dry rocky or stony soils There is a very luxuriant variety called the Irish whin, and one with double flowers found a few years ago in Devonshire, and now in propagation by cuttings in the nurseries.

U nanus greatly resembles the common species, but is smaller in all its parts. It flowers from August to January, which renders it valuable in shrubberies as a successor to the other.

1541 *Ononis.* From ονος, an ass, because asses only feed upon so prickly a plant. O. spinosa, *Arrête boeuf*, Fr, *Rest harrow*, Eng, was formerly very troublesome in corn fields, on account of its long ligneous roots obstructing the progress of the plough, and its thorny branches the harrow: but in all properly cultivated lands the plant has disappeared. It is frequent in aboriginal pastures on dry soils, and is eaten by cows, sheep, and goats, but not freely by horses. All the species are of easy culture, and the greenhouse kinds are readily increased by young cuttings under a bell-glass in sand.

1542. *Anthyllis.* From ανθος, a flower, and ουλος, a beard. So called from the silky appearance of its heads of flowers, whence also one species is called Barba Jovis A. Vulneraria is recommended as a herbage

10213 **montána** *W.*	mountain	♃	△	or	½	jn jl	Pu	S. Europe	1759.	D	s	l Bot cab. 578
§10214 **sericea** *W.*	wing-leaved	♃	▭	or	½	jl au	W	Barbary	1786.	C	p	l Dest ac par 1 t.3
10215 **cornicina** *W.*	horny		○	or	1	jl au	W	Spain	1759	S	p	l Cav.ic.1 t.39. f 2
10216 **lotoides** *W.*	Lotus-like		○	or	½	jn jl	Y	Spain	1739.	S	co	Cav. ic 1. t. 40
10217 **Gerárdi** *W.*	Gerard's		○	or	½	jn.au	W	Provence	1806.	S	co	Ger. prov. t. 18
10218 **Bárba-jóvis** *W.*	Jupiter's Beard	♃	▭	or	3	mr.my	Pa.Y	S. Europe	1640.	C	p.l	Bot. mag 1927
§10219 **crética** *W*	Cretan	♃	▭	or	1½	jn jl	Pk	Candia	1737.	C	p	l Bot. mag 1092
10220 **heterophýlla** *W.*	various-leaved	♃	▭	or	1	jn jl	Pk	S Europe	1768.	C	p	l
10221 **cytisoides** *W*	downy-leaved	♃	▭	or	2	ap jn	W	Spain	1731	C	p.l	Barr ic 1182
10222 **Hermánniæ** *W*	Lavender-lvd	♃	▭	or	1½	ap jl	Y	Levant	1739.	C	p.l	Alp exot t 26
10223 **tragacanthoides** *P s*	Goat's thorn like	♃	▭	o.	1	jn jl	W	Barbary	...	C	p	l Desf atl 2. t 194
10224 **erinácea** *W*	prickly	♃	▭	or	1	ap my	Pu	Spain	1759	C	s	p Bot mag 676
1543 A'RACHIS. *W*	Earth-Nut					*Leguminosæ.*		*Sp.* 1—2				
10225 **hypogæ'a** *W.*	American		◫	clt	2	my jn	Y	S Amer	1712	O	s	l Trew pl rar 3 t.3
†1544 LUPI'NUS *W*	Lupine					*Leguminosæ*		*Sp* 14—16.				
10226 **perénnis** *Ph*	smooth-perenn	♃	△	or	2	my jl	B	N Amer	1658.	D	p	l Bot mag 202
10227 **nootkaténsis** *Ph*	hairy-perennial	♃	△	or	6	jn au	Pu	NootkaSo	1794.	D	p	l Bot. mag 1311
10228 **álbus** *W*	white		○	ag	3	jl au	W	Levant	1596	S	co	
10229 **Thérmis** *W*	Egyptian		○	or	3	jn jl	W	Egypt	1802	S	co	
10230 **várius** *W*	small-blue		○	or	3	jl au	B.w	S Europe	1596.	S	co	
10231 **hirsútus** *W*	great-blue		○	or	2	jl au	B	S Europe	1629	S	co	Bau h 11.p.289
10232 **microcárpus** *B M*	small-fruited		○	or	1½	ap	B	Chili	1821	S	co	Bot mag. 2413
10233 **mexicánus** *Lag*	Mexican	♃	◫	or	2	f	B	Mexico	1819	S	co	Bot. reg 457
10234 **pilósus** *W*	rose		○	or	3	jl au	F	S Europe	1710.	S	co	
10235 **angustifólius** *W.*	narrow-leaved		○	or	2	jl au	B	Spain	1686.	S	co	Knor del 2 t L 7
10236 **linifólius** *W*	Flax-leaved		○	or	2	jl au	B	.....	1799	S	co	Roth abh 14 t 5
10237 **lúteus** *W*	yellow		○	or	2	jl au	Y	Sicily	1596	S	co	Bot. mag. 140
10238 **villósus** *W*	villous	♃	△	or	½	jl au	Pk	Carolina	1787	R	s	l
10239 **arbóreus** *H K*	tree			or	6	jl au	Y	.....	1793.	R	s	l Bot mag. 682
1545 AMOR'PHA *W*	Bastard-Indigo					*Leguminosæ*		*Sp* 6				
10240 **fruticósa** *W*	shrubby			or	6	jn jl	Pu	Carolina	1724	S	s	p Bot reg 427
β emarginata	*emarginate-lvd*			or	6	jn jl	Pu	Carolina	1724	C	s	p
10241 **microphýlla** *Ph*	dwarf			ft	2	jl au	Pu	Missouri	1811	C	s	p
10242 **pubéscens** *Ph*	pubescent			or	3	jn jl	B	Carolina	1803	C	s	p Bot. cab 689
10243 **canéscens** *Ph*	canescent			or	3	jl au	B	Missouri	1812.	C	s	p
10244 **nána** *Nutt*	pygmy			or	1½	jl au	B	Missouri	1811	C	s	p
10245 **cróceo-lanáta** *Wats*	yellow-haired			or	5	jl au	Pu	N Amer	1820	C	s	p Dend brit 139
1546. A'BRUS *W*	Wild-Liquorice					*Leguminosæ*		*Sp* 1				
10246 **precatórius** *W*	Jamaica		▭	or	12	mr my		W Indies	1680.	S	s	p Rhee mal.8 t 39
1547 PHASE'OLUS. *W*	Kidney-Bean					*Leguminosæ*		*Sp* 20—55				
10247 **vulgáris** *W*	common		○	cul	1	jn s	W	India	1597	S	co	Lob ic 2 p 59
10248 **multiflórus** *W*	scarlet		○	cul	12	jl s	S	S Amer	1633	S	co	Sch ha 2 t 199 a
10249 **lunátus** *W*	scymetar-podded		◫	cul	12	jn jl	G	E. Indies	1779	S	co	H n h 10 t 63 f 1
10250 **inamœ'nus** *W.*	various-colored		○	un	6	jl au	G	Africa	1794	S	co	Jac vind 1 t 66
10251 **farinósus** *W*	mealy		◫	un	3	jl au	Pk	E. Indies	1759	C	co	N ac p 17 30 t 42
10252 **vexillátus** *W*	sweet-scented		◫	cul	3	jl au	G	W Indies	1732	S	co	Jac vind 2 t 102
10253 **hélvolus** *W*	pale red		○	cul	3	jl au	Pa R	Carolina	1732	S	co	Dil el t 233 f 300



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plant by some agricultural writers, as A Young, and is by others confounded with Birdsfoot trefoil (Lotus corniculata, and major), and with the Liquorice-vetch (Astragalus glycyphyllos), to which, to a cursory observer, it bears considerable resemblance Linnæus observes, that in Oeland, where the soil is a red calcareous clay, the flowers of Anthyllis vulneraria are red, but that in Gothland, where the soil is white, the flowers also are white ours are yellow

A Barba Jovis is a silvery looking bush, with white and hairy leaves, pale yellow flowers, and woolly pods Like most of the Leguminosæ, this genus seeds freely, but in default of seeds, increase may be effected by "young cuttings planted under a bell-glass in sand, which are not difficult to root the glasses must be kept wiped, or the dew is apt to make them mouldy, which destroys them" (*Bot Cult* 135)

1543. *Arachis. Aracos*, or *Aracuna*, is a name applied by Pliny to a plant which had neither stem nor leaves, but was all root. The moderns have applied it to a plant, the fruit of which is borne underground The specific name *hypogæa* (ὑπὸ γῆν, below ground), is in allusion to the curious circumstance of the pods, as they increase in size, forcing themselves into the earth, where they ripen their seeds, thence called earth-nuts. The plant is generally cultivated in the warmer parts of North and South America, but is supposed to be originally from Africa. In South Carolina the seeds are used as chocolate, in the eastern countries as almonds, and in Cochin-China they furnish an oil used for lamps, and as a substitute for oil of olives. About Paris it is raised on hotbeds and transplanted into the open garden, where it ripens its seeds, which are used as other legumes. It has also been brought to maturity in a stove in England, and proved very prolific. (See *Hort Trans.* vol. v p 372)

1544. *Lupinus* Said to be derived from *lupus*, a wolf, because this plant devours, as it were, all the fertility

10213 Herbaceous, Leaves pinnated equal, Head terminal 1-sided, Flowers oblique
10214 Herbaceous, Leaves pinnated equal silky, Spike peduncled ovate
10215 Herbaceous, Leaves pinnated unequal, Head solitary stalked, Pods hooked blunt shorter than calyx
10216 Herbaceous, Cauline leaves ternate: radical pinnate unequal trifid or simple
10217 Herbaceous, Leaves pinnated unequal, Pedunc lateral longer than leaf, Heads leafless
10218 Shrubby, Leaves pinnated equal silky, Bractes as long as globose many-flowered head
10219 Shrubby, Leaves pinnated equal and ternate villous, Flowers spiked
10220 Shrubby, Leaves pinnated · floral ternate
10221 Shrubby, Leaves ternate unequal, Calyxes woolly lateral
10222 Shrubby, Leaves ternate linear-cuneate somewhat stalked, Calyxes campanulate, Branches spiny
10223 Shrubby, Petioles spiny, Leaves pinnated, Flowers axillary subsessile, Cal. inflated
10224 Shrubby spiny, Leaves simple

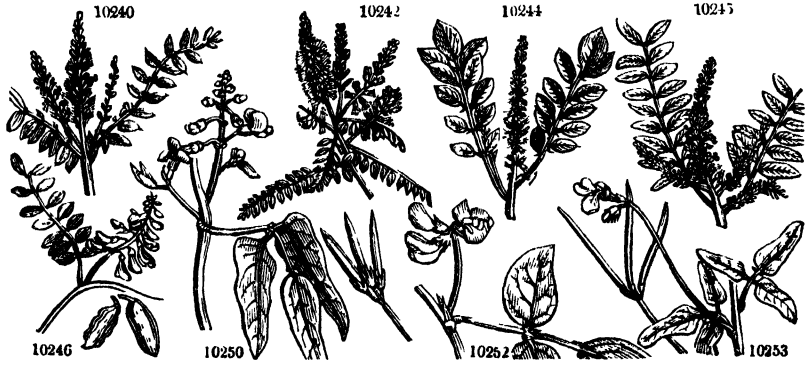
10225 Leaves in fours cuneate rounded, Stipules undivided, Stem nearly smooth

10226 Cal. altern without appendage upper lip emarginate, lower entire
10227 Cal whorled without appendage lower lip entire, Stem and leaves hairy
10228 Cal. altern without appendage. upper lip entire, lower 3-toothed
10229 Cal. altern with an appendage: upper lip entire, lower 3-toothed
10230 Cal half-whorled with an appendage upper lip bifid, lower about 3-toothed
10231 Cal. altern with an appendage upper lip 2-parted, lower 3-toothed
10232 Leaves digitate, Cal whorled without append. Upper lip emarg, lower bifid, Pods 2-seeded
10233 Cal altern with an appendage upper lip half-bifid, lower obscurely 3-toothed
10234 Cal whorled with an appendage upper lip 2-parted, lower entire
10235 Cal. altern. with an appendage upper lip 2-fid, lower entire, Leaflets linear-lanceolate flat
10236 Cal. altern with an appendage upper lip 2-fid, lower subtrifid, Leaflets linear channelled
10237 Cal whorled with an appendage upper lip 2-parted, lower 3-toothed
10238 Cal. half-whorled with an appendage. upper lip 2-fid, lower undivided, Leaves simple obl villous
10239 Shrubby, Cal. whorled without appendage stalked. lips acute entire

10240 Teeth of calyx 4 blunt, one acuminate
β Leaflets emarginate, Calyxes hoary
10241 Smoothish, Leaves on short stalks blunt at each end, Spikes solitary short, Pods 1-seeded
10242 Leaves on short stalks without a point obtuse smooth, Spikes long panicled downy
10243 Hoary, Leaflets subsessile ovate-elliptical acute mucronate, Spikes panicled hoary
10244 Said to be the same as *A microphylla*
10245 Ferruginous, Spikes simple clustered, Leaflets ovate-lanceolate downy mucronate

10246 The only species

10247 Raceme solitary shorter than leaves, Pedunc 2, Bractes less than cal spreading, Pods pendulous
10248 Raceme solitary length of leaves, Pedunc 2, Bractes less than cal appressed, Pods pendulous
10249 Pods scymetar-shaped somewhat lunate smooth
10250 Vexillum of flowers revolute, Calyxes whole colored
10251 Peduncles subcapitate, Seeds 4-cornered cylindrical powdery
10252 Peduncles thicker than petiole capitate, Wings subfalcate deformed, Pods linear straight
10253 Flowers capitate. Cal bracteate. Vexill short. Wings expanded very large, Leaflets deltoid oblong



and Miscellaneous Particulars.

of the soil: but this is a very doubtful explanation The species are border flowers, in much esteem for their velvet-like leaves and fine large flowers They are vigorous growing plants, and most of them would afford the agriculturist a considerable bulk of herbage.

L. albus is supposed to be the species that was cultivated for this purpose by the Romans, though L. luteus is what is at present grown in the fields in the south of Italy as human food. In the south of France, it is grown in poor dry extensive plains, as a meliorating crop to be ploughed in where no manure is to be had, and the ground is too sterile for clover or other better plants. (*Villars.*) The perennial and ligneous species may be increased by pieces of the root, but they all seed freely

1545. *Amorpha.* From α, privative, and μορφη, form, in allusion to the deformity of the corolla, which has neither alæ or carina A fruticosa was once used in Carolina as an indigo plant, but is now neglected. All the species are of easy cultivation, and increase by seeds or cuttings in sand

1546. *Abrus* From αβρος, elegant The roots are used in the West Indies similarly to those of our liquorice, and the seeds are strung and worn as beads for ornaments, and also as rosaries, whence the specific name *precatorius* They are frequently thrown, with other West Indian seeds, on the north-west coast of Scotland Linnæus affirms, that they are very deleterious, but they are eaten in Egypt, though the hardest and most indigestible of the pulse tribe. In our stoves the plant requires a good deal of room and heat in order to flower freely. It is generally raised from seed, but cuttings will root in sand plunged in heat

1547 *Phaseolus.* From *phaselus*, a little boat, which the pods may easily be supposed to resemble P vulgaris and multiflorus, *Haricot*, Fr., *Schminkbohne*, Ger, *Fagiuolo*, Ital, are well known culinary legumes The dwart kidney bean is earlier than the other, and better adapted for forcing, but much the largest crop

10254 **semierĕctus** *W.*	dark red	½	pr	2	jl	R	W. Indies	1732.	S	co	Bot. reg 743
10255 **alātus** *W*	winged	½	un	3	jl	Pu	Carolina	1732.	C	s l	Dil.el.t 235 f 303
10256 **Caracálla** *W.*	Snail-flower	½	cul	1½	au s	G	India	1690.	S	r m	Bot rep. 341
10257 **acontifŏlius** *W.*	Aconite-leaved		cu	2	jn au	Pk	E. Indies	1731.	S	s l	Jac. obs 3 t 92
10258 **trilobus** *W*	three-lobed		un	2	jl au	G	E. Indies	1777	S	s l	Bur ind t 50. f 1
10259 **stipulāris** *W.*	large-stipuled		un	2	jl au	Y Br	Peru	1805	S	s l	
10260 **nānus** *W.*	common dwarf		un	1	jn s	W	India	...	S	s l	
10261 **radiātus** *W*	rayed		un	1	jn jl	Pu	China	1732	S	s l	Dil el.t.235 f 304
10262 **Max** *W.*	hairy-podded		cul	1½	jn jl	G	India	1758	S	s l	Rum am 5 t.140
10263 **Múngo** *W*	small-fruited		cul	1½	jn jl	Y	India	1790.	S	s l	
10264 **diversifólius** *P S* **_trilobus_** Ph	various-leaved		un	1½	jn jl	Pu	N. Amer	1806	S	s l	
10265 **lathyroides** *W*	Lathyrus-like		or	2	jl au	Sc	Jamaica	1786	S	s l	Slo ja.1 t.116.f 1
10266 **subtrilobus** *Lank*	three-lobed		un	1½	jl au	Y	Brazil	1824	S	co	

1548 **TERAMNUS** *Browne* TERAMNUS. *Leguminosæ* *Sp.* 1—2

10267 **volúbilis** *Swz*	hook-podded		or	10	...		Jamaica	1824	C	r m	

*1549 **CARPOPO'GON** *Rox* CARPOPOGON. *Leguminosæ.* *Sp* 2.

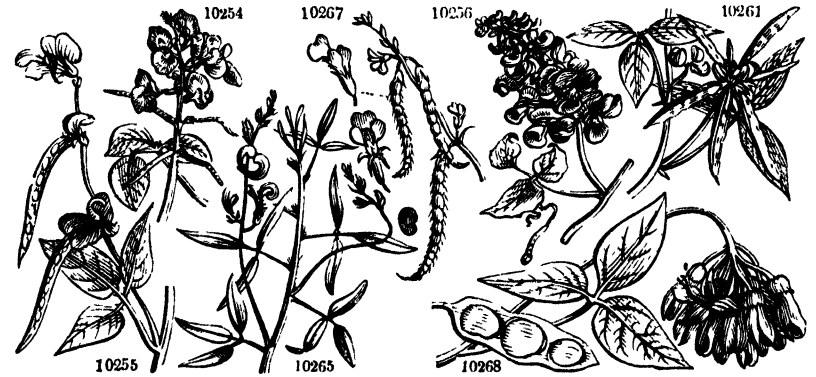
§10268 **gigantĕus** *Rox*	gigantic		or	20	...	Pu	E Indies	1815.	C	l p	Rhee. mal. 8. 36
§10269 **imbricātus** *Rox*	imbricated		or	10	...	Pu	E Indies	1815.	C	l p	

*1550 **DO'LICHOS** *W* DOLICHOS. *Leguminosæ.* *Sp* 23—76.

§10270 **Lablab** *W*	black-seeded		un	8	jn jl	Pu	Egypt	1694.	S	s l	Bot mag 896
10271 **sinensis** *W*	Chinese		pr	6	jl au	Pu	India	1776.	S	s l	Bot mag 2232
§10272 **lutĕolus** *Ph*	yellow		un	4	jl au	Y	America	1805	S	s l	Jac hort. t. 90
10273 **unguiculātus** *W*	Bird's-foot		un	3	jn jl	Y	W Indies	1780	S	s l	Jac vind 1 t 23
10274 **tranquebáricus** *W*	Tranquebar		un	3	jn jl	Y	E. Indies	1801	S	s l	Jac vind 3 t 70
10275 **gladiātus** *W*	sabre-podded		pr	6	au	Pk	E Indies	1790	S	s l	Jac ic 3. t. 560
§10276 **tetragonólobus** *W*	square-podded		un	4	s n	Y	E. Indies	1816	S	s l	
10277 **sesquipedālis** *W*	long-podded		un	6	au	Pa pk	W Indies	1781.	S	s l	Jac vind. 1 t 67
10278 **hirsūtus** *W.*	hirsute		or	10	jn	Pu	China	1802.	C	s l	Kæmpt ic t. 41
10279 **pilōsus** *W*	hairy-podded		un	3	au	Pa	E. Indies	1790	S	s l	
10280 **minimus** *W*	small		un	1½	jl au	Y	Jamaica	1776	S	s l	Jac obs 1 t. 22
10281 **tetraspĕrmus** *W*	four-seeded		un	3	my au	Pa Y	E. Indies	1816	S	s l	
10282 **scarabæoides** *W*	silver-leaved		un	2	jn jl	Pa	E. Indies	1773	S	s l	Plu alm t 53 f 3
10283 **reticulātus** *W*	net-leaved		un	3	jn jl	Pa	N S W	1781	C	s l	
§10284 **bulbōsus** *W*	bulbous		un	4	jl	Pu	W Indies	1781	S	s l	Rum am 5 t 132
§10285 **purpŭreus** *W*	purple		or	12	au s	Pu	E Indies	1790	S	s l	Bot reg. 830
10286 **lignōsus** *W*	woody		or	12	jl au	Pu	E. Indies	1776	S	p l	Bot. mag 380
10287 **lutĕus** *W.*	yellow-flowered		un	8	jl au	Y	Jamaica	1812	S	s l	
§10288 **ensiformis** *W.*	scymetar-podded		un	3	jl au	Pu	E. Indies	1778	S	s l	Jac ic 3 t 559
§10289 **Sōja** *W*	Soy		cul	3	jl au	Pk	E. Indies	1790	S	s l	Jac ic 1 t 145
10290 **Catiang** *W.*	small-fruited		cul	3	jl au	Pa	E. Indies	1793	S	s l	Rhee mal 8 t 41
10291 **biflōrus** *W.*	two-flowered		un	3	jl au	Pa Y	E Indies	1776	S	s l	Plu alm t 213 f 4
10292 **róseus** *W*	Rose-colored		pr	3	jl au	Pk	Jamaica	1812	S	s l	

*1551 **STIZOLO'BIUM** *P S.* COW-AGE, or COW-ITCH *Leguminosæ* *Sp* 3—8

§10293 **altissimum** *P S*	tall		or	50	...	Pu	Martinico	1779	C	l p	Ja.am t 182 f 85
§10294 **ĕreus** *P S*	broad-podded		cu	12	jn jl	Y	W Indies	1691	C	l p	Plum. ame t 107
§10295 **pruriens** *P S*	common		cu	12	...	Pu	India	1680	C	l p	Jac amer t 122



History, Use, Propagation, Culture,

is produced by the twining species Neither sorts can be safely planted in the open air before the end of April, or first week of May, and the leaves are blackened by the first frosts of autumn But in a stove or pit, green pods of the dwarf kinds may be gathered all the winter, and with this advantage over forced productions of the fruit kind required to be ripened, that the pods are as good from plants in the stove in midwinter, as from those in the open garden in midsummer The garden culture of both species is so easy and universally known, that we shall not occupy ourselves with details Though in this country the green pods only are used, on the continent the ripened seeds are as much the object of culture In Holland, the twiner is grown in every cottage garden for both purposes, and in France and Switzerland, it is grown chiefly for the ripened seeds in the latter countries it grows on very poor dry soil. On the first blackening of the leaves with frost, the plants are pulled up, dried like tobacco leaves under the dripping eaves of the houses, and in winter threshed out for the seeds, to be boiled and eaten with cream or butter, stewed in haricots, or put in soups. According to the analysis of Einhoff, 3840 parts of kidney bean afforded 1805 parts of matter analogous to starch, 857 of vegeto-animal matter, and 709 parts of mucilage from which is to be inferred, that it is the most nourishing of all the legumes

The perennial stove species thrive best in a light rich soil, and may be propagated readily from cuttings or from seed. P caracalla, or Snail-flower, is a very curious species, and will grow and flower freely, if kept clear from the red spiders This species was so named by the Portuguese, who first brought it from South America, in consequence of its hooded flower Caracalla (from the Celtic words *car*, a head, and *cal*, a covering) was the name of a hooded dress much worn by the Gauls, and gave his nickname to the Emperor Marcus Aurelius Antoninus, who was accustomed to wear the dress.

10254 Flowers spiked, Cal. without bractes, Wings expanded larger, Leaflets ovate
10255 Flowers loosely spiked, Wings the length of vexillum
10256 Vexillum and keel spirally twisted together
10257 Stem hairy, Lateral leaflets 3-lobed · terminal 5-parted, Segm. lanceol. Peduncles 3-fl. shorter than petiole
10258 Stem smooth, Lateral leafl 2-lobed, terminal 3-lobed : segments ovate, Pedunc. 3-fl longer than petiole
10259 Stem smooth, Leafl blunt lateral sinuose, terminal hastate 3-lobed, Peduncles longer than leaf spiked
10260 Stem smooth, Bractes larger than calyx, Pods pendulous compressed rugose
10261 Stem round, Flowers capitate, Pods cylindrical horizontal
10262 Stem angular hispid, Pods pendulous hairy
10263 Stem flexuose round hairy, Pods capitate hairy
10264 Downy, Lower leaves rhomboid oval. upper 3-lobed, Heads on long stalks, Pods round subulate

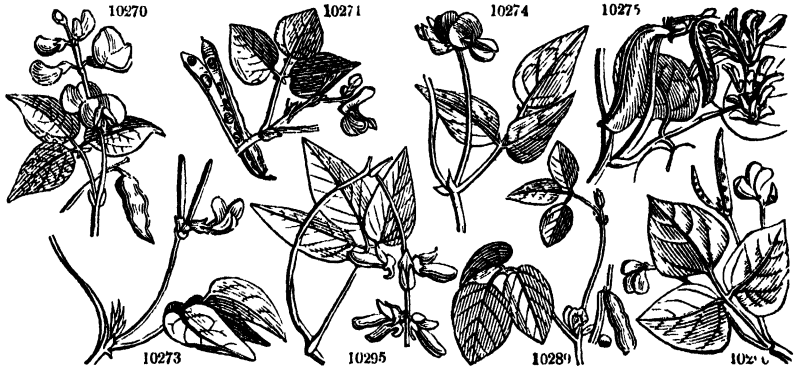
10265 Leaflets oblong acuminate, Peduncles elongated, Pods round subulate
10266 Leaflets about 3-lobed, Lobes acuminate, Racemes axillary

10267 Leaflets ovate-lanceolate downy

10268 Leaflets ternate smooth, Flowers in heads, Calyxes hairy campanulate
10269 Flowers imbricated

10270 Pods ovate acinaciform, Seeds ovate with a hilum curved towards one end
10271 Pods pendulous cylindrical torulose, Peduncles erect many-flowered
10272 Pods capitate many cylindrical, Seeds rounded
10273 Pods capitate subcylindrical with a recurved concave end
10274 Pods capitate few cylindrical with a mucronate straight point
10275 Pods racemose ensiform with 3 keels at back straight at point, Seeds with an arillus
10276 Pods membranous quadrangular
10277 Pods subcylindrical smooth very long
10278 Pods racemose compressed hairy, Outer leaflets 2-lobed
10279 Pods subracemose linear hairy, Leaflets ovate-lanceolate downy
10280 Pods racemose compressed 4-seeded, Leaflets rhomboid
10281 Pods racemose acinaciform 4-seeded, Leaflets rhomboid smooth
10282 Leaves ovate downy, Flowers solitary, Seeds 2-horned
10283 Leaves ovate acute rugose netted villous, Racemes few-flowered
10284 Leaves smooth toothed with many angles
10285 Stem smooth, Petioles downy, Wings of corolla spreading
10286 Peduncles capitate, Pods straight linear
10287 Flowers somewhat spiked, Pods subcylindrical smooth, Leaves roundish rhomboid blunt entire smooth
10288 Pods acinaciform with 3 keels
10289 Racemes axillary erect, Pods pendulous hispid about 2-seeded
10290 Pods twin linear nearly erect
10291 Stem smooth, Peduncles 2-flowered, Outer leaflets somewhat angular
10292 Stem creeping, Leaflets roundish shining, Fl racemose, Pods with 3 keels at back

10293 Pods racemose hairy equal, Seeds surrounded by the hilum, Leaves smooth on each side
10294 Pods racemose with transverse lamellæ hairy, Seeds surrounded by the hilum
10295 Pods racemose valves keeled hairy, Peduncles in threes



and Miscellaneous Particulars

1548 *Teramnus* So called by Browne, apparently in allusion to its delicately-shaped legume, τερμνοτης being used particularly to express the tenderness of eatable pulse, ατερμων was a weed hostile to leguminous plants.

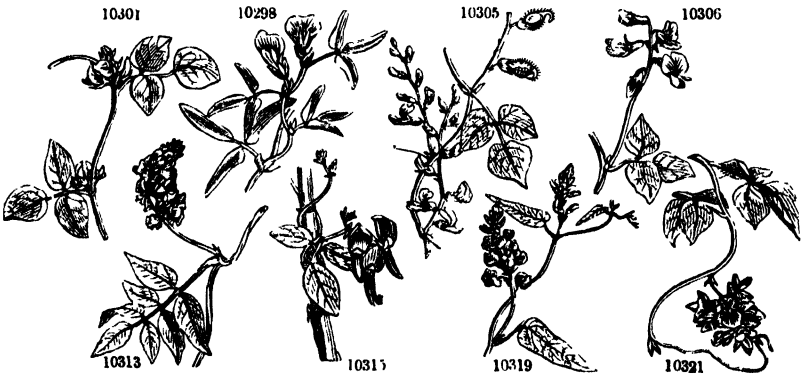
1549 *Carpopogon* From καρπος, fruit, and πωγων, a beard, the pods being bearded. Rapid growing climbers of the easiest culture.

1550 *Dolichos* A name under which Dioscorides describes a plant supposed to have been the kidney bean of the moderns The species are climbers, some of them to the height of the highest trees. The pods of most of them are eatable, but far inferior to the kidney bean Some of them have tuberous roots which may be eaten The seeds of D Soja (*Somju*, Jap), which are usually called *Miso* in Japan, are put into soups, and are the most common dish there, insomuch that the Japonese frequently eat them three times a day The Soja of the Japonese, which is preferred to the Kitjap of the Chinese, is prepared from these seeds, and is used in almost all their dishes instead of common salt. The Chinese also have a favorite dish made of these seeds, called *Teu hu* or *Tau hu*, which looks like curd, and though insipid in itself, yet with proper seasoning is agreeable and wholesome (*Thunb* and *Loureiro*)

The perennial kinds are easily increased by cuttings, and all the species seed freely D purpureus and lignosus have the handsomest flowers, but none of them can be considered of much beauty.

1551. *Stizolobium* From στιζω, to prick, and λοβος, a pod. S. urens and pruriens produce on the outside of their pods the irritating substance used in medicine as a vermifuge, under the name of Cowhage The species are twining shrubs of the West Indies, with long bunches of yellow scentless flowers The seeds of S urens are often seen in cabinets of curiosities many qualities are attributed to them by the superstitious Creoles. The French settlers call them *Yeux bourrique*, asses' eyes. S. pruriens is considered a powerful diuretic.

*1552. GLY'CINE. *L*	GLYCINE.					*Leguminosæ.*	*Sp* 19—55.						
§10296 sarmentósa *W.*	sarmentose		○	un	2	jn.au	Pa	Carolina	1805.	S	s l	Sch.bo.an.12, t 2
§10297 monóica *W.*	pale-flowered		△	cu	4	s	F	N. Amer	1781.	C	s p	W mRœ A.3 t.4
§10298 angustifólia *W*	narrow-leaved			un	6	jn au	Y	C G H.	1795.	C	p l	Jac.schœ 2 t 231
10299 débilis *W*	hairy			un	1½	jn jl	Pa	E. Indies	1778.	S	p.l	
§10300 comósa *W*	tufted		△	un	1½	jl s	B	N Amer.	1812.	C	p l	
§10301 tomentósa *Ph*	downy		△	un	½	jn s	Y	N Amer.	1732	C	p l	Dill.elt. t.26.f.29
§10302 reniformis *Ph*	Kidney-leaved		△	pr	2	jl au	Y	Carolina	1806.	C	p l	
10303 suavéolens *W.*	sweet-scented			or	3	jl s	Y.B	E. Indies	1816.	C	p.l	
§10304 reticuláta *W*	net-leaved			or	6	jl s	Y	Jamaica	1779.	C	p l	
§10305 caribæ'a *W*	trailing			pr	2	s o	Y	W Indies	1742.	C	p l	Bot reg 275
§10306 bituminósa *W*	clammy			pr	4	ap.s	Y	C G H.	1774	C	p l	Bot. reg 261
10307 parviflóra *P S*	small-flowered			un	3	jl	Pa	E. Indies	1812	C	p l	
§10308 sagittáta *W en*	arrow-leaved			un	4	my au	Y	Havannah	1815.	C	p l	
10309 rhombifólia *W*	rhomb-leaved			un	6	my au	...	E. Indies	1815	C	p l	
§10310 vincentina *Ker*	St Vincent's			pr	2	my au	Y	St. Vincen.	1822	C	co	Bot reg 799
§10311 phaseoloides *Swz.*	Kidn.-bean-like			un	2	jn jl	Br	Jamaica	1818	C	p l	Bot mag 2284
§10312 sinénsis *B M*	Chinese			or	15	my jn	B	China	1818.	L	r m	Bot mag 2083
§10313 A'pios *W*	tuberous-rooted		△	ft	6	au s	Pk	N Amer	1640	C	s p	Bot mag 1198
§10314 frutéscens *Ph*	shrubby			or	10	jn s	Pu	N Amer	1724.	R	s p	Bot mag 2103
†*1553 KENNE'DIA *Vent*	KENNEDIA					*Leguminosæ*	*Sp* 6.						
10315 rubicúnda *V.*	dingy-flowered			or	10	mr au	Br	N S W.	1788.	S	s p	Bot mag 268
§10316 coccínea *V*	many-flowered			or	10	my au	S	N Holl	1803	S	s p	Vent malm 105
10317 prostráta *H K*	single-flowered			or	4	mr jn	S	N S. W	1790	C	s p	Bot mag 270
10318 Comptoniána *B R*	Compton's			or	12	mr jn	B	N Holl	1803	C	s.p	Bot. rep 602
§10319 monophýlla *V*	simple-leaved			or	10	mr jn	Pu	N. S. W.	1790.	S	s p	Bot mag 263
10320 ováta *B M.*	ovate			or	6	my au	Pu	N. Holl	1818	C	s p	Bot mag 2169
1554 CYLI'STA *W*	CYLISTA.					*Leguminosæ*	*Sp* 3						
10321 villósa *H K*	Cape			or	6	ap my	Y	C G H	1776	S	p l	Bot rep 446
10322 albiflóra *B M.*	white-flowered			or	6	ap my	W	Mauritius	...	C	p l	Bot mag 1859
10323 scariósa *W*	Coromandel			or	4	...	Y	E. Indies	1806.	S	p l	Rox. cor 1 t 92
†1555 GALA'CTIA *Mi.*	GALACTIA					*Leguminosæ.*	*Sp* 1—5.						
10324 péndula *Pers*	pendulous			pr	6	jl au	R	Jamaica	1794.	C	l p	Bot. reg. 269
†1556 CLITO'RIA *W*	CLITORIA					*Leguminosæ.*	*Sp* 8—16						
10325 Ternátea *W*	wing-leaved			or	4	jl au	B	E Indies	1739	C	s p	Bot mag 1542
10326 heterophylla *Lam*	various-leaved			or	1	jl au	B	E Indies	1812	S	s p	Bot mag 2111
10327 brasiliána *W*	Brazilian			or	4	jl au	Pu	Brazil	1759.	S	s p	Breyn cent t 1
10328 virginiána *W*	small-flowered			or	6	jl au	B	America	1732	C	s p	Par. lond 51
10329 mariána *W*	Maryland		△	or	3	au	B	N. Amer	1759	C	s p	
10330 arboréscens *H K*	tree			or	8	au s	Pk	Trinidad	1804.	C	s p	
10331 Plumiéri *Pers*	Plumier's			or	6	s n	W B	W Indies	..	C	s p	Bot reg 268
10332 mexicána *Link.*	Mexican			or	3	s n	Pu	Mexico	1823.	S	co	
†*1557 O'ROBUS *W*	BITTER-VETCH					*Leguminosæ*	*Sp* 16—42						
10333 lathyroides *W*	upright		△	or	1½	jn	L B	Siberia	1758	R	p l	Am ruth t 7 f 2
10334 lúteus *W*	yellow		△	or	1½	jn jl	L Y	Siberia	1759	R	h l	Bot cab 783
§10335 digitátus *Bieb*	digitate		△	or	1½	my	Pu	Tauria	1823	R	c o	Bux cent 2 t 38
10336 vérnus *W*	spring		△	or	1	mr ap	Pu	Europe	1629	R	s l	Bot. mag 521
10337 tuberósus *W*	tuberous		△	cul	1	my jn	Pu	Britain	heaths	R	p l	Eng bot. 1153
10338 pallescens *Bieb*	pallid		△	or	1	my	W	Tauria	1823	R	co	
10339 canéscens *L.*	hoary		△	or	1½	my jn	W B	France	1816	R	co	Bot. mag. 3117
10340 álbus *W*	white-flowered		△	or	1	my jn	W	Austria	1794	R	s l	Sweet fl g 22
10341 várius *Schreev*	particolored		△	or	1½	my jn	Y R	Italy	1759	R	p l	Bot. mag 675
10342 lácteus *Bieb*	milk-white		△	or	1½	my jn	W	Caucasus	1820	R	c o	
10343 hirsútus *L.*	hairy		△	or	1	my jn	B	Thrace	1822	R	c o	Bot. mag 2345



History, Use, Propagation, Culture,

1552. *Glycine.* From γλυκυς, sweet G monoica perfects its seeds under ground like Arachis hypogæa, Trifolium subterraneum, and Lathyrus subterraneus They are all of easy culture, like their preceding and following allies G. frutescens, and especially G sinensis, are most beautiful hardy climbing shrubs, with long pendulous branches of blue flowers, like the Laburnum

1553. *Kennedia* Named after Mr Kennedy, a nurseryman of celebrity in the vicinity of London. Handsome conservatory climbers of the easiest culture

1554 *Cylista* From κυλιξ, a calyx, that of the species so called being very large

1555. *Galactsa* From γαλα, milk, the plant is milky in all its parts A pretty flowering climber of easy culture in the soil indicated, and increased by cuttings in sand under a bell-glass

1556. *Clitoria* A name derived from an anatomical term, a resemblance to the subject of which has been fancied to exist in the flower C Ternatea was first brought to Europe from Ternate, one of the Moluccas islands, which induced Tournefort to adopt Ternatea as a generic appellation, and it was continued by Linnæus as a specific one

10296 Leaves ternate ovate smooth, Racemes filiform about 3-fl Flowers apetalous, Pods oblong 2-seeded
10297 Leaves ternate ovate smooth, Stem hairy, Racemes pendulous, Fls of stem with cor of root apetalous
10298 Leaves ternate, Leaflets linear lanceolate silky, Fl. axillary solitary, Pods 2-seeded
10299 Leaves ternate, Leafl oval hairy beneath, Pods subsolitary linear many-seeded, Style persistent straight
10300 Leaves ternate hairy, Racemes lateral
10301 Leaves ternate tomentose, Racemes axillary very short, Pods 2-seeded
10302 Downy, Leaves simple reniform rounded rugose netted, Racemes few-flowered
10303 Leaves ternate ovate acute hairy viscid, Peduncles jointed 1-2-fl Pods oblong
10304 Leaves tern ovate rhomboid pubesc beneath netted tomentose, Racemes axillary, Pods subpubescent
10305 Leaves ternate ovate rhomboid beneath dotted with resin, Racemes longer than leaf
10306 Leaves ternate, Flowers racemose, Pods tumid villous
10307 Leaves ternate ovate somewhat hairy, Racemes axillary, Pods linear hooked at end
10308 Leaves simple sagittate, Petioles winged, Stem twining shrubby
10309 Leaves tern roundish rhomboid smooth beneath dotted with resin, Racemes 1-sided longer than leaf
10310 Leaves pinnate, Leaflets 5 oblong apiculate, Flowers 3 axillary
10311 Leaves ternate villous beneath, Racemes terminal
10312 Leaves pinnated, Leaflets 11 ovate lanceolate silky, Raceme terminal nodding lax many-flowered
10313 Root tuberous, Lvs pinn. Leafl 5-7 ov lanc narrowed towards the end, Spikes dense shorter than leaves
10314 Leaves pinnated, Leaflets 9 ovate downy, Racemes dense terminal with bracteæ, Pods coriaceous

10315 Leaves ternate, Leaflets ovate, Pedunc. about 3-fl Pods very hairy
10316 Leaves ternate, Leaflets obovate, Flowers capitate, Pods smoothish
10317 Leaves ternate, Leaflets obovate villous, Pedunc 1-2-fl Keel longer than obl wings, Stem prostrate
10318 Leaves ternate, Leaflets ovate retuse netted, Racemes erect many-flowered
10319 Leaves simple smooth netted subcordate at base, Flowers racemose
10320 Leaves simple ovate, Racemes axillary few-flowered

10321 Cal membranous, Upper segment bifid
10322 Down rusty, Cal half 5-fid, Bractes ovate acuminate, Cor larger than cal
10323 Cal scarious, Upper segment emarginate

10324 Leaves ternate, Raceme erect, Flowers pendulous

10325 Leaves quinate pinnate, Peduncles axillary 1-flowered
10326 Leaves pinnate, Leaflets 5 round lanceolate or linear
10327 Leaves ternate, Calyxes solitary campanulate
10328 Leaves ternate, Calyxes twin campanulate
10329 Leaves ternate, Calyxes cylindrical
10330 Leaves ternate, Peduncles many-flowered, Ovary downy, Style villous
10331 Leaves ternate, Leaflets ovate-oblong acuminate, Cal campanulate shorter than ovate bractes
10332 Leaves ternate, Leaflets mucronate glaucous beneath hairy, Cal cylind much larger than bractes

10333 Leaves conjugate subsessile, Stipules toothed
10334 Leaves pinnate in 4 or 5 pairs obl glaucous beneath, Stipules half sagittate toothed at base
10335 Leaves of 2 pairs linear subulate approximating, Stip half-sagittate subulate 1-toothed at base
10336 Leaves pinnate in 3 pairs ovate acuminate, Stipules half-sagittate entire, Stem simple
10337 Leaves pinnate in 3 or 4 pairs lanceolate, Stipules half-sagittate entire, Stem winged
10338 Leaves of 2 pairs linear-subulate downy, Stip half-sagittate subulate nearly entire, Stem simple downy
10339 Stem branched, Leaves in 2 pairs linear, Stipules half sagittate subulate
10340 Leaves in 2 pairs ensiform stalked, Stipules simple, Stem simple
10341 Leaves in 4 pairs lin lanc Stipules half-sagittate entire, Stem winged branched upwards
10342 Leaves of 2 pairs lin-lanc mucronate stalked nerved, Stipules half-sagittate toothed at base
10343 Leaves conjugate stalked, Stipules entire, Plant covered with long hairs



and Miscellaneous Particulars

1557. *Orobus* From ὄρος, to excite, and βους, an ox, that is to say, a food nourishing to cattle Handsome plants, and free flowerers O luteus Haller considers as one of the handsomest of the papilionaceous tribe. O tuberosus, according to Lightfoot, is in great esteem among the Highlanders of Scotland for the tubercles of the root, they dry and chew them in general to give a better relish to their liquor, they also affirm them to be good against most disorders of the thorax, and that by the use of them they are enabled to repel hunger and thirst for a long time In Breadalbane and Ross-shire, they sometimes bruise and steep them in water, and make an agreeable fermented liquor with them. They have a sweet taste, something like the roots of liquorice, and when boiled are well flavored and nutritive, and in times of scarcity have served as a substitute for bread (*Lightfoot*)

Boiled well, a fork will pass through them, and dried slightly and roasted, they are served up in Holland and Flanders in the manner of chesnuts, which they resemble in flavor Dickson (*Hort Trans* ii 359) recommends cultivating them in a bed or border of light rich soil, paved at the depth of twenty inches, to prevent their roots from running down Plant the tubers six inches apart, and three inches below the surface,

10344 **angustifólius** *W.*	narrow-leaved	♃	△	or	1	my jn	W	Siberia	1766.	R	s l	Gmel sib 4. t. 5
10345 **niger** *W*	black	♃	△	or	3	jn jl	Pu	Europe	1596.	R	p.l	Bot mag 2261
10346 **pyrenáicus** *W*	Pyrenean	♃	△	or	2	my jn	Pu	Spain	1699	R	p.l	Pl alm t 210 f 2
10347 **sylváticus** *W*	wood	♃	△	or	2	my jl	Cr	Britain m wo		R	p l	Eng. bot 518
10348 **ochroleúcus** *W & K*	sulphur-colored	♃	△	or	2	my jl	Pa Y	Hungary	1816	R	p l	Pl rar hu 2 t 118

†1558 LA'THYRUS *W* Lathyrus. *Leguminosæ* *Sp.* 30—57

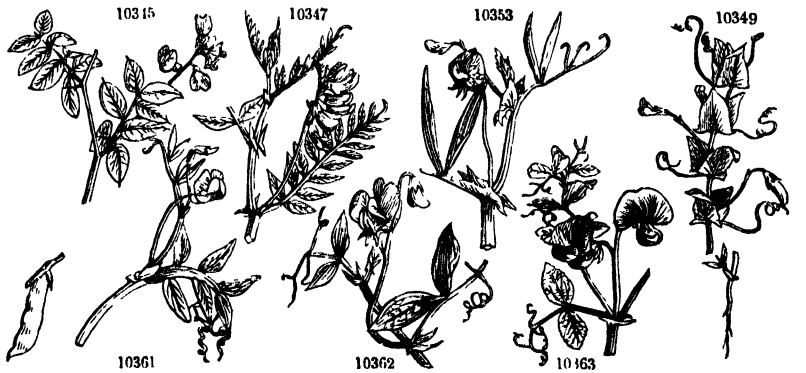
10349	Aphá:a *W*	yell Vetchling	♃	○	or	3	jn jl	Y	England san fi.		S	co	Eng. bot. 1167
10350	Nissólia *W*	crimson		○	or	2	my	Cr	England bus pl		S	co	Eng bot 112
10351	amphicárpos *W*	Earth Pea	♃	○	cu	1½	jn jl	Ap	Levant	1680	S	co	Mo his 2 t.23 f 1
10352	Cicera *W*	flat-podded	♃	○	or	2	jn jl	R	S Europe	1633	S	co	Ger emac f 3
10353	sativus *W*	Chickling Vetch	♃	○	ag	3	jn jl	L B	S Europe	1640	S	co	Bot mag 115
10354	inconspicuus *W*	small-flowered	♃	○	un	1	jl au	Pu	Levant	1739	S	co	Jac vind 1 t 86?
10355	setifolius *W*	bristle-leaved	♃	○	or	1	jn jl	Sc	S. Europe	1739	S	co	Bau h. 2. p 308
10356	coccineus *P S*	scarlet	♃	○	or	2	jn jl	Sc	Italy	1800	S	co	
10357	sphæricus *W*	round-seeded	♃	○	or	2	jn jl	Cr	S. Europe	1801	S	co	Decand. ic. t.32
10358	angulátus *W*	angular-seeded	♃	○	or	2	jn jl	R	S. Europe	1683	S	co	Bu.cen 3 t 42.f 2
10359	spurius *W en*	bastard	♃	○	or	2	jn jl	Pu	.... ..	1815	S	co	
10360	monánthos *W*	one-flowered	♃	○	or	2	my jl	Pk	Russia	1731	S	co	
10361	articulátus *W*	joint-podded	♃	○	or	4	jl au	F w	S Europe	1640	S	co	Bot mag 253
10362	odorátus *W*	Sweet Pea	♃	○	it	4	jn jl	W	Sicily	1700	S	r m	Bot mag. 60
10363	grandiflórus *B M*	perennial	♃	△	or	4	jn au	Pu	S Europe	1814	R	co	Bot mag 1938
10364	ánnuus *W*	two-flowered	♃	○	or	4	jn au	Y	S Europe	1621	S	co	
10365	tingitánus *W*	Tangier	♃	○	or	4	jn au	D P	Barbary	1689	S	co	Bot mag 100
10366	Clýmenum *W*	various-flower	♃	○	or	4	jn jl	Pu	Levant	1713	S	co	Plu alm t 114,f 6
10367	hirsutus *W*	rough-podded	♃	○	or	4	jl	Pu	England	bor fi	S	co	Eng bot. 1255
10368	magellánicus *W*	Ld Anson's Pea	♃	○	or	6	jn jl	Y	Cape Horn	1744	S	co	
10369	tuberósus *W*	tuberous	♃	△	cul	2	jl au	R	Holland	1596	R	co	Bot mag 111
10370	túmidus *L*	tumid	♃	○	or	1	jl au	R	. .	1820	S	co	All. ped. 1. 26. 2
10371	rotundifólius *Bieb*	round-leaved	♃	○	or	1½	jl au	Pu	Taurica	1822	S	co	
10372	pratensis *W*	meadow	♃	△	or	3	jn au	Y	Britain	me pa	R	co	Eng bot. 670
10373	sylvéstris *W*	Wood Everlasting Pea	♃	△	or	3	jl s	Pu	Britain	mo w	R	co	Eng bot. 805
10374	latifólius *W*	broad-lvd Everlasting	♃	△	or	6	jl s	Pk	England	woods	R	co	Eng bot 1108
10375	heterophýllus *W*	various-leaved	♃	△	or	4	jl s	F	Europe	1731	R	co	Bau h 2. p 304
10376	palústris *W*	marsh	♃	△	or	4	jl au	B	Britain	mo w	R	co	Eng. bot 169
10377	incurvus *W*	curve-podded	♃	△	or	2	jl au	B	Russia	1802	R	co	Bux cent 4 t 46
10378	pisiformis *W*	Siberian	♃	△	or	3	jn jl	W B	Siberia	1759	R	co	Lin fil dec t 20

1559 O'CHRUS *Bauh* Ochrus. *Leguminosæ* *Sp* 1

10379	pállida *P S* *Pisum O'chrus* W	yellow-flowered	♃	○	or	3	jn jl	Y	S. Europe	1633	S	s l	Sch han 2 t.200

1560 PI'SUM *W* Pea. *Leguminosæ* *Sp* 3

10380	sativum *W*	common	♃	○	cu	3	jn s	W	S Europe	...	S	co	Lam ill t 638



History, Use, Propagation, Culture,

the second year some will be fit to gather, and by taking only the largest, the bed will continue productive for several years, adding some fresh compost every year

1558 *Lathyrus* A name employed by Theophrastus to designate a leguminous plant. It is said by his commentator Bodæus a Stapel, to have been derived from λα, an augmentative particle, and θουρος, any thing which is exciting, and to have been applied to this plant in consequence of certain aphrodisiacal qualities ascribed to it. L. sativus, *Gesse*, Fr, is frequently sown in Switzerland for soiling horses In several parts of the continent, a white light pleasant bread is made from the flour of this pulse, but it produced such dreadful effects in the last century, that the use of it was forbid by an edict of George, Duke of Wurtemburg, in 1671, and this not being observed, was enforced by two other edicts under his successor Leopold, in 1705, and 1714

Mixed with wheat flour in half the quantity, it makes a very good bread, that appears to be harmless. But bread made with this flour only has brought on a most surprising rigidity of the limbs in those who have used it for a continuance, insomuch that the exterior muscles could not by any means be reduced, or have their natural action restored These symptoms usually appeared on a sudden, without any previous pain; but sometimes they were preceded by a weakness and disagreeable sensation about the knees Baths, both hot and cold, fomentations and ointments of various kinds have been tried without effect, insomuch that it is regarded as incurable, and being neither very painful nor fatal, those who are seized with it usually submit to it with patience

Swine fattened with this meal lost the use of their limbs, but grew very fat lying on the ground. A horse fed some months on the dried herb, was said to have his legs perfectly rigid. Kine are reported to grow lean on it, but sheep not to be affected Pigeons, especially young ones, lose the power of walking by feeding on the seed. Poultry will not readily touch it, but geese eat it without any apparent damage. In some parts of Switzerland, cattle feed on the herb without any harm It would be worth enquiring, therefore, whether the soil may not contribute something to the ill qualities of the plant, and it is remarked that the seed from a strong, fat, moist soil, is much more deleterious than from a light dry one (*Duvernoy*)

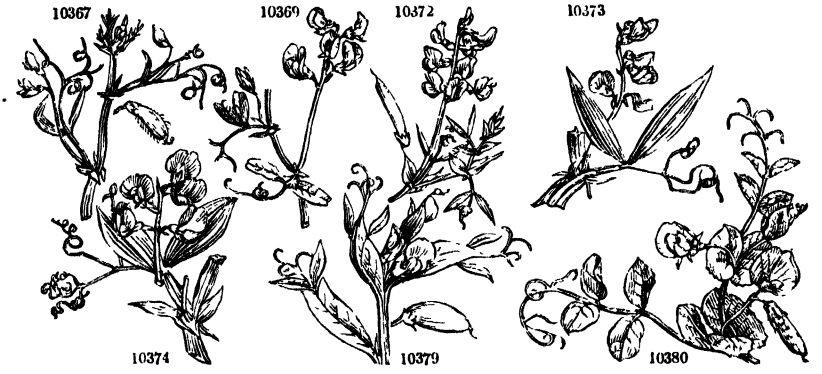
Fabbroni, from Florence, in 1786, says, that the government there has cautioned the peasants against the

10344 Leaves in 2 pairs ensiform, Stipules subulate, Stem simple
10345 Stem branched, Leaves in 6 pairs ovate oblong
10346 Stem branched, Leaves in 2 pairs lanceolate nerved, Stipules somewhat spiny
10347 Leaves pinnate hairy of many pairs ovate lanc Stip half-sagitt. Stem branched decumbent hairy
10348 Leaves pinnate smooth of many pairs elliptical, Stipules ovate lanceol. Stem branched erect hairy

10349 Peduncles 1-flowered, Tendrils leafless, Stipules sagittate cordate
10350 Peduncles many-flowered, Leaves simple, Stipules subulate
10351 Peduncles 1-flowered longer than calyx, Tendrils 2-leaved simple
10352 Peduncles 1-flowered, Tendrils 2-leaved, Pods ovate compressed channelled at back
10353 Peduncles 1-flowered, Tendrils 2-leaved and 4-leaved, Pods ovate compressed with 2 edges at back
10354 Peduncles 1-flowered shorter than calyx, Tendrils 2-leaved simple, Leaflets lanceolate
10355 Peduncles 1-flowered, Tendrils 2-leaved, Leaflets setaceous linear
10356 Peduncles 1-flowered as long as cal Petioles 2-leaved, Leaflets lanc. Pods linear roughish mucronate
10357 Peduncles 1-flowered awned, Tendrils 2-leaved simple ensiform
10358 Peduncles 1-flowered awned, Tendrils 2-leaved simple, Leaflets linear
10359 Peduncles 1-flowered, Tendrils 4-leaved, Petioles winged, Pods compressed
10360 Peduncles 1-flowered awned, Tendrils many-leaved, Leaflets linear truncate mucronate
10361 Peduncles about 1-fl Tendrils many-leaved, Leaflets alternate lanceolate, Petioles winged
10362 Peduncles 2-flowered, Tendrils 2-leaved, Leaflets ovate oblong, Pods hairy
10363 Peduncles 2-flowered naked, Tendrils 2-leaved, Leaflets obovate wavy, Stems rigid 4-angled
10364 Peduncles 2-flowered, Tendrils 2-leaved, Leaflets ensiform, Pods smooth, Stipules 2 parted
10365 Peduncles 2-flowered, Tendrils 2-leaved, Leaflets altern linc smooth, Stipules lunate
10366 Peduncles 2-flowered, Tendrils many-leaved, Leaflets lanceolate, Stipules toothed
10367 Peduncles about 3-flowered, Tendrils many-leaved, Leaves lanc Pods hairy, Seeds rough
10368 Peduncles long many-fl Stipules broad cordate sagittate, Tendrils 2-leaved
10369 Pedunc many-fl. Tendrils 2-leaved, Leaflets oval, Joints naked
10370 Pedunc 1-fl shorter than stipules, Tendrils 2-4-leaved, Stip toothed, Pods erect turgid and villous
10371 Pedunc many-fl Tendrils 2-leaved, Leaflets roundish, Joints membranous
10372 Pedunc many-fl. Tendrils 2-leaved quite simple, Leaflets lanceolate
10373 Pedunc many-fl Tendrils 2-leaved, Leaflets ensiform, Joints membranous
10374 Pedunc. many-fl Tendrils 2-leaved, Leaflets lanceolate, Joints membranous
10375 Pedunc many-fl Tendrils 2-leaved and 4-leaved, Leaflets lanc Joints membranous
10376 Pedunc many-fl Tendrils many-leaved, Leaflets linear lanc acute
10377 Pedunc many-fl. Tendrils many-leaved, Leafl lanc obl blunt mucronate, Joints membran Pods curved
10378 Pedunc. many-fl Tendrils many-leaved, Leafl ellipt blunt, Stipules half-sagitt ovate broader than leaflet

10379 Petioles decurrent membranous 2-leaved, Peduncles 1-flowered

10380 Petioles round, Stipules rounded below crenate, Peduncles many-flowered



and Miscellaneous Particulars.

use of Lathyrus sativus, swine having lost the use of their limbs, and become pitiable monsters by being fed on this pulse exclusively The peasants, however, eat it boiled, or mixed with wheat flour, in the quantity of one-fourth, without any harm

The poisonous Lathyrus from Barbary, is L semine punctato of Casp Bauhin, and seems to be only a variety, for in the crops of L. sativus in Italy, they find black seeds striped with white, as in the African seed Fabbroni suspects it to be a mule between L sativus and Cicera, for the flower and seed partake of the characters of both, having a black seed marked with white, and a white banner with a red keel to the corolla. (*Fabbroni's Letters in* MSS *Banks*)

L. odoratus is one of our most esteemed border annuals, and is extensively grown in pots for decorating chambers and windows L tingitanus, articulatus, and annuus are also sown as border annuals

L. tuberosus produces tubers on the roots, like those of the earth nut (Bunium bulbocastanum), these are sold in the markets of Holland, like those of Orobus tuberosus and Trapa natans, and their flavor is highly esteemed

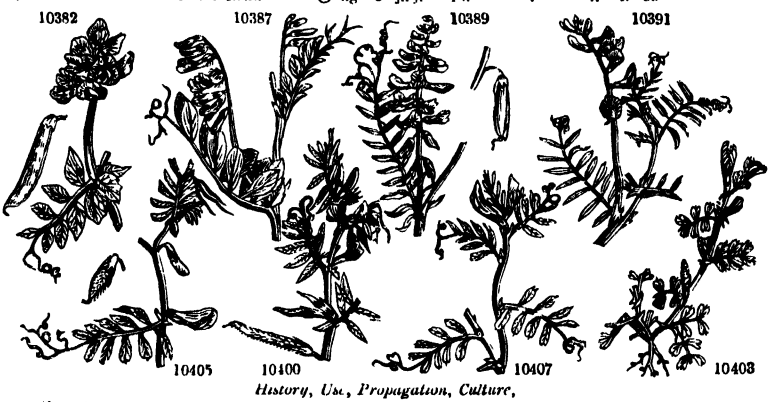
L. latifolius is a very shewy plant for shrubberies, arbors, and trellis work, and yields a great quantity both of green fodder and seeds, which some botanists have suggested might be applied to agricultural purposes.

1559 *Ochrus; ὠχρὸς*, yellow, in allusion to the color of its flowers. A small annual plant with yellow flowers, native of hedges in the south of Europe

1560. *Pisum* From the Celtic *pis*, a pea P. sativum, *Pois*, Fr., *Erbse*, Ger, and *Pisello*, Ital, is the most valuable of culinary legumes. Like most domestic plants of great antiquity, its native country is unknown, though it is commonly referred to the south of Europe The varieties of the pea are numerous, and differ widely among themselves from the early frame, a low plant bearing only one white blossom on each footstalk, to the crown-bearing, having pink blossoms on a terminating corymb The rouncival grows ten or twelve feet high, and the imperial not two feet. The sugar-pea has pods in which the inner film is wanting, or much less tough than usual, which admits of boiling the pods entire, and eating them in the same manner as kidney beans

In the open garden, the pea is sown at intervals from January to the middle of July, and a succession of

10381 **arvense** *W*	field	⅄ ○	ag	3	jn s	R	S Europe ...	S	co	Mor. ox. 2 1.4
10382 **maritimum** *W.*	sea	⅄ △	or	1½	jl	B	England sea sh.	D	a.l	Eng bot 1046
1561. VI'CIA *W*	VETCH				*Leguminosæ*	*Sp* 38—100				
10383 **pisiformis** *W.*	Pea-shaped	⅄ △	or	2	jl au	Pa.Y	Austria 1739	R	co	Jac. aust.4. t.364
10384 **dumetorum** *W*	great-wood	⅄ △	or	1	my jn	Pu	France 1752	R	co	Spreng fl hal. t.7
10385 **sylvatica** *W*	common-wood	⅄ △	or	6	jl au	W	Britain mo i w	R	co	Eng bot 79
10386 **cassubica** *W*	Cassubian	⅄ △	or	3	jn jl	L B	Germany 1711.	R	co	Jac aust.3 t.229
10387 **atropurpurea** *W*	dark-purple	⅄ △	or	3	jn jl	Pu	Algiers 1815	R	co	Vent. cels. t. 84
10388 **villosa** *W*	villous	⅄ ○	or	3	jn jl	D Pu	Germany 1815.	S	co	
10389 **Cracca** *W*	tufted	⅄ △	or	2	jn au	V	Britain hed	R	co	Eng. bot. 1163
10390 **tenuifolia** *W*	slender-leaved	⅄ △	or	1½	jn jl	V	Germany 1799	R	co	Bot. mag 2141
10391 **onobrychoides** *W*	Saintfoin	⅄ ○	or	2	jn jl	Pu	S. Europe 1789	S	co	Bot. mag 2206
10392 **biennis** *W*	biennial	⅄ ◑	or	2	jl s	Pu	Siberia 1753	S	co	Gmel. sib 4 t 2
10393 **insolidna** *W*	red-flowered	⅄ ○	or	3	jn jl	D Pu	Levant 1773	S	co	Bot reg. 871
10394 **benghalensis** *W*	Bengal	⅄ ▣	or	3	jn jl	D Pu	E. Indies 1792	S	co	Her lugd t 625
10395 **canescens** *W*	hoary	⅄ ○	or	1	jn au	B	Libanus 1800	S	co	Labill. syr. t. 7
10396 **capensis** *W*	Cape	⅄ ◭	or	1	jn au	Pa	C G H 1802	R	co	
10397 **pellucida** *W*	pellucid	⅄ ◭	or	1	jn au	Pa	C G H 1812	R	co	Jac schœ 2 t 222
10398 **biflora** *W*	two-flowered	⅄ ○	or	1½	jn au	B	Algiers 1801	S	co	Desf. atl. 2. t.197
10399 **globosa** *W.*	globular	⅄ ○	or	1½	jn au	B	 1804	S	co	
10400 **sativa** *W*	common	⅄ ○	ag	3	my jn	Pu	Britain corn fi	S	h l	Eng bot. 334
β segetalis	*hedge*	⅄ ○	ag	3	my jn	Pu	Britain corn fi	S	h l	
γ nemoralis	*wood*	⅄ ○	ag	3	my jn	Pu	Britain corn fi	S	h.l	
10401 **angustifolia** *W*	narrow-leaved	⅄ ○	or	1½	my jn	R	Germany ...	S	co	All.ped.t.59.f.2
10402 **amphicarpos** *W*	subterraneous	⅄ ○	or	1	my jn	B	France 1815	S	co	Clus exot. t 88
10403 **lathyroides** *W*	spring	⅄ ○	or	1½	ap jn	Pu	Britain fall fl	S	h l	Eng bot 30
10404 **lutea** *W*	yellow	⅄ △	or	1½	jn au	Y	Britain sea sh	R	co	Eng bot 481
10405 **hybrida** *W*	hairy-flowered	⅄ △	or	1½	jn au	Y	England thick	R	co	Eng bot 482
10406 **striata** *Bieb*	streaked	⅄ ○	or	1½	jn au	Pu	Tauria 1823	R	co	
10407 **lævigata** *W*	smooth-podded	⅄ △	or	1½	jl au	Pa.Y	England sea sh	R	co	Eng bot. 483
10408 **megalospérma** *Bieb*	Taurian	⅄ ○	or	2	jl au	Pu	Tauria 1798	S	co	
10409 **articulata** *W en*	jointed	⅄ ○	or	1½	jl au	Pu	 1798	S	co	
10410 **pannonica** *W*	Hungarian	⅄ ○	or	1½	jn jl	Pu	Hungary 1658	S	co	Jac aust 1 t 34
10411 **sordida** *W*	sordid	⅄ ○	or	1	jn jl	Y	Hungary 1802	S	co	Pl rar hu 2 t 133
10412 **Michauxii** *W en.*	white-flowered	⅄ ○	or	1½	jl au	Pu	 1803	S	co	
10413 **peregrina** *W*	broad-podded	⅄ ○	or	1½	jl au	Pu	France 1779	S	co	Plu alm-t 233.f 6
10414 **monantha** *W*	single-flowered	⅄ ○	or	2	jl au	R	Barbary 1790	R	co	
10415 **sepium** *W*	bush	⅄ △	or	2	my jn	B	Britain hed	R	h l	Eng bot 1515
10416 **bithynica** *W*	purple	⅄ △	or	1½	jl au	Pu	England san fi	S	co	Jac vind 2 t.147
10417 **platycarpos** *W*	flat-podded	⅄ ○	or	1½	jl au	Pu	Germany 1723	S	co	Roth abhan t 1
10418 **narbonensis** *W*	broad-leaved	○	ag	3	jn jl	Pu	France 1596.	S	co	Roth abhan t 2
10419 **serrati'olia** *W*	saw-leaved	○	ag	3	jn jl	Pu	Hungary 1723	S	h l	Jac aust app t 8
10420 **Faba** *W*	Garden Bean	○	cul	3	jn jl	Pa	Egypt ...	S	h l	Blackw her t.19
β equina	*Horse Bean*	○	ag	3	jn jl	Pu	. ..	S	co	



History, Use, Propagation, Culture,

crops is thus obtained from the end of May to the beginning of November By raising in hotbeds and transplanting, the first crop may be gathered in the beginning of May, and by raising and maturing in pits, pease may be gathered in April The pea, however, does not force well, and requires extraordinary attention to giving air, otherwise the blossoms will not set The culture of the pea is known to every countryman

The grey pea, cultivated in agriculture, is by some considered as a species, though it is obviously a mere variety, not further removed from the frame pea than is the blue Prussian, or the crown pea. A dry soil and season is essential for a good crop, unless the plants can be supported by sticks like the garden crops The seed is chiefly used for feeding pigs, and splitting for soup In boiling split pease, some samples, without reference to variety, fall or moulder down freely into pulp, while others continue to maintain their form. The-former are called boilers This property of boiling depends on the soil, stiff land, or sandy land that has been limed or marled, uniformly produces pease that will not melt in boiling, no matter what the variety may be Pease straw cut green and dried, is reckoned as nourishing as hay, and is considered as excellent for sheep. The produce of pease in flour is as three to two of the bulk in grain, and husked and split for soups as four to two A thousand parts of pea flour affforded Sir H Davy 574 parts of nutritive or soluble matter, viz. 501 of mucilage, or vegetable animal matter, 22 of sugar, 35 of gluten, and 16 of extract, or matter rendered insoluble during the operation

P. maritimum has seeds of a bitterish disagreeable taste, but are reported nevertheless to have been eaten in times of scarcity. (*Turner's Herbal*)

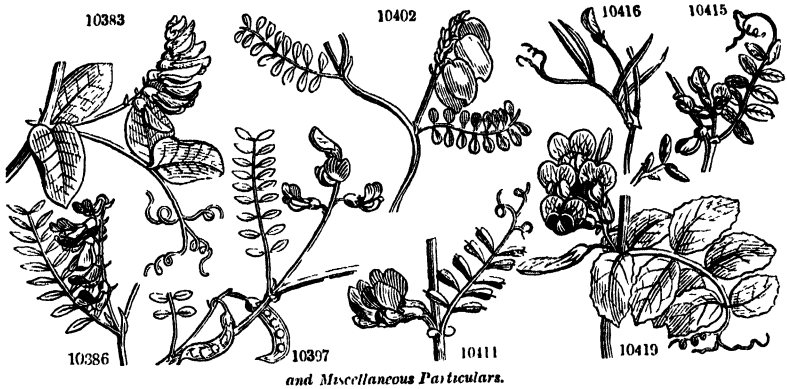
1561 *Vicia* From *gwig*, Celtic, whence βικιον, Greek, *vicia*, Latin, *vesce*, French, *vetch*, English, &c. V sylvatica and cracca, where they occur in meadows, are considered valuable herbage plants They yield great bulk of fodder, which is allowed to be very nutritive. Some have proposed to cultivate them alone, but Curtis observes, they would probably in that case choke themselves for want of support.

V. sativa, the winter and summer tare, fetch or vetch, is a valuable agricultural plant. Some consider the winter variety as a distinct species, but Professor Martyn proved, by cultivating both, that they were not

10381 Petioles 4 leaved, Stipules crenate, Peduncles 1-flowered
10382 Petioles flat above, Stem angular, Stipules sagittate, Peduncles many-flowered

10383 Peduncles many-fl Petioles many-leaved, Leaflets ovate: lower sessile
10384 Peduncles many-fl Leaflets reflexed ovate mucronate, Stipules somewhat toothed
10385 Peduncles many-fl longer than leaf, Leaflets ellipt. Stipules lunate with setaceous teeth
10386 Peduncles many-fl shorter than leaf, Leaflets oblong subpubesc Stipules half sagittate entire lanceolat
10387 Peduncles many-fl shorter than leaf, Teeth of calyx setaceous very villous, Leaflets lanceolate villous
10388 Peduncles many-fl longer than leaf, Flowers imbricated, Leaflets obl ovate villous, Stip half-sagittate
10389 Peduncles many-fl longer than leaf, Flowers imbricated, Leafl lanc blunt, Stip half-sagitt lin subulate
10390 Peduncles many-fl longer than leaf, Flowers imbricated, Leafl lin smoothish 3-nerved, Stip lin entire
10391 Peduncles many-fl longer than leaf, Flowers distant, Leafl lin. Stip half-sagitt lin lanc toothed at base
10392 Peduncles many-fl Petioles suleate 12-leaved, Leaflets lanc smooth, Stip. half-sagittate stalked
10393 Peduncles many-fl Leaflets obl Stipules entire, Pods villous ovate oblong
10394 Peduncles many-fl Leaves entire, Stipules entire, Pods nearly erect
10395 Peduncles many-fl long, Upper leaves subcirrhous, Stipules half-sagittate entire, Leafl oval-obl hoary
10396 Peduncles many-fl long, Leaves not cirrhous, Leafl obl lanc silky beneath, Stip lanceol entire
10397 Peduncles many-fl shorter than leaf which is not cirrhous, Leaflets obovate emarginate, Stip oblong
10398 Peduncles 2-flowered awned shorter than leaf, Leaflets linear narrowed at each end, Stip half-sagittate
10399 Pods subsessile solitary, Leaflets ovate, Stipules marked 4-toothed
10400 Pods sessile sub-binate, Leaflets obl. ovate truncate mucronate, Stipules toothed marked

10401 Pods sessile sub-binate spreading, Lower leaflets ovate emarginate upper lin entire, Seeds globose
10402 Pods sessile lower subterranean, Leaflets linear truncate, Stipules half-sagittate
10403 Pods sessile solitary erect smooth, Leaflets 6 lower subcordate
10404 Pods sessile solitary reflexed hairy, Stems diffuse, Stipules colored, Standard smooth
10405 Pods sessile solitary reflexed hairy 5-seeded, Standard villous
10406 Pods stalked reflexed, Standard silky, Stipules lanceolate marked, Upper leaflets obl elliptical acute
10407 Pods sessile solitary reflexed smooth, Stems nearly erect, Leaves quite smooth
10408 Pods sessile solitary reflexed downy, Leaflets linear blunt, Stipules half-sagittate entire
10409 Pedunc 1-fl in fruit longer than leaf and awned, Leaflets linear blunt mucronate, Stipules multifid
10410 Pods stalked about 3, and the standard hairy, Stipules lanceolate marked
10411 Pods subsessile twin reflexed smooth, Leaflets obl ovate retuse, Stipules marked
10412 Pedunc 1-fl very short, Leafl lin lanc truncate, Stipules lanc undivided, Pods finely downy
10413 Pods subsessile pendulous smooth 4-seeded, Leaflets linear emarginate
10414 Pedunc 1-fl awned, Leaflets lanceolate blunt, Stipules bifid
10415 Pods stalked about 4 erect, Leaflets ovate entire
10416 Pods stalked solitary erect, Leaflets 4 oval-lanceolate, Stipules toothed
10417 Pods subsessile solitary compressed somewhat inflated, Leaflets ovate toothed at end, Stip cil toothed
10418 Pods subsessile subternate compressed, Leaflets ovate entire, Stipules ciliate toothed at base
10419 Pods subsessile subternate, Leaves and stipules serrate
10420 Pods subsess subtern torulose, Leaflets ovate entire, Petioles not cirrhous, Stip sagittate toothed at base



and Miscellaneous Particulars.

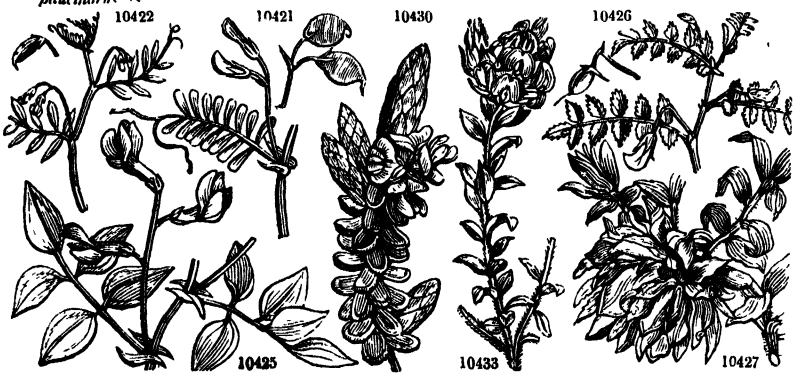
even very distinct varieties The winter variety is sown in September and October, and the summer at different periods, from February to June, for successional cuttings The soil requires to be in a good heart, otherwise they will produce but a poor crop of herbage. on a good soil they will yield ten or twelve tons, which is found excellent for milch cows and working stock The crop is seldom left to ripen its seeds, but when seeds are wanted, the only use made of them being for sowing or feeding pigeons

V narbonensis and serratifolia are cultivated in Germany in the same manner as our tare Vicia sepium has been recommended to be sown among clover for mowing

V Faba is a well known legume both of the garden and the field The garden varieties are numerous, the earliest is a small seeded variety, the Mazagan, and the largest the Windsor. Beans are planted at the various times in which pease are sown, but the late sowings of this plant do not answer so well as those of the pea When the ground is properly pulverised and in good heart, they succeed well when transplanted, and where a first crop is injured by insects, if the stems are cut down to the ground during their flowering season, they will send up a succession of shoots, which will bear a crop In this way, according to some, the bean may be rendered perennial, as it is certain the scarlet kidney bean may by merely protecting the roots from the frost

The field bean, of which there is a larger and smaller sort, the latter called *ticks*, is sown in drills by a machine, so as to admit of horse hoeing, and otherwise ploughing or stirring between the rows. By this means a larger crop is produced, and the land cleaned and brought into a better state for a succeeding corn crop Beans are excellent food for hard working horses, and for fatting hogs for bacon The flower of beans and pease is more nutritive than that of oats, but less easy of digestion A bushel of beans is supposed to yield fourteen pounds more of flour than a bushel of oats, and a bushel of pease eighteen pounds more, or, according to some, twenty pounds A thousand parts of bean flour were found, by Sir H Davey, to yield 570 parts of nutritive matter, of which 426 were mucilage or starch, 103 gluten, and 41 extract, or matter rendered insoluble during the process.

1567. ER'VUM *W*	Tare.					*Leguminosæ.*	*Sp.* 4—16						
10421 Lens *L.*	Lentil	⅄	○	clt	1	my	Pa	France	1548	S	r m	Rivini tet. t. 35
10422 tetraspérmum *W.*	smooth	⅄	○	un	1½	jn	Pu	Britain corn fi		S	h.l	Eng bot. 1223
10423 hirsútum *W*	hairy	⅄	○	un	2	jn jl	B	Britain corn fi		S	h l	Eng. bot. 970
10424 dispérmum *W*	two-seeded	⅄	○	un	1½	jn jl	Pa	E. Indies	1802.	S	co	
1563. ERVI'LIA *Link*	Ervilia					*Leguminosæ*	*Sp.* 1.						
10425 sativa *Link*	common	⅄	○	clt	1½	jn jl	Pu	S. Europe	1596.	S	co	Black t. 208 f. 3
1564 CI'CER. *W*	Chick-Pea.					*Leguminosæ*	*Sp* 1						
10426 arietinum *W*	common	⅄	○	clt	1	jl au	Pa	S Europe	1548.	S	co	Bot mag 2274	
*1565 LIPA'RIA *W*	Liparia					*Leguminosæ*	*Sp* 8—13						
10427 sphærica *W*	globe-flowered			or	4	jl au	Or	C G. H	1794	S	p l	Bot mag 1241	
§10428 capitáta *W*	headed			or	3	jl au	Y	C G H.	1812	C	co		
§10429 tomentósa *W*	downy			or	3	jl au	Y	C G H	1812	C	co		
§10430 vestita *W*	concave-leaved			or	3	my jn	Y	C G H	1800	S	p l	Bot rep 382	
§10431 graminifólia *W*	narrow-leaved			or	3	jn jl	Y	C G H	1800.	C	co		
§10432 villósa *W*	woolly			or	3	jn jl	Y	C G H	1774.	C	co	Hon h 5 t 29 f 1	
§10433 hirsúta *W*	shaggy-stem'd			or	3	ap.d	Y	C G H	1792	S	p l	Bot reg 8	
§10434 sericea *W*	silky-leaved			or	3	jn jl	Y	C G. H	1794.	S	p.l		
†*1566. CY'TISUS *W.*	Cytisus					*Leguminosæ*	*Sp* 24—41						
10435 Labúrnum *W*	comm Laburn			tm	15	my jn	Y	Switzerl	1596	S	co	Bot mag 176	
10436 alpinus *W en*	Scotch Laburn			tm	30	jn	Y	Europe	1596	S	co	Schmidt arb.	
10437 tomentósus *B R*	tomentose			or	1½	jl au	Y	C G H	1798	S	p l	Bot rep 237	
10438 nigricans *W*	black-rooted			or	3	jn jl	Y	Austria	1730.	S	s l	Bot reg 802	
§10439 folliolósus *W*	leafy			or	2	jl au	Y	Canaries	1779	C	p l	Bot. mag 426	
10440 divaricátus *W*	clammy			or	3	jl au	Y	S Europe	1656.	S	s l	Bot. mag 1387	
10441 sessilifólius *W*	common			or	6	my jn	Y	Italy	1629	S	s l	Bot mag 255	
§10442 wolgáricus *W*	wing leaved			or	2	my jn	Y	Siberia	1786	S	s l	Pall ross 1 t 47	
§10443 Cájan *W*	Pigeon-Pea			or	2	jl au	Y	E. Indies	1687	S	s l	Rhee mal 6 t 13	
10444 nánus *W en.*	dwarf			or	¼	my jn	Y	Levant	1816	S	s l	Dend brit 81	
10445 hirsutus *W*	hairy			or	5	jn au	Y	S. Europe	1739	S	co	Jac obs 4 t 96	
10446 capitátus *W*	cluster-flowered			or	3	jn jl	Y	Austria	1774	S	s l	Bot cab 497	
10447 austriacus *W*	Austrian			or	3	jn s	Y	Austria	1741	S	s l	Jac. aust 1 t 21	
10448 leucánthus *W*	cream-colored			or	4	jn jl	Pa Y	Hungary	1800	C	s l	Bot mag 1438	
10449 purpúreus *W*	purple-flowered			or	3	my au	Pu	Austria	1792	S	s l	Bot mag 1176	
β albiflórus	*white-flowered*												
10450 supínus *W*	trailing			or	1	my au	Y	S Europe	1755	S	s l	Jac aust 1 t 20	
10451 biflórus *W*	two-flowered			or	3	my jn	Y	Hungary	1760	S	s l	Bot reg 308	
10452 falcátus *W & K*	sickle-shaped			or	3	jn au	Y	Hungary	1816	S	s l	Bot. cab 520	
10453 triflórus *W*	three-flowered			or	4	jn jl	Y	Spain	1640	S	s l		
10454 elongátus *W & K.*	long-branched			or	4	my jn	Y	Hungary	1804	C	s l	Pl rar hu 2 t 183	
10455 rhombifólius *Ph*	rhomb-leaved			or	3	.....	Y	Louisiana	1811	C	s l		
10456 prolíferus *W*	silky			or	2	ap my	Y	Canaries	1779	C	p.l	Bot reg. 121	
10457 argénteus *W*	silver-leaved			or	3	au	Y	France	1739.	S	s l	Bau.h 2 p.359	
10458 calycinus *Bieb*	few-flowered			or	2	au	Y	Tauria	1820	C	co	Bot. cab 673	
pauciflórus													



History, Use, Propagation, Culture,

1562 *Ervum* From *erw*, tilled land, in Celtic, to which this plant is a pest E. lens (from *lentil*, Celtic), *Lentille*, Fr., *Lenize*, Ger, and *Lenticcia*, Ital, is a legume of the greatest antiquity, being in esteem in Esau's time, and much prized in eastern countries ever since. In Egypt and Syria they are parched in a frying-pan and sold in the shops, and considered by the natives as the best food for those who undertake long journies. There are three varieties of lentils cultivated in France and Germany, the small brown, which is the lightest flavored, and the best for haricots and soups, the yellowish, which is a little larger, and the next best; and the lentil of Provence, which is almost as large as a pea, with luxuriant straw, and more fit to be cultivated as a tare, than for the grain as human food. A dry warm sandy soil is requisite for the lentil, it is sown rather later than the pea, at the rate of a bushel, or one and a half bushel, to the acre, in other respects its culture and harvesting are the same, and it ripens sooner The produce of the lentil in grain is about a fourth less than that of the tare, and in straw it is not a third as much, the plants seldom growing above one and a half foot high The straw is, however, very delicate and nourishing, and preferred for lambs and calves, and the grain, on the continent, sells at nearly double the price of pease Einhoff obtained from 3840 parts of lentils, 1260 parts of starch, and 1433 of a matter analogous to animal matter.

1563 *Ervilia.* A word with the same meaning as *Ervum* See that word.

1564 *Cicer.* All authors agree in deriving the name from *κιχυς*, force; on account of the eminent qualities the ancients attributed to it. It grows naturally in the South of Europe, and is cultivated there for the same purposes as the lentil, but it is too delicate for field culture in this country It is called *Arietinum*, because the young seed bears a very curious resemblance to a ram's head.

1565. *Liparia.* From *λιπαρος*, brilliant, in allusion to the surface of the leaves. "The species," Sweet observes, "thrive very well in a mixture of loam and peat, and do not require so much water as some other genera of the order L. villosa, vestita, sericea, and some others, if they get too much water over their leaves

10421 Pedunc. 2-fl. Seeds compressed, Leaflets entire
10422 Pedunc about 2-fl. Pods smooth 4-seeded, Leaflets oblong truncate
10423 Pedunc many-fl Pods hairy 2-seeded, Leaflets lin blunt
10424 Pedunc 2-fl. awned, Pods smooth 2-seeded, Leaflets lin lanceolate downy

10425 Pedunc awned shorter than leaf, Leaflets obl. truncate smooth, Stipules hastate

10426 Pedunc. 1-fl Seeds globose gibbous, Leaflets serrated

10427 Flowers capitate, Leaves lanceolate nerved smooth
10428 Flowers capitate head erect, Leaves lanceolate smooth
10429 Flowers capitate, Leaves lanceolate downy
10430 Flowers capitate, Leaves ovate concave woolly beneath
10431 Flowers spiked hairy, Leaves lanceolate, and angular stem smooth
10432 Flowers fascicled, Leaves ovate villous downy
10433 Flowers racemose, Leaves obovate oblong smooth, Stem hairy
10434 Flowers somewhat spiked, Leaves ovate villous downy

10435 Racemes simple pendulous, Leaflets ovate oblong, Pods hairy
10436 Racemes simple pendulous, Leaflets ovate oblong rounded at base, Pods quite smooth
10437 Racemes lateral erect, Branches round spreading, Leaflets ovate downy
10438 Racemes terminal erect, Calyxes hairy teeth minute, Leaflets ellipt hairy
10439 Racemes terminal erect, Calyxes villous segments falcate, Leafl obovate oblong
10440 Racemes terminal erect, Calyxes and pods viscid, Leaflets oblong
10441 Racemes erect, Calyx with a triple bractea, Floral leaves sessile
10442 Racemes terminal 1-sided, Leaves pinnated hoary, Leaflets roundish elliptical
10443 Racemes axillary erect, Leaflets sublanceolate downy the middle one in a long stalk
10444 Raceme term 1-sided 4-fl Leaflets obovate downy beneath, Calyxes deeply 3-parted
10445 Pedunc aggregate subterminal, Calyxes hairy trifid, Leaflets obov mucronate hairy beneath
10446 Flowers capitate, Branches straight round villous, Leaflets ovate ellipt villous, Bract linear
10447 Fl in term umbels, Stems erect, Leaflets lanc strigose pubescent
10448 Fl umbelled term Stems erect, Leaflets ellipt smooth acute
10449 Fl axillary solitary stalked, Stems procumbent, Leaflets obovate, Pods linear repand

10450 Fl stalked sub-binate axillary, Stem decumbent, Leaflets obovate blunt
10451 Pedunc sub-binate axillary Stems diffuse-erect, Leaflets oblong lanceolate
10452 Flowers stalked lateral about 3 erect, Stem declinate branched, Leaflets obovate mucronate
10453 Flowers stalked axillary about 3, Calyxes campanulate, Leaflets obovate blunt hairy
10454 Flowers stalked lateral about 4, Stem erect, Branches long, Cal tubular, Leaflets obovate
10455 Racemes term erect, Leaflets obl rhomboid blunt, Stipules rounded ovate oblique
10456 Flowers in lateral umbels, Stems erect, Leaves ellipt erect silky beneath, Calyxes woolly
10457 Pedunc about 3 term Leaflets oblong lanceolate silky, Pods linear silky, Stems decumbent
10458 Flowers umbelled terminal, Cal 3-parted lower tooth trifid, Leaflets rounded obovate, Stems ascending



and Miscellaneous Particulars

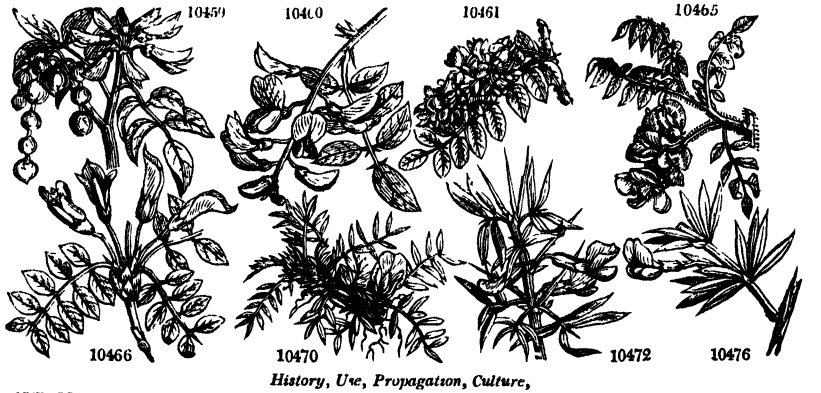
will be killed Very young tops, taken off for cuttings, and planted under a bell-glass, in sand, are not difficult to root. (*Bot Cult* 217.)

1566 *Cytisus* Pliny says it was so called because found in *Cythnus*, one of the Cyclades The Cytisus of the ancients is believed to have been our Medicago arborea. A genus of ornamental trees and shrubs, of which the Laburnums, *Cytise des alpes*, Fr, *Bohnenbaum*, Ger, are well known and universally admired examples. There are two species of Laburnum, which are so much alike, that in most nurseries they are confounded together, or only one in cultivation. C alpinus is the tree Laburnum, whose timber (the false ebony of the French) is much prized by cabinet-makers and turners, for its hardness, beauty of grain, and durability The tree is frequently sown in plantations infested with hares and rabbits, who will touch no other tree as long as a twig of laburnum remains "Though eaten to the ground in winter," as Boutcher observes, "it will spring again next season, and thus afford a constant supply for these animals, so as to save the other trees till of a size to resist their attacks The timber has been sold for upwards of half a sovereign per foot." It becomes most valuable in light loams and sandy soils

C wolgaricus and purpureus are very handsome shrubs; and make a fine appearance when grafted on stocks of laburnum five or six feet in height

C. cajan (an alteration of the Malay name, *Catjang*), *Pois d'Angola*, Fr., is frequently planted in the West India Islands, chiefly in rows as a fence to the sugar plantations, and will thrive on barren land The seed is much eaten by poor people and negroes, and is esteemed a wholesome pulse. In the island of Martinico even the better sort of people hold it in estimation, and prefer it to the European pea. The chief use of it in Jamaica is for feeding pigeons, whence its name. The branches, with the ripe seed and leaves, are given to feed hogs, horses, and other cattle, which grow very fat on them. (*Sloane and Jacq. Obs.*)

1567 MULLE'RA. *W.*	Mullera					*Leguminosæ. Sp.* 1.							
10459 monilifórmis *W.*	bracelet	♀	□	or	20	.....	Y	Guiana	1792.	C	l.p	Merian. sur. t.35	
1568. ROBI'NIA *W.*	Robinia.					*Leguminosæ Sp* 6—10							
10460 Pseudacácia *W*	comm Acacia	☿		tm	40	my jn	Pa.pu	N. Amer	1640	S	s l	Schmid.ar.1 t.32	
β inérmis W.	*smooth large-lv*	☿		tm	40	my jn	Pa pu	N Amer	...	S	s l		
10461 viscósa *W*	clammy	☿		tm	30	jn au	Pk	N. Amer	1797	G	s.l	Bot. mag 560	
10462 violácea *W.*	Ash-leaved	☿	□	or	12	.....	V	W. Indies	1759.	S	p l		
10463 purpúrea *Link.*	purple	☿	□	or	15	jl.au	Pu	.....	1810	G	co		
10464 guineen'sis *W en*	Guinea		□	or	6	...	Y	S. Leone	1822	C	p l		
10465 hispida *W.*	Rose-acacia			or	10	my s	Pk	Carolina	1743	G	s l	Bot. mag 311	
β rósea	*upright*			or	10	my s	Pk	.....	...	G	s.l		
*1569 CARAGA'NA. *Royen*	Siberian Pea-Tree					*Leguminosæ Sp* 11—13							
10466 sibírica *Roy*	common	☿		or	15	ap my	Y	Siberia	1752.	S	co	Schm.arb 1.t 33	
Robinia Caragana L.													
10467 arenária *Downe*	sand			or	1	jn jl	Y	Siberia	1802.	Sk	s l	Bot. mag. 1886	
10468 grandiflóra *Bieb.*	large-flowered			or	½	jn jl	Y	Iberia	1823	G	s.l		
10469 Altagána *W*	flat-podded			or	3	ap jn	Y	Siberia	1789.	G	s l	L'her stirp t.76	
10470 jubáta *W.*	bearded			or	1½	...	Y	Siberia	1796	G	s l	Bot. cab 562	
10471 tragacánthoides *W*	Goat's thn.-like			or	4	ap my	Y	Siberia	1816.	G	s l	Pa act pet 10.t.7	
10472 spinósa *W*	thorny			or	6	ap my	Y	Siberia	1775	L	s p	Schm arb 1 t 36	
§10473 Halodéndron *W*	salt-tree			or	6	my jn	Pu	Siberia	1779	R	s l	Bot mag 1016	
10474 Chamlágu *W*	shining			or	4	my jn	Y	China	1773	G	co	L'her stirp. t.77	
10475 frutéscens *W*	shrubby			or	2	ap my	Y	Siberia	1752	L	co	Schm arb. 1 t. 34	
10476 pygmæ'a *W*	dwarf			or	1	ap my	Y	Siberia	1751.	Sk	s.p	Schm.arb.1.t. 37	
1570 SWAINSO'NIA *H K.*	Swainsonia					*Leguminosæ. Sp* 2							
10477 galegifolia *H K*	red-flowered		□	or	2	jl au	R	N S W	1800	S	s.p	Bot. mag 792	
10478 coronillifólia *H K*	purple-flowered		□	or	2	jl au	Pu	N S W	1802.	S	s p	Bot. mag 1725	
†1571 SUTHERLAN'DIA *H K*	Sutherlandia					*Leguminosæ Sp.* 1							
10479 frutéscens *H K.*	scarlet		□	or	3	jn jl	Sc	C G H	1683	S	s l	Bot mag 181	
1572 LESSER'TIA *H K*	Lessertia					*Leguminosæ Sp* 4							
10480 ánnua *H K*	annual		○	or	1	jn jl	R	C G H.	1731	S	s l	Ex fl 84	
10481 diffúsa *H K.*	procumbent		○	or	1	jl au	R	C. G H	1792	S	s l	Jac ic. 3 t. 576	
10482 perénnans *H K.*	perennial		△	or	1	au	R	C. G H	1753	C	s l	Jac vind 3 t 3	
10483 púlchra *B M*	pretty		○	pr	1½	my	R	C G H	1817	S	co	Bot.mag. 2064	
†1573 COLUTE'A. *L*	Bladder-Senna					*Leguminosæ Sp* 4—12							
10484 arboréscens *W.*	common			or	10	jn au	Y	France	1568.	S	co	Bot mag 81	
10485 média *W en*	smaller			or	10	jn au	Or	.....	...	L	co	Dend brit 140	
10486 cruénta *W*	oriental			or	4	jn jl	Sc	Levant	1710	L	co	Schm arb t 119	
10487 Pocócki *W*	Pocock's			or	6	my o	Y	Levant	1752.	S,	co	Schm arb t. 120	



History, Use, Propagation, Culture,

1567 *Mullera* In honor of Otho Frederick Muller, a Dane, one of the editors of the Flora Danica There have also lived four other Müllers, Germans, and botanists The fruit is remarkable for its form, which is that of a necklace, a number of little balls being united by stalks, and not opening as in other leguminosæ, but always remaining closed The flowers are pink, and the size of a bunch of Laburnum

1568 *Robinia* In memory of Jean Robin, herbarist to Henry IV. of France, author of Histoire des Plantes, &c, Paris, 1620 His son, Vespasian, was subdemonstrator at the Jardin de Roi, and was the first person who cultivated the R. pseudacacia in Europe

R. pseudacacia is a thorny fast-growing tree, of middling stature, of no great beauty as a tree, but ornamental when young, and very well adapted for copse-wood and rough timber The leaves come out late in spring, and fall off early in autumn, like those of the ash. The timber is much valued in North America, and said to be superior to that of the laburnum, "being close-grained, hard, and finely veined; and in America more valued by the cabinet-maker than any other native timber whatever Pursh, in his Flora, asserts, that being nearly incorruptible, it is equally useful for posts and gates. We are informed by a friend, that gate-posts of this timber, on a property near Baltimore, have remained fresh for nearly a century The finest pinnated leaves, and pendulous white odorous flowers, add greatly to its beauty Its value is scarcely known in this country." (*Cal. Mem* II. 414.) It prefers a deep sandy soil, and rather sheltered situation; being very apt to throw up suckers from the running roots, and as it stoles freely, it seems peculiarly calculated for coppice-woods Beatson (*Com to Board of Agr*) has cultivated it in this way to great advantage.

In North America the use of the locust-tree has hitherto been confined to trenails, on account of its scarcity, but were it as plentiful as oak, it would be applied for more purposes by the shipwright, such as knees, floor-timbers, and foot-hooks, being much superior to oak for its strength and duration, and, from the tree spreading into branches, affords full as large a proportion of crooks or compass timber as oak.

A cubic foot of acacia, in a dry state, weighs from 48 to 53 pounds avoirdupois. If we compare its toughness in an unseasoned condition with that of oak, it will not be more than 8—100 less Its stiffness is equal to 99—100 of oak; and its strength nearly 96—100; but were it properly seasoned, it might, possibly, be found much superior to oak in strength, toughness, and stiffness. A piece of unseasoned acacia, two feet six inches long, and an inch square in the vertical section, broke when loaded with a weight of 247 pounds avoirdupois. Its medium cohesive force is about 11,500 pounds (*Dict. of Archi.*)

10459 The only species

10460 Racemes with 1-fl pedicels, Leaves pinnated with an odd one, Stipules spiny, Pods smooth

10461 Racemes with 1-fl pedicels, Leaves pinnated with an odd one, Branches and pods viscid with glands
10462 Racemes with 2-fl pedicels, Cal truncate, Leaves pinnated with an odd one, Stem unarmed
10463 Petioles somewhat spiny, Leaflets lanceolate mucronate downy, Pedic. 1-flowered
10464 Racemes axillary few-flowered, Calyxes and branchlets finely bristly
10465 Racemes axillary, Leaves pinnate with an odd one, Stem hispid

10466 Pedunc. simple several, Leaves in 4 pairs, Petioles unarmed, Pods cylindrical

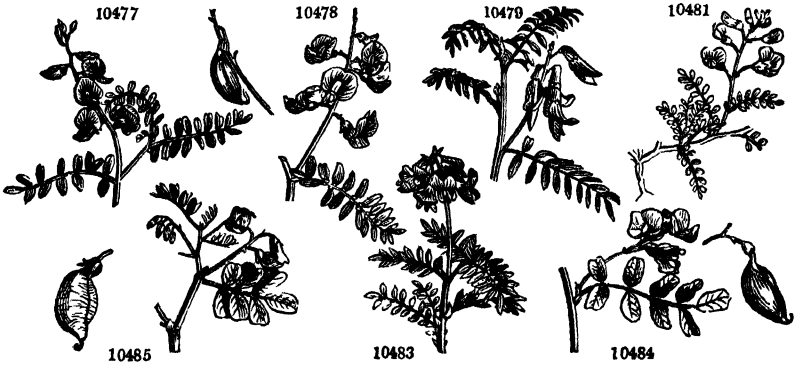
10467 Leaves about 4 pair, leaflets obcordate, Peduncles twin shorter than flower
10468 Pedunc simple, Leaves 4 stalked hoary terminated by a weak spine, Pods downy
10469 Pedunc. simple solitary, Leaves in about 8 pairs, Stipules spiny, Pods compressed
10470 Pedunc simple, Leaves in many pairs downy, Petioles filiform spiny, Branches villous
10471 Pedunc simple, Leaves in 2 pairs, Leafl obl lanc silky, Stipules and petioles spiny
10472 Pedunc simple, Leaves in 4 pairs, Leafl cuneate smooth, Stipules and petioles spiny
10473 Pedunc. 3-fl. Leaves in 2 pairs silky, Petioles spiny persistent, Pods bladdery
10474 Pedunc. simple, Leaves in 2 pairs, Leaflets obovate shining, Stipules and petioles spiny
10475 Pedunc. simple, Leaves about 4 somewhat petiolated terminated by a weak spine
10476 Pedunc. simple, Leaves 4 sessile

10477 Stalk of pod longer than persistent filaments
10478 Stalk of pod shorter than persistent filaments

10479 Leaflets obl blunt hoary beneath, Stem shrubby, Branches silky with down

10480 Leaflets linear emarginate smooth, Stem weak, Raceme axillary
10481 Leaflets linear emarginate hairy, Cal without bractes with black hairs
10482 Leafl obl downy, Stem erect, Racemes terminal
10483 Leaflets in 7 pairs ovate acute smoothish, Racemes axillary subcapitate 1-sided

10484 Leaflets ellipt retuse, Prominences of the standard short
10485 Leaflets obcordate glaucous, Pedunc about 6-flowered, Pods closed at end
10486 Leafl obovate emarginate glauc Prom of standard blunt very small, Pods open at end
10487 Leafl roundish ellipt. very blunt mucronate, Prom of standard long ascending, Stem shrubby



and Miscellaneous Particulars

R. hispida is a very handsome shrub, but it requires a sheltered situation, otherwise the branches are very liable to be shattered or blown off by high winds In young trees grafted above ground, the fracture commonly takes place at the graft, so that a good preventative is to graft on the root a little below the surface. Grafts in this manner are also much more certain of success

R viscosa resembles, in its leaves and flowers, the common acacia; but is, altogether, a much handsomer tree.

1569 *Caragana* This genus has been confounded by Linnæus and his followers with Robinia The name is derived from the appellation of the most common species in Tartary, where it is called among the Moguls, *Carachanâ* Altagana, the name of another species, is in like manner a slight alteration of the Tartar name Aldachanâ.

C spinosa, on account of the length and toughness of the branches, and its large stout thorns, is admirably adapted to form impenetrable hedges, and is sufficiently hardy to bear our climate About Pekin, they stick the bushes in clay on the tops of their walls, to prevent persons from getting or looking over them. (*Pallas*)

C. Halodendron is a handsome shrub, and grows in Siberia on dry naked salt-fields, and it is probably from the want of this principle in our garden soils, that it so seldom flowers here

C. pygmæa is a weak low shrub, with a shining yellow bark, with wood of a deep bay, almost as hard as horn

C frutescens is used by the Tartars for the same purposes as osiers, for which its tough shoots render it proper.

C. jubata is remrakable plant, its shoots always remaining covered by the persistent brown stipulæ of the fallen leaves. It is extremely difficult to propagate, and is rarely even seen in this country The most successful cultivators of it are Messrs Loddiges and Son

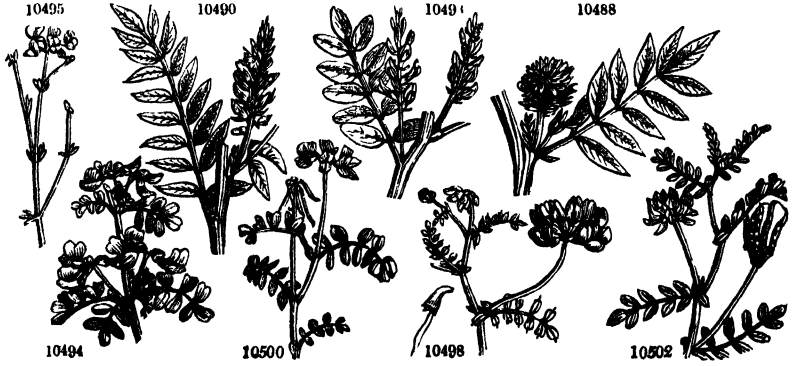
1570. *Swainsona* Named after the late Mr Isaac Swainson, who had a botanic garden at Twickenham.

1571 *Sutherlandia.* In honor of Mr James Sutherland, who published, in 1683, an 8vo catalogue of the Physic Garden at Edinburgh This and the former genus seed freely, and may also be readily increased by cuttings.

1572 *Lessertia.* Named by Decandolle in honor of M. Stephen Delessert, to whose mother Rousseau's Letters on Botany were addressed

1573 *Colutea.* An ancient name of a bush with sweet-scented flowers, probably similar to the genus now

1574. GLYCYRRHI'ZA. *W* GLYCYRRHIZA.						*Leguminosæ.*	*Sp* 5—6.						
10488	echináta *W*	prickly-headed	♃	△	or	3	jn.s	Pa	Italy	1596.	R	s p	Bot. mag 2154
10489	glandulífera *W.*	glandulous	♃	△	or	3	jn au	Pa	Hungary	1805.	R	l p	Pl rar hu. 1. t. 21
10490	lepidóta *Ph.*	silky-leaved	♃	△	or	3	jl au	Pa	Missouri	1811.	R	s l	Bot. mag. 2150
10491	aspérrima *W.*	rough	♃	△	clt	2	jl au	L.B	Siberia	1795	R	s.p	Pall. rap.t.M.f 3
10492	hirsúta *W.*	hairy	♃	△	clt	3	jl au	Pa	Levant	1739	R	s.p	
1575 LIQUORI'TIA *Monch* LIQUORICE						*Leguminosæ*	*Sp.* 1						
10493	officinális *Monch*	common	♃	△	clt	4	jl.au	L.B	S. Europe	1562.	R	r.m	Lam. ill t 625.f.2
***1576. CORONIL'LA.** *H K* CORONILLA						*Leguminosæ.*	*Sp.* 12—25						
10494	E'merus *W.*	Scorpion Senna			or	3	ap jn	R	France	1596	L	co	Bot. mag 445
10495	júncea *W.*	Rush			or	3	jn jl	Y	France	1656	C	r m	Bot. cab 235
10496	valentina *W.*	nine-leaved			or	2	mr n	Y	S Europe	1596.	C	r m	Bot. mag 185
10497	glaúca *W*	seven-leaved			or	2	my s	Y	France	1722.	C	r.m	Bot. mag 13
10498	viminális *H K*	slender			or	3	my n	Y	Mogador	1798	C	l p	Par. lond 13
10499	coronáta *W.*	large headed	♃	△	or	2	jn jl	Y	S Europe	1776.	C	co	Bot. mag 907
10500	minima *W*	least	♃	△	or	½	jl	Y	S. Europe	1658	C	co	Bot mag 2179
10501	argéntea *W.*	silvery-leaved			or	2	my jn	Y	Crete	1664	L	s l	Mil ic 2 t 289.f 1
10502	vária *W*	purple	♃	△	or	4	jl n	Pu	Europe	1597.	C	co	Bot mag 258
10503	crética *W*	Cretan		○	or	2	jn jl	St	Candia	1731.	C	s l	Jac vind 1 t 25
§10504	Securidáca *W.*	Hatchet-Vetch		○	or	1½	jl.au	Y	Spain	1562	C	co	G.de f 2 t 153 f 3
10505	ibérica *Bieb*	Iberian			or	2	jl.au	Y	Iberia	1822	C	co	Bot cab 789
1577 HIPPOCRE'PIS. *W* HORSESHOE-VETCH						*Leguminosæ*	*Sp* 4—7						
10506	unisiliquósa *W*	single-podded		○	pr	1	jn jl	Y	Italy	1570	S	co	Lam ill t.630
0507	multisiliquósa *W.*	many-podded		○	pr	1	jl au	Y	S. Europe	1683	S	co	Schk ha 2 t 206
0508	balearica *W*	shrubby			pr	2	my jn	Y	Minorca	1776	C	r.m	Bot mag 427
0509	comósa *W.*	tufted	♃	△	pr	½	ap au	Y	England	ch.hil.	D	s l	Eng. bot. 31
1578 ORNITHO'PUS. *W* BIRD'S-FOOT						*Leguminosæ*	*Sp* 6—10						
10510	perpusillus *W*	common		○	pr	¼	my au	R	Britain	dry pas.	S	co	Eng bot. 369
§10511	ebracteátus *Brot* *O durus* Cav	round-podded	♃	○	pr	¼	my jn	Vy	Portugal	...	S	co	Cav ic 1 t. 41
10512	compréssus *W*	hairy		○	pr	¼	jn jl	Vy	S. Europe	1730	S	co	
§10513	scorpioides *W*	Purslane-leav'd		○	pr	¼	jn jl	Vy	S Europe	1596.	S	co	Cav ic 1. t. 37
§10514	repándus *P S.*	repand		○	pr	¼	jn jl	Vy	Barbary	1805	S	co	Lam ill t.631 f 2
10515	sativus *P. S.*	Serradilla		○	ag	3	jn jl	Vy	Portugal	1818	S	co	
1579 SCORPIU'RUS *W* CATERPILLAR.						*Leguminosæ*	*Sp* 4.						
10516	vermiculáta *W.*	common	♃	○	pr	2	jn jl	Y	S Europe	1621.	S	co	Mor hi 2 t 11 f 3
10517	muricáta *W*	two-flowered	♃	○	pr	2	jn jl	Y	S. Europe	1640	S	co	Mor hi 2 t 11 f 4
10518	sulcáta *W*	three-flowered	♃	○	pr	2	jn jl	Y	S Europe	1596.	S	s l	Mor ox 2 11. 1
10519	subvillósa *W*	four-flowered	♃	○	pr	2	jn jl	Y	S Europe	1731	S	co	Mor hi 2. t 11.f.2
1580 SMI'THIA *Salisb* SMITHIA.						*Leguminosæ*	*Sp* 1—2						
10520	sensitiva *Sal*	annual	♃	▣	un	½	jl s	Y	E Indies	1785	S	s l	Par. lond. 92



History, Use, Propagation, Culture,

so called Shrubs with membranaceous inflated pods, free-growers and flowerers, well adapted to introduce in extensive shrubberies

C arborescens grows on Mount Vesuvius, even in the ascent to the crater, where there are scarcely any other plants The leaves are recommended as answering all the purposes of senna, and Allioni has given particular directions for the preparation of them A larger dose seems to be required to produce the same effect. The seeds, in a quantity of a drachm or two, excite vomiting. It is said by Haller and Ray to afford food grateful to cattle

1574 *Glycyrrhiza* From γλυκυς, sweet, and ῥιζα, a root, the sweet taste of the liquorice root is well known. But the species from which the name is derived now constitutes a different genus See Liquiritia.

1575 *Liquoritia* A Latinized appearance of our common English word *Liquorice*, which in its turn is said to be an alteration or corruption of the French word *Reglisse*, itself a corruption of *Glycyrrhiza* So, at least, says De Theis. To others, however, it is appears more probable that the name alludes to the quantity of *liquor* or *liquid* which the roots contain, and which constitutes their great value

L. officinalis is a deep-rooting perennial, which has long been much cultivated in Spain; and since Elizabeth's time has been grown in different parts of England The soil should be a deep sandy loam, trenched by the spade or plough, or with the aid of both, to two and a half or three feet in depth, and manured, if necessary The plants are procured from old plantations, and consist of the side-roots, which have eyes or buds. These may be taken off, either in autumn, when a crop of liquorice is taken up for use, and laid in earth till spring; or taken from a growing plantation, as wanted for planting. The planting season may be either October, or February and March. In general the latter is preferred. The plants are dibbled in, in rows three feet apart, and from eighteen inches to two feet in the row, according to the richness of the soil. The after-culture consists in horse-hoeing and deep stirring, in weeding, and in cutting over and carrying away the haulm every autumn, after it is completely withered As the plants do not rise above a foot the first season, a crop of onions or beans is sometimes taken in the intervals The plants must have three summers' growth, at the

10488 Pods echinate, Fl. capitate, Stipules lanc. Leaflets smooth oblong mucronate
10489 Pods glandular echinate, Fl. racemose, Stipules withering, Leafl. oblong lanc. emarg. clammy beneath
10490 Leaflets oblong acute silky, Pods racemose oblong hispid
10491 Pods smooth moniliform, Raceme term Stipules lanc. Leafl obovate emarg. rough beneath
10492 Pods hirsute, Leafl. obl. lanc. Flowers racemose

10493 Pods smooth, Stipules O, Leaflets ovate retuse clammy beneath

10494 Pedunc. about 3-fl. Claws of cor three times as long as calyx, Stem angular
10495 Leaves 5-nate and 3-nate linear lanceolate fleshy blunt
10496 Leaflets about 9, Stipules nearly round
10497 Leaflets 7 very blunt, Stipules lanceolate
10498 Leaflets 6-10 pair more or less obovate and retuse, Pods very long curved upwards
10499 Leaflets 9 ellipt. : inner close to stem, Stipules opp the leaves lanceolate
10500 Procumbent, Leafl. 9 ovate, Stipule opp the leaf emarg Pods angular knotty
10501 Leaflets 11 silky the outer the largest
10502 Leaflets several lanceolate smooth, Pods rounded erect
10503 Leaflets 15 cuneate retuse, Pods rounded erect 5 together
10504 Leaflets several obl. cuneate, Pods compressed ensiform
10505 Leaflets 9 very blunt somewhat emarginate, Stipules round toothletted

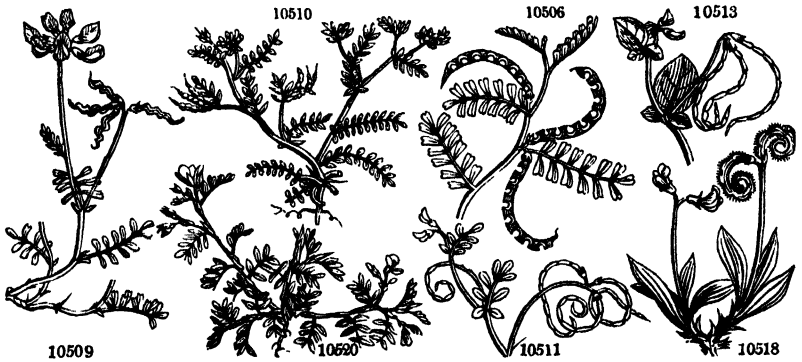
10506 Pods sessile solitary erect
10507 Pods stalked clustered circular lobed on one edge
10508 Pods stalked clustered smooth lobed on the outer edge, Leaves and cal hairy
10509 Pods stalked clustered arcuate rough sinuated on one side

10510 Leaves pinnated, Flowers capitate with a bractea, Pods roundish incurved
10511 Leaves pinnated, Flowers capitate without a bractea, Pods round incurved

10512 Leaves pinnated, Flowers capitate with a bractea, Pods compressed recurved rugose
10513 Leaves ternate subsessile the odd one very large
10514 Leaves ternate or quinate the odd one largest, Stipules large membranous 2-toothed
10515 Leaves pinnated, Pods rugose pendulous scarcely bowed, Joints compressed roundish

10516 Pedunc 1-fl Pods covered over with blunt scales
10517 Pedunc. 2-fl Pods bluntly aculeate outwardly
10518 Pedunc about 3-fl Pods bearing outwardly distinct acute spines
10519 Pedunc. about 4-fl. Pods bearing outwardly clustered acute spines

10520 Lips of calyx entire, Racemes stalked few-flowered



and Miscellaneous Particulars

end of which the roots may be taken up by trenching over the ground The roots are either immediately sold to the brewers' druggists, or to common druggists, or preserved, like carrots or potatoes, in sand, till wanted for use. They are used in medicine and porter-brewing

1576 *Coronilla.* From *corona*, a crown Its pretty flowers are disposed in little tufts like coronets. Handsome free-flowering shrubs, of easy culture. C valentina, glauca, and viminalis are valuable as flowering in winter, and often all the summer. C argentea bears a profusion of flowers, which have a strong sweet scent. The silvery color of this plant is occasioned by its growing on a poor dry soil, and if it is removed into better ground, it will take a glaucous color, and the contrary. C. emerus is a popular shrub of much beauty

C varia is a strong coarse-growing plant, and has been grown as an adjunct to clover, lucern, &c. Curtis says, it is bitter, but others have found horses and cows to eat it greedily.

1577 *Hippocrepis* From ἵππος, an horse, and κρηπις, a shoe, in allusion to the form of its pod. Pretty little annual plants, with bright yellow flowers

1578 *Ornithopus.* From ὄρνις, a bird, and πους, a foot The pods are twisted and curved in such a manner as to resemble the claws of a small bird. Curious on account of their jointed pods, but not worth culture as plants of ornament O sativus is a most valuable agricultural plant. It was introduced for purposes of field culture about the year 1818, from Portugal, under the name of Serradilla. Sown upon the barren, light, sandy downs of Thetford, in Norfolk, it produced an abundant crop of most excellent fodder, where nothing else would grow. It is exceedingly like O. scorpioides, except that it arrives at the height of two feet instead of as many inches.

1579. *Scorpiurus.* From σκορπιος, a scorpion, and ουρα, a tail; on account of the twisted pod, which is very like the tail of some reptile.

1580. *Smithia.* In memory of Sir James Edward Smith, M. D., F. R. S., knight, president of the Linnean Society, possessor of the Linnean herbarium, and author of various elementary and other useful botanical works. These are inconspicuous worthless weeds, possessing little interest beyond their irritable foliage.

*1581. SESBA'NIA *H K.* Sesba'nia. *Leguminosæ. Sp* 5—9.

§10521	grandiflóra *H K.*	great-flowered		or	10	jl.au	Or	E. Indies	1768.	C	l.p	Rhee.mal 1 t.51
§10522	ægyptíaca *H K.*	Egyptian		or	4	jl au	Y	Egypt	1680.	S	co	Al.ægypt 81 t.82
• 10523	aculeáta *H K*	prickly		or	4	jl au	Y	E. Indies	1690	S	co	Jac ic 3. t. 564
10524	cannabína *P S*	Hemp		or	4	jl au	Y	E. Indies	1800.	S	co	
10525	picta *Cav.*	painted		or	6	jl au	Y	W Indies	1823.	C	co	Bot. reg 873

1582 ÆSCHYNO'MENE *H K* Æschynomene *Leguminosæ Sp* 5—27

10526	sensitíva *W*	shrubby		or	3	...	Y	W Indies	1733.	C	s l	Plum. ic t 149
10527	áspera *W*	rough-stemmed		or	2	jn jl	Y	E. Indies	1759.	S	s l	Breyn cent.t.52
10528	hispida *W*	hispid		or	2	au	Y	N Amer.	1803	S	s l	
10529	americána *W.*	hairy		or	2	jl au	Y	Jamaica	1732.	S	s l	Sloa h 1 t 118.f.3
10530	indica *W*	Indian		or	2	jn.jl	Y	E. Indies	1799	S	s l	Rhee mal 9 t 18

†1583 STYLOSAN'THES. *Swz.* Stylosanthes. *Leguminosæ Sp* 1—7

10531	procúmbens *Swz.*	procumbent		un	1	jl au	Y	W Indies	1821.	S	co	Slo jam.t.110.f.2

*1584. HAL'LIA. *Th.* Hallia *Leguminosæ. Sp* 3—10

10532	flácida *W*	long-leaved		un	1½	au s	Pu	C G H	1789	C	l p	
10533	cordáta *W.*	heart-leaved		un	2	au	Pu	C G H	1787	D	l p	Jac schœ 3 t 296
10534	imbricáta *W*	imbricated		un	1½	au	Pu	C. G H.	1812.	C	s.l	Bot. mag 1800

1585 LESPEDE'ZA. *Mich* Lespedeza *Leguminosæ. Sp* 7—14

10535	fruticósa *P S*	shrubby		pr	4	jl au	Pu	Virginia	1739.	C	l p	Jac vind 3 t. 89
10536	sessiliflóra *Ph*	sessile-flowered		pr	3	jl	Pu	N Amer	...	D	l p	
10537	júncea *P S.*	slender-branch		pr	2	jl au	W	India	1776.	D	l p	Lin fil dec 1 t.4
10538	capitáta *Ph*	headed		pr	2	jn jl	W	N Amer	1789	D	l.p	
10539	polystáchia *Ph*	hairy		pr	3	jn au	W	N Amer	1789	D	l p	Mic amer 2.t.40
10540	violácea *Ph*	violet-flowered		pr	2	jl au	Pu	N Amer	1789	D	s l	
'0541	lagopodioides *P S*	Hare's foot-like		pr	2	my jn	Pa	China	1790	D	s l	Bur ind. t 53 f.2

1586 FLEMIN'GIA *Rox* Flemingia *Leguminosæ Sp* 6—10

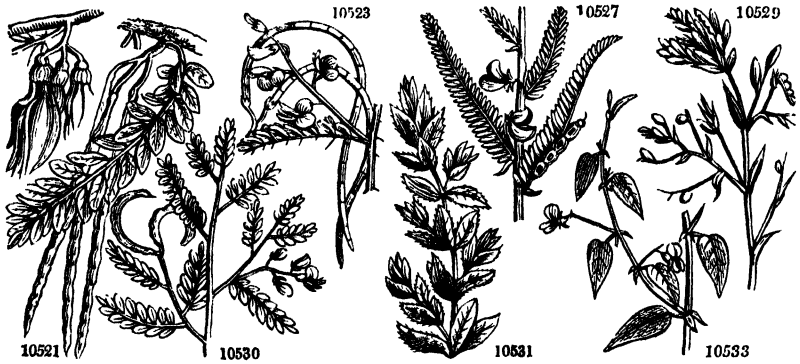
10542	stricta *H. K*	straight		un	2	jl s	Pu	India	1798	D	s p	Rox cor. 348
10543	semialáta *H K.*	many-spiked		un	3	jl au	Pu	Nepaul	1805	S	p l	Rox cor. 349
10544	congésta *H K.*	crowded-spiked		un	3	jl s	Pu	India	1802	C	l p	
10545	nána *H K.*	dwarf		un	1½	au	Pu	India	1804	C	l p	
10546	lineáta *H K*	branch-spiked		un	2	jl au	Pu	India	1793	C	l p	Bur ind t 53 f 1
10547	strobilifera *H K*	Beech-leaved		un	3	jl au	Pu	E. Indies	1787	C	p l	Bot. reg 617

*1587 ZOR'NIA *Mich* Zornia *Leguminosæ Sp* 2—7

§10548	pulchélla *P S*	neat-Indian		un	1½	jl au	Pu	E Indies	1799.	C	l p	Burm zeyl. t 52
10549	diphýlla *P S*	two-leaved		un	1	jl au	Pu	India	1733	S	l p	Rhee mal 9 t.82

*1588 HEDY'SARUM *W* Hedysarum *Leguminosæ Sp* 56—220

§10550	Alhági *W*	prickly-stem		un	2	jl au	R	Levant	1714	C	s l	Ranw it 94.t.14
§10551	bupleurifólium *W*	Hare's-ear-lv		un	1	jl au	Pu	India	1793	S	s l	Roxb cor 2 t 194
§10552	nummulariifólium *W*	Money-wort lv		un	1	jl s	Pu	India	1777	S	l p	Pet gaz t 26 f.4
§10553	styracifólium *W*	Storax-leaved		un	2	...	Pu	E. Indies	1796	C	l.p	
§10554	gangéticum *W*	oval-leaved		un	1½	jl au	Pa Y	E. Indies	1762.	S	r.m	Bur zeyl t.49 f 2
§10555	triquetrum *W*	triangul -stalk		or	1	jl au	Pu	E. Indies	1802.	S	l p	Bur ind t 52.f 2
§10556	maculátum *W*	spotted		un	1	jl au	Pu	India	1732	S	l p	Dil el t 141 f 168
§10557	vaginále *W*	sheathed		un	¼	jl au	R	E Indies	1790	S	l p	Bur.zeyl t 49 f 1
§10558	sagittátum *P S.*	arrow-leaved		un	3	...	R	E. Indies	1807	C	l p	
§10559	vespertilionis *W*	bat-winged		un	1	jl au	W	C China	1780	C	r m	Jac ic 3 t 566



History, Use, Propagation, Culture,

1581 *Sesbania* The Arabic name *Sesban*, a little Latinized. Most of these plants are ornamental. S. grandiflora is a beautiful plant, it grows in peat and loam, and cuttings root in sand under a hand-glass

1582 *Æschynomene* A name given by Pliny to a plant which withdrew its leaves from the contact of the hand. It is derived from αισχυνομαι, to be modest. One of the species of Æschynomene is sensitive, but it is not the plant of Pliny

1583 *Stylosanthes* From στυλος, a style, and ανθος, a flower· a flower with a very long style Worthless tropical weeds

1584 *Hallia.* Named after Birger Martin Hale, a pupil of Linnæus, and the student under whose name the thesis called Nectaria florum stands in the Amœnitates Academicæ

1585. *Lespedeza* Named by Michaux, in honor of Lespedez, a governor of Florida, who protected that botanist in his botanical researches Herbaceous, chiefly North American plants with little merit.

1586. *Flemingia.* Named after Dr John Fleming, president of the East India Company's Medical Board at Bengal.

1587 *Zornia.* Supposed to have been named after Mr John Zorn, an apothecary at Kempten, in Bavaria, author of a work called Icones Plantarum Medicinalium, in five volumes, octavo, between the years 1779 and 1784 There was also a Dr Bartholomew Zorn, of Berlin, author of Botanologia Medica, 1714, &c. &c.

1588. *Hedysarum.* From ἡδυς, sweet, and αρωμα, smell, some the species have fragrant flowers. A

10521 Racemes about 3-fl. Leafl obl. emarg smooth, Pods filiform straight compressed
10522 Racemes many-fl Leafl lin blunt mucronate, Rachis of leaves smooth, Pods filiform round
10523 Racemes few-fl Leafl linear blunt mucronate, Rachis of leaves prickly, Pods filiform round
10524 Pedunc 1-fl Leafl lin blunt mucronate, Rachis of leaves smooth
10525 Racemes many-fl pendulous, Leafl lin. blunt, Pods filiform round moniliform

10526 Stem smooth, Leafl. lin blunt, Racemes few-flowered, Pods smooth
10527 Stem rough below, Leafl lin blunt, Racemes comp hispid, Joints of pod rough in middle
10528 Stem hispid, Leafl lin blunt, Racemes simple, Pods hispid
10529 Stem hispid, Leafl lin falcate acuminate, Racemes simple, Joints of pods roundish distinct smooth
10530 Stem smooth, Pods smooth torose on one side and blunt, Leaflets blunt

10531 Leaves ovate lanc. smooth, Spikes many-fl. Bractes smooth mucronate, Stem downy

10532 Leaves lanc mucronate smooth, Pedunc 1-fl the length of leaves
10533 Leaves cordate obl acute smooth, Pedunc the length of leaves
10534 Leaves cordate ovate convolute imbricated, Flowers axillary sessile

10535 Leafl. subovate villous beneath, Flowers in sessile fascles, Stem shrubby
10536 Leafl oblong, Fascles of flowers sessile numerous, Pods nearly naked acute
10537 Leafl somewhat lin hairy beneath, Racemes axillary, Pods smooth length of calyx
10538 Simple, Leafl. ellipt Spikes capitate on short stalks axillary and terminal, Cal vill length of cor
10539 Branched villous, Leafl round oval, Spikes axillary on long stalks, Cor as long as calyx
10540 Branched diffuse, Leafl ellipt blunt hairy beneath, Racemes short umbelled
10541 Leaves ternate ovate, Racemes oblong, Pods inflexed, Calyx hairy

10542 Stem subsimple upright, Leafl broad lanc smooth, Racemes axill sol length of petiole
10543 Branched nearly upright, Leafl. ellipt smooth, Petioles winged, Racemes panicled term. and axillary
10544 Nearly erect, Leafl. broad-lanc Racemes axillary clustered
10545 Somewhat branched, Leafl obovate, Petioles winged, Racemes clustered, Pods gland viscid
10546 Erect branched, Leafl obovate cuneate, Racemes axill on long stalks dichotomous
10547 Leaves simple, Spikes like cones, Bractes cucullate foliaceous netted

10548 Leaves ternate large, Bractes numerous orbicular lined
10549 Leaves binate ovate-lanc. Bractes ovate acute

10550 Leaves simple lanc. blunt, Stem spiny
10551 Leaves simple lanc acute, Stem unarmed, Stipules scarious
10552 Leaves simple obovate roundish, Stipules scarious shorter than petiole, Pods smooth netted
10553 Leaves simple cordate-roundish blunt smooth above downy beneath
10554 Leaves simple ovate acute with stipules
10555 Leaves simple cordate oblong stalked winged, Branches 3-cornered
10556 Leaves simple ovate blunt
10557 Leaves simple cordate oblong, Petioles simple, Stipules sheathing
10558 Leaves simple cordate lanc sagittate, Flowers solitary, Pedunc capillary very long
10559 Leaves simple and ternate intermediate 2-lobed lobes spreading lanc Joints of pod wavy plaited



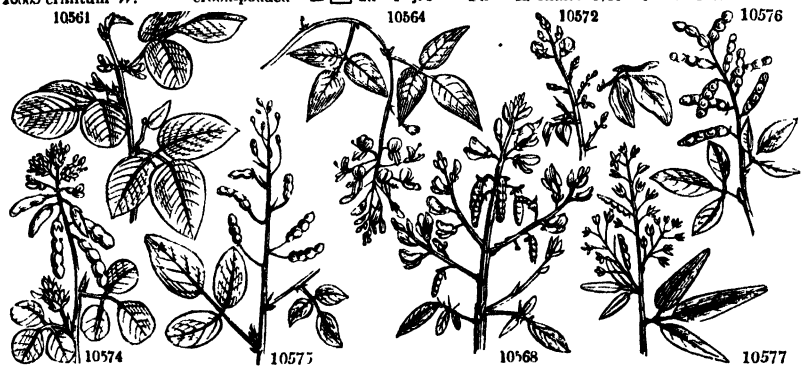
and Miscellaneous Particulars

numerous genus, not remarkable for beauty, but containing two curious species, the manna plant, and the turning Hedysarum; and one of considerable importance in European agriculture, the Saint-foin

H. Alhagi is a thorny shrub, with lanceolate leaves, and coriaceous, subcylindric, and scarcely jointed pods It is on this plant that Manna Trungebeen is found in Mesopotamia (*Russ. Alepp*) and other eastern countries. It is chiefly gathered about Tauris, where the shrub grows plentifully. Sir George Wheeler found it growing in Tinos, Tournefort also found it in many plains of Armenia and Georgia, and made a distinct genus of it, under the name of Alhagi, from the Arabic *Aghul* or *Al-gul*

H. gyrans is a native of Bengal near the Ganges, and is called there *Buram Chadals*, or *Burram Chandals* This is a wonderful plant, Linnæus observes, on account of its voluntary motion, which is not occasioned by any touch, irritation, or movement in the air, as in Mimosa, Oxalis, and Dionæa, nor is it so evanescent as in Amorpha. No sooner had the plants raised from seed acquired their ternate leaves, than they began to be in motion this way and that, this movement did not cease during the whole course of their vegetation, nor were they observant of any time, order or direction; one leaflet frequently revolved, whilst the other on the same petiole was quiescent, sometimes a few leaflets only were in motion, then almost all of them would be in movement at once. the whole plant was very seldom agitated, and that only during the first year It continued to move in the stove during the second year of its growth, and was not at rest even in winter (*Supp. Linn*) Swartz observes, that the motion is irregular, and that it sometimes ceases entirely, that in a very hot day it is immoveable, being agitated only in the evening, and that slowly. In our climate, the leaves, in

§10560	*tomentósum W*	woolly	un	1½	jn.jl	Pu	China	1782.	C	l p		
§10561	*umbellátum W.*	umbel-flowered	un	3	...	W	E. Indies	1801.	C	l.p		*Jac.schœ 3 t.297*
§10562	*biarticulátum W.*	two-jointed	un	3	...	Pu	E. Indies	1808.	C	l p		*Bur zeyl.t.50.f.2*
§10563	*latifólium Roxb*	broad-leaved	pr	2	au	Pu	China	1818.	C	l.p		*Bot reg 355*
10564	*uncinátum Jacq*	hooked	un	2	jl	Pu	Caraccas	1823.	C	co		*Jac. schon. t.298*
						Y	Brazil	1824.	C	co		
§10565	*lagocéphalum Link*	woolly-headed	un	2	jn jl	Pu	Mexico	1823.	C	p l		
§10566	*aparines Link.*	Bedstraw	un	2	jn jl	Pu	Manilla	1822.	C	p.l		
§10567	*malacophýllum Link*	soft-leaved	un	3	jl.au	Pu	E. Indies	1775.	S	p.l		*Jac. ic 3. t. 565*
10568	*gyrans W*	Moving-plant	cu	3	jl.au	Pu	Jamaica	1733	D	s l		
§10569	*trigónum W.*	three-sided	un	1	jl au	Pu	N. Amer	1640.	D	s l		*Corn.canad t. 45*
§10570	*canadénse W*	Canadian	un	6	jl au	Pu	N. Amer	1733	D	s.l		
§10571	*canéscens W.*	hoary	un	2	jl au	W pu	N Amer	1733	D	s.l		
§10572	*marilándicum W.*	Maryland	un	1½	jl o	Pu	N Amer	1725	D	s l		*Dil el.t 144.f.171*
§10573	*obtúsum W*	obtuse	un	2	jl.au	V	N Amer	1805.	D	s.l		
§10574	*cápitátum W.*	headed	un	3	jl	Pu	Ceylon	...	C	s l		*Bur ind t 54.f 1*
§10575	*tortuósum W*	twisted-podded	un	3	jl au	Pu	Jamaica	1781.	C	s.l		*Slo ja 1 t 116 f 2*
§10576	*viridiflórum W.*	green-flowered	un	3	jl s	G	N. Amer	1787	D	s.l		*Plu alm t.308 f 5*
§10577	*paniculátum W*	panicled	pr	2	jl	Pu	N. Amer	1781	C	s.l		*Pl. man.t.432 f.6*
§10578	*tuberósum W*	tuberous	un	3	...	Pu	E. Indies	1806.	D	s l		
§10579	*cuspidátum W*	sharp-pointed	un	1½	jl au	V	N Amer	1806.	D	s l		
§10580	*glutinósum W*	glutinous	un	1½	jl au	Pu	N Amer	1805.	D	s l		
10581	*serotinum W en.*	late-flowering	un	1½	jl s	V	.....	...	D	s.l		
§10582	*triflórum W.*	three-flowered	un	2	jn jl	Pu	India	1796	S	s l		*Bur. ind. t 54.f 2*
10583	*volúbile W*	twining	un	3	jl s	Pu	N Amer	1727	C	s l		*Dil el t 143 f 170*
§10584	*pictum W*	painted-leaved	un	6	...	Pu	E. Indies	1788	C	p.l		*Jac ic 3 t 567*
10585	*argénteum L*	silver-leaved	un	½	jl au	Pa pu	Siberia	1796	D	s l		*Pall it 2 t 9*
10586	*fruticósum W*	Siberian-shrub	el	4	jn jl	Pu	Siberia	1782	C	s l		*Pall it 3. t. 5 f 1*
§10587	*sennoides W*	Senna-like	un	3	jl au	Pu	.....	1823	C	co		
10588	*alpinum W*	alpine	el	4	jn jl	Pu	Siberia	1798	D	s l		*Bot. reg 808*
10589	*obscúrum W*	creeping-rooted	el	½	jl au	Pu	Alps of Eu.	1640	D	s.l		*Bot. mag 982*
10590	*taúricum W*	Taurian	pr	½	jl	Pa pu	Tauria	1804	D	s l		
10591	*róseum H K.*	Rose-colored	pr	½	jl au	Pk	Caucasus	1803.	S	s l		*Bot. mag 996*
10592	*coronárium W.*	Fr Honeysuckle	sp	4	jn jl	Sc	Italy	1596	S	co		
10593	*flexuósum W*	wave-podded	un	1	jl au	Pu	Asia	1680.	S	s l		*Sck hand 2.t.207*
10594	*húmile W*	dwart	un	½	jl au	Pu	Spain	1640	D	s l		
10595	*muricátum W.*	prickly-podded	un	1½	jn jl	Y	Patagonia	1793.	D	s l		*Jac ic 3 t 568*
10596	*spinosissimum W*	thorny	un	1	jl au	Pa pu	Spain	1731.	S	s l		*Plu alm t 50 f 2*
§10597	*Onobrýchis W*	Saint-foin	ag	1	jn jl	Pk	Britain ch pa.		D	s l		*Eng bot 96*
§10598	*saxátile W.*	rock	or	1	jn au	L Y	S Europe	1790	D	s l		*All.ped 1 t 19 f 1*
§10599	*álbum W*	white	pr	1	jn au	W	Hungary	1804	D	s l		*Pl rar hu 2 t 111*
§10600	*ascéndens Swz.*	ascending	un	1½	jn au	Pu	Jamaica	1818.	C	s.l		
	β cærúleum Lindl	*blue*	un	2	jn au	B	W Indies	1818	C	s l		*Bot reg 815*
10601	*grandiflórum Bseb.*	large-flowered	or	1½	jn au	Pu	Tauria	1821	D	co		*Bieb cent t 68*
10602	*cándidum Bseb*	white	pr	½	my jn	Pu	Tauria	1824	D	co		
§10603	*Caput-gálli W*	Cock's-head	pr	1½	jl au	F	France	1731	S	s l		
§10604	*Crista-gálli W*	Cock's-comb	pr	1	jn au	F	S Europe	1710	S	s l		
10605	*crinitum W.*	crook-podded	un	4	jl s	Pk	E. Indies	1780	C	s l		*Burm ind t. 53*



History, Use, Propagation, Culture,

general, only make a faint and feeble attempt towards the middle of the day at exerting their extraordinary faculty (*Shaw*)

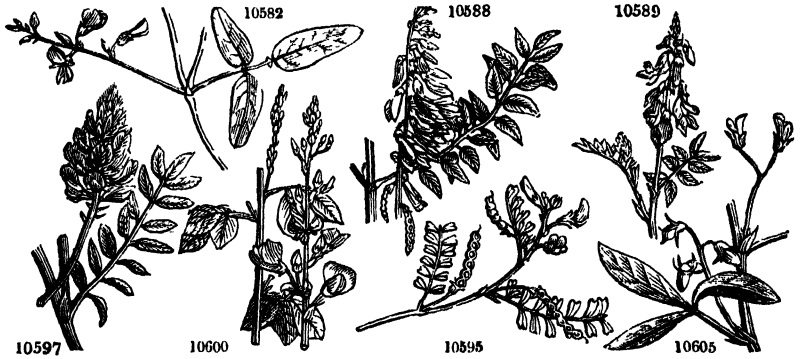
This motion does not depend upon any external cause that we can trace, and we are not able to excite it by any art that we possess It is not the action of the sun's rays, for this plant is fond of shade, and the leaves revolve well on rainy days, and during the night · exposed to too much wind or sun, it is quiet Perhaps, says Linnæus, there may be some part in vegetables, as in animals, where the cause of motion resides

H. coronarium, *Sulla*, or *Sainfoin à bouquets*, Fr, is an esteemed border biennial, and some speculative agriculturists recommend it for cultivation as a field plant In Calabria it grows wild in great luxuriance, near four feet high, affording excellent nourishment to horses and mules, both green and made into hay: but it does not well bear the spring in the north of Italy: we may presume, therefore, that it will scarcely bear our climate well enough to answer the purposes of husbandry. Osbeck mentions, that he saw it brought into Cadiz in great bundles, as food for cattle.

H. Onobrychis, *L'esparcet*, Fr, *Esparzette*, Ger, and *Cedrangolo*, Ital, is a deep rooting perennial, with branching spreading stems, compound leaves, and shewy red flowers It is a native of many parts of Europe, but never found but on dry warm chalky soils, where it is of great duration. It has been long cultivated in France, and in other parts of the continent, and as an agricultural plant, a good deal in England, in the chalky districts, and its peculiar value is, that it may be grown on soils unfit for being constantly under tillage, and which would yield little undergrass This is owing to the long and descending roots of the saint-foin, which will penetrate and thrive in the fissures of rocky and chalky understrata. Its herbage is said to be equally suited for pasturage or for hay, and eaten green it is not so apt to swell or hove cattle as the clovers or lucern. Arthur Young says, that upon soils proper for this grass no farmer can sow too much of it, and in

10560 Leaves ternate downy beneath, Stem angular downy, Racemes axillary
10561 Leaves ternate roundish ovate and branches 3-cornered hairy, Pedunc umb. axill. shorter than petiole
10562 Leaves ternate oblong, Stem branched, Raceme terminal, Pods with 2 joints strigose
10563 Leaves simple reniform cordate repand, Racemes axillary with hooked hairs
10564 Leaves ternate ovate villous, Stem climbing, Racemes terminal
10565 Leafl. roundish hairy beneath, Panic. term contracted bracteate, Pedunc. and cal. very hairy
10566 Leaves tern. Stem hairy rough, Leafl. roundish and obl. pale beneath somew. hairy, Racemes terminal
10567 Leaves tern obl. subcordate pale and soft beneath, Raceme terminal
10568 Leaves tern. oval-lanc blunt: lateral very minute, Panicle terminal, Pods repand below pendulous
10569 Leaves tern. ovate acute hairy, Stem climbing 3-cornered, Racemes very long axillary
10570 Leaves tern. obl. lanc. Stipules filiform, Fl racemose, Pods hispid
10571 Leaves tern. roundish downy beneath, Stipules ovate acuminate, Stem angul. cil hispid
10572 Leaves tern oblong villous beneath, Stipules subulate, Racemes panicled, Pods with 3 joints
10573 Leaves tern ovate blunt subcordate at base, Stipules lanc. subulate, Panicle terminal
10574 Leaves tern roundish obovate downy beneath, Stipules lanc. Racemes axillary
10575 Leaves tern ovate-obl blunt smoothish, Racemes erect axillary, Pods tortuous
10576 Leaves tern ovate-obl rough beneath, Stip. lanc cuspid. Racemes panicled with bractes
10577 Leaves tern oblong lanc. smooth, Panic term Joints of pod rhomboid downy
10578 Leaves tern. ovate acute, Raceme term. very long, Pods repand villous
10579 Leaves tern ovate acum. Panicle term. Joints of pod netted downy at edge
10580 Leaves tern. roundish ovate acuminate, Panicle scape-like from the base of stem, Peduncles viscid
10581 Leaves tern ellipt. blunt beneath and petioles hirsute, Raceme term simple
10582 Leaves tern obcordate, Stem procumb Pedunc 1-fl axillary, Pods with upper edge repand
10583 Leaves tern lanc. blunt, Racemes axillary, Stem twining
10584 Leaves pinnate lanc Raceme very long spiked, Joints of pod ellipt. plaited
10585 Leaves pinnate oval broader at base silky beneath, Cal shorter than corolla, Joints of pod downy rough
10586 Leaves pinnate, Leafl ellipt blunt downy beneath alternate, Joints of pod netted
10587 Leaves pinn Leafl altern smooth obovate retuse, Racemes axill few-fl
10588 Leaves pinn ovate lanc smooth, Racemes long axill Bractes shorter than peduncle
10589 Leaves pinn ovate smooth, Racemes axill Bractes longer than peduncle
10590 Leaves pinn. lanc linear downy beneath, Joints of pod roundish roughish
10591 Leaves pinn in 7 pairs ellipt Racemes capitate axillary stalked, Standard striped
10592 Leaves pinn roundish ellipt Joints of pod roundish aculeate naked
10593 Leaves pinn oblong, Pods flexuose, Joints prickly
10594 Leaves pinn linear cuneiform, Wings very short, Joints of pod roundish hairy prickly
10595 Leaves pinn obovate emarg hispid at edge, Raceme term Pods with many joints muricated
10596 Leaves pinn obovate emarg Flowers in capitate racemes, Joints of pod round villous acuminate
10597 Leaves pinn cuneate smooth, Wings as long as calyx, Pods smooth 1-seeded prickly
10598 Leaves pinn linear smooth, Wings shorter than calyx, Pods smooth 1-seeded prickly
10599 Leaves pinn. linear silky beneath, Wings shorter than cal Pods downy 1-seeded prickly-toothed
10600 Leaves ternate roundish downy beneath, Stem round, Branches declinate ascending hairy

10601 Leaves pinnate ellipt silky, Cal as long as wings, Joints of pod villous
10602 Leaves pinnate silky shining roundish ovate, Cal length of corolla, Joints of pod rugose downy
10603 Leaves pinnate obl smooth, Wings shorter than cal Pods 1-seeded prickly, Teeth of crest subulate
10604 Leaves pinnate obl smooth, Petals nearly equal, Pods 1-seeded prickly, Teeth of crest lanceolate
10605 Leaves pinnate, Racemes long, Pods inflexed



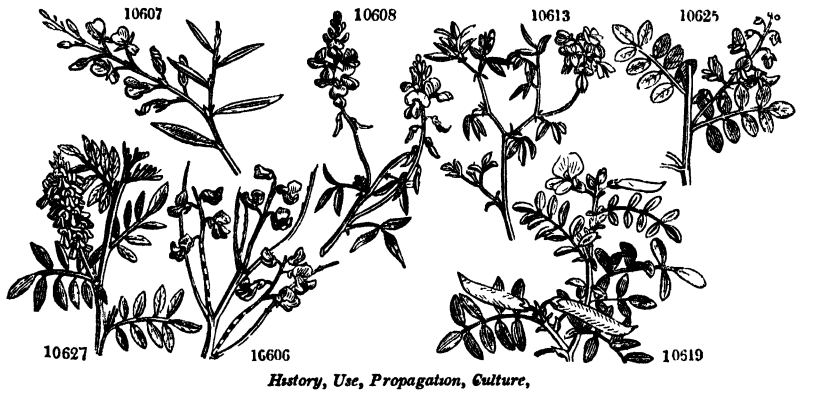
and Miscellaneous Particulars

The Code of Agriculture, it is said to be "one of the most valuable herbage plants we owe to the bounty of providence."

The deeper the soil is stirred previously to sowing the better, the seed is generally put in broad cast, at the rate of three or four bushels the acre, and sometimes a little red clover is sown afterwards to produce a crop the second season, when the saint-foin plants are but small When saint-foin is annually mown, it should be top-dressed with manure, but if only occasionally mown, the benefits derived from the grazing of sheep or cattle will, to a considerable extent, answer for surface dressings in a plant that derives a part of its nutriment from the subsoil. Saint-foin is highly nutritive, either cut green or made into hay The produce, on a medium of soils and cultivation, may probably be estimated at from about one and a half to two tons the acre And on the poorer and thinner staple sorts of land, it will perhaps seldom afford less than from a ton to a ton and a half on the acre. One thousand parts of saint-foin afforded Sir H. Davy thirty-nine of nutritive matter, which is the same as that afforded by the red and white clover.

The usual duration of saint-foin, in a profitable state, is from eight to ten years. It usually attains its perfect growth in about three years, and begins to decline towards the eighth or tenth on calcareous soils, and about the seventh and eighth on gravels There are instances, however, of fields of saint-foin, which had been neglected and left to run into pasture, in which plants have been found upwards of fifty years from the time of sowing. It has been cultivated upwards of a century on the Cotswold hills, and there roots of it have been traced down into stone quarries from ten to twenty feet in length, and in Germany, Von Thaer found them attain the length of sixteen feet. In general, the great enemy to the endurance of saint-foin, is the grass which accumulates, and forms a close turf on the surface, and thus chokes up the plant.

†1589 INDIGOFERA. *W.* Indigo					*Leguminosæ.*	*Sp* —						
10606 filifólia *W.*	naked-stalked	or	1	jl o	Pu	C G H.	1812.	C	s.l	Bot. reg. 104		
10607 linifólia *W.*	Flax-leaved	or	1	jl.au	Pu	E. Indies	1792.	S	s.l	Rox cor 2.t.194		
10608 psoraloides *W.*	long-piked	or		jl s	R	C G H.	1758	S	s.p	Bot. mag. 476		
10609 cándicans *W.*	white-leaved	or		my s	R	C G H	1774	C	s p	Bot. mag 198		
10610 amœ'na *W.*	scarlet-flowered	or		mr.ap	Sc	C G H.	1774.	C	s p	Bot. reg. 300		
10611 incána *W.*	hoary	or	2	my jl	Pu	C G H.	1812.	C	s p			
10612 sarmentósa *W*	dwarf	or	½	jn jl	Pu	C G H.	1786.	C	s p			
10613 denudáta *W.*	smooth-leaved	or		my jl		C. G H	1790	C	s p	Bot. cab. 500		
10614 trita *W*	oval-leaved	or	1	jn jl	Pk	E. Indies	1802.	C	s p			
10615 microphýlla *Lam*	small-leaved	or	½	ja d	Pu	C G. H	1812.	C	s.p			
10616 coriácea *W*	leathery-leaved	or	3	jl au	Pu	C G H	1774.	C	s.p			
10617 enneaphýlla *W*	trailing	or	4	jl au	Pu	E. Indies	1776.	C	s.p	Bur ind t 55 f 1		
10618 cytisoides *W.*	angular-stalked	or		jl au	R	C G H	1774.	C	s p	Bot. mag 742		
10619 stricta *W*	upright	or	3	jl au	Pu	C G H.	1812.	C	s p	Jac schœ 2.t 236		
10620 hirsúta *W.*	hairy-leaved	or	3	...	Pu	E. Indies	1759	C	s.p	Burm zeyl. t 14		
10621 angustifólia *W.*	narrow-leaved	or		jn o	Pu	C G H	1774	C	s.p	Bot. mag 465		
10622 australis *W.*	Botany-Bay	or		mr jn	Pk	N. S W	1790	S	s p	Bot. cab 149		
10623 viscósa *W.*	clammy	or	1	jn jl	Pu	E. Indies	1806.	C	s p	Sert han 2. t 12		
10624 A'nil *W*	West-Indian	clt	3	jl au	Pu	W Indies	1731	C	s p			
10625 tinctória *W*	East-Indian	clt	3	jl.au		E Indies	1731	C	s p	Rhe. mal. 1 t. 54		
10626 argéntea *W*	silver-leaved	clt	2	jl.au	Pu	W Indies	1776	C	s p	L'Her stirp.t 79		
10627 endecaphýlla *W.*	eleven-leaved	el	4	jl au	Sc	S Leone	1823	S	co	Bot. reg 789		
10628 stipulária *Lmk.*	large-stipuled	un	1½	...	...	C G H	1824	C	s.p			
10629 aphýlla *Lmk*	leafless	un	1½	...	...	C. G. H	1825.	C	s.p			
1590 TEPHRO'SIA *P S* Tephrosia.				*Leguminosæ.*	*Sp* —							
10630 toxicária *P S*	Fish-Poison	clt	3	...	Pu	S Amer	1791	S	p l	Plum. ic t 135		
10631 virginiána *Ph*	Virginian	or	4	jn au	Pk	N Amer	1765	C	s p	Plu alm.t 23 f 2		
10632 grandiflóra *P S.*	Rose-colored	or	4	my s	Pk	C G H	1774.	C	p l	Bot reg 769		
10633 stricta *P S*	straight-podded	or	3	my jn	Pk	C G. H	1774	C	p l	Scop insub 1.t.2		
10634 pállens *P S*	pale-flowered	or	3	jn au	Pk	C G H	1787.	C	p l			
10635 villósa *P S*	villous	or	2	jn jl	W	E. Indies	1779	S	p l	Plu alm. t.59 f.6		
10636 piscatória *P S*	woolly	or	2	jn jl	Pu	India	1778	C	l.p			
10637 purpurea *P S*	purple	or	2	jl au	Pu	E. Indies	1768	C	l p	Burm zeyl. t. 32		
10638 capitulàta *Lmk*	capitellate	or	1½	jl au	Pu	Owhyhee	1823	C	co			
19039 lanceæfólia *Lmk.*	lance-leaved	or	3	jl au	Pa Y	.....	1820	C	co			
1591 GALE'GA. *P S* Goat's-Rue				*Leguminosæ*	*Sp* —							
10640 officinális *W.*	officinal	or	4	jn s	B	Spain	1568	D	co	Sc.ha.2 t 208 a.		
β alba	*white-flowered*	or	4	jn s	W	Spain	...	D	co			
10641 orientális *W*	oriental	or	4	jn au	W	Levant	1801	C	p l	Bot mag. 2192		
10642 caribæ'a *W*	Caribean	or	3	jn jl	Pa	Caribees	1786	C	l.p	Jac amer. t 125		
10643 ochroleúca *W*	sulphur-colored	or	3	.	Pa Y	... ..	1799	C	l p	Jac ic 1. t. 150		
10644 mucronáta *Thunb*	mucronate	or	2	jn jl	Pa	C G H	1823	C	l p			



History, Use, Propagation, Culture,

1589 *Indigofera.* That is to say, a plant bearing *indigo* The species are elegant little shrubs, free-flowerers, and of easy culture Most of them will yield the dye, but those chiefly cultivated for this purpose are the I Anil (*Alnyl*, Arab.), in the West Indies, and the I tinctoria, argentea, and some other species in the East Indies The indigo is one of the most profitable articles of culture in Hindustan, because an immense extent of land is required to produce but a moderate bulk of the dye, because labor and land here are cheaper than any where else, and because the raising of the plant and its manufacture may be carried on without even the aid of a house The first step in the culture of the plant is to render the ground, which should be friable and rich, perfectly free from weeds, and dry if naturally moist The seeds are then sown in shallow drills about a foot apart The rainy season must be chosen for sowing, otherwise if the seed is deposited in dry soil, it heats, corrupts, and is lost. The crop being kept clear of weeds, is fit for cutting in two or three months, and this may be repeated in rainy seasons every six weeks The plants must not be allowed to come into flower, as the leaves in that case become dry and hard, and the indigo produced is of less value, nor must they be cut in dry weather, as they would not spring again A crop generally lasts two years. Being cut, the herb is first steeped in a vat till it has become macerated and parted with its coloring matter; then the liquor is let of into another, in which it undergoes the peculiar process of beating, to cause the fecula to separate from the water This fecula is let off into a third vat, where it remains some time, and is then strained through cloth bags, and evaporated in shallow wooden boxes placed in the shade Before it is perfectly dry, it is cut in small pieces of an inch square, it is then packed in barrels, or sowed up in sacks for sale. Indigo was not extensively cultivated in India before the British settlements were formed there, its profits were at first so considerable, that, as in similar cases, its culture was carried too far, and the market glutted with the commodity The indigo is one of the most precarious of oriental crops, being liable to be destroyed by hail storms, which do comparatively little injury to the sugar-cane and other plants.

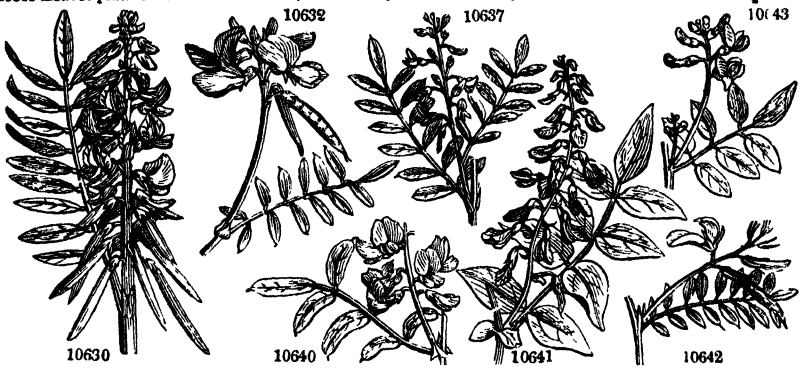
The indigo cultivated in the West Indies, thrives best in a free rich soil, and a warm situation, frequently refreshed with moisture. Having first chosen a proper piece of ground, and cleared it, hoe it into little

10606 **Leaves simple filiform, Flowers racemose**
10607 **Leaves simple linear hoary, Pods globose**
10608 **Leaves ternate lanc. silky beneath, Racemes longer than leaf, Pods pendulous**
10609 **Leaves ternate lin lanc. silky beneath, Racemes longer than leaf few-fl. Pods straight**
10610 **Leaves ternate oblong downy beneath, Racemes longer than leaf, Pods reflexed appressed**
10611 **Leaves ternate obovate silky beneath, Raceme term long, Stem decumbent**
10612 **Leaves ternate, Leafl ovate mucronate sessile, Pedunc axill about 2-fl. Branches filiform spreading**
10613 **Leaves ternate obcordate smooth, Racemes longer than leaf, Pods pendulous**
10614 **Leaves ternate ovate acute, Racemes short, Stem erect**
10615 **Leaves ternate obovate on short stalks, Pedunc. long filiform, Pods pendulous**
10616 **Leaves quinate obovate mucronate hairy, Stipules subulate, Pods straight smooth**
10617 **Leaves pinnate cuneate 7, Racemes as long as leaves, Pods 4-cornered 2-seeded**
10618 **Leaves pinnate 5 or 7 oblong narrowed at each end, Racemes longer than leaf**
10619 **Leaves pinnate 7 or 9 oblong downy beneath, Racemes about 5-flowered sessile, Stem straight**
10620 **Leaves pinnate of 4 or 5 pairs hoary beneath, Racemes length of leaves spiked, Pods 4-cornered villous**
10621 **Leaves pinnate linear, Racemes axillary, Stem shrubby downy**
10622 **Leaves pinnate smooth of many pairs oblong, Racemes shorter than leaf, Standard smooth**
10623 **Leaves pinnate of 6 pairs obovate strigose, Racemes shorter than leaf, Pods pendulous, Stem viscid**
10624 **Leaves pinnate oblong of 3 pairs, Racemes shorter than leaf, Pods falcate**
10625 **Leaves pinnated obl smooth of 4 pairs, Racemes shorter than leaf, Pods round arcuate**
10626 **Leaves simple ternate and pinnate silky, Pods torulose pendulous**
10627 **Leaves pinn obl smooth, Racemes spiked shorter than leaf, Pods 4-cornered reflexed**
10628 **Stem muricate downy, Leafl oval hairy, Stip oval acute, Racemes longer than leaves**
10629 **Leaves about 3, Leafl.** lanc. blunt mucronulate smooth deciduous, **Petioles persistent**

10630 **Leafl.** obl. lanc. blunt downy beneath, Raceme terminal long, Pods round spreading
10631 **Pods falcate backwards compressed villous spiked, Calyxes woolly, Leafl oval-obl acuminate**
10632 **Leafl.** obl mucronate downy beneath, Stip ovate acuminate, Raceme 4-fl terminal, Pods pendulous
10633 **Leafl** cuneate-obl. recurved mucronate villous beneath, Stipules subulate, Raceme few-fl
10634 **Pods straight spreading ciliated, Stip subulate, Leafl 9-11 obl acute downy beneath**
10635 **Leafl** lanc cuneate retuse silky beneath, Stip setaceous, Pods falcate backwards villous pendulous
10636 **Pods straight ascending villous, Stip subulate, Pedunc 2-edged, Leafl obl blunt**
10637 **Leafl** obl cuneate emarg mucronate smooth, Stip subulate, Pods racemose straight ascending
10638 **Leafl.** inversely lanc obtuse emarg silky beneath, Racemes terminal short
10639 **Leafl.** inversely lanc. emarg mucronate hairy, Stip subulate, Racemes terminal

10640 **Leafl.** lanc. mucronate smooth, Stip lanc. sagittate, Pods erect straignt

10641 **Leafl** ovate acuminate smooth, Stip ovate, Flowers cernuous
10642 **Leafl.** obl acute downy beneath, Stip subulate, Pods smooth racemose pendulous
10643 **Leafl** ovate acute downy, Stip subulate, Pods straight pendulous smooth racemose
10644 **Leaves pinn** ovate mucron villous, Stem erect, Branches downy



and Miscellaneous Particulars.

trenches, not above two inches, or two inches and a half in depth, not more than fourteen or fifteen inches asunder In the bottom of these, at any season of the year, strew the seeds pretty thick, and immediately cover them. As the plants shoot, they should be frequently weeded, and kept constantly clean, until they spread sufficiently to cover the ground Those who cultivate great quantities, only strew the seeds pretty thick in little shallow pits, hoed up irregularly, but generally within four, five, or six inches of one another, and covered as before Plants raised in this manner, are observed to answer as well, or rather better, than the others, but they require more care in the weeding They grow to full perfection in two or three months, and are observed to answer best when cut in full blossom The plants are cut with reaping hooks, a few inches above the root, tied in loads, carried to the works, and laid by strata in the steeper Seventeen negroes are sufficient to manage twenty acres of indigo, and one acre of rich land, well planted, will, with good seasons and proper management, yield five hundred pounds of indigo in twelve months, for the plant ratoons (i e. it sends out stolones), and gives four or five crops a year, but must be replanted afterwards.

Indigo has long been cultivated in Spain, but is on the decline in that country, owing to the more favorable circumstances of the East and West Indies. It was tried in the south of France and Italy, during the Buonaparte dynasty, but found not worth following for the same reason

1590 *Tephrosia* From τεφρος, ash-colored, in allusion to the color of the foliage T toxicaria is a spreading shrubby plant The leaves and branches, well pounded, and thrown into a river or pond, very soon affect the water, and intoxicate the fish, so as to make them float on the surface, as if dead, most of the large ones recover after a short time, but the greatest part of the small fry perish on these occasions. It has been introduced to Jamaica, and cultivated there, on account of its intoxicating qualities. (*Browne*)

1591. *Galega.* A name of unexplained meaning. Ruellius says, it is the word *Glaux*, Italianized! G officinalis was formerly accounted cordial and sudorific, but is now out of repute. The species are handsome border flowers.

1592. PHA'CA. *W.* BASTARD VETCH. *Leguminosæ* *Sp.* 6—14.

10645	bœ'tica *W.*	hairy	△	pr	4	jl	R	Spain	1640.	R	s.l	Moris. s. 2 t.8. f 1
10646	frígida *W.*	small	△	pr	1	jl	Y	Austria	1795.	R	s.l	Jac. aust. t. 166
10647	alpina *W.*	smooth-Alpine	△	pr	2	jl	Y	Austria	1759	R	s l	Jac ic. l. t. 151
10648	austrális *W.*	trailing	△	pr	½	my.jn	B	S. Europe	1779.	R	s l	Bot. cab. 490
10649	arenária *W.*	sand	△	pr	½	jl.au	B	Siberia	1796.	R	s l	Pal it 3. t.cc f.1 2
10650	astragalína *P. S*	procumbent	△	pr	1	jn jl	W B	N Europe	1771.	R	s.l	Bot. cab. 429

1593 OXY'TROPIS. *Dec* OXYTROPIS. *Leguminosæ* *Sp* 12—21.

10651	montána *Dec*	mountain	△	pr	½	jl au	Pu	Austria	1581	D	s.l	Bot. mag. 843
10652	Lambérti *Ph.*	Lambert's	△	pr	1	au s	Pu	Missouri	1811.	D	s.l	Bot. mag 2147
10653	uralénsis *P S.*	silky	△	pr	½	jl	Pu	Siberia	1800.	D	s.l	Pall astrag t. 42
10654	sórdida *P. S.*	hairy-mountain	△	pr	½	my au	Y Pu	Scotland	...	D	s l	Eng. bot 466
	Astrágalus walen'sis E. B											
10655	campéstris *Dec*	field	△	pr	½	jn jl	Pu	Germany	1778.	S	s.l	Pl rar.hu 2 t.130
10656	uncáta *Dec.*	Aleppo	○	pr	1	jl au	W	Aleppo	1768	D	co	
10657	altáica *Dec*	Altaic	△	pr	½	jl s	B	Siberia	1802.	S	co	Pall. astrag t.45
10658	cymbicárpos *Dec*	boat-podded	○	pr	½	jl au	Pa	Portugal	1800	S	co	
10659	pilósa *Dec*	pale-flowered	△	pr	½	jn.au	Pa Y	Siberia	1732	D	s l	Bot cab. 544
10660	dealbáta *Dec*	mealy	△	pr	½	jl au	Pu	Caucasus	1803.	D	s l	Pal. ast t 23 f 2,3
10661	defléxa *Dec*	small-flowered	△	pr	½	jn jl	Pu	Siberia	1800	D	s l	Jac ic 1 t 153
10662	dichóptera *Dec*	pubescent	△	pr	½	jn jl	Pu	Siberia	1815	D	s.l	Pall. astrag. t.39

1594 ASTRA'GALUS. *Dec* MILK VETCH. *Leguminosæ* *Sp* 63—110

10663	christánus *W*	great-yellow	△	or	3	jl	Y	Armenia	1737.	D	s l	Tourn it 2 t 254
10664	tomentósus *W*	downy-leaved	△	or	3	jl	Y	Egypt	1800	C	p l	Dec astrag t.29
10665	alopecuroídes *W.*	Fox-tail-like	△	or	2	jn jl	L Y	Spain	1737	C	s l	Pall astrag t 8
10666	vulpínus *W*	Fox-tail	△	or	2	jn jl	L Y	Siberia	1815	C	s l	Pall astrag t 7
10667	narbonénsis *W*	French	△	or	3	jn jl	Pa Y	S. Europe	1789	C	s l	Pall. astrag t 10
10668	capitátus *W*	headed	△	or	3	jl au	Pa Y	Levant	1759	C	s l	
10669	sulcátus *W*	furrowed	△	pr	4	jl	L B	Siberia	1785	C	co	Jac. vind 3 t. 40
10670	melilotoídes *W*	Melilot-like	△	pr	3	jn jl	Pu	Siberia	1785.	C	co	Pall astrag t 41
10671	virgátus *W.*	twiggy		pr	3	my au	Vi	Siberia	1806	C	co	Pall astrag t 18
10672	tenuifólius *W*	fine-leaved	△	pr	1	jl au	Pu	Siberia	1780	C	p l	Sweet fl g 73
10673	as'per *W.*	rough Astracan	△	pr	3	jl au	Pa Y	Astracan	1796	C	p l	Jac ic t 152
10674	galegiformis *W.*	Goat's-Rue-lv	△	or	2	jn au	Y u	Siberia	1729	C	s l	Pall astrag t 29
10675	chinénsis *W*	upright Chinese	△	or	1	jn jl	R	China	1795	C	p l	Linn fil dec t.3
10676	virescens *Dec*	green-flowered	△	or	3	jn jl	G Y	Siberia	1737	D	p l	
10677	falcátus *Dec.*	sickle podded	△	or	3	jn jl	Pa Y	Siberia	...	D	p l	Dec astrag t. 26
10678	uliginósus *W*	marsh	△	or	2	jn au	L B	Siberia	1752.	D	p l	Pall astrag t 26
10679	carolinánus *W*	Carolina	△	or	1½	jl au	G.Y	N. Amer.	1732	D	s l	Dill elt t 39 f 45
10680	canadénsis *W.*	woolly	△	or	1½	jn jl	Y	N. Amer	1732	D	s l	Dodar mem t 64
10681	semibiloculáris *Dec*	semibilocular	△	or	1½	jn au	Pa.Y	Siberia	1804	D	s l	Dec astrag t 23
10682	Cicer *W.*	bladdered	△	or	2	jn jl	Y	Europe	1570	D	s l	Jac aus t 251
10683	carnósus *Ph*	fleshy-podded	△	or	2	jn jl	W	Louisiana	1811	D	s l	
10684	caryocárpus *B* ? *eg.*	swelled-podded	△	or	1	jn jl	Pu	N Amer	1811	D	s l	Bot reg 176
10685	glycyphýllus *W*	sweet	△	or	3	jn jl	Y c	Britain	ch wo	D	s l	Eng bot. 203
10686	microphýllos *W*	small-leaved	△	or	1	jn jl	Y	Siberia	1773	D	p l	
10687	triméstris *W.*	Egyptian	○	or	½	jn jl	Y	Egypt	1759	S	co	Jac vind 2 t.174
10688	Búceras *W en.*	horned	○	or	2	jn jl	Pu	.....	1816	S	co	
10689	hamósus *W*	hook-podded	○	or	1	jn jl	Pa.Y	Spain	1633.	S	co	Lam ill t 622 f 4
10690	canaliculátus *W en.*	channel-podded	○	or	2	jn jl	W	.....	1816	S	co	
10691	contortuplicátus *W*	wave-podded	○	or	1	jl au	Y	Siberia	1764	S	co	Pall. astrag t 79
10692	bœ'ticus *W.*	triang -podded	○	or	3	jn jl	Pu	S Europe	1759	S	co	Bocc sic. 7 t 4
10693	Stélla *W*	star-podded	○	or	½	jl au	Pu	S Europe	1658	S	co	Plu alm t 79. f 4
10694	aegiceras *W en.*	Goat's-horned	○	or	1	jl au	Pa Y	.....	1818	S	co	
10695	brachycárpus *Bieb*	short-fruited	△	or	1½	jn jl	Pu	Caucasus	1820	D	s l	Bot mag 2335
10696	stipulátus *B M*	large-stipuled	△	or	1	jn jl	Y	Nepal	1822	D	s l	Bot. mag. 2380
10697	cruciátus *Link*	cruciate	○	or	1½	jn jl	Vi	.....	1820.	S	s l	
10698	verticillaris *W.*	whorled	△	or	1½	jn jl	Pk	Siberia	1822	D	s l	
10699	sesámeus *W*	Bird's-foot	○	or	1	jn jl	Pa B	S Europe	1616.	S	s l	Garid. prov. t.12
10700	annuláris *W*	ring-podded	○	or	1½	jn jl	Pu	Egypt	1800	S	s.l	
10701	pentaglóttis *W*	rough-Spanish	○	or	½	jn jl	Pu	Spain	1739	S	s.l	Cav ic 2 t 188
10702	epiglóttis *W*	heart-podded	○	or	½	jn jl	W	S. Europe	1737.	S	s l	Herm. lugd. t 77



History, Use, Propagation, Culture,

1592 *Phaca* Φακη, or φακος, was the Greek name of the lentil, and was derived from φαγω, to eat These are pretty herbaceous plants, with the habit of Astragalus.

1593. *Oxytropis.* From οξυς, pointed, and τροπις, a keel. A genus entirely resembling Astragalus in habit; but considered distinct by modern botanists

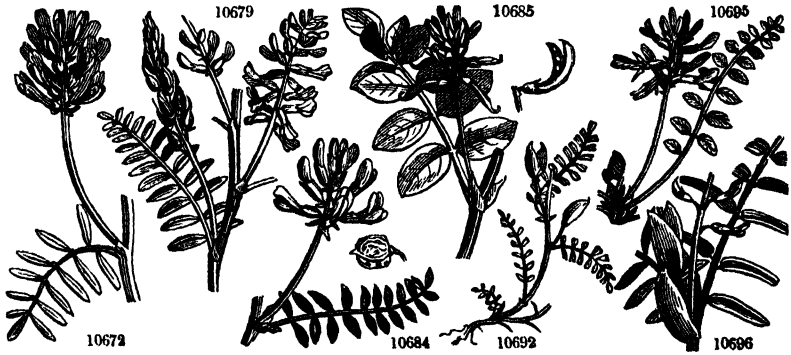
1594. *Astragalus.* This was a name given by the Greeks to one of their leguminous plants, but it is not known to which. The modern genus is composed of plants, the greater number of which are very orna-

10645 Erect hairy, Leafl. oval acute, Stip. lanc. Pods obl. cymbiform compressed
10646 Erect undivided, Leafl 11 obl blunt subciliated, Pods oblong inflated
10647 Erect branched downy, Leafl. in many pairs obl. lanc blunt, Pods half ovate acute
10648 Branched ascending, Leafl. about 17 lanc. · the odd one subsessile, Alæ bifid
10649 Branched ascending smooth, Leafl. about 11 lin.-lanc · the odd one subsess. Pods obovate inflated erect
10650 Caulescent procumb. Fl pendulous racemose, Pods acute at each end hairy

10651 Stemless villous, Pods erect roundish-obl. villous acuminate with style half 2-celled
10652 Stemless silky, Leafl. 19 lanc ellipt acute at each end, Spikes capitate
10653 Stemless villous silky, Pods erect ovate cylindr inflated 2-celled
10654 Stemless, Leafl. lanc silky, Scape longer than leaf and calyxes silky, Heads few-fl cernuous

10655 Stemless, Calyx and pods villous, Leafl lanc acute, Stem decumbent
10656 Stemless, Pods subulate hooked longer than leaf, Leafl obcordate
10657 Stemless, Leafl lanc smooth, Scapes as long as leaves hairy, Flowers in obl. heads
10658 Stemless, Leafl cuneiform retuse subsessile, Pods smooth, Flowers nearly apetalous
10659 Caulescent erect hairy, Leafl lanc acute, Spikes stalked longer than leaf, Pods subulate hairy
10660 Caulescent erect hairy, Leafl 3-pair lanc acute, Stip obl. acun Spikes stalked longer than leaf
10661 Caulescent ascending, Leafl ovate lanc deflexed hairy, Spikes stalked longer than leaf
10662 Caulescent diffuse downy, Stipules united, Wings emarg Peduncles as long as leaf

10663 Caulescent erect, Leafl ellipt. stalked, Stip lin subulate, Pedunc about 3-fl axill clustered
10664 Caulescent erect, Leafl roundish cordate sessile downy, Stip ovate acuminate, Pedunc 1-fl axill
10665 Caulescent erect, Spikes cylindrical subsessile, Cal and pods woolly
10666 Caulescent erect, Heads of flowers stalked globose, Pods 4-seeded inclosed in woolly calyx
10667 Caulescent erect, Heads of flowers sessile axill short, Corolla larger than calyx
10668 Caulescent erect, Heads globose, Pedunc very long, Leafl emarginate
10669 Caulescent erect striated, Leafl lin lanc smooth, Stip lanc Racemes longer than leaf
10670 Caulescent erect panicled, Leaves of 2 or 3 pair linear cuneate retuse smooth, Racemes filiform
10671 Caulescent erect shrubby, Leaves in 6 pairs lin lanc hoary, Racemes long spiked
10672 Caulescent erect, Leafl linear lanc Spikes obl stalked longer than leaf, Standard twice as long as alæ
10673 Caulescent erect rough, Leafl lin lanc Spikes stalked longer than leaves straight, Pods 3-cornered
10674 Caulescent erect straight smooth, Leafl ellipt blunt, Fl racemose pendulous, Pods 3-cornered smooth
10675 Caulescent erect straight smooth, Leafl ellipt. blunt, Fl racemose pendulous, Pods inflated rugose
10676 Caulescent erect smooth, Leafl lanc acute, Racemes longer than leaf, Pods falc acute pendulous
10677 Caulescent erect, Peduncles as long as leaves, Leaflets 33-41, Pods about 3-cornered arcuate
10678 Caulescent erect, Leafl obl downy, Spikes stalked, Bractes obl length of calyx
10679 Caulescent erect, Leafl obl downy beneath, Spikes stalked, Bractes lanc length of peduncle
10680 Caulescent diffuse, Pods subcylindrical mucronate, Leafl naked beneath
10681 Pedunc. as long as leaves, Leafl 33-41 scarcely downy, Pods 3-cornered bowed nodding
10682 Pedunc as long as lvs. Leafl smoothish obl blunt mucro Stip lanc Racemes stalked longer than leaf
10683 Pedunc. as long as lvs. silky-white, Leafl 21 ellipt smooth above, Spikes subsessile, Pods fleshy
10684 Pedunc. longer than leaf, Fl erect closely spiked, Pods half 2-celled
10685 Caulescent prostrate, Leafl smooth ovate mucronate blunt, Stip. ovate-lanceolate
10686 Caulescent erect spread Leafl ov hairy, Stip solitary opp the lvs 2-parted, Spikes stalked long than leaf
10687 Caulescent, Scapes 2-fl Pods hooked subulate with 2-keels
10688 Caulescent prostrate, Leafl ellipt cuneate emarg Racemes few-fl Peduncles longer than leaf
10689 Caulescent procumbent, Leafl cuneate emarg Stip ov Racemes few-fl stalked shorter than leaf
10690 Caulescent erect, Leafl. obl retuse, Fl axill sol subsessile, Pods deeply channelled
10691 Caulescent procumbent downy, Leafl obovate emarg Racemes stalked arcuate twisted
10692 Caulesc procumb Leafl obl. blunt mucro Spikes stalked few-fl shorter than lvs. Pods obl. hooked at end
10693 Caulescent diffuse, Heads stalked lateral, Pods straight subulate mucronate
10694 Caulescent difluse, Leafl ellipt emarg Racemes few-fl stalked shorter than leaf, Pods hooked
10695 Stemless, Leaves ellipt downy, Scapes racemose longer than leaf, Pods obovate the length of calyx
10696 Caulescent, Leaflets oval-oblong or obovate smooth, Stipules very large leafy
10697 Stem decumb Leafl obl downy, Pedunc axill few-fl Pods arcuate with elevated veins
10698 Stemless, Leafl subulate 4 whorled pilose, Scapes spiked longer than leaf, Lower flowers remote
10699 Caulescent diffuse, Heads subsessile lateral, Pods erect subulate with a reflexed point
10700 Caulescent diffuse, Pods subulate incurved smooth, Leafl. obovate
10701 Caulescent procumb Leafl obl. retuse, Heads stalked shorter than leaf, Pods half ovate squamose at end
10702 Caulescent procumb Leafl lin narrowed at base, Heads subsessile, Pods half ovate reflexed downy

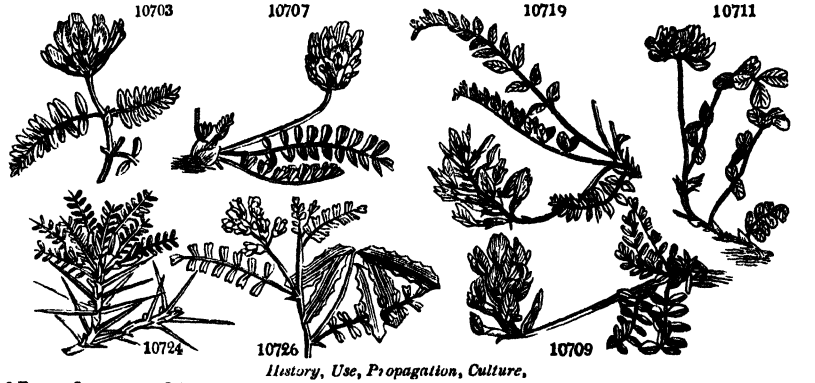


and Miscellaneous Particulars.

mental A glycyphyllos is the largest of the European species. The leaves are sweet, with a mixture of bitterness, and do not seem to be agreeable to cattle, at least the plant, in its wild state, is left untouched; otherwise it might have been desirable to cultivate it

A Tragacantha was formerly considered as the plant yielding the gum Tragacanth of commerce, but Olivier (*Voyage dans l'Empire Ottoman*, v 342 pl 44.) discovered that it was generally procured from A. verus It is probable that both species, and perhaps some others, yield this gum. A. verus is a native of the north

10703 hypoglóttis *W.*	purple-mountain		△	or	½	jn jl	Pu	Britain	sa.hes.	D	s.l	Eng bot. 274
10704 austríacus *W*	Austrian		△	or	½	jn jl	Pa.B	Austria	1640.	D	s.l	Jac. aus. 2 t 195
10705 fruticósus *W*	woody			or	1½	jn.jl	Vi	Siberia	1804.	D	s.l	Pall astrag. t.19
10706 arenárius *W.*	sand		△	or	1	jn.jl	B	Germany	1798.	D	s.l	Retz. obs. 3. t. 3
10707 leucophæ'us *W.*	dwarf-white		△	or	½	my.au	W	.....	1776.	D	s.l	Bot. cab. 111
10708 depréssus *W.*	depressed		△	or	½	my jn	W	Europe	1772	D	s.l	Bot. cab 680
10709 leontínus *Jac.*	Lion's-tail		△	or	½	my jn	B	Austria	1816.	D	s.l	Bot. cab. 432
10710 Glaux *W*	small-Spanish		○	or	½	jn jl	Pu	Spain	1596.	S	s.l	Clus. hist.2 t 241
10711 sínicus *W*	Chinese-annual		○	or	½	jl au	Pu	China	1763.	S	s.l	Bot. mag. 1350
10712 álbidus *W*	white-Italian		△	or	½	jl au	W.v	Europe	1737.	D	s.l	Pl.rar.hun.1.t.40
10713 Onobrýchis *W*	purple-spiked		△	el	1½	jn jl	Pu	Austria	1640.	D	s.l	Jac aus. 1. t. 38
10714 Laxmánni *W.*	Laxmann's		△	or	1	jn au	B	Siberia	1804	D	s.l	Jac. vind. 3. t. 37
10715 physódes *W*	inflated		△	or	½	jn jl	Pu	Siberia	1759	D	s.l	Dec. astrag t. 48
10716 halicácabus *Lam.*	bladdered		△	or	½	jn	Pa Y	Armenia	1806.	D	s.l	Schreb.decad t.3
10717 caprínus *W*	goat-scented		△	or	1	jn jl	Pa Y	Barbary	1683.	D	s.l	Mor.hi.2. t.24.f 3
10718 longiflórus *W.*	long-flowered		△	or	½	jn jl	Y	Tartary	1806.	D	s.l	Pall. astrag t.50
10719 monspessulánus *W.*	Montpelier		△	or	1	jl au	Pu	France	1710	D	s.l	Bot. mag. 375
10720 incánus *W*	hoary		△	or	½	jn jl	Pu	Montpel.	1759	D	s.l	
10721 exscápus *W*	hairy-podded		△	or	½	my jl	Y	Hungary	1787.	D	s.l	Jac ic 3 t 561
10722 tragacanthoides *W.*	Armenian		△	or	½	my jl	Y	Armenia	1791.	D	s.l	Bu cen 3 t 38 f 2
10723 aristátus *W.*	awned			or	1	my jl	Pu	Pyrenees	1791	D	s.l	Pall astrag. t. 3
10724 Tragacántha *W.*	gt Goat's Thorn			or	1	my jl	Pa Y	S. Europe	1640	C	s.p	Dend. brit. 84
10725 Potérium *W.*	sm Goat's Thorn			or	½	jnj l	W	Levant	1640.	C	s.p	Park. theat f. 2
1595 BISER'RULA. *W*	HATCHET VETCH					*Leguminosæ.*	*Sp* 1					
10726 Pelecínus *W.*	bastard		○	pr	1	jl au	Pu	S Europe	1640.	S	s.p	Lam. ill. t. 622
1596 DA'LEA *P S.*	DALEA					*Leguminosæ.*	*Sp* 9—19					
10727 Cliffortiána *W.*	Vera Cruz		○	pr	1½	jl au	B	Vera Cruz	1737.	S	co	Linn cliff. t. 22
10728 alopecuroides *W.*	Fox-tail		○	pr	1	jl au	Pa B	Mississippi	1812.	S	co	Mich. am. 2. t.38
10729 aúrea *Ph*	golden		△	pr	2	jl au	Y	Louisiana	1811	D	co	
10730 laxiflóra *Ph*	loose-flowered		△	pr	6	jl au	W	Louisiana	1811.	D	co	
10731 enneaphýlla *W.*	nine-leaved		□	pr	5	jl.au	Pk	W Indies	1772.	S	co	
10732 citriodóra *W.*	leafy		□	or	1	o n	Pk	N Spain	1780	S	co	Cav. ic. 3. t. 271
10733 Lagópus *W.*	downy-spiked		□	or	4	o n	Vi	Mexico	1780	S	co	Cav. ic. 1 t. 86
10734 mutábilis *W*	changeable		□	or	1½	o n	Pu	Mexico	1818	C	co	Bot. mag 2486
10735 bicolor *W en*	two-colored		□	or	2	o n	Y B	S Amer	1817.	C	co	Hook. ex. fl. 43
†1597 PSORA'LEA. *W*	PSORALEA					*Leguminosæ*	*Sp* 28—62.					
10736 pinnáta *W*	wing-leaved		□	or	6	my jl	B	C G H.	1690	C	p l	Bot. rep. 474
10737 odoratíssima *W.*	fragrant		□	or	6	my jl	Pa B	C G H	1795	C	p l	Jac schœ.2 t.229
10738 verrucósa *W.*	warted		□	or	3	my au	B	C G H	1774.	C	p.l	Jac schœ 2.t.226
10739 aculeáta *W.*	prickly		□	or	4	jn jl	B	C G H	1774	C	p l	Bot. mag 2158
10740 bracteáta *W.*	oval-spiked		□	or	4	jn jl	Pu	C G H	1731	S	p l	Bot mag. 446
10741 spicáta *W*	long-spiked		□	or	4	jl au	B	C G H	1774	C	p l	Bot. rep 411
10742 aphýlla *W.*	leafless		□	or	2	jn jl	B	C G H	1790.	S	p.l	Bot. mag. 1727
10743 multicaúlis *W.*	many-stalked		□	or	3	au o	W B	C G H.	1793	C	p.l	Jac.schœ 2 t.230
10744 tenuifólia *W*	fine-leaved		□	or	2	mr jl	W B	C G H	1793.	C	p.l	Jac.schœ 2.t.225
10745 decúmbens *W.*	trailing		□	or	2	ap my	W B	C G H	1774	S	p l	Bot. cab. 282
10746 hirta *W*	hairy		□	or	3	my au	W B	C G H	1713	C	p.l	Jac schœ.2.t.228
10747 Stáchydis *W.*	Stachys-leaved		□	or	3	ap my	Br	C G. H	1793.	C	a.l	
10748 répens *W*	creeping		△	or	1½	jl au	B	C G. H	1774.	C	a.l	
10749 bituminósa *W*	bituminous		□	or	4	ap s	Pa B	S. Europe	1570.	C	p.l	Lam. ill.t. 614 f.1
10750 glandulósa *W*	Mexican tea		□	or	4	my au	Pa B	Peru	1770.	C	p l	Bot. mag. 990
10751 pedunculáta *B reg.*	flat-headed		□	or	3	o au	Pu	C G. H	1815	C	p l	Bot. reg. 223
10752 palæstina *W.*	Palestine		□	or	2	ap s	Vi	Levant	1771.	S	p.l	Jac vind.2.t.184



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of Persia, flowering in July and August It rises two or three feet only in height, on a stem about an inch in thickness, with many branches closely crowded together, and covered with imbricated scales and spines, formed from the petioles of the former year The leaves, which scarcely exceed half an inch in length, are composed of *six*, seven, or eight pairs of opposite, villous, stiff, pointed leaflets, and the mid-rib is terminated with a sharp yellowish point The flowers are small, yellow, and proceed from the axillæ of the leaves with cottony bractes The calyx is five-toothed, and shorter than the corolla, which is papilionaceous The gum exudes in summer, more or less copiously according to the heat of the weather, in tortuous filaments, which are allowed to dry on the plant before being collected A large portion of the Tragacanth collected in Persia, is sent to India, Bagdad, Bassorah, and Russia But what we receive is sent to Aleppo, whence it is exported, packed in cases

Good gum Tragacanth is inodorous, impressing a very slightly bitter taste as it dissolves in the mouth Its mucilage differs from that of acacia gum, in being precipitated by the superacetate of lead, and oxymuriate of tin; and not by silicated potass (*Bostock. Nich Journ.* lviii. 30.), or the oxysulphate of iron. Medically it is de-

10703 Caulescent procumb. Leafl. obl. blunt, Spikes ov stalked longer than leaf, Pods erect ov[illegible]
10704 Caulescent procumb. Leafl. lin trunc emarg. Racemes stalked longer than leaf, Wi[illegible]
10705 Caulescent erect Lvs 7 pairs obl bluntish subpubescent, Heads few-flowered stalked, [illegible]
10706 Caulescent branched prostrate, Leafl lin lanc silky complicate, Racemes 6-fl longer [illegible]
10707 Caulescent procumb Leafl obcordate silky beneath, Racemes stalked as long as leave[illegible]
10708 Subcaulescent procumb Leafl obovate. Racemes shorter than petiole, Pods round lanc. [illegible]
10709 Caulescent decumb Leafl ellipt. blunt, Spikes obl. stalked longer than leaf
10710 Caulescent diffuse, Heads stalked imbricated ovate, Fl erect, Pods ovate callous inflated
10711 Caulescent prostrate, Umbels stalked, Pods prismatical 3-cornered erect subulate at end
10712 Caulescent diffuse hoary, Leaves 5 pairs, Leafl ellipt. blunt, Spikes stalked longer than leaf
10713 Caulescent diffuse, Peduncspiked, Standard twice as long as flower
10714 Caulescent procumb Spikes long, Pods oblong 3-cornered furrowed mucronate villous
10715 Stemless, Leafl ov glauc Scapes longer than leaf, Fl capitate, Pods inflated membranous smooth
10716 Stemless smooth, Calyxes bladdery contracted at mouth
10717 Stemless, Leafl ov obl acute hairy, Scapes racemose erect twice as short as leaf, Pods ovate villous
10718 Stemless, Leafl ellipt retuse somewhat hairy, Scapes racemose few-fl twice as short as leaf
10719 Stemless, Leafl ellipt blunt, Scapes racemose declinate longer than leaf, Standard long
10720 Stemless, Scapes decumb Leafl ovate subsessile downy beneath, Pods hoary
10721 Stemless, Leafl obl blunt hairy, Flower somewhat stalked aggregate, Cal appressed hairy
10722 Nearly stemless, Fl numerous radical subsessile
10723 Petioles spiny, Leafl obl mucro hairy, Peduncvery short about 4-fl Cal teeth setaceous
10724 Petioles spiny, Leafl ellipt hoary, Peduncabout 4-fl as long as leaves, Cal. teeth ovate
10725 Petioles spiny, Leafl obl. hoary, Pedunc very short 2-flowered

10726 The only species

10727 Pentandrous, Spikes obl stalked terminal, Bractes length of cal Leaves in 6 pairs lin cuneate retuse
10728 Pentandrous, Spikes cylindric stalked term Bractes shorter than cal Lvs in 10 pairs ellipt. retuse mucr.
10729 Spikes obl term sol Lvs. about 3 pair obl and obovate obtuse
10730 Spikes long panicled, Lvs about 4 pairs linear
10731 Decandrous, Spikes capitate stalked axillary, Leaves in 4 pairs obl blunt
10732 Decandrous, Spikes capitate stalked term Lvs in 10 pairs obovate
10733 Decandrous, Spikes cylindr terminal, Lvs of 15 pairs lanc blunt
10734 Decandrous, Spikes cylindr terminal, Lvs of 10 pairs obcordate
10735 Decandrous, Spikes term long, Lvs of 5 pairs obovate

10736 Lvs pinn of 2 pairs lin. Pedunc. axill 1-fl
10737 Lvs pinn of 7 pairs lin-lanc Pedunc 1-fl axillary
10738 Lvs pinn and tern lanc Pedunc axill 1-3-flowered, Branches warted
10739 Lvs. tern cuneiform recurve mucronate, Flowers axillary solitary approximated
10740 Lvs tern obovate recurve mucro with pellucid spots, Spike term capitate, Bractes ciliated
10741 Lvs tern obovate recurve mucronate dotted beneath, Spike terminal oblong
10742 Lvs. of the stem and branches ternate and simple, of the branchlets none, Stipules imbricated
10743 Upper lvs simple, rest ternate, Leafl lin lanc mucronate, Pedunc axill clustered capitate
10744 Upper lvs simple, rest ternate, Leafl lin lanc mucro Pedunc axill solitary
10745 Leaves tern. lanc cuneate with a recurved mucro Pedunc axill aggregate
10746 Leaves tern. obovate with a recurved mucro, Pedunc axill solitary
10747 Leaves tern stalked obl mucro. Spikes terminal interrupted, Calyxes villous
10748 Leaves tern obovate emarg. Stem creeping, Flowers in umbels
10749 Leaves tern Leafl. ov-lanc. Petioles downy smooth, Spikes capitate stalked axillary
10750 Leaves tern Leafl ov-lanc acum Petioles rough, Racemes axillary
10751 Leaves ternate silky beneath, Pedunc axillary about twice as long as leaves, Heads depressed involucred
10752 Leaves tern ovate, Petioles downy sulcate, Spikes capitate stalked axillary



una Miscellaneous Particulars.

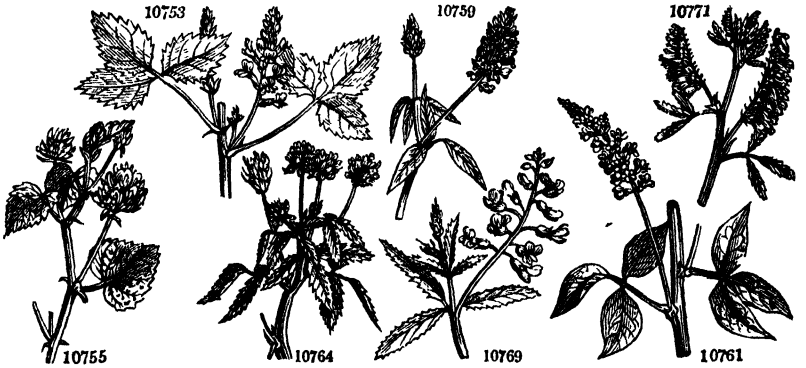
mulcent, and may answer the purposes of the acacia gum, being even better adapted for allaying tickling cough, and sheathing the fauces in catarrhal affections, owing to its great viscidity It is chiefly, however, employed for pharmaceutical purposes (*Thomson's London Dispensatory*, 187.) The seeds of A boeticus are roasted, ground, and used as a substitue for coffee in Hungary

1595 *Biserrula.* From *bis*, twice, and *serrula*, a little saw. The pods are toothletted on each edge. Pelecinon was the name given by the Greeks to the plant called by the Latins *Securidaca*

1596. *Dalea* Named after Thomas Dale, an English botanist, who lived in the beginning of the last century. There was another Dale, an author of a Pharmacologia. These are pretty little plants, with the aspect of Psoralea

1597. *Psoralea.* From ψωραλεος, warted, on account of the numerous little tubercles with which most of the species are covered. The species are chiefly low shrubs; some of them are ornamental, and all are of easy culture and propagation by young cuttings in sand or seeds, which they produce in abundance. P esculenta, the bread-root of America, is cultivated in Missouri, and other parts of that country. In this climate it will

10753 [illegible] *W.*	Madeira	♚	⊔	or	½	jl.au	Pu	Madeira	1640.	C	p.l	Jac schœ 2 t.227
1075[illegible]	headed	♚	⊔	or	2	jl au	Pu	C G H	1793.	S	p.l	
1075[illegible]	Hazel-leaved	⅓	⊡	or	2	jn jl	Vi	India	1739.	C	p.l	Bot mag 665
[illegible]	Bread-root	⅓	△	cit	3	jn.jl	B	Missouri	1811.	C	p.l	Pursh amer.t.22
[illegible] *Ph*	large-rooted	⅓	△	or	3	jn jl	Pu	Louisiana	1811.	C	p.l	
10758 Lupinéllus *Ph*	small-flowered	⅓	△	or	2	jn jl	B	Carolina	1812	C	p.l	
10759 melilotoídes *Mich.*	Melilot-like	⅓	△	or	3	au	Vi	Carolina	1814.	C	p l	Bot. mag 2063
10760 arbórea *B. M.*	tree	♚	⊔	or	6	my	Pa pu	C. G H	1814.	C	p.l	Bot. mag 2090
10761 onobrýchis *Nutt.*	rough-podded	⅓	△	or	3	au	Pu	N. Amer	1818.	C	p l	Bot. reg. 453
10762 divaricáta *W en.*	divaricating	♚	⊡	or	3	au	Pu	S. Amer.	1820.	C	p.l	
10763 pubéscens *W en.*	downy	♚	⊡	or	2	au	B	Mexico	1825.	C	p l	
*1598 MELILO'TUS. *J* Melilot						*Leguminosæ.*		*Sp* 16—25.				
10764 cærúlea *P S*	blue		○	m	3	au s	L.B	Germany	1562.	S	co	Bot. mag 2283
10765 índica *P S*	Indian		○	un	2	jn.au	W	India	1680	S	co	Plu.alm.t.45 f 4
10766 rugulósa *W en.* *M parvíflora* Desf.	white-Indian		○	un	3	jn au	W	India	1798.	S	co	
10767 messanénsis *P S*	Sicilian		○	un	3	jn au	Y	Sicily	1680	S	co	
10768 polónica *P S*	Polish		○	un	2	jn au	L Y	Poland	1778	S	co	
10769 macrorhíza *P. S.*	long-rooted	⅓	△	un	3	jl.au	Y	Hungary	1801.	D	co	Pl.rar hun 1 t 26
10770 dentáta *P S*	toothed	⅓	△	un	3	jn au	Y	Hungary	1802	D	co	Pl rar hun 1 t 46
10771 officinális *W en.*	common		○	ec	1	jl s	Y	Britain	bus pl	S	s.l	Eng. bot. 1340
10772 vulgáris *W en.*	white-flowered	⅓	○	un	3	jl s	W	Europe	...	S	co	
10773 Kochiána *W en*	smooth-podded	⅓	○	un	3	jn s	Y	Germany	1816.	S	co	
10774 Petitpierreána *W en*	rough-podded	⅓	○	un	2	jn s	W	Germany	1816	S	co	
10775 itálica *P S*	Italian		○	un	2	jn au	Y	Italy	1596	S	co	Camer hort. t.29
§10776 crética *P S*	Cretan		○	un	1½	jn au	Y	Candia	1713	S	co	Bau.prodr t. 142
10777 ornithopodioídes *P S*	Bird's-foot		○	un	1	jn jl	R	Britain	bar hea.	S	co	Eng bot 1047
10778 mauritánica *Schousb* *M. sulcáta* P S	Moorish		○	un	2	jn jl	Y	Barbary	1798	S	co	
10779 hamósa *Link.*	hooked		○	un	1		Y	Tauria	1824	S	co	Bux.ce 2 t.44.f.1
1599 LUPINASTER. *Ph* Bastard-Lupine						*Leguminosæ*		*Sp* 1				
10780 pentaphýllus *Ph*	five-leaved	⅓	△	cl	1½	jl au	Pu	Siberia	1741.	D	co	Bot. mag. 879
1600 TRIFO'LIUM. *J* Trefoil						*Leguminosæ.*		*Sp* 60—140				
10781 reflexum *W*	reflexed	⅓	△	pr	1	jn au	Pu	Virginia	1794.	D	s l	
10782 angulátum *W*	angular	⅓	○	pr	1½	jn au	R	Hungary	1803.	S	s l'	Pl.rar.hu 1 t 27
10783 strictum *W*	upright		○	pr	1	jl au	W	S Europe	1805.	S	s l	Pl rar hu 1 t. 37
10784 hybridum *W*	mule	⅓	△	pr	⅔	jl au	Pu	Europe	1777	D	s l	Mic ge t.25 f 2 6.
10785 Michelánum *P S*	Italian		○	pr	⅔	jl au	Pu	Italy	1815	S	s l	Mi n g pl t25 f 2
10786 cæspitósum *W.*	turfy	⅓	△	pr	½	jn au	Pu	Switzerl	1815	D	s l	Vill delph 3 t 41
10787 répens *W*	white Clover	⅓	△	ag	1½	my s	W	Britain	mea	D	co	Eng bot 1769
10788 comósum *W.*	tufted	⅓	△	pr	½	jn jl	W	America	1798	D	s l	
10789 alpínum *W*	Alpine	⅓	△	pr	½	jn au	Pu	Italy	1775	D	co	Pon bald t 340
10790 palléscens *P S*	pale	⅓	△	pr	1	jn au	Pu	Carinthia	1804	D	s l	Mic ge. t 25. 3
10791 subterráneum *W.*	subterraneous		○	pr	½	my	W	England	bar he	S	s l	Eng bot 1048
10792 globulár *W*	globular		○	pr	1	jn au	Pu	Levant	1713	S	s l	
10793 Cherléri *W*	hairy		○	pr	½	my jn	Pu	Montpel	1750	S	s l	Barr ic 859
10794 pictum *W*	painted		○	or	1	jl au	Pu	...	1800	S	s l	
10795 lappáceum *W*	burr		○	pr	½	jn au	W	Montpel	1787	S	s l	
10796 diffúsum *W*	diffuse	⅓	○	pr	½	jl u	Pu	Hungary	1801	S	s l	Pl rar hu 1 t 50



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grow in the open air, but requires the protection of a frame to produce abundant crops of roots, which are used like those of the potatoe in the countries where it is a native (*Pursh. Amer.* t. 22.)

1598 *Melilotus* From *Mel*, honey, and *Lotus*. These plants are similar to the Lotus, and are the favorite resort of bees. M officinalis is the chief ingredient in flavoring the Gruyère cheese. This cheese no doubt owes its chief excellence to the mixture of herbs in the mountain pasturage which surrounds the valley of Gruyère, but partly also to the flowers and seeds of this plant, which are bruised and mixed with the curd before it is pressed.

1599 *Lupinaster*. That is to say, *Lupine-like*. A pretty little herbaceous plant, with bright flowers.

1600. *Trifolium*. A plant with three leaves, the τριφυλλον, of the Greeks, *trêfle*, of the French, and *trefoil*, of the English This genus includes the two most valuable herbage plants adopted in European agriculture, the white and red clover Notwithstanding all that has been said of the superiority of lucern to clover, and of the excellence of saint-foin, and various Leguminosæ of the pea kind, yet the red clover for mowing, and the white species for pasturage, are, and probably ever will be, found to excel all other plants in these respects. The yellow clover, T procumbens, and the cow or meadow clover, T. medium, are also in cultivation, but are far inferior to the others The meadow clover is a useful addition to the white sort in laying down permanent pastures; the yellow grows on poor soils, but the herbage is not much liked by cattle. The soil best adapted for clover is a deep sandy loam, which is favorable to its long tap-roots. but it will grow in any soil, provided it be dry So congenial is calcareous matter to clovers, that the mere strewing of lime on

10753 Leaves tern. roundish ovate repand at end, Spikes interrupted axillary
10754 Leaves tern. and simple linear, Head terminal
10755 Leaves simple ovate somewhat toothed, Spikes ovate
10756 Leaves digitate quinate lanc. unequal flat entire villous, Spikes axillary dense
10757 Leaves digitate quinate obovate mucro. entire, Spikes axillary dense
10758 Leaves digitate quinate very narrow, Spike few-flowered, Pods ovoid
10759 Leaves 3 lanc Spikes obl. Bractes with long points, Pods round rugose
10760 Leaves pinnated of 5 pairs, Leaflets linear lanceolate, Pedunc. axillary 1-fl. longer than leaf
10761 Leaves ternate, Leaflets ovate-lanceolate somewhat downy, Racemes 1-sided on long stalks
10762 Leaves ternate lanc smooth, Spikes interrupted stalked axill. longer than leaf
10763 Leaves tern. ovate-obl. downy, Spikes interrupted stalked axill. shorter than leaf

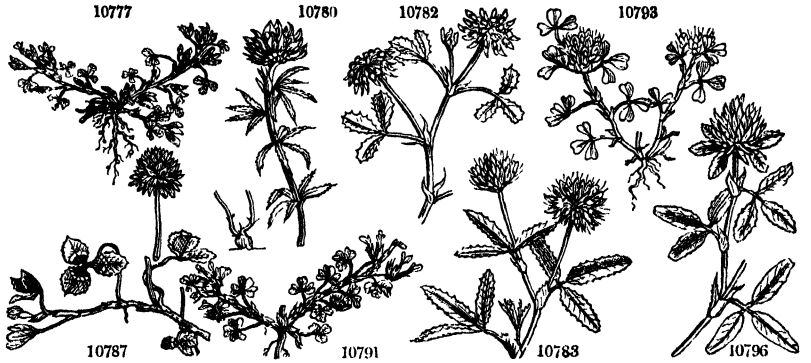
10764 Racemes obl. stalked, Stipules lanc membranous
10765 Pods racemose naked smooth mucronate 1-seeded
10766 Pods racemose about 4-seeded oblong rugose, Leaflets ellipt. toothed

10767 Pods 1-seeded ovate acute naked rugose, Racemes shorter than leaf
10768 Pods racemose naked 2-seeded lanceolate
10769 Pods racemose naked rugose 1-seeded, Stems and branches ascending, Leafl linear
10770 Pods racemose naked 2-seeded somewhat rugose acute, Stipules toothed at base
10771 Pods racemose naked 2-seeded rugose acute, Stipules lanc subulate undivided
10772 Pods racemose naked 1-seeded rugose obovate acute Stipules setaceous
10773 Pods racemose naked 2-seeded smoothish ovate acute compressed, Stipules toothed
10774 Pods racemose naked 1-seeded rugose obovate, Stipules setaceous
10775 Pods racemose naked 2-seeded rugose blunt, Leaflets entire
10776 Pods racemose naked 2-seeded membranous oval, Stem nearly erect
10777 Pods naked 8-seeded about 3 times as long as calyx, Stems declinate
10778 Pods 1-seeded obovate blunt naked rugose, Racemes longer than leaf, Stems diffuse

10779 Pods racemose naked compressed 1-seeded nerved hooked, Stipules subulate

10780 Heads halved, Leaves quinate sessile

10781 Heads in fruit reflexed, Pods 3-seeded
10782 Heads umbelled in fruit reflexed, Pods 4-seeded, Stem angular with furrows flexuose
10783 Heads globose, Pods 2-seeded, Cal the length of corolla, Leafl serrulate, Stipules rhomboid
10784 Heads umbelled, Pods 4-seeded, Teeth of cal nearly equal, Leafl ovate-obl emarg serrulate
10785 Heads umbelled stalked, Teeth of cal subulate equal, Leafl obcord serrate
10786 Heads umbelled, Pods 4-seeded, Teeth of calyx equal, Leafl obovate blunt serrated
10787 Heads umbelled, Pods 4-seeded, Teeth of calyx nearly equal, Leafl ovate obl emarg serrulate
10788 Heads in globose umbels imbricated, Standards deflexed persistent, Pods 4-seeded
10789 Heads umbelled, Scape naked, Pods 2 seeded pendulous, Leaves linear lanc
10790 Heads umbelled, Pods 2-seeded, Teeth of cal unequal, Leafl obovate blunt toothed
10791 Heads villous 5-flowered, Central tuft reflexed rigid wrapping up the fruit
10792 Heads villous globose, Upper calyxes without florets
10793 Heads villous globose terminal solitary, Teeth of calyx setaceous longer than corolla
10794 Heads villous globose terminal solitary, Teeth of calyx setaceous shorter than corolla
10795 Heads subglobose hispid, Teeth of calyx subulate as long as cor Leafl obovate retuse
10796 Spikes roundish ovate villous, Teeth of calyx unequal setaceous as long as corolla



and Miscellaneous Particulars.

some soils will call into action clover-seeds, which it would appear have lain dormant for ages At least this appears the most obvious way of accounting for the well-known appearance of white clover in such cases

The climate most suitable for the clovers, as of most plants natives of Europe, is one neither very hot nor very dry and cold Most leguminous plants delight both in a dry soil and climate, and warm temperature; and the clover will be found to produce most seed under such circumstances, but as the production of seed is only in some situations an object of the farmer's attention, a season rather moist, provided it be warm, is always attended by the most bulky crops of clover herbage.

The time of sowing seeds is generally the spring, during the corn-seed time, or from February to May, but they may also be sown from August to October; and when they are sown by themselves, that is, unaccompanied by any corn crop, this will be found the best season, as the young plants are less liable to be dried up and impeded in their progress by the sun, than when sown alone in spring, and remaining tender and unshaded during the hot and dry weather of July

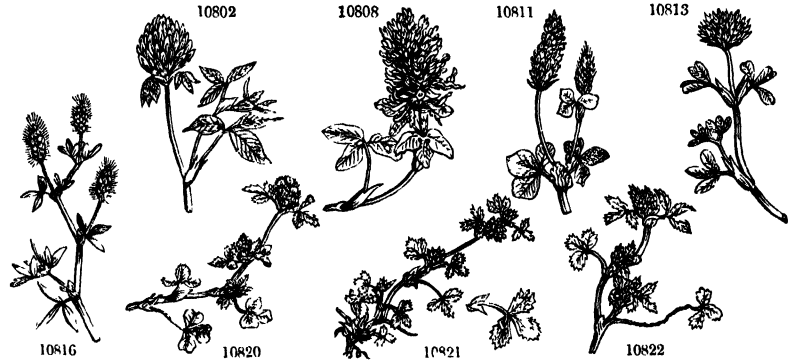
The manner of sowing is almost always broad-cast. When sown with spring corn, clover and grass-seeds are usually put in immediately after the land has been pulverized by harrowing in the corn seed, and are themselves covered by one course more of the harrows; or, if the corn is drilled, the small seeds are sown immediately before or after hand-hoeing, and the land is then finished by a course of the harrows

In the operation of sowing, some consider it best to sow the clover and rye-grass separately, alleging that that the weight of the one seed and lightness of the other, are unfavorable to an equal distribution of both

10797	nóricum *Pers.*	alpine	✱	O	pr	½	jl au	W	Al. of Eur	1821.	S	a.l	.
10798	hispidum *Desf*	hispid		O	pr	1	jl au	Pu	Barbary	1817.	S	a.l	Desf atl.t.209 f.1
10799	malacánthum *Link*	soft-flowered		O	pr	1	jl au	Pa	.....	1824	S	a.l	
10800	saxátile *W*	rock	✱	◎	pr	½	my jl	Pu	Switzerl	1816.	S	a.l	All. ped t 59.f 3
10801	rúbens *W*	long-spiked	✱	△	pr	2	jn s	D R	S. Europe	1633.	D	co	Jac. aust. 4 t.338
10802	pratense *W*	common Clover	✱	△	ag	2	my s	Pu	Britain me pa		D	h l	Eng bot 1770
10803	pensylvánicum *W.en*	Buffalo Clover	✱	△	pr	1½	jn s	R	N. Amer	1811.	D	l p	
10804	médium *W*	Cow-grass	✱	△	ag	2	jn jl	Pu	England dr pa.		D	h l	Eng bot 190
10805	alpéstre *W*	oval-spiked	✱	△	pr	1	jl	D P	Europe	1789	S	co	Jac aust.5 t.436
10806	bracteátum *W en.*	large-bracted	✱	◎	pr	1	jn jl	Pu	Morocco	1804.	S	a.l	
10807	pannónicum *W*	Hungarian	✱	△	pr	1	jn jl	W Y	Hungary	1752	S	co	Jac. obs. 2, t 42
10808	canéscens *W*	gray	✱	△	pr	1	my jn	W ɣ	Caucasus	1803.	S	co	Bot mag 1168
10809	maritimum *W*	teasel-headed		O	pr	½	jn jl	Pa pu	Britain	sal m.	S	s l	Eng bot 220
10810	squarrósum *W*	various-leaved		O	pr	½	jl	Pa pu	Spain	1640	S	a.l	Mor hi 2 t 13 f 1
10811	incarnátum *W.*	flesh-colored		O	pr	1	jl	F	Italy	1596.	S	co	Bot mag 328
10812	pállidum *W*	pale-flowered		O	pr	1	jn jl	W	Hungary	1803.	S	a.l	Pl rar. hu. 1.t 36
10813	ochroleucum *W*	sulphur-colored	✱	△	pr	1	my jl	Sul	England	dr pa.	D	s l	Eng bot. 1224
10814	angustifólium *W*	narrow-leaved		O	pr	1½	jn au	Pu	S Europe	1640	S	s l	Barr. ic t. 698
10815	lasiocéphalum *Link.*	woolly-leaved		O	pr	1½	jn au	Pu	C G H	1823	S	co	
10816	arvénse *W*	Hare's-foot		O	w	1	jl au	F	Britain	san fi	S	s l	Eng bot 944
10817	stellátum *W*	starry	✱	O	pr	½	jl	Pu	England	so co	S	s l	Eng bot 1546
10818	clypeátum *W*	oriental		O	pr	1	jn au	W Y	Levant	1711	S	s l	Alp exot t 306
10819	álbidum *W*	white		O	pr	1½	jl au	W	.....	1796	S	s l	
10820	scábrum *W*	rough	✱	O	pr	½	my jn	W	Britain	san fi	S	s l	Eng bot 903
10821	glomerátum *W*	round-headed	✱	O	w	½	jn	Pk	England	gra.pa.	S	s l	Eng bot 1063
10822	striátum *W*	soft-knotted		O	w	½	jn	Pu	Britain	bar gr	S	s l	Eng bot 1843
10823	alexandrinum *W*	Egyptian		O	pr	1	jn jl	Pa Y	Egypt	1798	S	s l	
10824	suffocátum *W*	suffocated	✱	O	w	½	jn jl	W	England	sea sh	S	s l	Eng bot 1049
10825	involucrátum *W*	involucrated		O	pr	1	jn jl	Pa.pu	Morocco	1802.	S	co	
10826	spumosum *W*	bladdered	✱	O	un	½	jn jl	R	France	1771	S	s l	
10827	resupinátum *W*	resupinate	✱	O	un	½	jn jl	Pu	Germany	1713	S	s l	Barr. ic t 872
10828	recúrvum *P S*	recurved		O	or	½	jn jl	W	Hungary	1805	S	s l	Pl rar hu 2 t.165
10829	tomentósum *W*	woolly	✱	O	pr	¾	jn jl	Pu	S Europe	1640	S	s l	Mag mons t 264
10830	fragíferum *W*	Strawb.-headed	✱	△	w	½	jl au	F	England	moi p.	D	s l	Eng bot 1050
10831	montánum *W*	mountain	✱	△	or	1	jl au	W	Europe	1786	D	co	Flor dan t 1172
10832	bádium *P S*	yellow-stalked	✱	△	pr	½	jn au	Y	Pyrenees	...	D	s l	Barr ic 1024
10833	spadíceum *W*	bay-colored	✱	△	pr	½	jn au	Br	Europe	1778	D	s l	Bot. mag 557
10834	speciósum *W*	large-flowered	✱	△	el	1	jn jl	Pu	Candia	1752	D	s.l	
10835	agrárium *W*	golden		O	pr	½	jn jl	Y	Europe	1815	D	s l	Flor dan. t 558
10836	procúmbens *H K*	Hop	✱	O	ag	1	jn jl	Y	Britain	dr pa	S	s l	Eng bot 945
10837	minus *H K*	lesser-yellow	✱	O	w	½	jn jl	Y	Britain	gra gr	S	s l	Eng. bot 1256
10838	filiformе *W*	slender-yellow	✱	O	w	½	my jl	Y	Britain	gra pa	S	co	Eng. bot 1257
10839	phleoides *W*	Cats'-tail-head.		O	un	½	my jl	W ɣ	Spain	1818	S	co	
10840	strictum *L*	upright		O	pr	½	my jl	W	Spain	1805	S	co	Mic. gen t 25 f.7

1601 LO'TUS *W* Bird's-Foot Trefoil *Leguminosæ Sp* 24—60

10841	édulis *W*	esculent	✱	O	clt	½	jl au	Y	Italy	1710	S	s l	Cav ic 2 t 157
10842	peregrinus *W*	flat-podded	✱	O	pr	½	jl au	Y	S Europe	1713	S	s l	Scop del. 1 6



History, Use, Propagation, Culture,

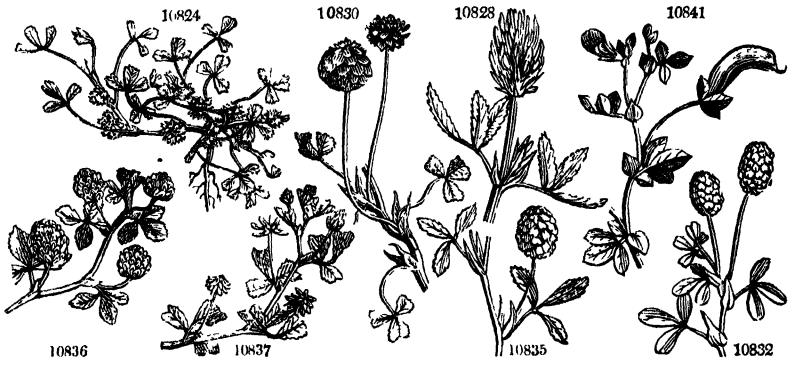
The quantity of seed varies from eight to fourteen pounds per acre, according to the intention of the crop, the quantity of grass-seeds sown, &c The after culture of clover and rye-grass consists chiefly of picking off any stones or rather hard bodies which may appear on the surface in the spring succeeding that in which it was sown, and cutting out by the roots any thistles, docks, or other large grown weeds After this, the surface should be rolled once to smooth it for the scythe This operation is best performed in the first dry weather of March Some give a top-dressing of soot, gypsum, common lime, peat, or wood-ashes, at this time or earlier, gypsum has been particularly recommended as a top-dressing for clovers and the other herbage legumes, because as their ashes afford that substance in considerable quantities, it appears to be a necessary ingredient of their food

The taking of the clover, or clover and rye grass crop, is either by cutting green for soiling, by making into hay, or by pasturing It is observed in *The Code of Agriculture*, that it is a most important point to ascertain, in what cases cutting or feeding is most beneficial If fed, the land has the advantage of the dung and urine of the pasturing stock, but the dung being dropt in irregular quantities, and in the heat of summer, when it is devoured by insects, loses much of its utility If the dung arising from the herbage, whether consumed in soiling, or as hay, were applied to the land in one body and at the proper season, the operation would be more effectual The smother of a thick crop, continued for any time upon the ground, greatly tends to promote its fertility, and it has been pretty uniformly found, after repeated trials, upon soils of almost every description, that oats taken after clover that has been cut, either for soiling or hay, is superior to the crop taken after clover pastured by sheep

The produce of clover-hay, without any mixture of rye-grass, on the best soils, is from two to three tons per acre, and in this state in the London market it generally sells twenty per cent. higher than meadow-hay, or

10797 Spikes term globose hairy subsessile, Leafl. oval entire and stem densely villous
10798 Heads villous globose term solitary, Teeth of calyx setaceous shorter than cor Leafl. obovate entire
10799 Stem flexuose hairy, Leafl obcord. hairy, Cal camp lined
10800 Leaves obovate hirsute, Heads lateral and terminal minute, Stem erect
10801 Spikes cylindr obl. Teeth of cal. villous; lower as long as monopetalous unequal cor.
10802 Spikes dense ovate, Stipules awned, Leafl. oval nearly entire
10803 Leafl ovate ellipt. blunt entire, Stipules awned, Spikes ovate cylindr. solitary dense
10804 Spikes lax subglobose sol Stipules subulate, Leafl ellipt. finely serrulate, Stems branched flexuose
10805 Spikes dense subglobose twin, Stipules setaceous, Leafl lanc finely serrulate, Stems quite simple
10806 Spikes ovate conical dense sol sessile, Corolla monopetalous, Leafl. ovate blunt
10807 Spikes dense obl ellipt solitary, Leafl obl lanc entire emarg vill. Stem simple straight
10808 Spikes ovate lax sol Leafl obovate emarg villous, Stem simple ascending
10809 Spikes subglobose dense, Leafl obovate lanc serrulate at end hairy
10810 Spikes obl somewhat hairy, Lower tooth of cal very long reflexed, Stem herbaceous erect
10811 Spikes obl villous blunt leafless, Leafl roundish obcordate ovate crenate villous
10812 Spikes sol roundish, Stipules membranous, Leafl roundish, Edge of corolla bearded inside
10813 Spikes villous elliptical, Stem erect branched downy, Leafl obl lower obcordate
10814 Spikes vill. conical obl. Teeth of cal setaceous nearly equal, Leafl linear
10815 Stem erect hairy, Leafl linear, Calyx hairy with lanc subulate spreading teeth
10816 Heads very hairy subcylindrical, Cal teeth setaceous longer than the cor Leafl narrow obovate
10817 Spikes hairy ovate, Calyxes much spreading, Stem diffuse, Leafl obcordate
10818 Spikes ovate, Calyxes spreading lower tooth very large lanc Leafl obovate
10819 Spikes subglobose stalked, Cal spreading lower tooth subulate linear, Leafl oblong
10820 Heads term and axill sess ov Cal teeth unequal narr lanc rigid length recurved, Leafl obcor serru
10821 Heads round axill sessile, Teeth of cal equal subulate spreading rigid, Leafl obovate serrulate
10822 Heads term and axill ov subsol subsess Cal striat hairy with unequal straight teeth. Leafl obcor nearly
10823 Heads obl. stalked, Cal vill teeth subul unequal, Upper lvs opp Leafl ellipt toothletted [entire pubesc.
10824 Heads sessile lateral roundish smoothish, Teeth of cal lanc acute recurved longer than cor
10825 Heads orbicular stalked in a round toothed involucre, Stipules awned
10826 Heads ovate, Cal in fruit ovate ventricose smooth, Comm involucre membranous 5-leaved
10827 Heads roundish, Cor resupinate, Cal of fruit inflated membranous downy, Leafl obovate acute
10828 Heads ov obl Cal of fruit inflated naked, Branches recurved, Leafl setaceous serrulate
10829 Heads round, Cal of fruit inflated membranous downy, Teeth obliterated [creep Leafl obcord serrated
10830 Heads upon long stalks round. Cal after flow inflat membran pubesc two of teeth setaceous reflex Stems
10831 Spikes about 3 somewhat imbricated, Standard subulate withering, Cal naked
10832 Spikes round imbr Standard deflexed persistent, Leafl obcord serrate, Stem hirsute
10833 Spikes oval imbr Vexillum deflexed persistent, Leafl obovate intermediate sessile
10834 Spikes obl with reflexed flowers, Standard roundish flat toothletted persistent, Stem flexuose
10835 Spikes oval imbr Standard deflexed persistent, Teeth of cal subulate unequal smooth
10836 Spikes oval imbr Standard deflexed persistent sulcated, Stems procumbent, Leafl obovate [upwards
10837 Spikes capit hemispherical, Pedunc straight, Standards smoothish, Stems procumb Petiole lengthened
10838 Heads lax of few-fl Pedunc capillary flexuose, Standards smooth, Stems procumb Leafl subsessile
10839 Heads obl Cal teeth subulate unequal rigid spreading, Leafl obl nearly entire emarg
10840 Heads ellipt Pods 2-seeded, Cal length of cor Leafl lanc. blunt serrulate

10841 Pods subsolitary gibbous incurved
10842 Pods subbinate compressed linear, Leafl obovate hairy, Stem procumbent



and Miscellaneous Particulars

clover and rye-grass mixed The weight of hay from clover and rye-grass varies according to the soil and the season, from one to three tons per English acre, as it is taken from the tramp-ricks, but after being stacked, and kept till spring, the weight is found to be diminished twenty-five or thirty per cent.

The value of clover and rye-grass hay, in comparison with the straw of beans or pease, may be in the proportion of three to two, and with the finest straw of corn crops, in the proportion of two to one One acre of red or broad clover will go as far in feeding horses or black cattle, as three or four of natural grass And when it is cut occasionally, and given to them fresh, it will probably go still much farther, as no part of it is lost by being trod down

The saving of clover seed is attended by considerable labor and difficulty Clover will not perfect its seeds, if saved for that purpose early in the year, therefore it is necessary to take off the first growth either by feeding or with the scythe, and to depend for the seed on those heads that are produced in the autumn.

The produce in seed may generally be from three to four or five bushels per acre, when perfectly clean, weighing from two to three hundred weight But there is great uncertainty in the produce of clover-seed, from the lateness of the season at which it becomes ripe, and the fertility of the soil is considerably impaired by such a crop Yet the high value of the seed is a great inducement to the saving of it, in favorable situations

T. incarnatum is sometimes sown as a border flower

1601 *Lotus* Λωτος, in Greek There were three sorts of Lotus distinguished by the ancients, viz *their tree* lotus, which was our Zizyphus lotus, the *marsh* lotus, which was our Nymphæa lotus, and the *herbaceous* lotus, which appears to have been the present genus

The pods of L. edulis are still eaten in Candia, by the poorer inhabitants. Lotus rectus has by some been

10843 glaúcus *W*	glaucous	♀	◯	pr	1	jn au	Y	Madeira	1777	C	s.l	
10844 anthylloides *P*	Anthyllis-like	♃	⊔	pr	½	jn au	Y	C G H.	1812.	S	s l	Vent.malm. t.92
10845 angustissimus *W*	narrow-podded	☽	◯	pr	1	jl au	Y	France	1683	S	s.l	Bauh. hist 2. f 2
10846 gracílis *W & K.*	slender		○	pr	1	jl au	Y	Hungary				
10847 diffúsus *W*	slender-podded	♃	○	pr	1½	my jn	Y	England rocks		S	s.l	Eng bot 925
10848 combrénsis *W*	Portugal		○	pr	½	jn jl	W	Portugal	1800	S	s.l	
10849 arábicus *W*	red-flowered	♃	○	pr	½	jl s	Pk	Arabia	1773.	S	s l	Jac vind 2 t 155
§10850 austrális *H K*	New Holland	♃	⊔	el	2	my s	Pk	N S. W.	1808.	S	s p	Bot mag 1365
10851 Dioscóridis *W*	Dioscorides's		○	pr	1	jn jl	Y	Crete	1658	S	s l	Al ped. 1 t 59 f.1
10852 ornithopodioides *W*	claw podded	♃	○	pr	½	jn au	Y	Sicily	1683.	S	s l	Cav ic 2 t. 163
10853 jacobǽus *W*	dark-flowered	♃	⊔	or	2	ja d	D Br	C.Verd Is.	1714.	C	r m	Bot mag 79
β lúteus	*yellow-flowered*											
10854 créticus *W*	silver-leaved	♃	⊔	pr	1½	jn s	Y	Levant	1680	C	p l	Cav ic 2 t 156
10855 ténuis *W & K*	slender	♃	△	pr	1	jn au	Y	Hungary	1816	D	p l	Waldst. & Kit.t.
10856 hirsútus *W*	hairy	♃	⊔	pr	2	jn au	W	S Europe	1683	C	p l	Bot mag 336
10857 réctus *W*	upright	☽	△	pr	3	jn au	F	S Europe	1640	D	co	Mor s 2 t. 18 f 13
10858 odorátus *H K*	sweet-scented	☽	△	ft	1½	jn au	Y	Barbary	1804	D	s l	Bot mag 1233
10859 pedunculátus *W*	long-peduncled	♃	△	pr	1	jn au	Y	Spain	1814	D	s l	Cav ic 2 t 164
10860 májor *E B*	greater	♃	△	ag	1½	jn au	Y	Britain	w sh g	D	s l	Eng bot 2091
10861 corniculátus *E B*	common	♃	△	ag	1½	jn au	Y	Britain	pas	D	co	Eng bot 2090
10862 cytisoides *W*	downy	♃	△	pr	1	jl au	Y	S Europe	1752	D	co	All ped 1 t 20 f 1
10863 parviflorus *Desf*	small-flowered	♃	○	un	1	jl au	Y	Barbary	1810	S	co	Desf atl t 211
10864 Gebélia *Vent*	Aleppo	♃	△	ed	1	my jn	Pk	Aleppo	...	D	co	Vent cels. t 57

1602 TETRAGONO'LOBUS. *Roth* Tetragonolobus *Legumnosæ Sp* 4

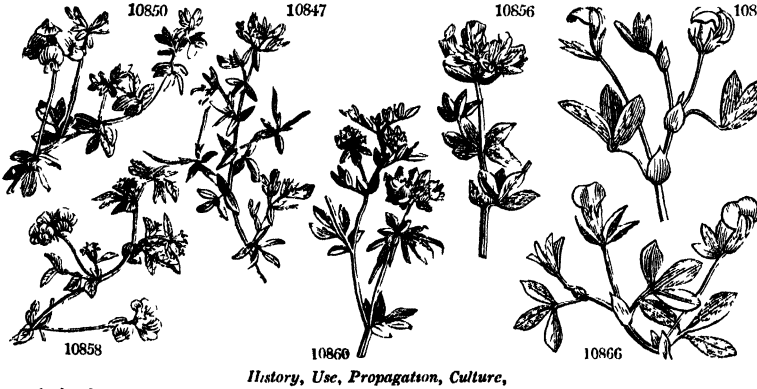
10865 maritimus *Roth*	sea	♃	△	or	1	my o	Y	Europe	1683	D	co	Fl dan 800
10866 siliquósus *Roth.*	squaro-podded	♃	△	or	½	jl au	Y	S Europe	1683	D	co	Jac aust 4 t 361
10867 édulis *Link*	Winged-Pea	♃	○	elt	1	jl au	D.R	Sicily	1796	S	co	Bot. mag 151
Lotus tetragonolobus W												
10868 conjugátus *Link*	twin-podded	♃	○	or	1	jl au	Y	Montpel	1754	S	s l	

1603 TRIGONEL'LA *W* Fenugreek *Legumnosæ Sp* 19—32

10869 ruthénica *W*	small	♃	△	un	1½	jn jl	Y	Siberia	1741	S	p l	Gmel sib 4 t 8
10870 platycárpos *W.*	round-leaved	♃	◯	un	1	jn s	W	Siberia	1741	S	co	Gmel sib 4 t 9
10871 hýbrida *P S*	hybrid	♃	◯	un	1	jn s	W v	France	1806	S	s l	
10872 polycérata *W.*	broad-leaved		○	un	1	jl s	Y	S Europe	1640	S	s l	
10873 hamósa *W*	Egyptian	♃	○	un	¾	jl au	Y	Egypt	1640	S	s l	Alp ægypt t 124
10874 spinósa *W.*	thorny		○	un	½	jl au	Y	Candia	1710	S	s l	Lam ill t 611 f 2
10875 corniculáta *W*	horse-shoe		○	ft	½	jn jl	Y	S Europe	1597	S	s l	Mor s 2 t 16 f 11
10876 monspeliaca *W*	Montpelier	♃	○	un	1	jn jl	Y	Montpel	1710	S	s l	Pl rar hu 2 t 142
10877 pinnatífida *W*	cut-leaved	♃	○	un	⅛	jn au	Y	Spain	1801	S	s l	Cav ic 1 t 38
10878 Fœ'num-græ'cum *W*	common		○	ec	2	jn au	Y	Montpel	1597	S	co	Sch s ha 2 t 211
10879 esculénta *W en*	esculent		◫	elt	1½	jn au	Y	E Indies	1815	S	s l	
10880 índica *W*	Indian	♃	◫	un	1	jn au	Y	E Indies	1793	S	s l	Plu alm.t 200 f 7
10881 striáta *L*	striated		○	un	1	jn au	Y	Abyssinia	1800	S	co	
10882 cancellata *Desf*	cancellate	♃	○	un	¾	jn jl	Y	..	1823	S	co	
10883 ténuis *Bieb*	slender		○	un	½	jn jl	Y	Tiflis	1824	S	co	
10884 flexuósa *Bieb*	flexuose		○	un	½	jn jl	Y	Tiflis	1820	S	co	
10885 calliceras *Bieb*	neat-podded		○	un	½	jn jl	Y	Tiflis	1823	S	co	
10886 elongáta *Link*	long		○	un	¾	jn jl	Y	... ..	1823	S	co	
10887 gladiáta *Bieb*	sword-podded	♃	○	un	½	ap my	W	Tauria	1825	S	co	
T prostrata Dec.												

1604 DORYC'NIUM *W* Dorycnium *Legumnosæ Sp* 2—3

10888 monspeliénse *W*	shrubby	♄	⊔	or	3	jl s	W	S Europe	1640	S	p l	Par thea 360 f
10889 herbáceum *W*	herbaceous	♀	△	or	2	jn s	W	S Europe	1802		co	Vil dauph 3 t 4



History, Use, Propagation, Culture,

supposed the Cytisus of Virgil, but, as other contend, without sufficient foundation Lotus jacobæus is a valuable greenhouse plant, as flowering all the year L major and corniculatus are very suitable to sow with white clover and cow-grass, in laying down lands to permanent pasture Dr Henderson has written a good deal in their favor, Miller is against them, but Sinclair, in his work on the British Grasses, found it a valuable ingredient in meadows, especially where the soil was rather moist (*See Ency of Agr.* p 111 b 6.) *Gebelia* is the Arabic name (*Gébélié*) of the species to which it has been applied.

1602. *Tetragonolobus.* From τετρας, four, γωνια, an angle, and λοβος, a bean, in allusion to the four wings of the pods. Tetragonolobus edulis is now a popular border annual, on account of its curious pods, but it was formerly an esculent legume, these pods being used like those of the kidney bean, by the poor of Sicily and Spain.

1603. *Trigonella* From τρις, three, and γωνια, an angle The standard of the flower is flat, and the keel very small and narrow, which gives the flower a triangular appearance. T fœnum-græcum, a plant cultivated by the Romans, is still occasionally employed in the agriculture of the south of Europe The seeds have a strong

10843 Pods subbinate cylindr smooth, Leafl subcuneif fleshy hoary, Stip leaf-shaped
10844 Heads few-fl, Leafl. and bractes 3-leaved subspatulate
10845 Pods subbinnate lin straight erect, Stem erect, Pedun. alternate
10846 Pods subternate round subulate straight, Cal. cil Leafl obl Stem erect
10847 Pedunc. about 1-fl. Stem much branched decumb Pods round straight very slender
10848 Pedunc about 1-fl. Stem branched procumb Leafl obovate smooth, Pods lin compressed
10849 Pods cylindr awned, Pedunc 3-fl Bractes 1-leaved
10850 Heads few-fl with bractes, Leafl and stipules obovate cuneate equal, Pods cylindr smooth
10851 Pods round torulose, Pedunc. 3-fl Bractes 3-leaved
10852 Pods usually in threes arcuate compressed, Stems diffuse
10853 Pods usually in threes, Stem herbaceous erect, Leafl. linear

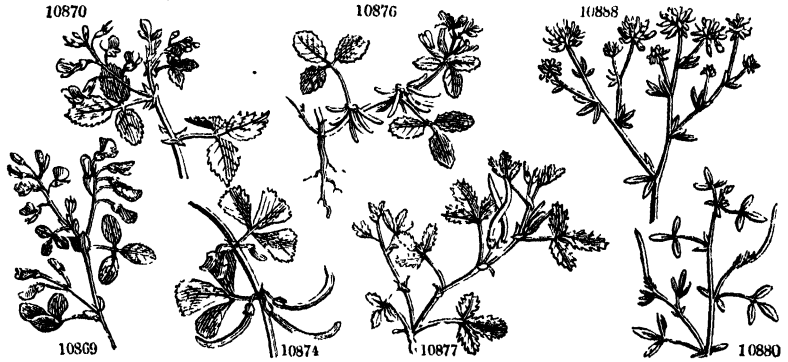
10854 Pods usually in threes, Stem half-shrubby, Leaves silky shining
10855 Pods about 4 rounded awned, Stem branched, Leafl lin lanc smooth
10856 Heads roundish, Stem erect hairy, Pods ovate
10857 Heads roundish, Stem erect smooth, Pods straight smooth
10858 Hairy, Heads halved, Bractes 1-leaved, Pods straight torulose mucronate
10859 Heads depressed on long stalks, Leafl obl lanc acuminate, Stipules ovate
10860 Heads depressed many-fl Pods spreading cylindr Claws of carina linear
10861 Heads depressed, Stems decumb Legumes cylindr spreading
10862 Heads halved, Stem diffuse much branched, Leaves downy
10863 Heads halved, Pods obl compressed, Cal as long as cor Bractes 1-leaved
10864 Pods straight cylindr mucronate, Stems decumb smooth, Pedunc few-fl

10865 Pods solitary, Leaves smooth, Bractes lanceolate
10866 Pods solitary, Leaves procumb Leaves downy beneath
10867 Pods solitary, Bractes ovate, Intermediate leaflets somewhat toothed

10868 Pods in pairs, Bractes oblong ovate

10869 Pods stalked heaped obl lin straight, Leafl obl truncate mucronate
10870 Pods stalked heaped pendulous oval compressed, Leaflets roundish
10871 Pods stalked compressed ovate veiny, Leafl cuneiform nearly entire smooth
10872 Pods subsessile heaped erect straightish long linear, Pedunc not awned
10873 Pods stalked racemose hooked round, Pedunc spiny longer than leaflet
10874 Pods stalked heaped declinate subfalcate compressed, Pedunc spiny very short
10875 Pods stalked heaped declinate subfalcate, Pedunc long somewhat spiny
10876 Pods sessile heaped arcuate divaricating inclined short, Pedunc mucronate unarmed
10877 Pods sessile about 3 linear nearly erect, Leaves truncate cuneate pinnatifid toothed
10878 Pods sessile straight nearly erect a little falcate acuminate
10879 Racemes stalked, Common pedunc longer than leaf, Pods linear falcate heaped pendulous
10880 Pods sessile subsolitary subfalcate, Leaflets entire
10881 Pods stalked longer than leaf, Leaves streaked
10882 Pods stalked umbelled erect incurved, Leafl cuneate serrate, Stem much branched
10883 Pods about 4 arcuate erect, Pedunc. unarmed when in flower as long as leaf, Leafl cuneate
10884 Pods about 6 arcuate erect wavy torulose, Pedunc unarmed when in fl longer than leaf, Leafl cuneate
10885 Pods stalked heaped declinate falcate furrowed, Pedunc awned longer than leaf
10886 Pedunc very short spiny, Pods short curved upwards
10887 Pods subsessile nearly erect falcate acuminate downy, Stem spreading

10888 Leafl linear lanc acute, Teeth of calyx ovate
10889 Leafl obate blunt, Teeth of calyx ovate

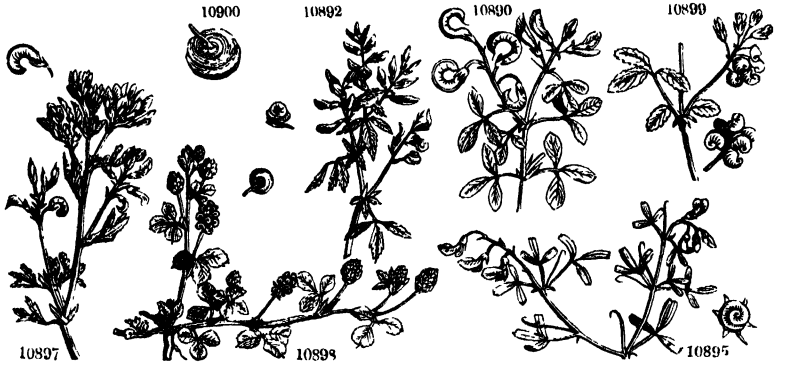


and Miscellaneous Particulars

disagreeable smell, and an unctuous farinaceous taste, accompanied with a slight bitterishness An ounce renders a pint of water thick and slimy To rectified spirit, they give out the whole of their distinguishing smell and taste, and afterwards to water a strong flavorless mucilage These seeds are never given internally, their principal use being in cataplasms and fomentations, for softening, maturating, and dispersing tumours, and in emollient glysters. They were also an ingredient in the *oleum e mucilaginibus*, but this has no longer a place in the pharmacopœia (*Woodville* and *Lewis*) They are used by grooms and farriers for horses Fenugreek has not been cultivated in any quantity for use in England, because it is an uncertain crop, occasioned by the inconstancy of our weather

1604 *Dorycnium* The Greek name of an herb, supposed to be the Convolvulus Dorycnium of the moderns The plant now called by the name has no resemblance to that of the ancients. D. hirsutum is a beautiful half-hardy shrub, well deserving cultivation

1605. MEDICA'GO. *W.*	Medick				*Leguminosæ*		*Sp* 40—76						
10890 arbórea *W*	Moon-Trefoil		J	or	8	my n	Y	Italy	1596	C	s l	Lob. ic. 2 p 46 f. 2
10891 cretácea *W en.*	shrubby		O	cu	4	jl	Y	Tauria	1805	C	s l	
10892 sativa *W*	Lucern		△	ag	2	jn jl	V	England me pa		D	r m	Eng bot. 1749
10893 glomeráta *W en.*	clustered		△	cu	1	jn jl	Y	Italy	...	D	s.l	
10894 glutinósa *Bieb*	clammy		O	cu	½	jn jl	Y	Tauria	...	S	co	
10895 prostráta *W*	prostrate		△	cu	¾	jn jl	Y	Hungary	1793	D	s.l	Jac hor. vin. t. 89
10896 brachycárpa *Bieb*	short-podded		O	cu	½	jn jl	Pa Y	Tifliz	1823.	S	co	
10897 falcáta *W.*	yellow		△	ag	2	jl	Y	England bor fl.		S	co	Eng. bot 1016
10898 lupulina *W*	Nonesuch		O	ag	1	my au	Y	Britain pas		S	co	Eng bot. 971
10899 obscúra *W*	doubtful		O	cu	1	jl au	Y	.....	1734.	S	co	Ret.ob 1 p.24 t 1
10900 orbiculáris *W*	flat-podded		O	cu	1	jl au	Y	S Europe	1688.	S	co	Moris s 2 t. 15 f 1
10901 marginata *W en.*	margined		O	cu	1	jl au	Y	S Europe	1816.	S	co	
10902 élegans *W*	elegant		O	cu	1	jl au	Y	Sicily	1680	S	co	Moris s 2 t 15. f 4
10903 scutellata *W*	Snail		O	cu	1	jn au	Y	S Europe	1562.	S	co	Moris. s 2. t. 15 f 3
10904 Hélix *W*	many-fl.-Snail		O	cu	1	jn au	Y	.....	1816.	S	co	
10905 tornáta *W*	smooth-podded		O	cu	1	jn au	Y	S Europe	1658	S	co	
10906 turbináta *W*	Turban		O	cu	1	jn au	Y	S Europe	1680	S	co	Moris s 2 t 15 f 5
10907 tuberculáta *W.*	wart-podded		O	cu	1	jn au	Y	S. Europe	1658	S	co	Moris. s. 2. t. 15 f 6
10908 aculeáta *W*	spiny		O	cu	1	jn au	Y	. . . .	1802	S	co	
10909 granadénsis *W en*	Spanish		O	cu	¾	jn au	Y	Spain	1816	S	s l	Jac. coll t 15 f 2
10910 Márex *W.*	prickly		O	cu	1	jn au	Y	.. .	1802	S	s l	
10911 intertéxta *W*	hedgehog		O	cu	1	jn au	Y	S Europe	1629.	S	co	Moris. s 2 t 15 f. 7
10912 ciliáris *W*	fringed		O	cu	1	jl au	Y	France	1686.	S	co	
10913 carstiénsis *W*	creeping-rooted		△	cu	1	jn jl	Y	Carinthia	1789	D	co	Bot mag 909
10914 maculáta *W*	spotted		O	cu	1½	my jn	Y	England gra pa		S	s l	Eng bot. 1616
10915 coronáta *W*	crowned		O	cu	1	jn jl	Y	S Europe	1600	S	s.l	Mor s 2.t 15.f 16
10916 apiculáta *W*	tufted		O	cu	1	jn jl	Y	S Europe	1800	S	s l	
10917 tentaculáta *W*	bur-podded		O	cu	1	jn jl	Y	S Europe	...	S	co	Gært sem. t. 155



History, Use, Propagation, Culture,

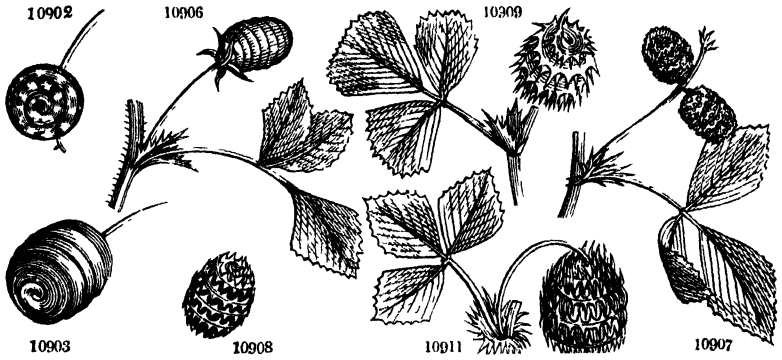
1605. *Medicago* A native of the country of the *Medes*, whence this plant was brought to Greece during the expedition of Darius M arborea, the Cytisus of the ancients, flowers great part of the year, and when sheltered is seldom destitute of flowers In the open air it begins to flower in April, and continues till December Those flowers which appear early in summer, will have the seeds ripe in August, or the beginning of September, and the others will ripen in succession It grows in great plenty in Abruzzo, and many parts of the kingdom of Naples, where the goats feed upon it, and with the r milk abundance of cheese is made there It also abounds in several of the islands in the Archipelago, where the Turks use the wood to make handles for their sabres, and the caloyers, or Greek monks, form their beads of it In old shrubs, the heart is of a dark color, and hard like ebony

According to Miller, this shrub bids the fairest of any to be the Cytisus of Virgil, Columella, and the other ancient writers on husbandry, and being celebrated by them as an excellent fodder, has been recommended for cultivation here But however useful it may be in Candia, Rhodes, Sicily, Abruzzo, and other dry warm countries, yet it will never thrive in England, (where we have also many plants of this leguminous tribe far more succulent than this,) so as to be of any real advantage, for in severe frost it is very subject to be destroyed, or at least so much damaged, as not to recover its former verdure before the middle or end of May, (and even after a mild winter, it will generally appear injured by our cold spring winds, even at that season, so that it cannot be of any use here for early spring fodder) Besides, the shoots will not bear cutting above once in a summer, and then will not be of any considerable length and the stems growing very woody, the cutting of it will be very troublesome. Upon the whole, therefore, it is not worth the trial, though in hot, dry, rocky countries, where few other plants will thrive, it may be cultivated to great advantage But, however unfit Tree Medick may be for use as fodder in England, yet for the beauty of its hoary leaves, abiding all the year, together with its long continuance in flower, it deserves a place in every good garden and plantation, with shrubs of the same growth (*Dict in loco, and Martyn's Virgil*)

M sativa, *Foin de Bourgogne*, Fr, *Alfalfa*, Span, and *Lucerne*, Eng, (from the Languedoc pâtois *Lauserda*), is a deep rooting perennial plant, sending up numerous small and tall clover-like shoots, with blue or violet spikes of flowers It is highly extolled by the Roman writers, it is also of unknown antiquity in old Spain, Italy, and the south of France, is much grown in Persia and Peru, and mown in both countries all the year round. It is mentioned by Hartlib, Blythe, and other early writers, and was tried by Lisle, but it excited little attention till after the publication of Harte's Essays, in 1757. But though it has been so much extolled, it has yet found no great reception in this country If any good reason can be given for this, it is, that lucern is a less hardy plant than red clover, requires three or four years before it comes to its full growth, and is for these and other reasons ill adapted to enter into general rotations When the climate and soil suit, perhaps, a field of it may be advantageously sown, adjoining the homestall, to afford early cutting or food for young or sick animals, for which it is said to be well adapted, but though it will produce good crops for eight or ten years, yet from the time the farmer must wait till this crop attains its perfection, and from the care requisite to keep it from grass and weeds, we do not think it is ever likely to come into general culture.

There are no varieties of the lucern deserving the notice of a cultivator. What is called the yellow lucern, or Swiss lucern, is the Medicago falcata, a much more hardy and coarser plant, common in several parts of England, but not cultivated any where excepting in some poor soils in Switzerland.

10890 Pods lunate entire at edge, Stem arborescent
10891 Pedunc. many-fl. racemose, Pods reniform 1-seeded, Leafl rhombold roundish mucronate
10892 Pedunc. racemed, Legume smooth spirally twisted, Stipules entire, Leafl. long toothed
10893 Pedunc racemed, Pods twisted falcate downy, Leafl lin truncate toothletted at end
10894 Pedunc racemose, Pods twisted falcate and cal. viscid villous Leafl. obovate toothed at end
10895 Pedunc racemose, Pods smooth cochleate twisted, Stipules toothed at base, Leafl. lin toothed at end
10896 Heads axill. sessile, Pods half orbicular acute lined 1-seeded
10897 Pedunc. racemose, Pods twisted falcate downy, Leafl. obl. toothed at end
10898 Spikes oval, Legumes reniform 1-seeded, Stipules entire, Leafl. obovate
10899 Pods racemose reniform 2-seeded, Stip toothed, Leafl rhomboid ovate
10900 Pedunc 2-fl Pods unarmed cochleate orbicular flattish, Stip setaceous multifid, Leafl obov toothed
10901 Pedunc 2-fl Pods unarmed cochleate orbicular very flat at each end, Folds loose
10902 Pedunc. 2-fl Pods unarmed cochleate orbicular flat transversely rugose at edge, Stip toothed
10903 Pedunc 2-fl Pods unarmed cochleate orbicular convex at base flat above with concentrically spiral folds
10904 Pedunc many-fl Pods unarmed cochleate orbicular flat with distant folds
10905 Pedunc many-fl Pods unarmed cochleate cylindr flat at each end with distant folds
10906 Pedunc. 2-fl. Pods unarmed cochleate cylindr convex at each end with imbricated folds
10907 Pedunc 2-fl. Pods unarmed cochleate cylindr flattish at each end with tubercled folds
10908 Pedunc. about 2-fl Pods cochleate cylindr flattish at each end, Folds muricated at edge
10909 Pedunc about 2-fl. Pods cochleate cylindr. flat at each end, Prickles subulate appressed
10910 Pedunc. about 2-fl Pods cochleate cylindr convex at each end aculeate, Aculei straight
10911 Pedunc about 2-fl. Pods cochleate oval with downy pubescent setaceous appressed reflexed prickles
10912 Pedunc. about 2-fl Pods cochleate oval with straight subulate downy prickles
10913 Pedunc many-fl Pods cochleate compressed at each end with subulate straight prickles
10914 Pedunc. about 2-fl. Pods cochleate compressed at each end with subulate arcuate prickles
10915 Pedunc. many-fl Pods cochleate cylindr flat at each end pubescent with close-pressed subul prickles
10916 Pedunc many-fl Pods cochleate flat at each end with 3 netted folds muricate at edge
10917 Pedunc. about 2-fl Pods cochleate cylindr flat at each end with smooth lanc distich close-pressed prickles



and Miscellaneous Particulars

The soil for lucern must be dry, friable, inclining to sand, and with a subsoil not inferior to the surface, unless the soil be good and deep, it is in vain to attempt to cultivate lucern

The preparation of the soil consists in deep ploughing and minute pulverisation, and, in our opinion, the shortest way to effect this, is to trench it over by the spade to two or three feet in depth, burying a good coat of manure in the middle, or at least one foot from the surface This is the practice in Guernsey, where lucern is highly prized.

The climate for lucern, as we have already hinted, must be warm and dry, it has been grown in Scotland and Ireland, and might probably do well in the southern counties of the latter country, but in the former it has not been found to answer the commendations of its admirers

The season most proper for sowing lucern, is as early as can be done in the spring months, as in this way the plants may be fully established before the season becomes too hot If the plants be intended to be transplanted out in the garden method, it will also be the best practice to sow the seed-bed as early in the spring as the frosts will admit, in order that they may be strong, and fit to set out about the beginning of August

The manner of sowing lucern is either broad-cast or in drills, and either with or without an accompanying crop of corn for the first year Broad-cast, and a very thin crop of barley or other spring corn, is generally, and, in our opinion, very properly preferred

The quantity of seed, when the broad-cast method is adopted, is said to be from fifteen to twenty pounds per acre, and from eight to twelve if drilled The seed is paler, larger, and dearer than that of clover, it is generally imported from Holland, and great care should be had to procure it plump and perfectly new, as two years old seed does not come up freely The same depth of covering as for clover will answer

The after-culture of lucern, sown broad-cast, consists in harrowing, to destroy grass and other weeds, rolling, after the harrowing, to smooth the soil for the scythe, and such occasional top-dressings of manure as the state of the plants may seem to require

The top-dressings given to lucern may be either of the saline or mixed manures. Ashes are greatly esteemed, and also gypsum and liquid manure of any kind

The taking of lucern by mowing for soiling, or hay, or by tethering, hurdling, or pasturing, may be considered as the same as for clover Lucern frequently attains a sufficient growth for the scythe towards the end of April, or beginning of the following month, and in soils that are favorable for its culture, will be in a state of readiness for a second cutting in the course of a month or six weeks longer, being capable of undergoing the same operation at nearly similar distances of time during the whole of the summer season

The application of lucern is also the same as of clover. The principal and most advantageous practice, in the application of lucern, is that of soiling horses, neat cattle and hogs, but as a dry fodder, it is also capable of affording much assistance, and as an early food for ewes and lambs, may be of great value in particular cases All agree in extolling it as food for cows, whether in a green or dried state.

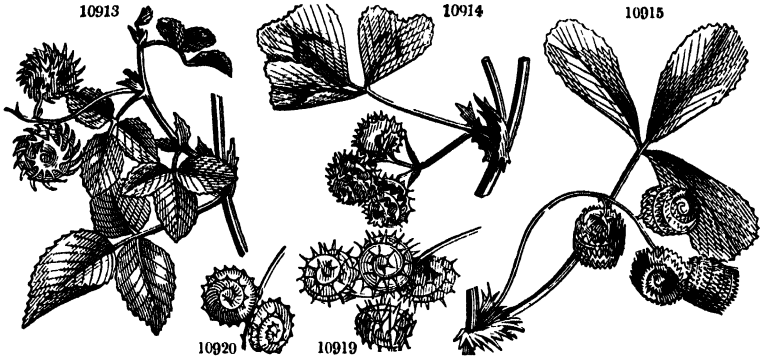
The produce of lucern, cut three times in a season, has been stated at from three to five and even eight tons per acre In soiling, one acre is sufficient for three or four cows during the soiling season, and a quarter of an acre, if the soil be good, for all sorts of large stock, for the same period, or half an acre on a moderate soil.

The nutritive product of lucern, according to Sir H Davy, is 2-3-tenths per cent., and is to that of the

10918 denticulàta *W.*	toothed	✱	○	cu	1	jn jl	Y	S. Europe	1800.	S	s.l
10919 muricàta *W.*	prickly	✱	○	cu	1	my jn	Y	England sea co.		S	co
10920 Gerárdi *W.*	Gerarde's	✱	○	cu	1	jn.au	Y	Hungary	1816.	S	co
10921 marina *W.*	sea	✱	△	cu	1	jn au	Y	S. Europe	1596.	D	s l
10922 Terebéllum *W.*	short-spined	✱	○	cu	1	jn.au	Y	S. Europe	1798.	S	s.l
10923 tribuloides *W.*	Caltrops-like	✱	○	cu	1	jn au	Y	S. Europe	1730.	S	s l
10924 rigidula *W.*	thorny-podded	✱	○	cu	1	jn au	Y	S Europe	1730.	S	s.l
10925 minima *W*	least	✱	○	cu	1	my jn	Y	England ch so.		S	co
10926 nigra *W*	black	✱	○	cu	1	jl.au	Y	S. Europe	1789.	S	s.l
10927 græ'ca *W cn.*	villous	✱	○	cu	½	jl.au	Y	Greece	1804.	S	s l
10928 laciniàta *W*	cut-leaved	✱	○	cu	½	jl.au	Y	S. Europe	1683.	S	s l
10929 uncinàta *W.*	hooked	✱	○	cu	1	jl.au	Y	S. Europe	...	S	co

1606. HYMENOCAR'PUS. *W* Hymenocarpus *Leguminosæ Sp.* 3.

10930 radiàtus *W*	ray-podded	✱	○	pr	½	jn jl	Y	Italy	1629.	S	s.l
10931 circinàtus *W*	kidney-podded	✱	○	pr	½	jl.au	Y	Italy	1640.	S	co
10932 nummulárius *W cn*	money-leaved	✱	○	pr	½	jl.au	Y	Italy	1640.	S	co



History, Use, Propagation, Culture,

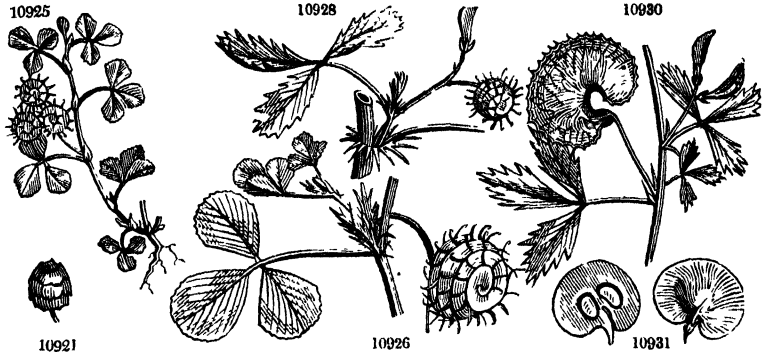
clovers and saintfoin as 23 to 39 This result does not very well agree with the superior nutritive powers attributed to lucern, and is one proof, among many, how little the analysis of the chemist agrees with the experience of the farmer

To save seed, the lucern may be treated precisely as the red clover, and it is much easier threshed, the grains being contained in small pods, which easily separate under the flail, or a threshing machine, or clover mill

M. lupulina, Hop-trefoil, sometimes called Shamrock, and in Norfolk Black Nonesuch, is cultivated occa-

10918 Pedunc. many-fl. Pods cochleate flat at each end, Folds 2 reticulated with prickles of their edges diverging
10919 Pedunc. many-fl Pods cochleate flat at each end smooth, Folds 5 with short subulate prickles
10920 Pedunc. about 2-fl. Pods cochleate flat at each end villous, Folds 5 with subulate hooked prickles
10921 Pedunc many-fl. Pods cochleate roundish muricate, Leafl. downy obovate entire
10922 Pedunc many-fl. Pods cochleate cylindr. flat at each end, Folds 5 with short subulate reflexed prickles
10923 Pedunc 2-fl. Pods cochleate cylindr. flat at each end with conical distichous reflexed prickles
10924 Pedunc. many-fl. Pods cochleate cylindr. Prickles conical straight spreading
10925 Pedunc many-fl. Pods cochleate hairy, Prickles subulate straight hooked
10926 Pedunc. 2-fl Pods cochleate cylindr with close folds, Prickles subulate straight hooked
10927 Pedunc. many-fl Pods cochleate somewhat hairy, Prickles subulate straight hooked
10928 Pedunc. 2-fl Pods cochleate cylindr. with subulate straight hooked prickles, Leafl. lin. truncate
10929 Pedunc. many-fl Pods cochleate villous flat at each end with 5 folds, Prickles subulate straight hooked

10930 Pods toothed at edge, Leaves ternate
10931 Pods toothed at edge, Leaves pinnate
10932 Pods entire at edge, Leaves pinnate



and Miscellaneous Particulars

sionally along with the perennial clovers, and sometimes confounded with the common yellow clover, which is an annual and much smaller plant. Its treatment is the same as that of white clover, but its herbage is little relished by cattle, and both it and the yellow clover are going fast out of repute

M scutellata and intertexta are sown as border flowers for the curiosity of their pods

1606 *Hymenocarpus* From ὑμην, a membrane, and καρπος, fruit, in allusion to the membranous texture of the pods Little inconspicuous plants resembling Trifolium



Class XVIII. — POLYADELPHIA. Stamens united into several parcels.

One of the smallest of the Linnean classes, characterized by the cohesion of the filaments in several parcels It almost wholly consists of plants remarkable either for their beauty or importance otherwise From the Theobroma the nutritious substance which forms the basis of Chocolate is procured Melaleuca and its allies are among the most elegant of New Holland plants The genus Symplocos contains a plant useful as a dye To Citrus belong the Orange, Lemon, Lime, and all their delicious varieties; and the Loasa, with which the class is here concluded, consists of some of the most ornamental and curious of our garden annuals

By some botanists this class is distributed among others, especially Icosandria and Polyandria

Order 1 DECANDRIA  Stamens 10 or 12.

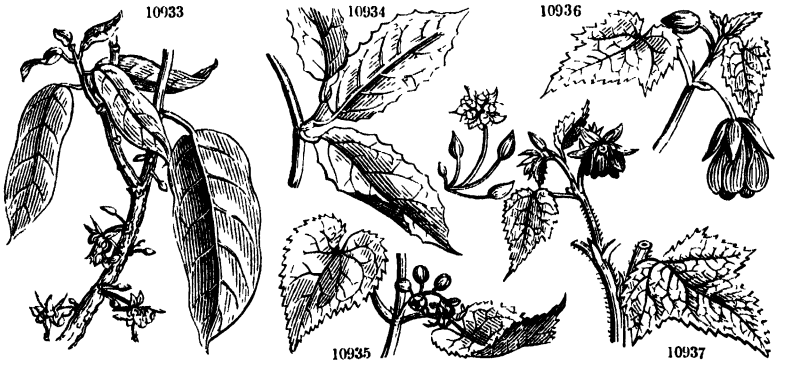
1607 *Theobroma* Cal 5-leaved Petals 5, fornicate Nectary urceolate, with 5 horns Filaments 5, each with 2 anthers Style filiform Stigma 5-parted Caps 5-celled, without valves Seeds in a buttery pulp

1608 *Bubroma* Cal 3-leaved Petals 5, 2-horned Nect campanulate, 5-fid. Filam 5, attached to the outside of nectary, each with 3 anthers Style simple Capsule woody, warted, valveless, bored with 12 rows of holes

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DECANDRIA.

1607 THEOBRO'MA *W*	Chocolate Nut				*Byttneriaceæ* *Sp* 2—5						
10933 Cacáo *W*	smooth-leaved	♀	▭	clt	16	...	Br	S Amer	1739	C	r m Bot cab 545
10934 guianénsis *W*	woolly-leaved	♀	▭	or	16	...	Br	Guiana	1803	C	r m Aub. gui 2. t 275
*1608 BUBRO'MA *W*	Bastard Cedar				*Byttneriaceæ* *Sp* 1—3						
§10935 Guazúma *W*	Elm-leaved	♀	▭	tm	40	au s	Y	Jamaica	1739	C	p l Trew ehret t 76
1609 ABRO'MA *W*	Abroma				*Byttneriaceæ* *Sp* 2—3						
10936 augústa *H K*	smooth-stalked	♀	▭	or	10	au	Pu	E Indies	1770	C	l p Jac vind 3 t. 1
10937 fastuósa *H K*	prickly-stalked	♀	▭	or	10	ju o	Pu	N S W	1800	C	l p Par lond 102



Hstory, Use, Propagation, Culture,

1607 *Theobroma* From Θεος, God, and βρωμα, food, in allusion to the excellent nature of its produce The Mexicans call the beverage obtained from it (*hocolatl* (*Nueremb*) T Cacao is a tree which grows in a very handsome form to the height of twelve or sixteen feet, the trunk is upright, and about as high as a man before the head spreads out, the wood is light and of a white color, the bark brownish Leaves lanceolate-oblong, bright green, quite entire, flowers small, reddish, inodorous Fruits smooth, yellow, red, or of both colors, about three inches in diameter rind fleshy, near half an inch in thickness, flesh-colored within · pulp whitish, the consistence of butter, separating from the rind in a state of ripeness, and adhering to it only by filaments, which penetrate it and reach to the seeds Hence it is known when the seeds are ripe, by the rattling of the capsule when it is shaken The pulp has a sweet and not unpleasant taste, with a slight acidity, it is sucked and eaten raw by the natives The seeds are about twenty five in number when fresh they are of a flesh-color gathered before they are ripe, they preserve them in sugar, and thus they are very grateful to the palate they quickly lose their power of vegetation, if taken out of the capsule, but kept in it, they preserve that power for a long time The tree bears leaves, flowers, and fruit all the year through, but the usual seasons for gathering the fruit are June and December In two years from the seed it is above three feet high, and spreads its branches, not more than five of which are suffered to remain: before its third year is complete it shows for fruit A tree yields from two to three pounds of seeds annually These seeds are remarkably nourishing, and agreeable to most people, which occasions them to be commonly kept in most houses in America, as a necessary part of the provisions of the family they are generally ground or pounded very fine, a little arnatto added, and made into paste · they are much charged with oil, but mix well with milk or water, and are formed into rolls of one pound each.

This simple preparation of chocolate is the most natural and the best It is in daily use amongst most

1609. *Abroma* Cal 5-part Petals 5, with saccate dilated claws Cup of stamens 10-fid, with 5 segments, each bearing 3 anthers, the other 5 petaloid. Styles 5 Caps. 5-celled, 5-winged, many-seeded.

Order 2. POLYANDRIA. Stamens indefinite.

1610 *Melaleuca.* Parcels of stamens 5, opposite the petals, long, anthers incumbent. Caps 3-celled, many-seeded, connate, and included in the thickened tube of the calyx which is grown to the branch

1611 *Tristania.* Parcels of stamens 5, opposite the petals, and scarcely longer than they are, anthers incumbent. Caps. 3-celled, many-seeded, united with the turbinate stalked tube of the calyx

1612. *Calothamnus* Parcels of stamens 4-5, opposite the petals (some either connate or sterile). Anthers inserted by the base, entire. Caps 3-celled, many-seeded, connate, and included in the thickened tube of the calyx, which is grown by the base to the branch

1613. *Beaufortia* Parcels of stamens 5, opposite the petals Anthers inserted by the base, bifid at the end, with deciduous lobes Caps 3-celled, 1-seeded, connate, and included in the thickened tube of the calyx, which is grown by the base to the branch

1614 *Symplocos* Cal 5-fid, superior Petals 5-8, cohering at the base in a tube. Stamens united to the corolla in 4 rows. Drupe dry, 5-celled.

1615 *Citrus* Cal 5-fid Petals 5, oblong Anthers 20, the filaments variously divided Berry 9-celled.

1616 *Xanthochymus.* Cal 5-leaved. Petals 5 Nectaries 5. Stamens united in 5 parcels Apple 1-5-seeded.

1617 *Hypericum* Cal 5-parted Petals 5. Filaments many in 3 or 5 parcels. Capsule superior.

1618 *Ascyrum* Cal 4-leaved Petals 4 Caps 1-celled, 2-3-valved

1619. *Louisa* Cal 5-leaved Petals 5 Nectary 5-leaved Caps ½-inferior, 1-celled, ½-3-valved, many-seeded

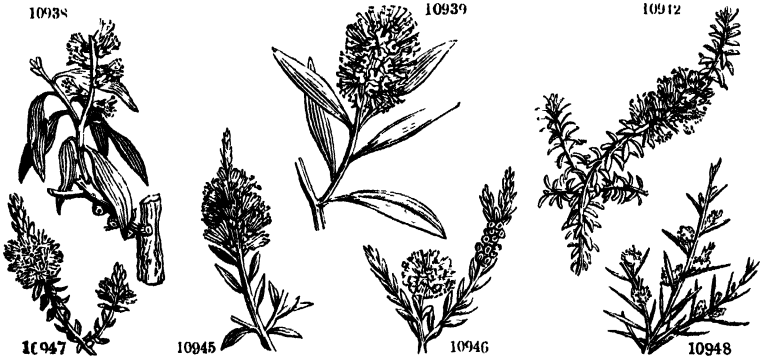
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DECANDRIA.

10933 Leaves entire smooth
10934 Leaves acuminate repand-toothed downy beneath

10935 Leaves cordate ovate acute with unequal serratures

10936 Leaves 7-angled floral ovate acuminate somewhat toothed, Pedunc axill Branches unarmed
10937 Adult lvs with simple and stellate hair beneath, Wings of caps subtruncate at end, Branches muricated



and Miscellaneous Particulars.

families in Jamaica, where the tree is largely cultivated, and affords a nutritious food for children, as well as adults. But as chocolate made abroad cannot by law be imported into this country, consequently all chocolate consumed in Britain ought to be made here It is composed principally of the kernel of the cocoa, as above mentioned, but the art is in very few hands and we believe that a small portion of soap is added to most British chocolate, in order to cause it to froth when it is dissolved in hot water

Cocoa is a simple preparation made in Britain, from the cocoa-nut, or from the shells of it, or from a mixture of both It is considered much easier of digestion than chocolate, and very nourishing.

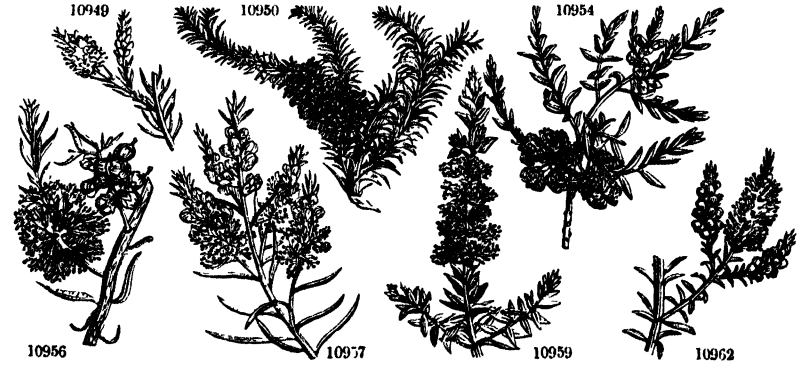
In our stoves Theobromas thrive in light rich soil, and cuttings root in sand under a hand-glass

1608 *Bubroma* In contradistinction to Theobroma, from Θεος, an ox, and βρωμα, food, as if producing a substance fit only to be eaten by cattle. *Orme d'Amerique*, Fr A wide spreading tree, not unlike the Elm, with oblong heart-shaped leaves, which sleep hanging quite down, whilst the petioles remain entirely stiff and straight It grows in the lowlands of Jamaica, forming a very agreeable shade for the cattle, and supplying them with food in dry weather, when all the herbage is burned up or exhausted. The seeds are very mucilaginous, but otherwise agreeable to the palate The wood is light, and so easily wrought, that it is generally used by coachmakers in all the side pieces (*Browne*) It is also frequently cut into staves for casks A decoction of the inner bark is very glutinous, and very like that of the elm In our stoves it thrives well in a loamy soil, and cuttings root freely in sand under a hand-glass

1609. *Abroma* Still named with reference to the two preceding genera, from α, privative, and βρωμα, food, as if unfit for either gods or oxen This, Sweet observes, "is a hardy stove genus, and easily managed, the species flower freely at various seasons, and will grow in the common garden soil: but a mixture of good loam with a little peat is an excellent compost for them. They propagate freely by seeds and cuttings" (*Hot Cult.* 10)

POLYANDRIA.

†1610 MELALEU'CA	*H K*	Mellaeuca				*Myrtaceæ.*		*Sp* 25—30.					
10938 Leucadéndron *W.*	Cajeputi Tree	♀	☐	or	15	...	W	E. Indies	1796.	C	s.l p	Rum.amb 2 t 16	
10939 viridiflóra *W*	green-flowered	♀	☐	or	10	...	G	N S. W	1798	C	s l p	Cav ic. 4 t. 333	
10940 paludósa *Br*	long-leaved red	♀	☐	or	6	jl s	R	N Holl	1803.	C	s l p		
10941 globífera *Br*	globe-fruited	♀	☐	or	4	...	...	N Holl.	1803	C	s l p		
10942 diosmifólia *Br*	Diosma-leaved	♀	☐	or	4	jn jl	G	N Holl.	1794	C	s l p	Bot rep. 476	
10943 styphelοides *Br*	Styphelia-leav	♀	☐	or	4	my jn	...	N S W	1793	C	s l p		
10944 genistifolia *Br.*	Broom-leaved	♀	☐	or	4	...	...	N S W	1793	C	s l p		
10945 striáta *Br*	striated	♀	☐	or	4	...	Pu	N Holl	1803	C	s l p	La no ho 2 t 165	
10946 thymoides *Br*	yellow spear-lv	♀	☐	or	3	...	Pu	N. Holl	1803.	C	s l p	Lab nov 2 t 167	
10947 squámea *Br.*	scaly-branched	♀	☐	or	4	jn jl	Pu	V Di L	1805	C	s.l.p	Bot. reg 477	
10948 nodósa *Br*	Whin-leaved	♀	☐	or	2	jn jl	Pu	N S W	1790	L	s l p	Ex bot 1 t 35	
10949 ericifolia *Br*	Heath-leaved	♀	☐	or	3	jl s	G	N S W.	1788	L	s l p	Ex bot 1 t 34	
10950 armillária *Br*	pale-flowered	♀	☐	or	2	jn jl	G	N S W.	1788	L	s l p	Bot rep. 175	
10951 uncináta *Br*	hook-leaved	♀	☐	or	3	jn s	Pu	N Holl.	1803	C	s l p		
10952 scábra *Br*	rough-leaved	♀	☐	or	3	f s	Pu	N Holl.	1803	C	s l p		
10953 pulchélla *Br*	neat	♀	☐	or	2	jn s	Pu	N Holl	1803	C	s l p	Bot cab 200	
10954 thymifólia *Br*	Thyme-leaved	♀	☐	or	2	jn s	Pu	N. S. W	1792	C	s l p	Bot mag 1868	
10955 decussáta *Br*	decussate	♀	☐	or	4	jl s	Pu	N Holl.	1803	C	s l p	Bot mag 2268	
10956 fulgens *Br*	splendid	♀	☐	or	6	jl s	S	N Holl	1803	C	s l p	Bot reg 103	
10957 linarifólia *Br*	Toad-Flax-lvd	♀	☐	or	3	jn au	Pu	N S. W	1793	C	s.l p	Exot bot 1 t 56	
10958 hypericifólia *Br*	Hypericum-lv	♀	☐	or	3	jn au	S	N S W	1792	C	s l p	Bot rep 200	
10959 squarrósa *Br*	Myrtle-leaved	♀	☐	or	2	...	W	N S W	1794	C	s l p	Bot mag 1935	
10960 calycína *Br*	permanent-cup	♀	☐	or	3	jn au	Pu	N Holl	1803	C	s.l p		
10961 dénsa *Br*	whorl-leaved	♀	☐	or	2	. .	Pu	N Holl	1803	C	s.l p		
10962 incána *Br*	hoary	♀	☐	or	3	jn au	Y	N Holl	1817	C	s.l p	Bot reg 410	
1611 TRISTA'NIA *Br*	Tristania					*Myrtaceæ*		*Sp* 3					
10963 nereifolia *Br*	Oleander-leav	♀	☐	or	6	jn s	Y	N S. W	1804	C	s p	Bot mag 1058	
10964 laurina *Br*	Laurel-leaved	♀	☐	or	6	...	Y	N S W.	1798	C	s p		
10965 conférta *Br.*	Pittosporum-lv	♀	☐	or	6	jl s	Y	N S W	1805	C	s p		
1612 CALOTHAM'NUS *Lab*	Calothamnus					*Myrtaceæ*		*Sp.* 3					
10966 quadrifida *Br*	four-cleft	♀	☐	or	3	jl s	S	N Holl	1803.	C	s p	Bot. mag 1500	
10967 villósa *Br*	hairy	♀	☐	or	3	jl s	S	N Holl	1803	C	s p		
10968 grácilis *Br*	slender-leaved	♀	☐	or	3	jl s	S	N Holl	1803	C	s p		
†1613. BEAUFOR'TIA *Br*	Beaufortia					*Myrtaceæ*		*Sp.* 2.					
10969 decussáta *Br*	splendid	♀	☐	spl	3	my jl	S	N Holl	1803	C	s.p	Bot. reg 18	
10970 spársa *Br.*	alternate-leav	♀	☐	spl	3	...	R	N. Holl	1803	C	s p		
1614 SYM'PLOCOS *L*	Symplocos					*Symplocaceæ*		*Sp* 2—6					
10971 tinctória *W*	Laurel-leaved	♀	☐	or		...	Y	Carolina	1780	L	p l	Cat car 1 t. 54	
10972 sínica *Ker.*	Chinese	♀	☐	or	3	my	W	China	1822	C	p l	Bot reg 710	
1615 CI'TRUS *W*	Orange-Tree					*Aurantiaceæ*		*Sp* 8—15					
10973 Limónum *Risso*	Lemon	♀	☐	fr	15	my jl	W	Asia	1648	B	r.m	Gæ fr 2 t 121 f 2	
10974 Limétta *Risso*	Lime	♀	☐	fr	8	my jl	W	Asia	1648	B	r m	Blackw t 362	
10975 Aurántium *Risso*	sweet	♀	☐	fr	15	my jl	W	Asia	1595	B	r m	Lam ill t 630 f 2	
10976 vulgáris *Risso*	Seville	♀	☐	fr	15	my jl	W	Asia	. .	B	r.m		
β myrtifolia Hort	*myrtle-leaved*	♀	☐	fr	3	my jl	W	Asia	...	B	r m	Bot reg 346	



History, Use, Propagation, Culture,

1610 *Melaleuca* From μελας, black, and λευκος, white: because the original tree has black wood and white branches A beautiful Australasian genus, which grows and flowers freely in equal parts of sandy loam and peat, with common greenhouse treatment "Some cultivators," Sweet observes, "grow them entirely in peat, in which they will grow very well for a time; but they will not be strong and healthy, nor flower so well as in a mixture Ripened cuttings, not too old, will root freely in sand under a bell-glass." (*Bot Cult* 223)

The bark of Melaleuca Leucadendron is used by the Chinese as oakum, for making good the spaces between the timbers of their vessels They also use it in the roofing their houses From the same tree is obtained the Cajeputi oil, remarkable for its green color, its peppermint flavor, and turpentine smell It is rarely to be procured in Europe in an unadulterated state When pure it is one of the best preservatives of preparations of natural history, and is used externally with much success as a cure for rheumatic affections and pains in the joints.

1611. *Tristania.* From τρεις, three, and στημι, to stand; in allusion to the ternate disposition of the flowers and leaves The species may be treated like Melaleuca, and are pretty little evergreen shrubs.

1612. *Calothamnus.* From καλος, beautiful, and θαμνος, a rod, in allusion to the splendid appearance of the branches covered with scarlet blossoms The species are beautiful plants, and not difficult of culture or propagation in sand, and the air kept still and moderately moist by covering with a hand-glass.

POLYANDRIA.

10938 Leaves alternate lanc acuminate oblique 5-nerved, Branches and petioles smooth
10939 Leaves alternate ellipt. lanc coriaceous 5-nerved, Branches and petioles downy
10939 Leaves linear-lanc. long equal-sided straight 3-nerved lateral nerves close to the scabrous edge
10941 Leaves obl 5 nerved equal-sided narrower at base, Heads spherical, Capsules connate
10942 Leaves oval or oblong obsoletely 1-nerved stalked flat close and branches quite smooth, Spikes obl smooth
10943 Leaves ov. acuminate with a pungent point striated with many nerves sess smooth, Spikes downy
10944 Leaves lin lanc. obsoletely 1-3-nerved, Spikes lax leafy smooth, Parcels of anthers polyandrous
10945 Leaves lanc lin acute dotted obsoletely striated rigid subsess Tube of calyx woolly [3-nerved
10946 Lvs lanc occasionally obl 3-nerved stalked and branches smooth, Heads glob or oval, Segm of cal acute
10947 Leaves ov lanc acuminate 3-nerved young lvs and branches villous, Heads globose downy
10948 Leaves subulate lin mucro rigid 1-nerved flat, Heads globose, Segm of cal membranous smooth
10949 Leaves lin -subul nerveless pointless spreading and subrecurved, Spikes oval smooth
10950 Leaves lin -subul mucro recurved at end, Spikes cylindr very smooth
10951 Leaves angular filiform mucro erect, hooked back at end, Branches virgate, Heads oval
10952 Leaves roundish mucro rough clustered, Heads round, Parcels of stamens 4-6-androus
10953 Leaves scattered and somewhat opp oval blunt obsoletely 3-nerved, Flowers subsolitary smooth
10954 Leaves opp lanc nerveless, Spikes few-fl Parcels of stamens polyandrous
10955 Leaves opp decussate oval-lanc 3-nerved, Spikes oval quite smooth, Parcels of stamens polyandrous
10956 Leaves opp lanc lin acute 1-nerved, Spikes oval quite smooth, Parcels of stamens multifid
10957 Leaves opp lanc lin acute 3-nerved, Spikes obl smooth, Parcels of stamens longitudinally pinnated
10958 Leaves opp ellipt obl 3-nerved lateral nerves obsol and close to the recurved edge, Spikes quite smooth
10959 Leaves opp ovate acute 5 7-nerved stalked, Spikes obl and oval, Bractes leafy
10960 Leaves opp ovate-lanc 3-5-nerved subsess Clusters few-fl Segm. of cal acute nerveless
10961 Leaves ternate obovate 3-nerved smooth, Spikes oblong or oval
10962 Leaves tern. lin lanc. hoary on both sides, as are the branches, Spikes oval or oblong

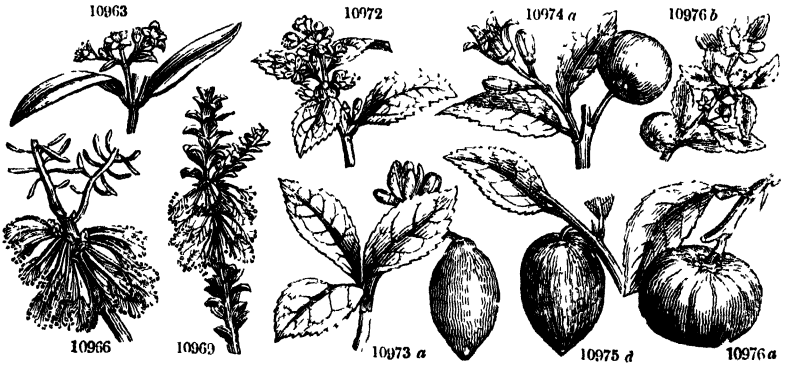
10963 Leaves opp lanc Parcels of stamens 3-5-androus
10964 Leaves altern cun lanc Branches and calyxes downy, Caps half superior
10965 Leaves lanc ellipt acute alternate · terminal clustered, Segm of calyx acute leafy

10966 Flowers 4-fid, Parcels of stamens distinct equal 12-15-androus, Old leaves and fruit smooth
10967 Flowers 5-fid, Parcels of stamens distinct equal polyandrous, Old leaves and fruit villous
10968 Flowers 5-fid, Parcels of stamens distinct equal 3-androus, Leaves very long and fruit smooth

10969 Leaves opp decussate ovate or oval many-nerved
10970 Leaves scattered oval many-nerved

10971 Flowers clustered sessile, Leaves glaucous
10972 Leaves ellipt. lanc downy on each side corrugate veiny, Sepals acuminate

10973 Peti somew winged, Lvs obl acute toothed, Fl 35-androus, Fruit obl with a thin rind and very acid pulp
10974 Petioles naked, Lvs ov rounded serrated, Fl 30-androus, Fruit globose with a nipple and sweet pulp
10975 Petioles nearly naked, Lvs ov obl and acute, Fl 20-androus, Fruit globose with a thin skin and sweet pulp
10976 Peti winged, Lvs ellipt acute crenulat Fl 20-androus, Fruit glob with a thin rough skin and bitter pulp



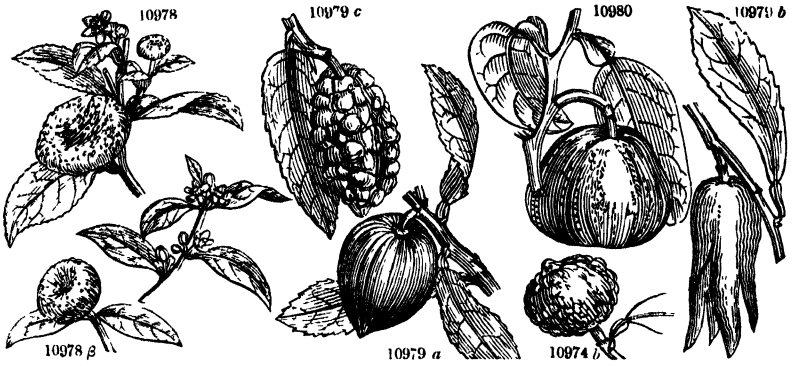
and Miscellaneous Particulars.

1613 *Beaufortia.* So called in honor of Mary, Duchess of Beaufort, who died January 7, 1714, in the 85th year of her age She had a fine collection of plants at Badmington, in Gloucestershire, during the life-time of her husband, Henry, first duke of Beaufort Splendid plants, free-growers, and abundant flowerers, with common greenhouse treatment, in two-thirds peat, and one-third loam. Cuttings, Sweet found to answer best when "taken from nearly ripened wood, planted in sand, and covered with a bell-glass."

1614 *Symplocos.* From *συμπλοκη*, connection, union The petals are naturally five, but united at the base so as to seem but one A tree with oblong fragrant shining leaves, and sweet-smelling flowers, succeeded by subsessile drupes A decoction of the leaves is used in North America for dying linen and silk of a bright yellow color

1615 *Citrus.* The meaning of this word has escaped the ingenuity of etymologists. An ancient genus, combining in its species many excellencies, handsome evergreen shining tree-like forms, most odoriferous flowers, and brilliant, fragrant, delicious fruits It is one of the most striking of fruit-bearing trees, and must have attracted the notice of aboriginal man long before other fruits of less brilliancy, but of more nutriment or flavor The golden apples of the heathens, and forbidden fruit of the Jews, are supposed to allude to this family, though it is remarkable that we have no authentic records of any species of Citrus having been known, certainly none were cultivated by the Romans The citron was introduced into Europe from Media, under the name of *malus medica*, and was first cultivated in Italy by Palladius, in the second century The orange

10977 buxifólia *P S*	Box-leaved	♚ ⊔ fr	3	my jl	W	China	...	B	r.m		
10978 nóbilis *H. K.*	Mandarin	♚ ⊔ fr	15	my.jl	W	China	1805.	B	r m	Bot. rep 608	
β minor	*smaller*	♚ ⊔ fr	15	my jl	W	China	1805	B	r m	Bot reg 211	
10979 médica *Risso*	Citron	♚ ⊔ fr	8	my jl	W	Asia	...	B	r m	Ferr hesp t. 39	
10980 Decumána *W*	Shaddock	♀ ⊔ fr	15	my jl	W	India	1724.	B	r.m	Ru.am 2.t.24.f.2	



History, Use, Propagation, Culture,

is supposed to have been introduced into Italy in the fourteenth century, above a thousand years after the citron In England, these trees have been cultivated since 1629 Parkinson, writing at that time, says, "the orange hath abiden with some extraordinary looking and tending, when neither citron nor lemon trees could be preserved any length of time" The orange trees he alludes to were those of Beddington, in Surrey, introduced from Italy by a knight of the noble family of the Carews (*Gibson's* edit of *Camb Brit*), and the first that were brought into England, they were planted in the open ground and placed under a moveable cover during the winter months It has been said that these trees were raised by Sir Francis Carew, from seeds brought to England by Sir Walter Raleigh but as such trees would not have readily borne fruit, Professor Martyn thinks it much more likely that they were plants brought from Italy Bradley says, they always bore fruit in great plenty and perfection, that they grew on the outside of a wall, not nailed against it, but at full liberty to spread; they were fourteen feet high, the girt of the stem twenty-nine inches, and the spreading of the branches one way nine feet, and twelve feet another These trees, Evelyn informs us, were neglected in his time, during the minority of their owner, and finally entirely killed by the great frost in 1739-40, they were planted before 1595

During the latter end of the seventeenth and beginning of the eighteenth centuries, the orange tree was a very fashionable article of growth in conservatories, when there were but few exotics of other sorts kept there The plants were procured from Genoa, with stems generally from four to six feet in height, they were planted in large boxes, and were set out during summer to decorate the walks near the house, in the manner still practised at Versailles and the Thuilleries About the middle of the eighteenth century, when a taste for botany and forcing exotic fruits became general, that for superb orange trees began to decline, many of these large trees have decayed through neglect, and those which are now to be found in the greater number of greenhouses, are generally dwarf plants bearing few fruit, and those of small size In some places, however, are still to be found large and flourishing trees Those at Singorony, in Glamorganshire, are the largest in Britain, they are planted in the floor of an immense conservatory, and bear abundantly It is said that the plants were procured from a wreck on the coast in that quarter, in the time of Henry VII.

At Nuneham, near Oxford, are some fine old trees, planted under a moveable case, sheltered by a north wall In summer the case is removed, and the ground turfed over, so that the whole resembles a native orange grove At Wormleybury, Hertfordshire, and Shipley Hall, in Derbyshire, are very fine large orange and lemon trees grown in borders and in boxes (*Hort Trans* vol ii 295, and iv 306)

At the Wilderness, Kent, are three trees in boxes, not surpassed by any trees so grown in Europe

At Woodhall, near Hamilton, trees of all the species of Citrus are trained against the back walls of forcing houses, in the manner of peaches, and produce large crops of fruit

In the south of Devonshire, and particularly at Saltcombe, one of the warmest spots in England, may be seen, in a few gardens, orange trees that have withstood the winter in the open air upwards of a hundred years The fruit is as large and fine as any from Portugal Trees raised from seed, and inoculated on the spot, are found to bear the cold better than trees imported

The common character of the Citrus family is that of low evergreen trees, with ovate or oval-lanceolate, entire or serrated leaves On the ungrafted trees are often axillary spines The flowers appear in peduncles, axillary or terminating, and one or many-flowered The fruits are large berries, round or oblong, and generally of a yellow color The species seem best distinguished by the petiole, which in the orange and shaddock is winged, in the citron, lemon, and lime, naked The form of the fruit, although not quite constant, may also serve for a distinction In the orange and shaddock it is spherical, or rather an oblate spheroid, with a red or orange-colored rind, in the lime, spherical, with a pale rind, in the lemon, oblong, rough, with a nipple-like protuberance at the end, in the citron, oblong, with a very thick rind The flowers of the citron and lemon have ten stamens, and those of the orange more It is very difficult to determine what is a variety, and what is a species in this genus, many of the sorts in cultivation are by buds

Dr Sickler, who spent several years in Italy, and paid great attention to the kinds and culture of the orange, published in 1815, Der Vollkommen Orangerie-Gartner (The complete Orange Gardener), in which he describes above seventy sorts of Citrus

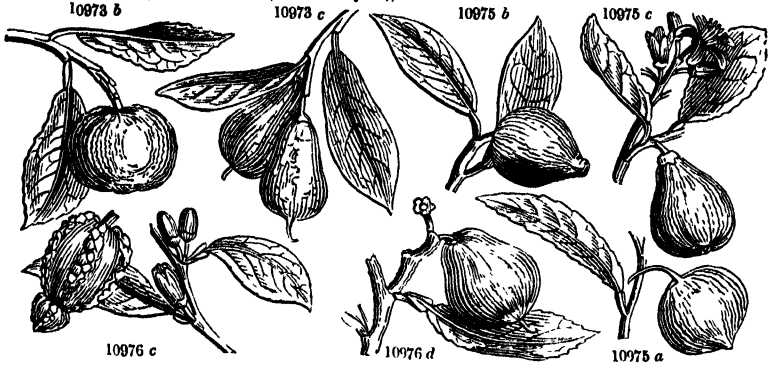
Gallesio (*Traité du Genre Citrus*, &c Savonna, 1818.) has given a synopsis of the forty principal sorts cultivated in Italy

The most splendid work on oranges which has yet appeared is the Histoire Naturelle des Orangers, by Risso, of Nice, and Poiteau, of Versailles (Paris, fol 1818) Here 169 sorts are described, and 105 of them figured, and their French and Italian culture given at great length They are arranged as sweet oranges, of which they describe 42 sorts, bitter and sour oranges, 32 sorts, bergamots, 5 sorts, limes, 8 sorts, shaddocks, 6 sorts, lumes, 12 sorts, lemons, 46 sorts, citrons, 17 sorts.

All the species of Citrus endure the open air at Nice, Genoa, and Naples, but at Florence and Milan, and often at Rome, they require protection during the winter, and are generally placed in conservatories and sheds The largest conservatory in Italy is that of Prince Antonio Borghese, at Rome, which contains seventy select sorts of *agrumi* The largest trees are at Sorenta, Terracina, Gaeta, and Naples, but the most regular and garden-like culture of the orange, is in the orange orchards at Nervi, Monaco, and other places in the neighbourhood of Genoa. At Nervi are also the orange nurseries which may be said to supply all Europe with trees, they are, in general, wretchedly cultivated, and the stocks inoculated in the most unscientific manner, but the fine climate, strong clayey soil, and abundant manuring, supply in a great degree the nicer practices

10977 Petioles lin. very short, Lvs. ovate retuse, Flowers racemose
10978 Petioles sublinear straight, Branches ascending unarmed, Fruit depressed, Skin separated from flesh

10979 Petioles naked, Lvs obl acute, Fl. 40-androus, Fruit obl rugose with acid pulp
10980 Petioles winged, Lvs blunt emarg Fruit very large with a thick skin



and Miscellaneous Particulars

of gardening There the names of varieties vary as much as those of gooseberries do in England, but from upwards of 180 names, not above 40 distinct sorts can be procured Good plants of the Maltese and other varieties of orange may be procured from Malta, and some sorts also from Lisbon From the nurseries at Paris about thirty sorts may be obtained, much smaller plants than those from the other places named, but more scientifically grafted or inoculated The catalogues of London nurserymen enumerate above thirty varieties of oranges, twelve of lemons, and several varieties of the other species, the plants are partly Genoese, partly French, and partly propagated here

The C aurantium, the common orange, *orange*, Fr, *pomeranze*, Ger, and *arancio*, Ital, is a middle sized evergreen tree, with a greenish-brown bark, and, in its wild state, with prickly branches The fruit is nearly round, from two to three inches in diameter, and of a gold color It is now cultivated in most countries of Europe, in the open air in Italy and Spain, and in conservatories or greenhouses in Britain and the north of Europe

The two principal varieties are the sweet or China orange, the *orange douce* of the French, and *porto-gallo* or *poma de sino* of the Italians, and the bitter or Seville, the *bigarade* of the French, and *arancio volgaro* of the Italians The Maltese orange, distinguished by its red pulp, is also a noted and much-esteemed sort The box-leaved, willow-leaved, and some others, are cultivated more as curious varieties than for their fruit

C Medica, the citron, *citron*, Fr, *citronier*, Ger, and *cedrate*, Ital, in its wild state grows to the height of about eight feet, erect and prickly, with long reclining branches The leaves are ovate, oblong, alternate, subserrate, smooth, pale green The fruit or berry is half a foot in length, ovate, with a protuberance at the lip. There are two rinds, the outer thin, with innumerable miliary glands, full of a most fragrant oil, the inner thick, white, and fungous

In China they have a variety of the C Medica, of very considerable size, quite solid, with scarcely any pulp or cells, and divided at the end into five or more long round lobes, on which account it is called *Phat thu*, or finger-orange The fruit is laid upon fine porcelain vessels in the sitting-rooms of the Chinese, for the sake of its agreeable perfume

Dr Sickler enumerates only about a dozen citrons and citronates as grown in Italy The French nurseries have nearly twenty names in their lists In England six are cultivated for sale

C Limonum, the lemon, *limon*, Fr, *limonier*, Ger, and *limone*, Ital, has the fruit less knobbed at the extremities, is rather longer and more irregular, and the skin is thinner than in the citron, the wood is more knotty, and the bark rougher

Dr Sickler enumerates twenty-eight varieties as grown in Italy The French, according to Ville Hervé have eleven sorts, in the London nurseries are cultivated twelve

C Limetta, the lime, by some esteemed a variety of the C Medica, *lime*, Fr, Ital, and Ger, grows to the height of about eight feet, with a crooked trunk, and many diffused branches, with prickles The leaves are ovate lanceolate, almost quite entire Berry an inch and a half in diameter, almost globular, with a protuberance at the top, the surface regular, shining, greenish-yellow, with a very odorous rind, enclosing a very acid juice

The French have two sorts of lime, and, according to Dr Sickler, the Italians have four varieties, five kinds are grown in the London nurseries

C decumana, the shaddock, *orange pampelmouse*, Fr, *arancio massimo*, Ital, is above the middle size, with spreading prickly branches The leaves are ovate, subacute, seldom obtuse, the petioles are cordate, winged, the wings as broad as the leaves The berry spheroidal, frequently retuse at each end, of an even surface, and greenish yellow color, pulp red or white, juice sweet or acid, rind white, thick, fungous, and bitter Thunberg says, the fruit in Japan grows to the size of a child's head, and Dr Sickler states its weight as fourteen pounds, and its diameter as from seven to eight inches. It is a native of China and Japan, and was brought to the West Indies by Captain Shaddock, from whom it has derived its name

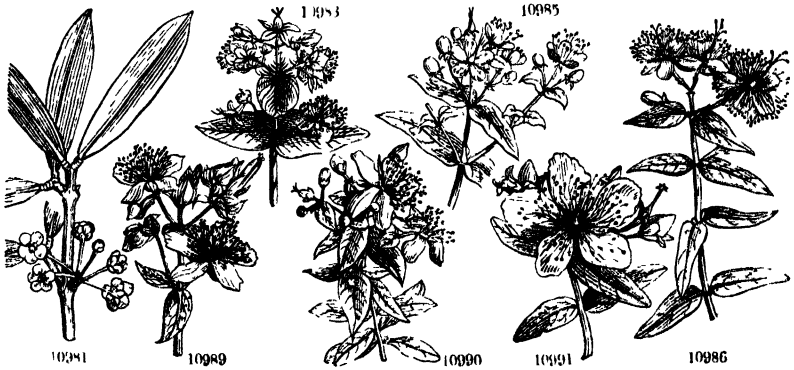
The Italians, according to Dr Sickler, have one, and the French, according to the Nouveau Cours, &c, four sorts Four are grown in the English nurseries

All the sorts may be propagated by seeds, cuttings, layers, and grafting, or inoculation

The object of raising plants from seed is either to obtain new varieties or stocks for grafting To attempt raising new varieties in Britain will in general be found a tedious process, as the trees do not even in Italy show fruit for six or eight years or more, and there is now in the botanic garden at Toulon, a large handsome tree, of twenty-five years' growth, which in 1819 had not blossomed Shaddock stocks are the strongest, and next to these the citron Budding and grafting are performed at the usual season, but these operations may be performed at any time when the sap is in motion

Henderson, of Woodhall, a most superior cultivator of the Citrus tribe, considers cuttings as the quickest mode of getting plants, and has practised it for thirty-seven years past his directions are as follows "Take the strongest young shoots, and also a quantity of the two years old shoots, these may be cut into lengths from nine inches to eighteen inches. Take the leaves off the lower part of each cutting to the extent of about five inches, allowing the leaves above that to remain untouched then cut right across, under an eye, and make a small incision in an angular direction on the bottom of the cutting When the cuttings are thus prepared, take a pot, and fill it with sand, size the cuttings, so that the short ones may be all together, and those that are taller in a different pot Then, with a small dibble, plant them about five inches deep in the sand, and give them a good watering overhead, to settle the sand about them Let them stand a day or two

1616 XANTHOCHY'MUS *Rox*	XANTHOCHYMUS.				*Guttiferæ*	*Sp* 2—4.						
10981 pictórius *H K*	painter's	♀	fr	20	...	Y	E. Indies	1796.	S	r m	Roxb.cor.2.t.196	
10982 ovalifólius *Roxb*	oval-leaved	♀	fr	12	...	Y	E. Indies	1824.	S	r m		
*1617. HYPE'RICUM	*H* St JOHN'S WORT				*Hypericineæ.*	*Sp* 63—133						
10983 elátum *H K*	tall		or	5	jl au	Y	N. Amer.	1762.	L	s l	Dend. br.t. 85	
10984 frondósum *Mich*	green		or	5	jl au	Y	N. Amer.	1806.	C	s l		
10985 amœ'num *Psh*	elegant		or	4	jl au	Y	Carolina	1812.	L	s l	Dil el t.151 f 182	
10986 hircínum *L*	stinking		or	3	jl s	Y	S. Europe	1640	L	s l	Dend. brit. 86	
10987 fulgósum *H K*	shining		or	3	au	Y	Azores	1778.	C	p l		
10988 floribúndum *H K*	many-flowered		or	3	au	Y	Madeira	1779.	C	p l	Com hort 2 t 68	
10989 olýmpicum *L*	Olympian		or	4	jl s	Y	Levant	1706	S	s l	Bot mag 1867	
10990 canariénse *L*	Canary		or	2	jl s	Y	Canaries	1699.	C	p l	Bot cab 953	
10991 monógynum *L*	Chinese		or	3	mr s	Y	China	1753	C	p l	Bot mag. 334	
10992 cordifólium *Chois*	heart-leaved		or	2	...	Y	Nepal	1825	C	co		
10993 pyramidátum *H K*	pyramidal		or	1	jl au	Y	Canada	1759	D	p l	Vent malm 118	
10994 Ascyron *L*	Siberian		or	1	jn s	Y	Siberia	1774	Sk	co	Gmel sib 4 t 69	
10995 ascyroides *W*	large-capsuled		or	1	jn jl	Y	N Amer	1812	Sk	co		
10996 pátulum *Thunb* *H úralum* B M	spreading		or	1	jn jl	Y	Nepal	1823	C	co	Bot mag 2375	
10997 Kalmiánum *Lam*	Kalmia-leaved		or	2	jn jl	Y	N Amer	1759	C	s l		
10998 calycínum *L*	large-flowered		or	1	jn s	Y	Ireland	...	Sk	co	Eng bot 2017	
10999 baleáricum *L.*	warted		or	1½	mr s	Y	Majorca	1714	C	r m	Bot mag 137	
§11000 Androsæ'mum *L*	Tutsan		or	2	jl s	Y	Britain woods		Sk	co	Eng. bot. 1225	
11001 cochinchinénse *Lour*	red-flowered		pr	3	jl au	R	China	1821	C	co		
11002 paludósum *Chois*	marsh		pr	2	jl au	Y	N Amer	1821	D	co		
11003 virgínicum *L* *Elodea campanulàta* Ph	Virginian		or	1½	jl s	Y	N Amer.	1800	D	p l		
11004 angulósum *Mich*	toothed-flower		or	2	jn jl	Y	N Amer	1812.	D	p l	Plu.alm.t.245 f.6	
11005 punctátum *Lam.*	dotted		or	1½	jn jl	Y	N Amer	1823	D	co		
11006 dolabriférme *Vent.*	hatchet-leaved		or	2	jn jl	Y	N Amer	1821.	D	co	Vent cels t. 45	
11007 procúmbens *Mich*	procumbent		or	½	au s	Y	N Amer	1822	D	co		
11008 rosmarinifólium *Lam*	Rosemary-lv		or	2	jn au	Y	Carolina	1812	L	s l		
11009 virgátum *Lam*	twiggy		or	1½	jn au	Y	N Amer	1820	D	co		
11010 myrtifólium *Lam*	myrtle-leaved		or	1	jl au	Y	N Amer	1818	D	co		
11011 prolificum *L*	prolific		or	4	jn au	Y	N Amer	1758	S	s l	Dend brit 88	
11012 glaucum *Mich*	glaucous		or	1½	jl au	Y	N Amer	1812	C	p l		
11013 lævigátum *H K*	smooth		or	1½	jl s	Y	N Amer	1772	D	p l		
11014 nudiflórum *Mich*	naked-panicled		or	1½	s o	Y	N Amer	1811	C	p l		
11015 quadrángulum *L*	square-stalked		or	1½	jl au	Y	Britain m me.		C	p l	Eng bot 370	
β *dúbium* W	*imperforate*		or	3	jl au	Y	Britain m thi		C	p l	Eng bot 296	
γ *maculátum* All	*spotted*		or	2	jl au	Y	N Amer	1789	C	p l		
δ *undulátum* W en	*wave-leaved*		or	1	jl au	Y	Barbary	1802	D	p l		
11016 attenuátum *Chois*	narrow-leaved		or	1½	jl au	Y	Dahuria	1822	D	p l		
11017 japónicum *Thunb*	Japanese		or	1½	jl au	Y	Nepal	1823	D	p l		



History, Use, Propagation, Culture,

in a shady place, and if a frame be ready with bottom heat, plunge the pots to the brim Shade them well with a double mat, which may remain till they have struck root, when rooted, take the sand and cuttings out of the pot, and plant them into single pots, in the proper compost. Plunge the pots with the young plants again into a frame, and shade them for four or five weeks, or till they are taken with the pots, when they may be gradually exposed to the light. From various experiments, I found that pieces of two year old wood struck quite well, and in place, therefore, of putting in cuttings six or eight inches long, I have taken off cuttings from ten inches to two feet long, and struck them with equal success Although I at first began to put in cuttings only in the month of August, I now put them in at any time of the year, except when the plants are making young wood By giving them a gentle bottom heat, and covering them with a hand-glass, they will generally strike root in seven weeks or two months The citron is most easily struck, and is the freest grower, I, therefore, frequently strike pieces eighteen inches long, and as soon as they are put into single pots, and taken with the pots, they are grafted with other sorts, which grow freely I am not particular as to the time either of striking cuttings or of grafting" (*Calcd. Hort Mem* iii 308)

At Genoa and Florence, citrus trees are grown in a strong yellow clay, which is richly manured; and this soil is considered by the first Italian gardeners as best suited to their natures.

The French gardeners, in preparing a compost for the orange-tree, endeavour to compensate for quantity by quality, because the pots or boxes in which the plants are placed ought always to be as small as possible, relatively to the size of the tree The following is the composition recommended. to a fresh loam, which contains a third of clay, a third of sand, and a third of vegetable matter, and which has lain a long time in a heap, add an equal bulk of half-rotten cow-dung The following year turn it over twice The succeeding year mix it

10981 Leaves oblong
10982 Leaves smaller oval blunt

§ 1 *Sepals united at base and unequal. Stamens* 00. *Styles* 3-5 ASCYREIA
10983 Young stem winged, Lvs. ov obl. acute dilated at base somew emarg, revolute at edge, Fl. corymbose
10984 Branches double-edged, Lvs. ov. elongated blunt at end narrow at base, Fl large subsolitary
10985 Branches double-edged, Lvs obl ellipt. bluntish at end narrowed at base with a crisp revolute edge
10986 Branches winged, Lvs emarg at base dilated sess acute at end ovate lanc glandular at edge
10987 Branches winged, Lvs sess. open ovate obl somewhat acute slightly perforated
10988 Stem round, Lvs. sess lanc. not dotted numerous, Peduncles dilated at end
10989 Stem round, Lvs. ellipt. ovate bluntish with pellucid dots, Calyx ovate acute
10990 Stem obsoletely quadrangular, Branches compressed, Lvs ov -lanc acute, Cal blunt ovate
10991 Stem round, Lvs ellipt blunt a little dotted with black, Styles united
10992 Stem round shrubby, Lvs ov amplexicaul. cordate not dotted clustered, Flowers few
10993 Stem winged, Lvs amplexicaul obl lanc acute revolute at edge, Pedunc short thick
10994 Stem square herbaceous simple erect, Leaves amplexicaul lanc. acute with pellucid dots
10995 Stem winged at base square at end herbaceous simple, Lvs obl lanc acute
10996 Stem round suffruticose purple, Lvs ovate lanc acute narrowed at base revolute at edge with pellucid dots

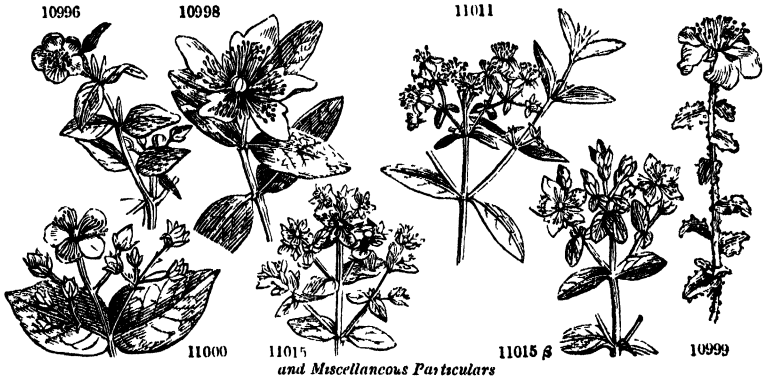
10997 Branches square, Lvs lin lanc Flowers in terminal corymbs
10998 Styles 5, Fl. solitary, Segm. of the cal unequal obovate obtuse, I vs obl Stem shrubby branched square
10999 Stem square warted, Lvs ovate blunt amplexicaul warted
11000 Styles 3, Caps pulpy, Stem shrubby compressed, Cal leaflets unequal, Leaves ovate sessile

§ 2 *Sepals 5, equal, entire. Stamens deeply triadelphous, parcels penicilled at end Styles* 3 TRIDESMOS
11001 Flowers trigynous, Leaves subpetiolate very dense, Pedunc about 5-fl axillary

§ 3 *Sepals 5, equal, entire Styles* 3 *Filaments definite in number,* 9-15-18, *deeply united* ELODEA
11002 Stem herbaceous round, Leaves oblong blunt narrowed into a stalk with pellucid dots
11003 Stem round half-shrubby, Leaves oblong blunt amplexicaul with pellucid dots

§ 4 *Scpals 5, equal, sometimes entire, sometimes toothed, or with glandular teeth, Stamens* 00. *Styles usually* 3 PERFORARIA
* *Sepals entire*
11004 Stem herbaceous square erect, Leaves distant long ovate amplexicaul situated at edge acute not dotted
11005 Stem round black dotted, Leaves ovate-lanc somewhat acute amplexicaul dotted with black
11006 Stem erect purple, Leaves lin lanc reflexed with pellucid dots, Flowers corymbose
11007 Stem procumbent square herbaceous, Leaves linear-lanceolate blunt revolute at edge with pellucid dots
11008 Stem round straight, Leaves amplexicaul blunt ovate revolute at edge, Styles united
11009 Stem straight square, Leaves ovate-lanceol slightly amplexicaul dotted with black revolute at edge
11010 Stem round, Leaves ovate cordate amplexicaul or cuneate lanc revolute at edge
11011 Stem round, Branches angular, Lvs linear lanc revolute at edge with pellucid dots, Styles often united
11012 Stem round, Leaves cordate amplexicaul blunt revolute at edge glaucous with pellucid dots
11013 Flowers trigynous, Styles united, Lvs ovate subamplex Sepals ov acute, Middle flower of panicle sessile
11014 Stem square and winged, Leaves ovate obl blunt needle-dotted not pellucid, Panicle naked
11015 Styles 3, Stem herbaceous 4-angular somewhat branched, Leaves ovate with pellucid dots, Cal lvs lanc
β Stem obsoletely quadrangular, Leaves elliptical ovate obtuse destitute of pellucid dots, Cal lvs elliptical

11016 Stem round dotted with black, Leaves ovate obl blunt amplexicaul dotted with black
11017 Stem weak square smooth, Leaves ovate subcordate blunt revolute at edge scarcely dotted beneath



and Miscellaneous Particulars

with nearly one-half its bulk of decomposed horse dung Turn it over twice or three times, and the winter before using add a twelfth-part of sheep dung, a twentieth of pigeon dung, and a twentieth of dried ordure.

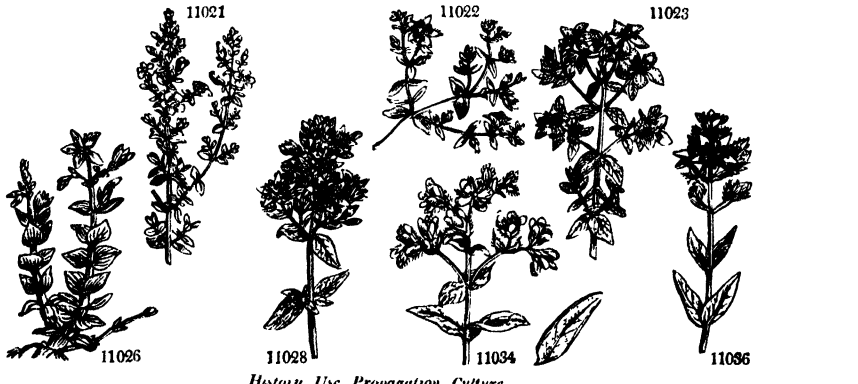
Henderson, already mentioned, takes one part of light-brown mould from a piece of ground that has not been cropped nor manured for many years, one part of peat earth, such as is used for growing heaths, two parts of river sand, or pit sand, if it be free from mineral substances, and one part of rotted hot-bed dung, with one part of rotted leaves of trees, and mixes them all well together, so as to form a compost-soil of uniform quality (*Calcd Hort Mem* iii 302)

Though orange-trees will grow exceedingly well in large pots and boxes, yet to have them produce the finest crop of fruit they should be planted in the ground like peach-trees, and trained like them, or as standard cherries in a conservatory. The latter has by far the best effect, especially when the stems of the trees are seven or eight feet high, and the head forms a handsome cone, but the largest fruit is produced when the trees are planted against the back-wall trellis of a narrow house, and treated like peach-trees Henderson grows his largest fruit in this manner, and we have seen them fully as large as any we ever saw at Genoa or Naples.

1616. *Xanthochymus* From ξανθός, yellow, and χύμα, any thing which exudes. in allusion to the color of the juice which flows from the ripe fruit when wounded, and which, being inspissated, yields a material for water-color painting which is as good as Gamboge Handsome plants, of the usual culture in light loam, and propagated by cuttings in sand under a hand-glass

1617 *Hypericum* A name of unknown meaning The species are chiefly under-shrubs, generally with dotted leaves, and almost, without exception, yellow flowers The hardy species are useful for the fronts of

11018	crispum *L*	curl-leaved	or	1	jl au	Y	Greece	1688	C	p l	Bocc. mus t. 12
11019	setósum *H K.*	unbranched	or	1	jl au	Y	Carolina	1759	D	p l	
11020	heterophýllum *Vent.*	various-leaved	or	2	jl au	Y	Persia	1812	D	l.p	Vent cels t. 68
11021	ægyptiacum *L*	Egyptian	or	2	jn jl	Y	Egypt	1787.	C	p.l	Bot. reg 196
11022	humifúsum *L.*	trailing	or	½	jl au	Y	Britain	pas.	D	co	Eng bot. 1226
11023	perforátum *L.*	perfoliate	or	1½	jl au	Y	Britain	bu.pl.	D	p l	Eng bot. 295
11024	canadénse *L*	Canadian	or	1	jl s	Y	N. Amer.	1770	D	p l	Bot. cab. 953
11025	fasciculátum *W*	clustered	or	1½	jl	Y	N. Amer	1800.	C	a.l	
11026	Elódes *L.*	marsh	or	½	jl.au	Y	Britain	sp bo	D	p l	Eng bot 109
11027	tomentósum *L*	woolly	or	1	jl s	Y	S Europe	1648	C	r m	
11028	hirsutum *L*	hairy	or	2	jn jl	Y	Britain	ch.ba.	D	p l	Eng bot 1156
11029	nummulárium *L*	money-leaved	pr	1	jn jl	Y	S Europe	1823	D	co	Lam ill t 643
11030	élegans *Steph*	elegant	pr	1½	jn jl	Y	Siberia	1822	D	co	Spreng fl.hal t.9
11031	glandulosum *H K*	glandular	or	2	my au	Y	Madeira	1777	C	p l	
11032	reflexum *L*	hanging-leaved	or	1½	jn s	Y	Teneriffe	1778	C	p l	
11033	pulchrum *L*	small upright	or	1½	jl	Y	Britain	woods	D	p l	Eng bot 1227
11034	barbátum *L*	bearded	or	2	jn o	Y	Scotland	sc thi	D	co	Eng bot 1986
11035	dentátum *Lois*	toothed	pr	2	jn o	Y	Mediterr	1820	D	co	Lois fl gall t 17
11036	montánum *L*	mountain	or	1½	jl au	Y	Britain	m wo	D	p l	Eng bot 371
11037	fimbriátum *Lam*	fringed	pr	2	jl au	Y	Pyrenees	1821	D	p l	Vill delph t 44
	β alpinum W & K	*alpine*	pr	2	jl au	Y	Hungary	1822	D	p l	Wal & Kit t 265
11038	serpyllifólium *Lam*	Thyme-leaved	or	½	jl au	Y	Levant	1688	C	r m	M.h.2 s 5 t 6 f 2
11039	ciliátum *Lam*	fringe-flowered	or	2	jl	Y	Levant	1739	D	l p	Bocc mus t 127
11040	triplinérve *Vent*	three-nerved	pr	1½	jl	Y	N. Amer	1821	D	co	Vent cels t 58
11041	hyssopifolium *Vill*	Hyssop-leaved	pr	1	jl au	Y	S Europe	1823	D	co	Vill delph t 44
11042	empetrifólium *W*	fine-leaved	pr	1	jl au	Y	S Europe	1820.	C	p l	Dend brit 141
11043	Córis *L*	Heath-leaved	pr	1	my s	Y	Levant	1640	C	p l	Bot mag 178
11044	ericoides *L*	Heath-like	pr	1	jn jl	Y	Spain	1821.	C	p l	Cav ic t 122
11045	aspalathoides *W*	Aspalathus like	or	1	jn au	Y	Carolina	1811.	C	s l	
1618	ASCY'RUM *W*	Ascyrum			*Hypericineæ*		*Sp* 5—6				
11046	púmilum *Ph*	dwarf	pr	½	jn au	Y	Georgia	1806	C	l p	
11047	Crux A'ndreæ *Ph*	St Andrew's Cross	pr	2	jl	Y	N Amer	1759	C	l p	Pluk.alm 419,5
11048	hypericoides *Ph.*	Hypericum-like	pr	1½	jl s	Y	N Amer	1759	C	l p	
11049	stans *W*	large-flowered	pr	1½	jl s	Y	N Amer	1806	C	l p	Vent. malm 90
11050	amplexicaúle *Ph*	stem-clasping	pr	2	jl s	Y	N Amer	1823	C	co	
†1619	LOA'SA *L*	Loasa			*Loaseæ*		*Sp* 4—10				
11051	Plácei *Lindl.*	Place's	or	4	jn s	Y	Chile	1822	S	co	Bot reg 785
11052	nítida *Lam*	shining	or	2	jn s	Y	Chile	1822	S	co	Bot reg 667
11053	volúbilis *Juss*	twining	cl	1½	mr s	Y	Chile	1824	S	s l	Jus an m t 5. f 2
11054	grandiflóra *Lam*	large-flowered	or	2	...	Y	Caracas	1825	S	co	Jus an m t 4 f 2



History, Use, Propagation, Culture,

shrubberies H. calycinum soon spreads over a considerable surface, and being evergreen, and growing under the shade, it is well adapted for covering bare spots under trees, and at the base of walls where few plants will thrive

H. Androsæmum, from *ανηρ*, a man, and *αιμα*, blood, because the fresh capsules, bruised between the fingers, give out a blood-colored juice, is called Tutsan from *Toute-saine*, Fr, from its bruised capsules being formerly applied to fresh wounds

H perforatum was formerly used in external wounds and hæmorrhages as a balsamic, and was reputed to have other medical properties The semi-transparent dots on the leaves are the receptacles of an essential oil The flowers tinge spirits and oils of a fine purple color, and the dried plant, boiled with alum, dyes wool of a yellow color The common people in France and Germany gather it with great ceremony on St. John's day, and

11018 Stem round much branched, Lvs sess. lanc. undul. wavy at base with pellucid dots, Cal. very small blunt
11019 Flowers 2-3-gynous terminal, Cal lanc entire, Leaves lanc oblong and erect, Stem simple downy
11020 Stem round, Lvs. lin. lanc with pelluc dots · low closely imbric very short blunt, Cal acute rather unequal
11021 Stem round, Leaves very small ovate close not dotted, Flowers few subsessile, Cal. acute lanceolate
11022 Styles 3, Flowers terminal subcymose, Stems comp. prostrate, Leaves oblong obtuse glabrous
11023 Styles 3, Stem compressed, Leaves elliptico-oblong obtuse with pellucid dots, Cal leaves lanceolate
11024 Stem herbaceous upright 4-winged, Lvs. lin somewhat blunt with fine pellucid dots and black dots beneath
11025 Stem round diffuse, Leaves lanceol. linear narrow at base revolute at edge, Calyx somewhat unequal

** *Sepals toothed, or toothed glandular*

11026 Styles 3, Cal with (reddish) glandular serratures glabrous, Lvs roundish pubesc Stem rounded creeping
11027 Stem downy round ascend Lvs. ovate blunt somewhat amplexicaul with black dots at edge, Cal acuminate
11028 Styles 3, Cal with (black) glandular serratures, Stem erect rounded pubesc. Lvs. ov. slightly downy beneath
11029 Stem round ascending, Leaves orbicular stalked, Calyx ovate blunt
11030 Stem straight slightly wing Lvs ov-lanc subamplex blunt with pellucid dots, Anthers dotted with black
11031 Stem round straight branched, Lvs ellipt lanc. acute glandular at edge with pellucid dots, Cal lanc acute
11032 Stem round a little villous at end, Leaves amplexicaul lanceol. acute generally reflexed, Panic lax few-fl.
11033 Styles 3, Cal with (black) glandul serratures, Stem erect, Lvs cord glab amplexicaul [dots beneath
11034 Sty 3, Corymbs term Cal fring with long pedunc! glands, Stem erect round Lvs ov with (black) scattered
11035 Stem round ascending, Leaves amplexicaul oblong bluntish with pellucid dots. upper sometimes toothed
11036 Styles 3, Pls paniculate-corymb. Cal with glandul. serratures, Stem erect round smooth, Lvs ov glabrous
11037 Stem round purplish simple, Lvs amplexicaul. ovate dotted with black at the edge, Cal. ov. acute ciliated

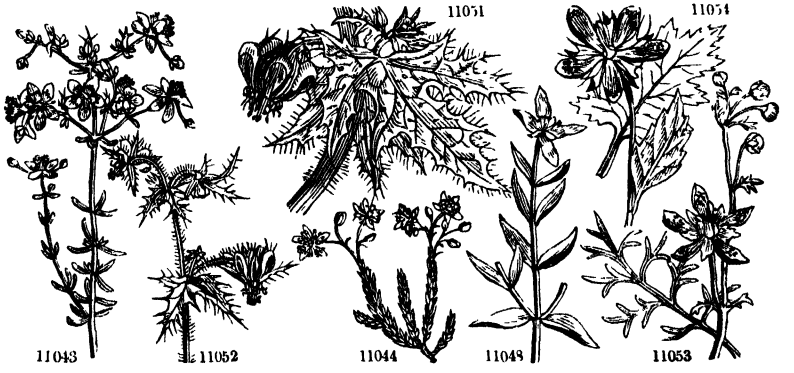
11038 Stem round, Leaves ovate blunt with a small petiole revolute at edge, Calyx ovate blunt [with black
11039 Stem round slightly winged, Lvs amplexicaul subcord ovate obl blunt with pellucid dots, Anthers dotted
11040 Stem with 2 angles decumbent at base, Lvs linear-lanc spreading blunt revolute at edge, Cal ovate acute
11041 Stem round ascending, Lvs obl. lanc bluntish narrowed at each end with pellucid dots, Cal somewhat blunt
11042 Stem round, Branches somewhat winged, Leaves in threes linear revolute at edge, Calyx very small blunt
11043 Stem round ascending, Leaves whorled linear revolute at edge, Calyx linear somewhat blunt
11044 Stem round tortuous minute, Leaves round acute clustered dotted glaucous very small

§ 5 *Sepals 5, entire, equal, like the leaves Stamens* 00 *Styles* 3-5 BRATHYS

11045 Stem round compressed at end, Leaves dense not dotted channelled revolute at edge, Cal equal straight

11046 Stem small simple quadrangular, Leaves oval blunt fascicled, Pedicels 6 lines long reflexed
11047 Stem round, Branches erect, Lvs ovate linear blunt generally fascicled in the axillæ, Inner sepals orbicular
11048 Stem round, Leaves oblong linear blunt with 2 glands at base, Inner sepals somewhat orbicular
11049 Stem winged straight, Leaves ovate ellipt. blunt glaucous, Inner sepals cordate orbicular
11050 Stem dichotomous panicled, Leaves ovate cordate crisp, Corymb naked, Styles 3

11051 Sepals scarcely toothed reflexed as long as petals, in fruit reflexed and longer than the obovate capsule
11052 Sepals toothed shorter than petals, in fruit erect and shorter than the pear-shaped capsule
11053 Stem twining, Leaves bipinnatifid with narrow obtuse segments
11054 Hispid, Leaves opposite and alternate cordate ovate lobed, Petals flattish, Flower very large



and Miscellaneous Particulars

hang it in their windows as a charm against storms, thunder, and evil spirits, mistaking the meaning of some medical writers, who have fancifully given this plant the name of *Fuga Dæmonum*, from a supposition that it was good in maniacal and hypochondriacal disorders In Scotland it was formerly carried about as a charm against witchcraft and enchantment

H. humifusum is one of the prettiest little plants of the genus, well adapted for growing in pots

1618 *Ascyrum* From α, privative, and σκυρος, roughness, that is to say, a smooth plant, *Linn.* Curious little plants, of the same culture as the Hypericums

1619 *Loasa.* A name applied to these plants by Adanson, but of unknown meaning. Stinging, mostly annual plants, some of the species are handsome hardy annuals, remarkable for the beauty of their highly curious flowers L. volubilis will not succeed in the open air



Class XIX. — SYNGENESIA. Stamens 5. Anthers united by their edges.

This is one of the most extensive and best defined of all the Linnean classes Its essential character depends, as its name indicates, (συν, together, and γενεσις, generation,) upon the adhesion of the antheræ or male organs of the flower into a single tube It comprehends the whole of the Corymbiferæ, Cichoraceæ, and Cinaroce-phalæ of Jussieu, and, with the exception of Aconarpheæ, nothing else The genera constituting the order Monogamia of Linnæus are excluded by Linnean botanists of the present day

In addition to the cohesion of the anthers, upon which this class immediately depends, it is further characterized by the flowers, commonly called florets, being clustered together in heads, and inserted upon a common receptacle, which is surrounded by an involucrum, commonly, but very improperly, termed calyx The few genera, such as Kuhnia, Euxenia, Aconarpha, &c , in which a union of anthers either does not exist at all, or in a very incomplete degree, are therefore retained in Syngenesia, because of their congruity in the structure of their inflorescence

The real nature of the various constituent parts of syngenesious inflorescence being, from its complicated nature, very puzzling to the unlearned, and, as it would seem, to some professors also, it may be useful to explain briefly the analogy the various parts bear to the organs of other plants, and the terms employed in describing them

The *Head* or *Capitulum* is a cluster of flowers of the nature of an umbel, inserted upon a common rachis, which, by contraction or incomplete developement, assumes the form of a conical or flat body, out of which the flowers proceed, and which is called a receptacle This is surrounded by the involucrum M Cassini calls the head *Calathide*

The *Involucrum* is the most external part of the head It consists of a more or less considerable number of scales or leaves, placed in a single row, either distinctly from each other, or united at their edges, in which case the involucrum is called one-leaved, or placed in many rows, becoming gradually shorter as they are external, in which case they are called imbricated If the external scales surround the internal at the base in a regular manner, then the involucrum is said to be calyculate The involucrum was called *common calyx* by Linnæus, and has been more recently denominated a perianthium M Cassini names it *Pericladium*

The *Receptacle* (Chnanthium of Cassini) is a cellular fungous surface surrounded by the involucrum, and bearing the florets It is either columnar, conical, flat, or depressed, and naked, or covered with appendages called hairs or bristles, according to their nature, or paleæ, when they are dilated and have a glumaceous appearance If naked, and merely scarred by the insertions of the florets, it is called dotted or puncticulate, when the scars are more considerable and deeper, the receptacle is said to be scrobiculate, if the insertions are so deep as to appear to be divided by membranous partitions, it is cellular, or favose, or alveolate, if furnished with hairs, it is villose, if with paleæ, it is paleaceous or chaffy

The *Paleæ* are of the same nature as bracteæ, and exist in various degrees of developement Occasionally they are as large as the scales of the involucrum, which they in that case closely resemble

The flower, usually termed *Floret*, consists of two parts, the ovarium and the corolla, each with its appendages

The *Ovarium* is always one-celled, but it occasionally has two additional obsolete cells, as in Arctotis It is either naked, or covered with hairs in various degrees, occasionally becoming enveloped in fine wool, and it is surmounted by an organ named the pappus

The *Pappus* has generally been esteemed a superior calyx, and it is the opinion of M Cassini that it is analogous to the scales of the receptacle, and the leaves of the involucrum

The *Corolla* is placed on the top of the ovarium It is either funnel-shaped, with a limb divided into four or five equal lobes, in which case the florets are denominated *tubular*, or it is split on one side, and spread open into the form of a strap, when the florets are called *ligulate*, or it is divided into two portions, of which one is unequal to the other, this form is called bilabiate or two-lipped Bilabiate corollas may be either ligulate or flosculous, according to the species to which they belong Occasionally the corolla appears to be absent

The *Stamens* are attached to the orifice of the tube of the corolla, just below the limb Their *filaments* are usually, but not always, distinct, their *anthers* are adherent by their edges, and furnished with a little membranous appendage at the tip, and sometimes with two spur-like processes at their base

The *Style* is filiform, and either split at the summit into two linear spreading stigmas, or consists of a single piece from the base to the summit. The form and surface of the stigma, and the upper part of the style are subject to a great diversity of appearances, which are of the utmost importance in determining the affinities of the genera

The *Florets* are either hermaphrodite, unisexual, or neuter Upon these differences of sex the orders of Linnæus are founded

In *Syngenesia æqualis* the florets are all hermaphrodites

In *Syngenesia superflua*, those of the disk or centre are hermaphrodite, of the circumference or ray female, (and *superfluous*)

In *Syngenesia frustranea*, those of the disk are hermaphrodite, of the ray neuter, (and *useless*)

In *Syngenesia necessaria*, those of the disk are male, of the ray female, (and *necessary*)

Syngenesia segregata is only characterized by the heads themselves being clustered and surrounded by a common involucrum

The genera of Syngenesia have always attracted much attention from systematic botanists, who have met with very unequal success in characterizing them. The older botanists comprised them all under a few general heads or names Tournefort, with his usual happiness, pointed out a large proportion of the most natural genera. Vaillant established a considerable number Linnæus, profiting by the labours of his predecessors, rejecting some genera, and dividing others, increased their number, and adapted them to his sexual system, in nearly the same order in which they exist at the present day Jussieu, by applying to the genera the principles of his natural method, reduced them to an arrangement much superior in point both of facility and of natural affinity to that of his northern rival. But however meritorious the labours of these great systematists may have been, much remained to be effected, even among their own plants, by those who followed them. The indefatigable Gartner, who worked upon the only satisfactory or philosophical principles that of strict analysis, soon discovered that the combinations of Linnæus and Jussieu were often too vague and ill defined to accord with his notions of accurate subdivision Hence many other genera arose But since his days, the extent of Syngenesia has, like all other parts of botanical science, increased exceedingly, and has arrived in our days at a state little short of absolute confusion Injudicious or superficial botanists, impressed with the fear of innovation, and with a pious reverence even for the errors of those who went before them, have from time to time crowded the genera of Jussieu and Linnæus with the most incongruous species, and so have rendered many of those which were originally pure and simple, heterogeneous masses of species Much has been done by our learned countryman, Mr Robert Brown, to reduce to order this class of individuals, and, as far as his published observations have extended, with the happiest success In France, an ingenious and accurate observer, Mr Henry Cassini, has undertaken a revision of the whole class, upon principles peculiar to himself; and it must be allowed, that what he has executed has given ample room for regret that he has not published more Unfortunately, his observations are scattered over the face of many books, and are in no case in such a state of arrangement as to be extensively useful It is hoped that a period will soon arrive when he, or at least some

of his countrymen, will place in one view the result of his labours, so as to enable the world to judge with more accuracy, both of their extent, and of their real importance in defining the limits of the genera and their orders The style and stigma, which had been previously almost overlooked, have furnished M Cassini with what appear to be beautiful distinguishing marks of his orders, and it is upon these organs that much of the peculiarity of his arrangement depends. In the mean while, till it can be ascertained what the ultimate division of Compositæ is likely to be, it has been considered more prudent in this work to indicate none of the divisions of either M Cassini, or of his fellow labourers in France or elsewhere

In a popular point of view, Syngenesia may be considered interesting in a high degree It abounds in plants of ornament, all of which are, without exception, of easy cultivation It is not necessary to particularize the merits of the brilliant varieties of the Dahlia, or of the Chinese Chrysanthemum, which are the chiefest ornaments of every autumnal garden, nor to point out the beauty of the various tribes of Aster, Helianthus, Coreopsis, Xeranthemum, or Gnaphalium These and an hundred others must be familiar to every lover of gardening It is, however, worth remarking, that nearly all syngenesious plants are autumn flowers In the tropics, many become trees of considerable dimensions, in temperate climates, they are mostly herbaceous or low bushes

With regard to the qualities of syngenesious plants, considered economically or medicinally, it may be stated, that, whatever they may be, they consist in a bitter principle, and an oily secretion But these vary in particular tribes In some the bitter is combined with a resinous principle, by which its powers are increased in different degrees In those plants in which the resin is found in small quantities only, and mixed with a bitter or astringent mucilage, tonic, stomachic, and febrifugal properties seem to be acquired, as in the camomile, the golden rod, the feverfew, and the Eupatorium perfoliatum, and the stimulant powers of these plants appear to increase in proportion as the resin is abundant Some kinds are anthelmintic, as the wormwood and tansy, others are emmenagogue, as the feverfew, the yarrow, and various kinds of wormwoods Certain species possess sudorific qualities, as the Eupatorium, the yarrow, the wormwood, and the marigold, others, again, are powerful diuretics, as Liatris, while stimulating powers exist in considerable activity in others, as in the Sneezewort and Arnica The Spilanthus, Anthemis, Pyrethrum, and some others, excite salivation The Eupatorium Ayapana of Brazil, and the Guaco of Peru, which is another species of Eupatorium, are most powerful alexiterics According to the analysis of M Braconnot, the wormwood owes its bitterness to an extremely bitter animalized matter, which forms a little less than one fifth of its weight, the same chemist also states that plant to contain a volatile oil, and an acid, apparently new, which is found in combination with potash Before the perfect developement of the leaves, the bitter principle is so much diluted with insipid mucilage, that the young shoots of some of the thistle tribe, the Cardoon for example, are used for culinary purposes, and it is probable, that it is owing to the small proportion which the bitter bears to the whole mass, that the receptacle of the artichoke, of the Onopordum, and of the cotton thistle, is found fit for food The corollas of the Cardoon, and of many thistles, have the power of curdling milk The juice of the lettuce and other cichoraceous plants is milky, bitter, astringent, and narcotic In a wild state, the narcotic principle is so abundant, that the inspissated juice of Lactuca virosa has been used as a substitute for opium, and with much success But under the effect of cultivation, the mucilage is so much more abundant than any other substance that the same species often form well-known articles of wholesome and agreeable food And, indeed, under any circumstances, wild or domesticated, the young shoots, when the narcotic principle is scarcely developed, are frequently eaten with safety, it is for the same reason, namely, the incomplete formation of the bitter principle, and the superabundance of mucilage, on account of the absence of light, that the blanched leaves of cardoons and chicory, and the white roots of the Scorzonera and the Salsafy, are capable of being eaten without inconvenience The seeds of all syngenesious plants abound in oil, which is expressed from those of the Madia of Chili, the Verbesina sativa, and the common sunflower Owing to the difficulty of procuring this oil in a pure state, its virtues are not ascertained with much accuracy They are generally believed to be slightly purgative and diaphoretic

Order 1  ÆQUALIS

Flowers of the disk and ray all hermaphrodite

1620 *Geropogon.* Receptacle setose-paleaceous Involucre many-leaved, simple, or with bracteolæ Pericarps of disk with branched pappus, of the ray with five awns

1621 *Tragopogon* Involucre simple, of many leaves Receptacle naked Pappus feathery, stipitate Pericarps longitudinally striated

1622 *Tolpis* Involucre oblong, conical, simple, or imbricated with unequal scales Receptacle naked, dotted Pappus sessile, hairy

1623 *Anapogon* Receptacle naked Pappus feathery, stipitate Involucre 1-leaved, 8-parted, turbinate

1624 *Podospermum* Receptacle warted Pericarps cylindrical on a long stalk Leaves finely cut Otherwise as Scorzonera

1625 *Scorzonera* Receptacle naked Pappus feathery, somewhat stalked Involucre imbricated, with scales scarious at edge

1626 *Picridium* Involucre ventricose at base, imbricated with broadish scales, membranous at edge Pappus sessile, villous, simple Pericarps 4-cornered, warted across

1627. *Sonchus* Involucre imbricated, swelling at the base Receptacle naked Pappus simple, sessile

1628 *Lactuca* Involucre imbricated, cylindrical, its scales with a membranous margin Receptacle naked Pappus simple, stipitate

1629 *Chondrilla* Receptacle naked Involucre with bracteolæ Pappus simple, stalked Florets in many rows Pericarps muricated

1630 *Prenanthes* Involucre with scales at the base Receptacle naked Pappus simple, sessile Florets few

1631. *Leontodon* Involucre with scales that are frequently lax and flaccid Receptacle naked Pappus simple, stipitate

1632 *Apargia.* Involucre imbricated with scales at the base. Receptacle naked, dotted. Pappus feathery, sessile, unequal

1633. *Thrincia* Receptacle favose Pappus of the ray membranous, multifid, of the disk stalked, feathery Involucre with 8 angles and 8 leaves

1634 *Picris* Calyx double, the inner equal, the outer lax Receptacle naked. Pappus feathery Pericarps transversely striated

1635. *Hieracium* Involucre ovate, imbricated. Receptacle nearly naked, dotted Pappus simple, sessile.

1636 *Lagoseris* has the characters of Crepis, but the pappus is stalked

1637 *Borkhausia.* Involucre oblong in two rows, the outer much shorter than the inner. Receptacle alveolate Pappus of the centre stalked, of the circumference sessile or subsessile

1638. *Crepis* Involucre surrounded with deciduous scales, and at length swelling into protuberances Receptacle roughish Pappus sessile

1639. *Helminthia* Receptacle naked Involucre double outer 8-leaved, equal; inner 5-leaved, as long as outer Pericarps striated across Pappus stalked, feathery

1640 *Myoseris* Receptacle paleaceous Paleæ capillary Involucre calyculated Pappus hairy, sessile.

1641. *Tolpis* Receptacle favose Involucre with bracteolæ, which are subulate, and as long as involucre Pappus of the ray toothed, of the disk with 2 or 4 awns

1642. *Andryala.* Receptacle villous. Involucre many-parted, nearly equal, rounded. Pappus simple, sessile.

1643. *Rothia.* Recept. villous, chaffy at edge Invol. many-leaved, equal Pappus hairy, of the disk sessile, of the ray none.
1644 *Krigia.* Recept. naked. Pappus membranous, 5-leaved, with 5 bristles between Invol. many-leaved, simple
1645. *Hyoseris* Recept naked. Invol with bracteolæ. Pappus double: exterior capillary; interior paleaceous, awned
1646. *Hedypnois* Recept naked Invol with bracteolæ Pappus of disk double: outer obsolete, of many bristles, inner paleaceous, 5-leaved, of the ray a membranous toothletted margin
1647. *Robertia.* Invol many-leaved, equal Recept. scaly. Pappus feathery, the hairs being slightly membranous at base
1648 *Serisola* Recept paleaceous. Invol simple Pappus somewhat hairy
1649 *Soldevilla* Invol imbricated, in fruit ventricose at base, with scales conniving at end. Recept. paleaceous, paleæ very short, setose. Pappus O.
1650 *Hypochæris* Involucre oblong, imbricated Receptacle chaffy Pappus feathery, stipitate, or sessile
1651 *Lapsana* Involucre with scales at the base. Receptacle naked (its inner leaves equal, channelled, *Sm.*) Pericarps destitute of pappus (deciduous)
1652 *Zacintha* Recept naked Pericarps of the ray incurved, of the disk straight. Pappus very short, somewhat feathery. Invol with bracteolæ, which are membranous
1653 *Rhagadiolus* Recept. naked Pericarps arcuate, spreading Pappus O Invol with bracteolæ
1654 *Moscaria* Invol 6-leaved, equal Recept flat, paleaceous External pericarps with a short feathery pappus, central with none.
1655 *Catananche* Recept paleaceous Invol. imbricated, scarious Pappus paleaceous, 5-leaved, paleæ awned
1656 *Tripolium* Invol imbricated, the exterior scales somewhat squarrose Florets bilabiate: the upper lip 3-toothed, lower entire revolute Recept. villous Pappus with 3 feathers
1657 *Cichorium* Involucre surrounded with scales or smaller leaflets Receptacle naked or slightly hairy. Pappus sessile, scaly, shorter than the pericarp
1658 *Bacasia* Invol imbricated, scarious Florets, one in the middle large tubular, the others 4-toothed, with a revolute bristle inserted in the mouth of the tube Recept pilose Pappus feathery
1659 *Scolymus* Receptacle paleaceous Invol imbricated, spiny Pappus O
1660 *Arctium* Involucre globose, each of its scales with an incurved hook at the extremity Receptacle chaffy Pappus simple
1661 *Serratula* Involucre cylindrical, imbricated with scales that are not spinous Receptacle chaffy Pappus roughish or feathery, rigid, persistent
1662 *Saussurea* Involucre imbricated, not spiny, outer scales acute, inner obtuse, membranous Pappus feathery, in two rows, the exterior being shortest, the inner somewhat united at base
1663 *Carduus* Involucre swelling, imbricated with spinous scales Receptacle hairy Pappus deciduous, roughish
1664 *Silybum* Invol ventricose, imbricated: outer leaves with appendages at end, inner cochleate. Recept. chaffy Pappus linear, chaffy, deciduous
1665 *Cnicus* Involucre swelling, imbricated with spinous scales Receptacle hairy Pappus deciduous, feathery
1666 *Onopordum* Involucre swelling, its scales spreading, and spinous Receptacle cellular Pappus deciduous, rough
1667 *Berardia* Invol imbricated with linear unarmed scales Recept somewhat favose, naked Pappus hairy, generally twisted spirally, persistent
1668 *Cynara* Recept setose Invol dilated, imbricated, scales fleshy, emarginate, with a point Pappus sessile, feathery
1669 *Carlina* Involucre swelling the exterior scales with numerous spines, the inner ones colored, scariose
1670 *Atractylis* Recept paleaceous Pappus feathery Invol imbricated with bracteolæ Florets of ray 5-toothed
1671 *Acarna* Recept paleaceous Pappus feathery Invol imbricated with bracteolæ Florets flosculous
1672 *Stokesia* Recept naked Pappus with 4 bristles Invol leafy, somewhat imbricated Heads radiated florets of ray funnel-shaped, irregular
1673 *Stoba a* Invol imbricated, with toothed spiny scales Florets flosculous. Recept hispid, favose Pappus paleaceous
1674 *Onobroma* Invol ventricose outer scales large, herbaceous, spiny, acuminate; inner coriaceous, unarmed. Recept paleaceous. Pappus setaceous, rigid, unequal
1675 *Carthamus* Recept paleaceous, setose Invol ovate, imbricated, scales ovate, leafy at end Pappus paleaceous, hairy, or none
1676 *Cardopatum.* Invol 6-8-fl many-leaved, imbricated, the outer scales branched, spiny Recept paleaceous, with long fasciculed paleæ Pericarps villous
1677 *Stæhelina* Recept with very short paleæ Pappus feathery Anthers awned at base Invol. hemispherical, imbricated
1678. *Palafoxia* Invol oblong, somewhat imbricated, 8 or many-leaved, many-flowered Cor flosculous, longer than calyx, with a 5-fid limb Pappus chaffy Receptacle naked Fruit marginal, wrapped up in the involucre
1679 *Pteronia.* Recept paleaceous, paleæ many-parted Pappus somewhat feathery Invol imbricated with keeled scales
1680 *Vernonia* Recept naked Invol ovate, imbricated Pappus double outer paleaceous, inner capillary
1681 *Ammobium* Invol imbricated, colored, radiant Anthers with 2 bristles at the base Chaffs of receptacle distinct Pappus a toothed edge
1682 *Liatris* Recept naked Invol oblong, imbricated Pappus feathery
1683 *Mikania* Recept naked Invol 4-6-leaved, equal, 4 or 6-flowered Pappus hairy
1684 *Sparganophorus* Invol subglobose, imbricated with unequal scales, recurved, spreading at end Recept naked Pericarps crowned with a somewhat cartilaginous cup
1685 *Eupatorium* Involucre imbricated, oblong Florets few Receptacle naked Pappus rough
1686 *Dumerilia* Invol many-parted, equal Receptacle paleaceous Florets bilabiate Anthers spurred at base Pappus feathery, sessile
1687 *Ageratum* Recept naked Pappus with 5 somewhat-awned paleæ Invol oblong in a double row. Corollas 4-5-fid
1688. *Cælestina* Invol cylind many-leaved, imbricated Recept convex, naked Florets all tubular. Stigmas very long, spreading Pericarps truncate, 5-cornered Pappus a membranous rim.
1689 *Stevia* Recept naked Pappus paleaceous Invol cylindrical in a single row
1690 *Cephalophora* Recept naked, hemispherical Pappus paleaceous, many-leaved. Invol many-leaved, reflexed
1691. *Amphiepis.* Invol hemispherical, imbricated Recept flat, naked Florets all tubular Pericarps cylindrical, naked Pappus hairy, deciduous
1692 *Hymenopappus* Invol many-leaved, spreading, scales ovate, colored Recept. naked Pappus many-leaved, paleaceous
1693 *Melananthera* Recept paleaceous, convex Invol many-leaved, in a double row Pappus of from 2 to 18 rough bristles Pericarps turbinate, angular

1694. *Marshallia.* Recept. paleaceous. Pappus of 5 membranous acuminate paleæ. Involl. imbricated; scales somewhat lanceolate, incumbent.
1695 *Spilanthes.* Recept. paleaceous, conical. Pappus with 2 awns, one smaller than the other. Involl. nearly equal.
1696. *Salmea.* Recept conical, paleaceous Pappus with 2 awns. Pericarps depressed. Involl imbricated
1697 *Bidens* Involucre of many leaves, with many foliaceous bracteas at the base Receptacle plane, chaffy Cor. sometimes radiant. Pericarps crowned with from 2-5 persistent awns, which are rough, with minute deflexed bristles
1698 *Platypteris* Involl many-leaved, imbricated, squarrose. Recept. convex, paleaceous. Pericarps compressed, winged, with 2 awns at top.
1699 *Lagascea.* Involl. 1-leaved, tubular, 1-flowered, divided at end. Floret tubular, hermaphrodite. Pericarps linear, cuneate, compressed Pappus a small fringed crown
1700 *Lavenia.* Recept. naked. Pappus with 3 awns, glandular at end. Involl. ovate, somewhat imbricated.
1701. *Cacalia* Recept naked, Pappus pilose Involl. cylindrical, oblong, at the base only with bracteolæ.
1702 *Klenia.* Recept. naked Pappus hairy Involl simple, equal, 5-leaved
1703. *Ethulia* Recept naked Pappus a very narrow rim. Involl equal, in a double row.
1704 *Psqueria* Recept. naked. Involl equal, 4-leaved, 4-flowered, Pappus none. Pericarps pentagonal.
1705 *Chrysocoma* Recept naked Pappus simple Involl hemispherical, imbricated Style scarcely longer than florets
1706 *Tarchonanthus.* Recept. villous. Pericarps enveloped in hair Involl 1-leaved, half 7-fid, turbinate.
1707 *Calea* Recept paleaceous. Pappus hairy Involl imbricated
1708 *Isocarpha* Recept paleaceous conical, the outer paleæ forming the involucrum Pappus O Anthers not spurred at base Stigmas with a long appendage
1709. *Petrobium* Recept. paleaceous, flattish Involl many-leaved, in 2 rows: outer row shortest Pericarps angular Pappus awned
1710 *Neurolæna.* Recept paleaceous, flattish Pappus capillary, toothletted, persistent Involl. imbricated, leafy Anthers awnless at the base
1711 *Humea* Recept minute, glandular Pappus none Involl. loosely imbricated, membranous. Florets about 3, tubular Anthers awned
1712 *Cæsulia* Recept paleaceous. paleæ enveloping the pericarps Pappus O. Involl 3-leaved
1713. *Ixodia* Recept paleaceous Pappus O Involl imbricated inner scales radiant colored.
1714 *Santolina* Recept paleaceous Pappus O Involl imbricated, hemispherical
1715 *Otanthus* Involl. hemispherical imbricated Florets with 2 appendages at base Recept convex, paleaceous Pappus O
1716 *Calractc* The same as Calea, but it has a radius of ligular female florets
1717 *Athanasia* Recept paleaceous Pappus paleaceous, very short Involl imbricated
1718 *Balsamita* Recept naked. Pappus O Involl imbricated
1719 *Pentzia.* Recept naked Pappus a membranous torn rim. Involl imbricated, hemispherical.



SUPERFLUA

§ *Florets of the disk hermaphrodite: of the ray female*

1720 *Tanacetum* Involl hemispherical, imbricated Recept naked Florets of the ray trifid, obsolete sometimes wanting Pericarps crowned with a membranous margin or pappus
1721 *Artemisia* Involl ovate or rounded, imbricated Recept naked (or downy, *Sm*) Florets of the ray subulate Pericarps crowned with a membranaceous pappus
1722 *Gnaphalium.* Recept naked Pappus hairy or feathery Involl imbricated marginal scales round, scarious, colored
1723 *Leontopodium* Heads sessile in the leaves Involl woolly Florets 5-fid. Pappus pencilled or hairy Otherwise Gnaphalium
1724 *Evax* Heads surrounded by bracteæ Involl ovate, imbricated, with appressed acuminate scales Florets of disk 4-toothed. of the ray not toothed Recept subulate, paleaceous Pericarps of the female flowers without pappus
1725 *Antennaria* Recept scrobiculate Pappus capillary Involl imbricated, scarious, colored Anthers spurred at base Florets dioecious
1726 *Metalasia* Involl cylindrical, radiant colored Pappus deciduous, capillary, clavate Florets few, hermaphrodite Otherwise as Gnaphalium
1727 *Astelma* Recept naked Pappus feathery, sessile · rays connate at base. Involl imbricated with scarious scales, the interior of which are connivent
1728. *Athrixia* Heads radiant Involl obl. imbricated, awned, squarrose. Florets bilabiate. Pappus feathery Recept. alveolate.
1729 *Xeranthemum* Recept paleaceous Pappus paleaceous-setaceous Involl imbricated, radiated. with a colored ray
1730 *Elichrysum* Recept naked Pappus hairy or feathery Involl imbricated, radiated ray colored
1731 *Carpesium* Recept. naked Pappus O Involl imbricated, with the outer scales reflexed
1732 *Baccharis* Recept. naked Pappus pilose Involl imbricated, cylindrical Female florets mixed with the hermaphrodite ones
1733 *Molina* Involl campanulate, imbricated Pappus feathery Recept convex, naked, dotted. Flowers dioecious
1734. *Conyza.* Involl roundish, imbricated Recept. naked Florets of the ray 3 cleft. Pappus rough
1735 *Madia* Recept naked Pappus O Involl double outer 8-10-leaved, equal, longer than the inner, which is many-leaved
1736 *Erigeron* Involl imbricated Recept naked Florets of the ray numerous, very narrow, mostly of a different color from the disk Pappus simple
1737 *Tussilago* Involl simple, equal, submembranaceous, swelling Recept naked Pappus simple
1738 *Senecio* Involl subcylindrical, equal, scaly below, the scales withered at the tip Recept naked Pappus simple
1739 *Aster.* Involl imbricated, its lowermost scales spreading (except in A trifolium). Recept. naked Florets of the ray more than 10 Pappus simple
1740 *Solidago* Involl imbricated, its scales connivent. Recept naked Florets of the ray (of the same colour as the disk) about 5. Pappus rough
1741 *Cineraria* Recept naked Pappus simple Involl simple, many-leaved, equal
1742 *Calotis* Recept naked. Pericarps crowned with two opposite paleæ and 1-3 barbed awns. Involl nearly equal, many-leaved, in a single or double row
1743 *Kaulfussia* Involl simple leaflets keeled Recept. naked, convex Pappus of the ray a minute fringed rim, of the disk stiff and feathery
1744 *Inula* Involl imbricated Recept naked Florets of the ray very numerous, linear. Anthers with 2 bristles at the base Pappus simply composed of hairs
1745. *Pulicaria* Involl roundish, imbricated · scales linear, acuminate. Recept. naked. Pappus compound · outer a membranous cup, inner setaceous Pericarps uniform
1746 *Grindelia* Recept naked Pappus setaceous, deciduous Involl imbricated, hemispherical

1747. *Podolepis.* Recept. naked. Pappus hairy. Involucre imbricated, scarious, hemispherical: scales unguiculate

1748 *Chætanthera* Involucre many-leaved, ciliated Florets of ray linear, 3-toothed, with a fine bifid spiral segment at the divisions. Anthers spurred at base. Recept. naked, flat Pappus hairy

1749. *Arnica* Recept naked. Pappus simple Involucre with equal leaves Florets of ray generally with 5 filaments without anthers

1750 *Gerberia.* Florets bilabiate, those of the ray ligulate. Involucre imbricated, coriaceous Recept flat, naked. Pappus with long bearded paleæ

1751 *Doronicum* Scales of the involucre in 2 equal rows, longer than the disk. Recept naked. Pericarps of the disk crowned with a simple pappus, those of the ray without a pappus.

1752. *Perdicium* Recept naked Pappus hairy. Florets 2-lipped

1753 *Tetragonotheca* Recept paleaceous. Pappus O Involucre 1-leaved, 4-cornered, 4-parted.

1754. *Xamenesia* Recept paleaceous Pappus O Pericarps of ray naked, emarginate; of the disk winged. Involucre many-leaved, nearly equal

1755. *Helenium* Recept naked, of the ray paleaceous Pappus 5-awned. Involucre 1-leaved, many-parted. Florets of ray half-trifid

1756 *Bellis* Involucre hemispherical, its scales equal Recept naked, conical

1757 *Bellium* Recept naked Pericarps conical, with a paleaceous 8-leaved crown and awned pappus. Leaves of involucre equal

1758 *Dahlia* Recept paleaceous Pappus O Involucre double outer many-leaved, inner 1-leaved, 8-parted

1759 *Ræbera* Involucre double outer many-leaved, inner 8-leaved Recept naked Pappus hairy

1760 *Tagetes* Recept naked Pappus with 5 erect awns Involucre simple, 1-leaved, 5-toothed, tubular. Florets of ray 5, persistent.

1761 *Heterospermum* Recept naked Outer grains compressed with a membranous edge, inner oblong with two awns Involucre double outer 4-parted, inner many-leaved

1762 *Schkuhria* Recept naked Pappus paleaceous Involucre 5-leaved Florets of ray solitary.

1763 *Pectis* Recept naked Pappus with 3 or 5 awns Involucre 5-leaved Florets of ray 5

1764 *Longchampsia* Differs from Pectis and Leysera, in having a double pappus, the exterior of which is edged, the inner feathery

1765 *Leysera* Recept. somewhat paleaceous Pappus paleaceous of the disk feathery Involucre scarious

1766 *Selloa* Involucre imbricated, ovate Recept naked Pappus O Female florets inconspicuous, mixed among the leaves of the involucrum

1767 *Bethania* Recept. paleaceous Pappus membranous, cylindrical, short. Involucre imbricated, scarious Rays numerous.

1768 *Zinnia* Recept paleaceous Pappus with 2 erect awns Involucre ovate, cylindrical, imbricated Florets of ray 5, persistent, entire

1769 *Chrysanthemum* Involucre hemispherical, imbricated with scales whose borders are membranous. Recept naked. Pappus none

1770 *Pyrethrum* Recept hemispherical, imbricated with scales whose borders are membranous. Recept naked Pericarps crowned with a membranous margin

1771 *Matricaria* Involucre hemispherical or almost plane, imbricated with scales whose borders are membranous Recept naked, almost cylindrical Pappus none

1772 *Boltonia* Recept favose, hemispherical Pappus toothed, awned, somewhat 2-horned Rays numerous Involucre imbricated

1773 *Ludbeckia* Recept naked Pappus O Pericarps angular, with the lowest joint of style persistent. Rays numerous Involucre many-parted

1774 *Cenia* Involucre fruit turbinate, multifid Florets of ray very numerous, short Recept naked Pericarps compressed

1775 *Cotula* Recept nearly naked Pappus margined Florets of disk 4-fid, of the ray scarcely any

1776 *Grangea* Involucre imbricated, spreading Marginal florets 3-toothed Recept hemispherical Pericarps with a toothed edge at top

1777 *Anacyclus* Recept paleaceous Pappus emarginate Pericarps with membranous edges

1778. *Anthemis* Involucre hemispherical, its scales nearly equal, their margins scarious. Recept convex, chaffy Pericarps crowned with a membranous border or pappus

1779 *Centrospermum* Involucre hemispherical, of many imbricated, round, scarious scales Recept naked Pappus spiny. Outer pericarps cymbiform, smooth

1780 *Santolina* Recept paleaceous Pericarps of ray with 3 awns of the side naked, warted, of the disk winged Involucre imbricated, flat.

1781 *Achillea* Involucre ovate, imbricated, unequal Recept plane, chaffy Florets of the ray 5-10, roundish, obcordate Pericarps naked

1782 *Tridax* Involucre cylindrical, imbricated, with ovate oblong scales Florets of ray 3-parted Recept. paleaceous Pappus hairy, simple

1783 *Amellus* Recept paleaceous Pappus simple Involucre imbricated Florets of ray undivided

1784 *Staukea* Recept hirsute Pappus sessile, hairy Involucre imbricated

1785 *Columellia* Involucre cylindrical, imbricated Florets of ray undivided Recept naked, favose. Pappus a toothed edge

1786 *Eclipta* Recept paleaceous Pappus O Florets of disk 4-fid

1787 *Meyera* Involucre 4-leaved, the 2 inner smallest. Recept small, paleaceous, 2 paleæ enveloping the pericarp, keeled Pappus O

1788 *Chrysanthellum* Involucre cylindrical, about as long as florets, scaly at base Recept paleaceous Florets numerous, linear, 2-toothed, short, of the centre few, and generally abortive. Pericarps naked, roundish, furrowed, with an entire edge

1789 *Siegesbeckia* Recept paleaceous Pappus O Outer involucre 5-leaved, inner spreading. Ray halved

1790 *Verbesina* Recept paleaceous Pappus awned Involucre in one row Florets of the ray about 5

1791 *Synedrella* Involucre generally of 2 leaves Florets flosculous Recept obsolete, paleaceous paleæ glumaceous, the outer ovate Pericarps oval, flat, edged, the central dissimilar, near, oblong, with 2 or 3 awns.

1792 *Galinsoga* Recept paleaceous Pappus many-leaved, paleaceous Involucre imbricated.

1793 *Acmella* Involucre simple, with a few somewhat leafy divisions Recept. oblong, paleaceous. Heads radiant Pericarps 4-cornered, truncate at end, naked

1794 *Zaluzania* Involucre with distinct, somewhat ovate, equal segments Head radiant Recept. conical, paleaceous, paleæ membranous, trifid, involving the pericarps, which are 4-cornered and naked

1795 *Pascalia* Recept paleaceous Pericarps drupaceous Pappus a toothed rim Involucre imbricated

1796 *Heliopsis* Involucre imbricated, with ovate lined squamæ Cor of ray linear, large Recept paleaceous, conical, with lanceolate paleæ Pericarps 4-cornered. Pappus O

1797 *Buphthalmum* Recept. paleaceous Pappus an obsolete rim. Sides of pericarps, especially of the ray, edged

Order 3  FRUSTRANEA

Florets of the disk fertile: of the ray sterile.

1798. *Helianthus* Recept paleaceous, flat Pappus 2-leaved. Involucre imbricated, subsquarrose

1799 *Gymnoloma* Involucre hemispherical, loosely imbricated Recept. convex, paleaceous. Central florets sterile, marginal radiant. Pappus O

1800 *Rudbeckia* Recept. paleaceous, conical. Pappus with a 4-toothed rim Involucre with a double row of scales

1801 *Galardia.* Recept. paleaceous, hemispherical Pappus paleaceous, many-leaved. Involucre imbricated, many-leaved, flat. Rays 3-parted

1802 *Tithonia* Involucre many-leaved, cylindrical Rays 3-toothed. Recept paleaceous, convex. Pappus paleaceous, 5-leaved.

1803 *Cosmea* Recept paleaceous Pericarps 4-cornered Pappus with 2 or 3 awns. Involucre double, each 1-leaved, 8-parted

1804 *Coreopsis* Recept paleaceous. Pericarps compressed, emarginate Pappus with 2 horns. Involucre double, each many-leaved

1805. *Simsia* Involucre subcylindrical, nearly equal, with linear lanceolate incumbent scales. Recept. paleaceous Pericarps flattish, somewhat edged, each edge awned

1806 *Osmites* Recept paleaceous Pappus obsolete Florets of ray ligulate Involucre imbricated scarious

1807. *Encelia.* Recept paleaceous. Pappus O Pericarps vertical, flat, with a ciliated edge Involucre imbricated

1808 *Sclerocarpus* Recept paleaceous Pappus O Involucre double, each 3-leaved

1809 *Cullumia* Recept. favose Pericarps smooth Pappus O Involucre 1-leaved, covered with imbricated leaflets

1810 *Berckheya* Recept favose Pericarps villous Pappus paleaceous (sometimes bristly-paleaceous, ciliated) Involucre 1-leaved, covered with imbricated leaflets

1811 *Dudelta* Recept favose, inclosing the pericarps. Pappus many-parted, setaceous, paleaceous, toothed Involucre 1-leaved, covered with leaflets, the exterior very large

1812 *Gorteria* Recept scrobiculate Pappus a ciliated edge Involucre 1-leaved, covered with imbricated leaflets, of the fruit indurated, connivent, deciduous

1813 *Gazania* Recept naked, or alveolate Pericarps very villous Pappus hairy-paleaceous Involucre 1-leaved, the tube naked, or covered with imbricated leaflets

1814 *Cryptostemma.* Recept favose Pappus paleaceous, covered by the entangled wool of the pericarp Involucre imbricated

1815. *Arctotheca.* Recept favose Pappus O Involucre imbricated

1816 *Sphenogyne* Recept with distinct paleæ Pappus paleaceous, simple Stigmas with a dilated truncated end Involucre imbricated, the inner scales or all with a dilated scarious end

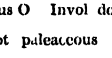
1817 *Zoegea* Recept setose Pappus setaceous Rays ligulate Involucre imbricated

1818 *Leuzea* Involucre imbricated, spherical, not spiny Recept bristly Pappus feathery, in many rows Florets all hermaphrodite

1819 *Centaurea* Involucre scaly Recept bristly Corollas of the ray infundibuliform, irregular, longer than those of the disk Pappus simple

1820 *Galactites* Involucre imbricated, with somewhat squarrose spiny scales Recept favose Pappus feathery, deciduous

1821 *Wedelia* Involucre 5-leaved, with broad leafy segments Recept. paleaceous Florets of the centre generally abortive, of the ray many, oval, 2-3-fid. Stigmas setaceous. Pappus stipitate, membranous, toothletted

Order 4  NECESSARIA

Florets of the ray female fertile of the disk male.

1822. *Melleria* Recept naked Pappus O Involucre of 3 valves Ray halved

1823 *Baltimora* Recept paleaceous Pappus O Involucre cylindrical, many-leaved Ray 5-flowered

1824 *Sulphium* Recept paleaceous Pappus with a 2 horned edge Involucre squarrose

1825. *Tyzis* Involucre imbricated Cor of ray 3-fid Recept paleaceous Pappus O Pericarps villous at end

1826 *Polymnia* Recept paleaceous Pappus O Involucre double outer 4 or 5-leaved, inner 10-leaved, with common leaflets

1827 *Chrysogonum* Involucre 5-leaved. Recept paleaceous Pappus 1-leaved, 3-toothed Pericarps with a little 4-leaved calyx

1828 *Melampodium* Recept paleaceous, conical Pappus 1-leaved, vulviform Involucre 5-leaved

1829 *Chaptalia* Recept naked Pappus capillary Florets of the ray in a double row, deformed, of the disk bilabiate

1830 *Calendula* Recept naked Pappus O Involucre many-leaved, equal Pericarps of the disk membranous

1831 *Arctotis* Recept setose-alveolate Pericarps half 2-celled, or 2-furrowed at the back Pappus paleaceous Involucre imbricated, with scales scarious at end

1832. *Osteospermum* Recept naked Pappus O Involucre many-leaved Pericarps globose, colored, bony.

1833 *Othonna* Recept naked Pappus hairy Involucre 1-leaved, many-cut

1834 *Hippia.* Recept naked Pappus O Pericarps with very broad edges, naked. Involucre hemispherical, somewhat imbricated Florets of ray 10, obsoletely trifid

1835. *Solva* Involucre 7-leaved, leaflets with imbricated edges, the 3 outer largest Ray none Recept very small, somewhat villous Pericarps compressed, surrounded by a membrane, crowned by 2 prickles and the style

1836. *Psadia* Recept naked Pappus hairy, sessile Involucre imbricated, ovate Florets of ray short

1837. *Eriocephalus* Recept paleaceous Pappus O Involucre double inner 1-leaved, outer 5-leaved.

1838 *Filago.* Recept paleaceous Pappus O Involucre imbricated Female florets mixed among the scales of involucre

1839 *Micropus* Recept. paleaceous Pappus O Involucre calyculate Rays none Female florets enwrapped in the scales of involucre

1840 *Parthenium* Recept paleaceous, flat Pericarps obovate, nearly naked Involucre 5-leaved.

1841. *Iva* Recept pilose Pericarps naked, blunt Involucre 3-leaved Florets of ray 5 Styles 2, long.

1842 *Acicarpha* Involucre 5-parted Cor all tubular. Recept paleaceous, the palea being united with the pericarps after flowering. Pappus O. Stamens half-separate

Order 5  SEGREGATA

Each floret having its own peculiar involucre

1843. *Elephantopus* Involucre 4-flowered Florets ligulate, hermaphrodite Recept. naked Pappus setaceous.

1844 *Œdera* Involucre many-flowered Tubular florets hermaphrodite, and one or more female and ligulate. Recept. paleaceous Pappus with many paleæ

1845. *Flaveria* Partial involucre 2-5-leaved, 2-5-flowered. Common involucre imbricated with unequal scales. Florets tubular, 1 often ligulate. Pappus O Recept naked

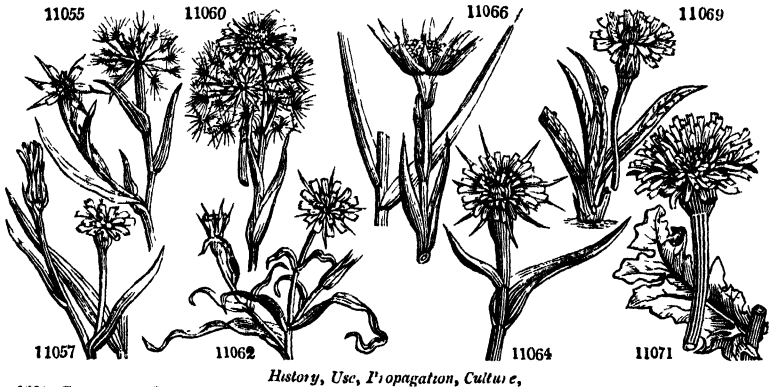
1846. *Stabe.* Involucre 1-flowered. Floret tubular, hermaphrodite. Recept naked. Pappus feathery.

1847 *Nauenbergia.* Partial involucre 2-leaved, 1-flowered, common involucre leafy. Pappus O. Receptacle setose

1848. *Cassinia* Invol. 2-flowered, 4-leaved Florets hermaphrodite. Pappus paleaceous, pencilled Recept. naked
1849. *Sphæranthus* Invol. 8-flowered. Florets tubular, hermaphrodite, and obsoletely female. Recept. scaly Pappus O
1850. *Echinops* Invol 1-flowered Florets tubular, hermaphrodite. Recept setose Pappus obsolete
1851. *Rolandra* Florets fascicled in a head, with scales between. Invol. 2-valved, 1-flowered. Florets hermaphrodite Pappus O

ÆQUALIS.

1620 GEROPO'GON	*W* Old Man's Beard				*Compositæ*	*Sp* 3—6						
11055 gláber *W.*	smooth	○	or	1½	jl au	Pk	Italy	1704	S	co	Bot. mag 479	
11056 hirsútus *W*	hirsute	○	or	1½	jl au	R	Italy	1759	S	co	Col. ecph 1 t 231	
11057 calyculátus *W*	perennial	♃	△ or	2	jl au	Pk	Italy	1774	S	co	Jac vind 2 t 106	
1621 TRAGOPO'GON	*W.* Goat's Beard				*Compositæ*	*Sp* 11—17						
11058 cánus *W & K*	hoary	♃	◯ or	1	jl au	Pu	Hungary	1824	S	co		
11059 angustifólius *L*	narrow-leaved	♃	◯ or	½	jl au	Pu	Italy	1823	S	co		
11060 pratensis *W*	yellow	♃	◯ or	2	my jn	Y	Britain	past	S	r m	Eng bot 434	
11061 mutábilis *Jac*	changeable	♃	◯ or	3	my jn	Pa	Siberia	1816	S	co	Jac ic 1 t 157	
11062 undulátus *W.*	wave-leaved	♃	◯ or	2	my jn	W Y	Crimea	1790	S	co	Jac ic. 1 t 178	
11063 orientális *W*	oriental	♃	◯ or	3	jn jl	Y	Levant	1787	S	co		
11064 major *W*	great	♃	◯ or	6	my jn	Y	Austria	1788	S	co	Jac aust 1 t 29	
11065 floccósus *W & K.*	woolly	♃	◯ or	3	my jn	Y	Hungary	1816.	S	co	Pl rar hu 2 t 112	
11066 porrifólius *W*	Salsafy	♃	◯ cul	4	my jn	Pu	England	m me.	S	r m	Eng bot 688	
11067 crocifólius *W.*	Crocus-leaved	♃	◯ or	1	jn jl	Pu	Italy	1739	S	co	Col ecph 1 t.230	
11068 villósus *W*	hairy	♃	◯ or	4	my jn	P Y	Spain	1794	S	co		
1622 TROX'IMON	*Gærtn.* Troximon				*Compositæ*	*Sp* 2—3						
11069 glaucum *Ph*	glaucous-leaved	♃	△ or	1	my jn	Y	Missouri	1811	D	co	Bot mag 1667	
11070 virgínicum *Ph*	Virginian	♃	△ or	1	jl au	Y	N Amer	1799	D	co		
1623 ARNOPO'GON.	*W* Sheep's Beard				*Compositæ*	*Sp* 3—6						
11071 Dalechámpii *W.*	great-flowered	♃	△ pr	2	jn o	L Y	S Europe	1739	D	co	Bot mag 1623	
11072 picroides *W*	prickly-cupped		○ pr	1	jl au	Y	S Europe	1683	S	co	Lam ill t 646 f 1	
11073 ásper *W.*	rough		○ pr	1½	jl au	Y	Montpel.	1774	S	co		
†1624 PODOSPER'MUM *Dec*	Podospermum				*Compositæ*	*Sp* 3—6						
11074 calcitrapifólium *Dec*	Centaury-lvd.	♃	△ pr	1	jn jl	Y	Levant	1820	D	co	Buxb cent 2,t 22	
11075 laciniátum *Dec*	cut-leaved	♃	◯ pr	2	jn jl	Y	S Europe	1640.	S	s l	Jac aust 4 t 356	
11076 octangulare *Dec*	octagon	♃	◯ pr	1	jn jl	Y	S Europe	1818.	S	co		
1625 SCORZONE'RA	*W* Viper's Grass				*Compositæ*	*Sp* 19—33						
11077 tuberósa *W*	tuberous	⁂	△ pr	½	jn	Y	Volga	1825	D	co	Pal it app t Y f 3	
11078 tomentósa *W*	white	♃	△ pr	1	jn jl	Y	Armenia	1789.	D	co		
11079 humilis *Jac*	dwarf	♃	△ pr	1	au	Y	Europe	1597	D	co	Jac aust 1 t 36	
11080 hispánica *W*	garden	♃	△ cul	3	jn s	Y	Spain	1576	D	co	Lam ill t 647 f 1	
11081 glastifólia *W*	Woad-leaved	♃	△ pr	2	jn s	Y	Germany	1816	D	co		
11082 caricifólia *W*	Carex-leaved	♃	△ pr	1½	jn s	Y	Siberia	1805	D	co	P it 3 ap t J i f 1	
11083 purpúrea *W*	purple-flowered	♃	△ pr	2	my jn	Pu	Austria	1759	D	co	Jac aust 1 t 35	
11084 rósea *W*	Rose-colored	♃	△ pr	1½	jl	Pk	Hungary	1807	D	co	Pl rar hu 2 t 121	
11085 graminifólia *W*	Grass-leaved	♃	△ pr	2	jn au	L Y	Portugal	1759	D	co	Jac obs 4 t 100	
11086 angustifolia *B*	narrow-leaved	♃	△ pr	½	jn au	Y	S Europe	1759	D	co	Pl rar hu 2 t 122	
11087 eriospérma *W*	woolly-seeded	♃	△ pr	1	jn au	Y	Siberia	1805	D	co		
11088 taraxacifólia *W*	Dandelion-lvd	♃	△ pr	½	jn au	Y	Bohemia	1801	D	s l	Jac ic 1 t 160	
11089 taúrica *Bieb*	Taurian	♃	△ pr	1	jn au	Y	Tauria	1820		co		
11090 parviflóra *Jacq*	small-flowered	♃	△ pr	2	jl au	Y	Austria	1819	D	co	Jacq aust t 305	
11091 lanáta *Bieb*	woolly	⁂	△ pr	1	jl au	Y	Iberia	1824	D	co	Mor se 7 t 6 f 17	
11092 ensifólia *Bieb*	sword-leaved	♃	△ pr	1	my jn	Y	Caucasus	1825	D	co		
11093 hirsuta *L.*	hairy	♃	△ pr	½	my jn	Y	S Europe	1818	D	co	All ped 31.	



History, Use, Propagation, Culture,

1620 *Geropogon* So named from γερων, an old man, and πωγων, a beard, in allusion to the long silky beard of the seeds

1621 *Tragopogon* From τραγος, a goat, and πωγων, a beard, a name applied in the same way as Geropogon T porrifolius, or Salsafy, has a long tapering fleshy white root, which is used like carrots or parsneps, and cultivated in gardens for that purpose The flavor of the root is mild and sweetish, dressed like asparagus, there is some resemblance in taste It is occasionally grown in British gardens, and a good deal in those of France and Germany It is raised and treated in all respects similarly to the carrot. T pratensis answers equally well for culture as this species, and was formerly preferred to it

1852. *Brotera.* Partial involucre 1-flowered, many-leaved, common 6-8-flowered, imbricated, many-leaved. Florets tubular, uniform Receptacle naked Pericarp covered by the adhering involucre.
1853 *Gundelia* Involucre O Hollows of the receptacle 5-flowered. Florets tubular, male and hermaphrodite. Receptacle paleaceous. Pappus O
1854. *Euxenia.* Involucre 1-leaved, 10-cleft, reflexed, two of the segments larger than the rest. Anthers distinct. Pappus none. Receptacle chaffy.

ÆQUALIS.

11055 Leaves smooth
11056 Leaves hairy
11057 Involucrum with scales at the base

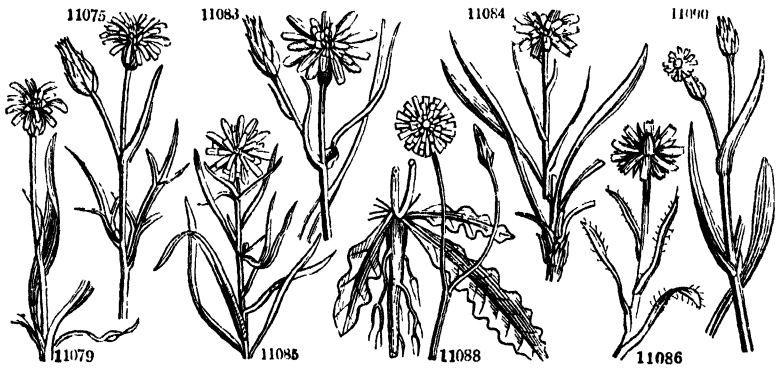
11058 Involucre 8-leaved as long as ray, and peduncles downy, Leaves linear straight
11059 Involucre 8-leaved longer than rays of corolla, Leaves entire straight smooth
11060 Involucre about as long as the corolla Leaves undivided glabrous acuminated channelled, Peduncles cylindrical
11061 Involucre 8-leaved as long as rays of corolla Leaves entire straight lanceolate acuminate
11062 Involucre as long as rays of corolla Leaves entire sub-linear, those of the stem very wavy
11063 Involucre shorter than ray of corolla Leaves entire somewhat wavy
11064 Involucre longer than ray of corolla Lvs entire straight, Peduncle thickened upwards, Florets rounded at end
11065 Woolly with down, Involucre shorter than ray of corolla Lvs linear channelled cauline revolute
11066 Involucre much longer than the corolla Leaves undivided straight, Peduncle thickened upwards
11067 Involucre 5-leaved longer than ray of corolla Leaves entire, Radical and peduncles villous at base
11068 Involucre half as long again as ray of corolla Stem and leaves villous

11069 Scape 1-flowered Leaves of involucre imbricated cuspidate, Leaves linear entire glaucous on each side
11070 Smooth glaucous, Stem erect 2-3-headed somewhat naked, Leaves smooth. radical subhyrate

11071 Involucre downy unarmed, Leaves runcinate toothed
11072 Involucre hispid aculeate, Leaves runcinate toothletted cauline dilated at base
11073 Involucre hispid aculeate, Leaves entire cauline oblong attenuated at base

11074 Lower leaves lyrate with oblong mucronate segments upper pinnatifid
11075 Lower leaves pinnatifid. upper linear, Involucre smooth lower scales spreading mucronate
11076 Lower leaves decursively pinnatifid lanceolate. upper linear-lanceolate, Involucre before opening 8 angular

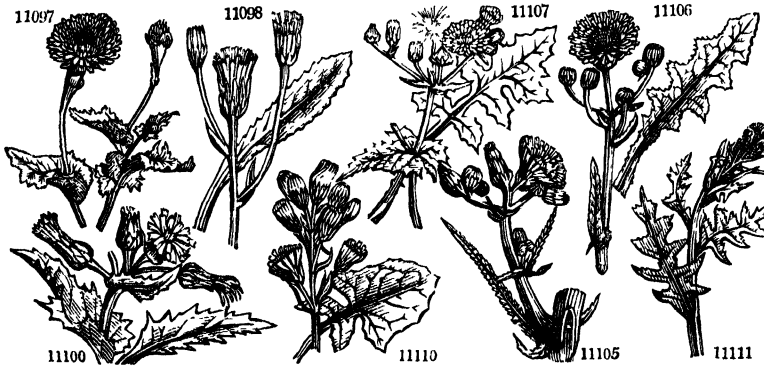
11077 Stem 1-flowered leafy, Leaves linear downy beneath, Root tuberous
11078 Leaves ovate nerved downy entire sessile
11079 Stem somewhat naked about 1-flowered, and scales of involucre woolly, Leaves oblong lanceolate nerved flat
11080 Stem branched, Leaves amplexicaul lanceolate entire subserrulate at base
11081 Stem about 1-headed leafy, Leaves linear lanceolate acuminate smooth nerved flat
11082 Stem about 1-headed leafy ascending, Leaves lanceolate ensiform smooth nerved flat, Ray longer than involucre
11083 Leaves linear subulate channelled triquetrous, Stem branched
11084 Leaves lanceolate linear flat cauline keeled linear, Stem 1-flowered
11085 Leaves linear ensiform acuminate rigid nerved keeled, Involucre villous leafy at base, Stem somewhat branched
11086 Leaves subulate entire, Peduncle thickened, Stem villous at base
11087 Leaves linear acuminate keeled woolly at base, Stem branched, Involucre woolly, Fruit downy
11088 Leaves runcinate blunt smooth, Scape leafless branched, Peduncles thickened
11089 Stem leafy many-headed, and involucre downy, Lower leaves lanceolate acuminate entire downy upper linear subulate
11090 Stem branched leafy at base, Leaves lanceolate ensiform smooth nerved flat, Ray shorter than calyx
11091 Stem 1-headed leafy at base, Leaves linear lanceolate wavy silky with down all over
11092 Stem leafy many-flowered erect, Leaves nerved filiform acuminate, Involucre and seeds woolly
11093 Leaves linear and 1-flowered, Stem hairy



and Miscellaneous Particulars

1622. *Troximon.* So named by Gærtner, from τρωξιμος, eatable: but, as Sir James Smith observes, without much propriety
1623. *Arnopogon* So named from αρης αρνος, a lamb, and πωγων, a beard · see Geropogon This is the same genus as has been called by Scopoli and Willdenow, Urospermum
1624 *Podospermum* From πους ποδος, a foot, and σπερμα, seed, on account of the long stalk of the fruit. Small herbaceous plants with the flowers of Scorzonera
1625 *Scorzonera* From *scurzon*, the Catalonian name of the viper The plants are esteemed in Spain as a certain remedy for the bite of a viper, but it is believed that the slender tortuous form of the roots has

11094 muricáta *Dec*	muricated	☿	△	pr		jn au	Y	S Europe	1820	D	co	
11095 aspérrima *W.*	roughest	☿	△	pr	1	jn au	Y	Galatia	1821.	D	co	
1626. PICRI'DIUM *P S*	Picridium					*Compositæ.*		*Sp* 3.				
11096 vulgáre *P S*	various-leaved		○	cul	1½	jn au	Y	France	1773	S	co	All ped.1 t 16 f 1
Sónchus picroides W												
11097 tingitánum *D S*	Tangier		○	or	1½	jn s	Y	Barbary	1713	S	co	Bot mag 142
11098 álbidum *P S*	pale-flowered	☿	△	or	1	jl o	W.y	France	1781	D	co	Jac ic 1. t 161
Crépis álbida W												
*1627 SON'CHUS *W.*	Sow Thistle					*Compositæ*		*Sp* 25—40				
11099 maritimus *W*	sea	☿	△	pr	2	jl s	Y	S. Europe	1748	D	co	All ped 1.t 16 f 2
11100 fruticosus *W*	shrubby	♣	□	or	3	ap jl	Y	Madeira	1777	S	pl	Jac ic 1 t 161
11101 pinnátus *W*	wing-leaved	♣	□	or	3	...	Y	Madeira	1777	C	co	
11102 lævigátus *W en*	smooth	♣	□	or	3	...	Y	Madeira	1816	C	co	
11103 lyrátus *W en*	lyre-leaved	♣	□	or	3	...	Y	Madeira	1816	C	co	
11104 radicátus *W*	long-rooted	♣	□	or	3	jl	Y	Canaries	1780	C	co	
11105 palustris *W*	tall marsh	☿	△	pr	6	jl au	Y	England riv ba		D	co	Eng bot 935
11106 arvénsis *W*	corn	☿	△	w	1½	jl au	Y	Britain corn fi		D	co	Eng bot 674
11107 oleráceus *W*	common		○	w	2	jn au	Y	Britain fields		S	co	Eng bot 843
11108 tenérrimus *W*	clammy		○	un	2	jl au	Y	S Europe	1691	S	co	Plu alm t 93 f 3
§11109 Plumiéri *W*	Plumier's	☿	△	or	6	jl au	B	Pyrenees	1794	D	co	
§11110 alpinus *W*	blue-flowered	☿	△	or	4	jl au	B	Scotland al pas		D	co	Eng bot 2425
§11111 Lappónicus *W*	Lapland	☿	△	or	6	jl au	B	Lapland	1804	S	co	Smit icones t 21
§11112 floridánus *W*	small-flowered	☿	○	or	6	jl	B	N Amer	1713	S	co	
11113 caucásicus *Fischer*	Caucasian	☿	△	or	3	au s	Y	Caucasus	1818	D	co	
11114 acuminátus *W*	acuminate	☿	○	or	2	au s	Y	N Amer	1812.	D	co	
11115 pállidus *W*	Canadian	☿	△	or	2	jl s	Y	Canada	1704	D	co	Rob ic 148 151
§11116 sibíricus *W*	Siberian	☿	△	or	2	jl s	L B	Siberia	1759	D	co	Gmel sib 2 t 3
§11117 tatáricus *W*	Tartarian	☿	△	or	4	jn jl	B	Siberia	1784	D	co	
11118 divaricátus *Horn*	divaricating	☿	△	or	3	jl au	Y	... ...	1823	D	co	
11119 uliginósus *Bieb*	swamp		○	or	4	jn jl	Y	Caucasus	1821	S	co	Schku bot t 256
11120 lácerus *W*	torn		○	or	1½	jn jl	Y	.....	1820	S	co	
11121 chondrilloides *Desf*	spreading	☿	○	or	1½	jn jl	Y	Spain	1729	S	s l	Boc,sic 13. t 7 f 4
11122 macrophýllus *L*	large-leaved	☿	△	or	6	jl au	B	N Amer	1823	D	co	
11123 leucophœ'us *W*	shining	☿	○	or	6	jl au	Pu	N Amer	1821	S	co	
1628 LACTU'CA *W*	Lettuce					*Compositæ*		*Sp* 19—26.				
11124 sativa *W*	garden		○	cul	4	jn jl	Y w	.... .	1562.	S	co	
11125 crispa *W*	curled		○	cul	3	jn jl	Y	... ..	1570	S	co	
11126 palmáta *W*	palmate		○	cul	3	jn jl	Y	... ..	1683	S	co	
11127 intybácea *W*	Endive-leaved		○	cul	3	jn au	Y	S Amer	1781	S	co	Jac ic 1 t 162
11128 quercina *W*	Oak-leaved		○	cul	3	my jl	Y	Sweden	1686	S	co	
11129 stricta *W*	upright	☿	○	un	3	jn jl	Y	Hungary	1805	S	co	Pl rar hu 1 t 48
11130 elongáta *W.*	elongated	☿	○	un	3	jn jl	Y	Pensylva	1805	S	co	
11131 Scariola *W.*	prickly	☿	○	un	3	jl au	Y	England rubble		S	co	Eng bot 268
11132 virósa *W*	strong-scented	☿	○	un	3	jl s	Y	Britain ch ba		S	co	Eng bot 1957
11133 angustána *W*	entire-leaved		○	un	2	jl au	Y	Italy	1791	S	co	All ped 1 t 52 f 1
11134 sagittata *W*	arrow-leaved	☿	○	un	2	jl au	Y	Hungary	180 .	S	co	Pl rar hung 1 t 1
11135 saligna *W*	least	☿	○	un	½	jl au	Y	England ch ba		S	co	Eng bot 707
11136 índica *W*	Indian		◫	un	1½	jl au	Y	E Indies	1784	S	co	
11137 altíssima *Bieb*	tallest	☿	○	un	6	jl au	Y	Caucasus	1823	S	co	



History, Use, Propagation, Culture,

given rise to this belief, rather than any quality inherent in the plant · for it is a rule to which there are few exceptions, that all plants used as food by man, possess very inactive qualities If their action was powerful, they would be unfit for food

Scorzonera hispanica is esteemed diuretic, stimulant, and sudorific A drink is made from it for variola, and a distilled water is also prepared from it It is also an esculent of occasional culture The root is carrot-shaped, about the thickness of one's finger, tapering gradually to a fine point, and thus bearing some resemblance to the body of a viper The outer rind being scraped off, the root is steeped in water, in order to abstract a part of its bitter flavor It is then boiled or stewed in the manner of carrots or parsneps The roots are fit for use in August, and continue good till the following spring Its culture is the same as that of carrot or salsafy

1626 *Picridium* A diminutive of *Picris*, which see Picridium sativum, *Picridium cultivé*, Fr, is sown in the spring as a small salad, and, if not allowed to become too old before it is cut, is an excellent vegetable, with a pleasant delicate flavor, wholly devoid of the bitterness of endive, and of the insipidity of very young lettuces P. tingitanum is a favorite border annual.

1627. *Sonchus.* Σονχος, in Greek, said to be altered from σομφος, hollow, or soft, in allusion to the soft feeble stem of the plants Sonchus oleraceus, *Sow-thistle*, Eng, *Havenkohl*, Ger, seems to have nearly the same properties as the Dandelion and Succory, but it is little regarded as a medicine It is a favorite food with hares and rabbits, and is said to be eaten by goats, sheep and swine, but not to be relished by horses The young tender leaves are in some countries boiled and eaten as greens and it is even affirmed, that the tender

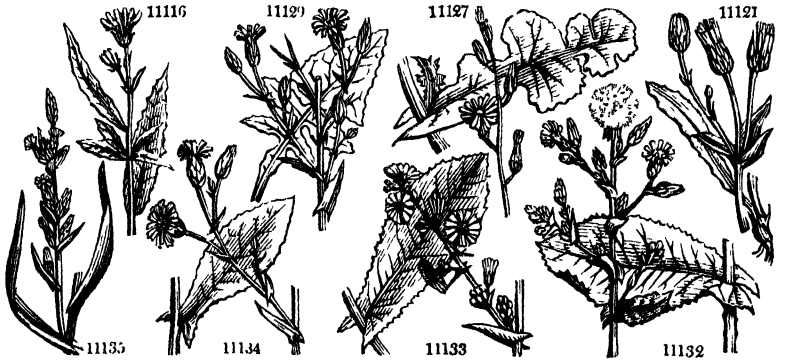
11094 Lower leaves linear · upper pinnatifid, Lobes remote linear
11095 Leaves runcinate hispid, Stem about 2-fi somewhat leafy hispid

11096 Cauline leaves amplexicaul obl nearly entire radical sublyrate runcinate, Scales of involucre appressed

11097 Leaves amplexicaul obl pinnatifid toothed, Involucre squarrose
11098 Leaves scabrous, Scales of involucre membranous at edge ciliated

11099 Peduncle subsol term. naked, Leaves lanc amplexicaul undivided finely toothed backwards
11100 Peduncle branched somewhat scaly, Leaves lanc runcinate, Stem shrubby
11101 Peduncle naked, Involucre smooth, Leaves pinn Pinnæ lin -lanc somewhat toothed
11102 Peduncle naked, Involucre turbin smooth lower scales reflexed at end, Leaves pinnatifid
11103 Peduncle naked, Involucre turbin smooth low scales reflexed at end, Lvs lyrate pinnatif Corymb divaricating
11104 Peduncle naked and involucre smooth, Stem nearly naked, Radic lvs lyrate smooth on each side, Lobes triang
11105 Peduncle and involucre hispid somewhat umbelled, Leaves runcinate sagittate at base [ovate
11106 Peduncles and involucre hispid sub-umbellate, Leaves runcinate dentato-ciliate cordate at the base
11107 Peduncles sub-tomentose umbellate, Involucre glabrous, Lvs runcinate dentato-ciliate amplexic. at base
11108 Peduncle downy umbell Involucre hairy, Leaves bipinnatifid cordate sagittate at base
11109 Peduncle naked, Flowers panicled, Leaves runcinate
11110 Peduncles and involucre hispid racemose, Leaves sublyrate, Terminal lobe deltoid very large
11111 Peduncle squarrose, Fl racemose, Leaves runcinate acuminate smooth glaucous beneath
11112 Peduncle sub-squarrose, Fl. panicled, Leaves lyrate-runcinate toothletted stalked
11113 Leaves sessile lower cordate toothed, upper hispid entire, Peduncles scaly
11114 Peduncle sub-squarrose, Fl panicled, Radic leaves sub-runcinate cauline ovate acuminate stalked
11115 Raceme comp terminal, Leaves lanc ensiform amplexicaul toothed
11116 Peduncle squarrose, Fl corymb Leaves lanc sessile lower runcinate toothed, upper entire
11117 Peduncle naked, Fl in corymbose panicles, Leaves lanc runcinate narrowed at base
11118 Leaves pinnatifid with little white spiny teeth, Calyx slender
11119 Peduncle and involucre smooth a little downy, Leaves sub runcinate spiny-toothed amplexicaul
11120 Peduncle somewhat downy umbellate, Involucre smooth, Leaves pinnatifid toothed auricled cordate at base
11121 Radic leaves unequally pinnatifid cauline linear lanc toothed, Peduncle long 1-flowered
11122 Peduncles hirsute naked, Fl panicled, Leaves lyrate cordate at base hairy beneath
11123 Peduncle scaly, Fl racemose, Leaves runcinate acuminate, Stem panicled virgate

11124 Leaves rounded cauline cordate, Stem corymbose
11125 Leaves sinuate-crenate toothed wavy curled radical with a hairy keel, Florets 5-parted
11126 Lower leaves tripartite pinnatifid with obl blunt segm upper cordate
11127 Leaves runcinate tooth-ciliated blunt amplexicaul sagittate radical obovate, Stem panicled
11128 Leaves smooth beneath lower runcinate toothletted at base dilated and sagittate, upper lanc sagittate
11129 Leaves smooth beneath radical runcinate lyrate toothed, upper runcinate pinnatifid
11130 Leaves smooth beneath lower runcinate entire amplexicaul upper lanceolate sessile
11131 Leaves vertical prickly at keel acute at end sagittate at base runcinate pinnatifid
11132 Leaves oblong toothed horizontal, their keel prickly, their apex obtuse
11133 Leaves smooth beneath obl lanc ciliate-toothed sagittate at base
11134 Leaves smooth beneath lower oblong narrowed at base toothletted, upper lanceolate entire
11135 Leaves with a prickly keel radical lanc pinnatifid, cauline linear entire sagittate
11136 Leaves lanceolate ensiform sessile unequally toothed
11137 Leaves toothletted smooth lower sinuated, upper lanceolate sagittate acuminate, Pan much branched



and Miscellaneous Particulars

shoots of the smooth variety, boiled in the manner of spinach, are superior to any greens not in common use

Nearly the same thing may be affirmed of S arvensis, palustris, and other species

Sonchus floridanus is used as a cure for the bite of the rattle-snake, in the same way as Prenanthes serpentaria It is called by the American settlers *Gall of the Earth*

S tenerrimus is eaten by the common people in Italy as a salad

1628 *Lactuca* From *lac*, milk, on account of the milky sap, which flows copiously when the plants are cut Besides Lactuca sativa, the French cultivate as small salad both L quercina, palmata, and intybacea, which are all excellently adapted for such a purpose. L sativa is well known as furnishing among its numerous varieties the best vegetable of the salad kind grown in the open garden Whoever has the command of lettuce, onions, and cucumbers, may well dispense with most other acetarious plants It is questioned by some, whether the greater number of what are set down as species in this genus, are any thing more than variations of one type, and, at all events, it is thought L virosa, a poisonous plant, is the parent of our cultivated sorts, which would not be more remarkable than the fact that the indigenous celery is one of our strongest poisons

All the species of Lactuca abound in a milky juice, which is found to partake, in a considerable degree, of the qualities of opium The production of this juice is lessened by culture, and especially by blanching It is most abundant in plants in a wild state, and in both wild and cultivated lettuce during inflorescence. Of late years, this juice has been collected by incisions and scraping off the thickened juice, as in the collecting the opium of the poppy (See p 461), and an opium has been produced little inferior to that of the East. It is called

11138 viminea *Link.*	rushy-twigged	☿	○	un	1	jl au	Y	Austria	1789.	S	co	Jac aust 1. t 9
11139 segusiána *Balbis*	Italian		○	pr	½	jl au	Pu	Piedmont	1822.	S	co	
11140 sonchifólia *W.*	Sow-thistle-lvd	☿	△	un	2	jl au	Pa B	Candia	1822	D	co	
11141 tenérrima *W*	purple-flowered	☿	△	un	¾	jl au	Pu	S Europe	1815.	D	co	
11142 perénnis *W*	perennial	☿	△	un	2	jn au	L.B	Germany	1596.	D	co	Bot. mag 2130

1629. CHONDRIL'LA. *W.* Gum-Succory. *Compositæ. Sp.* 2—5.

11143 júncea *W*	common	☿	△	un	1½	s o	Y	France	1633.	D	co	Jac. aust. 5 t.427
11144 graminea *Bieb.*	grass-leaved	☿	△	un	1½	s o	Y	Volga	1824.	D	co	

*1630 PRENAN'THES *W* Prenanthes *Compositæ Sp* 9—13

11145 purpúrea *W.*	purple-flowered	☿	△	or	4	jl s	Pu	Germany	1658.	D	co	Jac. aust. 4 t 317
§11146 álba *W.*	white-flowered	☿	△	or	2	jl au	W	N Amer	1762.	D	pl	Bot mag 1079
§11147 altíssima *W.*	tall	☿	△	or	6	jl au	L Y	N Amer	1696.	D	pl	Plu alm t 317 f 2
§11148 cordáta *Ph*	heart-leaved	☿	△	or	4	jl au	Pa.Y	N Amer.	1816	D	co	
§11149 spinósa *W*	prickly	♄	⌒	un	3	mr my	Y	Barbary	1640	C	co	Park the 804 f 7
11150 murális *W*	wall	☿	△	w	2	jl	Y	Britain	woods	D	co	Eng. bot 457
§11151 pinnáta *L*	pinnate	♄	⌒	un	3	jn jl	Y	Teneriffe	1820.	S	co	
§11152 arbórea *Brouss*	arborescent	♄	⌒	un	3	jn jl	Y	Teneriffe	1824	S	co	
11153 hieraciifólia *W.* *Crepis pálchra* L.	small-flowered		○	un	1½	jn s	Y	Scotland	sc roc	S	co	Eng. bot 2325

1631 LEON'TODON *W* Dandelion. *Compositæ Sp* 6—9.

11154 Taráxacum *W.*	common	☿	△	w	1	ap jl	Y	Britain	me pa	D	co	Eng bot 510
11155 serótinus *W*	late-flowering	☿	△	un	1½	jl s	Y	Hungary	1816	D	co	Pl rar hu 2 t 114
11156 palústris *E B.* *lividus* W	marsh	☿	△	w	1½	jn jl	Y	Britain	mo p	D	co	Eng bot 553
11157 obovátus *W*	obovate-leaved	☿	△	un	1	jl	Y	Spain	1805	D	co	
11158 glaucéscens *Bieb*	glaucous	☿	△	un	1	jl	Y	Volga	1823	D	co	
11159 bessarábicus *Fisch*	Bessarabian	☿	△	un	1	jl	Y	Bessarabia	1821	D	co	

*1632 APAR'GIA *W* Apargia *Compositæ Sp* 14

11160 aurantíaca *W*	Orange-colored	☿	△	pr	½	my jn	Or	Hungary	1816	D	co	
11161 alpina *W.*	Alpine	☿	△	un	1	my jn	Y	Austria	1816.	D	co	Bot. cab 539
11162 hastilis *W.*	shining-leaved	☿	△	un	1	jl au	Y	S Europe	1796.	D	co	Jac. aust. 2. t 164
11163 dúbia *W.*	tooth-leaved	☿	△	un	1	au	Y	Germany	...	D	co	
11164 tuberósa *W*	knotty-rooted	☿	△	un	1	my jl	Y	France	1683.	D	co	Lob ic 232 f 1
11165 incána *W.*	hoary	☿	△	un	1	my jn	Y	S. Europe	1784	D	co	Jac aust 3 t 287
11166 Taráxaci *W*	Dandelion-lvd	☿	△	w	1	au	Y	Britain	sc alps.	D	co	Eng bot 1109
§11167 autumnális *W.*	autumnal	☿	△	w	1	au	Y	Britain	me pa	D	co	Eng bot 830
11168 crispa *W*	curled	☿	△	un	½	jl au	Y	France	1803	D	co	Vil dauph 3 t 25
11169 híspida *W*	rough	☿	△	w	½	jl s	Y	Britain	ch pas.	D	co	Eng bot 554
11170 áspera *W*	hairy	☿	△	un	1	jn jl	Y	Hungary	1805	D	co	Pl rar hu 2 t 110
11171 crócea *W*	deep-yellow	☿	△	un	1	jn jl	Or	Hungary	1823.	D	co	
11172 caucásica *Bieb*	Caucasian	☿	△	un	1	jn jl	Y	Caucasus	1820	D	co	
11173 Villársi *W.*	Dauphiny	☿	△	un	1	jn jl	Y	Dauphiny	1821	D	co	Vill dclph 3 t 25



History, Use, Propagation, Culture

Lactucarium, and was first brought into notice by Dr Duncan of Edinburgh, who finds it can be administered with effect in cases where poppy opium is inadmissible Details of the process of collecting and preparing the article, will be found in the Caledonian Horticultural Memoirs. (Vol i 160-259 h. 314, and iv. 153)

The culture of lettuce as a salad plant is familiar to every one who has a garden It is sown monthly, or oftener, throughout the year, in order to have a successional supply, and thinned out or transplanted to increase the size and succulency. The latter quality is greatly increased by watering in summer; and blanching, another desirable property, is promoted by tying up the leaves when the plant has attained about two-thirds of its usual size Snails and slugs are very fond of this plant, and should either be watched and hand-picked, or the ground well watered with lime water, which effectually destroys them The lettuce, unlike the cabbage and spinage, is a vegetable which can be grown to as great perfection in a warm as in a temperate climate, provided it be grown on rich soil, and abundantly supplied with water Hence the lettuces of Paris, Rome, and Calcutta, are as large and tender as those of London and Amsterdam.

This genus is the type of the tribe *Lactuceæ* of M Cassini. It differs essentially from all other tribes of Compositæ, in having a divided or ligulate corolla only, and from nearly all other tribes in its style, which can be compared to that of Vernonieæ only The radiant head of flowers is a character common both to Lactuceæ and Nassauvieæ The greater part of Lactuceæ are found in Europe, a smaller number in Asia and Africa, very few in America, and in the southern hemisphere none at all.

1629 *Chondrilla.* Derived from χονδρος, a lump Dioscorides says, it bears on its stems little lumps of gummy matter But Theophrastus speaks of the grumous or tubercled roots of his Chondrilla. The plant now so called is an inconspicuous perennial plant, of no recorded use.

1630. *Prenanthes.* From πρηνης, drooping, and ανθος, a flower. The heads of flowers of all the species are

11138 Leaves decurrent: lower pinnatifid toothed outwards, upper linear, Stem branched
11139 Lower leaves lanc. runcinate toothed narrowed at base and sessile upper linear sagittate
11140 Leaves runcinate pinnatifid unequally toothed: floral lanceolate, Flowers racemose
11141 Radic leaves pinnatif. toothed · cauline linear entire sagittate, Branches 1-flowered
11142 Leaves all pinnatifid: segments linear toothed upwards. Fl in corymbose panicles

11143 Radic. leaves runcinate: cauline linear entire
11144 Radic. leaves runcinate: cauline undivided filiform, Stem and involucre smooth

11145 Involucre 5-fl Leaves obl lanc. amplexicaul cordate denticulate glaucous beneath
11146 Involucre many-fl. Leaves angular hastate toothed, Flowers nodding racemose panicled
11147 Involucre 5-fl Leaves 3-lobed stalked angular toothletted rough at edge, Racemes axillary, Fl nodding
11148 Stem panicled upwards, Leaves stalked cordate toothed ciliated, Panicle lax racemose
11149 Leaves linear tooth-sinuated sessile, Stem shrubby much branched, Branches spiny
11150 Florets 5, Leaves lyrate-pinnatifid and toothed, the terminal lobe with about 5 angles
11151 Leaves pinnated, Leafl linear filiform, Panicle corymbose stalked, Stem shrubby
11152 Leaves pinnatifid pinnate with linear segments
11153 Leaves pubesc. toothed, those on the stem subsaggitate, Stem panicled corymb. Involucre pyramidal glabrous

11154 Outer scales of the involucre reflexed, Leaves runcinate glabrous toothed
11155 Outer involucre spreading, Leaves runcinate scabrous, Segments round toothletted
11156 Outer scales of the involucre erect appressed, Leaves sinuato-dentate nearly glabrous

11157 Outer involucre spreading, Scales ovate, Scape 1-fl Leaves obov. bluntish toothed
11158 Outer involucre spreading, Scales ovate-lanceol Lvs runcinate pinnatifid glabrous with lin falc distant lobes
11159 Leaves pinnatifid to the nerve smooth, Leaves of involucre smooth reflexed

11160 Scape 1-fl naked thickened and hairy upwards, Involucre hispid, Leaves lanc obl somewhat toothed
11161 Scape 1-fl squarrose thickened and somewhat hairy upwards, Involucre hispid, Leaves lanc obl smoothish
11162 Scape 1-fl naked and involucre smooth, Leaves lanc runcinate-toothed smooth
11163 Scape 1-fl nearly naked upward and involucre hairy, Leaves lanc. toothed at base with a few forked hairs
11164 Scape 1-fl naked smooth Scales of involucre acute hairy, Lvs obov runcin hairy scabrous, Root tuberous
11165 Scape 1-fl nearly naked and calyx pubesc Lvs lanceol acute somewhat toothed hoary, Hairs multifid
11166 Scape single-flowered thickened upwards, Leaves glab runcinato-dentate, Involucre very hairy
11167 Scape branched scaly upwards, Lvs lanc toothed or pinnatif sub-glab. Peduncle swelling beneath involucre
11168 Scape naked 1-fl and involucre hairy, Lvs runcinate pinnatifid hairy, Segm recurved tooth Hairs 3-forked
11169 Scape single-flowered, Leaves dentate scabrous, Florets hairy at their orifice glandular at the tip
11170 Stem leafy somewhat branched hairy, Involucre smooth, Leaves lanc runcinate hairy, Hairs forked
11171 Scape 1-fl scaly thickened upwards and hairy, Involucre hispid, Leaves runcinate smooth
11172 Scape naked 1-fl. glabrous, Involucre hairy, Leaves runcinate toothed scab somewhat hairy Hairs prostrate
11173 Scape naked 1-fl and involucre smoothish, Leaves pinnatifid-toothed hispid, Hairs simple subulate



and Miscellaneous Particulars

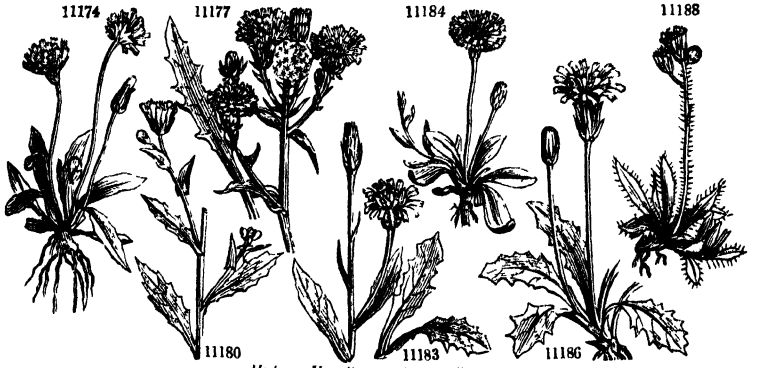
nodding Prenanthes serpentaria grows to the height of two feet, bearing pale purple flowers. It is known by the inhabitants of Virginia and Carolina under the name of the Lion's Foot, and is in high esteem as a cure for the bite of the rattle-snake The juice of the plant boiled in milk is taken inwardly, and steeped leaves, frequently changed, are applied to the wound. It must not be confounded with Prenanthes rubicunda, called False Lion's Foot, which is a less powerful plant

Prenanthes virgata has a very fine effect in large plantations

1631 *Leontodon.* So named from λεων, a lion, and οδους, a tooth; in reference to the deep tooth-like divisions of the leaves. The English name *Dandelion*, is a corruption of the French translation of this word, *Dent de lion*, in German *Pfaffenröhrlein* and *Dotterblume* It has been recommended as a winter salad, blanched like Endive, but it possesses too much bitter principle to render it fit for table under any management *Dent de lion*, Fr, from its cut leaves, and *Pess-en-lit*, in French, and most other European languages, from its diuretic qualities. The tender leaves in spring, used in compound salads, are equal to those of Endive or Succory. The roots, which are fusiform, and abound in a milky juice, are eaten raw as a salad by the French, and boiled by the Germans, like Salsafy and Scorzonera Dried and ground into powder, they afford a substitute for coffee, in all respects equal to that of Chicory roots. It is a difficult weed to extirpate, because every inch of root will form buds and fibres, and thus constitute a new plant Swine are fond of it, and goats will eat it, but sheep and cows dislike it, and by horses it is refused.

1632 *Apargia.* Απαργια is the Greek name of a plant now unknown. It has been employed by Dalechamp and Scopoli for a species of Hieracium. At the present day it is given to a genus of weedy plants, with the appearance of Leontodon.

1633. THRIN'CIA *W.*	**THRINCIA.**					*Compositæ*		*Sp* 3—6					
11174 hírta *W*	simple-haired	☿	△	un	1½	jl au	Y	Britain	gra.pa	D	co		Eng. bot. 555
11175 hispída *W.*	hispid		○	un	1	jn au	Y	S Europe	1815	S	co		
11176 maroccána *P S*	Morocco		○	un	1	jn.au	Y	Morocco	1799.	S	co		
Hyóseris hispida W.													
1634. PI'CRIS. *W*	**OX-TONGUE**					*Compositæ.*		*Sp* 4—7					
11177 hieracioídes *W*	Hawkweed-like		○	un	1½	jl au	Y	England	bor.fl.	S	co		Eng bot. 186
11178 asplenioídes *W*	Spleenwort-lvd	☿	△	un	1½	jl.au	Y	Barbary	1805	D	co		L'Her stirp. t 82
11179 hispída *H K*	hispid	☿	△	un	1	jl au	Y	Lævant	1789	D	co		
11180 sprengeriána *P S*	branched		○	pr	1	jn jl	Y	Portugal	1783.	S	co		Moris s 7 t 5.f.15
***1635. HIERA'CIUM** *W.*	**HAWKWEED.**					*Compositæ*		*Sp* 75—117.					
11181 rupéstre *All*	rock	☿	△	pr	½	jn jl	Y	Switzerl	1820.	D	co		All auct 1.t 1.f 1
11182 alpínum *L*	Alpine	☿	△	pr	½	jl au	Y	Britain	al roc	D	co		Eng bot 1110
11183 alpéstre *Jacq*	mountain	☿	△	pr	½	jl au	Y	Switzerl	1822	D	co		Jacq austr t 191
11184 Pilosélla *L*	Mouse-ear	☿	△	pr	½	my jl	Y	Britain	dry pa.	D	co		Eng bot 1093
11185 bulbósum *W.*	bulbous	⚹	△	pr	½	my jl	Y	Barbary	...	D	co		
§11186 aúreum *W.*	golden	☿	△	or	½	my jl	D Y	Italy	1769	D	p.l		Jac. aust 3 t 297
11187 dúbium *L*	branching	☿	△	pr	½	jl au	Y	Britain	hills	D	co		Eng bot 2332
11188 auricula *L*	umbelled Mouse-ear	☿	△	pr	1½	jl au	Y	England	moun	D	co		Eng bot 2368
11189 fállax *W en*	hairy spear-lvd	☿	△	pr	1	jl au	Y	.....	1816	D	co		
11190 florentínum *All*	Florentine	☿	△	pr	2	jl au	Y	Germany	1796	D	co		Bauh pin t. 67
11191 cymósum *L.*	small-flowered	☿	△	pr	1	my jn	Y	Europe	1739	D	co		Col ecph 1. t.243
11192 angustifólium *Hoppe*	narrow-leaved	☿	△	pr	¼	my jn	Y	Switzerl	1823	D	co		
11193 staticifólium *All*	Thrift-leaved	☿	△	pr	1½	jn jl	Y	Europe	1804	D	co		Vil.dauph.3 t 27
11194 flagellare *W en*	creeping	⚹	△	pr	1	my jl	Y	.....	1816	D	co		
11195 bifur'cum *Sieb*	forked	☿	△	pr	1½	jn	Y	Tauria	1820	D	co		
11196 bífidum *W*	bifid	☿	△	pr	1½	jn	Y	Hungary	..	D	co		
11197 Gmelíni *W*	Gmelin's	☿	△	pr	1½	jn jl	Y	Siberia	1798	D	co		Gme sib 2 t 8 f 2
11198 præmórsum *L*	bitten	☿	△	pr	1	jn jl	Pa Y	Switzerl	1818	D	co		Gm sib.2 t 13 f 2
11199 incarnátum *Jacq*	flesh-colored	☿	△	pr	1½	jn jl	Pk	Carniola	1815	D	co		Jac ic t 578
11200 aurantíacum *L*	orange	☿	△	or	1½	jn jl	O	Scotland	sc wo	D	p l		Eng bot 1469
11201 Lawsóni *Vill*	Lawson's	☿	△	pr	½	jn jl	Y	Britain	n of e	D	co		Eng. bot. 2083
11202 venósum *W*	veined	☿	△	pr	½	jn jl	Y	N Amer	1790	D	co		
11203 Gronóvii *W.*	Gronovius's	☿	△	pr	1	jn jl	Y	N. Amer.	1798.	D	co		Pluk.alm.420 2
11204 paniculátum *W.*	panicled	☿	△	pr	1½	jn jl	Y	Canada	1800	D	co		
11205 glaúcum *All*	glaucous	☿	△	pr	1½	jn jl	Y	S Europe	1807	D	co		All ped. 28. 3
11206 saxátile *Jacq.*	rock	☿	△	pr	1	jl au	Y	Austria	1801	D	co		Jac. ic. 1 t. 163
11207 prenanthoídes *Vill*	large-leaved	☿	△	pr	2	jl au	Y	Switzerl	1820	D	co		
11208 chondrilloídes *W*	Gum-succory	☿	△	pr	½	jn jl	Y	Austria	1640	D	co		Jac. aust 5. t.429
11209 cydoniæfólium *Vill*	Quince-leaved	☿	△	pr	2	jl au	Y	France	1816	D	co		
11210 mólle *Jacq*	soft-leaved	☿	△	pr	1	jl au	Y	Scotland	sc wo	D	co		Eng bot 2210
11211 cerinthoídes *L*	Honeywort-lv	☿	△	pr	1½	jl s	Y	Scotland	sc roc	D	co		Eng bot 2278
11212 amplexicaúle *L*	heart-leaved	☿	△	pr	1½	jl au	Y	Pyrenees	1739	D	co		All ped. t 15 f 1
§11213 pyrenáicum *L*	Pyrenean	☿	△	pr	1	jl au	Y	Pyrenees	1723	D	co		
β pilósum W	*pilose*	☿	△	pr	1	jl au	Y	Pyrenees	1723	D	co		Her parad t 184
γ austriacum Jacq	*Austrian*	☿	△	pr	1	jl au	Y	Pyrenees	1723	D	co		Jac aust 5 t 441
§11214 sibíricum *W*	Siberian	☿	△	pr	2	jl au	Y	Siberia	1755	D	co		Gmel sib 2 t 10
§11215 grandiflórum *All*	great-flowered	☿	△	pr	2	jl au	Y	Switzerl	1791	D	co		Pl rar hu 1 t 99
11216 intybáceum *Jacq*	Endive-leaved	☿	△	pr	2	jl au	Pa Y	Europe	1794	D	co		Jac aus 5 t ap 43
11217 Halléri *Vill*	Haller's	☿	△	pr	½	jl au	Y	Europe	1802	D	co		Vil dauph 3 t 26
11218 maculátum *E B*	stained-leaved	☿	△	pr	1½	jl au	Y	Britain	al roc	D	co		Eng bot 2121
11219 pulmonárium *E B*	Lungwort	☿	△	pr	1½	jl au	Y	Scotland	sc roc	D	co		Eng bot 2307
11220 porrifólium *W*	Leek-leaved	☿	△	pr	1	jl au	Y	Austria	1640	D	co		Jac aust 3 t 286
11221 montánum *W*	mountain	☿	△	pr	1	jn jl	Y	S Europe	1775.	D	co		Jac aust 2 t 190
11222 eriophýllum *Lank.*	villous	☿	△	pr	1½	jn au	Y	....	...	D	co		
11223 sylváticum *W.*	wood	☿	△	pr	1½	au	Y	Britain	rocks	D	co		Eng. bot 2031
11224 villósum *L*	shaggy Alpine	☿	△	pr	1	jl.au	Y	Scotland	al roc	D	co		Eng. bot 2379
11225 pilocéphalum *Lank*	hairy-headed	☿	△	pr	1	jl au	Y	Europe	1820	D	co		
11226 trichocéphalum *W en*	shaggy	☿	△	pr	1	jl au	Y	...	1823	D	co		
11227 flexuósum *W*	bending-stalk'd	☿	△	pr	1½	jl au	Y	Hungary	1804	D	co		



History, Use, Propagation, Culture,

1633 *Thrincia* From θρινξ, a feather, in allusion to the feathery pappus of the seeds. Small uninteresting weeds of no value or beauty

1634 *Picris.* From πικρος, bitter, a name given by the Greeks to some plant resembling Lettuce, on account of its bitterness None of the species are remarkable for their qualities

11174 Scape single-fl. Leaves dentate scab. Involucre nearly glab. Outer pericarps with a scaly pappus
11175 Scape 1-fl pilose, Invol hoary naked, Leaves lanc. blunt toothed, Hairs forked
11176 Scape 1-fl hispid, Leaves obl. runcinate toothed hispid, Hairs forked

11177 Stem erect scabrous, Leaves amplexicaul. lanc. toothed, Fl. corymbose, Outer invol. lax
11178 Stem ascending scabrous, Leaves obl lanc blunt sinuate pinnatifid, Pedunc. thickened
11179 Leaves obl lanc nearly entire sessile, and invol hispid, Hairs glochidate
11180 Stem branched spreading leafy, Leaves amplexicaul. obl repand hispid

§ 1 *Scape one-flowered, naked.*

11181 Scape 1-leaved, Invol. hairy, Leaves lanc runcinate toothed subpubescent, Teeth recurved
11182 Scape somewhat naked villous, Invol very villous, Leaves lanc. entire acute villous
11183 Scape 1-leaved downy upwards, Invol cylindr downy, Leaves lanc toothletted
11184 Leaves entire ovate downy beneath, Stolones creeping
11185 Scape naked thickened upwards hairy, Invol smooth, Leaves lanc obl. somewhat toothed smooth
11186 Scape nearly naked, Invol. hispid, Leaves lanc spatulate runcinate-toothed smoothish

§ 2 *Scape many-flowered, naked*

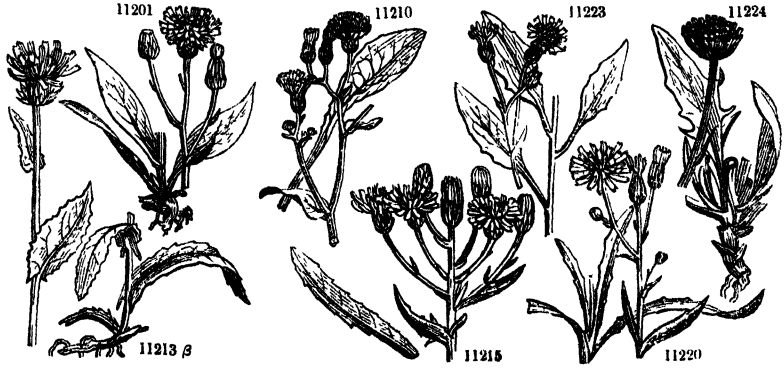
11187 Scape about 4-fl naked, Leaves obl blunt entire, Stolones creeping
11188 Scape 1-leaved with about 6 fl Fl umb Leaves lanc acute entire, Stolones creeping
11189 Scape leafy pilose at base, Fl corymbose, Peduncles downy, Leaves lanc acute nearly entire pilose
11190 Scape leafy smoothish, Fl. in corymbose panicles, Pedunc spreading, Invol hairy
11191 Scape leafy hispid, Fl in corymbose panicles, Pedunc clustered, Invol hispid
11192 Scape about 3-fl 1-leaved hairy, Leaves lin lanc acute pilose
11193 Scape somewhat naked branched about 3-fl Pedunc. squarrose, Leaves lin lanc toothletted smooth
11194 Scape about 2-fl Peduncles long, Leaves spatulate lanc entire pilose, Stolones creeping
11195 Scape forked about 2-fl and leafy at base, Leaves lanc acute entire, Stolones O
11196 Resembles H murorum, but the stem is naked
11197 Scape naked corymbose, Leaves lyrate runcinate hairy
11198 Leaves ovate somewhat toothed, Scape naked racemose, Upper flowers opening first
11199 Scape naked scabrous at base, Fl in racemose corymbs, Leaves oblong blunt toothletted hairy
11200 Scape leafy hispid, Fl corymbose, Pedunc clustered, Leaves obl acutish pilose-hispid
11201 Scape somewhat naked branched, Invol with glandular hairs, Leaves oblong acute entire woolly
11202 Scape naked branched, Invol smooth, Leaves obovate acute entire ciliated, Veins colored
11203 Scape leafy in corymbose panicles, Invol. pubescent, Radic. leaves entire obovate blunt ciliated

§ 3 *Stem leafy*

A *Leaves entire*

11204 Stem erect, Leaves alternate lanc naked toothed, Panicle capillary
11205 Stem erect branched, Leaves lanc sessile somewhat toothed glaucous narrowed at each end
11206 Stem erect branched, Leaves lin lanc nearly entire narrowed at each end ciliated at base
11207 Stem erect simple, Leaves lanc cordate amplexicaul toothletted downy, Fl racemose corymbose
11208 Stem erect few-fl Caulme leaves lanc acum runcinate radical obl lanc undivided
11209 Stem erect pilose panicled, Leaves ovate oblong subcordate sessile remotely toothed entire at end
11210 Stem erect hairy, Fl subcorymbose, Caulme leaves oblong lanceolate stem-clasping radical toothed
11211 Stem erect villous, Lvs pilose somewhat toothed radic obov, caul obl half-amplexicaul, Inv hirsute
11212 Stem erect branched, Lvs ovate cord amplexicaul toothed towards the base, Pedunc and invol hirsute
11213 Stem erect simple furrowed smoothish, Rad lvs obl deeply toothed at base, caul. hastate sagit. Inv lax

11214 Stem erect panicled furrowed downy, Leaves rugose upper lanceol Invol lax hispid
11215 Stem ascending simple furrowed viscid, Leaves lanc with recurved teeth, Involucre hispid
11216 Stem erect branched hispid, Leaves lanc toothed sessile narrowed at each end, Invol lax hispid
11217 Stem erect about 2-fl Leaves pilose toothed radical oblong, caulme lanc sessile, Invol. villous
11218 Stem cymose fistulous many-leaved, Leaves ovate-lanceolate toothed forwards
11219 Stem cymose solid few-leaved, Leaves lanceolate broadly toothed forwards
11220 Stem erect branched leafy, Leaves linear entire
11221 Stem erect simple leafy 1-fl Leaves ovate-lanc toothletted sessile
11222 Radic. leaves oblong and lanceolate bluntish narrowed at base toothletted woolly, Invol hoary
11223 Stem leafy erect simple, Leaves oblong villous somewhat toothed, Fl panicled
11224 Stem erect somewhat branched and lvs villous: radic obl lanc toothed, caul ovate cord amplexicaul
11225 Differs from H villosum in having the involucrum covered with dense short brown hairs
11226 Radical lvs lanc narrowed into stalk caul. sub-amplexic toothed backwards acute smooth, Inv villous
11227 Stem erect smooth below, Leaves sub-villous lanc acute radical toothletted, Invol villous



and Miscellaneous Particulars

1635 *Hieracium.* It was believed formerly, that birds of prey made use of the juice of this kind of plant to strengthen their vision, whence it was called *Hieracium*, from ἱέραξ, a hawk; the French word *Epervière*, the English *Hawk-weed*, and the German *Habichtskraut*, all bear witness to the universal belief in this very strange opinion. An extensive genus of plants, many of which, especially H aurantiacum, are objects

11228	prostrátum *W. en. s*	prostrate	☼	△	pr	⅛	au	Y	S. Europe	1822.	D	co
11229	Kálmii *W*	Kalm's	☼	△	pr	1½	au	Y	Pensylva.	1794.	D	co
11230	speciosissimum *W.*	shewy	☼	△	pr	1½	au	Y	S. Europe	1821.	D	co
11231	denticulátum *E B*	small-toothed	☼	△	pr	1	jl au	Y	Scotland	sc.wo.	D	co
11232	Millèri *Lmk*	Miller's	☼	△	pr	1	jl.au	Y	.....	1820	D	co
11233	echioides *W*	Viper's-bugloss	☼	△	pr	⅛	jl au	Y	Hungary	1802.	D	co
11234	verruculátum *Lmk*	warted	☼	△	pr	1	jl au	Y	.....	1821.	D	co
11235	undulátum *H K.*	wave-leaved	☼	△	pr	1½	jl.au	Y	Spain	1778.	D	co
11236	dentátum *Lmk*	rough-bordered	☼	△	pr	3	jn.s	Y	Scotland	sc.wo.	D	co
	prenanthoides Sm.											
11237	latifólium *Lmk*	broad-leaved	☼	△	pr	2	jl au	Y	Croatia	1820	D	co
11238	foliósum *W & K.*	leafy	☼	△	el	2	jl au	Y	Hungary	1805.	D	co
11239	sabaúdum *W*	Savoy	☼	△	el	3	jl.au	Y	Britain	groves.	D	co
11240	lævigátum *W*	smooth	☼	△	el	2	au s	Y	.....	1804.	D	co
11241	canéscens *Lmk*	hoary	☼	△	el	2	au s	Y	.....	1822.	D	co
11242	umbellátum *L.*	narrow-leaved	☼	△	el	3	jl s	Y	Britain	woods	D	co
11243	bracteolátum *Lmk*	bracteolate	☼	△	el	1½	jl s	Y	Europe	1823.	D	co
11244	longifólium *Hornem.*	long-leaved	☼	△	el	1½	jl s	Y	.....	1821	D	co
§11245	fruticósum *W*	shrubby	☼	⌊	el	2	jn jl	Y	Madeira	1785	C	co
11246	húmile *W*	small	☼	△	pr	½	jl.au	Y	Germany	1804	D	co
11247	nigréscens *W*	dark-colored	☼	△	pr	¼	jl au	Y	.....	1801.	D	co
11248	prunellifólium *Gouan*	Self-heal-leav	☼	△	pr	⅛	jl au	Y	Switzerl	1820	D	co
11249	murórum *L*	wall	☼	△	w	1½	jl	Y	Britain	rocks	D	co
§11250	paludósum *L*	Succory-leaved	☼	△	pr	1½	jl au	Y	Britain	moun	D	co
11251	lapsanoides *W.*	Lapsana-like	☼	△	pr	1½	jl.au	Y	Pyrenees	1812.	D	co
11252	ramósum *W & K.*	branching	☼	△	pr	2	au	Y	Hungary	1805	D	co
§11253	lyrátum *W*	Lyre-leaved	☼	△	pr	2	jl au	Y	Siberia	1777	D	co
11254	glutinósum *W*	clammy		○	pr	1½	jl au	Y	S. Europe	1796	S	co
11255	fasciculátum *Psh.*	bundled	☼	△	pr	5	jl au	Y	Canada	...	D	co

1636. LAGO'SERIS *Lmk* Lagoseris — *Compositæ* — *Sp.* 6—10

11256	bursifólia *Lmk*	Shepherd's-purse-lv	☼	△	un	2	jl au	Y	Sicily	1823.	S	co
	Crepis bursifolia L.											
11257	versicolor *Fischer*	changeable	☼	△	un	2	jl au	Y	Dauria	1820	D	co
11258	leontodóntoides *Lmk*	Dandelion-like	☼	○	un	1	jl au	Y	Italy	1804	S	co
11259	raphanifólia *Lmk*	Radish-leaved	☼	△	un	2	jn jl	Y	.....	1816.	D	co
11260	taurinénsis *Lmk*	Turin		○	un	2	jn jl	Y	Italy	1822	S	co
11261	intybácea *Lmk*	Endive-leaved	☼	○	un	2	jn jl	Y	Portugal	1816.	S	co

1637 BORKHAU'SIA *Dec* Borkhausia — *Compositæ* — *Sp* 7—9

11262	nicæénsis *Lmk.*	Nice		○	pr	1½	jn jl	Y	Nice	1823	S	co
11263	alpina *Lmk*	Alpine		○	pr	1	jl	Y	Italy	1739	S	co
11264	rúbra *Lmk.*	purple		○	pr	1½	jn jl	Pu	Italy	1632	S	co
11265	fœ'tida *Lmk*	fetid		○	un	1½	jn jl	Y	S Europe	1824.	S	co
11266	gravéolens *Lmk.*	stinking		○	un	1½	jn jl	Y	... .	1825	S	co
11267	áspera *Lmk*	rough		○	un	1½	jl au	Pa Y	Sicily	1797	S	co
11268	hispida *Lmk*	hispid		○	un	2	jl au	Y	S Europe	1798	S	co

1638 CRE'PIS *W* Crepis — *Compositæ* — *Sp* 13—23

11269	nemausénsis	Palestine		○	un		jn jl	Y	S Europe	1794	S	co
11270	Sprengeriána *W*	Sprenger's		○	un	1½	jn jl	Y	Italy	1823	S	co
11271	rigida *W.*	rigid	☼	△	un	4	my jl	Y	Hungary	1805.	D	co
11272	rígens *W*	stiff-leaved	☾	△	un	1	jl au	Y	Azores	1778	D	co
11273	hieracioides *W*	Hawkweed like	☼	△	un	1½	jl au	Y	Hungary	1816	D	co
11274	tectórum *P S.*	smooth		○	un	1½	jn s	Y	Britain	past.	S	co
11275	cinérea *P S*	red-stalked	☼	○	un	2	jn s	Y R	Europe	...	S	co
11276	agréstis *W.*	field		○	un	1½	jl au	Y	Hungary	1801	S	co
11277	biénnis *W*	biennial	☼	○	un	4	jn au	Y	England	ch pa.	S	co
11278	vírens *W*	green		○	un	½	jn jl	Y	Switzerl	1796	S	co
11279	Dioscóridis *W*	Dioscorides's		○	un	1	jn jl	Y	France	1772	S	co
11280	coronopifólia *W.*	fleshy-leaved		○	un	1	au s	Y	Madeira	1777.	S	co
§11281	filiformis *W.*	fine-leaved	☾	○	un	1½	jn jl	Y	Madeira	1777	S	co



History, Use, Propagation, Culture,

deserving cultivation, others are of little interest, but all most difficult to distinguish or characterize The species appear to intermix with the same facility as roses and willows.

Hieracium venosum, a very pretty plant, is called in America, *Poor Robin's Plantain*, and is believed to possess considerable medical powers.

1636. *Lagoseris.* From λαγος, a hare, and σερις, a lettuce. Obscure weed-like plants.

11228 Near H. villosum, but the leaves are broader
11229 Stem erect many-fl Leaves lanc toothed, Peduncles downy
11230 Stem at base and lvs. here and there covered with hairs, Fls. smaller and inv less vill than in H. villosum
11231 Stem erect many-fl. Leaves sessile ellipt lanc. toothletted smoothish glaucous beneath
11232 Radic. lvs. obl. narrowed at base acute caul. sub-amplexic. lanc. Pedunc glandular, Inv glandul. hairy
11233 Stem erect strigose hispid, Leaves lanceolate nearly entire strigose hispid, Flowers corymbose
11234 Stem pilose warted glandular upwards, Leaves sub-amplexicaul. oblong acute with long hairs beneath
11235 Stem erect branched hoary, Leaves obov. obl. hoary toothed towards the base, Hairs feathery
11236 Stem erect many-fl Leaves amplexicaul. somewhat rough toothed at edge, Pedunc downy

11237 Stem densely leafy, Leaves amplexicaul. 3 inches long 1¼ inch wide toothed hairy
11238 Stem erect simple, Leaves ovate cordate amplexicaul. toothletted ciliated, Fl. panicled, Involucre smooth
11239 Stem erect simple, Lvs ovate-obl smoothish acute sess sub-amplexic. toothed towards base, Fls. corymbose
11240 Stem erect branched, Leaves obl lanc smooth stalked deeply toothed in the middle, Fl. panicled
11241 Leaves narrowed at base sessile with long points toothed, Involucre downy hoary
11242 Stem erect simple, Leaves linear somewhat toothed, Fl in corymbose umbels
11243 Leaves broader than in the last and less toothed, Stem few-flowered
11244 Leaves mostly radical with long points toothletted hairy, Involucre hoary with long white and black hairs
11245 Stem branched shrubby, Leaves oblong toothed stalked, Peduncles sub-corymbose, Involucre downy

B *Leaves sublyrate, lyrate, pinnatifid*

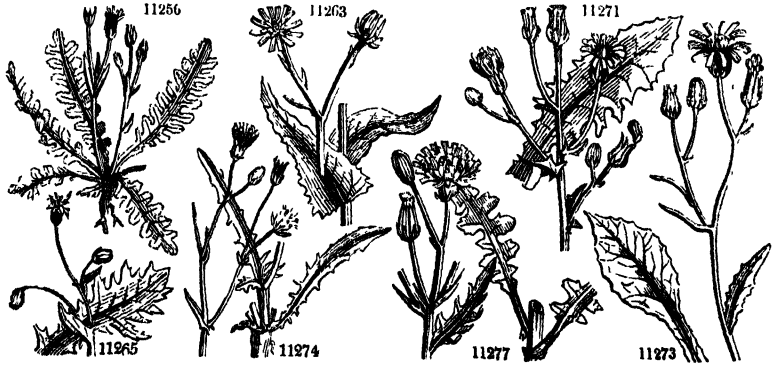
11246 Stem erect few-fl Peduncles and involucre pilose, Leaves oblong sub-pinnatifid at base
11247 Stem naked few-fl Pedunc. and involucre glandular downy blackish, Leaves oblong stalked toothed at base
11248 Stem procumbent branch at base few-fl. Ped and involucre downy, Lvs. ovate unequal at base toothletted stalked
11249 Stem erect leafy pilose simple, Fl panicled, Leaves ovate deeply toothed at base
11250 Stem simple, Leaves smooth obl narrowed at base runcinate toothed caul amplexicaul Involucre hispid
11251 Stem simple, Cauline leaves lyrate runcinate amplexicaul hairy, Fl panicled, Involucre hispid
11252 Stem erect panicled, Leaves ovate stalked deeply toothed at base, Flowers panicled
11253 Stem simple, Leaves smooth radical runcinate lyrate, cauline lanceolate, Involucre and pedunc hispid
11254 Leaves lanc runcinate roughish, Flowers in umbels
11255 Stem erect leafy simple smooth, Leaves sessile obl. acute finely toothed, Pedicels of panic. in bundles

11256 Leaves pinnatifid crenate, Scape naked few-flowered

11257 Leaves long lanceolate acute repand smooth, Fl cylindrical, Outer involucre very small
11258 Leaves runcin toothed smooth, Scape naked many-fl ascending, Involucre downy outer scales appressed
11259 Radic leaves and lower cauline pinnated lyrate, Flowers corymbose, Involucre and pedunc glandular
11260 Leaves scabrous radic lyrate runcinate, cauline lanc amplexicaul toothed at base, Involucre downy
11261 Lower lvs runcin pinnatifid. upper entire, Branches naked, Involucre downy with leaflets bristly at the back

11262 Leaves runcin pinnatifid pilose scabrous, Stem panicled, Leaves of involucre keeled channelled downy
11263 Leaves ovate cordate-sagittate amplexic toothed, Peduncles long 1-fl Involucre hispid outer membranous
11264 Radic leaves runcinate-lyrate cauline amplexicaul lanceol, lower pinnatifid, Involucre hispid
11265 Leaves runcinate pinnatifid scabrous sessile upper lanceol deeply cut at base, Involucre ovate angular
11266 Leaves amplexicaul pinnatifid hairy, Leaves of involucre downy hoary flat
11267 Leaves amplexicaul lower obl toothed, upper cut-toothed, Stem setose hispid, Involucre muricated in fruit
11268 Setose hispid, Leaves runcinate auricled at base upper lanc sagitt hastate, Involucre very hispid

11269 Leaves runcin lyrate bluntly toothed, Scape naked many-fl hispid, Lvs of involucre membranous at edge
11270 Hispid-scabrous, Leaves oblong amplexicaul remotely toothed, Stem divaricating branched
11271 Leaves rigid scabrous toothed radic obovate, caul sagittate amplexicaul Fl in racemose panicles
11272 Leaves hispid ovate obl finely and deeply biserrate, Scape naked corymbose
11273 Leaves smooth toothed. radical ovate-spatulate, cauline oblong sessile, Corymb terminal
11274 Lvs glab runcin · the upper ones linear-sagitt amplexic Stem glab. Panic subcorymb Involucre pubescent
11275 Leaves lanc · lower entire toothed smooth, cauline lanceolate amplexic Stem furrowed branched
11276 Radic leaves lanc runcinate cauline lanc toothed at base sagittate, Panicles corymbose
11277 Leaves hispid runcinate pinnatifid upper sessile lanc. toothed prickly upon the keel
11278 Leaves smooth lower remotely toothed, upper nearly entire subsagittate, Involucre downy
11279 Radic leaves lyrate runcinate cauline hastate lanceolate, Branches divaricating, Involucre downy
11280 Leaves pinnatifid segments linear, radical toothed, cauline entire, Stem panicled, Involucre downy
11281 Leaves linear-filiform entire smooth, Pappus sessile

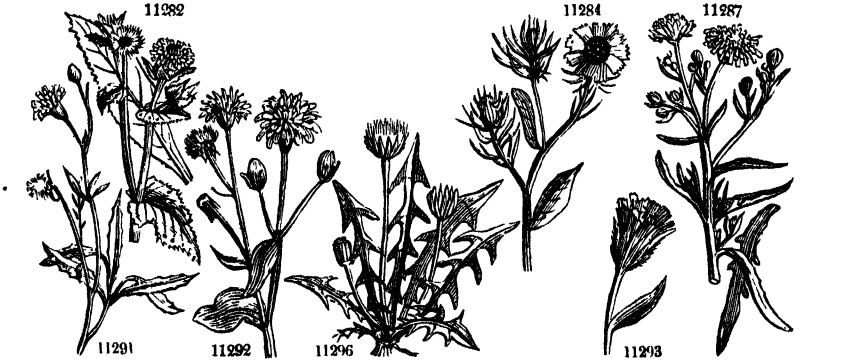


and Miscellaneous Particulars.

1637. *Borkhausia.* Named after Moritz Borkhausen, a German botanist, author of some useful works, especially upon the useful plants of Germany, published in one volume octavo, in 1790. Small annual plants, formerly referred to Crepis.

1638. *Crepis.* A name made use of by Pliny, to designate a plant of which he gives no description The plants of this genus are common weeds of the hedges of Europe

1639. HELMIN'THIA *J* Helminthia					*Compositæ*			*Sp* 1.					
11282 echioides *W.*	bristly	○	or	3	jn jl	Y		Britain	bor.fl.	S	co	Eng bot. 972
1640 MYO'SERIS *Link* Myoseris.					*Compositæ.*			*Sp* 1.					
11283 purpúrea *Lank*	purple	☿	△ or	1½	my jn	Pu		Tauria	1824.	D	co		
1641. TOL'PIS *W* Tolpis.					*Compositæ*			*Sp* 3.					
11284 barbáta *W*	purple-eyed	○	pr	2	jn jl	Y	Pu	France	1620.	S	co	Bot. mag. 35	
11285 umbellâta *Balbis*	umbelled	○	pr	2	jn jl	Y	Pu	Genoa	1820	S	co		
11286 altissima *Pers*	tall	○	pr	4	jn jl	Y		Piedmont	1823	S	co	Balb diss. 4. t 1	
1642 ANDRY'ALA *W* Andryala					*Compositæ*			*Sp* 6—10					
11287 cheiránthifólia *W.*	various-leaved	☤	△ pr	½	my o	Y		Madeira	1777.	D	co	L'Her st.35 t 18	
11288 pinnatífida *W*	wing-leaved	☤	◯ pr	¾	jl au	Y		Madeira	1778.	S	co		
11289 crithmifólia *W*	Samphire-leav	☤	◯ pr	¾	jn au	Y		Madeira	1778	S	co		
11290 nígricans *W*	dark-flowered		○ pr	½	jn au	Y		Barbary	1804.	S	co		
11291 ragusina *W.*	downy	☤	△ pr	½	jn au	Y		Archipel	1753.	D	co	Mil ic 1 t.146.f.2	
11292 lanáta *W*	woolly	☤	△ or	½	my jn	Y		S Europe	1732	D	s.p	Mil.ic.1 t 146 t 1	
1643 RO'THIA *W* Rothia					*Compositæ*			*Sp* 3—6					
11293 andryaloides *W*	Andryala-like	○	un	1	au	Y		Spain	1810	S	co	Gær sem 2 t.174	
11294 cheiránthifólia *W*	Stock-leaved	○	un	1½	jl au	Y		S Europe	1768	S	co		
11295 runcináta *W*	hoary	☤	◯ un	1	jl au	Y		S Europe	1711	S	co		
1644 KRI'GIA *W* Krigia					*Compositæ*			*Sp* 1					
11296 virginica *W*	Virginian	○	pr	¾	my jl	Y		N Amer	1811	S	co	Jour his n 1 t 12	
1645. HYO'SERIS *W* Swine's-Succory.					*Compositæ*			*Sp* 5—11					
11297 radiáta *W*	starry	☿	△ un	½	jn jl	Y		S Europe	1640	D	co	Plu. alm t 37 f 2	
11298 lúcida *W*	shining	☿	△ un	½	jn au	Y		Levant	1770	D	co	Schm ic t 39 41	
11299 scábra *W*	rugged		○ un	½	jl au	Y		Sicily	1789	S	co	Boc m 146 t 106	
11300 arenária *W.*	sand		○ un	½	jl au	Y		Morocco	1800	S	co		
11301 hispida *W*	hispid	☿	△ un	½	jl au	Y		Barbary	1821	S	co		
1646 HEDYP'NOIS *W* Hedypnois.					*Compositæ*			*Sp* 7—16					
11302 monspeliénsis *W*	branching		○ un	1	jn jl	Y		S Europe	1683.	S	co		
11303 rhagadioloides *W*	Nipplewort		○ un	1½	jl au	Y		S Europe	1773	S	co	Cav ic 1 t 43	
11304 crética *W*	Cretan		○ un	1	jn jl	Y		Candia	1731	S	co		
11305 coronopifólia *Tenore*	Buckshorn-leav'd		○ un	¾	jn jl	Y		Italy	1823	S	co		
11306 tubæformis *Tenore*	tube-stalked		○ un	¾	jn jl	Y		Naples	1824	S	co		
11307 mauritánica *W.*	Moorish		○ un	½	jn jl	Y		Barbary	...	S	co		
11308 pendula *W*	pendulous		○ un	1½	jn jl	Y		.....	...	S	co		
1647 ROBER'TIA *Roth* Robertia					*Compositæ*			*Sp* 1					
11309 taraxacoides *Dec*	Dandelion-lvd	☿	△ un	½	jn jl	Y		Corsica	1824.	S	co		
*1648 SERI'OLA *W.* Seriola					*Compositæ*			*Sp* 4—7					
§11310 lævigáta *W*	smooth		○ un	½	jl au	Y		Candia	1772.	S	co	Desf atl t 216	
11311 ætnénsis *W*	rough		○ un	¾	jl au	Y		Italy	1763	S	co	Jac obs 4 t 79	
11312 úrens *W*	stinging		○ un	½	jl au	Y		S Europe	1773.	S	co	Schmid ic t 32	
§11313 Alhátæ *Bivona*	Alhata's	☿	△ un	¾	jl au	Y		Ætna	1825.	D	co	Bivon cent.2. t.7	
1649 SOLDEVI'LLA *Lag* Soldevilla					*Compositæ*			*Sp* 1					
11314 setósa *Lag*	bristly	☿	△ cu	¾	my jn			Spain	1822	D	co		
*1650 HYPOCHÆ'RIS *W* Cat's-Ear					*Compositæ*			*Sp* 7—16					
§11315 helvetica *W*	one-flowered	☿	△ un	½	jn jl	Y		Switzerl	1779	D	s l	Jac ic 1 t 165	
§11316 maculáta *W*	spotted	☿	△ un	1	jn jl	Y		England ch hil.		D	s l	Eng bot 225	



History, Use, Propagatum, Culture,

1639 *Helminthia* An abridgment of *Helminthotheca*, a name employed for this genus by Vaillant. It is derived from ἑλμινς, a worm, and θηκη, a case. in allusion to the corrugated seeds, which may be fancied to resemble bundles of little worms The genus was united by Linnæus with Picris, but has been again separated by modern botanists.

1640 *Myoseris* So named from μυς μυος, a mouse, and σερις, lettuce, a name invented for the purpose of maintaining a resemblance in nomenclature with Hyoseris, Lagoseris, and other similar plants.

1641. *Tolpis* A name invented by Adanson, ahd supposed to have no meaning. Handsome annual flowers.

1642. *Andryala* A name, the meaning of which has not been discovered Rather pretty plants, natives of the south of Europe and north of Africa.

1643 *Rothia* Named by Schreber, in honor of Dr. A. G. Roth, author of a Flora Germanica, in 1788, Catalecta Botanica, in 1797, and other works It has been united with Andryala by Richard

1644. *Krigia* Named after Dr Krieg, a German botanist, who accompanied Mr. Vernon to America in search of plants See Vernonia A pretty little North American plant, with grassy leaves and bright yellow neat flowers

11282 Involucrum large prickly, Leaves repand

11283 Leaves runcinate pinnatifid · lobes oblong acute toothed spreading, Scape naked many-fl smooth

11284 Leaves obl toothed, Pedunc. 1-flowered
11285 Leaves lanc oblong lower sinuate-toothed, Pedunc proliferous
11286 Leaves obl linear scabrous toothed, Stem branched divaricating, Lower scales of involucre downy

11287 Leaves gland downy lower runcinate toothed, upper ovate lanc. entire, Stem and pedunc. glandular
11288 Leaves downy pinnatifid, Involucre downy pilose, Hairs rigid
11289 Leaves pinnated linear downy
11290 Leaves pinnatifid lyrate, Flowers corymbose aggregate, Pedunc and involucre hispid
11291 Leaves downy oblong lower toothed, Stem branched, Branches 1-flowered
11292 Leaves ovate woolly lower somewhat toothed, Corymb terminal, Pedunc about 2-flowered

11293 Stem branched at base diffuse, Leaves downy ovate lanceolate amplexicaul nearly entire
11294 Stem erect corymbose, Leaves somewhat downy linear sinuate-toothed sessile upper entire
11295 Stem erect corymbose, Leaves downy sessile lower obl runcinate, Pedunc. gland. villous

11296 The only species

11297 Scapes 1-fl. naked, Leaves smooth lyrate runcinate toothed term lobe trifid
11298 Scapes 1-fl naked, Leaves smooth lyrate runcinate somewhat fleshy segm angular imbricated
11299 Scapes 1-fl. naked thickened at end, Leaves lyrate pinnatifid toothed ciliated roughish
11300 Stem branched leafy diffuse, Leaves amplexicaul oblong toothed scabrous ciliated at edge
11301 Scapes 1-fl hispid, Leaves obl runcinate toothed hispid, Hairs forked

11302 Stem diffuse branched, Leaves obl toothed narrowed at base sessile, Scales of involucre in fruit smooth
11303 Stem diffuse branched, Lvs obl toothed narr at base sess Scales of involucre in fruit hairy
11304 Stem diffuse branched, Lvs obl toothed subcordate amplexicaul Scales of involucre in fruit smooth
11305 Related to the last, but the leaves are deeply toothed with 3-forked hairs
11306 Leaves somewhat toothed, Hairs simple, Pedunc very thick
11307 Stem erect branched, Lvs obl somew toothed subcordate amplex Scales of involucre in fruit alternately setose
11308 Stem erect panicled, Lvs obl hispid deeply toothed, Scales of involucre in fruit smooth muricated at the end

11309 The only species

11310 Smooth, Leaves obovate toothed
11311 Hispid, Leaves obovate somewhat toothed
11312 Stinging, Stem branched, Leaves toothed
11313 Radical leaves spatulate toothed pilose, Stem ascending smooth, Pappus stalked

11314 Hairy with very short stellate hairs and bristles, Lvs lanc entire, Pedunc. term thickened upwards 1-fl

11315 Stem simple leafy 1-fl Leaves lanc toothed
11316 Stem almost leafless solitary, Leaves ovate-oblong undivided toothed (spotted above)



and Miscellaneous Particulars

1645 *Hyoseris* From υς *us*, a hog, and σερις, the Greek name of the Lettuce, or of a plant resembling it. hogs-lettuce, in allusion to the abominably fetid smell of the plant.

1646 *Hedypnois* Under this name, a kind of wild endive, the medicinal qualities of which he much extols, is described by Pliny Dalechamp, his commentator, derives the word from ἡδυς, sweet, and πνεω, to breathe, on account of a pleasant flavor communicated to other vegetables in cookery But the modern genus, which consists of uninteresting weeds, has not been discovered to possess this quality

1647 *Robertia* Named by the authors of the Flore Française, after M Robert, a Corsican botanist. A small weedy plant resembling Dandelion

1648. *Scriola* A diminutive of σερις, chicory. Small chicoraceous weeds of the south of Europe S. Alliatæ is not, as its name would lead one to suspect, named from any smell of garlic which it possesses, but in honor of Prince Joseph Alliata, a Sicilian nobleman, and patron of Bivona Bernardi

1649 *Soldevilla* So named by Lagasca, apparently in honor of some botanist. A little Spanish weed with terminal solitary flowers.

1650. *Hypochæris.* From υπο, for, and χοιρος, a pig; *Porcelle*, Fr, for the same reason, viz., that pigs eat the roots with avidity. All the species are uninteresting weeds.

11317 **minima** *W.*	least		○	un	½	jl	au	Y	Barbary	1797.	S	co	
11318 **hispida** *W. en.*	bristly	♃	△	un	½	jl	au	Y	S. Europe	1804.	D	co	W.hor.be.1 t.46
11319 **glábra** *W.*	smooth		○	un	1	jl.au		Y	Britain	sa hea.	S	co	Eng bot. 575
§11320 **radicáta** *W.*	long-rooted	♃	△	un	1½	jn	s	Y	Britain	me.pa.	D	s l	Eng. bot. 831
11321 **Balbisii** *W.*	Balbis's	♃	△	un	1	jn	s	Y	Italy	1824.	D	co	

1651 LAPSA'NA. *W.* Nipplewort

						Compositæ.			*Sp* 6—10.				
11322 **fœ'tida** *W*	stinking	♃	△	un	½	jl	au	Y	Italy	1722.	D	co	Pl. rar.hu.1. t.49
Hyóseris fœ'tida P S.													
11323 **pusilla** *W*	least		○	w	¼	my.jn		Y	Britain	gra.fi.	S	co	Eng. bot. 95
Hyóseris minima E. B													
11324 **commúnis** *W*	common		○	w	1½	jn.jl		Y	Britain	clt gr.	S	co	Eng bot. 844
11325 **crispa** *W*	curled		○	un	1½	jl	au	Y	.....	1799	S	co	
11326 **intermédia** *Bieb*	intermediate		○	un	1½	my	jn	Y	Tauria	1823.	S	co	
11327 **lyráta** *W en.*	lyrate	♃	△	un	1½	jl.au		Y	Caspi Sea	1816.	D	co	

1652 ZACIN'THA. *W* Zacintha.

						Compositæ.			*Sp* 1				
11328 **verrucósa** *W*	warted		○	un	¼	jn	jl	Y BR	S. Europe	1633	S	co	Gæ se 2.t.157.f 7

1653 RHAGADI'OLUS *W* Rhagadiolus

						Compositæ			*Sp* 3—5.				
11329 **stellátus** *W.*	starry		○	un	1	jn	jl	Y	S. Europe	1633	S	co	
11330 **édulis** *W.*	heart-leaved		○	un	1	jn	jl	Y	Levant	1633	S	co	Sch han 3 t 225
11331 **Kœlpínia** *W*	small		○	un	¼	jl		Y	Davuria	1788	S	co	Pall.it 3 t.Ll f 2

1654 MOSCA'RIA *Fl per* Moscaria.

						Compositæ			*Sp* 1.				
11332 **pinnatífida** *Fl per*	pinnatifid		○	pr	½	jl	au	...	Chili	1823	S	co	

1655 CATANAN'CHE. *W* Catananche

						Compositæ			*Sp* 2—3				
11333 **cærúlea** *W*	blue	♃	△	or	3	jl	o	B	S Europe	1596	D	co	Bot mag 293
11334 **lutea** *W*	yellow		○	or	¼	jn	jl	Y	Candia	1640	S	co	Alp exot. t 286

1656 TRIPTI'LION *Fl per* Triptilion

						Compositæ			*Sp* 1—4				
11335 **cordifólium** *Lag*	cordate		○	pr	½	my	au	W	Chili	1824	S	co	Bot reg 853

1657 CICHO'RIUM *W* Succory.

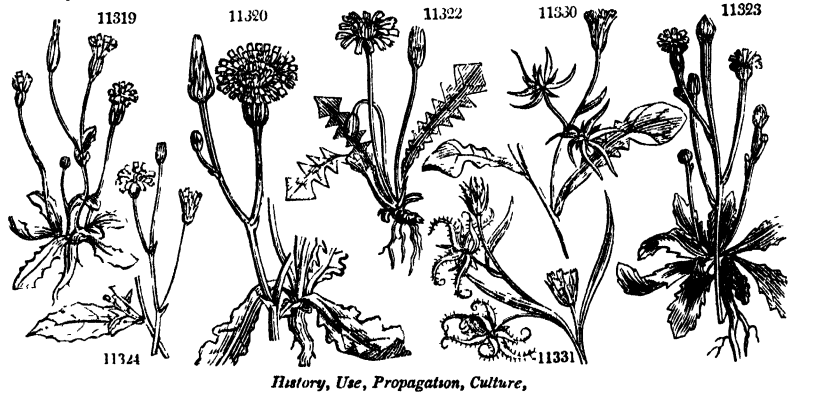
						Compositæ			*Sp* 5—7.				
11336 **Intybus** *W*	wild	♀	△	ag	2	jn	au	B	Britain	gra so	D	co	Eng. bot 539
11337 **púmilum** *W.*	dwarf		○	un	¼	jl	au	B		1709	S	co	Jac obs 4 t 80
11338 **Endivia** *W.*	Endive	♀	○	cul	2	jl	au	B	E. Indies	1548	S	r m	
11339 **divaricátum** *W*	branching		○	un	2	jl	au	B	Barbary	1798	S	co	
11340 **spinósum** *W*	prickly	♀	▯	un	2	jl	au	B	Candia	1633.	S	co	Bauh prodr t 62

1658 BACA'ZIA *Fl per* Bacazia

						Compositæ.			*Sp.* 1				
11341 **spinósa** *Fl per*	prickly	♃	⌊	or	4	my	jl	...	Peru	1825	C	p l	

1659 SCO'LYMUS. *W* Golden Thistle

						Compositæ			*Sp* 3—4				
11342 **grandiflórus** *Desf*	large-flowered	♃	△	or	3	my	jn	Y	Barbary	1820	S	co	Desf atl t 218
11343 **maculátus** *W*	annual		○	or	3	jl	au	Y	S. Europe	1633	S	co	Lam ill. t 659
11344 **hispánicus** *W*	perennial	♃	△	or	3	jl	s	Y	S Europe	1658	D	co	



History, Use, Propagation, Culture,

1651 *Lapsana* From λαπαζω, to purge The Lapsana, says Pliny, gently relaxes the body. L communis is called *nipple-wort*, in English, and *herbe aux mamelles*, Fr, having been formerly applied to the breasts of women to allay the irritation occasioned by nursing

1652. *Zacintha* A plant growing in the island of *Zacintha* or Zante It was formerly included in Lapsana, under the name of L Zacintha

1653 *Rhagadiolus* From ῥαγας, a slit, each division of the calyx being hollowed out in the middle so as to resemble a furrow, or little gutter

1654 *Moscharia* This plant gives out an agreeable smell of *musk* An annual plant, with stem-clasping pinnatifid deeply cut leaves, found in sandy waste places in Chili, where it is commonly called *Almizcelillo.*

1655 *Catananche* Vaillant explains the meaning of this word, by deriving it from the two Greek words, κατα, and αναγκη, necessity that is to say, a plant which compels admiration What is certainly known of its origin is, that it was employed by Dioscorides to designate a plant used by the women of Thessaly, in philtres and love potions The modern genus, which contains two or three species of ornamental border annuals, can have no reference to that of the ancients, one kind of which is believed to have been Ornithopus compressus, and another Astragalus pugniformis. John Bauhin calls Lathyrus Nissolia by the name of Catananche leguminosa

1656. *Triptilion* A genus instituted by the authors of the Flora Peruviana, and named from τρεις, three, and πτιλον, a feather, on account of the three divisions of the pappus The species mentioned above is a very pretty little annual, or rather biennial plant, flowering during all the winter months in any place whence frost is excluded, but it requires not to be kept too dry There is a fine species in Chili, with bright blue flowers, but it has not been yet introduced The inhabitants of South America employ the flowers of the different species as everlasting flowers, for which their dryness renders them very well adapted.

1657. *Cichorium.* In Greek κιχωρη De Theis's remarks are upon this subject excellent. Bodæus, he observes, Lonnæus, and others, have derived this name from κιω, to come, and χωριον, the field, that is to say,

11317 Leaves toothed roughish, Invol. hispid, Pappus of disk stipitate plumose: of the ray sessile setose
11318 Hispid, Calyxes hairy, Stem branched, Lvs. lanc toothed
11319 Nearly glab Invol. obl. imbricated, Stem branched somewhat leafy, Radical leaves dentato-sinuate
11320 Stem branched leafless glab. Pedunc. with small scales, Lvs. runcinate obtuse scab.
11321 Different from the last in having a smooth involucrum

11322 Stemless, Scape 1-fl. Leaves runcinate pinnatifid, Terminal lobe rhomboid

11323 Scape branched very thick and fistulose upwards, Leaves obovate oblong toothed

11324 Invol of the fruit angular, Stem panicled, Pedunc slender, Lvs. ovate petiolate angulato-dentate
11325 Caulescent branched, Leaves ovate stalked doubly toothed
11326 Caulescent branched, Lvs angular-toothed lower lyrate-pinnatifid, Pedunc and invol smooth
11327 Caulescent panicled, Stem downy below, Radical leaves lyrate toothed. upper lanc entire

11328 Rad. leaves lyrate acute, Cauline sagittate amplexicaul. toothed

11329 Fruit smooth spreading, Cauline leaves lanc undivided
11330 Fruit smooth spreading, Leaves lyrate
11331 Fruit prickly spreading, Leaves linear lanc. entire

11332 Leaves amplexicaul pinnatifid · segments deeply jagged

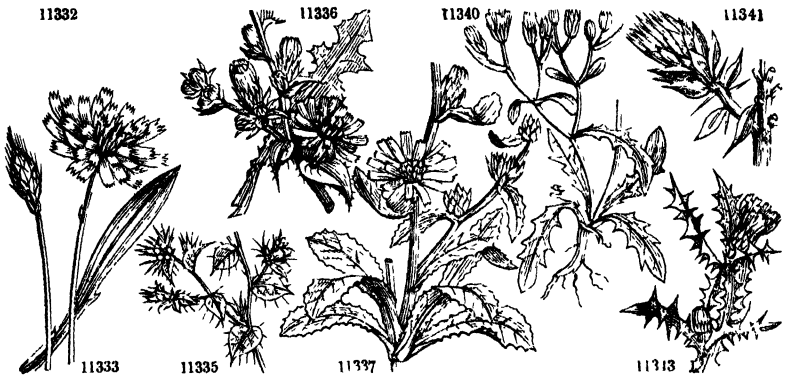
11333 Lower scales of invol ovate mucronate, Leaves villous linear sub-bipinnatifid at base
11334 Lower scales of invol lanc Leaves lanc toothed 3-nerved

11335 Leaves cordate spiny

11336 Flowers sess axill in pairs, Leaves runcinate
11337 Flowers axillary twin sessile, Leaves obovate toothed
11338 Pedunc axill twin · one long 1-fl, the other very short about 4-fl Flowers capitate
11339 Pedunc axill. twin one long 1-fl, the other very short about 2-fl Stem dichotomous, Rad. lvs. runcinate
11340 Flowers axill. solitary, Stem dichotomous, Branches naked spiny, Lvs lanc runcinate toothed

11341 Leaves obovate mucronate cartilaginous, Flowers solitary

11342 Fl solitary lateral sessile, Lvs decurrent, Stem subsimple villous erect
11343 Fl solitary, Lvs roughish smooth, Stem winged toothed
11344 Fl subaggregate, Lvs scabrous with the middle rib below hairy interruptedly decurrent



and Miscellaneous Particulars

it is a plant found wild in fields,—which grows every where but this etymology is overstrained. It is much more natural to suppose that the Egyptians, who used this plant in great quantities, would have communicated to the Greeks, along with the manner of using it, the name by which it was known in Egypt, which appears from Forskahl to be *chikoùryeh* Pliny remarked, that the Egyptians made their chicory of much consequence, and it is very well known that, at the present day, chicory or similar plants constitute half the food of the common people in Egypt In like manner, there can be little doubt that the specific terms Endivia and Intybus, are both derived from the Arabic name *hendibeh*

The leaves of Cichorium Intybus are employed by the French under the name of *Barbe du Capucine*, as a kind of winter salad, for which purpose the leaves are blanched like Endive The most common method of cultivating the plant, is to sow the seed in drills in the end of July, and to keep the plants about six inches apart, and quite free from weeds In the winter the roots are taken out of the ground and packed up in a warm cellar among earth, in layers, like bottles in a wine cellar, the crowns only of the roots being exposed. In a few days, young leaves are produced in great abundance, from the situation in which they are cultivated quite blanched, and, if not grown too rapidly, with an agreeable taste There is also a variety of C Intybus, called *Chichorée à café*, which is cultivated extensively in France for the sake of its roots, which are taken up in the winter season, cut into squares, dried artificially, and afterwards, being roasted, are ground along with their coffee, for which they serve as an adulteration There are those, however, who assert, that it is to this admixture of Succory root that the superior flavor of the French to the English coffee is to be attributed

1658 *Bacazia.* Named by the authors of Flora Peruviana, in honor of George Bacas, professor of botany at Carthagena.

1659. *Scolymus* The Greek name of a spiny plant, which appears to have been the modern artichoke. The word itself is derived from σκολος, a spine S hispanicus has simple tuniform roots, soft and sweet like Scorzonera, and equally good to eat. The leaves and stalk also abound with a milky juice, and the people of Salamanca eat it in the same manner as Cardoons The flowers are used for adulterating saffron

1660. ARC'TIUM *W.*	BURDOCK.					*Compositæ.*		*Sp* 3—4					
11345 **Lappa** *W.*	smooth-headed	○	w	3	jl.au	Pu	Britain	wa. gr.	S	co	Eng. bot. 1928
11346 **Bardana** *W.*	woolly-headed	○	w	3	jl au	Pu	Britain	wa. gr	S	co	Eng. bot 2478
11347 **minus** *Bueb.*	small	○	w	2	jl au	Pu	Europe	...	S	co	Schk.bot.3. t.227
1661. SERRA'TULA *W*	SAW-WORT.					*Compositæ.*		*Sp* 16—40					
11348 **tinctória** *W*	common	△	elt	3	jl o	Pu	Britain	woods.	D	co	Eng bot. 38
11349 **coronáta** *W*	Siberian	△	pr	5	jl au	Pu	Siberia	1739	D	co	Gmel sib 2 t 20
11350 **quinquefólia** *W*	five-leaved	△	pr	2	jl au	Pu	Persia	1804	D	p.l	Bot. mag. 1871
11351 **pygmæ'a** *W*	Pigmy	△	pr	1	jl au	Pu	Austria	1816.	D	co	Jac aust t 440
11352 **angustifólia** *W*	narrow-leaved	△	pr	1½	jl au	Pu	Siberia	1816	D	co	Gmel sib 2 t 33
11353 **salicifólia** *W*	Willow-leaved	△	pr	2	jl au	R	Siberia	1796	D	co	Gmel sib 2 t 37
11354 **centauroides** *W.*	Centaury-like	△	pr	1	jl au	Pu	Siberia	1804.	D	co	G sib 2 n 38 t 17
11355 **simplex** *B M*	simple	△	pr	1	jl au	Pu	Nepal	1821	D	co	Bot. mag 2482
11356 **argúta** *Fisch*	fine-toothed	△	pr	3	jl o	Pu	Hungary	1824	D	co	
11357 **radiáta** *Bieb*	rayed	○	pr	1½	jl	Pu	Hungary	1800	S	co	Pl rar hu 1 t 11
11358 **xeranthemoides** *Bieb*	amth.-headed	△	pr	1½	jl	Pu	Caucasus	1825	D	co	Gmel sib t 47 f 1
11359 **heterophýlla** *Desf*	various-leaved	△	pr	2	jl au	Pu	Dauphiny	1824	D	co	Vill delp 3 t 19
11360 **stœchadifólia** *Bieb*	woolly-headed	△	pr	1½	jl au	Pu	Tauria	1820	D	co	
11361 **Picris** *Bieb*	scarious	△	pr	1	jl au	Pu	Caucasus	1822	D	co	
11362 **áspera** *Lmk.*	rough	○	pr	1½	au s	Pu	Nepal	1821	S	co	
11363 **alâta** *W.*	winged	△	pr	2	jl au	Pu	.....	...	D	co	
1662 SAUSSU'REA *Dec*	SAUSSUREA					*Compositæ*		*Sp* 3—6					
11364 **elongáta** *Dec*	long	△	pr	2	jl au	Pu	Caucasus	1820	D	co	
11365 **alpina** *Dec*	Alpine	△	pr	½	jl au	Pu	Britain	al roc	D	p l	Eng bot 599
11366 **discolor** *Dec.*	discolored	△	pr	1	jl au	Pu	Switzerl.	1818	D	co	Hall helv t. 6
1663 CAR'DUUS *W.*	THISTLE					*Compositæ*		*Sp* 26—100					
11367 **leucógraphus** *W*	white-spotted	○	or	2	jn jl	Pu	Italy	1752.	S	co	Jac vind 3 t. 23
11368 **crassifólius** *W. en*	thick-leaved	△	or	2	jl	Pu	. ....	1805	D	co	
11369 **arábicus** *W.*	Arabian	○	or	½	jl au	Pu	Arabia	1789	S	co	Jac ic 1 t 166
11370 **nútans** *W*	musk	○	or	2	jl au	Pu	Britain	gra fi	S	co	Eng. bot 1112
11371 **carlinoides** *W*	Pyrenean	○	or	1	jl au	Pu	Pyrenees	1784	S	co	Gouan ill t. 23
11372 **argentátus** *W*	silvery	○	or	1	jl au	Pu	Egypt	1789	S	co	Jac.ho.vin t 192
11373 **onopordoides** *Bieb*	Onopordum-like	△	or	1½	jl au	Pu	Iberia	1818	D	co	
11374 **carlinæfólius** *W*	Carline-leaved	○	or	2	jl au	Pu	Pyrenees	1804	S	co	
11375 **acanthoides** *W.*	welted	○	w	2	jn au	Pu	Britain	wa. gr	S	co	Eng bot 973
11376 **tenuiflórus** *W*	slender-flowered	○	w	2	jn au	Pu	Britain	banks	S	co	Eng bot 412
11377 **crispus** *W*	curled	○	or	2	jl au	Pu	Europe	1804	S	co	Flor dan. t 621
11378 **hamulósus** *W.*	spiny-hooked	○	or	5	jn jl	Pu	Hungary	1802	S	co	
11379 **cándicans** *W*	hoary	○	or	3	jl au	Pu	Hungary	1805	S	co	Pl. rar hu 1 t 83
11380 **Personáta** *W*	cut-leaved	○	or	4	jl au	Pu	Austria	1776	S	co	Jac aust 4 t 348
11381 **polyánthemus** *W*	many-flowered	○	or	2	jn jl	Pk	Rome	1739	D	co	Trium obs t.103
11382 **orientális** *W en*	oriental	△	or	2	jl	Pu	Iberia	1804	D	co	
11383 **paniculátus** *W*	panicled	△	or	2	jn jl	Pu	S Europe	1781	D	co	
11384 **pycnocéphalus** *W*	Italian	△	or	1½	jl s	Pu	S Europe	1739	S	co	Jac vind. 1 t 44
11385 **cyanoides** *W.*	blue-bottle-lvd	△	or	2	jl au	R	Siberia	1778	D	co	Gmel sib 2 t 15
11386 **arctioides** *W.*	pinnated	△	or	2	jl au	Pu	Carniola	1804	D	co	Scop carn t 53
11387 **alpéstris** *W*	Alpine	△	or	1½	jl au	Pu	Croatia	1805	D	co	
11388 **deflorátus** *W*	various-leaved	△	or	6	jl s	R	Austria	1570	D	co	Jac aust 1 t 89
11389 **parviflórus** *W.*	small-flowered	△	or	2	jn jl	Pu	S Europe	1781	D	co	
11390 **nitidus** *W*	glossy	△	or	2	jl	Pu	Hungary	1806	D	co	Pl rar hu 1 t 52
11391 **cerinthoides** *W.*	Honeywort-lvd	△	or	2	jl au	Pu	S. Europe	1739	D	co	Cav ic 3. t 226



History, Use, Propagation, Culture,

1660 *Arctium* From ἄρκτος, a bear, (*arth*, Celtic); on account of the rough bristly fruit, which may be compared to the coarse hair of a bear Lappa is derived from *llap*, a hand, in Celtic, because it lays hold of every thing near it. The burdock is too familiar to every schoolboy to need illustration It is equally common in Europe and Japan, by road sides and on ditch banks. Few quadrupeds, except the ass, will eat the plant, but birds feed on the seeds, and snails and caterpillars on the leaves The stems, stripped of their rind before the flowers appear, may be eaten, either boiled or raw, with oil and vinegar. Withering says, a decoction of the roots is esteemed by some equal to that of Sarsaparilla. Burnt green, between the time of flowering and seeding, three pounds of the ashes produced sixteen ounces of very white alkaline salt, as good as the best potash.

1661. *Serratula.* A diminutive of *serra*, a saw, the leaves being edged with cutting teeth. Plants with the habit and qualities of thistles Serratula tinctoria dyes cloth of a yellow colour.

1662. *Saussurea.* Named in honor of the celebrated Swiss philosopher Horace Benedict de Saussure, who, among his other acquirements, possessed a considerable knowledge in botany He died in 1799, in the fifty-ninth year of his age.

1663. *Carduus.* This word appears to be derived from *ard*, a point, in Celtic, in allusion to the numerous

11345 Leaves cordate petiolate
11346 Cauline leaves cordate stalked entire, Involucre cobwebbed downy
11347 Involucre woolly, inner scales subulate somewhat colored scarcely longer than outer, Racemes axillary paniculed

11348 Leaves sharply serrate glabrous pinnatifid: the terminal lobe the largest, Flowers in a small clust. umbel
11349 Leaves serrated unequally pinnate of about 5-pairs, Pinnæ confluent, Peduncle 1-flowered Fl rayed
11350 Lvs. serrated unequally pinnate of about 2-pairs, Pinnæ confluent, Peduncle 1-flowered Inner scales of involucre long
11351 Lvs. linear lanceolate hirsute revolute at edge, Stem 1-flowered villous. Scales of involucre ovate-lanceolate appressed [colored
11352 Leaves linear entire hirsute, Fl. terminal corymbose
11353 Leaves linear entire downy beneath revolute at edge, Corymb fastigiate
11354 Leaves pinnatifid oblique acute smooth unarmed, Scales of involucre mucronate: inner scarious
11355 Leaves pinnatifid: lobes distant, Stem nearly simple 1-flowered, Involucre globose squarrose
11356 Like S tinctoria, but the lower leaves are oval and entire
11357 Leaves pectinate-pinnatifid naked segments linear unarmed, terminal ovate, Scales of involucre ovate mucronate
11358 Involucre unarmed somewhat awned radiate, Leaves pinnatifid
11359 Leaves ovate pinnatifid toothed unarmed hoary beneath upper sessile Stem 1-flowered Scales of involucre ovate unarmed
11360 Leaves linear entire downy beneath, Corymb nearly simple, Involucre oblong ovate downy
11361 Involucre ovate scales roundish scarious at edge, Leaves lanceolate lower somewhat toothed at base
11362 Stem somewhat downy, Lvs. oblong acute narrowed at base serrated, Fl subsessile, Involucre unarmed
11363 Lvs. downy beneath somewhat toothed: radical cordate stalked, Cauline lanceolate, decurrent, Involucre squarrose

11364 Involucre corymbose somewhat downy, Leaves fleshy smooth radical lyrate hastate, Cauline hastate
11365 Leaves villous beneath toothed radicate ovate-lanceolate Flowers terminal somewhat umbelled
11366 Lvs. downy beneath toothed, radicate ovate-subcordate, cauline ovate-lanceolate Fl terminal somewhat umbelled

11367 Leaves decurrent toothed spiny, Peduncle naked very long 1-flowered Involucre spiny inclining
11368 Lvs half decurrent oblong spiny-toothed somewhat fleshy smooth glaucous beneath, Peduncle very long 1-flowered
11369 Leaves oblong decurrent sinuate spiny with white veins villous beneath, Fl sessile clustered, Involucre cylindrical
11370 Leaves decurrent spinous, Fl drooping, Scales of the involucre lanceolate cottony: outer ones spreading
11371 Leaves decurrent pinnatifid downy segments palmate spiny, Flowers clustered
11372 Leaves decurrent runcinate spiny, Peduncle somewhat downy 1-flowered Involucre ovate mucronate unarmed
11373 Leaves decurrent sinuate spiny smooth, Peduncle short subcorymbose downy
11374 Leaves decurrent spiny glabrous, Peduncle erect 1-flowered unarmed
11375 Lvs decurrent sinuated spinous, Involucre globose nearly sessile its scales linear slightly recurved [lanceolate erect
11376 Lvs decurrent sinuated spinous somewhat cottony beneath, Involucre nearly cylindrical clustered sessile their scales
11377 Lvs decurrent oblong sinuated spiny at edge downy beneath, Fl stalked clustered terminal
11378 Lvs decurrent lanceolate pinnatifid toothed spiny villous beneath, Peduncle 1-flowered, downy, Scales of involucre subulate spiny
11379 Leaves half decurrent lanceolate pinnatifid spiny downy beneath, Peduncle scaly downy
11380 Caul. lvs half decurrent oblong undivided spiny toothed subvillous beneath radicate pinnatifid at base
11381 Leaves decurrent sinuated ciliated naked beneath, Fl stalked heaped
11382 Leaves half decurrent pinnatifid toothed spiny white with down beneath, Fl subsessile terminal clustered
11383 Leaves half decurrent toothed sinuate spiny smooth, Flowers paniculed
11384 Leaves decurrent pinnatifid sinuated downy spiny, Peduncle naked downy, Involucre deciduous
11385 Lvs downy beneath upper finely decurrent linear Stem 1-flowered Scales of involucre lanceolate mucron downy
11386 Lvs. decurrent deeply pinnatifid segments toothed upwards spiny with setaceous ciliæ at end
11387 Leaves half decurrent pinnatifid acuminate: segments 2-lobed ciliated spiny, Peduncle downy
11388 Leaves half decurrent pinnatifid-serrate somewhat spiny ciliated naked radicate undivided, Peduncle very long
11389 Leaves adnate at base lanceolate naked eroded ciliate-spiny unarmed [woolly
11390 Leaves unarmed radicate ovate toothed somewhat cut at base, Cauline sessile pinnatifid linear
11391 Leaves naked radical oblong entire, cauline lanceolate somewhat toothed, Scales of involucre ovate mucronate



and Miscellaneous Particulars.

points with which it is beset. C. marianus, the milk-thistle, derived its name from the Virgin Mary, some of whose milk is said to have fallen upon the leaves of the plant, and changed them to white. An extensive genus of rather handsome weeds. C Personata is said to have been so called, because its ample leaves were formerly used as a mask (*persona*) Some of the gigantic species make handsome ornaments for the shrubbery, but the greatest number are nuisances to the husbandman, some on account of their deep vivacious roots, which cannot be eradicated without extreme difficulty, but the greater number because of their bulky herbage, and the extensive dissemination of their seeds by the wind.

The footstalks of the leaves of most or all of the species of this and the allied genera might be eaten in the manner of Cardoons, if similarly blanched. The dried flowers of C. arabicus and nutans will curdle milk. The seeds of all the species of Serratula, Cnicus, Onopordum, and similar genera, are greedily eaten by small birds, especially the finches

The Carduineæ of M Cassini differ from Carlineæ of the same author, in the filaments being hairy or papillose, from Centaurieæ in the structure of ovarium and of pappus, and from Echinopseæ, to which they bear a general resemblance, by many very important characters. The species inhabit Europe, Asia, and Africa; there are scarcely any in America, and none in the southern hemisphere.

1664	**SILYBUM.** *Gærtn*	Silybum				*Compositæ.*	*Sp 2—5.*					
11392	**marianum** *Gærtn.*	milk	☿	○	w	5	jl	Pu	Britain banks.	S	co	Eng. bot 976
11393	**cérnuum** *Gærtn.*	nodding	☿	△	or	4	jn jl	Y	Siberia 1755.	D	co	Gmel. sib.2. t.19
*1665.	**CNI'CUS.** *W*	Horse Thistle.				*Compositæ.*	*Sp 52—114.*					
11394	**palústris** *W*	marsh	☿	○	w	3	jl au	Pu	Britain m pas.	S	co	Eng bot 974
11395	**cánus** *W.*	hoary	☿	△	or	4	jl au	Pu	Austria 1633.	D	co	Jac aust 1.t 42.3
11396	**Acárna** *W*	winged		○	or	2	jl s	Pu	Spain 1683.	S	co	Cav. ic. 1 t. 53
11397	**monspessulánus** *W.*	Montpelier	☿	△	or	2	jn jl	Pu	Montpel 1596.	D	co	
11398	**lanceolátus** *W.*	common	☿	○	w	3	jn s	Pu	Britain banks	S	co	Eng. bot. 107
11399	**férox** *W*	prickly	☿	○	or	3	jl au	Pu	S Europe 1683	S	co	All ped 1 t. 50
11400	**ciliátus** *W*	fringed	☿	△	or	3	au	Pu	Siberia 1787.	D	co	Mur co got 6.t.5
11401	**erióphorus** *W*	woolly-headed	☿	○	or	2	jl au	Pu	Britain ch pa.	S	co	Eng. bot. 386
11402	**discolor** *W*	two-colored	☿	○	or	2	jl au	Pu	N Amer 1803	S	co	
11403	**altissimus** *W*	giant	☿	△	or	6	au s	Pu	N Amer 1726	D	co	Dil elt t 69 f 80
11404	**praténsis** *W*	meadow	☿	△	w	3	jn	Pu	Britain m.pas	D	co	Eng bot 177
11405	**heterophýllus** *W*	melancholy	☿	△	or	2	jl au	Pu	Britain m al p.	D	co	Eng. bot 675
11406	**helenioides** *W*	Elecampane-lv	☿	△	or	6	jl au	Pu	Siberia 1804	D	co	All ped. t. 13
11407	**serratuloides** *W*	Saw-wort-like	☿	△	or	3	jn o	Pu	Siberia 1752.	D	co	Jac aust. 2 t.127
11408	**elátior** *Link*	tall	☿	△	or	6	jn o	Pu	 1823	D	co	
11409	**uliginósus** *Bieb*	swamp	☿	△	or	3	jn jl	Pu	Caucasus 1820	D	co	
11410	**pannónicus** *W*	Hungarian	☿	△	or	3	jl s	Pa.pu	Austria 1816	D	co	
11411	**strictus** *Tenore*	upright	☿	△	or	2	jl s	Pu	Naples 1819	D	co	
11412	**desertórum** *Fisch*	desert	☿	△	or	3	jl s	Pu	Siberia 1824	D	co	
11413	**serrulátus** *Bieb*	serrulate	☿	△	or	3	jl au	Pu	Tauria 1820	D	co	
11414	**lanifórus** *Bieb*	woolly-flowered	☿	△	or	2	jl au	Pu	Tauria 1819	D	co	
11415	**arachnoideus** *Bieb*	cobwebbed	☿	△	or	2	jl au	Pu	Tauria 1818	D	co	
11416	**strigósus** *Bieb*	strigose	☿	○	or	2	au s	Pu	Caucasus 1823.	D	co	
11417	**hórridus** *Bieb*	horrid	☿	○	or	1½	au s	Pu	Iberia 1823	S	co	
11418	**scleránthus** *Bieb*	hard-headed	☿	○	or	2	jl au	Pu	Caucasus 1820	S	co	
11419	**echinátus** *W*	echinate	☿	△	or	1	jl au	Pu	Barbary 1817	D	co	
11420	**mérmis** *W*	unarmed	☿	△	or	3	jl au	Pu	 1824	D	co	
11421	**ambíguus** *Pers*	doubtful	☿	△	or	2	jl au	Pu	M Cenis 1820	D	co	
11422	**orgyális** *W*	lofty	☿	△	or	6	jl au	Pu	 1823	D	co	
11423	**setósus** *Bieb*	setose	☿	○	or	1½	jn jl	Pu	Silesia 1822	S	co	
11424	**carthamoides** *W*	Carthamus-like	☿	△	or	2	jl au	Pu	Siberia 1818.	D	co	
11425	**arvénsis** *Ph.*	corn or way	☿	△	w	2	jl	Pu	Britain ro.sid	D	co	Eng bot. 975
	Serrátula arvénsis W											
	Carduus arvénsis E B											
11426	**rivulâris** *W.*	river	☿	△	or	3	jl au	Pu	Hungary 1804	S	co	Jac aust 1. t 91
11427	**pauciflórus** *W.*	few-flowered	☿	○	or	2	jl au	Pu	Hungary 1816	D	co	Pl rar hu 2 t 161
11428	**tatáricus** *W*	Tartarian	☿	△	or	1½	jl au	W	Siberia 1775	D	co	Jac aust 1 t 90
11429	**rigens** *W.*	upright Alpine	☿	△	or	1½	jl au	Pu	Switzerl 1775	D	co	Act helv 4 t 16
11430	**carniólicus** *W.*	Carniolian	☿	△	or	2	jl au	Pa Y	Carniola 1792	D	co	Sc ca n 1005 t.52
11431	**oloráceus** *W*	pale-flowered	☿	△	or	3	jl au	Pa Y	Europe 1570.	D	co	Fl dan 860
11432	**munítus** *W en.*	armed	☿	△	or	3	jl au	Pu	Caucasus 1816	D	co	
11433	**obvallátus** *Bieb.*	bracteate	☿	△	or	3	jl au	Pu	Caucasus 1816	D	co	
11434	**Erisithales** *W*	clammy	☿	△	or	3	jn au	Pu	France 1752	D	co	Jac aust 4 t.310
11435	**ochroleúcus** *W*	pale-yellow	☿	△	or	2	jl	Pa Y	Switzerl 1801	D	co	
11436	**tuberósus** *W.*	tuberous	☿	△	or	3	au o	Pu	England woods	D	co	Lob ic t 10 f 2
11437	**acaúlis** *W.*	dwarf	☿	△	pr	1	jl au	Pu	Britain gra pa	D	co	Eng bot 161
11438	**Casabónæ** *W.*	Fish-bone	☿	◫	or	2	jn.au	Pu	S Europe 1714	S	p l	Schmd ic t 51,52
11439	**áfer** *W*	Barbary	☿	◫	or	2	jn jl	Pu	Barbary 1800.	S	co	Bot mag. 2287



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1664. *Silybum* A name under which Greek writers describe a plant not well known at present. Sprengel refers it to S marianum. This plant was formerly cultivated, and the young leaves used in spring as a salad, or boiled as pot greens, the young stalks, peeled and soaked in water, to extract a part of their bitterness, were also eaten, and were said to be excellent. In the spring of the second year, the root is prepared like salsafy or skirret, and the receptacle of the flower is pulpy, and eats like that of the artichoke In Apulia the whole plant is much used as fodder for cattle.

1665 *Cnicus* This is a name under which Dioscorides describes a prickly rough plant; derived from κνίζω, to prick. It is now referred to a tribe of plants having such characters in an eminent degree. Acarna and Erisithales are both names by which the ancients distinguished plants, either the very same as those now so called, or very similar to them. The tender stalks of C palustris, as of most of the species, being peeled, are eatable either raw or boiled C arvensis is well known as one of the most troublesome weeds in arable land. It is never found, however, in very sandy, gravelly, or peaty soils; but generally in such as are loamy and dry. An instance is given in the Farmer's Magazine, of the descending roots of this plant having been dug out of a quarry nineteen feet long, nor is it less remarkable for its horizontal roots Mr Curtis planted about two inches of a root in his garden in April, and by November following it had thrown out under ground stolones on every side, some of them eight feet long; some of these stolones had thrown up leaves five feet

11392 Lvs. amplexicaul. waved spinous : radic. ones pinnati. Scales of invol subfoliac. recurved spinous at margin
11393 Leaves downy beneath ovate toothed. radical cord. Petioles winged toothed, Invol subsolitary cernuous

11394 Lvs. decurrent scabr pinnatif spinous, Invol ovate clustered their scales ovate-lanc. mucro. appressed
11395 Lvs. halt decurrent somew hoary lanc ciliate spiny, Pedunc naked downy solit. Scales of invol. appressed
11396 Leaves decurrent lanc hoary toothed spiny, Fl aggregate involucrate, Invol with pinnated spines
11397 Lvs. decurrent lanc smooth subrepand uneq. ciliated, Pedunc. naked downy alternate [lanc. spreading
11398 Lvs decurr. hispid pinnatif their segm generally 2-lobed spreading spinous, Invol ov toment. their scales
11399 Lvs. subdecurr pinnatif : segm 2-lobed spreading spiny villi beneath, Invol. hemispher sessile
11400 Lvs amplexicaul. hispid pinnatif segm 2-lobed spreading spiny downy beneath, Invol. ovate
11401 Leaves sess pinnatif every other segm pointing upwards spin scabr Involucres spherical woolly
11402 Leaves sess pinnatif hairy downy beneath segm. 2-lobed spreading spiny, Invol globose with cobweb down
11403 Leaves sess obl. lanc. scabrous downy beneath toothed ciliated radic pinnatifid, Invol bracteate ovate
11404 Leaves sess lanc. waved at the edge and unequally spin pubesc. cottony beneath, Flowers mostly solitary
11405 Lvs. amplexic lanc ciliato-dentate undivided or laciniated white and downy beneath, Fl mostly solitary
11406 Lvs subcordate amplexicaul. lanc ciliated downy beneath lower somewhat cut, Fl clustered
11407 Lvs. lanc sessile ciliated strigose beneath · radical sinuated, Scales of invol recurved at end
11408 Lvs pinnatifid with strong spines somewhat downy beneath, Fl sess aggregate, Lvs of invol spiny
11409 Lvs halt decurr obl sinuate toothed spiny hoary beneath, Heads close together with appressed scales
11410 Leaves halt decurrent lanc entire ciliated, Pedunc very long 1-fl woolly
11411 Very like C arvensis, but the leaves are decurrent
11412 Stem somew downy, Lower lvs sinuate-toothed with strong spines rough above finely downy beneath
11413 Lvs amplexic hispid pinnatifid segm 2-lobed spreading spiny downy beneath, Heads ov glabrous spiny
11414 Lvs. amplexic hispid pinnatif. segm 2-lobed spread spiny downy beneath, Heads ov. cobwebbed with down
11415 Lvs amplexic hispid pinnatif segm 2-lobed spread spiny beneath naked subvillous, Heads ov cobwebbed
11416 Lvs amplexic. hispid pinnatifid segm 2-lobed spreading spiny naked beneath, Heads ov glabrous
11417 Lvs amplexicaul hispid pinnatifid prickly segm angular lobed spiny, Heads nodding cobwebbed
11418 Stem branched many-fl Heads terminal solitary spiny at base, Lvs amplexicaul sinuate toothed spiny
11419 Leaves sess pinnatifid hispid woolly beneath segm 2-lobed spreading spiny, Invol ovate woolly
11420 Leaves sess lanc. cut-toothed. radical pinnatifid, Scales of invol ovate lanc membranous at edge
11421 Leaves ciliate spiny downy beneath lower stalked obl acum. subsinuate, upper pinnatifid auricled
11422 Like the last, but the leaves of involucrum are reflexed
11423 Leaves obl smooth serrulate with bristly ciliæ blunt mucro Stem corymbose
11424 Leaves unarmed sess obl toothed · radical undivided and pinnatifid, Invol. scarious villous
11425 Leaves sess pinnati spin Stem panicled, Invol ovate, Scales appressed mucronated

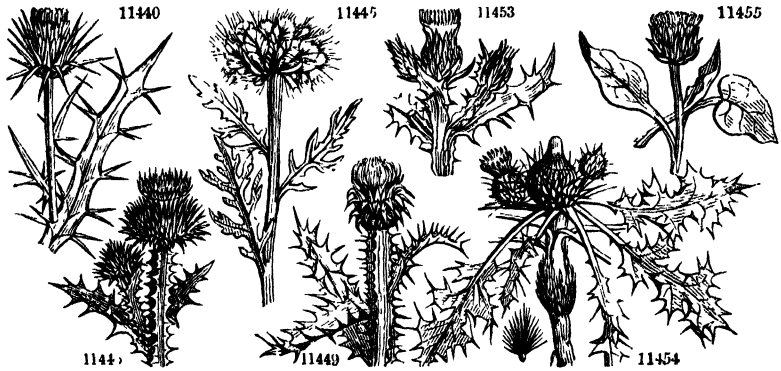
11426 Leaves toothed ciliated naked cauline amplexicaul lower and radical pinnatifid, Fl clustered capitate
11427 Leaves amplexicaul ovate sublyrate ciliate serrate scabrous radic lyrate, Fl clustered
11428 Leaves amplexicaul obl lanc toothed ciliate-spiny, Pedunc 1-fl Invol bracteate
11429 Leaves sess pinnatifid segm cut serrate spiny at edge, Invol bracteate, scales ovate appressed
11430 Leaves cordate amplexicaul ovate obl toothed ciliated radical obl blunt ciliated sinuate
11431 Leaves amplexicaul cord pinnatif. ciliate serr Fl terminal subracemose bracteate, Bractes colored ovate
11432 Leaves amplexicaul obl pinnatif toothed spiny hispid above downy beneath, Term fl sess axill. stalked
11433 Leaves amplexicaul pinnatif toothed spiny glabrous, Fl term aggreg sess surrounded by colored bractes
11434 Leaves amplexicaul pinnatifid ciliated, Pedunc cernuous, Invol glutinous scales lanc spreading
11435 Leaves amplexic pinnati-downwards ciliated pinnæ lanc 3-nerved, upper confluent, Pedunc cernuous
11436 Leaves amplexicaul pinnatifid ciliate-spiny. segm 2-lobed toothed upwards at the base
11437 Stemless, Invol glabrous
11438 Leaves sess lanc entire downy beneath with triple spines at the edge, Fl axill sessile
11439 Leaves sess lanc downy beneath subrepand lobes emarg with 2 spines, Fl stalked subcorymbose



and Miscellaneous Particulars

from the original root. The whole together, when dug up and washed, weighed four pounds In the spring following, it again made its appearance, on or about where the small piece was originally planted. There were between fifty and sixty young plants, which must have sprung from fragments of the roots that had eluded the gardener's search, though he was particularly careful in extracting them. From these facts it may readily be conceived how difficult it is to eradicate this weed from arable land, a naked fallow, with frequent and deep ploughing, will not accomplish it, unless the season is more than usually dry Laying land down to grass, keeping it in that state seven or eight years, and during the whole time pulling up every shoot as soon as it appears, is found fully more effectual than a naked fallow But the plant is so common by road sides, and seeds so abundantly, that it is hardly possible to effect its extermination In common field lands, and others indifferently cultivated, it often forms the larger half of the produce, and formerly used to be pulled when beginning to come into flower, and given as food to horses and cows Those who pull this weed require to be furnished with strong gloves, or thistle pincers (*Ency. of Agr* § 2394) Some English botanists seem doubtful if horses and cows will eat it; but those who know any thing of the history of agriculture in Scotland will recollect, that before the introduction of naked fallows and turnips, it formed the *supporting* of housed cattle, during five or six weeks of every summer The ashes of the plant yield a very pure vegetable alkali. C. canus has fleshy white roots like the skirret, and may be dressed and eaten

11440 diacánthus *Lab*	two-spined	☿	□	or	3	jn jl	Pu	Syria	1800	S	co	Lab.ic pl sy.2.t.3
11441 stellátus *W*	starry	☿	○	or	2	jn jl	Pu	Italy	1665	S	co	Triumf.obs t 96
11442 syríacus *W*	Syrian		○	or	1½	jl au	W	Levant	1771.	S	co	Camer hort t 10
11443 spinosíssimus *W*	feathery-head.	☿	△	or	3	jn au	Pa.Y	Switzerl.	1759.	D	co	Bot mag 1366
11444 centaurioídes *W*	Artichoke-lvd.	☿	△	or	3	jl au	Pu	Pyrenees	1640	D	co	Moris s 7 t 25 f 2
11445 umiflórus *W.*	one-flowered	☿	△	or	2	jl au	Vi	Siberia	1796.	D	co	Gmel. sib 2. t 38
1666 ONOPORDUM *W*	Cotton Thistle					*Compositæ.*		*Sp* 9—14				
11446 Acánthium *W.*	woolly	☿	◯	or	6	jl au	Pu	Britain	gra.ba.	S	co	Eng. bot. 977
11447 taúricum *W*	Taurian	☿	◯	or	12	jl.au	Pu	Tauria	1800.	S	co	
11448 macracánthum *W.*	long-spined		○	or	10	jl au	Pu	Barbary	1798.	S	co	Schou maroc t 5
11449 illyricum *W*	Illyrian	☿	◯	or	6	jl.au	Pu	S Europe	1648	S	co	Jac vind.2. t.148
11450 deltoídeum *W.*	Siberian	☿	△	or	12	au	Pu	Siberia	1784.	D	co	
11451 græ'cum *W.*	Grecian		○	or	10	jn jl	Pu	Levant	1799	D	co	Gouan ill. t. 25
11452 cynaroídes *Stev*	artichoke	☿	◯	or	10	jn	W	Caucasus	1823	S	co	
11453 arábicum *W.*	Arabian	☿	◯	or	8	jl	Pu	S Europe	1686	S	co	Jac vind 2. t.149
11454 acaúlon *W*	dwarf	☿	◯	or	½	jl.au	W	.....	1739.	S	co	Jac. ic 1. t. 167
1667 BERARDIA *Vill*	Berardia.					*Compositæ*		*Sp.* 1.				
11455 subacaúlis *P S* *Arctium lanuginósum* Dec.	round-leaved	☿	△	pr	1½	jl au	Pu	Italy	1791.	D	co	Vil dauph 3 t.22
*1668 CYNARA *W.*	Artichoke					*Compositæ*		*Sp* 7—10				
11456 Scólymus *W*	garden	☿	△	cul	8	au s	Pu	S Europe	1548	D	co	Blackw. t. 548
11457 hórrida *W*	Madeira	☿	△	or	6	au s	Pu	Madeira	1778	D	co	
11458 Cardúnculus *W.*	Cardoon	☿	△	cul	5	au s	Pu	Candia	1658	D	co	Tabern ic 1075
11459 húmilis *W.*	dwarf	☿	△	un	1½	jl au	B	Spain	1613.	D	co	Plu alm t 81 f 2
§11460 acaúlis *W.*	stemless	☿	△	un	1	jl	Pu	Barbary	1799	D	co	Desf. atl.2. t. 223
11461 glomeráta *Th*	Cape	☿	△	un	2	jl au	Pu	C G H	1816	D	co	
11462 pygmæ'a *W*	pigmy	☿	△	un	1	jl au	Pu	Spain	1820	D	co	
1669 CARLI'NA *W*	Carline Thistle.					*Compositæ*		*Sp* 9—18				
11463 acanthifólia *W*	Acanthus-lvd.	☿	△	or	2	jn	W	Carniola	1818	D	co	All ped t 51
11464 acaúlis *W*	dwarf	☿	△	or	¾	jn	W	Italy	1640	D	co	Knor the 2 t c 1
11465 simplex *P S*	single-flowered	☿	△	or	1½	jn jl	W	Hungary	1816	D	co	Pl rar hu 2 t.152
11466 aggregáta *W.*	clustered	☿	△	or	2	jn s	W	Hungary	1804	D	co	
11467 lanáta *W*	woolly		○	or	3	jn jl	Pu	S Europe	1683	S	co	Garid. aix t 21
11468 corymbósa *W*	corymbed	☿	△	or	3	jl au	Y	S Europe	1640.	D	co	Col ecp.1 t 27 f.1
11469 vulgáris *W*	common	☿	◯	w	1½	jn s	Pu	Britain	dry pa	S	co	Eng. bot 1144
11470 racemósa *W*	racemed		○	or	¾	jn au	Y	Spain	1658	S	co	Desf atl t 224
11471 pyrenáica *W*	Pyrenean	☿	△	or	2	jn	Pu	Pyrenees	1788	D	co	



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in the same manner. C lanceolatus is one of the most common and noxious weeds of the genus, chiefly on account of its great bulk, its numerous downy seeds, and the facility with which they are distributed by the wind its dried flowers curdle milk. C helenioides, used to be called the melancholy thistle, and was used by quacks as a cure for madness C Casaubonæ is so named after Casaubona, herbarist to the Grand Duke of Tuscany, who sent the seed to John Bauhin C syriacus is spotted with white, as are a number of Egyptian plants C oleraceus, according to Schreber, is not eaten by cattle, but the Russians are said to boil the leaves in the spring, and eat them as coleworts The tender stalks of C cernuus are so used in Siberia

1666 *Onopordum* A name employed by Pliny for a plant which he describes too imperfectly to be recognized now The virtues which he ascribes to it, and whence the name has been derived (ονος and πεδω), certainly have no existence in the modern genus, which consists of noble thistle-like plants, that, if allowed plenty of room, form very magnificent specimens of annual vegetation O acanthium (from its leaves being like those of the Acanthus) was formerly used like the artichoke and Cardoon The seeds of this plant, until those of other thistles, are strongly defended by the calyx, and are not subject to be blown about by winds The whole plant is white, tomentose, and one of the most magnificent of the family.

1667 *Berardia* So named by Villars, after M Berard, a botanist of Grenoble.

1668 *Cynara* Said to be derived from κυων, a dog, on account of the stiff hard spines of the involucrum, which resemble the teeth of a dog The English word *Artichoke* is said to be derived from the Celtic *art*, a spine, and *chaulx*, a cabbage, but it must be confessed that the word is very like the Arabic name of the plant, *Carcioffo* or *Kharchuf* C scolymus is a well known garden esculent In some parts of France and Italy it is eaten raw in its wild state by the common people According to Gerarde, it was introduced into this country from Italy, but is become, "by reason of the great moisture which our country is subject unto," greater and better than those of Italy, a circumstance not to be doubted, and applicable to many other plants of culture, for it is a fact, that art can in many cases surpass nature, always, however, working upon nature's principles The artichoke is one of those plants the most patient of drought, and in this unusually dry and hot season (1825) was almost the only vegetable procurable in the neighbourhood of Paris, during three or four weeks in July and August Once in the seventeenth century, and again about 1739, most of the artichokes in England were destroyed by frost, but replaced from France There are three varieties in cultivation, the conical, French, or oval; the globe, which has a large dusky purplish head, and the dwarf globe, a prolific variety, which is smaller The parts used are the lower part of the leaves of the calyx, the fleshy receptacles of the flower, freed from the bristles and seed down, vulgarly called the choke, and some-

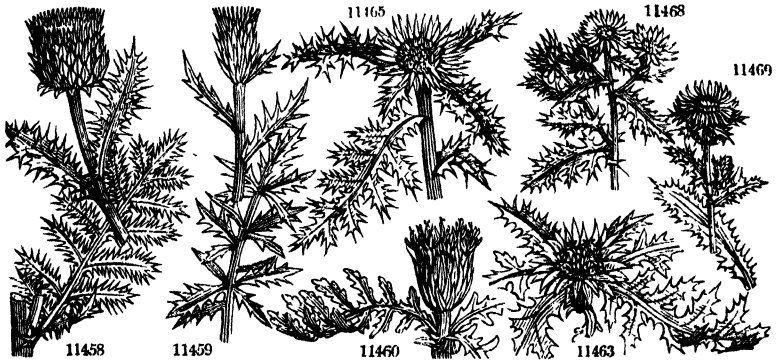
11440 Leaves narr. pinnatifid downy beneath with strong spines, Fl large solitary, Lvs. of invol spiny recurved
11441 Leaves sess. lanc. entire unarmed downy beneath, Spines axill branched at base, Fl axill sessile
11442 Leaves amplexicaul obl toothed spiny with white veins, Fl subsess. bracteate, Scales of invol. appressed
11443 Leaves amplexicaul pinnatifid toothed spiny pubescent, Stem simple, Fl. terminal clustered
11444 Leaves pinnatifid, Invol scarious scales acuminate
11445 Leaves pinnatifid, Invol scarious villous

11446 Scales of invol spreading subulate, Lvs. ov -obl sinuated and spin. decurrent woolly on both sides
11447 Scales of invol. much spreading, Lvs decurrent smooth on each side sinuated toothed spiny
11448 Scales of invol much spreading as long as invol. Lvs decurr downy sinuated toothed spiny . radic. pinnate
11449 Lower scales reflexed: upper much spreading, Lvs decurrent downy sinuated toothed spiny
11450 Invol. squarrose with cobwebbed down, Leaves stalked ovate angular downy beneath
11451 Scales of invol ovate-lanc mucronate spreading, Lvs. decurrent downy subsinuate toothed spiny
11452 Stem and leaves tomentose radical pinnatifid, cauline obl adnate decurrent toothed spiny
11453 Scales of invol ovate mucronate appressed, Lvs. decurrent somewhat downy sinuate toothed spiny
11454 Steml Invol glob subsess Scales of invol. lanc. spiny spreading, Lvs stalked pinnatif toothed spiny downy

11455 Stemless, Invol. obl subsess. Scales of invol obl lanc. downy unarmed, Lvs. stalked roundish ovate

11456 Leaves somewhat spiny pinnate and undivided, Scales of invol ovate
11457 Leaves pinnatifid downy beneath spiny, Spines of the base of leaves and pinnæ connate at base
11458 Leaves spiny: all pinnatifid, Scales of invol ovate
11459 Leaves spiny pinnatifid downy beneath, Scales of invol subulate
11460 Stemless, Leaves unarmed downy beneath pinnatifid segm cut-toothed, Scales of invol lanc
11461 Stemless, Leaves pinnatifid spiny
11462 Stemless, Leaves pinnated smoothish segm toothed spiny, Inner scales of invol. scarious at end

11463 Stemless, Leaves pinnatifid downy beneath segm toothed angular spiny
11464 Stem simple 1-fl Lvs pinnatifid naked: segm cut-toothed spiny
11465 Stem simple 1-fl longer than flower, Leaves deeply pinnatifid squarrose
11466 Stem simple 1-fl numerous aggregate, Leaves pinnatifid smooth, segm pinnatifid spreading spiny
11467 Stem subbifid, Middle flower sessile, Lvs hoary lanc toothed spiny
11468 Stem many-fl corymbose smoothish, Lvs lanc pinnatifid toothed smooth
11469 Stem many-fl corymb pubesc. Leaves lanc unequally spin and sinuated downy beneath
11470 Stem somewhat divided, Fl axill sess Leaves lanc toothed downy spiny pubescent
11471 Stem many-fl. Leaves decurrent



and Miscellaneous Particulars

times the tender central leafstalk in a blanched state like the Cardoon Medicinally, the plant is reputed to be aperient, stomachic, and somewhat heating It is said to dye a good yellow, and the flowers curdle milk

The plant is propagated by suckers in March and April, and requires a light rich soil, well dunged, and pulverised to a good depth. The leaves being large, the plants are placed in rows at four feet distance, and two feet apart in the row They will produce some heads the first season, a full crop the next, and, if well manured, will last for five or six years The plants require to be covered a foot thick with litter during winter, which is removed, and the ground dressed in March and April The heads will appear in the beginning of June.

When the artichoke is to be cultivated as Cardoon, the plants are to be cut over by the surface about mid-summer, in September they will have produced leaves about two feet high, they are then bound close with a wreath of hay or straw, and earth drawn round them The blanching will be perfected in a month or six weeks.

Bauhin thought the Cardoon a hybrid from the common artichoke, to which it bears a great resemblance The tender stalks of the inner leaves, rendered white and crisp by earthing up, are used for stewing, and for soups and salads during winter, like celery. It requires the same soil as the artichoke, to be planted at three or four feet apart in May, or sown where it is to remain in March. In September the leaves may be tied together and earthed up, and in October and November they will be blanched from one to three feet in length

With the florets of Cynara Cardunculus, which the Portuguese call *Cardo do coalho*, milk was formerly coagulated by the people of Portugal, as it is by rennet in England

1669. *Carlina* Olivier de Serres says, this plant was named after the famous Charlemagne, whose army was cured of the plague by means of this plant. Linnæus ascribes the name to the Emperor Charles V., whose army was relieved from the plague in Barbary in the same way. C. acaulis has black woody roots an inch thick, the upper part of which, with the receptacle of the flower, when tender, may be eaten, but the root of the adult plant becomes acrimonious, and is recommended as an alexipharmic. It contains an acrid resinous principle, by which it stimulates the solids, dissolves the humours, and promotes perspiration. C vulgaris is found all over Europe in dry barren soils. The flowers expand in dry, and close in moist weather, retaining this property a long time.

Upon this and a few other genera M. Cassini has founded a tribe, which he denominates Carlineæ, which although possessing no very precise characters of difference, is, he believes, distinct from both his Centaurieæ and Cardumeæ, from which it may always be distinguished by the perfect smoothness of the filaments The species of Carlineæ are found in every part of the world.

1670. ATRACTYLIS. *W* Atractylis.					*Compositæ*		*Sp.* 1—4						
11472 húmilis *W.*	dwarf	☽	△	un	1	jn jl	W	Spain	1759.	D	co	Cav ic. 1. t. 54	
1671. ACAR'NA *W.*	Acarna.				*Compositæ.*		*Sp* 2—6.						
11473 gummífera *W.*	gummy-rooted	☽	△	un	½	jn.au	Pu	S. Europe	1640.	D	co	Cav. ic. 3 t. 228	
11474 cancellàta *W.*	netted		○	un	½	jn jl	B	S Europe	1640.	S	co	Lam ill t.662 f 1	
1672. STOKE'SIA. *W.*	Stokesia				*Compositæ*		*Sp.* 1						
11475 cyánea *W*	blue-flowered	♀	⌭	pr	2	au	B	Carolina	1766.	D	co	L'He.ser.27.	
1673 STOBÆ'A *Th*	Stobæa				*Compositæ.*		*Sp.* 1—11.						
11476 pinnáta *Th*	Carthamus-like	♎	⌴	or	2	ja d	Y	C. G. H.	1812.	C	co	Bot mag 1788	
*1674 ONOBRO'MA *Gærtn*	Onobroma.				*Compositæ.*		*Sp* 2						
11477 cæruleum *Gærtn*	blue-flowered	☽	△	or	1	jn jl	B	Spain	1640	D	co	Bot. mag 2293	
Carthamus cæruleus W													
§11478 salicifólium *Link*	Willow-leaved	♎	⌴	or	3	au	W	Madeira	1784.	C	s p		
*1675 CAR'THAMUS. *W*	Carthamus.				*Compositæ*		*Sp.* 7—20.						
11479 tinctórius *W.*	officinal		○	or	3	jn jl	O	Egypt	1551.	S	s l	Bot reg 170	
§11480 lanátus *W*	woolly		○	or	3	jl.au	Y	S. Europe	1596	S	co	Bot. mag. 2142	
§11481 créticus *W.*	Cretan		○	or	2	jn jl	W	Candia	1731	S	co		
11482 tingitánus *W*	Tangier	☽	△	or	2	jn jl	B	Barbary	1759	D	co	Cav. ic 2 t. 128	
§11483 mitissimus *W*	small	☽	△	or	½	jn jl	B	France	1776	D	co		
§11484 Carduncéllus *W*	mountain	☽	△	or	½	my jn	B	France	1734	D	co		
§11485 arboréscens *W*	tree	♎	⌴	or	6	jl.au	Y	Spain	1731	C	s p	Bot. mag 3302	
1676 CARDOPA'TUM *Pers*	Cardopatum				*Compositæ.*		*Sp* 1.						
11486 corymbósum *Pers*	corymbose	♀	△	un	3	jl.au	B	Levant	1821	D	co	M.h s 7.t 33 f.17	
1677 STÆHELI'NA *W*	Stæhelina				*Compositæ*		*Sp* 3—13						
11487 dúbia *W*	Rosemary-lvd.	♎		ft	3	jn jl	Pu	S Europe	1640	C	p l	Lam ill t 666 f 4	
11488 arboréscens *W*	Storax-leaved	♎	⌴	pr	6	jl s		Candia	1739	C	p l	Schreb dec 1 t 1	
11489 chamæpéuce *W*	Pine-leaved	♎	⌴	pr	2	jl n		Candia	1640	C	p l	Plu alm t 94 f 3	
1678 PALAFOX'IA. *Lag.*	Palafoxia				*Compositæ*		*Sp* 1						
11490 lineáris *Lag.*	linear-leaved	♀	◯	pr	2	jn jl	W	Mexico	1821.	S	co	Bot. mag. 2139	
1679 PTERO'NIA *W*	Pteronia				*Compositæ*		*Sp* 5—33.						
11491 camphoráta *W*	aromatic	♎	⌴	or	3	jn jl	Y	C G H	1774	C	p l	Pl.man. t.345 f 2	
11492 stricta *W*	cluster-flower'd	♎	⌴	or	3	ap jn	Y	C G H	1774	C	p l		
11493 flexicaúlis *W*	bending-stalk'd	♎	⌴	or	3	jn au	Y	C G H	1812.	C	co		
11494 oppositifólia *W*	opposite-leaved	♎	⌴	or	½	jl	Y	C G H	1774	C	p l	Bre prod.t 17.f 3	
11495 scariósa *W*	Window-calyx	♎	⌴	or	2	jn au	Y	C G H	1815	C	co		
*1680 VERNO'NIA *W*	Vernonia.				*Compositæ*		*Sp* 9—18						
11496 noveboracénsis *W.*	long-leaved	☽	△	or	6	s n	Pu	N Amer	1710.	D	co	Dil el t 263 f 342	
11497 prælàta *W*	tall	☽	△	or	8	s n	Pu	N Amer	1732	D	co	Dil.el.t 264 f 343	
11498 angustifólia *Ph*	narrow-leaved	☽	△	or	4	s n	Pu	N Amer	1817	D	co		
11499 glaúca *W*	glaucous-leav'd	☽	△	or	4	s n	Pu	N Amer	1710	D	co	Dil el t 262 f 341	
11500 sericea *Rich*	silky	♎	◯	or	5	d	Pu pu	Brazils	1823	C	co	Bot reg 522	
11501 flexuósa *B. M*	flexuose	♀	⌧	or	1½	s	Pu	Brazil	1823.	S	co	Bot mag 2477	

11472 11473 11475 11476



11477 11479 11482 11486

History, Use, Propagation, Culture,

1670 *Atractylis* Vaillant (*Mem Acad. Sc* 1718.) derives this from ατρακτος, a distaff, because the light stems were very fit to make spindles

1671 *Acarna* A name under which Theophrastus describes a plant resembling a thistle Willdenow applied it to the present genus, which consists of thistle-like plants

1672 *Stokesia.* Named in honor of Jonathan Stokes, M.D, well known as the coadjutor of Dr Withering in his botanical arrangement of British plants A perennial plant, with large handsome blue flowers.

1673. *Stobæa* Named after Dr. Stobæus, of Lund, one of Linnæus's earliest patrons, and said to have been a practical naturalist

1674 *Onobroma* From ονος, an ass, and βρωμα, food, in allusion to the worthlessness of its herbage. Thistle-like plants of little beauty

1675 *Carthamus* From its Arabic name *qortom*, a word which signifies to paint, on account of the fine color yielded by the flowers. Tournefort, with little reason, derives it from the Greek καθαιρω, to purge The flowers of Carthamus tinctorius are used by the Chinese to give some of the fine rose, scarlet, purple, and violet colors to their silks. For this purpose, the flowers are thrown into an infusion of some alkali, and left to macerate; the colors are afterwards drawn out by the addition of lemon juice in various proportions, or of any other vegetable acid.

It is cultivated at present in many parts of Europe, and in the Levant, whence great quantities are annually imported into England for dyeing and painting In Spain it is grown in gardens, as Marygolds are in England, to color soups, olives, and other dishes The Jews in Poland are remarkably fond of it, and mix it with their bread, and most of their viands According to Houghton, it was formerly cultivated in Gloucestershire, both for the flowers and seed. The common people took it for saffron, and used it in their puddings, cakes, and

11472 Stem and leaves smooth

11473 Stemless, Leaves pinnatifid, Outer leaves of involucre tricuspidate
11474 Stem branched, Leaves lanc. ciliate toothed downy, Outer leaves of involucre setaceous pinnatifid conniving [larger than flower

11475 The only species

11476 Leaves downy pinnatifid · pinnæ linear terminated by a spine

11477 Stem about 1-fl Leaves ovate lanc spiny-toothed

11478 Stem shrubby, Leaves sessile lanceolate downy beneath spiny-toothed, Branches 1-flowered

11479 Stem quite smooth, Leaves ovate entire spiny toothed, Fruit naked
11480 Stem woolly, Lower leaves pinnatifid toothed upper amplexicaul pinnatifid toothed spiny
11481 Stem smoothish, Involucre somewhat woolly, Lower leaves lyrate upper half-amplexicaul
11482 Radic leaves pinnated cauline pinnatifid, Stem 1-flowered
11483 Leaves unarmed radical toothed, cauline pinnate
11484 Cauline leaves linear pinnated as long as plant
11485 Leaves ensiform sinuate toothed

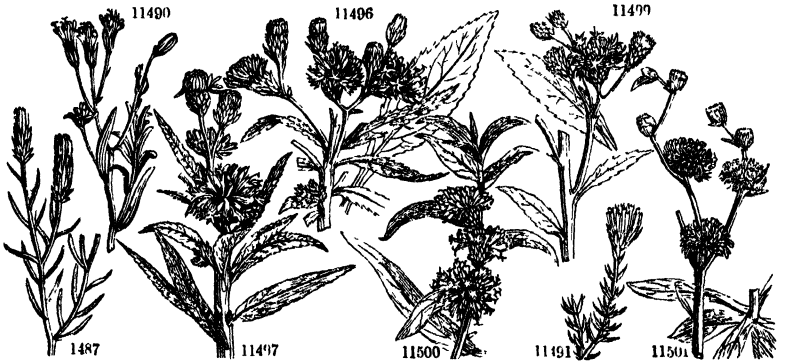
11486 Spiny much branched with small blue flowers

11487 Leaves sessile linear toothletted downy beneath, Inner scales of involucre lanc long
11488 Leaves stalked ellipt blunt entire silky with down beneath
11489 Leaves lin clustered very long revolute at edge hoary beneath, Branches downy

11490 The only species

11491 Leaves scattered and fascicled filiform ciliated, Leaves of involucre ciliated, Hairs of receptacle clustered
11492 Lvs scattered and fascicled filiform subciliate at base, Lvs of involucre entire, Holes of receptacle multipartite
11493 Leaves connate linear filiform glabrous, Scales of involucre ovate, Stem wavy, Fl terminal in threes stalked
11494 Leaves ovate powdery downy, Scales of involucre ovate entire
11495 Leaves ovate smooth, Scales of involucre ovate mucronate membranous

11496 Leaves lanc scabr serrulate, Corymb fastigiate, Scales of involucre filiform at end
11497 Leaves ovate-lanc serrate downy beneath, Corymb fastigiate, Scales of involucre ovate acuminate
11498 Stem simple, Lvs many long and narrow lin nearly entire, Corymb somewhat umbell. Scales of involucre stiff
11499 Leaves oblong acuminate serrate, Corymb fastigiate, Scales of involucre ovate acute [mucronate
11500 Leaves linear-lanc silky beneath downy on each side nearly entire, Flowers alternate 1-sided sessile
11501 Stem straight dichotomous upwards branches flexuose, Heads in the forks of the branches sessile



and Miscellaneous Particulars

bread, but by putting in too great a quantity they found it communicate a purgative quality, and gave up its use It is still, however, used in this way by some pastrycooks In Germany it is cultivated on light land well pulverised; it is sown in rows about eighteen inches distance, and afterwards thinned to three or four inches apart in the row · in September the plants begin to flower, and the field is then gone over once a week, for six or seven weeks, to gather the expanded florets, which are dried in a kiln in the same manner as true saffron Turkeys and geese are said to feed greedily on the seed, and in a short time become very fat

C lanatus is used by the women of the south of France and Spain for distaffs, and hence it had the name of distaff thistle. The root of C carduncellus is eaten in Africa.

1676. *Cardopatum.* A name of unknown meaning A spiny branched plant with little blue flowers, formerly referred to Carthamus.

1677 *Stæhelina* One Benoit Stæhelin, a Swiss botanist, published, in 1730, an academical dissertation upon the Filicula saxatilis corniculata and the Equisetum These are pretty half-shrubby thread-leaved plants, mostly deserving cultivation.

1678. *Palafoxia* Named by Lagasca, after the Spanish General Palafox, of whose merits as a botanist we are unmformed A small perennial plant with the habit of Stevia.

1679 *Pteronia.* From πτερον, a wing; altered by Linnæus from the Pterophorus of Vaillant, a word which seems to allude to the feathery scales of the receptacle. A genus of humble rigid shrubs.

1680. *Vernonia* Named after Mr. William Vernon, fellow of St Peter's College, Cambridge, who travelled in North America in search of plants, and left behind him an Herbarium, which came into the hands of Sir Hans Sloane, and contributed to enrich the third volume of Ray's Historia Plantarum. Vernoniæ constitutes the twentieth of M Cassini's subdivisions of Compositæ They are distinguished from Lactuceæ by

11502 pandurâta *Jacq*	fiddle-leaved	♃ △	or	4	s.n	Pu	.....	1825.	D	co	
11503 arboréscens *Cass*	tree	♄ □	or	5	n d	Pu	Jamaica	1738.	C	co	Pl sp.10 t 130 f 2
§11504 anthelmíntica *W.*	purple	☿ ⊡	or	1½	au.s	Pu	E. Indies	1770.	S	co	Rhee.mal.2. t.24

1681. AMMO'BIUM *R Br* Ammobium. *Compositæ* *Sp* 1

11505 alátum *R. Br.*	winged	☽ △	pr	2	mr.s	W	N. Holl.	1822.	S	co	Bot. mag. 2459

1682 LIA'TRIS *W* Liatris *Compositæ.* *Sp* 11—18.

11506 squarrósa *W*	rough-cupped	☽ △	el	3	jl au	Pu	N Amer	1732	D	p.l	Sweet fl. gard.44
11507 scariósa *W*	scarious cupped	☽ △	el	4	s o	Pu	N. Amer	1739	D	p l	Bot. mag. 1709
11508 sphæroídea *Ph*	globular-cupp'd	☽ △	el	3	au.o	Pu	N. Amer.	1817.	D	co	Sweet fl gard.87
11509 élegans *W.*	hairy-cupped	☽ △	el	4	s o	Pu	N Amer	1787	D	p l	Bot. reg 267
11510 pilósa *W*	hairy-leaved	☽ △	el	1½	s o	Pu	N Amer	1783	D	p.l	Bot. reg 595
11511 cylindrácea *Ph*	cylindrical-cup	☽ △	el	4	au o	Pk	N Amer	1811.	D	co	
11512 heterophýlla *Ph*	various-leaved	☽ △	el	3	jl au	Pu	N Amer	1790.	D	p l	
11513 pycnostáchya *Ph*	pubescent-lvd.	☽ △	el	3	au o	Pu	N Amer	1732.	D	co	Dill elt.t 72.f 83
11514 spicáta *W*	long-spiked	☽ △	el	6	au o	Pu	N Amer	1732	D	p l	Bot rep 401
11515 odoratissima *W.*	sweet scented	☾ △	el	3	au o	Pu	Carolina	1786	R	s.p	Bot. rep 633
11516 pumila *Hort*	dwarf	☽ △	el	1	au o	Pu	N Amer.	...	R	s p	Bot. cab. 147

1683 MIKA'NIA *W* Mikania *Compositæ.* *Sp* 3—21

11517 Houstóni *W*	Houston's	♄ □	or	8	jl au	Pk	Jamaica	1733	C	co	
11518 hastáta *W*	halbert-leaved	♄ □	or	8	...	Pk	Jamaica	...	C	co	Bro jam. t 34 f 3
11519 scándens *W*	climbing	♄ △	or	10	au s	Pa.B	N. Amer.	1714	D	co	Jac. ic 1. t. 169

1684 SPARGANO'PHORUS *Gærtn.* Sparganophorus. *Compositæ* *Sp* 2.

11520 Vaillántii *Gærtn*	Vaillant's	⊡	un	1½	au	Y	India	1823.	S	co	Gærtn t 165. f 4
11521 Struchium *Sw.*	Swartz's	⊡	un	2	au	Y	Jamaica	...	S	co	Bro jam t.34 f 2

1685 EUPATO'RIUM. *W* Eupatorium *Compositæ* *Sp* 30—107.

11522 Dálea *W*	shrubby	♄ □	or	6	au	Pk	Jamaica	1773	C	co	Jac schœ 2 t 146
11523 fœniculáceum *Ph*	Fennel-leaved	♃ △	or	4	jn s	Pa Y	N Amer	1807	D	co	
11524 hyssopifólium *W*	Hyssop-leaved	☿ △	or	1	au s	W	N Amer	1699	D	co	Dil el t 115.f 140
11525 sessilifólium *W*	sessile-leaved	☿ △	or	1	s o	W	N Amer	1777	D	co	
11526 teucrifólium *W*	Teucrium-lvd	☿ △	or	2	au n	W	N Amer	1816.	D	co	W hort ber 32
11527 rotundifólium *W*	round-leaved	☿ △	or	1	jl au	W	N Amer	1699	D	co	Plu alm t 88 f 4
11528 altissimum *W*	tall	☿ △	or	5	s o	W	N Amer	1699	D	co	Jac vind 2 t.164
11529 trifoliátum *W*	three-leaved	☿ △	or	6	au o	Pu	N Amer	1768	D	co	
11530 cannabinum *W*	Hemp Agrimony	☿ △	or	4	jl o	Pk	Britain	wat pl	D	co	Eng bot. 428
11531 syriacum *W*	Syrian	☿ △	or	4	jl s	Pu	Syria	1807	D	co	Jac. ic 1 t 170
11532 purpureum *W*	purple-stalked	☿ △	or	5	s o	Pk	N Amer	1640.	D	co	Corn canad t.72
11533 maculátum *Ph*	spotted-stalked	☿ △	or	3	au s	Pu	N Amer	1656	D	co	Herm.par. t.158
11534 punctátum *Ph*	dotted	☿ △	or	4	au s	Pu	N Amer	1815	D	co	
11535 verticillátum *W*	whorl-leaved	☿ △	or	5	au s	Pu	N. Amer	1811	D	co	
11536 perfoliátum *W*	Feverwort	☿ △	or	2	au o	W	N Amer	1699	D	co	Plu alm t 87 f 6
11537 cœlestinum *W*	blue-flowered	☿ △	or	2	jl n	L B	N Amer	1732	D	co	Dil el t 114 f 139
11538 urticæfólium *W*	Nettle-leaved	☿ △	or	1½	jl au	Pk	S Amer	1803.	D	co	Smith med t 68
11539 aromáticum *W*	aromatic	☿ △	or	4	jl au	W	N Amer	1739.	D	co	Plu alm t 88 f 3
11540 ageratoides *W.*	Ageratum-like	☿ △	or	4	au o	W	N Amer	1640	D	p l	Corn canad t 21
11541 odorátum *W*	sweet-scented	♃ □	ft	3	au o	Pk	Jamaica	1752	C	co	Plu alm.t 177 f 3
11542 ivæfólium *W*	Iva-leaved	☾ △	or	3	jn jl	Pk	Jamaica	1794	D	co	
11543 salviæfólium *B M*	Sage-leaved	☿ △	or	4	au s	Pk	N Amer	1814	D	co	Bot mag 2010
11544 lamiifólium *Link*	Nettle leaved	☾ △	or	3	au s	Pk	....	1823	D	co	
11545 ceanothifólium *W*	Ceanothus-lvd	☿ △	or	4	au s	W	....	1824	D	co	
11546 iresinoides *Kth*	snowy	♄ □	or	2	au o	W	N Grenad	1820	C	co	Kun nov.g t.340
11547 paniculátum *Mill.*	paniced	☾ △	or	6	au o	Pk	....	1818	D	co	

Eupátpus paniculátus Hort.



History, Use, Propagation, Culture,

their corolla, which is not ligulate, and from every other tribe by their style, which is absolutely the same as that of Lactuceæ. The greater part of Vernonieæ are found in America, a few in Asia and Africa, but none in Europe.

1681. *Ammobium* From *αμμος*, sand, and *βιω*, to live, in allusion to the places where it grows. A pretty half-hardy New Holland herbaceous plant, with dry white involucral scales, like a Gnaphalium.

1682. *Liatris.* A word of unknown meaning A genus of charming North American herbaceous plants They should be taken out of the borders in the autumn, and preserved in pots till the succeeding spring Of Liatris odoratissima, the leaves when dry give out a very pleasant smell resembling Vanilla, and which lasts for years It is called the Carolina Vanilla plant.

Liatris squarrosa is a very handsome species, with large heads of most beautiful flowers of a rich purple It and L. scariosa are known in North America under the name of rattlesnake's master In case of being bitten by this reptile, the bruised bulbs of the plants are applied to the wound, while, at the same time, a decoction in milk is taken inwardly.

11502 Leaves oval blunt serrate-crenate: lower with a winged amplexicaul. stalk, Fl. subcorymbose
11503 Leaves ovate entire acute downy beneath, Spikes recurved 1-sided, Bractes reflexed
11504 Leaves ovate-lanc. narrowed at each end serrated roughish pubescent beneath, Fl. term. about 3

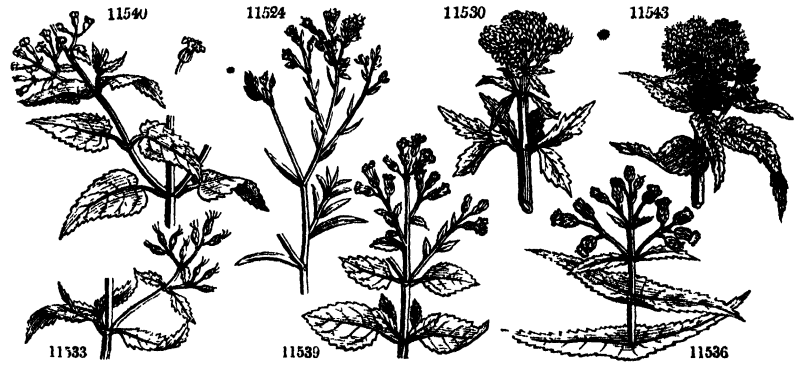
11505 Leaves oblong wavy decurrent

11506 Stem simple pubescent, Leaves very long linear nerved roughish at edge, Racemes few-fl leafy
11507 Stem simple pubescent, Lvs. lanc. narrowed at each end smooth rough at edge, Inv squarrose at bottom
11508 Stem simple pubescent, Leaves smooth: lower stalked broad-lanc. Invol. subglobose with scarious scales
11509 Stem simp. vill. Lvs. lin. subfalc dott rough, Spike somew. leafy, Pedic. short, Inner scales ligul colored
11510 Stem simple pubesc. Lvs lin pilose ciliated, Invol racemose lax, Scales lin obl bluntish [mucronate
11511 Slender all over hairy, Lvs grassy, Spike few-fl. Inv subsess. cylindr few-fl Scales round. at end abruptly
11512 Stem simple smooth, Leaves lanc. smooth: upper lin lanc very small, Invol. spiked subsquarrose
11513 Stem simple hirsute, Lvs. straight narrow-lin downy, Spike long, Fl. closely cluster Inv appress squarrose
11514 Stem simple tall, Lvs lin. smooth ciliated at base nerved and dotted, Spike very long, Fl sessile [at end
11515 Quite smooth, Stem simple, Rad leaves obl.: cauline amplexicaul Panicle corymbose lax spreading
11516 Dwarf, Leaves linear, Stem simple, Flowers spiked

11517 Stem climbing, Leaves ovate entire, Flowers spiked
11518 Stem climbing, Leaves subcordate hastate toothed, Flowers in spikes
11519 Stem climbing smooth, Lvs. cord. repand toothed acuminate with spreading unequal lobes, Fl. corymbose

11520 Flowers sessile lateral
11521 Flowers axillary sessile, Corollas all trifid

11522 Leaves lanc veiny obsoletely serrate smooth, Invol 4-fl Stem shrubby
11523 Stem panicled, Leaves smooth lower pinnated, upper fascicled, all filiform
11524 Leaves opp subverticill linear entire pubescent 3-nerved dotted radical somewhat toothed
11525 Leaves sessile amplexicaul distinct ovate-lanc rounded at base serrated smooth, Stem smoothish
11526 Leaves sessile distinct ovate scabrous upper coarsely serrated at base, uppermost entire
11527 Leaves sessile distinct roundish cordate bluntly serrate veiny
11528 Leaves subsessile lanceolate 3-nerved narrowed at each end downy lower serrated in middle
11529 Leaves stalked 3 or 4-nate ovate narrowed at each end serrated roughish
11530 Leaves opposite subpetiolate tri-quinque-partite: their segments lanceol deeply serrate
11531 Leaves petiolate ternate and simple downy beneath unequally serrate, Stem smooth
11532 Leaves stalked 4 or 5-nate ovate lanceolate serrate rugose veiny roughish, Stem hollow
11533 Leaves stalked 4 or 5-nate ovate lanceolate unequally serrate downy beneath, Stem solid furrowed
11534 Leaves stalked 4 or 5-nate ovate acuminate serrated scabrous on each side, Stem solid round
11535 Leaves stalked 3 or 4-nate ovate-lanceol. cuneate at base unequally serrate smoothish, Stem solid smooth
11536 Leaves connate perfoliate downy
11537 Leaves stalked cordate ovate bluntish 3-nerved bluntly serrate, Fl. corymbose
11538 Hispid, Leaves stalked cordate cut serrate, Panic terminal, Invol many-fl subulate pungent
11539 Leaves stalked ovate acute 3-nerved bluntly serrate glabrous, Stem panicled upwards, Fl corymbose
11540 Leaves stalked ovate acuminate 3-nerved unequally coarsely serrated smooth, Corymb many-fl. spreading
11541 Leaves stalked triangular ovate serrated entire at end downy beneath, Corymbs spreading term sessile
11542 Leaves narrow lanceol 3-nerved subserrated, Invol squarrose many-flowered
11543 Leaves amplexicaul. lanc acuminate rugose serrated, Flowers panicled clustered
11544 Leaves stalked ovate acuminate unequally and bluntly crenated pubescent, Panicle contracted
11545 Leaves stalked ovate acuminate toothed 3-nerved glabrous
11546 Stem twining villous, Lvs deltoid ovate acute 3-nerved soft beneath, Panicle term. trichotomous diffuse
11547 Like E. lamiifolium, but the flowers smaller and panicled



and Miscellaneous Particulars

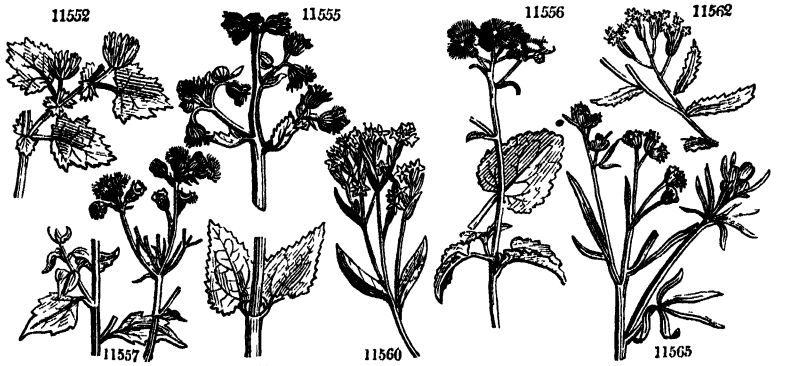
1683 *Mikania* Named by Willdenow, after Professor Mikan, of Prague. Climbing tropical plants, one of which, M Guaca, is employed in South American medicine as a powerful febrifuge.

1684. *Sparganophorus.* From σπαργανον, a fillet, and φερω, to bear, because the seed is crowned with a membranous band or border

1685. *Eupatorium.* This plant, says Pliny, derives its name from Eupator King of Pontus, who first used it in medicine. *Aya-pana* is the vernacular name of the species so called among the natives of the banks of the river Amazon. The tribe of Eupatorieæ is distinguished from Vernonieæ by its style. They are chiefly found in America, very few inhabit Asia, scarcely any Africa, and not one has been found in Europe.

The Eupatorium perfoliatum has some reputation as a medicinal plant. A dissertation upon the subject of its merits was published a few years since by an American physician, from which it appears that the virtues of the plant reside chiefly in the leaves, and that the most efficient mode of exhibiting it is by means of a simple decoction The medical powers of Eupatorium are, as its sensible properties would seem to indicate, those of a tonic stimulant. Given in moderate quantities, either in substance, or in cold infusion or decoction, it promotes digestion, strengthens the viscera, and restores tone to the system. Like other vegetable bitters,

11548 pubéscens *W.*	downy	♃	△	or	4	jl.au	W	N. Amer.	1819.	D	co	
11549 mólle *Swz.*	soft	♀	△	or	4	jl.au	W	Jamaica	1823.	D	co	
11550 deltoideum *Jacq*	deltoid	♀	△	or	3	jl au	Pu	.....	1822.	D	co	
11551 scándens *Link*	climbing	♇	△	or	6	au s	Y	... ..	1821.	D	co	
1686. DUMERI'LIA *Lag* Dumerilia						*Compositæ.*		*Sp.* 1.				
11552 paniculáta *Lag*	panicled	♚	□	or	3	au	Pu	Colombia	1825.	C	co	Ann mus 19 t 7
1687. AGE'RATUM *W* Ageratum						*Compositæ*		*Sp* 4—8.				
11553 conyzoides *W*	hairy		○	or	1	jl au	L B	America	1714	S	p.l	Ex. fl 15
11554 latifólium *W*	broad-leaved		○	or	1½	jl au	W	Peru	1800.	S	co	Cav ic 4 t 357
11555 strictum *B M*	upright		○	or	2	jn jl	W	Nepal	1821.	S	co	Bot. mag. 2410
11556 mexicánum *B M*	Mexican		○	or	1½	jn jl	B	Mexico	1822	S	co	Bot. mag 2524
1688 CÆLES'TI'NA *Cass* Cælestina						*Compositæ.*		*Sp.* 1—2				
11557 ageratoides *Cass*	blue-flowered	♃	□	or	1	jl.o	B	.....	...	C	co	Bot. mag. 1730
†1689 STE'VIA. *W* Sievia.						*Compositæ.*		*Sp.* 10—14.				
11558 purpúrea *W en*	purple	♃	△	pr	1½	au s	Pu	Mexico	1812	D	co	Bot. reg 93
11559 Eupatória *W*	entire-leaved	♃	△	pr	2	jl s	Pk	Mexico	1798.	S	p l	Bot. mag. 1849
11560 hyssopitólia *B M*	Hyssop-leaved	♃	△	pr	1½	au s	Pk	Mexico	...	D	co	Bot mag 1861
11561 salicifólia *W.*	Willow-leaved	♃	△	pr	1½	au s	Pk	Mexico	1803.	S	p l	Cav ic 4 t 354
11562 serráta *W*	saw-leaved	♃	△	pr	1½	jl s	F	Mexico	1799	D	s p	Jac schœ 3.t.300
11563 ivæfolia *W en.*	Iva-leaved	♃	△	pr	2	jl.s	W	Mexico	1816.	D	s p	
11564 ováta *W en.*	oval-leaved	♃	△	pr	2	au s	W	Mexico	1816	D	s p	
11565 pedáta *W*	multifid		○	pr	1½	jl s	W	Mexico	1803	S	s p	Bot. mag. 2040
11566 lanceoláta *Lag*	lanceolate	♃	△	pr	1	jl s	Pu	Mexico	1822	D	co	
11567 pubéscens *Lag*	pubescent	♃	△	pr	1½	jl s	Pu	Mexico	1823	D	co	
1690 CEPHALO'PHORA *W* Cephalophora						*Compositæ*		*Sp* 1				
11568 glaúca *W*	glaucous	♃	△	un	2	jl au	Y	Chili	1798	D	co	Cav. ic. 6 t 599
1691 AMPHE'REPHIS *Kth.* Amperephis.						*Compositæ*		*Sp* 1—3				
11569 intermédia *Link*	intermediate		○	pr	1½	jl au	Pu	Brazil	1821	S	co	Pla.sel.H.B f 29
†1692 HYMENOPAP'PUS *J* Hymenopappus						*Compositæ.*		*Sp.* 1—2				
11570 tenuifólius *Ph*	slender-leaved	♀	◯	un	2	jn au	W	Louisiana	1811.	S	co	
1693 MELANANTHE'RA *Mi.* Melananthera						*Compositæ*		*Sp* 2—5				
11571 hastáta *Ph*	snowy	♀	△	un	2	jn jl	W	N. Amer.	1732	D	co	Dill elt. t 47 f 55
Bidens nivea W.												
β panduræfolia	*fiddle-leaved*	♀	△	un	2	jn jl	W	N Amer	1732	D	co	Dill elt t 46 f 54
11572 deltoidea *Mich*	rough-leaved	♀	◯	un	3	jl au	Y	S Amer	1799.	S	co	Jac. ic. 3 t 583
Calea aspera W.												
1694 MARSHAL'LIA *Ph* Marshallia.						*Compositæ.*		*Sp* 2—3				
11573 lanceoláta *Ph*	spear-leaved	♃	△	pr	1½	jn jl	Pu	Carolina	1812	D	co	
11574 latifólia *Ph*	broad-leaved	♃	△	pr	1½	jn jl	Pa pu	Carolina	1806	D	co	Mich amc 2 t 43
1695 SPILAN'THES *W* Spilanthes						*Compositæ*		*Sp* 3—14				
11575 Pseudo-Acmélla *W*	spear-leaved		◯	un	1	jl	Y	Ceylon	1768	S	s l	Pluk al t 159 f 4
11576 álba *W*	white-flowered		◯	un	1½	jn jl	W	Peru	1783	S	co	L'He stirp 7 t 4
11577 oleráce a *W*	esculent		○	cul	1	jl s	Y	E Indies	1770	S	co	Jac.vind.2 t.135
1696 SAL'MEA *Dec* Salmea.						*Compositæ*		*Sp.* 2—3				
11578 scándens *Dec*	scandent	♇	□	pr	6	jn jl	W	Vera Cruz	1820	D	co	Bot mag 2062
11579 hirsúta *Dec*	hirsute	♃	□	pr	6	au	W	Jamaica	1823	S	co	



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if given in large quantities, especially in warm infusion or decoction, it proves emetic, sudorific, and aperient. Even in cold infusion, it tends to bring on diaphoresis. The plant is also stated to be an excellent remedy for the cure of intermittent fevers When employed as a tonic, this plant may be taken in doses of twenty or thirty grains, or a teacup full may be used of the infusion rendered moderately bitter When intended to act as an emetic, a strong decoction may be made from an ounce of the plant in a quart of water boiled to a pint (*Ruggelow.*)

1686. *Dumerilia* Named after M A M. Constant Duméril, author of an Elementary Treatise upon Natural History, published in one volume octavo, at Paris, in 1804 Small half-shrubby South American plants, with firm hairy leaves

1687. *Ageratum* A name employed by Dioscorides, and probably applied by him to some plants similar to what we call properly "everlastings," it is derived from *α*, privative, and *γηρας*, old age, because it never grows old; that is to say, always preserves its color

1688. *Cælestina* From *cælestis*, blue, in allusion to the color of the flowers.

1689. *Stevia.* Dedicated by Cavanilles to the memory of Peter James Esteve, a Spanish physician of the sixteenth century. He left behind him a dictionary of the plants natives of the kingdom of Valentia.

1690. *Cephalophora* From *κεφαλη*, a head, and *φερω*, to bear, its flowers being united in little heads.

1691. *Amperephis.* From *αμφηρεφης*, which signifies well covered, on account of the double involucrum of the genus.

11548 Lvs. sessile distinct ovate scabrous veiny: lower doubly serrate; upper subserrate, Stem panicled downy
11549 Leaves stalked cordate acute subserrate villous beneath, Involucre 8-15-fl Stem shrubby
11550 Leaves stalked hastate triangular 3 nerved unequally serrate downy beneath, Panic corymbose
11551 Stem twining, Leaves reniform ovate acuminate serrate-toothed, Panicle axillary

11552 Leaves roundish 7-lobed · lobes crenate, Panicle corymbose terminal

11553 Leaves ovate subcordate, Stem hairy, Paleæ of pappus awned toothletted
11554 Leaves ovate cuneate at base, Stem pilose, Paleæ of pappus lanceolate acute
11555 Stem erect simple scabrous, Leaves cordate rugose unequally serrated
11556 Hispid, Leaves cordate ovate crenate rugose, Corymb compound, Paleæ of pappus lanceolate awned

11557 Leaves stalked ovate acute rounded at base serrated pilose above hairy beneath

11558 Leaves lanc channelled narrowed into the footstalk 3-nerved, Corymb fastigiate
11559 Leaves lanc 3-nerved entire. Corymb fastigiate, Pappus paleaceous and awned
11560 Leaves oblong ovate entire, Corymbs spreading, Pappus awned as long as corolla
11561 Leaves lanc narrowed at each end serrated in the middle, Corymb spreading, Pappus with 2 awns
11562 Leaves lin lanc serrated at end, Corymbs fastigiate, Pappus paleaceous and awned
11563 Leaves lanc narrowed into the footstalk 3-nerved finely serrated at end, Corymbs fastigiate
11564 Leaves ovate 3-nerved serrated cuneate and entire at the base, Pappus chaffy and awned
11565 Leaves stalked digitate pedate entire, Pappus paleaceous (*Florestina*, Cass)
11566 Leaves sessile narrowed at base rough with minute hairs, Pappus with 3 awns
11567 Leaves 10 lines long 4 lines broad finely downy beneath, Flowers purple

11568 The only species

11569 Leaves of involucre foliaceous · inner ovate obl rounded, outer awned

11570 Hoary, Leaves sub-bipinnatifid, Flowers in compound corymbs

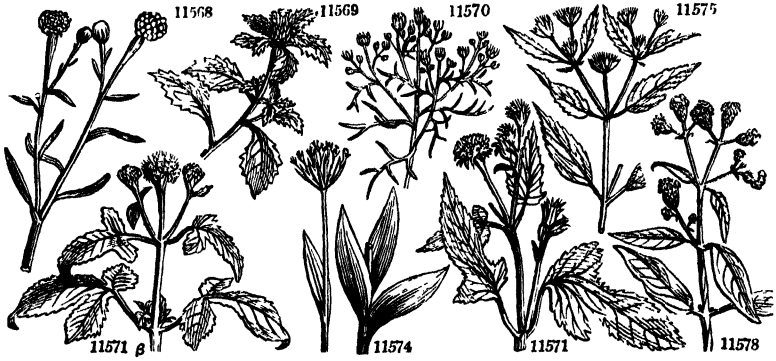
11571 Leaves 3-nerved ovate acuminate scabrous unequally toothed

11572 Flowers solitary stalked winged, Leaves oblong triple nerved unequally serrated scabrous

11573 Leaves long-lanc Leaves of involucre blunt, Paleæ spatulate
11574 Leaves lanc oval acuminate 3-nerved, Paleæ narrow linear

11575 Leaves lanceolate serrate, Stem erect
11576 Leaves ovate repand, lower alternate, Stem branched ascending, Involucre many-leaved
11577 Leaves ovate subcordate serrated, Stem branched diffuse

11578 Leaves opp ovate-acumin serrate, Peduncle panicled, Heads ovate
11579 Leaves opp ovate-lanceolate entire downy, Peduncle opp diverging many-flowered



and Miscellaneous Particulars

1692 *Hymenopappus.* From ὑμην, a membrane, and παππος, pappus, in allusion to the membranous pappus of its seeds

1693 *Melananthera.* From μελας, black, and *anthera.* A plant with black anthers, a very unusual character in this tribe of plants, the anthers of which are usually either white or yellow, according to the color of the corolla

1694 *Marshallia* Named after Henry Marshall, an Englishman, author of a sort of history of the trees and shrubs of North America, published in 1778.

1695. *Spilanthes* From σπιλος, a spot, and ανθος, a flower, in allusion to the heads of flowers of the original species, which are yellow with a brown disk. Jacquin says he so called it, because the flowers are spotted with black points. S salivaria is used by the natives of South America to relieve the tooth-ache by the salivation which it produces copiously The flower-heads of S. oleracea are an excellent ingredient in salads, on account of their agreeable and lasting piquancy.

The leaves of Spilanthes tinctoria of Loureiro, which is said to be very similar to the Abcedaria figured by Rumphius, vol. v t 65, give out when bruised a beautiful blue color, quite equal to indigo.

1696. *Salmea.* This name was originally given by Cavanilles to a genus related to Aloe, and was named after Prince Charles of Salm-Salm, a great promoter of botanical science. It was transferred to the genus which now bears the name by Professor Decandolle, in the appendix to his Hortus Monspeliensis.

1697. **BI'DENS** *W*	Bidens.				*Compositæ*		*Sp.* 18—25					
11580 nodiflóra *W*	sessile-flowered	⊡	un	1	jl au	Y	E. Indies	1732	S	co	Dill.elt t 44 f 52	
11581 tripartita *W*	trifid	○	un	2	jl s	Y	Britain	wat pl.	S	co	Eng bot. 1113	
11582 cérnua *W*	nodding	○	un	2	jl s	Y	Britain	dit.	S	co	Eng bot 1114	
11583 heterophýlla *W.*	various-leaved	⊻	△	un	2	au s	Y	Mexico	1803.	D	s.l	Orteg dec 8 t.12
11584 frondósa *W*	smooth-stalked	○	un	1½	jl au	Y	N. Amer.	1710.	S	co	Mor s 6. t.5 f.21	
11585 leucántha *W*	white-flowered	○	un	1½	jl au	W	S. Amer.	...	S	co		
11586 chinénsis *W*	Chinese	○	un	2	jn jl	W	China	1801	S	co	Ru.am 6 t 15.f 2	
11587 pilósa *W*	hairy	○	un	1½	jl	Y	N. Amer	1732.	S	co	Dill elt t 43.f 51	
11588 sambucifolia *W*	Elder-leaved	⊻	△	un	3	jl au	Sc	S Amer	1801	D	co	Cav. ic 3 t. 229
11589 bipinnáta *W*	Hemlock-leav	○	un	2	jl au	Y	N Amer	1687	S	co	Her parad t.123	
11590 bullàta *W*	rough-leaved	○	un	2	jl au	Y	N. Amer	1759.	S	co	Ard spec 2 t 18	
11591 prócera *B. Reg*	tall	⊻	○	or	6	n	Y	Mexico	1822.	S	co	Bot reg 684
11592 luxúrians *W.*	luxuriant	⊻	△	un	3	jl au	Y	Mexico	...	D	co	
11593 foliósa *W*	leafy		○	un	3	jn jl	Y	.....	1818	S	co	
11594 connáta *W*	connate		○	un	2	jn jl	Y	N Amer	1817.	S	co	
11595 parviflora *W.*	small-flowered		○	un	1	jn jl	Y	Baical	1823	S	co	
11596 odoráta *Cav*	sweet-scented		○	ft	3	jn jl	W	Mexico	1825.	S	co	Cav ic. 1. t. 13
11597 reflèxa *Lmk.*	reflexed	⊻	△	un	2	jn jl	Y	Mexico	1824.	D	co	
1698 **PLATYP'TERIS** *Kunth*	Platypteris.				*Compositæ.*		*Sp* 1					
11598 crocáta *Kth*	saffron-colored	⊻	△	or	2	ja mr	Or	S Amer	1812.	D	co	Bot. mag 1627
Spilanthus crocatus B M												
*1699 **LAGAS'CA** *Cav*	Lagasca				*Compositæ.*		*Sp* 2					
11599 móllis *Cav*	soft	⊻	⊡	or	2	jn s		S Amer	1815.	S	co	Bot mag 1804
§11600 rúbra *Kth*	red	⊻	□	or	2	jl	R	Mexico	1823	C	co	Hum no g t.311
1700 **LAVE'NIA** *W*	Lavenia				*Compositæ*		*Sp* 1—2					
11601 erécta *W*	upright		⊡	un	2	jl s	Y	E. Indies	1739	S	co	Burm zeyl t. 42
*1701 **CACA'LIA** *W.*	Cacalia				*Compositæ*		*Sp* 26—60					
11602 papillária *W*	rough-stalked	⊻	□	cu	2	..	Y	C G H	1727	C	s p	Dill elt t 55 f 63
11603 Anteuphórbium *W.*	oval-leaved	⊻	□	cu	3	f mr	Y	C G H	1596.	C	s p	Dill.elt t.55 f 2,3
11604 Kleinia *W*	Oleander-leav	⊻	□	cu	3	s o	Y	Canaries	1732	C	s p	Plant grass 12
11605 Ficoides *W*	flat-leaved	⊻	□	cu	6	jn n	Y	C G H	1710	C	s p	Plant grass 90
11606 carnósa *W*	narrow-leaved	⊻	□	cu	1½	jn	Y	C. G H	1757.	C	s p	
11607 répens *W*	glaucous-leaved	⊻	□	cu	1	jn o	Y	C G H.	1759.	C	s p	Plant grass 42
11608 Hawórthii *Sweet*	woolly-leaved	⊻	□	cu	2	...	Y	C G H.	1795.	C	co	
tomentósa M n not	of Thunberg											
11609 articuláta *W*	jointed	⊻	□	cu	1½	s n	Y	C G H	1775	C	s p	Plant grass 18
11610 tomentósa *Th*	tomentose	⊻	□	cu	2	...	Y	C G H	1795.	C	s p	
11611 appendiculáta *W*	appendaged	⊻	□	cu	2	...	Y	Teneriffe	1815	C	co	
11612 bicolor *W*	two-colored	⊻	□	or	2	my s	Pu	E Indies	1804.	C	co	Bot reg 110
11613 ovális *B reg*	oval-leaved	⊻	□	or	3	my s	Y	E Indies	...	C	s p	Bot reg 101
11614 sonchifólia *W.*	Sow-thistle-lvd	⊻	⊡	or	1½	jl	Pu	E. Indies	1768	S	co	Rhe mal.10 t 68
§11615 salicina *Lab*	Willow-leaved	⊻	□	or	6	jn jl	Y	N Holl.	1820	C	co	Bot reg. 923
11616 coccínea *H K*	scarlet-flowered		○	or	1½	jn jl	O	.... .	1799	S	co	Bot. mag 564
11617 sarracénica *W.*	creeping-rooted	⊻	△	or	4	au o	Y	France	1772	D	s p	
11618 hastáta *W*	spear-leaved	⊻	△	or	1	au o	W	Siberia	1780	D	co	Gmel sib 2 t 66
11619 rhombifólia *W*	rhomb-leaved	⊻	△	or	3	au o	Y	Siberia	1816	D	co	
11620 suavéolens *W*	sweet-scented	⊻	△	or	6	au o	W	N Amer	1752	D	co	
11621 atriplicifólia *W*	Orache-leaved	⊻	△	or	4	au	L Pu	N Amer	1669	D	co	Pluk al. t 101 f 2
11622 reniformis *W.*	Kidney-leaved	⊻	△	or	1½	jl au	W	N Amer	1801	D	co	
11623 alpina *W.*	Alpine	⊻	△	or	2	jl au	Pu	Austria	1739	D	co	Jac aust.3 t 234
11624 álbifrons *W*	white-leaved	⊻	△	or	2	jl au	W	Austria	1739	D	co	Jac aust.3. t 235
11625 scándens *W.*	climbing	⊻	△	or	6	ap	Pk	C G H.	1774	D	co	
11626 pinnáta *W en.*	wing-leaved	⊻	△	or	2	jl au	Pk	Iberia	1816	D	co	
11627 sagittáta *W*	sagittate		⊡	or	3	jl au	O Pu	Java	1823	S	co	



History, Use, Propagation, Culture,

1697. *Bidens.* So called because its seeds are surmounted with two teeth. Very worthless inconspicuous weeds

1698. *Platypteris* So called from πλατυς, broad, and πτερον, a wing, in allusion to the margin of the seeds. A small stove herbaceous plant of little merit

1699. *Lagasca* Named in honor of Don Mariano La Gasca, professor of botany at Madrid, an amiable man and excellent botanist. He is, at the time of writing this, residing in England, whither he has fled from the dangers of persecution in his own country

1700. *Lavenia.* A name of unknown meaning, originating with Sherard. Small useless annuals, natives of the East and West Indies

1701. *Cacalia.* A name applied by Dioscorides to a mountain plant with large whitish leaves By some it is believed to have been what is now called Cacalia alpina. To Sprengel it appears to be the Bupleurum

11580 Flowers discoid stalked, Outer involucre 3 times as long as flower, Lvs. ovate with 1 or 2 teeth on each side
11581 Leaves tripartite, Leaflets lanceolate deeply serrated, Bristles of the pericarp 2-3
11582 Fls. droop Bractens lanc ent. (longer than involucre) Lvs lanc serrat. undivid. Bristles of pericarp about 4 erect
11583 Flower radiant erect, Outer involucre longer than inner, Cauline leaves lanc. serrated · radical subternate
11584 Fls. discoid, Outer involucre 6 times as long as flower, Leaflets ciliated at base, Lower lvs pinn · upper ternate
11585 Fls radiant, Outer involucre the length of inner, Lower leaves pinnate · upper ternate, Leaflets ovate serrated
11586 Fls. radiant, Outer involucre length of inner, Low lvs. pinn. . upper tern Leafl ovate or subcord serr uneq at base
11587 Fls discoid, Outer involucre length of inner, Low. lvs. pinn : upper tern Term. leafl twice as large as the rest
11588 Flowers radiant, Outer involucre longer than inner, Leaves decussively pinnated serrated
11589 Flowers subradiant, Outer involucre length of inner, Leaves bipinnate leaflets lanc pinnatifid
11590 Fls. discoid, Outer involucre longer than flower, Lvs scabr toothed low roundish ovate · upper tern. Stem hairy
11591 Leaves bi-tripinnate · pinnæ linear acute channelled entire, Outer leaves of involucre blunt downy
11592 Flowers radiant erect, Outer involucre longer than inner, Leaves lanc stalked equally serrate
11593 Leaves lanc acute serrated subciliated, Outer involucre leafy
11594 Flowers discoid, Outer involucre 3 times as long as flower, Cauline leaves ternate lateral connate
11595 Flowers discoid, Outer involucre longer than inner, Leaves ternate : leaflets 3-parted cut-toothed
11596 Flowers radiant, Outer involucre length of inner, Leaves bipinnate, Leaflets cuneiform 3-toothed
11597 Leaves lyrate-pinnated: pinnæ ovate acute serrated pubescent, Flowers panicled

11598 Leaves hoary toothed, Stem with 4 wings

11599 Leaves stalked ovate acuminate subcrenate softly silky
11600 Leaves on short stalks elliptical blunt obsoletely toothed rigid

11601 Stem branched erect, Leaves elliptical finely serrated

11602 Stem shrubby with cylindr truncate papillæ, Leaves lanc flat
11603 Stem shrubby, Leaves ovate-oblong flat, Petioles with a triple line at base
11604 Stem shrubby, Leaves lanc flat, Flowers corymbose
11605 Stem shrubby, Leaves compressed fleshy
11606 Stem shrubby, Leaves roundish fleshy incurved, Pedunc terminal 1-fl naked
11607 Stem shrubby, Leaves depressed fleshy
11608 Stem shrubby, Leaves depressed fleshy woolly

11609 Stem shrubby, Leaves fleshy flat ternate, Leaflets 3-lobed
11610 Stem suffruticose, Leaves ovate-lanc toothed downy beneath
11611 Shrubby downy, Leaves cordate ovate acute angular downy beneath . stalks with leafy appendages
11612 Stem herbac branched, Lvs lanc smooth toothed of the stem amplexicaul, of the branches stalked
11613 Leaves thickish villous lower oval repand-toothed stalked, upper sublyrate amplexicaul
11614 Stem herbaceous, Leaves amplexicaul toothed lower lyrate, upper sagittate toothed
11615 Leaves obl lanceolate connate downy beneath, Racemes axillary
11616 Radical leaves ovate spatulate cauline entire amplexicaul crenate edged
11617 Stem herbaceous, Leaves sessile obl lanc serrated at the base cuneate entire decurrent
11618 Stem herbaceous, Leaves stalked 3-lobed hastate serrate, Flowers racemose nodding
11619 Stem herbaceous, Lvs stalked rhomboid hastate unequally toothed, Flowers corymbose spreading erect
11620 Stem herbaceous, Leaves stalked hastate-sagittate serrated, Flowers corymbose erect
11621 Stem herbaceous, Leaves stalked radical cordate toothed, cauline rhomboid with 2 teeth on each side
11622 Stem herbaceous, Leaves stalked radical cordate reniform repand toothed, cauline oblong toothed
11623 Stem herbaceous, Leaves stalked cordate toothed, Petioles naked, Corymbs fastigiate, Involucre 5-flowered
11624 Stem herbac Leaves stalked cordate toothed hoary beneath, Petioles auricled at base, Corymbs fastigiate
11625 Stem twining, Leaves triangular sinuate-toothed
11626 Stem herb Rad lvs bipinnatifid · caul pinn Pinnæ toothed upper confluent, Corymb comp fastigiate
11627 Stem herbaceous, Leaves toothletted lower stalked obovate, upper obl lanc sagittate amplexicaul



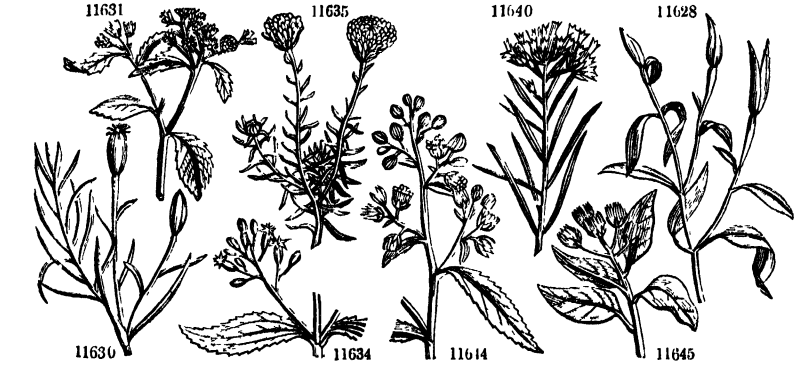
and Miscellaneous Particulars

longifolium of the moderns. The species are nearly all objects of ornament Some of them are remarkable for their fleshy awkward looking stems, others for their discolored leaves The succulent kinds require to be grown in old rubbish, and to be treated as directed for Mesembryanthemums The leaves of some species (C procumbens and sonchifolia) are used as salad by the Chinese, and those of C. Ficoides are sometimes pickled by the French.

C Kleinia is called cabbage tree, from the resemblance which the stalks have to those of the cabbage, and carnation tree, from the shape of the leaves and color of the flowers

Upon Cacalia alpina, &c, M Cassini has founded his genus Adenostyles and tribe of Adenostyleæ, distinguished from Senecioneæ, to which Cacalia belongs, by the roughness of all the back of the two lobes of the style But we do not find the division adopted by other botanists M. Cassini himself suspects that Adenostyleæ may be united with Tussilagineæ.

1702. KLEI'NIA *W.*	KLEINIA					*Compositæ*		*Sp.* 3—5					
11628 ruderális *Jacq.*	dunghill		un	1	jl au	W	Jamaica	...	S	co	Jacq. am t. 127
11629 porophýllum *W.*	perforated		un	1½	jn o	W	N Amer.	1699	S	co	Cav ic 3 t. 222
11630 suffruticósa *W*	suffruticose	♃	un	½	jn o	Pu	Brazil	1820.	C	co	Cav. ic. 3. t 257
1703 ETHU'LIA *W*	ETHULIA					*Compositæ*		*Sp.* 3—7.					
11631 conyzoides *W*	panicled		un		jl au	Pa.pu	India	1776	S	co	Bot. reg 695
11632 divaricáta *W*	spreading		un	½	jl au	Pu	India	1815	S	co	Lam ill t. 699
11633 brazilién sis *Link.*	Brazil	♿	un	2	jl.au	Pu	Brazil	1823.	D	co	
1704 PIQUE'RIA *W.*	PIQUERIA.					*Compositæ*		*Sp* 1—3					
11634 trinérvia *W*	three-nerved	♿	pr	2	jl.au	W	Mexico	1798.	D	co	Cav. ic 3. t. 235
†**1705 CHRYSO'COMA.** *W.*	GOLDY-LOCKS					*Compositæ*		*Sp* 9—18					
11635 Comaúrea *W.*	great-shrubby		or	6	jn au	Y	C G H.	1731	C	pl	Bot mag 1972
11636 cérnua *W.*	small-shrubby		or	4	my.s	W	C G H.	1712	C	pl	Coin hort 2. t 45
11637 ciliaris *W*	Heath-leaved		or	4	jl o	W	C G H	1759	C	pl	Coin hort 2 t 48
11638 sábra *W*	rugged		or	4	au s	W	C G H.	1732	C	pl	Dil elt t.88 f 103
11639 denticuláta *W.*	toothed		or	4	au s	Y	.....	...	C	co	Jac schœ 3 t 368
11640 Linosyris *W*	German		or	2	s o	Y	Europe	1596	D	co	Eng bot. 2505
11641 dracunculoides *W*	Siberian		or	2	s o	Y	Siberia	...	D	co	
11642 biflóra *W*	two flowered		or	3	au s	B	Siberia	1741	D	co	Gm sib 2 t 82 f 1
11643 villósa *W*	hairy-leaved		or	1½	au s	Y	Hungary	1799	D	co	Pl rar hu 1 t.53
1706 TARCHONAN'THUS *W.*	AFRICAN FIFABANE					*Compositæ*		*Sp* 1—7					
11644 camphorátus *W.*	shrubby		or	6	jn o	Pu	C G H	1690	C	pl	Lam ill. t. 671
1707 CA'LEA *W*	CALEA					*Compositæ*		*Sp* 1—3					
11645 jamaicénsis *W*	purple-flowered		un	3	jn jl	Pu	W Indies	1739	C	co	Slo ja 1. t 151 f 3
1708 ISOCAR'PHA, *R Br*	ISOCARPHA					*Compositæ.*		*Sp* 1—3					
11646 oppositifólia *R Br*	opposite-leaved	♿	un	3	jl au		W Indies	1739	S	co	
1709 PETRO'BIUM *R Br*	WHITE WOOD					*Compositæ*		*Sp* 1					
11647 arbóreum *R Br*	St Helena	♀	or	12	...	Y	St Helena	1825.	C	co	
1710 NEUROLÆ'NA *R Br*	HALBERD-WEED					*Compositæ*		*Sp* 1					
11648 lobáta *R Br*	common		un	2	jn jl	Y	W Indies	1733	R	sp	Bot. mag. 1734
1711 HU'MEA *Sm*	HUMEA					*Compositæ*		*Sp* 1					
11649 élegans *Sm.*	rose-colored	♿	cl	6	jn o	R	N S W.	1800	S	sp	Exot. bot 1 t. 1
1712 CÆSU'LIA *W*	CÆSULIA					*Compositæ*		*Sp* 1—3					
11650 axillaris *W.*	axillary-flower	♿	un	½	jl s	W	E Indies	1804	R	pl	Bot. rep 431
1713 IXO'DIA *H K*	IXODIA					*Compositæ*		*Sp* 1					
11651 achillæoides *H K*	Milfoil-like		pr	2	mr s	W	N Holl	1803	C	sp	Bot mag 1534
***1714 SANTOLI'NA** *W*	LAVENDER-COTTON.					*Compositæ*		*Sp* 7—16					
11652 Chamæ-Cyparissus *W*	common		or	2	jl	Y	S Europe	1573	C	co	Lam ill t 671 f 3
11653 squarrósa *W*	hoary		or	1½	jl au	Y	S Europe	1570	C	co	Mor s 6 t 3 f 17
11654 víridis *W*	dark-green		or	2	jl	Y	S Europe	1727	C	co	
11655 rosmarinifólia *W*	Rosemary-lvd		or	2	jl s	Y	S Europe	1683	C	co	Exot bot 2 t 62
§11656 alpina *W*	Alpine		or	1	jl s	Y	Italy	1798	D	co	Barr rar t 322
§11657 anthemoides *W*	Chamomile-lv		or	½	jl au	L Y	Italy	1727	D	co	
§11658 crithmifólia *W*	Samphire-leav	♿	or	½	jl au	Y	S Europe	.	D	co	



History, Use, Propagation, Culture,

1702. *Kleinia* Named after James Henry Klein, a German botanist, who published, in 1719, a dissertation upon the Juniper

1703 *Ethulia* A word formed by Linnæus without any explanation of its meaning It is not easy to understand wherefore Vaillant's more ancient name of Sparganophorus should not have been adopted

1704. *Piqueria* So named by Cavanilles, in honor of Andreas Piquerio, a Spanish botanist, who published a translation of Hippocrates, in 1757

1705. *Chrysocoma* From χρυσος, gold, and κομη, hair, in allusion to the tufts of yellow flowers with which the stems are terminated The specific name Comaurea is a mere translation of the generic appellation. Linosyris, the name of another species, is so called from *linum*, flax, and *osyris*, an ancient name for a plant with long flexible branches and flax-like leaves, which is the character of C linosyris, which, when handled, sends forth a very fine aromatic smell

1706. *Tarchonanthus* *Tarchon* is a name given by the Arabian physicians to the Artemisia Dracunculus, and is the root of our English word *Tarragon*. Ανθος signifies flower, and the word thus compounded may be Englished Tarragon-flower

1707. *Calea* Derived from καλος, beautiful The species are ornamental shrubs of South America, with undivided leaves, and corymbose, terminal, or axillary heads of yellowish purple flowers Mr. Brown's history

11628 Leaves obl lanc acute at each end nearly entire
11629 Leaves elliptical blunt mucronate repand with pellucid dots
11630 Leaves linear entire with pellucid dots, Stem suffruticose

11631 Flowers panicled
11632 Leaves linear toothed decurrent, Pedunc. opposite the leaves 1-fl Stem divaricating
11633 Stem winged, Leaves lanc acute serrated downy decurrent, Flowers corymbose

11634 Leaves opp. ovate-lanc serrated 3-nerved, Invol with 4 flowers

11635 Leaves linear straight smooth decurrent at back
11636 Leaves linear recurved roughish, Flowers cernuous
11637 Leaves linear straight ciliated, Branches pubescent
11638 Leaves lanc ovate recurved toothletted serrated, Peduncles pubescent
11639 Leaves oblong tapered at base toothletted wavy
11640 Leaves linear glabrous, Involucres lax
11641 Leaves linear-lanceolate 3-nerved scabrous, Flowers corymbose, Invol lax
11642 Panicled, Leaves lanc 3-nerved dotted naked
11643 Leaves lanc. villous, Involucres contracted

11644 Leaves oblong entire downy beneath

11645 Flowers about 3 stalked, Leaves ovate-oblong subserrate stalked

11646 Corymbs heaped, Peduncles very long, Leaves lanc Stem herbaceous

11647 Leaves opp undivided, Panicle terminal brachiate

11648 Corymbs heaped, Leaves alternate: upper ovate-lanceolate, lower toothed hastate sinuate serrate

11649 Panicles very large erect diffuse capillary

11650 Leaves lanc. narrowed at base serrated alternate

11651 The only species

11652 Pedunc 1-fl Leaves hoary toothed in 4 rows, Teeth blunt, Branches dowy, Invol pubescent
11653 Pedunc 1-fl. Leaves hoary toothed in 4 rows, Teeth subulate much spreading, Branches downy
11654 Pedunc. 1-fl Leaves smooth toothed in 4 rows, Teeth subulate straight, Branches and invol smooth
11655 Pedunc 1-fl Leaves linear warted at edge upper entire
11656 Pedunc 1-fl Leaves bipinnate, Stems simple
11657 Pedunc 1-fl Leaves bipinnate, Stems much branched villous
11658 Like Santolina alpina, but segments of leaves are shorter and thicker



and Miscellaneous Particulars

of this genus, in the twelfth volume of the Transactions of the Linnean Society, is a model of botanical erudition and acuteness, such as has been rarely seen in modern days

1708 *Isocarpha.* From ισος, equal, and καρφη, chaff, in allusion to the equality of the chaff of the receptacle and the leaves of the involucrum Herbs of South America, with opposite undivided leaves, and ovate terminal heads of whitish flowers

1709 *Petrobium* From πετρος, a stone, with reference, it is presumed, to the texture of the grains A small tree, native of St Helena, where it is called *white wood*

1710. *Neurolæna.* From νευρον, a nerve, and λαινος, stony. An erect shrub of South America, with alternate, undivided, and lobed leaves, and terminal compound corymbs of yellow flowers

1711 *Humea* Named in honor of Sir Abraham Hume, Bart. of Wormleybury, in Hertfordshire, a gentleman whose whole life has been devoted to the protection and assistance of the arts and sciences, and especially of botany. A beautiful plant with immense capillary panicles of brilliant crimson flowers

1712. *Cæsulia.* Meaning unknown Little creeping weed-like plants, rooting at the joints

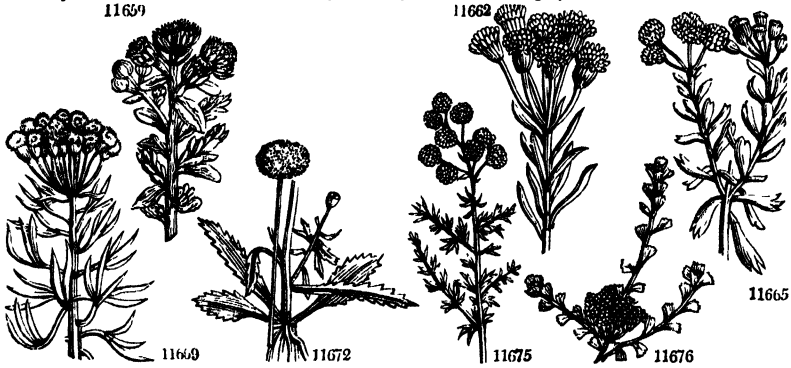
1713. *Ixodia* From ιξωδης, viscid. A greenhouse shrub, native of the south coast of New Holland, flowering most part of the year

1714. *Santolina.* Supposed to be a diminutive of *sancta*, a holy little herb, in allusion to some reputed virtues A genus of slightly shrubby somewhat aromatic plants, with yellow discoid flowers

1715. OTAN'THUS. *Link* Otanthus.					*Compositæ.*		*Sp.* 1.					
11659 maritimus *Link*	sea		pr	½	jl.s	Y	England	sea sh.	C	s.l	Eng. bot. 141
Santolina maritima L.												
1716. CALEAC'TE. *R Br* Caleacte					*Compositæ.*		*Sp.* 1.					
11660 urticifólia *R Br*	nettle-leaved		or		jl.au	Y	Vera Cruz	1740.	C	co		
Soldágo urticifólia Mill												
*1717. ATHANA'SIA *W* Athanasia.					*Compositæ*		*Sp* 11—28.					
11661 capitáta *W*	hairy		or	1½	ja.mr	Y	C. G. H	1774.	C	l.p	Mor s 6. t.3 f.48	
11662 pubéscens *W*	villous-leaved		or	6	jn.au	Y	C G. H.	1768.	C	co	Com hort.2 t 47	
§11663 ánnua *W*	annual		un	1	jl au	Y	Barbary	1686.	S	co	Bot. mag 2276	
11664 dentáta *W*	tooth-leaved		pr	1½	jl au	Y	C G H.	1759.	C	l p	Comm. rar t 41	
11665 trifurcáta *W.*	trifid-leaved		pr	3	jl au	Y	C G. H.	1710	C	l.p	Com hort 2 t 49	
11666 virgáta *W*	twiggy		pr	1	jl au	Y	C G H.	1815.	C	co	Jac schœ 2.t.148	
11667 tomentósa *W.*	Lavender-leav		pr	2	my jn	Y	C G H.	1774.	C	l p		
11668 filifórmis *W.*	fine-leaved		pr	2	au	Y	C. G. H	1787.	C	l p		
11669 crithmifólia *W.*	Samphire-leav.		pr	2	jl.au	Y	C. G H.	1723.	C	l p	Com. hort.2 t.50	
11670 parvifióra *W.*	small-flowered		pr	2	ap	Y	C G. H.	1731.	C	l p	Jac schœ.2 t 149	
11671 pectináta *W*	pectinated		pr	1½	my jn	Y	C G H.	1774.	C	co		
1718 BALSAMI'TA. *W* Costmary.					*Compositæ*		*Sp* 4—6.					
11672 virgáta *W*	twiggy		un	3	jn jl	Y.G	Italy	1791.	D	co	Jac. obs. 4 t 81	
11673 ageratifólia *W.*	Ageratum-lvd		un	2	jn o	Y G	Candia	1605.	C	co	Alp exot. t. 326	
11674 vulgáris *W.*	common		or	3	au s	Y G	Italy	1568	D	co	Sch han.3 t 240	
11675 ánnua *Link.*	annual		un	2	jl au	Y G	Spain	1629.	S	co	Mil.ic 2 t.227.f 1	
1719 PENTZIA *Th* Pentzia.					*Compositæ*		*Sp* 1					
11676 flabellifórmis *W*	fan-leaved		or	3	my au	Y	C G H.	1774.	C	p l	Bot. mag. 212	

SUPERFLUA.

1720 TANACE'TUM. *W* Tansy					*Compositæ*		*Sp.* 5—21.				
11677 lmifólium *W*	Flax-leaved		un	1½	au	Y	C G H	1774.	C	p l	
11678 suffruticósum *W.*	shrubby		un	2	my s	Y	C G H.	1751.	C	p l	Com hor.2. t.100
11679 argénteum *W.*	silvery		un	1	my s	Y	Levant	1812.	D	co	
11680 vulgáre *W.*	common		cul	2	jl au	Y	Britain	ro.sid.	D	co	Eng bot. 1229
β crispum	*curled*		cul	2	jl au	Y	.....	...	D	co	
11681 angulátum *W*	angular		un	2	jl au	Y	Levant	1820	D	co	Willd.ach.t.2.f 3
1721 ARTEMI'SIA *W.* Wormwood					*Compositæ*		*Sp.* 58—87.				
11682 judaica *W*	Judean		or	1½	au	Y	C G H	1683.	C	co	Plu alm. t 73 f 2
11683 valentina *W*	Spanish		or	1	jl au	Y G	Spain	1739	C	co	Barr. ic. t. 485
11684 subcanescens *W.*	hoary-leaved		or	2	jl au	Y G	S. Europe	...	C	co	
11685 Abrótanum *W.*	Southernwood		or	4	au o	Y G	S Europe	1548	C	co	Blackw. t. 555
11686 húmilis *W en*	dwarf		or	2	au o	Y G	Carniola	...	C	co	
11687 tenuifólia *W*	slender-leaved		or	10	s d	Y G	China	1732	C	co	Dill. elt t.33.f 37
11688 arborescens *W*	tree		or	10	jn au	Y G	Levant	1640	C	co	Lob. ic. 753
11689 argéntea *W*	silvery		or	4	jn jl	Y G	Madeira	1777	C	co	
11690 glaciális *W*	silky		or	½	jl au	Y G	Switzerl	1739	D	co	Jac aus.5,t.ap 35
11691 mutellina *W.*	Alpine		or	½	jl au	Y G	Al of Eur	1815.	D	co	Vil.dauph.3 t.35
11692 prócera *W*	lofty		or	8	jl au	Y G	S. Europe	1820.	C	co	
11693 caucásica *W.*	Caucasian		or	½	jn jl	Y G	Caucasus	1804.	D	co	
11694 chinénsis *Lour*	Moxa		m	4	jn jl	Y G	China	1818.	C	co	
11695 spicáta *W*	spiked		or	1	jn jl	Br	Switzerl.	1790.	D	co	Jac aus 5 t.ap 34
11696 pectináta *W*	comb-leaved		ft	1	jn jl	Br	Dauria	1806.	S	co	Pal.it 3 t Hh.f 2
11697 tanacetifólia *W*	Tansy-leaved		or	1	jl au	Br	Siberia	1768	S	co	Al ped 1.t 10 f.3
11698 Santónica *W*	Tartarian		or	1	s n	W G	Siberia	1596	C	co	Gmel sib 2. t 51
11699 scopária *W.*	besom		or	2	jl.s	W G	Hungary	1796.	S	co	Pl. rar. hu.1 t 65



History, Use, Propagation, Culture,

1715 *Otanthus.* From ωτος, an ear, and ανθος, a flower, in allusion to the appendages which are placed on each side of the base of the florets. An infusion of the leaves and stem is said to be employed successfully in the east in cases of stone and gravel

1716. *Caleacte.* So called because it is the ornament of the sea coasts where it grows, and derived from καλος, beautiful, and ακτη, the sea shore

1717. *Athanasia* From α, privative, and θανατος, death; that is to say, a plant which does not perish. But the application of the word, as far as the present genus is concerned, is far from obvious.

1718 *Balsamita* Derived from βαλσαμον, balm, in allusion to its strong balsamic smell Ugly plants of no merit whatever. B vulgaris has the English name *Costmary*, from the Greek Κοστος, an aromatic shrub, and Mary; the Virgin Mary's costus. from its being put into ale, it has our old English name of *Ale-cost.* It is more aromatic and has a pleasanter smell than tansy, to which it is nearly allied

1719. *Pentzia.* Named by Thunberg, after his pupil Charles John Pentz. A bushy branching hoary shrub, with little yellow flowers.

11659 Pedunc. corymbose, Leaves oblong blunt crenated densely woolly

11660 The only species

11661 Leaves ovate villous, Heads terminal subsessile
11662 Leaves obov lanc. blunt villous, Umbels terminal, Branches villous
11663 Corymbs simple contracted, Leaves pinnatifid toothed
11664 Corymbs compound, Leaves recurved lower linear toothed, upper ovate serrate
11665 Leaves cuneiform cut-trifid, Flowers in umbels
11666 Leaves cuneiform · lower pinnatifid cut: upper 3 or 5-toothed, Flowers in umbels
11667 Leaves linear tomentose, Panicle compound
11668 Leaves linear filiform smooth, Flowers panicled
11669 Leaves trifid with linear smooth segments, Flowers somewhat in umbels
11670 Leaves pinnated: pinnæ linear smooth, Panicle decompound
11671 Leaves pinnated: pinnæ linear smooth, Panicle compound

11672 Stem herbaceous branched at base, Branches 1-fl Leaves sessile lanc serrated
11673 Leaves obovate serrated sessile clustered, Flowers subcorymbose
11674 Leaves ellipt. toothed: lower stalked, upper sessile auricled at base, Flowers corymbose
11675 Radical leaves bipinnate: cauline many pinnated downy, pinnæ linear acute mucronate

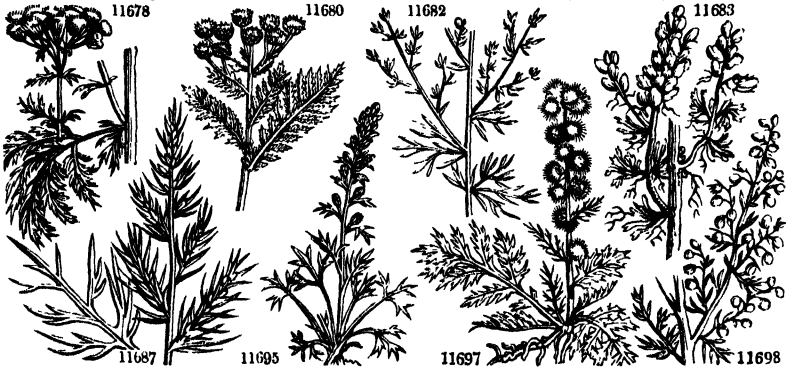
11676 Corymbs simple, Leaves deltoid serrated at end

SUPERFLUA.

11677 Leaves lanceolate channelled, Raceme terminal fastigiate
11678 Leaves pinnated · pinnæ linear toothed pubescent, Corymb fastigiate leafy at base
11679 Leaves pinnated silky with down, Pinnæ lanc somewhat toothed at end, Corymb terminal
11680 Leaves bipinnatifid incise-serrate

11681 Leaves pinnatifid: segm. lanceolate serrated, Corymb contracted, Invol angular

11682 Leaves obovate blunt lobed small, Flowers panicled stalked
11683 Leaves hoary: lower pinnated with palmate pinnæ, upper palmate sessile, Heads panicled simple
11684 Cauline leaves pinnated smoothish. floral undivided linear, Panicle virgate, Heads glob stalked nodding
11685 Stem upright, Lower leaves bipinnate upper pinnated capillary, Invol downy hemispherical
11686 Caul. lvs pinnat. very smooth: floral undivided setaceous, Involucres downy, Heads glob stalk nodding
11687 Stem upright, Leaves bipinnate capillary floral simple, Invol oblong
11688 Leaves tripinnatifid silky cinereous, Leaflets linear, Heads globose, Flowers branched simple
11689 Leaves bipinnatifid silky white, Leaflets lanc linear, Heads globose, Flowers branched virgate
11690 Stem quite simple, Leaves all palmate multifid white, Heads terminal clustered
11691 Stem quite simple, Leaves all palmate multifid white, Lower heads stalked upper sessile
11692 Stem branched spreading, Leaves all bipinnate capillary, Invol smooth hemispherical
11693 Stem quite simple, Leaves all palmate multifid silky acute
11694 Leaves hoary lower cuneiform obtuse 3-lobed, upper linear blunt, Flowers globose stalked cernuous
11695 Stem quite simple, Leaves hoary radical palmate multifid, caul. pinnatifid, upper linear entire blunt
11696 Stem quite simple, Leaves pectinate pinnatifid glabrous, Pinnæ linear filiform, Pedunc 1-fl axillary
11697 Stem quite simple, Lvs bipinnatifid subpub beneath: segm lin lanc acum entire, Raceme naked term
11698 Cauline leaves pinnated linear smooth, Branches undivided, Spikes 1-sided reflexed
11699 Cauline leaves pinnated setaceous smooth. radic pinnated multifid silky, Stem erect, Branches divided



and Miscellaneous Particulars.

1720 *Tanacetum* An alteration of Athanasia, which see. *Tanaisie*, Fr, *Tansy*, Eng, *Reinfahren*, Ger The common Tansy has a strong aromatic smell, and an extremely bitter taste. It is stimulant and carminative, and its seeds are reckoned anthelmintic and sudorific It is said to drive bugs away from a bed in which it is laid A distilled water and a kind of stomachic bitter are prepared from it The young leaves are shredded down and employed to give color and flavor to puddings, they are also used in omelets and cakes, and those of the curled variety for garnishing

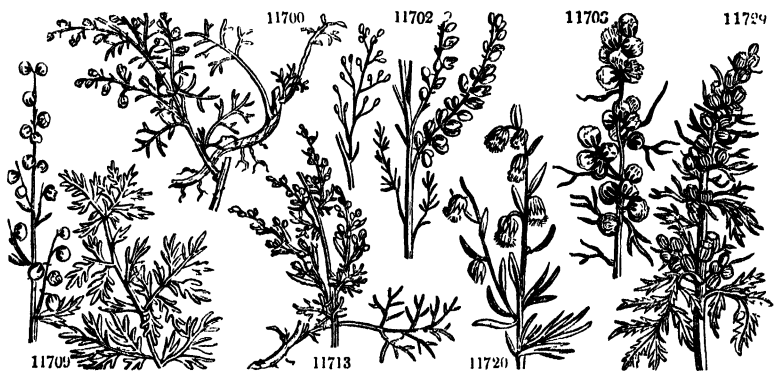
1721. *Artemisia.* Artemis was one of the names of Diana, the goddess of chastity. The plant is said to have been named after this goddess, on account of the purposes to which it was applied in bringing on precocious puberty. Pliny, however, informs us, that in his time, there was an opinion that the plant was named after Artemisia, the Queen of Mausolus, King of Caria.

A Abrotanum, Santonica, maritima, and Absinthium, are included in the Materia Medica, but, according to Dr. Thomson, the latter species is the only one deserving to be retained. It is tonic, antispasmodic, and anthelmintic, and when externally applied, is discutient and antiseptic It has been used with advantage in inter-

11700 campéstris *W.*	field	△	w	1	au	Br	England	san fl	D	co	Eng. bot 338
11701 áfra *Jacq.*	African	□	or	2½	au	W.a	C G H	...	C	co	
11702 pauciflóra *W.*	few-flowered	△	or	½	au	Y	Siberia	1800	D	co	G sib 2. t.52.f 1,2
11703 palústris *W*	marsh	○	or	2	jl au	Y	Siberia	1804	S	co	Gmel. sib.2. t.55
11704 neglécta *W cn*	neglected	△	or	2	jl au	G.Y	Siberia	1b15	D	co	
11705 crithmifólia *W*	Samphire-leav		or	1	au o	Br	Portugal	1739	C	co	
11706 saxátilis *W*	rock	△	or	2	jn au	W	Hungary	1816	D	co	
11707 glauca *W*	glaucous	△	or	1½	jn au	G	Siberia	1806	D	co	
11708 monogyna *W*	one-styled	△	or	2	jn au	Y	Hungary	1816	D	co	Pl rar hu 1 t 70
11709 lacinıáta *W*	torn	△	or	2	jl au	G	Siberia	...	D	co	Gmel sib 2.t.57
11710 palmáta *W*	palmated	□	or	1	jn jl	G Y	S. Europe	1739	C	co	
11711 nívea *W cn*	snowy	△	or	2	jn jl	G Y	Siberia	1815	D	co	
11712 maritima *W.*	drooping-flow	△	or	1	au.s	Br	Britain	sea sh	D	co	Eng bot 1706
11713 gállica *W*	upright-flower	△	or	2	au s	Br	Britain	mud.s	D	co	Eng bot 1001
11714 fragrans *W*	Lavender-leav	△	or	1	jn jl	L Y	Armenia	1739	D	co	
11715 álbida *W*	whitened	△	or	3	jn jl	L Y	.....	...	D	co	
11716 austríaca *W*	Austrian	△	or	1½	au o	Br	Austria	1597	D	co	Jac aust.1 t 100
11717 vallesiaca *W*	downy	△	or	1	jl au	L.Y	Italy	1739.	D	co	
11718 salina *W*	salt	△	or	1½	jl au	W G	Hungary	1823	D	co	
11719 rupéstris *W*	nodding-flower.	△	or	1½	au	Br	Siberia	1748	D	co	Flor dan t 801
11720 sericea *W*	silky-leaved	△	or	1½	jn jl	W	Siberia	179 x	D	co	Gmel sib t.64.f 1
11721 répens *W*	creeping	△	or	1	jn jl	Br	Siberia	1805	D	co	
11722 nútans *W*	nodding	△	or	3	jn jl	Br G	Tartary	...	D	co	
11723 saxátilis *W*	rock	△	or	3	jn jl	Br G	Hungary	...	D	co	
11724 pontica *W*	Roman	△	or	3	s	Y	Austria	1570	D	co	Jac aust 1 t 99
11725 chamæ'melifólia *W*	Chamomile-lv	△	or	1½	jl au	P Br	S Europe	1739	D	co	Vil dauph 3 t 35
11726 ánnua *W*	annual	○	or	4	jl au	W G	Siberia	1741	S	co	Am ru t 19.f 23
11727 camphoráta *W.*	Camphorated		or	5	jl au	W G	Italy	1825	C	co	
11728 taúrica *W*	Taurian	△	or	½	jl au	W G	Tauria	1818	D	co	
11729 biénnis *Ph*	biennial	☉	or	2	jl au	Y G	Missouri	1804	S	co	Bot. mag 2472
11730 Absinthium *W*	common	△	or	1½	jl s	Y	Britain	rubble	D	co	Eng bot. 1230
11731 Sieversiána *W*	Sievers's	☉	or	2	jl au	Br G	Siberia	1800	S	co	
11732 fasciculáta *Bach*	fascicled	△	or	2	jl au	Y Pu	Iberia	1823	D	co	
11733 vulgáris *W*	Mugwort	△	w	3	au s	Pu	Britain	rubble	D	co	Eng bot 978
11734 indica *W*	Indian	△	or	3	s o	Y G	E Indies	1796	D	co	Rhe mal 10 t 45
11735 integrifolia *W.*	entire-leaved	△	or	2	jl au	Y.G	Siberia	1759	D	co	G sib 2 t 68 f 1 2
11736 japónica *W*	Japanese	△	or	3	o n	W	Japan	1804.	D	co	
11737 cærulescens *W.*	bluish		or	1½	au o	Y	England	sea sh.	C	co	Eng bot 2426
11738 modóra *W cn*	modorous	△	or	2	jl au	Y G	Siberia	1548.	D	co	G si.2.t.59 60 t 1.
11739 Dracúnculus *W*	Tarragon	△	cul	2	jl au	W G	S Europe	1548.	D	co	

*1722 GNAPHA'LIUM *W* Everlasting. *Compositæ* *Sp* 38—106

11740 crispum *W*	curled	□	el	6	...	Pk	C G H	1809	C	s p
11741 arbóreum *W*	tree	□	el	6	f au	W	C G H	1770	C	s p
11742 grandifólrum *W*	great-flowered	□	el	3	jn au	W	C G H	1731	C	s p Bot rep 489
11743 divaricátum *Thunb*	spreading	□	el	3	jn au	W	C G H	1820	C	s p Bre prod t.18 f 3
11744 tephródes *Link*	brown	□	el	3	jn au	Y w	C G H	1823	C	s p
11745 acumnátum *Link*	acuminate	□	el	3	jn au	W	C G H	1823	C	s p
11746 lasiocaulon *Link*	woolly-stemm	□	el	3	jn au	W	C G H	1823	C	s p
11747 congéstum *W*	close-headed	□	pr	3	my jn	Pu	C G H.	1791	C	s p Bot reg 243
11748 pátulum *W*	spreading	□	or	3	ja au	W	C G H	1771	C	s p
11749 discolórum *W*	two-colored	□	or	3	my au	Br	C G H	1815	C	co Bur afr t 97 f 4
11750 cephalótes *W*	large-headed	□	or	4	ja n	Pk	C G H	1789	C	co Plu phy t 410 f 2
11751 fastigiátum *W*	close-flowered	□	or	3	my au	W	C. G H	1812	C	co Pet.gaz. 12.t.7 f.3
11752 milleflorum *W*	many-flowered	□	or	1	jn s	Pa pu	C G H	1802	C	s p
11753 diosmæfólium *P S*	Diosma-leaved	□	or	1½	mr au	W	C G H	1812	C	co Vent.malm t 74
11754 ericoides *W*	Heath-leaved	□	or	1½	mr au	Pk	C G H	1774	C	s p Bot mag. 435
11755 teretifólium *W*	round-leaved	□	or	1	mr au	Br	C G H	1812	C	co Bur afr t 77. f 3
11756 Stœchas *W*	comm.-shrubby		or	2	m o	Y	Europe	1629	C	co Barr ic. 410



History, Use, Propagation, Culture,

mittents, gout, scurvy, and dropsy, and although modern practitioners will scarcely rely on its efficacy in these complaints, yet it is undoubtedly of some value as a stomachic (*London Dispen.* p 182) The seed of wormwood is used by the rectifiers of British spirits, and the species is a good deal cultivated on dry soil near Mitcham, in Surrey, for that purpose A vulgaris is used in some parts of Sweden instead of hops, in order to increase the inebriating quality of malt liquor The plant is readily eaten by cattle and sheep, and is found in our best natural pastures on dry soils It is said to be stomachic and slightly stimulating

The species called Abrotanum, *Garderobe*, Fr, derives its name from α, privative, and βροτος, mortal; on account of the great virtues attributed to it as a preservative of life, Absinthium, from α, privative, and ψυθος, pleasure, i e unpleasant

Dracunculus, *Tarragon*, Eng, *Estragon*, Fr, *Dragon*, Ger, and *Dragoncella*, Ital, is said to have been so called on account of its tortuous roots, which may be likened to the sinuous tail of a dragon, but it is much

11700 Caul. lvs pinnated setac smooth. radic pinnated with 3-fid hoary segm Stem procumb branched virgate
11701 Leaves bipinnatifid downy beneath segm lanceolate blunt, Panic 1-sided, Heads nodding
11702 Cauline leaves pinnated or trifid filiform pubescent, Stem ascending somewhat divided
11703 Cauline leaves pinnated smooth pinnæ filiform remote very long, Heads globose erect sessile
11704 Cauline lvs pinnated smooth lower and radic. 3-partite multifid, Stem panic erect, Peduncles nodding
11705 Cauline lvs pinnated smooth somewhat fleshy pinnæ simple or bifid lin blunt, Heads obl stalked erect
11706 Cauline lvs hoary pinnated linear filiform · floral undivided filiform, Heads roundish angular nodding
11707 Leaves glaucous downy lower pinnated, Pinnæ linear-lanceolate, Heads globose stalked nodding
11708 Leaves multipartite hoary, Racemes erect 1-sided, Heads erect about 5-fl Only one female floret or none
11709 Leaves pilose triply-pinnatifid, Stem simple with a leafless panicle, Heads globose nodding
11710 Leaves simply pinnate with some of the segments bifid subpalmate, Heads erect
11711 Leaves hoary-silky: lower pinnated, Stem nearly erect much branched, Heads sessile ovate
11712 Leaves downy pinnated. the uppermost undivided, Racemes drooping, Recept naked, Flow. obl sessile
11713 Leaves downy pinnate. the uppermost undivided, Racemes drooping, Recept. naked, Flowers obl sessile
11714 Leaves hoary radical bipinnate, Pinnæ close linear blunt of the branches pinnated sessile
11715 Leaves pinnated white with down Fascicles of flowers bracteate, Heads downy
11716 Leaves hoary lower pinnated, pinnæ linear 3-parted, Heads stalked roundish nodding
11717 Leaves snow-white cauline bipinnate linear filiform, floral simple, Heads obl sessile erect
11718 Leaves hoary radical pinnated, pinnæ 3-parted linear-filiform, Heads obl stalked nodding
11719 Leaves subpubescent · cauline pinnated, pinnæ linear acute, Heads globose stalked nodding
11720 Leaves silky · cauline pinnate, pinnæ 3-parted linear runcinate, Heads globose nodding
11721 Leaves silky white, Pinnæ 3-parted linear acute, Heads roundish stalked cernuous
11722 Cauline leaves pinnated or trifid linear, Stem erect panicled, Branchlets nodding 1-sided
11723 Cauline lvs hoary pinnated linear-filiform, Stem ascending branched panicled, Involucre roundish angular
11724 Leaves downy beneath cauline bipinnate, Leaflets linear, Heads roundish stalked nodding
11725 Leaves smooth lower tripinnate, upper bipinnate, Leaflets linear acute, Heads globose stalked nodding
11726 Leaves smooth triply pinnatifid, Stem straight, Heads roundish subsessile erect
11727 Cauline leaves pinnated hoary white pinnæ trifid linear, Stem erect, Involucre hoary, Heads globose
11728 Leaves hoary. lower bipinnate, Pinnæ linear-filiform, Heads oblong sessile
11729 Leaves smooth radic triply pinnate, upper undivided linear, Heads roundish subsessile erect
11730 Lvs bi-tripinnatif clothed with short silky down, Segments lanc. Heads hemispheric droop Recept hairy
11731 Lvs. somewhat hoary caul bipinnatifid, floral trifid or lanc Heads globose stalked nodding, Involucre scarious
11732 Lvs downy lower decompound, upper simple, Panicle corymbose, Heads fascicled ovate hoary
11733 Leaves pinnatifid. their segm cut downy beneath, Heads somewhat racemed ovate, Recept naked
11734 Leaves downy beneath caul pinnatifid, floral undivided linear, Heads sessile obl erect, Involucre smooth
11735 Leaves lanc acuminate downy beneath somewhat toothed, Heads ovate subsessile erect
11736 Leaves smooth lanc acute. cauline trifid at end, Heads roundish stalked nodding
11737 Leaves hoary lanceolate entire radical cut, floral oblong stalked nodding
11738 Lvs smooth lanc narrowed at each end, Heads roundish stalked erect, Scales of involucre membranous at edge
11739 Leaves smooth lanceolate narrowed at each end, Heads roundish stalked erect

11740 Leaves downy beneath scabrous above radical stalked oblong, cauline amplexicaul wavy
11741 Leaves sessile linear smooth above revolute at edge, Heads capitate, Peduncle long
11742 Leaves amplexicaul ovate oblong 3-nerved woolly above, Corymb stalked, Involucre cylindrical
11743 Leaves amplexicaul panduriform spatulate blunt downy, Corymb and branches divaricating
11744 Branches downy, Lvs linear revolute at edge smooth above downy beneath, Leaves of involucre lanceolate acute
11745 Branches pubescent Lvs lanc lin acumin smooth above finely downy beneath, Heads corymb cylindrical
11746 Tomentose, Leaves linear acute curved, Heads in capitate stalked corymbs
11747 Leaves lanc sessile 3-nerved naked above woolly beneath, Corymb contracted-capitate
11748 Leaves amplexicaul spatulate downy acute, Corymb term Branches spreading
11749 Leaves sessile lanc Involucres white lower scales brown
11750 Leaves lin-lanc mucronate revolute at edge downy beneath, Heads sessile capitate terminal
11751 Leaves lanc mucronate revolute at edge downy beneath, Heads corymbose
11752 Leaves obl blunt downy, Corymbs fastigiate, Heads cylindrical
11753 Leaves lin spreading recurved scabrous above, Corymb dense, Involucre cinereous at base
11754 Leaves sessile linear, Outer involucre rough inner flesh-colored
11755 Leaves clustered roundish, Corymbs branched, Involucres downy outside
11756 Leaves linear, Corymb compound, Branches virgate



and Miscellaneous Particulars.

more probable that the word is a corruption of *Tarchon*, the Arabic name of the plant See Tarchonanthus The leaves and points of the shoots are used as an ingredient in pickles. A simple infusion of the plant in vinegar makes a pleasant fish sauce, it is eaten along with beef steaks, as horse-radish is with roast beef, and is employed, both in Europe and Persia, to correct the coldness of salad herbs, and season soups and other compositions The plant is of the easiest culture, but, like other species of the genus, dislikes a wet soil

From the acrid leaves of A chinensis the drug called Moxa is obtained; a substance much in use among the Chinese as an actual cautery For this purpose, the Moxa is laid upon the part affected and set on fire The Cochin Chinese, and also the Japanese, according to Kæmpfer, use Artemisia vulgaris for the same purpose, and it is said with great success, in removing tumours and rheumatic pains, or slight convulsions

1722 *Gnaphalium* A word under which Dioscorides describes a plant with soft white leaves, which served the purpose of cotton It agrees pretty well with the modern genus, which consists of very pretty, sometimes

11757	ignéscens *W.*	red-flowered	♃	or	2	jn o	R	C. G. H.	1731.	C	s.p	
11758	crassifólium *W.*	thick-leaved	♃	or	1	jl.s	Y	C. G. H.	1774.	C	s.p	
11759	maritimum *W*	sea	♃	or	4	jn au	W.Y	C. G H.	1772.	C	co	Bur. afr. t. 77. f.2
11760	dasyánthum *W. cn.*	hairy-flowered	♃	or	4	jn au	Y	C. G. H.	1812.	C	co	
11761	orientále *W*	eastern	☿	or	1½	ap.au	Y	Africa	1629.	C	s p	Com hort. 2 t 55
11762	cymósum *W.*	branching	☿	or	1½	ap au	Y	Africa	1731.	C	co	Dil. el.t.107 f 128
11763	rútilans *W.*	shining-flower.	☿	or	1	jn jl	R.Y	C. G H.	1731.	C	s p	Dil. el t 107 f 127
11764	arenárium *W*	sand	☋	or	1	jl.s	Y	Europe	1739.	D	co	Bot. mag 2159
11765	angustifólium *Pers*	narrow-leaved	♃	or	2	jl s	Y	Naples	...	D	co	Barr. ic. 1125
11766	lúteo-álbum *W.*	Jersey		or	2	jl.au	Y w	England	san pl	R	s l	Eng. bot. 1002
11767	albéscens *W*	white Jamaica	♃	or	2	...	W.Y	Jamaica	1793.	C	co	
11768	apiculátum *Lab*	New Holland	☿	or	1½	ja.d	Y	V. Di. Isl.	1804.	D	co	Bot. reg 240
11769	odoratissimum *W.*	sweet-scented	♃	ft	2	ap au	Y	C G H.	1691.	C	s p	Mil ic 1 t.131.f 2
11770	sanguíneum *W*	bloody	☋	or	1½	my jl	Cr	Egypt	1768.	D	co	Rauw.it.285.t.37
11771	c ndidissimum *W.*	hoary	☋	or	2	my jl	Pa.Y	Caspian	1823.	D	co	
11772	fo'tidum *W*	strong-scented	☿	or	2	jn.s	L.Y	C. G H	1692.	S	s l	Bot mag 1987
11773	helianthemifólium	*W.* Sun-rose-lvd.	♃	or	1	jl o	W	C G H.	1774	C	co	Volck nori t. 194
§11774	squarrósum *W*	squarrose	♃	or	½	jl o	Pu	C. G H	1816.	C	co	Jac frag t 3. f 4
11775	purpúreum *W*	purple-flower'd	☿	or	1½	jn s	Pu	N. Amer.	1732	S	co	Dil.el.t.109. f 133
§11776	declinátum *W*	creeping	☿	or	½	jl s	Br	C G. H	1787.	S	co	
§11777	glomerátum *W*	cluster-flower	☿	or	½	mr.s	Pa.Y	C. G. H.	1774	D	co	

1723 LEONTOPO'DIUM *R Br* Lion's-Foot — *Compositæ* *Sp.* 1—2

11778	vulgáre *R Br.*	common	☋	cu	½	jn.jl	Y	Austria	1776	S	p.l	Bot. mag 1958

1724 E'VAX. *Lam.* Evax. — *Compositæ* *Sp* 1—3.

11779	pygmæ'a *Lam*	pygmy		un	¼	jl au	Br	S Europe	1629.	C	co	Cav ic. 1. t 36

†1725. ANTENNA'RIA. *R Br* Antennaria. — *Compositæ* *Sp* 8—11 ?

11780	contórta *B R*	twisted-leaved	☿	pr	2	jl	W	Nepal	1821	D	co	Bot. reg 605
11781	triplinérvis *B. M.*	three-nerved	☿	pr	½	au	W	Nepal	1823	D	co	Bot. mag 2468
11782	dioica *R Br.*	dœcious	☋	pr	¼	my jl	Pk	Britain	...	D	p l	Eng bot 267
11783	alpina *R Br*	Alpine	☋	pr	¼	jn jl	Pk	Al of Eur	1775.	D	p l	Flor dan t 332
11784	plantaginea *R Br.*	Plantain-leav'd	☋	pr	1	jn jl	W	Virginia	1759	D	p l	Plu alm t 348 f 9
11785	margaritacea *R Br*	pearly	☋	pr	1½	jl s	Y	England	mea	D	p l	Eng bot 2018
11786	undulàta *R Br.*	wave-leaved		pr	1	jn s	W	Africa	1732	S	s l	Dil el t 108 f 130
11787	obtusifólia *R Br.*	blunt-leaved		pr	1	jl s	W	N. Amer	1699.	S	co	Dil el t.108 f 131

1726. METALA'SIA *R Br.* Metalasia — *Conposítæ* *Sp* 1

11788	seriphioides *R Br.*	Seriphium-like	♃	pr	3	...	Y	C G. H.	1825.	D	p l	

1727 ASTEL'MA *R Br* Astelma. — *Compositæ* *Sp* 2—7 ?

11789	eximium *R Br*	giant	♃	spl	3	jl au	Cr	C G H	1793	S	s p	Bot. reg 532
11790	frúticans *R. Br*	shrubby	♃	or	3	jn au	Y	C G H	1779	C	co	Bot reg. 726

1728. ATHRIX'IA *Ker.* Athrixia. — *Compositæ* *Sp* 1

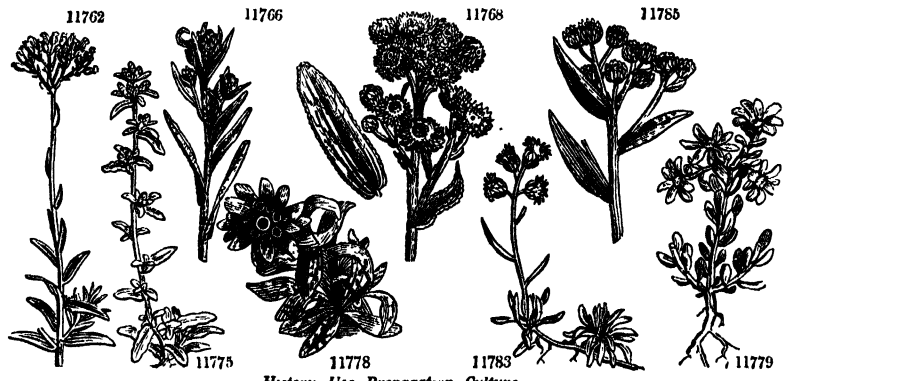
11791	capénsis *Ker.*	Cape	♃	or	3	ap	R	C. G. H.	1821.	C	p l	Bot. reg 681

1729 XERAN'THEMUM *W* Xeranthemum — *Compositæ* *Sp* 3.

11792	ánnuum *W.*	annual		or	3	jl au	Pu	S Europe	1570	S	s l	Jac. aust. 4 t.388
11793	inapértum *W.*	small-flowered		or	2	jl au	Pu	S Europe	1620	S	co	Moris s.6.t.12.f 1
11794	orientále *W.*	oriental		or	2	jl au	W	Levant	1713.	S	co	

†*1730 ELICHRY'SUM. *W* Elichrysum — *Compositæ* *Sp* 22—49.

§11795	vestitum *W.*	upright	♃	or	2	jl s	W.	C G H.	1774	S	s.p	Bur afr t. 66.f 1
11796	spirále *W.*	spiral-leaved	♃	or	2	jl o	W	C G H	1801	S	s p	Bot rep 262
11797	imbricátum *W*	imbricated	♃	or	2	jl o	W	C G. H.	1820	S	s p	Pet. gaz t. 5 f 10
§11798	spectábile *Lodd*	showy	♃	or	3	my jn	Pk	C G H.	1810	S	s p	Bot. cab 59
11799	speciosissimum *W.*	showy	♃	el	8	jl s	W	C G H	1691	S	s.p	Bot rep 31
11800	dealbátum *P S.*	herbaceous	☿	or	1½	ja d	W	V. Di Isl	1812.	D	co	La no ho 2 t 190
11801	fúlgidum *W.*	great-yellow	♃	el	2	f o	Y	C G H	1774.	S	s p	Bot. mag. 414



History, Use, Propagation, Culture,

beautiful woolly leaved shrubs or herbs, all of the description called Everlasting, on account of the permanence of the colors and form of their dry flowers

1723 *Leontopodium* From λεων, a lion, and πους, a foot. The soft tufted silky heads have been compared to the foot of such an animal as a lion

1724. *Evax* A name, the meaning of which has not been explained A little white annual weed.

1725 *Antennaria.* In allusion to the awns of the pappus, which resemble the *antennæ* of some insect. A genus founded upon the Gnaphalium margaritaceum of Linnæus. It consists of herbaceous plants, natives of Europe and North America, having the male and female flowers in distinct involucra, and on different individuals.

1726. *Metalasia.* Apparently so called from μετα λασσω, to change or alter: but the application of the name is not evident.

11757 Leaves sublanc. downy sessile, Corymbs altern. round, Heads globose
11758 Leaves broad-lanc. somewhat stalked coriaceous downy, Corymb. compound, Stem proliferous
11759 Much branched, Leaves lanc. acutish sessile, Inner scales of involucre yellow
11760 Leaves lanc acute 3-nerved at base wavy pilose: beneath tomentose, Corymb contracted bracteate
11761 Leaves lin. lanc. hoary: radical blunt, cauline acute, Corymb compound, Peduncles long
11762 Leaves lanc. 3-nerved smooth above, Raceme terminal, Stem branched below
11763 Leaves lanc. Corymb decompound, Stem branched below
11764 Leaves hoary downy blunt: radical spatulate lanc., cauline lin.-lanc. Corymb compound
11765 Leaves linear long narrow downy replicate at edge, Corymb compound umbellate
11766 Leaves half amplexicaul linear-lanc subrepand downy on each side: lower blunt, Corymb clustered
11767 White with down, Lvs. lin.-lanc. undivided below, Heads clustered conical
11768 Leaves subspatulate downy naked at end membranous or subulate, Flowers panicled
11769 Leaves decurrent blunt mucronate downy on each side flat
11770 Leaves decurrent lanc. downy flat with a naked point
11771 Leaves white silky-downy linear-lanc acute, Corymb compound
11772 Leaves amplexicaul. entire acute downy beneath, Stem branched
11773 Leaves subamplexicaul lanc Corymbs compound, Scales of involucre plaited
11774 Leaves sessile lingulate very downy, Inner scales of involucre subulate recurved
11775 Leaves lin spatulate downy beneath, Stem erect simple, Heads sessile terminal and axillary
11776 Leaves lin. lanc. Involucre with white lanceolate rays
11777 Stem herbaceous diffuse, Lower scales of involucre subulate naked, Leaves subamplexicaul.

11778 Head terminal enveloped in woolly bracteæ

11779 Stem branched at base, Bractes obovate

11780 Leaves lin mucronulate reflexed, Corymbs few-flowered simple or proliferous, Scales of involucre blunt
11781 Stem erect simple, Lvs ellipt. mucronate amplexicaul. 3-nerved [elongated obtuse colored
11782 Shoots procumb. Stems simp. Corymbs crowded, Rad. lvs spatulate, Fl. dœcious, Inner scales of involucre
11783 Stem simple, Rad. leaves lanc. floral terminal aggregate sessile, Inner scales of involucre long
11784 Runners procumb. Rad lvs ov. nerved, Corymb contracted, Fl dœcious, Inner scales of involucre long blunt
11785 Leaves lin lanc acuminate alternate, Stem branched upwards, Corymb fastigiate
11786 Leaves decurrent lanc acute wavy downy beneath, Stem branched
11787 Leaves lin lanc acutish. smooth above, pubescent beneath, Corymbs terminal contracted

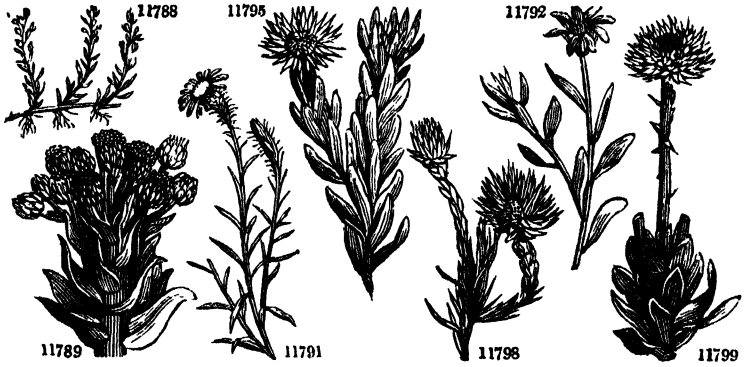
11788 Leaves small fascicled lin subulate downy above, Flowers lateral

11789 Leaves sessile ovate close erect downy, Corymb sessile
11790 Leaves amplexicaul. ovate-oblong 3-nerved acute woolly beneath on each side

11791 The only species

11792 Scales of involucre blunt scariose: the inner ones of the ray lanc blunt spreading
11793 Scales of involucre acute membranous at edge. the inner ones of the ray lanc acute conniving
11794 Scales of involucre roundish scarious: the inner ones of the ray ovate acuminate erect

11795 Leaves sess. lanc. linear woolly acute: floral with a membrane at end, Branches 1-flowered
11796 Leaves sess. lanc. downy keeled spirally imbricated, Branches 1-flowered
11797 Leaves obl.-lanc. silky imbricated, Branches 1-flowered, Peduncles squarrose
11798 Leaves linear subulate erect imbricated, Peduncle scaly 1-flowered
11799 Leaves sessile lanc obovate acute 3-nerved woolly, Branches 1-flowered
11800 Leaves lanc white beneath silky recurved spreading, Branches 1-fl. Peduncles nearly naked
11801 Leaves amplexicaul ovate lanc downy beneath tomentose at edge, Branches 3-flowered



and Miscellaneous Particulars

1727. *Astelma.* From α, privative, and στέμμα, a crown, in allusion to the construction of the fruit. Beautiful Cape shrubs with everlasting flowers.

1728. *Athrixia.* So called by Mr. Ker, we presume from α, without, and θρίξ, hair, in allusion to the absence of hairs upon the receptacle and the stigmas of the ray. A pretty greenhouse shrub, with narrow lanceolate leaves, and bright crimson solitary heads of flowers.

1729. *Xeranthemum.* From ξηρος, dry, and ανθος, a flower, on account of the dry nature of the leaves of the calyx, which retain their color and form for years. The species are popular annual flowers, of easy culture in light rich soil. They are valued for their properties of retaining their texture and color, when gathered and dried, in the manner of Gnaphalium, Elichrysum, and other genera of what are vulgarly called everlastings.

1730. *Elichrysum.* From ήλιος, the sun, and χρυσος, gold, in allusion to the brilliant yellow color of the flowers. The species are much admired for the brilliancy of their flowers even in a dried state. E. bracteatum is the handsomest annual species, and should be raised on a hotbed, and afterwards transplanted into a warm situation.

11802 **variegátum** *W*	large globul.-fl	♃	⊔	or	2	my jn	Br w	C G H.	1801.	S	s.p	Bot rep 384
§11803 **proliferum** *W*	proliferous	♃	⊔	or	2	my n	Cr	C G H	1789	C	s p	Bot. reg 21
11804 **canéscens** *W*	elegant	♃	⊔	or	1½	ap au	Pu	C G. H	1794	C	s p	Bot. mag 420
11805 **argénteum** *W*	silvery	♃	⊔	or	2	ap jl	W	C G H.	1800	C	co	Bot reg 552
11806 **retórtum** *W*	trailing	♃	⊔	or	1	jl au	W	C G. H	1732.	C	s p	Dil el.t 322 f 415
§11807 **sesamoides** *W*	superb	♃	⊔	or	2	ap jn	Pu.w	C. G. H.	1739	C	s p	Bot. mag 425
§11808 **fasciculátum** *W*	bundle-leaved	♃	⊔	or	2	mr s	W	C G H	1799	S	s p	Bot. rep 242
β álbum	*white-flowered*	♃	⊔	or	2	mr s	W	C G H	1799	S	s p	Bot rep 279
γ rúbrum	*red-flowered*	♃	⊔	or	2	mr s	Pu	C. G H	1799	S	s p	Bot rep 650
11809 **rígidum** *H K.*	rigid-leaved	♃	⊔	or	1½	my jn	W	C G H	1801	C	co	Bot rep 387
§11810 **ericoides** *P S*	filiform	♃	⊔	or	½	ap jn	W	C G H	1796	C	co	Lam ill t 693.f 2
11811 **Stæhelina** *W*	Stæhelina-like	♃	⊔	or	1½	ja.d	W	C G H	1801	C	co	Bot. rep 428
11812 **frágrans** *B R*	fragrant	♃	⊔	ft	1½	jl	Pk	C G H	1803	C	co	Bot. rep 561
11813 **herbáceum** *B R*	shining-flower	¥	△	el	1½	jl.s	Y	C. G H.	1802.	D	co	Bot. rep. 487
spléndens B M 1773												
11814 **paniculátum** *W*	corymb-flower.	♃	⊔	or	2	jn s	W	C G H	1800	S	co	Bur afr t 67 t 1
11815 **bracteátum** *W*	wave-leaved	♃	○	or	4	jl o	Y	N Holl.	1799.	C	co	Bot. rep 375

1731 CARPE'SIUM *W* Carpesium — *Compositæ* *Sp.* 2

11816 **cérnuum** *W*	drooping	¥	△	un	2	jl au	Y	Austria	1739	D	co	Jac aust 3 t.204
11817 **abrotanoides** *W*	Southernw.-like	¥	△	un	2	jl au	Y	China	1768	D	co	Osb. it. t. 10

*1732 BAC'CHARIS. *W* Plowman's Spikenard — *Compositæ* *Sp* 6—43

11818 **angustifólia** *Ph*	narrow-leaved	♚	⊔	pr	2	jl s	W	N Amer	1812	C	co	
11819 **ivæfólia** *W*	Peruvian	♚	⊔	pr	3	jl au	W	America	1696	C	l p	Sch hand 3 t 244
§11820 **nerufólia** *W*	Oleander-leav	♚	⊔	pr	2	au n	W	C G H	1752	C	l p	
11821 **halimifólia** *W*	Groundsel Tree	♚		or	4	o n	W	N Amer.	1683	C	co	Schmidt arb t 82
11822 **adnáta** *W en*	adnate	♚	□	un	6	au n	Pu	S Amer	1823	C	co	
11823 **Dioscóridis** *W*	Dioscorides's	♚	⊔	or	4	au n	W	Levant	...	C	co	Rauwf it. t 54

1733 MOLI'NA. *Fl per* Molina — *Compositæ* *Sp* 1—37.

11824 **parviflóra** *Fl per*	small-flowered	♚	⊔	un	6	...		S Amer	1824	C	co	

1734 CONY'ZA *W* Flea-bane — *Compositæ* *Sp* 34—62

11825 **squarrósa** *W*	great	¥	○	w	2	jl au	Y	Britain	ch pa	S	co	Eng bot 1195
11826 **marylándica** *Ph*	Maryland		○	un	1	au o	Pu	N Amer	...	S	co	Dill.elt.t 88 f 104
11827 **axillàris** *W*	axillary		⊡	un	1½	au o	Y	.....	1823	S	co	
11828 **camphoráta** *Ph*	Camphor-scent	¥	△	un	3	au o	Pu	N Amer	1704	D	co	Dill elt t 89 f 105
11829 **pátula** *W*	spreading		○	un	1½	jl s	Y Pu	China	1758.	S	co	Mill ic 2 t 247
11830 **balsamífera** *W*	balsam-bearing	¥	⊠	un	2	jl s	Br	E Indies	1822	S	co	Rump 6 t 24 f 1
11831 **bifrons** *W*	oval-leaved	¥	△	un	1	au s	Y	N Amer	1739.	D	p l	Plu alm t. 87 f 4
11832 **fastigiáta** *W*	fastigiate		⊡	un	2	jn jl	Pu	Senegal	1820	S	co	
11833 **cándida** *W*	woolly	♚		un	1	jn jl	Y	Candia	1714	C	co	Bar ic t. 217
11834 **chinénsis** *W*	Chinese	♚	□	un	2	jl au	Y Pu	China	1796	S	co	Ru. am 6.t 14 f 2
11835 **verbascifólia** *W.*	Mullein leaved	♚	⊔	un	1	...	Y	Sicily	1808	C	co	Bocc. sic. t 31.f 2
11836 **chilénsis** *Spreng*	Chili		○	un	3	au o	Y	Chili	1816	D	co	
11837 **aurita** *W*	auricled		⊡	un	1	au o	W	E Indies	1818	S	co	
11838 **hirsuta** *W*	shaggy	¥	⊡	un	2	au s	Y Pu	China	1767	S	co	
11839 **ægyptíaca** *W.*	Egyptian		⊡	un	1½	jl	Y	Egypt	1778	S	co	Jac vind 3 t. 19
11840 **Gouáni** *W*	Gouan's	¥	⊡	un	1	jl au	Y	Canaries	1772	S	co	Jac. vind. 3 t 79
11841 **amœ'na** *Link*	agreeable		⊡	un	3	jl au	Pu	Congo	1824	S	co	
11842 **sícula** *W*	red-stalked		○	un	1	au s	Y	Sicily	1779.	S	co	Bocc. sic t 31 f 4
11843 **fœ'tida** *W*	stinking	¥	△	un	2	au s	Y	Africa	1724	D	co	Mill. ic 2. t. 243
11844 **sórdida** *W*	small-flowered	♚	⊔	un	1	jl s	Br	S Europe	1570.	C	co	Barr. ic t 368
11845 **saxátilis** *W*	stone	♚	⊔	un	1	jl au	Br	S Europe	1640	C	co	Schk han.3 t 241
11846 **rupéstris** *W*	rock	♚	⊔	un	1	..	Y	Arabia	1790.	C	co	Schmid. ic t 36
11847 **sericea** *W*	snowy	♚	⊔	un	1½	..	Y	Canaries	1779	S	p l	
11848 **muloides** *W*	cluster-flower	♚	⊔	un	1	jl au	Pu	Teneriffe	1780	C	co	Jac. ic 1 t 171
11849 **odoráta** *W*	sweet-scented	♚	⊔	ft	2	jn au	Pu	India	1759	C	p l	Plum. ic t 97
11850 **glomeráta** *Link*	glomerate		⊡	un	1½	jn au	Pu	.....	1825.	S	co	
11851 **spatuláta** *Link.*	spatulate	¥	⊠	un	3	jn au	B	.....	1825	D	p l	
11852 **arboréscens** *W*	tree	♚		un	6	n d	B	Jamaica	1733	C	p.l	
11853 **incisa** *W*	ear-leaved	♚	⊔	un	3	jn au	Pu	C G H	1774	S	p l	
11854 **thapsoides** *W*	Thapsus-leav'd	♚		un	2	jl s	Pu	Casp Sea	1806.	C	co	
11855 **virgáta** *W*	wing-stalked	¥	△	un	2	au s	Pu	America	1783	D	co	Slo. hi 1 t.152 f 5
11856 **geminiflóra** *Tenore*	twin-flowered	♚	⊔	un	1½	au s	Br	.....	1823	C	co	



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The woody species require a sandy peat soil, and to be struck in sand on a hotbed, but not covered with a bell-glass, as they are very apt to damp.

1731. *Carpesium.* Named from καρπεσιον, a bit of straw; the long dry leaves of the involucrum resemble straws.

1732. *Baccharis* A name given by the Greeks to an aromatic plant dedicated to Bacchus. The species now

11802 Leaves oblong downy imbricated, Branches 1-headed, Heads nodding
11803 Diffuse proliferous, Leaves roundish ovate smooth convex closely imbricated, Heads sessile
11804 Leaves obl blunt imbricated, Branches 1-fl. Scales of involucre ovate
11805 Leaves obl silky recurved
11806 Decumbent, Leaves lanc. silky somewhat recurved, Branchlets 1-flowered, Peduncles squarrose
11807 Leaves acerose lin keeled smooth appressed, Branches 1-fl Flowers sessile
11808 Lvs. acerose lin roundish downy above · lower spreading, upper appressed, Branches 1-fl Peduncle scaly

11809 Leaves linear lanc channelled amplexicaul · adult smooth, Branches woolly
11810 Branches numerous very fine filiform, Leaves very small 3-cornered imbricated appressed
11811 Leaves obl lanc narrowed at base silky, Peduncles naked 1-flowered terminal
11812 Leaves wavy woolly reflexed at end, Heads small terminal few
11813 Leaves amplexicaul oblong revolute at edge woolly, Flowers terminal solitary shining

11814 Leaves linear-lanc silky, Corymb simple terminal
11815 Leaves lanc acute at each end roughish, Peduncles 1-flowered long, Involucre bracteate

11816 Heads terminal solitary cernuous
11817 Heads axill subsolitary

11818 Leaves narr linear entire, Panicle compound many-flowered, Involucre small
11819 Leaves lanc. longitudinally toothed serrate
11820 Leaves lanc serrated with one or two teeth forwards
11821 Leaves obovate emarginate crenate forwards
11822 Leaves lanc serrate at end subdecurrent downy beneath
11823 Leaves obl sessile toothed teeth of the base deeper and stipule-like

11824 Leaves lanc 3-nerved tooth-serrated, Corymbs terminal leafy

11825 Lvs pubesc ov-lanc serr the upper ones ent Stem herbaceous corymb Scales of the involucre recurved leafy
11826 Leaves sessile broad-lanc acute serrated, Corymbs terminal fastigiate
11827 Leaves ovate acute at each end toothed stalked pilose, Stem erect branched, Peduncles many-headed
11828 Leaves stalked ovate lanc very acute toothletted, Corymbs term and axillary shorter than leaf
11829 Leaves ellipt serrated villous beneath, Involucre subglobose, Leaves lanc subulate, Branches spreading
11830 Leaves oblong lanc doubly toothed acute downy beneath rugose veined, Petioles toothed
11831 Leaves spatulate oblong amplexicaul serrated rugose
11832 Leaves sess lanc obl lower obovate-obl subserrated at end, Branches corymbose-fastigiate
11833 Leaves ovate stalked entire obtuse downy, Peduncles 1-fl solitary terminal axillary thickened
11834 Leaves lanc ovate reflexed serrated downy beneath, Flowers terminal heaped
11835 Leaves ov stalked crenate blunt downy rugose veiny, Peduncles 1-fl solitary terminal and axillary
11836 Leaves sublyrate cauline entire, Stem downy panicled, Involucre campanulate
11837 Leaves toothed radical smoothish obovate cauline obl downy, Scales of involucre subulate
11838 Leaves oval entire hirsute beneath
11839 Leaves obl spatulate tooth pilose, Heads panicled globose, Leaves of involucre subulate soft
11840 Lvs lanc serrated at end scabrous at edge lower obov. Heads heaped, Lvs of involucre membranous at edge
11841 Stem hairy, Leaves sessile oval blunt denticulate hairy, Panicle terminal contracted
11842 Leaves lin. lanc scabrous nearly entire revolute at edge, Stem panicled, Scales of involucre lax
11843 Leaves lin attenuate at base mucronate, Corymbs stalked contracted terminal
11844 Leaves lin nearly entire, Peduncles long 3-headed
11845 Leaves lin somewhat toothed, Peduncles very long 1-headed
11846 Leaves spatulate somewhat toothed and stem downy, Peduncle long 1-fl
11847 Leaves linear filiform and stems silky with down, Flowers panicled
11848 Leaves cuneiform lin blunt crenate toothletted smooth, Stem shrubby, Anthers with two setæ
11849 Leaves ovate stalked hoary beneath serrated, Corymb terminal compound
11850 Leaves broad lanc. blunt serrulate downy scabrous, Heads clustered surrounded by bractes
11851 Stem branched with spreading hairs, Leaves subamplexicaul blunt coarsely serrated hairy
11852 Leaves ovate entire acute downy beneath, Spikes recurved 1-sided, Bractes reflexed
11853 Leaves ovate subcordate pilose viscid toothed auricled at base, Recept favose
11854 Leaves decurrent ovate mucronate downy lower serrated, Flowers corymbose
11855 Leaves decurrent lin lanc serrulate downy beneath, Spike long terminal interrupted
11856 Stem white with down, Leaves lanc serrulate downy beneath, Heads terminal



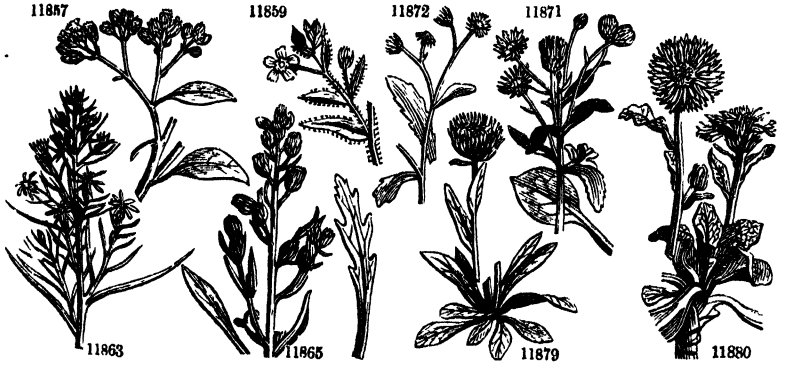
and Miscellaneous Particulars.

called B Dioscorides is supposed to have been the Baccharis of the Greeks. An extensive genus of shrubby plants, few of which are deserving of cultivation

1733. *Molina.* Named after John Ignatius Molina, a Spaniard, who published, in 1782, a Natural History of Chili

1734 *Conyza.* This plant was believed to have the property, when suspended in a room, of driving away

11857	*carolinénsis W.*	Carolina	♚ □	un	5	jl.o	Pu	Carolina	1821.	C	co	Jacq. ic t. 585
11858	*rugósa W.*	St. Helena	♚ □	un	6	n		Brazil	1772.	S	p l	
†1735	MA'DIA. *W.*	MADIA				*Compositæ.*		*Sp.* 2—3.				
11859	*viscósa W.*	clammy	○	un	1½	jl.au	Y	Chili	1794.	S	co	Jac. schœ.4.t.302
11860	*mellósa W.*	honeyed	○	un	1½	jl au	Y	Chili	1825.	S	co	
†1736	ERI'GERON. *W.*	ERIGERON.				*Compositæ.*		*Sp.* 21—53.				
11861	*gravéolens W*	strong-smelling	○	pr	1½	jl au	Y	S. Europe	1633.	S	co	Ger. ema.481.f 2
11862	*compósitum Ph*	Daisy-flowered	⚹ △	pr	½	jl.au	W.B	N. Amer.	1811.	D	co	
11863	*carolinianum W*	Hyssop-leaved	⚹ △	pr	1	jl au	Pu	N Amer	1727.	D	s.p	Dil.el t 306.f 394
11864	*canadénse W*	Canada	○	pr	1	au s	W	England rubble.		S	co	Eng bot. 2019
11865	*bonariénse W*	Buck's-horn	○	pr	1½	jl au	Pu	S Amer	1732.	S	co	Dil.el.t.257.f 334
11866	*linifólium W*	Flax-leaved	○	pr	1	jl.au	Pu	S Amer	...	S	p.l	
11867	*philadélphicum W.*	spreading	⚹ △	pr	1	jl.au	Pu	N. Amer.	1778	D	co	
11868	*nudicaúle Ph*	naked-stalked	⚹ △	pr	1	jl	B	N. Amer	1812	D	co	
11869	*purpúreum W*	purple	⚹ △	pr	1	jl au	Pu	Huds Bay	1776.	D	co	
11870	*bellidifólium W*	Plantain-leav	⚹ △	pr	½	jl au	Pu	N. Amer	1790.	D	co	Bot. mag. 2402
11871	*heterophyllum W*	various-leaved	⚹ ◯	pr	1	jl s	W	N Amer	1640.	S	co	Fl dan 486
11872	*jamaicen'se W.*	Jamaica	⚹ □	pr	1	jl s	Pu	Jamaica	1818.	S	co	Slo. jam.t.152.f 3
11873	*longifólium Desf*	long-leaved	⚹ △	pr	2	jl au	Pu	N. Amer	1820	D	co	
11874	*caucásicum Bieb*	large-flowered	⚹ △	pr	½	jl au	Pu	Caucasus	1821.	D	co	
11875	*asteroides Lamk*	Aster-like	⚹ △	pr	1½	jl au	W	.....	1823.	D	co	
11876	*Villársii W.*	Villars's	⚹ △	pr	1	jl.au	Pu	Piedmont	1804	S	co	Bot. reg. 583
11877	*ácre W.*	blue	⚹ ◯	pr	1½	jl au	B	Britain gra pa.		S	co	Eng bot. 1158
11878	*alpinum W.*	Alpine	⚹ △	pr	1	jl	Pu	Scotland al rills		D	s l	Eng. bot 464
11879	*unifiórum W*	dwarf	⚹ △	pr	½	au.s	Pu	Scotland highl		D	co	Eng bot. 2416
11880	*glaúcum B reg*	shrubby	▬ □	pr	1	ja d	Pu	S Amer.	1812	C	co	Bot. reg. 10
11881	*delphinifólium W.en.*	Larkspur-leav	⚹ ◯	pr	1½	jl s	Pu	S Amer	1816	S	co	
*1737	TUSSI'LAGO. *W*	COLT'S FOOT.				*Compositæ*		*Sp* 12—17				
§11882	*nútans W.*	drooping-flow	⚹ ◯	un	½	jn jl	L Pu	W. Indies	1793	S	co	Plum ic t 41.f.1
11883	*alpina W*	Alpine	⚹ △	pr	½	mr my	L Pu	Austria	1710	D	co	Bot. mag 84
11884	*discolor W*	two-colored	⚹ △	pr	½	ap my	L.Pu	Austria	1633	D	co	Jac aust 3 t 247
11885	*sylvéstris W.*	wood	⚹ △	un	1	ap my	L.Pu	Austria	1816.	D	co	Jac.aus 5.ap t 12
11886	*Fárfara W.*	common	⚹ △	w	½	mr ap	Y	Britain	mo pl	D	co	Eng. bot. 429
11887	*frígida W.*	Lapland	⚹ △	or	½	my	Pa	Lapland	1710.	D	co	Fl dan t. 61
11888	*frágrans W.*	sweet-scented	⚹ △	or	1	ja mr	W	Italy	1806.	D	co	Bot mag 1388
11889	*álba W*	White Butter Bur	⚹ △	pr	1	ja ap	W	Europe	1683.	D	co	Fl dan t 524
11890	*nívea W*	downy-leaved	⚹ △	pr	1	ap	W	Switzerl	1713.	D	co	Retz obs 2 t. 3
11891	Petasites *E B.*	Common Butter Bur	⚹ △	w	1	mr ap	F	Britain	m me.	D	co	Eng bot 431
	hýbrida E. B.	*hybrid*	⚹ △	w	1½	mr ap	F	Britain	m me	D	co	Eng bot 430
11892	*spúria W.*	lobe-leaved	⚹ △	pr	1	mr ap	W	Germany	1790	D	co	Retz obs. 1. t 2
11893	*palmáta W.*	cut-leaved	⚹ △	pr	½	ap	W	Labrador	1778	D	co	Hort. kew.3 t.11
†1738	SENE'CIO. *W*	GROUNDSEL.				*Compositæ*		*Sp* 62—171				
11894	*reclinátus W.*	Grass-leaved	⚹ ◯	or	2	jn au	Pu	C G H	1774.	S	co	Jac ic 1 t 174
11895	*hieraciifólius W*	Hawkweed	○	or	1½	au	W	N. Amer	1699.	S	co	Her. parad t 226
11896	*purpúreus W.*	purple	⚹ △	or	2	jl s	Pu	C G. H	1774.	D	co	Jac. ic 3 t. 580
11897	*cérnuus W*	drooping	○	or	1	jl au	Vi	E Indies	1780	S	co	Jac vind. 3 t 98
11898	*erubéscens W*	blush-colored	⚹ ◯	or	2	jn o	Pk	C G H.	1774.	S	l p	
11899	*divaricátus W.*	straddling	⚹ ◯	or	1½	jl	Pu	China	1801	S	l.p	
11900	*croáticus W.*	Croatian	⚹ △	or	4	jl au	Y	Hungary	1805.	D	co	Pl ra hu 2 t 143
11901	*Pseúdo-China W*	Chinese	⚹ △	or	½	jn au	Y	E. Indies	1732	C	co	Dil el.t.258.f.335
11902	*hæmatophýllus W.en.*	purple-leaved	⚹ △	or	2	ap	Y	.....	1789.	C	co	
11903	*japónicus W.*	jagged-leaved	⚹ △	pr	1	au	Y	Japan	1774.	D	co	



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gnats and fleas From this imaginary property, its Greek name (from κονωψ, a gnat), its Latin name, *pulicaria*, its English name, *flea-bane*, and its French name, *Herbe aux puces*, are all derived Conyza marilandica gives out a strong smell of camphor

1735. *Madia.* *Madi* is the name of the plant in Chili Clammy weeds, only seen in botanical gardens.

1736 *Erigeron* A name synonymous with *senecio*, which is a translation of it. Named from ἠρ, the spring, and γεραω, an old man, because it becomes old in the beginning of the season. The name Senecio having been applied to another genus, the Greek term is preserved for this, which is related to it. E. viscosum is used to drive away fleas and gnats, probably from its strong scent, or, as some suppose, from the clammy juice of the leaves and stalks, hence the old name of Flea-bane, or Flea-wort

1737 *Tussilago.* From *tussis*, a cough, for curing which the flowers are frequently employed at this day. Farfarus is the name under which the Greeks designated the White Poplar, the leaves of which are like the modern T. Farfara.

T. Farfara is a certain indication of a clayey soil, and, according to Dr Withering, is the first plant which vegetates in marle or lime stone rubble The clayey part of the pestilential Maremmes of Tuscany, where scarcely any other plant will grow, is covered with common colts foot. The cotton of the leaves wrapped in a rag,

11857 Leaves ovate-lanc entire hoary downy beneath, Corymb compound terminal
11858 Leaves decurrent ellipt. crenate downy beneath, Heads capitate

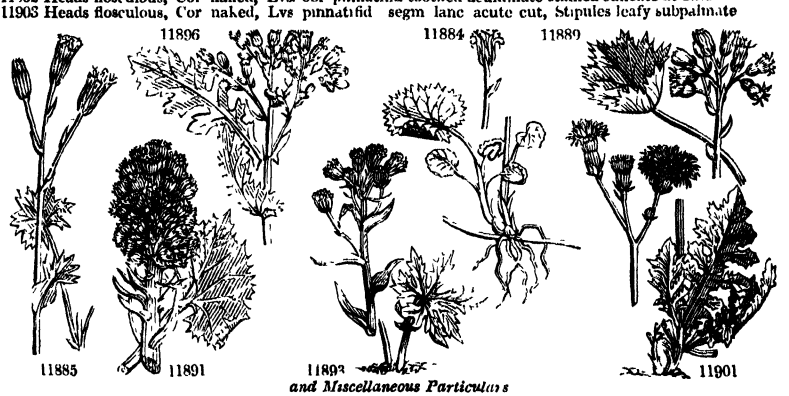
11859 Leaves lanc sessile viscid, Outer involucres 10-leaved
11860 Leaves amplexicaul. lanc viscid

11861 Leaves sublinear entire, Branches lateral many-flowered
11862 Nearly stemless, Rad leaves on long stalks triply 3-parted, cauline linear undivided
11863 Stem panicled, Flowers subsolitary terminal, Leaves linear entire
11864 Stem and flowers panicled hairy, Leaves lanc. ciliated
11865 Lower leaves lanc lacinate cauline linear, Heads racemose
11866 Leaves scabrous · lower lanc toothed in middle, upper linear, Heads corymbose
11867 Stem many-fl Lvs. lanc. subserrate cauline half amplexicaul. Florets of ray capillary the length of disk
11868 Radical leaves oval-lanc acute somewhat toothed, Stem nearly leafless simple long
11869 Stem many-fl pilose, Leaves obl somew toothed amplexicaul Florets of ray capillary longer than disk
11870 Rad. leaves obovate serrated cauline lanc entire, Stem about 2-fl Ray longer than disk
11871 Rad. leaves roundish ovate deeply toothed stalked cauline lanc toothed subserrated in middle
11872 Stem few-fl subvillous, Leaves cuneiform lanc Serratures 2 on each side
11873 Branches spiked, Scales of involucre long, Peduncles scaly, Leaves very long smooth sessile
11874 Leaves entire bluntly mucronate. radical oblong stalked, cauline cordate ovate sessile
11875 Stem nearly naked, Rad leaves spatulate smooth dotted: cauline linear, Heads corymbose
11876 Leaves lanc 3-nerved scabrous somewhat toothed sessile, Stem panicled, Ray shorter than disk
11877 Pedunc. alternate (scarcely racemose) single-fl Pappus as long as the florets of the ray, Lvs lanc obtuse
11878 Stems with usually only one fl Pappus much shorter than the florets of the ray, Lvs lanceolate
11879 Stem 1-flowered, Involucre pilose
11880 Leaves ciliated glaucous clammy radical with winged stalks and few teeth, cauline sessile entire
11881 Leaves pinnatifid, segments of the cauline leaves linear entire, of the radical lanc somewhat toothed

11882 Scape 1-fl naked, Head radiated nodding, Lvs stalked obovate toothed sinuated at base downy beneath
11883 Scape 1-fl nearly naked, Head discoid, Lvs reniform toothed smooth
11884 Scape 1-fl nearly naked, Head discoid, Lvs reniform toothed downy beneath
11885 Scape about 1-fl nearly naked, Head discoid, Lvs smooth reniform slightly 7-lobed
11886 Scape single-fl imbricated with scales, Lvs cordate angular toothed downy beneath
11887 Thyrsus fastigiate, Heads radiant, Lvs roundish cordate unequally toothed downy beneath
11888 Thyrsus fastigiate, Heads radiant, Lvs roundish cordate equally toothed downy beneath
11889 Thyrsus fastigiate, Heads discoid, Lvs orbicular cordate doubly and finely toothed
11890 Thyrsus oblong, Heads discoid, Lvs obl cordate unequally toothed white beneath lobes spreading
11891 Thyrsus ovate-oblong, Lvs cordate unequally toothed with the lobes approximate downy beneath

11892 Thyrsus oblong, Heads discoid, Lvs obl cordate unequally toothletted snow-white beneath
11893 Thyrsus fastigiate, Heads obsoletely radiant, Lvs roundish cordate half 7-lobed downy beneath

11894 Heads flosculous, Cor naked, Involucre ventricose somewhat imbricated, Lvs filiform lin entire smooth
11895 Heads flosculous, Cor. naked, Lvs obl amplexicaul unequally and deeply toothed, Stem virgate
11896 Heads flosculous, Cor naked, Lvs lyrate hairy upper lanc toothed
11897 Heads flosculous, Cor naked, Lvs ellipt. tooth-serrated hairy, Peduncles long many-flowered
11898 Heads flosculous, Cor naked, Lvs lyrate pilose on each side viscid
11899 Heads flosculous, Cor naked, Lvs lanc toothed scabrous, Flowering branches spreading
11900 Heads flosculous, Cor. naked, Lvs obl lanc finely serrated smooth, Heads corymbose
11901 Heads flosculous, Cor naked, Lvs lyrate pinnatifid toothed, Scape nearly naked
11902 Heads flosculous, Cor naked, Lvs. obl pinnatifid toothed acuminate stalked cuneate at base
11903 Heads flosculous, Cor naked, Lvs pinnatifid segm lanc acute cut, Stipules leafy subpalmate



and Miscellaneous Particulars

dipped in a solution of saltpetre, and dried in the sun, makes an excellent tinder The leaves are the basis of the British herb tobacco, they have been regarded as expectorant from the earliest ages, having been smoked through a reed in the days of Dioscorides, with the view of relieving the chest from accumulated mucus in catarrh, asthma, and phthisis. At present, though it occupies a place in the Materia Medica, very little reliance is placed on its powers (*London Disp* p 542.)

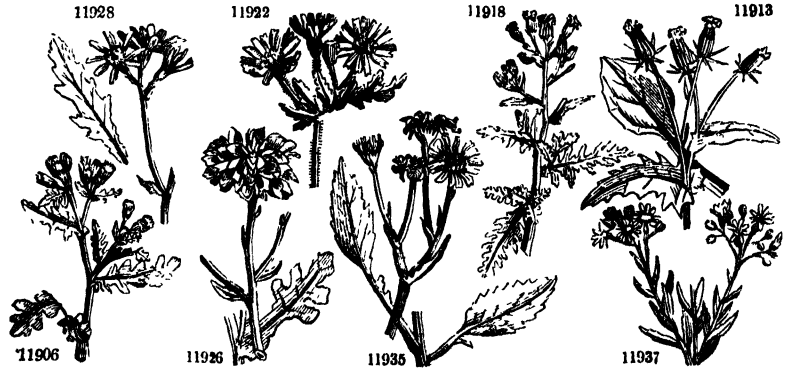
T. Petasites, from the Greek πέτασος, a broad covering, in allusion to the leaves, which are larger than those of any British plant, and affbrd shelter from rain to poultry and other small animals It is called Butter bur, in allusion to a former application, and Pestilent-wort, from its supposed efficacy in the plague T. hybrida is by some considered, a variety of this species, as T. alba is of T paradoxa T fragrans is valued in gardens as an early and fragrant flower; like all the species, it is apt to run very much, and is therefore best kept in pots.

It is remarkable that no plant belonging to the tribe of Tussilagineæ, has been discovered with hermaphrodite flowers They are distinguished from other tribes by their stigma, which occupies both surfaces of the lobes of the style. They are nearly all natives of Europe

1738. *Senecio*. For the explanation of this word, see Erigeron. Most of these species are annual weeds, or

11904 **glomerátus** *Desf*	clustered		○	un	1½	au	Y	N Holl.	1816	S	co	
11905 **cacaloides** *Fisch.*	Cacalia-like		⊠	pr	1	au	Y	Brazil	1820.	S	co	
11906 **vulgáris** *W.*	common	♑	△	w	1	ja d	Y	Britain	rubble.	D	co	Eng bot. 747
11907 **arábicus** *W*	Arabian	♑	○	un	1½	jl au	Y	Egypt	1804	S	co	
11908 **dentátus** *Jacq*	toothed	♑	△	un	1	jl au	Y	C G H.	1820.	D	co	
11909 **verbenaefólius** *W*	Vervain-leaved		○	un	1	jn jl	Y	Egypt	1803	S	co	Jac vind 1. t. 3
11910 **triflórus** *W*	three-flowered		○	pr	1½	jl s	Y	Egypt	1776	S	co	
11911 **ægyp'tius** *W*	Egyptian		○	pr	1½	jl au	Y	Egypt	1771	S	co	
11912 **crassifólius** *W*	thick-leaved		○	pr	½	jl au	Pu	S Europe	1815	S	co	Barr ic 261
11913 **lividus** *W*	livid		○	un	1	jl au	Y	Spain	1801	S	co	Schk hs. 3 t 245
11914 **trilobus** *W*	three-lobed		○	un	1	jn au	Y	Spain	1728.	S	co	
11915 **cinerisc'ens** *W*	gray	♑	⊔	un	6	my jl	Y	C G H	1774	C	p l	Jac.schœ.2.t.150
11916 **squamósus** *W*	squarrose	♑	⊔	un	3	my jl	Y	C G H	1820	C	p l	
11917 **viscósus** *W*	stinking		○	w	1	jn o	Y	Britain	ch ba	S	co	Eng. bot 32
11918 **sylvaticus** *W*	mountain		○	w	1	jl au	Y	Britain	woods.	S	co	Eng. bot 748
11919 **nebrodénsis** *W*	Sicilian		○	un	1½	jn au	Pa.pu	S Europe	1704	S	co	Barr rar. 401
11920 **glaúcus** *W*	sea-green		○	un	1½	jn.au	Y	Egypt	1739.	S	co	
11921 **hastátus** *W*	halberd-leaved	♐	△	un	1½	my au	Y	C G H	1722	D	l p	Dil el t.152 f 184
11922 **vernális** *W*	spring		○	un	1	ap jn	Y	Hungary	1803	S	co	Pl rar. hu. 1 t 24
11923 **artemisiæfólius** *I am*	Wormwood-lv.	♑	△	un	1½	jn jl	Y	France	1816	D	co	
11924 **rupéstris** *W*	rock	♑	△	un	½	jn jl	Y	Hungary	1805	D	s l	Pl rar hu 2 t 128
11925 **venustus** *W.*	wing-leaved	♐	◎	el	1½	jl s	Pu	C G. H.	1774	C	p l	Bot reg 901
11926 **élegans** *W*	elegant		○	pr	2	jn au	Pu	C G H	1700	S	co	
β flore pléno	*double-flowered*	♑	⊔	el	2	ja d	Pu	C G H	1700	C	s l	Bot mag 238
11927 **squálidus** *W*	melegant		○	w	1½	jn o	Y	England	walls	S	co	Eng bot 600
11928 **speciósus** *W*	red-flowered	♑	△	or	½	jl au	Sc	.....	1789	D	s l	Bot. reg 41
11929 **erucifólius** *W.*	Eruca-leaved	♑	△	un	2	jl au	Y	Europe	1816	D	co	Barr rar t 153
11930 **umbflórus** *W*	Alpine	♑	△	un	½	jl au	Y	Al of Eur.	1799	D	l p	All ped. t. 17. f 8
11931 **incánus** *W*	downy	♑	△	un	½	jl au	Y	Al of Eur	1759	D	s p	Plu alm t 39 f 6
11932 **abrotanifólius** *W*	Southernw -lv	♑	△	un	2	jl o	Y	Al of Eur	1640	D	co	Jac aust 1 t 79
11933 **tenuifólius** *W*	slender-leaved	♑	△	un	2	jl au	Y	Britain	woods.	D	l p	Eng bot 574
11934 **Jacobæ'a** *W*	Common Ragwort	♑	△	w	2	jl au	Y	Britain	dry pa	D	s l	Eng bot 1130
11935 **aquáticus** *W*	marsh	♑	△	un	3	my jn	Y	Britain	mar	D	l p	Eng bot 1131
11936 **aúreus** *W*	golden	♑	△	un	2	jl au	Y	N Amer	1758	D	l p	
11937 **rosmarinifólius** *W*	Rosemary-lvd	♑	⊔	pr	3	jl au	Y	C G H	...	C	l p	Jac ic 3 t 587
11938 **ásper** *W*	rough	♑	⊔	pr	3	jl au	Y	C G H.	1774	C	p l	
11939 **rigescens** *W*	stiff-leaved	♑	⊔	pr	3	jl au	Y	C G H.	1815.	D	l p	Jac. coll 5 t 6 f 1
11940 **linifólius** *W*	Flax-leaved	♑	△	un	2	jl au	Y	Spain	1820	D	co	Bocc mus t 49
11941 **paludosus** *W*	bird's-tongue	♑	△	pr	5	jn au	Y	England	fens	D	p	Eng bot 650
11942 **nemorénsis** *W*	branching	♑	△	or	3	jl au	Y	Austria	1785	D	co	Jac aust 2 t 184
11943 **sarracénicus** *W*	creeping-rooted	♑	△	or	6	jl o	Y	Britain	moi pl	D	co	Eng bot. 2211
11944 **ovátus** *W*	ovate	♑	△	or	3	jl o	Y	Germany	1823	D	co	
11945 **macrophýllus** *Bieb*	large-leaved	♑	△	or	4	jl au	Y	Caucasus	1818	D	co	
11946 **solidagin**oides *W*	Solidago-like	♑	⊔	or	2	jl au	Y	C G H	1824	C	co	
11947 **umbrósus** *W en*	various-leaved	♑	△	or	2	jl au	Y	Hungary	1815	D	l p	
11948 **coriáceus** *W*	leathery-leaved	♑	△	or	4	jl au	Y	Levant	1728	D	l p	Dil el.t 105 f 125
11949 **Doria** *W*	broad-leaved	♑	△	or	4	jl s	Y	Austria	1570	D	co	Jac aust 2.t 185
11950 **Doronicum** *W*	Leopard's B ane	♑	△	or	1	jl s	Y	S Europe	1705	D	co	Jac aus 2 t.ap.45
11951 **lánceus** *W*	spear-leaved	♑	⊔	or	3	jl o	Y	C G H	1774	C	p l	
11952 **longifólius** *W*	long-leaved	♑	⊔	or	3	au n	Y	C G H.	1775	C	p l	Com hort 2 t 71
11953 **halimifolius** *W.*	succulent-leav	♑	⊔	or	3	jl	Y	C G H	1723	C	l p	Dil el t 104 f 124
11954 **ilicifólius** *W*	Ilex-leaved	♑	⊔	or	3	jn jl	Y	C G H.	1731	C	l p	Comm rar t 42
11955 **rigidus** *W.*	hard-leaved	♑	⊔	or	3	jn s	Y	C G H.	1704.	C	l p	Com hort 2 t 75

†*1739 **ASTER** *W*	Starwort					*Compositæ*	*Sp* 109—169					
11956 **reflexus** *W*	reflexed-leaved	♑	⊔	or	3	f s	Cr	C G H	1759.	C	p l	Bot mag 884
§11957 **tomentósus** *W*	tooth-leaved	♑	⊔	or	1½	my jl	Pk	N S. W	1793	C	p l	Bot. rep. 61
11958 **sericeus** *W*	silky-leaved	♑	⊔	or	3	my n	B	Missouri	1802.	C	s p	Vent cels 33
11959 **Cymbalariæ** *W.*	Ivy-leaved	♑	⊔	or	2	my n	W	C G H	1786.	C	p l	Vent. malm. 95
11960 **hirtus** *B M*	fluted-stemmed	♑	⊔	or	3	my jl	W	N S W	1812	C	l p	Bot mag 1509
§11961 **argophýllus** *H K*	Musk scented	♑	⊔	or	10	my jl	W	V Di L	1804.	C	s.p	Bot mag. 1563



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rude gigantic yellow flowered autumnal perennials, S. venustus and cinerascens, however, are elegant plants with purple flowers. Of S elegans there is a double flowered variety, common in green houses, and readily propagated by cuttings.

Senecio hieracifolius is the pest of newly cleared ground in North America, as S. vulgaris is in Europe. It is known by the name of the Fire-weed.

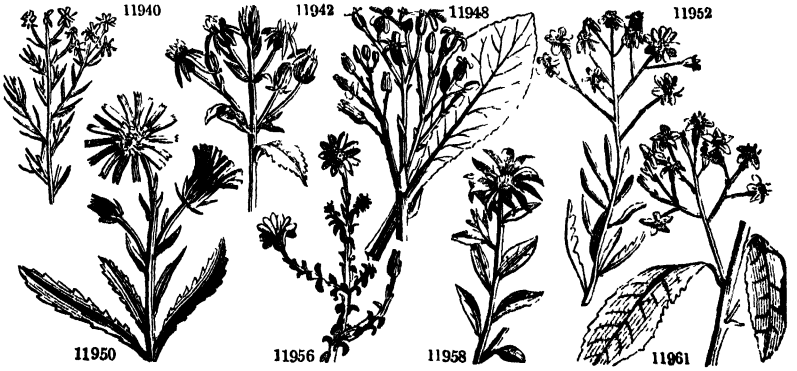
Senecio vulgaris is esteemed emollient and resolvative It is employed in spitting of blood, in the form of a poultice, and against the gout and hæmorrhoids. It is given to horses suspected to be troubled with worms.

11904 Herb downy upwards, Lvs. sinuate toothed and pinnatifid, Heads clustered, Involucre cylindrical
11905 Herb hirsute, Lvs broad-lanc. sinuate-toothed and toothletted teeth callous at end, Heads panicled
11906 Leaves semiamplexicaul pinnatifid toothed, Heads in clustered corymbs destitute of a ray
11907 Heads flosculous, Cor naked, Leaves subbipinnate stalked smooth, Involucre not withered
11908 Heads radiant, Leaves half-amplexic. pinnatifid, Segments linear acute toothed distant, Peduncles long
11909 Heads flosculous, Cor. naked, Leaves obovate stalked cut-toothed, Pedunc filiform 3-headed
11910 Heads radiate, Ray revolute, Leaves stalked obl. sinuate, Peduncle 3-headed, Involucre conical
11911 Heads radiate, Ray revolute, Leaves amplexic lin lanc. pinnatifid, Scales of involucre sphacelate in part
11912 Heads radiate, Ray revolute, Leaves amplexicaul. lanceolate-linear fleshy bluntly sinuated
11913 Heads radiate, Ray revolute, Leaves amplexicaul. lanceolate toothed, Scales of involucre all unwithered
11914 Heads radiate, Ray revolute, Leaves amplexicaul obovate 3-lobed at end serrated
11915 Heads radiate, Ray revolute, Leaves pinnatifid downy revolute at edge, Panicle spreading
11916 Leaves amplexicaul cut toothed scabrous above downy beneath, Heads racemose
11917 Ray revolute, Leaves pinnatifid and viscid, Scales of the involucre lax hairy
11918 Ray revolute, Lvs sess pinnatifid lobed and toothed, Scales of involucre very short glab Stem erect straight
11919 Ray revolute, Leaves lyrate sinuate blunt stalked, Stem hirsute [corymbose
11920 Ray revolute, Leaves amplexicaul lanceolate blunt toothed entire
11921 Heads radiate, Petiole amplexicaul Peduncles 3 times as long as pinnate sinuated leaves
11922 Heads radiate, Leaves amplexicaul pinnatifid hirsute crisp-toothed, Stem woolly
11923 Cor radiant, Leaves pinnated multifid · segm filiform smooth, Heads corymbose
11924 Cor radiant, Lvs amplexic. pinnatifid glabrous above segm angular toothed, Stem and involucre glabrous
11925 Cor radiant, Stem involucre and leaves glabrous, Leaves pinnatifid segm linear acute toothed
11926 Cor. radiant, Leaves pilose viscid pinnatifid equal spreading, Rachis narrowed below

11927 Cor radiant, Leaves half-amplexicaul pinnatifid segm linear subdentate distant
11928 Cor. radiant, Stem simple nearly naked, Radical leaves stalked oblong toothed ciliated
11929 Cor radiant, Leaves pinnatifid toothed somewhat hairy, Stem erect
11930 Cor radiant, Leaves tomentose oblong toothed, Stem leafy 1-flowered
11931 Cor rad Lvs toment on each side snow-white pinnatif. segm lin blunt somew tooth. Corymb contracted
11932 Cor radiant, Leaves pinnate multifid linear naked acute, Peduncles about 2-flowered
11933 Cor radiant, Leaves pinnate: pinnæ lin -subulate somewhat cut downy beneath, Stem somewhat hairy
11934 Ray spreading, Leaves lyrate bipinnatifid divaric toothed glabrous, Stem erect, Pericarps hairy
11935 Ray spreading, Florets elliptical, Leaves lyrate serrated · lower obovate entire, Pericarps glabrous
11936 Cor. radiant, Rad lvs. ovate-cordate serrated stalked cauline pinnatifid toothed, Peduncles thickened
11937 Cor radiant, Lvs lanc lin nearly entire smoothish, Corymb contracted terminal stalked
11938 Cor radiant, Lvs. lanc lin toothed rigid scabrous, Corymbs terminal and axillary stalked
11939 Cor radiant, Lvs lanc lin subtomentose glaucous finely toothletted or entire, Corymb contracted terminal
11940 Cor radiant, Leaves linear entire, Corymb squamose, Stem herbaceous
11941 Cor radiant, Lvs half amplexicaul lanc finely serrate subvillous beneath, Corymb terminal spreading
11942 Cor radiant, Lvs ovate lanc serrated ciliated at edge sessile unequal at base
11943 Ray spreading, Lvs. lanc sharply serrated nearly glabrous, Corymbs of rather few flowers
11944 Cor radiant, Lvs ovate-lanc finely serrated smooth on each side subsessile
11945 Cor radiant, Outer scales of involucre subulate spreading, Lvs subdecurrent obl lanc villous
11946 Cor radiant, Lvs sess. obovate toothed at end glaucous: younger silky, Corymb compound terminal
11947 Cor radiant, Lvs toothed lower ovate decurrent in the stalk upper cordate obl amplexicaul
11948 Cor radiant, Scales of involucre appressed, Lvs subdecurrent villous beneath lanc. serrated
11949 Cor radiant, Outer scales of involucre spreading, Lvs subdecurrent obl lanc glauc serrate
11950 Cor radiant, Stem undivided about 1-fl Lvs undivided serrated radical ovate villous beneath
11951 Cor radiant, Lvs. lanc. cordate at base amplexicaul smooth finely serrated
11952 Cor radiant, Lvs lin. scattered
11953 Cor. radiant, Lvs obovate fleshy somewhat toothed
11954 Cor radiant, Lvs obl sessile toothed downy beneath upper amplexicaul. toothed only at base
11955 Cor radiant, Lvs amplexicaul spatulate repand eroded scabrous

§ 1 *Shrubby*

11956 Leaves ovate subimbricated recurved serrate-ciliated, Heads terminal
11957 Leaves ovate serrate spreading downy beneath, Heads terminal about 3
11958 Leaves obl lanc sessile entire 3-nerved silky with down, Flowers terminal
11959 Leaves stalked roundish ovate hairy with 1 or 2 teeth on each side, Peduncles 1-headed long terminal
11960 Stem fluted, Leaves alternate stalked lanc blistered repand-toothed downy beneath, Flowers panicled
11961 Leaves ovate lanc. toothed silky beneath, Panicles compound axillary, Rays 3

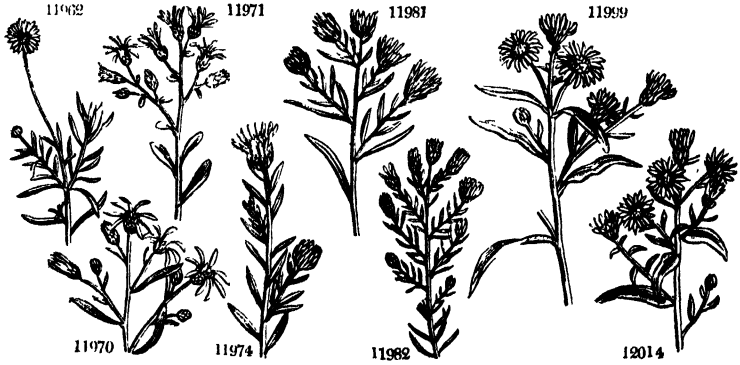


and Miscellaneous Particulars

The tribe of Senecioneæ is nearly related to Anthemideæ, and a portion of Inuleæ, from which the differences in the style are insufficient to distinguish them. They appear, however, to be sufficiently well characterized by their other floral organs They are found in every part of the world, especially in the south of Africa. *Humboldt has observed*, that they are very numerous in the upper region of the Andes, just below the limits of eternal snow, where the sun has little influence, where hurricanes are incessant, and not a tree is able to rear its head.

1739. *Aster*. The flowers of all the species of Aster resemble little stars, on account of the numerous rays

11962 angustifólius *W*	narrow-leaved	▬	or	6	my jl	Pa.B	C. G. H.	1804.	C	l.p	Jac schœ 3.t.370
11963 villósus *Th*	villous	▬	or	4	my jl	W	C. G H.	1812.	C	l p	
11964 obtusátus *W*	obtuse-leaved	▬	or	4	my jl	W	C. G H.	1793.	C	l p	
11965 fruticulósus *W*	shrubby	▬	or	3	mr jl	W	C G. H.	1759.	C	p.l	Bot. mag 2283
11966 filifólius *V*	thread-leaved	▬	or	3	mr jl	W	C G H.	1812.	C	l p	Vent malm t 82
11967 aculeátus *Lab*	prickly-leaved	▬	or	2	mr jl	W	N Holl	1818.	C	l p	Bot. cab 830
11968 exasperátus *Link.*	rough	▬	or	3	mr jl	W	C G H	1823	C	l p	
11969 carolinánus *W*	tall	▭	el	8	au s	Pu	Carolina	...	D	co	
11970 hyssopifólius *W*	Hyssop-leaved	△	or	1½	s o	W	N Amer	1683	D	co	Doda. mem. t 60
11971 solidagimoides *W*	Solidago-like	△	or	2	au s	W	N Amer	1699.	D	co	Plu alm. t 79 f 2
11972 tardifólius *Mich.*	late-flowering	△	or	1	au s	W	N Amer	1820	D	co	
11973 nemoráhs *H K.* *ledifólius* Ph.	wood	△	or	1	au s	La	N Amer	1778	D	co	
11974 rigidus *Ph.*	stiff-leaved	△	or	⅝	au o	Pu	N Amer	1759	D	co	Plu alm t.14 f 7
11975 linarifólius *Ph*	Toad-flax-leav	△	or	½	s o	Pa B	N Amer	1699	D	co	
11976 graminifólius *Ph*	grass-leaved	△	or	⅛	s o	Pa pu	Huds Bay ...		D	co	
11977 linifólius *W.*	Flax-leaved	△	or	2	jl au	W	N Amer	1739	D	co	
11978 pilósus *W*	hairy	△	or	2	au o	Pa B	N Amer	1812	D	co	
11979 foliósus *W*	leafy	△	or	3	o	Pa B	N Amer	1732	D	co	Dill elt t 35.f 39
11980 subulátus *Mich.*	subulate	△	or	2	s o	Pa B	N Amer	...	D	co	
11981 tenuifólius *W.*	slender-leaved	△	or	3	s o	W	N Amer	1725	D	co	Plu alm t 78 f 5
11982 dumósus *W*	bushy	△	or	3	s o	W	N Amer	1734	D	co	Plu alm. t 78 f 6
11983 ericoides *W*	Heath-leaved	△	or	3	s	W	N Amer	1758	D	co	
11984 multiflórus *W.*	many-flowered	△	or	3	s o	W	N Amer	1732.	D	co	Dill elt t 36 f 40
11985 ciliátus *Ph*	ciliated	△	or	3	s o	W	N Amer.	...	D	co	
11986 canéscens *Ph*	canescent	△	or	2	s o	Pa pu	N Amer	1812.	D	co	
11987 paludósus *W*	marsh	△	or	3	jl o	B	N Amer.	1784.	D	m s	
11988 sparsiflórus *Ph*	scattered-flow	△	or	3	s n	Pa pu	N. Amer.	1798.	D	co	
11989 coridifolius *W*	Coris-leaved	△	or	1	au.n	B	N Amer	.	D	co	
11990 surculósus *Mich*	rooting	△	or	1	au n	B	N Amer	...	D	co	
11991 squarrósus *W*	ragged	△	el	1½	jn jl	B	N Amer	1801	D	co	
11992 argénteus *Mich*	silver-leaved	△	el	1	jl s	Pu	N Amer	1801.	D	co	
11993 cóncolor *W*	self-colored	△	el	1	au n	Pu	N Amer	1759	D	co	
11994 myrtifólius *Link.*	myrtle-leaved	△	or	2	au s	W	... ..	1812	D	co	
11995 reticulátus *Ph*	netted-leaved	△	or	3	au o	W	N Amer	1812.	D	co	
11996 cornifólius *W*	Cornus-leaved	△	or	3	au o	W	N Amer	1811.	D	co	
11997 humilis *Ph*	low	△	el	1	au o	W	N Amer	1699	D	co	Willd ho ber 67
11998 amygdalinus *Ph* *umbellatus* W	Almond-leaved	△	or	2	jl s	W	N Amer	1759	D	co	
11999 salicifólius *W*	Willow-leaved	△	or	6	s o	F	N Amer	1760	D	co	Rob ic 307
12000 æstivus *W*	summer	△	or	2	jl au	B	N Amer	1776	D	co	
12001 Novæ Anglíæ *W* *β ruber*	New England *red-flowered*	△	el	6	s o	Pu	N Amer	1710	D	co	Bot reg 183
		△	or	6	s o	R	N Amer	1812	D	co	Bot re 183 f mf
12002 spurius *W* *cyáneus* Ph *rubricáulis* Lam	beautiful-blue	△	spl	4	s o	Pu	N Amer	1789	D	co	Hof ph 1 t B f 1
12003 grandiflórus *W*	great-flowered	△	or	2	o n	Pu	N Amer	1720	D	co	Bot reg 273
12004 phlogifólius *W*	Phlox-leaved	△	or	1½	jl o	Vi	N Amer	1797	D	co	
12005 pátens *W*	spreading-hairy	△	or	1½	s.n	Pu	N Amer	1773	D	co	
12006 alpinus *W*	Alpine	△	or	¾	my au	Pu	Al of Eur	1658	D	p l	Bot mag 199
12007 pulchéllus *W*	pretty	△	or	¾	my au	Pu	Armenia	...	D	co	
§12008 punctátus *W*	dotted	△	or	3	au s	Vi	Hungary	1815	D	co	Pl rar hu 2 t 109
12009 ácris *W*	acrid	△	or	2	au s	B	S Europe	1731	D	co	Plu al t 271 f 3
12010 cánus *W*	hoary-leaved	△	or	2	au s	Pu	Hungary	1816.	D	co	Pl rar hu 1 t.30
12011 pannónicus *W*	Hungarian	△	or	2	jl au	Vi	Hungary	1815	D	co	Jac vind 1 t 8
12012 Améllus *W*	Italian	△	or	2	au s	Pu	Italy	1596	D	co	Bot reg. 340
12013 sanguus *W*	Sallow-leaved	△	or	3	au s	W	Germany	1815	D	co	
12014 longifólius *P. S.*	long-leaved	△	or	3	o	W	N Amer	1798.	D	co	Mor.s.7 t 22 f 26
12015 amplexicaúlis *W*	stem-clasping	△	or	3	s n	ß	N Amer	...	D	co	
12016 prenanthoides *W*	Prenanthes-like	△	or	3	s n	B	N Amer	1821.	D	co	
12017 adulterinus *W en*	bastard	△	or	3	au o	Vi	N Amer	..	D	co	
12018 lævigátus *W*	smooth-stemm	△	pr	3	s.n	F	N Amer	1794	D	co	



History, Use, Propagation, Culture,

of their circumference. A very numerous genus of plants, commonly called in England, Christmas Daisies, in allusion to the late period of the year at which they blossom They are not very ornamental, and yet their flowers are acceptable at a season when few others are to be seen in open air. The species are extremely

11962 Leaves linear acute not dotted somewhat hoary, Pedunc term solitary 1-fl long
11963 Leaves linear filiform obtuse hairy, Invol imbricated
11964 Leaves linear fleshy smooth dotted blunt, Pedunc 1-headed, Invol. imbricated shorter than disk
11965 Leaves linear blunt glabrous dotted, Pedunc. 1-headed long, Invol imbricated as long as disk
11966 Leaves linear filiform fasicled smooth dotted, Ligules entire
11967 Leaves linear scattered revolute at edge prickly above, downy beneath, Heads in racemose panicles
11968 Stem and leaves rough, Leaves dense linear reflexed, Flowering branches short racemose
11969 Leaves obl narrowed at each end sess Stem somew climbing, Branches downy, Scales of invol squarrose

§ 2. *Herbaceous*

* *Leaves entire*

11970 Leaves lin lanc 3-nerved dotted acute scabr at edge, Ray about 5-fl. Invol imbric twice as short as disk
11971 Lvs lin lanc obsol 3-nerv blunt scab at edge, Hds in sess. clust Ray about 5-fl Inv imbr short. than disk
11972 Lvs cuneate obov acute nervel scab on each side twisted spread Inv cylindr imbr with 2 bractes at base
11973 Lvs lin lanc narr at base nerveless roughish revolute at edge, Inv lax imbr Branches filiform 1-headed

11974 Lvs lin mucro somew keeled rigid scabrous at edge cauline reflexed, of the branches much spreading
11975 Lvs many lin mucron. nerveless not dotted keeled scabrous rigid, Branches fastigiate 1-headed
11976 Lvs narrow lin nerveless not dotted smooth erect, Branchlets term nearly naked 1-headed
11977 Lvs lin nerveless dotted scabr reflexed spreading, Branches corymb fastigiate leafy, Invol imbr short
11978 Lvs. lin lanc hoary, Stem branched villous, Branchlets somew 1-sided 1-headed, Invol obl lax imbricated
11979 Lvs lin lanc narrowed at each end acum Stem downy paniced erect, Branches few-headed, Inv imbr
11980 Very smth with small fl Stem panicled, Branch many-head Lvs lin subulate, Invol cylindr Ray minute
11981 Lvs. lin lanc narrow both ways hispid at edge, Stem smth. branched erect, Branches 1-headed, Inv imbr
11982 Lvs lin glabrous · those of the branches very short, Branches panicled, Invol cylindr closely imbricated
11983 Lvs lin glab those of the branches subul close together, of the stem long Invol subsquarr Leafl acute
11984 Lvs lin glab. Stem much branched diffuse downy, Branchlets 1-sided, Inv imbr scales obl squarr acute
11985 Lvs ciliat · caul lin lanc nerv those of the br very short lanc 3-nerv Stem branch downy, Br panic
11986 Hoary, Lvs lin Panic corymb much branched leafy, Invol imbr very acute longer than disk [at base
11987 Lvs remote lin amplexicaul erect very smth scabr at edge, Pedunc almost naked, Inv squarr with 2 lvs
11988 Very smth Lvs subul lin somew fleshy subreflex Stem slender much branch Branchl setaceous 1-head
11989 Lvs very numerous lin. blunt reflexed hispid at edge, Stem branch diffuse smooth, Branches 1-headed
11990 Dwarf with creeping roots, Stems weak simple, Lvs long lanc smoothish, Invol with lin obl blunt scales
11991 Lvs very numerous ovate-acum reflexed hispid at hedge, Stem branched hairy, Branches 1-headed
11992 Lvs obl lanc silky sess Stem slender decumbent loosely branched, Branchlets and branchlets 1-headed
11993 Lvs obl lanc hoary on each side, Stem simple erect downy, Raceme terminal
11994 Cauline leaves amplexicaul scabrous of the branches small, Invol imbricated scales length of disk
11995 Hoary all over, Lvs lanc obl acute at each end sess revolute at end netted and 3-nerved beneath
11996 Smooth, Lvs obl ovate acuminate shortly stalked scabrous at edge, Panicles few-headed, Stem smooth
11997 Lvs subrhomboid oval-lanc acuminate at each end somew stalked glabr hispid at edge, Corymb diverging
11998 Lvs lanc narrowed at base acuminate scabrous at edge, Stem simple corymb at end, Invol loosely imbr

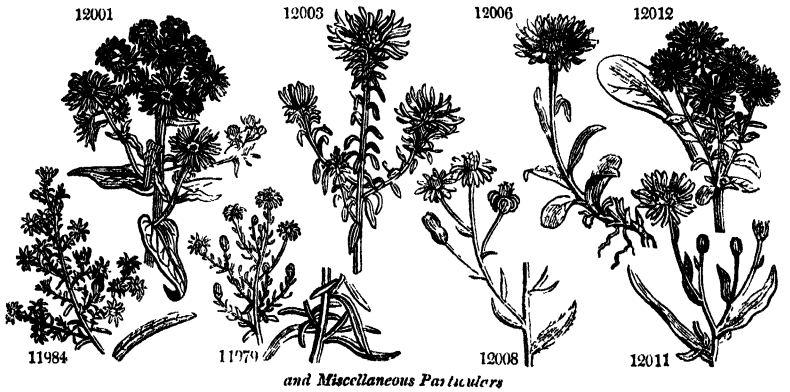
11999 Lvs lin lanc nearly entire smth Stem smth paniced at end, Invol l inc imbr. Scales acute spread at end
12000 Lvs lanc somewhat amplexical narrowed at end scabrous at edge, Stem erect hispid, Branchlets pilose
12001 Lvs lin lanc pilose amplexicaul auricled at base, Stem simple pilose straight, Heads sess term clustered

12002 Lvs lin lanc. amplexicaul polished, Stem virgate panicl Branches racemose, Inner scales of invol colored

12003 Lvs lin rigid acute subamplexicaul those of the branches reflexed hispid at edge, Scales of invol squarr
12004 Lvs lanc cordate amplexicaul downy beneath, Stem quite simple downy, Pan. term. lax few-headed
12005 Lvs obl lanc ciliate cordate amplexicaul scabrous on each side hairy, Stem branched hairy
12006 Stem 1-fl Rad lvs lanc spatulate cauline lanc Scales of invol nearly equal lanc bluntish
12007 Stem 1-fl Rad lvs spatulate cauline lin -lanc Scales of invol nearly equal linear acuminate
12008 Lvs. lin remote 3-nerved acuminate dotted scabrous at edge, Branches corymb fastigiate, Ray 10-fl
12009 Lvs lin lanc glabrous not dotted 3-nerved, Invol imbricated twice as short as disk
12010 Lvs lin lanc 3-nerved hoary on each side, Invol twice as short as disk imbricated
12011 Lvs lin lanc hispid at edge, Stem simple corymbose, Scales of invol lanc. blunt equal
12012 Lvs obl lanc scabrous, Invol imbr subsquarrose lvs blunt, inner membranous colored at edge
12013 Lvs lin lanc sessile scabrous at edge, Stem panicled smooth, Invol lax imbricated
12014 Lvs lin lanc rarely toothed long smooth, Heads terminal, Invol squarrose

** *Leaves lanceolate and ovate lower serrate.*

12015 Lvs ov-obl acute amplexicaul cordate serrated smooth, Stem panicled smooth, Branches 1-2-headed
12016 Lvs amplexicaul spatulate lanc acuminate serrated in middle cordate at base, Branches pilose
12017 Lvs amplexic lanc lower subserr smooth, of the branches lin squarr. Invol squarr shorter than disk
12018 Lvs subamplexicaul broad-lanc subserrate smooth, Stem glabrous, Branches many-headed



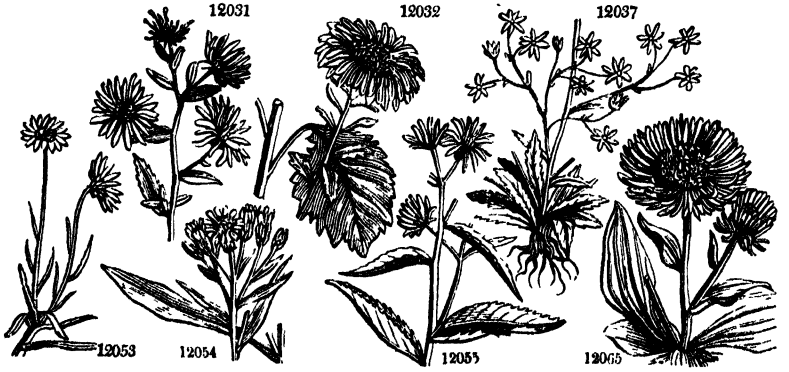
and Miscellaneous Particulars

difficult to distinguish the most ornamental are A punceus, Novæ Angliæ, pulchellus, and macrophyllus A chinensis is a well known border annual, of which there are varieties of different colors, and semi double, and double It is raised on a hotbed, and transplanted into the open ground in April or May

12019 **versicolor** *W*	various-colored	△	el	3	au s	W,pu	N	Amer.	1790.	D	co		
12020 **mutábilis** *W.*	changeable	△	or	2	s.o	Pu	N.	Amer.	1710	D	co	Herm.lugd. t.67	
12021 **lævis** *W*	smooth	△	or	2	s o	B	N.	Amer.	1758.	D	co		
12022 **concinnus** *W en.*	neat	△	pr	1½	s o	Pu	N	Amer	1800.	D	co		
12023 **puniceus** *W*	red-stalked	△	or	8	jl o	B	N	Amer.	1710.	D	co	Herm. lug. t.651	
12024 **hispidus** *W.*	rough-stalked	△	or	1	s o	W	China		1804.	D	co	Ic Kæmpf. t. 29	
12025 **floribúndus** *W*	abundant-flow	△	or	4	s o	Pu	N.	Amer.	....	D	co		
12026 **Novi-Belgii** *W*	New-York	△	or	4	s o	P B	N,	Amer	1710	D	co	Herm. lugd. t.69	
12027 **bellidiflórus** *W en*	Daisy-flowered	△	or	3	s o	Pa R	N	Amer.	....	D	co		
12028 **spectábilis** *W*	showy	△	el	2	au s	B	N	Amer	1777.	D	co		
12029 **serótinus** *W*	late-flowering	△	or	3	s n	B	N	Amer	....	D	co		
12030 **tardiflórus** *W*	spear-leaved	△	or	2	jl s	P B	N	Amer.	1775.	D	co		
12031 **blándus** *Ph*	charming	△	or	2	o n	Pa,pu	N.	Amer	1800.	D	co	Bot. cab 959	
§12032 **chinénsis** *W*	Chinese	○		2	jl s	D Pu	China		1731.	S	co	Dill.elt. t.34.f.38	
12033 **acuminátus** *Ph*	acuminate	△	or	1½	au o	W	N.	Amer	1806.	D	co		
12034 **conyzoides** *W*	Conyza-like	△	or	1	au s	W	N	Amer	1778	D	co		
12035 **Rádula** *W.*	rasp-leaved	△	or	2	s n	W	N.	Amer	1785.	D	co		
12036 **strictus** *Ph*	upright-dwarf	△	pr	½	s n	Vi	N	Amer	1806	D	co		
12037 **Tradescánti** *W.*	Michaelmas Daisy	△	or	3	jl s	W	N	Amer	1633.	D	co	Mor. s 7 t 21.f 42	
12038 **recurvátus** *W.*	recurved	△	or	3	au s	Pa B	N	Amer	1800	D	co		
12039 **éminens** *Ph*	eminent	△	or	2	s n	Li	N	Amer.	....	D	co		
12040 **láxus** *Ph*	loose-stalked	△	or	2	s n	W	N	Amer	....	D	co		
12041 **simplex** *W en*	single-stalked	△	or	3	au.o	W pu	N	Amer.	....	D	co		
12042 **polyphýllus** *W en*	many-leaved	△	or	3	au.o	W	N	Amer	....	D	co		
12043 **juncéus** *W*	slender-stalked	△	or	4	s o	F	N	Amer	1758.	D	co		
12044 **lanceolátus** *W*	lanceolate	△	or	4	au n	W pu	N	Amer	1811.	D	co		
12045 **dracunculoides** *W*	Tarragon-like	△	or	3	s n	W	N	Amer	1811	D	co		
12046 **frágilis** *W.*	brittle	△	or	2	s	W	N	Amer	1800	D	co		
12047 **míser** *W*	meagre-flower	△	un	3	s o	W	N	Amer	1759	D	co		
12048 **divérgens** *W*	spreading-downy	△	un	3	s o	W	N	Amer	1758	D	co		
12049 **diffúsus** *W*	diffuse	△	or	2	s o	W	N	Amer	1777	D	co		
12050 **péndulus** *W*	pendulous	△	or	2	s o	W	N	Amer.	1758	D	co		
12051 **caucásicus** *W*	Caucasian	△	or	1	jl au	Pu	Caucasus		1804	D	co		
12052 **altáicus** *W en*	dwarf	△	or	¾	my au	B	Siberia		1804	D	co		
12053 **tenéllus** *W*	slender	◫	or	¾	ap o	B	C G H		1769	C	p l	Bot mag 33	
12054 **Tripolium** *W*	sea	△	or	2	au s	B	Britain		sea sh	D	co	Eng bot 87	
12055 **sibíricus** *W*	Siberian	△	or	2	jl o	B	Siberia		1768	D	co	Gm sib 2 t.80 f.1	
12056 **élegans** *W*	elegant	△	or	2	au o	B	.....		1790	D	co		
12057 **pállens** *W en*	pale-flowered	△	or	3	s o	Vi	N	Amer	....	D	co		
12058 **præcox** *W en.*	early-flowering	△	or	2	jl au	Vi	N	Amer	1800	D	co		
12059 **undulátus** *W*	wave-leaved	△	or	3	au o	P B	N	Amer	1699	D	co	Herm parad 96	
12060 **paniculátus** *W*	panicled	△	el	4	s o	B	N.	Amer	1640	D	co	Corn canad t 65	
12061 **cordifólius** *W*	heart-leaved	△	or	2	jl au	P B	N	Amer	1759	D	co		
§12062 **corymbósus** *W*	corymbed	△	or	2	s	W	N	Amer	1765	D	co		
12063 **macrophýllus** *W*	large-leaved	△	or	2	jl.s	W	N	Amer	1739.	D	co		
12064 **heterophýllus** *W en*	various leaved	△	or	3	jls	Pa pu	N	Amer	1811	D	co		
12065 **alwartèns.s** *Lodd*	fine rayed	△	el	1	my	R	Caucasus		1807	D	co	Bot. mag 2321	

†*1740 **SOLIDA'GO** *W* Golden Rod — *Compositæ* *Sp* 48—61

12066 **canadénsis** *W*	Canadian	△	pr	2	jl s	Y	N	Amer	1648	D	co	Sch.hand 3 f 246
12067 **frágrans** *W en*	fragrant	△	pr	3	jl s	Y	N	Amer	....	D	co	
12068 **prócera** *W*	great	△	pr	6	s o	Y	N	Amer	1758	D	co	
12069 **serotina** *W*	upright-smooth	△	pr	4	jl au	Y	N	Amer	1758	D	co	
12070 **gigantèa** *W*	gigantic	△	pr	6	au s	Y	N	Amer	1758	D	co	
12071 **ciliáris** *W*	ciliated	△	pr	3	au s	Y	N	Amer	1811	D	co	
12072 **refléxa** *W*	hanging-leaved	△	pr	3	au s	Y	N	Amer	1758	D	co	
12073 **lateriflóra** *W*	lateral-flowered	△	pr	3	au s	Y	N	Amer	1758	D	co	



History, Use, Propagation, Culture,

Asteræ are chiefly characterized by their style, which, in its most complete state, is alone sufficient to distinguish them from every other tribe They are found in every part of the world, but especially in North America and Africa.

1740. ***Solidago*** From *solidari*, to unite, on account of the vulnerary qualities of the plants. The species are all autumnal coarse-looking herbaceous plants with yellow flowers, in the shrubbery they make a pretty

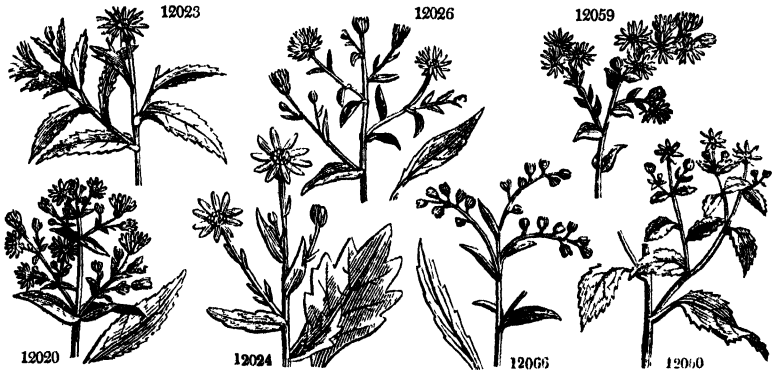
12019 Lvs. subamplexicaul broad-lanc subserrate smooth, Stem glabrous, Scales of involucr shorter than disk
12020 Lvs. subamplexic. : upper lanc acumi entire; lower lanc narrowed at base serrated, Branchlets virgate
12021 Lvs subamplexicaul remote obl entire lucid · radic. subserrated, Involucr imbr with cuneiform leaflets
12022 Lvs. subamplexicaul lanc lower subserrate smooth, Stem simple paniclcd at end, Involucr closely imbricated
12023 Lvs amplexicaul. lanc. serrate roughish, Branches panicled, Involucr lax longer than disk
12024 Lvs. obl lanc. scabrous ciliated lower ovate, Stem hispid, Branches 1-headed, Scales of involucr obl imbr
12025 Lvs subamplexicaul. lanc lower serrated, Stem smooth, Branches corymbose
12026 Lvs. subamplexicaul lanc glabrous scabrous at edge: lower subserrated, Branches divided
12027 Lvs amplexicaul narr lanc scabr. above lower subserr. Stem much branched, Involucr with spread scales
12028 Lvs lanc roughish somewhat amplexicaul. lower serrate in the middle, Scales of involucr lax leafy
12029 Lvs obl lanc. acuminate sessile smooth scabrous at edge lower serrated, Branches corymbose smooth
12030 Lvs sessile serrated smooth spatulate lanc narrowed at base and bent down towards each side
12031 Lvs subamplexic. obl lanc acuminate serrated smooth, Stem pyramidal, Racemes scarcely longer than lvs
12032 Lvs ov coarsely toothed stalked cauline sessile cuneate at base, Stem hispid, Branches with single heads
12033 Lvs broad lanc narrow at base entire with a very long point, Stem simp. flexuose angul Panic corymb
12034 Lvs obl. 3-nerved narrowed at base acute upper sess nearly entire, lower stalked serrated, Stem corymb
12035 Lvs lanc serrate acuminate rugose very rough, Stem erect angular simple
12036 Lvs. sess narrow lanc serrated scabrous, Stem 1 or few-headed
12037 Lvs lanc sess serr smooth, Branches virgate, Involucr imbricated, Stem round smooth
12038 Lvs sess narrow lanc : lower serrated in middle, Stem branched smooth recurved, Involucr lax imbricated
12039 Lvs lin lanc acumn scabrous at edge lower subserrated, Stem panicled, Branches 1-headed
12040 Lvs lin lanc acumn scabrous at edge lower subserrated, cauline reflexed, Stem lax panicled
12041 Lvs lanc acum scabrous at edge cauline serrated at end, those of the branches entire, Stem panicled
12042 Lvs lin entire radic obl subserrated, Stem much branched downy, Involucr loosely imbricated
12043 Lvs lanc lin sessile smooth lower subserrate, Stem panicled smooth, Involucr imbricated
12044 Lvs lin lanc sessile entire smooth lower lanc subserrate, Stem branched diffuse smoothish
12045 Lvs lin acuminate entire lower lin lanc subserrate, Branches corymbose, Involucr imbricated
12046 Lvs lin acuminate entire: radical obl serr Branches in corymbose panicles, Involucr imbricated
12047 Lvs sess lanc serrated smooth, Involucr imbricated leaflets acute, Stem rather villous
12048 Lvs ellipt-lanc serrated smooth cauline lan-lanc long, Branches spreading, Involucr imbr Stem pubesc
12049 Lvs ellipt-lanc serrated smooth even-sized, Branches spreading, Involucr imbricated, Stem pubescent
12050 Lvs ellipt-lanc serr. smooth those of the branches distant, Branches much spreading pendulous
12051 Stem 1-fl Lvs ovate sessile scabrous, Scales of involucr nearly equal linear
12052 Lvs lin lanc entire blunt mucronate 3-nerved at base veiny, Stem simple corymbose downy
12053 Lvs filiform aculeate ciliate, Involucr hemispherical, Leaflets equal
12054 Stem glabr corymb Lvs lin-lanc fleshy obscurely 3-nerv Scales of involucr lanc membran obt imbricated
12055 Leaves lanc subamplexicaul serrate pilose scabrous, Involucr lax leafl lanc acuminate tobaccous hispid
12056 Leaves scabr caul obl lanc acute, radical obl stalked, Scales of involucr obl cuneate blunt subsquarrose
12057 Leaves sessile obl lanc serrate floral ciliated, Stem branched glabrous, Involucr closely imbricated
12058 Lvs obl lanc serrat narrow at base, Stem hairy, Involucr imbric nearly equal, Outer scales somew spreading

**** Leaves cordate and ovate, serrate*

12059 Leaves obl cordate amplexicaul entire, Petioles winged, Stem panicled hispid, Branchlets 1-sided
12060 Leaves ovate-lanc subserrated stalked smooth, Petioles naked, Stem much branched smooth, Involucr lax
12061 Leaves cordate pilose beneath finely serrated stalked, Stem panicled smoothish, Panicle spreading
12062 Leaves ov finely serrated acum smoothish lower cord stalked, Branches hairy, Scales of involucr blunt
12063 Leaves ovate stalked serrated scabrous upper ovate cordate sessile, Stem branched diffuse, Scales acute
12064 Leaves smooth cauline ovate subcord acuminate deeply serrated entire at end, Stem panicled smooth
12065 Leaves ovate narrowed at base entire about 5-nerved, Involucr lax squarrose, Ray very fine

§ 1 Racemes 1-sided, Leaves 3-nerved [exceeding disk

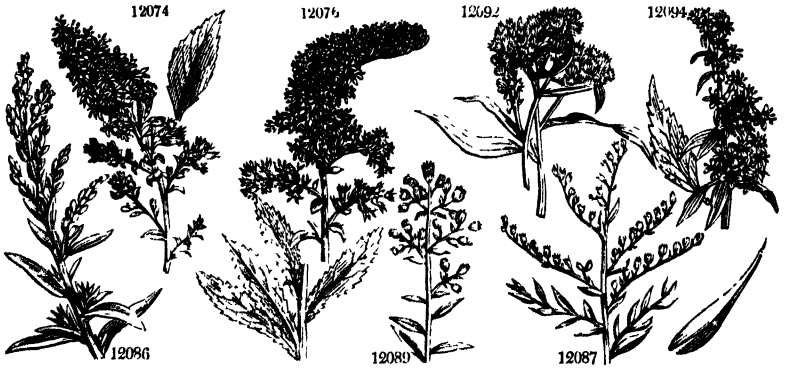
12066 Stem downy, Lvs lanc serrat triple-ribb rough, Clusters copious panicl unilateral recurv Radius hardly
12067 Leaves obl 3-nerved subserrated, Racemes 1-sided, Ligulæ middling, Stem smooth, Peduncles downy
12068 Stem villous erect, Lvs lanc serrated triple-ribbed rough villous beneath, Clusters spiked erect drooping before flowering, Radius short
12069 Stem erect round very smooth, Leaves lin-lanceol smooth triple-ribbed serrated rough-edged, Clusters panicled unilateral, Stalks downy
12070 Stem erect smooth, Lvs. lanc smooth serrated rough edged obscurely triple-ribbed, Clusters paniculated unilateral, Stalks hairy, Radius short
12071 Stem erect smooth, Leaves lanc. somewhat triple-ribbed smooth rough-edged slightly serrated, Clusters panicled unilateral, Stalks smooth, Bract fringed, Radius short
12072 Stem erect villous, Lvs lanc somew serrat. triple-ribbed rough reflexed, Clusters panicled slightly unilateral
12073 Stem erect rather hairy, Lvs lanc obscurely triple-ribbed smooth rough edged the lower ones slightly serrated, Clusters panicled unilateral somewhat recurved



and Miscellaneous Particulars

appearance among other coarse things, but there is not one of them which is worth a place in a choice collection of ornamental plants The leaves of the Solidago odora have a delightfully fragrant odor, partaking of that of anise and Sassafras, but different from either When subjected to distillation, a volatile oil, possessing the taste and aroma of the plant in a high degree, collects in the receiver This oil apparently has its residence in the transparent cells which constitute the dotting of the leaves The effects of the S odora are

12074	áspera *W.*	rough-leaved	♃	△	pr	3	s	Y	N. Amer.	1732.	D co Dil.el.t.305.f.392
12075	altíssima *Ph.*	tall	♃	△	pr	8	au.s	Y	N. Amer	1686.	D co Mart. cent. 14
12076	rugósa *Ph.*	wrinkle-leaved	♃	△	pr	3	au s	Y	N. Amer.	1732.	D co Dil.el.t.308 f.396
12077	villósa *Ph.*	villous	♃	△	pr	2	au s	Y	N Amer	1732.	D co
12078	scábra *W*	scabrous	♃	△	pr	3	au s	Y	N Amer	1811	D co
12079	nemorális *W*	woolly-stalked	♃	△	pr	1½	s	Y	N Amer	1769	D co
12080	pátula *W*	spreading	♃	△	pr	2	s o	Y	N Amer.	1805	D co
12081	ulmifólia *W*	Elm-leaved	♃	△	pr	2	au o	Y	N Amer	1805	D co
12082	argúta *W*	sharp-notched	♃	△	pr	4	jl au	Y	N. Amer.	1758	D co
12083	júncea *W*	Rush-stalked	♃	△	pr	2	au.s	Y	N Amer	1769.	D co
12084	ellíptica *W*	oval-leaved	♃	△	pr	3	au s	Y	N. Amer	1759	D co
12085	recurváta *W en*	recurved	♃	△	pr	2	s n	Y	N. Amer.	...	D co
12086	sempervírens *W*	evergreen	♃	△	pr	5	s o	Y	N Amer	1699	D co Cor canad t 139
12087	odóra *W*	sweet-smelling	♃	△	pr	3	jl au	Y	N. Amer	1699	D co Pluk.al t.116.f.6
12088	pauciflósculósa *Ph*	slender-flower	♃	△	pr	2	au o	Y	N Amer	1811	D co
12089	bícolor *W*	two-colored	♃	△	pr	2	au s	Y	N. Amer	1759.	D co Pluk al t.114.f.8
12090	petioláris *W*	late-flowered	♃	△	pr	4	o d	Y	N. Amer	1758	D co
12091	stricta *W*	Willow-leaved	♃	△	pr	3	s	Y	N Amer.	1758	D co
§12092	lanceoláta *Ph*	Grass-leaved	♃	△	pr	5	o	Y	N. Amer.	1758	D co Bot mag 2546
§12093	tenuifólia *Ph.*	slender-leaved	♃	△	pr	2	s o	Y	N Amer	1758	D co
12094	cæ'sia *W*	Maryland	♃	△	pr	2	s o	Y	N Amer	1732.	D co Dil el.t 307 f.395
12095	lívida *W en*	livid	♃	△	pr	2	s o	Y	N Amer	...	D co
12096	hírta *W en*	hairy	♃	△	pr	2	s o	Y	N Amer	...	D co
12097	lithospermifólia *Ph*	Gromwell-lvd	♃	△	pr	2	au o	Y	N Amer	1811.	D co
12098	lævigáta *W*	fleshy-leaved	♃	△	pr	6	o n	Y	N. Amer	1699	D co
12099	mexicána *W.*	Mexican	♃	△	pr	6	jl o	Y	N Amer	1683.	D co Dodar ac.4.t.219
12100	vimínea *W*	twiggy	♃	△	pr	3	s	Y	N Amer	1759	D co
12101	erécta *Ph*	upright	♃	△	pr	3	au o	Y	N Amer	...	D co
12102	macrophýlla *Ph*	large-leaved	♃	△	pr	3	au.o	Y	N Amer	...	D co
12103	flexicaúlis *W*	crook-stalked	♃	△	pr	2	s	Y	N Amer	1725	D co Herm parad 244
12104	latifólia	broad-leaved	♃	△	pr	1½	s	Y	N Amer	1725	D co Pluk al. t.235.f 4
12105	ambígua *W.*	angular-stalked	♃	△	pr	2	jl au	Y	.....	1759	D co
12106	axillária *Ph*	axillary	♃	△	pr	2	au o	Y	N Amer	1811	D co
12107	Virgaúrea *W*	common	♃	△	pr	2	jl s	Y	Britain	woods	D co Eng bot 301
12108	cámbrica *W*	Welsh	♃	△	pr	½	jl au	Y	Wales	..	D co Dil el t 306 f 393
12109	multiradiáta *W*	Labrador	♃	△	pr	½	jl au	Y	Labrador	1776	D co
12110	minúta *W*	least	♃	△	pr	½	jl au	Y	Pyrenees	1772	D co Bot cab. 189
12111	húmilis *Ph.*	dwarf	♃	△	pr	1	jl au	Y	N Amer	1811	D co
12112	elàta *Ph*	tall-hairy	♃	△	pr	6	au o	Y	N Amer	1811	D co
12113	rígida *W*	hard-leaved	♃	△	pr	3	s	Y	N Amer	1710	D co Herm parad.243
†*1741	CINERA'RIA *W*	Cineraria					*Compositæ*	*Sp* 31—72			
12114	geifólia *W*	Kidney-leaved	♃	⌴	or	2	ap au	Y	C G H	1710	C p l Com hort 2. t.73
12115	canéscens *Wendl*	hoary	♃	⌴	or	2	ap au	Y	C G H.	1790	C p l Bot mag 1990
	parviflora H K										
12116	aurita *W*	purple-flower'd	♃	⌴	or	1½	jn jl	Pu	Madeira	1777.	C l p Bot mag 1786



History, Use, Propagation, Culture,

aromatic, pleasant to the taste, gently stimulant, diaphoretic, and carminative. An essence made by dissolving the essential oil in proof spirit, is used in the eastern states as a remedy in complaints arising from flatulence, and as a vehicle for unpleasant medicines of various kinds. It has been employed successfully to allay vomit-

§ 2. *Racemes 1-sided. Leaves not 3-nerved.*

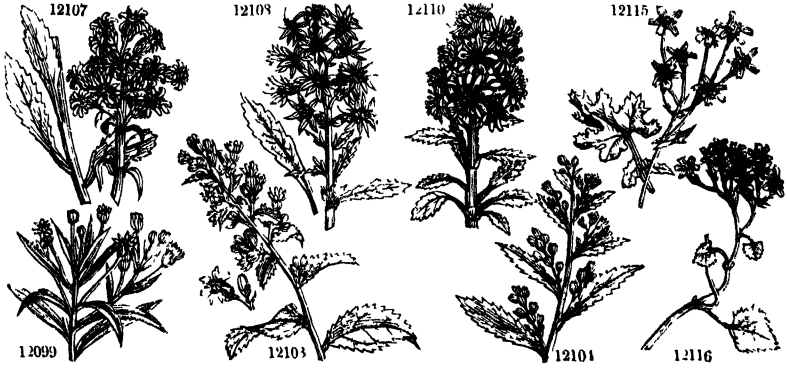
12074 Stem erect round hairy, Lvs. ov rather ellipt. very rough rugged serrated without lateral ribs, Clusters panicled unilateral
12075 Stem erect hairy, Lvs lanc the lower ones deeply serrated very rough rugose, Panicles unilateral
12076 Stem erect hairy, Lvs. ovate-lanc. the lower ones closely serrated rugged very rough, Clusters panicled compound widely spreading unilateral
12077 Stem erect vill. Lvs lanc rather soft serrated without lateral ribs, Clusters panicled unilateral
12078 Stem erect hairy, Lvs. oblong pointed smooth above rugged and rough beneath, Clusters unilateral
12079 Stem erect downy, Stem lvs lanc hisp ent radic ones somew. wedge-shap serrat. Clust. panic unilateral
12080 Stem erect smooth angular, Lvs. ellipt serrated smooth the radic. ones obl.-spatulate, Clusters panicled unilateral spreading, Pedunc downy
12081 Stem erect striated smooth, Lvs ellipt pointed deeply serrated vill. beneath: radical ones obovate, Clusters panicled unilateral, Pedunc villous, Rays short
12082 Stem erect smooth, Lvs smooth sharply and unequally serr.: those of the stem ellipt., radical ones ovate-obl Clusters panicled unilateral, Rays elongate
12083 Stem erect smooth, Lvs. lanc. smooth rough-edged · the lower ones serrated, Clusters panicled unilateral
12084 Stem erect smooth, Lvs ellipt smooth serrated, Clusters panicled unilateral, Rays of a middling length
12085 Stem erect downy, Lvs. lanc serrated rough edged, Clusters elongated unilateral recurved panicled
12086 Stem erect smth Lvs lin.-lanc rather fleshy smth entire rough-edg Clust. panic. unilateral, Ped. roughish
12087 Stem erect striated downy, Lvs lin.-lanc entire smooth rough-edged, Clust. panic. unilateral nearly simple

§ 3 *Racemes erect*

12088 Smooth somewhat shrubby, Lvs lanc obtuse without ribs, Panicle compound many-fl tuft of flowers erect, Involl narr.-oblong with 5 flor in the disk and 1 in the radius
12089 Stem hairy, Lvs ellipt hairy the lower ones serr, those on the fl.-branches entire numerous and small, Clusters erect, Scales of involl obtuse
12090 Stem erect villous, Lvs ellipt roughish stalked, Clusters erect, Rays twice the length of the involl
12091 Stem erect smth Stem-lvs lanc entire smth rough-edg radic ones serrat Clust panic erect, Ped. smth.
12092 Stem smooth furrowed much branched, Lvs almost lin ent roughish nearly erect with 3 or 5 rough ribs, Rays not longer than the disk
12093 Stem rough angular branch corymb Lvs spread lin very narr slightly 3-ribb rough with axilla tufts of smaller ones, Rays scarcely exceeding the disk
12094 Stem nearly erect very smooth and even, Lvs lanc smooth with roughish edges and ribs, Clusters erect, Rays rather longer than the disk
12095 Stem smooth panic Lvs lanc serrat smth rough-edged, Branches racemose at the extremity, Rays elong
12096 Stem panic hairy, Lvs lanc rough on both sides those of the stem serrat, of the branches ent. Clusters erect, Rays elongated
12097 Stem branch downy, Lvs lanc rough on both sides tapering 3-ribb entire, Clusters erect, Rays elongated
12098 Stem erect smth Lvs lanc fleshy entire smooth in every part, Clusters panic erect, Pedunc scaly hairy, Radius twice the length of involl
12099 Stem oblique smooth, Lvs lanc somew fleshy entire smooth in every part, Clusters panic erect, Pedunc scaly smooth, Rays longer than involl
12100 Stem erect slightly downy, Lvs lin lanc smooth rough-edged tapering at the base: the lower ones somew serrated, Clusters erect, Rays elongated
12101 Stem rather vill Lvs lanc veiny smooth entire somewhat stalked
12102 Lower lvs ov pointed taper unequally and sharply serr smooth those of the stem lanc tapering at each end serr nearly sess Clusters axill stalked leafy the length of the leaves
12103 Stem zig-zag roundish smooth, Lvs lanc pointed serrated smooth nearly sess Clust axill erect
12104 Stem somew zig-zag angular smooth, Lvs ovate pointed strongly serrated smooth · tapering into a winged footstalk, Clusters axillary erect
12105 Stem slightly zig-zag smooth angul branch Lvs ov.-lanc pointed densely serrated rather hairy beneath tapering into a wing footstalk upper ones ent Clust axill. erect the upper ones much long. than the lvs.
12106 Stem smooth round erect, Lvs lanc serr glabrous, Racemes axill subglobose erect, Rays long
12107 Cauline leaves lanc · the lower ones ellipt Racemes panicled erect crowded
12108 Stem quite simple downy, Lvs cuneiform lanc downy, Racemes erect, Rays long
12109 Stem a little villous, Lvs sessile lanc smooth ciliated lower serrated at end, Rays long numerous
12110 Stem quite simple pilose, Lvs lanc acute serrated smooth, Raceme term simple erect, Rays long
12111 Stem simple erect smooth, Lvs lanc serrated smooth tapering and elongated at the base, Clusters erect
12112 Stem hairy round, Lvs lanc rather hairy beneath, Clusters erect, Rays elongated
12113 Lvs. ov.-obl. rough like the corymbose stem with minute rigid hairs the lowermost serrat., upper entire, [Clusters compact, Rays twice the length of the obtuse calyx

12114 Pedunc. branched, Lvs reniform narrowed somewhat lobed downy, Petioles auricled at end
12115 Pedunc. branched, Lvs cordate 5-lobed toothed woolly, Petioles with appendages, Ray 3-flowered

12116 Heads corymbose, Lvs cordate somewhat angular downy beneath, Petioles auricled at base

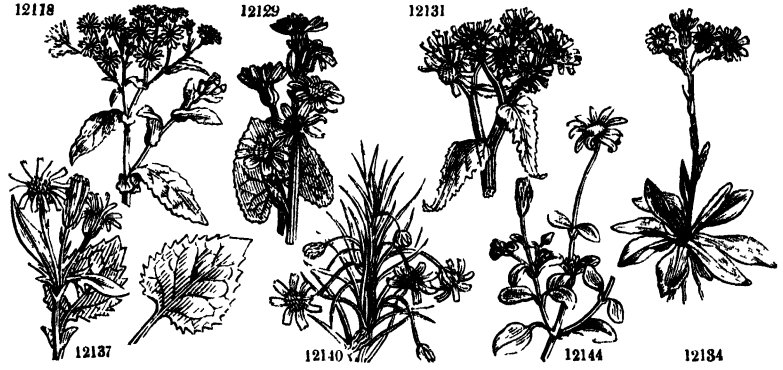


and Miscellaneous Particulars

ing, and to relieve spasmodic pains in the chest of a milder kind. The leaves are also used in some parts of the United States as an agreeable substitute for tea. (*Bigelow*)

1741. *Cineraria.* From *cineres*, ashes, in reference to the soft white down which clothes the lower, and

12117	lácteа *W. en.*	milk-colored	♃	or	3	jn jl	W	.....	1816.	C	l.p	
12118	cruénta *W*	purple-leaved	♃	or	2	f my	Pu	Canaries	1777.	R	p.l	Bot. mag. 406
12119	hýbrida *W en*	hybrid	♃	or	2	f.my	Pu	.....	...	C	p.l	
12120	populifólia *H. K.*	Poplar-leaved	♃	or	2	jn.s	R	Canaries	1780.	C	p l	Vent. malm. 100
12121	lobáta *W*	lobed	♃	or	3	jn au	Y	C G H	1774	C	p.l	
12122	malvæfólia *W*	Mallow-leaved	♀	or	2	au	Y	Azores	1777	R	p l	
12123	Petasítes *B M*	Butter-bur-lvd.	♃	or	3	f d	Y	Mexico	1812.	C	l p	Bot. mag. 1536
12124	discolor *W*	white-leaved	♃	or	4	jl au	Y	Jamaica	1804	C	l.p	
12125	elátior *Bouché*	tall	♀	or	5	jl au	W	.....	...	D	l p	
12126	parvifólora *Bach*	small-flowered	♃	or	2	jl au	Y	Caucasus	1820	D	l.p	
12127	americána *W*	American	♃	or	6	...	Y	Grenada	1825	C	p.l	
12128	bicolor *L*	two-colored	♃	or	2	jl au	Y	.....	...	C	co	
12129	speciósa *Schrad*	shewy	♃	or	6	jl au	Y	Siberia	1815	D	co	Bot. reg 812
12130	sibírica *W*	Siberian	♃	or	4	jn au	Y	Siberia	1784	C	co	Bot. mag 1869
12131	gigantéa *H K*	gigantic	♃	or	4	jl au	Y	Cape Horn	1801	D	co	Exot bot 2 t 65
§12132	glaúca *W*	glaucous-leav'd	♃	or	6	jn jl	Y	Siberia	1790	D	co	Gmel sib 2. t 74
12133	palústris *W*	marsh	♃	or	3	jn jl	Y	England	mar.	D	m s	Eng bot. 151
12134	campéstris *W*	mountain	♃	or	½	my jn	Y	England	ch pa	D	co	Eng bot 152
	integrifólia E. B											
12135	longifólia *W*	long-leaved	♃	or	2	jn au	Y	Austria	1792	D	co	Jac. aust.2 t 181
12136	cordifólia *W.*	heart-leaved	♃	or	2	jl au	Y	Austria	1739	D	co	Jac aust 2 t 176
12137	alpina *W*	Alpine	♃	or	2	jn au	Y	Austria	1683	D	co	Jac aust.2 t 177
12138	maritima *W*	Sea Ragwort	♃	or	2	jl s	Y	S Europe	1633	C	l p	Lob ic t 227. f 2
12139	canadénsis *W*	Canadian	♃	or	2	jn au	Y	Canada	1739	D	co	
§12140	linifólia *W*	Flax-leaved	♃	or	2	jn au	Y	C G H	...	C	l p	Jac schœ 3 t 308
12141	humifusa *W*	trailing	♀	or	¼	jl au	Y	C G H	1704	R	p l	
12142	viscósa *W*	clammy	♀	or	2	jn au	Y	C. G H	1774	C	p l	Ja frag 12 t 7 f 2
12143	lanáta *W*	woolly	♃	or	3	my s	Pu	Canaries	1780	C	p l	Bot mag 53
§12144	amelloídes *W*	blue-flowered	♃	or	1¼	f s	B	C G H	1753	S	p l	Bot mag 249
1742	CALOTIS *R Br*	Calotis				*Compositæ*		*Sp* 1—2				
12145	cuneifólia *R Br*	wedge-leaved	♀	pr	1	my jn	B	N Holl.	1819.	D	co	Bot reg 504
1743	KAULFUSSIA *Nees*	Kaulfussia				*Compositæ*		*Sp* 1.				
12146	amelloídes *Nees*	Cape Aster-like	♀	pr	1	jl au	B	C G H	1819	D	co	Bot reg 490
*1744	INULA *W*	Inula				*Compositæ*		*Sp* 25—37				
§12147	Helénium *W*	Flecampane	♃	or	4	jl au	Y	Britain	m me	D	co	Eng bot 1546
12148	Oculus-Christi *W*	hoary	♃	or	1½	jl s	Y	Austria	1759	D	co	Jac aust 3 t 223
12149	británnica *W*	creeping-rooted	♃	or	2	jl s	Y	Germany	1759	D	co	Fl dan t. 413
12150	undulàta *W*	wave-leaved		or	1	jl o	Y	Egypt	1739	S	co	
12151	Indica *W*	Indian		or	1½	jl o	Y	E Indies	1730	S	co	Bur zeyl t 55 f 2
12152	squarrósa *W*	net-leaved	♃	or	1	jl s	I. Y	Italy	1768	D	co	Plu alm t 16 f 1
12153	viscósa *W*	clammy	♀	or	1½	jl au	Y	S Europe	1596	C	p l	Jac vind 2 t 165
12154	tuberósa *P S*	tuberous-rooted	♃	or	1½	jl au	Y	S Europe	1640	D	co	Mor s 7 t 19 f 20
	Erigeron tuberosum W											
12155	salicina *W*	Willow-leaved	♃	or	2	au s	Y	N Europe	1648	D	co	Fl dan t 786
12156	glandulósa *W*	glandular	♃	or	2	jl au	Y	Georgia	1804	D	co	Bot mag 1907
12157	Bubónium *W*	Austrian	♃	or	1½	jl s	Y	Austria	1801	D	co	Jac aus 5 ap t 19
12158	hírta *W*	hairy	♃	or	1	jn s	Y	Austria	1759	D	co	Jac aust 4 t 358
12159	suaveólens *W*	woolly-leaved	♃	or	1½	jn au	Y	S Europe	1758	D	co	Jac vind 3 t 51
12160	Vaillántii *W*	Vaillant's	♃	or	2	jn au	Y	France	1739	D	co	
12161	móllis *Bernhardi*	soft	♃	or	2	jn au	Y	... ..	.	D	co	
12162	odóra *W*	fragrant	♃	or	1½	jn au	Y	S Europe	1821	D	co	M h 3 s 7 t 21 f 6
12163	mariána *W*	American	♃	or	1	jl.au	Y	N Amer	1742	D	co	Mill ic 1 t 57 f 1
12164	germánica *W*	German	♃	or	4	jn jl	Y	Germany	1759	D	co	Jac aust 2 t 134
12165	ensifólia *W*	sword-leaved	♃	or	⅝	jl s	Y	Austria	1793	D	co	Jac aust 2 t 162
12166	crithmifólia *W*	Samphire-leav	♃	or	2	au s	Y	England	sal m	D	co	Eng bot 68
12167	provincialis *W*	oval-leaved	♃	or	1	jl au	Y	France	1778	D	co	
12168	montána *W*	mountain	♃	or	1½	jl au	Y	S Europe	1759	D	co	Garid aix t 10



History, Use, Propagation, Culture,

often the upper surface of the leaves C discolor, populifolia, &c are popular half shrubby plants, well calculated for bearing the confined air of a sitting room Most of the hardy herbaceous species are fine ornamental plants of easy culture C lanata and amelloides flower the greater part of the year; the former species is considered the handsomest of the genus, its petals exteriorly are of a most vivid purple, interiorly they are white.

1342. *Calotis* The name has been derived from καλὸς, beautiful, and ους ωτος, an ear, in allusion to the two membranous ear-shaped paleæ of the pappus A pretty little New Holland herbaceous plant.

1743. *Kaulfussia* Named after Dr George Frederick Kaulfuss, professor of botany at Halle, a distinguished living Cryptogamic botanist A small plant with bright blue flowers.

1744. *Inula.* The derivation of this word is uncertain. The Latins applied it to a plant which was eaten as

12117 Lvs. cordate angular downy beneath, Corymbs terminal panicled, Scales of involucre recurved at end
12118 Heads corymbose, Lvs cordate angular toothed purple beneath, Petioles winged auricled at base
12119 Pedunc about 1-headed, Branches corymb. Lvs. cord angular toothed downy beneath, Petioles winged
12120 Heads corymbose, Lvs cordate subangular downy beneath, Petioles with many appendages at end
12121 Heads subcorymbose, Lvs roundish many-lobed smooth, Petioles auricled at base, Involucre calyculate
12122 Heads cymose, Lvs cordate angular downy beneath, Petioles simple
12123 Leaves large round lobed downy and green on each side
12124 Heads corymbose, Leaves oblong lanc acuminate toothletted smooth white beneath
12125 Lvs cord subangular smooth above downy beneath, Petioles with an appendage at top, Heads corymb.
12126 Stem simple, Heads panicled, Lvs smooth tooth. . lower deltoid stalked upper obl lanc amplexicaul.
12127 Panicles axillary, Lvs alternate stalked broad lanc serrated smooth above hoary beneath [above
12128 Heads corymb Involucre hoary pubesc Lvs obl pinnatif at base segm somew toothed shining and smooth
12129 Raceme simple, Lvs reniform toothletted, Petiole inflat Stem simple leafy, Bractes in the midd of stalk
12130 Raceme simple, Lvs cordate blunt toothletted smooth, Stem simple 1-leaved
12131 Heads corymb Lvs cauline ov acute finely serrated downy beneath petioles winged at base, radic. cord.
12132 Raceme simple, Lvs spatulate cordate entire smooth, Stem simple
12133 Heads corymbose, Lvs broad lanc tooth-sinuated, Stem villous
12134 Heads umbellate, Stem simple, Lvs downy radical ovate subcrenulate, cauline lanc entire

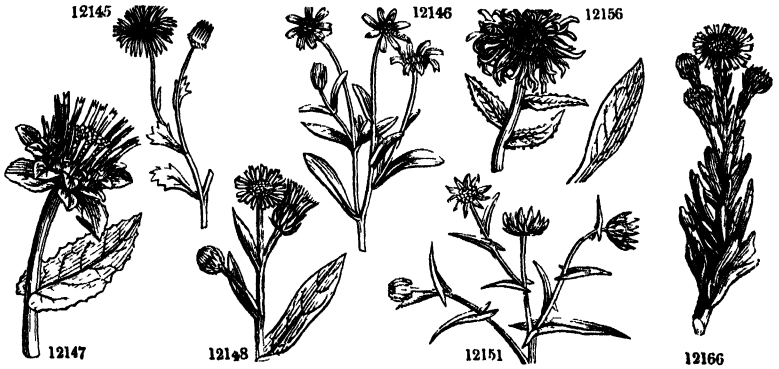
12135 Heads in corymbose umbels, Stem simple, Lvs somewhat toothed radic spatulate, caul obl. lanc
12136 Panicle few-headed, Stem simple, Lvs all stalked cordate doubly toothed, Petioles toothed at base
12137 Heads corymbose, Lvs pinnated term pinnæ large cordate cut-toothed, lateral cuneate toothed at end
12138 Heads panicled, Involucre downy, Lvs pinnatifid segments blunt about 3-lobed downy beneath
12139 Heads panicled, Lvs pinnatifid subvillous segments sinuated, Stem herbaceous
12140 Pedunc 1-headed axillary, Lvs linear subulate glabrous, Stem shrubby
12141 Pedunc 1-headed, Lvs reniform somewhat angular, Petioles auricled at end or naked
12142 Pedunc 1-headed, Lvs pinnatifid lobed acute viscid fleshy
12143 Pedunc. 1-headed, Lvs cordate roundish with 7 angles woolly beneath
12144 Pedunc. 1-headed, Lvs opposite ovate naked

12145 Leaves cuneate cut-toothed at end

12146 The only species

12147 Lvs amplexic somewhat toothed ovate rugged downy beneath, Scales of the involucre downy
12148 Leaves amplexic oblong entire hirsute, Stem pilose corymbose
12149 Leaves amplexic lanc serrated at base pilose beneath, Stem corymbose villous
12150 Leaves amplexic cordate lanceolate wavy
12151 Leaves amplexic cordate lanc quite smooth serrated, Stem corymbose smooth, Pedunc 1-headed filiform
12152 Leaves oval rigid sessile serrulate scabrous netted, Scales of involucre ovate reflexed
12153 Leaves sessile reflexed at base lanc serrated, Stem downy clammy, Peduncles axillary leafy
12154 Leaves sessile lanc-lin Stem pilose branched, Branches spreading 1-headed, Root tuberous

12155 Leaves lanc recurved serrate scabrous, Branches angular, Lower heads tallest
12156 Lvs sess obl obsoletely serrated serratures glandular, Stem hairy 1-headed, Scales of involucre lanc villous
12157 Lvs sess obl with cartilaginous teeth scabrous rigid, Stem corymbose, Scales of involucre blunt squarrose
12158 Lvs sessile lanc bluntly serrated rigid pilose, Stem villous 1-headed, Scales of involucre lanceolate
12159 Leaves ellipt narrowed at base stalked pilose lower toothed, Stem many-flowered
12160 Leaves sessile oblong lanc serrated downy beneath, Heads stalked about 4 in terminal umbels
12161 Leaves lanc acute serrulate hairy, Lvs of involucre lanc hairy outer reflexed
12162 Leaves amplexicaul toothed very hairy radical ovate, cauline lanceolate
12163 Leaves sessile oblong lanc attenuated at base obtuse entire mucronate with a gland, Pedunc filif. viscid
12164 Leaves sessile obl acute entire scabrous, Stem branched at top, Heads corymbose
12165 Leaves sessile lin. acuminate nerved smooth scattered, Stem about 1-headed
12166 Leaves linear fleshy generally 3-pointed
12167 Leaves subserrate downy beneath radical stalked ovate, Stem erect 1 flowered
12168 Leaves lanc hirsute entire, Stem 1-headed, Involucre short imbricated



and Miscellaneous Particulars.

a preserve with sugar Inuleæ in many respects resemble Anthemideæ, Senecioneæ, and Nassauvieæ, especially in their style, but they are perfectly well characterised by the peculiarities of their ovarium, pappus, stamens, and corolla They are also related to Carlineæ They are found in every part of the world, and especially in southern Africa; almost all the Compositæ of the southern latitudes being referable to them

I Helenium, called Elecampane, from the officinal name Enula campana, is one of the largest of British herbaceous plants It was formerly esteemed a tonic, and is still retained in the Materia Medica, though little used Bruised and macerated in wine, with balls of ashes and whortle berries, it dyes a blue color. The young branches of I Crithmifolia are frequently sold in the London markets for samphire, to which they bear some resemblance in appearance, but none in virtues.

12169 **bifrons** *W*	Italian	☿	△	or	1½	jn au	Y	S Europe	1713	D	co	Herm par t 127
12170 **saturejoides** *W.*	Savory-leaved	♃	▭	or	1	...	Y	Vera Cruz	1733	C	l p	Rel Hous 8 t 19
12171 **fœtida** *W*	stinking		○	or	2	jn au	Y	Malta	1688	S	co	Boc sic. 26. t. 13

1745 PULICA'RIA *Gærtn* Pulicaria — *Compositæ* — *Sp* 3

12172 vulgáris *Gærtn*	Small Fleawort		○	w	1	au s	Y	England moi h		S	co	Eng bot 1196
12173 arábica *Lank*	Arabian	☿	△	pr	1½	au s	Y	Arabia	1823	D	co	Pluk al t 149 f 4
12174 dysentérica *Lank*	meadow	☿	△	un	2	au.s	Y	England wat pl.		D	co	Eng bot 1115

†1746. GRINDE'LIA *W en* Grindelia — *Compositæ* — *Sp* 5—7

12175 glutinósa *H K*	glutinous	♃	⊔	or	2	ja d	Y	Mexico	1803	C	l p	Bot reg 187
12176 inuloides *W en*	Inula-like	♃	⊔	or	1½	jn s	Y	Mexico	1815.	C	l p	Bot reg 248
12177 squarrósa *Ph.*	Snake's-headed	☿	⧋	or	2	jl s	Y	Missouri	1811	D	l p	Bot mag 1706
12178 angustifólia *Kunth*	narrow-leaved	☿	⧋	or	1	jl s	Y	Mexico	1822	D	l p	Bot reg 781
12179 ciliáta *Nutt*	ciliated	☿	○	or	1½	jl.s	Y	N Amer	1821	D	l p	Hook ex fl 45

†1747 PODOLE'PIS. *H K* Podolepis — *Compositæ* — *Sp* 2.

12180 rugáta *H K*	wrinkle-scaled	☿	⧋	or		jl au	W	N Holl	1803	C	s p	Lab no h 2 t 208
12181 acumináta *H K*	sharp-scaled	☿	⧋	or		my au	W	N S W	1803.	C	s.p	Bot. mag 956

1748 CHÆTANTHE'RA. *Fl per* Chætanthera — *Compositæ* — *Sp* 1—2.

12182 ciliáta *Fl. per*	ciliated	☿	⧋	or	2	jl au		Chili	1822	D	co	

*1749 AR'NICA *W* Arnica — *Compositæ* — *Sp* 5—34

12183 montána *W*	mountain	☿	△	or	1	jl au	Y	Europe	1731	D	p l	Bot. mag 1749
12184 scorpioides *W*	alternate-leav	☿	△	or	½	jl au	Y	Austria	1710	D	p l	Bot cab 913
12185 Doróniçum *W*	Alpine	☿	△	or	1½	jl au	Y	Austria	1816	D	l p	Jac aust 1 t 92
§12186 Bellidiástrum *W*	Daisy-leaved	☿	△	or	1	jn au	W	Austria	1570	D	p l	Bot mag 1196
12187 glaciális *W*	ice	☿	△	or	1	jn au	Y	Switzerl	1823	D	p l	Jacq ic t 580

1750 GERBE'RIA *Burm* Gerberia — *Compositæ* — *Sp* 1—2

12188 crenáta *Lindl*	crenated	☿	◫	pr	½	jl au	Pu	C G H	1822	D	p l	Bot reg 855

†1751 DORO'NICUM *W* Leopard's-Bane — *Compositæ* — *Sp* 6—11

12189 Pardaliánches *W*	great	☿	△	or	3	my	Y	Britain m pas		D	co	Eng bot 630
12190 scorpioides *W*	mountain	☿	△	or	3	ap jn	Y	Germany ..		D	co	
12191 austriacum *W.*	Austrian	☿	△	or		ap jn	Y	Austria	1816	D	co	Jac aust t 130
12192 altáicum *W*	Siberian	☿	△	or	1	jn au	W	Siberia	1783	D	s l	P ac p 1779 t 16
12193 orientále *W en*	oriental	☿	△	or	1	jn au	Y	Caucasus	1815	D	l p	
12194 plantagineum *W*	Plantain-leav'd	☿	△	or	2	my	Y	S Europe	1570	D	co	

†1752 PERDI'CIUM *H K* Perdicium — *Compositæ.* — *Sp* 1—12

12195 Anándria *H K*	Siberian	☿	△	un	¾	mr		Siberia	1759	D	co	Gm sib 2 t 68 f 1

1753 TETRAGONOTHE'CA *W* Tetragonotheca — *Compositæ* — *Sp* 1

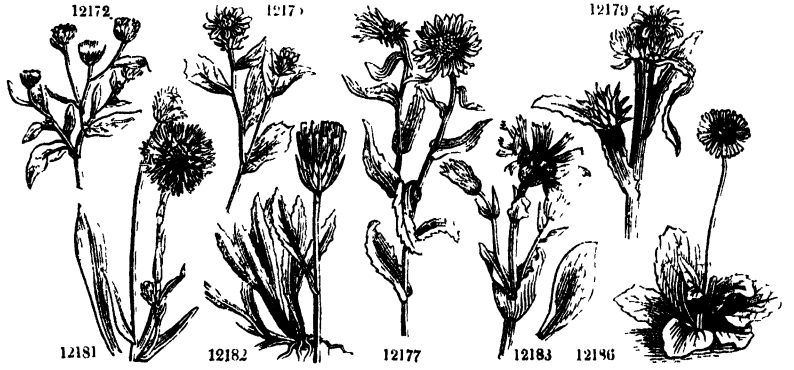
12196 helianthoides *W.*	Sunflower-like	☿	△	or	4	au o	Y	Virginia	1726	D	p l	Sch han 3 t 263

†1754 XIMENE'SIA *W* Ximenesia — *Compositæ* — *Sp* 1

12197 encelioides *W*	Mexican	☿	⧋	or	3	jn n	Y	Mexico	1795	S	l p	Cav ic 2 t. 178

†1755 HELI'NIUM *W* Helinium — *Compositæ* — *Sp* 4—8

12198 autumnále *W*	smooth	☿	△	or	3	au o	Y	N Amer	1729	D	p l	Sch han 3 t 250
12199 pubéscens *W*	downy	☿	△	or	3	au s	Y	N Amer	1776	D	p l	
12200 quadridentatum *W*	wing stalked	☿	△	or	3	my o	Y	Louisiana	1730	D	l p	Bot reg 598
12201 quadripartitum *Link*	four-parted	☿	△	or	3	my o	Y	.....	1823	D	l p	



History, Use, Propagation, Culture.

1745 *Pulicaria* So named in allusion to its property of driving away fleas, *pulices* See Conyza P dysenterica has its specific name from having cured certain Russian soldiers of the bloody flux It is called by our old authors middle flea-bane, and was supposed by its smoke in burning to chase away fleas and other insects Forskahl says, it is named in Arabic *Rasa ejub*, or *Job's tears*, from a notion that Job used a decoction of this herb to cure his ulcers Of course it was formerly recommended to cure the itch. P. vulgaris is also said to drive away fleas and gnats

1746. *Grindelia* A handsome genus of herbaceous plants, with neat foliage, and pretty yellow flowers They are sometimes called Donia

1747. *Podolepis.* From πους, a foot, and λεπις, a scale The stalks of the flowers are covered with scales

1748. *Chætanthera.* From χαιτα, hair, and ανθηρα, an anther, the anther being furnished with a hairy tuft

1749. *Arnica.* This is said to be a corruption of *ptarmica*, derived from πταιρω, to sneeze The Arnica montana is a powerful sternutatory, in the Vosges it is even called *tabac* on that account The whole plant has important medicinal properties, it is fortifying, diuretic, emmenagogue, vulnerary, antiseptic, resolvative, and sternutatory. The root powdered is employed in diarrhœa, dysentery, and quartan fevers, it is also applied outwardly to bad ulcers, and in cases of gangrene. The flour is used in asthenia, rheumatic pains,

12169 Leaves ovate-oblong decurrent toothed entire at end, Flowers corymbose clustered
12170 Leaves sessile opp linear lanc entire dotted beneath, Pedunc long 1-headed
12171 Leaves lanceolate linear entire, Corymbs branched, Rays of flowers very short

12172 Leaves amplexicaul oblong wavy villous, Stem erect panicled, Pedunc. 1-fl. opposite the leaves
12173 Leaves oblong sessile, Pedunc. filiform, Involucre cylindrical
12174 Leaves oblongo-cordate amplexic. rugged downy, Stem woolly panicled, Scales of involucre setaceous

12175 Leaves ovate-obl serrated, Involucres viscid
12176 Leaves sessile obl lanceolate acute serrated at end not viscid
12177 Leaves obl amplexicaul serrated, Scales of involucre filiform at end revolute squarrose
12178 Stems simple, Lower leaves spatulate upper linear-oblong serrated 1-nerved
12179 Leaves oblong blunt half-amplexicaul. ciliate serrated, Leaves of involucre linear flat bristle-pointed

12180 Scales of involucre rugose blunt, Stem quite simple
12181 Scales of involucre equal ovate acuminate, Stem nearly simple

12182 Leaves lanceolate ciliated

12183 Leaves ovate entire cauline twin opposite
12184 Leaves toothed, Teeth acuminate radical stalked elliptical roundish, cauline alternate oblong
12185 Leaves remotely toothed hirsute radical stalked obl narrowed at base, caul alternate obl lanceolate
12186 Scape 1-headed naked, Leaves stalked obovate repand
12187 Leaves somewhat toothed and hairy radical stalked obl rounded at base, caul altern obl lanceolate

12188 Leaves obovate crenate smooth, Scape 1-headed

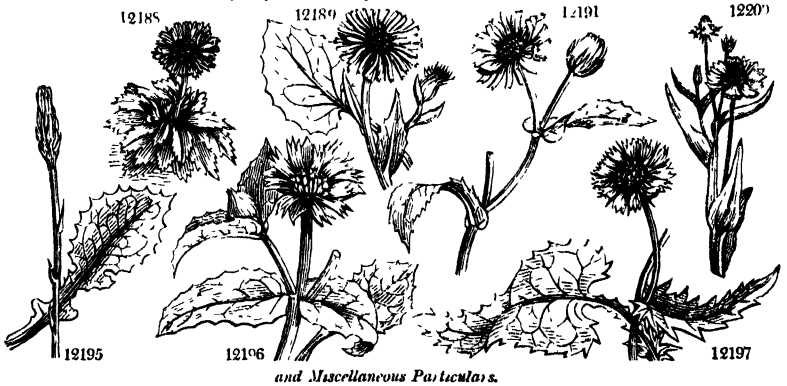
12189 Leaves cordate repando-dentate radical ones petiolate, cauline ones amplexicaul
12190 Leaves remotely toothletted upper oblong amplexicaul, lower ovate stalked, Petioles winged auricled
12191 Leaves toothletted upper lanc amplexicaul, lower spatulate ovate, radical cordate stalked
12192 Leaves toothed obov amplexic radical obov spatulate narrowed into the stalk, Stem simple 1-headed
12193 Smooth, Radical leaves cordate deeply toothed, cauline oblong amplexicaul Stem about 1-headed
12194 Downy, Lower leaves stalked ovate with winged petioles upper amplexicaul, all toothed

12195 Leaves stalked or ovate toothed subsinuate at base downy beneath. the old ones quite smooth

12196 The only species

12197 The only species

12198 Leaves serrated quite smooth
12199 Leaves serrated downy
12200 Lower leaves pinnatifid upper entire smooth, Florets of disk 4-toothed
12201 Leaves lanceolate decurrent, Ray of corolla 4-parted



and Miscellaneous Particulars.

bruises, gutta serena, and paralysis of the bladder The root is given in doses of six to twelve grains, the flowers of from three to four grains Dr Thomson observes, that in the hands of British practitioners it has not merited the eulogium of the French and German (*Lond Disp.* p 169)

1750 *Gerbera.* T Gerber, a German naturalist, is only known as a traveller in Russia A very pretty little greenhouse plant with neat purple flowers

1751. *Doronicum* Derived from the Arabic name *Doronigi. Pardaliauches* is from παρδος, a tiger, and αγχω, to strangle, on account of the use said formerly to have been made of the plant for the purpose of destroying wild animals

1752 *Perdicium.* A name given by Pliny to a plant of which the partridge, *perdrix*, is very fond. The plant is not now recognized

1753 *Tetragonotheca.* From τετρα, four, γωνια, an angle, and θηκη, a capsule, in allusion to the four angles of the grains.

1754. *Ximenesia.* Named by the Abbé Cavanilles, after Joseph Ximenez, a Spanish apothecary, who is said to have attended to plants

1755 *Helenium* Named after the celebrated Helen, who is said to have availed herself of the cosmetic properties of the plant named after her That is believed to be the modern Inula Helenium, the ancient name being unoccupied, it has been applied to this American genus, which resembles the other

†1756. BEL'LIS. *W.*	Daisy.					*Compositæ.*		*Sp* 3—4					
12202 perénnis *W.*	common	☿	△	pr	¼	mr au	W	Britain	past.	D	co	Eng. bot. 424
β hortensis	*large-double*	☿	△	pr	¼	mr au	R	.....	...	D	co	Bot mag 228
γ fistulósa	*double-quilled*	☿	△	pr	¼	mr au	R	.....	...	D	co	
δ prolífera	*Hen & Chicken*	☿	△	pr	¼	mr au	St	.....	...	D	co	
12203 sylvéstris *W*	large Portugal	☿	△	pr	⅝	my jl	W	Portugal	1797	D	co	Bot mag 2511
12204 ánnua *W*	annual		○	pr	¼	mr jl	W	S. Europe	1759.	S	co	Bot mag. 2174
1757 BEL'LIUM *W.*	Bellium.					*Compositæ.*		*Sp* 2					
12205 bellidioides *W*	small		○	pr	¼	jn s	W	Italy	1796	S	s.p	Lam ill t. 684
12206 minutum *W*	dwarf	☿	△	cu	1 in	jn o	W	Levant	1772.	D	co	Sc ac up 1 t 5 f 2
†1758 DAH'LIA *Cav*	Dahlia.					*Compositæ*		*Sp.* 2—3					
12207 supérflua *H K.*	fertile-rayed	☿	△	or	6	jl n	Pu	Mexico	1789.	R	h.l	Cav ic 1. t. 80
12208 frustránea *H K.*	barren-rayed	☿	△	or	6	s.n	Sc	Mexico	1802	R	h l	Cav ic 2 t 226
β coccínea	*scarlet*	☿	△	or	6	s n	Sc	Mexico	1802	R	h l	Bot mag 762
γ auréntia	*Orange-colored*	☿	△	or	6	s n	Or	Mexico	1802	R	h l	
δ lútea	*yellow*	☿	△	or	6	s n	Y	Mexico	1802.	R	h l	
†1759. BŒBE'RA. *W*	Bœbera					*Compositæ*		*Sp* 1					
12209 chrysanthemoides *W*	Chrysanth.-like		○	pr	1½	o	Y	Carolina	1821	S	l p	
†1760 TAGE'TES *W.*	Tagetes					*Compositæ.*		*Sp* 8—12.					
12210 lucida *W*	sweet-scented	☿	△	or	1	jl n	Y	S Amer	1798	D	p l	Bot mag 740
12211 pátula *W*	French Marygold		○	or	2	jl o	Y o	Mexico	1573	S	co	Bot mag 150
12212 erécta *W*	African Marygold		○	or	3	jn s	Y	Mexico	1596	S	co	Lam ill t 684
12213 minúta *W.*	small-flowered		○	or	2	au o	Pa Y	Chili	1728	S	co	Dil el t 280 f 362
12214 tenuifólia *W*	fine-leaved		○	or	3	jl o	Y	Peru	1797	S	co	Bot. mag 2045
12215 clandestina *Lag*	concealed		○	or	3	jl o	Y	Mexico	1823	S	co	
12216 micrántha *Cav*	small-flowered		○	or	3	jl o	Y	Mexico	1822	S	co	
12217 glandulósa *Schrank*	glandular		○	or	3	jl o	Y	S Amer	1819	S	co	
1761 HETEROSPER'MUM *W*	Heterospermum.					*Compositæ*		*Sp* 1—3					
12218 pinnátum *W*	wing-leaved		○	un	2	au s	Y	New Spain	1799	S	co	Cav ic 3. t. 267
1762 SCHKUH'RIA *W*	Schkuhria					*Compositæ*		*Sp* 1.					
12219 abrotanoides *W.*	Wormwood-lvd		○	un	2	jl.s	Y	Mexico	1798.	S	co	Sch ha 3 t.250 b
1763 PEC'TIS. *W.*	Pectis.					*Compositæ*		*Sp* 2—7.					
12220 ciliáris *W*	ciliated		▣	un	1	jl	Y	Hispanio	1793	S	co	Plum ic 151 f 2
12221 linifólia *W.*	Flax-leaved		▣	un	1	jl au	Y	Jamaica	1732	S	co	Sl jam.1 t.149 f 3
1764 LONGCHAMP'SIA *Willd*	Longchampsia					*Compositæ*		*Sp* 1					
12222 capillifólia *Willd*	hair-leaved		○	pr	½	jn jl	W	Barbary	1822	S	co	



History, Use, Propagation, Culture,

1756 *Bellis* So called from *bellus*, pretty Every one knows the daisy.

1757. *Bellium.* See Bellis, from which this genus differs chiefly in the pappus of the grains

1758 *Dahlia* Named after Andrew Dahl, a Swedish botanist, and pupil of Linnæus Continental botanists call the genus Georgina This genus grows in Mexico, in sandy meadows, and till the peace of 1814 was more cultivated in France than in England · at present it is one of the most fashionable hardy plants Though its leaves are coarse, resembling those of the common dwarf elder, yet the flowers are showy, and continue in beauty till late in autumn The plants grow freely in any soil or situation; but the poorer the ground is, the smaller the size of the plant, and the earlier and more abundant the flowers The single-flowered varieties of D superflua are almost without end, the double varieties of both species are much less numerous. Any number of the former may be raised from seeds, which ripen in abundance, and if sown in February on artificial heat, and transplanted in the end of April, they will flower in the July or August following The double varieties are increased by dividing the roots, or by grafting, or by cuttings, they may also be sometimes raised from seeds A very general way in which both kinds are propagated is by cuttings They may be either taken from the root-shoots in spring, or the tops of the young shoots early in summer, the lower end of each cutting should be cut smoothly off in the middle of a joint, and all the leaves left on, excepting those that would be buried in planting the cutting If planted in sandy soil, on a gentle bottom heat, and covered with a hand-glass, they will soon strike root, and produce both flowers and tubers the same autumn. The double sorts are grafted on tubers of the single varieties much in the manner of whip-grafting, but without a tongue. There must be no buds on the tuber; cut off a slice from the upper part of it, in a sloping direction, and make, at the bottom of the part so cut, a ledge, whereon to rest the graft, next, cut the scion sloping to fit, it should contain two joints, and be cut so that one of these may be at the bottom of it to rest on the ledge, from that joint the scion will occasionally put forth roots, from the other the future stem will be formed. Having tied the graft, clay it as in common grafting; then put the root in fine mould, burying half the graft, and place the pot in a gentle moist heat under a glass If this be done in March, the plant may he shifted into a larger pot in April, and planted out in the end of May

As the Dahlia is a bulky plant, it requires either to be grown in a very large pot, or in from three quarters to a yard and a half of surface. They look well in rows, or occurring singly in a shrubbery

The treatment of the Dahlia bears a considerable resemblance to that of the potato and the marvel of Peru; as soon as the frost has blackened the tops of these three plants, their roots require to be taken up, and

12202 Scape naked single-headed, Leaves obovate crenate

*12203 Scape naked single-headed, Leaves obovate crenate 3-nerved
12204 Stem somewhat leafy

12205 Stolones creeping, Scapes 1-headed, Leaves spatulate
12206 Stem leafy capillary

12207 Rachis of lvs winged, Leafl. ovate acumin serrated shining and smooth beneath, Outer involucre reflexed
12208 Rachis of lvs naked, Leaflets ovate acuminate serrated roughish beneath, Outer involucre spreading

12209 Leaves pinnated leaflets linear pinnatifid-toothed

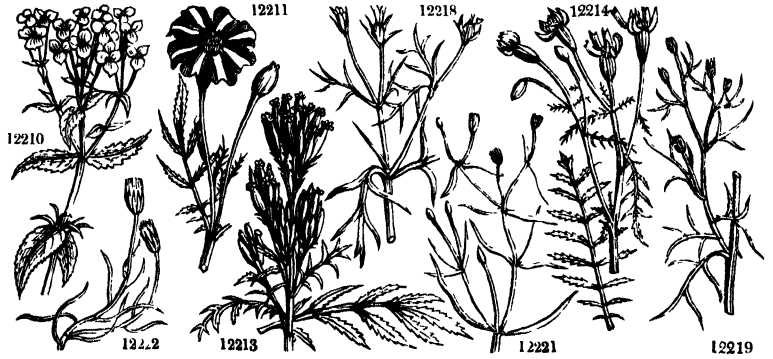
12210 Leaves simple lanceolate finely serrated ciliate at base
12211 Leaves pinnated leafl lanc ciliate-serrated, Peduncle 1-headed thickened, Inv smooth, Stem spreading
12212 Leaves pinnated leaflets lanc ciliate-serrated, Peduncle 1-headed ventricose, Involucre angular, Stem erect
12213 Leaves pinnated leafl lanc serrated, term subdecurrent, Peduncle many-fl scaly, Flowers dense
12214 Leaves pinnated . leaflets linear serrated, lower serratures long, Stem panicled, Involucre clavate
12215 Leaves pinnated · leaflets filiform, Ray not longer than involucrum
12216 Leaves pinnated leaflets filiform subulate entire, Stem branched diffuse, Peduncle 1-headed solitary
12217 Leaves pinnated . lower segments lanceolate, upper linear, Serratures with intermediate glands

12218 Stem smooth, Leaves pinnated, Leaflets linear subulate entire

12219 Leaves altern. pinnate linear setaceous

12220 Leaves linear amplexicaul ciliated at base attenuated at end
12221 Leaves linear sessile acute ciliated at base

12222 Stem filiform branched, Leaves woolly subulate filiform, Peduncles naked axillary 1-headed



and Miscellaneous Particulars.

kept in a dry place, where the frost cannot get at them till spring. About April they may be divided and planted in the open air where they are to flower, or, what is more common planted in large pots, and forwarded in heat till the middle of May, when they may be turned out of the pots where they are finally to remain. In this case they will flower a month or six weeks earlier than by the other method, and will, in general, continue flowering till they are destroyed by frost Some care is requisite to preserve the roots sufficiently moist and plump to maintain the living principle, and yet not to rot, shrivel, or freeze them. The safest mode is to plant them in pots or boxes of dry earth, and place them in a shed or cellar, or under an ample covering of litter thatched over

1759 *Bæbera* Bœber is said by Willdenow to have been a learned Russian botanist

1760 *Tagetes* Named after Tages, a Tuscan divinity, the son of Genius, and the grandson of Jupiter T. patula is a tender annual, deservedly popular, from the brilliancy and variegation of its flowers · it is cultivated in Japan, China, and many parts of India, but does not appear to be indigenous of those countries. The varieties of T. erecta differ chiefly in the shades of the same color, but there are also double and quilled flowers Both species are raised from seeds, upon a moderate hot-bed, in the beginning of April, and when they are three inches high, transplanted to where they are finally to remain The varieties are very apt to degenerate, and can only be reproduced by the most careful selection and separation

This genus serves for the basis of M Cassini's Tagetineæ, which do not appear to be at all distinct from Helianthee, from which they differ principally in the form of their ovarium M Cassini's principal motive for distinguishing them as a separate race, seems to have been his wish to reduce his tribe of Helianthee, which he finds too extensive. Nearly all the species are found in America.

1761. *Heterospermum.* From *ἑτερος*, various, and *σπερμα*, seed; on account of the variable shape of the grains

1762. *Schkuhrea.* Named in honour of Christian Schkuhr, an acute German botanist, who has published some of the most accurate and useful, if not splendid, botanical works which the world has seen It is to be regretted that their rarity makes them more generally unknown than they deserve to be.

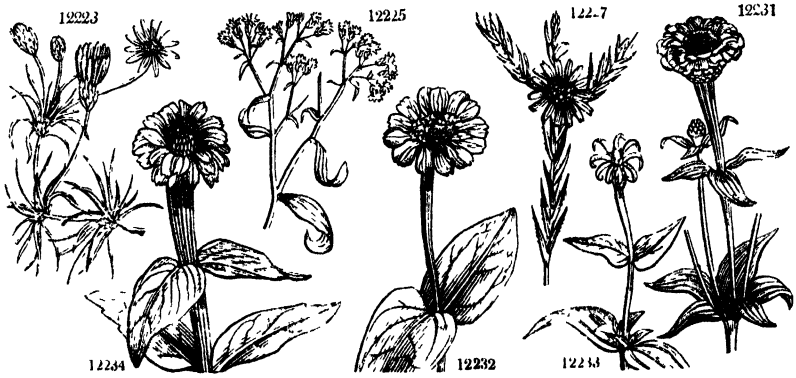
1763 *Pectis.* From *pecten*, a comb, to which the teeth of the pappus may be compared.

1764. *Longchampsia.* So named after Doctor J L. A. Loiseleur Deslongchamps, a French botanist, author of a useful Flora Gallica, in two small duodecimo volumes, published at Paris, the first in 1806, the second in 1807.

1765. LEYSE'RA *W*	Leysera				*Compositæ*	*Sp* 2—8.							
12223 gnaphalódes *W*	woolly	♃	⊔	pr	2	j l s	Or	C G H	1774	S	p l	Jac. ic 3 t. 588	
12224 squarrósa *W.*	squarrose	♃	⊔	pr	2	j l s	Or	C G H	1815.	C	l p	Pluk al. t. 302 f 3	
1766 SELLO'A *Spreng.*	Selloa				*Compositæ*	*Sp* 1							
12225 glutinósa *Spreng.*	clammy	☤	⊠	un	3	f	Y	Brazil	1819.	D	co	Bot. reg 462	
1767 RELHA'NIA. *W*	Relhania				*Compositæ.*	*Sp.* 3—19.							
12226 squarrósa *W*	cross-leaved	♃	⊔	pr	1½	my jn	Y	C. G H	1774.	C	p l		
12227 púngens *W*	pungent	♃	⊔	pr	1½	s	Y	C. G H	1820.	C	p.l	Bot. reg 587	
12228 lateriflóra *W*	side-flowering	♃	⊔	pr	½	s	Y	C. G. H.	1823.	C	p.l		
1768 ZINNIA *W*	Zinnia				*Compositæ*	*Sp.* 6—8.							
12229 pauciflora *W*	yellow-flowered		○	or	2	jl au	Y	Peru	1753.	S	r m	Mill ic. 1. t 64	
12230 multiflóra *W.*	red-flowered		○	or	2	jn o	R	N. Amer	1770.	S	r m	Bot. mag 149	
12231 verticillata *W*	whorl-leaved		○	or	2	jl.au	R	Mexico	1789.	S	r m	Bot rep. 189	
12232 elegans *W*	purple-flowered		○	or	2	jn s	Pu	Mexico	1796	S	r m	Bot mag 52	
12233 tenuiflóra *W*	slender-flowered		○	or	2	jl au	Sc	Mexico	1799	S	co	Bot mag 555	
12234 hýbrida *B M*	hybrid		○	or	2	jn jl	Sc	S. Amer	1818.	S	co	Bot mag. 2123	
†1769 CHRYSANTHEMUM *W*	Chrysanthemum.				*Compositæ*	*Sp* 23—43							
12235 pinnatifidum *W*	cut leaved	♃	⊔	pr	3	my au	W	Madeira	1777.	C	p l		
12236 atrátum *B*	fleshy-leaved	☿	△	pr	1	jl au	W	Austria	1731	D	co		
12237 heterophýllum *W*	various-leaved	☿	△	pr	1	jl au	W	Switzerl.	1806	D	co		
12238 Leucánthemum *W*	Ox-eye Daisy	☿	△	pr	2	jn jl	W	Britain past		D	co	Eng bot 601	
12239 montanum *W*	mountain	☿	△	pr	2	jn jl	W	France	1759.	D	co	Jac obs 4 t 91	
12240 ceratophylloides *All*	Buckshorn	☿	△	pr	½	jn jl	W	Piedmont	1803	D	co	All ped 1 t 37 f 1	
12241 grammifólium *W*	Grass-leaved	☿	△	pr	1	my jl	W	Montpel.	1739	D	co	Jac obs 4 t 92	
12242 monspelliénse *W.*	Montpelier	☿	△	pr	1	jn s	W	Montpel.	1739.	D	co	Jac obs 4 t 93	
12243 Achilléæ *W*	Milfoil-leaved	☿	△	pr	1	jn au	W	Italy	1775	D	co	Mic gen. 34 t 29	
12244 argénteum *W*	silver-leaved	☿	△	pr	1	jl au	W	Levant	1731	D	co		
12245 árcticum *W*	northern	☿	△	pr	½	jn au	W pu	Kamtsch	1801	D	co	W hort ber 33	
12246 carinátum *W*	three-colored		○	pr	2	jl o	W pu	Barbary	1796	S	co	Bot. mag 508	
12247 pumilum *W en.*	small		○	pr	¼	jl o	W	.... ..	1806.	S	co		
12248 sylvéstre *W en.*	field	☿	△	pr	2	jn jl	W	.... ..	1804	D	co		
12249 ségetum *W*	corn		○	w	1½	jn au	Y	Britain	corn fi	S	co	Eng bot 540	
12250 Mycónis *W*	tongue-leaved		○	pr	1	jl au	Y	Italy	1775	S	co	Jac obs 4 t. 94	
12251 itálicum *W*	Italian	☄	△	pr	2	jn jl	Pa Y	Italy	1796	D	co		
12252 coronárium *W.*	garden		○	or	¼	jl s	Y	Sicily	1629	S	co	Lam ill t. 678. f 6	
12253 Indicum *L*	Indian	♚		un	2	s n	Y	China	...	C	r m		
12254 sinénse *Sab*	Chinese	♚		spl	3	o n		China	1764	C	r m		

Garden Varieties

1 Purple *Bot. mag* 327
2 Changeable White *Bot mag* 2042
3 Quilled White *Bot reg* 4
4 Superb White *Bot reg* 455
5 Tasselled White
6 Quilled Yellow
7 Sulphur Yellow
8 Golden Yellow *Bot reg* 4*
9 Large Lilac
10 Rose or Pink
11 Buff or Orange
12 Spanish Brown
13 Quilled flamed Yellow *Hort trans.* 4 t. 14
14 Quilled Pink *Bot reg.* 616
15 Early Crimson *Hort trans* 5 t 3
16 Large quilled Orange *Hort trans* 5 t 3
17 Expanded light Purple
18 Quilled light Purple
19 Curled Lilac *Sweet's fl Garden*, t 7
20 Superb clustered Yellow *Sweet's fl Garden*, t 11
21 Semidouble quilled Pink *Hort trans* 5 t 17*
22 Semidouble quilled White



History, Use, Propagation, Culture,

1765 *Leysera.* So called in honor of Frederick William Leyser, a German, and author of a Flora Halensis in 1783

1766. *Selloa.* Named after Mr Sello, a German botanist, employed by the Prussian government in collecting materials for a natural history of Brazil An uninteresting stove perennial plant, remarkable for having florets mixed among the leaves of the involucrum

1767. *Relhania.* In honor of the Rev Richard Relhan, an English botanist, and author of a Flora Cantabrigiensis. The genus was named by L'Heritier Plants of no beauty and easy culture.

1768 *Zinnia* John Godfrey Zinn, a German, published, in 1757, a Catalogue of the Plants in the Garden of Gottingen, &c Handsome border annuals, with persistent flowers, of the same culture as Tagetes

1769 *Chrysanthemum* From χρυσος, gold, and ανθος, a flower; because many of the kinds bear flowers of a yellow color *Chrysanthème*, Fr, *Goldblume*, Ger., and *Crisanitro*, Ital. C. sinense is one of the handsomest of autumnal flowers, and of the easiest possible culture in any soil It is a popular flower in China, whence all our numerous varieties have very recently been obtained, and chiefly through the exertions of the Horticultural Society These are certainly a very great addition to the beauties of the flower garden in a dry autumn, and to the green-house or conservatory in the wet and foggy months of November and December, when scarcely any thing else is in flower The plants are propagated by divisions, by suckers, and by cuttings.

12223 Leaves linear subulate ciliate rough, Scales of involucre lanceolate
12224 Leaves filiform downy, Scales of involucre membranous reflexed

12225 The only species

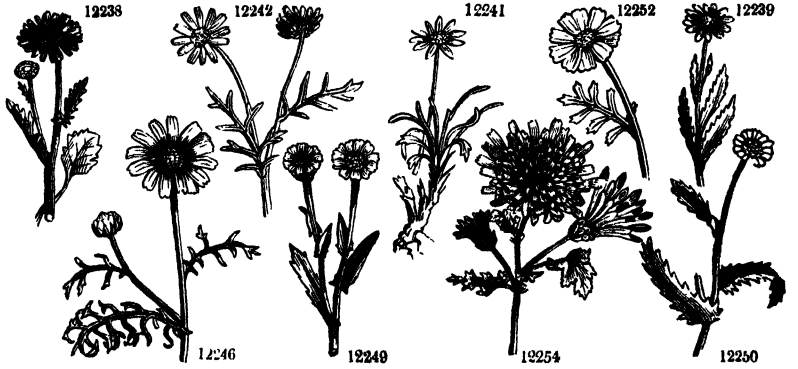
12226 Leaves oblong acuminate nerveless recurved at end
12227 Leaves linear somewhat pungent striated beneath, Heads sessile
12228 Leaves linear villous, Pedunc. lateral shorter than leaf

12229 Heads sessile, Leaves opp cordate-lanceolate amplexicaul. sessile
12230 Heads stalked, Leaves opp ovate-lanceolate somewhat stalked
12231 Heads stalked, Leaves whorled ovate-lanceolate stalked, Ray double
12232 Heads stalked, Leaves opp cordate ovate sessile amplexicaul. Stem hairy, Paleæ serrated
12233 Heads stalked, Leaves opp cordate lanceolate stalked, Ray linear-lanceolate reflexed
12234 Leaves cordate sessile rough at edge, Grains of disk with 2 awns of the ray awnless

12235 Leaves smooth attenuated at base pinnatifid . segments cut
12236 Leaves all cuneiform oblong finely serrated, Stem simple 1-headed erect
12237 Leaves sessile lower linear lanceolate serrated , upper spatulate
12238 Leaves amplexic obl obt. cut pinnatifid at base , radical ones obovate petiolate, Stem erect branched
12239 Lower leaves stalked spatulate serrate upper lin lanc serrated, Stem 1-headed
12240 Leaves pinnated · pinnæ linear acute, Stem erect 1-headed
12241 Leaves linear nearly entire, Stem quite simple
12242 Lower leaves palmated : leaflets linear pinnatifid
12243 Leaves bipinnate : pinnæ oblong serrated, Heads corymbose
12244 Leaves bipinnate hoary : leaflets acute entire, Stem 1-headed simple
12245 Radical leaves 3-parted cut-toothed : cauline cuneiform 3-parted blunt
12246 Leaves bipinnated fleshy smooth, Scales of involucre keeled
12247 Leaves bipinnated linear subulate smooth, Stem erect somewhat branched
12248 Very near C leucanthemum, but the lower leaves are more spatulate
12249 Leaves amplexic glaucous incise-serrate above toothed at the base
12250 Leaves lingulate blunt serrated, Scales of involucre equal
12251 Leaves bipinnate serrated, Rays length of disk, Stem procumbent
12252 Leaves bipinnatifid acute broadest externally, Stem branched
12253 Leaves flaccid stalked pinnatifid finely toothed upper entire, Ray a little longer than flower
12254 Leaves coriaceous stalked sinuate-pinnatifid toothed glaucous, Ray very long

Garden Varieties.

23 Semidouble quilled Orange *Hort trans* 5 t 17**
24 Late pale Purple
25 Quilled Salmon Color *Hort trans* 5 t. 17*
26 Small Yellow *Hort. trans.* 5 t. 17**
27 Paper White
28 Pale Buff
29 Early Blush
30 Blush Ranunculus-flowered
31 Changeable pale Buff
32 Two colored Red
33 Starry Purple
34 Brown Purple
35 Late quilled Yellow
36 Double Yellow Indian
37 Parkes's small Yellow
38 Tasselled Yellow
39 Tasselled Lilac
40 Semidouble quilled pale Orange
41 Golden Lotus-flowered
42 Two colored incurved
43 Yellow Waratah
44 Double White Indian



and Miscellaneous Particulars.

as they are very apt, in every case, to throw up suckers, the latter mode is decidedly the best. The cuttings may be taken from the side branches at any season from April to September, taken off before the end of May, they will flower the succeeding autumn; those taken off afterwards will not flower till next year. Chrysanthemums are so very prolific in suckers, that they soon become unsightly plants, and produce small and degenerate blossoms, unless frequently renewed from cuttings. The Chinese are said to do this every year, they take off the cuttings in May, strike them as we do, and then put each plant in a very small pot, in which it flowers the succeeding autumn The plants are thus kept in a dwarf state, and clothed with green foliage from the ground to the flower. In order that the blossoms may be strong, they leave only one or two flower-buds on the summit of each plant, and they remove all suckers and side shoots till the blossom is over This mode is now generally adopted with us; but sometimes the plants are retained a second, or even a third year, in which case care is requisite to leave no more stems, and to have no more suckers growing at one time than the roots can support in a vigorous state. As under this management the stems attain a great height, they require to be supported by a rod, and adjusted so as to form a symmetrical figure by a nice application of black threads, or small copper wires.

Sometimes the Chrysanthemum is grown in beds or borders, in which case the plants should be taken up every year, and their superfluous suckers removed; or, which is better, they should be totally renewed by cuttings.

12255	paludósum *Desf*	marsh	○	pr	1½	jn jl	W	Barbary	1810	S	co	Desf atl.2. t. 238
12256	rotundifólium *W &K*	round-leaved	△	pr	1½	jn jl	W	Hungary	1817	D	co	
12257	anómalum *Lag*	anomalous	△	pr	1	jn jl	W	Spain	1816.	D	co	

1770. PYRE'THRUM *W* Feverfew — *Compositæ* *Sp* 32—47

12258	fœniculáceum *W en*	Fennel-leaved		or	3	ja d	W	Teneriffe	1815	C	co	Bot reg. 272
12259	crithmifólium *W en*	Samphire-leav.		or	3	ja d	W	Teneriffe	1815	C	co	
12260	anethifólium *W en*	Dill-leaved		or	3	ja d	W	Teneriffe	1815	C	co	
12261	latifólium *W en*	broad-leaved	△	pr	2	jn jl	W	Pyrences	1820.	D	co	
12262	Halleri *W*	Haller's	△	pr	1	jn jl	W	Switzerl	1819.	D	co	Barr. ic. 458 f. 2
12263	ceratophylloides *W*	Buckshorn-lvd.	△	pr	1	jn jl	W	Piedmont	1819.	D	co	
12264	frutéscens *W*	shrubby		or	3	ja d	W	Canaries	1699.	C	p l	
12265	coronopifolium *W en*	Horn-leaved		or	2	ja d	W	Canaries	...	C	l p	
12266	grandiflórum *W en*	great-flowered		or	3	ja d	W	Canaries	1815.	C	l p	
12267	pinnatifidum *W*	pinnatifid	△		2	my jn	W	.....	1823.	D	co	
12268	pulveruléntum *W*	powdery	△	pr	1½	jn au	W	Caucasus	1806.	D	co	
12269	sericeum *Bieb*	silky	△	pr	1	jn au	W	Iberia	1823	D	co	
12270	parviflórum *W*	small-flowered	○	un	2½	jn au	W	... ..	1820	S	co	
12271	speciósum *W en.*	large-flowered		or	3	ja d	W	Canaries	1815	C	l p	
12272	ptarmicæfólium *W*	Sneezewort-lv	△	pr	1¼	jl au	W	Caucasus	1803	D	co	
12273	serótinum *W.*	creeping-rooted	△	pr	1	s o	W	N Amer	1731	D	co	Jac. obs. 4 t 90
12274	ulginósum *W.*	marsh	△	pr	1½	jl s	W	Hungary	1816	D	co	
12275	alpinum *W*	Alpine	△	pr	¼	jl au	W	Switzerl	1759.	D	co	
12276	Balsamita *W*	various-leaved	△	pr	2	jl au	W	Levant	1779	D	co	Jac obs 4 t 89
12277	macrophyllum *W*	large-leaved	△	pr	3	jl au	W	Hungary	1803	D	co	Pl rar hu 1 t 94
12278	róseum *W en*	scarlet-flower'd	△	el	1½	au s	Pk	Caucasus	1804	D	co	Bot mag 1080
	Chrysánthemum coccineum B M											
12279	achilleæfólium *Bieb*	Milfoil-leaved	△	pr	2	au s	Y	Caucasus	1823	D	co	Gm sib. t 86 f 2
12280	corymbósum *W*	mountain	△	pr	1	jn au	W	Germany	1596.	D	co	Jac aust 4 t 379
12281	Parthénium *W*	common	△	w	2	jn s	W	Britain	rubb	D	co	Eng bot 1231
	β *flore plèno*	*double-flowered*	△	or	2	jn s	W	.....	...	C	r m	
12282	parthenifólium *W*	Parthenium-lv	△	pr	2	jn jl	W	Caucasus	1804	D	co	Vent. cels. t 43
12283	caucásicum *W*	Caucasian	△	pr	½	jl au	W	Caucasus	1804	D	co	
12284	tenuifólium *W en*	slender-leaved	△	pr	1	jl au	W	Caucasus	1806	D	co	
12285	modórum *W*	scentless	◔	pr	1	au s	W	Britain	dry fi	S	co	Eng bot. 676
12286	maritimum *W*	sea	△	pr	1	jn o	W	Britain	sea sh.	D	co	Eng bot 979
12287	millefolátum *W*	many-leaved	△	pr	2	my s	Y	Siberia	1731	D	co	Mill. ic. 1 t 9
12288	bipinnátum *W*	wing-leaved	△	pr	¾	jn jl	Y	Siberia	1796.	S	co	Gm sib 2 t.85 f 1
12289	indicum *H K*	Indian	○	un	½	jn s	Y	E. Indies	1810	C	p l	Bot. mag 1521

1771 MATRICA'RIA *W* Matricaria — *Compositæ.* *Sp* 4

12290	suavéolens *W*	sweet	○	un	1½	jn au	W	Europe	1781	S	co	
12291	Chamomilla *W*	Wild Chamomile	○	w	1	my jl	W	Britain	ro sid	S	co	Eng bot 1232
12292	capénsis *W*	Cape	○	un	½	jl s	W	C. G H	1699	S	co	Seb th 1 t.16 f 2
12293	pusilla *W en*	small	⊙	un	¼	jl s	W	.....	...	S	co	

1772 BOLTO'NIA *W* Boltonia — *Compositæ* *Sp* 2

12294	asteroides *W*	Starwort-flow	△	pr	2	au o	F	N Amer	1758	D	s l	Bot mag 2554
12295	glastifólia *W*	glaucous-leav'd	△	pr	1½	s	Pk	N Amer	1758	D	s l	Bot. mag 2381

1773 LIDBECK'IA *W* Lidbeckia — *Compositæ* *Sp* 2—3

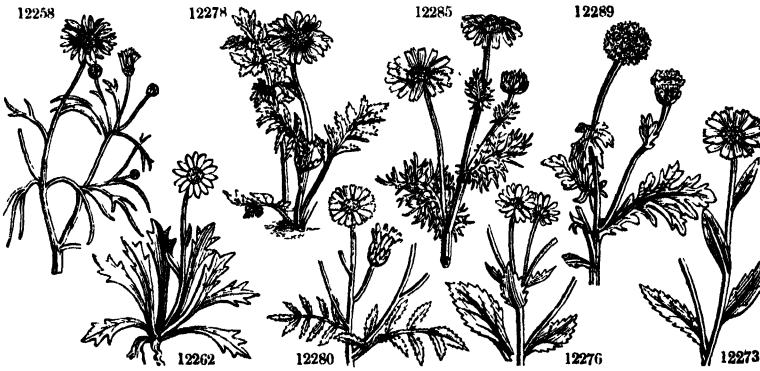
12296	pectináta *W.*	silver-leaved		pr	2	my jn	Y	C G H	1774.	C	l p	Ber ca 306 t 5 f 9
12297	lobáta *W*	lobed		pr	2	my jn	Y	C G H	1800.	C	l p	Lam ill. t 701 f 3

1774 CE'NIA *J* Cenia — *Compositæ* *Sp* 1

12298	turbináta *P S*	turbinated	○	un	1	jl au	W	C G H	1713	S	co	Lam. ill t.701 f 1

1775 COTU'LA *W* Cotula — *Compositæ* *Sp* 5—20

12299	anthemoides *W*	Anthemis-like	⊡	un	1	jl au	Y	St Helena	1696	S	co	Dill elt. t 23 f 25
12300	coronopifólia *W*	Buckshorn-lvd	⊡	w	½	jl au	Y	C G H	1683	S	co	Lam ill t.700 f 1



History, Use, Propagation, Culture,

Though these plants will grow in any soil, yet when in small pots they require a rich loam, and are the better for being watered, as in China, with liquid manure The different varieties are well described by Mr. Sabine, in the fourth and fifth volumes of the Horticultural Transactions

1770 *Pyrethrum* An ancient Greek name, applied to this plant from its supposed resemblance to the πυρεθρον of Dioscorides That plant is believed to have been the Anthemis pyrethrum, or Pellitory of Spain, of the moderns, and to have received its name from the burning qualities of its root; πυρ, fire. All the plant of Pyrethrum Parthenium has a strong unpleasant smell, and a bitter taste It is used externally, in the form of lotion and of poultice, and internally as an infusion for colic, hysterical affections, and weak digestion There are some double-flowering varieties, which are very ornamental.

1771. *Matricaria.* So named on account of the use which is made of it in disorders of females. *Matricaire*, Fr., *Mutterkraut*, Ger., and *Matricara*, Ital It excites menstruation Chamomilla is an alteration of the

12255 Leaves all cuneiform oblong bluntly serrated, Stem branched diffuse
12256 Leaves stalked serrated · lower roundish, upper ovate, Stem 1-headed
12257 Leaves with very narrow segments, Petioles very short connate

12258 Leaves pinnatifid fleshy · segments linear entire, Pedunc long corymbose
12259 Leaves trifid fleshy, segments somewhat toothed linear blunt, Pedunc. long subcorymbose
12260 Leaves bipinnatifid linear acute, Pedunc 1-headed terminal
12261 Leaves lanceolate serrated · radical oblong, Stem 1-headed
12262 Cauline leaves lanceolate deeply toothed radical pinnatifid, Stem 1-headed
12263 Leaves pinnatifid segments of the lower linear lanc. entire or bifid, upper linear entire
12264 Leaves fleshy pinnatifid linear toothed upper linear trifid
12265 Leaves pinnatifid segments lanc. somewhat 3-toothed fleshy, Pappus unequally toothed
12266 Leaves pinnatifid segm lanc deeply toothed somewhat fleshy upper lin. toothed, Pappus uneq toothed
12267 Leaves downy glaucous subsessile lyrate pinnatifid unequally toothed, Heads corymbose
12268 Leave pinnate powdery, Leaflets pinnatifid blunt toothed, Pedunc corymbose, Pappus toothed
12269 Leaves woolly bipinnate, Pinnæ and pinnules obl imbricated, Stem 1-headed, Involucre woolly
12270 Leaves bipinnate · pinnæ lin -filiform 2 or 3-parted, Stem erect branched, Pappus 2-lobed
12271 Leaves pinnatifid, segm lanc finely serrated, Grains subulate, Pappus unequally toothed
12272 Leaves linear serrulate, Heads corymbose
12273 Leaves lanc, lower serrated at end, upper entire, Branches corymbose
12274 Leaves lanc all deeply serrated, Stem erect branched at end
12275 Lower leaves pinnatifid toothed upper linear entire, Stem 1-headed
12276 Leaves ovate obl serrated radical stalked, cauline sessile auricled at base, Heads corymbose
12277 Leaves hairy subsessile pinnatifid toothed blunt, Corymb terminal compound
12278 Leaves pinnated smooth: pinnæ once or twice pinnatifid with acute diverging segments, Involucre smooth

12279 Leaves bipinnate linear silky · pinnæ crossing, Pedunc. corymbose, Ray shorter than involucre
12280 Leaves pinnated, Pinnæ lanc pinnatifid finely serrated upper confluent, Pedunc corymbose
12281 Lvs petiol flat bipinnate the segm ovate cut, Pedunc branch. corymb Stem erect, Involucre hemispherical [pubescent
12282 Leaves pinn · pinnæ obl obt pinnatifid toothed, upper confluent, Stem virgate, Heads corymbose
12283 Leaves bipinnate leaflets linear subulate, Stem 1-headed
12284 Rad leaves bipinnate pinnæ linear pinnatifid, cauline bipinnatifid, Heads corymbose
12285 Leaves sess bipinnatifid with segm capillary, Stem branched spreading, Pappus entire
12286 Leaves bipinnatifid the segm linear fleshy awnless, Stem diffuse branched, Pappus lobed
12287 Leaves bipinnate linear blunt, Stem ascending somewhat corymbose, Ray length of involucre
12288 Leaves hoary bipinnate linear blunt, Stem simple, Pedunc twin, Ray shorter than disk
12289 Leaves pinnatifid, pinnæ cut-toothed, Pedunc. long nearly naked 1-headed, Scales of involucre blunt

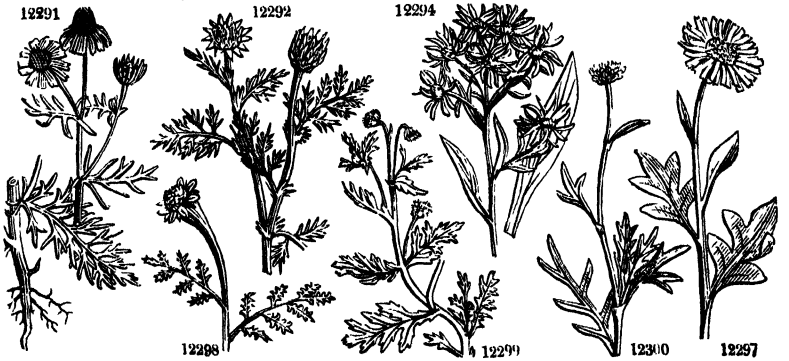
12290 Leaves triply pinnate. Scales of involucre acute
12291 Leaves glabrous bipinnatifid the segments capillary, Involucre nearly plane: its scales obtuse
12292 Leaves glabrous bipinnatifid stem branched suffruticose
12293 Leaves pinn somewhat fleshy, Pinnæ linear blunt, Scales of involucre blunt, Grains margined on one side

12294 Leaves all entire
12295 Lower leaves serrated

12296 Leaves pinnatifid glaucous beneath
12297 Leaves stalked 5-lobed

12298 Ray short white red on the lower surface

12299 Leaves pinnate multifid dilated, Ray none
12300 Leaves lanc lin amplexicaul. pinnatifid toothed, Stem procumbent, Branches 1-headed



and Miscellaneous Particulars

Greek χαμαι μηλον, a dwarf-apple, which Pliny informs us was applied to the plant, on account of its smelling of apples, or rather quinces It is remarkable, that the Spaniards call it *manzanilla*, which also means a little apple The chamomile of medicine is another plant. See Anthemis.

M Chamomilla is supposed to possess the same qualities with the officinal chamomile (Anthemis nobilis), but in an inferior degree. Most of the species, and chiefly this one, are rejected by quadrupeds.

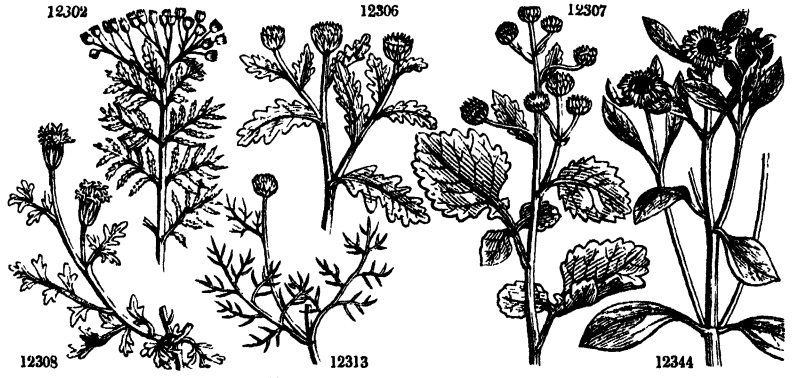
1772 *Boltonia.* Named after I B. Bolton, an English botanist, who wrote a work upon the Ferns of Great Britain, and another upon the fungi growing about Halifax, published in 1788-9

1773 *Lidbeckia.* E. G Lidbeck, a German botanist, published some works upon agricultural matters.

1774 *Cenia* From κενος, empty, in allusion to its inflated calyx.

1775 *Cotula.* A diminutive of Cota, an old name for some species of Anthemis, which this resembles in immature.

12301 viscósa *W*	clammy	♀	☒	un	½	au	W	Vera Cruz	1739	D	l p		
12302 tanacetifólia *W*	Tansy-leaved		○	un	⅔	jn au	Y	C. G H.	1783	S	co	Plu. ma. t.430 f.7	
12303 sphæránthus *Link.*	round-headed	♀	☒	un	2	my jn	Y	Congo	1821.	D	co		
1776. GRAN'GEA *J*	Grangea					*Compositæ.*		*Sp* 4—6.					
12304 cuneifólia *Lam.*	wedge-leaved		○	un	¼	jl s	Y	China	1816.	S	co	Lam ill t 699 f 2	
12305 minima *W.*	least		○	un	1 in	jl s	Y	China	1768	S	co	Burm in.t.58 f.3	
12306 maderaspátana *Lam*	Madras		⊡	un	⅔	jl.au	Y	E. Indies	1780.	S	co	Lam ill t.699 f 3	
12307 latifólia *Desf*	two-colored		⊡	un	1½	jl.au	W.Y	E. Indies	1804.	S	co	Lam. ill t 699 f 1	
Cótula bicolor W													
†1777 ANACY'CLUS. *W*	Anacyclus					*Compositæ.*		*Sp* 6—11.					
12308 créticus *W*	trailing		○	pr	1	jn au	Y	Candia	1759.	S	co	Ann mus.11 t 22	
12309 orientális *W.*	oriental		○	pr	1½	jn au	Y	Levant	1731	S	co	Boe lugd 1 t 110	
12310 aúreus *W*	golden-flowered		○	pr	½	jn au	Y	Levant	1570	S	co	Lam ill t 700 f 2	
12311 valentinus *W.*	fine-leaved		○	pr	1	jn jl	Y	Spain	1656	S	co	Sch ha 3 t 254 b	
12312 radiátus *Lank*	purple-stalked		○	pr	1½	jl au	Y	S. Europe	1596.	S	s l	Breyn cent t.75	
Anthemis valentina W													
12313 clavátus *Link*	clubbed		○	pr	1½	jl au	W	Barbary	1801	S	co	Biv. cen. sic 1 t.	
1778 ANTHEMIS *W*	Chamomile.					*Compositæ.*		*Sp* 29—47					
12314 rigéscens *W en*	rigid	♀	△	pr	2	jl s	W	Caucasus	1805	D	co	W hor be 1 t.62	
12315 Cóta *W*	Venetian		○	pr	1	jl au	W	Italy	1714	S	co	Plu alm t 17.f 5	
12316 altissima *W*	tall		○	pr	6	au	W	S Europe	1731	S	co		
12317 maritima *W*	sea		○	pr	1	jl au	W	England sea co		S	s l	Eng bot. 2370	
12318 tomentosa *W*	downy	♀	△	pr	½	jl o	W	Levant	1795	D	co		
12319 pubéscens *W*	pubescent	♀	△	pr	1	jl au	W	S Europe	1803	D	co		
12320 mixta *W.*	simple-leaved		○	pr	1	jl au	W	France	1731.	S	co	Mic gen. t 30 f.1	
12321 saxátilis *W en*	rock	♀	△	pr	1	jl au	W	Hungary	1807.	D	co		
12322 Chamomilla *W. en.*	various-leaved	♀	△	pr	1	jl au	W	S Europe	1807.	D	co		
12323 chía *W*	cut-leaved		○	pr	1½	jn o	W	Chio	1731	S	co		
12324 nóbilis *W*	common	♃	△	m	½	jl s	W	Britain	gra pa.	D	co	Eng bot. 980	
—*flore pleno*	double												
12325 arvénsis *W.*	corn	♀	◯	w	1	jn au	W	Britain	dr fi	S	co	Eng bot. 602	
12326 austriaca *W*	Austrian		○	w	1	my au	W	Austria	1759	S	co	Jac aust 5 t 444	
12327 Cótula *W*	stinking		○	w	1	jn s	W	Britain	cor fi	S	co	Eng bot 1772	
12328 fuscáta *W*	brown-scaled		○	pr	1	jl au	W	Portugal	1805	S	co		
12329 montána *W*	mountain	♀	△	pr	½	jl o	Pu	Italy	1759	D	co	Ger prov t. 8	
12330 Pyréthrum *W*	Pellitory of Spain	♀	△	or	1	jn jl	W	S Europe	1570	D	s p	Bot. mag 462	
12331 globósa *W*	globe	♀	◭	el	1	au s	W	S Europe	1570	D	co	Jac schœ 3 t 371	
12332 tinctória *W*	Ox-Eye	♀	△	pr	1½	jn n	Y	Britain	sto pl	D	co	Eng bot. 1472	
12333 discoidea *W.*	saw-leaved		○	pr	1	jl au	Y	Italy	1800	S	co		
§12334 arábica *W*	Arabian		○	pr	1½	jl au	D Y	Barbary	1759.	S	s l	Smith spic 9 t.10	
12335 apiifólia *R Br.*	Parsley-leaved	♀	◭	pr	2	au s	W	China	1819	D	co	Bot reg 527	
12336 punctáta *W*	dotted	♃	⊔	pr	1	au s	W	Barbary	1818.	S	co	Desf atl t. 239	
12337 ruthénica *Bieb*	Russian		○	pr	1½	my jn	W	Tauria	1823	D	co		
12338 fruticulosa *Bieb*	shrubby	♀	△	pr	1½	jn	W	Caucasus	1820	D	co		
12339 coronopifólia *W*	Buckshorn-lvd	♀	△	pr	1	jn jl	W	Spain	1818	D	co		
12340 alpina *W*	alpine	♀	△	pr	⅔	jn jl	W	Austria	1824	D	co	Jac.aust app t 30	
12341 carpática *W*	Carpathian	♀	△	pr	½	jn jl	W	Carpathia	1820	D	co		
12342 fállax *W*	doubtful		○	pr	1	jl au	W	.....	1825	S	co		
1779 CENTROSPER'MUM *Spreng*	Centrospermum					*Compositæ.*		*Sp* 1.					
12343 chrysánthum *Spreng*	yellow		○	pr	¾	jl au	Y	Spain	1823	S	co		
1780 SANVITA'LIA *Cav*	Sanvitalia					*Compositæ*		*Sp* 1					
12344 procúmbens *Cav*	trailing	☆	○	un	1	jl au	Y	Mexico	1798.	S	co	Bot reg. 707	



History, Use, Propagation, Culture,

1776 *Grangea* A genus of Adanson's The meaning of the word is unknown

1777 *Anacyclus* An abridgement of *Ananthocyclus*, which was the name originally proposed by Vaillant, and which does not appear to have been altered for the better He formed it from α, privative, ανθος, a flower, and κυκλος, a circle, on account of the rows of ovaries without flowers, which are placed in a circle round the disk

1778. *Anthemis* From ανθος, a flower, on account of the multitude of flowers with which the plants are covered. A. nobilis is in considerable repute, both in the popular and scientific Materia Medica The flowers, which are the parts used, have a strong and fragrant smell, and a bitter aromatic taste, both are extracted by water and alcohol. The active principles appear to be bitter extractive, resin, and essential oil Medicinally, the flowers are considered tonic, carminative, and slightly anodyne: yet when a strong infusion of them is taken in a tepid state, it proves powerfully emetic Given in substance, united with opium and astringents, if the bowels be easily affected, they have been successfully used for the cure of intermittents, and the infusion, in combination with ginger, or other aromatics, and the alkalies, is an excellent stomachic in dyspepsia, chlorosis, gout, flatulent cholic, and chronic debility of the intestinal canal. The tepid strong infusion is a ready emetic, and is often employed to promote the operation of other emetics By coction in water, the essential oil is

12301 Leaves lyrate pinnated, Flowers radiant
12302 Leaves tripinnate: segment acute, Stem erect, Heads flosculose corymbose
12303 Stem hirsute, Leaves lyrate pinnatifid hairy, Heads terminal hemispherical

12304 Leaves cuneiform smooth 3-toothed stalked, Heads axill sessile
12305 Leaves obl cuneate repand-toothed stalked, Heads axill. sessile
12306 Leaves obl sinuate toothed downy, Stem branched procumbent, Pedunc. 1-headed opp. the leaves
12307 Leaves obovate toothed cut at base stalked, Peduncles branched

12308 Leaves bipinnate, Leaflets oblong, Stem procumbent
12309 Leaves bipinnate, Leaflets linear subulate flat, Stem ascending, Peduncle naked terminal
12310 Leaves bipinnate roundish hoary with excavated dots
12311 Leaves decompound linear segm divided roundish acute, Heads flosculose
12312 Leaves 3-pinnate, Pinn linear-subulate downy, Stem branched divaricating, Pedunc. thick

12313 Leaves bipinnate linear, Pedunc. inflated, Grains winged

12314 Leaves bipinnatifid: segm. somewhat toothed rigid, Paleæ oblong acuminate
12315 Leaves bipinnatifid segm lin subulate toothed, Paleæ round pungent dilated at base
12316 Leaves bipinnatifid segm lanc somewhat toothed, lower teeth reflexed, Paleæ lanc cuspidate
12317 Leaves bipinnatifid dotted beneath segm lanc entire, Grains naked, Stem herbaceous
12318 Snow-white, Leaves pinnate pinnæ 3 or 5-fid, Involl downy, Stem erect
12319 Leaves bipinnate pinnæ linear, Stem erect and involl downy, Inner scales sphacelate at end
12320 Leaves sessile pinnatifid segments toothed, Stem erect branched
12321 Leaves pinnate pinnæ linear entire subpubescent, Floral leaves simple, Branches 1-headed
12322 Rad leaves bipinnatifid toothed cauline pinnatifid somewhat toothed
12323 Leaves bipinnatifid stalked segm trifid oblong acute, Petioles sheathing, Sheaths toothed
12324 Lvs bipinn the segm lin subul. a little downy, Scales of receipt membranous scarcely long, than the disk [entire pappus
12325 Lvs bipinnatif their segments lin lanc pubesc Receipt conical its scales lanc Pericarps crowned with an
12326 Receipt conical paleæ obl mucronate, Grains naked, Leaves bipinnate woolly
12327 Leaves bipinnatif glabrous their segm subul Receptacle conical its scales setaceous, Pappus O
12328 Receipt subconical, Paleæ obl blunt, Grains naked, Lvs bipinnate linear filiform 3-parted
12329 Leaves pinnated downy pinnæ linear trifid bluntish, Stem ascending, Pedunc long naked downy
12330 Leaves 3-pinnate leaflets linear, Stem decumbent, Branches axillary 1-headed
12331 Leaves hairy bipinnatifid segments trifid linc linear, Stem nearly erect divided
12332 Leaves bipinnatifid serrated downy beneath, Stem erect branched subcorymbose
12333 Leaves bipinnate serrated smooth, Stem erect branched, Pappus membranous toothed cut on one side
12334 Leaves pinnated pinnæ linear 3-parted, Stem proliferous, Heads solitary axillary sessile
12335 Leaves smooth pinnatifid lobes cuneate trifid or cut, Heads solitary
12336 Leaves bipinnatifid dotted beneath segments entire, Crown of grains toothed
12337 Leaves woolly bipinnate pinnæ lanc. acute, Flowering branches corymbose, Receipt conical
12338 Leaves stalked silky bipinnate segm linear acute, Involl downy, Rays ovate
12339 Leaves linear sessile pinnatifid segm entire, Stem erect branched
12340 Leaves sessile pinnatifid segm linear subulate pectinate entire, Stem downy 1 headed
12341 Leaves pinnated pinnæ linear entire blunt, Stem downy 1-headed [edge
12342 Leaves pinnated revolute at edge segm lin. subul subtrifid, Upper scales of involl blunt with a membran

12343 The only species, resembling a Calendula

12344 Stem procumbent, Leaves ovate entire



and Miscellaneous Particulars.

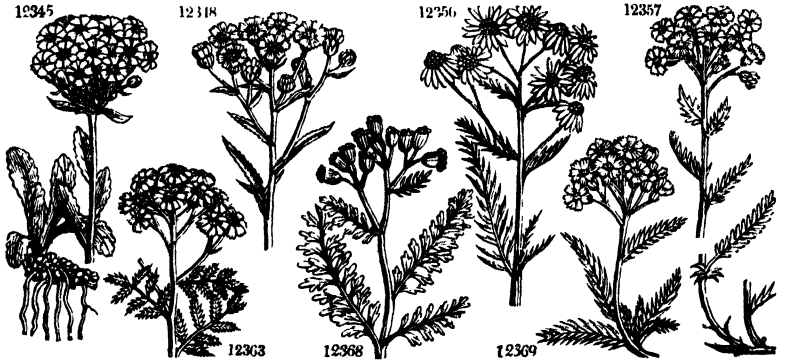
dissipated: chamomile flowers, therefore, ought never to be ordered in decoctions. Externally, they are used as fomentations in cholic, intestinal inflammation, and to phagedenic ulcers and their infusion is also found to be an useful addition to emollient anodyne glysters in flatulent cholic, and in irritations of the rectum producing tenesmus. (*London Disp* p 158) There is a double variety generally grown for the apothecaries, it is more ornamental than the single, but much less efficacious as a medicine

A cotula is said by Linnæus to be a very grateful plant to toads, to drive away fleas, and to annoy bees. It is a very common weed on soft rich soils and dunghills, and increases by seeds with amazing rapidity The tribe of Anthemideæ, of which this genus is the example, are nearly related to Helianthee In their style they resemble Inuleæ, Senecioneæ, and Nassauvieæ, but their floral organs are different. They inhabit Europe, Asia, and Africa, scarcely one has been found in America, or the southern parts of the world

1779 *Centrospermum* From *κεντρον*, a spur, and *σπερμα*, a seed, in allusion to the spiny points of the pappus A small annual plant with the aspect of Calendula

1780 *Sanvitalia* Named by Lamarck without any explanation. A hardy annual plant, with flowers having a yellow ray and dark purple disk, like some species of Rudbeckia.

1781. ACHILLE'A *W.*	Milfoil					*Compositæ*		*Sp.* 50—69					
12345 linguláta *W.*	tongue-leaved	♃	△	or	1	jl au	W	Hungary	1815	D	co	Pl rar. hun. 1 t. 2	
12346 Hérba-róta *W*	Herbarota	♃	△	or	½	jn jl	W	France	1640	D	co	All ped. 1 t 9 f 3	
12347 grandiflóra *M B*	great-flowered	♃	△	or	1	jl au	W	Caucasus	1815	D	co		
12348 Ptármica *W*	Sneezewort	♃	△	or	1	jl n	W	Britain	mou.pl	D	co	Eng. bot. 757	
β flore pléno	*double-flowered*	♃	△	or	1	jl n	W	.....	...	C	co		
12349 cristáta *W.*	slender-branch	♃	△	or	½	jl au	W	Italy	1784	D	p l		
12350 Agératum *W*	Sweet Maudlin	♃	△	or	2	au o	Y	S. Europe	1570.	D	s p		
12351 decolórans *W en.*	pale-yellow	♃	△	or	1	jn.au	W Y	.....	1798	D	co		
12352 speciósa *W en.*	spear-leaved	♃	△	or	1½	jl s	W	.....	1804	D	co		
12353 alpina *W*	Alpine	♃	△	or	½	jl n	W	Siberia	1731	D	s p	Bo. mu 144 t 101	
12354 serráta *W*	saw-leaved	♃	△	or	2	au s	Y	Switzerl	1686	D	co		
12355 Clavénnæ *W*	silver-leaved	♃	△	or	½	jn j'	W	Austria	1656	D	p l	Bot mag 1287	
12356 impátiens *W*	impatient	♃	△	or	2	jn s	W	Siberia	1759	D	co	Gme si 2 t 83 f 1	
12357 pectináta *W*	comb-leaved	♃	△	or	1½	au s	Pa Y	Hungary	1801.	D	co	Pl rar hun. 1 t 34	
ochroleúca Waldst.													
12358 squarrósa *W*	rough-headed	♃	△	or	1	jl au	W	.....	1775	D	p l		
12359 falcáta *W.*	sickle-leaved	♃	△	or	½	jn s	Pa Y	Levant	1739	D	co	Lam. ill t 683 f 3	
12360 tenuifólia *W*	slender-leaved		○	or	1	jn au	Y	Levant	1733	D	co		
12361 Santolina *W*	Lavend.-cotton-lv	♃	△	or	1	jn au	Pa Y	Levant	1739	D	p l		
12362 anthemoides *W*	Chamomile-like	♃	△	or	½	jn au	Pa Y	....	...	D	co		
12363 atráta *W*	black-capped	♃	△	or	2	jl s	W	Austria	1596	D	co	Jac aust 1 t 77	
12364 biserráta *Bieb*	biserrate	♃	△	or	1½	jn jl	W	Albania	1820	D	co		
12365 coronopifólia *W*	Buckshorn-lvd	♃	△	or	1½	jl au	Pa Y	Levant	1823	D	co	Wil achill. t. 1 f 2	
12366 álbida *W en*	whitish	♃	△	or	1	jl	Pa Y	.....	1819	D	co		
12367 chamæmelifólia *Dec*	dwarf	♃	△	or	⅔	jl	W	France	1825.	D	co		
12368 Gerbéri *W*	Siberian	♃	△	or	1½	jl au	Pa Y	Siberia	1821	D	co	Gmel sib t 83 f 2	
12369 moscháta *W*	musk	♃	△	or	2	jn jl	W	Italy	1775	D	co	Jac aus 5 t ap 33	
12370 nána *W*	dwarf	♃	△	or	½	jn au	W	Italy	1759	D	co	All ped 1 t 9 f 2	
12371 crética *W*	Cretan	♃	△	or	1	jl au	W	Candia	1739	D	p l	Boec mus t. 34	
12372 ægyptíaca *W*	Egyptian	♃	△	or	1	jl s	Pa Y	Levant	1640	R	p l	Tourn it 1 t 87	
12373 macrophylla *W.*	large-leaved	♃	△	or	3	jl au	W	Italy	1710	D	co	Triumf obs t 23	
12374 aúrea *W*	golden-flower'd	♃	△	or	1	jn s	Y	Levant	1739	D	co		
12375 Eupatórium *W.*	Caspian	♃	△	or	2	jl au	Y	Casp Sho	1803	D	co		
12376 compácta *W*	compact	♃	△	or	1	jl au	Pa Y	.. ...	1803	D	co		
12377 pubéscens *W*	downy	♃	△	or	1	jn s	L Y	Levant	1739	D	p l		
12378 crithmifólia *W*	Samphire-leav	♃	△	or	½	jl au	W	Hungary	1804	D	p l	Pl rar hun 1 t 66	
12379 tanacetifólia *W*	Tansy-leaved	♃	△	or	1	jl au	Pk	Switzerl	1658	D	co	Moris 6 t 11 f 14	
12380 distans *W*	branching	♃	△	or	3	jl au	W	Italy	1804	D	co	All ped t 53 f 1	
12381 lanáta *W en*	woolly	♃	△	or	1	jl au	W	. ..	1804	D	co		
12382 mágna *W*	great	♃	△	or	3	jn n	W	S. Europe	1683	D	co		
12383 Millefólium *W*	Yarrow	♃	△	or	2	jn o	W	Britain	pas	D	co	Eng bot 758	
β rúbra	*red-flowered*	♃	△	or	2	jn o	W	... ..	...	D	co		
12384 asplenifólia *P S*	Rose-colored	♃	△	or	1½	jn au	Pk	N Amer	1803	D	s p	Vent cels t 93	
12385 micrántha *W*	small-flowered	♃	△	or	1	jn o	Y	Levant	1805	D	p l		
12386 tomentósa *W*	tomentose	♃	△	or	2	my o	Y	Britain	hea	D	co	Eng bot 2532	
12387 ochroleuca *W*	cream-colored	♃	△	or	2	jl s	Pa Y	. ..	1804	D	co		
12388 microphýlla *W*	small-leaved	♃	△	or	1	jl s	W	Spain	1800	D	co	Barr ic 1114	
12389 Ligústica *W*	Ligurian	♃	△	or	¼	jn au	W	Italy	1791	D	co	All ped 1 t 53 f 2	
12390 nóbilis *W*	showy	♃	△	or	2	jn au	W	Germany	1640	D	co	Schk han 3 t 255	
12391 myriophýlla *W en*	many-leaved	♃	△	or	1½	jl s	W	... ..	1798	D	co		
12392 odoráta *W*	sweet-scented	♃	△	or	¼	jn au	W	Spain	1729	D	co	Jac col 1 t 21	
12393 setácea *W*	bristly	♃	△	or	1	jn au	W	Hungary	1805	D	p l	Pl rar hun 1 t 80	
12394 abrotanifólia *W*	Southernw.-lv	♃	△	or	2	jn au	Y	Levant	1739	D	p l		
1782. TRI'DAX *W*	Tridax					*Compositæ*		*Sp* 1—2.					
12395 procumbens *W*	long stalked		○	un	½	jl au	Y	Mexico	1804	S	co		
1783 AMEL'LUS *W*	Amellus.					*Compositæ*		*Sp* 3—4					
12396 Lychnitis *W.*	trailing	♃	⌴	pr	½	jn jl	Vi	C. G H	1768	C	p l	Jac.co su t 10 t1	
12397 villósus *Ph*	villous	♃	△	pr	1	au s	Y	Missouri	1811	D	co		
12398 spinulósus *Ph.*	spiny	♃	△	pr	2	au s	Y	Missouri	1811	D	co		



History, Use, Propagation, Culture,

1781. *Achillea* Named after Achilles, a disciple of Chiron, and the first physician who used it in healing wounds. A Ptarmica is called sneeze-wort, because the dried powder of the leaves snuffed up the nostrils provokes sneezing. In the spring, the young tender shoots were formerly put into salads, to correct the coldness of other herbs There is a variety with double flowers, which is very ornamental, especially in pots A moschata, the *Genipi* of the Swiss, is an excellent sudorific, aromatic, and acrid, and is a grateful food to cattle

12345 Leaves obl. linear blunt doubly serrulated downy ciliated, Stem villous
12346 Leaves linear narrowed at base serrated and stem smooth [at end
12347 Leaves lin acute equally and finely serrulate smooth, Stem panicled, Corymbs few-headed, Paleæ bifid
12348 Leaves linear lanc. acuminate sharply serrated

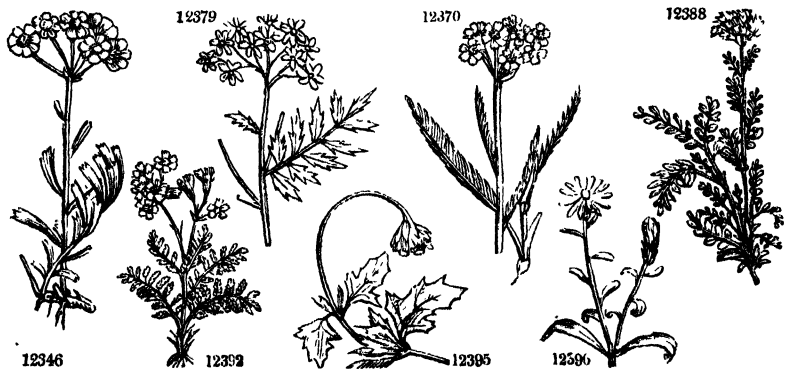
12349 Leaves lin plane acuminate toothed teeth emarginate transversely ciliated, Stem diffuse
12350 Leaves obl blunt serrated narrowed into the petiole fascicled glabrous, Corymb compound contracted
12351 Leaves linear acuminate equally and finely serrated smooth : serratures of the base deepest, Paleæ entire
12352 Leaves lanc. equally and finely serrated downy, Serratures of base deepest, Stem panicled, Paleæ entire
12353 Leaves linear pectinate pinnatifid glabrous : segm subserrated, Corymb compound
12354 Leaves downy linear lanc pinnatifid segments deepest at base
12355 Leaves downy pinnatifid smooth segm linear blunt upper toothed at end, Corymb simple
12356 Leaves pectinate pinnatifid smooth . segm linear acute, lower 2-parted, Corymb simple
12357 Leaves pectinate pinnatifid segm linear subulate entire, Corymb compound contracted, Stem downy

12358 Leaves pinnatifid : segm obl cuneate unequally toothed vertically bent, Corymbs simple
12359 Leaves pinnated roundish pilose : pinnæ 3-parted toothed imbricated across, Corymbs simple
12360 Leaves pinnat somew downy, Pinnæ 3 part blunt entire transversely imbr Ray scarcely long than invol
12361 Leaves pinnated somewhat downy, Pinnæ 3-parted transverse distant segm 3-toothed, Stem branched
12362 Leaves pinnated downy : pinnæ linear entire blunt, lowest longest, Cymes simple
12363 Leaves pectinate pinnate smooth pinnæ linear acuminate usually 3-parted
12364 Leaves linear-lanc acuminate unequally and finely biserrate villous beneath
12365 Leaves downy pinnatifid segm lanc serrated, Corymb compound
12366 Stem downy, Leaves pinnated minutely cut acute rigid bent upwards with a downy nerve
12367 Leaves pinnated . pinnæ long distant very narrow linear entire, Corymb compact branched
12368 Cauline lvs pinnatifid with entire segm radic pinnatifid with 3-fid segm Ray scarcely larger than invol.
12369 Leaves pectinate pinnate smooth, Pinnæ linear bluntish entire dotted
12370 Leaves pinn villous pinnæ toothed linear, radical bipinnate, Stem quite simple
12371 Leaves pinn downy pinnæ roundish 4-fid concave spreading, Stem branched at end
12372 Leaves pinn downy · pinnæ roundish bluntly toothed, Corymb compound
12373 Leaves pinn smooth · pinnæ lanc cut-serrated, outer confluent, Corymb compound
12374 Leaves bipinnate downy pinnæ linear-lanc toothed, Corymb simple, Peduncles long
12375 Leaves bipinnatifid hoary · segm lin lanc serrated, Corymb compound globose, Flowers flosculous
12376 Leaves bipinnatif. setaceous villous segm lanc entire, Corymb compound contracted, Flowers flosculous
12377 Leaves bipinnatifid pubescent segm linear lanc unequal acute, Corymb compound
12378 Leaves downy . cauline bipinnatifid with linear blunt segm , radical bipinnate, Corymbs compound
12379 Leaves bipinnatifid segm lanc serrated, Corymb compound spreading
12380 Leaves bipinnatifid . segm lanc cut-serrated, Rachis winged cut-serrated, Corymbs fastigiate compound
12381 Leaves bipinnatifid villous . segm. lanc blunt, Corymbs fastigiate compound
12382 Leaves thrice pinnatifid segm lanc acute, Corymbs compound fastigiate
12383 Leaves bipinnate slightly hairy their segm linear toothed acute, Stems furrowed

12384 Leaves pinnatifid downy beneath segm toothed, Stem branched fastigiate smooth
12385 Leaves bipinnatifid downy segm lanc entire, Corymb compound
12386 Leaves bipinnatifid woolly the segm crowded linear acute, Corymbs repeatedly compound
12387 Leaves subbipinnatifid pinnæ of the base undivided segm lin lanc Corymb compound, Invol cylindr
12388 Leaves bipinnatifid shorter than the intervals between them segm lin entire, Corymbs comp fastigiate
12389 Leaves bipinnatifid : segm lin finely serrated, Rachis winged entire, Corymb compound fastigiate
12390 Cauline leaves bipinnatifid · segm lin somew toothed, Rachis winged toothed radical thrice pinnatifid
12391 Leaves bipinnate downy · pinnæ pinnatifid, Segments linear-subulate, Corymbs compound fastigiate
12392 Leaves bipinnate pilose beneath . pinnæ linear entire, Corymb simple
12393 Leaves bipinnate leaflets linear setaceous mucronate very compact pilose, Corymbs compound fastigiate
12394 Leaves bipinnate downy . pinnulæ very fine linear entire distant, Corymbs compound fastigiate

12395 The only species

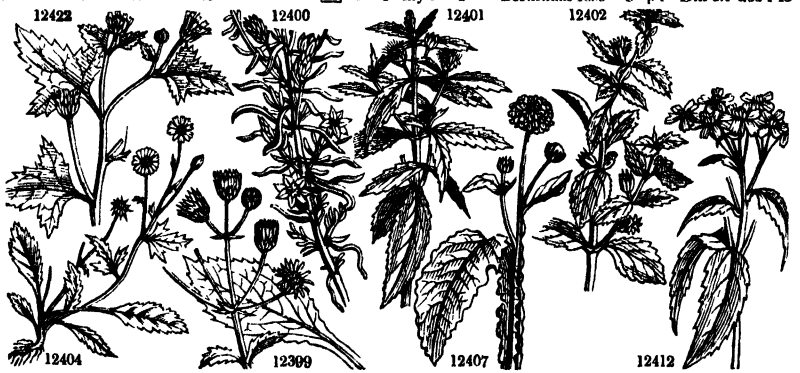
12396 Leaves hoary linear lanc opposite those of the branches alternate
12397 Very villous, Leaves sessile oblong acuminate entire, Heads axillary on short stalks
12398 Hoary, Lvs bipinnatifid cut-toothed, Segm linear rigid mucronate, Heads lateral and terminal clustered



and Miscellaneous Particulars.

1782 *Tridax.* From τριδαξος, cut into three pieces The rays of the flower are divided in three
1788. *Amellus* A name used by Virgil for a beautiful flower growing on the banks of the river *Mella* The plant of Virgil is supposed to have been Aster Amellus

1784. STAR'KEA *W*	Starkea					*Compositæ.*		*Sp.* 1					
12399 umbellàta *W*	umbel-flowered	♀	△	un	1½	jn jl	Y	Jamaica	1768.	D	l.p	Lam. ill.t.682.f 2	
1785. COLUMEL'LIA *Jacq*	Columellia					*Compositæ.*		*Sp* 1					
12400 biénnis *Jacq*	biennial	♀	◯	un	1	jn jl	Y	C. G. H.	1821	S	co	Jac.schœ.3.t.301	
1786. ECLIP'TA. *W.*	Eclipta					*Compositæ*		*Sp* 2—10					
12401 erécta *W.*	upright		◯	un	2	jl s	W	America	1690	S	l p	Dil el t.114 f 137	
12402 prostráta *W.*	trailing	☌	◯	un	¾	jl s	W	E. Indies	1732.	S	l p	Dil.el.t.113.f 138	
1787 MEYE'RA *Swz.*	Meyera					*Compositæ.*		*Sp* 1					
12403 séssilis *Swz.*	sessile	♀	△	un	1	jl au	Y	W. Indies	...	D	co	Bot. rep. 429	
1788 CHRYSANTHEL'LUM. *P S.*	Chrysanthellum					*Compositæ*		*Sp* 1					
12404 procúmbens *P S*	procumbent		◯	un	1½	jn jl	Y	W. Indies	1768.	S	co	Sw. ob 314.t.f.f 1	
Verbesina mútica W													
1789 SIEGESBECK'IA *W*	Siegesbeckia					*Compositæ.*		*Sp* 2—5					
12405 orientális *W*	oriental		○	pr	2	au o	Y	India	1730	S	co	Schk han 3 t 256	
12406 flosculósa *W*	small-flowered		○	pr	2	jn jl	Y	Peru	1784	S	co	L'Her. stirp t 16	
*1790 VERBESI'NA *W*	Verbesina.					*Compositæ*		*Sp* 10—23.					
12407 aláta *W*	wing-stalked	♀	△	pr	2	my o	Or	S Amer	1699	C	l p	Bot. mag. 1716	
12408 virginica *W*	white-flowered	☿	△	pr	2	jl s	W	N Amer	1812.	D	co		
12409 gigantéa *W*	tree	♃	▭	un	8	...	Y	W Indies	1758.	C	l p	Jac ic. 1. t 175	
12410 Siegesbéckia *W*	American	☿	△	un	3	o n	Y	Virginia	1731.	D	co		
§12411 Coreópsis *Ph.*	Coreopsis-like	☿	△	pr	5	s n	Y	N Amer	1640	D	co	Jac. vind 2 t.110	
Coreópsis alternifólia W													
12412 serráta *W*	saw-leaved	♀	△	un	3	jl o	Y	Mexico	1803	D	l p	Cav ic 3 t 214	
12413 sativa *H K.*	Oil-seed		◯	un	6	au s	Y	E. Indies	1806	S	co	Bot. mag 1017	
12414 calendulácea *W*	Ceylon		◯	un	2	jl s	Y	Ceylon	1739	S	co	Bur zey t 22 f 1	
12415 dichótoma *W.*	forked		◯	un	3	jn jl	Y	E. Indies	1789	S	co	M co go 1779 t 4	
12416 fruticósa *W*	shrubby	♃	▭	un	3	jn au	Y	W Indies	1759.	C	co	Plum. ic. t. 52	
1791 SYNEDREL'LA *P S*	Synedrella					*Compositæ*		*Sp* 1—3					
12417 nodiflóra *P S*	sessile-flowered		◯	w	½	jn jl	Y	W Indies	1726.	S	s.l	Ex flora. 60	
1792 GALINSO'GEA *W*	Galinsogea					*Compositæ*		*Sp* 2—6					
12418 parviflóra *W*	small-flowered		○	un	3	my s	D Y	S. Amer	1796	S	co	Cav ic 3. t. 281	
12419 triloláta *W*	three-lobed		○	un	3	au n	O	Peru	1797	S	co	Bot mag 1895	
1793 ACMEL'LA *P S*	Acmella					*Compositæ*		*Sp* 2—7					
12420 mauritiána *P S*	Balm-leaved		◯	un	1½	jl.au	Y	Mauritius	1768	S	s l	Rump am 6 t.65	
Spilanthes Acmella W													
12421 buphthalmoides *P S*	oval-leaved		○	un	1½	jl s	Y	S Amer	1798	S	co	Jac. schœ 2 t.151	
1794. ZALUZA'NIA. *P. S*	Zaluzania.					*Compositæ*		*Sp* 1—2					
12422 triloba *P S*	three-lobed	♀	△	un	1½	jl s	Y	Mexico	1798	D	l.p		
1795 PASCA'LIA *W*	Pascalia.					*Compositæ*		*Sp* 1					
12423 glaúca *W*	glaucous-leaved	☿	△	pr	1½	jn au	Y	Chili	1799	D	co	Bot rep 549	
1796. HELIOP'SIS. *P S*	Heliopsis					*Compositæ*		*Sp* 1					
12424 lævis *P S*	Sunflower-lvd	☿	△	or	6	jl o	Y	N Amer	1714	D	co	L'Her.stirp t 45	
Buphthálmum helianthoides W													
*1797 BUPHTHAL'MUM *W*	Ox-Eye					*Compositæ*		*Sp* 9—27					
§12425 frutéscens *W*	shrubby	♃	▭	or	2	jn au	Y	America	1696	C	p l	Dill elt t 28 f 44	
§12426 arboréscens *W*	tree	♃	▭	or	3	my s	Y	Bermudas	1699	C	p l	Dill elt t.38 f 43	



History, Use, Propagation, Culture,

1784 *Starkea* Named by Willdenow, after the Rev. Mr Starke, of Gros Tchirna, in Silesia, who paid much attention to the Cryptogamous plants of that country This genus was included by Linnæus in Amellus, from which Willdenow remarks that it differs in habit, and in its hairy receptacle

1785 *Columellia* So called by Jacquin, after the celebrated Geoponic writer, Lucius Junius Moderatus Columella, a Spaniard born forty-two years before Christ. A plant resembling Amellus annua. The flowers are yellow and sessile in the dichotomies of the branches. The Columellia of Loureiro is a different thing.

1786. *Eclipta* A translation of the Malay name *Wangi-wangi-maihg*, which signifies an eclipse of the sun, to which the form and disposition of the radiated flower has been likened. Worthless weeds with white flowers.

1787 *Meyera.* Named after Gottlieb-Andrew Meyer, a German, who published, in 1694, a dissertation upon the Sycomorus of Scripture

1788. *Chrysanthellum* A diminutive of Chrysanthemum, which see.

1789. *Siegesbeckia* Dr John George Siegesbeck, a German physician, director of the garden at St. Petersburgh, published in 1736, a catalogue of it under the title of Flora of St. Petersburgh. There was also a Botanosophia from his pen in 1737

12399 Leaves opp. 3-nerved downy beneath, Heads in umbels

12400 The only species

12401 Stem erect strigose, Leaves oblong lanc. sessile remotely serrated
12402 Stem prostrate strigose, Leaves obl lanc. somewhat stalked subserrate somewhat wavy scabrous

12403 Stem erect, Leaves amplexicaul ovate toothed

12404 Leaves alternate 3-parted toothed: radical oblong serrated, Stem creeping

12405 Leaves stalked ov unequally toothed subtriangular at base somewhat cut, Outer involl. longer than inner
12406 Leaves sessile ovate toothed, Florets of disk 3-toothed triandrous

12407 Leaves alternate decurrent wavy blunt
12408 Leaves alternate lanc. subserate, Corymb compound
12409 Leaves alternate deeply pinnatifid, Stem shrubby
12410 Leaves opposite ovate lanc serrated acuminate at each end decurrent
12411 Stem winged, Lvs. lanc acuminate somewhat stalked serrated, Heads corymbose, Cor of ray lanceolate

12412 Leaves opposite ovate-lanc serrated downy beneath
12413 Leaves opposite cordate lanc amplexicaul remotely serrated, Involl simple 5-leaved
12414 Leaves opposite obl lanc bluntish strigose serrated at end, Pedunc 1-headed long, Involl simple
12415 Leaves opposite ov acuminate serrated 3-nerved hairy, Pedunc winged 1-headed, Involl simple
12416 Leaves opposite ov acuminate serrated 3-nerved scabrous on each side, Pedunc 1-headed axillary

12417 Leaves opposite ov serrated 3-nerved, Heads axillary subsessile, Involl simple, Stem trichotomous

12418 Leaves ovate 3-nerved serrated
12419 Leaves oblong lanceolate toothed 3-nerved lower hastate 3-lobed

12420 Stem procumbent downy, Lvs ovate entire, Pedunc lateral, Ray shorter than disk

12421 Leaves ovate serrated 3-nerved downy beneath, Ray many-flowered

12422 Leaves ternate 3-lobed lower opposite, Stem suffrutescent

12423 The only species

12424 Leaves opposite ovate serrated 3-nerved, Involl. leafy, Stem herbaceous

12425 Leaves opposite obovate hoary, Petioles with 2 teeth
12426 Leaves opposite lanceolate narrowed at base not toothed smooth



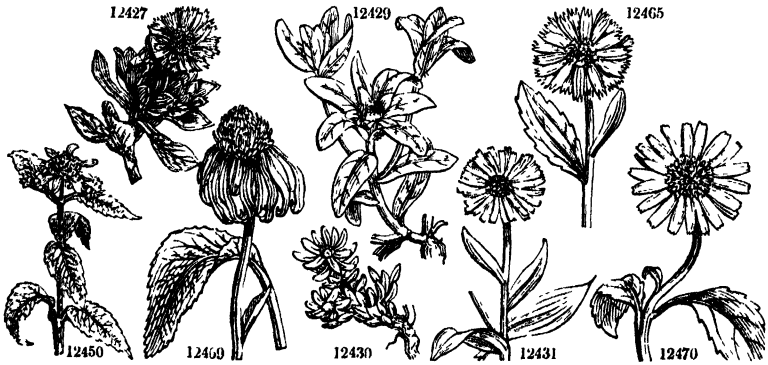
and Miscellaneous Particulars.

1790. *Verbesina* A name with the same meaning as Verbena, which see. The V. alata resembles Vervain in the appearance of its foliage
1791 *Synedrella* A name of unknown meaning. A little worthless weed
1792. *Galinsogea* Named after after Mar Ma Galinsoga, first physician to the queen of Spain, and intendant of the garden of Madrid One of the species, G trilobata, is sometimes cultivated as a hardy annual But it does not possess much merit.
1793. *Acmella* From ακμη, a point, on account of the pricking taste of the foliage.
1794 *Zaluzania.* Apparently an alteration of Zaluzianskia, a name applied in error to Marsilea trifolia, and formed in honor of an obscure Polish botanist.
1795 *Pascalia.* A genus dedicated by Ortega to Didan Pascal, doctor of medicine, and a professor at Parma.
1796. *Heliopsis.* A name with the same meaning, and a genus with the same habit, as Helianthus, which see.
1797. *Buphthalmum.* From βους, an ox, and οφθαλμος, an eye, in allusion to the broad open disk of the flowers It is believed that the Buphthalmum of Pliny is a species of Anthemis.

12427	sericeum *W*	silky	▭	or	3	my jl	Y	Canaries	1779	C	p l	Bot mag 1836
12428	spinósum *W*	prickly	○	or	3	jn s	Y	Spain	1570	S	co	Barr ic 551
12429	aquáticum *W*	sweet-scented	○	or	½	jl au	Y	S Europe	1731	S	co	Breyn cent. t.77
12430	maritimum *W*	sea	☾	△ or	1	jl s	Y	Sicily	1640	D	s l	Bocc mus t 129
12431	salicifólium *W*	Willow-leaved	☾	△ or	1½	jn o	Y	Austria	1759	D	co	Jac. aust. 4 t 370
12432	grandiflórum *W*	great-flowered	☾	△ or	1½	jn o	Y	Austria	1722	D	p.l	Moris s 6.t 7 f 52
§12433	cordifólium *W*	heart-leaved	☾	△ or	1	jn.au	Y	Hungary	1739.	D	p.l	Pl.rar hu.2.t 113

FRUSTRANEA.

†1798.	HELIAN'THUS. *W.* Sun Flower.					*Compositæ*	*Sp* 24—31					
12434	ánnuus *W*	annual	○	or	6	jn.o	Y	S Amer.	1596	S	co	Reneal spec t 83
12435	indicus *W*	dwarf annual	○	or	3	jn.o	Pa. Y	Egypt	1785	S	co	Tabern ic 704
12436	tubæfórmis *W*	tube-flowered	○	or	5	jl au	Y	Mexico	1799	S	co	Jac schœ 3 t 375
12437	dentátus *W*	tooth-leaved	☾	△ or	6	s n	Y	Mexico	1798	C	l p	Cav ic 3 t 220
12438	multiflórus *W.*	many-flowered	☾	△ or	6	au o	Y	N Amer	1597	D	co	Bot. mag 227
	β plénus	*double-flowered*	☾	△ or	6	au o	Y	N Amer.		D	co	
12439	tuberósus *W*	Jerusalem Artich	☾	△ cul	8	s o	Y	Brazil	1617	R	co	Jac vind 2 t 161
12440	angustifólius *Ph*	narrow-leaved	☾	△ or	3	s o	Y	N Amer	1789	D	co	Bot mag 2051
12441	macrophýllus *Ph*	large-leaved	☾	△ or	6	au o	Y	N Amer	1800	D	co	W hort ber.t.70
12442	móllis *W*	soft	☾	△ or	4	jl o	Y	N Amer	1805	D	co	
12443	decapétalus *W*	ten-petalled	☾	△ or	6	au n	Y	N Amer	1759	D	p l	Rob ic 235
12444	prostrátus *W*	rough	☾	△ or	2	jl s	Y	N Amer	1800	D	co	
12445	strumósus *W*	Carrot-rooted	☾	△ or	8	jl s	Y	N Amer	1710	D	p l	Boc. sic. t 27 f 4
12446	altissimus *W*	tall	☾	△ or	8	jl s	Y	N Amer	1731	D	co	Jac vind 2 t 160
12447	giganteus *W*	gigantic	☾	△ or	10	s o	Y	N Amer	1714	D	co	Moris s 6 t.7 f 66
12448	longifólius *Ph*	long-leaved	☾	△ or	6	au o	Y	Georgia	1812	D	co	
12449	diffusus *B M*	diffuse	☾	△ or	3	au o	Y	N Amer	1821	D	co	Bot mag 2620
12450	lineáris *Cav*	linear	☾	△ or	2	au o	Y	Mexico	1823	D	co	Bot reg 523
12451	trachelifólius *W*	Trachelium-lv	☾	△ or	6	s o	Y	N Amer	1825	D	co	
12452	excélsus *W*	lofty	☾	△ or	8	s o	Y	Mexico	1820	D	co	Cav ic t 219
12453	missuricus *Link*	Missouri	☾	△ or	3	s o		Missouri	1821	D	co	
12454	trilobátus *Link*	three-lobed	☾	△ or	3	s o	Y	Mexico	1824	D	co	
12455	divaricátus *Ph.*	divaricate	☾	△ or	6	au o	Y	N Amer	1759	D	p l	Mo h s 6 t 7 f 66
12456	pubéscens *W*	downy	☾	△ or	4	jl o	Y	N Amer	1795	D	co	Bot reg. 524
12457	atrorúbens *W*	dark-purp -eyed	☾	△ or	3	jl o	Br	N Amer	1732	D	p l	Bot reg 508
1799	GYMNOLO'MIA. *Kunth*	Gymnolomia				*Compositæ*	*Sp* 1					
12458	maculátum *Kunth*	spotted	☠	▭ pr	3	jn jl	Y	W Indies	1821	D	p l	Bot reg 662
†*1800	RUDBECK'IA *W*	Rudbeckia				*Compositæ*	*Sp* 12—20					
12459	pinnáta *Ph*	fragrant	☾	△ or	3	au s	Y	N Amer	1803	D	co	Bot mag 2310
12460	digitáta *W*	narr -jagged-lv	☾	△ or	6	au s	Y	N Amer	1759	D	p l	Moris s 6 t 6 f 54
12461	laciniáta *W*	broad jagged-lv	☾	△ or	6	jl s	Y	N Amer	1640	D	p l	Moris s 6 t 6 f 53
§12462	columnáris *Ph*	high-crowned	☾	△ or	3	au s	Y	N Amer	1811	D	co	Bot mag 1601
12463	subtomentósa *Ph*	downy-lobed	☾	△ or	3	au s	Y	N Amer	1802	D	co	
12464	triloba *W.*	three-lobed	☾	○ or	4	au s	Y	N Amer	1699	S	co	Bot reg 525
12465	hirta *W*	great-hairy	☾	△ or	2	jn n	Y	N Amer	1714	D	p l	Sweet's fl gar 82
12466	fólgida *H K*	small-hairy	☾	△ or	3	jl au	Y	N Amer	1760	D	p l	Bot mag 1996
12467	lævigáta *Ph*	smooth	☾	△ or	3	jl au	Y	Carolina	1812	C	co	
12468	amplexifólia *W*	stem-clasping		○ or	3	jl au	Y	Louisiana	1793	S	co	Jac. ic 3 t 592
§12469	purpúrea *Ph*	purple	☾	△ or	5	jl o	D P	N Amer	1699	D	p l	Bot mag 2
§12470	serótina *Sweet*	late	☾	△ or	2	au	Y	N Amer	1823	D	co	Sweet's fl gard 4



History, Use, Propagation, Culture,

1798 *Helianthus* From ἥλιος, the sun, and ἄνθος, a flower Nothing can be a more complete ideal representative of the sun, than the gigantic sun-flower, with its golden rays, it is dedicated with great propriety to the sun which it never ceases to adore while the earth is illuminated by his light When he sinks into the west, the flowers of Helianthus are turned towards him, and when he rises in the east, the flowers are again ready to be cherished by the first influence of his beams.

H. annuus is a well known border annual, which will grow in any soil There are varieties with double flowers, the tubular florets being changed into ligular ones, like those in the ray. The whole plant, and particularly the flower, exudes a thin pellucid odorous resin, resembling venice turpentine. From the seeds an edible oil has been expressed, and they are also excellent food for domestic poultry The flowers turning with the sun, is by some considered a popular error, Gerarde says he never could observe it, and Professor Martin has seen four flowers on the same stem pointing to the four cardinal points H. tuberosus, *Topinambour*, Fr, *Erdapfel*, Ger., and *Girasole*, Ital, is called Jerusalem, from the corruption of the Italian word *Girasole*, and Artichoke, from the resemblance in flavor which the tubers have to the bottoms of artichokes These tubers are in considerable esteem on the continent as a substitute for potatoes, and before the introduction of that vegetable, they were a good deal in use in this country. Their culture and treatment is the same as for that vegetable H. multiflorus a showy autumnal flower

12427 Leaves opposite close spatulate oblong silky, Scales of involucre setaceous hirsute
12428 Leaves alternate obl lanc. amplexicaul entire hirsute, Involucre leafy mucronate
12429 Involucre bluntly leafy sessile axillary, Leaves oblong blunt alternate nearly entire, Stem dichotomous
12430 Involucre bluntly leafy stalked, Lvs alternate spatulate, Stem herbaceous
12431 Leaves alternate obl.-lanc subserrated 3-nerved villous, Involucre naked, Stem herbaceous
12432 Leaves alternate lanc. somewhat toothletted smooth, Involucre naked, Stem herbaceous
12433 Leaves alternate: lower stalked cordate doubly serrated. upper sess. ovate serrated, Stems herbaceous

FRUSTRANEA.

12434 Leaves all cordate 3-nerved, Peduncle thick, Heads cernuous
12435 Leaves all cordate 3-nerved, Peduncle evensized, Involucre leafy
12436 Leaves cordate cuneate at base villous 3-nerved, Peduncle thick fistular
12437 Leaves ovate acuminate narrowed at base unequally serrate scabrous, Peduncle filiform, Rays obovate
12438 Leaves 3-nerved scabrous: lower cordate, upper ovate, Ray many-flowered Scales of involucre lanceolate

12439 Leaves 3-nerved scabrous: lower cordate-ovate, upper ovate acuminate alternate, Petioles ciliated at base
12440 Stems slender about 1-headed, Leaves linear revolute at edge rough
12441 Leaves ovate acuminate 3-nerved serrated scabrous above hoary beneath, Involucre squarrose
12442 Leaves ovate acuminate 3-nerved closely serrated scabrous above hoary and soft beneath
12443 Lvs ovate acuminate remotely serrat 3-nerved scabr Scales of involucre lanceolate nearly equal subciliated, Rays 10 or 12
12444 Lvs lanceolate acuminate scabr serrated 3-nerved upper entire, Scales of involucre lanceolate ciliated, Stem procumbent
12445 Lvs ovate acuminate serrated 3-nerved scabrous beneath, Scales of involucre linear lanceolate ciliated at base
12446 Lvs. altern. lanc. serr. scabr 3-nerved narrow at end stalked, Petioles ciliated, Scales of involucre lanceolate ciliated.
12447 Lvs. altern. lanc serr scabr obsol 3-nerv narrow at each end subsessile ciliated at base, Scales of involucre lanceolate ciliated
12448 Smooth, Stem panicled, Branches few-flowered at top, Lvs sessile very long entire lower serrated
12449 Stem hispid spreading, Leaves ovate rigid scabrous, Peduncles very long 1-flowered
12450 Leaves altern. or opp sessile linear revolute at edge entire 1-nerved, Heads corymbose
12451 Leaves ovate lanceolate acuminate serrated 3-nerved very rough on each side, Scales of involucre linear lanceolate ciliated
12452 Leaves altern. lanc serrated scabrous 3-nerved narrowed at each end woolly at base, Stem villous in 2 rows
12453 Leaves amplexicaul Heads on long stalks, Disk of head dark purple
12454 Stem erect hairy, Lvs stalked 3-lobed very rough, Involucre hairy, Pappus with 2 setæ
12455 Stem smooth much branched, Lvs opp sessile lanceolate ovate 3-nerved, Panicle trichotomous slender few-flowered
12456 Leaves subsessile cordate ovate 3-nerved amplexicaul closely serrated downy, Scales of involucre lanceolate villous
12457 Leaves opp spatulate crenate 3-nerved scabrous, Scales of involucre erect the length of disk

12458 Leaves oblong-lanceolate subserrate, Heads 1-3, Ray 8-flowered

[hispid
12459 Lvs all pinnat. one or other of the lower pinnæ 2-parted, the rest undivided, Pappus entire Stem furrowed
12460 Rad lvs. pinn.. leaflets sessile lanceolate toothed somewhat cut, upper confluent, Pappus entire
12461 Rad lvs pinn. leaflets ovate unequal at base about 3-lobed toothed, Pappus 4-toothed
12462 Stem upright simple few-flowered at top, Leaves pinnatifid cut. segments linear, Involucre simple 5-leaved
12463 Stem branched, Branches erect many-flowered Lvs oblong lanceolate acute serrated lower 3-lobed
12464 Leaves spatulate lower 3-lobed, upper undivided
12465 Leaves undivided spatulate ovate 3-nerved serrated hairy, Receptacle conical, Paleæ lanceolate
12466 Leaves oblong lanceolate toothletted hispid narrowed at base subcordate, Receptacle hemispherical, Paleæ lanceolate
12467 Quite smooth, Peduncles long 1-headed, Lvs ovate-lanceolate acuminate each way 3-nerved
12468 Leaves oblong lanceolate cordate amplexicaul lower serrated, Disk cylindrical conical
12469 Leaves lanceolate ovate alternate undivided, Rays blind
12470 Stem hispid, Lower leaves broad-ovate tapered at base remotely toothed very rough, Rays 3-toothed



and Miscellaneous Particulars

This genus has given rise to a most important and extensive tribe of plants, the Helianthæ, which is at once the most numerous of the various tribes of Compositæ, and on account of its strict affinity with several others, the most difficult to characterize with precision. Although it is perfectly natural, yet there is scarcely a character belonging to it which is not subject to many exceptions, and to more or less important modifications. Almost all the species of Helianthæ are natives of America, several of Asia, a few of Africa, and scarcely any of Europe They appear to be entirely unknown in the southern parts of the world.

1799 *Gymnolomia* From γυμνος, naked, and λωμα, an edge, in allusion to the nature of the margin of the grains

1800. *Rudbeckia* Named after the famous Olaus Rudbeck, professor of botany at Upsal, who died of grief in 1702, at witnessing the destruction by fire of his laborious work, called *Campi Elysii*, which was nevertheless published in 1701 and 2, by the diligence of his son He is also celebrated for having made the discovery that the Paradise of Scripture was situated somewhere in Sweden Handsome border annuals or perennials. R. purpurea is remarkable for bearing purple flowers.

†1801 GALAR'DIA *W.* Galardia					*Compositæ*		*Sp* 1—2.					
12471 bicolor *W*	two-colored	☿ △	or	2	jl o	Or	Carolina	1787.	D	co	Bot. mag. 1602	
1802. TITHO'NIA *Decf* Tithonia					*Compositæ.*		*Sp* 1					
12472 tagetiflóra *W*	Marigold-flow	⊡	pr	1	jl o	Or	Vera Crux	1818.	D	co	Bot. reg. 591	
1803. COS'MEA *W* Cosmea					*Compositæ.*		*Sp* 4—6.					
12473 lútea *B M*	yellow-flowered	⊙	pr	2	o n	Y	Mexico	1811.	S	co	Bot. mag 1689	
12474 sulphúrea *W*	Southernw.-lvd	○	pr	2	jl au	Y	Mexico	1799.	S	co	Jac ic 3 t. 595	
12475 bipinnáta *W*	purple-flowered	☿ △	pr	2	jl au	Pu	Mexico	1799.	C	l p	Bot mag 1535	
12476 parviflóra *W*	white-flowered	○	pr	2	jl au	W	Mexico	1800.	S	co	Jac. schœ.3 t.374	
†*1804 COREOP'SIS *W* Coreopsis					*Compositæ.*		*Sp* 19—32.					
12477 ferulæfolia *H*	Fennel-leaved	☿ △	or	3	o n	Y	Mexico	1799	D	l p	Bot. mag 2059	
12478 verticillata *W*	whorl-leaved	☿ △	or	3	jl o	Y	N. Amer	1759	D	p l	Bot mag 156	
12479 tenuifólia *W*	slender-leaved	☿ △	or	2	jl au	Y	N Amer	1780	D	co	Pl man. t.344 f 4	
12480 chrysántha *W*	Angelica-leav	☿ ◎	or	2	jl s	Y	W Indies	1752.	S	co	Plum. ic 53. f 1	
12481 aúrea *W*	Hemp-leaved	☿ △	or	3	au s	Y	N Amer	1785.	D	p l		
§12482 tripteris *W.*	three-leaved	☿ △	or	6	au o	Y	N Amer	1737.	D	p l	Moris s 7.t.3 f 44	
12483 senifólia *W.*	six-leaved	☿ △	or	4	au o	Y	N Amer	1812.	D	co		
12484 álba *W*	climbing	☿ △	or	6	jn jl	W	Jamaica	1699.	D	l p	Herm para. 124	
12485 incísa *B reg*	jagged-leaved	☿ △	or	6	s d	Y	W Indies	...	D	co	Bot. reg 7	
12486 réptans *W*	trailing	☿ ⊡	or	6	jl s	Y	W Indies	1792	S	co	Smith spic t 22	
12487 lanceoláta *W*	lanceolate	☿ ◎	or	3	jl s	Y	Carolina	1724	S	co	Bot. cab 821	
12488 tinctória *Nutt*	Dyer's	☿ ○	or	2	my o	Y	Missouri	1822	S	co	Bot. reg 846	
12489 auriculáta *W*	ear-leaved	☿ △	or	6	au o	Y	N. Amer	1699	D	p l	Plu. alm t 83 f 5	
12490 latifólia *W*	broad-leaved	☿ △	or	3	au s	Y	N Amer	1786.	D	co		
12491 argúta *Ph*	sharp-notched	☿ △	or	2	au s	Y	Carolina	...	D	co		
12492 crassifólia *W.*	thick-leaved	☿ △	or	3	au o	Y	Carolina	1786.	D	p l		
12493 angustifólia *W*	narrow-leaved	☿ △	or	2	jn au	Y	N Amer	1778	D	p l		
§12494 aláta *W*	wing-stalked	☿ △	or	3	jl au	Y	Mexico	1803	D	co	Cav ic 3 t. 260	
§12495 procera *W*	tall	☿ △	or	8	s.o	Y	N Amer	1765	D	p l		
1805 SIM'SIA *Pers* Simsia					*Compositæ*		*Sp* 2—3					
12496 ficifólia *Pers*	fig-leaf	○	un	3	jl au	Y	Mexico	1799	S	co	Cav ic 1. t. 77	
12497 amplexicaulis *Pers*	stem-clasping	☿ △	un	4	jl au	Y	.....	1806	D	p l		
1806 OSMI'TES *W* Osmites					*Compositæ*		*Sp* 2—5					
12498 camphorina *W*	Camphire-scent.	☗ ⊔	pr	1½	ap jl	W	C G H	1794	C	l p	Se mu 1 t.90.f 8	
12499 dentáta *Thunb*	toothed	☗ ⊔	pr	1½	ap jl	W	C G H	1820	C	l p		
1807 ENCE'LIA *Cav* Encelia					*Compositæ*		*Sp* 1—2.					
12500 canéscens *Cav*	downy-leaved	☗ ⊔	pr	1½	jl	Or	Peru	1786	C	l p	Bot reg 909	
1808 SCLEROCAR'PUS. *W* Sclerocarpus.					*Compositæ*		*Sp* 1					
12501 africánus *W*	African	⊙	un	2	jl au	Y	Guinea	1812	S	co	Jac. ic 1 t 176	
1809 CULLU'MIA *H K* Cullumia					*Compositæ*		*Sp* 3					
12502 ciliáris *H K*	ciliated	☗ ⊔	or	2	my jn	Y	C G H	1774	C	p l	Bur afr t 54 f 1	
12503 setósa *H K*	recurv smooth-lv	☗ ⊔	or	2	jn au	Y	C G H	1780	C	l p		
12504 squarrósa *H. K.*	recurv. awl-lvd	☗ ⊔	or	2	jn au	Y	C G H	1786	C	l p	Th act haf 3 t.5	
1810 BERCKHE'YA *H K* Berckhuya					*Compositæ*		*Sp* 8—20					
12505 cynaroides *W*	Artichoke-cup	☿ △	or	1	jn	Y	C G H	1789	D	l p		
12506 obováta *W*	smooth-shrubb	☗ ⊔	or	2	jn au	Y	C G H	1794	C	l p	Ho n h 6 t 34 f 2	
12507 incána *W*	hoary	☗ ⊔	or	2	jl au	Y	C G H	1739	C	l p	Jac ic. 3. t. 591	
12508 cuneáta *W*	wedge-leaved	☗ ⊔	or	2	jn au	Y	C G H	1812	C	l p	Th act ha.3 t 10	
12509 palmáta *W.*	palmated	☗ ⊔	or	3	jn au	Y	C G H	1800	C	l p	Th act ha 3 t 13	
12510 grandiflóra *W*	large-flowered	☗ ⊔	or	2	jn au	Y	C G H	1812.	C	l p	Bot. mag 1844	
12511 unifióra *W*	single-flowered	☿ △	or	3	jn au	Y	C G H	1815.	D	co	Th act haf 3 t 7	
12512 cérnua *H K.*	drooping-flow	☿ ◎	or	2	my.jl	Y	C G H	1774.	S	co	Meerb ic 1 t 40	
1811 DIDEL'TA *W* Didelta					*Compositæ*		*Sp* 2					
12513 carnósum *W.*	alternate-leav'd	☗ ⊔	un	3	jn jl	Y	C G H	1774	C	l p	L'Her stirp t.28	
12514 spinósum *W*	opposite-leaved	☗ ⊔	un	3	jn jl	Y	C G H.	1774.	C	l p	Wen.obs.t.4.f.32	



History, Use, Propagation, Culture,

1801. *Galardia.* Fougeroux de Bondaroy, the nephew of Duhamel, dedicated this genus to M. Gaillard de Charentonneau, an amateur of botany

1802 *Tithonia* A fanciful name given to this plant by Desfontaines, because of the color of its flower, which resembles Yellow Morning, or Aurora, whose husband was Tithonus.

1803. *Cosmea* From κοσμος, beautiful, on account of the elegance of the foliage.

1804 *Coreopsis* From κορις, a bug, and οψις, resemblance Its seed is convex on one side, and concave on the other; it has a membranous margin, and it has two little horns at the end which gives it very much the appearance of some insect C verticillata is a handsome shrubbery plant, continuing long in flower, the florets are used in North America, to dye cloth red C tinctoria is a very handsome border annual.

1805 *Simsia* Named by Persoon, after Dr John Sims, the co-editor with Mr König, of the excellent Annals of Botany, and for many years the sole editor of the Botanical Magazine.

12471 Stem branched, Leaves lanc. Paleæ of pappus entire awned

12472 The only species

12473 Leaves pinnate and bipinnatifid, Pinnæ serrated somewhat decurrent, Ray few-flowered neuter
12474 Leaves bipinnatifid segm lanc Segm. of exterior involucre lanceolate
12475 Leaves bipinnate, Leaflets linear subulate, Scales of outer involucre ovate
12476 Leaves bipinnate, Leaflets filiform, Scales of outer involucre lanceolate

12477 Leaves bipinn. Pinnules lin lanc not broader than their rib
12478 Leaves whorled 3 or 5-pinnated. pinnæ lin 3-parted and undivided, Disk discolored
12479 Leaves whorled 3 or 5-pinnated: pinnæ lin 3-parted and undivided, Disk same color as ray
12480 Leaves ternate ovate-obl serrated, Ray same color as disk
12481 Leaves serrated radical 3-parted: cauline trifid or entire lanc linear
12482 Leaves entire radical pinnated, cauline in threes lanc. stalked
12483 Leaves entire ternate sessile
12484 Leaves subternate cuneate serrated
12485 Villous, Leaves stalked quinate and ternate leaflets ovate-lanc subpinnatifid or cut serrated
12486 Leaves serrated ovate upper ternate, Stem creeping
12487 Leaves lanceolate entire ciliated
12488 Rad leaves pinnate or bipinnate entire, Outer leaves of involucre short, Ray discolored at base
12489 Leaves entire ovate lower ternate
12490 Leaves ovate acuminate crenate toothed, Grains naked
12491 Leaves stalked lanc ovate by degrees acuminate finely serrated, Corymbs dichotomous term. and axillary
12492 Leaves obovate oblong entire downy
12493 Leaves alternate lin lanc entire smooth, Ray oblong trifid middle segm largest
12494 Stem winged, Leaves alternate scabrous roundish ovate cuneate at base 3-nerved
12495 Leaves ellipt. acuminate serrated stalked veiny decurrent lower whorled, upper alternate

12496 Leaves 3-lobed toothed roughish, Petiole naked at base
12497 Hoary, Leaves somewhat palmate 3-lobed, Petiole leafy at base amplexicaul

12498 Leaves lanc obsoletely serrated toothed at base smooth
12499 Leaves obovate toothed villous

12500 Cor of ray 4-fid nearly equal to disk, Leaves hoary with down

12501 The only species

12502 Leaves ovate smooth imbricated at the edge and rib ciliate-spiny, Spine of the end reflexed
12503 Leaves alternate obl recurved smooth ciliate-spiny, Leaves of involucre ciliated
12504 Leaves altern lanc. subulate recurved smoothish ciliat spiny decurr at base, Segm of involucre ciliate spiny

12505 Cauline leaves altern amplexicaul. ciliate spiny · radical entire unarmed, Scales of involucre entire
12506 Leaves opp obl. lanc narrowed at base spiny-toothed smooth, Scales of involucre ciliate spiny
12507 Leaves altern ovate spiny-toothed 3-nerved netted hoary villous, Scales of involucre toothed spiny villous
12508 Leaves altern. obl. cuneiform spiny-toothed villous on each side, Scales of involucre toothed spiny
12509 Leaves altern lanc pinnatifid downy beneath segm entire spiny at end, Scales of involucre 3 or 5-fid
12510 Leaves opp lanc 3-nerved spiny-toothed downy beneath, Scales of involucre spiny-toothed [toothed
12511 Leaves altern lanc. spiny-toothed downy beneath, Stem herbaceous 1-headed, Scales of involucre lanc spiny-
12512 Leaves altern lanc amplexicaul spiny-toothed ciliated smooth on each side, Heads cernuous

12513 Leaves altern lanceolate oblong fleshy
12514 Leaves opp somewhat amplexicaul ovate



and Miscellaneous Particulars.

1806. *Osmites.* From ὀσμη, perfume. One of the species gives out a strong smell of Camphor.
1807. *Encelia.* A name of Adanson's, the meaning of which is unknown. A pretty half shrubby plant, with grey soft leaves
1808 *Sclerocarpus* From σκληρος, hard, and καρπος, fruit, with reference to the bony covering of the grain
1809. *Cullumia* Named after Sir Thomas Cullum, an English baronet, and one of the earliest promoters of the principles of Linnæus in this country He is still living, at a very advanced age.
1810 *Berckheya* Named after John Lefranc de Berckhey, a Dutch botanist.
1811. *Didelta.* From δις, double, and δελτα, a Greek letter equivalent to the English D, because the receptacle resembles a double triangle.

1812 GORTE'RIA *W* Gorteria					*Compositæ*			*Sp* 1—3					
12515 personáta *W.*	procumbent	⊥▢	or	½	jl	au	Y	C	G	H	1774	S	co	Jac. col 4 t.21 f 1
1813 GAZA'NIA. *H K* Gazania					*Compositæ*			*Sp* 4—9					
12516 rígens *H K*	great-flowered	✱ ⊔	or	1	my	s	Or	C	G	H	1755	C	p l	Bot. mag 90
12517 uniflóra *B M.*	garden	✱ ⊔	or	1	jl	au	Y	C	G	H	1816.	C	p l	Bot. mag 2270
12518 Pavónia *H. K.*	Peacock	✱ ⊿	or	1½	jn	jl	Y	C	G.	H.	1804.	C	p.l	Bot reg. 35
12519 subulàta *H K*	awl-leaved	✱ ⊿	or	1	jl	au	Y	C	G	H	1792	D	l p	
1814 CRYPTOSTEM'MA Cryptostemma					*Compositæ*			*Sp.* 3—5					
12520 calendulàceum *H K*	Marygold-flow	○	or	1	jn	au	Y Pu	C	G	H	1752.	S	co	Bot. mag 2252
12521 hypochondriacum *H K*	divided-rayed	○	or	1	jl	au	Y	C	G	H	1731.	S	co	
12522 runcinátum *H K*	Dandelion-lvd	○	or	1	jl	au	Y	C	G.	H.	1794.	S	co	
1815 ARCTOTHE'CA *W* Arctotheca					*Compositæ*			*Sp* 1					
12523 répens *W.*	creeping	⊥⊿	or	1	jl	au	Y	C.	G	H	1793	D	co	Jac schœ.3 t.306
1816 SPHENO'GYNE *H K* Sphenogyne					*Compositæ*			*Sp* 7.					
12524 anthemoides *H K*	white-crowned	○	el	½	jl	s	Y	C	G	H.	1774.	S	co	Bot mag. 544
12525 crithmifólia *H K*	Samphire-leav	⊞ ⊔	el	1	ap	au	Y	C	G	H	1768	C	l p	Bur afr. t 65 f 1
12526 scariósa *H K*	scaly-cupped	⊞ ⊔	el	1	ap	au	Y	C	G	H	1774.	C	l p	
12527 abrotanifólia *H K*	Southernw -lv	⊞ ⊔	el	1	my	au	Y	C	G	H	1789	C	l p	
12528 dentáta *H K*	small-leaved	⊞ ⊔	el	1½	jn	jl	Y	C	G	H	1787.	C	l p	Burm afr t. 64
12529 odoráta *H K*	smooth-seeded	⊞ ⊔	el	1	ap	jn	Y	C	G	H	1774	C	l p	
12530 pilifera *Ker*	piliferous	⊞ ⊔	el	1½	d		Y	C	G	H	1821.	C	l p	Bot. reg 604
1817 ZŒ'GEA *W* Zœgea					*Compositæ.*			*Sp* 1					
12531 Leptaurea *W.*	yellow-flowered	○	un	½	jl	au	Or	Levant			1779	S	co	Jac ic 1 t. 177
1818 LEU'ZEA *Dec* Leuzea.					*Compositæ*			*Sp* 2—5					
12532 conifera *Dec*	cone	⊻ △	or	½	jn	s	Pu	S	Europe		1683	D	l p	Ann mu. 16 t 14
12533 altáica *Lenk*	Altai	⊻ △	or	¾	jn	s	Pu	Siberia			1822.	D	co	
*1819 CENTAU'REA *W* Centaury					*Compositæ*			*Sp* 101—182					
12534 phrýgia *W*	feathery-calyx	⊻ △	or	1½	jn	o	Pu	Switzerl			1633.	D	co	Fl dan 520
12535 salicifólia *Bieb*	Willow-leaved	⊻ △	or	1½	jn	o	Pu	Caucasus			1823	D	co	
12536 pectináta *W*	pectinated	⊻ △	or	1	jl	o	Pu	France			1727	D	co	
12537 austriaca *W*	Austrian	⊻ △	or	1½	jn	o	Pu	Austria			1815	D	co	
§12538 uniflóra *W*	one-headed	⊻ △	or	1	jn	o	Pu	S	Europe		1819	D	co	
12539 flosculósa *W*	flosculous	⊻ △	or	1	jn	o	Pu	Italy			1818	D	co	
12540 nervósa *W en*	nerved	⊻ △	or	1½	jn	s	Pu	S	Europe		1815	D	co	
12541 trichocéphala *W*	downy-calyxed	⊻ △	or	1	jl	au	Pu	Siberia			1805	D	co	Gm s 2 t 45 f 1 2
12542 rivulàris *Brot*	river-side	⊻ △	or	2	jl	s	Br	Portugal			1812	D	co	
12543 hyssopifólia *W.*	Hyssop-leaved	⊞ ⊔	or	½	jl	au	Pu	Spain			1812.	C	co	Barr ic 306
12544 nigra *W*	Black Knapweed	⊻ △	w	1	my	au	Pu	Britain			past	D	co	Eng bot 278
12545 nigréscens *W*	dark	⊻ △	un	1½	jn	au	Pu	Hungary			1805	D	co	
12546 Triumfétti *W.*	Triumfetti's	⊻ △	un	1	jn	au	Pu	M	Cenis		1820	D	co	
12547 montána *W*	mountain	⊻ △	or	1½	jn	au	B	Austria			1596	D	co	Bot. mag 77
12548 axillàris *W*	axillary	⊻ △	or	1	jn	au	Pu	Austria			1823	D	co	
12549 Cyánus *W*	Blue-bottle	○	or	3	jn	au	B	Britain			corn fl.	S	co	Eng bot 277
12550 paniculáta *W*	panicled	⊻ ◯	or	1½	jl	au	Pu	Europe			1640	S	co	Jac aust 4 t 320
12551 spinósa *W*	prickly-branch	⊻ ⊿	or	2	jl	s	Pu	Candia			1640	C	p l	Bot mag 2493



History, Use, Propagation, Culture,

1812 *Gorteria* Named after David Gorter, a Dutchman, professor of botany at Harderwych, and afterwards physician to Elizabeth, Empress of Russia He published a Flora Belgica in 1767, and assisted Kraschenninikoff in his Flora Ingrica G Rigens is a very showy plant when the flowers are fully expanded All the species are of easy culture

1813 *Gazania* Supposed to have been so called from γαζα, riches, in allusion to the splendour of the flowers.

1814. *Cryptostemma* From κρυπτον, concealed, and στεμμα, a crown, the scaly crown of the grains being involved in wool Tender annuals, natives of the Cape of Good Hope

1815. *Arctotheca.* See Arctotis, from which this has been divided

1816 *Sphenogyne* So called from σφην, a wedge, and γυνη, a female, in allusion to the wedge-shaped stigmas. Pretty annual flowers.

1817. *Zoegea* Named after Dr J Zoega, who published a Flora Islandica in 1775. *Leptaurea* is an abbreviation of *Lepto-centaurea*, small centaurea

1818. *Leuzea.* Divided by M Decandolle, from Centaurea, from which it differs in not having the outer florets barren, nor the pappus with simple hair, nor the insertion of the fruit oblique. He named it after his friend Deleuze.

12515 Leaves lanc. entire and sinuated, Stem erect, Flowers stalked

12516 Leaves lanc. spatulate and pinnatifid entire white with down beneath, Pedunc. 1-headed terminal
12517 Stem shrubby decumbent, Leaves spatulate-lanceolate downy beneath, Ray same color as disk
12518 Leaves pinnatifid hairy above downy beneath: segm oval-lanc Scape 1-headed, Stem decumbent
12519 Stem leafy decumbent 1-headed, Leaves subulate linear revolute at edge downy beneath

12520 Ligulæ undivided, Leaves pinnatifid toothed downy beneath
12521 Ligulæ 3-5-parted, Leaves lyrate downy
12522 Ligulæ 3-5-parted, Leaves runcinate toothed downy beneath

12523 The only species

12524 Smooth, Lvs bipinnatifid or pinnatifid linear-filiform, Lvs of pappus white
12525 Smooth, Lvs pinnatifid linear filiform, Outer leaflets of involucre subulate
12526 Leaves bipinnatifid or pinnatifid linear filiform smooth, Scales of involucre scarious blunt shining
12527 Leaves bitripinnatifid and involucre downy
12528 Leaves pinnatifid smoothish segm 2-3-toothed, Teeth piliferous, Outer scales of involucre lanceolate
12529 Leaves flat smooth cut pinnatifid at end, Outer lvs of involucre scarious at end, Pappus obsolete
12530 Leaves fleshy linear pinnatifid and bipinnatifid, Pappus much shorter than the florets of disk

12531 The radical and lower cauline leaves pinnatifid

12532 Leaves tomentose root ones lanceolate, stem ones pinnatifid, Stem simple
12533 Flower very large

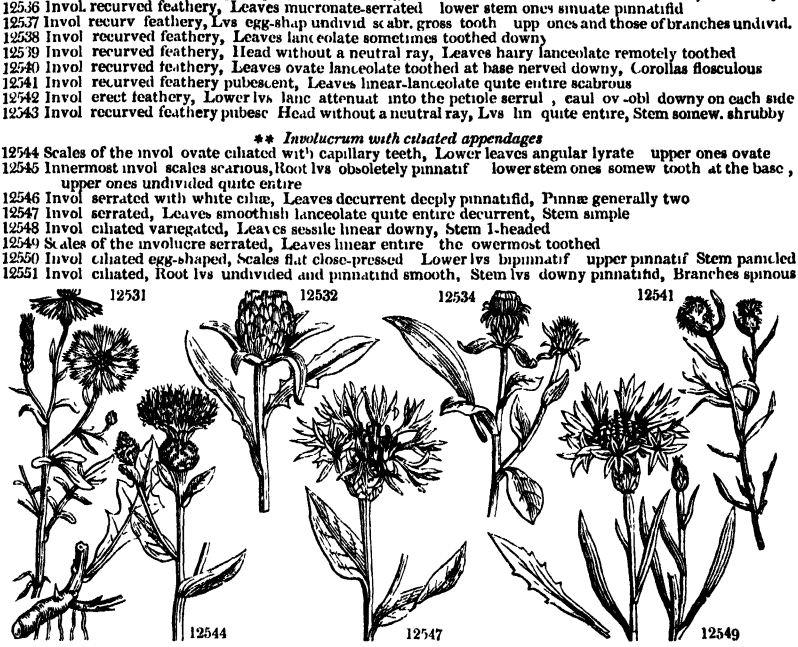
§ 1 CYANUS. *Involucrum ciliated, unarmed.*

* *Involucrum with feathery setæ*

12534 Inv recurved-feathery, Leaves oblong undivided scabrous mucronate serrulated
12535 Inv recurved-feathery top-shaped, Leaves oblong undivided scabrous mucronate serrulated, Stem simple
12536 Involucrum recurved feathery, Leaves mucronate-serrated lower stem ones sinuate pinnatifid
12537 Involucrum recurv feathery, Lvs egg-shap undivid scabr. gross tooth upp ones and those of branches undivid.
12538 Involucrum recurved feathery, Leaves lanceolate sometimes toothed downy
12539 Involucrum recurved feathery, Head without a neutral ray, Leaves hairy lanceolate remotely toothed
12540 Involucrum recurved feathery, Leaves ovate lanceolate toothed at base nerved downy, Corollas flosculous
12541 Involucrum recurved feathery pubescent, Leaves linear-lanceolate quite entire scabrous
12542 Involucrum erect feathery, Lower lvs lanc attenuat into the petiole serrul, caul ov-obl downy on each side
12543 Involucrum recurved feathery pubesc Head without a neutral ray, Lvs lin quite entire, Stem somew. shrubby

** *Involucrum with ciliated appendages*

12544 Scales of the involucrum ovate ciliated with capillary teeth, Lower leaves angular lyrate upper ones ovate
12545 Innermost involucrum scales scarious, Root lvs obsoletely pinnatif lower stem ones somew tooth at the base, upper ones undivided quite entire
12546 Involucrum serrated with white ciliæ, Leaves decurrent deeply pinnatifid, Pinnæ generally two
12547 Involucrum serrated, Leaves smoothish lanceolate quite entire decurrent, Stem simple
12548 Involucrum ciliated variegated, Leaves sessile linear downy, Stem 1-headed
12549 Scales of the involucre serrated, Leaves linear entire the owermost toothed
12550 Involucrum ciliated egg-shaped, Scales flat close-pressed Lower lvs bipinnatif upper pinnatif Stem panicled
12551 Involucrum ciliated, Root lvs undivided and pinnatind smooth, Stem lvs downy pinnatifid, Branches spinous



and Miscellaneous Particulars.

1819 *Centaurea.* It is said, that with this plant, the *Centaur* Chiron cured the wound in his foot made by the arrow of Hercules Crupina is from the Dutch verb *kruipen*, which signifies to creep; because the dark multifid pappus resembles the legs of a creeping insect.

Phrygia signifies dry (φρυγ ιος), in allusion to its calyx

Jacea is said to have been so named from *jacere*, to lie down, on account of its prostrate habit.

Calcitrapa, the Latin of a caltrop, or iron ball covered with stiff spines, formerly used in warfare to impede the operations of cavalry Its calyx is very like one of these instruments

Centaurea Crocodilium is so named, because the spines of the calyx have been fancifully likened to the claws of a Crocodile.

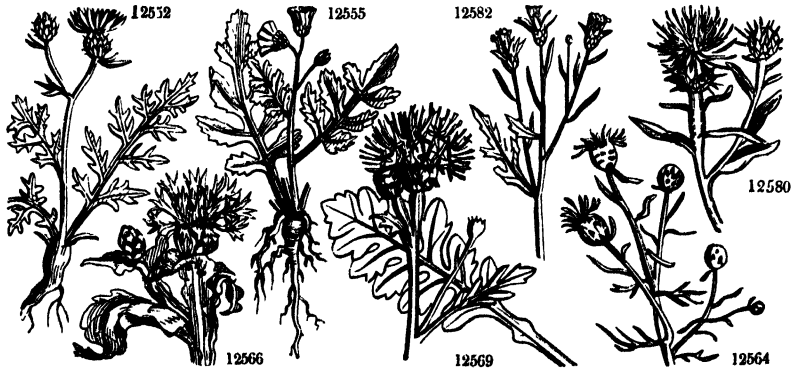
Verutum, the name of another species, is the Latin of a short javelin used by the Roman foot-soldiers The spines on its calyx resemble a small dart

C. nigra is a harsh stubborn weed in meadows and permanent pastures, seldom touched by cattle either green or in hay, and with difficulty extirpated C cyanus, *Bluet*, Fr., *Kornblume*, Ger., and *Cano*, Ital., is a common weed in corn fields, on gravelly soils, throughout Europe, and also a popular border annual The expressed juice of the natural florets makes a good ink; it also stains linen of a beautiful blue, but the color is not permanent. C. benedicta was so called from its being supposed to possess extraordinary medical powers, it was

12552 **Cinerária** *W.*	hoary-leaved	△	or	3	jl au	Pu	Italy	1710.	D	co	Mor. s.7. t 26 f20
12553 **cinérea** *W.*	gray	△	or	2	jn jl	Pu	Italy	1710.	D	co	Jac. vind. 1. t 92
12554 **dealbáta** *W.*	mealy	△	or	1½	jl au	Pu	Caucasus	1804.	D	co	
12555 **argéntea** *W.*	silver-leaved	⎍	or	1½	jl.au	Pa Y	Candia	1739	C	p.l	Barr ic. t 218
12556 **coriácea** *W*	leathery-leaved	△	or	1½	jn jl	Pu	Hungary	1804.	D	co	Pl.rar hu.2./.195
12557 **Fischéri** *W en.*	Fischer's	△	or	2	jn jl	Vi	Siberia	1816.	D	co	
12558 **macrocéphala** *W.*	large-headed	△	or	3	jn au	Y	Caucasus	1805.	D	co	Bot mag. 1248
12559 **átropurpúrea** *W*	dark-purple	△	or	3	jn au	Pu	Hungary	1802	D	co	Pl rar hu 2 t 116
12560 **aláta** *W*	winged-stalked	△	or	1½	au s	Y	Tartary	1781.	D	co	Vent. cels 80
12561 **elongáta** *W*	long	△	or	2	au s	Vi	Barbary	1823.	D	co	
12562 **Scabiósa** *W*	Great Knapweed	△	w	1½	jn au	Pu	Britain	corn fl.	D	co	Eng. bot. 56
12563 **intybácea** *H K.*	Succory-leaved	△	or	1½	jl s	Pu	S. Europe	1778.	D	co	
12564 **maculósa** *P S*	spotted-calyxed	△	or	1	jl au	Pu	Siberia	1816.	D	co	Gm.s 2.t 44 f 1,2
12565 **Stœ'be** *W*	wing-leaved	△	or	1	jn.jl	Y	Austria?	1759.	D	co	
12566 **ochroleúca** *W*	Caucasian	△	or	1½	jl au	Pa Y	Caucasus	1801.	D	co	Bot. mag. 1175
12567 **ovína** *W.*	sheep's	△	or	1	jl n	Y	Caucasus	1802.	D	co	
12568 **sempervírens** *W*	evergreen	△	or	1½	jl au	Y	Spain	1683.	C	p.l	Bocc sic t 39 f.3
12569 **ragusína** *W.*	white-leaved	⎍	or	2	jn jl	Y	Candia	1710	C	p l	Bot mag. 494
12570 **tatárica** *W*	Tartarian	△	or	2	jl au	Y	Tartary	1801	D	co	
12571 **calocéphala** *W. en.*	smooth-stalked	△	or	3	jn au	Y	Levant	1816.	D	co	

12572 **coronopifólia** *W.*	Buck's-horn	○	or	3	jn jl	Y	Levant	1739	S	co	
12573 **parviflóra** *W*	small-flowered	△	or	1½	jn jl	Vi	Barbary	1823.	D	co	
12574 **reflexa** *W.*	crook-spined	△	or	3	jl au	Y	Iberia	1801	D	co	
12575 **centauroides** *W.*	lyre-leaved	△	or	3	my jl	Y	S Europe	1739.	D	co	Col ecph 1 t 35
12576 **collina** *W*	hill	△	or	3	jn jl	Y	S Europe	1596.	D	co	
12577 **rupéstris** *W*	rock	△	or	2	jl au	Y	Italy	1804.	D	co	Co ecp 1 t et f 2
12578 **pubéscens** *W*	downy	△	or	1	jl au	Y	.....	1804	D	co	
12579 **Balsamita** *W*	Syrian	△	or	2	jl au	Y	Syria	1820	D	co	
12580 **aurea** *W.*	great-golden	△	or	2	jl s	Y	S Europe	1758.	D	co	Bot. mag 421
12581 **peregrina** *W.*	soft-leaved	○	or	2	jl au	Y	S Europe	1740	S	co	
12582 **radiáta** *W*	rayed	△	or	1½	jl au	W	Siberia	1804.	D	co	Gm.sib 2 t 47 f 1
12583 **sórdida** *W*	sordid	△	or	1	jl au	Pu	.....	1818	D	co	
12584 **hybrida** *W*	hybrid	△	or	1½	jl au	Y	Tauria	1822	D	co	
12585 **rigida** *W*	rigid	△	or	1	jl au	Pu	.....	1823.	D	co	

12586 **sonchifólia** *W*	Sow-thistle-lvd	△	or	1	au o	Pu	Mediterr.	1780.	D	co	Pluk phyt 39 f 1
12587 **cruénta** *W en.*	obovate-leaved	△	or	1	jn au	Pu	.....	1816.	D	co	
12588 **Séridis** *W.*	purple-flower'd	△	or	1	jn au	Pu	Spain	1686.	D	co	Plu alm t 38 f 1
12589 **romána** *W.*	Roman	○	or	3	jl s	R	Rome	1739	S	co	Barr rar t 504
12590 **férox** *W*	hedgehog	△	or	2	jl s	Pu	Barbary	1790	S	p l	Desf atl 2 t 242
12591 **sphærocéphala** *W*	globe-headed	△	or	2	jl au	Pu	S Europe	1683	D	co	Bot mag 2551
12592 **Isnárdi** *W*	Jersey	△	or	1	jl au	Pu	Britain Jersey		D	co	Eng bot 2256
12593 **napifólia** *W*	Turnip-leaved	○	or	3	jl s	Pu	Candia	1691	S	co	Herm par t 189
12594 **áspera** *W*	rough	○	or	2	jn o	Pu	S Europe	1772	S	co	Boc mus 35 t.26
12595 **pulláta** *W*	various-colored	△	or	2	jn au	Pu	S Europe	1759	D	co	Lob ic. t 542. f.2
12596 **polyacántha** *W.*	many spined	○	or	½	jl au	Pu	Portugal	1804	S	co	
12597 **benedicta** *W.*	Blessed Thistle	○	or	2	jn o	Y	Spain	1548	S	co	Zorn ic 122
12598 **solstitiális** *W*	Barnaby's Thistle	○	or	2	jl au	Y	England	fields	S	co	Eng bot 243
12599 **melitensis** *W*	cluster-headed	○	or	½	jl au	Y	Malta	1710	S	co	Bocc sic t. 35
12600 **sulphúrea** *W en.*	sulphur-colored	○	or	½	jl au	Y	.....	1815	S	co	
12601 **sícula** *W*	Sicilian	○	or	1½	jl au	Y	Sicily	1710	S	co	Bocc. sic. t 8. f 1
12602 **Adámi** *W.*	Adams	○	or	1	jl au	Y	Siberia	1804	S	co	
12603 **stramínea** *W.*	straw-colored	○	or	½	jl au	Y	Egypt	1801	S	co	W. hort. ber 26
12604 **erióphora** *W*	woolly-headed	○	or	½	jn o	Y	Portugal	1714.	S	co	
12605 **Calcitrapa** *W*	Star-thistle	○	or	1	jl au	Pk	England	gra.so	S	co	Eng bot 125
12606 **calcitrapoides** *W.*	Phœnician	○	or	1	jn jl	Pu	Levant	1683	S	co	
12607 **Verútum** *W*	dwarf	○	or	2	au s	Y	Levant	1780	S	co	Jac. ic 1 t. 178
12608 **ægyptiaca** *W.*	Egyptian	△	or	1	jn s	W	Egypt	1790.	C	p.l	



History, Use, Propagation, Culture,

said not only to destroy worms and cure fevers, but also the plague, and the most putrid and stubborn ulcers and cancers. At present it is in no estimation whatever

It has by some botanists been thought advisable to separate this genus into several others; but the differences upon which the separation has been made depend upon variations in the form of the involucrurs,

12552 Involucre ciliated, Leaves downy very white all compound · lowest bipinnatifid, highest pinnate-laciniated
12553 Involucre ciliated, Leaves somewhat downy cinereous: lower ones pinnate-laciniate, upper ones simple
12554 Involucre ciliated, Lvs. downy undern. Root lvs bipinnatifid: segm. lanceolate acute, Stem-leaves pinnatifid
12555 Involucre serrated, Leaves downy · root ones pinnated, upper 1-eared
12556 Involucre ciliat. smooth, Lvs pinnatif. scabr. Segm. obl. lanc. acute highest root ones sometimes cut at base
12557 Involucre ciliated sphacelate, Scales spreading, Leaves obl. lanc. entire villous downy · cauline decurrent
12558 Involucre scales roundish egg-shaped ciliated, Leaves oblong lanc. undivided very scabrous acute serrated
12559 Involucre scales ovate lanceolate serrate-ciliated, Leaves bipinnatifid, Segments lanceolate
12560 Involucre egg-shaped smooth, Scales somew. scar. at tip, Lvs greenish decurr. undivided radical ones lyrate
12561 Involucre scales scar. at tip serr. Lvs. scab. at edge root ones obl. tooth., stem ones lanc. somew. decurr. quite ent.
12562 Scales of the involucre ciliated ovate pubescent, Leaves pinnatifid roughish the segm. lanceolate acute
12563 Involucre ciliated nearly globular, Leaves deeply pinnatifid, Segments linear
12564 Involucre. ciliated ovate roundish beautifully spotted, Leaves slender bipinnatifid, Stem a little panicled
12565 Involucre ciliated oblong, Leaves pinnatifid linear quite entire
12566 Involucre serrated, Leaves oblong serrated decurrent and undivided [branched divaricated
12567 Involucre ciliat. Scales ovate-lanc. spread at tip, Lower lvs bipinnatif. lanc. lin · upper ones pinnatifid, Stem
12568 Involucre ciliated, Leaves lanceolate serrated lowest tooth elongated so as to appear like a stipule
12569 Involucre ciliated, Leaves downy pinnatifid, Segments obtuse egg-shaped quite entire outer ones largest
12570 Involucre ciliated, Leaves scabrous underneath pinnatifid, Segments lanceolate sometimes toothed
12571 Involucre scarious, Scales ovate lanceolate serrated ciliated, Leaves scabrous beneath: radical bipinnatifid

§ 2. CALCITRAPA. *Involucrum ciliated with spines*

* *Spines simple* [panicled

12572 Involucre erect feathery, Head without a neutral ray, Lower lvs pinnatif upper ones lin. All quite ent. Stem
12573 Involucre ciliate-spinous egg-shaped, Scales reflexed at tip, Lvs hoary root ones lyrate, stem ones linear
12574 Involucre ciliate-spinous at tip, Spines of lower scales reflex. Lvs pinnat. Pinnæ lin. obt. Root leaves bipinnat.
12575 Involucre ciliate-spinous, Leaves lyrate-pinnated generally entire terminal lobe large toothed
12576 Involucre ciliate-spinous, Stem-leaves pinnatifid root ones bipinnatifid, Segments lanceolate
12577 Involucre ciliate-spinous, Stem leaves pinnated root leaves bipinnated, Pinnæ linear-filiform
12578 Involucre ciliate-spin. at tip, Stem-lvs pinnatif. lin. lanc. root ones bipinnatif. Segm. lanc. terminal 1-toothed
12579 Involucre ciliate fringed with straight rigid white bristles, Lvs. obl. a little toothed, Head yell. without a ray
12580 Involucre simply spinous, Spines spreading, Florets equal, Leaves hairy lower ones pinnatifid
12581 Involucre bristly spinous, Leaves lanceolate petioled toothed near the base
12582 Involucre scarcely spinous somewhat awned rayed, Leaves pinnatifid
12583 Involucre ciliated spinous, Stem-leaves pinnated quite entire root-leaves bipinnatifid
12584 Involucre ciliate spinous at the tip, Leaves hoary pinnatifid quite entire upper ones linear-lanceolate
12585 Involucre ciliate subspiny, Leaves oblong downy sessile somewhat toothed, narrowed at base deeply toothed

** *Spines palmate*

12586 Involucre palm.-spin. Spines reflex Lvs obl. smooth embracing the stem ½ decurr. repand tooth Teeth prickly
12587 Involucre palm.-spinous, Spines reflex Lvs. obov. somew. tooth stalked floral somew. decurr. mucro.-toothed
12588 Involucre palm.-spin. Spines reflex Lvs obl. hoary embrac. stem ½-decurr. tooth cut at base, Teeth rather prickly
12589 Involucre palm. spinous, Lvs decurr. not prickly root ones pinnatifid, terminal lobe very large
12590 Involucre palm spin. Spines reflex larger than calyx, Lvs hoary obl. sess. decurr. pinnatifid, Teeth not prickly
12591 Involucre palmate spinous, Lvs ovate-lanc. petioled toothed
12592 Involucre palmate spinous solitary sess. Lvs lanc. a little embracing the stem pinnatifid toothed
12593 Involucre. palmate spinous, Stem lvs lanc. toothed decurrent root lvs lyrate obtuse
12594 Involucre palmate spinous, Spines 3 or 5, Lvs lanc. sessile toothed
12595 Involucre ciliated surrounded by a whorl of long lvs Lvs lyrate toothed obtuse
12596 Involucre palmate spinous, Lvs embracing the stem runcinate pinnatifid prickly · toothed root ones lyrate
12597 Involucre. doubly spinous woolly bracteated, Leaves half decurrent toothed spiny
12598 Involucre palm. spinous term. solitary, Spines straight, Lvs lanc. decurr. not prickly root ones lyrate
12599 Involucre palm spin. term. ones clustered sess. Spines straight, Lvs lanc. scabrous decurr. not prickly. lower stem ones a little toothed, root ones sinuated
12600 Involucre palm spinous solitary subsessile, Spines straight, Lvs lanc. scabrous toothletted decurrent
12601 Involucre palm spin. Spines spread. Lvs scabr. stem lvs lanc. a little embrac. stem finely tooth., root ones lyrate
12602 Involucre palm spinous solit. Spines straight inner scales scarious at the tip, Lvs downy lanc. decurr. lower ones finely toothed pinnatifid at the base
12603 Involucre palmate spinous terminal sess. glomerated, Leaves petioled pinnatifid cut-toothed

*** *Appendages of involucrum spiny-pinnate*

12604 Involucre doubly spinous woolly, Lvs. half decurrent entire and sinuated, Stem proliferous
12605 Involucre doubly spinous sess. Lvs pinnatifid toothed, Stem divaricated spreading hairy
12606 Involucre. somewhat doubly serrated, Lvs embracing the stem lanc. undivided serrated [entire decurr.
12607 Involucre palm spin. midd. spine very long, lat. ones short, Root-lvs sinuate-pinnatif. Stem ones lanc. quite
12608 Involucre. doubly spinous somewhat woolly, Lvs sess. lanc. entire and toothed, Stem proliferous



and Miscellaneous Particulars

unconnected with differences of organization, they are therefore not adopted here. The tribe of Centaureæ of M. Cassini is not distinguished from Carduineæ by any very important characters. The greater part of the species are natives of Europe and Asia, several of Africa, a very few of America, and none of the southern parts of the world.

12609 **salmántica** *W.*	Ragwort-leaved	♃	○	or	3	jl.au	Pu	S. Europe	1596	S	co	Jac. vind. 1. t. 64
12610 **muricáta** *W.*	muricated		♂	or	1	jl.au	Pu	Spain	1621.	S	co	
12611 **Crocodýlium** *W*	blush-flowered		○	or	1½	jl.au	Pu	Levant	1777.	S	co	Barr. rar t. 503
§12612 **Rhapóntica** *W.*	Swiss	♃	△	or	1½	jl.au	Pu	Switzerl.	1640.	D	co	Bot mag 1752
12613 **babylónica** *W.*	Babylonian	♃	△	or	7	jn s	Y	Levant	1710.	D	co	Alp. exot. t. 282
12614 **splendens** *W.*	shining	♃	○	or	3	jl au	Pu	Spain	1597	S	co	
12615 **dilátа** *H K*	pale-flowered	♃	△	or	2	jl au	Pa.pu	S Europe	1781.	D	co	
12616 **decúmbens** *P S*	decumbent	♃	△	or	1½	jl s	Pu	France	1815	D	co	
12617 **Jácea** *W*	Brown Knapw	♃	△	w	1½	jl s	Pu	England	past.	D	co	Eng bot. 1678
12618 **tagána** *W.*	Portugal	♃	△	un	1½	jl au	Pu	Portugal	1640	D	co	Brot phy lus t.8
12619 **álba** *W.*	white-flowered	♃	△	or	2	jn s	W	Spain	1597	D	co	
12620 **amára** *W*	bitter	♃	△	or	1½	jl au	Pu	Italy	...	D	co	Boc mus 3 t 17
§12621 **nítens** *W.*	shining		○	or	2	jl au	Pu	Caucasus	1823.	S	co	Bu cen 2 t 15 f 1
12622 **sibírica** *W*	Siberian	♃	△	or	1	jl.au	R	Siberia	1782	D	co	Gm sib.2 t 42 f 2
12623 **glastifólia** *W.*	Woad-leaved	♃	△	or	4	jn s	Y	Siberia	1731.	D	co	Bot. mag 32
12624 **oriéntális** *W*	oriental	♃	△	or	1½	jl au	Y	Siberia	1759	D	co	
12625 **Béhen** *W*	saw-leaved		○	or	1½	jl au	Y	Levant	1797	S	co	
12626 **répens** *W.*	creeping	♃	△	or		jn au	Y	Levant	1739	D	co	
12627 **moscháta** *W*	Sweet Sultan		○	or	2	jl o	Pu	Persia	1629	S	s l	Kn thes 2 t C 4
12628 **Centaúrium** *W*	great		△	or	4	jl au	Y	Italy	1596	D	co	
12629 **ruthénica** *W*	Russian	♃	△	or	3	jl au	Pa.Y	Russia	1806.	D	co	Gmel. sib. 2. t 41
12630 **suavéolens** *W*	Yellow Sultan		○	or	1½	jl o	Y	Levant	1683.	S	s l	Sweet fl gard 51
12631 **Crupína** *W.*	black-seeded		○	or	3	jn jl	F	Italy	1596	S	co	Col ecphr 1 t 54
12632 **Lippii** *W*	Lippi's		○	or	1	jn jl	Pa.pu	Egypt	1739	S	co	Is a.pa 1719 t 10
12633 **glaúca** *W.*	glaucous	♃	△	or		jn jl	Pa Y	Caucasus	1805	D	co	
12634 **alpína** *W.*	Alpine	♃	△	or	3	jl au	Y	Italy	1640	D	co	Corn.can 69.t 70

1820 GALACTITES. *P S.* Galactites. *Compositæ* *Sp* 1.

12635 **tomentósa** *P S*	woolly		○	or	1½	jl au	Pu	S Europe	1738	S	co	An mus 16 t 9

NECESSARIA.

1821 WEDE'LIA. *W* Wedelia *Compositæ* *Sp* 3—21

12636 **hispída** *Kth*	hispid	♀	△	or	1½	jn	Y	N Spain	1819	D	co	Bot reg 543
12637 **radiósa** *Ker*	many-rayed	♃	□	or	3	ap n	Y	Brazil	1820	C	co	Bot reg 610
12638 **perfoliáta** *W*	perfoliate		○	un	2	jl au	Y	Mexico	1796	S	co	Cav ic. 1 t 15
Alcina perfoliata Cav.												

1822 MILLE'RIA *P S* Millería *Compositæ* *Sp* 2.

12639 **quinquefíora** *W.*	five-flowered		□	un	2	jl o	Y	Vera Cruz	1731	S	co	Cav ic 1 t 82
12640 **biflóra** *W*	two-flowered		□	un	1	jl o	Y	Campeachy	1730	S	co	Mart dec. 47 f 1

1823 BALTIMO'RA *W* Baltimora. *Compositæ* *Sp* 1

12641 **récta** *W*	upright		○	un	2	jn jl	Pa Y	Vera Cruz	1699	S	co	Sch.ha.3 t.261 C

†1824 SILPHIUM *W* Silphium *Compositæ* *Sp* 10—15

12642 **lacinátum** *W*	jagged-leaved	♃	△	w	12	jl s	Y	N Amer	1781	D	co	Lin. fil fas 1 t 3
12643 **compósitum** *W*	scollop-leaved	♃	△	w	6	jl s	Y	N Amer	1789	D	co	
12644 **terebinthináceum** *W*	broad-leaved	♃	△	w	6	au s	Y	N Amer	1765	D	co	Jac vind. 1 t. 43
12645 **perfoliátum** *W*	perfoliate	♃	△	w	7	jl o	Y	N Amer	1766	D	co	
12646 **conjúnctum** *W en*	conjoined	♃	△	w	7	jl o	Y	N Amer	.	D	co	
12647 **connátum** *W*	round-stalked	♃	△	w	6	jl o	Y	N Amer	1765	D	co	
12648 **Asteriscus** *W*	hairy-stalked	♃	△	w	5	jl s	Y	N Amer	1732	D	co	Dill elt t 37 f 42
12649 **trifoliátum** *W.*	three-leaved	♃	△	w	6	jl o	Y	N Amer	1755	D	co	Moris s 6 t 3.f 68
12650 **ternátum** *W*	various-leaved	♃	△	w	4	jl o	Y	N Amer	1806	D	co	
12651 **átropurpúreum** *W*	purple-stalked	♃	△	w	4	jl o	Y	N Amer	1812	D	co	



History, Use, Propagation, Culture,

C moschata is a handsome border annual, of which there is a white-flowered variety. C Centaurium, montana, splendens, and glastifolia, are among the most ornamental of the perennials

1890 *Galactites* A plant formerly included in Centaurea, and named on account of the milky veins of its leaves (γαλα, milk).

1821. *Wedelia* Named after George Wolfgang Wedel, a German, born in 1625, died in 1721 He was professor at Jena, and published many learned dissertations upon the plants of the ancients There was also a John Adolphus Wedel, professor in the same university.

§ 3. CROCODYLIUM *Involucrum not ciliated, but spiny at end*

12609 Invol. globul smth Spine very small weak a little reflex. Lvs lanc serrat · root ones lyrate, Stem divaricat
12610 Invol simply spinous villous, Lower lvs lyrate toothed upper ones lanc Peduncles very long
12611 Invol. scarious simply spinous, Lvs. pinnatifid quite entire terminal : segm larger toothed

§ 4 RHAPONTICUM. *Leaves of involucrum with a round scarious appendage, which is often lacerated.*

12612 Invol. scales lacerated, Lvs ovate-obl. finely toothed tomentose [ones lyrate
12613 Invol. conical hard, Scales ending in a patulous point, Lvs somew tomentose decurr undivided root
12614 Inv. egg-shap Scales mucronat Lower lvs bipinnatif lin upper one pinnat Pinnæ lin sometimes toothed
12615 Invol ciliated, Scales acum somew thorny, Lvs obl pinnatif. Florets of the ray longer than those of disk
12616 Invol. scarious, Scales dilated cut, Lvs linear-lanc radical cut
12617 Scales of invol. scarious torn lower ones pinnatifid, Lvs. lin lanc. the lower ones broader and toothed
12618 Invol. scales roundish quite ent. Lvs obl smth root ones serrat Stem ones sometimes slightly cut at base
12619 Invol scales entire mucronated, Lvs pinnate toothed · stem ones linear toothed at the base
12620 Stems decumbent, Lvs lanc quite entire
12621 Invol. cylindrical, Scales mucronated, Lvs pinnated, Pinnæ lin mucronated quite entire
12622 Invol scales egg-shaped obtuse ciliated, Lvs downy on both sides pinnatif and undivided, Stem declining
12623 Leaves undivided quite entire decurrent
12624 Invol scales pectinate ciliated, Lvs deeply pinnatifid, Segm linear lanceolate [the stem decurrent
12625 Invol conical, Scales quite ent Lvs coriaceous reticularly veined root ones lyrate, stem ones embracing
12626 Leaves lanc. toothed somewhat petioled, Peduncles filiform leafless

§ 5. *Leaves of involucrum neither ciliated, nor spiny, nor with a scarious appendage*

12627 Invol roundish smooth, Scales egg-shaped, Lvs lyrate toothed
12628 Invol scales egg-shaped, Lvs pinnated, Leaflets decurrent serrated
12629 Invol scales egg-shap obt Lvs pinnat smooth, Leafl cartilagin sharply serrat termin one obl egg-shaped
12630 Invol round smooth, Lower lvs broad somew spatul tooth upp ones lyr at base, Head yell sweet scent
12631 Invol scales linear awl-shaped, Leaves pinnated serrated
12632 Invol scales mucronate, Leaves somewhat decurrent lyrate toothed
12633 Invol pubescent, Scales roundish obtuse, Leaves deeply pinnatifid lowest segments toothed
12634 Invol. scales egg-shaped obtuse, Leaves pinnated smooth quite entire odd one serrated

12635 Invol bristly spinous, Leaves decurrent sinuated spinous downy underneath

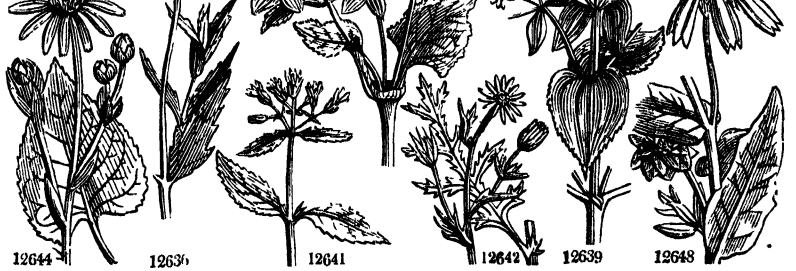
NECESSARIA.

12636 Leaves lanceolate acuminate serrated with a large tooth on each side at the base
12637 Leaves ovate-lanceolate, Invol urceolate squarrose, Rays imbricated
12638 Stem herbacaous, Leaves rhomboid narrowed at base connate

12639 Leaves stalked roundish-ovate narrowed at base floral subcordate, Pedunc terminal dichotomous
12640 Leaves stalked oblong ovate ciliated, Pedunc terminal aggregate

12641 Stem winged, Heads pale-yellow small

12642 Radical and cauline leaves pinnatifid, Stem hirsute
12643 Cauline leaves sinuate pinnatifid radical ternate sinuate multifid
12644 Leaves alternate ovate serrated scabrous radical cordate
12645 Leaves opposite deltoid stalked perfoliate, Stem square smooth
12646 Lvs opp conn unequally toothed, Stem smooth square, Four outer sc of invol. longer than the inner
12647 Leaves sessile stalked, Stem round scabrous
12648 Leaves opposite or alternate sessile oblong hairy lower serrate, Stem round hispid
12649 Stems 6-angled, Leaves ternate ovate toothed, Panicle trichotomous
12650 Stems round, Leaves ternate somewhat toothletted, Panicle dichotomous
12651 Stems round, Leaves about 4 toothletted, Panicle dichotomous



and Miscellaneous Particulars

1822. *Milleria* So named by Linnæus, after Philip Miller, F R. S., the well known author of the Gardener's Dictionary, and considered the first botanical gardener of his time He was born in 1692, and died in 1769

1823. *Baltimora* This plant grows in the neighbourhood of Baltimore

1824 *Silphium.* D'Herbelot asserts, that *silphi* or *serpi*, was a name given by the natives of Africa to the plant which produced the *laser* of the Romans, a substance held in great esteem among them for its flavor and its medicinal properties All the species are tall herbaceous plants with bright yellow flowers, and are very proper ornaments for a shrubbery.

1825. TRIX'IS *Dec.*	TRIXIS.				*Compositæ.*	*Sp* 1—5						
12652 senecioides *Hooker*	Groundsel-like	○	pr	1½	au s	W	Chili	1821.	S	co	Hook ex. fl. 101
1826 POLYM'NIA *W*	POLYMNIA.				*Compositæ*	*Sp.* 3—4						
12653 canadénsis *W*	Canadian	☿	△ or	6	jl au	L Y	N. Amer.	1768.	D	co	L am.ac.3 t.1.f.5
12654 Uvedália *W*	broad-leaved	☿	△ or	8	au o	Y	N Amer	1699.	D	co	Cav. ic. 3. t. 227
12655 abyssínica *W*	upright	☾	◫ or	4	ap my	Y	Africa	1775	S	co	
1827 CHRYSO'GONUM *L*	CHRYSOGONUM				*Compositæ.*	*Sp* 1						
12656 virginiánum *L*	Virginian	☿	△ pr	¼	my jn	Y	N Amer	...	D	p.l	Plu alm t 83 f 4
1828 MELAMPO'DIUM *W*	MELAMPODIUM				*Compositæ.*	*Sp* 2—6						
12657 americánum *W*	American	◫	un	1½	au o	W	Vera Cruz	1733	S	co	Rel. Hous. 9. t 21
12658 humile *W*	dwarf	◫	un	1½	jn o	W	Jamaica	1782	S	co	
†1829 CHAPTA'LIA. *Vent*	CHAPTALIA.				*Compositæ*	*Sp* 1						
12659 tomentósa *Ph*	woolly	☿	△ pr	¼	my jn	W	N. Amer	1806.	D	co	Bot. mag 2257
1830 CALEN'DULA *W*	MARYGOLD				*Compositæ.*	*Sp* 19—34						
12660 arvénsis *W*	field	○	or	2	my s	D Y	Europe	1597	S	co	
12661 sícula *W en*	Sicilian	○	or	1	my s	D Y	Sicily	1816.	S	co	
12662 stellàta *W*	starry	○	or	2	jn s	O	Barbary	1795	S	co	Sch. hand 3. t. 265
12663 officinális *W*	common	○	or	3	jn s	O	S Europe	1573	S	co	
β plena	*double-flowered*	○	or	3	jn s	O	.....	...	S	co	
12664 sáncta *W*	pale-flowered	○	or	2	my s	Y	Levant	1731	S	l p	
12665 incána *W*	hoary	○	or	1½	jn au	Y	Barbary	1796	S	l p	Desf atl 2 t. 245
12666 pluviális *W*	Small Cape	○	or	1	jn au	W pu	C G H.	1699	S	s l	Mill ic t. 75 f. 2
12667 hýbrida *W*	Great Cape	○	or	1	jn jl	W	C G H	1752	S	s l	Sweet fl gard 39
12668 nudicaúlis *W*	naked-stalked	○	or	1	jn au	W pu	C G H.	1731	S	s l	Com hort 2 t. 33
12669 graminifólia *W*	Grass-leaved	☾	△ or	1	my s	W pu	C G H	1731.	C	p l	Bot reg 289
12670 Trágus *W*	bending-stalk'd	☊	▭ or	2	my jn	W pu	C G H	1774.	C	p l	Bot. mag 1981
β flaccida V	*flaccid*	☊	▭ or	2	my jn	Or	C G H.	1774.	C	l p	Bot reg 28
12671 viscósa *H K*	viscous	☊	▭ or	2	jn s	Or	C G H.	1790	C	p l	Bot rep 412
12672 oppositifólia *W*	glaucous-leav'd	☊	▭ or	2	au	Y	C G H.	1774	C	p l	
12673 fruticósa *W*	shrubby	☊	▭ or	2	jn jl	Y	C G H	1752.	C	p l	Mill. ic 2. t. 283
12674 chrysanthemifólia *V*	large-flowered	☊	▭ or	2	mr au	Y	C G H	1790.	C	p l	Bot reg 40
12675 arboréscens *W*	rough-leaved	☊	▭ or	3	d	Y	C G H	1774	C	p l	Jac ic 3. t. 596
12676 suffruticósa *W*	suffruticose	☊	▭ or	1	d	Y	C G H	1823	C	p l	
12677 denticuláta *W*	toothletted	☊	▭ or	2	d	Y	Barbary	1821	C	p l	
12678 muricáta *W*	muricated	☊	▭ or	2	d	Y	C G H	...	C	p.l	
1831 ARCTO'TIS. *H K*	ARCTOTIS				*Compositæ*	*Sp* 26—40						
12679 acaúlis *W.*	dwarf	☾	△ or	¼	ap jl	Y R	C G H.	1759	R	p l	Bot. reg. 122
12680 tricolor *W*	three-colored	☾	△ or	1½	my jl	W R	C G H	1794.	D	l p	Bot reg 131
12681 undulàta *W*	wave-leaved	☾	△ or	1	ap jn	Or	C G H	1795	C	p l	Jac schœ 2 t. 160
12682 grandiflóra *H K*	great-flowered	☾	◯ or	1½	mr my	Pa Y	C G H	1774	S	l p	
12683 glaucophýlla *W*	Sea-green-leav	☾	△ or	1	my au	Y Pu	C G H	1794	D	l p	Jac schœ 2 t. 170
12684 plantaginea *W*	Plantain-leav'd	☾	△ or	1	jn au	Or	C G H	1768	C	p l	
12685 argéntea *W.*	silver-leaved	☾	◯ or	1	au	Or	C G H	1774	D	l p	
12686 rósea *W*	Rose	☾	△ or	1	jl.s	Pk	C G H	1793	C	l p	Jac schœ 2 t 162
12687 decúmbens *W*	decumbent	☾	△ or	1	jl s	Y	C G H	1790	D	l p	Jac schœ.3 t 381
12688 angustifólia *W.*	narrow-leaved	☊	▭ or	1½	jl s	Pu	C G H	1739	C	l p	
12689 flácida *W*	bending-stalked		◯ or	1	my jl	W R	C G H	1794	S	l p	Jac schœ 2 t 163
12690 decúrrens *W*	decurrent	☊	▭ or	1½	jn jl	W R	C G H	1794	C	l p	Jac.schœ 2.t.165
12691 melanocícla *W en*	various-colored	☊	▭ or	1	jn jl	W pu	C G H	1812	C	l p	
12692 réptans *W*	creeping	☾	△ or	¾	jl s	W o	C G. H	1795	R	p l	Jac.schœ 3 t.382
12693 auriculáta *W*	ear-leaved	☊	▭ or	1	jn au	Y	C G H	1795	C	p l	Jac schœ 2.t 169
12694 *tastuósa W*	Orange-flower	☾	◫ spl	2	my jl	O R	C G. H	1795.	S	co	Jac schœ.2 t 166



History, Use, Propagation, Culture,

1825. *Trixis* From τρεις, three, on account of its triangular capsule with three cells

1826 *Polymnia.* Polymnia was the name of one of the Muses Why it has been applied to this plant is not very obvious. A coarse broad-leaved weedy plant.

1827. *Chrysogonum* From χρυσος, gold, and γονυ, a knee The bright yellow flowers are usually produced in the bends of the stems

1828. *Melampodium* One of the Greek names of black hellebore, with which the modern plant has no relation. The plant of the ancients was probably named from the blackness of the roots, (μελας, black, and πους, a foot).

1829 *Chaptalia* Dedicated by Ventenat to the famous French chemist, M. Chaptal. A pretty little North American herbaceous plant.

1830. *Calendula.* So named because it may be found in flower during the *Calends* of each month, or, which is the same thing, during every month in the year. C. pluvialis has been named from its flowers closing at the approach of rain.

12652 Herbaceous downy, Leaves sinuate pinnatifid toothed: cauline amplexicaul

12653 Leaves toothletted acuminate: lower pinnatifid; upper 3-lobed or entire
12654 Leaves 3-lobed acute running down the petiole: lobes angular sinuated
12655 Leaves opposite sessile oblong lanceolate somewhat toothed, Invol. 5-parted, Florets all female

12656 Leafstalks longer than leaves

12657 Stem erect, Leaves somewhat linear 1-toothed on each side
12658 Stem erect, Leaves lyrate-toothed sessile

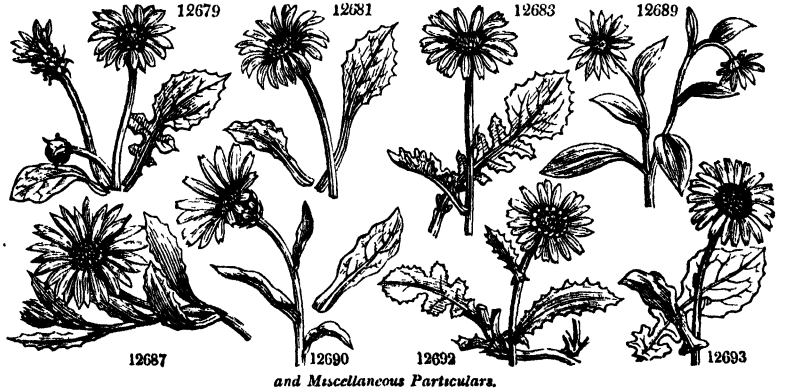
12659 Leaves ovate-oblong entire silvery beneath, Scape naked 1-headed, Head nodding

12660 Pericarps cymbiform muricated incurved: outer lanceolate-subulate muricated at back
12661 Pericarps cymbiform muricated incurved outer ovate with a membranous edge toothed crested at back
12662 Pericarps cymbiform incurved muricated outer 5 ovate-lanceolate membranous toothed at edge
12663 Pericarps cymbiform all incurved muricated

12664 Pericarps urceolate obovate smooth, Involucre somewhat muricated
12665 Pericarps cymbiform smooth outer subulate erect somew muricat Lvs obl. spatul downy on each side
12666 Leaves narrow lanceolate sinuate toothletted, Stem leafy, Peduncles filiform
12667 Leaves oblong lanceolate blunt toothed, Stem leafy, Peduncles thickened at end
12668 Leaves lanceolate sinuate toothed, Stem nearly naked
12669 Leaves linear nearly entire, Stem nearly naked
12670 Leaves linear somewhat toothletted muricate dotted beneath, Pericarps orbicular, Stem suffruticose

12671 Leaves cuneate cut toothed glabrous, Invol downy ciliated, Stem shrubby weak
12672 Leaves opposite linear entire somewhat fleshy smooth
12673 Leaves obovate somewhat toothed, Stem fruticose decumbent
12674 Leaves obovate sublyrate roughish, Stem suffruticose erect
12675 Lvs obl toothed scabrous, Invol in fruit cernuous, Pericarps nearly orbicular, Stem fruticose panicled
12676 Peric cymbif incurv muricat outer lanc subulate muricated erect, Lvs obl spatul downy on each side
12677 Pericarps all uniform incurved cymbiform muricated, Leaves lanceolate toothletted acute smoothish
12678 Leaves oblong papillose scabrous lower toothed, upper entire, Stem shrubby

12679 Radiant florets fertile, Stem very short decumbent, Leaves hoary on each side ternate lyrate
12680 Radiant florets fertile, Leaves downy beneath ovate entire or lyrate-toothed, Scape furrowed 1-headed
12681 Radiant florets fertile, Leaves downy beneath wavy-toothed ovate or lyrate, Scapes 1-headed
12682 Leaves pinnatifid toothletted cobwebbed 3-nerved
12683 Radiant florets fertile, Leaves hoary pinnatifid repand somewhat toothed, Outer scales of invol reflexed
12684 Radiant florets fertile, Leaves lanceolate ovate nerved toothletted amplexicaul
12685 Radiant florets fertile, Leaves lanceolate linear entire downy
12686 Radiant florets fertile, Stem procumbent, Leaves spatulate-lanceolate repand-toothed hoary
12687 Radiant florets fertile, Stem procum Leaves obl. lanc unequally toothed hoary downy beneath 3-nerved
12688 Radiant florets fertile, Stem branched ascending, Leaves downy spatulate lanceolate 3-nerved pubescent
12689 Radiant florets fertile, Stem branched ascending, Leaves spatulate lanceolate entire 3-nerved downy
12690 Radiant florets fertile, Stem shrubby, Leaves hairy oblong undivided somewhat toothed
12691 Radiant florets fertile, Stem shrubby erect hoary, Lvs obov oblong vill toothed decurr down the petiole
12692 Radiant florets fertile, Stem ascend Lvs hairy hoary beneath lower lyrate-toothed, upper lanc tooth
12693 Radiant florets fertile, Stem snow white, Leaves lyrate amplexicaul downy toothed term lobe rhomb
12694 Radiant florets fertile, Stem erect, Leaves hairy oblong toothed, Outer scales of invol reflexed ciliated



and Miscellaneous Particulars.

C officinalis, *Souci du jardin*, Fr, *Goldblume*, Ger, and *Furrancio*, Ital, has been a garden plant time out of mind, and used in soups and broths, both to color them, and as comforters of the heart and spirits It had formerly many virtues ascribed to it, but is now totally out of use in this country According to Linnæus, the flowers are open from nine in the morning till three in the afternoon There are double, lemon-colored, and prolific varieties From the flowers of Calendula officinalis is obtained a distilled water, a kind of vinegar, and a conserve

With this genus for his type, M Cassini has formed a small tribe which he calls Calenduleæ, remarkable for a peculiar smell, very perceptible in the common pot-marygold, which is said to be confined to themselves alone. But this seems to be almost the only character by which they are distinguished from Heliantheæ The greater part of Calenduleæ are found in the country of the Cape of Good Hope, but some are found in Europe and Asia.

1831. *Arctotis* Vaillant, who named this genus, called it *Arctotheca*, from αρκτος, a bear, and θηκη, a capsule, because its fruit is shaggy like a bear. This and some neighbouring genera have given rise to M

12695 spinulósa *W*	thorny-leaved	♃	or	1½	my au	Or	C	G. H	1795.	S	co	Jac.schœ 2 t.167
12696 maculáta *W*	spotted	♃	or	1½	my au	W o	C	G H.	1812.	C	l p	Bot. reg. 130
12697 áspera *B. reg*	broad rough-lv	♃	or	1½	jl s	Y	C	G H	1710	C	p l	Bot. reg 34
12698 auréola *B reg*	narr rough-lv	♃	or	1	jl s	Or	C	G. H	1710	C	p l	Bot reg 32
12699 bicolor *W en*	two-colored	♃	or	1	jl s	W R	C	G. H	1812.	C	l p	
12700 speciósa *B. M.*	shewy	♃	or	1½	jn au	Y	C.	G H	1812.	C	p.l	Bot mag 2182
12701 elátior *W*	tall	♃	or	1½	jn au	Y Pu	C	G. H	1820	C	p l	Jac schœ 2 t.172
12702 arboréscens *W.*	Tree	♃	or	1½	jn au	W pk	C	G H	1818	C	p l	Jac schœ 2 t 171
12703 cúprea *W*	copper-colored	♃	or	1½	jn au	Y Pu	C	G H.	1823	C	p.l	Jac schœ 2 t 176
12704 Cinerária *W*	grey	♃	or	1½	jn au	Y o	C	G. H	1824	D	p l	Jac schœ.2 t 174

1832 OSTEOSPER'MUM *W* OSTEOSPERMUM *Compositæ* *Sp* 9—27.

12705 corymbósum *W*	corymbose	♃	or	3	au	Y	C.	G H	1822.	C	l.p	
12706 spinósum *H K*	rough-leaved	♃	or	3	f o	Y	C	G. H	1700.	S	l p	Com nort 2. t 48
12707 spinéscens *H K*	smooth-leaved	♃	or	3	mr jn	Y	C	G. H	1793	C	l p	Jac schœ 3 t 377
12708 pistíferum *W.*	smooth	♃	or	4	mr my	Y	C	G H.	1757	S	l p	Bot. cab 470
12709 moniliferum *W*	Poplar-leaved	♃	or	3	jl au	Y	C	G H	1714	S	l p	Dil elt t 68 f 79
12710 ilicifólium *W*	Holly-leaved	♃	or	4	jl au	Y	C	G H	1816	C	l p	Bur afr 172. t.62
12711 rígidum *W*	rigid	♃	or	3	ap jl	Y	C.	G H	1774	C	l p	
12712 cæruleum *W*	blue-flowered	♃	or	3	jn s	B	C	G H	1774	C	l p	Jac ic 1 t 179
12713 polygaloides *W*	Milkwort-leav	♃	or	3	jn s	Y	C	G H	1759	C	l p	Pluk.mant.t 382

1833 OTHON'NA *W* RAGWORT *Compositæ* *Sp* 21—39.

12714 pinnáta *W*	wing-leaved	♃	or	3	ap jn	Y	C	G H	1759	C	l p	Bot. mag. 768
12715 pectináta *W.*	Wormwood-lv	♃	or	3	ap jn	Y	C	G. H	1731	C	p l	Bot. mag 306
12716 Athanásiæ *W*	Athanasia-like	♃	or	3	n d	Y	C	G H	1795	C	p.l	Jac schœ.2 t 242
12717 abrotanifólia *W*	Southernw -lv	♃	or	3	ja mr	Y	C	G H	1692	C	p l	Bot. reg 108
12718 retrotráeta *W*	bending-stalk'd	♃	or	2	mr au	Y	C	G H	1812	C	l p	Jac schœ 3 t 376
12719 coronopifólia *W.*	Buckshorn-lvd	♃	or	2	jl s	Y	C	G H	1731	C	p l	Com hort.2 t 70
12720 cheirifólia *W.*	Stock-leaved	♃	or	1½	ap jn	Y	Barbary		1752	C	p l	Bot reg 266
12721 Tagétes *W.*	Marygold-leav	☉	or	1	ap jn	Y	C	G H	1823	S	co	
12722 flabellifólia *B C.*	fan-leaved	♃	or	1	ap jn	Y	C	G H	1821	C	co	Bot. cab. 728
12723 crassifólia *W*	thick-leaved	♃	or	2	s o	Y	C	G H	1710	C	p l	Mil ic 2 t.245, f 2
12724 dentic ulata *W*	tooth-leaved	♃	or	2	ap jl	Y	C	G H	1774	C	p l	Bot mag. 1979
12725 heterophylla *W.*	various-leaved	♃	or	2	ap jl	Y	C	G H	1812.	C	l p	
12726 Lingua *W*	tongue-leaved	♃	or	2½	my s	Y	C	G H	1787	D	l p	Jac schœ 2 t 238
12727 filicaúlis *W.*	Yam-rooted	⁂	or	1½	ap my	Y	C	G H	1791	D	l p	Jac schœ.2 t 241
12728 bulbósa *W*	bulbous	⁂	or	2	my jn	Y	C	G H	1774	D	l p	Breyn. cent t 66
12729 pertoliáta *Jac*	pertoliate	♃	or	1½	my.jl	Y	C	G H	1789	D	l p	Bot mag 1312
12730 parviflora *W*	small-flowered	♃	or	2	jl au	Y	C	G H.	1704	C	p l	Volk norib t 226
12731 ericoides *W*	Heath-leaved	♃	or	2	jl au	Y	C	G H	1815	C	l p	
12732 tenuissima *W*	fine-leaved	♃	or	1½	ap jl	Y	C	G H.	1759	C	l p	Jac.schœ 2.t 239
12733 arboréscens *W*	tree	♃	or	2	jl au	Y	C	G H.	1723	C	p l	Dil.el.t.103 f 123
12734 cacaloides *W*	tuberous	⁂	or	½	my s	Y	C	G H.	1774	D	l p	

1834 HIP'PIA *W* HIPPIA *Compositæ* *Sp* 2—5

12735 frutéscens *W*	shrubby	♃	un	½	f au	Y	C	G H	1710	C	p l	Bot. mag 1855
12736 integrifólia *W*	annual		un	½	jl au	Y	E	Indies	1777	S	l p	H.uat h. t.67 f 2

1835. SOLI'VA *Fl per* SOLIVA *Compositæ* *Sp* 1—6

12737 anthemifólia *R Br*	Chamomile-lvd	○	un	½	jn jl	Ap	N	Holl	1818.	S	co	An.mus. t 61. f 1
Gymnóstyles anthemifólia Juss												

1836 PSIA'DIA. *W* PSIADIA. *Compositæ.* *Sp* 1

12738 glutinósa *W.*	glutinous	♃	un	2	jn au	Y	Mauritius		1796	C	p l	Jac schœ 2 t 1 2

1837. ERIOCE'PHALUS *W* ERIOCEPHALUS *Compositæ* *Sp* 2—4

12739 africánus *W*	cluster-leaved	♃	or	3	ja mr	Y	C	G H	1732	C	p.l	Bot. mag. 833
12740 racemósus *W*	silver-leaved	♃	or	3	mr ap	Y	C	G H	1739	C	p l	

*1838 FILA'GO *L* COTTON ROSE *Compositæ* *Sp* 16—21

12741 germánica *L*	common	○	un	¾	jn au	Y Br	Britain		san fi	S	co	Eng. bot, 948
12742 gállica *L*	narrow-leaved	○	un	¾	jn au	Y Br	Britain		san fi	S	co	Eng. bot, 2369
12743 pyramidáta *L*	pyramidal	○	un	¼	jn au	Br Y	S Europe		1779	S	co	



History, Use, Propagation, Culture,

Cassini's tribe of Arctotideæ, which has the remarkable peculiarity of occasionally producing an ovarium with three cells. In the peculiarities of their style they approach the tribes of Echinopseæ, Cardumeæ, Centaureæ, and Carlineæ. They are entirely confined to the regions of the Cape of Good Hope.

1832. *Osteospermum.* From ὀστεον, a bone, and σπερμα, seed, in allusion to the hardness of the fruit.

1833. *Othonna.* Dioscorides mentions this name as being applied to various things, but especially to a plant with a leaf like rocket, but perforated with little holes, whence it was called Othonna, from ὀθονη, linen. The plant of the ancients can have had little affinity with that of the moderns.

1834. *Hippia.* A name applied by Cordus to the common Chickweed, because it was agreeable food for

12695 Radiant florets fertile, Stem erect, Leaves hoary viscid oblong amplexicaul mucronate-toothed
12696 Radiant florets fertile, Leaves pinnatifid lyrate angular toothed downy beneath
12697 Radiant florets fertile, Stem erect, Leaves pinnatifid scabrous downy beneath revolute at edge
12698 Radiant florets fertile, Outer scales of invol. reflexed cuneate obl. with a broad short point somew. cobw.
12699 Radiant florets fertile, Stem erect, Leaves pinnatifid lyrate hoary downy beneath, Invol imbricated
12700 Stemless, Leaves lyrate pinnatifid hoary beneath 3-nerved, Outer scales of invol. linear recurved
12701 Radi. flor. fertile, Stem erect, Branches downy hairy, Lvs. pinnatif downy ben : seg lin lanc angul downy
12702 Radiant florets fertile, Stem erect, Pedunc. hairy, Lvs pinnatif. hoary downy ben : seg lanc. angul toothed
12703 Radiant florets fertile, Stem erect, Leaves downy beneath : segm. linear subpinnatifid wavy
12704 Radiant florets fertile, Leaves hoary downy long-stalked pinnatifid. segm lanceolate blunt toothed

12705 Leaves lanceolate glabrous, Heads paniculed
12706 Leaves obovate serrate downy, Spines branched
12707 Leaves lanceolate pinnatifid-toothed scabrous, Spines branched
12708 Leaves lanceolate mucronate somewhat stalked smooth serrated, Branches toothletted angular
12709 Leaves obovate serrated stalked subdecurrent
12710 Leaves oblong toothed-angular scabrous ½-amplexicaul Branches furrowed
12711 Leaves toothed pinnatifid hairy, Branches unarmed
12712 Leaves pinnatifid smooth, Segments lanceolate unequally serrated
12713 Leaves lanceolate scattered decurrent smooth entire, Axillæ woolly

12714 Leaves pinnatifid · pinnæ lanceolate entire decurrent
12715 Leaves pectinate-pinnatifid downy segm. linear toothed at the edge
12716 Leaves pinnate filiform, Invol hemispherical many-toothed
12717 Leaves multifid pinnated linear, Joints of stem villous
12718 Leaves lanceolate 1 toothed on each side in the middle or entire, Peduncles axillary, Stem divaricating
12719 Lower leaves lanceolate entire upper sinuate toothed
12720 Leaves lanceolate 3-nerved entire, Stem suffruticose creeping
12721 Leaves deeply pinnatifid glabrous segments linear somewhat toothed, Stem herbaceous
12722 Leaves pinnatifid very small, Peduncles long slender axillary 1-headed, Ray longer than disk
12723 Leaves lanceolate entire somewhat fleshy, Stem erect
12724 Leaves oblong toothletted smooth narrowed at base amplexicaul. Heads paniculed
12725 Radical leaves ovate angular toothed cauline lanceolate entire
12726 Leaves entire radical lanceolate, cauline lanceolate subcordate ½-amplexicaul Stem erect
12727 Leaves entire: radical cordate, cauline ovate lanceol cordate at base amplexicaul Stem flaccid filiform
12728 Leaves ovate somewhat toothed, Peduncles 1-headed very long
12729 Root tuberous, Leaves amplexicaul Peduncles 1-headed
12730 Leaves lanceolate smooth amplexicaul Heads paniculed
12731 Stem dichotomous imbricated leaflets acerose, Peduncle very long solitary in the divarications
12732 Leaves filiform fleshy, Stem shrubby
12733 Leaves oblong entire, Stem arborescent fleshy with woolly scars
12734 Fleshy naked smooth a span high, Leaves fascicled obovate sessile, Peduncle 1-headed

12735 Shrubby villous, Leaves pinnatifid, Heads corymbose
12736 Hispid erect, Leaves ovate serrated 5-nerved, Racemes terminal

12737 Leaves pinnated · leaflets linear many-times lobed acute, Pericarps cuneiform hairy

12738 The only species

12739 Leaves entire and divided, Heads corymbose
12740 Leaves linear silky

12741 Stem erect prolifer. at summit, Lvs lanc downy acute, Fls capitate in the axils of branches and terminal
12742 Stem erect dichotom Lvs lin acum downy, Fls crowded axill. and term Clust much shorter than leaves
12743 Stem erect subdichotomous, Leaves lanceolate spatulate downy, Flowers clustered axillary and terminal



and Miscellaneous Particulars.

horses, ἵππος, a horse; and given to this plant by Linnæus for no reason whatever. Little plants resembling Tansy

1835. *Soliva.* Named by the authors of the Flora Peruviana, after Salvator Soliva, a Spanish physician and botanist.

1836. *Psiadia* From ψιας, a drop of dew, in allusion to the dew-bespangled foliage of the plants.

1837. *Eriocephalus.* From ερίον, wool, and κεφαλη, a head, on account of the woolly grains collected in terminal heads.

1838. *Filago.* All the parts of these plants are covered with delicate threads or *fila.*

12744 **montána** *Pers*	mountain		○	un	½	jn au	Br Y	S. Europe	1820.	S	co	
12745 **minima** *Pers*	least		○	un	½	jl au	Y Br	Britain	sa pas.	S	co	Eng bot 1157
12746 **arvénsis** *Pers*	corn		○	un	½	jl au	Y Br	Europe	1804.	S	co	
12747 **Lagópus** *Pers.*	Hare's-foot		○	un	½	jl au	Y Br	Siberia	1820	S	co	
12748 **rec'ta**	upright-wood	♃	△	un	1	au	Y Br	Britain	sa pas	D	co	Eng. bot 124
12749 **coarctáta**	contracted		○	un	1	au	Br	M Video	1819.	D	co	
12750 **americána**	Jamaica	♀	⊠	un	1	jl au	Pa Y	Jamaica	1815	D	co	
12751 **supína** *Lk*	dwarf	♃	△	un	¼	jn jl	Y Br	Scotland	sc.alp	D	co	Eng bot. 1193
12752 **pusilla** *Hænke.*	pygmy	♃	△	un	1in	jn jl	Y.Br	Austria	1820	D	co	Krock siles t 41
12753 **sphæ'rica** *Lk*	spherical	♃	△	un	1½	jn jl	W	N. Holl	1819.	D	co	
12754 **cephaloídea** *Lk*	large-headed		○	un	½	jn jl	Y w	N. Holl ?	1823	S	co	
12755 **uliginósa**	marsh		○	un	1	au	Y Br	Britain	wat pl.	D	co	Eng bot. 1194
12756 **sylvática**	highland	♃	△	un	1	au	Y.Br	Britain	al.pas	R	s.l	Eng bot 913
1839 MICRO'PUS *W.*	Micropus.					*Compositæ*		*Sp* 2—3				
12757 **supínus** *W*	trailing		○	un	¼	jn s		S Europe	1710	S	l p	Sch hand.3 t 267
12758 **erectus** *W*	upright		○	un	½	jn s		S. Europe	1683.	S	l.p	Læt hisp t.1 f 3
1840 PARTHE'NIUM *W*	Parthenium					*Compositæ*		*Sp* 2.				
12759 **Hysteróphorus** *W*	cut-leaved		○	un	1	jl o	W	Jamaica	1728	S	l p	Bot mag 2275
12760 **integrifólium** *W.*	entire-leaved	♃	△	un	3	jn o	W	Virginia	1661	D	p.l	W hort ber. 4
1841 I'VA *W*	Iva					*Compositæ*		*Sp* 2—5				
12761 **ánnua** *W*	annual		⊡	un	2	jl au	W	S Amer	1768	S	l p	Schmidel ic t 15
12762 **frutéscens** *W*	shrubby	🜨		or	4	au	W	N Amer	1711	C	co	Plu.alm t.27. f 1
1842 ACICAI'PHA *Juss.*	Acicarpha					*Calycereæ*		*Sp* 1—3				
12763 **spatuláta** *acq*	spatulate	♀	⊠	cu	¼	...		Brazil	1824	D	p l	

SEGREGATA.

1843 ELEPHANTO'PUS *W*	Elephant's Foot					*Compositæ*		*Sp* 3—7				
12764 **scáber** *W*	rough-leaved	♀	⊠	un	1	jn s		E. Indies	1695.	C	s p	Rhee mal 10 t 7
12765 **carolinánus** *W*	Carolina	♀	△	un	1½	jl s	R	America	1732	C	l p	Dil el t.106 f 126
12766 **tomentósus** *W.*	woolly	♀	△	un	1	jl au	R	W Indies	1733	D	l p	
1844 ŒDE'RA *W*	Œdera					*Compositæ*		*Sp* 1—3				
12767 **prolifera** *W*	proliferous	♃	⊔	pr	1½	my jn	Y	C G. H	1789	C	s l	Bot mag 1637
1845 FLAVE'RIA *J*	Flaveria					*Compositæ*		*Sp* 1—2				
12768 **contrayérba** *W en*	Peruvian	♀	⊡	m	1½	jl s	Y	Peru	1794	S	l p	Bot. mag 2400
1846. STŒ'BE. *W*	Stœbe					*Compositæ*		*Sp* 2—4				
12769 **æthiópica** *W*	Juniper-leaved	♃	⊔	pr	2	au		C G H	1759	C	p l	
12770 **cinérea** *W*	Heath-leaved	♃	⊔	pr	2	jl s		C G H	1784	C	p.l	Pl man t.297 f 1
1847 NAUMBUR'GIA *W*	Naumburgia					*Compositæ*		*Sp* 1				
12771 **trinervàta** *W*	three-nerved		○	un	3	jl au	Y	S Amer	1799	S	l p	Sch b j 1800 2 t 5
Brotéra Contrayer'va Spr												
*1843 CASSI'NIA *H K*	Cassinia					*Compositæ*		*Sp.* 3—11				
§12772 **aúrea** *R Br*	yellow	♀	△	or		jl au		N Holl	1803.	D	l p	Bot reg 764
12773 **spectábilis** *R Br*	shewy		○	or	6	jl au	Y	N Holl.	1818	S	co	Bot reg 678
12774 **leptophýlla** *R Br*	small leaved	♃	⊔	pr	2	jl o	W	N Zeal	1821	C	co	
1849 SPHÆRAN'THUS *H*	Sphaeranthus.					*Compositæ*		*Sp* 3—8				
12775 **indicus** *W*	Indian	♀	⊠	un	2	au d	B	E. Indies	1699	C	p l	Bur zeyl t.94 f 3
12776 **africánus** *W*	African		◯	un	1	jl au	B	C G H	1759.	S	co	Pl.man t 108 f 7
12777 **hirtus** *W*	hairy	♀	⊠	un	2	l au	B	.....	1823	C	co	Lam ill t.718 f 1



History, Use, Propagation, Culture,

1839. *Micropus* From μικρος, small, and πους, a foot; so called with reference to Leontopodium (which see), than which it is smaller, but which it resembles in its velvety silvery leaves

1840 *Parthenium* The Greek name of the Matricaria, which see The indecent derivation of the word *Hysterophorus*, is sufficiently explained by Vaillant. (*Mem. Acad Sciences, anno* 1720)

1841 *Iva* This name, according to Fuchsius, is a mere abbreviation of *abiga*, see Ajuga. It has been applied by Linnæus to these plants because their smell resembles that of the ancient Iva

1842. *Acicarpha.* From ακις, a point, and καρφος, a palea, because that appendage is spiny

1843 *Elephantopus* It is said that some resemblance may be found between the radical leaves of this plant and an elephant's foot (ελεφας, an elephant, and πους, a foot)

1844. *Œdera.* After George Œder, a Dane, professor of botany at Copenhagen, and the founder of the extensive Flora Danica.

1845. *Flaveria* From *flavus*, yellow, because the plants are used in Chili for dying of that color.

12744 Stem erect subdichotomous, Lvs lin. lanc appressed downy, Flowers clustered axillary and terminal
12745 Stem erect branch Branch. sprdg Lvs. lanc acute cottony, Fls conic clust. lat term. Clust longer than lvs.
12746 Stem erect panicled, Leaves oblong lanceolate woolly, Heads clustered lateral and terminal downy
12747 Stem erect branched, Lvs lanc cord at base amplexicaul woolly, Heads clust. lat. and terminal downy
12748 Leaves nearly glabrous above, Spike longer more interrupted
12749 Stem herbaceous quite simple, Leaves oblong spatulate downy beneath hoary, Heads clustered
12750 Stem erect branched, Lvs obov spatulate downy beneath, Heads axillary and terminal clustered spiked
12751 Stem decumb branch only from base, Flower stems erect, Fls solit or racem Lvs lin downy on both sides
12752 Stem quite simple nearly erect about 3-flowered, Leaves linear acute downy, Runners procumbent
12753 Stem branched erect, Leaves linear 3-nerved acute very narrow at base downy beneath
12754 Stem simple, Leaves linear 3-nerved acuminate silky beneath, Heads terminal clustered [than lvs
12755 Stem very much branch diffuse woolly, Lvs lin-lanc downy, Fls in term crowded clust. which are shorter
12756 Stem simple nearly erect downy, Fls. axillary forming a distant leafy spike Leaves linear lanc. downy

12757 Leaves opposite obovate cuneate
12758 Leaves alternate lanceolate, Heads woolly

12759 Leaves bipinnatifid
12760 Leaves undivided oblong toothed

12761 Leaves lanceolate-ovate, Bractes lanceolate and petioles downy
12762 Leaves lanceolate dotted scabrous deeply serrated, Stem shrubby

12763 Leaves spatulate

SEGREGATA.

12764 Leaves scabrous · radical narrowed at base, cauline lanceolate, Stem branched strigose
12765 Radical and cauline leaves oblong narrowed at base somewhat hairy, Stem simple hairy
12766 Leaves ovate downy

12767 Leaves lanceolate serrated reflexed

12768 Leaves somewhat stalked lanceolate 3-nerved mucronate-serrate

12769 Leaves mucronate subulate reflexed, Stem erect
12770 Leaves linear subulate oblique, Spike cylindrical

12771 The only species

12772 Leaves lanceolate-linear smooth glandular beneath, Corymbs decompound
12773 Panicle decompound, Leaves lanceolate decurrent with their under surface and the branches woolly
12774 Corymb nearly sessile, Leaves small linear white beneath

12775 Leaves lanceolate serrate decurrent glabrous, Peduncles winged, Wings of stem and peduncles serrated
12776 Leaves decurrent ovate serrated, Peduncles round
12777 Leaves obovate serrated hairy decurrent, Peduncles winged, Wings of stem and peduncles serrated



and Miscellaneous Particulars

1846 *Stæbe.* The name under which Theophrastus and Pliny designate a plant of a rough and spiny habit. This is the character of the modern plant, which is very dissimilar to that of the ancients, which is believed to have been Poterium spinosum

1847. *Naumburgia* Named by Willdenow without explanation; but we presume in honor of John Samuel Naumburg, author of a Dissertation upon Veronica Chamædrys, &c, published at Erfurt in 1792.

1848 *Cassinia* Named after M Henri Cassini, a celebrated French botanist, who has devoted much attention to the study of the very difficult tribe of plants to which this belongs, and with singular success But his observations are scattered through so many different works, that it is almost hopeless to acquire a knowledge of their actual extent. Neat New Holland shrubs with white or yellow flowers.

1849 *Sphæranthus.* From σφαιρα, a globe, and ανθος, a flower, on account of the globular form of the heads of flowers.

1850. ECHI'NOPS *W.*	Globe Thistle				*Compositæ*	*Sp.* 7—9.						
12778 sphærocéphalus *W.*	great	♃	△	or	5	jl.au	L.B	Austria	1596.	D	co	
12779 spinósus *W.*	thorny-headed	♃	△	or	4	jl au	W	Egypt	1597.	D	l p	Moris s 7 t.35.f.4
12780 Ritro *W*	small	♃	△	or	3	jl s	B	Europe	1570.	D	co	Bot. mag 982
12781 strigósus *W*	annual		○	or	2	jl s	W	Spain	1729.	S	l.p	Bot. mag 2109
12782 lanuginósus *W*	woolly	♃	△	or	2	jn jl	B	Levant	1736.	D	l.p	
12783 paniculátus *Jacq.*	panicled	♃	△	or	6	jl au	B	Spain	1815	D	l p	Bot. reg. 356
12784 strictus *B M*	upright	♃	△	or	3	jl au	Pa B	Europe	1822	D	l.p	Bot. mag. 2457
1851 ROLAN'DRA *W.*	Rolandra				*Compositæ*	*Sp* 1						
12785 argéntea *W*	silver-leaved	♃	⌴	or	jl	W	W Indies	1714.	C	l p	Slo. jam.1.t 7. f.3	
1852. BROTE'RA *W.*	Brotera.				*Compositæ.*	*Sp* 1						
12786 corymbósa *W.*	umbelled	♃	△	or	2	jn.jl	B	S Europe	1640.	D	l.p	Mor. s.7.t.33.f 17
1853 GUNDE'LIA *W*	Gundelia.				*Compositæ*	*Sp* 1						
12787 Tournefórtii *W.*	Tournefort's	♃	△	un	1½	jn au	L.G	Levant	1739	D	s.p	Mill ic. t. 287
†1854 EUXE'NIA *Cham*	Euxenia.				*Compositæ.*	*Sp* 1						
12788 gráta *Cham.*	pleasant	♃	⌴	pr	2	...	Y	Chili	1825	C	p l	Hor Phy ber t 6



History, Use, Propagation, Culture,

1850 *Echinops* From ἐχῖνος, a hedgehog, and ὤψις, resemblance, because of the bristly round heads of flowers protected in every direction by stiff spines The woolly leaves of Echinops strigosus are employed in Spain as tinder Upon this genus M. Cassini has founded his tribe of Echinopseæ, which it must be confessed is entirely distinct from any other, and extremely remarkable on account of its very singular aberrations from the ordinary structure of Compositæ

1851 *Rolandra* After Daniel Rolander, a pupil of Linnæus, who visited Surinam Nothing appeared from him except an account of Dolichocarpus in the seventeenth volume of the Transactions of the Academy of Sciences of Stockholm

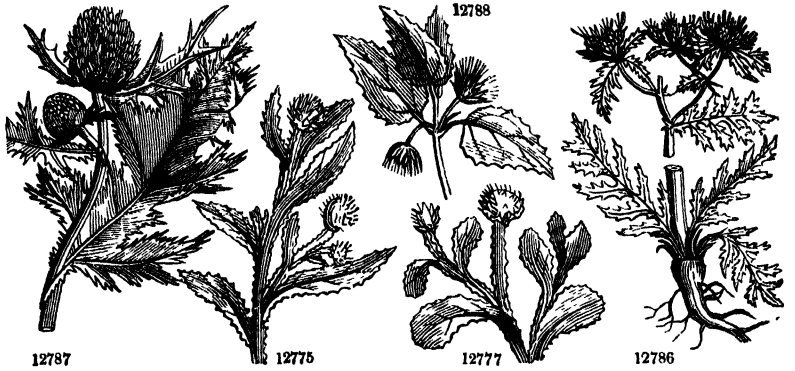
12778 Leaves pinnatifid downy above woolly beneath, Stem branched
12779 Heads scattered with long spines
12780 Head globose, Leaves pinnatifid smooth above
12781 Heads fascicled, Lateral involucre sterile, Leaves strigose on the upper side
12782 Stem branched woolly, Leaves subbipinnate: segments narrow smooth above, Head subsessile
12783 Leaves rugose squarrose pinnatifid smooth above glaucous with down beneath
12784 Stem simple upright 1-headed, Leaves eroded pinnatifid spiny-toothed smooth above downy beneath

12785 The only species

12786 Heads corymbose numerous

12787 Leaves long and spiny

12788 The only species



and Miscellaneous Particulars.

1852. *Brotera* Named after Felix Avelhar Brotero, a Portuguese botanist, professor at Coimbra; author of a useful Flora Lusitanica

1853 *Gundelia* Named after Andrew Gundelsheimer, a German botanist, who accompanied Tournefort in his journey into the Levant in 1709

1854 *Euxenia.* A name unexplained by its author Apparently derived from ξενος, hospitable, but in what sense we do not perceive.



CLASS XX. — GYNANDRIA.

THE singular plants which constitute this class are distinguished from all others by the anomalous structure of their flowers These do not, as is usually the case, contain a certain number of stamens surrounding a central ovarium or style, but on the contrary are furnished with a solitary fleshy undivided process, round which the sepals radiate, and which supplies the place of stamens and style The nature of this process has been variously explained the modern opinion is that it is formed by the accretion of the stamens and style into a single mass, and this opinion seems to be confirmed by analysis and analogy. Omitting, therefore, a notice of such theories respecting its nature as are opposed to that which is now received as the most correct, it will suffice to explain a little in detail, the opinion which is adopted in this work The central process, called the columna or column, is understood to be formed by the filaments of three stamens surrounding a style, and by mutual accretion firmly united with it and with each other into a solid mass Of these three stamens, it most frequently happens that the *two lateral* are sterile, and not furnished with even the vestige of an anthera; and that their presence is not indicated by more than two irregular excrescences, as in Orchis, or by the same number of small appendages, as in Satyrium, or by two horn-like or tooth-like processes, present in several of the genera with waxy pollen-masses · it even happens, and not unfrequently, that no vestige whatever of them remains But in Cypripedium both are fertile and bear perfect anthers, while the central stamen is barren and foliaceous When the lateral stamens are, as above stated, abortive, which is the most common form of the columna, the central stamen bears at its upper extremity an anther, which is either moveable or fixed firmly in its place The pollen which this contains, assumes three very distinct appearances in different tribes It is either granular, dividing into many separable small pieces, as in Orchis, or powdery, consisting of an infinite number of granules, as in Spiranthes, or waxy, when it consists of a few large concrete masses, as in Epidendrum The stigma is most frequently concave, and placed nearly under the anther, but in such a manner, that there is no contact between it and the pollen In what way, therefore, fecundation can take place among truly Gynandrous plants, is one of those mysterious contrivances of nature which has not yet been explained. It is generally believed to take place by absorption in some undiscovered manner, before the flowers expand, but it is extremely difficult to understand how this can occur in many genera The foregoing remarks apply only to the tribe of plants called Orchideous The few genera attached to the latter part of the class are Gynandrous by the cohesion indeed of their stamens and style, but in a much more obvious manner

Gynandrous plants are among the most interesting of the vegetable productions of the globe, whether we consider the vivacity of their colors, or the singularity of their organization, or the grotesque appearance of their tortuous roots, or the delicious perfume of their flowers They are distributed in abundance over all the earth. In Europe and the temperate parts of the world, they are principally found in meadows and pastures among grass, but in tropical regions they often constitute the chief beauty of the forest, occupying the forked branches of living trees, or the prostrate trunks of fallen timber, over which, in company with ferns and parasitical Aroideæ, they climb and trail in every direction, until they adorn the one with bright hues and rich odours foreign to their nature, and render the others more beautiful in death, than in the full vigour of their existence.

Order 1 MONANDRIA  Stamen 1

§ 1. *Anther terminal, erect Pollen granular, cohering by an elastic thread.*

1855 *Disa* Flowers ringent · helmet with a spur or bag at the base. Inner sepals united to the column. Lip without a spur

1856 *Satyrium* Flower ringent · five anterior sepals united at base. Lip behind, fornicate with two spurs or bags at the base. Anther resupinate. Stigma 2-lipped

1857 *Platanthera* Flower vaulted. Lip entire with a spur. Cells of the anther widely divided at their base by the broad interposed stigma Glands of pollen masses naked Lips of stigma absent.

1858 *Gymnadenia* Cor ringent Lip spurred at the base beneath Glands of the stalks of the pollen-mass naked, approximate

1859 *Orchis* Cor ringent. Lip spurred on the underside at the base Glands of the stalks of the pollen-mass (1-2) contained in one common little pouch

1860 *Nigritella* Ovary straight. Flower spreading Lip posterior, entire, with a scrotiform spur. Glands of pollen-masses distinct, and enclosed in a single 2-celled pouch

1861. *Habenaria* Cor ringent. Lip spurred on the upper side at the base beneath Glands of the stalk of the pollen-mass naked, distinct, with the cells of the footstalks adnate or separated.

1862 *Bartholina* Flower ringent inner sepals united below with the lip Lip spurred beneath at the base Stalks of the pollen-masses long, cells united to the column · glands distinct, half covered by the exterior lobe

1863 *Glossula* Sepals conniving in a galea the upper without a spur Lip anterior, spurred, 3-parted, with an inflated spur Pollen-masses 2, 2-parted, with 2 glands inclosed in distinct pouches.

1864 *Anacamptis* The flower of Orchis, from which it differs in having the gland of the pollen-masses single, with inflexed edges, and enclosed in a pouch

1865 *Accras* Flower ringent. Lip without a spur Glands of the pollen-masses included in a common pouch.

1866 *Ophrys* Flower somewhat spreading Lip without a spur Glands of the pollen-masses inclosed in two distinct pouches

1867 *Chamorchis* Ovary reclinate at end Flower galeate. Lip without a spur, undivided. Glands of the pollen-masses naked Upper lip of stigma divided Anther of Orchis

1868 *Herminium.* Flower somewhat spreading. Lip without a spur Glands of the pollen-masses naked, distinct.

1869 *Serapias* Flower ringent Lip without a spur. Column sharp-pointed Pollen-masses attached to a single gland inclosed in one pouch.

§ 2 *Anther parallel with stigma Pollen powdery*

1870. *Goodyera.* Cor ringent, with the 2 exterior or lateral segments of the perianth placed beneath the lip, which is gibbous at the base and undivided at the extremity. Column free. Pollen angular

1871. *Dauris.* Flower irregular Two outer linear sepals placed beneath the trifid lip, the inner clawed and spreading. Column with the lateral lobes petaloid. Pollen farinaceous.

1872. *Ponthieva.* Flower irregular. Lip behind, with the inner sepals inserted in the column. Pollen farinaceous.

1873 *Neottia.* Flowers connivent Lip sessile, 2-lobed, with no calli Anther terminal, sessile Stigma 2-lipped pervious, the front lip thickened.
1874 *Spiranthes* Spike spiral Ovary oblique at the end. Sepals connivent Lip clawed, parallel with columna, with 2 calli at the base, entire Anther terminal stalked. Stigma flat, cuspidate, membranous, finally split
1875 *Stenorhynchus* Like the last; but the lip adheres to the columna by means of the margins of its lateral lobes it has no callosities Stigma corneous, always entire
1876 *Lastera* Flowers connivent. Lip 2-lobed, sessile, with no calli Anther intramarginal, half covered over by the hooded clinandrium Stigma closed, nearly flat, with a strong transverse furrow.

§ 3. *Anther terminal, persistent. Pollen powdery*

1877 *Arethusa.* Lip united at base with the columna, at the end hooded, in the inside crested. Sepals 5, united at base Pollen angular
1878 *Calopogon* Lip at the back clawed, with a bearded inside. Sepals 5, distinct Column separate. Pollen angular
1879 *Pogonia* Lip sessile, hooded, crested inside Sepals 5, distinct, without glands Pollen farinaceous.
1880 *Epipactis* Lip ventricose below, the extremity either undivided or 3-lobed, the middle lobe the largest, connected as it were by a joint Pollen farinaceous
1881. *Calcana* Lip unguiculate, placed at the back, with a peltate hollow lamina, having a perforation on the outside Pollen farinaceous
1882. *Corallorhiza* Lip produced behind, adnate with the spur or free Column free Masses of pollen 4, oblique, not parallel.

§ 4. *Anther terminal, opercular deciduous Pollen waxy.*

1883. *Rodriguezia.* Perianth 4-leaved ringent Lip entire, unguiculate cornute at base, callous in the middle. Pollen-masses 2, with an elastic caudicula Stigma with 2 horns
1884 *Gomeza* Like the last, but lip not cornute at base
1885 *Cymbidium* Lip not spurred, concave, jointed with the simple base of the columna Sepals spreading, distinct. Pollen masses 2, 2-lobed behind
1886 *Brassia.* Lip expanded, undivided Sepals spreading, distinct Column not winged Pollen-masses 2, 2-lobed behind, fixed by the middle to a common process of the stigma.
1887 *Lissochilus* Pollen-masses 2, obliquely 2-lobed Lip saccate at base, sessile, undivided, convex at the base, united with the apterous toothless column Inner sepals divaricating, petaloid, outer reflexed, calycine
1888 *Geodorum* Lip cucullate-ventricose, sometimes spurred at base, sessile, not jointed with the column. Sepals like the lip, 1-sided Pollen-masses 2, lobed at back
1889 *Catasetum* Perianth not inverted, generally globose Lip saccate, concave, different from the sepals. Pollen-masses 2, 2-lobed behind, inserted on a large naked transverse caudicula, which finally separates with elasticity
1890 *Tyrzeuxis* Perianth 2-parted, upper segment 2-lobed, lower 3-parted, inflated Lip parallel with column, with a recurved dilated limb Stigma excavated. Anther 1-celled, fleshy. Pollen-masses 2, adhering to a fusiform caudicula
1891 *Xylobium* Perianth spreading Lip behind jointed, with an unguiform process of the column, 3-lobed, incumbent on columna Outer lateral sepals united by their bases, with the process of column. Pollen-masses 2, furrowed on one side, seated on a broad caudicula
1892 *Maxillaria* Perianth spreading Lip in front 3-lobed, jointed with the unguiform process of the column Lateral outer sepals united by their bases with the process of column Pollen-masses 2, bipartite, united by their bases to a common gland
1893 *Notylia* Perianth 4-leaved upper sepals spreading Lip divaricating entire Columna acuminate. Pollen-masses 2, entire Anther posterior, not terminal
1894 *Pleurothallis* Lip jointed with the simple or slightly lengthened base of column The two anterior sepals united at base Pollen-masses 2, not furrowed
1895 *Oncidium* Lip expanded, lobed, tubercled at base Petals spreading, sometimes only 4 Column winged Pollen-masses 2, 2-lobed behind, fixed by the middle to the common process of the stigma
1896. *Cyrtopodium.* Sepals 5, distinct Lip 3-lobed, connected with a joint with the unguiform process of the base of the apterous column Pollen-masses 2, 2-lobed behind.
1897 *Cœlogyne* Perianth resupinate, spreading Lip 3-lobed, cucullate, jointed with columna. Column winged Anther lateral, 2-celled Pollen-masses 2, 2-parted Stigma funnel-shaped, 2-lipped
1898 *Macradenia* Lip sessile, cucullate, concave, undivided, acuminate Sepals distinct, spreading Column distinct, with the lobes of its end conniving Pollen-masses 2, unfurrowed, seated on a long filiform caudicula
1899 *Dendrobium.* Lip without a spur, jointed with the unguiform process of the column, to whose edges the anterior sepals adhere Pollen-masses 4, parallel
1900 *Anæctochilus* Flowers erect Sepals conniving The two lateral exterior large, cohering at end two inner very small subulate Lip oblong, with 2 teeth near the base Pollen-masses 4, without gland or caudicula
1901 *Camaridium* Perianth resupinate, expanded Sepals distinct Lip distinct, sessile, cucullate, 3-lobed Column round Stigma arched. Pollen-masses 4, parallel, compressed, without a caudicula at the time of expansion.
1902 *Oxysthadium* Lip sessile, hooded, connate with the base of column. Sepals conniving Pollen-masses 4, oblique, furrowed at base
1903 *Isochilus* Lip almost of the same shape as the distinct, connivent, sepals Pollen-masses 4, parallel
1904 *Pholidota* Flowers resupinate Sepals uniform, the three outer erect, keeled at back. Lip ventricose Column dilated at end Anther 2-celled Pollen masses 4, each pair having 1 gland
1905. *Broughtonia* Column distinct, or at the very base united with the unguiculate lip, which is lengthened at the base into a tube, connate with the ovarium Pollen-masses 4, parallel, with a granular caudicula reflexed upon the masses.
1906 *Cattleya* Sepals spreading Lip sessile, cucullate, surrounding the half round column Pollen-masses 4, with as many powdery reflexed caudiculæ
1907. *Epidendrum* Column united with the claw of the lip, and forming a tube which sometimes runs down the ovarium. Pollen-masses 4, with as many powdery reflexed caudiculæ
1908 *Polystachya* Perianth not inverted, cuneate, closed Pollen-masses 4, placed on a simple naked caudicula with a gland
1909 *Cryptarrhena* Sepals 5, distinct, spreading. Lip not spurred, with a dilated flat lamina Column distinct, not winged Anther enclosed in the cucullate head of the column Pollen-masses 4
1910 *Ornithocephalus* Flowers resupinate Lip stalked Sepals nearly equal, the two upper finally reflexed Column short, with a very long beak Pollen-masses 4, adhering to a very long glandular caudicula
1911. *Bletia.* Lip sessile, cucullate, sometimes spurred at the base Sepals 5, distinct. Column separate. Pollen-masses 8 or 4, 2-lobed.
1912. *Eria* Perianthium woolly, conniving or expanded. Lip 3-lobed, jointed with an unguiform process of the column to whose sides the anterior sepals are united. Pollen-masses 8, cohering at the end by means of a powdery substance.
1913. *Octomeria* Lip jointed with an unguiform process, to the edges of which the anterior sepals adhere Pollen-masses 8. Perianthium quite smooth
1914. *Brassavola.* Lip with a simple claw, undivided. Sepals distinct, spreading Pollen-masses 8 or more

1915. *Sarcanthus.* Lip fleshy, entire, calcarate, the spur furnished with various appendages in the interior Sepals spreading equally Pollen-masses 2, seated on an elastic caudicula

1916. *Vanda.* Lip saccate, continuous with the simple base of the apterous column, trifid, with the middle lobe fleshy. Sepals spreading, distinct Pollen-masses 2, obliquely 2-lobed, attached to an elastic caudicula

1917 *Aerides* Lip spurred or saccate, inserted at the end of the unguiform process, to whose edges the anterior sepals are united Pollen-masses 2, two-lobed behind, fixed by a common process to the middle of the stigma.

1918 *Renanthera.* Like the last, but sepals very long and spreading, and lip only a little saccate at base

1919 *Ionopsis* Sepals connivent, the anterior placed under the labellum. Lip spurred at base Pollen-masses 2

1920 *Eulophia* Sepals 5, distinct, uniform, ascending, spreading Lip spurred at base, with a sessile crested lamina, 3-lobed. Pollen-masses 2, two-lobed, with a posterior lobe attached to an elastic caudicula

1921 *Angræcum* Sepals conniving, galeate. Lip spurred 3-lobed, jointed with column. Pollen-masses 2. Stigma concave, transverse

1922 *Aeranthes* Lip spurred, membranous, entire, jointed with an unguiform process of the column, to which the two front sepals are adherent. Pollen-masses 2, hollow, perforated on one side, with no caudicula, and two glands.

1923 *Calanthe* Lip spurred, lobed, united with the columna. Perianth. spreading. Pollen-masses 8.

1924 *Stelis* Lip of the same form as the inner dwarf vaulted sepals Three outer sepals united at base. Pollen-masses 2

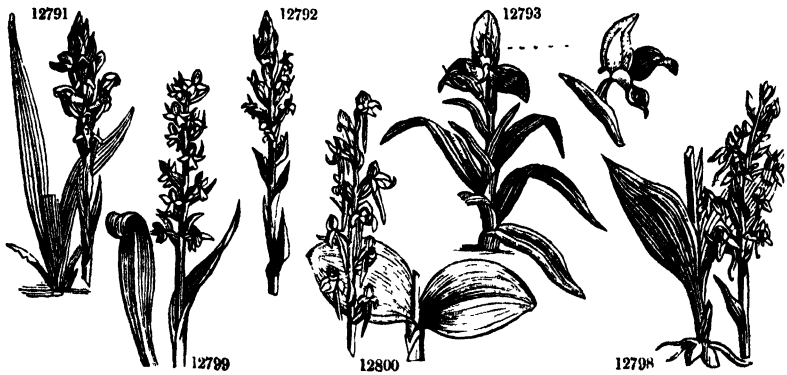
1925 *Malaxis* Lip flat, expanded, regularly vertical Column round Pollen-masses 4, loose.

1926 *Prescotia* Perianth. spreading Two upper sepals connate at base Lip behind, erect, fleshy, cucullate, entire, embracing the very minute column Pollen-masses 2, twin, granular, united by the end to a gland.

1927. *Macrostylis.* Lip flat, sagittate, or deeply cordate. Column very small, round. Pollen-masses 4, loose

MONANDRIA.

1855 DI'SA *Sw*	Disa.			*Orchideæ*	*Sp* 6—37						
12789 cornúta *W*	horned	⁂ △ el	1½	jn jl	Pa B	C	G	H	1805	R	s p
12790 spatulàta *W*	spoon-lipped	⁂ △ cu	1	jn jl	Pa pu	C	G	H	1805	R	s p Journ sc 4 t 5, f 3
12791 prasinàta *B Reg*	green-flowered	⁂ △ cu	¾	jn jl	G R	C	G	H	1815,	R	s p Bot reg 210
12792 bracteàta *W*	small-flowered	⁂ △ cu	¾	jn jl	G	C	G	H	1818	R	s p Bot reg 324
12793 grandiflóra *W*	large-flowered	⁂ △ spl	1	jl au	Sc	C	G	H.	1825	R	s p Bot reg 926
12794 graminifólia *Banks*	blue	⁂ △ spl	1½	...	B	C	G	H	1825	R	s p Journ.sc 6.t. 1 f 2
1856 SATY'RIUM *W.*	Satyrium.			*Orchideæ*	*Sp* 3—19						
12795 cucullátum *W*	cucullate	⁂ △ cu	¾	ju s	Pa Y	C	G	H	1787	R	s p Bot reg 416
12796 car'neum *H K*	great-flowered	⁂ △ el	1⅛	ju s	Pk	C	G	H	1787	R	s p Bot. mag 1512
12797 cornifólium *W*	leathery-leaved	⁂ △ or	1	o	Y	C	G	H	1820	R	s p Bot. reg 703
1857 PLATAN'THERA *Rich.*	Platanthera			*Orchideæ*	*Sp* 3—11						
12798 bifólia *Rich*	Butterfly Orchis	⁂ △ pr	1	my jn	W	Britain		woods	R	p l	Eng bot 22
12799 dilatáta	dilated	⁂ △ pr	1½	au	W	Canada		1823	R	s p	Hook ex fl 95
12800 orbiculáta	round-leaved	⁂ △ cu	1	ap my	G	Canada		1823.	R	s p	Hook ex fl 145
1858 GYMNADE'NIA *R Br*	Gymnadenia			*Orchideæ*	*Sp* 3—6.						
12801 conópsea *R Br*	fragrant	⁂ △ pr	1	jn jl	Pu	Britain		me pas	R	h l	Eng bot. 10
12802 viridis *Rich*	Frog Orchis	⁂ △ pr	¾	jn jl	G	Britain		me pas	R	l p	Eng bot 94
12803 álbida *Rich*	small-white	⁂ △ pr	½	jn jl	W	Britain		sun hi	R	l p	Eng bot 505
1859 OR'CHIS *L*	Orchis.			*Orchideæ*	*Sp.* 19—84						
12804 Mório *W*	meadow	⁂ △ or	¾	my jn	Pu	Britain		me pas	R	l p	Eng bot 2059
12805 longicórnu *P. S*	flat-spurred	⁂ △ or	¾	ap my	Pu	Barbary		1815	R	l p	Bot reg 202
12806 máscula *W.*	early purple	⁂ △ or	1	ap my	Pu	Britain		woods	R	l p	Eng bot. 631



History, Use, Propagation, Culture,

1855. *Disa* A name of unknown meaning, adopted by Linnæus from Bergius. Beautiful Cape herbaceous plants, with flowers of various colors, either growing singly, or in long spikes. Disa cornuta produces a spike, often a foot or a foot and a half long D grandiflora has large, nearly solitary flowers, of a brilliant scarlet color The species are cultivated without difficulty in a stove or in a greenhouse, if the roots are planted in light sandy peat, mixed with a very little loam, and not overwatered. The same treatment is suitable to the other tender tuberous or fibrous-rooted Orchideæ.

1856. *Satyrium.* The aphrodisiacal properties of Orchideous plants induced the ancients to give this name to almost all the species they knew, from σατυρος, a satyr The bag-like appendages of the lip have perhaps assisted in the application of the name The species are mostly handsome plants, with yellow or pink flowers Mr. Salisbury says, he preserved Satyrium cucullatum some years, by attending to planting the bulb in a pot, nearly full of broken tiles, mixed with pure sandy loam, and keeping it quite dry when not vegetating

1928. *Liparis.* Perianth. spreading. Lip flat, expanded, entire, turned various ways. Column winged. Pollen-masses 4, with neither caudicula nor glands

1929. *Calypso* Lip ventricose, spurred beneath near the end. Sepals ascending, 1-sided. Column petaloid, dilated. Pollen-masses 4.

§ 5 *Pollen granular. Seeds not arillate*

1930. *Vanilla.* Flower jointed with ovary, and deciduous. Lip united at base with columna. Capsule fleshy.

Order 2. DIANDRIA.  Stamens 2.

1931 *Cypripedium* Lip ventricose, inflated Column terminated by a petaloid lobe dividing the anthers Two anterior sepals usually united.

1932 *Stylidium* Cal 2-lipped Cor irregular, 5-fid, the fifth segment dissimilar. Column reclinate, with a double bend Anthers with 2 spreading lobes. Caps 2-celled

1933 *Gunnera* Cal. 2-toothed, superior. Cor. O Style 2-parted. Drupe 1-seeded, crowned by the teeth of the calyx.

Order 3. HEXANDRIA.  Stamens 6.

1934 *Aristolochia* Cal. O Cor. 1-petalous, ligulate, ventricose at base. Caps. 6-celled, many-seeded, inferior.

MONANDRIA.

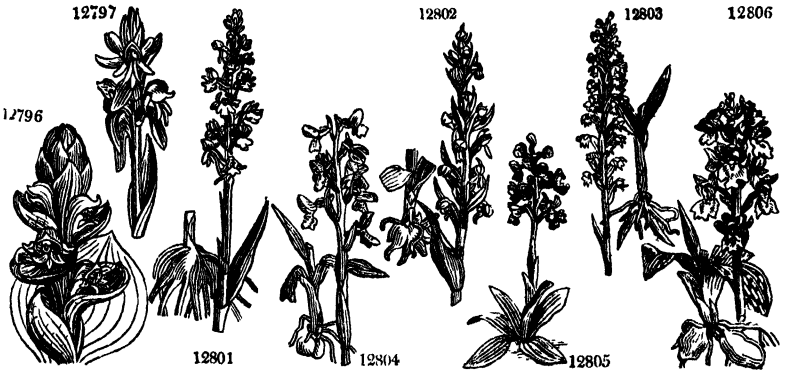
12789 Helmet blunt spur conical deflexed, Inner sepals 2-toothed, Lip obovate velvety flat, Spike lax
12790 Helmet erect acute, Lip stalked dilated at end trifid, Stem few-flowered, Leaves linear
12791 Helmet blunt spur obl keeled convex at back, Lip linear acutish, Spike lax, Bractes shorter than fls.
12792 Helmet blunt spur obl Lip linear broadest at end, Spike cylindrical, Bractes erect longer than flowers
12793 Helmet acute erect spur conical nodding, Lip linear blunt, Stem about 2-fl
12794 Leaves filiform shorter than 3-flowered scape, Spur blunt ascending

12795 Radical leaves twin cordate roundish concave · cauline remote cuculiate bluntish
12796 Radical leaves twin cordate roundish cauline sheath-like close, Spike compact, Sepals keeled outside
12797 Leaves ovate acuminate somew reflexed sheathing coriaceous crenated at edge, Fls and helmet cernuous

12798 Horn filiform twice as long as ovary, Lip linear entire, Rad leaves twin oblong narrowed at base
12799 Lip lanceolate obtuse dilated at base, Spur the length of lip a little shorter than the ovary, Stem leafy
12800 Lip linear lanceolate, Three upper sepals erect conniving lateral reflexed, Leaves 2 orbicular

12801 Bulbs palmate, Lip trifid entire, Spur setaceous twice as long as ovary
12802 Horn short double, Lip linear 3-toothed lateral teeth acute, middle very short
12803 Horn blunt 3 times shorter than ovary, Lip 3-parted: segments acute, middle one largest

[ovary
12804 Lip 3-lob.: lobes cren obt. midd one emargin Seg of perianth ascend. obt Spur cone ascend shorter than
12805 Lip 3-lobed. lateral reflexed toothletted, middle shorter than blunt, Spur long comp truncate ascending
12806 Lip 3-lob crenul. obt the midd lobe cleft, Seg of the perianth cleft, exterior one reflex Spur lin ascend compressed at the extremity rather longer than the ovary



and Miscellaneous Particulars.

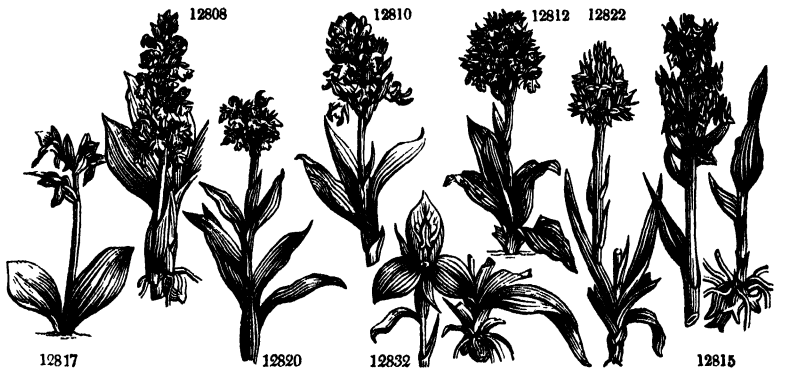
1857 *Platanthera* So named from πλατυς, broad, and ανθηρα, an anther, on account of the width of that organ, which is as broad or broader than the base of the labellum Curious wood plants with greenish flowers.

Platanthera bifolia is one of our indigenous plants, which may be cultivated without any difficulty, if planted in pure loam from a lime-stone bottom It succeeds in a pot, if filled half full of broken tiles, and when in the open ground, the border should be well drained, at least six inches in depth. No plant bears forcing better, or exhales a more delightful perfume This species is never observed but in a lime-stone soil, and is exceedingly plentiful near Buxton.

1858 *Gymnadenia.* From γυμνος, naked, and αδην, a gland; because it differs from Orchis in not having the glands enclosed in a pouch, but altogether uncovered. The principal species of the genus is the Orchis conopsea of old botanists

1859. *Orchis.* The Greek name of the plant. In Arabic, according to Forskahl, it is called *sahlieb*, from

12807	ustulàta *W*	dwarf	⁂ △	or	½	my jn	Pu	England	dr pa.	R	l p	Eng bot. 18
12808	fúsca *W.*	brown	⁂ △	or	3	my jn	Br.P	England	ch.hil.	R	l p	Eng bot. 16
12809	tephrosan'thos *Dcf.*	fine-lipped	⁂ △	or	1½	my jn	Pa pu	Britain	ch hil	R	l p	
12810	militáris *W.*	military	⁂ △	or	1	my jn	Pu	England	ch so	R	h l	Eng bot. 1873
12811	undulàta *Buvona*	wavy-leaved	⁂ ⧋	or	1	d	Pa.pu	Sicily	1818	R	l p	Bot. reg. 375
12812	acuminàta *W*	pointed-flower.	⁂ ⧋	or	1	ap my	Pa pu	Barbary	1815.	R	l p	Bot mag 1932
12813	globósa *W*	round-spiked	⁂ △	or	¾	jn jl	Pa pu	Austria	1792	R	l p	Jac aust 3 t 265
12814	hircina *W*	Lizard	⁂ △	or	1½	jn jl	Pu	England	ch.wo	R	l p	Eng bot. 34
12815	latifólia *W*	marsh	⁂ △	or	1	my jn	Pk	Britain	m.me.	R	l p	Eng bot. 2308
12816	maculàta *W.*	spotted-palmate	⁂ △	or	1½	jn jl	F	Britain	woods	R	h l	Eng bot. 632
12817	spectábilis *W*	showy	⁂ △	or	¾	jn jl	Pk	N. Amer.	1801.	R	l p	Bot cab. 78
12818	papilionácea *W*	papilionaceous	⁂ △	or	1½	jn jl	Pa pu	S. Europe	1788	R	l p	
12819	longibracteáta *Biv*	Sicilian	⁂ ⧋	or	1½	d	Pu	Sicily	1818	R	l p	Bot reg 357
12820	variegáta *All.*	variegated	⁂ ⧋	or	¾	ap my	Pa.pu	S Europe	1818	R	l p	Bot reg 367
12821	sulphúrea *Schrad*	sulphur-colored	⁂ ⧋	or	1	my jn	Y	Portugal	1820	R	l p	Bot mag. 2569
1860.	NIGRITEL'LA. *Rich*	Nigritella					*Orchideæ*	*Sp* 1				
12822	angustifólia *Rich*	dark-flowered	⁂ △	cu	¼	jn jl	Br P	Austria	1759	R	l p	Flo dan t. 998
1861	HABENA'RIA. *R Br.*	Habenaria.					*Orchideæ*	*Sp* 9—17				
12823	bracteáta *R Br*	long-bracted	⁂ △	cu	1	my jn	G	N Amer	1805	R	l p	Sweet fl. gar 62
12824	hyperbórea *R Br*	northern	⁂ △	cu	¼	jn jl	G	Iceland	1805	R	l p	
12825	herbiola *R Br*	American	⁂ △	cu	1	jn jl	G	N Amer	1789	R	p l	
12826	tímbriáta *R Br*	purple-fringed	⁂ △	el	1½	jn jl	Pu	Canada	1789	R	p l	Bot cab 552
12827	cristáta *R Br*	yellow-crested	⁂ △	el	1½	s	Y	N Amer.	1806	R	p l	
12828	ciliáris *R Br.*	yellow-fringed	⁂ △	el	1	jn jl	Y	N. Amer	1796	R	p l	Bot mag 1668
12829	lácera *Mich*	torn	⁂ △	pr	1½	jn jl	Pa Y	N Amer	1812.	R	p l	Bot cab 229
12830	blepharíglottis *Hook*	white-fringed	⁂ △	pr	1	my jn	W	Canada	1820	R	s p	Hook ex fl 87
12831	tridentáta *Hook*	three-toothed	⁂ △	pr	1½	my jn	W	Canada	1820.	R	s p	Hook. ex fl. 81
1862	BARTHOLI'NA *R. Br*	Bartholina					*Orchideæ*	*Sp* 1				
12832	pectináta *R Br*	pectinated	⁂ ⧄	cu	¾	o	W	C G H	1787.	R	l p	Journ sc 4
1863	GLOS'SULA *Lindl*	Glossula					*Orchideæ*	*Sp* 1				
12833	tentaculáta *Lindl*	feeler-flowered	⁂ ⧄	cu	¾	d	G	China	1824.	R	l p	Bot. reg. 862
1864	ANACAM'PTIS *Rich*	Anacamptis					*Orchideæ*	*Sp* 1				
12834	pyramidális *Rich*	pyramidal	⁂ △	or	1½	jn jl	R	Britain	dr pa	R	h l	Eng bot. 110
1865	A'CERAS. *R Br*	Aceras.					*Orchideæ*	*Sp* 1—3				
12835	anthropóphora *R Br.*	Green Man	⁂ △	cu	1	jn	G	England	ch pa	R	l p	Eng bot 29
1866	O'PHRYS *L.*	Ophrys.					*Orchideæ*	*Sp* 6—14				
12836	apífera *W*	Bee	⁂ △	el	⅝	jn jl	Pu	England	ch pa	R	h l	Eng bot 383
12837	tenthredinífera *W*	Saw-fly	⁂ ⧋	el	⅝	ap my	Y s	Barbary	1815	R	s l	Bot reg 205
12838	aranífera *W*	Spider	⁂ △	el	⅝	ap my	G	England	ch so	R	s l	Eng. bot. 65



History, Use, Propagation, Culture,

whence doubtless our word *salep* has been obtained This is a curious and beautiful genus, but rather difficult of culture Few of the species produce seeds, but are propagated by their bulbs or tubers, which, in most of the species, are of a peculiar structure and economy An Orchis being taken out of the ground is found with two solid masses, ovate or fasciculated at the base of the stem, above which proceed the thick fleshy fibres which nourish the plant. One of these bulbs or tubers is destined to be the successor of the other, and is plump and vigorous, whilst the other or decaying one is always wrinkled and withered From this withered one has proceeded the existing stem, and the plump one is an offset, from the centre of which the stem of the succeeding year is destined to proceed By this means, the actual situation of the plant is changed about half an inch every year, and as the offset is always produced from the side opposite to the withered bulb, the plant travels always in one direction at that rate, and will in a dozen years have marched six inches from the place where it formerly stood

In the garden, the Orchis can hardly be said to be propagated, the species are generally taken up from their native habitations with balls, and transferred to a shady border, where they remain for a year or two, but seldom increase. Those which grow in the open fields are generally found in calcareous soil, and those in bogs or woods thrive best in peat, or peat and loam mixed. The culture of this genus, however, has been very little attended to According to Sweet, the best time to transplant the British Orchideæ, is when they are in a growing state.

The Orchis affords the preparation known as Salep, imported from Turkey, and other parts of the Levant; and which has also been made in this country from O mascula, and other species. The root is washed, the brown skin rubbed off, and then dried in an oven and ground into powder This powder, as an article of diet, is accounted extremely nutritious, containing a great quantity of farinaceous matter in a small bulk. O. mascula is very abundant in the meadows of Gloucestershire, and Salep has been made from its bulbs, equal to that imported. (*Encyc of Agr* 5527)

12807 Lip 3-part. : seg. lin. dotted scabr. ; midd. 2-parted, Sepals erect ac. Spur uncin. thrice as short as ovary
12808 Lip 3-part. dott. scabr. : later seg. obl ; midd. larg 2-lob. cren. with a point betw Spur straightish thrice as short as ovary, Bractes 4 times as short as ovary
12809 Lip 4-parted very narrow. segm filif ; middle longer with a tooth between, Spike conic Bractes minute
12810 Lip 3-parted very narrow seg lin. ; midd. 2-lob. blunt with a point between, Spur straight twice as short as ovary, Bractes obsolete
12811 Bulbs ovate, Stem leafy, Lip 3-parted scabr : lat. seg very narr. · midd. very long bifid with an appendage, Leaves wavy spotted
12812 Lip 3-lobed dotted middle broadest with a tooth between, Spur compressed, Outer sep subul Spike dense
12813 Lip 3-part. midd seg emarg Sep mucron at end, Spur twice as short as ovar. Spike dense ov Lvs lanc.
12814 Lip 3-parted lat. seg lin sub. middle long bifid thrice as long as ovary, Spur very short conical double
12815 Lip slightly 3 lobed sides reflex Three inn segm of perianth conniv. Spur cylind shorter than germen, Bract longer than the flowers
12816 Lip plane 3-lobed crenate 3 inn. segm of perianth conniv., lat. ones patent, Spur cylind shorter than the germen, Bract as long as the germen
12817 Lip obov undiv cren ret. Sep straight · lat long Spur clav short than ovary, Bract longer than fl [ovary
12818 Lip obov undiv tooth emarg Sep nerv. conniv Spur subul short than ovar Bract. membr. col. as long as
12819 Bulbs undivided, Sepals conniving, Lip trifid · middle segment projecting 2-lobed, Bractes longer than fl.
12820 Lip trifid dotted segments ovate serrulate, middle broadest emarginate, Spike ovate compact
12821 Scape naked, Lip slightly 3-lobed at end, Spur ascending, Bractes as long as ovary

12822 The only species

12823 Spur short double, Lip linear retuse 3-toothed · lateral blunt, middle obsol Bractes twice as long as fl
12824 Spur cylindrical shorter than ovary, Lip entire linear oblong [than flower
12825 Spur filif shorter than ovary, Lip obl blunt toothed on each side at base, Palate 1-toothed, Bractes longer
12826 Spur filiform longer than ovary, Lip 3-parted with cuneiform fringed segments
12827 Spur filiform shorter than ovary, Lip lanceolate pinnatedly fringed, Inner sepals toothed cut
12828 Spur filiform longer than ovary, Lip lanceolate pinnatedly fringed, Inner sepals fringed cut
12829 Lip long 3-parted segm somewhat digitate filiform, Spur length of ovary, Spike obl Flowers alternate
12830 Roots fascicled, Lip lanc ciliated the length of upper sepals, Spur very long a little shorter than ovary
12831 Sepals conniving, Lip nearly equal broad ovate bluntly 3-toothed, Spur filiform curved longer than ovary

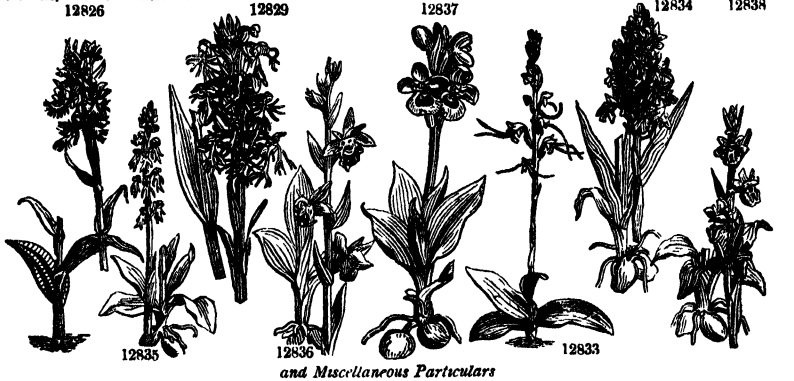
12832 The only species

12833 The only species

[spread Spur filif
12834 Lip 3-cleft : lobes eq. ent. with 2 longitud append. on upp. side near base, Seg of perin. lanc. 2 outer ones

12835 Lip the length of ovary

12836 Lip 3-fid : middle lobe largest ½-trifid, middle segm longest subulate deflexed
12837 Lip 2-lobed villous obovate appendaged, Sepals spreading three outer oblong blunt, inner very short
12838 Lip 3-lobed lateral short blunt : middle retuse



and Miscellaneous Particulars

Orchis fusca and militaris, according to Salisbury, succeed best in chalky soil, free from all manure whatever, but they will endure more moisture than would be supposed, for he found them in a very wet part of the meadow below the terrace, at Mill Hill, where they had, no doubt, been planted by Mr Peter Collinson. Gymnadenia conopsea affords another singular instance of this sort, which is found growing wild on the driest limestone, mixed with Anacamptis pyramidalis, and in bogs where one can hardly tread, mixed with Epipactis palustris.

1860 *Nigritella.* So named by M Richard, from *niger*, black, in allusion to the color of the flowers

1861. *Habenaria* From *habena*, a thong or rein, on account of the long spur of the flower, which resembles something of that sort. Most of the species have white flowers, and natives of America. Some have bright yellow flowers, others purple ones

1862. *Bartholina.* Named in honor of Thomas Bartholini, a Danish physician, who flourished at the end of the seventeenth century. A small Cape plant, with a beautifully fringed white flower.

1863. *Glossula.* So called by Mr Lindley, from γλωσσα, a tongue, in reference to the tongue-like segments of the labellum An obscure Chinese plant, with pale green minute flowers.

1864. *Anacamptis* From ανακαμπτω, to bend back, in allusion, it is presumed, to the reflexed edges of the appendage of the pollen-masses. In all respects similar to Orchis in habit It is the Orchis pyramidalis of Linnæus

1865 *Aceras.* From α, without, and κερας, a horn, in allusion to the absence of the spur from the labellum, by which character it is chiefly distinguished from Orchis Aceras anthropophora is difficult to cultivate It can only be propagated by seeds, which thrive best in a mixture of sand, loam, and chalk

1866 *Ophrys* From the Greek word οφυς, which signifies an eye-lash, to which the delicate fringe of the inner sepals may be very well compared. O apifera is a singularly beautiful plant, not uncommon on calcareous soils, near woods, and in open meadows. It ripens seeds plentifully, as will all the species, if care be taken, as

12839 **muscífera** *H. K.*	Fly	✱ △	el	¼	my.jn	Pu	England	ch.pa.	R	h	l	Eng. bot. 64
12840 **arácnites** *W.*	villous	✱ △	el	¼	my.jn	Br	Europe	...	R	h	l	Bot. mag 2516
12841 **lútea** *W.*	yellow	✱ ⧋	el	¼	ap my	Y	Spain	1818.	R	h	l	Hook. ex. fl. 10

1867. CHAMOR'CHIS. *Rich* CHAMORCHIS. *Orchideæ.* *Sp.* 1.

12842 **alpina** *Rich.*	alpine	✱ ⧋	pr	¼	ap.my		Switzerl.	1824	R	s	p	

1868. HERMI'NIUM *R Br.* HERMINIUM. *Orchideæ.* *Sp* 1.

12843 **Monórchis** *R Br*	musk	✱ △	cu	¼	jn jl	G	England	ch.ba.	R	l	p	Eng bot 71

1869 SERA'PIAS. *R Br.* SERAPIAS. *Orchideæ* *Sp* 2—4

12844 **Lingua** *W*	tongue-lipped	✱ ⧋	cu	1	my jn	Br	S Europe	1786.	R	l	p	Bot cab 655
12845 **cordígera** *W*	heart-lipped	✱ ⧋	cu	1	jl.au	Br	S Europe	1806	R	l	p	Bot rep 475

1870. GOODYE'RA. *H K* GOODYERA *Orchideæ* *Sp* 5—9

12846 **répens** *H K*	creeping	⚹ △	pr	¾	jl au	W	Scotland	al wo.	D	l	p	Eng bot 289
12847 **pubéscens** *H K*	downy	⚹ △	pr	¾	jl	W	N Amer.	1802	D	l	p	Lind. coll 25
12848 **discolor** *B reg*	purple-leaved	⚹ ⧋	pr	1	n d	W	S. Amer	1815.	D	l	p	Bot. reg 271
12849 **prócera** *Hook*	Nepal	⚹ ⧋	pr	2	jn jl	W	Nepal	1821	D	l	p	Hook ex fl 39
12850 **tesselláta** *Lodd.*	tessellated	⚹ △	pr	¾	jn jl	W	N Amer.	1821	D	l	p	Bot cab 952

1871 DIU'RIS *Sw* DIURIS. *Orchideæ* *Sp.* 1

12851 **aúrea** *Sw*	golden-flowered	⚹ ⧋	el	1½	...	Y	N S W	1810.	R	l	p	Exot bot. 1. t. 9

1872. PONTHIE'VA *R Br* PONTHIEVA *Orchideæ* *Sp* 2

12852 **glandulósa** *R Br*	glandular	⚹ ⧋	cu	1	ja mr	G	W Indies	1800	D	l	p	Bot. mag 842
12853 **petioláta** *Lindl.*	stalked	⚹ ⧋	cu	1	au	Br	S Vincent	1822	D	l	p	Bot. reg 760

*1873 NEOTTIA *L.* NEOTTIA *Orchideæ* *Sp* 1

12854 **Nidus avis** *W*	bird's-nest	✱ △	cu	1	my	Br	Britain	ch wo	R	l	p	Eng bot 48

1874. SPIRAN'THES *Rich* SPIRANTHES. *Orchideæ* *Sp* 6—13.

12855 **picta** *Lindl*	Lemon-scented	⚹ ⧋	pr	2	ap jn	W	Trinidad	1805.	D	s	p	Bot mag 1562
12856 **elàta** *Lindl*	tall	⚹ ⧋	pr	2	ap jn	W	W Indies	1790	D	s	p	Bot. mag 2026
12857 **pudica** *Lindl*	modest	⚹ ⧋	pr	¾	n d	Pk	China	1819	D	s	p	Lindl coll 30
12858 **bicolor** *Lindl*	two-colored	⚹ ⧋	pr	1	ja f	W	Trinadad	1823	D	s	p	Bot. reg 794
12859 **cérnua** *Rich*	nodding-flower	⚹ △	pr	1	jl	W	N Amer	1796	D	l	p	Bot. mag 1568
12860 **æstivális** *Rich*	Ladies-traces	⚹ △	pr	¾	au s	W	Britain	me pa	D	l	p	Eng bot. 541

1875 STENORHYN'CHUS *Rich* STENORHYNCHUS. *Orchideæ* *Sp* 2—7

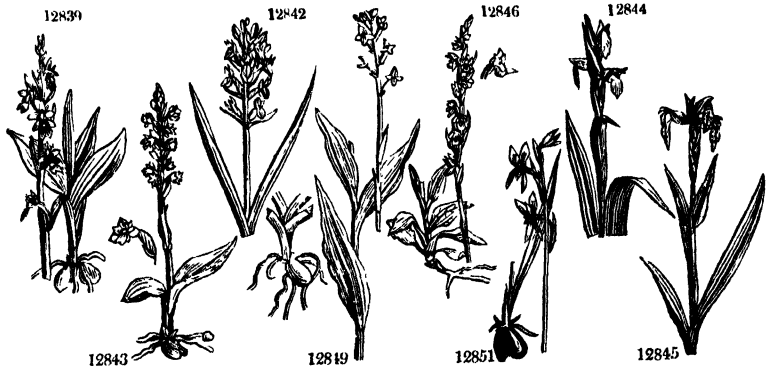
12861 **speciósus** *Rich*	showy	⚹ ⧋	el	1	ap jn	Sc	W Indies	1790	D	s	p	Bot mag 1574
12862 **orchioides** *Rich*	frosted-flower'd	⚹ ⧋	el	1¼	my	F	Jamaica	1805	D	s	p	Bot mag 1036

1876 LISTE'RA *R Br* TWAY-BLADE *Orchideæ* *Sp* 2

12863 **ovàta** *H K*	common	⚹ △	cu	1	my jn	G	Britain	woods	R	l	p	Eng bot 1548
12864 **cordàta** *H K*	heart-leaved	⚹ △	cu	¼	jn jl	G	Britain	moi h	R	l	p	Eng bot 358

1877 ARETHU'SA *L* ARETHUSA *Orchideæ* *Sp* 1—4

12865 **bulbósa** *H K*	bulbous	✱ ⧋	el	¾	my jn	Pk	N Amer	...	R	l	p	Bot mag 2204



History, Use, Propagation, Culture,

Sweet directs, to "rub the pollen on the stigma." The seeds must be sown as soon as ripe, and the plants transplanted to where they are finally to remain, when of a small size Several species of this genus, and of Orchis, were successfully cultivated by Collinson, in his botanic garden at Mill-Hill. His method was to place them in a soil and situation as natural to them as possible, and to suffer the grass and herbage to grow round them O aránitera, with a little attention and management, will grow and flower freely in pots. Curtis found the following method successful · "take up the roots carefully when in flower, bare them no more than is necessary to remove the roots of the other plants, fill a large sized garden-pot with three parts choice loam moderately stiff, and one part chalk, mixed well together, and passed through a sieve somewhat finer than a common cinder sieve, in this mixture place your roots at about the depth of two inches, and three inches apart, water them occasionally during summer, if the weather prove dry, at the approach of winter place the pot in a frame under a glass, to keep it from wet and frost, which combined, destroy the beauty of the foliage, if not the plant itself, in the autumn, before any of the others make their appearance, this species emerges" (*Curtis, Fl Lond* n 68)

Salisbury says, that Ophrys muscífera, and most of its congeners, are very easily cultivated; but require the purest loam from a chalky bottom, and the border to be most effectually drained, for any permanent wet in summer makes them push too soon. On the hillocks and declivities where they grow wild, the slight showers are absorbed by the surrounding turf or long grass, and the heavy rains we usually have after midsummer-day run off quickly

1867 *Chamorchis* From χαμαι, dwarf, and *Orchis* A pretty little alpine plant, exceedingly difficult to cultivate Roots have been brought in damp moss from Switzerland, but they probably have perished ere *now*

1868 *Herminium* A name which is not explained by its author It is the Ophrys Monorchis of old botanists.

1869. *Scrapias* is the name of an Egyptian divinity, whose temples were notorious scenes of profligacy. In this sense, with reference to the uses of the plant, as also in Satyrium, the word seems to have been applied by Pliny. Rare herbaceous plants of the south of Europe, but cultivated in a frame

1870. *Goodyera* So called after Mr. John Goodyer, an obscure British botanist. The species grow freely in sandy peat, and, unlike most of the Orchideæ, may be increased by dividing the roots

12839 Lip 3-fid: middle lobe large 2-lobed, Anther blunt
12840 Stem leafy, Lip vill. 3-lobed: midd. lobe obov. shortly 3-lobed at end, Inner sepals linear-lanc. very short
12841 Stem leafy, Lip downy obov. 3-lobed at end: lobes nearly equal, Inner sepals lanc. twice as short as outer

12842 Leaves linear setaceous, Scape naked

12843 The radical leaves lanceolate twin

12844 Lip 3-parted: middle lobe oblong lanceolate acute smoothish hanging down
12845 Lip 3-parted: middle lobe ovate acuminate hanging down with a hairy disk

12846 Radical leaves ovate, Lip and petals lanceolate
12847 Radical leaves ovate, Lip ovate acuminate, Sepals ovate
12848 Leaves fleshy chocolate-colored ovate without nerves
12849 Stem leafy, Leaves ovate-lanceolate stalked, Lip rounded glandular inside, Petals broad ovate
12850 A smooth variety of G. pubescens

12851 Leaves linear channelled shorter than scape, Middle segm. of lab. with a double keel inside

12852 Lip unguiculate acuminate, Inner sepals ½-ovate
12853 Spike lax erect, Leaves stalked erect crisp smooth, Flowers discolored

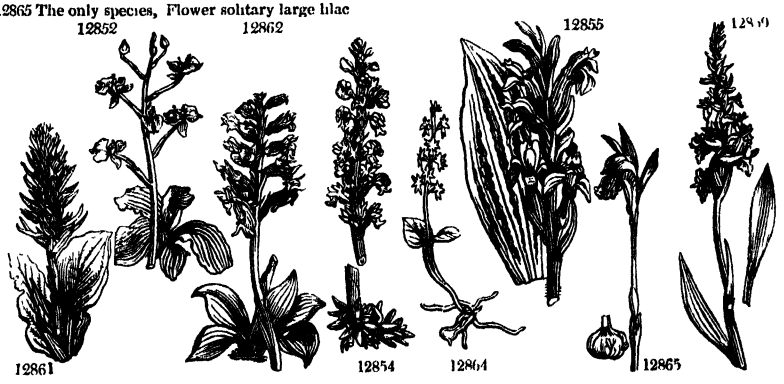
12854 The only species

12855 Rad. lvs obl lanc Scape with bractes, Anterior sepals decurrent placed under the ½-inferior labellum
12856 Lip obovate emarginate, Scape sheathed, Bractes shorter than flower, Leaves ovate stalked flat at edge
12857 Leaves linear-lanc Lip subsessile crenulate at end, Sepals ovarium and rachis quite smooth
12858 Lvs linear lanceolate 2-colored, Scape villous much longer than leaves, Fl gibbous on its outside at base
12859 Leaves lanceolate 3-nerved, Stem sheathed, Flowers recurved cernuous, Lip oblong entire acute
12860 Rad leaves oblong somewhat stalked, Spike twisted with the flowers on one side, Lip ovate

12861 Lip lanc undivided, Scape bracteate, Bractes longer than flower, Leaves oblong wavy towards the end
12862 Rad leaves broad lanceolate, Spike erect, Lip saccate at base with the sepals, Lip acuminate

12863 Stem with only a pair of ov-ellipt opp lvs Col of fructification having an appendage in which the anther [is placed
12864 Stem with only 2 cordate opposite leaves, Col without any appendage behind, Lip with 2 teeth at the base

12865 The only species, Flower solitary large lilac



and Miscellaneous Particulars

1871. *Dusris* From δις double, and ωσα, a tail, in allusion to the form of the sepals Beautiful New Holland plants, which may be cultivated in the same way as Disa

1872. *Ponthieva* Named after De Ponthieu, who sent many specimens of West Indian plants to Sir J Banks The species may be cultivated in pots, well drained, and filled with sandy loam and peat. Water must be sparingly given when the plants are not in a growing state

1873. *Neottia* This word in Greek signifies bird's nest, and has been applied to the present plant on account of the interwoven fibres of its roots No means of cultivating the only species has been yet discovered. It grows naturally in woods among decayed leaves, and is supposed to be parasitical

1874. *Spiranthes.* From σπειρα, a screw, or any thing spirally twisted, on account of the disposition of the flowers on their spike Delicate little herbaceous plants with fibrous roots, and generally white flowers. S. æstivalis has the germs on the flower-stalks placed regularly one above another, somewhat resembling tresses of plaited hair; whence its name of Ladies' traces or tresses This species grows more readily in the garden than most of its tribe

According to Salisbury, no plant whatever is more easy to cultivate than this At Chapel-Allerton it propagated itself every where, springing up from seeds in the neighbouring pots, whatever soil or plants happened to be in them, and they were once found germinating on a dead root of a Persian Cyclamen, in a pot, which, for want of draining, was full of Jungermannias

1875 *Stenorhynchus* A splendid genus of evergreen stove herbaceous plants, with brilliant red or yellow flowers They have been named from στενος, narrow, and ῥυγχος, a beak, on account of the long pointed stigma. N orchioides is one of the most beautiful plants of this genus, introduced by E. J A Woodford, Esq in 1806, from the Island of Barbadoes, where it grows wild in the most arid places among grass It requires, nevertheless, moderate waterings here while the leaves are green

1876 *Listera* Dr Martin Lister was a celebrated English physician and naturalist, who died in 1711 The species require a shady situation and a light sandy soil, with some peat intermixed They will grow on a bank under the drip of trees, or in small pots They are increased by dividing the roots

1877 *Arethusa* A poetical name. Arethusa was a nymph of Diana, who was transformed into a fountain. The species of this genus are all found in moist places. They are very impatient of cultivation The best way to manage them, is to plant them in loose wet peaty soil, and to keep them in a frame well exposed to the sun

1878. CALOPO'GON. *R. Br* Calopogon — *Orchideæ. Sp.* 1.
12866 pulchéllus *H K.* tuberous-rooted el 1½ jl.au Pu N. Amer. 1771. R l p Bot. mag 116
Limodórum tuberósum B M

1879. POGO'NIA *R Br* Pogonia — *Orchideæ. Sp* 3—4.
12867 ophioglossoides *B reg* Adder's-tongue el 1 jn jl Pk N. Amer 1816. R l p Bot. reg. 148
12868 divaricáta *H K.* Lily-leaved pr ½ jn jl Pk N Amer 1787 D l.p Lam ill t.729.f.3
12869 péndula *Lindl* pendulous pr ½ au Pk N. Amer. 1824 D l p Bot. reg. 908

1880. EPIPACTIS. *Sw.* Epipactis. — *Orchideæ Sp.* 5—9
12870 latifólia *W* broad-leaved or 1½ jl au Pu Britain m wo D l.p Eng bot. 269
12871 palústris *W* marsh or ½ jl au Pu Britain mar. D l.p Eng bot. 270
12872 pállens *W* white or 1 jn W Britain ... D l p Eng. bot 271
12873 ensifólia *W.* narrow-leaved or 1½ jn W Britain m wo. D l p Eng bot 494
12874 rúbra *W.* purple or 1½ jn jl Pu Britain m.wo D l.p Eng. bot 437

1881 CALEA'NA *R Br.* Caleana — *Orchideæ* *Sp* 1—2
12875 major *H K* smooth-lipped pr 1½ ... G N S W. 1810. D l p

*1882 CORALLORRHI'ZA *H. K.* Corallorrhiza — *Orchideæ* *Sp* 1—4
12876 innáta *H K* spurless cu ½ jn jl G Scotland sc wo. D l p Eng bot. 1547

1843 RODRIGUE'ZIA. *Fl per* Rodriguezia — *Orchideæ* *Sp* 1—2
12877 secunda *Kunth* one-sided el ½ o R S Amer. 1818 D p r w Hook ex. fl. 129
Pleurothallis coccinea Hooker

1884 GOME'ZA. *R. Br* Gomeza. — *Orchideæ. Sp* 1
12878 recúrva *B M* recurved el ½ my jn Y Brazil 1814. D p r w Bot mag. 1748

1885 CYMBI'DIUM. *Swz* Cymbidium — *Orchideæ* *Sp* 7—11
12879 tripterum *W* triangul.-fruit. cu ½ jn jl W Jamaica 1790 D p r w Smith ic pict.14
12880 aloifólium *W* Aloe-leaved or 1 my jn Br E. Indies 1789 D l p Bot. mag 387
12881 ensifólium *W* sword-leaved ft 2½ jn o Br China 1780 D l p Bot mag. 1751
12882 sinénse *W.* Chinese ft 1½ s o Br China 1793 D l p Bot. mag 888
12883 lancifólium *Hook* lance-leaved el ½ my Y R E. Indies 1822 D l.p Hook ex fl 51
12884 depéndens *Lodd* hanging-down cu ½ jl Y G China 1822 D p r w Bot. cab. 936
12885 xiphiifólium *Lindl* sword-leaved pr ½ my au G China 1814. D l p Bot reg 529

1886 BRASSIA *R Br* Brassia — *Orchideæ* *Sp* 2
12886 maculáta *H K* spotted-flower el 1 jn jl Y R Jamaica 1806 D p r.w Bot. mag. 1691
12887 caudáta *Lindl* long-tailed el 1 jn jl G V R W Indies 1823 D p r w Bot. reg 832

1887 LISSOCHI'LUS *R Br* Lissochilus. — *Orchideæ. Sp* 1
12888 speciósus *R Br* showy spl 2 my jn Y C G H. 1818. D l p Lindl. coll. 31

1888 GEODO'RUM *Jacks* Geodorum — *Orchideæ* *Sp.* 3—4
12889 purpúreum *H K.* purple el 1 jn au Pu E. Indies 1800 D l.p Roxb cor 1 t 40
12890 citrinum *H K* Lemon-colored el 1 o d Y E. Indies 1800 D l p Bot. mag. 2195
12891 dilatátum *H K* shovel-lipped el 1 my au Pk E Indies 1800 D l p Bot. reg. 675

†*1889 CATASE'TUM *Rich* Catasetum — *Orchideæ* *Sp* 5—7
12892 tridentátum *Hook* three-toothed gr 2 jl au Y Br Trinidad 1822 D p r w Hook ex fl 90
12893 Claverin'gi *Lindl* Capt Clavering's gr 2 jl au Y Br Brazil 1822 D p r.w Bot. reg 840
12894 floribúndum *Hooks* many-flowered gr 2 n Y Br Trinidad 1824 D p r w Hook ex fl 151



History, Use, Propagation, Culture,

1878. *Calopogon.* From καλος, beautiful, and γωνια, a beard, in allusion to the beautiful fringe of the lip An elegant plant, which was introduced accidentally, as Mr. Curtis informs us, by the laudable exertions of his gardener, who, in the spring of 1783, examining attentively the bog earth which had been brought over with some Dionæas, found several tooth-like knobby roots, which, upon being planted in heat, afforded this plant: on the shelf of a stove, or on a bark pit it thrives exceedingly, and seems merely to require a longer and hotter summer than our climate affords.

1879 *Pogonia* A name with the same derivation as the last genus. The species also require the same treatment.

1880 *Epipactis.* A name given by the Greeks to a sort of Hellebore, and used by Swartz to distinguish a tribe of plants previously called Helleborine Pretty herbaceous hardy plants. "Some of its species thrive in the borders in the common garden soil, and most of them will do well in pots, in a mixture of loam and peat, they require but little water when in a dormant state, and are increased by dividing the roots." (*Bot Cult. 365*)

1881 *Caleana* Named after Mr George Caley, a most indefatigable and acute botanical collector, who resided several years among the natives of New South Wales, where he made a valuable collection of plants. The name has been subsequently changed by Mr Brown to Caleya which as being too similar to Calea, a very different plant, we cannot prefer to the original designation The species require the common treatment of the tribe, and are increased by division of the roots

1882. *Corallorrhiza.* From κοραλλιον, coral, and ριζα, a root, on account of its branched roots, which much resemble coral. A plant supposed to be incapable of cultivation It is a native of boggy places in the northern parts of the world. The three American species C verna, multiflora, and odontorhiza, are said to have been introduced in 1824, but we have not heard of their having been cultivated with any success.

12866 Leaves plaited long linear lanceolate The only species

12867 Root fibrous, Leaf of the scape and bractea elliptical lanceolate, Outer sepals oblong-ovate
12868 Root subpalmate, Leaf and bractea of scape linear oblong, Outer sepals lanceolate linear
12869 Leaves ovate squamiform amplexic Fls subcernuous solitary, Middle lobe of lip obl. crisp, Stem angular

12870 Lvs ov amplexic Lower bractes long than fls Fls drooping, Lip entire acuminated shorter than petals
12871 Lvs lanc. amplexic. Bractes short. than fl Fls slightly drooping, Lip cren. obt. rather long than perianth
12872 Leaves ovate-lanceolate sessile, Bractes longer than the flower, Lip obtuse shorter than perianth
12873 Lvs. lanc much acum subdistich Bract very minute subul Fls erect, Lip obt much short than perianth
12874 Lvs lanc Bractes longer than ovary, Flowers erect, Lip acute with wavy elevated lines, Ovary smooth

12875 Leaf lanc lin. flat, Scape with a single bract in the middle, Lip smooth narrowed and ½-ovate at each end

12876 Spur abbreviated adnate

12877 Spikes nodding 1-sided, Leaves lanceolate complicate

12878 Spikes nodding 1-sided, Leaves lanceolate flat

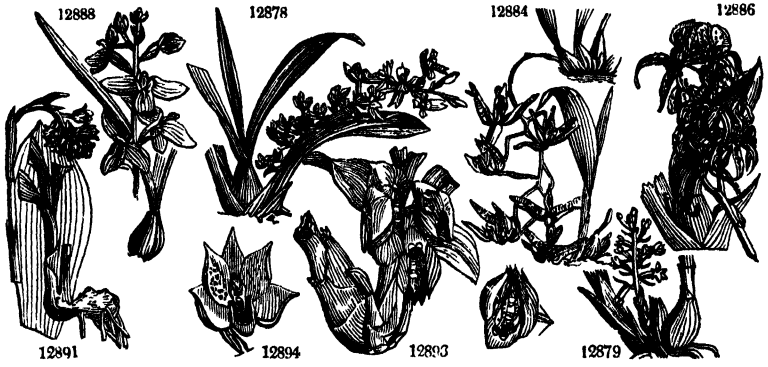
12879 Stemless, Leaves growing on a bulb radical sheathing, Scapes many-flowered, Ovary 3-winged
12880 Leaves radical broad-linear channelled fleshy retuse at end, Scapes many-flowered pendulous
12881 Leaves radical ensiform nerved, Scape round few-flowered, Lip ovate somewhat recurved spotted
12882 Leaves radical ensiform nerved, Scape few-flowered, Flowers 1-sided, Sepals striated 3 outer reflexed
12883 Leaves radical lanceolate nerved narrowed at base, Scape round few-fl Lip obl recurved at end spotted
12884 Bulbous, Leaves plaited, Racemes divaricating pendulous radical
12885 Leaves thickish lin.-subulate channelled nerved crenate as long as scape, Spike few-fl Lip not spotted

12886 Sepals lanceolate spreading not longer than ovary
12887 Sepals linear lanceolate acuminate the lower caudate very much longer than ovary

12888 The only species A tall plant with long rigid linear lanceolate leaves on a bulbous base

12889 Scape longer than leaves, Raceme pendulous, Flowers alternate, Lip ovate acute painted
12890 Scape shorter than lvs. Spike pendulous, Fls close, Lip somewhat spurred at base blunt and entire at end
12891 Scape shorter than lvs Spike pendulous, Fls close, Lip somew spurred at base dilated and crenul. at end

12892 Two inner sepals spotted, Lip galeate 3-toothed
12893 Spike shorter than leaves, Leaves galeate fleshy 3-toothed at end, Sepals oblong inner spotted
12894 Spike short than lvs. Lip gal. blunt 3-tooth Two inner sep mott with purple, others as well as col green



and Miscellaneous Particulars

1883 *Rodriguezia* Named by the authors of the Flora Peruviana, after Emanuel Rodriguez, a Spanish physician, and, as it is said, of considerable botanical merit A beautiful herbaceous plant, growing upon decayed wood. Its flowers are placed in cernuous racemes of a lively pink color.

1884 *Gomeza* So called by Mr Brown, in honor of Senor Goinca, a Spanish apothecary. Mr Lindley thinks it not distinct from the last. A bulbous epiphyte, with drooping spikes of yellow flowers

1885 *Cymbidium* From κυμβη, a little boat, in allusion to the form of the labellum All the genuine species of Cymbidium are terrestrial, and rarely are found growing upon trees. In cultivation the species grow in loam, chips of wood, potsherds, and other rubbish, broken small, and put in well-drained pots They are increased by dividing at the root

1886. *Brassia* Named after Mr Brass, an intelligent gardener, who collected seeds and plants in Africa for the Kew Garden The two species now known are among the most beautiful of the various tribes of Epidendrums Brassia maculata has large pale yellow flowers, elegantly spotted with brown; B caudata has similar flowers, with long tails to their lower segments

1887. *Lissochilus* From λισσος, smooth, and χειλος, a lip, in reference to the absence of callosity or crests from that part An exceedingly rare and very noble plant, which grows freely in sandy loam with a little peat. The flowers grow in long spikes of a bright yellow color.

1888 *Geodorum* From γης, the earth, and δωρον, a gift, in reference to the beauty of the blossoms lying on the earth. Handsome plants, succeeding with the treatment of Cymbidium.

1889 *Catasetum* Apparently a word of hybrid extraction, from κατα, and seta, a bristle, in allusion to the two long bristles or horns of the columna, which constitute one of the most remarkable characters of the genus.

12895 Hookéri *Lindl.* Hooker's ⚷ △ or 1½ n Y Br Brazil 1818 D p r w Lind. coll. bot.
12896 cristátum *Lindl* crested ⚷ △ cu 2 o.n G Brazil 1823. D p r w

1890 TRIZEUX'IS. *Lindl.* Trizeuxis. *Orchideæ. Sp* 1
12897 falcáta *Lindl.* falcate ⚷ △ cu ½ f mr G W. Indies 1890. D p.r w Lindl. coll. 2

1891. XYLO'BIUM *Lindl* Xylobium *Orchideæ Sp* 1—*uncertain*
12898 squálens *Lindl* dingy-flower'd ⚷ △ cu ⅓ my jn Y.Br Brazil 1822. D p.r.w Bot. reg. 732

†1892. MAXILLARIA *Fl per.* Maxillaria *Orchideæ Sp* 2—*uncertain.*
12899 Barringtóniæ *Lindl* large-flowered ⚷ △ cu 1½ jn.au Y G W Indies 1790. D p r w Hook ex fl. 119
12900 Harrisónіæ *Lindl* Mrs Harrison's ⚷ △ spl 1½ s Y.G S Amer. ... D p r.w Bot. reg. 897

1893 NOTY'LIA *Lindl* Notylia *Orchideæ Sp* 1—2.
12901 punctáta *Lindl* dotted ⚷ △ cu ½ au s G Trinidad 1822. D p.r.w Bot. reg 759
Pleurothallis punctata B reg.
Gomeza tenuiflora Bot cab

1894 PLEURO'THAL'LIS. *R Br* Pleurothallis. *Orchideæ Sp* 2—5
12902 racemiflora *Lindl* racemose ⚷ △ cu 1 ap G W Indies 1823 D p r w Hook ex fl 123
12903 ruscifólia *H K* Butcher's-broom-lv ⚷ △ cu ½ my jn G W Indies 1791. D p r w Jac. am t.133 f 3

†1895 ONCI'DIUM *Sw* Oncidium *Orchideæ Sp* 9—25
12904 altissimum *W* sharp-petaled ⚷ △ or 4 au s Y W Indies 1793 D p r w Jac. amer t. 141
12905 carthaginénse *W.* Spread-eagle ⚷ △ or 4 my jn Ol W Indies 1791 D p r w Bot mag 777
12906 bifólium *H K.* two-leaved ⚷ △ or ¾ jl Y S Amer 1811 D p r w Bot mag 1491
12907 triquetrum *H K* triangular-lvd ⚷ △ or ½ jl au Y Jamaica 1793 D p r w
12908 luridum *Lindl* Mr Griffin's ⚷ △ or 2 f mr Ol S Amer 1822 D p r w Bot reg 727
12909 barbátum *Lindl* bearded ⚷ △ or 1½ ap my Y S Amer 1818 D p r w Lindl. coll
12910 flexuósum *B M* zigzag ⚷ △ el 1½ jn jl Y Brazil 1818 D p r w Bot. mag 2203
12911 pumilum *Lindl* dwarf ⚷ △ pr ½ jn jl Ol Brazil 1824 D p r w Bot reg 920
12912 Papilio *Lindl* Butterfly Plant ⚷ △ gr 1½ mr Y u Trinidad 1823 D p r w Bot reg 910

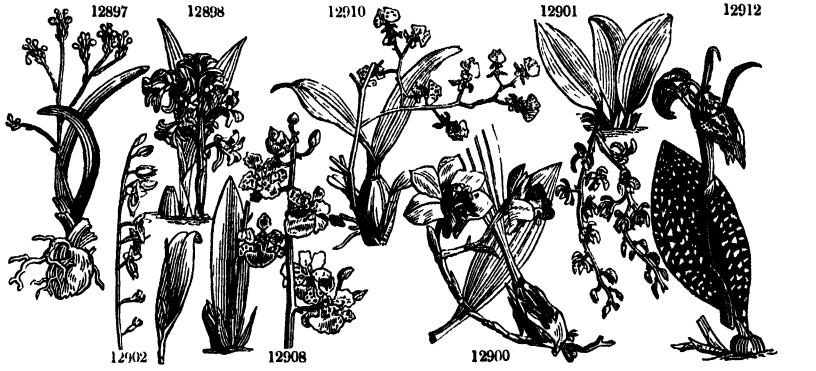
1896 CYRTOPO'DIUM *R Br* Cyrtopodium *Orchideæ Sp* 2
12913 Andersónii *H K* Anderson's ⚷ △ el 2 my au Y W Indies 1804 D p l Bot mag. 1800
12914 Woodfórdii *B M* Woodford's ⚷ △ el 2 o Pk S Amer. 1814 D p l Bot mag 1814

1897 CŒLO'GYNE *Lindl* Cœlogyne *Orchideæ Sp* 3—7
12915 punctuláta *Lindl* dot-flowered ⚷ △ el ¾ .. Y E Indies 1822 D p r w
12916 nitida *Lindl* shining-leaved ⚷ △ el 1 .. Y E Indies 1822 D p r w
12917 fimbriáta *Lindl.* fringed ⚷ △ pr ½ jl o Y Br China 1824 D p r w Bot reg 868

1898 MACRADE'NIA *R Br* Macradenia *Orchudeæ Sp* 1
12918 lutéscens *R Br* yellowish ⚷ △ cu ½ d Ol Trinidad 1821 D p r w Bot. reg. 612

1899 ANISOPE'TALUM *Hooker* Anisopetalum *Orchideæ Sp* 1
12919 Careyánum *Hooker* Dr Carey's ⚷ △ cu ½ o Br P Nepal 1823 D p r w Hook ex fl. 140

†1900 DENDRO'BIUM *H K* Dendrobium *Orchideæ Sp* 9—17
12920 speciósum *R Br* showy ⚷ △ spl 1 jn au Pu N S W 1801 D p l Exot. bot 1 t 10
12921 linguiforme *R Br* tongue-leaved ⚷ △ cu ½ ... Pu N S W 1810 D p r w Exot. bot 1 t 11
12922 cucullátum *R. Br* cucullate ⚷ △ el 2 mr Pk E Indies 1815 C p l Bot mag 2242
12923 Pierárdi *Roxb* Pierard's ⚷ △ el 2 mr Pk E. Indies 1815 C p l Hook ex fl 9
12924 fimbriátum *Hook* fringed ⚷ △ spl 2 ap Y E Indies 1823 C p l Hook. ex fl 71
12925 crumenátum *W* sweet-scented ⚷ △ ft 2 ap my W Sumatra 1823 C p l Ru. am 6 t 47 f 2



History, Use, Propagation, Culture,

Very fine epiphytes, with large bulbous roots, plaited leaves, and fine, often spotted, flowers of a greenish purple color The bulbs contain a quantity of viscid juice, which is used, when fresh, in Brazil, for the purpose of sealing letters The plants are there called *Cebolleta.*

1890 *Trizeuxis* So called by Mr Lindley without explanation We suppose the name has been formed from τρις, three, and ζευξις, union, in allusion to the remarkable union of three segments into one, which takes place in this genus A very singular epiphyte, which is with difficulty kept alive in the stove by being placed in finely pulverised decayed wood

1891 *Xylobium* From ξυλον, wood, in allusion to the substance upon which it grows A curious Brazilian bulbous epiphyte with plaited leaves This is of easy cultivation

1892. *Maxillaria* So called by the authors of the Flora Peruviana, as they inform us, because the labellum when looked at sideways, resembles the *Maxillæ* of some insects All fine South American plants, with plaited leaves and showy flowers They are cultivated like other epiphytes, and not with much difficulty

1893 *Notylia* So called, we presume, from νοτος, the back, and τυλος, a hump, in reference to a singular callosity at the back of the stigma, which Mr Lindley, the author of the genus, considers very curious. An unostentatious epiphyte without bulbs, and with solitary leaves, out of the bosom of which grows a pendulous raceme.

1894. *Pleurothallis* From πλευρα, a rib, and θαλλω, to flower, in allusion to the one-sided disposition of the flowers. Singular little epiphytes with solitary leaves, no bulbs, and flowers of a green color. They grow rarely in decomposed wood.

12895 Spike length of leaves erect, Flowers globose, Sepals rounded
12896 Perianth spreading, Lip opened out saccate crested

12897 The only species. Flowers very small in little heads upon a branched scape

12898 Bulbs conical truncate, Flowers close, Leaves lanceolate plaited about 3-nerved twice as long as scape

12899 Leaves about 3 oblong nerved seated on a bulb, Scape about 1-flowered sheathed
12900 Lvs solitary lanc. plaited, Raceme 2-fl Perianth very large wavy spreading, Lobes of lip recurved crisp

12901 Spikes pendulous lax as long as the narrow oval nerved leaves

12902 Stem long 1-leaved, Scape erect longer than obl emarginate leaf, Fls racemose 1 sided
12903 Stem long 1-leaved, Leaf ovate-lanceolate, Flowers clustered in the bosom of the leaf

12904 Sepals 5 lanceolate longer than lip, Scape panicled
12905 Sepals 5 obovate unguiculate a little shorter than lip, Scape panicled
12906 Sepals 4 obov wavy, Lip long than sep midd lobe dilated reniform 4-lobed, Scape racem Bulbs 2-leaved
12907 Sepals 4 acute, Middle lobe of lip roundish undivided, Scape racemose, Leaves 2-cornered
12908 Leaves ellipt acute, Scape upright branched, Sepals wavy retuse spreading nearly equal, Lip reniform
12909 Lvs flat obl lanc Sepals 5 obovate undul ate blunt, Lip transverse shorter than seg bearded in the middle
12910 Lip 2-lobed spotted much longer than the sepals, Bulbs ovate comp leafy at base and end, Scape panicled
12911 Lvs rigid oval oblique, Panicle thyrsoid length of lvs Sep obov Lip 3-lobed crested, Wings of col ent
12912 Lvs solitary oval dotted spread Scape jointed 2-edged few-fl Upper sepals lin very long, Col 2-horned

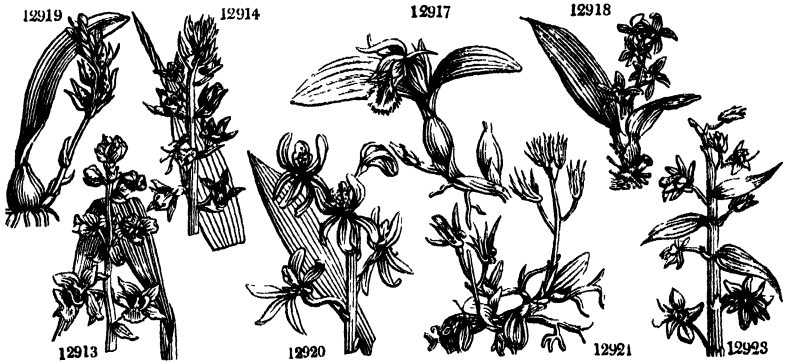
12913 Lip narrow clawed lateral lobes divaricating longer than the middle which is hollowed out
12914 Lip ventricose lateral lobes shorter than middle which is crested and callous

12915 Bulbs fascicled, Lvs lanc atten at base, Sepals lanc finely dotted, Midd lobe of lip acute, Crest obsolete
12916 Bulbs and leaves coriaceous and shining
12917 Lvs. twin obl lanc spreading, Fls terminal solitary, Inner sepals filiform, Lip fringed with two crests

12918 Bulbs 1-leaved leafy at base, Leaves oblong 3-nerved, Spike erect shorter than leaves

12919 Leaves lanceolate keeled solitary on their bulb, Spike imbricated radical very little longer than the bulb

12920 Stems erect 2-3-leav at end, Lvs oval obl shorter than many-fl terminal raceme, Sepals narrow oblong
12921 Stems creep Lvs oval blunt depressed fleshy several times shorter than raceme, Sepals long linear acute
12922 Stems pendul Lvs bifarious lanc acum Ped opp the leaves about 2-fl Lip undivided ov cucul at base
12923 Stems pendul Lvs bifarious broadly lanc Pedunc about 2-fl Lip undivid tubul oblique almost truncate
12924 Leaves lanc striated, Racemes many-fl Lip undivided obliquely campanulate fringed
12925 Stem branched somewhat compr. tuberous at base, Leaves ovate-lanc Spikes erect, Fls remote alternate



and Miscellaneous Particulars

1895 *Oncidium.* From *ογκος*, a tumour, on account of the callosities with which the disk of the labellum is covered. Among the most beautiful of epiphytous plants, conspicuous by their long loose panicles of olive-colored or yellow flowers. Oncidium altissimum grows to the height of three or four feet. O Papilio, the curious Butterfly-plant of Trinidad, has large yellow and red blossoms poised on slender footstalks, and dancing about in the air like some gaudy insects All the species are cultivated without any difficulty in almost any soil, with plenty of heat and moisture

1896 *Cyrtopodium* From *κυρτος*, convex, and *τυς*, a foot, in allusion to the labellum of the original species These are handsome bulbous plants, growing either upon the ground or upon trees They are rather difficult to manage well, and are seldom seen in collections Their flowers, which are handsome, are rarely produced

1897 *Cœlogyne* So named by Mr Lindley, from *κοιλος*, hollow, and *γυνη*, a female, on account of the form of the stigma, which is peculiar for an Epidendrum Some of the species, natives of Nepal, which have not yet been introduced into our gardens, are most beautiful bulbous epiphytes, with shining fleshy leaves, and spikes of gorgeous flowers proceeding from a rigid imbricated scaly base

1898 *Macradenia.* From *μακρος*, long, and *αδην*, a gland, on account of the long subulate process to which the pollen-masses are attached A singular little epiphyte with yellowish brown flowers

1899 *Anisopetalum* From *α*, without, *ισος*, equal, and *πεταλον*, a petal, on account of the inequality of the sepals, or petals as they commonly called. A curious Nepal plant, with bulbous roots, and little erect spikes of brownish flowers

1900 *Dendrobium* From *δενδρον*, a tree, with reference to the habit of the species in growing upon trees In the woods of the East Indies they climb and twist themselves about the branches of live trees, or throw

12926 émulum *R. Br* aspiring ☇ △ pr ½ ... ... N. S W. 1824. D p.r.w
12927 monilifórme *W* glassy ☇ △ pr ¾ ... Pu China 1824. D p r w Kœmpf. t.865
12928 rígidum *R. Br.* rigid ☇ △ cu ½ ... ... N. Holl. 1824 D p r.w

1901. CAMARI'DIUM. *Lndl.* Camaridium — *Orchideæ. Sp* 1.
12929 ochroleúcum *Lndl.* pale-yellow ☇ △ pr 1 jl W Trinidad 1823. C p r w Bot. reg. 844
Dendróbium álbum Hook

1902 ORNITHI'DIUM. *Salisb* Ornithidium — *Orchideæ Sp* 1.
12930 coccíneum *H K.* scarlet-flowered ☇ △ or 2 ja d R W. Indies 1790. C p r.w Bot mag. 1437

1903 ISOCHI'LUS. *R Br* Isochilus — *Orchideæ Sp* 2—5 ?
12931 lineáris *R Br.* linear ☇ △ pr ¾ my jl R W Indies 1791 D p r w Bot. reg 745
12932 prólifer *R Br.* proliferous ☇ △ pr ½ ... W W Indies 1793. C p.r.w Bot. reg. 825

1904 PHOLIDO'TA *Lndl* Pholidota — *Orchideæ Sp* 1—2
12933 imbricáta *Lndl* imbricated ☇ △ or 1½ ... Br w Nepal 1824. D p r w Hook. ex fl 138

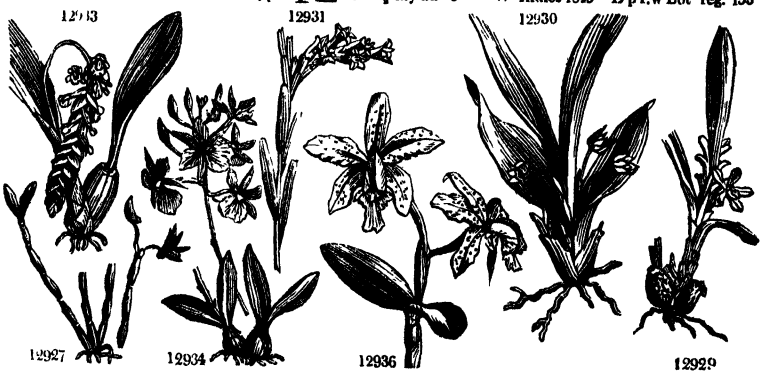
1905 BROUGHTO'NIA *R Br.* Broughtonia. — *Orchideæ. Sp.* 1.
12934 sanguínea *R Br* blood-colored ☇ △ spl 1½ jn jl Sc Jamaica 1798. D p.r.w Bot. cab. 793

†1906 CATTLE'YA *Lndl* Cattleya. — *Orchideæ Sp* 3—4
12935 labiáta *Lndl* dark-lipped ☇ △ spl 1 jl au Vi S Amer 1818 D p r w Lndl. coll 33
12936 Loddigésii *Lindl* pale-lipped ☇ △ el 1 jl au Vi S Amer 1816 D p r w Bot cab. 337
12937 Forbesii *Lndl* yellow ☇ △ or ¾ jl.au Y S Amer 1823 D p r w

†1907 EPIDEN'DRUM *L* Epidendrum — *Orchideæ Sp* 14—67
12938 cochleátum *W* dark-purple ☇ △ cu 1 f d Br P W Indies 1786. D s p Bot. mag 572
12939 frágrans *W* sweet-scented ☇ △ ft ¾ o Y.G Jamaica 1778 D s p Bot. mag 1669
12940 secúndum *W* side-flowering ☇ △ or 2 jn jl R W Indies 1793. C p r w Jac amer t. 157
12941 fuscátum *W* brown ☇ △ cu ¾ jn jl Br W Indies 1790 D p r w Bot reg 67
E anceps Jacq
12942 elongátum *W* long-stalked ☇ △ or 2 my.au R W Indies 1798. C p r w Bot. mag. 611
12943 umbellátum *W* umbelled ☇ △ cu ¾ jn jl G Jamaica 1793 D p r w Bot. reg. 80
12944 nútans *W.* nodding ☇ △ or 1 jn jl G Jamaica 1793. D p r w Bot. reg. 17
12945 conópseum *H K* Florida ☇ △ pr ½ au Y Florida 1775. D p r w
12946 ciliáre *W* fringed ☇ △ or 1 mr au W W Indies 1790. D p.r w Bot. reg 784
12947 cuspidátum *Lodd* pointed ☇ △ or 1 'n W.Y W Indies 1808 D p r w Bot. reg 783
12948 diffúsum *W* diffuse ☇ △ pr ¾ o G Jamaica 1816. D p r w Bot cab 846
12949 noctúrnum *W.* night ☇ △ or 1 o G Jamaica 1816 D p r w Bot. cab. 713
12950 monophýllum *Hook* one-leaved ☇ △ cu ½ d G Jamaica 1823 D p r w Hook. ex. fl. 109
12951 polybul'bon *Sw* many-bulbed ☇ △ cu ½ d W Jamaica 1822. D p r w Hook. ex. fl. 112

1908 POLYSTA'CHYA *Hooker* Polystachya — ... *Sp* 2—5
12952 lutéola *Hook* smooth ☇ △ cu ¾ jl.au Y G W. Indies 1818 D p r.w Lindl. coll.
12953 pubérula *Lndl.* downy ☇ △ cu ½ o Y G S Leone 1822. D p r w Bot. reg 851

1909 CRYPTARRHE'NA *R Br* Cryptarrhena — *Orchideæ Sp* 1
12954 lunáta *R Br* crescent-lipped ☇ △ de ½ my au Y W Indies 1815 D p r.w Bot reg. 153



History, Use, Propagation, Culture,

down their long shoots almost in the same manner as the Miseltoe in England. The flowers are generally very beautiful, and frequently highly fragrant they vary from a deep yellow to nearly white All the species in the gardens are cultivated without the least difficulty by being planted in any light vegetable earth. Sometimes they are put in baskets among damp moss, but they do not succeed so well under that treatment as when planted in earth.

1901 *Camaridium* Named by Mr Lindley, from καμαρα, an arched roof The stigma of this genus has the upper lip vaulted in a remarkable degree. An inelegant leafy caulescent bulbous epiphyte, with solitary white flowers

1902 *Ornithidium* From ορνιθος, a bird, in allusion to the resemblance which exists between the cuspidate upper lip of the stigma, and a bird's beak The habit of this plant is like that of the last, but the flowers are red. They are both cultivated without difficulty in a stove, by being planted among rotten wood, or tan.

Mr Salisbury says, Ornithidium coccineum is a parasite on old trees, near torrents, in the island of Martinico; its fibrous roots insinuating themselves into the crevices of their moist bark Here it thrives exceedingly, in pots filled with the same, flowering at various seasons, but chiefly in October and November During summer it should be placed in a shady part of the stove, and often sprinkled with water, but it requires little or none in winter, especially when plunged

1903 *Isochilus* From ισος, equal, and χειλος, a lip, because the lip and the other divisions of the flower are of nearly equal breadth The species grow in baskets of moss and old tan, or planted in pots of sandy soil, and chips of wood, and other dry rubbish They are increased by divisions at the root

1904 *Pholidota.* A singular bulbous epiphyte, native of Nepal, remarkable for the close manner in which the flowers are covered over by the imbricated scale-like bracteæ, from which circumstance (φολις, a scale), we

12926 Stems erect 2-3-leaved at end, Leaves oval obl. entire shorter than terminal many-fl. raceme
12927 Stem round jointed striated moniliform naked quite simple, Leaves oblong lanceolate
12928 Stems creeping, Leaves obl. lanceolate acute fleshy the length of the few-flowered spreading raceme

12929 The only species

12930 Flowers small and appearing in the axillæ of the long leaves, Stems branched bulb-bearing

12931 Spike terminal, Leaves distichous linear blunt emarginate, Stem simple
12932 Flowers axillary, Leaves distichous lanceolate oblong, Stem proliferous, Bulbs axillary 2-leaved

12933 Lvs solitary on a truncated conical naked bulb: lanceolate plaited, Raceme pendulous densely imbricated

12934 Leaves twin oblong seated on a bulb, Scape divided

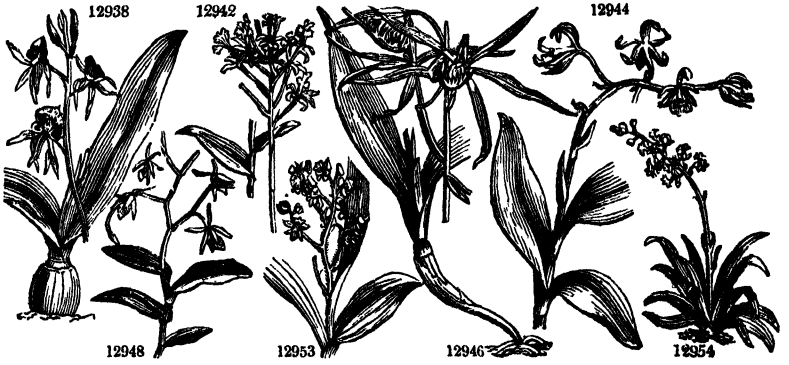
12935 Outer sepals linear lanceolate acute 3 times as narrow as inner, Lip undivided
12936 Sepals nearly equal obtuse, Lip 3-lobed with the middle lobe saddle-shaped
12937 Sepals lanceolate. inner narrower wavy obtuse, Middle lobe of lip cordate lunate

12938 Leaves twin oblong seated on a bulb, Scape long, Lip cordate blunt
12939 Leaf lanceolate seated on a bulb, Scape short many-flowered, Lip cordate acuminate
12940 Stem simple, Leaves oblong emarginate, Peduncle terminal very long, Spike lax 1-sided
12941 Stem simple, Leaves obl or acuminate, Peduncle terminal long, Spike globose, Col. shorter than sepals

12942 Stem simple, Leaves oblong, Peduncle terminal long, Spike lax, Lip toothed ciliated
12943 Stem simple, Leaves obl somewhat emarginate, Flowers clustered in the bosom of a terminal leaf
12944 Stem simple, Leaves ov lanc amplexicaul Flowers spiked nodding, Lip 3-lobed. middle lobe 3-toothed
12945 Stem simple, Fls spiked erect, Lip 3-lobed middle lobe retuse, Inner sepals narrower, Leaves lanceol.
12946 Stem simple, Lvs twin oblong veinless, Lip 3-parted · middle seg subulate longest, lateral fringed
12947 Stem simple, Leaves 3, Spike remote few-fl Lip 3-parted middle segm linear, lateral cut fringed
12948 Stem simple 2-edged, Leaves oblong, Panicle terminal much branched, Lip cordate acuminate
12949 Stem simple, Leaves obl veinless, Flowers terminal, Lip 3-parted entire intermediate segm linear long
12950 Stem 1-leafed, Leaf ellipt lanc obt Raceme few-fl from the bosom of the leaf, Two inner sepals small
12951 Stem creeping bulbiferous, Bulbs 2-leaved 1-flowered, Lip cordate

12952 Spike compound spikelets alternate erect, Flowers smooth
12953 Spike panic. thyrsiform, Leaves lanc 7-nerved longer than scape, Fls. and ovaries downy, Bulbs ovate

12954 Leaves tufted lanceolate nerved shorter than erect spike



and Miscellaneous Particulars.

presume, Mr. Lindley has constructed the name No explanation, however, of his names is ever given by this author, who seems to attach too little importance to the etymology of botany.

1905. *Broughtonsa* Named by Brown, in the Hortus Kewensis, without explanation. A handsome plant, with fine scarlet flowers It is very rare, and cultivated with little success.

1906 *Cattleya* Named by Mr Lindley, after William Cattley, Esq. a munificent encourager of botany, and his early friend. A superb genus of bulbous epiphytes, with fleshy leaves growing in pairs, and large violet or yellow flowers

1907. *Epidendrum.* From *ἐπι*, upon, and *δενδρον*. All the species are found naturally growing upon trees, not however, as De Theis tells us, sucking their sap, by insinuating their little roots beneath the bark, but vegetating in the soil which collects upon the forks of the branches Many of the species have singular flowers, but none of those in the gardens are remarkable for their beauty They are generally cultivated with less difficulty than most other epiphytes. Salisbury tells us, Epidendrum ciliare should be planted in pots, filled with porous stones, a few decayed leaves, and knobs of bark taken fresh from the woods: but it requires very little water, and if the leaves turn yellow, it is a sign that they have either too much wet, or too much sun With such treatment by keeping four or five pots of it, the stove will be enlivened with their long tubular flowers, slowly succeeding one another, at most periods of the year. It is easily propagated by dividing its stems

1908 *Polystachya.* From *πολυς*, many, and *στάχυς*, a spike, on account of the compound nature of the inflorescence. Inconspicuous plants, requiring the treatment applied to similar kinds.

1909 *Cryptarrhena.* A pretty little stemless epiphyte with distichous leaves, and neat yellow flowers It was named by Mr Brown, from *κρυπτος*, concealed, and *ἀρσην*, a male, on account of the hooded apex of the column which covers up the anther. The plant is believed to be now lost to the gardens.

1910. **ORNITHOCE'PHALUS.** *Hook* ORNITHOCEPHALUS. *Orchideæ Sp.* 1.
12956 **gladiátus** *Hook.* sword-leaved ℰ ⍓ cu ½ ... G Trinidad 1823. D p.r.w Hook. ex fl. 127

†1911. **BLE'TIA** *Fl per.* BLETIA. *Orchideæ. Sp* 6—8.
12956 Tankervilliæ *H K.* Tankerville's ⁂ ⍓ spl 2 mr ap W.Br China 1778. R p l Bot mag 1924
12957 verecúnda *H K.* tall ⁂ ⍓ el 3 ja.my Pu W. Indies 1733. R p l Bot. mag. 930
Læmodorum altum B M
12958 flórida *H K* purple ⁂ ⍓ el 2 jl au Pu W Indies 1786. R p l Redouté lil 83
12959 hyacinthina *H K.* hyacinthine ⁂ ⍓ el 1 mr jn Pu China 1802 R p l Bot. mag. 1492
12960 capitáta *R. Br.* headed ⁂ ⍓ el ... jn.jl ... W. Indies 1795 R p.l
12961 pállida *Lodd* pallid ⁂ ⍓ el 2 f Pk W. Indies 1820. R p.l Bot. cab. 629

1912 E'RIA *Lindl* ERIA. *Orchideæ. Sp* 2—4
12962 stellàta *Lindl.* stellate ℰ ⍓ el 2 f Br.Y E. Indies? ... D p.r w Bot. reg 904
12963 pubescens *Lindl.* downy ℰ ⍓ el 1½ mr Y E Indies 1820. D p r.w Hook ex. fl 124
Dendróbium pubéscens Hooker.

1913 OCTOME'RIA *R Br* OCTOMERIA *Orchideæ. Sp.* 1
12964 gramınifólia *R Br* Grass-leaved ℰ ⍓ cu ½ jn jl W Indies 1793. D p r w Plum ic. 176 f 1

1914 BRASAVO'LA *R. Br* BRASAVOLA *Orchideæ. Sp* 1—2.
12965 cucullàta *R Br* single-flowered ℰ ⍓ el ½ jn s W W Indies 1793 D p r w Bot. mag 543

1917 SARCAN'THUS *Lindl* SARCANTHUS *Orchideæ. Sp* 3—5
12966 paniculátus *Lindl* paniced ℰ ⍓ el 2½ my au Y China ... C p r w Bot reg 220
12967 teretifólius *Lindl* slender-leaved ℰ ⍓ cu ½ n Y Pu China 1819 C p r w Lindl coll 6
12968 rostrátus *Lindl* rostrate ℰ ⍓ pr 1 n Y R China 1819 C p r w Lindl coll 39

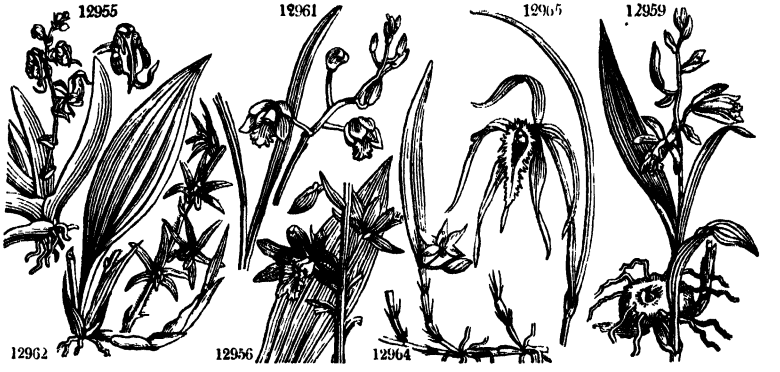
1916 VAN'DA *R Br* VANDA *Orchideæ Sp* 3—6
12969 multiflóra *Lindl* many flowered ℰ ⍓ el 2 jn Y China 1800 C p r w Lindl. coll 38
12970 Roxburghi *R Br* Roxburgh's ℰ ⍓ el 1½ n W pu China 1810 C p r w Bot reg 506
12971 trichorhiza *Hooker* hairy-rooted ℰ ⍓ pr ½ au Pu G E Indies 1822 C p r w Hook ex fl 72

1917 A'ERIDES *Sw* AIR-PLANT *Orchideæ Sp* 2—11
12972 odorátum *H K* fragrant ℰ ⍓ ft 1½ ... Pk China 1800 C p r w
12973 arachnites *Sw.* spider ℰ ⍓ or 1 ... Br P Japan 1793. C p r w Kæmpf t 869.f 1

1918 RENANTHE'RA *Lour* RENANTHERA *Orchideæ Sp* 1
12974 coccínea *Lour* scarlet ℰ ⍓ spl 5 ... Sc China 1816 C p r w

1919 IONOP'SIS *Kunth* IONOPSIS *Orchideæ Sp* 1—3
12975 utricularioides *Lindl* small-flowered ℰ ⍓ pr ½ o n W.pu W Indies 1822 D p r w Hook. ex fl. 113
Jántha pallidiflora Hooker

1920 EULO'PHIA *R Br* EULOPHIA *Orchideæ Sp* 2—7
12976 grácilis *Lindl* slender ⁂ ⍓ pr 2 my n G S Leone 1822 R p l Bot reg 742
12977 guineénsis *R Br* shovel-flower'd ⁂ ⍓ el 1 my n Pk S Leone 1822 R p.l Bot reg 686



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1910 *Ornithocephalus* A very curious little plant, only an inch or two in height, found in Trinidad growing upon rotten sticks in the woods It bears two or three green flowers, which contain a column, the upper extremity of which is lengthened out into a fine subulate process, resembling a snipe's bill in miniature, whence the name, from ὀρνιθος, a bird, and κεφαλη, a head No successful method of cultivating this plant has yet been discovered

1911 *Bletia* Dedicated to Luis Blet, a Spanish apothecary, who has always, as we are informed by the authors of the Flora Peruviana, distinguished himself in his botanical studies Very noble plants, growing in the earth

Bletia Tankervilliæ is a common but beautiful species The first plant which flowered in this country, was cultivated at Apperly Bridge, near Bradford, in Yorkshire, in May 1776, and had been sent there to Mrs. Hird, by her uncle, Dr Fothergill, in a black Chinese pot full of stiff loam, in which it had been imported. Many small bulbs, with leaves like those of a snow drop, grew near the edge of the same pot in a regular circle, and these afterwards proved to be Amaryllis Aurea The Bletia Tankervilliæ delights in warmth, fresh loam, and plenty of water, by which treatment, and attention to fecundate the stigma, it will ripen fruit abundantly

1912. *Eria* From ἐριον, wool, on account of the woolliness of the flower of all the known species Curious epiphytous plants, with bulbous roots, and flowers usually of a yellowish color They differ from Dendrobium chiefly in the number of their pollen-masses, and in habit. E stellata is a fine free-growing plant, with long broad fleshy leaves, and spikes of beautiful brown-yellow flowers nearly a foot and half in length

1913 *Octomeria* So called by Mr Brown, with reference to the eight parts, οκτω, and μερος, into which the pollen is divided. A singular little plant, with filiform leaves and small nearly solitary flowers The true limits between this genus and the last remain to be determined The two seem to be separated by nature

1914. *Brasavola.* Named after Antonio Musa Brasavola, an Italian botanist, born at Ferrara in 1500 Plants with long subulate fleshy leaves, and large white flowers. They are cultivated without difficulty in peat and sand, if good decomposed wood is not to be procured

1915 *Sarcanthus.* A curious genus of plants not remarkable for their beauty Their habit is various, but always caulescent; their flowers either yellow or yellowish, marked with various shades of purple. The name

12955 Leaves distichous obtuse compressed

12956 Lip spurred undivided, spur short, Leaves radical ovate lanceolate
12957 Lip not spurred: ribs of the disk branched, middle lobe broader than long, lateral narrower upwards

12958 Lip not spurred: ribs of the disk simple, middle lobe somewhat cuneiform, lateral broader at end
12959 Lip not spurred beardless, Pollen-masses 4, 2-lobed, Stem leafy, Flowers racemose
12960 Lip not spurred with a callus in the inside near the base, Stem leafy, Flowers capitate
12961 Leaves linear-lanceolate plaited, Sepals connivent, Scape higher than leaves

12962 Lvs. lanc. fleshy 5-nerved, Sep ov lanc. acum: midd lobe of lip acum Ovary and outer sep ferruginous
12963 Bulb obl.-ov. Lvs. distich. lanc smooth, Fls. loosely spik. Lip obl 3-lobed, Three exterior sep unit. at base

12964 Stem long 1-leaved, Leaf lanceolate, Peduncles twin 1-flowered, Root creeping

12965 Stem 1-flowered, Lip ciliated

12966 Stem panicled, Spur straight hanging down scarcely so long as ovary, Leaves bifid and unequal at end
12967 Leaves subulate, Lip spurred 2-celled, Raceme shorter than leaves
12968 Leaves lanc. flat somewhat recurved, Spike simple horizontal, Lip and anther rostrate

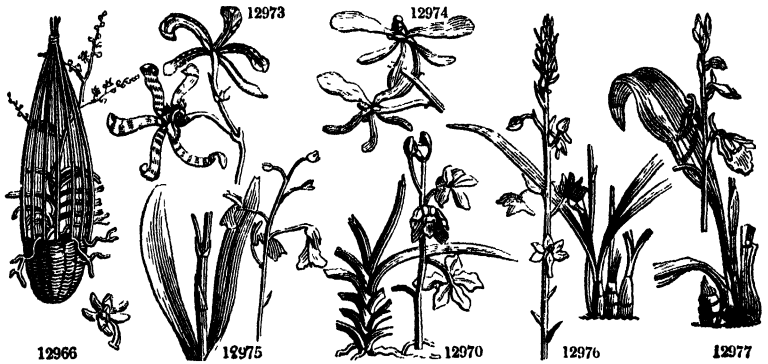
12969 Caulescent, Leaves remotely distichous broad linear channelled obtuse, Spikes opp the leaves
12970 Sepals oblong obovate wavy, Leaves obliquely 3-toothed at end
12971 Lip without a spur, Sepals linear-lanceolate nearly equal, Leaves cylindrical

12972 Spur ascending conical subulate, Middle lobe of lip shorter than lateral ones, Leaves blunt
12973 Stem branched rooting, Leaves lanceolate, Sepals revolute dilated at the end, Lip bifid in front

12974 The only species

12975 Leaves lanceolate lined flat, Scape panicled, Sepals shorter than the lip

12976 Scape very slender 3 times as long as the lanceol 3-nerved leaves, Spur clavate, Midd lobe of lip obsolete
12977 Leaves lanceolate nerved, Spur ascending, Lip membranous complete



and Miscellaneous Particulars.

has been given by Mr. Lindley, from σαρξ, flesh, and ανθος, a flower, in allusion to the texture of the sepals and labellum.

1916 *Vanda.* The Hindoo name of the original species Noble caulescent plants adhering to old decayed arms of trees or fallen wood, by means of their tendril-like fleshy tortuous roots. The flowers of all the species are large and shewy Their treatment is the same as the next.

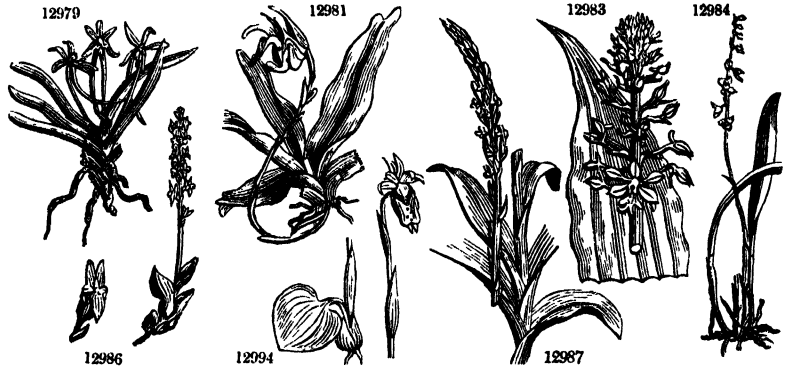
1917 *Aerides.* Derived from *aer*, the air, in allusion to the peculiar property the species possess of existing many months suspended in that element. This genus and the two last are those to which the name of Air-plant is most properly applied, very few others being capable of enduring for any considerable period such a removal from their natural places of growth The true species of this genus are beyond all comparison the most delightful productions of the vegetable world Their flowers are arrayed in long spikes or racemes of delicate colors and delicious fragrance. Hung up in a room in their native country, a little before flowering, they continue to unfold their blossoms in gradual succession for many weeks In this country they are rarely seen in flower. The only genuine species, the A odoratum, should be planted in rotten wood with a little peat, or a few decayed leaves, or any light black vegetable mould, and kept in the hottest and dampest place of the stove It put in baskets among moss and kept very damp, the plants will succeed for a short time, but they soon languish, and put on a yellow appearance, the certain indication of unhealthiness.

1918. *Renanthera* A name contrived by Loureiro, to express the kidney-form or reniform shape of the pollen-masses This plant is not uncommon in good collections, where it has sometimes acquired the height of six or eight feet, but it has never yet produced its flowers These appear, in the native country of the plant, in large loose panicles, and are individually of considerable size and of a rich crimson color, a little mottled with yellow

1919 *Ionopsis* So called by Mr. Kunth, from ιον, a violet, and οψις, resemblance I utricularioides is a pretty little epiphyte, with purplish falcate leaves. It succeeds ill under any management which has hitherto been applied to it.

1920 *Eulophia* From ευλοφος, well crested, with reference to the surface of the middle lobe of the lip. The two species in the gardens are terrestrial tender stove plants, with bulbous roots, plaited leaves, and flowers, in E. exaltata, green and inconspicuous, in E. guineensis, whitish pink, and very handsome. They should be treated like Cymbidium.

†*1921. ANGRÆ'CUM *Pet Th.* Angræcum							*Orchideæ.*	*Sp.* 3—41.							
12978	maculátum *Lindl*	spotted			pr	1	o n	Pk	Africa	1819.	D	p r. w	*Lindl. coll. 15*		
12979	falcátum *Lindl.*	falcate			pr	½	n d	W	China	1815	D	p r w	Bot mag. 2047		
12980	lúridum *Lindl*	lurid			pr	1½		Br	S. Leone	1822.	D	p r. w			
1922. AERAN'THES. *Lindl* Aeranthes.							*Orchideæ.*	*Sp.* 2—3.							
12981	grandiflóra *Lindl.*	large-flowered			or	¾		G Y	Madagasc	1823.	D	p r w	Bot. reg. 817		
12982	sesquipedális *Lindl*	long-horned			spl	1		W	Madagasc.	1823.	D	p r. w	P.Th.or.afr.t.66		
1923 CALAN'THE. *R. Br* Calanthe							*Orchideæ*	*Sp* 1—7.							
12983	veratrifólia *R. Br.*	plaited-leaved			or	2	jn jl	W	E. Indies	1819.	R	p.l	Bot. reg. 720		
1924 STE'LIS *Sw* Stelis							*Orchideæ.*	*Sp* 2—10.							
12984	ophioglossoides *W.*	Adder's-tong -lv			cu	½	my jn	G	W. Indies	1791	D	p.r.w	Bot. cab. 442		
12985	micrántha *W.*	small-flowered			cu	½	n d	G	Jamaica	1805.	D	p r w	Hook. ex. fl. 158		
1925 MALAX'IS. *L* Malaxis.							*Orchideæ*	*Sp* 1—3.							
12986	paludósa *W.*	marsh			de	½	jl	Y.G	England	tur.bo	R	p.s	Eng. bot. 72		
1926. PRESCO'TIA. *Lindl.* Prescotia.							*Orchideæ.*	*Sp* 1—2.							
12987	plantaginea *Lindl*	plantain-leaved			cu	1½		G	Brazil	1822.	R	p.l	Hook. ex. fl 115		
1927. MICRO'STYLIS *Nutt.* Microstylis.							*Orchideæ.*	*Sp* 1—2							
12988	ophioglossoides *N*	Snake's-tongue-lv			de	½	jl	Y o	N Amer	1824	R	p s	Plu.am t.434 f 4		
1928. LI'PARIS *Rich* Liparis.							*Orchideæ.*	*Sp* 5—9							
12989	hilifólia *Rich.*	Lily-leaved			pr	½	jn jl	G.Pu	N Amer.	1758.	R	p.s	Bot. mag 2004		
12990	Lœselii *Rich*	Loesel's			cu	½	jl	Y	England	sa.ma	R	p s	Eng. bot. 47		
12991	bituberculata *Lindl*	long-leaved			cu	¾	jl	G	Nepal	1822.	D	p r w	Hook. ex fl 116		
12992	foliósa *Lindl*	leafy			cu	½	au	G	Isl France	1823	D	p r w	Bot. reg 882		
12993	refléxa *Lindl*	reflexed			cu	1	au	G	N Holl	1824.	D	p r w			
1929 CALYP'SO *Salisb* Calypso							*Orchideæ*	*Sp* 1—2.							
12994	boreális *Salisb*	northern			pr	½	my jn	Y R	N Amer.	1805	R	s.p	Hook. ex. fl. 12		
1930 VANIL'LA *Sw* Vanilla							*Orchideæ*	*Sp* 2—3.							
12995	aromática *H K.*	aromatic			ec	10	jn au	W	S Amer	1739	C	p l	Plu. ic 183 t 188		
12996	planifólia *H K*	fragrant			or	10	ap jn	W	W Indies	1800	C	p l	Bot. cab 733		



History, Use, Propagation, Culture,

1921. *Angræcum* A latinized form of the Malay appellation *angrec*, which is bestowed upon all epiphytous plants This is a pretty genus, remarkable for the distinct spur to the lip A. maculatum has handsome flat fleshy spotted leaves, and varies with flowers of a delicate pink and of a pale green color A luridum is an exceedingly rare species, with plaited leaves and conical bulbs covered with the vestiges of former leaves A falcatum is a little Japanese plant, whose flower has a spur nearly as long as the plant itself It is easily grown among loose moss in a warm damp place, but there should always be some bits of rotten wood mixed among the moss for the tender roots to adhere to

1922 *Aeranthes* A word with the same meaning as Aerides Fine Madagascar plants A sesquipedalis, which has not yet blossomed, bears in its own country very large white flowers, with a spur a foot and half in length The species are not caulescent as in Aerides, and the flowers appear singly, or two or three together, not in long racemes

1923 *Calanthe* From καλος, beautiful, and ανθος, a flower The genus consists of robust terrestrial, not epiphytous, plants, with long plaited leaves, and fine white flowers, remarkable for the curious conformation of the labellum They are easily cultivated as Cymbidium

1924 *Stelis* This was the Greek name of some parasitical plant found growing upon trees The modern genus consists of little inconspicuous West Indian plants, with solitary leaves, and minute green flowers disposed in long filiform axillary spikes They are not very easily managed, the best mode of cultivation is to plant them in very rotten wood with a little moss about them, and to keep them in a hot damp stove

1925 *Malaxis* From μαλαξις, softness, in allusion to the delicate texture of the genuine species. They are natives of moist places in marshes, and are scarcely capable of successful cultivation

1926 *Prescotia* So called by Lindley in compliment to his friend John Prescot, Esq, an English gentleman resident at St Petersburgh, and highly distinguished for his botanical acquirements. A curious little plant, with long spikes of green flowers It is easily cultivated in peat and sand

1927 *Microstylis* From μικρος, little, and στυλος, a column, on account of the minuteness of the columna. Little bog plants, resembling Malaxis in habit and manner of growth

1928 *Liparis* Probably derived from λιπαρος, unctuous, in allusion to the surface of the leaves of the original species, L Loeselii This genus consists of plants varying somewhat in habit, but agreeing in having pale green or greenish purple flowers, in terminal spikes or racemes. Part of the species are terrestrial, requiring the treatment of Malaxis; the remainder are epiphytes

1929 *Calypso* A poetical name, from καλυπτω, to conceal; not merely alluding to the covering of the stigma, but preserving an analogy between this botanical beauty, so difficult of access, and the secluded goddess, whose isle was fabled to be protected miraculously from the observation of navigators.

1930 *Vanilla.* An alteration of *vaynilla*, which is a diminutive of *vasna*, a Spanish word, signifying a sheath. The fruit is a long cylindrical pod, very like the sheath of a knife Vanilla aromatica produces the fruit of that name, which is used in England to flavor chocolate, and in Spanish America for that purpose, for perfuming snuffs, and as a medicine. The Spaniards have three different sorts, which they distinguish in com-

12978 **Leaves lanceolate spotted flat entire**
12979 **Leaves somewhat radical ensiform channelled falcate, Scapes few-fl. Spur filiform very long**
12980 **Stem compr. sheathing panicled, Branches quite simple spreading, Lip 3-lobed, Spur inflex. blunt emarg.**

12981 **Leaves 2-lobed and very unequal at end shorter than the weak radical sheathed scape, Spur emarginate**
12982 **Spur very long filiform, Spikes sheathed axillary**

12983 **Leaves lanc plaited nerved, Spike dense many-flowered, Bractes small lanceolate**

12984 **Stem 1-leaved, Leaves oblong lanceolate the same length as raceme, Flowers 3-cornered**
12985 **Stem long 1-leaved, Leaf broad-lanceolate shorter than raceme, Flowers 6-cornered**

12986 **Lvs. about 4 at the base of the stem scabrous at the extremity, Scape pentagonal, Lip concave acute**

12987 **Leaves oblong cæsious flat nerved, Flowers in a long dense spike**

12988 **Scape 1-leaved, Leaf amplexicaul. Lip truncate emarginate**

12989 **Lvs twin ovate-lanc Scape 3-cornered, Inner sepals reflexed discolored, Lip concave obov. acute at end**
12990 **Leaves twin ovate-lanceolate, Scape 3-cornered, Lip ovate at end recurved**
12991 **Somewhat bulbous, Leaves 4-ovate plaited striated wavy, Lip reflexed with two tubercles at base**
12992 **Radical leaves unequal lanceolate entire acute fleshy about the same length as raceme, Lip oblong retuse**
12993 **Leaves lanceolate ensiform keeled, Raceme many-flowered, Lip 3-toothed at end**

12994 **Lip narr. at base somew clawed, Spur ½-bifid long than lip with acute teeth, Pedunc. longer than ovary**

12995 **Leaves ovate oblong nerved, Sepals wavy, Lip acute, Caps cylindrical very long**
12996 **Leaves oblong lanceolate flat obsoletely striated, Lip retuse**



and Miscellaneous Particulars

merce, viz ; the *pompona*, the *ley*, and the *simarona*. When the fruit begins to turn yellow, it is gathered and fermented in small heaps, in the same manner as is practised with the cocoa or chocolate pods (Theobroma) ; it is then spread in the sun to dry, and when about half dried, pressed flat with the hand and rubbed over with the oil of Palma Christi, or of the cocoa, it is then exposed to the sun to dry, the oiling repeated, and the pods covered with the leaves of the Indian reed to preserve them. The fruits which are brought to Europe are of a dark brown color, about six inches long, and scarce an inch broad, they are wrinkled on the outside, and full of a vast number of black seeds, like grains of sand, of a pleasant smell, resembling Balsam of Peru.

The species of this genus, like many other Epidendreæ, are falsely called parasitical, but are no more so than our Polypodium vulgare, which is often found growing on the trunks of old trees, especially pollards, rooted in the decaying bark. The Vanillæ shoot out roots at every joint like the Ivy, and may be either grown on a piece of a rotten trunk of a tree, or planted in a pot of rotten tan mixed with rubbish, and the stem trained against any surface which it can root into Like all the tribe, these plants require very little water.

Mr Salisbury has the following observations upon Vanilla planifolia. "It was discovered by Father Plumier, in the island of St. Domingo, where it grows wild, climbing to the tops of the highest trees; and is easily preserved in our stoves, throwing out one or more roots at every leaf, but as it seldom flowers here, I would recommend the following treatment — plant it at one end of a low bark stove, the temperature of which must be kept constantly hot and damp, never below sixty degrees of Fahrenheit in the night, during winter. Let the earth be fat loam, taken about an inch deep from the surface, in some old wood : mix this with a few decayed leaves and small pieces of rotten sticks, either in a tub bored full of holes, and sunk at the back corner of the bark pit ; or pale off a space of two square feet for it, draining the bottom a foot in depth very effectually with hollow tiles and porous stones. Select a healthy young plant to place in this earth, and as soon as it pushes vigorously, divide the stem, by pinching off its top, into three or four principal branches, which train backwards and forwards over that end of the bark pit, at two inches and a half distance from each other, on stout rods of a rough-barked elm nailed firmly across, the roots which issue from the bottom of the stem or branches must be suffered to penetrate into the earth, where they will swell and nourish the plants ; but if those beyond attempt to strike downwards, wind them gently along the elm rods, to which they will soon cling by small fibres, like those of Ivy. When the principal branches have extended to fifteen or twenty feet in length, divide them again by pinching their tops, as you find it necessary, into about a dozen branches in all, which must be left to flower, guiding them first horizontally, and afterwards in every possible direction, upon smaller rods of rough-barked elm, stuck into the bark pit at various angles. From the twentieth of March to the twentieth of September, shade that end of the stove by the light foliage of a Passiflora, trained all over the top, but pruned so thin as to admit the rays of the sun to play on the bed underneath : I prefer this method to a mat, for many reasons. Let the earth be always damp by gentle sprinklings of water, but never very wet, except in the great heats of summer, when I should be inclined to give the plant two or three drenching showers all over from a fine-nosed watering-pot, shutting up the house at night full of steam "

DIANDRIA.

1931. CYPRIPE'DIUM. *W.* Ladies-Slipper. *Orchideæ. Sp* 8—14

12997	Calcéolus *W*	common	△	or	1	my jl	Y	England woods.	R	s p	Eng. bot. 1
12998	parviflórum *W.*	small-flowered	△	or	1	my jn	Y	N. Amer	1759	R	s p	Bot. mag. 911
12999	pubéscens *W.*	yellow downy	△	or	1	my jn	Y	N. Amer	1790	R	s p	Bot. cab. 895
13000	spectábile *W.*	white-petalled	△	or	1½	jn jl	W	N. Amer	1731.	R	s.p	Bot. mag. 216
13001	húmile *W*	two-leaved	△	or	½	my jn	R.w	N. Amer.	1786	R	s p	Bot. mag 192
13002	arietinum *H K*	Ram's-head	△	or	½	my	W	N. Amer	1808.	R	s p	Bot. mag 1569
13003	venústum *Wall.*	handsome	⧄	el	½	jl.au	G Pu	Nepal	1816.	D	s.p	Bot reg 788
13004	insígne *Wall.*	noble	⧄	el	1	jl au	G.Pu	Nepal	1819.	D	s.p	Lindl coll. 32

1932 STYLI'DIUM *R Br* Stylidium. *Stylideæ. Sp* 5—45.

13005	graminifólium *R Br*	Grass-leaved	⧄	or	1	ap au	Pk	N S W.	1803	S	s.p	Bot. reg. 90
13006	fruticósum *R. Br.*	shrubby		or	1½	my o	Pk	N. Holl.	1803	S	s p	Par. lond. 77
13007	scándens *R Br*	climbing	⧄	or	2	jl au	Pk	N. Holl	1803.	S	s p	
13008	tenuifólium *R Br* *larscifólium* Rich	fine-leaved	⧄	or	1	jl.au	Pk	N. Holl.	1818	S	s.p	Bot. mag 2249
13009	adnátum *R Br*	adnate		or	½	jl au	Pk	N. Holl.	1824	S	s.p	Bot. reg 914

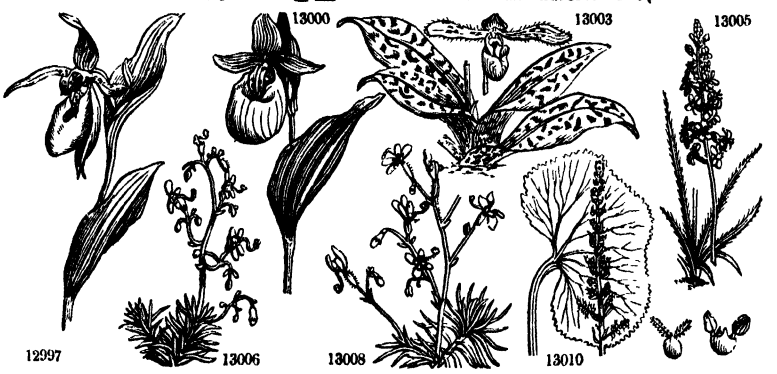
1933 GUNNE'RA. *W.* Gunnera *Urticeæ Sp* 1—2

13010	perpénsa *W*	Marsh-marygold-lv	⧄	un	2	jl.au	Y	C. G. H	1688.	R	p l	Bot. mag. 2376

HEXANDRIA.

†1934 ARISTOLO'CHIA *W* Birthwort *Aristolochiæ. Sp* 21—69

13011	trilobáta *W*	three-lobed		or	6	jn jl	Pu	S Amer	1775	C	p.l		
13012	máxima *W*	greatest		or	20	jl	Pu	New Spain	1759	C	l p	Jac. amer. t. 146
13013	Sipho *W.*	broad-leaved		or	30	jn jl	Y Br	N Amer	1763.	L	s p	Bot. mag 534
13014	tomentósa *B M*	downy-leaved		or	20	jn jl	Pu	N Amer	1799.	L	s p	Bot mag. 1369
13015	odoratíssima *W.*	sweet-scented		or	10	jl	Pu	Jamaica	1737.	C	p l	Slo. ja 1 t 104 f 1
13016	barbáta *W.*	bearded		or	10	...	Pu	Caraccas	1796	R	s l	Jac ic 3 t 608
13017	índica *W*	Indian		or	10	jn jl	Pu	E Indies	1780	C	s l	Rhee mal 8 t 25
13018	bœ'tica *W.*	Spanish	△	or	6	my jn	Pu	Spain	1596.	R	l p	Mor s 12 t 17 f 6
13019	glaúca *W*	glaucous-leav.		or	6	jl	Pu	Barbary	1785	C	p l	Bot mag. 1115
13020	sempervírens *W.*	evergreen		or	4	my jn	Pu	Candia	1727.	C	p l	Bot mag 1116
13021	lónga *W*	long-rooted	△	or	1½	jn o	Pu	S. Europe	1548	R	co	Mill ic t. 51 f 2
13022	Serpentária *W.*	Snake-root	△	or	1	jn jl	D Pu	N Amer.	1632	R	s p	Jac schœ 3.t 385
13023	bracteáta *W*	bracteated		or	3	jl	Pu	E Indies	1793	R	s l	
13024	Pistolóchia *W*	small	△	or	2	jn jl	Pu	S. Europe	1597.	R	s l	
13025	rotúnda *W.*	round-rooted	⧄	or	2	mr o	D Pu	S Europe	1596.	R	co	
13026	pállida *W*	pale-flowered	△	or	2	my au	W pu	Italy	1640.	R	s l	Mor s.12 t 18 f 2
13027	hírta *W.*	hairy	⧄	or	2	my jn	Pu	Chio	1759	R	s l	Tourn it 1 t 147
13028	Clematítis *W*	common	△	or	2	my au	Y	England woods		R	co	Eng. bot 398
13029	arbores'cens *W.*	tree		or	20	jn jl	Y Pu	America	1737.	C	l p	
13030	labiósa *B Reg*	speckled		or	20	jl.au	Gr	Brazil	1821	C	l p	Bot. reg. 689
13031	acumináta *W*	long-pointed		or	10	...	Pu	Mauritius	1822	C	l p	



History, Use, Propagation, Culture,

1931 *Cypripedium* From Κυπρις, Venus, and ποδιον, a slipper, in allusion to the elegant slipper-like form of the labellum Handsome plants "which will only thrive in a shady border in peat soil. The American species should be covered with some dry straw in very severe frosts, or if there should be too much wet, they are not easily increased, but will sometimes perfect seeds in favorable situations, particularly if pains be taken to apply the pollen to the stigma." (*Bot Cult* 358.)

1932 *Stylidium* From στυλος, a column, in reference to the manner in which the stamen and style are united into one columnar mass Beautiful little New Holland plants with pink flowers, remarkable for the singular elasticity of their column, which, being touched with a pin, starts with violence from the side to which it was turned when stimulated The species grow in sandy loam and peat, and are increased by seeds, or dividing at the root, some of them by cuttings

1933. *Gunnera* So called after Ernest Gunner, bishop of Norway, who published a Flora of his country from 1766 to 1772. An uninteresting plant with orbicular leaves. May be planted in a pot of loam and peat, and plunged in water; it is increased by dividing at the root.

1934. *Aristolochia* From αριστος, excellent, and λοχος, a female in child-birth, the plant was considered formerly to possess considerable powers in aiding the expulsion of the placenta, and in exciting the lochial

DIANDRIA.

12997 Stem leafy, Lobe of column elliptical blunt, Lip shorter than sepals compressed
12998 Stem leafy, Lobe of column triangular acute, Lip shorter than sepals compressed
12999 Stem leafy, Lobe of column triangular oblong blunt, Lip shorter than sepals compressed
13000 Stem leafy, Lobe of column elliptical cordate blunt, Lip longer than blunt sepals, Spike in front
13001 Stem leafless 1-flowered, Leaves 2 radical oblong blunt, Scape scarcely longer than leaves
13002 Flowers with 5 sepals, Lip saccate spurred, Stem leafy
13003 Leaves distichous fleshy nerveless spotted, Scape little longer than leaves
13004 Leaves cartilaginous ligulate not spotted twice as short as the hairy scape

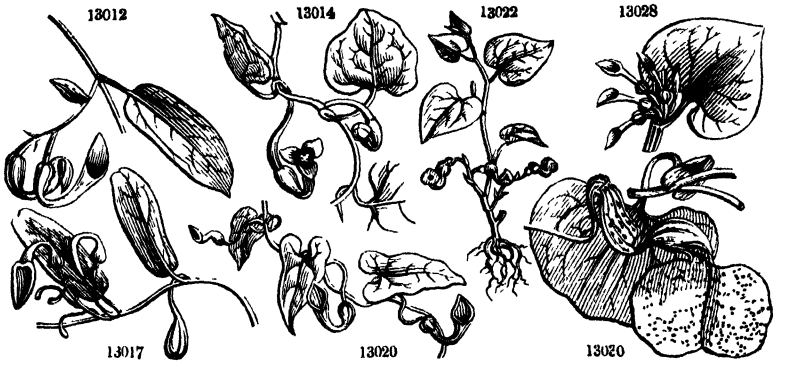
13005 Leaves linear toothletted at edge, Raceme spiked simple and scape glandular
13006 Leaves narrow linear decurrent smooth, Throat 4-crowned, Lip with an appendage
13007 Stem scandent, Leaves linear cirrhose, Throat crowned, Lip with an appendage, Column downy upwards
13008 Leaves setaceous linear sessile somewhat hairy, Orifice naked, Lip with an appendage

13009 Leaves linear, Spike subsessile divided: partial few-fl. Capsules adnate at base linear 1-celled

13010 Leaves reniform toothed shorter than the scape in fruit

HEXANDRIA.

13011 Leaves 3-lobed, Stem twining, Corollas cylindrical broken saccate at base, Lip cordate cuspidate
13012 Lvs obl acum 3-nerved, Stem twining, Peduncles many-flowered, Cor incurv Lip ovate mucronate
13013 Lvs cord acute, Stem twining, Pedunc 1-flowered with an ovate bract Cor ascend · limb trifid equal
13014 Stem twining, Lvs stalked cord downy beneath, Pedunc sol without bractes, Tube of cor. twisted back
13015 Lvs cordate ovate, Stem twining, Pedunc 1-fl longer than leaf, Lip cordate lanceolate longer than cor
13016 Leaves cordate obl Stem twining, Cor straight limb spreading, Lip spatulate bearded at end
13017 Leaves elliptical blunt somewhat emarginate slightly cordate, Pedunc many-fl Cor erect
13018 Leaves roundish cordate acute, Stem twining, Peduncles about 3, Cor incurved, Lip ovate
13019 Leaves cordate ovate blunt glaucous beneath, Stem twining, Cor incurved, Lip ovate retuse
13020 Leaves cordate oblong acuminate, Stem prostrate flexuose somewhat climbing, Cor incurved
13021 Leaves cordate ovate retuse, Stem prostrate flexuose somewhat climbing, Cor erect, Lip lanc acute
13022 Leaves cordate oblong acuminate, Stem flexuous ascending, Pedunc radical, Lip of cor lanceolate
13023 Leaves cordate blunt, Stem weak, Flowers solitary, Bractes cordate stalked
13024 Lvs cordate ovate crenate scabrous netted beneath, Stem branched at base flexuose prostrate, Cor erect
13025 Lvs cordate ovate blunt subsess Stem nearly erect and simple, Pedunc sol. 1-fl Cor erect
13026 Lvs. cordate ovate blunt emarginate stalked, Stem flexuose nearly erect, Pedunc sol 1-fl Cor erect
13027 Lvs cordate ovate blunt downy stalked, Stem erect hairy, Pedunc sol 1-fl Cor. recurved
13028 Lvs roundish cordate bluntish stalked, Stem erect, Pedunc. 1-fl. heaped, Cor. erect
13029 Leaves cordate lanceolate, Stem erect shrubby
13030 Leaves reniform roundish cordate amplexicaul Corolla incurved at base saccate · 2-lipped in the middle
13031 Leaves cordate acuminate, Flowers in racemes, Capsules acutely hexangular



and Miscellaneous Particulars

discharge. The root of A serpentaria is said to be the substance which the Egyptian snake-jugglers chew, for the purpose of stupifying the snakes by the introduction of their saliva into the reptiles' mouths. A. clematitis (from κλημα, a young shoot of the vine, in allusion to its appearance) is a species which furnishes one of the roots employed in European medicine. It is stimulant, stomachic, and emmenagogue; use has been made of it for various purposes, as for paleness of the countenance, fistula, sarcoma, &c A. pistolochia is also employed for the same purposes It grows upon the dry stony places of Languedoc and Provence. It is used in cases of obstructed perspiration, and in disorders of the lungs The roots should be chosen of a plump texture, and a yellowish color. They should be newly dried, and possess an aromatic flavor and a bitter taste.

Aristolochia trilobata and odoratissima have strong smelling roots, which are looked upon in Jamaica as powerful medicines, and used as stomachics by the slaves The first species is called Contrayerva of the north side, from its growing in that part of the island; and the other Contrayerva of the south side, for a corresponding reason The root of A serpentaria retains a place in the Materia Medica The dried root is imported into this country from North America, it has an aromatic odor, not unlike that of Valerian, and a sharp, warm, bitter, pungent taste, resembling in some degree that of camphor. Medicinally, it is stimulating diaphoretic, and tonic.



Class XXI. — MONŒCIA.

Male and female organs in distinct flowers, but upon the same plant.

This class consists of a variety of plants of all kinds, natures, and affinities, combined by the character of having their flowers unisexual, but upon the same plant, in which respect Monœcia is distinguished from the next class, Dioecia It contains nearly all the most important timber-trees of the temperate countries of the world, such as the oak, the pine, the birch, the beech, the walnut, the plane, the cypress, and many others The bread-fruit, so important an article of food in some parts of the world, is placed in Monandria. Various palms occupy a station in other parts of the class. The dangerous Manchineel-tree, and many poisonous or medicinal plants, are also placed here To Monœcia Polyandria belongs the famous Upas-tree of Java, to which so many fables are attached It is described in Rumphius's Herbarium Amboinense (2 87), under the name of Ipo, and is now ascertained to be a species of Antiaris From Siphonia elastica, a plant of Monœcia Monadelphia, and native of Brazil, one of the kinds of Caoutchouc or gum elastic of commerce is obtained.

Sprengel, and others, refer most of the genera of Monœcia to other classes, considering those only to be truly referable to it, of which the male and female flowers have some differences of structure.

Order 1. MONANDRIA.  Stamen 1.

1935. *Artocarpus* Male A cylindrical catkin Cal O. Petals 2 Filament the length of cor. Female Cal O. Cor O Ovaries numerous, collected in a globe Style filiform. Drupe compound

1936 *Casuarina* Male Catkin filiform Calyx 2-valved Cor O. Female Catkin globose. Calyx an ovate scale Cor O Caps 2-valved, 1-seeded. Seed winged at end.

1937 *Ceratocarpus* Male. Cal 2-parted Cor O. Filament long Female. Calyx 1-leaved, 2-horned, attached to the superior ovary. Cor O Style 2. Seed 1, tightly enclosed in the calyx

1938 *Zannichellia* Barren fl Perianth. none. Fertile fl. Perianth. single of 1 leaf. Germens 4 or more Style 1. Stigma peltate. Capsules sessile

Order 2. DIANDRIA.  Stamens 2

1939 *Lemna.* Male. Cal 1-leaved. Cor O Female Calyx 1-leaved Cor O Style 1 Capsule 1-celled, 2-seeded.

1940. *Anguria.* Male. Calyx 5-fid. Petals 5 Female. Cal 5-fid. Petals 5. Fruit inferior, 2-celled, many-seeded

Order 3. TRIANDRIA.  Stamens 3.

1941 *Comptonia* Male A catkin Calyx a scale Petals 2. Filaments 2-forked. Female A catkin Calyx a scale Petals 6 Styles 2 Nut ovate

1942. *Hernandia* Male Calyx 3-parted Petals 3. Female Calyx truncate, entire. Petals 6. Drupe hollow, open at orifice, with a moveable kernel

1943 *Axyris* Male. Calyx 3-parted. Cor O Female Calyx 5-leaved Cor O Styles 2 Seed 1

1944. *Tragia.* Male Calyx 3-parted. Cor O Female Calyx 5-parted Cor O. Style 3-fid. Caps of 3 pieces, and 3 cells. Seed solitary

1945 *Typha* Flowers collected into cylindrical dense spikes or catkins Barren fl Perianth. O Stam 3 together, upon a chaffy or hairy receptacle, united below into 1 filament Fertile fl. Perianth O. Pericarp pedicellate, surrounded at the base with hairs resembling a pappus

1946 *Sparganium.* Flowers in spherical dense heads Barren fl Perianth single, of 3 leaves Fertile fl single, of 3 leaves Drupe dry, with 1 seed

1947. *Carex* Flowers collected into an imbricated catkin Barren fl Calyx of 1 scale, glumaceous Cor O Fertile fl. Calyx of 1 leaf, glumaceous. Cor of 1 leaf, urceolate, ventricose. Stigm 2-3. Nut triquetrous, included within the persistent cor

1948 *Cobresia* Flowers in an imbricated catkin Male Calyx a solitary scale Cor O. Female Cal generally a double scale, one flat, the other involving the ovary. Cor. O Stigmas 3. Nut somewhat three-cornered, naked.

1949. *Uncinia.* Flowers in an imbricated catkin, androgynous. Male Cal a solitary beardless scale Female Cal bearded, beard hooked from the base of the inside of scale Stigmas 3

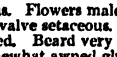
1950. *Zea* Male in distinct spikes Cal a two-flowered blunt glume Cor a blunt glume Female Cal a 2-valved glume Cor a 2-valved glume Style 1, filiform, pendulous. Seeds solitary, immersed in an oblong receptacle

1951. *Coix.* Male in remote spikes Cal a 2-flowered blunt glume Cor a blunt glume Female Calyx a 2-flowered glume Cor a blunt glume Style 2-parted. Seed covered by the ossified calyx

1952. *Tripsacum.* Male. Glume 2-flowered: outer male, inner neuter Cor. a membranous glume. Female. Calyx a 1-fl. glume, surrounded by a 1-leaved involucrum, perforated at the recesses. Cor. a 2-valved glume Styles 2 Seed 1.

1953. *Heteropogon* Spike simple, monœcious. Flowers male on one side, female on the other Male Cal 2-valved. Cor 2-valved, beardless: the inner valve setaceous. Nectary 2-lobed, turgid. Female. Cal. two-valved. Cor 2-valved, one thickish and bearded. Beard very long and hairy

1954. *Oryza* Male Calyx a 1-flowered somewhat awned glume Cor O Female. Cal a 1-fl. spreading, ovate, awned glume. Cor. a 2-valved blunt glume. Style bifid. Seed cartilaginous.

Order 4. TETRANDRIA.  Stamens 4

1955. *Alnus.* Flowers collected into imbricated catkins. Barren fl. Scale of the catkin 3-lobed, with three flowers. Perianth. single, 4-partite. Fertile fl. Scale of the catkin subtrifid, with 2 flowers. Perianth. O Styles 2. Fruit compressed

1956. *Betula.* Barren flower in a cylindrical catkin, its scales 3-fl. Perianth O Stam. 10-12. Fertile fl. Scale of the catkin imperfectly 3-lobed, 3-flowered. Perianth. O. Styles 2 Germens compressed, 2-celled, one abortive. Nuts compressed, with a membranaceous margin, 1-seeded.

1957 *Buxus* Male Calyx 3-leaved Petals 2 Rudiment of an ovary Female Calyx 4-leaved. Petals 3 Styles 3 Caps with 3 beaks and 3 cells. Seeds 2.
1958 *Cicca* Male Calyx 4-leaved Cor O. Female. Cal. 4-leaved. Cor. O. Styles 4. Capsule 4-coccous, not splitting, somewhat fleshy
1959 *Morus.* Male. Cal. 4-parted. Cor O. Female. Calyx 4-leaved. Cor. O. Styles 2 Calyx berried. Seed 1.
1960 *Bœhmeria.* Male Cal 4-parted. Cor. O. Nut O Female Cal O Cor O Style 1. Seed 1.
1961 *Pilea* Male Cal 4-parted membranous. Stamens 4 elastic. Female Calyx 3-leaved, with one sepal fleshy and gibbous. Stigma sessile fringed.
1962 *Urtica* Barren fl Perianth single, of 4 leaves, containing the cup-shaped rudiment of a germen. Fertile fl. Perianth. single, of 2 leaves Pericarp 1-seeded, shining
1963 *Pachysandra.* Male. Calyx 4-leaved. Cor O Female Calyx 4-leaved. Cor. O. Styles 3. Caps. 3-horned, 3-celled Seeds 2.
1964 *Diotis.* Male Calyx 4-leaved. Cor. O Female. Calyx 1-leaved, 2-horned. Style 2-parted. Seed 1, villous at base, covered with the 2-horned calyx.
1965. *Empleurum* Male Calyx 4-fid. Cor O Female. Cal. 4-fid, inferior Cor O. Stigma cylindrical, seated on a lateral tooth of the ovary Caps splitting at side Seed 1, with an arillus
1966 *Aucuba* Male Cal 4-toothed Petals 4 Recept. with a square hole. Female Cal 4-toothed. Petals 4 Ovary inferior Style 1, short Nut ovate, 1-celled
1967. *Littorella* Barren fl Calyx of 4 leaves Cor 4-fid. Stam. very long. Fertile fl. Calyx O. Cor. unequally 3 cleft Style very long Nut 1.
1968 *Serpicula* Male Cal 4-toothed Petals 4 Female Cal 4-parted. Pericarp a downy nut
1969 *Maclura* Male A catkin Female Cal. O Corolla O Style 1, filiform, villous Ovaries numerous, coalescing into a compound globose berry of many cells, cells 1-seeded. Seed obovate, compressed.

Order 5 PENTANDRIA  Stamens 5

1970 *Exocarpus* Male Cal 5-leaved Cor O Stamens inserted in calyx Female Style simple, short. Stigma peltate Drupe 1-seeded, placed on a fleshy receptacle
1971 *Nephelium* Male. Cal. 5-toothed Cor O. Female Cal. 4-fid. Cor O Ovaries 2. Styles two to each Drupes 2, dry, muricated, 1-seeded
1972 *Schizandra.* Male Cal 9-leaved in a triple row Cor O Anthers subsessile, cohering at end. Female. Cal. of male Cor O Ovaries numerous, capitate Berries 1-seeded, inserted on a long filiform receptacle
1973 *Franzeria.* Male Cal common, 1-leaved, many-toothed Cor 1-petalous, tubular, 5-toothed. Recept naked Female Calyx many-leaved Cor O Styles 4 Drupe dry, 4-celled, setose
1974 *Xanthium* Male Common calyx imbricated Cor monopetalous, 5-fid, funnel-shaped. Female Cal a 2-leaved, 1-flowered involucrum Cor O Drupe dry, muricated, 2-fid Nut 2-celled
1975. *Amaranthus.* Male Cal 3-5-leaved Cor O Stamens 3-5 Female Cal of the male Cor O Styles 3 Caps 1-celled, cut round about
1976 *Luffa* Male Cal. 5-parted. Cor 5-parted, attached to calyx Female Cal and cor of male Filaments 5, sterile Ovary inferior Stigma clavate. Gourd with a lid, 3-celled, furrowed
1977 *Ambrosia* Male Common cal 1-leaved Cor 1-petalous, 5-fid, funnel-shaped. Recept. naked Female Cal 1-leaved, entire, 5-toothed beneath, 1-flowered Cor O Nut formed by the indurated calyx, 1-seeded
1978. *Securinega* Male Cal 5-parted Cor O. Stamens 5, inserted under a rudiment of a pistillum Female. Capsule 3-celled

Order 6 HEXANDRIA  Stamens 6.

1979 *Zizania* Male Cal O. Cor a 2-valved blunt glume, mixed with the females Female Cal O Cor a 2-valved glume, cucullate, and awned Style 2-parted. Seed 1, enveloped in the plaited corolla
1980 *Pharus* Male Cal a 2-valved 1-fl. glume Cor a 2-valved glume Female The cal of the male. Cor a long involute 2-valved glume. Seed 1
1981 *Guettarda* Male Cal cylindrical Cor 4-7-fid, funnel-shaped Female Cal cylindrical Cor. 4-7-fid. Ovary 1 Drupe dry
1982 *Sagus* Common spatha 1-valved Spadix branched Male Cal 3-leaved Cor O Filam dilated Female Cal 3-leaved, with two of the leaves bifid Cor O Style very short. Stigma simple. Nut tessellated-imbricated, 1-seeded
1983 *Cocos* Common spatha 1-valved Spadix branched Male. Cal 3-leaved. Cor. 3 petals. Female Cal. 2-leaved Cor 6 petals. Style O Stigma a depression Drupe fibrous
1984 *Elate* Common spatha 2-valved Spadix branched Male. Cal. 3-toothed Petals 3 Anthers sessile Female Cal 3-toothed Petals 3 Stigmas 3 A drupe
1985 *Bactris* Common spatha 1-valved. Spadix branched Male Cal 3-parted Cor 3-fid. Female Cal 3-toothed Cor 3-toothed Style very short. Stigma capitate Drupe fibrous, succulent.

Order 7 POLYANDRIA  Stamens more than 6.

1986 *Cratophyllum* Barren fl Cal. multipartite Cor. O Stam 16-20 Fertile fl Cal multipartite. Cor O. Stigma nearly sessile, oblique Nut 1-seeded
1987 *Myriophyllum.* Barren fl Cal of 4 leaves Petals 4 Stamens 8 Fertile fl Cal. of 4 leaves Petals 4 Stigmas 4, sessile. Nuts 4, subglobose, 1-seeded
1988 *Sagittaria* Male Cal 3-leaved. Petals 3 Stamens about 24. Female Cal 3-leaved. Petals 3. Ovaries many. Seeds many, naked.
1989. *Begonia* Male Cal O Petals 4: the two opposite the largest. Stamens numerous Female Cal. O. Petals 4 or 6, like the male Styles 3, bifid Caps inferior, 3-angular, winged, 3-celled, many-seeded.
1990 *Poterium* Barren fl Cal of 4 leaves. Cor 4-partite. Stamens 30-40 Fertile fl Cal of 4 leaves Cor 4-partite Germens 2. Fruit 2-celled, invested with the cal
1991 *Amurola* Male Calyx 5-fid lower segm cut down to the base. Cor. O Stamens 8, declinate. Female as in the male Style incurved Caps 3-coccous, inflated, 3-valved Seeds globose
1992. *Acidoton.* Male Cal. 5-leaved. Cor. O Stamens 35-40 Female. Cal. 6-leaved. Cor O Style 3-fid. Caps 3-coccous.
1993. *Thelygonum.* Male Cal 2-fid Cor. O. Stamens about 12. Female. Cal 2-fid. Cor. O. Ovary 1 Caps coriaceous, 1-celled, 1-seeded
1994 *Castanea.* Barren fl in a very long cylindrical catkin. Perianth. single, of 1-leaf, 6-cleft. Stamen 5-20 Fertile fl. 3, within a 4-lobed, thickly muricated involucrum. Perianth. single, urceolate, 5-6-lobed, having the rudiments of 12 stamens Germen incorp with the perianth. 6-celled, with the cells 2-seeded, 5 of them mostly abortive. Styles 6. Nut 1-2-seeded, invested with the enlarged involucre.

1995. *Ostrya.* Male, an imbricated catkin Cal a scale Cor O Filaments branched, Female, a naked catkin. Cal O. Cor O. Caps inflated, imbricated, 1-seeded at base.

1996. *Carpinus* Barren fl in a cylindrical catkin, its scales roundish ciliated at the base Stamens 8-20 Fertile fl. in a lax catkin, its scales large, foliaceous, 3-lobed, 1-flowered Invol. O. Perianth of 1 leaf, urceolate, 6-dentate, incorporated with the 2-celled germen, of which 1 cell is abortive. Styles 2. Nut ovate, striated, 1-seeded

1997 *Fagus* Barren fl in a globose catkin Perianth single, of 1 cut, campanulate, 6-cleft. Stamens 5-12. Fertile fl. 2, within a 4-lobed prickly involucre Perianth. single, urceolate, with 4-5 minute lobes Germen incorporated with the perianth, 3-celled, two of them becoming abortive Styles 3. Nuts 1-seeded, invested with the enlarged involucre.

1998 *Corylus* Barren fl in a cylindrical catkin, its scales 3-cleft. Perianth O Stamens 8 Anthers 1-celled. Fertile fl Perianth. obsolete Germens several, surrounded by a scaly involucre Stigmas 2 Nut 1-seeded, surrounded at the base with the enlarged united coriaceous scales of the involucre

1999 *Juglans* Male, an imbricated catkin Cal a scale Cor 6-parted. Filaments 4-18 Female. Cal. 4-fid, superior Cor 4-fid Styles 2. Drupe coriaceous, with a furrowed nut

2000 *Quercus* Barren fl in a lax catkin Perianth. single, somewhat 5-cleft. Stamens 5-10 Fertile fl Invol cup-shaped, scaly Perianth single, incorporated with the germen, 6-lobed. Germen 3-celled, 2 of them abortive Style 1. Stigmas 3 Nut (acorn) 1-celled, 1-seeded, surrounded at the base by the enlarged cup-shaped involucre.

2001 *Liquidambar* Male, a conical catkin, surrounded by a 4-leaved involucre. Cal O Cor O Filaments numerous Female, a globose catkin, surrounded by a 4-leaved involucrum Cal 1-leaved, urceolate, 2-flowered Cor O Styles 2 Capsules 2, surrounded at base by calyx, 1-celled, many-seeded

2002 *Platanus* Male, a globose catkin Cal O Cor scarcely any. Anthers growing about the filament. Female, a globose catkin Cal many leaved Cor O. Styles with a recurved stigma Seeds roundish, mucronate with the style, pappose at base.

2003 *Salisburia* Male, a naked catkin. Cal O Cor O Anthers imbricated. Female. Cal 4-fid Drupe with a 3-cornered nut

2004 *Cathdovica* Common spatha 4-leaved Spadix cylindrical Male Common calyx a cubical 4-flowered receptacle proper calyx many-toothed Female Cal an edge Styles 4, very long Stigmas anther-like. Berry cubical many-seeded

2005 *Caladium* Male Cal and cor O Anthers peltate, many-celled, disposed in a spike at the end of the spadix Female Cal and cor O Ovaries inserted at base of spadix Style O Berry 1-celled, many-seeded

2006 *Arum* Spatha of 1 leaf, convolute at the base Perianth O Spadix with germens at the base Stem (sessile) near the middle of the spadix, which is naked above Berry 1-celled, 1-seeded

2007 *Caryota* Common spatha compound. Male Cal 3-leaved. Petals 3 Female. Cal. 3-leaved. Cor 3-parted Style 1 Berry 1-celled, 2-seeded

Order 8 MONADELPHIA  Stamens united into a single body.

2008 *Nipa* Palm Male Cal O Petals 6. Filament 1, 12-fid Female Stigma a lateral furrow. Drupe angular, 1-seeded.

2009 *Areca* Common spatha 2-valved Male Cal 3-parted Petals 3 Stamens 6, cohering at base, Female Cal 3-leaved Petals 3 Nect 6 toothed Styles 3, very short Drupe 1-seeded.

2010 *Retis* Male Anthers 2-celled Female Scales imbricated in a lupuliform cone, very short, crested, bracteate at back, trigynous Lateral pericarps auricled, middle cuneate, deciduous with the cone

2011 *Agathis* Male Anthers many-celled Female Scales imbricated in a round cone, naked at back, persistent monogynous Pericarps winged, united to the inside of scale Cotyledons 2

2012 *Pinus* Male Anthers 2-celled Female Scales in a conical cone, bracteate at base, digynous Pericarps attached to the inside of scale, more or less winged, deciduous Stigmas 2-3 fid Cotyledons 4-8

2013 *Abies.* The same as Larix, excepting its habit and stigma, which is that of Pinus Cotyledons 3-9

2014 *Larix* Male Anthers 2-celled Female Scales imbricated in a round cone, bracteate at base, digynous Pericarps attached to inside of scale, winged, deciduous Stigma hemispherical, cupped, glandular. Cotyledons 5-9

MONANDRIA.

1935 ARTOCAR'PUS *W* Bread Fruit *Urticeæ* *Sp.* 2—

13032 incisa *W* true ♀ ♀ clt 30 ... W G S Sea Isl 1793 Sk r m Rum amb 1 t 33

13033 integrifólia *W* Jaca Tree ♀ ♀ clt 30 m W G E Indies 1778 C r m Rh mal.3 t.26 28



13032

History, Use, Propagation, Culture,

1935. *Artocarpus* From ἄρτος, bread, and καρπος, fruit, in allusion to the well-known name and uses of the bread-fruit. *Rime* or *Frust-å-pain*, Fr, *Brodbaum*, Ger, and *Albero di pane*, Ital A incisa grows in the South Sea Islands to the size of a moderate sized oak, with alternate leaves, deeply gashed, glaucous, and two feet long The whole tree and the fruit before it is ripe, abound in a very tenacious milky juice. The fruit is about the

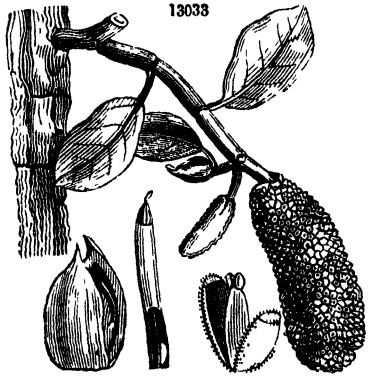
2015. *Schubertia.*

2016 *Podocarpus.* Male. Cal.-leaflets of the bud imbricated. Anthers many, adnate, bilocular, rostrate, fixed to the lengthened column of the filament Female. An ovate 1-celled nut, half immersed in a firm receptacle.
2017. *Cupressus* Male, an imbricated catkin Cal a scale. Cor O Anthers 4, sessile, without filaments. Female, a cone-like catkin Cal a 1-fl scale Cor O Stigma 2 concave dots. Nut angular.
2018. *Thuja* Male, an imbricated catkin Cal a scale Pet. 4. Anthers 4 Female, a cone-like catkin Cal a 2-fl scale Cor O Nut 1, surrounded by an edged wing.
2019 *Trichosanthes* Male Cal 5-toothed Cor 5-parted, ciliated. Filaments 3. Female. Cal. 5-toothed. Cor 5-parted, ciliated. Style 3-fid Gourd oblong.
2020 *Momordica* Male Cal. 5-fid Cor 5-parted Filaments 3 Female Cal. 5-fid Cor 5-parted. Styles 3-fid. Gourd dropping off with elasticity
2021 *Cucurbita* Male Cal. 5-toothed Cor 5-fid. Filaments 3. Female Cal. 5-toothed Cor 5-fid Ovary 3-fid. Seeds of gourd with a tumid edge
2022 *Cucumis.* Male Cal 5-toothed Cor 5-parted Filaments 3 Female Cal. 5-toothed Cor. 5-parted. Ovary 3-fid. Seeds of gourd with a sharp edge
2023 *Sicyos* Male Cal 5-toothed Cor 5-parted Filaments 3 Female Cal. 5-toothed Cor 5-parted. Style 3-fid. Gourd 1-seeded
2024 *Bryonia* Barren fl Cal 5, dentate Cor 5-cleft Filaments 3 Anthers 5 Fertile fl Calyx 5-dentate. Cor 5-cleft. Style trifid Berry inferior, globose, many-seeded
2025 *Andrachne* Male Cal. 5-leaved. Petals 5 Stamens 5, inserted into the rudiment of a style. Female Cal 5-leaved. Cor O Styles 3 Caps 3-celled Seeds 2.
2026 *Stillingia.* Male Cal hemispherical, many-fl Cor tubular, eroded Female. Cal 1-flowered, inferior Cor superior Style 3-fid Caps 3-coccous
2027 *Phyllanthus* Male Cal 6-parted. Cor O Filament columnar Anthers 3 Female Cal 6-parted Cor O Disk with 12 angles Styles 3 Capsule 3-coccous
2028 *Aleurites* Male. Cal 3-fid Petals 5 Scales 5 Filament columnar Anthers numerous. Female Cal 3-fid Petals 5 Scales 5 Style O Stigmas 2. Berry dicoccous
2029. *Omphalea* Male. Cal. 4-parted Cor O Disk a fleshy ring Filament columnar Anthers 2-3. Female Cal 4-parted. Cor O Style very short Stigma trifid. Caps 3-coccous, 3-celled Cells with a solitary nut
2030 *Hippomane* Male. Cal campanulate, emarginate Cor O Filament columnar Female Cal 3-leaved Cor O. Style very short Stigma 7-fid Drupe with a 7-celled nut
2031 *Sapium* Male Cal 2-fid Cor O Filament 2-fid Female Cal 3-toothed Cor O Style very short Stigma 3-fid. Caps 3-coccous
2032 *Croton* Male Cal cylindrical, 5-toothed Petals 5 Stamens 10-15 Female Cal many-leaved Cor O Styles 3, bifid Caps. 3-celled Seed 1.
2033 *Jatropha* Male Cal O, or 5-leaved Cor. monopetalous, funnel-shaped Stamens 10, alternately shorter Female Cal O Cor 5-petalous, spreading Styles 3, bifid Caps 3-celled Seed 1
2034 *Ricinus* Male. Cal 5-parted. Cor O Stamens numerous Female Cal 3-parted Cor O Styles 3, bifid. Capsule 3-celled Seed 1
2035 *Hura* Male An imbricated catkin. Perianth. truncate, 2-leaved Cor O Filament cylindrical, peltate at end, surrounded by many double anthers Female Cal cylindrical Cor O Style funnel-shaped Stigma 12-fid Caps 12-celled Seed 1
2036 *Sterculia* Male. Cal 5-parted Cor O Filament columnar, surmounted by numerous anthers Female. Cal. 5-parted Cor O Anthers sterile, surrounding the base of the stalked ovaries Follicles 5, many-seeded
2037. *Heritiera* Male Cal 5-toothed Cor O Filament columnar, surmounted below the end with anthers Female Cal 5-toothed Cor O Sterile anthers at base of ovaries Drupes 5, dry, 1-seeded
2038 *Acalypha* Male Cal 3-4-leaved Cor O Stamens 8-16. Female Cal 3-leaved Cor. O Styles 3. Caps 3-coccous, 3-celled Seed 1
2039 *Dalechampa* Common involucre outside, with 4 leaflets inside with 2, trifid Male Umbel 10-fl, with a 2 leaved involucre and numerous paleæ Cal 5-leaved Cor O Filaments many, connate Female Florets 3, with a 3-leaved involucre Cal 11-leaved. Cor O Style filiform Caps 3-coccous
2040 *Plukenetia* Male Cal 4-parted Cor O. Stamens 20 Female. Cal. 4-parted Cor. O. Style very long, with a peltate 4-lobed stigma. Caps 4-coccous

MONANDRIA.

13032 Leaves pinnatifid sinuated scabrous downy beneath
13033 Leaves oblong undivided narrowed at base scabrous beneath

13033



and Miscellaneous Particulars.

size and shape of a child's head, and the surface is reticulated, not much unlike a truffle; it is covered with a thin skin, and has a core about as big as the handle of a small knife; the eatable part lies between the skin and the core, it is as white as snow, and somewhat of the consistence of new bread It must be roasted before it is eaten, being first divided into three or four parts, its taste is insipid, with a slight sweetness, somewhat

1936. CASUARI'NA *W.* CASUARINA					*Casuarineæ*	*Sp.* 7—10						
13034 equisetifólia *W.*	Horse-tail	♀ ▭	or	15	o n	Ap	S. Sea Isl	1776.	S	s.p	Bot cab. 607	
13035 stricta *W*	upright	♀ ▭	or	15	f n	Ap	N. S W.	1775.	S	s p	Bot. rep 346	
13036 distyla *W*	two-styled	♀ ▭	or	15	...	Ap	N Holl.	1812.	S	s p	Ve des.pl. n. t.62	
13037 torulósa *W*	Cork-barked	♀ ▭	or	15	...	Ap	N S W.	1772	S	s p		
13038 quadriválvis *P S*	four-valved	♀ ▭	or	18	...	Ap	N S W.	1812	S	s p	La no ho.2.t.218	
13039 muricáta *Roxb*	muricated	♀ ▭	or	15	...	Ap	E. Indies	1822.	S	s p		
13040 nodiflóra *W*	knot-flowered	♀ ▭	or	15	...	Ap	N. Caled.	1823	S	s.p		
1937 CERATOCAR'PUS. *W.* CERATOCARPUS.					*Chenopodeæ.*	*Sp* 1						
13041 arenárius *W*	sand	○	un		¼ jn jl	G	Tartary	1757	S	s	Bu in.ac.pe 1 t.9	
1938. ZANNICHEL'LIA *W* POND WEED					*Naiades*	*Sp* 1—3						
13042 palústris *W.*	marsh	≛ ○	w	2	jl	Ap	Britain	dit	S	aq	Eng. bot. 1844	

DIANDRIA.

1939. LEM'NA *W* DUCK WEED					*Aroideæ*	*Sp.* 4—11					
13043 trisúlca *W*	Ivy-leaved	≛ ○	w	...	my jn	Ap	Britain	sta.wa.	S	l p	Eng bot 926
13044 minor *W*	lesser	≛ ○	w	...	jn jl	Ap	Britain	sta wa	S	l p	Eng bot. 1095
13045 gibba *W.*	gibbous	≛ ○	w	...	jn jl	Ap	Britain	sta wa.	S	l p	Eng bot 1233
13046 polyrhiza *W*	greater	≛ ○	w	...	my s	Ap	Britain	dit.	S	l p	l ng bot 2459
†1940. ANGU'RIA. *W* ANGURIA					*Cucurbitaceæ*	*Sp* 1					
13047 trilobáta *W.*	three-lobed	⅄ ⧄	or	20	jn jl	Pk	Carthag	1793.	R	l p	Jac amer t. 156

TRIANDRIA.

1941 COMPTO'NIA *W* COMPTONIA					*Myriceæ*	*Sp* 1					
13048 asplenifólia *W*	Fern-leaved	♣	or	4	mr my Br		N Amer.	1714.	Sh	s p	Dend brit 166
1942 HERNAN'DIA. *W* JACK IN A BOX					*Laurineæ*	*Sp* 2—3					
13049 sonóra *W.*	peltate-leaved	♀ ▭	or	20	...		E Indies	1693	C	p l	Rum.amb 2 t 85
13050 ovígera *W*	egg-fruited	☿ ▭	or	20	..		E. Indies	...	C	p l	Rum am 3 t 123
1943 AXY'RIS *W* AXYRIS.					*Chenopodeæ*	*Sp* 3—5					
13051 amaranthoides *W*	simple-spiked	○	un	1½	jn jl	G	Siberia	1758	S	co	Gmel sib t 2 f.2
13052 hýbrida *W*	bastard	○	un	1½	jn au	G	Siberia	1780	S	co	Gmel sib t 4 t 1
13053 prostráta *W*	trailing	⅄ ○	un	¼	jl au	G	Siberia	1798	S	co	Gmel sib t 5 f 2



History, Use, Propagation, Culture,

resembling that of the crumb of wheaten bread mixed with Jerusalem Artichoke The plant was first brought to England by the unfortunate Captain Bligh A fresh supply has been more than once received, and there are now a number of plants in the nurseries about London The bread-fruit, according to Sweet, is generally supposed to be difficult of cultivation in this country. He considers that the plants have been, in general, treated too tenderly, and not allowed sufficient air "They appear," he says, "to be of the same nature as the Fig, to which they are nearly allied Large cuttings root freely in a pot of sand, plunged under a hand-glass, in a moist heat, with all their leaves entire. If the leaves are shortened, it is a great chance if they succeed" (*Bot Cult* 19)

There are several varieties of the bread-fruit, as of all plants that have been long in cultivation The principal of these varieties are without seeds, the natives of Otaheite reckon at least eight, differing in the form of the leaf and fruit A integrifolia is also by many considered a variety of the other, for the leaves are sometimes lobed, and the situation of the fruit varies with the age of the tree, being first borne on the branches, then on the trunk, and finally on the roots

The bread-fruit is ripe in December, and is used boiled, or fried in Palm oil Besides the use of the fruit, the economical purposes to which the other parts of the tree are applied are various The wood is used in building boats and houses, a cloth is made of the inner bark, the male catkins serve for tinder, the leaves for wrapping up food, and for wiping the hands instead of towels, and the juice for making bird-lime, and a cement for filling up the cracks of vessels for holding water According to Forster, three trees are supposed to yield sufficient nourishment for one person.

The bread-fruit tree is distributed very extensively over the East Indian continent and islands, as well as the innumerable islands of the South Seas In 1793 it was introduced to the West Indies, and subsequently to different parts of South America Much has been said in praise of it by Europeans, and certainly, to the inhabitants of the South Sea Islands, it may be a valuable food, as the acorn was to the inhabitants of Britain, when they were in a certain state of civilization But whether a civilized and refined people would esteem this fruit for their own use as highly as they do for the use of the semi-barbarians of the South Seas, is a point which may reasonably be doubted

1936. *Casuarina.* The name under which the tree is described by Rumphius, who probably called it so from the resemblance its foliage bears to the plumage of the *casoar* or *cassowary* of the same country. By the Malays it is called *filao*, and by the South Sea Islanders *club-wood*, on account of the use of it for warlike weapons. Casuarina equisetifolia is a large spreading and lofty tree, with leaves, or rather branchlets, hanging down in bunches from twelve to eighteen inches in length, like a long head of hair, or a horse's tail, all jointed from top to bottom. The appearance of the whole tree is very remarkable. It was introduced by the first Lord Byron.

13034 Branchlets flaccid round, Scales of cones unarmed villous
13035 Dioecious, Branchlets erect furrowed, Scales of cones unarmed smoothish
13036 Dioecious, Branchlets ovate round, Scales of cones unarmed ciliated
13037 Dioecious, Branchlets flaccid, Scales of cones villous and rough with tubercles
13038 Dioecious, Young branches somewhat flaccid, Scales of cones villous, Male sheaths submultifid ciliated
13039 Branches erect, Scales of cones mucronate pubescent, in which it chiefly differs from C stricta
13040 Monoecious, Branchlets erect square, Scales of cones unarmed smooth

13041 Stem much branched diffuse making globose tufts

13042 Anthers 4-celled, Stigmas entire, Pericarps toothed on the back

DIANDRIA.

13043 Fronds thin elliptical-lanceolate caudate at one extremity, at the other serrate, Roots solitary
13044 Fronds nearly ovate compressed, Roots solitary
13045 Fronds obovate nearly plane above hemispherical beneath, Roots solitary
13046 Fronds obovate rotundate compressed, Roots numerous clustered

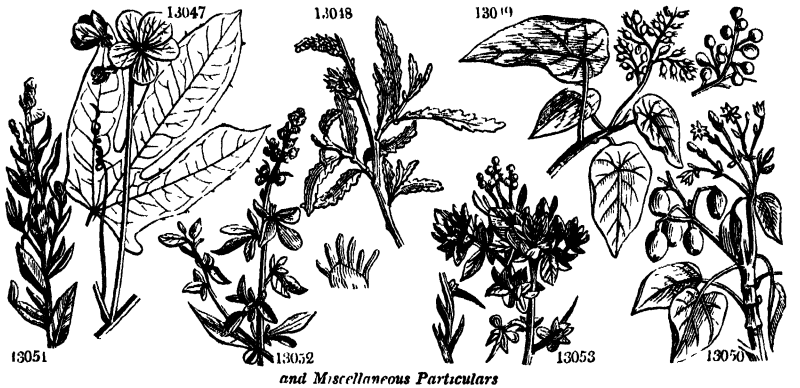
13047 Fruit small, Leaves 3-lobed

TRIANDRIA.

13048 Leaves oblong alternately sinuated

13049 Leaves peltate
13050 Leaves cordate ovate acuminate flat stalked at base

13051 Leaves ovate, Stem erect, Spikes simple
13052 Leaves ovate, Stem erect, Spikes panicled
13053 Leaves obovate, Stem somewhat divided, Flowers capitate



and Miscellaneous Particulars

1937. *Ceratocarpus* Named from κερας, a horn, and καρπος, fruit, because the seeds have two horns Useless weeds.

1938. *Zannichellia* So called in honor of John Jerome Zannichella, a Venetian apothecary, who died in 1729 He left behind him a few works of little consequence A plant found abundantly in the marshes of some parts of England

1939 *Lemna* Said to have been so called from λεπις, a scale, in allusion to the form of the plants Theophrastus describes under the same name an aquatic plant Annual weeds, which float on stagnant water, their flowers are very obscure, and not produced freely in northern climates L trisulca has dichotomous, filiform, divaricated stems, having a lanceolate leaf at the angle of the branches, but proliferous ones terminating the branches, where these leaves are conjoined, there shoots out a pendant radicle, with a conical papilla at its base. Linnæus observes, that the stems are flatted and proliferous, crossing each other, and thus resembling in the mode of growth the opuntia or Indian fig The leaves of L. minor are very small, of a roundish ovate form, collected into heaps by twos or threes, and forming extensive green plats on stagnant waters, each leaf drops a single radicle This plant affords nourishment not only to ducks, but to the fresh water polype, to Phalæna Lemnata, &c Its quick and extensive propagation makes it troublesome in some cases, but at the same time it is considered valuable as converting hydrogen gas into air adapted to respiration L. polyrhiza is distinguished by its dropping bundles of thick black fibres from the lower surface of the leaves. The plants sink in the water in the winter season, and either these or new ones appear again in the spring.

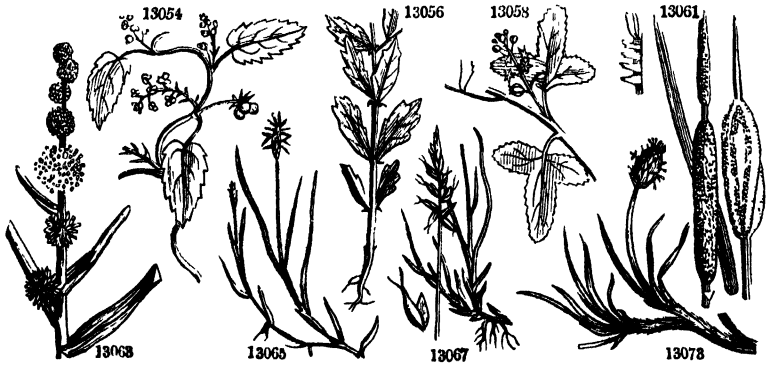
1940 *Angurıa* One of the Greek names for the Cucumber. The plant now so called is also a kind of gourd The species grow freely on light soil, and are propagated by seeds or roots.

1941. *Comptonia* Named in honor of Henry Compton, Lord Bishop of London, by whom the fine collection of plants attached to the episcopal palace at Fulham was formed. A handsome shrub, which thrives in peat soil, or sandy loam, and is increased by suckers or layers.

1942 *Hernandia.* So called in honor of Francisco Hernandez, a Spanish botanist, and first physician to Philip the second of Spain, by whom he was sent to Mexico for the sake of investigating the natural history of that country Linnæus is said to have named it in allusion to the large leaves and little flowers of the plant, which may be supposed to represent the great means and small advantages which attended the expedition of Hernandez This is an upright lofty tree, with an elegant head. The fruit is a nut, sustained and partly enveloped by a yellow persisting calyx The nuts are very large, and as they move in the wind, produce sound enough to alarm unwary travellers. In our stoves the plants grow freely in loamy soil, and ripened cuttings, with their leaves on, root in sand under a hand-glass.

1943. *Asyris* A word of unknown meaning Plants of little beauty and the easiest culture.

*1944. TRA'GIA *W.*	TRAGIA				*Euphorbiaceæ. Sp.* 5—9						
13054 volúbilis *W*	twining	♃	□	un	6	jn jl	G	W Indies	1739.	S	co	Tre pl rar.2. t.15
13055 involucráta *W*	involucred	♃	⊡	un	3	jn jl	G	E. Indies	1759	S	co	Jac ic 1 t. 190
13056 úrens *W.*	stinging	♃	○	un	3	au	G	Virginia	1699	S	co	Pluk al t.107 f 5
§13057 Chamæléa *W*	lance-leaved	✶	⊡	un	2	jn jl	G	E Indies	1793	D	l p	Rhee mal 2 t.34
13058 cannabína *W*	Hemp-leaved	♀	⊠	un	2	jn jl	G	E. Indies	1699	C	l p	Bur.ind. t.63. f.4
1945. TY'PHA. *W*	CAT'S-TAIL.				*Aroideæ. Sp* 3—7.						
13059 latifólia *W.*	great	ılll	△	ec	6	jl	Br	Britain	dit	S	l p	Eng bot 1455
13060 minor *W*	dwarf	ılll	△	ec	2	jl	Br	England	mar.	S	l p	Eng bot 1457
13061 angustifólia *W*	lesser	ılll	△	ec	3	jn jl	Br	Britain	pools	S	l p	Eng. bot 1456
1946 SPARGA'NIUM *W*	BUR REED				*Aroideæ* *Sp* 3—5						
13062 ramosum *W.*	branched	⚟	△	un	2	jl.au	Ap	Britain	dit.	S	l p	Eng bot 744
13063 simplex *W*	unbranched	⚟	△	un	1½	jl au	Ap	Britain	sta wa.	S	l p	Eng bot 745
13064 nátans *W.*	floating	⚟	△			jl		England	fens	S	l p	Eng bot 272
1947 CA'REX. *W*	CAREX.				*Cyperaceæ* *Sp* 106—235						
13065 dioíca *W*	dioecious	ılll	△	cu	¼	my jn	Ap	Britain	sp bo.	Sk	s p	Eng bot 543
13066 Davalliána *W*	Davall's	ılll	△	cu	¾	my jn	Ap	Britain	mar	Sk	s p	Eng bot. 2123
13067 pulicáris *W*	Flea	ılll	△	cu	1½	jn jl	Ap	Britain	mar	Sk	co	Eng bot 1051
13068 pyrenáica *W*	Pyrenean	ılll	△	un	1½	jn jl	Ap	Pyrenees	1820	Sk	co	S ca n 5 t D f 15
13069 paucifióra *W*	few-flowered	ılll	△	cu	1½	jn	Ap	Britain	bgs m	Sk	s p	Eng bot. 2041
13070 cyperoídes *W*	Bohemian	ılll	△	un	2	jn jl	Ap	Bohemia	1801	Sk	co	Schk car t A f 5
13071 stenophýlla *W*	narrow-leaved	ılll	△	un	2	jn jl	Ap	Austria	1822	Sk	co	Sc ca. t G li f 32
13072 chordorhíza *W.*	chord-rooted	ılll	△	un	1	jn jl	Ap	Sweden	1823	Sk	co	Sc ca t G li f 31
13073 incúrva *W.*	curved	ılll	△	un	¼	jl au	Ap	Scotland	san sh	Sk	co	Eng. bot 927
13074 fœ'tida *W*	stinking	ılll	△	un	¾	jl au	Ap	Switzerl	1791	Sk	co	Sch ca t Hh.f 96
13075 arenária *W.*	sand	ılll	△	ec	1	jn jl	Ap	Britain	san sh	Sk	co	Eng bot 928
13076 intermédia *W*	soft-brown	ılll	△	un	1½	my jl	Ap	Britain	mar	Sk	co	Eng. bot 2042
13077 schœnoides *W.*	rush-like	ılll	△	un	1	my jl	Ap	Germany	1823.	Sk	co	
13078 Schrebéri *W*	Schreber's	ılll	△	un	1½	jn jl	Ap	Germany	1800	Sk	co	Host gra 1 t 46
13079 brizoides *W*	Briza-like	ılll	△	un	2	my jl	Ap	Germany	1815	Sk	co	Host gra 36 t 47
13080 ováhs *W.*	oval-spiked	ılll	△	un	2	jn jl	Ap	Britain	mar	Sk	co	Eng bot 306
13081 lagopodioídes *W*	Hare's Foot	ılll	△	un	2	jn jl	Ap	N Amer	1805	Sk	co	Sc c. t Yyy f 177
13082 scopária *W*	Broom	ılll	△	un	2½	jn jl	Ap	N Amer	1812	Sk	co	Sc c. t Xxx f 175
13083 nemorósa *W.*	wood	ılll	△	un	3	jn jl	Ap	Germany	1824	Sk	co	
13084 vulpína *W*	great-spiked	ılll	△	un	3	my au	Ap	Britain	mar	Sk	co	Eng bot 307
13085 stipáta *W*	propped	ılll	△	un	3	my au	Ap	N Amer	1825	Sk	co	Sc c t. Hhh f 1 32
13086 divisa *W*	bracteated	ılll	△	un	2	my jl	Ap	Britain	sal m	Sk	co	Eng. bot 1096
13087 muricáta *W*	greater-prickly	ılll	△	un	2	my jn	Ap	Britain	mois p	Sk	co	Eng bot. 1097
13088 norvégica *W*	Norway	ılll	△	un	1½	my jn	Ap	Norway	1822	Sk	co	Schk.car t.8 f 66
13089 divúlsa *W*	gray	ılll	△	un	2	my	Ap	Britain	m s pl	Sk	co	Eng bot 629
13090 stellulàta *W*	little-prickly	ılll	△	un	¼	my jn	Ap	Britain	mar	Sk	co	Eng bot. 806
13091 rósea *W*	Rose	ılll	△	un	2	my jn	Ap	N Amer	1812	Sk	co	Sc ca t. Zzz f 179
13092 axillàris *W*	axillary	ılll	△	un	2½	my jn	Ap	England	bogs	Sk	co	Eng bot. 993
13093 remóta *W*	remote	ılll	△	un	2	my jn	Ap	Britain	groves.	Sk	co	Eng. bot. 832



History, Use, Propagation, Culture,

1944. *Tragia.* In honor of a German botanist named Jerome Bock, born in 1498, and died in 1554; *Tragus,* which was the name he bore in science, being a Greek translation of his real name, both signifying a goat. He published a history of plants, or Kræuterbuch, and several other works Twining plants of no interest

1945. *Typha* From τυφος, a marsh, in which all the species naturally grow T latifolia is one of the handsomest aquatics of the reed kind, its leaves are of a bluish color, an inch in width, and three feet long, the pollen of the flower is very abundant, and a light being applied to it, a flash of fire is produced Haller says, that the roots are eaten in salads, that cattle eat the leaves, and that the downy seeds serve for stuffing pillows. The leaves are sometimes used by coopers, and introduced between the staves of their casks, they are frequently used for making mats, baskets, chair bottoms, and sometimes for thatch Rubens, and other

13054 Leaves cordate ovate acuminate serrated smoothish, Petioles ciliated, Female sepals hairy entire
13055 Leaves hispid ovate-acuminate serrated, Female sepals pinnatifid setose hispid
13056 Leaves lanceolate sessile blunt somewhat toothed at end, and stem, which is erect and branched, downy
13057 Leaves linear lanceolate stalked blunt mucronate, Stem branched diffuse
13058 Leaves deeply 3-lobed toothed, Middle lobe long

13059 Leaves linear nearly plane, Sterile and fertile catkins close together
13060 Leaves linear plane twice as short as culm, Male and female catkins remote
13061 Leaves linear convex below, Sterile and fertile catkins a little distant from each other

13062 Leaves triangular at the base their sides concave, Common flower-stalk branched, Stigma linear
13063 Leaves triangular at the base their sides plane, Common flower-stalk simple, Stigma linear
13064 Lvs floating plane, Common fl.-stalk simple, Stigma ovate very short, Head of sterile fls mostly solitary

§ *Spikes dœcious*

13065 Spike simple dœcious, Fruit ascending ovate shortly acuminated striated rough at the margin upwards
13066 Spike simple dœcious, Fruit ovate much acuminated recurvate-deflexed smoothish at the margin

§ 2 *Spikes androgynous*

* 1 *Spike simple*

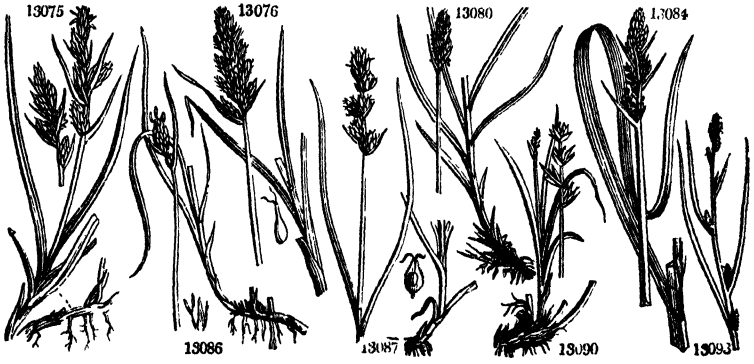
13067 Spike simple androgynous, Flowers few, Fruit distant oblongo-lanceolate acuminate reflexed, Stigmas 2
13068 Spike simple androgynous male at top, Stigmas 3, Fruit oblong with a short beak horizontal
13069 Spike simple androgynous of very few fls Fruit distant lanceolate subulate patenti-reflexed, Stigmas

* 2 *Spikelets capitate*

13070 Spikes androgynous male below collected in globose involucrated heads, Stigm 2, Fr lanc with 2 points
13071 Spikes androgynous male above collected in an oblong head, Stigm 2, Fr. ovate comp. nerved with 2 teeth
13072 Spikes androgynous male above collected in an ovate form, Stigm 2, Fr ov acumin Culm branched at base
13073 Spikl. ster. at extrem collected into a roundish head, Fruit broad rotund-ov short acum swell on both sides nearly entire at the point, Culm obt angular, Leaves channelled
13074 Spikes androgynous male above collected into an oval head, Stigm 2, Fruit ellipt. roundish acuminate bifid

* 3 *Spikelets spiked, many-flowered* [Culm triang. Lvs plane

13075 Lower spikel fert · upp ones ster all crowd Fr with membr marg Bract membranc low ones subfoli.
13076 Inferior and term spikelets fertile intermediate ones sterile, Fruit acutely margined, Culms triangular
13077 Spike androgynous comp Spikelets obl altern clust male above, Stigmas 2, Fr round ov edged 2 toothed
13078 Spike androgynous comp Spikelets ovate alternate clustered male below, Stigmas 2, Fr ovate 2-toothed
13079 Spike androg comp somew distich Spikel about 5 altern cun obl lanc male bel Stig. 2, Fr ov edg bifid
13080 Spikel ster at the base oval about 5 approxim Fruit as long as the cal ovato-acumin convex on one side, concave on the other, with a membranaceous margin bifid at the point
13081 Spike androg. comp Spikel 12 altern ellipt blunt approxim, male below, Stigms 2, Fr ov lanc edg bicusp
13082 Spike androgynous comp Spikel about 5 altern ellipt blunt somewhat approxim male below, Stigmas 2, Fruit ovate lanceolate edged bicuspidate
13083 Spike androgynous comp. Spikel numer collected in 3s or 5s ovate clustered male above, Stigmas 2, Fruit spreading ovate acuminate 2-toothed edged compressed
13084 Spikel ster at their extremities three comp collected into a cylind crowded spike, Fruit ovate acuminat. convexo-plane acutang.-diverg Stem very acute triang Leaves rather broad
13085 Spike androg comp Spikel about 5 obl male above clust Stigm 2 Fr spread ov acum with 2 points nerv.
13086 Spikel ster at their extremities crowded into a somewhat ovate head lower ones with a leafy erect bractea at their base, Fruit roundish ovate convex on one side slightly concave on the other
13087 Spikel ster at their extremities subcomp collected into a rather long more or less interrupted spike, Fruit convexo-plano ovato-acuminate acutangular divergent rough at the margin upward
13088 Spike androg comp Spikel 4 altern obl male below somewhat approxim Stigmas 2, Fr obl acutish compr
13089 Spike long somew decompound branched at the base lower spikelets remote, Fruit erect smooth at edge
13090 Spikel ster at base 3 or 4 dist Fr ov much attenuat convexo-plane acutangul divaricat rough at margins
13091 Spike androg comp Spikel about 4 remote male above, Stigm 2, Fr ov acum 2-tooth horiz. ciliat at base
13092 Spikes subternate remote sessile, Bractes long, Fruit bifid at end
13093 Spikel. ster at base dist. Fruit longer than cal obl-ovate acuminate convexo-plane subacutang obtuse at the marg the point bifid, Bract very narr reaching beyond the culm



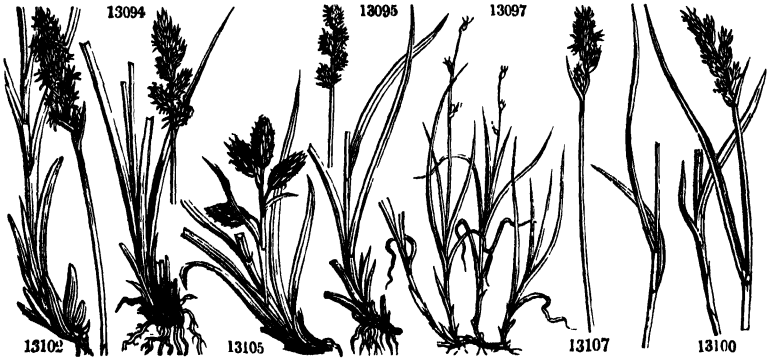
and Miscellaneous Particulars

Italian painters after him, have put it into the hand of Christ as a sceptre, when he was saluted as a king in mockery by Herod's soldiers The plant appears to be a native of every part of the world, in ponds, ditches, and by the sides of rivers and brooks

1946. *Sparganium* From σπαργανον, a band, in reference to the long ribbon-like leaves of the plants Sparganium ramosum is the commonest species it has a strong creeping root, and soon fills up a ditch or pond, if suffered to remain unmolested. It is common not only in Europe, but in Barbary, Siberia, and North America.

1947 *Carex*. From the Latin *carere*, to want. The upper spikes of these plants are constantly without seeds, consisting only of male flowers This numerous family of plants grow mostly in wet swampy grounds,

13094 elongáta *W.*	elongated	△	un	1	my jn	Ap	England	mar	Sk co	Eng bot. 1920		
13095 cúrta *W.*	white	△	un	1	jn	Ap	Britain	pools	Sk co	Eng bot 1386		
13096 fœ'nea *W.*	fodder	△	un	2	jn	Ap	N. Amer.	1818	Sk co			
13097 lolácea *W*	ray-grass-like	△	un	2	jn	Ap	Sweden	1810	Sk co	Sc.ca.t.P p f 104		
13098 stramínea *W.*	slender-stalked	△	un	2	jn jl	Ap	N. Amer.	1803.	Sk co	S.ca t.Xxx.f 174		
13099 multiflóra *W*	many-flowered	△	un	1	my jn	Ap	N Amer	1812	Sk co	Sc ca t Lll f 144		
13100 teretiúscula *W*	lesser panicled	△	un	2	my jn	Ap	Britain	bogs	Sk co	Eng bot 1065		
13101 paradóxa *W*	paradoxical	△	un	1½	my jn	Ap	Austria	1823	Sk co	Host gra 1 t 57		
13102 panículáta *W*	greater panicl	△	un	3	jn jl	Ap	England	bogs.	Sk co	Eng bot. 1064		
13103 appréssa *R Br*	close-spiked	△	un	2	my au	Ap	N. S. W.	1802	Sk co			
13104 bícolor *W.*	two-colored	△	un	1½	my jn	Ap	M Cenis	1810	Sk co	S c t. Aaaa f 181		
13105 atráta *W*	black	△	un	1½	jn jl	Ap	Britain	al me	Sk co	Eng bot 2044		
13106 thuringíaca *W*	Thuringian	△	un	1½	my jn	Ap	Germany	1810	Sk co	S ca.t.P.pp f 155		
13107 Buxbaúmn *W*	Buxbaum's	△	un	1	my jn	Ap	Sweden	1821.	Sk co	S ca. t X Gg.f 76		
13108 glareósa *W*	sandy	△	un	1	my jn	Ap	Norway	1816	Sk co			
13109 álba *W*	white	△	un	1	my jn	Ap	Austria	1818	Sk co	Sch.car t O f.55		
13110 clandestína *W*	dwarf silvery	△	cu	½	ap my	Ap	England	sun ro	Sk co	Eng bot 2124		
13111 digitáta *W*	fingered	△	un	½	my jn	Ap	England	woods	Sk co	Eng bot 615		
13112 plantagínea *W.*	broad-leaved	△	un	½	my jn	Ap	N Amer	1805	Sk co	Sch car t U f 70		
13113 Fraseriána *H K*	Fraser's	△	or	½	ap jn	Ap	N Amer.	1809	Sk s p	Bot mag 1391		
13114 pilulífera *W*	round-headed	△	un	1	ap jn	Ap	Britain	hea	Sk co	Eng bot 885		
13115 lucórum *W. en*	grove	△	un	1½	ap jn	Ap	N Amer	1825	Sk co			
13116 collína *W.*	hill	△	un	1	ap jn	Ap	Germany	1824	Sk co	Sch car t F f 29		
13117 ciliáta *W*	ciliated	△	un	1½	ap jn	Ap	Germany	1812	Sk co	Sch car t I f 42		
13118 præ'cox *W*	vernal	△	un	1	ap	Ap	Britain	dr pa	Sk co	Eng bot 1099		
13119 tomentósa *W*	downy-fruited	△	un	1	jn	Ap	England	mea	Sk co	Eng bot 2046		
13120 exténsa *W*	long-bracted	△	un	¾	jn	Ap	Britain	sea co	Sk co	Eng bot 833		
13121 fláva *W*	yellow	△	un	1	my jn	Ap	Britain	bogs.	Sk co	Eng bot 1294		
13122 Œdéri *E B*	Œrder's	△	un	¼	jn jl	Ap	England	m.me.	Sk co	Eng bot 1773		
13123 fúlva *W*	tawny	△	un	¾	jn jl	Ap	Britain	mar.	Sk co	Eng bot. 1295		
13124 dístans *W*	loose	△	un	1½	jn	Ap	Britain	mar.	Sk co	Eng bot 1234		
13125 binérvis *W*	green-ribbed	△	un	2	jn	Ap	Britain	dr he	Sk co	Eng bot 1235		
13126 saxátilis *W.*	rock	△	un	¼	jn	Ap	Greenland	1812	Sk co	S ca.t I &Tt.f 40		
13127 púlla *W*	russet	△	un	1	jl	Ap	Scotland	sc mo	Sk co	Eng bot 2045		
13128 ferrugínea *W*	rusty	△	un	1	jl	Ap	Austria	1822	Sk co	Sch car t.M.f 48		
13129 Mielichhófen *W*	loose-spiked	△	un	1	jl au	Ap	Scotland	al roc	Sk co	Eng bot. 2293		
13130 umbrósa *W.*	shady	△	un	1½	my jn	Ap	Austria	1810.	Sk co	S ca t.Uuu f 165		
13131 pilósa *W*	hairy	△	un	1	my jn	Ap	Europe	1820	Sk co	Sch car t M f 49		
13132 granuláris *W*	grain-seeded	△	un	1½	jn jl	Ap	N Amer	1807.	Sk co	S ca t Vvv f 169		
13133 panícea *W.*	Pink-leaved	△	un	¼	my jl	Ap	Britain	mo p	Sk co	Eng bot 1505		
13134 conglobáta *W*	clustered	△	un	1	my jl	Ap	Hungary	1812	Sk co			



History, Use, Propagation, Culture,

in bogs, fens, marshes, or in moist woods, where they yield a very coarse grass scarcely touched by cattle. With the exception of two or three species, they are of little use or beauty. Some unfortunately situated husbandmen have recourse to them as cattle fodder, or as thatch or fuel. In Kent, the leaves of the larger

13094 Spikes numerous obl. remotish naked, Fruit acuminate bifid recurved many-nerved longer than glumes
13095 Spikel ster at base about 5 rather dist ellipt. Bracteas very minute, Caps. broadly ov. acum conv. on one side and nearly plane on the other subobtusang. with 2 teeth at the extremity
13096 Spike androg comp Spikelets about 4 male below and close together, Fruit ovate acumin edged 2-tooth.
13097 Spike androg comp. Spikel about 4 male below and close together, Stigmas 2, Fruit elliptical blunt nerved
13098 Spike androg. comp Spikel about 5 roundish male below somew. approximated, Stigm 2, Fr. round. ovate beaked 2-toothed ciliated at edge

* 4 *Spikelets panicled*

13099 Spikes androg. narrow panicl male above obl blunt, Stig 2, Fr ov acum with 2 points, Scales ov mucron.
13100 Spike supradecompound contracted acutish, Spikelets clustered, Fruit spreading gibbous, Culm roundish
13101 Spikes androg narr panic male above, Low branch remote, Stig. 2 round ov beak 2-tooth cil ser at base
13102 Spikel ster at extrem thrice comp and collect into a panic spike, Fr broad ov acum gib on both sides
13103 Spike decomp longish, Scales acute, Fruit ovate plano-convex nerved on each side

* 5 *Spikelets racemose*

13104 Spikes androg. in threes stalked terminal male below erect, Stigmas 2, Fr obov blunt, Scales ov obtuse
13105 Fertile spikes pedunculated ovate pendulous the terminal one with sterile flowers at the base, Fruit roundish ovate depressed with a short beak bifid at the point

§ 3 *Terminal spikes male the others androgynous*

13106 Male spike solitary stalked, androg male above about 5 ellipt remote sessile with a leafy bract, Stigm 3, Fruit roundish 3-cornered downy

§ 4. *Terminal spike androgynous the others female*

13107 Spike androg pedunc. obov male below: female about 3 remote somewhat stalked, Stigm 3 Fr ellipt 3-cornered blunt slightly 2-toothed
13108 Spike androg. pedunc. obl male below female 2 sessile close obl Stigm 2, Fr oblong narrowed with an undivided mouth as long as ovate scale

§ 5 *Spikes of distinct sexes*

* 1 *Male solitary female sessile and subsessile*

† 1 *Scape sheathed, with membranous bractes*

13109 Male spike solit stalk fem twin stalk. about 5-fl Stigm 3, Fr obov-glob furrow beak. obliq truncate
13110 Bractes membran nearly leafless sheath Fem spikes remote few-fl included in sheath, Lvs channelled
13111 Bractes membranous nearly leafless sheathing, Spikes linear lax erect male shorter, Leaves flat
13112 Male spike sol stalk · fem 4 dist. stalk Stig 3 Fr ellipt 3-corner stalk smth short than obov cusp scale
13113 Leaves oblong lanceolate with a white scarious margin, Heads oblong, Scape not longer than leaves

† 2 *Culm leafy*

13114 Fertile spikes sess roundish approxim Scales mucron Fr obov-glob acute pubesc Culms weak scabrous
13115 Female spikes 2-3 ellipt sess supported by a foliaceous bract, Fruit somewhat downy with a long beak
13116 Male spike solit fem about 2 close ellipt. sess Stig 3, Fr obl with a short beak downy as long as ov. scale
13117 Male spike solit. . fem about 2 close obl sess Stig 3 Fr roundish-obov downy larg than obl blunt scale
13118 Sheaths short scarcely any equal to the flower-stalks, Fertile spikes oblong approximate, Scales elliptico-oblong, Fruit obovate subtriquetrous acute pubescent
13119 Sheaths very short, Female spikes subsessile cylindrical blunt, Glumes elliptical acute, Fruit downy
13120 Fertile spikes subsess obl Fr ov scarcely beaked striated bifid at point, Lvs very narrow, Culm glabrous
13121 Bracteas long foliaceous, Fert spikes roundish oval, Fr obov with a long recurved beak bifid at the point
13122 Sheaths and peduncles very short, Female spikes roundish, Fruit spreading on each side globose, Beak straight, Culm smooth
13123 Bracteas foliaceous, Spikes oblongo-ov distant rotundo-ov inflated rostrate bifid at point, Culm scabrous

* 2 *Male spike solitary upper female sessile and subsessile, lower stalked*

13124 Fertile spikes oblong erect, Scales mucronate, Fruit ovate somewhat inflated subtriquetrous depressed with rather a short beak bifid at the point
13125 Sheaths long shorter than peduncle, Spikes cylindrical remote somewhat compound, Fruit 2-nerved
13126 Male spike solit female twin, lower stalked obl Stigmas 2, Fruit ellipt. blunt as long as blunt scale
13127 Fertile spikes ov the lower one pedunculated, Scales obl Fruit subglob apiculate with a short bifid beak
13128 Male spike solitary female 3 distant, two lower stalked, Stigmas 3, Fr oblong compressed 3-cornered hispid at edge, Mouth membranous 2-lobed
13129 Fertile spikes 1-3 somewhat drooping, Fruit scarcely longer than the scale lax especially the lower ones ovate with a short beak bifid at the point
13130 Male spike sol obov female about 3 close, 2 lower on long stalks, Stigmas 3, Fruit compress. obov downy beaked 2-toothed at end
13131 Male spike sol female about 3 distant, two lower remote, Stig 3, Fr. ov beaked with a membran mouth
13132 Male spike sol · fem 3 rem two lower stalked, Stigmas 3, Fr glob ovate nerved ventric shortly beaked
13133 Fert spikes subcylind with dist fls Bract foliaceous, Fr subglob somew inflated obt glab entire at point
13134 Male spike sol. female about 4 remote, lower on a long stalk. the stalks of the others enclosed, Stigm 3, Fr globose shining with a short beak 2-toothed at end



and Miscellaneous Particulars.

species are used for tying the vines of hops to the poles; in Italy they are put between the staves of wine casks to make them tight, woven over Florence flasks, or in chair bottoms The Laplander combs and dresses some species of sedge, as we do flax, and in winter stuffs his shoes and gloves with it, as a defence against the

13135 **rostráta** *W.*	beaked	△	un	1	my jl	Ap	N Amer	1816	Sk co	S ca t. Hhh.f.134
13136 nítida *W*	glossy	△	un	1	my jn	Ap	Austria	1805	Sk co	Host. gra 1 t.71
13137 ánceps *W*	two-edged	△	un	1	jl au	Ap	N Amer	1815	Sk co	Sc ca t Fff f.128
13138 alpéstris *W*	Alpine	△	un	½	my jn	Ap	Europe	1804.	Sk co	Sch car t.G f 35
13139 cæspitósa *W*	tufted bog	△	un	1½	my jn	Ap	Britain	bogs	Sk co	Eng bot 1507
13140 stricta *H.*	straight-leaved	△	un	1	ap my	Ap	Britain	mar	Sk co	Eng. bot 914
13141 péndula *W.*	great-pendulous	⟍	un	4	my jn	Ap	Britain	woods	Sk co	Eng. bot. 2315
13142 rígida *W*	rigid	△	un	½	jn jl	Ap	Britain	moun	Sk co	Eng. bot 2047
13143 capilláris *W*	capillary	△	un	½	jl au	Ap	Britain	sc mo.	Sk co	Eng bot. 2069
13144 palléscens *W*	pale	△	un	1	ap jn	Ap	Britain	moi p	Sk co	Eng bot 2185
13145 ustuláta *W*	scorch Alpine	△	un	½	jn jl	Ap	Scotland	al riv	Sk co	Eng bot. 2404
13146 rariflóra *E. B.*	loose-flowered	△	un	½	jn	Ap	Scotland	sc al	Sk co	Eng bot 2516
13147 limósa *W*	green and gold	△	un	1½	jn	Ap	Britain	sp bo	Sk co	Eng bot. 2043
13148 Pseudo-Cyperus *W*	Bastard Cyperus	△	un	3	jn jl	Ap	Britain	mar	Sk co	Eng bot 242
13149 flexuósa *W*	bending	△	un	2	jn jl	Ap	N Amer	1807	Sk co	S.ca. t Ddd f 124
13150 sylvática *E B*	wood	△	un	3	my jn	Ap	Britain	woods	Sk co	Eng bot 995
13151 juncea *W en*	rushy	△	un	2	my jn	Ap	N Amer.	18.0	Sk co	
13152 strigósa *W.*	loose pendulous	△	un	2	ap my	Ap	England	woods	Sk co	Eng bot 994
13153 recúrva *W*	glaucous Heath	△	un	1	my jn	Ap	England	hea	Sk co	Eng bot 1506
13154 nutans *W*	nodding	△	un	2	jn jl	Ap	Austria	1815	Sk co	Host gra 1 t 83
13155 acumináta *W.*	acuminated	△	un	1½	jn jl	Ap	Istria	1818	Sk co	Host gra 1 t 97
13156 filiformis *W*	slender-leaved	△	un	2	jn jl	Ap	Britain	bogs	Sk co	Eng bot 904
13157 aquatilis *W*	water	△	un	1½	jn jl	Ap	Lapland	1813	Sk co	
13158 acúta *W*	slender spiked	△	un	2	my jn	Ap	Britain	wat pl	Sk co	Eng bot 580
13159 paludósa *W*	lesser common	△	un	2	my jn	Ap	Britain	wat pl	Sk co	Eng bot 807
13160 ripária *W.*	great common	△	un	2	ap jn	Ap	Britain	riv ba	Sk co	Eng bot 579
13161 vesicária *W*	short-spiked	△	un	2	my jn	Ap	Britain	mar	Sk co	Eng bot 779
13162 ampullácea *W.*	slender-beaked	△	un	2	my jn	Ap	Britain	bogs	Sk co	Eng bot 780
13163 secalina *W*	rye-like	△	un	2	my jn	Ap	Austria	1824	Sk co	Schk car t 5 f 65
13164 hordeiformis *W*	Barley-formed	△	un	2	jn jl	Ap	France	1805	Sk co	S ca t Ddd t 121
13165 hirta *W*	hairy	△	un	2	my jn	Ap	Britain	wat pl	Sk co	Eng bot 685
13166 lævigáta *W.*	smooth-stalked	△	un	3	my jn	Ap	Britain	bogs	Sk co	Eng bot 1587
13167 crinita *W*	haired	△	un	1½	jn jl	Ap	N Amer	1807	Sk co	Sc ca t Eee t 125
13168 salina *W*	salt-marsh	△	un	1	jn	Ap	Norway	...	Sk co	
13169 ambleocárpa *W*	short-fruited	△	un	1½	jn jl	Ap	Britain	.	Sk co	Mi g 62 t 32 f 12
13170 bullata *W*	blistered	△	un	1½	jn	Ap	N Amer	1811	Sk co	S ca t Uuu f 166
1948 COBRE'SIA *W*	COBRESIA				*Cyperacea*		*Sp* 1			
13171 carinna *W*	sedge-like	△	un	½	jl	Ap	Switzerl	1820	Sk co	Sc ca.t Rrr f 161
1949 UNCI'NIA *Rich*	UNCINIA				*Cyperaceæ*		*Sp* 1—4			
13172 phleoides *Rich*	Cat's-tail-like	△	un	1	jl	Ap	S Amer	1821	Sk co	Cav ic t 464 f 1
1950 ZE'A *W.*	INDIAN CORN				*Gramineæ*		*Sp* 2			
13173 Maÿs *W.*	common	○	ag	2	jn jl	Ap	America	1562	S r m	Lam ill. t 749
13174 Curagúa *Mol.* Valparaiso	Cross-corn	○	ag	1	jn jl	Ap	Chili	1824	S r m	
1951 COIX *W*	JOB'S TEARS.				*Gramineæ*		*Sp* 2—4			
13175 Lácryma *W*	common	⧄	cu	2	jn jl	Ap	E. Indies	1596	S l p	Bot mag 2479
13176 *agréstis W*	round-fruited	⧄	cu	2	jn jl	Ap	E. Indies	1812	S l p	Ru am 6 t 9 f 1



History, Use, Propagation, Culture,

extreme rigour of his climate C remota is a very elegant plant C paniculata grows in bogs in immense tufts, making a firm support for the heaviest bodies C Fraseri is the handsomest species of the genus, resembling at a short distance when in flower, one of the Liliaceæ C riparia has leaves half an inch wide, and from one to three feet long, in Italy the leaves are used by the glass-makers to bind their wine flasks, by the chair-makers to bottom chairs, and by the coopers to place in the junctures in the heads of casks, in the same manner as the leaves of the Typha are used in the same country, and the stalks of Scirpus lacustris in England C. arenaria increases rapidly in loose sand, and is sometimes planted with a view of fixing soils of this description, along with Elymus and Arundo

1948 *Cobresia.* Named by Willdenow, after a German nobleman of the name of De Kobres, who is said to have been a great promoter of natural history The plants resemble Carex.

13135 Male spike sol Scales obl. with very long beaks: female cylind. 2, stalk of the lower exserted, Stigm. 3, Fr. ovate inflated 5-nerved beaked
13136 Male spike sol. · fem 2 obl. close; low. stalk Stigm 3, Fr ellipt. glob. shin. bifid at end larg than ov scale
13137 Male spike sol.. fem. 3-rem , lower stalk Stigm. 3, Fr ov. nerv memb. at mouth long than mucron. scale
13138 Male spike sol . fem 3 few-fl 2 close sessile; lower rad. on a very long stalk, Stigm 3, Fr obov obl. 3-cornered with a very short beak
13139 Sheaths none, Bracteas foliaceous auric. at base, Spikes sess obl or subcylind obt Fruit broadly elliptical
13140 Fertile spikes nearly sessile cylindric. filif acumin Fr ovate somewhat acute plane above on each side, Culm acutely angular straight
13141 Fert. spikes cylind very long droop Fr ov short acum bif. at extremity closely imbricated, Leaves broad
13142 Digynous, Sheaths none, Spikes ovate. upper sessile, Leaves somewhat recurved rigid, Fruit compressed

* 3. *Male spike solitary, female all stalked*

13143 Fert. spikes few-fl lax drooping, Fr as long as ovate membranac decid scales oblongo-ovate acuminate
13144 Fert. spikes pedunculated oblongo-cylind subpendul Bract subfoliac Fruit ov.-ellipt. tumid obt glabrous
13145 Sheaths elongated shorter than the flower-stalk, Fruit elliptical ovate beaked (black) bifid at the point
13146 Fert spikes narrow obl very few-fl lax pendul Bract. subsetaceous, Scales acute longer and broader than the fruit, Fruit ovate somewhat acumin striated
13147 Fert spikes oblongo-ovate pendulous, Bracteas subsetaceous, Scales acute as long as the fruit, Fruit ellipt rotundate striated shortly mucronate
13148 Fertile spikes upon long footstalks cylind pendul Bract very leafy, Scales setaceous, Fruit oblong very much acuminate cloven at the tips striated
13149 Male spike sol fem about 4 remote filiform stalked cernuous, Stigm 3, Fr dist altern. obl beaked bifid
13150 Fert. spikes filif rather slender slightly drooping, Fr broadly ov much acumin cleft at point, Lvs narrow
13151 Male spike solit . fem usually twin stalk filif Stigm 3, Fr lanc hisp. scabr 2-toothed long. than obl scale
13152 Fert. spikes slend filif nearly erect, Fruit ov.-lanc nerved slightly recurv loose imbric. Lvs. rather broad

* 4 *Male spikes more than one*

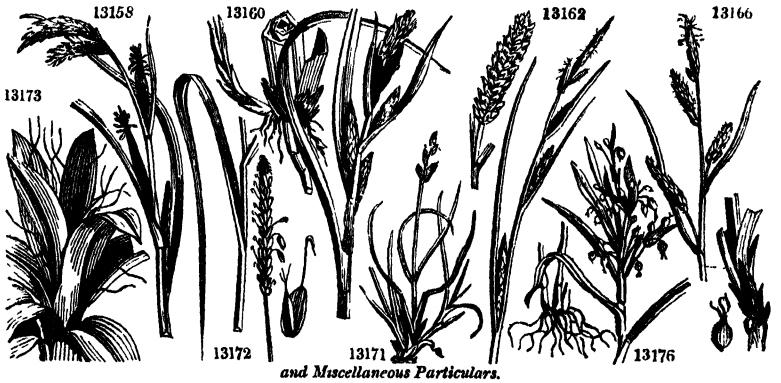
13153 Fertile spikes subcylindrical drooping, Fruit obovato-globose obtuse rather downy entire at the point
13154 Male spikes twin fem twin obl sess rem Stigm 3, Fr ov nerved forked ventric larg than ov lanc scale
13155 Male spikes 3 fem twin on short stalks nodd cylind Stigmas 3, Fr ellipt ventricose with a short ent beak
13156 Fert spikes short peduncul oblongo-cylind their cal subcusp Fr ov short beak bif at point very pubes
13157 Lvs subsessile subhn thickened, Stigmas 2, Fr ellipt with short beak ent at end as long as rounded scales
13158 Fert spikes long cylind acum slender erect when in fruit, Fr oval swelling subacum entire at point, Culm acutely angular scabrous
13159 Scal of sterile spike obtuse, Fertile spikes cylind obtuse, Fruit oblongo-ovate acute bifid at point striated
13160 Foliaceous, Scal. of sterile spike acum Fertile spikes scarcely peduncul broadly cylindrical acute, Fruit ovate subacum bifid at the point
13161 Fert spikes cylind slightly droop Scal lanc Fr broadly ovate inflat subulato-rostrate deeply bifid at point
13162 Fert spikes cylind long near erect, Scal lanc Fr crowd subglob. inflat setaceo-rost. slightly bif at point
13163 Male spikes 2 female 3 obl remote subsessile, Stigmas 3, Fr obl compr rostr bifid ciliate serrat. at edge
13164 Male spikes 2 female 3 obl remote subsessile, lower subrad Stigmas 3, Fr ovate comp. 2-toothed hairy
13165 Bracteas long foliac Fertile spikes short cylind distant their scal cuspidate, Fr ov with long beak hairy
13166 Fert spikes droop cylind all the scal acum or mucr Fr ov triang with rather long acum beak bif at point
13167 Male spikes twin fem 4 dist stalk pendul cylind Stigm 2, Fr round ellipt ventric with very short beak
13168 Male spikes 2 fem 2 rem on very long stalks erect obl Stigm 2, Fruit ellipt with short beaks ent at end
13169 Male spikes about 4 female 2 erect stalked cylind Stigmas 3, Fr obov obt shorter than obl blunt scale
13170 Male spikes 3, female 2 cylindr stalked erect, Stigm 3, Fr ov glob beaked with 2 forks, Beaks hispid

13171 Spikes 3 or 4 alternate male above

13172 Fruit oblong 3-cornered smooth at edge

13173 Leaves entire
13174 Leaves serrated

13175 Culm half round at top and obtuse, Flowers naked, Fruit ovate
13176 Culm round, Flowers naked, Fruit nearly round



and Miscellaneous Particulars.

1949 *Uncinia.* So called from *ογκος*, a hook, in allusion to the hooked awn, which in the fruit becomes hardened Plants with the habit of Carex

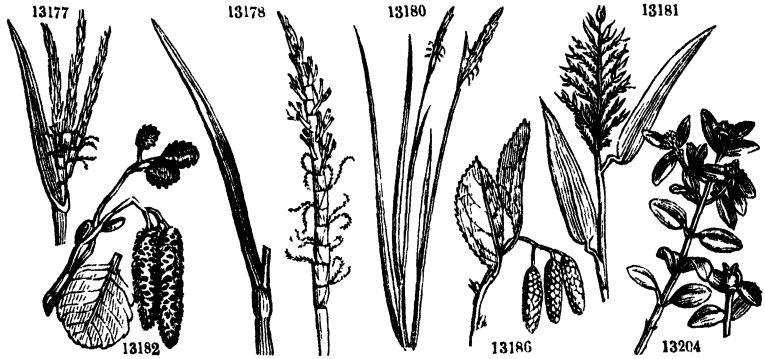
1950 *Zea.* The Greek name of corn of some kind. It is derived from *ζαω*, to live, and applied to this nutritive plant with propriety. The word *Maize* is the denomination of the vegetable among the South Americans Zea Curagua is the curious Valparaiso corn, to which a sort of religious reputation is attached, on account of the grains, when roasted, splitting regularly into the form of a cross. Of the well known Indian corn, Z Mays, there are numerous varieties, some of which are sufficiently hardy to thrive in this climate

1951 *Coix* A name used by Theophrastus to designate a kind of grass. C. Lachryma, commonly called Job's tears, derives its name from the appearance of its shining pearly fruit, which, when suspended on its slender pedicels, resembles in no inconsiderable degree a falling tear. Tropical grasses, which flower and seed plentifully in rich light soil

*1952. TRIP'SACUM *W*	TRIPSACUM				*Gramineæ*	*Sp.* 3—4.						
13177 dactyloides *W*	rough-seeded	△	un	4	au	Ap	Virginia	1640	D	p	l	Lam ill t 750
13178 monostáchyon *W*	single-spiked	△	un	2	au	Ap	N Amer.	1815	D	p	l	W. hort. ber. t.1
§13179 hermaphroditum *W*	hermaphrodite	⊡	un	2	au s	Ap	Jamaica	1776	D	p	l	
1953 HETEROPO'GON *Rich*	HETEROPOGON				*Gramineæ*	*Sp* 1—2.						
13180 gláber *Rich*	smooth	△	un	2	au	Ap	Switzerl.	1800	D	co		All. ped t.91 f 4
1954 OLY'RA *W.*	OLYRA				*Gramineæ.*	*Sp* 1—4						
13181 paniculáta *W*	broad-leaved	⊠	un	3	jl	Ap	W. Indies	1783	Sk	s	p	Sl jam 1 t.64 f.2

TETRANDRIA.

1955 AL'NUS *W*	ALDER.				*Amentaceæ.*	*Sp* 6—9						
13182 glutinósa *W*	common		ec	25	mr ap	Ap	Britain	wat.pl.	L	m	s	Eng bot 1508
β laciniáta	*cut-leaved*		or	25	mr.ap	Ap	Britain	...	L	m	s	Willd arb. 44
13183 oblongáta *W*	oblong-leaved		or	20	jl	Ap	S Europe	1730.	L	m	s	
β elliptica	*elliptic-leaved*		or	20	jl	Ap	.....	...	L	m	s	
13184 incána *W*	hoary-leaved		or	20	jn	Ap	Europe	1780	L	l	p	
β angulàta	*Elm-leaved*		or	20	jn	Ap	.. ..	...	L	l	p	
13185 undulàta *W*	curl-leaved		or	20	my jn	Ap	N Amer	1782	L	l	p	
13186 serrulàta *W*	notch-leaved		or	20	mr	Ap	N Amer	1769.	L	l	p	Abb ms. 2. t. 92
13187 cordifólia *Ten*	heart-leaved		or	20	my jn	Ap	Naples	1818.	L	co		
1956. BE'TULA *W*	BIRCH.				*Amentaceæ*	*Sp* 15—19						
13188 álba *W.*	common		tm	40	ap jn	Ap	Britain	mo st w	S	co		Eng bot 2198
13189 pen'dula *Roth*	weeping		or	40	ap jn	Ap	Britain	woods	S	co		
13190 populifólia *W*	Poplar-leaved		or	30	jl	Ap	N Amer	1750	L	co		Mich arb 2 t 2
13191 excélsa *W*	tall		tm	60	my	Ap	N Amer	1767	S	co		Dend brit 95
13192 daúrica *W*	Daurian		tm	30	jl	Ap	Siberia	1786	L	co		Pall ross 1 t 39
13193 nigra *W*	red		tm	60	jl au	Ap	N Amer	1736	L	co		Dend. brit 153
13194 lanulosa *Mich*	woolly		tm	70	jl au	Ap	N Amer	1817	L	co		
13195 papyrácea *W*	paper		tm	50	jn	Ap	N Amer	1750	L	co		Willd arb t.2 f 1
13196 lénta *W.*	soft		tm	50	jl	Ap	N Amer	1759	L	co		Dend brit 144
carpinifólia Ehr												
13197 nána *W*	smooth-dwarf		cu	8	my	Ap	Scotland	mo st h	L	co		Eng bot 2326
13198 púmila *W.*	hairy-dwarf		or	6	ap my	Ap	N Amer	1762	L	s	p	Jac vind 2 t 122
13199 póntica *Hort.*	Pontic		or	12	ap my	Ap	Turkey	.	L	s	p	Dend brit 94
13200 ováta *W*	ovate		or	15	ap my	Ap	Hungary	1820	L	co		Dend brit 96
13201 fruticósa *W*	shrubby		or	6	ap my	Ap	Siberia	1818	L	co		Dend brit 97
13202 pubéscens *Ehr*	pubescent		or	30	ap my	Ap	Germany	1812	L	co		
†1957 BUX'US *W*	BOX TREE				*Euphorbiaceæ*	*Sp* 3						
13203 baleárica *W*	Minorca		or	8	jl	Yo	Minorca	1780	C	co		
13204 sempervirens *W*	common		or	8	ap	Yo	England	ch hil	C	co		Eng bot 1341
β angustifólia	*narrow-leaved*		or	8	ap	Yo	.....	...	C	co		
γ suffruticósa	*dwarf*		or	1	.	Yo	..	...	Sk	co		
13205 chinénsis *Lank*	Chinese		or	3	n	Yo	China	1802	C	co		



History, Use, Propagation, Culture,

1952 *Trípsacum* So called by Linnæus, from τριβω, to bruise or crush, in allusion to the purpose to which its grain may be applied Forage grasses of the West Indies

1953 *Heteropogon* From ἑτερος, various, and πωγων, a beard, in allusion to the various kinds of awns with which the flowers are furnished

1954 *Olyra* A name under which Homer speaks of a grain which was used as the food of horses, and which has been thought analogous to Barley The plant now so called is a native of America, and has no resemblance to that of the ancients

1955 *Alnus* From the Celtic word *al*, near, and *lan*, the edge of a river, in reference to the places where the species grow A glutinosa, *Aulne*, Fr, *Elter*, Ger, and *Alno*, Ital, is a well known timber tree, which will grow in marshy situations The timber is applied to a variety of purposes, and in general for all works intended to be constantly under water, for turnery and furniture The bark is used by dyers and tanners, the sap being of a yellow color and very astringent There is a variety with cut leaves sold by the nurserymen as an ornamental tree, though it is more curious than showy

1956 *Betula.* *Betu* is the Celtic word for the Birch *Bouleau*, Fr, *Birchenbaum*, Ger, and *Betulla*, Ital B pendula is the most graceful tree of the genus, it grows both in mountainous situations and bogs, from Lapland to the subalpine parts of Italy and Asia. B. lenta, the mahogany birch, mountain mahogany, or cherry birch of Canada, abounds in the middle states of Pennsylvania, New York, and the Jerseys; but disappears altogether in the higher latitudes of the northern states. It is thought a very fit tree for planting in the valleys of the mountainous districts of Britain Its growth is rapid, and the timber is close grained, beautifully variegated, and well adapted for cabinet work The leaves, which appear early in spring, possess

13177 Spikes 3 clustered · male above, female below
13178 Spike solitary: male above, female below
13179 Spike solitary hermaphrodite flexuose, Spikelets somewhat distant

13180 Culm nearly simple, Sheath of leaves bearded at edge, Spike smooth

13181 Culm branched, Panicle terminal

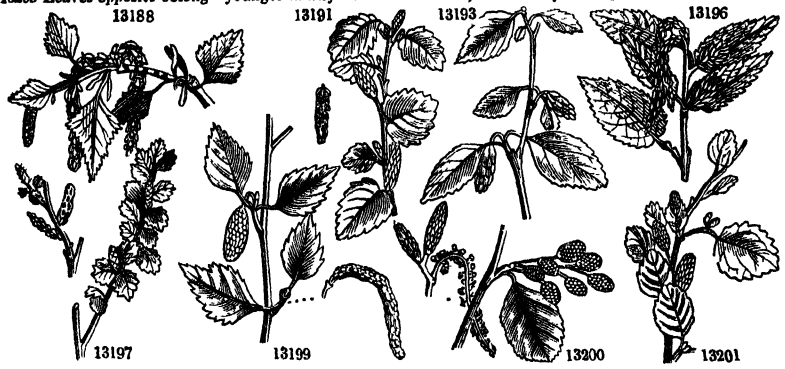
TETRANDRIA.

13182 Lvs. roundish cuneiform obt. lobed at margin and serrat. somew. glutin. downy in axils of veins beneath
β Leaves oblong pinnatifid, Segments cut
13183 Leaves oblong bluntish glutinous, Axils of the veins naked
β Leaves elliptical
13184 Leaves oblong acute downy beneath, Axils of the veins naked, Stipules lanceolate
β Leaves green beneath, Petioles green
13185 Lvs obl. acute rounded at base, Petioles and veins hairy beneath, Axils of veins naked, Stipules ov.-obl.
13186 Leaves obovate acuminate, Veins and axils of veins beneath hairy, Stipules elliptical blunt
13187 Leaves cordate acuminate entire lucid above

13188 Leaves ovato-deltoid acute doubly serrated glabrous
13189 Leaves ovate acuminate cut serrate smooth, Branches scabrous pendulous [smooth
13190 Lvs delt. with long points unequal serrat quite smooth, Scales of cones with lat lobes roundish, Petioles
13191 Leaves ovate acute serrated, Scales of cones with lat lobes rounded, Petioles downy shorter than pedunc.
13192 Leaves ovate narr at base ent unequally toothed smooth, Scales of cones ciliated lateral lobes rounded
13193 Lvs rhomb. ov doubly serr acute downy beneath entire at base, Scales of cones vill with lin. uneq lobes
13194 Leaves deltoid ovate small, Scales of female catkin densely woolly on the outside
13195 Leaves ovate acuminate doubly serrate, Veins hairy beneath
13196 Leaves cordate-ovate finely serrated acuminate, Scales of cones with blunt equal lobes and elevated veins

13197 Leaves orbicular crenate
13198 Leaves orbicular obovate serrated beneath with the branches downy, Female catkins cylindrical
13199 Petiole downy, Leaves rhomboid cut-toothed obtuse nearly smooth with tufts of hair in the axillæ beneath
13200 Lvs ovate doubly serr smooth, Fem. peduncles branched, Scales of cones with equal trunc nerved lobes
13201 Leaves roundish ovate nearly equally serrate smooth, Female catkins oblong
13202 Lvs. deltoid acute subcord. doubly serr. beneath with branches pubesc. Scales of cones with lateral lobes [rounded
13203 Leaves oblong, Petioles smooth, Anthers sagittate linear
13204 Leaves ovate, Petioles hairy at edge, Anthers ovate sagittate

13205 Leaves opposite oblong younger downy old ones smooth, Fl axillary solitary



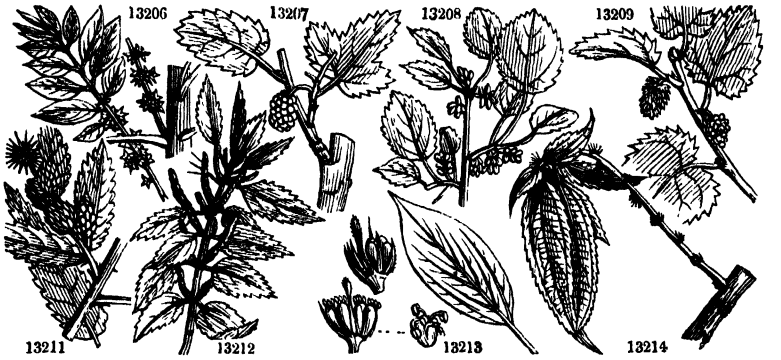
and Miscellaneous Particulars

a peculiar fragrance, which they retain after being dried in a stove, affording by infusion an agreeable diluent, superior to some of the common teas of commerce.

B populifolia and papyracea are elegant rapid growing trees, well deserving culture for their timber. All the species are ornamental, and more or less fragrant, and B. pumila and nana are pretty little shrubs. Of the Betula papyracea the North American Indians construct their large portable canoes, from which circumstance that species is known by the name of canoe birch Betula lenta is the most interesting of the genus, on account of the excellence of its wood It is known by the names of mountain mahogany, black birch, cherry birch, and sweet birch This last appellation it has from the sweet scent the branchlets give when bruised.

1957 *Buxus* An alteration of *πυξος*, its Greek name. B. sempervirens, *Buis*, Fr., *Buchsbaum*, Ger., and *Bosso*, Ital is one of the most useful of evergreen shrubs, edgings of the dwarf variety are of universal use in the walled gardens of Europe, and what is called the tree box is not less valuable as an evergreen shrub, which will grow under the shade and drip of trees The box is a native of most parts of Europe, from Britain southwards, and is very abundant in different parts of France and Switzerland. It abounds in many countries of Asia, as about Mount Caucacus, in Persia, China, Cochin China, and America. It was formerly very common in England, but has gradually disappeared as agriculture extended Box-Hill in Surrey, Boxley in Kent, and Boxwell in Gloucestershire, are named from their abounding in this tree. The timber of the box tree is of considerable value. It is sold by weight, and being very hard and smooth, and not apt to warp, is very well adapted to a variety of nicer works It is as extensively employed now as it appears to have been in the days of Evelyn, "for the turner, engraver, carver, mathematical instrument maker, comb and pipe or

1958. CICCA. *W*	Cicca					*Euphorbiaceæ* *Sp.* 1.							
13206 disticha *W*	long-leaved	♀ ▭	fr	10	...	G	E. Indies	1796	C	p l	Jac.schœ 2 t 194		
1959. MO'RUS *W.*	Mulberry.					*Urticeæ* *Sp* 5—7							
13207 álba *W*	white	☤	clt	30	jn	Ap	China	1596.	L	co	Schk han 3.t 290		
13208 tatárica *W.*	Tartarian	☤	or	20	jn	Ap	Tartary	1784.	L	co	Pall ros. 2. t. 52		
13209 nigra *W*	common	☤	fr	30	jn	Ap	Italy	1548.	L	co	Dend. brit. 159		
13210 rúbra *W*	red	♣	or	10	jn jl	Ap	N. Amer	1629.	L	r m			
13211 tinctória *W*	Dustick-wood	♀ ▭	or	20	...	Ap	W Indies	1739.	C	r m	Plum ic. t 204		
1960 BŒHME'RIA *W*	Bœhmeria					*Urticeæ* *Sp* 4—13.							
13212 cylindrica *W*	cylindrical	☤	△ un	4	jn au	G	Virginia	1759.	Sk	s.p	Slo jam 1 t.82 f 2		
13213 rubéscens *W*	tree	♣	▭ or	10	f my	G	Canaries	1779	C	s p	Jac frag t 5 f 1		
13214 ramiflóra *W*	branch-flower	♣	▭ un	8	f my	G	Jamaica	1823.	C	co	Jacq. amer t.157		
13215 lateriflóra *W.*	side-flowering	☤	△ un	1½	f my	G	N Amer.	1820	Sk	co			
1961 PI'LEA *Lindl*	Pilea					*Urticeæ* *Sp* 1—3.							
13216 muscósa *Lindl*	small-leaved	☘	⊠ pr	½	ap my	G	W Indies	1793.	C	co	Lind. coll 4		
1962 URTI'CA *W*	Nettle					*Urticeæ* *Sp* 32—67							
13217 pilulífera *W*	Roman		○ w	1½	jn au	G	England rub.		S	co	Eng bot. 148		
13218 baleárica *W*	Balearic		○ w	1½	jn jl	G	Balearic	1733.	S	co	Blackw t 321.f 1		
13219 convéxa *Hort*	convex		○ w	1½	jn jl	G	.....	1824.	S	co			
13220 Dodártii *W.*	Dodart's		○ w	1½	jl au	G	S Europe	1683	S	co			
13221 pumila *W*	dwarf		○ w	½	jl au	G	N Amer ...		S	co			
13222 involucráta *B M.*	involucred	⚘	▭ un	1	jl au	G	W Indies	1821	C	co	Bot. mag 2481		
13223 grandifólia *W*	great-leaved	⚘	▭ un	3	jl au	G	Jamaica	1793	C	co	Slo jam 1 t 83 f 2		



History, Use, Propagation, Culture,

flute maker; and the roots for the inlayer, and cabinet maker Of box are made wheels and shivers, pins, pegs for musical instruments, nut-crackers, button-moulds, weavers' shuttles, bollar-sticks, bumpsticks, and dressers for the shoemaker, rulers, rolling-pins, pestles, mall-balls, beetles, tops, tables, chessmen, screws, bobbins for bone-lace, spoons, knife-handles, but especially combs "

The English wood is esteemed inferior to that which comes from the Levant, and the American box is said to be preferable to ours, for most purposes, but the English is superior for the purpose of the engraver.

The ancients made combs of box, and musical instruments to be played upon by the mouth The Romans likewise clipped it into form, for which nothing, says Pliny, is more fit And Martial mentions clipped box trees in the gardens at Bassus's country-house

The tree box was second to the yew with us in former times for the purpose of being clipped into the shape of animals, &c ; but the dwarf box stood unrivalled " for bordering up a knot, and was esteemed a marvellous fine ornament to the flower garden "

The branches were in request among our ancestors for decking up houses, they are still seen among other evergreens in churches at Christmas, and in some countries they are borne by attendants at funerals

Box has been much celebrated as a medicine in the venereal disease, colicks, intermittent fevers, and even madness According to Dr Blaine, it is the principal ingredient in Well's Watford Drink, which is given as a preventive to canine madness

Pliny affirms, that no animal will touch the seed of box Gmelin relates, that the branches are fatal to the camels that eat them None of our animals seem to touch this tree Corsican honey was supposed by the ancients to owe its infamy to the bees feeding on the box

1958 *Cicca* A word of unknown meaning Cicca disticha thrives in light loamy soil, and is increased by cuttings with their leaves on, planted in sand, and covered with a hand-glass

1959 *Morus* Μορέα was the Greek name of the Mulberry; it is derived from the Celtic *mor*, which signifies black *Murier*, Fr, *Maulbeerbaum*, Ger, and *Moro*, Ital M. alba is commonly cultivated in France and other countries for its leaves, to feed silk-worms, though in some parts of Spain and in Persia they are said to prefer the black mulberry. In China, it appears that both sorts are grown for the same purpose. The most valuable variety of M alba is one grown in Italy, and especially in Lombardy, with vigorous shoots, and much larger leaves than the other A number of plants of this variety have been lately imported for the purpose of making a plantation in the south of Ireland, with a view to try the growth of silk in that country. In France the white mulberry is grown as pollard elms are in England, in Lombardy it is grown exactly in the same way as we grow willows for baskets, and in similar soil, in China it is also grown in moist loamy soil, and both there and in the East Indies as low bushes, and the plantation rooted up and renewed every three or four years In many parts of the continent, when the leaves are wanted for the worms, they are stript off the young shoots, which are left naked on the tree, in other places the shoots are cut off, which is not so injurious to the tree, while the points of the shoots, as well as the leaves, are eaten by the worms. The plants are sometimes raised by seed, but more commonly by layers, the Italian variety is frequently grafted on seedling stocks of the common sort, in order to preserve it from degenerating In the East Indies, the plants are raised from cuttings, three or four of which are placed together where they are finally to remain. (*Encyc. of Agr.* 884.)

The fruit of the white mulberry is white, and less acid than that of the black species

M. nigra is naturally a stronger tree than the other, the fruit is of a dark blackish red, and of an agreeable aromatic and acid flavor. It has a place in the Materia Medica, as cooling and laxative, allaying thirst, and being grateful in febrile diseases Young trees, like most others of the Monœcious class, often produce

13206 Leaflets oblong, Racemes lateral

13207 Leaves deeply cordate unequal at the base ovate lobed unequally serrated smoothish
13208 Leaves slightly cordate equal at base ovate or lobed equally serrated smooth
13209 Leaves cordate ovate or lobed unequally toothed scabrous
13210 Leaves cordate ovate acuminate or 3-lobed equally serrate scabrous soft beneath, Fem spikes cylindrical
13211 Leaves oblong unequal at base, Spines axillary solitary

13212 Leaves opp ovate-obl acum toothed smooth, Fl dicœcious, Male spikes clust. interrupt. · fem cylindrical
13213 Lvs altern obl narrow at each end entire, Spikes axill. clustered interruptedly branched, Branches hairy
13214 Lvs altern broadly lanc. acum serrated rugose, Fl cluster. axill and lateral monœcious, Males 3-androus
13215 Lvs. altern. ovate-lanceolate acuminate serrated scabrous, Fl clustered lateral, Stem herbaceous

13216 Leaves ovate acute entire, Stem simple ascending

13217 Leaves opposite ovate or somewhat heart-shaped deeply serrated, Heads of fruit globose
13218 Leaves opposite cordate serrate, Fruit-bearing catkins globose
13219 Leaves opposite entire convex oblong, Fruit-bearing catkins globose
13220 Leaves opposite ovate nearly entire, Heads of fruit globose
13221 Leaves opp ovate blunt-pointed 3-ribbed serrated, Fl -stalks somewhat corymbose shorter than footstalks
13222 Leaves opposite ovate rugose obtuse, Flower-stalks in the axillæ of the upper leaves
13223 Leaves opposite ovate pointed copiously serrated, Stipulas elliptical entire glauc. Corymbs much branched axillary longer than the footstalks



and Miscellaneous Particulars

only male blossoms for many years after they are planted, and yet afterwards become fruitful As the tree increases in age, it increases in fruitfulness, and in full grown trees the fruit is much larger and better flavored than in young ones In some of the old gardens near London, there are mulberry trees of a great age, which are very healthy and fruitful Bradley says, that most of these were planted in the times of James I, who attempted unsuccessfully to set up a silk manufacture in England. The fruit of the mulberry, like that of the strawberry and raspberry, is said not to undergo the acetous fermentation in the stomach, and therefore it may be safely eaten by gouty and rheumatic persons It is a mistake, however, to suppose that these fruits are lighter than others which have not the same antifermentative qualities

The mulberry is generally propagated by layers, but it may also be increased by seeds, cuttings, or grafting. It is generally grown as a standard in orchards; but will produce fruit sooner as an espalier or wall tree

M rubra has black shoots, rougher leaves than the black mulberry, and a dark reddish fruit, longer than the common sort, and of a very pleasant taste The tree is cultivated in China for feeding silk-worms, but not so generally as the white mulberry M indica is also cultivated for the same purpose. M tatarica bears pale red berries of an insipid taste, but eaten in Russia fresh, conserved, or dried, a wine and a spirit are also made from them, and the leaves are used for feeding silk-worms

M tinctoria is a tall branching tree, with a fine head, smooth leaves, and awl-shaped solitary spines The whole plant abounds in a slightly glutinous milk of a sulphureous color The timber is yellow, and a good deal used in dying that color, for which it is chiefly imported into Europe, under the name of Fustick-wood The berries are sweet and wholesome, but not much eaten, excepting by birds

All the species of Morus are remarkable for putting out their leaves late, so that when they appear, gardeners may safely set out their greenhouse plants, taking it for granted, that all danger from frost is over.

1960 *Bæhmeria* Named after George Rudolph Bohmer, a German botanist, and a member of the academy of Wittemberg He published several works, besides an academical dissertation upon the cellular tissue of vegetables Plants of little beauty, and easy cultivation and propagation

1961 *Pilea* So called by Mr Lindley, from *πίλος*, a cap, in allusion to the nature of one of the divisions of the perianthium A neat little creeping plant, which makes a good cover to hide the earth of large pots of tropical plants.

1962 *Urtica* A word formed from *uro*, to burn, in allusion to the stinging properties of most of the species. The English term *Nettle* seems to be the Anglo-Saxon *Netel*, which is itself an alteration of *nædl*, a needle, in the same language U dioica grows all over Europe, in Barbary, Siberia, and Japan, in hedges, neglected fields, gardens, and pastures This species, U urens, and pilulifera, with one or two others, are furnished with stings The small projecting bristles or prickles with which they are covered are tubular, and stand on a bag filled with a poisonous juice, they are perforated at the point, and when they are gently pressed vertically, the pressure at once forces the poison to ascend the tube, and enables the point to lodge it in the skin The tops of the tender shoots of U dioica are sometimes used as a pot herb early in spring, and they have even been forced for that purpose. A strong decoction of the plant salted, will coagulate milk very readily and without any disagreeable flavor The stalk is found to have a texture somewhat like that of hemp, and to be capable of being manufactured into cloth, ropes, and paper The leaves are the only food of the caterpillars of three of our most beautiful butterflies, Atalanta, Paphia, and Urticæ, the principal food of the Io, and the occasional food of the Comma album, the caterpillars also of the urticata and verticalis moths feed on it · a great number of other indiscriminate feeders devour its foliage, and the bases of the leaves in autumn are frequently disfigured by tubercles, which contain small maggots, probably producing Musca Urticæ. As a remedy for the

13224 reticulàta *W.*	net-leaved	♃ ▭	un	2	jn au	G	Jamaica	1793.	C	co	Bot. mag. 2567
13225 rùfa *W.*	rusty	♃ ▭	un	1	jn s	G	Jamaica	1793	C	co	
13226 úrens *W*	small	○	w	1	jn s	Ap	Britain	clt gr.	C	co	Eng bot. 1236
13227 dioica *W*	common	☿ △	w	1½	jl s	Ap	Britain	wa gr.	C	co	Eng. bot 1750
13228 membranácea *W.*	membranous	☽ △	un	1½	jl.s	Ap	Spain	1820	C	co	
13229 crassifólia	thick-leaved	♐ ▭	un	2	jl s	Ap	S Amer	1822.	C	co	
13230 árdens *Link*	burning	○	un	1	jl s	Ap	Nepal	1821.	S	co	
13231 cannabina *W.*	Hemp-leaved	☽ △	un	3	jl s	Ap	Siberia	1749	S	co	Am rut 249 t 25
13232 rugósa *W.*	rough-stalked	♐ ◎	un	2	my jl	Ap	Jamaica	1793	C	co	
13233 nudicaúlis *W.*	naked-stalked	♃ ▭	un	3	my jl	Ap	Jamaica	1793	C	co	
13234 grácilis *W*	slender-stalked	☽ △	un	3	jn au	Ap	Huds B	1782	C	co	
13235 Parietária *W*	Pellitory-leav'd	♃ ▭	un	1	jl s	Ap	Jamaica	1793.	C	co	Slo jam.1 t 93 f 1
13236 ciliáta *W.*	ciliated	♃ ▭	un	1	jl s	Ap	Jamaica	1815.	C	co	
13237 pulchélla *Link.*	pretty	♃ ▭	un	1½	jl.s	Ap	E. Indies	1820	C	co	
13238 scabrélla *Rox*	rough	♃ ▭	un	1	...	Ap	E Indies	1815	C	co	
13239 æ'stuans *W*	Surinam	♐ ◎	un	1	jn jl	Ap	Surinam	1803.	C	co	Jac schœ 3 t.388
13240 canadénsis *W*	Canada	☽ △	un	3	au o	Ap	Canada	1656	C	co	Pl. alm t. 237 f 2
13241 nívea *W*	white-leaved	☽ △	un	2	au s	Ap	China	1739	C	pl	Jac vind 2 t.166
13242 baccífera *W*	berry-bearing	♃ ▭	un	4	jl au	Ap	S Amer	1793	Sk	s p	Bot rep 454
13243 caracásana *W.*	Caraccas	♃ ▭	un	8	jl au	Ap	Caraccas	1824	C	co	Jacq schœ f.386
13244 caravellána *Schrk*	long-stalked	○	un	4	jl au	Ap	S Amer	1825	S	co	
13245 elongáta *Link*	lengthened	○	un	3	jl au	Ap	Philipp.Is	1823	S	co	
13246 diversifólia *Link*	various-leaved	⌊	un	3	au s	Ap	E. Indies	1823.	S	co	
13247 hórrida *Link*	horrid	○	un	3	au s	Ap	Nepal	1821	S	co	
13248 arboréscens *Link*	arborescent	♃ ▭	un	8	au s	Ap	Manilla	1822.	C	co	

1963 PACHYSAN'DRA *Mx* Pachysandra — *Euphorbiaceæ* *Sp* 2.

13249 procúmbens *W*	trailing	☽ △	pr	¼	mr ap	W	N Amer.	1800	D	s p	Bot reg 33
13250 coriácea *Hooker*	coriaceous	♃ ▭	pr	4	jn jl	W	Nepal	1822	C	co	Hook ex fl 148

1964 DIO'TIS *W* Diotis — *Chenopodeæ* *Sp* 1

13251 ceratoídes *W*	shrubby	♃	or	2	mr	Ap	Siberia	1780	L	s p	Jac ic. 1 t. 189

1965 EMPLEU'RUM *W* Empleurum — *Diosmeæ* *Sp* 1

13252 serrulátum *W*	Cape	♃ ⌊	or	3	jn jl	Pk	C. G H	1774	C	p l	Exot bot 2. t 63

1966 AU'CUBA *W* Aucuba — *Loranthee.* *Sp* 1

13253 japónica *W*	blotch-leaved	♃	or	6	my jl	Ap	Japan	1783.	C	co	Bot. mag. 1197

1967 LITTOREL'LA *W* Shore Weed — *Plantagineæ.* *Sp* 1

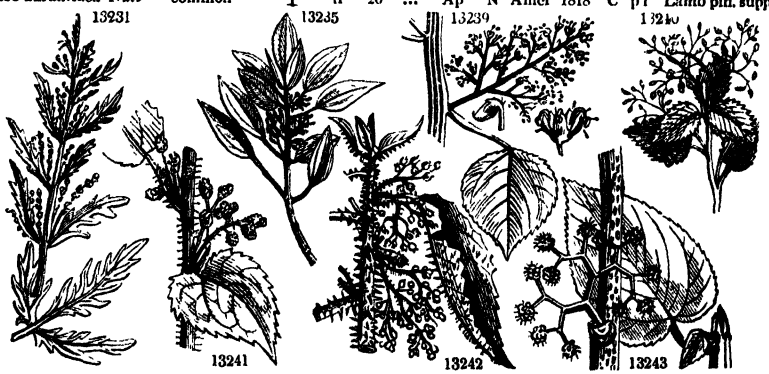
13254 lacústris *W*	Plantain-leav'd	♒ △	pr	½	jn au	W	Britain	w sa p	S	p l	Eng bot. 468

1968 SERPI'CULA. *W* Serpicula — *Onagrariæ* *Sp.* 1—3.

13255 répens *W*	creeping	♃ ⌊△⌋	pr	½	jl au	W	C G H	1789	D	p l	Lam. ill t. 758

1969 MACLU'RA *Nutt* Osage Orange — *Urticeæ* *Sp* 1

13256 aurantíaca *Nutt*	common	♃	fr	20	...	Ap	N Amer	1818	C	p l	Lamb pin. supp



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sting of the nettle, its own juice, or that of the dock, may be applied. The exotic species are of easy culture.

1963 *Pachysandra* From παχυς, thick, and ανηρ ανδρος, signifying, in botanical language, a stamen; the stamens are very stout. A plant of easy culture in common light soil, and freely increased by suckers from the roots

1964 *Diotis.* From δις, double, and ους ωτος, an ear, on account of the two appendages which exist at the base of the florets A shrub of no great beauty, which thrives in light soil, and is easily increased by layers or cuttings under a hand-glass

1965. *Empleurum.* From ευ, in, and πλευρον, the pleura, or membrane which envelopes the lungs The seeds of this plant are attached to a sort of coriaceous membrane

1966. *Aucuba.* The Japanese name of the plant. It is a well known laurel-like evergreen shrub, with leaves mottled with yellow Female flowers only have been produced in the gardens, but according to Kœmpfer,

13224 Leaves opposite elliptic-oblong acute serrated towards the point reticulated beneath, Stipulas ovate-entire, Clusters panicled about the length of the footstalks
13225 Leaves opposite elliptical acute serrated triple-ribbed their veins hairy, Stipulas roundish permanent, Clusters slightly branched, Stem shrubby shaggy with rusty hairs
13226 Leaves opposite elliptical with about 5 ribs, Clusters of flowers nearly simple
13227 Leaves ovate acuminate cordate at the base, Clusters of flowers much branched in pairs mostly dœcious
13228 Leaves opposite broadly ovate somewhat heart-shaped coarsely serrated, Fls. monœcious · male in twin upright unbranched stalked spikes with winged recept. : fem in nearly sess spikes shorter than footst.
13229 Leaves opposite ovate obl acute 3-ribbed serrated thickish reticulated and pale beneath, Corymbs stalked forked longer than the leaves, Flowers tufted
13230 Stem petioles and lvs. covered with rigid dense stimuli, Lvs. ov acum. doubly serrat. Spikes comp. whorled
13231 Leaves opposite in three deep pinnatifid segments, Clusters cylindrical in pairs erect
13232 Leaves opposite elliptical serrated 3-ribbed rugged, Clusters short dense terminal, Stem simple erect
13233 Lvs chiefly term opposite ellipt.-lanc pointed 3 ribbed entire nearly smth Stem angul. leafl. below, Cluster lateral dœcious
13234 Leaves opposite ovato-lanc. serr. heart-shaped at the base, Stem and footstalks hispid, Flowers dœcious, Clusters in pairs somewhat branched about as long as the footstalks
13235 Leaves opposite ovato-lanc entire, Stem much branched, Flowers dœcious
13236 Leaves opposite ellipt. 3-ribbed crenate fringed acute at each end entire at the base, Stem divaricated, Flowers aggregate on axillary stalks about the length of the footstalks
13237 Leaves long lanc. very rugose. glabrous above, beneath having a fine white down
13238 Stem downy roughish, Lvs on long stalks ov acute crenat downy roughish 3-nerv Stip lanc acute scar
13239 Lvs alternate ov serrat. minutely heart-shap at the base, Clusters axill forked, Fruit in orbicular corymbs
13240 Lvs. alternate ovate somewhat hairy serrated, Stipulas obtuse, Clusters axill compound spreading shorter than the leaves the lower ones male sessile, upper female stalked
13241 Leaves alternate roundish-ovate pointed toothed 3-ribbed snow white and downy beneath, Clusters axill repeatedly compound, Fl fasciculate
13242 Leaves alternate heart-shaped toothed prickly as well as the shrubby stem, Calyx of the fruit pulpy
13243 Leaves altern heart-shaped acutely crenate rough above soft and downy beneath, Panicles lateral leafless forked divaricated, Flowers capitate dœcious, Stem arborcous
13244 Leaves on long stalks cordate acuminate acutely serrated stinging, Spikes panicled
13245 Leaves stalked cordate acuminate serrated stinging, Racemes axillary
13246 Leaves cordate entire and 3-lobed coarsely tooth-serrated, Petiolcs and stem with long strigose prickles
13247 Stem with very long stimuli, Leaves pinnatifid with finely toothed segments, Spikes axillary compound
13248 Stem downy, Leaves on long stalks ovate-lanceolate acuminate subcrenate rough above soft beneath

13249 Stem procumbent, Leaves short oval crenate toothed above, Calyx minutely ciliated
13250 Leaves ovate lanceolate acuminated nerved

13251 Leaves lanceolate downy, Female flowers woolly

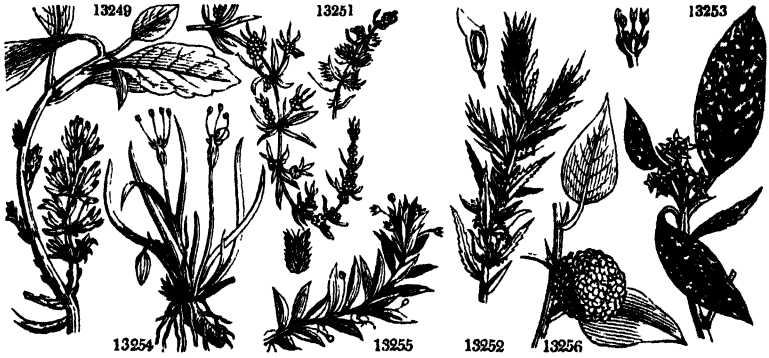
13252 Leaves lanceolate ensate crenate smooth, Capsules 1-celled

13253 The only species

13254 The only species

13255 Flowers tetrandrous, Leaves alternate linear lanceolate entire rough

13256 A small lactescent tree with alternate entire leaves and spiny branches



and Miscellaneous Particulars.

the fruit is a red oblong drupe, like a laurel berry, with a white sweetish pulp, and a kernel with a bitter taste.

1967. *Littorella* From *littus*, the shore, in allusion to the places where it grows. A pretty little delicate plant, with long tremulous white stamens.

1968. *Serpicula.* From *serpo*, to creep, on account of the habits of the species.

1969. *Maclura.* Dedicated by Nuttall, to William Maclure, Esq. of the United States, a philosopher, whose devotion to natural history, and particularly to the geology of North America, has scarcely been exceeded by Ramond or Saussure in Europe. A spreading deciduous tree, about twenty or thirty feet high, with a yellow axillary berry the size of an orange, but not so succulent, and said to be as agreeable when fully ripe. It was originally found by Hunter and Dunbar, on the banks of the Little Missouri or Washita river, also near Natchitoches, and upon the banks of the Arkansa.

PENTANDRIA.

1970. EXOCAR'PUS *Lab* Exocarpus. *Coniferæ Sp.* 1.
13257 cupressiformis *Lab.* Cypress-like ♀ ⊔ tm 40 ... Ap V Dt L 1824. C p.l Lab voyage.t.14

1971. NEPHE'LIUM *W* Rambutan *Sapindaceæ Sp* 1
13258 lappáceum *W.* Bur seeded ♀ □ fr 20 ... G E. Indies 1809. C s.p Lam. ill. t. 764

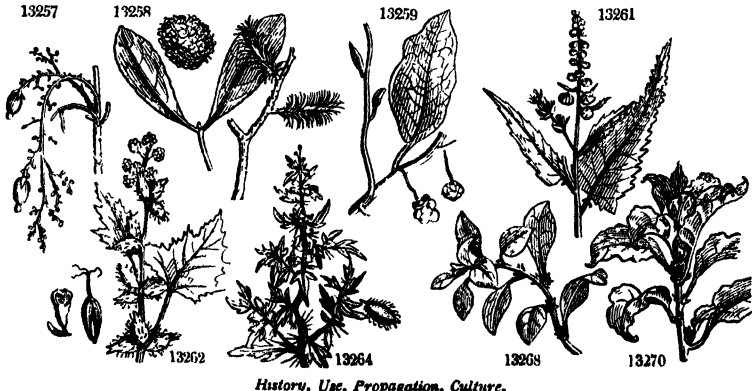
1972 SCHIZAN'DRA *W* Schizandra *Menispermeæ. Sp.* 1.
13259 coccinea *W* scarlet-flower'd ♀ ⊔ or jn jl Sc N. Amer 1806. L s p Bot. mag. 1413

1973 FRANZE'RIA *Cav* Franzeria ..... *Sp* 2—4.
13260 artemisioides *W* Mugwort-leav. ⊔ un 6 jl s G Peru 1759 C p l W hort. ber 2
13261 ambrosioides *W* Ambrosia-leav. ⊔ un 4 jl.s G Mexico 1796. C p l Cav ic 2 t 200

1974 XAN'THIUM *W.* Xanthium. ..... *Sp* 4—5
13262 Strumárium *W* Small Burdock ○ un 3 jl s G England dungh S co Eng. bot. 2544
13263 orientale *W* oriental ○ un 4 jl.s G China 1685 S co Sch hand.3 t.291
13264 spinósum *W* spiny ○ un 3 jl s G S. Europe 1713 S co Herm parad 246
13265 echinátum *W.* hedgehog ○ un 3 jl s G .... S co Cogot.1784 c ic

1975 AMARAN'TUS *W.* Amaranth. *Amarantaceæ Sp* 37—45.
13266 tenuifólius *W.* fine-leaved ○ un 1 jl s G E. Indies 1801. S co
13267 angustifólius *W.* narrow-leaved ○ un 1½ jl s G Levant 1723. S co
13268 álbus *W* white ○ un 1½ jl s G N Amer. 1778. S co W ama 9 t.1.f 2
13269 græcizans *W* Pellitory-leaved ○ un 1½ jl.s G N. Amer 1759 S co W ama 8 t 4 f 7
13270 melancholícus *W.* melancholy ○ or 1½ jn s Pu E. Indies 1731 S co W.am.15 t 9.f 18
13271 tricolor *W* three-colored ▣ or 2 jn s R Y E. Indies 1548 S r m Kn. th. 2.t A.3 6
13272 bicolor *W* two-colored ○ or 1½ jl s R Y E. Indies 1802. S r m
13273 polygamus *W.* hermaphrodite ○ un 2 jl.s G E. Indies 1780 S co Rum amb.5 t.82
13274 gangéticus *W* oval-spiked ○ un 2 jl s G E. Indies 1778 S co W am.16.t.6.f 11
13275 mangostánus *W* rhomb-leaved ○ un 2 jl s G E. Indies 1801 S co W amar 13.t.12
13276 polystáchyus *W.* many-spiked ○ un ½ jl s G E. Indies 1816. S co
13277 tristis *W* round-headed ○ un 2 jn au Pu China 1759 S co W.am.21.t.5 f 10
13278 inamœnus *W* unpleasant ○ un 2 jn au G Japan 1820 S co Hout. pfl.t.72.f 1
13279 mcom'tus *W en s* shabby ○ un 2 jn au G ..... 1823 S co
13280 lividus *W* livid ○ un 5 jl s R N Amer. 1759 S co W am. 20 t 1 f 1
13281 oleráceus *W* eatable ○ clt 6 jl au Pa R E. Indies 1764. S co W. am 17.t.5 f 9
13282 bullatus *Besser* blistered ○ un 4 jl au G ..... 1822. S co
13283 Blitum *W* wild ✱ ○ un 2 jn au G England dungh. S co Eng. bot. 2212
13284 prostrátus *W* trailing ✱ ○ un 2 jl s G France 1739 S co
13285 spicátus *P S* spiked ○ un 3 jl.s G Europe ... S co
13286 viridis *W* green ○ un 3 au s G Brazil 1768. S co W.am.18 t.8 f 16
13287 polygonoides *W.* spotted-leaved ✱ ○ un 1½ jl au G Jamaica 1778 S co W.am.11 t.6 f 12
13288 scándens *W* climbing ⊥ ○ un 2 jl au G America 1796 S co
13289 deflexus *W* bending ✱ ○ un 1 jl au G ..... 1805. S co W. a.10.t.10.f 20

13290 cauliflórus *Lank* stem-flowering ○ un 4 jn s G Nepal 1821. S co
13291 hybridus *W* clustered ○ un 4 jn s G N Amer. 1656. S co W am 26.t.9.f 17
13292 strictus *W* upright ○ un 2 jl s G ..... 1793 S co W. am.27 t 3 f 5
13293 paniculátus *W.* panicled ○ or 6 jl s G N Amer 1798 S co W. am 32 t 2.f 4
13294 sanguineus *W.* spreading ○ or 3 jl s R Bahamal 1775 S co W am 31 t 2 f 3
13295 retroflexus *W* hairy ○ un 2 jl.s G Pensylva 1759 S co W a. 33 t 11 f 21
13296 lætus *W* blunt-leaved ○ un 2 jl.s R ..... 1799 S co W am.28.t 8.f.15
13297 flávus *W* pale ○ or 4 jl s L Y India 1759. S co W am 35.t.3 f 6
13298 chlorostáchys *W* nodding ○ un 3 jl s G ..... 1796. S co W a.34 t 10.f.19
13299 hypochondriacus *W.* Prince's Feather ○ or 5 jl s D R Virginia 1684 S co
13300 cruéntus *W* various-leaved ○ or 3 jn au D R China 1728. S r m
13301 hécticus *W* oval-leaved ○ or 3 au Pk ..... 1796. S co W am.25 t.7.f 13
13302 caudátus *W.* Love lies bleeding ○ or 4 au s R E Indies 1596. S co
β máximus *tree* ○ or 6 au.s R ..... 1820 S co



History, Use, Propagation, Culture,

1970 *Exocarpus* So called from ἐξω, outside, and καρπος, fruit, because the nut appears to be seated on the outside of the pericarp, on account of the great receptacle on which it is placed.

1971. *Nephelium.* According to Dodoens, *Nephelion* was a name anciently given to the Burdock. The modern plant bears bristly fruit like the involucrum of the Burdock It is an excellent fruit, known in the islands of the Indian Archipelago by the name of Rambutan; grows in rich light loam, and is struck in pots of sand under a glass

1972. *Schizandra.* From σχιζω, to cut, and ανηρ, a stamen, its stamens are split A handsome plant, which grows in light loam and peat, and ripened cuttings root in sand under a hand-glass.

PENTANDRIA.

13257 The only species

13258 Leaves alternate pinnated, Racemes erect shorter than leaves

13259 Leaves lanceolate oval acute at each end end, rarely somewhat toothed

13260 Leaves bipinnatifid toothed, Petioles winged
13261 Leaves ovate-lanceolate cordate toothed, Petioles with an appendage

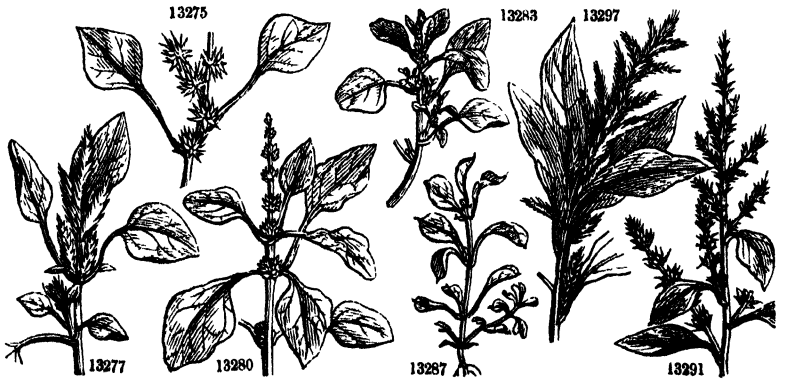
13262 Stem unarmed, Leaves cordate 3-nerved
13263 Stem unarmed, Leaves cuneiform ovate somewhat 3-lobed
13264 Spines ternate, Leaves 3-lobed
13265 Stem unarmed, Fruit oval aculeate, Prickles hooked echinate at base

1. *Triandrous.*

13266 Clusters axillary, Leaves linear-lanceolate cuneate retuse, Stem branched diffuse
13267 Clusters axillary, Leaves linear-lanceolate acute mucronate, Stem branched erect
13268 Clusters axillary, Leaves obovate retuse, Stem square simple
13269 Clusters axillary, Flowers trifid, Leaves obovate emarginate, Stem roundish branched
13270 Clusters axillary stalked roundish, Leaves ovate lanceolate colored
13271 Clusters sessile, Leaves oblong lanceolate colored
13272 Clusters sessile capitate, Leaves ovate acuminate blunt colored
13273 Clusters in short spikes, Cal and bract with hooked bristles, Leaves oblong lanceolate emarginate
13274 Clusters shortly spiked ovate, Leaves ovate lanceolate emarginate
13275 Clusters somewhat spiked axillary solitary, Leaves rhomboid roundish
13276 Clusters spiked, Spikes axillary and terminal, Leaves ovate lanceolate emarginate
13277 Clusters spiked loosely, Leaves subcordate ovate emarginate shorter than petiole
13278 Clusters somewhat spiked and 3-leaved · axillary in pairs, Leaves rhomboid lanceolate
13279 Clusters spiked, Leaves rhomboid-ovate acute
13280 Clusters somewhat spiked rounded, Leaves elliptical retuse, Stem erect
13281 Clusters axillary branched, Leaves rugose oblong very blunt emarginate
13282 Leaves subrhomboid acute repand bellate, Spikes terminal, Sepals mucronate pungent
13283 Clusters somewhat spiked, Flowers 3-leaved, Leaves ovate retuse, Stem diffuse
13284 Clusters spiked, Flowers 3-leaved, Leaves rhomb-ov bluntish retuse, Stem prostrate branched
13285 Clusters spiked terminal, Leaves ovate-oblong, Stem erect somewhat branched
13286 Clusters axillary twin triandrous, Male flowers 3-leaved, Leaves elliptical emarginate wavy at edge
13287 Clusters 3-leaved, Female flowers funnel-shaped, Leaves rhomboid ovate emarginate
13288 Leaves ovate, Spikes interrupted compound, Spikelets inflexed, Stem weak
13289 Spike very short few-fl. Leaves rhomboid lanceolate, Capsules not dehiscent

2 *Pentandrous*

13290 Leaves oval acute somewhat wavy toothed, Clusters axillary cymose
13291 Raceme decompound clustered erect, Leaves ovate-lanceolate
13292 Raceme compound erect straight, Leaves ovate concave
13293 Racemes supradecompound, Branches spreading pubescent, Leaves ovate-lanceolate
13294 Racemes supradecompound erect, Branches spreading smooth, Leaves oblong acute
13295 Racemes supradecompound erect clustered, Branches downy, Leaves ovate wavy
13296 Racemes compound erect, Leaves ovate blunt mucronate
13297 Racemes compound nodding, Leaves ovate lanceolate
13298 Racemes compound nodding, Leaves lanceolate
13299 Racemes compound erect clustered, Leaves oblong lanceolate mucronate
13300 Racemes decompound naked spreading, Leaves lanceolate ovate
13301 Racemes simply spiked, Flowers axillary clustered, Leaves ovate acute
13302 Racemes decompound pendulous, Leaves lanceolate ovate, Stem nodding



and Miscellaneous Particulars.

1973. *Franzeria.* A genus dedicated by Cavanilles to Antony Franzer, a botanical physician, whose merits are forgotten. Cuttings root in loam and peat under a hand-glass.

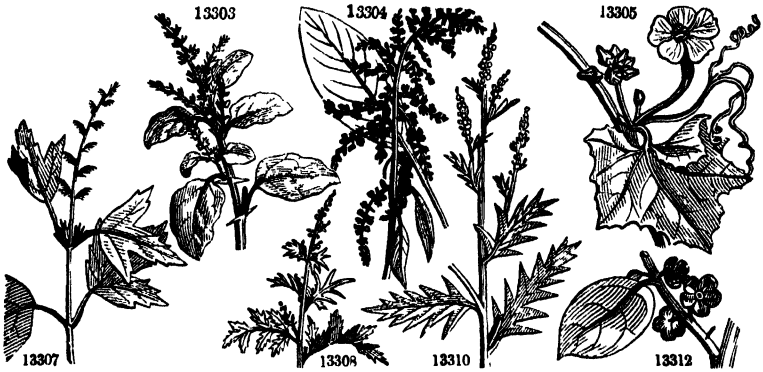
1974. *Xanthium.* From ξανθος, yellow, a color which it is asserted by Dioscorides, *lib. 4. cap.* 133, that an infusion of this plant communicates to the hair. Weeds of little beauty and easy culture.

1975. *Amarantus* From *a*, privative, and μαραινω, to wither, because the flowers of most of the species retain their bright colors when dead. Some of the species are very ornamental, and most of them might probably be used as spinage, as some sorts are in the East. A. polygamus is used in this way in Guiana and China, and A. oleraceus, tristis, and viridis, in India. A. melancholicus and tricolor are popular tender

13303 spinósus *W.*	prickly	♀	un	2	jl.s	G	India	1683.	S	co	W.am.38. t.4. f.8
13304 speciósus *B. M.*	shewy	♀	or	6	jl.au	R	Nepal	1819.	S	co	Bot. mag. 2227
1976. LUF'FA *Cav.*	LUFFA				*Cucurbitaceæ.*		*Sp.* 1—2.				
13305 foe'tida *Cav*	stinking	♂ ♀	or	12	jn.o		India	1812.	S	co	Bot. mag 1638
1977. AMBRO'SIA. *W.*	AMBROSIA.				.....		*Sp.* 6—10				
13306 integrifólia *W.*	entire-leaved	♀	un	3	jl.s	G	N. Amer	1816	S	co	
13307 trifida *W*	trifid-leaved	♀	un	6	jl s	G	N. Amer.	1699.	S	co	Moris s 6. t. 1. f.4
13308 elátior *W*	tall	♀	un	8	jl.au	G	N. Amer.	1696	S	co	Herm. lugd. t.35
13309 artemisifólia *W*	Mugwort-leav.	♀	un	5	jl au	G	N Amer.	1759	S	co	
13310 paniculáta *W*	panicled	♀	un	3	jl.s	G	N Amer	1811.	S	co	Plu alm. t.10 f.5
13311 maritima *W.*	sea	♀	un	3	jl.au	G	Italy	1570	S	co	Sch. hand.3.t.292
1978. SECURINE'GA. *W*	OTAHEITE MYRTLE				*Euphorbiaceæ.*		*Sp* 1—2				
13312 nitida *W.*	shining-leaved	♀	tm	40	jn jl	W	Mauritius	1793.	C	co	Lindl coll. 9

HEXANDRIA.

1979 ZIZA'NIA. *W.*	ZIZANIA.				*Gramineæ.*		*Sp* 1—5.				
13313 aquática *H K.*	Canada Rice	♂	ec	6	jl s	G	N. Amer	1790	S	co	Lin. trans 7 t.13
1980 PHA'RUS. *W.*	PHARUS.				*Gramineæ.*		*Sp* 1—3				
13314 latifólius *W*	broad-leaved	♂	or	6	jl.au	G	Jamaica	1793.	S	r m	Br jam t. 38. f 3
1981. GUETTAR'DA. *W*	GUETTARDA				*Rubiaceæ*		*Sp.* 2—17				
§13315 speciósa *W.*	great-flowered	♀	spl	30	...	Sc	E. Indies	1771	S	p l	
13316 rugósa *W*	rough-leaved	♀	or	20	...	...	W Indies	1793.	S	r m	
1982. SA'GUS. *W.*	SAGO PALM.				*Palmæ*		*Sp* 3—4.				
13317 Rúmphii *W.*	Rumphius's	♀	clt	50	...	G	E Indies	1800	Sk	r m	Ru am.1 t.17, 18
13318 Rúffia *W.*	turbinate	♀	or	60	...	G	Madagasc	1820	S	r m	
13319 vinifera *Hort*	prickly	♀	or	50	...	G	Guinea	1820	S	r m	Bea fl. d'Oware
*1983 CO'COS. *W.*	COCOA-NUT-TREE.				*Palmæ*		*Sp* 3—11				
13320 nucifera *W*	common	♀	clt	50	...	Pa G	E. Indies	1690	S	r m	Roxb cor. 1 t.73
§13321 aculeáta *W*	prickly	♀	clt	50	...	Pa. G	W. Indies	1796.	S	r m	Jac.am 278.t.169
§13322 fusifórmis *W*	Great Macaw-tree	♀	clt	30	...	Pa G	Jamaica	1731	S	r m	



History, Use, Propagation, Culture,

annuals, and A. sanguineus and caudatus common border flowers, like all the species, they are of easy culture in light rich soil. Most of the species are very prolific in seeds, which preserve their germinating quality several years.

1976. *Luffa.* Its name in Arabic is *loûff*, according to Forskahl. A curious kind of gourd, not often seen on account of its offensive odor. It is cultivated in Arabia and China. It climbs up the Palm trees, covering and elegantly adorning their trunks. The fruit when young is pickled, like the Mango, but Europeans think it has a disagreeable taste, and is not very wholesome. L. Charantia has a fruit with a yellowish skin, but very red flesh, and when ripe, it bursts elastically. Culture as in Cucumis.

1977. *Ambrosia.* A poetical name. *Ambrosia* is the name of the food of the heathen divinities, as nectar was their beverage, of the former, the odor was delightful, whence its name has been applied to an herb, the leaves of which, when bruised, emit a grateful scent. Weedy plants of no beauty.

1978. *Securinega.* From *securis*, a hatchet. The name was given by Commerson, because the wood was so hard as to be capable of being manufactured into cutting instruments. It grows and flowers freely in loam and peat, and cuttings strike in sand under a hand-glass.

1979. *Zizania.* One of the Greek names of the rye-grass was ζιζάνιον; according to Golius, the same plant was called by the Arabs *Zohán.* The modern plant has no relation to the ancient, being a native of America, where it is called Canada rice. This plant has been acclimated in Middlesex and Ross-shire, it grows on the margins of ponds, and is exceedingly prolific of bland farinaceous seeds, which afford a very good meal. It abounds in all the shallow streams of North West America, where its seeds contribute essentially to the support of the wandering tribes of Indians, and feed immense flocks of wild swans, geese, and other water fowl. Pinkerton says, this plant seems intended by nature to become the bread corn of the north.

1980. *Pharus.* From φάρος, a covering. Brown gave this name to the plants, because their long broad leaves are employed as wrappers for various purposes by the natives of Jamaica. Fine *stove* grasses.

1981. *Guettarda.* Etienne Guettard was a French botanist, who published in 1747, a catalogue of the plants growing in the vicinity of Estampes. Splendid plants, which grow in loam, peat, and sand; and are increased by cuttings in sand in a moist heat and covered.

1982. *Sagus.* So named in allusion to the nutritive properties of the substance obtained from it. From this palm is produced the Sago of the shops. The wood is full of white pith, like that of elder; the pith is taken out, bruised in a mortar, and then put into a cloth or strainer, held over a trough, and water being poured in, the pith is washed through the cloth into the trough; the water being then drawn off, the sago is taken out and dried for use or transportation. The fruit is eaten by the Japanese, but the tree is chiefly esteemed for its highly nutritive pith.

1983. *Cocos.* Linnæus regards this name as of Greek origin. In that language, κωκος means a kind of fruit, but it does not appear that there was any relation between that and the modern cocoa nut. D'Herbelot

13303 Racemes pentandrous terminal compound, Axillæ spiny
13304 Clusters densely spiked somewhat whorled, Spikes decompound erect colored, Lvs. obl. ellipt. red beneath

13305 Leaves cordate 5-lobed, Flowers large, Gourd a span long

13306 Leaves ovate sessile acuminate serrate ciliated at base
13307 Leaves 3-lobed serrated
13308 Leaves bipinnatifid smoothish, Petioles with long ciliæ, Racemes terminal panicled
13309 Leaves bipinnatifid hoary beneath: upper pinnatifid, Racemes 3 terminal
13310 Leaves smooth bipinnatifid: upper pinnatifid, Racemes terminal solitary, Branches fastigiate
13311 Leaves bipinnatifid blunt hoary beneath, Racemes terminal solitary, Branches villous

13312 Leaves alternate ovate, Flowers axillary clustered

HEXANDRIA.

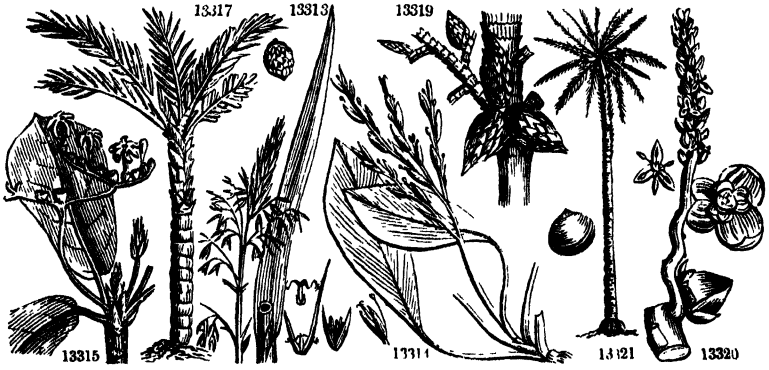
13313 Panicle effuse, Glumes aristate male and female mixed

13314 Panicle branched, Glumes awnless smooth, Leaves ovate-lanceolate

13315 Leaves obovate acute downy beneath, Flowers 7-androus 7-fid
13316 Leaves subcordate ovate acute scabrous downy beneath, Flowers hexandrous

13317 Branchlets of the spadix smooth
13318 Branchlets of the spadix annular
13319 Pinnæ spinulose, Fruit oblong furrowed

13320 Unarmed, Fronds pinnated, Leaflets replicate ensiform
13321 Caudex cylindrical prickly upwards, Fronds pinnated prickly
13322 Aculeate spiny, Caudex fusiform, Fronds pinnated, Stems and spathes spiny



and Miscellaneous Particulars.

says, (*Bibl Or* 278) that in India the fruit is called *coza*, whence the Turkish name *coz*, for a nut: but this requires confirmation. In Malabar it is called *tenga*, in the Moluccas *calappa*, and by the Brahmins *medo*. C. nucifera is a native of, and cultivated in, most places within the tropics. The trees grow to a great height, with a straight trunk, and, like almost every species of the Palm tribe, without branches. The leaves are from twelve to fifteen feet long, the flowers come out round the top of the trunk in large clusters, inclosed in a sheath, and the nuts succeed them, commonly ten or twelve together

There are few trees more extensively or variously useful The leaves are employed as thatch to cover houses, and to make mats either for sitting or lying upon The leaf, when reduced to fine fibres, is the material of which a beautiful and costly carpeting is fabricated for those in the higher ranks, the coarse fibres are made into brooms. After these useful materials are taken from this leaf, the stem still remains, which is about the thickness of the ankle, and furnishes firewood

The wood of this palm, when fresh cut, is spongy, but becomes hard after being seasoned, and assumes a dark brown color. On the top of the tree a large shoot is produced, which, when boiled, resembles brocoli, but is said to be of a more delicate taste, and though much liked, is seldom used by the natives, because on cutting it off, the pith is exposed, and the tree dies Between this cabbage-like shoot and the leaves, there spring several buds, from which, on making an incision, there distils a juice differing little from water, either in the color or consistence It is the employment of a certain class of men to climb to the top of the trees in the evening, with earthen pots tied to their waists, which they fix there to receive the juice, which is regularly carried away before the sun has had any influence upon it. This liquor is sold at the bazaars by the natives under the name of toddy. It is used for yeast, and forms an excellent substitute. In this state it is drank with avidity, both by the low Europeans and the natives, and is reckoned a cooling and agreeable beverage. After being kept a few hours, it begins to ferment, acquires a sharp taste, and a slight intoxicating quality. By boiling it, a coarse kind of sugar is obtained, and by distillation, it yields a strong ardent spirit, which being every where sold, and at a low price, constitutes one of the most destructive annoyances to our soldiers. The name given to this pernicious drink by Europeans, is Pariah arrack, from the supposition that it is only drank by the Pariahs, or out-casts, that have no rank.

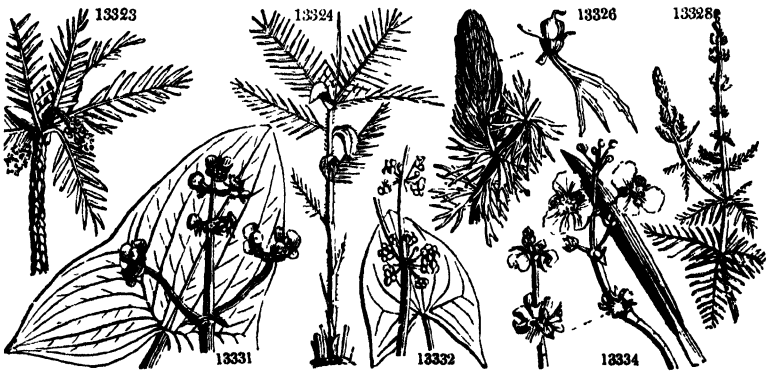
The trees from which the toddy is drawn do not bear any fruit, on account of the destruction of the buds, but if the buds be left entire, they produce clusters of the cocoa nut. This nut in the husk is as large as a man's head, and when ripe falls with the least wind. If gathered fresh, it is green on the outside; the husk and the shell are tender. The shell, when divested of the husk, may be about the size of an ostrich's egg, and is lined with a white pulpy substance, which contains about a pint and a half of a liquor like water, and though the taste be sweet and agreeable, it is different to that of the toddy.

In proportion as the fruit grows old, the shell hardens, and the liquor diminishes, till it is at last entirely absorbed by the white milky substance, which gradually acquires the hardness of the kernel of the almond.

1984. ELATE. *W.*	Elate.					*Palmæ. Sp.* 1.								
13323 sylvéstris *W.*	prickly-leaved	♀	▭	or	14	ap.jn	G	E. Indies	1763.	S	r m	Rh.mal.3.t.22.25		
1985. BACTRIS. *W.*	Bactris.					*Palmæ. Sp.* 2.								
13324 minor *W*	lesser	♀	▭	or	12	...	G	S. Amer.	1691.	S	r.m	Jac am. t.171. f.1		
13325 major *W.*	greater	♀	▭	or	25	...	G	Carthag.	1800.	S	r.m	Jac.am. t.171. f.2		

POLYANDRIA.

1986. CERATOPHYL'LUM *W* Hornwort.						*Fluviales. Sp.* 2—								
13326 demérsum *W*	common	♣	△	un	1	jl.s	G	Britain	dit.	D	l.p	Eng bot. 947		
13327 submérsum *W*	unarmed	♣	△	un	1	jl s	G	Britain	dit.	D	l p	Eng. bot. 679		
1987 MYRIOPHYL'LUM *W.* Water Milfoil.						*Onagrariæ. Sp* 2—5.								
13328 spicátum *W*	spiked	♣	△	pr	1	jn.au	R	Britain	dit.	D	l.p	Eng bot 83		
13329 verticillátum *W*	verticillate	♣	△	pr	1	jl	G	England	ponds	D	l p	Eng bot. 218		
1988 SAGITTA'RIA *W* Arrow-Head						*Alismaceæ. Sp* 6—16.								
13330 sagittifólia *W*	common	♣	△	or	2	jn au	W	England	rivers	D	l p	Eng bot. 84		
13331 sinénsis *B M*	Chinese	♣	⧋	or	2	s n	W	China	1812.	D	l p	Bot mag 1631		
13332 obtusifólia *W*	blunt-leaved	♣	⧋	or	2	jl au	W	China	1804	D	l p	Rhe mal 11 t 46		
13333 lancifólia *W*	lance-leaved	♣	⧋	or	1½	jn jl	W	W Indies	1787	D	l p	Bot. mag. 1792		
13334 rigida *B M*	brittle-leaved	♣	△	or	1½	jn jl	W	N Amer	1806	D	l p	Bot mag 1632		
13335 graminea *W*	Grass-leaved	♣	⧋	or	1½	jl au	W	Carolina	1812	D	l p			
†1989 BEGO'NIA *W.*	Begonia					.....		*Sp.* 16—38						
13336 nítida *W*	shining-leaved	♃	▭	or	1½	my d	W	Jamaica	1777.	C	s p	Par lond. 72		
13337 dichótoma *W*	forked	♃	▭	or	2	jl au	W	Caraccas	1800.	C	s p	Jac. ic. 3 t 619		
13338 discolor *H K*	two-colored	♃	▭	or	3	my s	W	China	1804.	R	s.p	Bot. mag 1473		
Evansiána B R.														
13339 macrophýlla *W*	large-leaved	♃	▭	or	3	my s	W	Jamaica	1793	C	s p	Plu ic.34 t.45 f 1		
13340 tuberósa *W*	tuberous	♃	⧋	or	½	jl s	W	Antioyna	1810	C	l p	R.am 5. t.169. f 2		
13341 acumináta *W*	pointed-leaved	♃	▭	or	1	my d	W	Jamaica	1790	C	s p	Bot reg 364		
13342 húmilis *W*	small	♀	◯	or	¼	o	W	W Indies	1788	C	l.p	Lin trans 1 t.15		
13343 hirsúta *W*	shaggy-leaved	♀	◯	or	1	my jn	W	W Indies	1789	C	l p	Aub gui 2. t.348		
13344 ulmifólia *W.*	elm-leaved	♃	▭	or	2	my jn	W	S Amer	1822.	C	l p	Bot. cab 638		
13345 argyrostigma *Fisch.*	silver-spotted	♃	▭	or	3	jl.o	W	Brazils	1819.	C	l p	Bot reg 606		
maculata Raddi														
13346 spatuláta *W*	spatulate	♀	⧋	or	1½	jl o	W	W. Indies	1819	C	l p	Bot cab 107		
13347 picta *Lodd*	painted	♀	⧋	or	¼	s	Pk	Nepal	1818	C	l p	Bot. cab. 571		
13348 paucifióra *Lindley*	few-flowered	♀	⧋	or	1½	jl o	W	.....	1816	C	l p	Bot reg. 471		
13349 odoráta *W.*	sweet-scented	♀	⧋	or	1½	jl o	W	.....	1824	C	l p			
13350 hirtélla *Link*	hairy	♀	⧋	or	1	jl o	W	.....	1824	C	l p			
13351 distícha *Link.*	distichous	♀	⧋	or	1	jl o	W	.....	1824	C	l p			
1990 POTE'RIUM. *W* Burnet						*Rosaceæ Sp* 6—7								
13352 agrimoniifólium *Cav.*	Agrimony-lvd	♀	△	pr	3	jl	G	Spain	1822.	S	co			
13353 Sanguisórba *W*	common	♀	△	ag	2	jl	G	England	ch hil	D	co	Eng. bot. 860		
13354 polygamum *W.*	Hungarian	♀	△	or	3	jl au	Br	Hungary	1803	D	co	Pl rar hu 2 t.198		



History, Use, Propagation, Culture,

and is almost as easily detached from the shell. The natives use this nut as their victuals; and from it they also express a considerable quantity of the purest and best lamp oil. The substance which remains after this operation, supplies an excellent food for poultry and hogs. Cups and a variety of excellent utensils are made of the shell.

The husk of the cocoa nut is nearly an inch thick, and is, perhaps, the most valuable part of the tree, for it consists of a number of strong fibres, easily separable, which furnish the material for the greatest part of the Indian cordage, but is by no means the only substitute which the country affords for hemp. This the natives work up with much skill.

Plants of the cocoa nut tree are frequent in our stoves, being easily raised from the nuts sold in the shops, planted in rich earth, and on a moist heat, but the plants are seldom allowed room enough to come into flower, though it has been observed, that this is almost the only palm that could be cultivated in this country for perfecting its fruit, all the others being dicecious plants Sweet observes, that they seldom succeed well in our collections; perhaps from being too much exposed to the sun: he is "informed they thrive best in the shade in the West Indies, where cultivators of them plant tall trees near them for that purpose." (*Bot. Cult.* p. 42.)

C. aculeata has a trunk the thickness of the human body, the pinnæ of the fronds are longer than in the cocoa, and prickly like the bark of the trunk. The fruit is as large as a crab, and of the same shape, under a green skin it has a thin sweetish astringent pulp; and within that, a nut full of a white sweet eatable kernel. The nut is said to yield the true palm oil The outside of the trunk is made into laths, bows, and darts.

1984. *Elate.* This was one of the names given by the Greeks to the membrane which envelopes the female flowers of the date; that is to say, to its spatha. Modern authors have applied the word to a kind of Indian palm. The fruit of E. sylvestris resembles a wild plumb The poorer sort of people chew it in the same manner with the Areca nut, with the leaf of the betel pepper and quick-lime. The elephants are fond of the fruit-stalks, which are very sweet. In our stoves the plants require a sandy loam, and a strong heat.

13323 Fronds pinnated, Leaflets opposite

13324 Fruit roundish
13325 Fruit ovate

POLYANDRIA.

13326 Fruit armed with three spines
13327 Fruit unarmed

13328 Sterile flowers in interrupted leafless spiked whorls
13329 Leaves pinnated capillary · upper pectinate-pinnatifid, Flowers axillary whorled

13330 Leaves lanceolate acuminate sagittate lobes lanceolate straight, Scape simple
13331 Leaves 3-fid and 3-parted. lobes nearly equal nerved, Scape branched angular, Male fl. solitary terminal
13332 Leaves ovate rounded blunt sagittate lobes ovate acuminate spreading, Scape panicled
13333 Leaves ovate narrowed at each end, Scape branched below
13334 Leaves lanceolata keeled, Petioles 3-cornered, Scapes simple, Female flowers sessile
13335 Leaves lanceolate linear, Female heads small

13336 Shrubby erect, Lvs. very smooth unequally cordate obsoletely toothed, Wing of caps very large roundish
13337 Shrubby erect, Lvs unequally cord subangul toothletted smooth hairy ben at the veins, Pan. dichotom.
13338 Leaves angular serrulate crimson beneath, Stem nodose, Wings of caps. unequal rounded

13339 Caulescent, Lvs. unequally cord cren-tooth. : lower angular, Wings of caps with obt ang one very large
13340 Creeping, Leaves unequally cordate angular toothed, Wings of capsule parallel
13341 Caulescent, Leaves hispid ½ cordate acuminate unequally toothed, Largest wing of caps obtusangular
13342 Caulescent erect, Leaves hispid ½ cordate doubly serrate, Wings of caps rounded nearly equal
13343 Caulescent, Leaves hispid ½ cordate doubly serrated, Largest wing of caps very large obtusangular
13344 Caulescent erect, Lvs hisp on each side unequally oblong doubly tooth. Largest wing of caps obtusangul.
13345 Leaves long acuminate repand spotted with white above red beneath

13346 Leaves blunt obsoletely toothletted smoothish, Stipules spatulate unequal ciliated, Wings of caps blunt
13347 Stemless, Leaves ovate cordate hirsute finely serrulated mottled, Capsules hairy
13348 Leaves nearly equally cordate very blunt crenate downy upper cuculiate, Stipules lanceolate scariose
13349 Leaves acuminate somewhat angular unequally obsoletely toothletted smooth on each side, Stip. scariose
13350 Leaves angular unequally serrulate-ciliated hairy beneath at the veins, Stipules scariose lanceol. fringed
13351 Leaves acute crenulate smooth strigose beneath, Cyme distichous, One wing of capsule very large acute

13352 Hirsute, Leaflets lanceolate, Spikes oblong ovate
13353 Thorns none, Stem somewhat angular, Stamens much longer than the calyx
13354 Unarmed, Stems angular, Terminal flowers female lower male, intermediate hermaphrodite



and Miscellaneous Particulars.

1985 *Bactris.* So called by Jacquin, from βακτηρον, a cane, because the small stem is made into walking-sticks, which are much valued. B minor produces a fruit of a dark purple color, the size of a common cherry, containing an acid juice, of which the Americans make a sort of wine It is also eaten raw, but is not pleasant. Canes are made of the stem, they are dark-colored, shining, jointed, and very light; the French call them *Cannes de Tobago* B major has a large nut with a solid kernel, which is eaten in Carthagena. In our stoves they form handsome plants, and grow freely in sandy loam; like other palms, they are only to be increased by seed.

1986. *Ceratophyllum.* So called from κερας, a horn, and φυλλον, a leaf, on account of the numerous horned divisions of the leaves. Aquatic weeds of no beauty

1987. *Myriophyllum.* From μυριος, a myriad, and φυλλον, a leaf, on account of the infinite number of divisions of its leaves Aquatics of some beauty, and the easiest culture.

1988. *Sagittaria* So called from *sagitta*, an arrow, in reference to the arrow-headed form of the leaves. S. sagittifolia is one of the handsomest of British aquatics, and is common in Siberia, China, Japan, and Virginia The bulb, which fixes itself in the solid earth below the mud, constitutes an article of food among the Chinese, and upon that account they cultivate it extensively. The roots are larger in those countries than with us. All the species are of common culture.

1989 *Begonia.* Named in honor of Michael Begon, a Frenchman, born in 1638; he was an intendant of Marine, and a promoter of botany. These are universally plants remarkable for the neatness of their foliage, and their succulent habit. B. argyrostigma and discolor are the two most beautiful species. They are all cultivated without difficulty either from seeds or cuttings.

1990. *Potersum* Literally, this word signifies a drinking vessel, and in the same sense, a kind of beverage A drink was made of it, which was reckoned useful in many complaints, it is also an ingredient in cool tankards. P. sanguisorba is sometimes sown along with clover as an herbage plant, it is now, however, out of

13355 *hybridum W*	sweet	♀	△	or	2	jn jl	G	France	1683.	D	co	Barr ic. t. 642
13356 *caudátum W.*	smooth shrubby	♀	□	or	3	ja.ap	G	Canaries	1779.	S	p.l	
13357 *spinósum W.*	prickly shrubby	♀	□	or	2	ap au	G	Levant	1595.	S	p.l	Moris.s.8.t.18.f 5
1991. AMIRO'LA. *Pers.*	AMIROLA.					*Terebintaceæ.*		*Sp* 1.				
13358 nítida *Pers*	shining-leaved	♣	□	or	9	...	...	Peru	1824	C	p.l	
1992. ACIDO'TON. *W*	ACIDOTON					.....		*Sp* 1.				
13359 úrens *W*	stinging	♣	□	un	8	...	G	Jamaica	1793.	C	l.p	Slo Jam.1 t.83.f.
1993. THELY'GONUM *W*	THELYGONUM.					*Urticeæ*	*Sp.* 1.					
13360 Cynocrámbe *W*	Dog's-cabbage	☿	○	un	½	jl	G	S. Europe	1710.	S	co	Lam ill. t. 777
1994 CASTA'NEA. *W.*	CHESNUT					*Amentaceæ.*	*Sp.* 2.					
13361 vésca *W*	common	♀		tm	50	my jn	G	England woods.		S	s.l	Eng bot. 886
13362 púmila *W*	dwarf	♀		or	12	jl	G v	N. Amer.	1699.	S	p.l	Mich. arb. 2. t.
1995 O'STRYA. *W.*	HOP-HORNBEAM.					*Amentaceæ*	*Sp.* 2—4.					
13363 vulgáris *W*	common	♀		or	20	my	Ap	Italy	1724.	L	s.l	Dend. brit. 143
13364 virginica *W.*	American	♀		or	20	my jn	Ap	N. Amer.	1692.	L	s.l	Abb. ms 2. t. 7
1996. CARPI'NUS. *W.*	HORNBEAM					*Amentaceæ.*	*Sp* 3—5.					
13365 Bétulus *W.*	common	♀		tm	30	mr my	Ap	Britain woods.		S	co	Eng bot. 2032
β *incisa*	*cut-leaved*	♀		or	15	mr my	Ap	.....	...	L	co	
13366 americána *W.*	American	♀		or	20	...	Ap	N. Amer	1812	S	co	Dend brit. 157
13367 orientális *W.*	eastern	♀		or	12	...	Ap	Levant	1739.	L	co	Dend. brit. 98
1997 FA'GUS. *W.*	BEECH					*Amentaceæ*	*Sp* 2					
13368 sylvática *W.*	common	♀		tm	70	ap my	Ap	Britain woods.		S	co	Eng bot. 1846
β *atro-rúbens* Duroi	*purple-leaved*	♀		or	30	ap my	Ap	.....	...	L	co	
γ *S incisa* W	*Fern-leaved*	♀		or	10	ap my	Ap	.....	...	G	s l	
13369 ferruginea *W.*	American	♀		or	30	my jn	Ap	N Amer	1766.	L	s l	Mich. arb. 2. t. 9
1998 CO'RYLUS. *W.*	NUT-TREE					*Amentaceæ*	*Sp* 5—7					
13370 Avellána *W.*	Common Hazel	♣		fr	10	f ap	Ap	Britain woods.		S	co	Eng. bot. 723
β *álba*	*White Filbert*	♣		fr	10	f ap	Ap	.....	...	L	co	
γ *rúbra*	*Red Filbert*	♣		fr	10	f ap	Ap	.....	...	L	co	
δ *grándis*	*Cob*	♣		fr	8	f ap	Ap	.....	...	L	co	
ε *glomeráta*	*clustered*	♣		fr	8	f ap	Ap	.....	...	L	co	
ζ *crispa*	*frizzled*	♣		fr	8	f ap	Ap	.....	...	L	co	
13371 tubulósa *W.*	Lambert's	♣		fr	10	mr ap	Ap	S Europe	1759.	L	co	Lam ill. t. 780



History, Use, Propagation, Culture,

repute The leaves when bruised smell like cucumbers, and taste something like the parings of that fruit; they are sometimes put into salads. All the species are of the easiest culture.

1991. *Amirola* A word with an unknown meaning The Peruvians form the shining black seeds of Amirola nitida into rosaries

1992. *Acidoton.* From ακιδωτος, pointed, in allusion to the stinging pointed hairs of the leaves.

1993. *Thelygonum.* A name under which Pliny described a plant which appears to have been Mercurialis It was derived from θηλυς, a woman, and γονυ, a knee, because of its joints, which where thought to resemble a woman's knee. Cyno-crambe, literally interpreted dog-cabbage, was the Greek name of Mercurialis perennis

1994 *Castanea* A native of the territory of Castanea, a town of Thessaly, near the borders of the river Peneus, where magnificent chesnut trees still are found The chesnut, *Châtagnier*, Fr, *Castansenbaum*, Ger, *Castagno*, Ital, is, like the walnut, both a timber and a fruit tree, some of the oldest trees in the world are of this species, as that mentioned by Brydone on Etna, and the chesnut at Tortworth, in Gloucestershire The fruit is generally eaten roasted, abroad, it is not only boiled and roasted, but ground into meal, and puddings, cakes, and bread are made from it. The timber is thought to have been formerly in very general use for house carpentry, though some consider what is generally called chesnut in our old buildings as oak. It is one of the best trees for hop poles, and scarcely any other is now planted in Kent and other hop districts for that purpose. Some excellent fruit-bearing varieties have been lately imported from France, these are increased by grafting or budding in the usual methods, but the plants for coppice woods or timber are best raised from nuts There is a variety with striped leaves which is very ornamental. The most esteemed of the French kinds are called *Marron*, a word which in old French literally signifies a substance, which it must be confessed the fruit is not unlike.

The American chesnut differs so little from the European, that no specific distinction can be drawn It is one of the largest and most useful trees of the forests, the wood being extremely durable, and in high esteem for posts and rails to construct fences The nuts are very delicious The Castanea pumila or Chinquapin nut, is a small tree, or rather shrub, growing to the height of thirty feet in the southern states, but scarcely exceeding seven or eight in cold latitudes. The fruit is very sweet and agreeable to eat.

1995. *Ostrya.* So called from οστεον, a scale, in allusion to the scaly catkins of the fruit, which resemble those of the hop, whence the plants are called Hop-Hornbeam. The wood of Ostrya virginica is exceedingly hard and heavy, whence it is generally known in America under the name of Iron-wood. In some parts it is called Lever-wood.

1996. *Carpinus.* From the Celtic words *car*, wood, and *pin*, the head, that is to say, wood fit for the yokes of cattle. The wood is white, and of a fine close texture, which makes it peculiarly fit to be wrought into the

13355 Unarmed, Stems round striated
13356 Unarmed shrubby, Branches round villous, Spikes long loose
13357 Spiny shrubby, Spines branched, Branches villous somewhat angular, Spikes oblong loose

13358 Leaves simple and ternate ovate serrated, Petioles thickened on each side

13359 Leaves alternate lanceolate ovate, Flowers in racemes

13360 Leaves ovate, Stem diffuse

13361 Leaves oblongo-lanceolate acuminate mucronate serrate glabrous on each side
13362 Leaves oblong acute mucronate serrate white with down beneath

13363 Cones ovate pendulous, Leaves ovate acute, Buds blunt
13364 Cones oblong ovate erect, Leaves oblong ovate acuminate, Buds acute

13365 Scales or bracteas of the fruit oblong serrated with two smaller lateral lobes

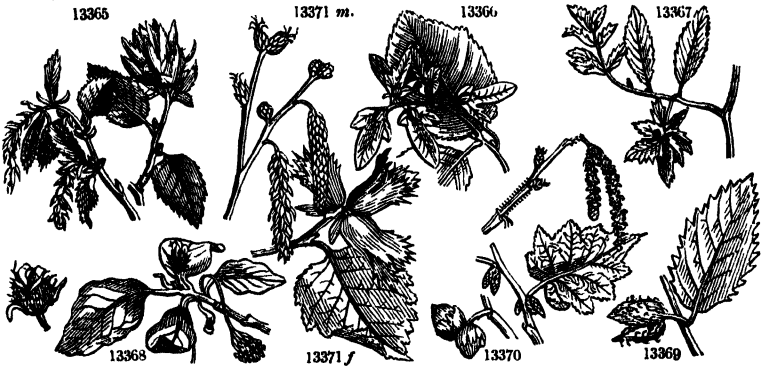
13366 Scales of cones 3-parted middle segment oblique ovate lanceolate 1-toothed on one side
13367 Scales of cones ovate unequal at base undivided somewhat angular unequally serrated

13368 Leaves ovate glabrous obsolctely dentate, their margins ciliated

13369 Leaves ovate acuminate downy beneath coarsely toothed ciliated at edge

13370 Stip. obl. obt Lvs roundish-cordate pointed, Invol. of fruit campanulate rather spreading torn at margin

13371 Stip. obl. blunt, Cal. of fruit tubul cylind contracted at end cut toothed, Leaves roundish cord acuminate



and Miscellaneous Particulars

various forms with which the country people of all nations have delighted to ornament their yokes. Our English word Horn-beam has evidently the same meaning C Betulus is a tree of little merit or beauty, having persistent leaves like the beech, it is well adapted for hedges or separation, where the object is shelter

1997 *Fagus.* From the Greek φαγος, which also signifies eatable We all know that mast was the original food of man The Fagus of Virgil, was the Quercus Æsculus. *Hêtre*, Fr, *Büche*, Ger., *Faggio*, Ital. F sylvatica is a handsome tree in every stage of its growth It seems to thrive best in a chalky clay or loam, rather sheltered It is one of the handsomest single trees for parks, and is well adapted to form lofty hedges The timber is brittle, and not of long duration, but it is much used by turners, joiners, and millwrights. The bark is remarkably thin, and has been used for making baskets and band-boxes The leaves are used in France by the country people, on account of their elastic quality, instead of straw for the paillasse to lay under their mattrasses The mast is readily eaten by swine and deer

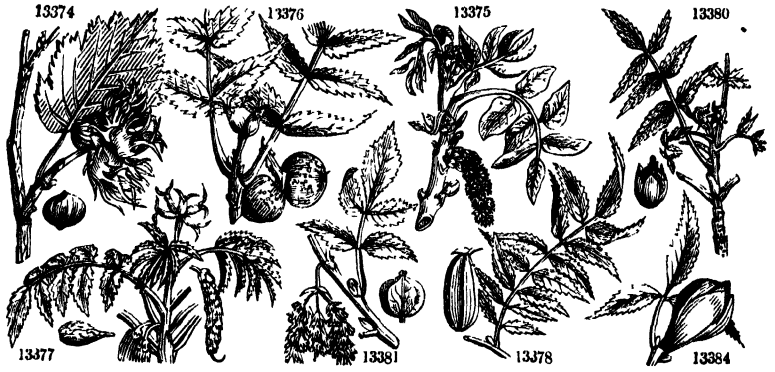
F cuprea, the copper colored, and F. purpurea, the purple beech, are two of the most striking of timber trees, from the color of their foliage. They are propagated by grafting, and grow as freely as the common beech.

Fagus ferruginea is distinguished by the Americans from the common kind by the name of Red Beech, the wood being of a darker color.

1998. *Corylus* From κορυς, a bonnet, to which the enwrapping calyx may be very well compared. Our word Hazel is in like manner derived from the Anglo-Saxon *Hæsel*, which signifies an head-dress. *Noisette*, Fr, *Nussbaum*, Ger, and *Avellano*, Ital C avellana has the specific name from Avellino, a city of the kingdom of Naples, near which, in a valley, it grows to a great extent, and in Swinburne's time, brought in an annual profit of near 12,000*l* sterling It is said they were originally imported into Italy from Pontus, and known among the Romans by the appellation of nux Pontica, which in process of time, was changed into that of nux Avellana, from the place where they had been propagated with the greatest success The common Hazel-nut is wild in many woods and coppices in Britain, whence the fruit is gathered in plenty and sent to the neighbouring markets. As underwood, the plant is of some value for hoops, fishing-rods, walking-sticks, withes for faggoting, crate-making, hurdles, wattling-fences, and springles to fasten down thatch Formerly the roots were used by the cabinet-makers, and where yeast was scarce, they twisted the twigs, steeped them in ale during its fermentation, hung them up to dry, and when they brewed put them into the wort.

There are several varieties of the cultivated filbert. What is called the frizzled filbert is esteemed the best. The plants do not require a rich soil, but one with a dry bottom. They are generally propagated by suckers, and grown as dwarf standards, each plant with a single clean stem, from six feet high down to twelve inches When allowed to throw up suckers from the root and form a thick bush, they cease to bear fruit in any quantity The filbert bears principally upon the sides of the upper young branches, and from small shoots which proceed from the bases of side branches cut off the preceding year. Hence the spurring-in method of

13372	*americána W.*	Dwarf Cuckold	fr	6	mr.ap	Ap	N Amer.	1798.	L	co	Wa am.t.29 f.63
13373	*rostráta W.*	Com. Cuckold	fr	5	mr ap	Ap	N Amer	1745.	L	co	Willd. arb t. 1 f.2
13374	*Colúrna W.*	Constantinople	fr	10	mr ap	Ap	Constant.	1665.	L	co	Dend. brit. 99
†*1999.	*JUG'LANS. W.*	Walnut			*Terebintaceæ.*		*Sp* 10—14.				
13375	*régia W.*	common	tm	50	ap.my	Ap	Persia	1562.	S	co	Lam. ill. 781
13376	*nigra W.*	black	tm	30	ap.my	Ap	N Amer	1629.	S	co	Dend. brit. 156
13377	*cinérea W.*	Butter Nut	tm	30	ap.my	Ap	N. Amer.	1656.	S	co	Jac. ic. l. t. 192
§13378	*olivæfórmis W*	Pekan Nut	tm	30	ap my	Ap	N Amer.	...	S	co	Mich. arb. l. t. 3
	angustifolia H. K										
§13379	*sulcáta W.*	thick shell-bark Hickory	tm	30	ap my	Ap	N Amer	1804.	S	co	Mich arb. l. t. 8
§13380	*álba W*	shell-bark Hickory	tm	30	ap my	Ap	N. Amer	1629	S	co	Dend brit. 148
§13381	*comprássa W.*	flat-fruited	tm	30	ap my	Ap	N Amer	1730.	S	co	Mich arb. l. t. 7
§13382	*amára Mich*	bitter Nut	tm	30	my	Ap	N Amer	1800	S	co	
§13383	*obcordáta W.*	obcordate	tm	30	my	Ap	N Amer	1812.	S	co	M. arb l t 9 f 3,4
§13384	*glábra W*	Hog-nut	tm	30	my	Ap	N. Amer.	1799.	S	co	M. arb. l. t 9. f. 1,2
	porcína Mich.										
2000	*QUER CUS. W.*	Oak.			*Amentaceæ*		*Sp* 50—98				
13385	*Phéllos Ph*	Willow	tm	60	my jn	Ap	N. Amer.	1723	S	s l	Mich arb. l. t. 12
13386	*maritima Ph.*	sea	or	6	my jn	Ap	N. Amer	1811.	S	co	Mi quer t 13 f 1
13387	*sericea Ph.*	running	or	2	my jn	Ap	N Amer	1724.	S	co	Mich. arb. 2. t. 15
13388	*virens Ph*	live	tm	40	my	Ap	N Amer	1739.	S	s l	Mich arb 2 t 11
13389	*cinérea Ph.*	ash-colored	or	10	my jn	Ap	N Amer	1789.	S	co	Mich arb 2. t 14
13390	*imbricária Ph.*	shingle	tm	40	my jn	Ap	N Amer	1786	S	co	Mich. arb. 2. t 13
13391	*laurifólia W.*	Laurel	tm	50	my	Ap	N Amer	1786	S	co	Mich. querc t 17
	β obtúsa Mich.	*blunt-leaved*	tm		my	Ap	N Amer.	1786	S	co	Mich. querc. t. 18
13392	*lútea W*	yellow	tm	20	my	Ap	Mexico	1825	S	co	
13393	*Ballóta W.*	Barbary	tm	60	my jn	Ap	Barbary	...	S	s l	
13394	*Ilex W*	evergreen	tm	60	my jn	Ap	S France	1581	S	s l	Dend brit 90
	α integrifólia	common	tm	60	my jn	Ap	S France	1581	S	s l	
	β serráta	*notched-leaved*	or	60	my jn	Ap	S. France	1581	G	s l	Duh arb l t 123
	γ oblónga	*long-leaved*	or	60	my jn	Ap	S France	1581.	G	s l	Duh arb l t 124
13395	*Súber W.*	Cork-tree	clt	20	jn	Ap	S France	1699	S	s l	Dend brit. 89
13396	*coccifera W*	Kermes	clt	10	my	Ap	S France	1683	G	s l	Dend brit. 91
13397	*gramúntia W.*	Holly-leaved	or	30	jn	Ap	France	1730	G	s l	



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pruning is the most successful in the production of fruit. C Colurna may be treated in the same manner as the other, but the plants kept at a somewhat greater distance apart

The nuts of the American Hazel-nut, Corylus americana, are very excellent.

1999 *Juglans* That is to say, *Jovis glans*, the nut of Jove, on account of its excellence, which must have been great indeed, when gods had nothing but oak or beech-mast to eat J regia, walnut, from *gaul*-nut, the tree being introduced from France, *Noyer*, Fr, *Walnussbaum*, Ger, and *Noci*, Ital, is cultivated both as a fruit and timber-tree The fruit in a green state, before the stone hardens, is much used for pickling, and also as an adulteration of soy sauce An oil, which supplies the place of that of almonds, is expressed from the kernel in France In Spain they strew the gratings of old and hard nuts, first peeled, into their tarts and other meats. The leaves strewed on the ground, and left there, annoy worms, or macerated in warm water, afford a liquor, which from its bitterness may effect their death The unripe fruit is used in medicine for the same purpose Pliny says, "the more walnuts one eats, with the more ease will he drive worms out of the stomach" The timber is used in this country for gun-stocks, being lighter in proportion to its strength and elasticity than any other It is used in cabinet-work in most parts of the continent the young timber is held to make the finest colored work, but the old to be finer variegated for ornament When propagated for timber, the nut is sown, but when fruit is the object, marching from the branches of fruit-bearing trees is preferable Budding has also been successfully adopted by Mr Knight, the buds succeed best when taken from the base of the annual shoots, ordinary-sized buds from the upper parts of such shoots generally fail. Walnut trees that have not been grafted or budded, may be induced to produce blossoms by ringing the bark

Juglans nigra, the black walnut, is a tree of large size, and its nuts are eaten by men and several species of animals. The wood is put to various mechanical and economical uses J. cathartica is known under the name of butter-nut, oil-nut, and white walnut, the nuts are used by the American Indians medicinally. The fruit of J. olivæformis, or the Pekan-nut, is delicious, sometimes it is exposed in the fruiterers' shops for sale. The nuts of J. sulcata, which is called thick shell-bark hickory, and Springfield and Gloucester nut, are large and well-tasted. The shell-bark hickory, shag-bark, or scaly-bark hickory, J. alba, is so called on account of its bark, which is torn lengthwise in long loose strips, as in J sulcata. The wood of J tomentosa, the Mocker-nut, white-heart hickory, or common hickory, is excellent for mechanical purposes, and particularly esteemed as fire-wood; but the nuts are hard, with but little kernel in them The Americans make very good and durable brooms by slitting into narrow slips the very tough wood of J. glabra, which is called pig or hog-nut, also broom hickory.

13372 Cal. of fruit roundish campan. larger than nut, Lamb dilated tooth serrated, Lvs. roundish cord. acumin.
13373 Stip. lin. lanc Cal. of fruit camp. tubul larger than nut 2-parted: seg cut toothed, Lvs. obl. ovate acumin.
13374 Stip. lanc. acum. Cal. of fruit double: outer many-parted; inn 3-part. Seg palm. Lvs. roundish ov. cordate

13375 Leaflets about nine oval smooth subserrated nearly equal, Fruit globose
13376 Leaflets numerous lanceolate serrated beneath with the petioles downy, Fruit globose dotted rough
13377 Leaflets numerous oblong lanceolate serrated soft with down beneath, Petioles viscid, Fruit oblong ovate
13378 Leaflets numerous lanceolate serrated, the odd one with a long stalk, Fruit oblong 4-cornered

13379 Leafl about 9 lanceolate acuminate serrate downy beneath · the odd one sess. Fruit roundish with 4 keels
13380 Leaflets 7 obl. lanc acuminate serrated rough and downy beneath: the odd one sess Fruit squarish smooth
13381 Leafl 7 obl lanc acum. serr downy beneath and soft: the odd one sess Fruit ov Nuts oblique compressed
13382 Leaflets about 9 ovate-oblong acum finely serrated smooth on each side, the odd one with a short stalk
13383 Leaflets 7 ovate acuminate serrated smooth on each side with resinous dots beneath, Nuts obcord. smooth
13384 Leaflets 7 ovate acuminate serrated smooth on each side with resinous dots beneath, Fruit and nuts oblong

A. *Leaves entire, or little toothed.*

13385 Leaves membranaceous linear lanc tapering at each end entire smooth with a small point, Nut roundish
13386 Leaves coriaceous elliptical-lanceolate entire smooth with a small point, Nut roundish
13387 Lv lanc.-obl somewhat wavy obt. at the base rather dilated upwards silky beneath, Nut almost globular
13388 Lvs coriac ellipt.-obl revol ent pointless obt. at base clothed with starry down ben Fr. stalk Nut oblong
13389 Lvs coriac ellipt.-lanc. revol. ent. blunt with a small point clothed with starry down beneath, Fruit sessile, Nut nearly globose
13390 Leaves elliptical oblong acute at each end entire almost sessile downy beneath, Nut nearly globose
13391 Leaves obovate entire smooth nearly sessile tapering at the base, Nut roundish even

13392 Leaves obovate entire shining somewhat heart-shaped at the base downy and yellow beneath

B *Leaves toothed spiny*

13393 Leaves elliptical coriaceous entire or serrated very downy beneath, Bark even, Nut cylindrical elongated
13394 Leaves ovate-oblong acute coriaceous entire or serrated hoary beneath, Bark even, Nut ovate

13395 Leaves ovate-oblong bluntish coriaceous entire or sharply serrated downy beneath, Bark cracked fungous
13396 Lvs. ellipt.-obl rigid smooth on both sides with spread brist spin. teeth, Nut ov Cal with spread point. ac
13397 Leaves roundish ellipt. nearly sess undulated with deep spin. divaricat. teeth densely downy beneath somewhat heart-shaped at the base



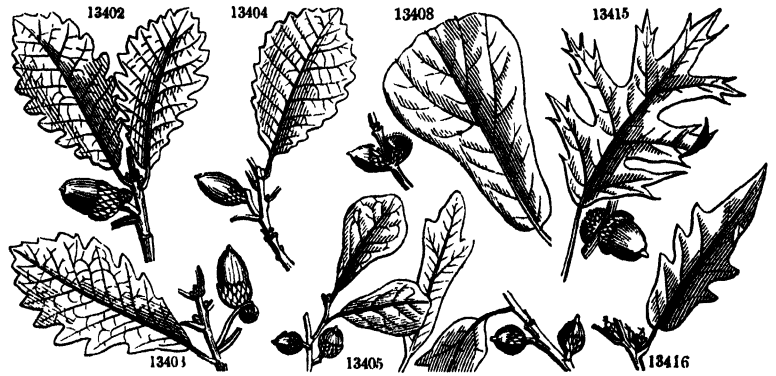
and Miscellaneous Particulars.

2000. *Quercus.* This name is derived from the Celtic *quer*, fine, and *cuez*, a tree, it was so called, in distinction to other trees, because the holy misseltoe grew upon it · otherwise the common name of the oak in Celtic was *derw*, whence *druids*, and the Greek δενς Phellos was the Greek name of the cork, Q. suber. Gramuntia has derived its name from growing in the wood of Grammont, near Montpelier. Suber is generally thought to have been formed from the Latin *sub*, under, because the bark was used by the Roman women as sandals, both for keeping their feet dry, and increasing their stature, but Vossius is of opinion, that it comes from συφαι, the Greek name of bark of any kind Coccifera has been so called because the little insect, coccus, which affords the well-known kermes dye, is found upon it. Kermes itself is an alteration of *qermez*, which signifies in Arabic, a little worm, the same people called the red dye *qermezy*, whence our Norman-English word *cramoisye* Robur is an alteration of *rove*, a Celtic synonym of the oak. Ægilops, literally goat's-beard, was so called on account of the long truss or beard-like lichens which were frequently found hanging suspended from it

The oak is a genus of trees familiar to man in the temperate zones of both hemispheres Q. Robur, now valued for its timber and bark, and formerly for its acorns, is familiar to every Briton There are two distinct varieties or subspecies, Q sessiliflora and pedunculata, and another Q pubescens Q. pedunculata is thought to be the common oak of England, being much more frequent in natural woods than the others. The timber of this variety is said to be whitish and hard, while that of the sessile-fruited is reddish and brittle. The bark of this and all the hardy species of oak is or may be used by the tanner. Oak saw-dust is the principal indigenous vegetable used in dyeing fustian, and different shades of drab and brown are also made from it Oak-apples are used in dyeing as a substitute for galls, the black got from them by the addition of copperas is more beautiful than that from galls, but not so durable These galls are occasioned by an insect of the Cynips kind, which deposits its eggs in the substance of the leaf When the bark of the oak has performed its office to the tanner, it is employed by the gardener to produce heat by its fermentation. Oak leaves are also used for the same purpose When a great proportion of the island was in forest, acorns were of importance for feeding swine; they are still valued for this purpose in districts where the oak abounds, as in Hampshire and Northamptonshire. Q cerris is a very handsome tree, and the timber is considered nearly as valuable as that of the common oak The Lucombe (from the name of the nurseryman who raised it) and Fulham (from the name of the nursery where it was first originated) varieties are nearly evergreens; they retain their verdure till Christmas, and remain on the tree in a brown or withered state till April or May following.

Q. coccinea is one of the handsomest of the American oaks; the leaves, which are six inches long, change in

13398	lusitánica *W.*	Portugal	tm	40	jn	Ap	Portugal	1824.	G	s.l	Cav. ic. 2. t. 129
13399	Prinoides *W.* *Chin'quapin* Ph.	Dwarf Chesnut	or	3	jn	Ap	N. Amer.	1823.	G	s.l	Mi.querc. t.9 f.1
13400	infectória *W.*	Dyer's	tm	40	my.jn	Ap	Levant	1822.	G	co	N.duh.7.t.49 f.1
13401	Turnéri *W*	Turner's	tm	40	mv jn	Ap	.....	...	G	co	
13402	Prinus *Ph*	Chesnut	tm	60	my jn	Ap	N. Amer	1730.	S	s.l	Mich. arb 2. t. 7
13403	bicolor *Ph*	white swamp	tm	60	my	Ap	N. Amer	1811.	S	s.l	Mich. arb. 2. t. 6
13404	montána *Ph*	Rock Chesnut	tm	50	my	Ap	N. Amer.	1800.	S	s.l	Mich arb. 2. t. 8
13405	aquática *Ph.*	water	tm	40	my	Ap	N. Amer.	1723.	S	s.l	Mich. arb.2. t.17
13406	nána *Ph*	dwarf	or	12	my	Ap	N. Amer.	1738.	S	s.l	Abb. ins. 2. t. 59
13407	Castánea *Ph.*	Yellow	tm	60	my	Ap	N. Amer.	1822	S	s.l	
13408	nigra *Ph.*	black	or	20	my	Ap	N. Amer.	1739.	S	s.l	Mich. arb.2. t 18
13409	triloba *Ph*	downy-black	tm	30	my	Ap	N. Amer.	1800.	S	s.l	Mich.querc. t.26
13410	stellata *W.* *obtusiloba* Mich.	Iron	tm	60	my	Ap	N. Amer	1819.	S	s.l	Mich. querc. t. 1
13411	hemisphærica *Ph*	hemispherical	or	10	my	Ap	N. Amer	...	S	s l	
13412	elongáta *W* *falcata* Mich	Spanish	tm	50	my	Ap	N Amer.	...	S	s l	
13413	tinctoria *Ph*	Quercitron	tm	70	my	Ap	N Amer	1800	S	s l	Mich querc. t.24
13414	discolor *Ph.*	two-colored	tm	60	my	Ap	N. Amer	1763.	S	s.l	Mich querc t 25
13415	rúbra *Ph*	champion	tm	40	my	Ap	N Amer.	1739	S	s l	Mich arb 2 t.26
13416	heterophýlla *Ph.*	various-leaved	tm	40	my	Ap	N Amer	...	S	s l	Mich arb.2. t 16
13417	coccínea *Ph.*	scarlet	tm	50	my	Ap	N Amer	1691.	S	s l	Mich arb 2 t 23
13418	Catesbæ'i *W.*	barren scrub	or	15	my	Ap	N. Amer.	1823	S	s.l	Mich querc t 29
13419	palústris *Ph*	marsh	tm	60	my	Ap	N. Amer.	1800	S	s.l	Mich arb 2. t.25
13420	macrocar'pa *Ph.*	over-cup white	tm	40	my	Ap	N. Amer	1800	S	s.l	Mich arb. 2 t 3
13421	Banistéri *Mich*	Banister's	or	6	my	Ap	N. Amer.	1800.	S	s.l	Mich arb 2. t.19
13422	Æ'gilops *W.*	Veloma	tm	20	...	Ap	Levant	1731.	S	s.l	Mil dic.n 7 t.215
13423	álba *Ph*	white	tm	60	my	Ap	N Amer.	1724	S	s l	Mich. arb 2. t. 1
	β *repánda* Mich	*repand-leaved*	tm	60	my	Ap	N. Amer.	...	S	co	
13424	Esculus *W*	Italian	tm	40	my	Ap	S Europe	1739.	S	s.l	
13425	Róbur *W* *Q. sessiliflóra* Sm	sessile-fruited	tm	60	ap my	Ap	Britain	woods.	S	h l	Eng bot 1845
13426	pedunculáta *W*	common	tm	60	ap my	Ap	Britain	...	S	h.l	Eng bot. 1342
13427	pubéscens *W*	durmast	tm	40	ap my	Ap	Britain	...	S	h.l	Hayne ab.t.141
13428	fastigiáta *Lam*	Cypress-oak	tm	40	ap my	Ap	S. Europe	1820.	G	co	N. duh. 7. t 55
13429	Taúzin *Lam*	hoary	tm	40	ap my	Ap	S. Europe	1822	G	co	N. duh. 7. t. 56
13430	Cérris *W.*	Turkey	tm	50	my	Ap	S. Europe	1735.	S	co	Dend. brit. 92
	β *bullata*	*rough-leaved*	tm	50	my	Ap	S Europe	...	G	co	
	γ *sinuata*	*narrow-leaved*	tm	50	my	Ap	S. Europe	...	G	co	
	δ *exoniensis*	*Lucombe*	tm	50	my	Ap	.....	...	G	co	
	ε *sempervirens*	*Fulham*	tm	50	my	Ap	.....	...	G	co	
	ζ *dentata*	*toothed*	tm	50	my	Ap	.....	...	G	co	Dend. brit 93
13431	austríaca *W.*	Austrian	tm	40	my	Ap	Austria	1824	G	co	Clus. hist.1 p.20



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autumn to a beautiful scarlet color, and unless hard frost comes on early, they do not fall off the tree till near Christmas. Q. rubra bears a near resemblance to the last species. Q tinctoria, *Quercitron*, Fr., has been recommended to be cultivated on account of its bark, which affords a valuable yellow dye. (*Calcd. Hort Mem.* iii. 378.

Q. suber is cultivated in Spain, Portugal, and the south of France, for its cork-bark The exterior bark is the cork, which is taken from the tree every eight or ten years, but there is an interior bark which is left on to protect the tree, so that stripping off the outer bark is so far from injuring the trees, that it is necessary to their continuation Trees that are never barked are said to die at the age of fifty or sixty years. The bark is taken off for the first time when the tree is about fifteen years old; it soon grows again, and may be rebarked three times, the bark improving every time till the tree attains the age of thirty years It is taken off in sheets or tables, much in the same way as oak or larch bark is taken from the standing trees in this country. After being detached, it is flattened by presenting the convex side to heat, or by pressure. In either case it is charred on both surfaces to close the transverse pores, previously to its being sold. The carbonized surface produced by this charring, may be seen in bungs and taps, but not in corks, which being cut in the lengthway of the wood, the charring is taken off in the rounding.

13398 Leaves elliptic. with deep point. serratures downy beneath, Fruit racemose, Cal. hemispherical, Nut obl.
13399 Lvs. on short stalks obov. acutely and coarsely toothed at base glaucous ben. Cup hemispheric. Acorn ov

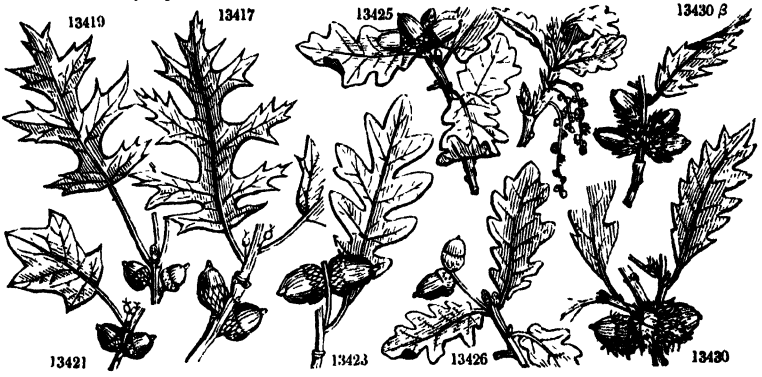
C. Leaves sinuated.

13400 Leaves oblong mucronate-toothed smooth on each side
13401 Leaves oblong coarsely mucronate-toothed smooth on each side cuneate at base, Branchlets hairy
13402 Lvs. on long. stalks obov. ac somew downy ben. with near eq serrat. Cal of fr contract at base, Nut ov.
13403 Lvs. nearly sess. obovate downy and white beneath with very broad unequal teeth, Fruit in pairs on long bristle-pointed stalks, Calyx hemispherical, Nut oblong ovate
13404 Lvs. on shortish stalks obovate acute downy and white beneath with nearly equal dilated short blunt serr. Cal. hemispherical with rugged scales, Nut oblong ovate
13405 Lvs wedge-shaped smooth tapering at the base dilated and obscurely 3-lobed at the end: the middle lobe largest, Calyx nearly hemispherical, Nut roundish
13406 Lvs. obl wedge-shaped smooth somew sinuated 3-lobed at extrem Lobes divaricated pointed: the middle one largest, Forks of the vein downy beneath
13407 Lvs on long footst. obl lanc pointed somewhat downy ben with numerous nearly equal dilated serratures, Cal. hemispherical, Nut round ovate
13408 Lvs. wedge-shaped somew cord dilated very slightly 3-lobed at the end, smooth above rusty beneath, Cal. hemispherical with membranous scales, Nut round ovate
13409 Lvs wedge-shaped with 3 terminal bristly-pointed lobes: the midd one longest downy beneath, Cal of the fruit flattish, Nut nearly round
13410 Leaves oblong sinuated downy beneath · lobes blunt, upper dilated 2-lobed, Cups hemispherical

13411 Leaves evergreen oblong-lanceolate undivided 3-lobed or sinuated smooth on both sides, Lobes pointed
13412 Lvs. downy ben. sinuat. with 3 or more somew falc brist.-point lobes term. one elong jagg Cal hemisph [undern Nut globose
13413 Lvs. downy ben obov. obl dilat. wide sinuat Lobes short obt slight toothed bristle-point. Cal. of fruit flat
13414 Leaves downy beneath oblong pinnatifid toothed bristle-pointed, Calyx turbinate, Nut ovate
13415 Lvs smooth obl sinuat on long stalks, Lobes ac sharply tooth bristle-point Cal of fr flat undern Nut ov
13416 Lvs on long stalks ovate lanc or obl entire or unequally lobed, Cup hemispherical, Acorn nearly globose
13417 Lvs. smooth obl. deeply and widely sinuated on long stalks, Cal of the fruit turbinate ½ as long as the nut
13418 Lvs smth obl. wedge-shap at base deeply and widely sinuat. on short stalks, Cal of fr turbin ½ as long as nut
13419 Lvs smooth obl deeply and widely sinuated on long stalks, Forks of the veins densely woolly beneath, Cal. of the fruit flattened, Nut nearly globose
13420 Lvs. obl. lyr downy ben: term lobe very large 3-cleft sinuat Cal of fr hemisph scaly fring with bristles
13421 Leaves obovate cuneiform 3-5-lobed, Lobes setaceous mucronate downy beneath [elong spread. scales
13422 Lvs. ov obl with bristle-pointed tooth-like lobes hoary ben Cal of fr very large hemispherical with lanc.
13423 Lvs. obl deeply pinnatif glaucous ben. Lobes lin obl obt. ent. dilated upw Fr. stalked, Cal depress. warty [hemispherical
β Leaves slightly lobed green on each side
13424 Lvs ov. obl sinuat smooth paler ben: segm bluntish somew angular at base, Fruit nearly sess. Cal. scaly
13425 Lvs decidu. oblong smooth dilated upwards stalked, Lobes obtuse, Stalks of fruit elongated, Nut oblong

13426 Leaves oblong subsessile smooth sinuated lobes round, Fruit oblong stalked [Fruit nearly sessile
13427 Lvs. obl. obov. stalked sinuat. downy ben lobes obt angul wavy somew heart-shap and unequal at base,
13428 Leaves subsessile smooth oblong ovate pinnatifid sinuated blunt, Branches ascending
13429 Leaves softly villous deeply pinnatifid. segm. oblong blunt sinuated, Cups warted [hemisph bristly
13430 Lvs. on very short stalks obl. deeply and uneq pinnatif hairy ben. Stip longer than footst. Cal of the fruit

13431 Lvs. on longish stalks ovate obl slightly but copiously sinuated downy and hoary ben. · lobes short ovate acute entire, Stipules shorter than the footstalks, Cal of the fruit hemispherical bristly



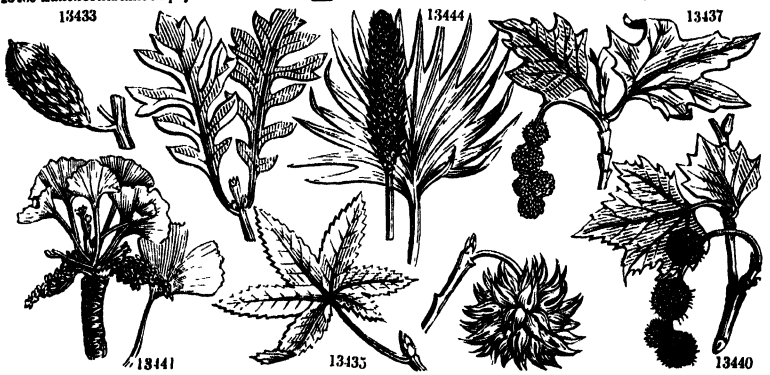
and Miscellaneous Particulars.

The uses of cork in Britain are well known It was used as sandals by the Greeks, whence our cork soles, and probably the Venetian choppings (*cioppini*, Ital.), or shoes so high heeled, as to raise the women above the men. The poor people in Spain lay broad planks of it by their bed-side to tread on, as great persons use Turkey and Persian carpets to defend them from the floor; and sometimes they line the walls and insides of their houses built of stone with this bark, which renders them very warm, and corrects the moisture of the air. Both in Spain and Barbary bee-hives are made of cork, for this purpose, they roll the bark into a cylinder of five or six feet long, and six inches in diameter, boring holes for the entrance and exit of the bees, as in the Polish hive. (*Encyc. of Gard.* 1738.)

Q. coccifera, *Cusoja*, Span., has prickly leaves like those of the holly, or Q. ilex, from this species is collected the kermes or scarlet grain, a little red gall, occasioned by the puncture of the Coccus ilicis. With these galls scarlet color was dyed, till the discovery of America, when another species of Coccus, the cochinillifer, was found in the Mexican woods upon the Cactus.

Q. phellos is remarkable for the form of the leaves, which differ in character from those of the rest of the species. Q. ilex, the holly, or holm oak, *Chêne verd*, Fr., *Elice*, Ital., and *Euzina*, Span., is a handsome evergreen tree, and the timber is supposed equal to that of the common oak. Q gramuntia is thought by some

13432 Pseudo súber *Desf.*	false Cork	♃	tm	40	my	Ap	S Europe	1824.	G	co	Sant.itin.156.t.4
13433 oliveformis *Ph.*	mossy-cup	♃	tm	50	my	Ap	N. Amer.	1811.	S	h.l	Mich. arb. 2. t. 2
13434 lyráta *Ph.*	Swamp-post	♃	or	15	my	Ap	N. Amer.	1786.	S	h.l	Mich. arb. 2. t. 5
2001 LIQUIDAM'BAR. *W*	Liquidambar.				*Amentaceæ.*		*Sp* 2.				
13435 Styraciflua *W.*	Sweet-gum	♃	tm	60	mr ap	Ap	N. Amer.	1683	S	s l	Mi ar.3.p.194.t.4
13436 imberbe *W.*	oriental	♃	or	6	...	Ap	Levant	1759.	L	s.l	
2002 PLA'TANUS. *W.*	Plane-Tree				*Amentaceæ.*		*Sp.* 4—5.				
13437 orientális *W*	oriental	♃	tm	50	ap my	Ap	Levant	1548.	C	co	Dend. brit. 101
13438 cuneáta *W.*	wave-leaved	♃	or	6	ap my	Ap	Levant	1739	C	co	
13439 acerifolia *W*	Maple-leaved	♃	tm	70	ap my	Ap	Levant	1724.	C	co	
13440 occidentális *W*	American	♃	tm	70	ap.my	Ap	N. Amer.	1640.	C	co	Dend. brit. 100
2003 SALISBU'RIA. *L T*	Salisburia.				*Amentaceæ.*		*Sp* 1.				
13441 adiantifólia *L. T*	Maiden-hair-lv	♃	or	20	ap.my	Ap	Japan	1754.	C	s.l	Dend. brit. 168
2004 CARLUDO'VICA *Fl per.*	Carludovica.				*Pandaneæ.*		*Sp.* 3—5.				
13442 angustifólia *Fl per*	narrow-leaved	♃	or	3	...	W	Peru	1818.	Sk	p.l	
13443 latifólia *Fl per.*	broad-leaved	♃	or	3	jl au	W	Peru	1818.	Sk	p l	
13444 palmáta *Fl per*	palmate	♃	or	3	jl.au	W	Peru	1818.	Sk	p.l	
*2005 CALA'DIUM *W*	Caladium.				*Aroideæ. Sp*		16—37.				
13445 helleborifólium *W.*	Hellebore-lvd.	♃	or	2	jn.jl	W	Caraccas	1796.	R	s p	Jac. ic. 3 t. 613
13446 bicolor *W*	two-colored	♃	or	1	jn jl	W	Madeira	1773	R	s p	Bot mag 820
13447 nymphæifólium *W.*	Water-lily-lvd.	♃	or	4	...	W	E. Indies	1800	R	s p	Rhe mal 11 t.22
13448 esculéntum *W.*	esculent	♃	clt	2	...	W	America	1739.	R	a.p	Sl.jam.1 t 106 f.1
13449 sagittifolium *W*	arrow-leaved	♃	or	2	...	W	W Indies	1710	R	s p	Jac vind 2 t.157
13450 pinnatifidum *W.*	pinnatifid	♃	or	2	...	W	Caraccas	1817	R	s p	Jac.schœ 2 t.187
§13451 seguinum *W*	Dumb-Cane	♃	or	6	my	W	America	1759	R	s p	Hook. ex fl. 1
13452 grandifólium *W*	great-leaved	♃	or	6	my jl	W	Caraccas	1803	R	s p	Jac schœ 2 t.189
13453 arboréscens *W*	tree	♃	or	8	jn jl	W	W Indies	1759	R	s p	Plu. ame 44 t.60
13454 tripartitum *W.*	ternate-leaved	♃	or	3	...	W	Caraccas	1816	R	s p	Jac schœ 2 t.190
13455 auritum *W*	ear-leaved	♃	or	3	...	W	America	1739	R	s p	Jac.schœ.2.t.191
13456 lácerum *W*	torn	♃	or	4	...	W	Caraccas	1822.	R	s p	
13457 odorátum *Roxb*	fragrant	♃	or	2	mr	W	Pegu	1818.	R	s p	Bot reg 641
13458 maculátum *Lodd*	spotted	♃	or	6	mr	G	S. Amer	1820.	C	s p	Bot. cab 608
13459 scándens *W*	climbing	♃	or	2	...	W	Guinea	1822.	R	s p	Fl. d'Oware, t. 3
13460 xanthorhizum *Jacq*	yellow-rooted	♃	or	4	...	W	.....	1822.	R	a.p	Jac.schœ.2.t.188



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to be only a variety of this species The acorns of Q esculus are sweet, and, it is said, are frequently eaten by the poor in the south of France the tree very much resembles the common English oak.

The willow oak grows to the height of about fifty or sixty feet The Q virens, or live oak, grows to the height of forty or fifty feet, spreading its branches, when in open places, extremely wide, it yields the finest and most durable ship-timber of any species known, for which reason it is considered one of the most valuable trees in America The laurel oak, or, as it is sometimes called, swamp willow oak, is about fifty or sixty feet high, its wood, according to the elder Michaux, is very valuable, and almost preferable to that of Q. virens. The water oak, Q aquatica, is about forty feet high when full grown · its wood is but little valued. Its leaves vary according to the soil and age, *ad infinitum* There is scarcely one tree found having leaves like the other, and the same tree is almost as variable in its different branches The downy black oak, Q triloba, is from twenty to forty feet high, according to Michaux, of very rapid growth, and extremely well calculated for inclosing land. The barren oak, or black jack of the Virginians, Q nigra, is of low growth, especially in the more northern states, it bears very abundantly, and furnishes a fine mast for hogs, the wood is small, but excellent for fuel The black oak, or Quercitron, Q tinctoria, is one of the largest trees of the American forest, and highly valuable on account of its timber as well as bark, which is very superior for tanning to any other oak. Q falcata is a very large tree, commonly called Spanish oak. The wood of the upland white oak, or iron oak, is of great value in ship-building The fruit of the Q Prinus, known by the name of the chesnut white oak, swamp chesnut oak, and, in the southern states of North America, white oak, is large, and of a sweet taste The bark of the rock chesnut oak, Q montana, is excellent for tanning The yellow oak, Q castanea, is a large and beautiful tree with eatable acorns

2001 *Liquidambar* From this tree flows a strong balsamic substance, which has been compared to ambergris, and named from *Ambar*, amber, and *liquidum*, fluid. L. styraciflua, in its general form and leaves, bears a considerable resemblance to the lesser Maple, (Acer campestre) as the wood is good timber and beautifully variegated Between the wood and the bark issues a fragrant gum, which trickles from the wounded trees, and by the heat of the sun congeals into transparent drops, which the Indians chew as a preservative to their teeth. It smells like the balsam of Tolu The species are propagated by layers, or from seeds.

The sweet gum-tree, or Liquidambar styraciflua, is sometimes found of an immense size, particularly in the southern states, its wood is of an exquisite hard texture and fine grain, and furniture made of it has a handsome appearance.

2002. *Platanus* From πλατυς, ample, broad, in allusion to the shadow afforded by the foliage. The species are trees of peculiar grace and elegance, and from that circumstance, and the classical associations attached to them, they are eminently adapted for pleasure grounds The chenar, or eastern plane, is very much employed

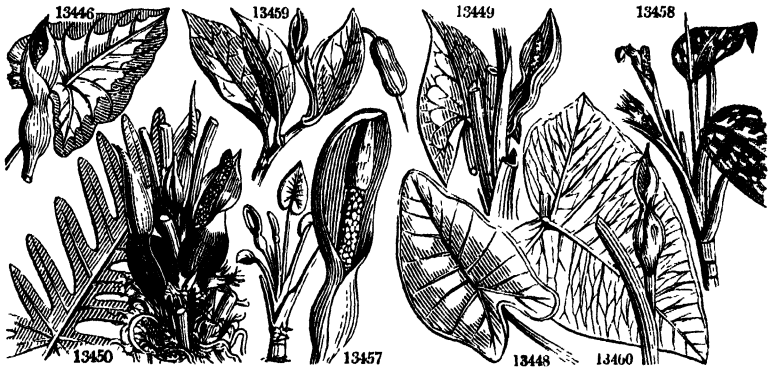
13432 Leaves oblong sinuate serrated downy beneath, Bark fungous
13433 Lvs. obl smooth glaucous ben. deeply and unequally pinnatif. Fruit ellipt.-ovate, Cal. cup-shaped fringed
13434 Lvs obl. deeply sinuated smooth much contracted in the middle: lobes acute; the upper ones dilated angular and abrupt, Calyx of the fruit globose muricated nearly covering the nut
13435 Leaves palmate-lobed, Recesses at the base of the veins villous
13436 Leaves palmate-lobed, Recesses at the base of the veins smooth

13437 Leaves 5-lobed palmate cuneate at base, Segm. lanceolate sinuated, Stipules nearly entire
13438 Leaves 3-5-lobed toothed cuneate at the base smoothish
13439 Leaves cordate 5-lobed remotely toothed truncate at base
13440 Leaves 5 angular obsoletely lobed toothed cuneate at base downy beneath

13441 The only species

13442 Fronds forked: segments ensiform narrow, Stems round
13443 Fronds forked. segments lanceolate, Stems channelled
13444 Fronds flabelliform 3-5-parted

13445 Stemless, Leaves pedate entire, Spadix as long as spathe [contracted in the middle
13446 Stemless, Lvs pelt-cordate sagittate colored in the disk, Spadix shorter than the hooded spathe, which is
13447 Stemless, Lvs peltate-cordate sagittate, Spadix longer than the cylindrical spathe sagittate at end
13448 Stemless, Leaves peltate-cordate, Spadix shorter than ovate-lanceolate spathe
13449 Stemless, Leaves sagittate acuminate, Spadix shorter than ovate-cucullate spathe
13450 Stemless, Leaves pinnatifid
13451 Caulescent suberect, Leaves oblong cuspidate, Spadix shorter than oblong spathe
13452 Caulescent rooting, Leaves cordate sagittate, Spadix as long as the cucullate ovate spathe
13453 Caulescent erect, Leaves sagittate, Spadix shorter than the cucullate ovate spathe
13454 Caulescent rooting, Leaves ternate, Petioles naked, Spadix as long as the cucullate ovate spathe
13455 Caules. root. Lvs ternate. leaflets eared at base on outside, Petiol winged bel. Spad shorter than spathe
13456 Caulescent rooting, Leaves cordate sinuate
13457 Caulescent, Leaves cordate with rounded lobes, Spadix as long as cymbiform spathe
13458 Caulescent suberect, Leaves oblong acuminate cuspidate cordate at base finely spotted with clear white
13459 Caulescent scandent, Leaves ovate oblong acuminate, Spadix longer than cucullate spathe
13460 Caules. erect, Lvs. cord sagittate, Spadix shorter than spathe, which is cucullate and contracted in middle



and Miscellaneous Particulars

in the gardens of Persia and India; it was highly esteemed by the Greeks and Romans, and was planted near their houses in the form of avenues and groves Groves of these trees are still equally revered in India, and are commonly found near the native temples and burial places of the princes. The timber is considered of similar quality to that of sycamore All the species are of easy culture by layers, and they will also grow by cuttings

The Platanus occidentalis is known in America by the name of the button-wood, water beech, sycamore, and plane-tree, in Canada it is called cotton-tree It is, perhaps, the largest tree in North America, on the fertile banks of the Ohio and Mississipi there are trees measuring from ten to sixteen feet in diameter

2003. *Salisburia* So called in honor of Richard Anthony Salisbury, F. R S., a modern distinguished botanist. A large tree remarkable for its fan-shaped leaves, cloven like some of the Adiantum species The fruit is a pale brown drupe of a globular form, it has never been produced in this country, though there are trees of a considerable size The fruit is yellow when ripe, with a fleshy, juicy, white pulp, adhering closely to the drupe, which is like that of an apricot The kernel is white, rather firm, sweet, with a mixture of austerity or bitterness when raw, but agreeable when roasted Dr Abel says, he saw the fruit exposed in the markets in China, but could not find out to what purpose it was applied.

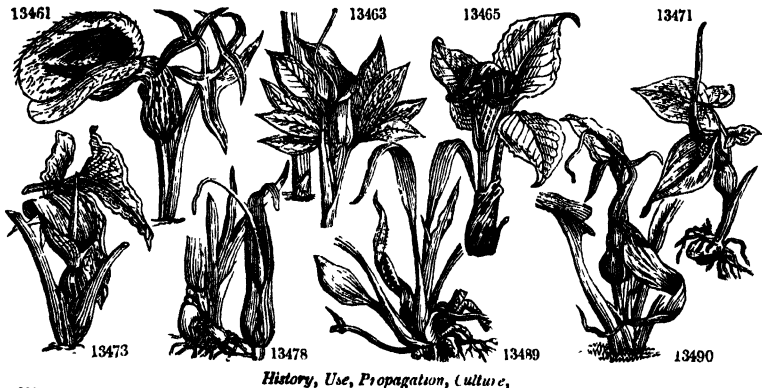
2004 *Carludovica* Named by the authors of the Flora Peruviana, in honor of Charles IV, king of Spain, and Luiza, his queen, both of whom were noble patrons of botany, and deserving of a finer genus to commemorate their virtues. The species are low palm-like herbs, of little beauty, but of great botanical interest.

2005 *Caladium* A name originally employed by Rumphius, to designate some species of Arum, and revived by Ventenat. Its meaning is unknown The species have the appearance of Areca, and are only cultivated for their singularly spotted stems, or neat green leaves, which are rarely disfigured by any of the accidents to which other stove plants are liable. The species are plants of the same general appearance as Arum. C sagittifolium, *Chou-de-Brezil*, Fr, and *Essbare Arum*, Ger., bears a near resemblance to Arum Colocasia, and is carefully cultivated in the West Indies for the leaves, which are boiled and eaten as coleworts, being extremely pleasing to the taste The roots are also eaten there, but they are in less esteem than the leaves This is generally supposed to be the species of the Arum family the most universally cultivated It is found in the East and West Indies, China, Japan, New Zealand, and the South Sea Islands. The root is extremely acrid, and when eaten raw, will excoriate the mouth; but baked in hot ashes, it looses its acrimonious quality, and becomes mild and well tasted; it is, however, heavy on a weak stomach, and is apt to occasion costiveness The leaves, which are very soft, glaucous, and covered with a very fine silky nap, are used in many places instead of plates and dishes.

*2006. A'RUM. *W.*	Arum				*Aroideæ.*	*Sp* 30—45						
13461 ermitum *W.*	hairy-sheathed	☿ △	cu	1	mr sp	Br	Minorca	1777.	R	s l	Bot reg 831	
13462 Dracúnculus *W*	Comm Dragon	☿ △	or	3	jn jl	Br	S Europe	1548	R	s l	Mor s 13 t 5 f 46	
13463 Dracóntium *W.*	Green Dragon	☿ △	or	2	jn	G	N. Amer	1759	R	s l	Bot reg 668	
13464 venósum *W*	purple-flower'd	☿ ⧖	cu	1½	mr	Pu	.....	1774	R	s l		
13465 triphýllum *W*	three-leaved	☿ △	cu	½	my jn	Br	N Amer	1664	R	s l	Bot mag 990	
13466 atrorúbens *W.*	purple-stalked	☿ △	cu	1	jn jl	Br	N Amer	1758.	R	s l	Pluk al t 148 f 6	
13467 ternátum *W*	Japan	☿ △	cu	½	my jl	Pu	Japan	1774	R	s l		
13468 Colocásia *W*	Egyptian	✱ ⧖	cul	2	...	G	Levant	1551	R	s p		
13469 macrorhizon *W*	long-rooted	✱ ⧖	cu	2	...	G	E Indies	1803.	R	s p	Herm parad 73	
13470 divaricátum *W.*	divaricated	✱ ⧖	cu	2	jn jl	G	E. Indies	1759	R	s p	Rhe mal 11 t 20	
13471 trilobátum *W.*	three-lobed	✱ ⧖	cu	1	my jn	Pu	Ceylon	1714	R	s.p	Bot mag 339	
13472 maculátum *W*	common	✱ △	w	1	my jl	W	Britain	sha pl	R	co	Eng bot 1298	
13473 orixénse *R Br*	Orixian	✱ ⧖	or	1	au.o	Pu	E. Indies	1802	R	s p	Bot reg. 450	
13474 itálicum *W*	Italian	✱ △	or	1½	my jn	LY	Italy	1683	R	co	Bot mag 2432	
13475 minútum *W*	small	✱ ⧖	cu	½	my jl	Pu	E Indies	1812	R	co	Rhe mal 11 t 17	
13476 virginicum *W*	Virginian	✱ △	cu	1	jn jl	R	N. Amer	1759	R	s.p		
§13477 Arisárum *W.*	Friar's Cowl	✱ △	cu	1½	ap jn	LY	S Europe	1596	R	s l	Jac schœ 2 t 192	
13478 tenuifólium *W*	Grass-leaved	✱ △	cu	1	ap jn	W	S Europe	1570	R	s p	Bot. reg 512	
13479 cucullátum *Lour*	hooded	✱ □	cu	2	...	G	China	1824	R	s p		
13480 Indicum *Lour*	Indian	✱ □	cu	5	...	Br	China	1824	R	s p		
13481 obtusilóbum *Link*	blunt lobed	✱ ⧖	or	2	...	...	.....	1824	R	l p		
13482 sagittifólium *Link*	arrow-headed	✱ ⧖	or	2	...	...	... ..	1824	R	l p		
13483 viviparum *Lodd*	viviparous	✱ ⧖	or	1½	my	G	.....	1817	R	l p	Bot. cab. 281	
13484 integrifólium *Link*	entire-leaved	✱ □	or	3	my jn	G	.... .	1825	R	l p		
13485 ramósum *Link*	branched	✱ □	or	3	my jn	...	... .	1810	R	l p		
13486 hederáceum *W*	Ivy-leaved	✱ ⧖	cu	6	my jn	Pu	W Indies	1793	R	l p	Jac amer t. 152	
13487 lingulátum *W*	tongue-leaved	✱ □	cu	6	...	...	W Indies	1793.	R	l p	Plum ic 20 t 37	
13488 bulbíferum *B M*	bulb-bearing	✱ ⧖	or	3	my	Pa	Bengal	1818	R	l p	Bot mag 2072	
13489 spirále *W*	spiral	✱ ⧖	or	1	my	Br	China	1816	R	l p	Bot mag 2220	
13490 flagelliforme *Lodd*	whip-lash	✱ ⧖	cu	1	my	Br	Bengal	1819.	R	l p	Bot cab. 396	
2007 CARYO'TA *W*	Caryota				*Palmæ*	*Sp* 2—3						
13491 ûrens *W*	torn-leaved	✱ □	or	20	...	W	E Indies	1788	S	r m	Rhee mal 1 t.11	
13492 mitis *Lour*	unarmed	✱ □	or		...		China	1820	S	r m		

MONADELPHIA.

2008 NI'PA *Thunb*	Nipa				*Palmæ*	*Sp* 1					
13493 fruticans *Thunb*	shrubby	✱ □	or	10	...	W	E. Indies	1822	S	r m	Rumph. l. t. 16
*2009 ARE'CA *W*	Cabbage-Tree				*Palmæ.*	*Sp* 5—9					
13494 Cátechu *W.*	medicinal	✱ □	clt	30	...	W	E Indies	1690	S	r m	Rox cor 1 t 75
13495 húmilis *W*	dwarf	✱ □	clt	6	...	W	E. Indies	1814	S	r m	Rump amb l t 7
§13496 oleráceа *W.*	esculent	✱ □	clt	40	...	W	W Indies	1656.	S	r m	Jac amer. t. 170



History, Use, Propagation, Culture,

2006. *Arum* Formerly *aron*, supposed to be an ancient Egyptian word by which the A colocasia was known The last mentioned name is an alteration of its Arabic denomination *golqás*, according to Forskahl Perennial herbaceous plants, mostly natives of hot climates The roots are fleshy, hot, and acrid, but in many species eatable, they are generally without stems, and altogether, with the Caladiums, form a very singular family A Dracunculus, *Serpentaire*, Fr, *Drachenwurz*, Ger, and *Dracunculo*, Ital, is a very remarkable plant, the stalks of the leaves being spotted with brown and purple, like the belly of a snake The flower, which, like others of the genus, has a very singular appearance, smells so strongly of carrion, that few persons can endure it. It might be used in medicine and domestic economy for the same purposes as A maculatum A Colocasia has a tuberous thick large oblong root, and leaves resembling those of the water-lily In Egypt and the Levant, this plant is esteemed a wholesome food, though not very delicate. The roots and petioles are boiled, and the leaves when young are sometimes eaten raw A trilobatum, and various others, are similarly used in the West Indies. There and in Europe the culture of all the species is of the simplest kind

A. maculatum, *Gouet*, Fr, *Aronswartzel*, Ger, and *Aro*, Ital, has a tuberous whitish root about the size of a large nutmeg, which is used both as food and medicine On tasting them, they seem to be merely mucilaginous and insipid, but they soon affect the tongue with a pungency as if pricked by needles; this uneasy sensation may be alleviated by milk, butter, or oil The acrimony is lost in drying, and the roots become farinaceous, insipid, and fit for boiling or baking. In the Isle of Portland, where the plant is very abundant, the roots are generally eaten by the country people, they are macerated, steeped, and the powder so obtained is dried and sent to London, and sold under the name of Portland sago. Medicinally, the root in its recent state is stimulant, diaphoretic, and expectorant. Though retained in the Materia Medica, it is seldom used. The berries which succeed the flower are devoured by birds, and Mr Curtis thinks, that even the roots are eaten by them, particularly pheasants. Dried and powdered, they are used by the French as a wash for the skin, under the name of cypress powder

2007. *Caryota.* The Greeks gave this name to a kind of cultivated date. Pliny says, it was so called,

13461 Leaves pedate entire, Spadix cylindrical shorter than ovate flat spathe, which is hairy inside
13462 Leaves pedate entire, Spadix lanceolate shorter than the ovate flat smooth spathe
13463 Leaves pedate entire, Spadix subulate longer than the oblong convolute spathe
13464 Leaves pedate entire, Spadix shorter than lanceolate spathe
13465 Stemless, Leaves ternate entire, Spadix clavate shorter than ovate acuminate flat stalked spathe
13466 Stemless, Leaves ternate ovate twice as short as spadix
13467 Stemless, Leaves ternate, Spadix longer than spathe
13468 Stemless, Leaves peltate ovate repand emarginate at base
13469 Stemless, Leaves paltate cordate repand 2-parted at base
13470 Stemless, Leaves cordate hastate, Spadix subulate longer than the reflexed ovate-lanceolate spathe
13471 Stemless, Leaves sagittate 3-lobed, Flowers sessile
13472 Leaves all radical hastato-sagitate: lobes deflexed, Spadix club-shaped obtuse shorter than the spathe
13473 Leaves hastate 3-parted, Spathe stalked 2-colored longer than spadix the end lanceolate and deflexed
13474 Stemless, Lvs. veiny with white hastate sagit lobes auricled diyaricating, Spad clav shorter than spathe
13475 Stemless, Lvs hastate sagittate mucronate lobes deflex Petioles dotted, Spad. cylind shorter than spathe
13476 Stemless, Leaves hastate cordate acute angles obtuse [cucullate spathe
13477 Stemless, Lvs hast sagittate mucron lobes deflexed oblong obtuse, Spadix cylind incurved shorter than
13478 Stemless, Leaves linear-lanceolate, Spadix subulate longer than lanceolate spathe
13479 Caulescent erect, Leaves peltate cordate auricles cucullate
13480 Caulescent subcrect, Leaves ovate bind at base rounded, Spadices axillary
13481 Caulescent, Leaves peltate cordate acute cut out at the base with a wide recess
13482 Leaves sagittate acute rounded at base
13483 Leaves peltate cordate sagittate, Spathe roundish oblong acute, Spadix obtuse much shorter than spathe
13484 Leaves lanceolate acute entire, Edge of petiole sheathing, Spathe cucullate
13485 Leaves peltate cordate
13486 Caulescent rooting, Leaves cordate oblong acuminate, Petioles round
13487 Caulescent creeping, Leaves cordate lanceolate, Petioles with a membranous edge
13488 Stemless, Leaves decompound bulbiferous, Spadix oblong ovate shorter than the obtuse veiny spathe
13489 Stemless, Leaves linear lanceolate, Spadix lanceolate shorter than the oblong lanc spirally twisted spathe
13490 Steml. Lvs. ov. ent. or 3-lob Spathe urceol at base reflex and taper-point at end, Spadix length of spathe

13491 Unarmed fronds bipinnate, Leaflets cuneiform obliquely bitten off
13492 Fronds bipinnate, Petioles nodding, Fruit 1-seeded

MONADELPHIA.

13493 Frond pinnated, Female flowers terminal capitate: male lateral with dichotomous peduncles

13494 Fronds pinnated, Leaflets plaited terminal bitten off, Stems and spadices smooth
13495 Fronds pinnated, Leaflets cuneiform truncate, Fruit globose ovate acute
13496 Fronds pinnated, Leaflets linear acute, Fruit oblong incurved



and Miscellaneous Particulars

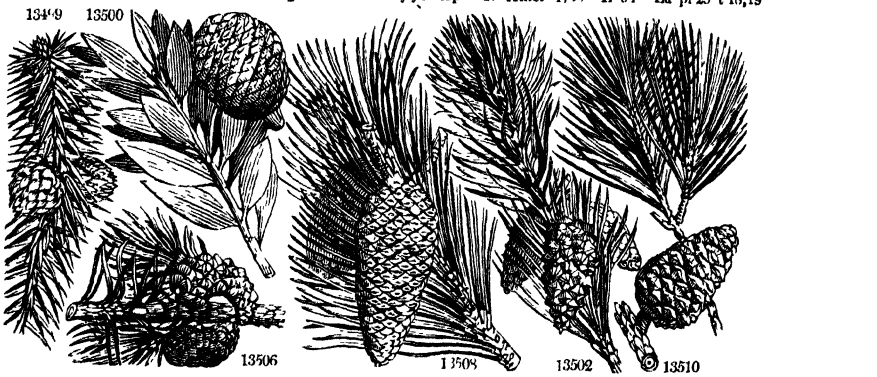
because a wine was prepared from it which soon got into the head, κεφαλη, head C urens, a fine species of palm, produces flowers in long pendulous spikes, which are succeeded by strings of succulent globular berries, dark red when ripe, with a thin skin, soft pulp, and very sharp and acrid to the taste In Ceylon, it yields a sort of liquor, sweet, wholesome, and no stronger than water It is taken from the tree twice or thrice a day, and an ordinary tree will yield three or four gallons They boil this liquor, and thus make a kind of brown sugar of it, called Jaggory The fruit is not eatable When the tree has come to maturity, there comes out a bud from the top, this bud they cut and prepare by putting salt, pepper, lemons, garlick, leaves, &c. over it, which keep it from ripening They daily cut off a thin slice from the end, and the liquor drops into a vessel, which they set to catch it The buds, like those of the Cocoa and Betel-nut, are excellent in taste, resembling walnuts or almonds C mitis is a very beautiful palm, with fronds four feet long and a branched spike of flowers, succeeded by berries, round, coriaceous, smooth, black, the size of a musket bullet, but not eatable Both species grow freely in sandy loam

2008 *Nipa* The name given to this fine palm in the Moluccas

2009 *Areca* The name which this palm bears in Malabar is, when it is an old tree, *Areec;* when young it is called *Paynga* A Catechu produces the nut which is cut in slices, wrapped in the aromatic leaves of the betel-pepper, and chewed as we do tobacco These leaves are previously covered with a thin layer of shell-lime (Ehunam), to preserve the flavor longer in the mouth In most parts of the East Indies the natives are continually chewing it, swallowing their saliva tinctured with the juice, and spitting out the rest. The inside of their mouths appears as red as blood, and it gives their teeth a dark color but it preserves the teeth, sweetens the breath, and is a stomachic and diuretic This palm is very generally cultivated in the East Indies.

A oleracea is the highest of the American palms, and is very distinct from the East Indian Areca. The sheaths of the leaves are very close, and form the green top of the trunk a foot and a half in length. The

13497	crinita *W*	hairy-coated	↑	or	90	...	W	I France	1824	S	r m		
13498	lutéscens *W.*	yellow	↑	or	20	...	W	I France	1824	S	r m		
*2010	BE'LIS *Salisb*	Bellis.				*Coniferæ*	*Sp* 1						
§13499	jacultifolia *Salisb* *Pinus lanceolata*	lance-leaved	↑	or	20	...	Ap	China	1804.	C	p l	Lam pin 52. t 54	
*2011.	A'GATHIS *Salisb*	Dammar Pine.				*Coniferæ*	*Sp* 2—3						
§13500	loranthifolia *Salisb* *Pinus Dammara*	common	↑	or	30	...	Ap	Amboyna	1804	C	p l	Rumph 2 t. 57	
§13501	australis *Hort*	Kawrie Pine	↑	tm	100	..	Ap	N Zeal	1821.	C	p.l		
†*2012	PI'NUS *W*	Pine.				*Coniferæ*	*Sp* 22—27						
13502	sylvéstris *W*	Scotch	↑	tm	80	my	Ap	Scotland sc alp		S	s l	Lamb pin 1 t. 1	
13503	Pumilio *W*	dwart	↑	or	20	ap my	Ap	Carniola	1779	S	s l	Lamb pin 5 t 2	
13504	Laricio *P S.*	Corsican	↑	tm	80	...	Ap	Corsica	1814	S	s l	Lamb pin 2 28 9	
13505	pungens *Ph*	pungent	↑	tm	40	.	Ap	N Amer	1804	L	s l	Mi arb 1 p 61 t 5	
13506	Banksiana *Ph.*	Scrub Pine	↑	or	12	my jn	Ap	Huds Bay	1785	L	s l	Lamb pin 7 t 3	
13507	Mughus *W*	Mugho	↑	or	10	my jn	Ap	Switzerl	..	S	co	Jac ic ra 1 t 193	
13508	Pinaster *W*	cluster	↑	tm	60	ap my	Ap	S Europe	1596	L	s l	Lam pin 9 t 4, 5	
13509	Pinea *W*	stone	↑	tm	40	my	Ap	S Europe	1548	L	s l	La pin 11 t 6,7,8	
13510	maritima *W*	maritime	↑	tm	40	my jn	Ap	S Europe	1759	L	s l	La.pin 13 t 9, 10	
13511	halepénsis *W*	Aleppo	↑	tm	40	my	Ap	Levant	1683	L	s l	Lam pin 15 t 11	
13512	inops *Ph*	Jersey	↑	tm	50	my	Ap	N Amer	1739	S	s l	Lam pin 18 t 13	
13513	resinósa *Ph*	pitch	↑	tm	50	my	Ap	N Amer	1756	L	s l	Lam pin 20 t 14	
13514	variábilis *Ph*	two and 3-leav	↑	tm	40	my jn	Ap	N Amer	1739	L	s l	Lam pin 22 t 15	
13515	Tæda *Ph*	frankincense	↑	tm	30	my jn	Ap	N Amer	1713	L	s l	La pi 23 t 16,17	
13516	excelsa *Wall*	Nepal	↑	tm	100	...	Ap	Nepal	1823	S	s l	La pi 2 5 3	
13517	serotina *Ph*	Fox-tail	↑	or	60	my jn	Ap	N Amer	1713	S	s l	Mi arb 1 p 86 t 7	
13518	rigida *Ph*	three-leaved	↑	or	80	my jn	Ap	N Amer	1759	L	s l	La pi 25 t 18,19	



History, Use, Propagation, Culture,

inhabitants cut off this top, take out the white heart of two or three inches in diameter, consisting of the leaves closely folded together, and eat it, either raw with pepper and salt, or fried with butter like the artichoke

2010 *Bellis* Named by R A Salisbury, in the Transactions of the Linnean Society, from βέλος, a javelin, on account of the form and texture of the leaves, which are not unlike a javelin head B lanceolata is a beautiful evergreen shrub, with distichous neat leaves, easily cultivated in any good conservatory.

2011 *Agathis* From ἀγαθὸς, a cluster, because the flowers are collected in clusters This genus is formed of the Dammar Pines, of which the A australis, or New Zealand Cowdie Pine, is one of the finest trees in the world, often growing perfectly straight to the height of 100 feet or more, and yielding one of best descriptions of wood for masts

2012 *Pinus* This name is of Celtic origin, and is the same in all the dialects of that tongue *Pin* or *pen*, a rock or mountain, has given rise to *pin*, in Armorican, *penge*, in Erse, *punua*, in Welsh, *pinu*, in Anglo-Saxon, *pine*, in English, *pynbaum*, in German, all signifying the fir-tree hence also the Appennines (Alpes penninæ), Pennafiel, Pennaflor, &c towns of Spain embosomed in mountains The fruit of P Pinea was formerly called Nux pinea, the pine nut Pinaster is Pliny's name for the wild pine Cembra is an alteration of the word *cembro* or *cirmolo*, the name given by the inhabitants of Trentin and Valteline to the plant Tæda is derived from the Greek δαὶς δαδὸς, which signifies a torch, for which the wood of P tæda is particularly adapted Strobus is a name employed by Pliny for an eastern tree, which was used to perfume apartments The moderns have applied it to a noble North American species

The trees which compose this genus are not less remarkable for their grandeur and beauty, than for their valuable timber They are all evergreens, and of lofty and erect growth The trunk of the Scotch pine is more generally employed and more universally applicable as timber than any other tree in the temperate zone of the northern hemisphere P sylvestris, *Pin*, Fr, *Kiefer* or *Föhre*, Ger, and *Pina*, Ital, is erroneously called a fir, and has the term Scotch applied to it, because it is the only species of the genus indigenous to Britain, and there only in the northern parts of Scotland. It is also indigenous in the Alps, in the north of Germany, Russia, and abundantly so in Sweden and Norway The finest pine woods in Britain, are at Invercauld in Inverness-shire, and Gordon Castle in Aberdeenshire The timber of the Scotch pine is the red or yellow deal of the north of Europe, and is the most durable and valuable of any of the genus, unless we except, in point of durability, the larch That grown in cold elevated situations in the highlands of Scotland, is found to be not inferior in quality to any imported from Norway, but that which has been planted in the low districts, is greatly inferior in point of durability, and can seldom be used in house carpentry and joinery The tree is of great value as a nurse plant to others less hardy The trunk of the tree produces resin by incision, and the roots tar by distillation Several varieties of the wild pine have been noticed by botanists. According to Sang, the variety commonly cultivated is least worth the trouble "The P sylvestris, v. r montana," he says, "is the variety which yields the red wood even young trees of this sort are said to become red in their wood and full of resin very soon The late Mr Don, of Forfar, exhibited specimens of cones of each variety to the Highland Society of Scotland, and likewise to the Caledonian Horticultural Society The variety preferred by Don, is distinguished by the disposition of its branches, which are remarkable for their horizontal direction, and for a tendency to bend downwards close to the trunk The leaves are broader and shorter than in the common kind, and are distinguishable at a distance by their much lighter and beautiful glaucous appearance.

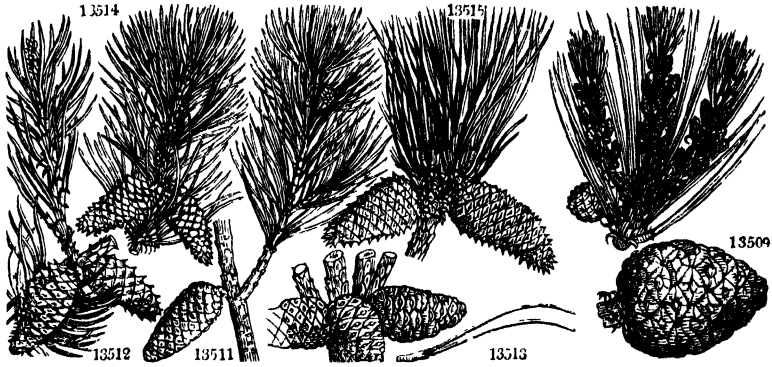
13497 Fronds pinnated, Stems hirsute, Spadixes branched spiny, Spines incurved
13498 Fronds pinnated, Leaflets plaited bitten off, Stems and spadixes branched smooth, Fruit roundish gibbous

13499 Leaves solitary lanceolate flat spreading, Cones round, Scales acuminate

13500 Leaves elliptical lanceolate striated'

13501 Leaves ovate oblong smooth not striated

13502 Leaves in pairs rigid, Cones conico-ovate acute as long as the leaves, generally in pairs
13503 Leaves in pairs, Trunk ascending, Cones ovate erect
13504 Lvs twin very long of two forms, Cones ovate, Scales narrowed at base very thickened at end not angular
13505 Leaves twin short acute, Cones ovate conical, Prickles of scales long subulate incurved lower reflexed
13506 Leaves twin divaricating oblique, Cones recurved twisted, Crest of anthers dilated
13507 Leaves double or triple rigid, Cones oblong generally in pairs rounded at base
13508 Leaves twin roughish at edge, Cones oblong conical shorter than leaf narrowed at base, Scales echinate
13509 Leaves twin the first dilated, Cones ovate blunt somewhat unarmed longer than leaf, Nuts hard
13510 Leaves twin very fine, Cones ovate-conical very smooth solitary stalked
13511 Leaves twin, Cones ovate-conical rounded at base somewhat shorter than leaf, Scales blunt
13512 Leaves twin, Cones oblong-conical the length of leaves solitary rounded at base, Scales echinate
13513 Leaves twin, Cones ovate-conical rounded at base solitary half as short as leaves, Scales unarmed
13514 Leaves twin or ternate, Cones ovate-conical subsolitary, Prickles of scales incurved
13515 Leaves long, Cones deflexed spines inflexed, Sheath of leaves long
13516 Leaves in 5s very long slender lax toothletted, Cones cylindrical smooth pendulous longer than leaves
13517 Leaves 3 very long, Cones roundish ovate mucronate
13518 Leaves 3, Cones ovate clustered, Spines of scales reflexed, Sheath of leaves short



and Miscellaneous Particulars

The bark of the trunk is smoother than in the common kind The cones are thicker, and not so much pointed. The plant is more hardy than the common sort, grows freely in almost any soil or situation, and quickly arrives at a considerable size "

P laricio is said to be nearly allied to the Scotch pine, but a much handsomer and finer tree Professor Thouin considered it equally hardy with P sylvestris, its wood is more weighty and resinous, and consequently more compact, stronger, and flexible It grows wild on the summits of the highest mountains in Corsica P resinosa, the red Canadian pine, is not unlike the Scotch pine, but rather redder in the bark The timber of this tree is frequently imported as masts, and is considered valuable. Grown on a damp and fertile soil, it is much less durable than from elevated situations, it is equally hardy with P sylvestris P pinaster is a grand and picturesque tree, and is a great favorite with the Roman and Florentine painters The timber is of less value than that of any of the others that have been mentioned, in Switzerland it is cut into shingles for covering their houses It is highly deserving of culture as an ornamental tree, but not for timber

P Pinea is very common in the south of Italy, there is an immense forest of them at Ravenna, and they are much planted in the gardens of the villas of Rome and Florence The seeds of this and the last species are eaten throughout Italy, both by the poor and rich They are as sweet as almonds, but with a slight flavor of turpentine The wood is not so resinous as that of most of the other sorts, and the tree can only be considered as deserving culture for its pictorial effect P Cembra, the Tannenbaum of Lord Byron (Childe Harolde), and the Aphernoush pine of Harte (Essays), grows higher up the Alps than other pines, and is even found at elevations where the birch will not grow The wood is very soft, and having scarcely any grain, is very fit for the carver The peasants of the Tyrol, where this tree abounds, make various sorts of carved works with the wood, which they dispose of in Switzerland among the common people, who are fond of the resinous smell which it exhales

P Tæda has longer leaves than the wild pine, and larger cones than P Pinea, the timber is like that of the Scotch pine, but has more resin There are a number of these trees at Woburn Abbey, which grow as freely as the Scotch pine, and the timber, as far as it has been tried, is superior

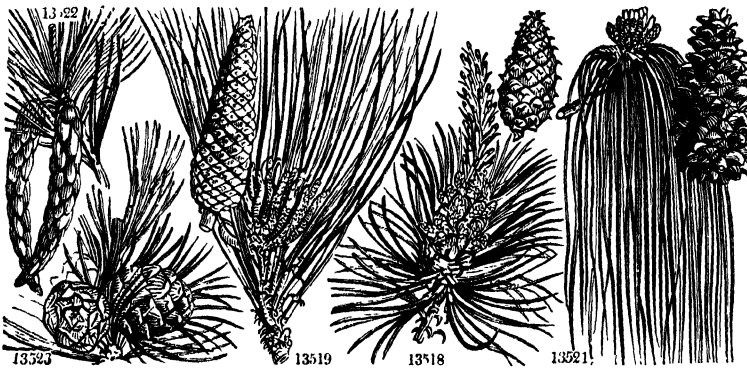
P palustris is remarkable for the length of its leaves, which often exceed a foot, and hang down in tufts at the end of the branches, having a singular appearance It grows in a warmer climate than most other pines, produces a valuable timber in America, but has been but little cultivated in this country P strobus forms the connecting link between the pine and the larch tribe, and is the tallest tree of the genus The bark is smooth and elegant, and the leaves numerous, soft, and of a bluish green The timber is imported in vast quantities under the name of white pine, it is much used in house carpentry, but is considered less durable than the red deal of Norway (P sylvestris), or the pitch pine of Canada (P resinosa) The tree seems to be of so delicate a habit, as to prevent our expecting it ever to become very large or valuable in Britain It has been a good deal cultivated, having formerly been supposed the most valuable tree of the genus, next to the common pine

The Pinus canariensis seems never to have been well described or understood Some have taken it for the Pinus Larix, others for the Pinus tæda, whilst others had confounded it with the Pinus maritima Von Buch, and the late Christian Smith, named it in their catalogue of the vegetation of Teneriff, Pinus canariensis, and they state, that it inhabits that island from the edge of the sea to an elevation of 6700 Parisian feet above the level of the sea, but that the region where it is most abundant may be reckoned at from 4080

13519 palústris *Ph*	swamp	tm	20	...	Ap	N Amer	1730	S	s l	Lam pm 27 t 20
13520 canariensis *Buch.*	Canary	or	40	...	Ap	Canaries	1815	S	s l	Pl r gen c ic
13521 longifólia *W*	long-leaved	or	40	...	Ap	E Indies	1801	G	p l	Lam pm 29 t 21
13522 Strobus *W*	Weymouth	tm	50	ap	Ap	N Amer	1705	L	s l	Lam pm 31 t 22
13523 Cémbra *W*	Siberian	tm	25	my	Ap	Siberia	1746	S	s l	La pi 34 t 23, 24

†*2013 A'BIES *Salisb* Fir *Coniferæ Sp* 10—12

13524 Fraséri *Ph*	Double Balsam	or	30	my	Ap	Pensylv	1811	C	s l	
13525 Picea *W*	Silver	tm	30	my	Ap	Germany	1603	L	s l	Lam pm 46 t 30
13526 Balsámea *W*	Balm of Gilead	or	50	my	Ap	N Amer	1696	S	s l	Lam pm 48 t 31
13527 canadénsis *Ph*	Hemlockspruce	or	30	my	Ap	N Amer	1736	S	s l	Lam pm 50, t 32
13528 orientális *W*	Oriental	or	30	my	Ap	Levant	1825	S	c o	Lam pm c ic.
13529 Clanbrasiliana *Hort*	Clanbrazil	or	6	my	Ap	.. ..	..	L	c o	
13530 communis	Norway spruce	tm	100	ap	Ap	N Europe	1548	S	s l	Lam pm 37 t 25
13531 álba *Ph*	White spruce	tm	50	mv jn	Ap	N Amer	1700	S	s l	Lam pm 39 t.26



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to 5900 feet, where snow falls for about a month The temperature of the zone M Decandolle estimates to be similar to that of Scotland, or to the north of France, or of Germany. The wood is resinous, highly inflammable, and is excellent for constructing buildings, being known to continue sound for ages

The Pinus inops, Jersey pine, pitch or scrub pine, is of middle size, straggling growth, and full of resin Its branches are tougher than those of any other pine, and might be used for many purposes if its wood were not subject to so early a decay The pitch pine, P resinosa, is generally known in its native country by the name of Norway pine, sometimes, particularly among the Canadian French, red pine It grows in close forests, is very tall, and its bark remarkably smooth and red the timber is very heavy, for which reason it is rejected for masts, though its shape and size appear to recommend it for that purpose The scrub pine, P Banksiana, is a small straggling tree, which in some instances, when growing among barren rocks, does not rise above five or eight feet high, though it will grow to a considerable size when by accident or culture it is brought on good soil trees of this species now in England exude a great quantity of resin from their branches The yellow pine, P. variabilis, is most in use for building houses, as well as shipping P tæda, the loblolly or Oldfield pine, is found in large tracts in the southern states of North America all the woods seem to be filled with its seeds, for when any piece of cleared land is neglected for any space of time, it will be covered with these pines It is difficult, and in some cases almost impracticable, to recover lands so run over, as the ground appears to have lost all fertile properties for other vegetation The long leaved, yellow, pitch, or brown pine, P palustris, is a beautiful as well as very useful tree The white or Weymouth pine grows in the state of Vermont to an enormous size, it is the best timber in America for masts.

2013 *Abies* According to Bullet, this name is derived from one of the dialects of the Celtic, *abetoa*, whence *abete*, Italian, *abeto*, Spanish, &c Hesychius, the Greek grammarian, calls it ἄβιν

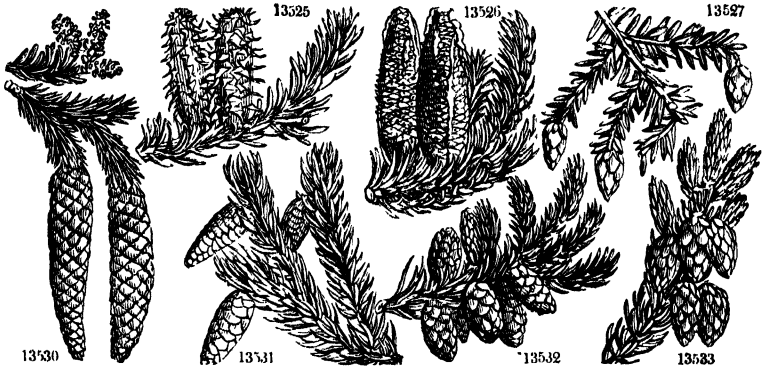
Abies communis, *Sapin*, Fr, *Fuchtenbaum*, Ger, and *Abiete*, Ital, is one of the tallest of European firs, with a very straight but not thick trunk It is a native of the north of Germany and Russia, and particularly abundant in Norway, its timber being the white deal, and, at an earlier age, the long spars imported from that country and the Baltic The timber is inferior to that of the common pine in durability and bulk, and being often knotty, is not proportionally strong for horizontal bearings with that timber White Norway deal, however, is used for a great variety of purposes in building, and the entire trees are more prized than any other for masts for small craft, for spars both for marine purposes and on land What constitutes the value of this fir is, that its timber is equally durable at any age, like that of the larch, and what renders it peculiarly adapted for masts, spars, scaffolding, poles, &c is its habit, almost in every case, whether standing single or detached, of growing perfectly erect and straight The tree may be cut for rods, stakes, and scythes, or other implement handles, when the trunk at the base is not more than two inches in diameter, and the bark being kept on it, it will prove almost as durable as the larch Pontey says, that poles of spruce are so far inferior to those of larch, that they are more apt to crack when exposed whole to the influence of the sun and air, but in all other respects they are nearly equal to it, and in straightness surpass it The tree is peculiarly valuable as a nurse, from being evergreen and closely covered with branches, by which radiated heat is retained, from its conical shape and rigid stem, by which it does not suffocate or whip the adjoining trees, from its being valuable at whatever age it is thinned out, and from its being an excellent shelter for the most valuable game It will not, however, grow in elevated situations, where the common pine and larch will flourish It is also an excellent hedge plant for shelter, but is deficient in point of defence and durability By incision, it yields a resin, from which, by various preparations, turpentine and Burgundy pitch are formed The tops or sprouts give the flavor to what is called spruce beer

A alba, rubra, and nigra, are American firs of the spruce kind, resembling in their general properties those of Europe The black spruce is reckoned the most durable in America it is used for knees for ship-building, where neither oak nor larch can be easily obtained These knees are not prepared from two diverging branches, as in the oak, but from a portion of the base of the trunk connected with one of the largest diverging roots The timber of the red spruce is universally preferred throughout the United States for sail yards, and, indeed, imported for this purpose into Liverpool from Nova Scotia, where it is also used for constructing casks for salted fish It is chiefly from the decoction in water of young shoots of the black spruce, and not exclusively from those of the white species, as supposed by Lambert, that the celebrated beer is prepared by fermentation, with a due proportion of sugar and molasses. The essence of spruce of the dealers is prepared by evaporating this decoction to the consistence of honey

A picea displays a more stable and majestic form than any of the firs The upper surface of the leaves is of a fine vivid green, and their under surface has two white lines running lengthwise on each side of the

13519 Leaves 3 very long, Cones subcylindrical muricated, Stipules pinnatifid ragged persistent
13520 Lvs very fine and slender of a bright glaucous green, Cones oblong pendulous Scales obtuse spreading
13521 Leaves 3 very fine very long, Sheath long, Stipules entire deciduous, Crest of anthers convex entire
13522 Leaves quinate, Cones cylindrical longer than leaf lax
13523 Leaves quinate, Cones ovate obtuse, Scales appressed, Nuts hard

13524 Leaves solitary glaucous beneath emarginate, Cones ovate obl erect, Bractes oblong reflexed emarginate
13525 Leaves solitary flat emarginate pectinate, Scales of cone very blunt appressed
13526 Leaves solitary flat emarginate subpectinate suberect above, Scales of the cone in fl acuminate reflexed
13527 Leaves solitary flat toothletted somewhat distichous, Cones ovate terminal scarcely longer than leaf
13528 Leaves solitary 4 cornered, Cones ovate cylindrical, Scales rhomboid
13529 This is a stunted variety of Abies communis
13530 Leaves solitary 4-cornered, Cones cylindrical, Scales rhomboid flattened repand at end eroded
13531 Leaves solitary 4-cornered incurved, Cones subcylindrical lax, Scales obovate entire



and Miscellaneous Particulars

midrib, giving the leaves that silvery look which has given rise to the name The timber is reckoned much inferior in value to that of the common pine, or of the white spruce It should not be cut till after forty or fifty years growth, at this age, if it has grown in a sheltered rocky steep or dell, it will be found to have produced a great bulk of timber It is more prolific in resinous matter than any other tree of the fir kind

A balsamea is a tree of more delicate habits than the silver fir its timber is of little value, and the balm or resin procured from it possesses no medical properties superior to those of common turpentine During summer, the tree sends out a pleasing terebinthinate odor

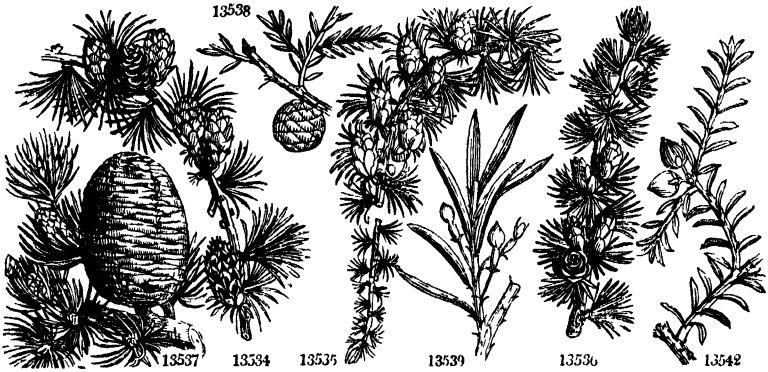
A canadensis is a drooping low evergreen tree, elegant in appearance, and valuable as growing under the shade or drip of other trees

All the species of the pine, fir, and larch families, with the exception of one or two, as yet rare in this country, are raised from seeds The cones are gathered in the winter season, and exposed to the sun, or to a gentle heat on a kiln, in order to facilitate the separation of the seeds The cones of the cedar should be kept for a year at least after they are taken from the tree, before the seed be attempted to be taken out This is necessary on account of the soft nature of the seeds, and the great quantity of resinous matter which the cones contain when growing, and which is discharged by keeping Cedar cones are generally imported from the Levant, and the seeds retain their vegetative powers for many years The cones of the Scotch pine, spruce, and larch, are the principal kinds which are opened by kiln heat The cones of the Weymouth pine, silver fir, and balm of Gilead fir, give out their seeds with very little trouble April is the best season for sowing all the species The soil should be soft and rich, well mellowed by the preceding winter's frost and snow, carefully dug and raked with a long toothed rake as finely as possible The rarer sorts are generally sown in pots, but the more common in beds The manner of sowing is by first drawing off the surface of the bed to the depth of half an inch, then drawing a light roller along it to render the surface perfectly even, next depositing the seed, and afterwards replacing the earth drawn off with a spade as evenly as possible This is what is technically called bedding in, and is one of the nicest operations of nursery culture The seed of the Scotch pine and Pinaster require a covering of half an inch in depth, those of the Weymouth pine, three quarters of an inch, and those of the stone pine, an inch and a quarter The Cedar is generally sown in broad pots, or boxes of light sandy loam, and covered half an inch The seeds of the larch require a covering of only a quarter of an inch, those of the spruce fir, an inch, those of the silver fir and balm of Gilead fir, from half to three quarters of an inch The seeds of the American spruce fir are smaller than those of any of the preceding kinds, and therefore require a lighter covering than any of them, one-fifth of an inch is quite sufficient The strictest attention is required, both in regard to quality of soil, and thickness of covering the seed, for though resinous trees are extremely hardy when grown up yet they are all very tender in infancy In sowing the seed, a considerable loss will be sustained by the suffocation of young plants if it is deposited too thick, and by the want of plants if too thin The judicious gardener will be regulated by the goodness of the seed, and the size of the foliage of the different species The raising regular crops of the pine family is reckoned a master piece of nursery culture in the open ground, and as it has been most extensively practised in the Scotch nurseries, it is generally considered as best understood there (See *Sang Plant Kal*)

The pine, fir, and larch families benefit less by transplanting in the nursery than the non-resinous trees And in general, where circumstances admit, the better plan is to remove them at once from the seed-bed at two years old, to where they are finally to remain The more delicate species, including the cedar and most of the pines, are best transplanted into pots, unless they can be placed at once where they are to remain The more common pines and firs are transplanted at two years of age into nursery lines, about the middle of April for all the tribe, excepting the larch, which, being deciduous, should be transplanted in February No description of tree-plants receive so much injury as this tribe from the loss of roots, from the roots being exposed to the air by being kept long out of the soil, or from compression and exclusion of air and moisture by being kept in close bundles, or thick layers They should, therefore, be finally planted as soon as possible after removal from the nursery, and, indeed, whenever it is practicable, no more should be taken up in one day than can be planted that day or the next Nor are any plants more easily deprived of the vital principle, by packing and carriage either by sea or land, though, being all evergreens, excepting the larch, they do not readily show it. This has been stated to us by experienced planters in Wales and different parts of England, as the reason why so few trees are finally produced from the immense numbers of Scotch pine and larch fir annually sent to the south by the Scotch nurserymen

Abies Balsamea forms an elegant tree forty or fifty feet high It grows in high and cold situations in the northern states of North America, where it is called balsam of Gilead fir, fir balsam, and American silver fir

13532 rúbra *Ph*	Red spruce		tm	50	my	Ap	N Amer	1755	S	s l	Lam pin 43 t.28
13533 nigra *Ph.*	Black spruce		tm	50	my	Ap	N. Amer	1700	S	s l	Lam pin 41. t 27
*2014. LA'RIX. *Salisb*	LARCH				*Coniferæ. Sp* 4—5						
13534 commúnis	common white		tm	50	mr ap	Ap	Germany	1629	S	s l	Lam pin 53 t 35
13535 péndula *W*	Black		tm	30	my	Ap	N Amer	1730	S	s l	Lam pin 56 t 36
13536 microcárpa *W*	Red		tm	80	my	Ap	N Amer.	1760	S	s l	Lam pin 58 t 37
§13537 Cédrus *W*	Cedar of Lebanon		or	60	my	Ap	Levant	1683.	S	s l	
2015 SCHUBE'RTIA *Mœh*	SCHUBERTIA				*Coniferæ Sp* 1						
13538 distícha *Mœh* *Cupréssus distícha* L.	deciduous Cypress		or	30	my	Ap	N Amer.	1640.	S	s p	Mic arb.3 p 4 t.1
2016 PODOCA'RPUS *L'Her*	PODOCARPUS.				*Coniferæ Sp* 4—6						
13539 macrophyllus *Hort*	long-leaved		or	10	jl.au	Ap	China	1804	C	l p	Bank ic Kæ t.24
13540 verticillátus *Hort*	whorl-leaved		or	10	...	Ap	Japan	..	C	l p	
13541 elongátus *P S*	African		or	10	jl	Ap	C G H.	1774	C	l p	
13542 núcifer *P S.*	nut-bearing		or	20	...	Ap	Japan	1822	C	l p	Kæmpen t 815
2017 CUPRE'SSUS *W*	CYPRESS				*Coniferæ Sp* 5—9						
13543 sempervírens *W*	common		or	20	my	Ap	Candia	1548	S	co	Dend brit 155
a stricta	*upright*		or	20	my	Ap	Mediterr	...	S	co	
β horizontális	*spreading*		or	20	my	Ap	Mediterr	.	S	co	
13544 lusitánica *W*	Cedar of Goa		or	12	ap my	Ap	Goa	1683	C	p l	Lam pin 95 t 42
13545 thyoides *B*	White Cedar		or	20	ap my	Ap	N Amer	1736	L	co	Dend brit 156
13546 juniperoides *W*	African		or	6	ap my	Ap	C G H	1736	C	p l	
13547 austrális *P S*	slender-branch.		or	10	ap my	Ap	N Holl	..	S	p l	
2018 THU'IA *W*	ARBOR VITÆ				*Coniferæ Sp* 4—9						
13548 occidentális *W*	American		or	25	my	Ap	N Amer	1596	L	co	Mi arb 3 p 29 t 3
13549 orientalis *W*	Chinese		or	25	my	Ap	China	1752	S	co	Dend brit 149



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The hemlock spruce is a very elegant tree, and grows in some situations to an enormous size its bark is a fine substitute for oak-bark in tanning

2014 *Larix* This has also for its root the Celtic word *lar*, which signifies fat, in allusion to the abundance of resin afforded by the plant Even Dioscorides remarks, that *Larix* is the Gallic name for resin. The authors of the Dictionary of Trevoux make the word Cedrus come from *κεδρος*, sweet-scented, on account of the balsamic odor exhaled by the wood when burned

L. Cedrus, *Cédre*, Fr, *Cedrbaum*, Ger, and *Cedro*, Ital, is unquestionably the most celebrated tree of the genus, and not less remarkable for the irregular grandeur of its form The general character of its shoot, even when the tree is young, is singularly bold and picturesque, and quite different from that of every other species of the tribe It is a native of the coldest parts of the mountains of Libanus, Amanus, and Taurus, but it is not now to be found in those places in great numbers Maundrell, in his journey from Aleppo to Jerusalem, in 1696, could reckon only sixteen large trees, though many small ones, one of the largest was twelve yards six inches in the spread of its boughs The forest of Libanus never seems to have recovered the havoc made by Solomon's forty score thousand hewers so that we have now, as Professor Martyn observes, probably more cedars in England than there are in Palestine

From the branchy head of this tree, and its aversion to pruning, it is not likely ever to become valuable as timber in this country When planted for that purpose, it should, as Sang recommends, be sown in groves, and thus by proximity drawn up with few branches Much has been said of cedar timber, which borders on the miraculous, as far as experience has gone, it is greatly inferior to that of the common larch, or the wild pine The great use of the cedar is to plant singly on lawns, or in the margin of plantations, where one or two specimens will give force and character to the dullest front of round-headed trees

L. Communis, *Melezo*, Fr, *Lerchenbaum*, Ger, and *Laricio*, Ital, is a deciduous tree, and there are two or three species or varieties not yet distinctly ascertained There is a variety with red and another with white flowers, one with cinereous bark, called the Russian larch, and one with pendulous branches L. pendula and L. microcarpa are considered species or subspecies, the timber of both is said to be harder than that of the common white larch, but these trees have never yet had a fair trial in this country As there are a few large specimens at Dunkeld and Athol, seeds will probably soon be obtained, and from their progeny a practical estimate may be formed of their merits in this country The red larch trees on the Athol estates do not contain one-third as many cubic feet of timber as the white larch of the same age The wood is so ponderous that it will scarcely swim on water. (*Hort Trans* iv 416) The timber of the white larch has been as much extolled as that of the cedar, and with much more reason The rapidity of its growth is not less remarkable than the durability of the timber. Both have been experimentally proved in the Highlands of Scotland It is stated by the Duke of Athol, that on mountainous tracts there, at an elevation of 1500 or 1600 feet, the larch, at eighty years of age, has arrived at a size to produce six loads (600 cubic feet) of timber, appearing in durability and every other quality to be likely to answer every purpose both of civil and naval architecture (*Hort Trans* iv 416) The tree will arrive at a timber size in almost any situation or soil Sang, a forest manager of extensive practice, has paid great attention to this tree "It bears," he says, "the ascendancy over the Scotch pine in the following important circumstances that it brings double the price, at least, per measureable foot, that it will arrive at a useful timber size in one-half, or a third part of the time, in general, which the pine requires, and, above all, that the timber of the larch, at thirty or forty years old,

13532 Leaves solitary subulate, Cones oblong blunt, Scales rounded somewhat 2-lobed entire at edge
13533 Leaves solitary 4-cornered erect straight, Cones ovate, Scales elliptical wavy at edge erect

13534 Leaves fascicled deciduous, Cones ovate-oblong, Edges of scales reflexed lacerated, Bractes panduriform
13535 Leaves fascicled deciduous, Cones oblong, Edges of scales inflexed, Bractes panduriform sharply acumin
13536 Leaves fascicled deciduous, Cones roundish few-fl Scales reflexed, Bractes panduriform bluntly acuminate
13537 Leaves fascicled rigid evergreen acute, Cones roundish, Scales truncate appressed

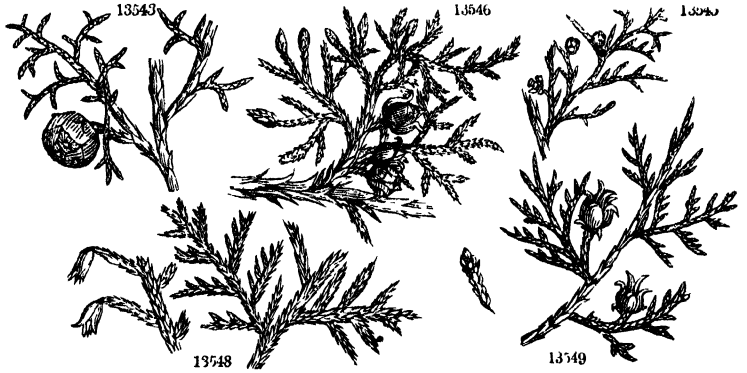
13538 Leaves distichous spreading

13539 Leaves solitary lanceolate remote
13540 Leaves whorled linear falcate
13541 Leaves lanceolate, Branches whorled
13542 Leaves solitary linear cuspidate remote

13543 Branches quadrang Lvs imbric in 4 rows blunt appr convex, Cones glob. Scales unarm. Branches straight

13544 Branches quadrang Lvs imbric in 4 rows appr glauc keel Cones subglob. Sc mucron Branches pendulous
13545 Branches compressed, Leaves imbricated 4 ways ovate warted at base
13546 Leaves linear much spreading decussate
13547 Leaves linear crossing appressed, Branches very slender

13548 Branches 2-edged, Leaves imbricated in 4 rows ovate rhomboid appressed naked warted, Cones obovate
13549 Branches 2-edged, Lvs imbricat in 4 rows ovate rhomboid appressed furrowed in middle, Cones elliptical



and Miscellaneous Particulars

when it has been planted in a soil and climate adapted to the production of perfect timber, is in every respect superior in quality to that of the pine at 100 years old In short, it is probable, that the larch will supersede the Scotch pine in most situations in this island, at no very distant period"

The chief objections to the timber of the larch are its liability to warp and twist, but this Monteath and others have proved may be effectually prevented by barking the trees in spring while growing, and not cutting them down till the following autumn, or even for a year afterwards This is also said to prevent the timber from being attacked by the dry rot The bark of the larch is more than half as valuable as that of the oak in tanning, turpentine is extracted from it in the Tyrol by incision, but that being always injurious to the timber, can never be recommended for adoption in this country (See *Encyc of Gard* 7053 *Monteath's Forester's Guide*, 2d edit p 234)

Like all other trees, and especially the resinous tribe, the timber of the larch is much affected by climate and soil A certain elevation of surface, coldness of climate, and inferiority of soil, is absolutely necessary to produce the timber in perfection Sang has known it in many places make the most rapid progress for thirty or thirty-five years, and though there was no external signs of disorder, yet when it was felled, the wood had begun to rot in the hearts of the trees, and some were quite hollow a good way upwards (*Plant Kal* 59)

Larix pendula, black larch, *Tamarack* or *Hackmatack* of the Americans, is a beautiful tree, resembling the European larch in appearance, as well as in the excellent qualities of its wood and bark

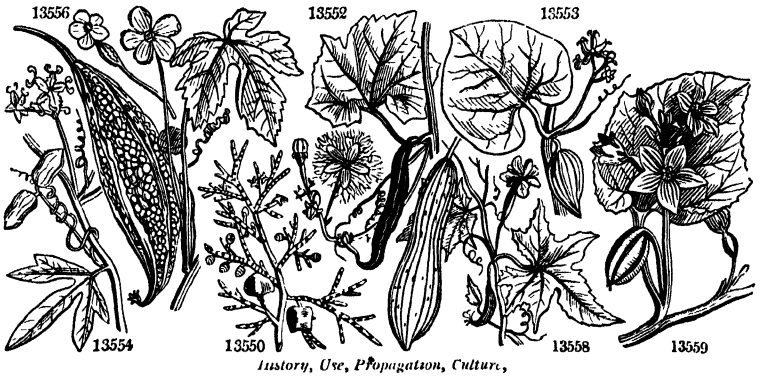
2015 *Schubertia* Named in honor of M Schubert, a Polish botanist The deciduous cypress grows in extensive swamps, and on the banks of large rivers, from Indian river, Delaware, to Florida, and on the Mississipi, it is one of the largest trees of the new continent, and one of the most valuable timbers that country produces, it grows to a considerable height in this country, though the extremities of the young shoots are almost every autumn destroyed by frost The finest specimens are at Sion-house and Blenheim

2016 *Podocarpus* From πους ποδος, a foot, and καρπος, fruit, in allusion to the stalk of the fruit. The species are increased by ripened cuttings in sand under a hand-glass

2017 *Cupressus* In Greek κυπαρισσος, from the isle of Cyprus, where this tree is very abundant. Cupressus sempervirens is a common timber tree in some parts of the Levant It was employed by the Moors round their palaces, and both by the ancient and modern Romans in their villas and gardens The timber of this tree is said to resist the worm, and to be of great durability The doors of St Peter's church at Rome were formed of this material, and have lasted eleven hundred years The Greeks made their coffins of it, and the mummy chests of Egypt are many of them of this wood In Crete, Malta, and other places, it is used for the common purposes of building, and when imported into this country it is employed by the cabinet-maker and turner Near buildings, where the prevailing architectural lines are horizontal, it forms very suitable combinations it is also considered an appropriate tree for burial places C Thyoides is an abundant tree in the swamps of New Jersey and Pennsylvania It is used for fencing and house-building, and is in the highest esteem for shingles and pipe staves C lusitanica is a native both of Goa and Japan, and the handsomest tree of the genus It is easily distinguished from all the evergreens of the Coniferæ by its abundance of very long dichotomous pendent branchlets The culture of the hardy species of this genus, and also of Thuja, is the same as that of Pinus

2018 *Thuja* An alteration of *thya*, its real name, from θυω, to sacrifice Its wood, which gives out when burnt an agreeable perfume, was used in sacrifices. Thuja occidentalis, *Cédre blanc*, Fr, is a well known

13550 **articulàta** *W.*	jointed	♀ ▭	or	15	f my	Ap	Barbary	1815	S	co	Bot. cab 844
13551 **cupressoïdes** *W.*	African	♀ ▭	or	10	...	Ap	C G H	1799	S	p.l	
*2019 TRICHOSANTHES *W* Snake Gourd					*Cucurbitaceæ*. *Sp* 3—12						
13552 **Anguìna** *W*	common	♂ ◯	or	4	my jn	W	China	1755	S	co	Bot mag 72?
13553 **cucumerìna** *W*	Cucumber-like	♂ ◯	or	4	jn jl	Y	E Indies	1804	S	co	Rhee mal 8 t 15
§13554 **tuberósa** *W*	tuberous	♀ △	or	6	jn jl	Y	W Indies	1810	D	co	Plum ic t. 24
2020 MOMORDICA *W* Momordica					*Cucurbitaceæ* *Sp* 5—17						
13555 **Balsámina** *W*	Balsam Apple	♂ ◯	or	4	jn jl	Y	India	1568	S	co	
13556 **Charántia** *W*	hairy	♂ ◯	or	4	jn jl	Y	E Indies	1710	S	co	Bot mag 2455
13557 **operculàta** *W*	rough-fruited	♂ ◯	or	4	jn s	Y	W Indies	1731	S	co	Comm rar t 22
13558 **Luffa** *W*	Egyptian	◯	or	4	jl au	L Y	E. Indies	1739	S	co	Rumam 5 t 147
13559 **Elatérium** *W*	Squirting Cucumber	♂ △	or	4	jn jl	Y	S Europe	1548	D	r m	Bot mag 1914
*2021 CUCURBITA *W* Gourd					*Cucurbitaceæ* *Sp* 8—13						
13560 **ovífera** *W*	egg-shaped	♂ ○	clt	3	jl s	Y	Astracan	...	S	co	
13561 **lagenária** *W*	bottle	♂ ○	clt	10	jl s	W	India	1597	S	co	Rum am 5. t 144
13562 **aurántia** *W*	Orange-fruited	♂ ◯	clt	3	jn au	Y	.....	1802.	S	co	
13563 **Pépo** *W*	Pumpkin	♂ ○	clt	16	jn au	Y	Levant	1570	S	co	
13564 **verrucósa** *W*	warted	♂ ○	clt	12	jn jl	Y	.....	1658	S	co	
13565 **subverrucósa** *W*	pimpled	♂ ○	clt	12	jn jl	Y	... ..	...	S	co	
13566 **Melopépo** *W*	squash	○	clt	3	my s	Y	.. ..	1597	S	co	Moris s 1 t 8 f 4
13567 **Citrúllus** *W.*	Water Melon	♂ ◯	clt	6	my s	Y	S Europe	1597	S	co	Rum am 5 t 146
2022 CUCUMIS *W*	Cucumber				*Cucurbitaceæ* *Sp* 13—19						
13568 **Colocýnthis** *W*	bitter	♂ ◯	or	6	my au	Y	C G H	1551	S	r m	
13569 **prophetárum** *W.*	globe	♂ ◯	or	2	jn s	Y	Levant	1777	S	co	Jac vind 1 t 9
13570 **Angúria** *W*	round prickly	♂ ◯	or	2	jl au	Y	Jamaica	1692	S	co	Mill ic 1 t 33
13571 **africána** *W*	African	♂ ◯	or	2	jl au	Y	C G H	...	S	co	Herm par t.134



History, Use, Propagation, Culture,

popular evergreen, which, though it seldom rises above the height of a shrub here, yet in Upper Canada attains the height of a timber tree, and the wood is considered more durable than any other The trunk is sawn up into planks and boards for houses and boat-building, and the branches used for posts and fencing The smaller branches and spray form besoms, and the leaves, made into a salve, are used by the Indians to cure the rheumatism In England, the timber has been chiefly employed by the turner and cabinet-maker In its native country the Arbor-vitæ succeeds best in soils where the roots have abundance of moisture It grows tallest in swamps and marshes, in very dry places it never comes to any degree of perfection The first tree of this species sent to Europe, was planted in the royal garden of Fontainbleau, in the reign of Francis the first. T orientalis is a shrub resembling the other in general appearance Both these species are readily increased by seeds, cuttings, or layers

2019 *Trichosanthes* From θριξ, hair, and ανθος, a flower The limb of the flower is divided into ten parts, of which the five outer are reversed and acute, the five interior ciliated T Anguina is a popular annual, with the habit of the common cucumber The flowers are cut into many small threads, and the fruit is taper, and nearly a foot long T cucumerina has smooth fruit of a red or orange color, the size of a pear In the popular medicine of Malabar, the seeds are used for disorders of the stomach and bowels Culture as for the common gourd

2020 *Momordica* From *mordeo, momordi*, to chew, its seeds have an irregular rugose surface, and the appearance of having been chewed M elaterium has a large fleshy perennial root, somewhat like that of Bryony The stems are thick, rough, trailing, branching, with rough leaves on long footstalks The fruit is an inch and a half in length, swelling like a cucumber, of a grey color like the leaves, and covered with short prickles When fully ripe, it quits the peduncles, and casts out the seed and juice with great force and to a considerable distance through the hole in the base, where the footstalk is inserted For medicinal use, the fruit is gathered in September, just before it is ripe, and the clear juice which runs from it and that obtained by the expression of the fruit are inspissated, and form the elaterium of the shops This fruit is a very violent cathartic It was much employed by the ancients, who regarded every part of the plant as purgative, but Dr. Clutterbuck has proved that this is an error (*Thomson's Lond Disp* 388.)

M balsamina has a fleshy ovate fruit, remotely tubercled in longitudinal rows, smooth in the other parts, red when ripe, bursting irregularly, and dispersing the seeds with a spring This fruit in Syria is famous for curing wounds They cut it open when unripe, and infuse it in sweet oil, exposed to the sun for some days, until the oil is become red It may then be applied to a fresh wound dropped on cotton M operculata has a green fruit, the top of which falls off when it is ripe like a lid, within it has no pulp, but is dry, and filled with netted fibres, very much interwoven

2021 *Cucurbita* A Latin word signifying a vessel It is said to be derived from the Celtic *cucc*, a hollow thing C lagenaria has a fruit shaped like a bottle, with a large roundish belly, and a neck very smooth, when ripe of a pale yellow color, some near six feet long and eighteen inches round, the rind becoming hard, and being dried contains water, seeds quadrangular oblong, cut off and emarginate at top, three-cornered and beaked at bottom, edge keeled with a double raised line, smoothish, of a pale bay color The Arabians call the bottle gourd *Charrah* The poor people eat it boiled, with vinegar, or fill the shell with rice and meat, and thus make a kind of pudding of it It grows in all parts of Egypt and in Arabia, wherever the mountains are covered with rich soil In Jamaica, the shells are generally used for water cups, and frequently serve for bottles among the negroes and poorer sort of white people in the country A decoction of the leaves

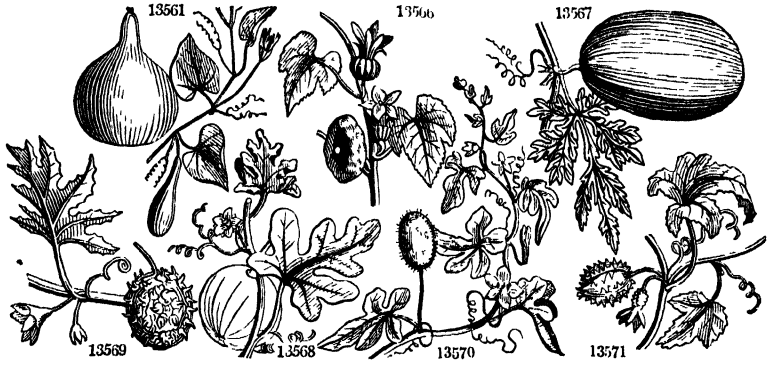
13550 Branches compressed, Lvs imbricated in 4 rows lanc acute appressed warted under end, Cones 4-cornered
13551 Branches round, Leaves imbricated in 4 rows oblong appressed smooth, Cones 4-cornered roundish

13552 Fruit rounded oblong incurved, Leaves cordate repand mucronate toothletted
13553 Fruit ovate acute, Leaves roundish cordate angular repand
13554 Fruit oblong acute, Leaves 5-lobed palmated entire

13555 Fruit roundish ovate narrowed at each end angul warted, Bract cordate toothed above midd of pedunc
13556 Fruit oblong acuminate angular warted, Bract cordate entire below the middle of the peduncle
13557 Fruit elliptical angular warted beaked, Beak deciduous forming a lid
13558 Fruit cylindrical oblong, furrows chain-like, Bract cordate entire at the base of the peduncle
13559 Fruit elliptical hispid, Leaves cordate hispid blunt toothed, Stem without tendrils

13560 Leaves cordate angular 5-lobed toothletted downy, Fruit obovate striped with lines lengthwise
13561 Leaves cordate roundish obtuse downy toothletted with 2 glands at base beneath, Fruit woody clavate
13562 Leaves subcordate about 3-lobed cuspidate finely toothletted rough, Fruit globose smooth
13563 Leaves cordate obtuse about 5-lobed toothletted, Fruit roundish or oblong smooth
13564 Leaves cordate deeply 5-lobed the middle lobe narrowed at base, Fruit roundish elliptical warted
13565 Leaves cordate deeply 5-lobed middle lobe narrowed at base toothletted, Fruit clav ellipt somew warted
13566 Leaves cordate obtuse about 5-lobed toothletted, Fruit depressed umbonate tumid at edge
13567 Leaves 5-lobed, Lobes sinuate pinnatifid blunt, Fruit elliptical smooth

13568 Leaves multifid, Fruit globose smooth
13569 Leaves cordate 5-lobed toothletted blunt, Fruit globose spiny muricated
13570 Leaves palmate sinuated, Fruit round echinate
13571 Fruit oval echinate, Leaves palmate sinuated, Stem angular



and Miscellaneous Particulars

is recommended much in purging clysters, and the pulp of the fruit is often employed in resolutive poultices: it is bitter and purgative, and may be used instead of Coloquintida

C. pepo, *Pattison* Fr., has hispid branchy tendril stems, which in good soil will extend forty or fifty feet in a season, and cover an eighth part of an acre. The fruit is oblong, ovate, varying in form and size, some not less than four feet in circumference. In some parts of England the pompion (corruptly pumpkin) is sometimes planted by cottagers on dunghills, and suffered to trail at length over the grass of an orchard. When the fruit is ripe, they cut a hole on one side, and having taken out the seeds, fill the void space with sliced apples, adding a little sugar and spice, and then, having baked the whole, eat it with butter, under the name of pumpkin pie. On the continent the fruit, both unripe and ripe, is used in soups, stews, and fried in oil or butter. The tender tops of the shoots boiled as greens are much more delicate than the fruit. C. aurantia is more tender than the common pompion. The fruit is small, round, of a bright yellow when ripe, and may be used like those of the other species. C. verrucosa has a small round fruit, with a woody rind. In America it is gathered when half grown, and boiled to eat as a substitute for greens, but for this purpose this and most of the species are inferior to the succade Gourd.

C. melopepo, *Patiron*, Fr., *Pfeifen Kurbis*, Ger., and *Popone*, Ital., has a large fruit, reddish yellow or yellowish-white within and without, roundish, but often flatted at top and bottom, torulose, and sometimes warted. It is cultivated in America as a culinary vegetable. C. Citrullus, *Pastèque*, Fr., *Wassermelone*, Ger., and *Cocomero*, Ital., is readily distinguished from all the other species by its deeply cut leaves. The fruit is roundish, large, smooth, often a foot and a half in length, with a white icy flesh, streaked with dark red and black seeds. It is much cultivated in the warm countries of Europe, and also in Asia, Africa, and America, for its cooling quality. It serves the Egyptians for meat, drink, and physic. It is eaten in abundance during the season, which is from the beginning of May until the overflowing of the Nile, that is, to the end of July or beginning of August. It is the only medicine the common people use in ardent fevers. For this purpose they have a variety that is softer and more juicy than the common sort: when this is very ripe, or almost putrid, they collect the juice, and mix it with rose-water and a little sugar. This fruit should be eaten by Europeans with great caution, when taken in the heat of the day, whilst the body is warm, colics and other bad consequences often ensue, and it is well known that persons are much troubled with worms at the time this fruit is in season.

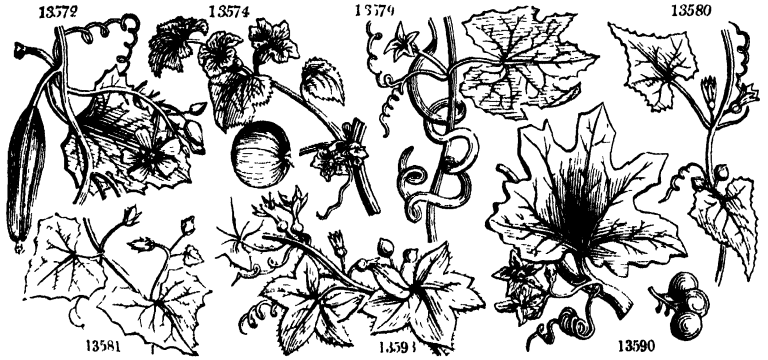
The Succade Gourd, a variety of C. ovifera, has an elliptic oblong pale-yellow fruit, by far the best for culinary purposes of any species of the genus. When very young, it is good fried with butter, when about half grown, it is excellent either boiled as a substitute for greens, or stewed in slices with rich sauce, when full grown, it is used for pies. Sabine, who has cultivated most species of Cucurbita, considers the vegetable marrow without a rival (*Hort. Trans.* vol. ii. 255.)

All the species may be raised on a hot-bed in April, and transferred to the open garden at the end of May, under a warm aspect and in a rich soil, or they may be sown in a trench filled with hot dung, where they are finally to remain. Their after culture is of the easiest description.

It is not very generally known, that the tender tops of all the species of the Cucurbita and Cucumis families, whose fruit may be eaten, when boiled form a very tender substitute for greens.

2022. *Cucumis*. A word with the same derivation as the last. C. Colocynthis has fruit the size and color of orange, the pulp light, spungy, and white, and most intolerably bitter. When ripe, it is peeled and dried in a stove, and in this state it is imported from the Mediterranean under the name of coloquintida. Medicinally, it

13572 **acutángulus** *W.*	acute-angled	✱ ○	or	2	jn s	Y	India	1692.	S	co	Jac vin 3 t.73,74
13573 **Mélo** *W*	Melon	✱ ◯	cul	4	my s	Y	.....	1570	S	r m	Sabb hort. t 65
13574 **Dudáim** *W*	Apple-shaped	✱ ◯	or	6	jl au	Y	Levant	1705	S	r.m	Bot rep 548
13575 **Cháte** *W*	hairy	✱ ◯	or	3	jn	Y	Levant	1759	S	co	Alp ægypt t.117
13576 **pubéscens** *W*	pubescent	✱ ◯	or	3	jn s	Y	.....	1815.	S	co	
13577 **sativus** *W*	common	✱ ○	cul	4	jl s	Y	E Indies	1573.	S	r m	Sabb hort t 63
13578 **flexuósus** *W*	Snake	✱ ◯	or	6	my s	Y	E. Indies	1597	S	r m	Ger.herb 763 t 3
13579 **anguinus** *W*	Serpent	✱ ◯	or	6	my s	Y	E. Indies	...	S	r m	Rumph 5 t. 148
13580 **maderaspátanus** *W*	Madras	✱ ◯	or	3	jl au	Y	E. Indies	1805	S	co	Pluk al t 170 f 2
2023 SICYOS *W*	SINGLE-SEEDED CUCUMBER				*Cucurbitaceæ*	*Sp* 2—6					
13581 **angulàta** *W*	angular-leaved	⚹ ○	cul	3	jl s	Y	N Amer	1710	S	co	Plu.phyt t 26 f 4
13582 **vitifolia** *W*	Vine-leaved	⚹ ○	cul	3	jl s	Y	.....	...	S	co	
2024 BRYO'NIA *W*	BRYONY				*Cucurbitaceæ*	*Sp* 18—42.					
13583 **scábra** *W*	globe-fruited	⚹ △	un	6	s o	W G	C G H	1774	C	p l	
13584 **trilóba** *W*	three-lobed	⚹ △	un	6	s o	W G	C G H	1825	C	p l	
13585 **verrucósa** *W.*	rough	⚹ △	un	4	...	W G	Canaries	1779.	D	co	
13586 **grándis** *W*	great-flowered	⚹ △	un	8	my au	W G	E Indies	1783.	C	p l	R.am 5 t 166 f 1
13587 **epigæ'a** *W*	umbel-flower'd	⚹ △	un	2	...	W G	E Indies	1815	D	co	
13588 **scabrélla** *W*	bristly	⚹ △	un	2	my jl	W G	E. Indies	1781	D	co	
13589 **latebrósa** *W*	hairy	⚹ △	un	3	jn	W G	Canaries	1779	D	co	
13590 **dioica** *W*	red-berried	⚹ △	m	8	my s	W G	Britain	hed.	D	co	Eng bot 439
13591 **álba** *W*	black-berried	⚹ △	m	8	jn jl	W G	Europe	1807	D	co	Lam ill t. 796
13592 **nítida** *Lank*	shining	⚹ △	un	3	jl s	W G	. ..	1824	S	co	
13593 **crética** *W*	Cretan	⚹ △	un	1½	jl s	W G	Candia	1759.	D	co	An mus 12 t. 17
13594 **quinquéloba** *Th*	five-lobed	⚹ △	un	3	jn o	Br	C G H	..	D	co	Bot reg 82
13595 **ficifólia** *W*	Fig-leaved	⚹ △	un	3	..	W G	Buen Ay	1726	D	co	Dill elt t.50 f 58
13596 **palmáta** *W*	palmated	⚹ △	un	4	jl au	W G	Ceylon	1778	D	co	
13597 **laciniósa** *W*	lacinated	⚹ △	un	4	jl au	W G	E Indies	1710	D	co	Herm lugd t.97
13598 **africána** *W*	African	⚹ △	un	4	jl au	W G	C G H	1759	D	co	Herm par t 708
13599 **dissécta** *W*	smooth-leaved	⚹ △	un	3	jl au	W G	C G H.	1710	C	p l	
2025 ANDRACH'NE. *W*	BASTARD ORPINE				*Euphorbiaceæ*	*Sp* 1—2					
13600 **telephioides** *W*	annual	○	w	½	jl au	W	Italy	1732	S	co	Lam ill t 797
2026 STILLIN'GIA *W*	STILLINGIA				*Euphorbiaceæ*	*Sp* 3					
13601 **sylvática** *W*	wood	⚸ △	un	2	jl au	Y	Carolina	1787	C	s p	
13602 **ligustrina** *W*	Privet-leaved	⚹	un	5	..	Y	N Amer	1812	C	s p	
13603 **sebífera** *W*	Tallow-tree	✱ □	ec	10	s	Y	China	1703	C	s p	Plu am t 390 f 2
*2027 PHYLLAN'THUS *W*	PHYLLANTHUS				*Euphorbiaceæ*	*Sp* 16—60					
13604 **obovátus** *W*	annual	○	un	⅔	jl au	Ap	N Amer	1803	C	s p	
13605 **maderaspatènsis** *W*	Madras	✱ □	un	3	jl	Ap	E Indies	1783	C	s p	
13606 **grandifólius** *W.*	great-leaved	✱ □	un	5	...	Ap	America	1771	C	s p	
13607 **virósus** *W*	venomous	✱ □	pr	4	...	G	E Indies	1802	C	s p	
13608 **turbinátus** *B M*	shining-leaved	✱ □	pr	2	jl	G	China	...	C	s p	Bot mag 1862
13609 **reticulátus** *Hort*	netted	✱ □	pr	3	au s	R	E. Indies	...	C	s p	Bot cab 116
13610 **fraxinifólius** *Hort*	Ash-leaved	✱ □	pr	4	au s	G	E Indies	1819	C	s p	Bot cab 839
13611 **mimosoides** *W*	Mimosa-like	✱ □	pr	10	au s	G	Caribbees	1817	C	s p	Bot cab 721
13612 **Conámi** *W*	Brazilian	✱ □	pr	6	jl	G	W Indies	1791	C	l p	Aub gui 2 t 354
§13613 **racemósus** *W*	racemed	✱ □	pr	1½	jl au	G	E Indies	1793	C	s p	
13614 **Niruri** *W*	Indian annual	▣	pr	½	jn s	G	E Indies	1692	S	s p	Rhe mal 10 t 15
13615 **polyphýllus** *W*	many-leaved	✱ □	pr	5	jl s	G	E. Indies	1805	C	s p	
§13616 **E'mblica** *W*	shrubby	✱ □	pr	12	...	G	E. Indies	1768	C	s p	Bot cab 548



History, Use, Propagation, Culture,

is a very powerful drastic cathartic, requiring to be employed with caution, on account of its violent effects When given alone, even in moderate doses, it purges vehemently, producing violent gripings, bloody ejections, and not unfrequently convulsions and inflammations of the bowels (*Thom Lond Dis* p 271)

C. **sativus** and Melo (μῆλον, an apple) are too well known to require farther notice in a work of this description. C anguria has hispid angular stems, and small flowers like those of Bryony The fruit is of the size and shape of a pullet's egg, of a dark-green color, and prickly like a hedgehog It is eaten green, or with other herbs in soups in the West India Islands, and is esteemed an agreeable and wholesome ingredient C prophetarum has a striped fruit smaller than a melon, the odor nauseous, and the taste as bitter as Coloquintida The fruit of C acutangulus is very insipid, but in India is eaten boiled and pickled C Chate has a roundish fruit almost like that of the melon, the taste is somewhat sweet and cool, but not so cool as the water melon In Egypt it is eaten as the most pleasant fruit they have, and that from which delicate persons have least to apprehend The culture of all the species is similar to that of the common cucumber

2023 *Sicyos* Σικυος was one of the Greek names of the cucumber, from σικυος, unpleasant The species are trailing plants like those of Cucumis, but with much smaller fruits

2024. *Bryonia* From βρυω, to push or grow rapidly, in allusion to the manner of its growth B alba and dioica, differ in little else besides the color of the berries, and by some are considered one species Goats are

13572 Leaves roundish angular, Fruit with 10 acute angles
13573 Angles of leaves rounded, Fruit torulose
13574 Angles of leaves rounded, Fruit spherical with a retuse nipple
13575 Hirsute, Angles of leaves entire toothed, Fruit fusiform narrowed at each end hairy
13576 Leaves cordate subangular acutish finely toothed scabrous, Fruit elliptical blunt downy
13577 Angles of leaves straight, Fruit oblong rough
13578 Leaves angular somewhat lobed, Fruit cylindrical furrowed curved
13579 Leaves lobed, Fruit cylindrical very long smooth doubled up
13580 Leaves cordate entire toothletted, Fruit globose smooth

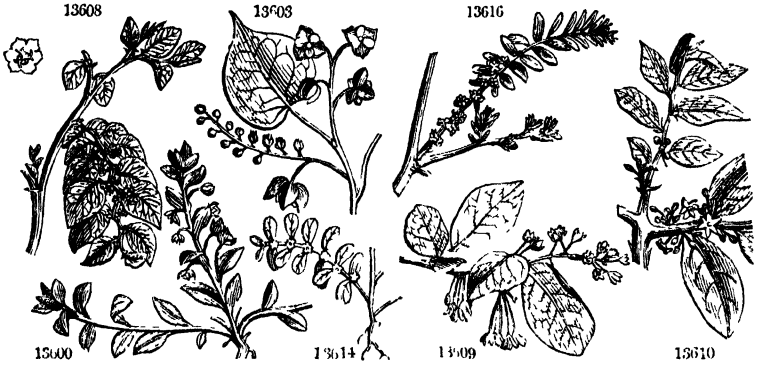
13581 Leaves cordate with an obtuse angle, 5-angular toothletted smooth
13582 Leaves roundish-cordate with a recess 5-lobed toothed hairy viscid

13583 Leaves cordate angular toothed rough with callous dots above and hairs beneath, Fl in umbels
13584 Leaves 3-lobed smooth above rough beneath
13585 Leaves cordate angular above and the veins beneath covered with callous dots, Tendrils simple
13586 Leaves cordate angular entire smooth with callous dots above and 5 glands at the base beneath
13587 Leaves 3-lobed rough toothed, Lateral lobes angular somewhat 2-lobed, Fl axillary somewhat umbellate
13588 Lvs 3-lobed toothed hispid on each side, Lat lobes dilated angular middle elong Stem muricato-hispid
13589 Leaves somewhat 3-lobed hairy narrowed at base
13590 Leaves cordate palmate 5-lobed toothed with callous dots, Fl racemose dicœcious
13591 Leaves cordate 5-lobed toothed rough with callous dots, Flowers racemose
13592 Leaves cordate 5-lobed apiculate hairy, Peduncles in umbels
13593 Leaves cordate 5-lobed entire with callous asperities on each side
13594 Leaves 5-lobed toothletted scabrous above, Peduncles 1-flowered
13595 Leaves 5-lobed somewhat toothletted, Lobes obtuse, Petioles and stem hispid
13596 Leaves palmate smooth 5-parted segments lanceolate repand serrated
13597 Leaves 5-parted palmate, Segm oblong lanc acuminate serrated, Petioles muricated, Peduncles 1-flowered
13598 Upper leaves 5 parted palmate, Segments oblong cut-toothed lower cordate angular toothed
13599 Lvs 5-parted palmate, Segm pinnatifid linear revolute at edge rough, Flowers in umbels, Berries acute

13600 Procumbent herbaceous

13601 Leaves sessile oblong blunt narrowed at base serrulate, Stem herbaceous
13602 Leaves petiolate lanceolate narrowed at each end entire, Stem shrubby
13603 Leaves stalked rhomboid acuminate entire, Stem arborescent

13604 Leaves obovate bluntish, Flowers twin axillary stalked, Stem branched round erect
13605 Leaves lanceolate cuneate blunt mucronate, Flowers solitary stalked axillary, Stem shrubby branched
13606 Leaves ovate-oblong blunt mucronate, Flowers axillary in threes, Branches compressed 3-cornered
13607 Leaves elliptical ovate blunt narrowed at base, Fls axillary aggregate dicœcious, Branches square compr
13608 Leaves simple orbicular-ovate lucid, Flowers axillary · male turbinate nodding
13609 Leaves oblong obtuse netted with red veins beneath, Flowers racemose and fasciculate
13610 Leaves elliptical acute at each end, Stipules ovate acute as long as petiole, Flowers fascicled
13611 Lvs pinn flower-bearing leaflets oblong attenuated at base and narrower on one side, Fls axill aggreg
13612 Lvs ovate acute, Fls axill somew umbelled, Pedunc filiform with 2 bractes at base, Branchlets compr
13613 Leaves lanceolate acute, Flowers terminal about 3, Branches pinnæform 2-edged
13614 Lvs pinn fl bearing leaf elliptical obtuse, Pedunc axill lower usually twin and male, upp solit fem
13615 Lvs pinn fl bearing leaflets linear obtuse mucronate, Flowers axillary solitary, the female uppermost
13616 Leaves pinnate fl bearing leaflets linear sharpish, Flowers axillary clustered, Petioles round downy



and Miscellaneous Particulars

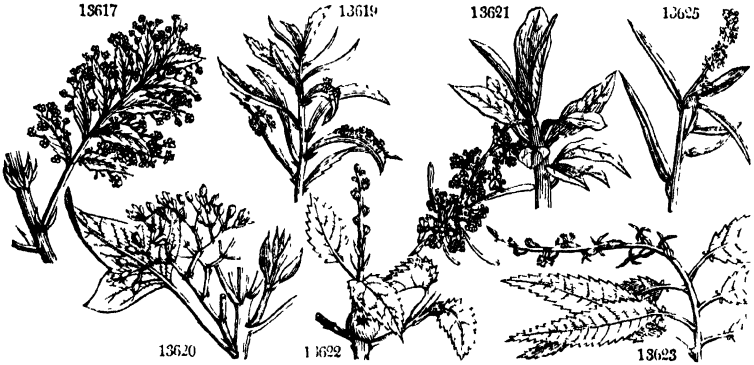
the only quadrupeds said to eat this plant The root grows to a vast size Gerarde says, "the queene's chiefe chirurgeon, Master William Goodorous, shewed me a roote hereof, that waied halfe an hundred waighte, and of the bignesse of a childe of a yeere old" To this Linnæus ascribes the quickness of its growth, though it springs late The roots have been formerly by impostors brought into an human shape, carried about the country, and shewn for mandrakes to the common people The method which these people practised, was to open the earth round a young thriving Bryony plant, being careful not to disturb the lower fibres of the root, to fix a mould such as is used by those who make plaster figures close to the root, fastening it with wire to keep it in its proper situation, and then to fill in the earth about the root, leaving it to grow to the shape of the mould, which is effected in one summer. This root is a famous hydragogue, and highly purgative and acrid

2025 *Andrachne* The Greek name of the Purslane The modern plant bears some analogy to that of the Greeks, in its thick and fleshy leaf Plants of little beauty, and the easiest culture.

2026 *Stillingia* Named after Dr Benjamin Stillingfleet, an English botanist S Sebifera is the tallow-tree of China An oil is expressed from the kernel, which hardens by cold to the consistence of common tallow, and by boiling becomes as hard as bees' wax Stillingia sylvatica is considered a specific in cases of syphilis

2027 *Phyllanthus.* From φυλλον, a leaf, and ανθος, a flower, because the flowers grow upon the edges of the

§13617	*latifólius W en.* *Xylophýlla latifolia* W	Sea-side Laurel	♣	▭	pr	2	au o	R	Jamaica	1783	C	s p	Bot mag 1021	
§13618	angustifólius *W en*	narrow-leaved	♣	▭	pr	2	jl au	R	Jamaica	1789	C	s p		
§13619	falcátus *W en*	sickle-leaved	♣	▭	pr	2	jl au	R	Bahama I.	1699	C	s p	Bot rep. 331	
2028	ALEURI'TES *W*	Aleurites.					*Euphorbiaceæ* *Sp* 1—4							
13620	triloba *W*	three-lobed	♀	▭	ft	10	..	Ap	Society Is	1793	S	r m		
2029	OMPHA'LEA *W*	Omphalea					*Euphorbiaceæ* *Sp* 1—3							
13621	triándra *W*	long-leaved	♀	▭	or	15	jn jl	G	Jamaica	1763	C	p l	Bot cab. 519	
2030	HIPPO'MANE *W*	Manchineel.					*Euphorbiaceæ* *Sp* 1							
13622	Manchinélla *W*	common	♀	▭	p	80	...	G	W Indies	1690	L	r m	Jacq amer t 159	
2031	SA'PIUM *W*	Sapium					*Euphorbiaceæ* *Sp* 1—4							
13625	aucupárium *W*	two-glanded	♀	▭	or	30	.	G	W Indies	1692	C	p l	Jac amer t 158	
*2032	CRO'TON *W*	Croton					*Euphorbiaceæ* *Sp* 20—118							
13624	variegátum *W*	variegated	♣	▭	or	10	..	W G	E Indies	1804	C	p l	Rhee mal 6 t 61	
13625	lineáre *Jac*	rosemary-leav	♣	▭	pr	6	jl	W G	W Indies	1733	C	p l	Bot cab 481	
13626	maritimum *W*	sea-side	♣	▭	un	4	.	W G	Carolina	1786	S	co		
13627	palustre *W*	marsh		▭	un	3	jl au	W G	Vera Cruz	1731	C	p l	Mart dec 4 t 38	
13628	glabéllum *W*	Laurel leaved	♣	▭	or	6		W G	Jamaica	1778	C	p l	Slo ja 2 t 174, f 2	
§13629	tinctorium *W*	officinal		○	dy	3	jl	W G	S Europe	1570	C	p l	Act p 1712 t 17	
13630	argénteum *W*	silver-leaved		▭	un	2	jl au	W G	S Amer	1733	S	co		
13631	Tíglium *W*	purging	♣	▭	m	10	au s	W G	E Indies	1796	S	co	Rhee mal 2 t 13	
13632	Eleutéria *W*	Seas de Balsam	♣	▭	m	6	.	W G	Jamaica	1748	C	l p		
13633	micans *Sw*	glittering	♣	▭	un	3	.	W G	Jamaica	1810	C	l p	Pluk al t 220 f 5	
13634	pungens *W*	pungent	♣	▭	un	4		W G	Carolina	1791	C	l p	Jac ic 3 t 622	
13635	penicillátum *W*	pencilled	♣	▭	un	4	jl au	W G	Cuba	1799	C	l p	Bot cab 440	
13636	aromáticum *W*	aromatic	♣	▭	un	6		W G	Ceylon	1793	C	p l	Rumph am 3 t 126	
13637	humile *W*	humble	♣	▭	un	2	.	W G	Jamaica	1799	C	p l		
13638	moluccánum *W* *Aleurites ambinux* P S	Molucca	♣	▭	un	10		W G	Ceylon	1803	C	p l		
13639	Astroites *W*	woolly	♣	▭	un	6	jl au	W G	W Indies	1782	C	p l		
13640	lobátum *W*	various-leaved		▭	un	2	jl au	W G	Vera Cruz	1730	S	co	Mart dec 5 t 46	
13641	pictum *Roxb*	painted	♣	▭	or	4	jl au	W G	E Indies	1810	C	p l	Bot cab 870	
13642	tomentósum *Link*	downy	♣	▭	un	2	my jn	W G	....	1824	C	co		
*2033	JA'TROPHA *W*	Physic-Nut					*Euphorbiaceæ* *Sp* 9—51							
13643	napæifólia *W*	Napæa-leaved	♣	▭	un	3	jn au	G	Antilles	1825				
13644	gossypifólia *W*	Cotton-leaved	♣	▭	or	3	my au	G	W Indies	1690	S	l p	Bot cab 117	
13645	integérrima *W*	spicy	♣	▭	or	3	my au	R	Cuba	1809	S	r m	Bot mag 1454	
13646	pandurælólia *W*	fiddle-leaved	♣	▭	or	4	my au	S	Cuba	1800	S	r m	Bot mag 604	
13647	Cúrcas *W*	angular-leaved	♣	▭	or	4		G	S Amer	1731	S	r m	Jac vind 3 t 6	
13648	multífida *W*	multifid	♣	▭	or	3	m au	G	S Amer	1690	S	r m	Pat lond 91	



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leaves Many of the species of this genus are remarkable for the neatness of their foliage and general aspect The abolished genus Xylophylla, which is now included in Phyllanthus, is very generally cultivated on account of the pretty and at the same time singular appearance of its leafless leaf-like branches, covered over at the edges with multitudes of pink flowers All the species require common stove culture

2028 *Aleurites* From αλευρον, flour, all the parts of the plant seeming to be dusted with a farinaceous substance A handsome plant of easy culture, and ripe cuttings with their leaves untouched, root in sand under a hand glass

2029 *Omphalea* A curtailment of Omphalandria, a name under which Dr Patrick Browne, in his History of Jamaica, first described the plant He formed it from ομφαλος, a navel, and ανηρ, a stamen, because the male organs are collected in a fleshy navel-like mass occupying the centre of the flowers. It grows freely in light loamy soil, and cuttings, with their leaves uninjured, root in sand under a hand-glass

2030 *Hippomane* From ἱππος, a horse, and μανια, madness, the name was given by the Greeks to a plant which grew in Arcadia, and which possessed the dangerous property of making horses furious This Hippomane must not, however, be confounded with that of Virgil (third Georgic), which is an animal substance

The Manchineel-tree grows to a vast size on the sea coast of the Caribbee Islands and neighbouring continent The leaves are ovate, serrated, acute, and very shining The fruit fall off from the tree spontaneously, and pave all the ground with their numbers They are highly poisonous, and are said to be eaten by the sea-crabs, which collect about the trees in vast numbers But this is supposed by Jacquin to be a vulgar error. The whole tree abounds with a white milk, which is highly poisonous, and so very caustic, that a single drop placed upon the skin instantly causes the sensation of a hot iron, and in a short space raises a blister It is a common belief that to sleep beneath the branches is death, but Jacquin and his companions reposed under it for three hours at a time without inconvenience The wood is a most beautiful material for furniture, being finely variegated with brown and white, and susceptible of a high polish. The workmen who fell the trees, first kindle a fire around the stem, by which means the juice becomes so much inspissated as not to follow the blows of their axes Whole woods on the sea-coast of Martinique have been burnt, in order to clear the country of such a dangerous pest

13617 Leaves pinnate lanceolate acuminate subcrenate coriaceous, Flowers stalked

13618 Leaves pinnate linear-lanceolate lined crenate, Flowers stalked hermaphrodite
13619 Leaves scattered linear-lanceolate subfalcate crenate, Flowers subsessile

13620 Leaves 3-lobed

13621 Leaves oblong blunt very smooth, Flowers triandrous, Stem arborescent

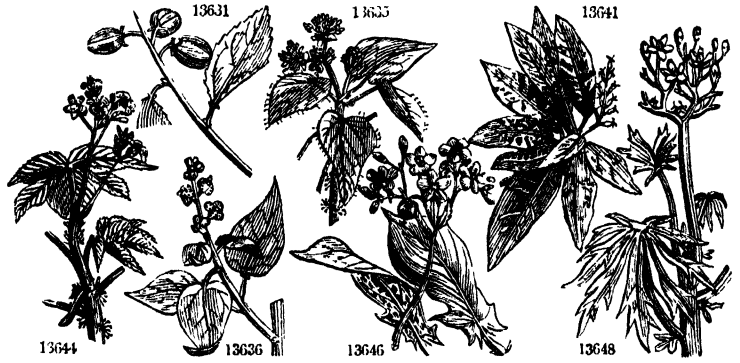
13622 Leaves ovato-serrated

13623 Leaves oblong acuminate serrulate, Petioles with 2 glands at the end

13624 Leaves lanceolate entire smooth variegated stalked
13625 Leaves linear entire stalked downy beneath
13626 Leaves elliptical entire bluntish hoary downy beneath stalked, Spikes terminal few-flowered
13627 Leaves ovate lanceolate plaited serrated scabrous
13628 Leaves ovate bluntish entire smooth, Fruit stalked
13629 Leaves ovate rhomboid repand entire at base hoary on each side, Peduncles terminal about 3-fl
13630 Leaves ovate serrated at end hoary downy beneath, Stipules ciliated, Spikes terminal subcapitate bracteate
13631 Leaves ovate acuminate serrated smooth with 2 glands at base, Petioles shorter than leaf, Racemes term
13632 Leaves ovate acuminate entire smooth silvery with scales beneath Racemes comp axillary, Stem arborescent
13633 Leaves cordate ovate attenuate somewhat toothletted warted and green above, silvery and shining beneath
13634 Leaves cordate acuminate serrulate rough above downy beneath with 4 glands at the base
13635 Leaves round cordate acuminate glandular-ciliated downy beneath, A fascicle of stalked glands at base of leaves
13636 Leaves oblong subcordate serrulate scabrous downy beneath with 2 glands at the base, Raceme terminal
13637 Leaves ovate acute subcordate entire scabrous above downy beneath
13638 Leaves subcordate angular blunt repand scabrous downy beneath

13639 Leaves oblong subcordate scabrous downy beneath and with 2 glands at base, Branches densely downy
13640 Leaves 3-5-lobed serrated with hairy petioles, Stem herbaceous
13641 Leaves oblong-lanceolate obtuse at base variegated and stained with red, Spikes axillary suberect
13642 Downy, Leaves cordate roundish blunt repand greenish above hoary beneath

13643 Leaves palmate 7-lobed hispid beneath stinging lobes pinnatifid, Petiole with 1 gland at end
13644 Leaves cordate 5-lobed serrated fringed with glands, Branched glandular hairs in axillæ of leaves and petioles
13645 Leaves ovate acuminate entire very smooth, Racemes subcymose
13646 Leaves oblong subpanduriform acuminate entire angular at base with 2 teeth on each side
13647 Leaves cordate angular
13648 Leaves palmate 11-lobed smooth lobes pinnatifid cuneate, Stipules setaceous multifid



and Miscellaneous Particulars

2031 *Sapium* A name under which Pliny indicates a sort of pine, so named from the abundance of resin which it produces, from *sap*, fat or greasy in Celtic The Americans employ the juice of Sapium aucuparium as bird-lime, for catching parrots and other birds For this purpose they cut off a limb of the tree, and the next day collect the sap which has flowed out and become inspissated They call it *Mangle cautivo* The juice is also burned in lamps Cuttings root freely in sand under a hand-glass

2032 *Croton* The Greek name of a certain insect called *ricinus* by the Latins, which the fruit of Croton resembles

Croton Tiglium affords an oil used in medicine, which is so powerfully irritating, that a small drop placed upon the tongue, has the effect of exciting an irritation along the whole intestinal canal, which does not soon subside It is usually employed in mixture with oil of almonds, in order to weaken its too violent powers C. lineare in its general appearance resembles rosemary, and is called wild rosemary in Jamaica C tinctorium is used to dye both silk and wool of an elegant blue color, and the juice is used to color wines and jellies The substance for this purpose is called Turnsol, and is made of the juice which is lodged between the calyx and the seeds this, if rubbed on cloths, appears at first of a lively green, but soon changes to a blueish purple, if these cloths are put into water, and afterwards wrung, they will dye the water of a claret color, the rags thus dyed are brought to England, and sold in the druggists' shops by the name of Turnsol.

C Eleuteria furnishes the Cascarilla bark, which is chiefly imported from Eleutheria, one of the Bahama Islands It consists of pieces of about six or eight inches long, scarcely one-tenth of an inch thick, quilled, and covered with a thin whitish epidermis It has a pleasant spicy odor, and a bitter warm aromatic taste. It is very inflammable, and is easily distinguished from all other barks by emitting, when burnt and extinguished, a fragrant smell resembling that of musk Medically, this bark is a valuable carminative and tonic, and is an excellent adjunct to the Cinchona bark in fevers C lacciferum, a plant not yet in gardens, is one among several species on which the gum lac is said to be produced Some of the spines we are in possession of, are much admired for their variegated leaves all of them are freely propagated by cuttings with the leaves on, planted in sand, and plunged in moist heat under a hand-glass

2033 *Jatropha.* From ιατρεον, a remedy, and φαγω, to eat The J Manihot (*Manihoka*, Brazilian) or Cassa-

§13649 Mánihot *W* Cassava ♣ □ clt 3 jl au G S Amer 1739 S r m Sloan jam 1 t 85
13650 úrens *W* stinging ♣ □ or 3 my jl G Brazil 1690 S r m Bot cab 478
13651 herbácea *W* annual ⊠ un 1½ jl au G Vera Cruz 1759 S r m Reliq hou 6 t 15

2034 RI'CINUS *W* PALMA-CHRISTI *Euphorbiaceæ Sp* 9—10
13652 communis *W* Castor-oil plant ♃/m 6 jl au G E Indies 1548 S co Bot mag 2209
13653 víridis *H* green ♃/ or 6 au G E Indies 1802 S s p W hort ber 49
13654 africánus *W* African ♣ □ or 15 jl au G Africa ... S s p
13655 lívidus *W* livid-leaved ♣ □ or 8 jl Pu C G H 1795 S s p Jac ic 1 t 196
13656 inermis *W* smooth-capsul ♃ or 6 jl au Pu India 1758 S s p Jac ic 1 t 195
13657 armátus *B R* rough-capsuled ♃ or 6 jl s G Malta 1807. S s p Bot rep 430
13658 Tanarius *H* scollop-leaved ♃ or 4 jl s G E. Indies 1810. S s p Rum am. 3 t. 121

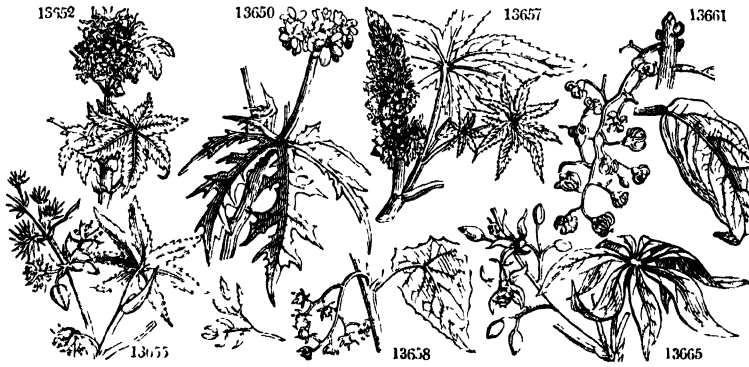
2035 HU'RA *W* SANDBOX-TREE *Euphorbiaceæ. Sp* 2
13659 crepans *H en* unequal tooth ♀ □ or 12 ... W I S Amer ... C l p
13660 crepitans *W en* equal toothed ♀ □ or 12 ... W I S Amer 1733. S p l Lam ill. t. 793

2036 STERCU'LIA *W* STERCULIA *Sterculiaceæ. Sp* 5—23
13661 Balánghas *W* coronet-flower ♀ □ or 20 jn s G E Indies 1787 Sk p l Bot reg 185
13662 crinita *W* hairy-capsuled ♀ □ or 20 ... G W Indies 1793 O p l Aub gui 2 t 279
13663 urens *W* stinging ♀ □ or 10 ... G E Indies 1793 O p l Rox cor 1 t 24
13664 platanifolia *W* Plane-tree-lvd ♀ □ or 30 jl G China 1757. S p l Cav diss 5 t. 145
13665 fœtida *W* fetid ♣ □ or 8 ... G E Indies 1690 S p l Rhee mal 4 t 36

2037 HERITIE'RA *W* LOOKING-GLASS PLANT .... *Sp* 1—2
13666 littorális *W* Laurel-leaved ♀ □ or 20 ... E Indies 1780 C p l Rhee mal 6 t 21

2038 ACA'LYPHA *W* ACALYPHA *Euphorbiaceæ Sp* 14—43
13667 virginica *W* Virginian ○ un 2 jl au G N Amer 1759 S co Sch han 3 t 311
13668 carolimána *W* Carolina ○ un 2 jl au G N Amer 1811 S co Lam ill t 789. f 2
13669 ciliáta *W* cilated ⊠ un 2 jl au G E. Indies 1799 S co Vah symb 1 t 20
13670 paucifiora *W en* few-flowered ○ un 2 jl au G China 1816 S co
13671 brachystáchya *H en* saw-leaved ○ un 2 jl au G China 1816 S co
13672 indica *H* Indian ⊠ un 2 jl s G E. Indies 1759 S co Rhe mal 10 t 81
13673 alopecuroidea *W* Fox-tail ○ un 2 jl s G Venezula 1804 S co Jac ic 3 t 620
13674 diversifolia *Jacq* various leaved ♣ □ un 2 G Caraccas
13675 integrifólia *W* entire-leaved ♣ □ un 5 jn s G Mauritius 1823 C co
13676 rubra *H* red ♀ △ un 1½ jl R ... 1820 C co
13677 híspida *W* hispid ⊠ un 3 jl au G E Indies ... S co
13678 cuspidáta *W.* cuspidate ♣ □ un 4 jn jl G Caraccas 1819 C co
13679 virgáta *W* virgate ♣ □ un 6 jn jl G Jamaica 1823 C co Bro jam t 36 f 2
13680 scabrosa *W* rough ♣ □ un 6 jn jl G Jamaica 1820 C co

2039 DALECHAMPIA *H* DALECHAMPIA *Euphorbiaceæ Sp* 1—17
13681 scándens *W* climbing ♣ □ un 12 jn jl G W Indies 1739 C l p Jac am 252 t 169



History, Use, Propagation, Culture,

root, yields an excellent nutritious article of food when the juice has been expressed, which is a strong poison J gossypifolia is considered a beneficial plant in the West Indies, on account of the seeds, which are much relished by and very nourishing to poultry J Manihot, the Cassava of the West Indies, and the Mandioca and Tapioca of Brazil, formerly supplied the greater part of the nourishment of the natives of South America, and is now very generally cultivated there and in the West Indies. It yields an agreeable wholesome food, is of rapid growth, the roots arriving to perfection in about eight months, and it will thrive in any soil or situation The juice of the root is sweetish, and when swallowed, or when the root is eaten without preparation, it brings on convulsions, and occasions violent retching and purging It acts only on the nervous system, it produces no inflammation on the stomach, but the stomach of a man or other animal poisoned by it, appears to be contracted one half A little mint-water and salt of wormwood, timely administered, will prevent all bad consequences In preparing the roots for use as food, they are washed, scraped, and grated to a pulp this pulp is then pressed, and when dried is a powder resembling starch or flower fit for use It is generally baked as bread, and bears a considerable resemblance to that made from wheat flour The roots entire, or in a powdered state, form an article of considerable export from different parts of Brazil All the species thrive well in our stoves, and are increased by cuttings, which Sweet states, succeed best when stuck in the tan in a good heat

2034 *Ricinus.* A name with the same derivation as Croton, No 2052, which see R communis, though an annual and herbaceous plant in our gardens, becomes a tree in Africa of several years' standing In Candia it continues many years, and, according to Belon, requires a ladder to come at the seeds The seeds furnish the well known Castor-oil of medicine This oil is obtained both by coction and expression The former method is performed by tying up the seeds, previously decorticated and bruised, in a bag, which is suspended in boiling water, till all the oil is extracted and rises to the surface, when it is skimmed off Oil so obtained is apt to become rancid, and, therefore, the better mode is to subject the seeds to the press, in the same manner as is done with almonds to procure almond oil (See Amygdalus) The oil obtained is equal to one fourth of the weight of the seeds employed It is often adulterated with olive oil, linseed oil, and poppy oil The great value of castor oil as a purgative is the mildness and rapidity with which it operates It is peculiarly adapted for infants,

13649 Leaves undivided 3-5-lobed palmate entire glaucous beneath
13650 Leaves 5-lobed cordate toothed hispid stinging
13651 Prickly, Leaves 3-lobed, Stem herbaceous

13652 Leaves peltate palmate lobes lanceolate serrated, Stem herbaceous frosted, Capsules prickly
13653 Lvs pelt. palm lobes oblong toothed, middle obsoletely 3-lobed, Stem herbaceous frosted, Caps prickly
13654 Leaves peltate palmate lobes oblong serrated, Stem shrubby smooth, Stigmas 6, Caps prickly
13655 Leaves peltate palmate colored lobes obl serrate-toothed, Stem shrubby smooth colored, Caps prickly
13656 Leaves peltate palmate lobes oblong serrated, Stem shrubby frosted, Capsules unarmed
13657 Leaves peltate deeply palmate 9 cut serrated, Petioles glandular, Caps. with herbaceous spines
13658 Leaves peltate ovate acuminate repand toothed, Caps prickly

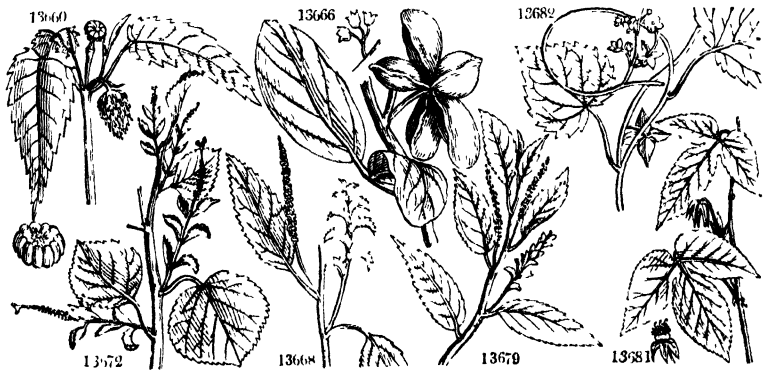
13659 Leaves ovate oblong slightly cordate toothed lower teeth long entire at end
13660 Leaves ovate deeply cordate equally serrate, Male catkin ovate

13661 Leaves ovate lanceolate, Capsules obovate
13662 Hermaphrodite, Leaves ovate entire, Flowers panicled decandrous, Caps smooth
13663 Leaves 5-lobed lobes acuminate, Calyxes campanulate, Caps ovate hispid
13664 Leaves palmate 5-lobed, Calyxes rotate reflexed
13665 Leaves digitate

13666 Leaves ovate simply veiny

13667 Female flowers at base of male spike, Involucre ovate acuminate toothed, Leaves obl lanc remotely toothed
13668 Fem fls at base of male spike, Involucre cordate toothed, Leaves subrhomboid ovate serrated entire at base
13669 Spikes axill male upwards female downw Involucre cordate acuminate with imbricated serratures ciliated
13670 Female flowers solitary or twin at base of the male spike, Involucre cordate serrate, Leaves rhomboid ovate
13671 Female flowers at base of the male spike without an involucre, Leaves roundish ovate subcordate serrated
13672 Spikes axill male above female below, Involucre smoothish serrated, Leaves ovate acum serr cuneate at base
13673 Female spike cylind solitary terminal, Involucre 3-parted awned ciliated, Leaves roundish-ovate acuminate
13674 Female flowers twin axillary, Involucres entire, Leaves ovate acuminate serrulate, Stem shrubby
13675 Flowers dioecious male spiked, female axillary, Involucre roundish entire, Leaves smooth lanc subcord
13676 Spikes male above, fem below, Involucre cuneiform toothed at edge, Styles multifid, Lvs obl subcord serr
13677 Spikes axillary male above, fem de below, Involucre cordate hispid, Leaves ovate acute hispid
13678 Male spikes axillary female at base, Involucre 0, Leaves ovate cordate acuminate serrated
13679 Spikes axillary erect, Female involucre cordate toothed very large, Leaves ovate-lanceolate serrated smooth
13680 Flowers dioecious spiked, Spikes axill Involucre of females cordate cut, Leaves obl lanceolate serrated smooth

13681 Leaves 3-lobed serrated lobes oblong serrated, Bractes 3-lobed ciliated, Petioles shorter than peduncle



and Miscellaneous Particulars.

women in childbed, and persons bed-ridden Sown in pots on heat early in the season, and transplanted as soon as the frosts are over into a mass of light rich soil, the plant makes one of the most magnificent of border annuals, often attaining the height of ten or twelve feet

2035 *Hura* Its American name Hura crepitans is a rapid growing tree. From the quickness of its vegetation, its parts are of so loose a texture, that a loud clap of thunder, or a sudden gust of wind, frequently causes the largest boughs to snap asunder The wood is only fit for joists and spars the sap of the leaves and bark is corrosive, and the seeds when roasted purge both upwards and downwards The species are propagated by large ripened cuttings, planted in sand, plunged in heat, and covered with a hand-glass Its fruit when ripe bursts with a loud crack, whence the specific name of crepitans, they are of a very elegant form, resembling a depressed sphere with many rounded ribs, arranged with the utmost symmetry

2036 *Sterculia* Sterculius was the god of the privy, from *stercus*, excrement. It has been well observed by a French author, that the Romans, in the madness of paganism, finished by deifying the most immodest objects and the most disgusting actions They had the gods Sterculius, Crepitus, Priapus, and the goddesses Cacu, Pertunda, &c &c The flowers of one species and the leaves of the other are highly fetid The species are lofty trees with large leaves, and some of them very showy flowers they all thrive in light loamy soil, and ripened cuttings, with their leaves on, root in sand, plunged in moist heat, and covered with a hand-glass The famous Cola nut of Guinea is the produce of S acuminata.

2037 *Brutera* Named in honor of Charles Louis L'Heritier de Brutelle, a distinguished French botanist, who was unfortunately assassinated in a street of Paris in 1800 He published many works, which will always have a high reputation for the excellence of their text, and the magnificence of their illustrations A fine tree, which may be treated like Sterculia.

2038 *Acalypha* A Greek name for the nettle, which this genus much resembles It is compounded of α, privative, καλος, beautiful, and αφη, touch Plants of no beauty and the easiest culture

2039 *Dalechampa* So called after James Dalechamp, a French botanist, born in 1513, died in 1588 He left a General History of Plants, and some commentaries upon Pliny May be treated as Plukenetia

2040 PLUKENE'TIA *W* PLUKENETIA *Euphorbiaceæ* *Sp* 1—5
13682 volúbilis *W.* twining ♀ □ un 6 jl au G W Indies 1739 C p l Plu. ic 220 t.226

History, Use, Propagation, Culture,

2040 *Plukenetia* Named after Leonard Plukenet, an English botanist, who published some valuable works, with an immense number of copperplates, of singular merit for their time The names of two of these works are so singular as to deserve explanation One was called Amaltheum botanicum This word in Greek, Αμαλθεια, was the name of the goat which suckled Jupiter As its milk was exquisite and abundant, the word came to signify, among the ancients, the symbol of richness and abundance. The famous library of Atticus was called Amaltheum, on account of the number and variety of the books which it contained. In



CLASS XXII. — DIŒCIA.

Male and female flowers upon different plants

To this class many of the observations made upon the last are equally applicable Like it, the genera would have been more conveniently distributed among previous classes. The genera it contains are chiefly trees, and many of them form the most valuable portion of the forests of all parts of the world

In Monandria is found the celebrated Pandanus or screw pine, which, with its strange spiral branches, constitutes one of the most singular features of the vegetation of the Isle of France Diandria contains the valuable Salix, Pentandria, the hop, the hemp, and the spinage The black Bryony, and various palms have a station in Hexandria, the poplar in Octandria, the Papaw and the Bonduc tree in Decandria Monadelphia is richly endowed with valuable trees, such as the yew, the Norfolk Island pine, the juniper, the nutmeg, and it also contains the wonderful pitcher-plant of China

Order 1 MONANDRIA  Stamen 1

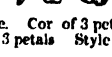
2041 *Pandanus* Male Cal. O. Cor O Anthers cuspidate. Female Cal. O. Cor O Style bifid Drupe compound or simple

Order 2 DIANDRIA.  Stamens 2

2042 *Salix* Barren fl Scales of the catkin single-flowered, imbricated, with a nectariferous gland at its base Perianth. O Stam 1-5 Fertile fl Scales of the catkin single-flowered Perianth O Stigmas 2, often cleft. Caps 1-celled, 2-valved, many-seeded Seeds comose

2043 *Cecropia* Male Spatha falling off Catkin cylindrical Cal turbinate 4-cornered scales Cor. O Female, as in the male Style 1 Stigma torn Ovaries imbricated Berry 1-seeded

2044 *Bonya* Male Cal. 4 leaved Cor O Stamens 2-3 Female Stigma capitate Berry 1-seeded.

Order 3 TRIANDRIA  Stamens 3

2045. *Empetrum* Barren fl Cal. tripartite. Cor of 3 petals (7 in E. B.) Stam 3 (9 in E. B.), upon long filaments Fertile fl Cal tripartite Cor of 3 petals Style very short Stigma with 6-9 rays. Berry superior, globose, with 6-9 seeds

2046. *Willdenowia* Male Cal of many glumes Petals 6 Nectary fleshy, 6-parted, surrounding the corolla Female Ovary superior. Style 1 Stigmas 2-3 Drupe 1-seeded.

2047. *Restio* Spike imbricated Cal 6 equal glumes. Cor O. Female. Styles 2-3 Nut stony, 1-celled, 1-seeded.

2048. *Elegia.* Cal 6 unequal glumes Female Styles 3 Caps 6-celled. Seeds solitary.

13682 Angles of capsules compressed keeled

and Miscellaneous Particulars

this sense Plukenet applied it to a work in which a great variety of curious plants was assembled. The other work was called Almagestum This also came originally from the Greek Claudius Ptolomæus, an astronomer and mathematician, published about the middle of the second century a work on astronomy, called Συνταξις μαγιστη, which may be Englished "Great work" Ishac ben Honain translated it into Arabic at the beginning of the ninth century, by order of the Caliph Mahmoun, to its title he added the Arabic article *Al*, and so formed the word *Al-magesti* or *Almaghesti*

2049 *Phœnix* Cal 3-parted Petals 3 Ovary 1 Drupe ovate-oblong.
2050 *Stilago* Male Cal tubular, 3-4-toothed Cor. 0 Stamens 2-3 Female, an annular disk at the base of the ovary Stigmas 2, one bifid Drupe 1-seeded.
2051. *Osyris* Male Cal. 3-fid. Cor 0. Female Style 1 Stigma roundish Berry 1-celled

Order 4. TETRANDRIA  Stamens 4

2052 *Aulax* Male Flowers racemose Cal. 0 Petals 4, staminiferous. Female Stigma oblique Nut exserted, ventricose, bearded
2053 *Leucadendron.* Male. Flowers capitate Cal. 0 Petals 4, staminiferous. Female Stigma oblique Nut or samara 1-seeded, included in the scales of the cone
2054. *Viscum* Barren fl. Cal. 0 Petals 4, dilated at the base, connate, resembling a cal Anthers sessile, adnate with the petals Fertile fl. Cal submarginate Petals 4, dilated at the base Style 1 Drupe inferior, 1-seeded
2055 *Myrica* Barren fl Scales of the catkin concave Perianth. 0 Fertile fl Scales of the catkin concave Perianth 0 Styles 2 Drupe 1-celled, 1-seeded
2056 *Nageia* Cal 4-leaved. Cor 0 Style bifid Drupe 1-seeded
2057 *Shepherdia* Male flowers in a catkin, 8-androus Female racemose at the ends of the branches. Limb of calyx flat, regular, 4-parted Disk with 8 glands Fruit of Hippophae
2058 *Hippophae* Male flowers in a catkin, tetrandrous Female solitary in the axillæ of the leaves Calyx tubular, bifid at end, closed Disk 0 Fruit formed of a berried calyx and akenium
2059 *Broussonetia* Male A cylindrical catkin Cal 4-parted Female A globose catkin Cal tubular, 3-4-toothed Ovaries becoming fleshy, clavate, prominent Style lateral Seed 1, covered by the calyx
2060 *Schæffera* Cal 4-leaved Petals 4 or 0 Berry 2-celled Seeds solitary
2061 *Brucea* Male Cal 4-parted Petals 4 Disk 4-lobed Female Pericarps 4, 1-seeded
2062 *Anthospermum.* Male Cal 4-toothed Cor with a short tube, and 4-parted limb. Female. Ovary inferior Styles 2, reflexed Fruit bipartible
2063 *Trophis* Male Cal 0 Petals 4 Female Cal. 0 Cor 0 Style 2 parted Berry 1 seeded
2064 *Montinia.* Male Cal 4-toothed Petals 4 Female Style bifid Stigmas reniform. Capsule inferior, 2-celled, many-seeded

Order 5. PENTANDRIA  Stamens 5.

2065. *Pistacia.* Male Cal 5-fid Cor 0 Female Cal 3-fid Cor 0 Styles 5. Drupe 1-seeded
2066. *Xanthoxylum.* Male. Cal. 5-parted Cor 0 Stamens 3-5 Female. Ovaries 5. Caps. 3-5, one seeded
2067 *Picramnia.* Male Cal 3-5-parted Petals 3-5 Stamens 3-5 Female Styles 2. Berry 2-celled, 2-seeded
2068 *Antidesma* Male Cal 5-leaved Cor 0 Anthers bifid. Female Stigmas 5 Berry cylindrical, 1-seeded
2069 *Iresine* Male. Cal. 2-leaved. Petals 5 Scales 5-7 Female Stigmas 2, sessile. Caps. with downy seeds
2070. *Spinacia* Male. Cal. 5-parted. Cor 0 Female Styles 4 Seed 1, within the indurated calyx
2071 *Fluggea.* Male Cal. 5-leaved. Cor. 0 Rudiment of an ovary Female. Style 2-parted. Stigmas recurved, bifid. Berry 4-seeded Seeds with an arillus.
2072 *Acnida* Male. Cal. 5-parted. Cor 0. Female Cal 3-parted Styles 0 Stigmas 3, sessile. Caps 1-seeded.

2074 *Cannabis.* Male Cal 5-parted Female Cal 5-leaved, entire, opening at the side Styles 2. Nut 2-valved within the closed calyx
2074 *Humulus* Barren fl Perianth single, of 5 leaves Anthers with 2 pores at the extremity Fertile fl Scales of the catkin large, persistent, concave, entire, single-flowered. Perianth O Styles 2. Seed 1
2075 *Modecca* Cal 5-fid Petals 5, inserted in the calyx Scales 5-10, rarely O Male. Stamens 5. Anthers erect. Female Caps stalked, 1-celled, 3 valved, many-seeded.

Order 6. HEXANDRIA.  Stamens 6.

2076 *Xerotes* Cor 6-parted, somewhat colored Male. Stamens 6. Anthers peltate. Female Stamens abortive Ovary 3-celled, with 1-seeded cells Caps cartilaginous, 3-celled, 3-valved Seeds peltate
2077 *Elais* Cal 6-leaved Cor 6-fid Style 1 Stigmas 3 Drupe 1-seeded, fibrous Nut 3-valved
2078 *Chamædorea* Cal 3-parted Cor 3-parted Stamens 6 Rudiment of a style. Female Scales 3 Styles 3 Drupe succulent, 1-seeded
2079 *Borassus* Cal 3-leaved Cor hypocrateriform, with a 3-parted limb Female Cal 8-9-leaved, imbricated Cor O Style O Drupe with 3 stones
2080 *Maurstia* Cal cyathiform, somewhat 3 toothed Petals 3 Drupe 1-seeded, tessellated
2081 *Smilax* Cal 5-leaved Cor O Styles 3 Berry 3-celled Seeds 2
2082 *Tamus* Cal. 6-parted Cor O Styles 3-fid Berry 3-celled, inferior Seeds 2
2083 *Testudinaria* Perianth 6-parted, spreading: segments linear, nearly equal. Male Stamens 6, inserted in the base of the segments Female Styles 3, united Capsule membranous Seeds winged
2084 *Rajania.* Cal 6-parted Cor. O Styles 3 Samaræ 1-seeded
2085 *Dioscorea* Cal 6-parted Cor O Styles 3 Capsule 3-celled, compressed Seeds 2, membranous Leaves generally alternate
2086 *Maba* Cal 3-fid Cor tubular, trifid Drupe 2-celled Cells 2-seeded

Order 7 OCTANDRIA  Stamens 8.

2087 *Populus* Barren fl Scales of the catkin lacerated Anthers 8-30, arising from a turbinate, oblique, entire, single perianth Fertile fl Scales of the catkin lacerated. Perianth, turbinate, entire Stigmas 4 Caps superior, 2-celled, 2-valved, many-seeded Seeds comose

Order 8 ENNEANDRIA  Stamens 9.

2088 *Mercurialis* Barren fl Perianth single, tripartite Stam 9-12 Anthers globose, 2-lobed Fertile fl Perianth single, tripartite Styles 2 Caps 2-celled Cells 1-seeded
2089 *Hydrocharis* Barren fl Cal tripartite Petals 3, "the three interior filaments beaked" *Sm* Fertile fl Cal tripartite Petals 3 Styles 6, each with 2 stigmas Caps inferior, coriaceous, roundish, six-celled, many-seeded
2090 *Triplaris* Cal 3 parted Petals 3 Stamens 9 Styles 3 Capsule 1-seeded, 3-valved

Order 9 DECANDRIA.  Stamens 10.

2091 *Coriaria* Cal 5-parted Cor O Scales 5 Anthers 2-parted Styles 5 Caps 5, 1-seeded, covered by the enlarged scales
2092 *Kiggelaria* Cal 5-parted Petals 5, glands 5, 3-lobed Anthers perforated Styles 5 Capsule one-celled, 5-valved, many-seeded
2093 *Schinus* Cal 5-fid Petals 5 Berry 3-coccous
2094 *Gymnocladus* Cal 5-toothed. Petals 5 Style 1. Legumen 1-celled, pulpy inside
2095 *Carica* Male Cal hardly any Cor 5-fid, funnel-shaped Filam in the tube of the cor Female Cal 5-toothed Petals 5 Stigmas 5 Berry furrowed, 1-celled, many-seeded

Order 10 DODECANDRIA.  Stamens 12.

2096 *Stratiotes* Male Spatha 2-leaved Cal 3-parted Petals 3 Stamens 11-13, perfect, 20 abortive Ovary inferior, 6-angular Styles 6, 2-parted Berry 6-celled, many-seeded
2097 *Hyænanche* Cal 5-7-leaved Cor O Stamens 10-20 Style 1 Stigmas 3 Caps 3-celled, 3-coccous Cells 2-seeded
2098 *Euclea* Cal 5 toothed Cor 5-parted Stamens 15 Ovary superior Styles 2 Caps berried, 3-horned, 3-celled Seeds solitary, with an arillus
2099 *Datisca* Male Cal 5-leaved Cor O Anthers sessile Female Cal 2-toothed. Styles 3 Capsule 3-angular, 3-horned, 1-celled, pervious, inferior
2100 *Menuspermum* Male Cal. 2-leaved. Petals 4 or 6 on the outside, 8 inside Stamens 16. Female Stamens 8, sterile Ovaries 2-3 Berries 2, 1-seeded
2101 *Cocculus* Sepals and petals ternate, usually in two, rarely in three rows Male Stamens 6, distinct, opposite the petals Female Drupes berried, 1-6, generally oblique, reniform, somewhat compressed, 1-seeded Cotyledons distinct

Order 11 ICOSANDRIA.  Stamens numerous, inserted in the calyx

2102 *Flacourtia* Cal 5-parted Cor O Stamens 50-100 Stigma stellate, sessile Berry many-celled, with 2-seeded cells
2103 *Peumus* Male Cal campanulate, 5-fid Petals 5, inserted in the calyx, reflexed Stamens about 46, glandular. Female Scales 5, subsagittate Ovaries 2-9 Style O Drupes oval, acuminate
2104 *Gelonium* Cal 5-leaved Cor O Stamens 12 Stigmas 3, lacerated. Caps 3-celled, 3-valved, 3-seeded
2105 *Rottlera* Male Cal. 2-parted Cor O Stamens 30-40 Female Cal 4-toothed Styles 3. Caps 3-celled, tricoccous, 3-seeded

Order 12. POLYANDRIA.  Stamens numerous, inserted under the ovarium

2106. *Cliffortia.* Cal 3-leaved. Cor. O Stamens about 30. Styles 3 Caps 3-celled. Seed 1.
2107 *Cycas* Male Catkin imbricated Cal. a spatulate scale. Cor O Anthers globose, sessile, on a scale Female. Spadix compressed, 2-sided Cal O Cor. O Style 1 Drupe 1-seeded
2108. *Zamia.* Catkin like a cone Male Calyx an obovate scale Cor. O Anthers globose, opening by a slit, sessile on the scale. Female. Cal peltate scales. Ovaries 2. Style O. Berries 2, 1-seeded.

Order 13. MONADELPHIA.  Stamens united into one body.

2109 *Latania.* Spadix many-leaved. Calyx 3-leaved. Petals 3. Stamens 15-16. Drupe coated, with three stones
2110. *Leptocarpus* Cal 6-leaved, glumaceous Cor O. Stamens 3 Ovary superior Style 1 Stigmas 2 or 3 Utricle or nut crustaceous, crowned by the base of the style
2111 *Ruscus* Cal 6-leaved. Cor O Male. Rudiment of ovary ovate, perforated at end. Female Style 1 Berry 3-celled Seeds 2.
2112. *Araucaria* Male Catkin imbricated Cal a woody scale. Anthers 10-12, united in a scale Female Catkin cone-shaped. Cal. a lanceolate 2-flowered scale. Style O Stigma 2-valved Nut coriaceous, cuneiform, winged at end.
2113 *Juniperus* Barren fl Scales of the catkin subpeltate Perianth O Stam. 4-8, 1-celled. Fertile fl Scales of the catkin few, united at length, fleshy, and surrounding the 3-seeded berry
2114 *Taxus* Barren fl Perianth single at the base Stam numerous Anthers peltate, 6-8-celled Cells opening beneath. Fertile fl Perianth. single, urceolate, scaly Style O Drupe fleshy, perforated at the extremity
2115 *Ephedra* Male A catkin Cal 2-fid Stamens 7 Anthers 4 inferior, 2 superior. Female. Cal 2-parted, quintuple Ovaries 2 Seeds 2, covered by the berried calyx
2116 *Cissampelos* Male Cal 4-leaved Cor O Disk rotate. Stamens 5 Filaments connate Female Cal 1-leaved, ligulate, roundish Styles 3 Berry 1-seeded
2117 *Excæcaria* Male Catkin cylindrical Cal a scale Filament 3-parted Female Calyx 3 scales Caps 3-coccous
2118 *Adelia* Male Cal 3-parted Cor O Stamens OO Female Cal 5-parted Styles 3, torn Capsule 3-coccous
2119 *Loureira* Male Cal 5-parted Cor tubular, campanulate, 5-fid Stamens 8-13, cohering at base Female Stigmas 3-4 Capsule dicoccous, 2-celled, with 1-seeded cells
2120 *Myristica.* Male Cal O Cor campanulate, trifid Filament columnar Anthers 6-10, connate Female Style 1 Stigmas 2. Drupe with an arilled 1-seeded nut Seed large, veiny, variegated in the inside
2121 *Nepenthes* Cal 4 parted, spreading, colored inside Cor. O Filament columnar. Anthers 15-17, connate Stigma peltate, sessile Caps 4-celled, many-seeded
2122 *Cluytia.* Male. Cal 5-leaved Petals 5 Disk glandular. Stamens 5, inserted into the rudiment of an ovarium Female. Styles 3 Capsule 3-celled Seed 1

MONANDRIA.

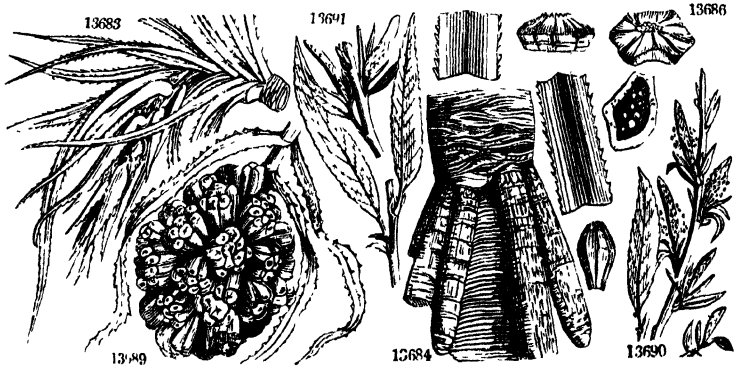
Pandaceæ *Sp* 7—25

2041. PANDA'NUS *W*	Screw-Pine	♀ □	or	20	...	W	E. Indies	1771	S	r m	Rox cor 1 t 94-6
13683 odoratíssimus *W*	green-spined	♀ □	or	20	...	W	Bourbon	...	S	r m	Ja fra t 13,14 f 1
13684 útilis *W en*	red-spined	♀ □	or	20	...	W	N S W	1805	S	r m	
13685 spirális *R Bi*	spiral	♀ □	or	20	...	W	Mauritius	..	S	r m	Jac frag t.14 f 2
13686 húmilis *W*	dwart	♀ □	or	8	...	W	E Indies	1820	S	r m	
13687 amaryllifólius *Roxb*	entire-leaved	♀ □	or	20	...	W	Guinea	1822.	S	r.m	Fl d'Oware,t 21
13688 candelábrum *Beauv*	Candlestick	♀ □	or	15	...	W	E. Indies	1822	S	r m	Rheede 2. t 6
13689 fascicularis *W*	fascicled	♀ □	or	20	...	W					

DIANDRIA.

Amentaceæ *Sp* 125—163.

2042 SA'LIX *W*	Willow											
13690 triándra *W*	long-leaved	♀	tm	30	my an	Ap	Britain	riv ba	C	m s	Eng bot 1435
13691 lanceoláta	sharp-leaved	♀	tm	30	ap my	Ap	England	mea	C	m s	Eng bot 1436
13692 Hoppeána *W*	Hoppe's	♀	tm	30	ap my	Ap	Austria	1820	C	m s	
13693 undulàta *W*	wave-leaved	♀	tm	30	ap my	Ap	Germany	...	C	m s	
13694 Villarsiána *W*	Villars's	♂	or	6	ap my	Ap	S. France	1818	C	m.s	
13695 amygdalina *W*	Almond-leaved	♂	or	6	ap my	Ap	Britain	mar.	C	m.s	Eng bot. 1936
13696 decipiens *E B*	varnished	♂	or	8	my	Ap	England	woods	C	m s	Eng bot 1937
13697 Russelliána *W*	Bedford	♀	tm	40	ap my	Ap	England	mar	C	m.s	Eng bot 1808
13698 Humboldtiána *W*	Humboldt's	♀ □	or	10	...	Ap	Peru	1823	C	m.s	
13699 tetraspérma *W*	four-seeded	♀ □	or	20	...	Ap	E Indies	1796	C	m s	Rox cor 1 t. 97
13700 nigra *W*	black	♀	or	20	my	Ap	N Amer	1811	C	m s	An bot 2. t 5 f 5
13701 pentándra *W*	Bay-leaved	♂	or	15	mr jn	Ap	Britain	riv ba.	C	m s	Eng bot. 1805
13702 nígricans *W*	dark broad-lvd	♂	or	10	ap	Ap	England	os hol	C	m s	Eng bot 1213
13703 phylicifólia *W*	Tea-leaved	♂	or	1½	my	Ap	Scotland	sc alp	C	m s	Eng bot 1958
13704 Wulfeniána *W*	Wulfen's	♂	or	6	my	Ap	Carinthia	1818	C	m s	
13705 silesíaca *W*	Silesian	♂	or	6	my	Ap	Silesia	1816	C	m s	
13706 Pontederána *W*	Pontedera's	♂	or	3	my	Ap	Switzerl	1821	C	m s	
13707 laurina *W*	two-colored	♂	or	8	ap my	Ap	England	...	C	m s	Eng bot 1806
13708 tenuifólia *W*	thin-leaved	♂	or	2	my jn	Ap	Britain	stoni	C	m s	Eng bot 2186
13709 Ammanniána *W*	Ammann's	♀	or	20	my jn	Ap	Austria	1821	C	m s	Fl sil t 17,18,19
13710 hastáta *W*	halbert-leaved	♀	or	15	my	Ap	Lapland	1780	C	m s	Fl lapp t 8 f g
13711 serruláta *W*	serrulate	♂	or	8	my	Ap	Lapland	1810	C	m s	Fl dan t 1238



History, Use, Propagation, Culture,

2041 *Pandanus* The Malay name of the genus is *Pandang*, which is said to signify, being interpreted, something to be regarded, and to have been so named on account of the beauty of the tree, and its exquisite odor P odoratissimus is a large spreading branching bush, with stem-clasping imbricated leaves, bearing some resemblance to those of the pine-apple, from three to five feet long, and placed in three spiral rows round the extremities of the branches It grows in all soils and situations in the warmer parts of Asia, and is much employed there for hedges It grows readily from branches, whence it is rare to find the full-grown ripe fruit The tender white leaves of the flowers, chiefly those of the male, yield that most delightful fragrance, for which they are so generally esteemed, and for which the plant is cultivated in Japan Of all the perfumes, it is by far the richest and most powerful. The lower pulpy part of the drupe is sometimes eaten by the natives in times of scarcity and famine. The tender white base of the leaves is also eaten raw or boiled, at such melancholy times The taste of the pulpy part of the drupe is very disagreeable The roots are composed of tough fibres, which basket-makers use to tie their work with, they are so soft and spongy as to serve the natives for corks The leaves are composed of longitudinal, tough, useful fibres In the South Sea Islands, where the Pandanus is also a native, this or some other species or variety is used for making mats The leaves are beautifully white and glossy In the Sandwich islands these mats are handsomely worked in

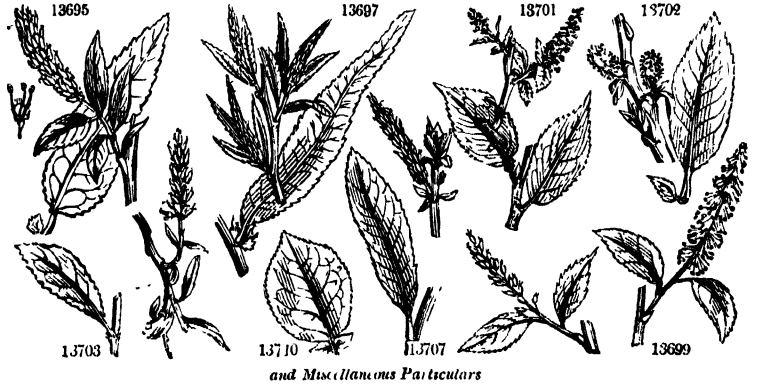
MONANDRIA.

13683 Leaves at back and edges spiny-toothed, Fruit globose solitary
13684 Leaves at back and edges spiny-toothed, Fruit globose, Branches ternate dichotomous .
13685 Stem without stolones, Clust. of drupes with from 9 to 20 cells obtuse depressed and tessellate at end
13686 Leaves at back and edges spiny-toothed, Fruit globose aggregated
13687 Leaves quite entire
13688 Leaves at edge and back serrate-spiny, Branches of stem erect
13689 Leaves and edges spiny-toothed, Spines distant, Drupe oblong solitary, Fruits fascicled

DIANDRIA.

§ 1 *Leaves smooth-serrated*

13690 Leaves lin obl serr. smooth rather unequally sloping at base, Catkins accompanying the leaves triandrous, Ovary stalked ovate compressed smooth, Stigma nearly sessile
13691 Leaves lanceolate tapering toward each end serrat smooth Footst decurr Catk accompanying the leaves triandrous, Ovary stalked oblong constricted smooth
13692 Leaves lanceolate tapering at each end serrated glaucous beneath, Catkins accompanying the leaves triandrous polygamous, Ovary stalked oblong lanceolate smooth, Stigmas sessile
13693 Leaves lanceolate pointed obtuse at the base smooth wavy and serrated, Footstalks decurrent, Catkins accompanying the leaves triandrous, Ovary stalked elliptic oblong, Style elongated
13694 Leaves elliptical roundish at the base serrated pointed glaucous white beneath, Catkins accompanying the leaves triandrous, Ovary stalked ovate smooth, Stigmas sessile
13695 Leaves ovate unequal at the base serrated smooth, Catkins accompanying the leaves triandrous, Ovary stalked ovate compressed smooth, Stigmas nearly sessile, Young branches furrowed
13696 Lvs lanc serrate quite smooth, Petioles somew glandular, Ovary narrowed stalked, Branches varnished
13697 Leaves lanceolate acuminate serrated smooth, Ovaries pedicellate subulate smooth
13698 Lvs lin pointed finely serr it smooth, Stam al out 6, Ovary stalked round ovate smooth, Stigmas sessile
13699 Leaves elliptic-lanceolate pointed finely serrated smooth glaucous beneath, Catkins following the leaves, Stamens about 6 deflexed, Ovary stalked ovate smooth, Style elongated
13700 Leaves ovato-lanc pointed serrated green on both sides smooth with a downy rib and footst Catkins accompanying the leaves vill Stam about 5 bearded at base, Ovary stalked ov l inc smooth, Stigm divid
13701 Leaves elliptic-lanceol ite or ovate pointed crenate glandular smooth, Footstalks glandular at the top, Catkins following the leaves, Stam 5 or more hairy, Ovary ovate smooth nearly sessile
13702 Leaves ellipt lanc acute cren smooth glaucous beneath, Catkins before leaves, Ovary stalked lanc downy
13703 Leaves elliptical lanceolate with wavy serratures smooth glaucous beneath, Stipules somewhat lunate glandular on the inside, Ovary stalked silky, Style longer than the stigma
13704 Leaves obovate bluntish serrated smooth glaucous beneath, Catkins dense with fringed scales, Ovary stalked awl-shaped nearly smooth, Style longer than the stigmas
13705 Leaves elliptical acute at each end smooth serrat green on both sides midrib footstalks as well as young foliage downy, Catkins before the leaves, Ovary ovato-lanceolate long stalked smooth
13706 Leaves elliptical acute serrated smooth obtuse at base glaucous beneath midrib footstalk as well as young foliage hairy, Ovary oblong downy
13707 Leaves elliptical acute tooth-serrated smoothish glaucous beneath, Ovary lanceolate silky
13708 Lvs ellipt acute serrat smoothish glaucous ben Stip small or none, Catk hairy, Caps sess very smooth
13709 Leaves oblong elliptical acute serrated smooth glaucous beneath, Footstalks elongated downy, Stipules ovate toothed permanent, Catkins before the leaves, Ovary lanceolate smooth
13710 Lvs. ovate acute serrated undulate crackling smooth heart-shaped at the base glaucous beneath, Stipules unequally heart-shaped longer than the broad footstalks, Catkins very woolly, Ovary lanc smooth
13711 Lvs ovate acute serrated smooth glaucous beneath, Footstalks very short smooth, Stipules ovate serrated permanent, Catkins accompanying the leaves, Ovary lanceolate nearly sessile



and Miscellaneous Particulars

a variety of patterns, and stained of different colors The branches being of a soft spongy juicy nature, cattle will eat them very well when cut into small pieces They call it Wharra tree at Otaheite. (*Hawksw Voy* ii 217)

2042 *Salix* From the Celtic *sal*, near and *lis*, water Our common name osier, seems to be a slight alteration of the Greek *οσιρα*, which means the same thing This is a numerous and difficult genus of trees and shrubs, with one or two exceptions limited in their range to the temperate regions of Europe and America. Many of the species are distinguished by such delicate shades, that only the most acute botanists can recognize them Soil, situation, and climate produce so considerable a change in their appearance, as to render it difficult to determine what are species and what varieties Those species which attain a timber size, are chiefly valued for the rapidity of their growth, they produce a great bulk of trunk and lop in a short time, and the bark of most of the species has recently been used in tanning; being, at an average of sorts, about half as valuable as that of the oak S alba is considered the most valuable timber tree of the genus It has a branching stem, and tapering flame-shaped head. It may be seen pollarded by way-sides in most parts of Europe, in which state it is very productive of poles, fence wood, crate ware, fuel, and bark for the tanner, which is considered nearly as good as that of the oak. A variety of this species, called by Pontey, the red

13712 prinoides *Ph*	Prinos-like	♆	or	10	mr ap	Ap	N. Amer.	1811.	C	m.s		
13713 discolor *W.*	brown-branch		or	8	ap	Ap	N. Amer.	1811	C	m s	Ann bot 2.t.5.f 1	
13714 angustáta *Ph.*	narrow-leaved	♆	or	10	mr ap	Ap	Pensylv.	1811	C	m.s		
13715 petiolàris *W.*	dark long-leav.	♆	or	10	ap	Ap	England	mar.	C	m s	Eng. bot 1147	
13716 myricoides *W*	Gale-like		or	8	ap	Ap	N Amer	1811	C	m.s	Ann bot 2.t.5 f 2	
13717 cordáta *W.*	heart-leaved		or	6	ap.my	Ap	N. Amer.	1811	C	m.s	Ann bot.2.t.5 f 8	
13718 rígida *W*	rigid	♆	or	15	ap my	Ap	N Amer	1811	C	m s	Ann bot.2 t.5 f 4	
13719 lúcida *W.*	shining		or	8	my	Ap	N Amer	1811.	C	m s	Ann.bot.2 t.5.f 7	
13720 ambígua *Psh.*	doubtful	♆	or	20	ap	Ap	N. Amer	1821.	C	m s		
13721 acutifólia *W.*	sharp-leaved		or	8	ap	Ap	Casp Sea	1823	C	m.s		
13722 vitellina *W.*	yellow-branch.	♆	cit	15	mr my	Ap	England	mar	C	m s	Eng bot. 1389	
13723 frágilis *W.*	cracking	♆	or	15	ap my	Ap	Britain	mar	C	m s	Eng bot. 1807	
13724 præ'cox *W.*	early	♆	or	20	ap my	Ap	Austria	1820.	C	m.s		
13725 Meyeriána *W.*	Meyer's	♆	or	20	ap my	Ap	Germany	1822	C	m s		
13726 babylónica *W*	weeping	♆	el	30	my	Ap	Levant	1692	C	m s	Rauw it 183 t.25	
13727 purpúrea *W*	bitter purple			8	mr	Ap	England	mar.	C	m s	Eng bot 1388	
13728 pomeránica *W. en*	Pomeranian	♆	or	10	my	Ap	Pomeran	1822	C	m.s		
13729 Hélix *W*	Rose	♆	or	10	mr ap	Ap	Britain	mar	C	m s	Eng bot. 1343	
13730 Lambertiána *W*	Boyton		cit	10	mr ap	Ap	England	riv ba	C	m s	Eng bot 1359	
13731 tetra'pla *Lmk.*	pretty		or	4	mr ap	Ap	.....	1825	C	m s		
13732 rúbra *W*	Green Osier		cit	8	ap my	Ap	England	os hol	C	m.s	Eng bot 1145	
13733 Forbyána *W.*	Basket Osier		cit	8	ap	Ap	England	os hol.	C	m s	Eng bot 1344	
13734 Croweána *W.*	Crowe's		cit	8	ap my	Ap	England	mar	C	m s	Eng bot 1146	
13735 malifólia *W*	Apple-leaved		or	3	ap	Ap	England	moun	C	m s	Eng bot 1617	
13736 Houstoniána *Ph*	Houston's		or	4	ap my	Ap	Virginia	...	C	m.s		
13737 falcáta *Ph*	sickle-leaved		or	4	ap my	Ap	N Amer	1811	C	m.s		
13738 Starkeána *W*	Starke's		or	4	ap my	Ap	Silesia	1820	C	m s		
13739 prunifolia *W*	Plum-leaved		or	3	ap my	Ap	Scotland	sc alp	C	m.s	Eng bot. 1361	
13740 myrsinites *W*	Whortle-leav'd		or	3	ap jn	Ap	Scotland	sc alp	C	m s	Eng bot. 1360	
13741 Waldsteiniana *W*	Waldstein's		or	4	ap jn	Ap	Croatia	1822.	C	m s		
13742 venulósa *E B*	veiny-leaved		or	2	ap my	Ap	Scotland	sc alp	C	m s	Eng bot 1362	
13743 planifólia *Ph*	flat-leaved		or	2	..	Ap	Labrador	1811	C	m s		
13744 fuscáta *Ph*	brown-stemm'd		or	2	ap	Ap	N Amer	1811	C	m s		
13745 vaccinifólia *E B*	Bilberry-leaved		or	2	ap my	Ap	Scotland	s of sc	C	m s	Eng bot 2341	
13746 carinàta *W.*	folded-leaved		or	3	ap my	Ap	Scotland	sc alp	C	m s	Eng bot 1363	
13747 coróscans *W*	glittering		or	3	ap my	Ap	Germany	1818	C	m s	Jacq aust t 408	
13748 eriántha *Schleich*	woolly-flower'd		or	2	ap	Ap	Switzerl	18?3	C	m s		



History, Use, Propagation, Culture,

twigged upland willow, and the S Russelliana, are considered the two next best species of the tree kind, and indeed, greatly resemble each other

The best willows for hoops and basket work are S viminalis, stipularis, rubra, Forbyana, triandra, mollissima, and vitellina. S triandra is the most common, and is grown both for basket work and hoops. S. Forbyana is the best for the finer sorts of basket work S stipularis is the species commonly cultivated in Holland for hoops and rods. S purpurea is one of the toughest of willows, and the extreme bitterness of the leaves and twigs renders it valuable for the tanner, for withs and basket work, not being liable to be eaten by vermin, and for hedges which cattle will not brouse on In bands for thatching, Linnæus says, it lasts above

13712 Lvs oval-obl. acute with distant wavy serratures smooth glauc ben Stipules ½ heart-shaped deeply toothed, Catkins villous before the leaves, Ovary stalked ovate pointed silky, Style elongated, Stigma cloven
13713 Leaves ovato-lanceolate smooth bluntly serrated glaucous beneath, Catkins before the leaves, Scales short rounded hairy, Ovary awl-shaped silky on a stalk thrice the length of the scale
13714 Lvs. lanc acute very long gradually tapering at base finely serrated quite smooth scarcely paler beneath, Stip ½ heart-shap Catkins before lvs erect smooth, Ovary stalk ov smooth, Style divid Stigm 2-lobed
13715 Leaves lanceolate serrated smooth glaucous beneath somewhat unequal at base, Stipules lunate toothed, Catkins lax, Ovary stalked ovate silky, Stigmas sessile divided
13716 Lvs. ovato lanc bluntly serr smooth ac. glauc ben gland at base, Stip ov with gland serrat Catk wool. Ovary lanceolate smooth its stalk longer than the scale, Style the length of the divided stigmas
13717 Lvs ovato-lanc serrat smooth paler ben heart-shaped at the base, Stip rounded finely toothed, Catk accomp lvs mostly triand Sca lanc woolly, Ovary stalked lanc. smooth, Style length of divided stigm.
13718 Lvs ellipt lanc rigid smooth sharply serrat two lowest serratures elongated, Footst hairy, Stip dilated round with glandul serrat Catk accomp lvs mostly triand Sc woolly, Ovary lanc smth on long stalk
13719 Lvs. ov taper-point smooth shining with glandul serrat mostly crowded at stip tooth Catk accomp lvs mostly triand. Scales hairy at base obt serr and smooth at end, Ovary stalked lanc awl-shaped smooth, Style divided, Stigma obtuse
13720 Leaves lanceolate pointed smooth green on both sides with gland serr Catkins accomp lvs. Nect. double rather large its lobes lanceolate smooth toothed at the summit, the terminal flowers triandrous
13721 Lvs lanc acum. uneq and bluntly serrated smooth somew glauc ben Branches dark purple with a bloom
13722 Leaves lanc acute with cartilaginous serrat smooth above glaucous and somew silky ben Stip small and deciduous smooth on their inside Ovary sessile ovato-lanceolate smooth, Stigmas nearly sessile 2-lobed
13723 Leaves ovato-lanc pointed serrated throughout very smooth, Footstalks glandular, Ovary ovate nearly sessile, Male flowers with an abortive ovary
13724 Leaves broadly lanc pointed smooth with glandular serrat glaucous beneath, Footstalks slightly hairy without glands, Catkins before the leaves, Ovary sessile ovate smooth, Style elongated
13725 Triandrous, Stamens reflexed, Leaves about four inches long and one broad smooth and green beneath
13726 Leaves lanceolate taper-pointed sharply serrated smooth glaucous beneath, Stipules ½ ovate taper-pointed revolute, Catkins naked accompanying the leaves, Ovary ovate sessile smooth, Branches pendulous
13727 Decumb Stam 1, Leaves obovato-lanc serrated smooth narrow at base, Stigm very short ov nearly sess
13728 Lvs downy serrulate acum glaucous beneath, when old becoming smoother, Catkins before lvs Style long
13729 Erect, Stamen 1, Leaves mostly opposite oblong lanc pointed slightly serrated smooth linear at base, Style nearly as long as divided stigmas
13730 Erect, Stam 1, Lvs obov lanc ac serrat smth round at base, Stip none, Stig very short ov notched obt.
13731 Branches downy, Leaves elliptical acute glaucous beneath the young ones downy
13732 Stam combined below, Leaves linear lanc elongated acute smooth with shallow serrat green on both sides
13733 Erect, Stamen 1, Leaves alternate with small stipules lanceolate acute with shallow serratures smooth rounded at base glaucous beneath, Style nearly as long as the linear divided stigmas
13734 Stamens combined below, Leaves elliptical slightly serrated quite smooth glaucous beneath
13735 Leaves elliptic-oblong toothed waved thin and crackling very smooth, Stipules heart-shaped about the length of the footstalk, Catkins very woolly, Ovary lanceolate smooth on a short stalk
13736 Leaves linear lanceolate acute very finely serrated smooth shining and green on both sides, Stipules none, Catkins accompanying leaves cylindrical villous, Scales ovate acute, Stam 3 to 5 bearded half way up
13737 Leaves very long linear-lanc. closely serrated tapering gradually and somewhat falcate upwards acute at the base smooth on both sides the young ones silky, Stipules crescent-shaped toothed deflexed
13738 Leaves elliptical nearly orbicular smooth somewhat serrated in the middle rather glauc beneath, Catk after the leaves, Capsules ovato-lanceolate stalked downy
13739 Leaves ovate serrated naked smooth and even above glaucous beneath, Branches rather downy, Capsules ovate silky, Style as long as the stigmas
13740 Leaves elliptical serrated smooth veiny polished on both sides, Young branches hairy, Ovary awl-shaped clothed with silky hairs, Style as long as the cloven stigmas
13741 Leaves obovate-elliptical smooth rather acute serrated in the middle shining above somewhat glaucous beneath, Ovary lanceolate silky, Young branches smooth
13742 Lvs ov serrat nak reticul with prominent veins above rather glauc ben Ovary ellipt silky, Style very short
13743 Somew erect straggling, Branches polished, Lvs obl lanc acute at each end serrul in midd very smooth
13744 Leaves obovate lanceolate acute smooth subserrated glaucous beneath, Stipules small, Ovaries ovate silky
13745 Leaves ovate serrated smooth even above glaucous and silky beneath, Ovary ovate silky, Style as long as the stigmas, Stems decumbent
13746 Leaves ovate finely toothed smooth minutely veined folded so as to form a keel, Ovary ovate downy
13747 Lvs ov ellipt ac serrat smooth tapering at base glauc ben lower serrat glandular, Caps ov. lanc. smth
13748 Leaves oblong acute serrulate whole colored beneath, when old quite smooth



and Miscellaneous Particulars

a century in Scania Few of the willow species can be considered ornamental, though the male plants of S. pentandra and amygdalina produce numerous showy catkins of a bright yellow color, and very odoriferous The leaves of S pentandra are also fragrant, exuding a copious yellow resin from their serrated edges The down of the seeds of this and other species, mixed with the third part of cotton, has been found a useful adulteration, especially for stuffing cushions and forming candle-wicks Goldfinches and other birds line their nests with this material

The weeping-willow is generally admired, it grows wild on the coast of Persia, and is common in China It is sometimes said to have been introduced by Pope, but the celebrated specimen of that tree which stood in

13749 **arbúscula** *W.*	little-tree		or	2	ap	Ap	Scotland	sc.alp.	C	m s	Eng bot. 1336
13750 **húmilis** *W.*	humble		or	1½	ap	Ap	.....	1820.	C	m s	
13751 **herbácea** *W.*	least		or	½	jn	Ap	Britain	sc.alp	C	m.s	Eng bot. 1907
13752 **ulmifólia** *Thuill*	elm-leaved		or	1	my	Ap	Switzerl.	1821.	C	m.s	
13753 **arbutifólia** *W*	Arbutus-leav'd		or	½	ap my	Ap	Switzerl.	1818.	C	m s	
13754 **Kitaibeliána** *W*	Kitaibel's		or	½	ap my	Ap	Carpathi	1823.	C	m.s	
13755 **retúsa** *W*	blunt-leaved		or	½	my	Ap	Italy	1763	C	m s	
13756 **serpyllifólia** *W*	Thyme-leaved		or	½	my	Ap	Switzerl.	1818	C	m s	
13757 **reticuláta** *W*	wrinkled		or	½	jn jl	Ap	Britain	sc alp	C	co	Eng bot. 1908
13758 **myrtilolídes** *W.*	Myrtle-leaved		or	2	my	Ap	Sweden	1772	C	m s	Vil.da.3 t.50 f.11
13759 **recurváta** *Ph.*	recurved-flow		or	3	ap	Ap	N Amer	1811	C	m s	
13760 **Uva-úrsi** *Ph*	Bearberry-like		or	½	ap my	Ap	Labrador	...	C	m.s	
13761 **cordifólia** *Ph.*	cordate-leaved		or	3	...	Ap	N. Amer.	1811.	C	m.s	
13762 **pedicellária** *Ph*	pedicellated		or	3	ap	Ap	N. Amer	1811	C	m.s	
13763 **glaúca** *W*	glaucous		or	1	my	Ap	Scotland	sc alp	C	m.s	Eng bot 1810
13764 **sericea** *W*	silky		or	1	my	Ap	S. Europe	1820.	C	m s	Vil de 3 t 51 f 27
13765 **lanáta** *W*	woolly		or	2	my	Ap	Lapland	1818	C	m s	
13766 **Lappónum** *W*	Lapland		or	2	my	Ap	Lapland	1812	C	m s	Fl.lappon t 8 f 1
13767 **arenária** *W.*	downy mount.		or	3	my jn	Ap	Scotland	sc alp	C	m s	Eng bot 1809
13768 **cinérea** *W.*	gray		or	15	my	Ap	Britain	woods	C	m s	Eng bot 1897
13769 **obtúsa** *Lank*	blunt		or	4	my	Ap	Switzerl	1820	C	m s	
13770 **bicolor** *W.*	two-colored		or	5	my	Ap	Hercynia	1820	C	m s	
13771 **Muhlenbergiána** *Ph.*	Muhlenberg's		or	3	ap	Ap	N Amer	1811	C	m s	Ann.bot.2 t 5 f.9
13772 **Jacquminána** *W*	Jacquin's		or	2	ap	Ap	Austria	1818	C	m s	Jac. aust 1 t.409
13773 **tristis** *W*	linear-leaved		or	4	ap	Ap	N Amer	1765	C	m s	
13774 **argéntea** *W.*	silky sand		or	3	my	Ap	Britain	san sh	C	m s	Eng bot. 1364
13775 **leucophýlla** *W.*	white-leaved		or	4	my	Ap	Europe	1824	C	m s	
13776 **elæagnoides** *Schles.*	Elæagnus-leav		or	4	my	Ap	Europe	1824	C	m s	
13777 **répens** *W.*	creeping		or	2	my	Ap	Britain	sa hea	C	m s	Eng bot 183
13778 **fúsca** *W*	brown		or	2	my	Ap	Britain	m hea	C	m s	Eng bot 1960
13779 **prostráta** *W.*	prostrate		or	1	my	Ap	Britain	m alp	C	m s	Eng bot. 1959
13780 **Schraderiána** *W.*	Schrader's			2	my	Ap	Germany	1820.	C	m s	
13781 **pyrenáica** *W.*	Pyrenean			1	my	Ap	Pyrenees	1823	C	m s	
13782 **hirta** *W*	hairy-branched		or	15	ap my	Ap	England	woods.	C	m s	Eng bot 1404
13783 **Dicksoniána** *W.*	Dickson's		or	1	ap	Ap	Scotland	sc alp	C	m s	Eng bot 1390
13784 **parvifólia** *E B*	small-leaved		or	2	ap my	Ap	England	mo h	C	m s	Eng bot 1961
13785 **adscéndens** *E. B*	ascending		or	½	ap my	Ap	England	mo h	C	m s	Eng bot 1962
13786 **incubácea** *W.*	trailing		or	3	my	Ap	Europe	1775	C	m s	
13787 **rosmarinifólia** *W*	Rosemary-lvd		or	2	ap my	Ap	Britain	san pl	C	m s	Eng bot. 1365



History, Use, Propagation, Culture,

the poet's garden at Twickenham, was a cutting from some rods employed in a package which came from Spain. Pope being present when the package was opened, observed that the pieces of stick appeared as if they had some vegetation, and added, perhaps they may produce something which we have not in England. Under this idea he planted it in his garden, and it produced the willow tree that has given birth to so many others, not as the parent tree of all the willows in the country, but as an admired and celebrated specimen S herbacea is not properly an herbaceous plant, but possesses the Linnean character of a tree, and is the smallest yet

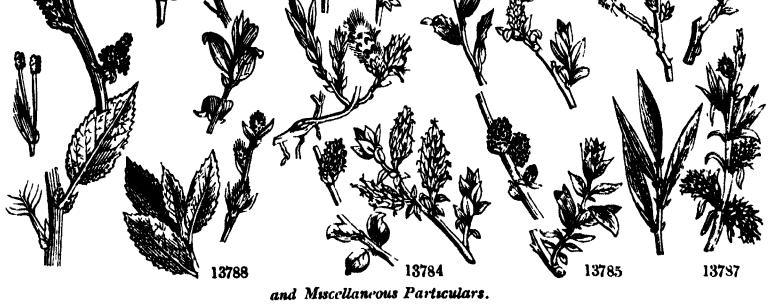
13749 Lvs. lanc acut. serrul. smooth glauc. ben. Catkins appearing with lvs. Caps. ov. lanc. smooth, Styles twin
13750 Lvs obl lanc. acute crenul.-serr. glaucous beneath, Stipules obsolete, Scales short round with long hairs
13751 Lvs orbicul. somew. retuse serrated shining on each side, Fem catkins about 5-fl. Caps ov. lanc smooth
13752 Lvs. obl. and ovate acute toothletted glaucous beneath, Stipules large toothed, Catkins short, Styles long
13753 Leaves lanc. acute obscurely serrated smooth and shining on both sides reticulated with veins beneath, Ovary lanceolate hairy, Style elongated, Stigmas deeply divided

§ 2. *Leaves smooth entire.* [lanceolate smooth ovary

13754 Leaves obovato-lanc ent. emarg smooth shining above, Catk cylind many-fl Scales shorter than ovato-
13755 Leaves obovate entire smooth shining above, Fem. catk obl of few-fl Scales length of obl smooth ovary
13756 Lvs ov or ovato-lanc acute ent. smooth shin above, Catk. obl of few-fls Caps ellipt. smooth, Stigm sess.
13757 Leaves orbicular somewhat ellipt. obt entire coriaceous smooth with reticulated veins glaucous beneath, Stigmas nearly sessile, Capsule shaggy
13758 Lvs ovate entire bluntish smooth glaucous beneath, Ovary ovato-lanc smooth its stalk longer than scale
13759 Leaves obov lanc acute entire glandular at edge smooth glaucous ben : young ones silky, Stipules none
13760 Stem depressed, Leaves spatulate obovate obtuse entire smooth shining above gland at margin beneath, Stip none, Catk lax, Scales obl fringed, Ovary stalked ovate smooth, Style deeply divid Stigm 2 lobed
13761 Stem depressed, Leaves oval rather acute entire reticulated with veins heart-shaped at the base smooth above pale with a hairy rib and margin beneath, Stipules ½ heart-shaped
13762 Stem erect, Branches smooth, Lvs obov lanc. acute entire smooth, Stip none, Catk stalked very smooth, Scales oblong scarcely hairy, Ovary ovate obl smooth its stalk twice as long as scale, Stigm sess divided

§ 3. *Leaves villous* [ovate woolly

13763 Leaves nearly entire ellipt.-lanc even and nearly smooth above woolly ben Footst decurrent, Ovary sess.
13764 Leaves oblong lanceolate entire obtuse silky on each side, Caps ovate oblong villous sessile
13765 Leaves roundish ovate acute entire shaggy on both sides hoary beneath, Capsules sessile smooth, Style four times as long as the blunt divided stigmas
13766 Leaves lanceolate entire bluntish clothed on both sides with long silky hairs, Ovary sessile very woolly, Style about the length of the deeply separated cloven blunt stigmas
13767 Leaves nearly entire ovate acute reticulated and somew downy above veiny and densely woolly beneath, Ovary sessile very woolly, Style about the length of the deeply separated linear divided stigmas
13768 Stem erect, Lower leaves entire upper more or less serrated obovate lanc reticulated with veins glaucous and downy ben Stip half heart-shaped serr Ovary lanc stalked silky, Style as long as blunt stigmas
13769 Leaves ovate acute serrulate smooth above hairy beneath, Stipules minute, Catkins long
13770 Leaves elliptical acute waved and slightly serrated nearly smooth glaucous beneath, Footstalks dilated at the base, Catkins before the leaves, Ovary stalked lanceolate silky
13771 Leaves lanceolate sharpish nearly entire downy revolute veiny and rugose beneath, Stipules lanc decid Scales of the catk oblong fringed, Ovary ovato-lanceolate silky stalked, Style short, Stigmas divided
13772 Leaves elliptical entire tapering at each end polished the veins beneath as well as the margin hairy, Ovary elliptical downy, Style elongated
13773 Leaves entire elliptical somewhat revolute with a recurved point rather downy above silky and shining beneath as well as the branches, Ovary stalked ovato-lanceolate silky, Style shorter than the stigmas
13774 Leaves elliptical entire recurved acute above downy beneath silky, Ovary ovate lanceolate villous
13775 Leaves brown above downy with short hairs hoary beneath acute nearly entire
13776 Leaves obtuse brown smooth and opaque above silky beneath [ovate downy, Stem depressed
13777 Lvs. ellipt.-lanc straight somew point nearly ent almost naked above glauc and silky ben Ovary stalked
13778 Leaves elliptic-obl acute straight flat with a few glandular teeth glaucous and silky beneath, Footstalks slender, Stem erect much branched, Stipules none
13779 Leaves elliptical acute convex rarely toothed glaucous rugged and silky beneath, Stem prost. Branches elongated straight, Ovary stalked ovate silky, Style shorter than the stigm.
13780 Leaves elliptical acute finely downy on both sides glaucous beneath slightly serrated towards the point, Stipules very small, Catkins rather before the leaves ovate hairy
13781 Leaves elliptical entire acute at each end reticulated with veins glaucous beneath most hairy at margin, Ovary somewhat stalked ovato-lanceolate villous, Style the length of the deeply divided stigm.
13782 Leaves elliptical heart-shaped pointed finely notched downy on both sides, Stipules half heart-shaped flat-toothed nearly smooth, Branches hairy
13783 Leaves elliptical acute slightly-toothed smooth, Young branches very smooth, Catkins ovate short erect, Ovary stalked ovate silky, Stigmas ovate obtuse nearly sessile
13784 Lvs ellipt nearly ent. with recurv points glaucous and silky ben Stem decumbent, Stipules ovate entire
13785 Lvs ellipt.-obl somew serrat with recurv points glauc and silky ben Stem ascend Stipules ovate serrated
13786 Leaves lanc pointed straight somewhat elliptical entire convex smooth above glaucous and silky beneath, Catkins oval erect, Ovary stalked lanceolate, Style the length of the stigma
13787 Leaves linear-lanceolate pointed straight entire silky beneath, Stem erect, Stipules upright flat, Catkins recurved, Ovary stalked lanceolate silky



and Miscellaneous Particulars.

known, being only from one to three inches in height S retusa is nearly as little as S. herbacea. S. vitellina with its brilliant yellow bark, planted in shrubberies, contrasts well with evergreens and the purple twigged dogwood

Almost all the willows are of the easiest propagation and culture Plantations for basket-work or hoops should be made on deep loamy soil on the banks of rivers, within reach of water, but by no means saturated with it. Few willows are either bog or marsh plants. The cultivated species require as much attention as

13788 ripária *W*	bank		or	6	ap my	Ap	Germany	1821.	C	m.s		
13789 angustifólia *W.*	narrow-leaved		or	3	ap my	Ap	Caspian	1825	C	m s		
13790 grísea *W*	grizzly		or	6	ap my	Ap	Pensylv.	1820	C	m s		
13791 spatuláta *W.*	spatulate		or	5	ap.my	Ap	Germany	1818.	C	m.s		
13792 aurita *W en.*	eared		clt	2	ap my	Ap	Europe	1820	C	m s	Hof sal 1 t.92 f 1	
13793 uliginósa *W en. aurita* E. B	marsh		or	2	ap jn	Ap	Britain	woods	C	m.s	Eng bot. 1487	
13794 aquática *W*	water		or	10	ap	Ap	Britain	w thi	C	m s	Eng bot. 1437	
13795 oleifolia *W*	Olive-leaved		or	4	mr	Ap	Britain	thick	C	m.s	Eng bot 1402	
13796 cotunifólia *W*	Quince-leaved		or	2	ap	Ap	Britain	woods	C	m s	Eng bot 1403	
13797 sphacelata *W*	withered-point		or	2	ap my	Ap	Scotland	sc alp	C	m s	Eng bot. 2333	
13798 cáprea *W.*	greatround-lvd		or	30	ap my	Ap	Britain	dr wo	C	m s	Eng bot 1488	
13799 Stuartiána *E B.*	Stuart's		or	4	jl au	Ap	Scotland	sc alp	C	m.s	Eng bot 2586	
13800 acuminata *W*	acuminate		or	15	ap	Ap	Britain	moi w.	C	m.s	Eng bot 1434	
13801 conifera *Ph.*	Cone-bearing		or	10	my	Ap	N Amer	1820	C	m s	Wa.am t 31 f 72	
13802 viminális *W*	Common Osier		clt	12	ap my	Ap	Britain	os gro	C	m s	Eng bot. 1898	
13803 mollissima *E B*	Smith's		or	20	ap my	Ap	England	os gro	C	m s	Eng bot 1509	
13804 stipulária *W.*	auricled		clt	6	mr ap	Ap	England	os gro	C	m s	Eng bot 1214	
13805 cándida *Ph*	hoary		or	10	ap my	Ap	N Amer	1811	C	m.s		
13806 Fluggeána *W*	Flugge's		or	10	ap my	Ap	S France	1820	C	m s	Vi del 3 t 51 f 28	
13807 álba *W*	common white		clt	40	ap my	Ap	Britain	woods	C	m s	Eng bot 2430	
13808 cærúlea *E B*	blue		or	40	ap my	Ap	England	m me	C	m s	Eng bot 2431	
13809 rupéstris *E B*	silky root		or	3	ap	Ap	Scotland	sc alp	C	m s	Eng bot 2342	
13810 Andersoniána *E B*	Anderson's		or	3	ap my	Ap	Scotland	sc mo	C	m s	Eng bot 2343	
13811 Forsteriána *E B*	Forster's		or	10	ap my	Ap	Scotland	sc wo	C	m s	Eng bot 2344	
13812 finmar'chica *W*	Finmarck		or	10	ap my	Ap	Sweden	1825	C	m s		
13813 holosericea *W.*	velvety		or	8	ap my	Ap	Germany	1822	C	m s		
2043 CECRO'PIA. *W.*	Snake-Wood					*Urticæ*	*Sp* 1—3					
13814 peltáta *W*	peltated	♀	or	30		Ap	Jamaica	1778	C	p l	Lam ill, t. 800	
2044 BO'RYA *W*	Borya					*Euphorbiaccæ*	*Sp* 6					
13815 porulósa *W*	Florida		un	6	...	G	Florida	1806	C	m s		
13816 ligustrina *W*	Privet-leaved		un	6	...	G	N Amer	1812.	C	m s		
13817 acuminata *W*	pointed		un	6	...	G	N Amer	1812	C	m s	Mich.ame.2.t 38	
13818 prinoides *W*	Prinos-like		un	6	...	G	N. Amer	1824	C	m s		
13819 nitida *W*	shining		un	6	...	G	N Amer	1824	C	m s		
13820 retusa *W.*	glaucous		un	6	...	G	N Amer	1824	C	m s		

TRIANDRIA.

*2045 EMPE'TRUM *W*	Crow Berry			.....	.....	*Sp* 2—3					
§13821 álbum *W*	white-berried		or	1½	ap jn	Ap	Portugal	1774	L	s p	
13822 nígrum *W*	black-berried		or	1	ap my	Ap	Britain	m he	L	s p	Eng bot. 526



History, Use, Propagation, Culture,

young trees in a nursery, otherwise they will soon become stunted and of irregular growth Excellent directions for their culture may be found in Sang's Planter's Kalendar

2043. *Cecropa* From κεκροψ, to cry out, a sort of translation of the English word trumpet-wood This tree has the trunk and branches hollow every where, and sloped from space to space with membranaceous septas, and answering to so many annular marks in the surface The leaves are large, peltate, lobed like those of Carica Papaya, and placed at the ends of the branches The fruits rise four, five or more, from the very top of a common pedunde, and shoot into so many oblong cylindrical berries, composed of a row of little acini, something like our raspberry, which they resemble in flavor when ripe, and are agreeable to most European palates on that account The wood of this tree, when dry, is very apt to take fire by attrition The native Indians have taken the hint, and always kindle their fires in the woods by rubbing a piece of it against some

13788 Leaves linear-lanceolate with small glandular teeth entire at the base clothed with close-pressed hairs above downy and rugged with veins beneath, Ovary ovate smooth
13789 Leaves linear very narrow without stipules nearly entire ovate at the base hoary above silky beneath
13790 Leaves lanceolate pointed serr smooth above glauc and silky beneath, Stipules linear deflex. deciduous, Catk before the leaves, Scales hairy, Ovary stalked oblong silky, Stigm nearly sessile
13791 Leaves lanceolate-obovate with a recurved point serrated at the end clothed with depressed hairs above rugged veiny and downy beneath, Stipules lanceolate
13792 Leaves obovate lanceolate obtuse mucronate with a hooked point subserrate green above hoary beneath
13793 Leaves obovate with a recurved point with wavy serrat. at end green and downy above hoary and shaggy with rugged veins beneath, Stip ½ heart-shaped toothed, Caps lanceolate stalked, Stigm nearly sessile
13794 Lvs slightly serrat obov.-ellipt. downy flat rather glauc. ben Stipules rounded tooth Stigm. nearly sess.
13795 Lvs obov. lanc flat rather rigid minute. indent ac undern glauc and hairy, Stip small notch Catk ellipt.
13796 Lvs ellipt almost circular slightly tooth downy with rectang veins ben Style as long as notched stigmas
13797 Leaves entire elliptical acute even downy on both sides somewhat withered at the point, Stipules obsol. Ovary lanceolate silky on a long hairy stalk, Stigmas nearly sessile
13798 Leaves ovate pointed serrated waved downy beneath, Stipules somewhat crescent-shaped, Ovary ovate downy on a long hairy stalk, Stigmas undivided nearly sessile
13799 Leaves nearly entire lanceolate acute shaggy above densely silky beneath, Stigmas capillary deeply divided, Style as long as the ovary
13800 Leaves lanc oblong pointed waved slightly downy beneath, Stipules kidney-shaped, Ovary ovate silky, Style the length of the linear stigmas
13801 Leaves oblong lanceolate acute distantly serrated smooth above flat and downy beneath, Stipules lunate somewhat toothed, Ovary stalked lanceolate silky, Style elongated, Stigm deeply cloven
13802 Leaves linear inclining to lanceolate very long pointed entire somewhat wavy silky beneath, Branches straight and slender, Ovary sessile, Style as long as the undivided linear stigmas
13803 Leaves lanceolate pointed obsoletely crenate whitish and silky beneath, Stipules crescent-shaped minute, Stigmas linear deeply divided about the length of the style
13804 Leaves lanc pointed obscurely crenate downy beneath, Stipules half heart-shaped very large, Nectary cylindrical, Stigmas linear undivided longer than the style
13805 Leaves linear lanceolate pointed revol obscurely toothed downy above snow-white and cottony beneath, Stip lanc about the length of the footstalk, Scales of the catk with hairs as long as the stamens
13806 Lvs obl lanc ac at each end nearly ent without stipul smooth above downy ben Ovary ovate lanc silky
13807 Leaves elliptic-lanceolate acute serrated permanently silky on both sides the lowest serratures glandular, Stamens hairy, Stigmas deeply cloven
13808 Lvs lanc. taper-point. serrat under-side at length almost naked, lowest serrat gland Stigm deeply cloven
13809 Leaves obovate serrated flat even silky on both sides, Stipules hairy, Branches minutely downy, Ovary stalked awl-shaped silky, Style as long as the undivided stigmas
13810 Leaves elliptic obl. acute finely notched slightly downy paler beneath, Stipulas half-ovate nearly smooth, Branches minutely downy, Ovary stalked smooth, Style as long as the cloven stigmas
13811 Leaves elliptical obovate acute notched slightly downy glaucous beneath, Stipules vaulted, Branches minutely downy, Ovary stalked silky, Style longer than the thick undivided stigmas
13812 Lvs obl acute entire silky on each side hoary ben Ovaries long-pointed lax, Scales very blunt smooth
13813 Lvs lanc acum toothl at end smooth above rugose and soft beneath, Caps downy lanc Stigmas sessile

13814 Leaves 9-lobed lobes oblong bluntish hispid and rough above white and downy beneath

13815 Leaves oblong lanceolate obtuse sessile coriaceous revolute at edge dotted beneath
13816 Leaves ovate-lanceolate acute subsessile somewhat membranous
13817 Leaves ovate-lanceolate narrowed at each end stalked membranous serrulated
13818 Leaves 2¾ inches long 1 broad serrated
13819 Leaves acute serrulate very smooth shining opposite and alternate
13820 Leaves alternate tapered into a short stalk retuse emarginate mucronulate very smooth glaucous

TRIANDRIA.

13821 Erect, Branches downy, Leaves linear revolute at edge roughish above
13822 Procumbent, Leaves linear oblong



and Miscellaneous Particulars

harder wood The bark is strong and fibrous, and is frequently used for all sorts of cordage The trunk is very light, and for that reason much used for bark-logs and fishing-floats The smaller branches, when cleaned of the septums, serve for wind instruments Both trunk and branches yield a great quantity of fixed salt, which is much used among the French, to despumate and granulate their sugars The fruit is much fed upon by pigeons and other birds, and thus the tree is much spread and propagated. (*Browne*) It may be increased like Brosimum

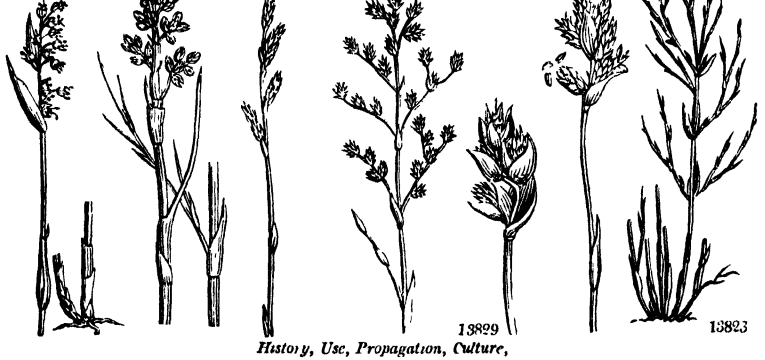
2044 *Borya.* Named in honor of M Bory de St Vincent, a distinguished French traveller and naturalist, known out of the scientific world by the violence of his *liberal* opinions. Small bushes of North America, of little beauty Sir James Smith has altered the name to Bigelovia.

2045 *Empetrum.* So called from the places of its natural growth, ἐν, in, and πέτρος, a stone. E. nigrum is

2046 WILLDENO'VIA *Th*	WILLDENOVIA				*Restiaceæ*	*Sp* 1—3.						
13823 têres *W*	round-stalked	⅄	△	pr	2	jn.jl	Ap	C G H	1790	R	s p	Ac.h.1790 t.2 f.2
* 2047 RES'TIO *W*	ROPP GRASS.					*Restiaceæ*	*Sp* 5—47					
13824 tectórum *W.*	thatch	⅄	△	un	3	my jn	Ap	C G H	1793	R	s.p	Ro gra 10 t 3 f 2
13825 virgátus *W*	twiggy	⅄	△	un	3	my.jn	Ap	C G H	1824	R	s p	Rot.gra 5 t 1. f 2
§13826 dichótomus *W*	dichotomous	⅄	△	un	3	my jn	Ap	C G H	1823	R	s.p	Rot.gra 4 t.2 f 1
13827 paniculátus *W.*	panicled	⅄	△	un	2	my jn	Ap	C. G H	1824	R	s p	Rot.gra 4 t 2 f 3
13828 vaginátus *W*	sheathed	⅄	△	un	3	my jn	Ap	C G. H	1820	R	s.p	
2048 ELE'GIA *W*	ELEGIA					*Restiaceæ*	*Sp* 2—3					
13829 juncea *Thunb*	Rush-like	⅄	△	un	1	jl au	Ap	C G H	1789	C	l p	Rot gra 8 t 3 f 4
13830 racemósa *Lam.*	racemed	⅄	△	un	1	my jn	Ap	C G. H	1804	C	l p	Lam ill t 804 f.4
2049 PHŒ'NIX *W.*	DATE PALM					*Palmæ*	*Sp* 4					
13831 dactylífera *W*	common	⅄	□	fr		...	W G	Levant	1597	S	r.m	K.amæ 686 t 1,2
13832 reclinâta *W*	reclining	⅄	□	or	10	...	W G	C G H	1792	S	l p	Jac frag 27 t 24
13833 farinífera *W*	small	⅄	□	or	8	...	W G	E. Indies	1800	S	r m	Rox. cor. 1 t 74
13834 acaúlis *Roxb*	stemless	⅄	□	or	6	...	W G	E. Indies	1816	S	r m	
2050 STILA'GO *W*	STILAGO					....		*Sp* 2				
13835 Bûnius *W*	Laurel-leaved	●	□	un	20	au	Ap	E Indies	1757	C	p l	Rhee mal 4 t 56
13836 diándra *W*	diandrous	●	□	un	20	...	Ap	E. Indies	1800.	C	p l	Rox cor 2 t 166
2051 OSY'RIS. *W.*	POET'S CASSIA					*Santalaceæ*	*Sp* 1—2					
13837 álba *W*	white	⅄		or	3	..	W	S. Europe	1739.	C	l p	Lam. ill. t 802

TETRANDRIA.

2052 AU'LAX *R Br*	AULAX					*Proteaceæ*	*Sp* 2					
13838 pinifólia *R Br*	Pine-leaved	⅄	□	or	2	jl s	Y	C G H	1780	C	l p	Bot rep 76
13839 umbellâta *R Br.*	umbelled	⅄	□	or	2	jn au	Y	C G H	1774	C	l p	Bot rep 248



History, Use, Propagation, Culture,

very common in the northern parts of Europe, in elevated situations, on dry, barren, moorish, or boggy soils It is more patient of cold than even the common heath The Highlanders' children eat the berries, but they are no very desirable fruit, and taken in large quantities, are said to bring on a slight head-ache The Russian peasants, however, eat them, and the Kamtschadales gather great quantities of them to boil with their fish, or to make a sort of pudding with the bulbs of their lilies They are esteemed antiscorbutic and diuretic Grouse and heathcocks feed upon them, and they give the excrement a tinge of purple. Boiled in alum-water they afford a dark purple dye, and boiled with fat, they are said to be used in dying otter and sable skins black Cattle do not seem to browse on this shrub The French word *Camarine*, is an alteration of *Camarinhas*, the Portuguese name of E. album

2046 *Willdenovia* A rush-like plant, with long flexible slender shoots, named in honor of Charles Louis Willdenow, a celebrated Prussian botanist, whose edition of Linnæus's Species Plantarum is not only the best which has been published in modern days, but excellent in itself

2047 *Restio* From *restis*, cord, the supple shoots of many species are used as withs at the Cape of Good Hope The houses of the Cape of Good Hope are commonly thatched with this plant both in town and country, and sometimes whole huts are built with it A roof thatched with it will last twenty or thirty years, and would last much longer, if the south-east wind did not blow much dirt into it, which causes it to rot.

2048 *Elegia* From ἔλεγος, lamentation, in allusion to the sad or mourning color of the whole plant A hard rushy plant, with the habit of a Restio

2049 *Phœnix* The Greek name of the date, and probably so called from Phœnicia, whence the best dates were brought Dactylifera is the Greek version of Palma, both signifying the hand, to the fingers of which the ancients likened the bunches of dates P dactylifera is a lofty palm, with a rugged trunk, on account of the persisting vestiges of the decayed leaves. These leaves, when the tree is grown to a size for bearing fruit, are six or eight feet long, with pinnæ three feet long, and a little more than an inch broad The flowers of both sexes come out in very long bunches from the trunk between the leaves, and are covered with a spatha, which opens and withers, those of the male have six short stamina, with narrow four-cornered anthers filled with farina The female flowers have no stamina, but have a roundish germ, which afterwards becomes an oval berry, with a thick pulp enclosing a hard oblong stone, with a deep furrow running longitudinally The fruit of this tree makes a great part of the diet of the inhabitants of Arabia and part of Persia. In Upper Egypt many families subsist almost entirely upon it They make a conserve of it with sugar, and even grind the hard stones in their hand-mills for their camels In Barbary they turn handsome beads for paternosters of these stones The date is said to strengthen the stomach and intestines, to stop looseness, and promote expectoration, for which purpose it is given in pectoral decoctions It is also recommended in the piles, given in red wine From the leaves of the tree they make baskets or bags in Barbary In Egypt they make fly-flaps of them, and brushes to clean their sofas or clothes The hard boughs are used as fences to their gardens, and cages to carry their fowls to market The trunk is split for the same purposes, and is even used in small buildings It serves likewise for firing The threads of the web-like integument between the

13823 Culm and branches round smooth

13824 Culm simple leafless, Spikes racemose somewhat 1-sided roundish triquetrous cernuous with bracteæ
13825 Culm dichotomous leafy, Branches compressed, Spikes panicled pendulous
13826 Culm dichotomous leafy decumbent, Branches round, Spikes solitary and alternate
13827 Culm dichotomous leafy, Branches compressed, Spikes sessile alternate erect
13828 Culm simple leafless, Spikes alternate erect, Scales acuminate

13829 Culm simple nearly naked, Spathes very large ovate nearly acute, Spikes clustered thyrsoid
13830 Culm channelled, Spathes large ovate obtuse, Spikes racemose

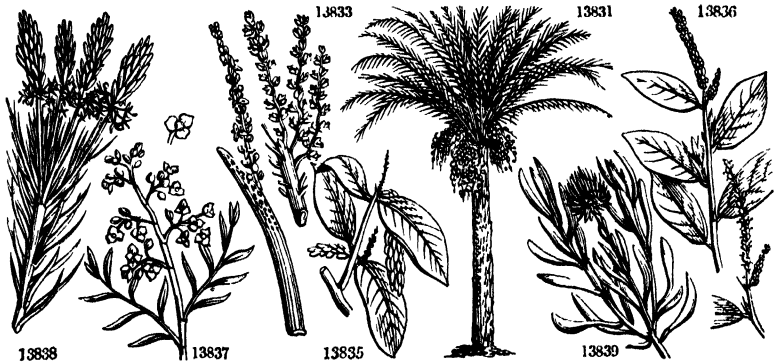
13831 Fronds pinnated unarmed, Leaflets folded together linear-lanceolate straight
13832 Fronds pinnated unarmed, Leaflets folded together linear-lanceolate loosely spreading
13833 Fronds pinnated unarmed, Leaflets linear-subulate folded together, Flowers hexandrous
13834 Pinnæ linear-ensiform folded together lower spiny

13835 Flowers triandrous
13836 Flowers diandrous

13837 The only species

TETRANDRIA.

13838 Leaves filiform channelled
13839 Leaves flat spatulate linear



and Miscellaneous Particulars

boughs make ropes and the rigging of smaller vessels The juice of the date tree is procured by cutting off the head or crown of the more vigorous plant, and scooping the top of the trunk into the shape of a basin, where the sap in ascending lodges itself, at the rate of three or four quarts a day, during the first week or fortnight, after which, the quantity daily diminishes, and at the end of six weeks or two months the tree becomes dry, and serves for timber or firewood This liquor, which has a more luscious sweetness than honey, is of the consistence of a thin syrup, but quickly becomes tart and ropy, acquiring an intoxicating quality, and giving upon distillation an agreeable spirit or araky, which is the general name in the East for all hot liquors extracted by the alembick

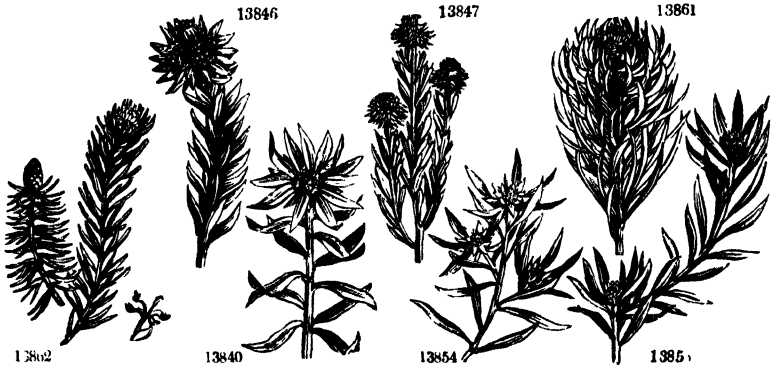
P farinifera produces black drupes of the size of a large kidney bean, these the natives of Coromandel eat as gathered from the bush without any preparation The leaflets are wrought into mats, the common petioles are split into three or four, and used for making ordinary baskets of various kinds, but they are not so proper for this purpose as the bamboo The small trunk, when divested of its leaves, and the strong brown fibrous web that surrounds the trunk at their insertions, is generally fifteen or eighteen inches long and six in diameter at the thickest part, its exterior or woody part consists of white fibres matted together, which envelope a large quantity of farinaceous substance, used as food by the natives in times of scarcity, but to separate this from the fibres, the trunk is split into six or eight pieces, then dried, beaten in wooden mortars, and afterwards sifted the rest of the preparation consists in boiling the meal into a thick gruel, or, as it is called in India, congee It seems to be much less nutritive than sago, and is less palatable.

2050 *Stilago* Perhaps so called from the length of the style; but the name is unexplained by its author. S. diandra produces an eatable fruit used by the natives, but not esteemed by Europeans. The species thrive in sandy loam, and cuttings root in sand under a hand-glass

2051 *Osyris.* The Greek name of a tree with long supple branches, which were used for brushes and similar purposes The modern shrub has also slender flexible branches, of which packing materials are formed throughout the south of Europe

2052. *Aulax.* From αυλαξ, a furrow, in allusion, we presume, to the furrows on the under-side of the leaves of the original species Neat shrubs with narrow leaves, nearly allied to Protea. This, Sweet observes, is "a pretty genus belonging to the Proteaceæ, which thrives best in a very sandy loam, with a great many potsherds broken small at the bottom of the pot, to let the water drain off freely, as they frequently get too much water, which makes the mould sodden, and stagnates their growth Ripened cuttings, taken off at a joint, and planted in a pot of sand, will strike root, if placed under a hand-glass in the propagating house, and the glass to be occasionally left off, an hour or two at a time, to give them air, and keep them from damping, which should be done in a morning before the sun has much power, or it will make them flag and injure them. Plants are readily raised from seeds, which should be sown in a mixture of two-thirds loam and one-third sand · as soon as they come up, they should be planted off in small pots, in the same kind of soil, as they are very apt to die, if left too long in the seed-pot" (*Bot Cult* 143)

2053. LEUCADEN'DRON *R Br*	LEUCADENDRON				*Proteaceæ*	*Sp* 24—37						
13840 **argénteum** *R Br*	Silver Tree	♀	▢	or	15	au	Y	C G H.	1693.	C	l p	Lam ill t.53 f.1
13841 **plumósum** *R Br*	feather-flower'd	♚	▢	or	4	jn au	Y	C G H	1774.	C	l p	
13842 **imbricátum** *R Br*	imbricated	♚	▢	or	4	...	Y	C G H	1790	C	l p	
13843 **buxifólium** *R Br*	Box leaved	♚	▢	or	4	...	Y	C G H	1812	C	l p	
13844 **Levisánus** *R Br*	short-leaved	♚	▢	or	4	ap jn	Y	C G H.	1774.	C	l p	Bur.afr t 100 f.2
13845 **linifólium** *R Br*	Flax-leaved	♚	▢	or	4	ap jn	Y	C G H	...	C	l p	Jac schœ 1 t 26.
13846 **fuscifólium** *R Br*	starred	♚	▢	or	4	my.jn	Y	C. G. H	...	C	l p	Bot. mag 881
Protea stellária B M												
13847 **tórtum** *L T*	twisted-leaved	♚	▢	or	3	mr my	Y	C G H	1790	C	l p	Bot. reg 826
13848 **cinéreum** *L T*	gray	♚	▢	or	3	jl au	Y	C. G H	1774.	C	l p	
13849 **corymbósum** *L T*	corymbed	♚	▢	or	3	ap jl	Y	C G H.	1790	C	l p	Bot. reg 402
13850 **decórum** *L T*	decorous	♚	▢	or	3	...	Y	C G H	1790	C	l p	
13851 **cóncolor** *L T*	one-colored	♚	▢	or	3	mr jn	Y	C G H	1774	C	l p	Bot. rep. 307
13852 **grandiflórum** *L T*	great-flowered	♚	▢	or	3	ap jn	Y	C G H	1789	C	l p	Par lond 105
13853 **decurrens** *L T*	decurrent	♚	▢	or	3	...	Y	C G H.	1812	C	l p	
13854 **strictum** *L T*	upright	♚	▢	or	3	ap jn	Y	C G H.	1795.	C	l p	Par lond 75
13855 **virgátum** *L T*	slender	♚	▢	or	3	ap jn	Y	C G H	...	C	l p	
13856 **adscéndens** *L T*	pale	♚	▢	or	2	jn au	Y	C G H	1774	C	l p	Pl man t 229 f 6
13857 **concinnum** *L T*	neat	♚	▢	or	3	...	Y	C G H	1800	C	l p	
13858 **salignum** *L T*	Willow-leaved	♚	▢	or	3	ap jn	Y	C G H	1774	C	l p	Boer lug 2 t 204
13859 **uliginósum** *L T*	swamp	♚	▢	or	3	ap.jn	Y	C G H	1795	C	l p	Breyn cen 21 t 9
13860 **floridum** *L T*	florid	♚	▢	or	3	ap jn	Y	C G H	1795	C	l p	Bot rep 572
13861 **æ'mulum** *L T*	incurved	♚	▢	or	3	jn s	Y	C G H	1789.	C	l p	Bot rep 429
13862 **abietinum** *L T*	Pine-leaved	♚	▢	or	3	jl s	Y	C G H.	1789	C	l p	Bot. rep 461
13863 **scábrum** *L T*	rough	♚	▢	or	3	...	Y	C G H	1812.	C	l p	
2054. VIS'CUM *W*	MISLETOE					*Loranthæ*	*Sp* 1					
13864 **álbum** *W*	common	☇		cu	2	my	G	England	trees.	S	m s	Eng bot. 1470
2055 MYRI'CA. *W*	CANDLEBERRY MYRTLE					*Amentaceæ*	*Sp* 12—21					
13865 **Gále** *W*	Sweet Gale	♚		or	4	my	Ap	Britain	sp bo	L	s p	Eng bot. 562
13866 **cerífera** *W*	common	♚		or	8	my jn	Ap	N Amer	1699	S	s p	Cat car 1 t 69
13867 **carolinénsis** *W*	broad-leaved	♚		or	4	my	Ap	N Amer	1730	S	s p	Cat car 1 t 13
13868 **pensylvánica** *Ph*	Pensylvanian	♚		or	3	my	Ap	N Amer	...	C	s p.	Du ar e n 2 t 55
13869 **Fáya** *W*	Azorian	♚	▢	or	6	jn jl	Ap	Azores	1777	L	s l	Du ar e n 2 t 56
13870 **æthiópica** *W*	African	♚	▢	or	8	jn jl	Ap	C G H	1795	L	s l	Plu alm t 48 f 8
13871 **serráta** *W*	saw-leaved	♚	▢	or	3	au	Ap	C G H	1793	L	s l	Plu am t.424 f 3
13872 **lacinváta** *W en*	smooth Oak-lv	♚	▢	or	3	jn jl	Ap	C G H	1752.	L	s l	Jac.frag 2 t.1 f.4
13873 **quercifólia** *W en*	hairy Oak-lvd.	♚	▢	or	3	jn jl	Ap	C G H.	1752.	L	r m	
13874 **cordifólia** *W*	heart-leaved	♚	▢	or	4	my jl	Ap	C. G H	1759	L	p l	Plu alm t 319 f 7
13875 **mexicána** *W*	Mexican	♚	▢	or	8	f	Ap	Mexico	1823	L	p l	
13876 **segregáta** *Jacq*	netted	♚	▢	or	6	...	Ap	S Amer	1824	L	p l	Jacq. ic. t. 625



History, Use, Propagation, Culture,

2053 *Leucadendron* From λευκος, white, and δενδρον, a tree, in allusion to the appearance of the most common species, No 13,840 The species are evergreen shrubs, with handsome foliage; they grow in light soil well drained and not over watered, and are increased by ripened cuttings in sand under a hand-glass

2054 *Viscum.* From the Latin *viscus*, clammy, on account of the sticky nature of the berries. *Gui*, Fr, *Mistl*, Ger, and *Visco*, Ital This may be considered the only true parasitical plant indigenous to Britain, as at no period of its existence does it derive any nourishment from the soil like Orobanche, or from decayed bark or wood like certain Fungi, and other epiphytes The root of the misletoe insinuates its fibres into the woody substance of the tree, the shoots are dichotomous, round, smooth, and even; and of a pale green, like the leaves, which are tongue-shaped and entire The whole forms a pendant bush of from two to five feet in diameter, evergreen, and in winter covered with small white very glutinous berries. The British species of misletoe is commonly found on fruit trees, but it will grow on various others, as the thorn, oak, maple, poplar, lime, ash, &c, and in the neighbourhood of Magdebourg it is abundant on Pinus sylvestris It is not difficult to propagate by inserting the berries in slits in the bark early in spring, and tying a shred of mat over the slit to protect them from the birds The Druids sent round their attendant youths with branches of the misletoe to announce the entrance of the new year, and something like the same custom is still continued in France. In England branches of it are hung up in most houses at Christmas, along with other evergreens The berries are devoured by several birds of the thrush kind, and especially by the Misletoe Thrush. Birdlime is made from the berries, and also from the bark, boiled in water, beaten in a mortar and washed It is, however, more commonly manufactured from the bark of the holly

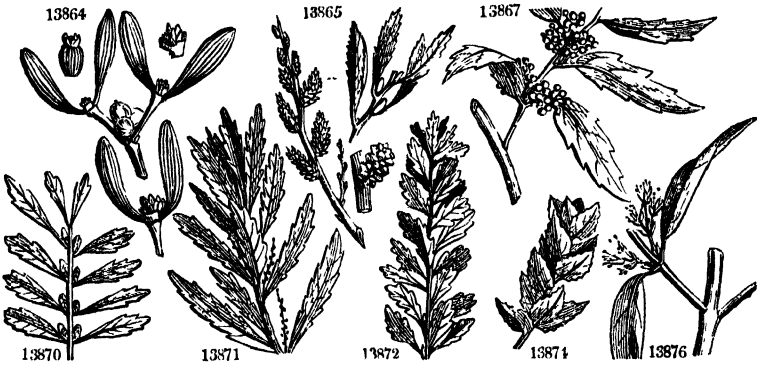
2055. *Myrica* The Greek (μυρικη) synonym of the Tamarix. It is said to have been derived from μυρω, to flow, because the plants are always found on the banks of rivers, and in inundated spots M Gale has leaves of a bitter taste, but fragrant like those of the myrtle Their essential oil rises in distillation The northern nations formerly used this plant instead of hops, and it is still in use for that purpose in some of the western isles, and a few places in the Highlands of Scotland Unless it be boiled a long time it is reported to occasion head-ache The catkins or cones boiled in water throw up a scum resembling bees' wax, which gathered in sufficient quantities would make candles It is used to tan calf-skins Gathered in the autumn it dyes wool

13840 Arborescent, Leaves lanceolate silky, Branches villous, Bractes short downy, Cal. silky
13841 Shrubby, Leaves linear lanceolate oblique smoothish, Male cal smooth female feathery, Fruit villous
13842 Lvs lanc lin smooth rounded at base, Branches vill Scales of cone silky cuneate, Fruit comose mucronate
13843 Leaves oval lanceolate when old smooth, Scales of cone dilated-cuneate silky
13844 Leaves spatulate callous at end, and branches villous, Fruit comose pointless
13845 Leaves linear spatulate tapering at base and branches smooth, Male head sessile larger than leaves
13846 Leaves linear lanceolate smooth . the younger straight tapering at base, Female head shorter than leaves

13847 Leaves linear bluntish twisted smooth, Branchlets somewhat silky, Cal silky, Fruit comose pointless
13848 Leaves spatulate linear silky with a callous beard at end, Cal very shaggy, Fruit cuneate downy
13849 Lvs lin acute channelled imbricated erect smooth, Scales of cone acute recurved, Fruit obcord ciliated
13850 Lvs obl veiny callous at end recurved smoothish floral colored ½ scarious, Scales of cone downy outside
13851 Leaves spatulate obl callous at end smooth, Branches downy, Scales of cone retuse ciliated downy at base
13852 Lvs lanc obl callous at end smooth floral colored, Branches somewhat downy, Scales ovate obt smooth
13853 Lvs spatul lanc call at end subdecurrent concave and branches smooth, Scales of cone roundish smoothish
13854 Lvs lin lanc mucron finally smooth, Involv ov ac longer than head, Scales of cone round dilated smooth
13855 Lvs lin acute with transparent edges and branches quite smooth floral lin lanc long, Fr winged emargin
13856 Leaves linear lanceolate acute floral lanceolate colored concave, Shrub low with ascending branches
13857 Lvs obl lanceolate bluntish veinless and branches quite smooth floral ½-colored, Fruit winged emarginate
13858 Leaves linear lanceolate cuspidate somewhat silky floral lanceolate colored, Fruit very narrow winged
13859 Leaves lanc lin silky with down on each side with callous points at end, Branches shag Cal of male hairy in lines
13861 Upp lvs lanc spatul ac rugose, Cones ov Scales cohering at base distinct above with recurv beardl. edges
13862 Lvs. all filiform chann bluntish smooth spreading incurved, Scales cohering at base distinct above 2-lobed
13863 Lvs all filiform channelled acute imbric straightish ciliated, Scales cohering at base distinct above 2-lobed

13864 Leaves lanceolate obtuse, Stem dichotomous, Heads of flowers axillary

13865 Leaves lanceolate broader upwards serrated, Stem shrubby
13866 Leaves oblong narrowed at base subserrate at end, Scales of male catkins acute, Berries globose
13867 Leaves oblong narrowed at base coarsely serrated, Scales of male catkins acute, Berries globose
13868 Leaves oblong acute at each end entire or slightly serrated at end revolute at edge
13869 Leaves elliptical lanceolate subserrate, Male catkins compound, Drupe with a 4 celled nucleus
13870 Leaves elliptical toothed the lowest quite entire
13871 Leaves lanceolate unequally acuminate serrated, Catkins long lax
13872 Leaves oblong deeply sinuated smooth
13873 Leaves oblong oppositely sinuated hairy
13874 Leaves subcordate serrate sessile
13875 Leaves oblong lanc. cuneate tapered at base nearly entire smooth shining with the middle nerve downy
13876 Leaves lanceolate entire netted with veins, Catkins few-flowered lax



and Miscellaneous Particulars

yellow, and is used for that purpose both in Sweden and Wales The Swedes sometimes use a strong decoction of it to kill bugs and lice, and to cure the itch The Welsh lay branches of it upon and under their beds to keep off fleas and moths, and give it as a vermifuge in powder and infusion, applying it also externally to the abdomen In most of the Hebrides, as well as in the Highlands of Scotland, an infusion of the leaves is frequently given to children to destroy the worms In Isla and Jura the inhabitants garnish their dishes with it, and lay it between their linen and other garments to give them a fine scent, and to drive away moths When it grows within reach of a port, the sailors make besoms of it for sweeping their ships. In the isle of Ely they make faggots with it to heat their ovens. Linnæus was induced to suspect, from the smell of this shrub, that camphor might possibly be prepared from it. Horses and goats eat, sheep and cows refuse it

M cerifera may be used for most of the purposes of the former species Candles are made from the berries in North America, whence it is called there the tallow shrub or candleberry tree, some also name it the bayberry-bush It grows abundantly on a wet soil, and seems to thrive particularly well in the neighbourhood of the sea, nor does it seem ever to be found high up in the country. The berries intended for making candles are gathered late in autumn, and are thrown into a pot of boiling water, their fat melts out floats at the top of the water, and may be skimmed off The fat when congealed looks like tallow or wax, but has a dirty green color, it is therefore melted again and refined, by which means it acquires a fine and pretty transparent green color. It is dearer than common tallow, but cheaper than wax. They usually mix some tallow with it. Candles of this kind do not easily bend or melt in summer as common candles do; they burn better and slower, nor do they cause any smoke, but rather yield an agreeable smell when they are extinguished At present not many candles of this kind are used, the animal tallow is readily come at, it being very troublesome to gather the berries They are chiefly used by poor people, who live near where the bushes grow, and have not cattle enough to supply them. A soap is made from the fat which has an agreeable scent, and is excellent for shaving, and it is used by surgeons for plasters. In Carolina they likewise make sealing-wax from these berries The root is accounted a specific in the tooth ache

All the species grow well in peat soil or sandy loam, in a moist situation They are increased by seeds or layers, but not readily by cuttings

2056. NAGE'IA *Gærtn* Nagæa
13877 Putranjiva *Roxb* grey-barked ☗ ▭ un 12 *Amentaceæ* *Sp* 1—3 ... Ap E. Indies 1822 C r m

†2057 SHEPHER'DIA *Nutt* Shepherdia
13878 canadénsis *Nutt.* Canadian ☤ or 10 *Elæagneæ* *Sp.* 1 ap my Ap N. Amer. 1759 L co

†2058. HIPPO'PHAE. *W* Sea Buckthorn
13879 rhamnoides *W* common ☤ or 12 *Elæagne æ* *Sp* 1 ap my Ap England sea co L co Eng bot 425

2059 BROUSSONE'TIA *W* Broussonetia
13880 papyrifera *W* Paper Mulberry ☤ or 12 *Urticeæ.* *Sp* 2 f s Ap Japan 1751 C co Kæm.amœ t.472
13881 spatuláta *Hort* entire-leaved ☤ or 12 f s Ap ..... 1824 C co

2060 SCHÆFFE'RIA *W* Schæfferia
13882 compléta *W* white-flowered ☗ ▭ or 6 .... *Sp* 1—2 au G W. Indies 1793. C p.l Lam ill. t. 809

2061 BRU'CEA *W* Brucea
13883 ferruginea *W* Ash-leaved ☗ ▭ or 6 *Terebintaceæ* *Sp* 2—3 ap my G Abyssinia 1775 C p.l Bot. cab 129
13884 sumatrána *Roxb* Sumatra ☗ ▭ or 10 ap my G E. Indies 1820. C p.l

2062 ANTHOSPER'MUM *W* Amber Tree.
13885 æthiópicum *W* Ethiopian ☗ ▭ or 2 *Rubiaceæ* *Sp* 1—4 jn jl G w C G H. 1692. C p l Plu alm.t.183 f 1

2063 TRO'PHIS *W* Ramoon Tree.
13886 americána *W.* American ☤ ▭ or 20 ..... *Sp* 2—4. ap my G W Indies 1789 C l p Bro jam t 37 f 1
13887 áspera *W.* rough-leaved ☤ ▭ or 25 ... G E. Indies 1802 C l.p

2064 MONTI'NIA *W* Montinia
13888 caryophyllácea *H K.* Sea Pursl -lvd. ☘ ▭ or 1 *Onagrariæ* *Sp* 1 jl C G H. 1774. C p l Smith spi.14.t.15

PENTANDRIA.

2065 PISTA'CIA. *W* Pistachia Tree
13889 officinárum *H K* officinal ☤ m 15 *Terebintaceæ* *Sp* 5—7 ap my Ap Levant 1570 C l p Rauw it 72. t. 9
13890 reticuláta *W.* *narbonen'sis* L. net-leaved ☤ or 15 ap Ap Levant 1752. C l.p
13891 Terebinthus *W* Turpent. Tree ☤ or 20 jn jl Ap S. Europe 1656. C r m Blackw t. 478
13892 atlántica *W* Atlantic ☤ ▭ or 12 .. Ap Barbary 1790 L r m



History, Use, Propagation, Culture,

2056. *Nagœa* *Nagi* is the Japanese name of one of the species. That in the gardens is an uninteresting shrub with a loose elegant foliage, and a light grey bark Ripened cuttings strike freely in a bark pit

2057 *Shepherdia* A name given by Nuttall to the Hippophae canadensis of our gardens, in honor of Mr William Shepherd, the worthy curator of the Liverpool botanic garden A small inelegant tree, with dark green deciduous leaves, covered over with brownish silvery scales on the lower side

2058 *Hippophae* An ancient name given to some plant now unknown, which was applied medicinally to horses, from *ἵππος*, a horse, and *φαω*, to give light H rhamnoides is very prolific in berries, which are yellow when ripe, succulent, smooth, and gratefully acid to the taste They are much eaten by the Tartars, and the fishermen of the Gulph of Bothnia prepare a rob from them, which imparts a grateful flavor to fresh fish Every part of the plant will dye yellow. The species grow in common soil, and are readily increased by layers or cuttings of the roots

2059 *Broussonetia* Named by L'Heritier, in honor of his countryman P N V. Broussonet, a well known naturalist, who travelled in Barbary, and published an Ichthyologia in 1782 This is a vigorous growing shrub or low tree, with large lobed leaves, variously shaped; the foliage of the male and female plant differing so much from each other that they might easily be taken for distinct species The fruit is little larger than peas, and from the bark the Chinese make paper, and the Otaheitans cloth.

B. papyrifera, though a low tree, produces vigorous shoots, furnished with large leaves The fruit is little larger than peas, surrounded with long purple hairs, when ripe changing to a black purple color, and full of sweet juice. In China and Japan it is cultivated as we do osiers, for the sake of the young shoots, from the bark of which the inhabitants of the east countries make paper The bark being separated from the wood is steeped in water, and the inner bark separated from the outer, the former making the whitest and best paper. The bark is next slowly boiled, then washed, and afterwards put on a wooden table and beaten into a pulp This pulp being put in water, separates like grains of meal. An infusion of rice and the root of manihot is next added to it. From the liquor so prepared, the sheets of paper are poured out one by one, and when pressed, the operation is finished

The juice of this tree is sufficiently tenacious to be used in China as a glue, in gilding either leather or paper. The finest and whitest cloth worn by the principal people at Otaheite and in the Sandwich Islands is made of the bark of this tree. The cloth of the Bread-fruit tree is inferior in whiteness and softness, and worn chiefly by the common people

2060. *Schæfferia* So called after James Christian Schæffer, a German naturalist of celebrity, who is best known by his excellent work on the Fungi of Bavaria, published in 1762 An inelegant shrub with green flowers.

13877 Leaves ovate lanceolate oblique at base finely and simply serrated smooth

13878 Leaves oblong stellate-hairy above brownish white and scaly beneath

13879 Leaves linear-lanceolate smooth above white with scales beneath

13880 Leaves 3-5-lobed acuminate serrated scabrous
13881 Leaves cucullate entire

13882 Flowers tetrapetalous axillary

13883 Leaves opposite stalked pinnated with an odd one of 5 or 6 pairs
13884 Leaflets serrated villous beneath, Racemes often compound

13885 Leaves somewhat whorled linear smooth

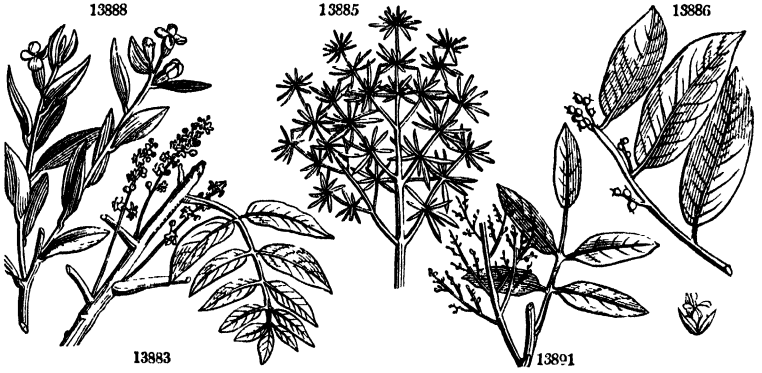
13886 Unarmed, Leaves oblong acum entire smooth, Fruit 1-seeded cornute, Horns reflexed shorter than fruit
13887 Unarmed, Leaves obovate oblong acuminate unequally serrate very scabrous on each side

13888 Leaves alternate oblong oval, Fl solitary

PENTANDRIA

13889 Leaves pinnated with an odd one, Leaflets 5 ovate tapered at base rather acute and mucronate at end
13890 Leaves pinnate and ternate, Leaflets roundish narrowed at base netted with veins retuse mucronate

13891 Leaves pinnate with an odd one, Leaflets about 7 ovate-lanceolate rounded at base acute mucronate
13892 Leaves pinnate with an odd one, Leaflets lanceolate about 9, Petiole winged between the terminal pairs



and Miscellaneous Particulars

2061 *Brucea* Named in honor of James Bruce, a celebrated Scotch traveller in Abyssinia, who discovered the plant

2062 *Anthospermum.* From ανθος, a flower, and σπερμα, seed, its female flower is entirely naked, consisting of a single ovarium, whence its name A heath-looking evergreen, the leaves of which are fragrant when bruised, and the propagation and culture of the easiest description.

2063 *Trophis* From τρεφω, to nourish P americana produces berries about the size of large grapes, and of an agreeable pleasant flavor The leaves and twigs are used as fodder for cattle when grass is scarce Cuttings root in sand under a glass

2064 *Montsua* In honor of Laurence Montin, a Swede, who published a little tract upon Splachnum. The specific name seems to hint at the nature of his disposition A little worthless weed-like Cape plant

2065 *Pistacia* Said by Forskahl to have been altered by the Latins from its Arabic name *foustaq* P officinalis abounds in Sicily, where it is cultivated for its nuts The male flowers come out from the side of the branches in loose bunches, and are of an herbaceous color The female flowers come out in the same manner in clusters The male puts forth its flowers first, and some gardeners pluck them whilst yet shut, dry them, and afterwards sprinkle the pollen over the female tree but the method usually followed in Sicily, when the trees are far asunder, is to wait till the female buds are open, and then to gather bunches of male blossoms ready to blow, these are stuck into a pot of moist mould, and hung upon the female tree till they are quite dry and empty This operation is called *tuchsarare*, and never fails to produce fructification, sometimes the gardeners ingraft the male bud upon the female tree

P Terebinthus (from τρεω, to cut) furnishes the Cyprus turpentine It is procured by wounding the bark of the trunk in several places, during the month of July, leaving a space of about three inches between the wounds, from these the turpentine is received on stones, upon which it becomes so much condensed by the coldness of the night, as to admit of being scraped off with a knife, which is always done before sunrise in order to free it from all extraneous admixture, it is again liquified by the sun's heat, and passed through a strainer, it is then fit for use The quantity produced is very inconsiderable, four large trees, sixty years old, only yielding two pounds nine ounces and six drachms, but in the eastern part of Cyprus and Chio, the trees afford somewhat more, though still so little as to render it very costly, and on this account it is commonly adulterated, especially with other turpentines The best Chio turpentine is generally about the consistence of thick honey, very tenacious, clear, and almost transparent, white, inclining to yellow, and of a fragrant smell, moderately warm to the taste, but free from acrimony and bitterness

P. Lentiscus (*lentiscere*, to be sticky) produces the mastick, which is obtained most abundantly, by making transverse incisions in the bark of the tree, whence the mastick exudes in drops, which are suffered

13893 Lentiscus *W.* — Mastick Tree — ♀ ▭ ec 15 my Ap S Europe 1664 L r m Bot. mag 1967
β massiliénsis — *narrow-leaved*

2066. ZANTHOX'YLUM *W* — Tooth-ach Tree — *Rutaceæ* *Sp* 5—43
13894 emarginátum *W* — notch-leaved — ♚ ▭ or 10 ... G w Jamaica 1739 C l p Slo ja 2 t 168 f 4
13895 Clava Hércules *W* — Lentiscus-leav — ♚ ▭ or 10 ap my G w W Indies 1739 C l p Cat car 1 t 26
13896 fraxíneum *B* — common — ♚ or 6 mr ap G w N Amer 1759 L s l Duh arb 1 t 97
13897 tricárpum *H K* — three-capsuled — ♚ or 6 ... G w N Amer. 1806. L l s
13898 nitidum *Dec* — shining — ♚ ▭ or 6 ap my G w China 1823 L r m Bot mag 2558

2067. PICRAM'NIA *W* — Picramnia — .... *Sp* 1—2
13899 Antidésma *W* — Ash-leaved — ♚ ▭ un 4 ... G Jamaica 1793 C p l Slo ja 2 t 208 f 2

2068 ANTIDE'SMA *W* — Antidesma — .. .. *Sp* 2—10
13900 alexitéria *B* — Laurel-leaved — ♚ ▭ un 10 my jn Ap E Indies 1793 C p l Rhee.mal 5. t 11
13901 paniculáta *W* — panicled — ♚ ▭ un 10 .. Ap E Indies 1800 C p l

2069 IRE'SINE *W* — Iresine — *Amaranthaceæ* *Sp* 3—8
13902 celosioides *W* — Florida — ♀ △ pr 1½ jl au W America 1733 D l p Lam ill t 815
13903 elongáta *W* — long-leaved — ♀ △ pr 2 jl au W S Amer 1822 S l p Pluk al t 201 f 1
13904 diffúsa *W* — straggling — ♀ △ pr 1½ jl au W S Amer 1818 S l p

2070. SPINA'CIA *B* — Spinage — *Chenopodeæ* *Sp* 1.
13905 olerácea *W* — common — ○ cul 1½ mr o G ... .. 1568. S co Sch hand 3 t 324
α spinósa — *prickly* — ○ cul 1½ mr o G .... S co
β glabra Mill — *round* — ○ cul 1½ mr o G . ... S co

2071 FLUG'GEA *W* — Fluggea. — *Euphorbiaceæ* *Sp* 1
13906 leucopyrus *W* — white — ♚ ▭ un 6 .. Ap E. Indies 1825 C r m

2072 ACNI'DA *W* — Virginian Hemp — *Chenopodeæ* *Sp* 1—3
13907 cannabina *W* — common — ○ un 2 jn jl G v N Amer 1640 S co

2073 CAN'NABIS *W* — Hemp — *Urticeæ* *Sp* 1
13908 sativa *W* — common — ○ ag 6 jn jl G India ... S h l Sch hand 3 t 325

2074 HU'MULUS *W* — Hop. — *Urticeæ* *Sp* 1
13909 Lúpulus *W* — common — ♃ △ ag 15 jn au Y Britain hed. D r m Eng bot 427



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to run down to the ground, and after they are concreted they are collected for use These incisions are made at the beginning of August, when the weather is very dry, and are continued till the end of September

Turpentine and mastick are considered as astringent and diuretic, but though they retain a place in our Materia Medica, they are not much used by modern practitioners Mastick is used by the Turkish and Armenian women as a masticatory for cleaning the teeth and giving an agreeable smell to the breath It is also employed to fill the cavities of carious teeth (*Thom Lond Disp* 414)

2066 *Xanthoxylum* From ξανθος, yellow, and ξυλον, wood X Clava-Herculis is esteemed a good timber tree in Jamaica, and an infusion of the leaves is used to cure the tooth-ach there and in Carolina. All the species may be increased by ripened cuttings, or by cuttings of the roots

2067 *Picramnia* From πικρος, bitter A small tree with fruit the size of a gooseberry, and pinnate leaves, the whole plant abounding in the bitter principle Large cuttings strike freely in sand under a hand-glass

2068 *Antidesma* So called from the use of the bark in making ropes, from αντι, like, and δεσμος, a bond A alexiteria is a middle-sized evergreen tree, with leaves resembling those of the lemon, and fruit in racemes, red and acid like the barberry A decoction of the leaves is reputed to be an antidote against the bite of serpents, and the bark is used for making ropes All the species require a rich loamy soil, and ripened cuttings with their leaves on root in sand in a moist heat

2069 *Iresine* Suppliants were accustomed among the Greeks to present themselves before the altar with a branch of olive bound with wool, which offering they called ιρεσιωνη, whence this plant, which is very like such a branch, on account of its close clusters of woolly flowers, has been named Herbaceous plants not of great beauty

2070 *Spinacia* From *spina*, a prickle, on account of the processes of the seed A well known annual esculent of the easiest culture in any rich soil

2071 *Fluggea* Named by Willdenow, in honor of —— Flugge, a German Cryptogamic botanist. A shrub with round ash-colored spiny branches The spines are from one and a half to three inches long, very strong and numerous, whitish, and covered with leaves

2072. *Acnida* From α, privative, and κνιδη, a Greek name of the nettle, that is to say, a nettle-like plant, which does not sting

2073. *Cannabis* According to Bullet, this name is taken from the Celtic *can*, a reed, and *ab*, small But Golius says, the plant has been known by the Arabs from time immemorial under the name of *ganeb* The hemp is a manufactorial plant of equal antiquity with the flax. It grows to a great height on rich soils under a warm climate, in some parts of Italy it has been found eighteen feet high (*Cruds Agr*), the common height in Lombardy and the Bolognese territory is twelve feet, in this country it seldom exceeds six feet, and the fibre of British hemp is no finer than where it is three times the length The culture, management, and uses of hemp are nearly the same as those of flax, but the male and female flowers being on different plants, and the male plant decaying long before the female, the former requires to be pulled up as soon as the setting of the seed in the females shews that they have effected their purpose Hemp is sown on well prepared

13893 Leaves abruptly pinnate, Leaflets lanceolate about 8, Petiole winged

13894 Unarmed, Leaves pinnate of 2 or 3 pair, Leaflets ovate emarginate villous, Racemes terminal
13895 Prickly, Leaves pinnate of 4 pair, Leaflets ovate repand-toothed unequal at base sessile, Panicles terminal
13896 Lvs pinn with an odd one of 4-5 pair, Leafl ov obsoletely serrul equal at base, Petiol rounded unarmed
13897 Lvs pinn with odd 1 of 3-5 pair, Leafl stalkl obl oval acum serrul obliq at base, Petiol and branch prickly
13898 Branches petioles and ribs prickly, Leaves pinnate with an odd one of 2-3 pairs, Leaflets oblong shining with remote glandular crenatures

13899 Racemes filiform pendulous, Flowers triandrous, Styles 2 recurved

13900 Lvs obl. narrowed at base acumin at end smooth shining on each side, Racemes axillary twin or solitary
13901 Lvs roundish cllipt rounded at each end retuse emarginate at point downy beneath, Racem term panicled

13902 Leaves dotted scabrous lower oblong acuminate, upper ovate-lanceolate, Panicle branched compact
13903 Leaves ovate-oblong acute, Panicle erect, Branches simple, Stem furrowed
13904 Leaves ovate smooth cuspidate, Panicle diffuse branched, Stem furrowed

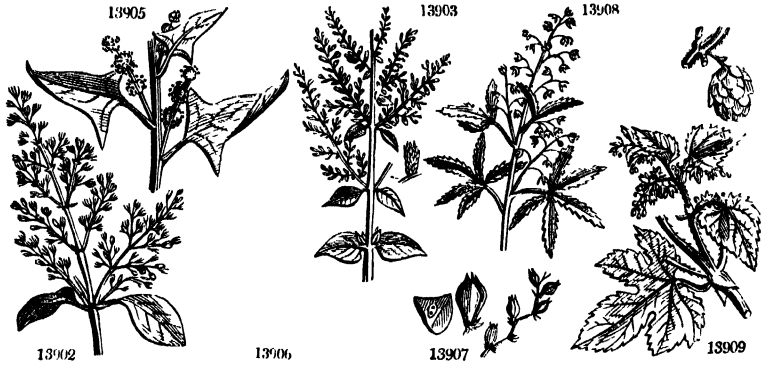
13905 Leaves sagittate, Fruit sessile

13906 The only species Leaves alternate orbic ovate entire smooth, Spines 2 or 3 inches long

13907 Leaves lanceolate, Capsules smoothish acutangular

13908 The only species

13909 The only species



and Miscellaneous Particulars

loamy soil about the end of April the male plants are generally pulled about the beginning of July, and the females four or five weeks after them, when they have ripened their seeds The plants being tied in bundles, are watered and bleached, in the same manner as flax, or they are dried and stacked without having gone through this process, and the fibres separated when wanted by the flax-breaking machine of recent invention, or by steeping in hot water and soft soap The produce of hemp in fibre varies from three to six hundred weight per acre, in seed, from eleven to twelve bushels The fibre produces a cloth stronger than that from flax, and the best of all cordage and ropes An oil is extracted from the seeds of hemp, which is used in cookery in Russia, and in this country by painters The seeds themselves are reckoned a good food for poultry, and are supposed to occasion hens to lay a greater quantity of eggs Small birds in general are very fond of them, but they should be given to caged birds with caution, and mixed with other seeds A very singular effect is recorded, on very good authority, to have been sometimes produced by feeding bullfinches and goldfinches on hemp-seed alone, or in too great quantity, viz. that of changing the red and yellow on these birds to a total blackness (*Ency of Agr* 5327)

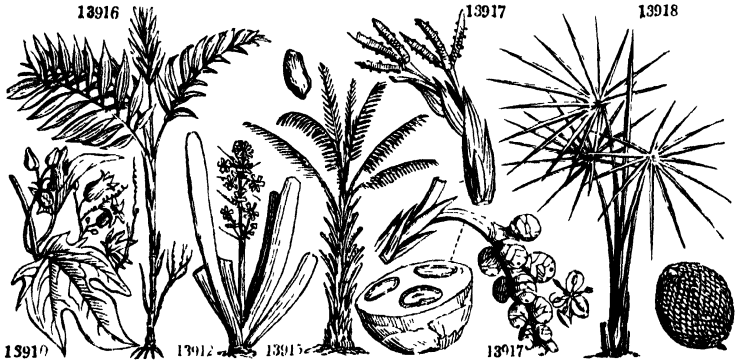
2074 *Humulus* From *humus*, fresh earth, the hop grows only in rich soils Our English word *hop*, seems to be the Anglo-Saxon *hoppan*, to climb *Lupulus* is a contraction of Lupus salictarius, the name by which it was, according to Pliny, formerly called, because it grew among the willows, to which, by twining round and choking up, it proved as destructive as the wolf to the flock

The hop has been cultivated in Europe an unknown length of time for its flowers, which are used for preserving beer Its culture was introduced from Flanders in the reign of Henry VIII, though indigenous both in Scotland and Ireland it is little cultivated in those countries, owing to the humidity of their autumnal season Like other plants of this sort, the hop bears its flowers on different individuals, the female plant, therefore, is alone cultivated There are several varieties grown in Kent and Surrey under the names of Flemish, Canterbury, Goldings, &c, the first is the most hardy, differing little from the wild or hedge-hop, the Goldings is a very improved and highly productive variety, but more subject to the blight than the other. The hop prefers a deep loamy soil on a dry bottom, a sheltered situation exposed to the south or south-west, but at the same time not so confined as to prevent a free circulation of air The soil requires to be well pulverized and manured previously to planting. In hop districts, the ground is generally trenched either with the plough or spade. The mode of planting is generally in rows, six feet apart, and the same distance in the row. Five, six, or seven plants are generally placed together in a circular form, and at a distance of five or six feet from each other The plants or cuttings are procured from the most healthy of the old stools, each should have two joints or buds, from the one which is placed in the ground springs the root, and from the other the stalk Some plant the cuttings at once where they are to remain, and by others they are nursed a year in a garden An interval crop of beans or cabbages is generally taken the first year. Sometimes no poles are placed at the plants till the second year, and then only short ones of five or six feet. The third year the hop generally comes into full bearing, and then from four to six poles from fourteen to sixteen feet in length are placed to each hill. The most durable timber for poles is that of the Spanish chesnut, which is much grown

2075 MODEC'CA *Lam*	MODECCA				*Passifloreæ*	*Sp* 1.					
13910 lobáta *Jacq*	lobe-leaved	♃ □	or	12	au	G	S Leone	1812	C	r m	Bot reg 433

HEXANDRIA.

2076 XEROTES. *R Br*	XEROTES.				*Juncæ. Sp.* 2—24						
13911 longifólia *R Br*	long-leaved	⚳ ⊔	or	3	...	G w	N. Holl.	1796	D	r m	
13912 rigida *R Br*	rigid	⚳ ⊔	or	2	...	G w	N. Holl	1791	D	r m	Bot cab 798
2077 ELA'IS *W*	OILY PALM				*Palmæ*	*Sp* 3					
13913 melanocócca *Gærtn*	black-seeded	♇ □	or	30	...	G w	N Grena	1821	S	co	
13914 occidentális *W*	West Indian	♇ □	or	30	..	G w	Jamaica	1820	S	r m	
13915 guineénsis *W*	Guinea	♇ □	or	30	...	G w	Guinea	1730	S	r m	Jac amer t 172
2078 CHAMÆDO'REA *W*	CHAMÆDOREA				*Palmæ*	*Sp* 1.					
13916 grácilis *W*	slender	♇ □	or	10	...	W G	Caraccas	1803	Sk	r m	Jac sch 2 t 247,8
2079 BORAS'SUS. *W*	BORASSUS				*Palmæ*	*Sp* 1					
13917 flabelliformis *W*	fan leaved	♇ □	or	30	...	W G	E Indies	1771	S	r m	Rox co 1 * 71,72
2080 MAURI'TIA *W*	MAURITIA				*Palmæ*	*Sp* 1					
13918 flexuósa *W*	wavy-spiked	♇ □	or	40	...	W G	Surinam	1816	S	r m	
2081 SMI'LAX. *W*	SMILAX				*Smilaceæ*	*Sp* 22—68					
13919 áspera *W*	Rough Bindw	♃	un	8	s	W G	S Europe	1648	Sk	s p	Sch hand 3 t 328
β auriculáta	*ear-leaved*	♃	un	8	s	W G	S Europe	1648	Sk	s p	Pluk al t 110 f 3
13920 excélsa *W*	tall	♃ ⊔	un	12	au s	W G	Syria	1739	Sk	s p	Buxb con 1 t 27
13921 zeylánica *W*	Ceylon	♃ □	un	10	...	W G	E Indies	1778	Sk	p l	Rum am 5 t 161
13922 quadrangulária *W*	square-stalked	♃	un	6	jn jl	W G	N Amer	1812	Sk	s p	Dend brit 109
13923 Sarsaparilla *W*	medicinal	♃	m	4	jl au	W G	N Amer	1664	Sk	s p	Dend brit 111
13924 China *W*	Chinese	♃ □	m	6	...	W G	China	1759	Sk	s p	Kæm amæ t 782
13925 rotundifólia *W*	round-leaved	♃	un	6	jl au	W G	N Amer	1760	Sk	s p	
13926 laurifolia *W*	Laurel-leaved	♃	un	5	jl	W G	N Amer	1739	Sk	s p	Cat car 1 t 15



History, Use, Propagation, Culture,

in Kent as coppice wood for that purpose The after-culture of the hop consists in stirring the soil, and keeping it free from weeds, in guiding the shoots to the poles, and sometimes tying them for that purpose with withered rushes, in eradicating any superfluous shoots which may arise from the root, and in raising a small heap of earth over the root to prevent any more shoots from arising

Hops are known to be ready for gathering, when the chaffy capsules acquire a brown color, and a firm consistence Each chaffy capsule or leafed calyx contains one seed Before these are picked, the poles with the attached stalks are pulled up, and placed horizontally on frames of wood, two or three poles at a time The hops are then picked off by women and children After being carefully separated from the leaves and stalks, they are dropped into a large cloth hung all round withinside the frame on tenter-hooks When the cloth is full, the hops are emptied into a large sack, which is carried home, and the hops laid on a kiln to be dried This is always done as soon as possible after they are picked, as they are apt to sustain considerable damage, both in color and flavor, if allowed to remain long in sacks in the green state in which they are pulled In very warm weather, and when they are pulled in a moist state, they will often heat in five or six hours for this reason the kilns are kept constantly at work, both night and day, from the commencement to the conclusion of the hop-picking season The operation of drying hops is not materially different from that of drying malt, and the kilns are of the same construction The hops are spread on a hair-cloth, from eight to twelve inches deep, according as the season is dry or wet, and the hops ripe or immature When the ends of the hopstalks become quite shrivelled and dry, they are taken off the kiln and laid on a boarded floor till they become quite cool, when they are put into bags

The bagging of hops is thus performed in the floor of the room where hops are laid to cool, there is a round hole or trap, equal in size to the mouth of a hop-bag After tying a handful of hops in each of the lower corners of a large bag, which serve afterwards for handles, the mouth of the bag is fixed securely to a strong hoop, which is made to rest on the edges of the hole or trap, and the bag itself being then dropped through the trap, the packer goes into it, when a person who attends for the purpose, puts in the hops in small quantities, in order to give the packer an opportunity of packing and trampling them as hard as possible When the bag is filled, and the hops trampled in so hard as that it will hold no more, it is drawn up, unloosed from the hoop, and the end sewed up, other two handles having been previously formed in the corners in the manner mentioned above The brightest and finest colored hops are put into pockets or fine bagging, and the brown into coarse or heavy bagging The former are chiefly used for brewing fine ales, and the latter by the porter brewers But when hops are intended to be kept two or three years, they are put into bags of strong cloth, and firmly pressed so as to exclude the air

The stripping and stacking of the poles succeeds to the operation of picking The shoots or bind being stripped off, such poles as are not decayed are set up together in a conical pile of three or four hundred, the centre of which is formed by three stout poles bound together a few feet from their tops, and their lower ends spread out

The produce of no crop is so liable to variation as that of the hop, in a good season an acre will produce 20 cwt.; in a bad season none, or only 2 or 3 cwt From 10 to 12 cwt. in a season reconsidered a tolerable average

13910 Leaves entire 3-7-lobed without glands cordate at base

HEXANDRIA.

13911 Stemless, Lvs long lin coriaceous straight toothed at end rough at edge, Panicles lanceolate contracted
13912 Scapes and spikes short, Lvs distichous cartilaginous convex beneath ½ truncate at end, Stem very short

13913 Stem ascending, Stalks spiny serrated, Anthers and fruits ovate acute
13914 Fronds pinnated, Leaflets sheathed, Stems unarmed
13915 Fronds pinnated, Stems toothed spiny diverging upper teeth recurved

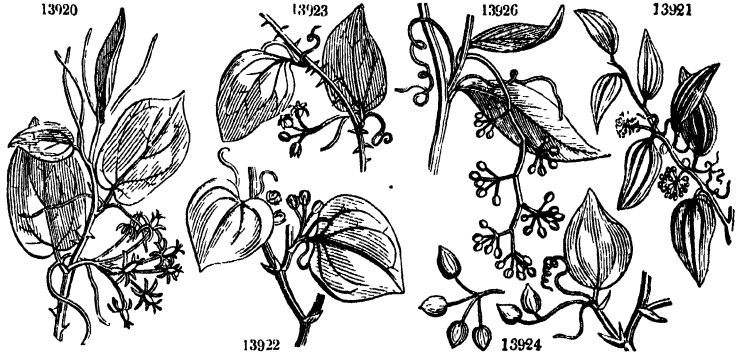
13916 Fronds pinnated 2 feet long pinnæ alternate oblong narrowed at base pointed at end

13917 Fronds palmate plaited cucullate, Stalks serrated

13918 Fronds flabelliform, Male spadix flexuose a foot long and more

13919 Stem prickly angular, Leaves hastate cordate lanceolate 7-9-nerved prickly toothed coriaceous

13920 Stem prickly angular, Leaves unarmed ovate slightly cordate about 7-nerved
13921 Stem prickly somewhat square, Leaves unarmed 3-5-nerved ovate-oblong cordate
13922 Stem prickly square, Leaves unarmed ovate acute 5-nerved
13923 Stem prickly nearly square, Leaves unarmed ovate lanceolate cuspidate about 5-nerved glaucous beneath
13924 Stem prickly rounded, Leaves roundish-cordate acute at each end 5-nerved
13925 Stem prickly rounded, Leaves roundish ovate acuminate slightly cordate 5-nerved
13926 Stem prickly rounded, Branches unarmed, Leaves elipt or elliptical-lanc obtuse recurved acute 3 nerved



and Miscellaneous Particulars

crop The quality of hops is estimated by the abundance or scarcity of an unctuous clammy powder which adheres to them, and by their bright yellow color

The expences of forming a hop plantation are very great, but once in bearing, it will continue so for ten or fifteen years before it requires to be renewed The hop culture in England, like that of the culture of the vine in France, is only calculated for cultivators of considerable capital, who can retain the produce from years of abundance to years of scarcity It is calculated on an average, that the hop crop fails almost entirely every fifth year, when the price will rise from two to thirty pounds per cwt To those who can cultivate and preserve the hop with a view to such a rise, few crops will be equally profitable

The hop is peculiarly liable to diseases, when young it is devoured by fleas of different kinds, at a more advanced stage it is attacked by the green fly, red spider, and otter moth, the larvæ of which prey even upon its roots The honey dew often materially injures the hop crop, and the mould, the fireblast, and other blights injure it at different times towards the latter periods of the growth of the plants

The use of hop in brewing is to prevent the beer from becoming sour, and this is the grand purpose for which it is cultivated But the young shoots both of the wild and improved hops are eaten early in the spring as asparagus, and were formerly brought to market for that purpose The stalk and leaves will dye wool yellow From the stalks a strong cloth is made in Sweden, the mode of preparing which is described by Linnæus in his Flora Suecica A decoction of the roots is said to be as good a sudorific as Sarsaparilla, and the smell of the flowers is soporific. During the illness of George the third, in 1787, a pillow filled with hops was used instead of opiates

2075 *Modecca*, is an Indian word by which two or three species of this genus appear in the Hortus Malabaricus, and has been adopted as a generic name by Lamarck A curious plant resembling a bryony, of easy culture and propagation

2076 *Xerotes* From ξηρος, dry, on account of the aridity of the herbage and of the situations in which it grows

2077. *Elais* The natives of Guinea express oil from the fruit of this, as the Greeks from their olives, ελαια, whence its name This palm bears a fruit about the size of a large plum The inhabitants of the West India Islands draw an oil from it, by the same process used in extracting oil from olives. From the sap an inebriating liquor is fermented, and the negroes weave the leaves into mats, on which they repose.

2078 *Chamædorea* Named, we presume, from χαμαι, dwarf, and δωρεα, a gift but we are ignorant of the sense in which the name has been applied

2079 *Borassus* This is one of the names which were applied to the spatha of the date, and was applied by Linnæus to the designation of this family of palms The fruit of this palm is of the size and shape of a child's head, a wine and a sugar are made from the sap of the trunk

2080. *Mauritia*. Named in honor of Prince Maurice of Nassau, the patron of Piso, for whom he obtained the necessary aid towards publishing his Natural History of Brazil A fine genus of palms

2081 *Smilax* From σμιλη, a grater, the stems are rough with stiff prickles S aspera has roots not unlike those of the Sarsaparilla. They have the same qualities, but in an inferior degree, and may be distinguished by

13927 tamnoides *W*	Tamus-leaved	♃	△	un	6	jn jl	W.a	N. Amer.	1739	Sk s p	Cat. car. 1 t. 52
13928 australis *R Br*	oblong-leaved	♃	▭	un	6	...	W a	N. S. W.	1815.	Sk s p	
13929 cadúca	deciduous	♃		un	6	jn jl	W a	N. Amer	1759	Sk s p	
13930 Bona nóx *W*	ciliated	♃		un	6	jn jl	W a	N Amer	1739.	Sk s p	Pluk al t 111 f 1
13931 latifólia *B P*	broad-leaved	♃	⌴	un	8	...	G.w	N. Holl	1791	Sk s p	
13932 herbácea *W*	herbaceous	♃	△	un	4	jl	G	N Amer	1699	Sk s p	Bot mag 1920
13933 lanceoláta *W*	spear-leaved	♃		un	5	my jn	G w	N Amer	1785	Sk s p	Cat car 2. t 84
13934 glycyphýlla *B P*	Botany Bay Tea	♃	⌴	un	6	...	G.w	N. S. W	1815.	Sk s p	
13935 púbera *W*	downy	♃		un	5	...	G w	N Amer	1806	Sk s p	
13936 Pseudo-china *W.*	BastardChinese	♃	⌴	un	6	my jn	G w	America	1739	C p l	Slo ja 1 t.143 f 1
13937 pedunculáris *W*	long-peduncled	♃	△	un	6	my.jl	G.w	N Amer	1812	C p l	
13938 glaúca *B M*	glaucous-leav'd	♃		un	2	my jl	G w	N Amer	1811	C p l	Bot mag. 1846
13939 rúbens *B at*	pink	♃		un	6	jl	G w	N Amer.	...	C p l	Dend. brit. 108
13940 longifólia *W*	long-leaved	♃	▭	un	10	my jl	G w	Cayenne	1820	C p l	

2082 TA'MUS *W.* Black Bryony. *Smilaceæ* *Sp* 2—3

13941 communis *W.*	common	⚷	△	m	10	my au	G	England	hed	R s p	Eng. bot. 91
13942 cretica *W*	Cretan	⚷	△	un	5	jl au	G	Candia	1739	R p l	

2083 TESTUDINA'RIA *Burch* Elephant's Foot, or Hottentot's Bread *Dioscoreæ.* *Sp* 1—2.

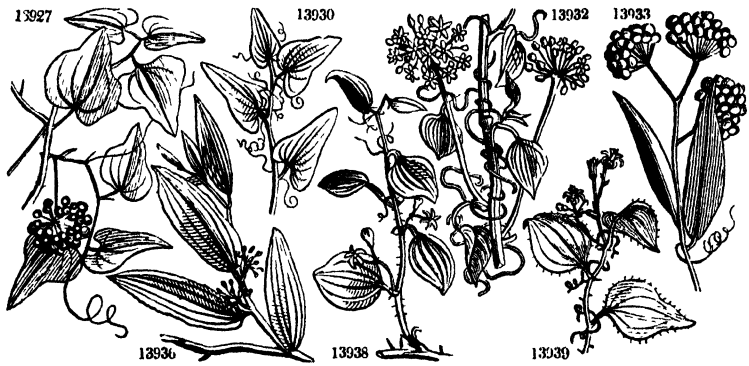
13943 elephan'tipes *Burch*	common	♃		cu	8	jl au	Y	C G H	1774	R p l	Bot. mag. 1347

2084 RAJA'NIA *W.* Rajania *Dioscoreæ* *Sp* 1—14

13944 cordáta *W*	Tamus-leaved	♃	⍁	un	6	jl	G	W Indies	1786	R p l	Plum.ic t 155 f 1

2085 DIOSCO'REA *W* Yam *Dioscoreæ* *Sp* 12—42

13945 pentaphýlla *W*	five-leaved	⚹	▭	cul	10	...	G	E. Indies	1768	R r m	Rhee mal 7 t 35
13946 aculeáta *W*	prickly-stemm.	⚹	⍁	cul	10	...	G	E. Indies	1803	R r m	Rhee mal 7 t 37
13947 aláta *W*	wing-stalked	⚹	⍁	cul	15	...	G	India	1739	R r m	Rhee.mal 7. t.38
13948 bulbífera *W*	bulb-bearing	⚹	⍁	esc	12	jl au	G	E Indies	1692	R r m	Par lond 17
13949 sativa *W*	common	⚹	⍁	clt	20	au	G	W Indies	1793	R r m	Rhee mal 8 t 51
13950 triphýlla *W*	three-leaved	⚹	▭	un	8	...	G	Malabar	1820	R r m	Rumph. 5 t. 128
13951 brasiliénsis *W*	Brazilian	⚹	▭	esc	8	...	G	Brazil	1823	R r m	
13952 coriácea *W*	leathery	⚹	▭	un	8	...	G	S Amer	1818	R r m	
13953 altissima *W*	tallest	⚹	▭	un	20	...	G	Martinıq	1821	R r m	Plum. ic 117 f 1
13954 angustifólia *W*	narrow-leaved	⚹	▭	un	10	...	G	Peru	1821.	R r.m	
13955 villósa *W*	pubescent	⚹	△	un	3	au	R	N Amer	1752	R s p	Jac ic 3 t 626
quaternata Ph											
13956 oppositifólia *W.*	opposite-leaved	⚹	⍁	un	6	..	G	E Indies	1803	R s p	Pet gaz t 31 f 6



History, Use, Propagation, Culture,

being larger, more porous, and much less compressed S Sarsaparilla (*zarza*, furze, Spanish) has long slender roots covered with a wrinkled brown bark, white within, and having a small woody heart It is inodorous, and has a mucilaginous very slightly bitter taste Medicinally it is demulcent and diuretic It was brought to Europe about the year 1520, and introduced as a medicine of great efficacy in the cure of lues venerea, but it fell into disrepute and was little used, till it was again brought into esteem by Dr William Hunter and Sir William Fordyce, about the middle of the last century, not, however, as a remedy fitted to cure syphilis, but of much efficacy in rendering a mercurial course more certain, and after the use of mercury Experience, however, has not verified the encomiums bestowed on it, and the extensive observations of Mr Pearson have fixed the degree of benefit which is to be expected from this root in syphilitic complaints The contagious matter and the mineral specific may, he observes, jointly produce, in certain habits of body, a new series of symptoms, which, strictly speaking, are not venereal, which cannot be cured by mercury, and which are sometimes more to be dreaded than the simple and natural effects of the venereal virus. Some of the most formidable of these appearances may be removed by sarsaparilla, the venereal virus still remaining in the system, and when the force of the poison has been completely subdued by mercury, the same vegetable is also capable of freeing the patient from what may be called the sequelæ of a mercurial course Sarsaparilla is also recommended in scrophula, elephantiasis, or cutaneous affections resembling it, and in chronic rheumatism, but its efficacy is doubtful (*Thom Lond Disp* 505)

S. China has roots as long as a child's hand, twisted, full of knots, reddish on the outside, flesh-colored in the heart, and destitute of smell It is employed both as food and medicine in China, and to feed hogs in the West Indies None of the species are of much beauty or worth growing, but as objects of curiosity

2082 *Tamus* This name was employed by Columella and others, for a plant resembling a vine, and bearing fruit not unlike grapes, a description which does not apply badly to the modern plant T communis has very large tuberous black coated masses attached to its roots These are so acrid, that the pulp has been formerly used as a stimulating plaster The young shoots, however, are so mild as to be good eating when dressed like asparagus The Moors eat them boiled with oil and salt. The flowers of the female plant are succeeded by ovate smooth berries

2083 *Testudinaria* So called from the resemblance which the great rugged cracked root of this plant bears to the shell of a tortoise (*Testudo* The rootstock is a large fleshy mass, covered with a thick bark cracked deeply in every direction The Hottentots in time of scarcity make use of the fleshy inside of the root as a sort of yam

2084 *Rajania* Named in honor of our distinguished countryman John Ray, a distinguished naturalist,

13927 Stem prickly rounded, Leaves ovate oblong acute subpanduriform obsoletely cordate 5-nerved
13928 Stems prickly rounded, Leaves oblong acute unarmed 5-nerved smooth, Petioles with tendrils
13929 Stem prickly rounded, Leaves ovate mucronate 5-nerved
13930 Stem unarmed angular, Leaves cordate ovate acute ciliate prickly 7-nerved
13931 Stem unarmed angular, Leaves ovate 5-nerved smooth subcordate or obtuse at base, Petioles with tendrils
13932 Stem unarmed angular, Leaves ovate acuminate 7-nerved, Common pedunc. of umbel longer than leaf
13933 Stem unarmed rounded, Leaves unarmed lanceolate
13934 Stem unarmed rounded, Leaves oblanceolate acute 3-nerved smooth glaucous beneath, Petioles with tendrils
13935 Stem unarmed rounded, Leaves oblong acute cordate about 5-nerved soft with down beneath
13936 Stem unarmed rounded, Leaves unarmed cauline cordate, of the branches ovate-oblong 5-nerved
13937 Stem unarm round Lvs roundish ov cord acum 9-nerv Peduncles of fr -bear umbel longer than leaves
13938 Stem prickly, Lvs unarmed rounded ovate mucronulate about 7-nerv glauc beneath, Pedunc about 2-fl.
13939 Stem angular prickly, Leaves ovate subcordate rather obtuse mucronate coriaceous 5-nerved denticulate
13940 Stem prickly square, Leaves unarmed hastate oblong obtuse mucronate about 7-nerved

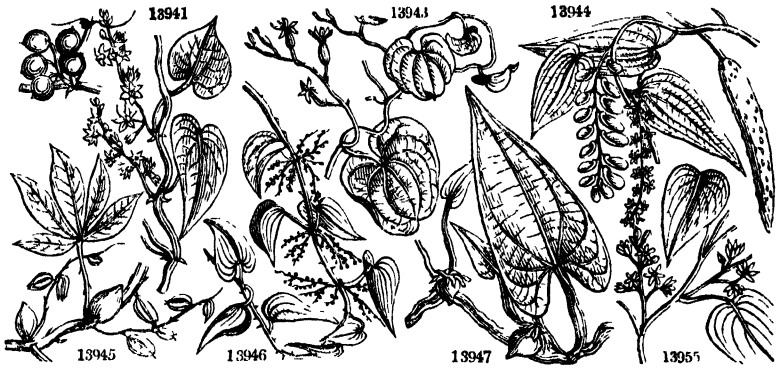
13941 Leaves cordate undivided
13942 Leaves 3-lobed

13943 Leaves reniform entire

13944 Leaves ovate lanceolate cordate 7-nerved

13945 Leaves alternate digitate, Leaflets 5 oblong acuminate veiny, Stem aculeate bulbiferous
13946 Leaves alternate roundish cordate acuminate 7-nerved, Stem aculeate bulbiferous
13947 Leaves opposite ovate cordate-sagittate cuspidate 7-nerved, Stem winged bulbiferous
13948 Leaves alternate cordate roundish ovate acuminate about 9-nerved, Stem smooth bulbiferous [round
13949 Lvs altern cord round ov cuspid about 9 nerv lobes of base close together, Caps obov Stem smooth
13950 Leaves alternate ternate, Leaflets obl acuminate nerved, Stem prickly
13951 Leaves alternate cordate 3-lobed middle lobe acuminate, Stem compressed round naked
13952 Leaves alternate cordate oblong acuminate coriaceous 7-nerved, Stem round smooth
13953 Leaves opposite cordate roundish ovate acute 7-nerved, Stem round smooth
13954 Leaves alternate cordate lanc narrow 3-nerved longer than petiole, Stem smooth
13955 Leaves opposite and whorled cordate acuminate 9-nerved downy beneath, Stem round

13956 Leaves opposite ovate acuminate 7-nerved, Stem round smooth



and Miscellaneous Particulars

born in 1628, died in 1705, and author of many works of the highest reputation His zoological arrangement is still regarded with much respect Twining plants resembling the Yam

2085 *Dioscorea* In memory of Pedacius Dioscorides, a Greek physician, born at Anazarba, in Cilicia. He is generally believed to have lived under Nero, but this is very uncertain Abulfarrage makes him to have flourished under Ptolemæus Physcon, but he is not generally credited D sativa, *Iguame*, Fr, and *Inhame*, Portug, has large thick tubers, a foot broad, and palmated like some Orchises The stalks are slender, and with the leaves bear some resemblance to black bryony The yam is largely cultivated for food in Africa and the East and West Indies, especially in the latter for the negroes The roots grow to a great size, are mealy, and esteemed to be easy of digestion, they are palatable, and not inferior to any roots now in use, either for delicacy of flavor or nutriment. They are eaten instead of bread, either roasted on the embers or boiled, the flower is also made into bread and puddings In Otaheite they make a dish, which they esteem very delicious, from the roots of the yam, with the kernel of the cocoa-nut scraped, and the pulp of the Musa or Banana The juice of yam-roots fresh is acrid, and excites an itching on the skin There are many varieties of these roots, some spreading out like the fingers (*Rumph* t 121), others twisted like a serpent (*Rumph.* t 122), others again very small, scarcely weighing more than a pound, with a whitish ash-colored bark, whereas the bark is commonly black The flesh of the yam is white or purplish, and viscid, but becomes farinaceous or mealy when dressed

D aculeata, by some considered only an improved variety of the sativa, is universally cultivated in the East and West Indies, in Africa, and in all the islands of the southern ocean within the torrid zone, and even as far as New Zealand The tubers are frequently three feet long, and weigh thirty pounds All the edible species and varieties are propagated in foreign countries like the common potatoe, but they arrive much sooner at maturity The buds of the roots are not apparent, but still a small piece of skin is left to each set, for from this piece of bark alone the shoots proceed. Holes are made in rows two feet apart, and at eighteen inches distant in the row, into those holes two or three sets are put, first covered with earth, and then with a little haulm or rubbish to retain moisture The only after-culture consists in hoeing up the weeds They are commonly planted in August, and are ripe about the November or December following. When dug up, the greatest care is taken not to wound them, as that occasions them to sprout much earlier than they otherwise would do They should be rubbed over with ashes, and piled regularly on beds or hurdles raised above the floor, that the air may come easily between them, or, if they be piled in heaps, some ashes should be strewed between the layers None of the species are worth cultivating as ornamental plants, but some of the edible sorts have been raised in hotbeds in the Paris garden, and being transplanted early into a warm situation, have produced tubers of a considerable size

2086. MA'BA. *J* Maba. *Ebenaceæ* *Sp.* 1—5
13957 buxifólia *P S* Box-leaved ☗ □ pr 1½ ... Y E. Ind es 1810. S s p Rox cor. 1. t 45

OCTANDRIA.

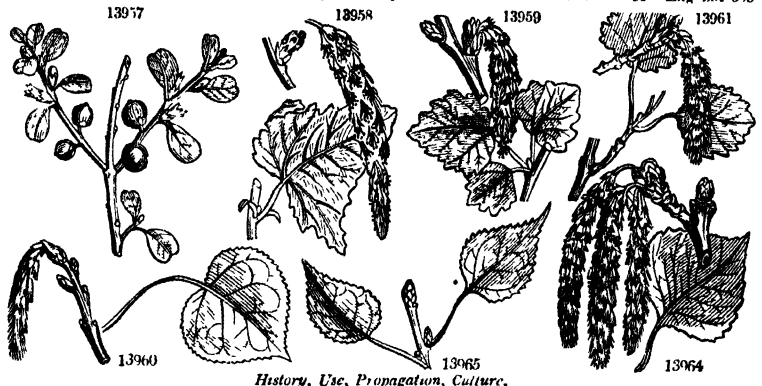
Amentaceæ *Sp* 16

†2087. PO'PULUS *W* Poplar.
13958 álba *W* Abele Tree ↟ tm 40 mr ap Ap Britain mo w. Sk co Eng bot. 1618
13959 canéscens *W.* gray ↟ tm 40 mr ap Ap England wat pl Sk co Eng bot 1619
13960 trépida *W* Trembling Americ ↟ tm 30 ... Ap N Amer. 1812. C co Mic arb 3 t 8 f 1
13961 trémula *W* Aspen ↟ tm 50 mr ap Ap Britain mo w Sk co Eng bot. 1909
13962 lævigáta *W* smooth ↟ tm 80 mr ap Ap N. Amer 1769 G co Mich arb 3 t 11
13963 græ'ca *W* Athenian ↟ tm 40 mr ap Ap Archipel. 1779 C co Duh ar 184 t 54
13964 nigra *W* black ↟ tm 30 mr ap Ap Britain wat.pl C co Eng bot 1910
13965 betulifólia *Ph hudsonica* Mich black American ↟ tm 40 mr ap Ap N Amer ... C co Mi arb 3 t 10 f 1
13966 dilatáta *W* Lombardy ↟ tm 70 mr ap Ap Italy 1758 C co Arb.brit 2 t 221
13967 monilífera *W* Canadian ↟ tm 70 my Ap Canada 1772 C co Dend brit 102
P grandidentata Mich
13968 aclades'ca *Lindl* black Italian ↟ tm 70 my Ap N Amer ... C co
13969 angulata *W* Carolina ↟ tm 80 mr Ap Carolina 1738 C co Mi a 3 p 302 t 12
13970 balsamífera *W* Tacamahac ↟ tm 70 ap Ap N Amer 1692 C co Mich.ar.3 t 13 f 1
13971 macrophýlla *Lindl* Ontario ↟ tm 70 .. Ap N Amer 1820 C co
13972 cándicans *W* heart-leaved ↟ tm 50 mr Ap N Amer 1772 G co Cat car 1 t 34
13973 heterophýlla *W.* various-leaved ↟ tm 70 ap my Ap N Amer 1765. G co Mich arb 3 t 9

ENNEANDRIA.

Euphorbiaceæ *Sp* 5—7

2088 MERCURIA'LIS *W* Mercury
13974 perénnis *W.* perennial ↡ w 1 ap my G Britain woods D s l Eng bot 1872
13975 ambígua *W* doubtful ○ w 1 jl au G Spain 1806. S co Lin fil dec 1 t 8
13976 ánnua *W* annual ○ w 1 jl s G Britain rub S co Eng bot 579



History, Use, Propagation, Culture,

2085 *Maba* The name given to the plant by the natives of Tonga-Tabu, according to Forster (*Gen.* 61) This shrub or small tree produces edible berries very well tasted The wood is dark colored, remarkably hard and durable, and where its size will admit, is employed for such uses as require the most durable, compact, and heavy timber

2086 *Populus* In ancient times the public places of Rome were decorated with rows of this tree, whence it came to be called arbor *populi*, as being a tree peculiarly appropriated to the *people* But Bullet asserts, that the Poplar has obtained its name from the constant motion of the leaves, which are in a perpetual state of agitation like the *populace* All the species are rapid-growing soft-wooded timber trees, some of which attain a very great size P alba is one of the most valuable of the British species The leaves of the common gray poplar are of a blackish-green above, but having a thick white cotton underneath, they are about three inches long, on petioles a foot in length The leaves of the Abele are about double the size, and divided into three, four, or five lobes The leaves of the gray poplar are also larger more deeply lobed, and the under-side of the leaves and young shoots are covered with a hoary down The Abele is said to have been introduced from Flanders, and the hoary poplar to have been originated in this country The timber is of great value for all sorts of wooden vessels, especially butchers' trays It is of quick growth, soft, white, and stringy, and little subject to swell or shrink It makes beautiful floors and turners' ware Some of the finest Abeles in England are at Hartwell near Aylesbury

P tremula is commonly called the asp, from the German *espe*, which is the general name for all poplars, is a rapid-growing tree in almost any soil or situation but the numerous shoots of the roots spread so near the surface that they will not permit any thing else to grow there The wood is extremely light, white, smooth, soft, and durable in the air It may be used for the same purposes as that of the Abele The bark is the favorite food of beavers On the leaves and leafstalks may sometimes be seen red glandular substances about the size of a pea, which are the nests of Pipula juniperina P nigra has a naked lofty trunk covered with an ash-colored bark, and a regular handsome head It is a tree of quick growth, and on the banks of rivers and in moist situations it grows up to a great height in a short time The bark is light like cork, and is sometimes used by fishermen to float their nets The timber is light and soft, fit for the turner and pattenmaker, and excellent for flooring-boards These boards are much slower in taking fire than those of resinous trees, they smoke a long time before they burst into a flame of course the wood is bad for fuel Many species of insects are supported by this and the other poplars The red substance like berries upon the leafstalks of this species are occasioned by the Aphis Bursoma. The leaves and young shoots are gathered in Sweden and other parts of Europe during the month of October and dried, to be given as fodder to the sheep in winter The practice is as old as the time of the Romans, who, as well as the modern Italians, planted this tree for their vines to run on. In Kamchatka the inhabitants are sometimes reduced to the necessity of converting the inner bark into bread Scheffer made paper from the cotton down of the seeds The buds both of this and the white poplar smell very pleasant early in the spring, and being pressed between the fingers yield a balsamic resinous substance, which, extracted by spirits of wine, smells like storax. A drachm of this tincture in broth is administered in internal ulcers and excoriations.

The black Italian poplar, so much recommended by Pontey, and said by him to have been intro-

13957 Leaves obovate entire, Flowers sessile, Calyxes hairy

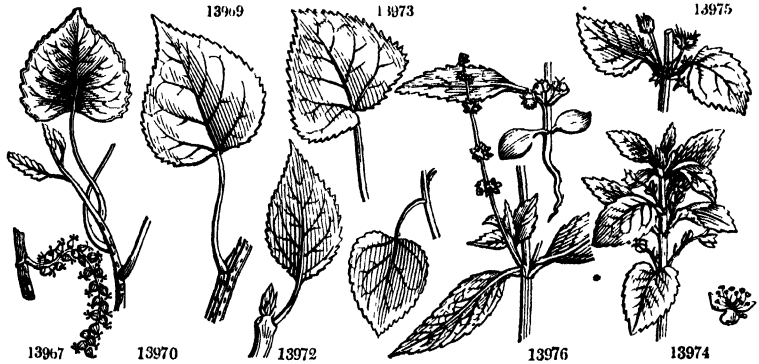
OCTANDRIA.

13958 Lvs roundish cord lobed toothed glab above downy and very white beneath, Fert catkins ov Stigmas 4
13959 Leaves roundish angular-repand toothed hoary beneath, Catkins cylindrical lax
13960 Leaves roundish toothed with 2 glands at base acuminate smooth younger silky
13961 Lvs nearly orbicul broadly tooth glab on both sides, Petioles compressed, Stigmas 4 auricled at base
13962 Lvs roundish ov acum subcord unequally serrat smooth, Petioles compressed, Branches round smooth
13963 Lvs round ov acute slightly cord with equal close serratures smooth a little chat Branches round smooth
13964 Leaves deltoid acute serrated glabrous on both sides, Fertile catkins cylindrical lax, Stigmas 4
13965 Leaves rhomboid acuminate toothed smooth, Younger branches hairy

13966 Leaves smooth on each side acuminate serrate deltoid, broader than long
13967 Lvs subcord smooth glandul at base, Serrat cartil hooked hairy, Nerves spread Branchl slightly winged towards end compound
13968 Lvs subcord, smooth glandul at base, Serrat cartil hooked hairy, Nerves spread Branchl winged simple
13969 Leaves cordate deltoid acuminate bluntly hook toothed, Branches winged angular
13970 Leaves ovate acuminate with close serratures white and netted beneath, Buds resinous
13971 Leaves cordate ovate large somewhat entire pale beneath.
13972 Lvs cordate ovate acumin bluntly and unequally serrated white beneath 3 nerved netted, Buds resinous
13973 Leaves cordate roundish-ovate blunt hook-toothed younger downy beneath

ENNEANDRIA

13974 Stem perfectly simple, Leaves rough, Root creeping perennial
13975 Stem herbaceous bracteate, Leaves ovate-oblong smooth ciliated, Fls whorled male and female mixed
13976 Stem branched, Branches opposite, Leaves glabrous, Root fibrous annual



and Miscellaneous Particulars

duced from America, seems intermediate between P nigra and dilatata, indeed, all the three sorts are by some considered as but one species P dilatata differs from the common black poplar chiefly in its close conical manner of growth, which resembles the cypress The leaves are greater in breadth than length, whereas in the black poplar the longitudinal character is the greatest Though it generally attains a great height, the increase of the trunk is by no means so rapid as in most of the other poplars It cannot, therefore, be highly recommended as a timber tree In Italy it is considered peculiarly adapted for packing-boxes, nails do not split it, and if cases of this wood fall or are thrown carelessly on the ground, it gives way a little, and returns to its former position without splitting, which oak and other heavy woods will not do In Lombardy all the vessels in which the grapes are carried home in carts from the vineyards, are of poplar plank, about two inches thick, and in them the grapes are squeezed Such vessels last thirty or forty years, and by their lightness are manageable, however large and long A four-wheeled cart is in general covered with one of them, and it contains about fifteen hundred weight of grapes, each hundred being a hundred pounds of thirty ounces The conic form of the Lombardy poplar, as a deciduous tree, is peculiar Among evergreens we find the same character in the cypress, and both trees, in many situations, have a good effect The cypress often, among the ruins of ancient (and the buildings of modern) Rome, breaks the regularity of a wall or a pediment, and the poplar has the effect among deciduous trees of the round-headed kind One beauty the Italian poplar possesses which is almost peculiar to it, and that is the waving line it forms when agitated by the wind Most trees, in these circumstances, are partially agitated, one side is at rest while the other is in motion, but the Italian poplar waves in one single sweep from the top to the bottom, like an ostrich-feather on a lady's head All the branches coincide in the motion, and the least blast makes an impression upon it when other trees are at rest

P balsamifera is a moderate sized conical tree, a native both of Siberia and America. The buds of this tree, from autumn to the leafing season, are covered with abundance of a glutinous yellow balsam, which often collects into drops, and is pressed from the tree for medical use This balsam is brought to Europe from Canada in shells It is smooth, of an even texture, a yellowish color, and a fragrant scent In Siberia a medicated wine is prepared from the buds, which is diuretic, and esteemed by the inhabitants serviceable in the scurvy The grouse and other birds of that family feeding on these buds during winter, acquire a flavor which is much esteemed by epicures P candicans bears a general resemblance to the preceding species, and, like it, the buds are covered with a resinous tenacious balsam The other American species are rapid-growing bulky timber-trees, well calculated for immediate effect and utility, but all the species being short-lived when compared with oaks, elms, and other slower-growing hard-wooded trees, confer a temporary premature character on landscape, for nothing can be great and lasting but what advances by degrees Such poplars as do not grow freely from cuttings of the shoots, are most rapidly increased by cuttings of the roots, but the largest plants are produced from layers

2087 *Mercurialis* Mercury is said to have discovered the virtues of this plant. Böhmer, indeed, in his *Lexicon*, says, after Ambrosinus, that the name is a corruption of *mulsercularis*, as being useful to women, but the Greeks call it *ἰερμὴ τοῦ*, which is the same as Mercurialis in its mythological sense M perennis is not eaten by any quadruped, and is poisonous to men and sheep The plant on being dried turns blue, and steeped in water it

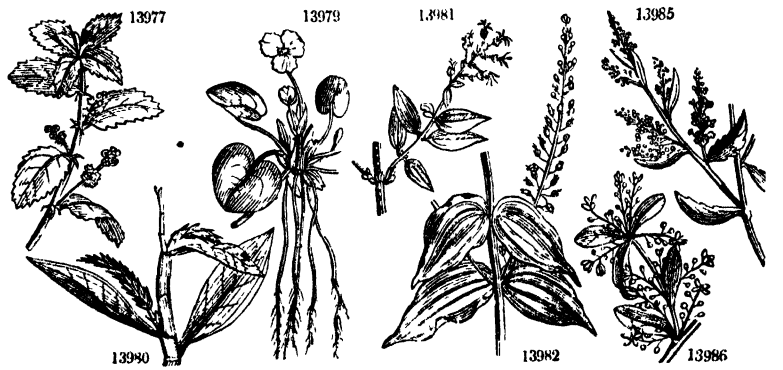
13977 ellíptica *W*	oval-leaved		un	1	my jl	G	Portugal	1802	C	co	Vent cels 12
13978 tomentósa *W*	woolly		un	1	jl s	G	Spain	1640	C	co	
2089 HYDRO'CHARIS *W*	Frog-bit				*Hydrocharideæ* *Sp* 1						
13979 Mórsus-ránæ *W*	common	≙ △	cu	¼	jn jl	W	Britain	dit	D	co	Eng bot 808
2090 TRIPLA'RIS *W*	Triplaris				.....		*Sp* 1—7				
13980 americána *W*	American	♀ □	tm	40	...	Pa.Y	S Amer	1824	C	r m	Aublet, t. 347

DECANDRIA.

2091 CORIA'RIA *W*	Coriaria				*Coriariceæ.* *Sp* 2—7						
13981 myrtifólia *W*	Myrtle-leaved	♣	or	6	my au	G	S Europe	1629	L	co	Dend brit 103
13982 sarmentósa *Forst*	running	⚹	cu	3	my au	G	N Zeal	1823	L	co	Bot mag 2470
2092 KIGGELA'RIA *W*	Kiggelaria.				*Euphorbiaceæ* *Sp* 1—2						
13983 africána *W*	African	♀ □	or	10	my jn	W G	C G H	1683	C	s l	Lam ill t 821
*2093 SCHI'NUS. *W*	Schinus.				*Terebintaceæ* *Sp* 3—7						
13984 Mólle *W*	Peruvian	♣ □	or	12	jl au	G	Peru	1597	L	r m	Mill ic 2 t 246
§13985 dentáta *H K*	tooth-leaved	♣ □	or	6	my jl	G	Owhyhee	1795	L	r m	Bot rep 620
§13986 depéndens *H K*	entire-leaved	♣	un	8	my jl	G	Chili	1790	C	p l	Cav. ic 3. t 239
Amýris polýgama W											
2094 GYMNOCLA'DUS *W*	Gymnocladus.				*Leguminosæ* *Sp* 1.						
13987 canadénsis *W.*	Canadian	♀	or	20	...	W	Canada	1748	R	s l	Mich ame.2 t.51
2095 CA'RICA *W*	Papaw Tree				*Cucurbitaceæ?* *Sp* 4—6						
13988 Papáya *W*	common	♀ □	cul	20	jl	G	India	1690	S	r m	Bot reg 459
13989 cauliflóra *W*	stem-flowering	♀ □	or	20	...	G	Caraccas	1806	S	r m	Jac schœ 3 t 311
13990 spinósa *W.*	prickly	♀ □	or	20	...	W G	Guiana	1821	S	r m	Aublet, t 346
13991 microcárpa *W.*	small-fruited	♀ □	or	20	..	W G	Caraccas	1806	S	r m	Ja sch 3 t 309,10
β monoica Dest	*monœcious*	♀ □	or	20	...	W G	.....	1818	S	r m	

DODECANDRIA.

2096 STRATIO'TES. *W*	Water Soldier				*Hydrocharidæ* *Sp* 1						
13992 aloides *W*	Aloe-like	≙ △	el	2	jn jl	W	England	dit.	D	l p	Eng bot. 379
2097 HYÆNAN'CHE. *H K*	Hyæna Poison				. ...		*Sp* 1				
13993 globósa *H K*	Cape	♣ □	or	8	ap s	W G	C G H	1783	C	l p	Lam enc 92 t 10
2098 EU'CLEA *W*	Euclea				. ...		*Sp* 2—5				
13994 racemosa *W*	round-leaved	♣ □	or	5	n d	W	C G. H	1772	C	p l	Jac.frag 3 t.1 f 5
13995 undulata *W*	wave-leaved	♣ □	or	5		W	C G H	1794	C	p l	



History, Use, Propagation, Culture,

affords a fine deep blue color, destructible, however, both by acids and alkalies It has been observed that the male and female plants are seldom found intermixed, each sort usually growing in large patches, whence it is probable that this plant, which increases much by the root, rarely produces perfect seeds. M. annua was formerly accounted medicinal, its seeds taste like those of hemp

2089 *Hydrocharis* From ὕδωρ, water, and χαρις, grace This little plant is one of the prettiest ornaments of still waters This plant increases by runners, which shoot out to a great length, and at the joints drop down long roots, which penetrate deep into the mud The joints are furnished with pendulous buds, supported on long footstalks. The buds consist of two stipulaceous scales folded together, within which are curiously enveloped the embryo leaves of the future plant.

2090 *Triplaris* All the parts of the fructification are in threes or *triple* T americana is a tree forty feet high, with a dense pyramidal head The leaves are oblong, entire, smooth, a span long The branches are often hollow, and are then filled with an innumerable quantity of little red ants, which are often showered down upon any incautious traveller who may stand under the shade of the tree, and whom they bite severely. (*Bredemeyer*)

2091 *Coriaria* A tanner's plant, from *corium*, a hide. Coriaria myrtifolia has handsome leaves, but very little beauty in the flowers It is considerably astringent, and is used not only in tanning leather, but in dying black colors It produces abundance of suckers

2092 *Kiggelaria* Named after Francis Kiggelar, an obscure botanist, who lived at the end of the seventeenth century An uninteresting plant Ripened cuttings strike in heat under a hand-glass

2093 *Schinus* This was the Greek name of the Pistacia Lentiscus It is now applied to an American genus which resembles Pistacia in sensible properties The word *molle*, applied to one species, does not allude to any softness in the plant which bears the name, but is a slight alteration of the Peruvian word *multi*. Fragrant shrubs with beautiful foliage, easily cultivated in a cold conservatory or out of doors in a warm sheltered place

2094 *Gymnocladus.* From γυμνος, naked, and κλαδος, a shoot, on account of the naked appearance of its strange rigid shoots during the winter This tree or shrub has pinnate leaves nearly a foot and a half long, both leaves and stalks are armed with thorns The stalks at first grow erect, but afterwards twine about the neighbouring trees and shrubs It is best propagated by cuttings of the roots.

13977 Stem suffruticose brachiate, Leaves elliptical acute at each end smooth glandular serrated
13978 Stem suffruticose, Leaves oblong downy with serratures on each side at the end

13979 The only species

13980 Racemes terminal and axillary brachiate

DECANDRIA.

13981 Leaves ovate-lanceolate 3-nerved stalked
13982 Procumbent diffuse, Leaves cordate-ovate acuminate entire 5-nerved stalked, Racemes nodding

13983 Leaves oblong unequally serrated

13984 Leaves pinnated, Leaflets serrated the odd one very long, Petioles equal
13985 Leaves simple toothed
13986 Leaves simple entire and trifid, Flowers generally octandrous

13987 Leaves bipinnate very large deciduous, Flowers equal dioecious

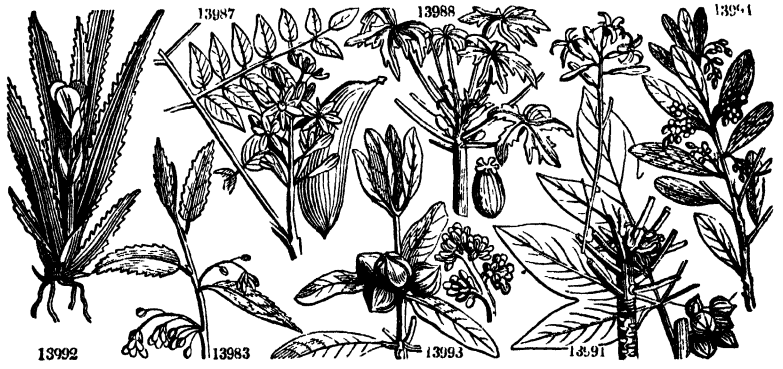
13988 Leaves palmate 7-lobed middle lobe sinuated, segments oblong acute, Male flowers corymbose
13989 Leaves palmate 5-lobed middle lobe sinuated, segments lanceolate, Male flowers from excrescences of trunk
13990 Leaves digitate, Leaflets 7 oblong acuminate entire, Trunk spiny
13991 Leaves 3 or 5-lobed middle lobe 3-lobed, Male flowers corymbose
β Lower leaves entire cauline 3-lobed, upper 5-lobed, Flowers monoecious subracemose erect

DODECANDRIA.

13992 Leaves linear lanceolate keeled prickly toothed

13993 Branches diffuse cinereous scarred, Leaves opposite 3 or 4-nate oblong retuse coriaceous

13994 Leaves oblong or obovate flat
13995 Leaves obovate wavy



and Miscellaneous Particulars

9095 *Carica* According to Linnæus, because a native of Caria, but as the plant has no relation to that country, it would be better to adopt, with Jussieu, the specific name Papaya for the genus C. Papaya rises with a thick soft herbaceous stem to the height of eighteen or twenty feet, naked till within two feet of the top, and having marks of the fallen leaves great part of its length The leaves have long footstalks, are very large, and divided into many lobes The whole plant abounds with a milky acrid juice, which is esteemed good for the ringworm The male flowers, which are in loose clusters on long peduncles, are of a pure white, and have an agreeable odor Sometimes these are succeeded by a small fruit about the size of a pear, which has occasioned some to suppose the male plant a distinct species The flowers of the female have short peduncles; they are large and bell-shaped, composed of six yellow petals When these drop off, the germ swells to a large fleshy fruit the size of a small melon When ripe it is eaten by the inhabitants of the Caribbee Islands, but its flavor is very indifferent The most common use of them is when they are about half grown, to soak them in salt water, to get out the milky juice, and pickle them as mangoes, for which they are considered a good substitute. The plant generally is said to have the property of intenerating animal fibre by suspension under its leaves or branches, but this quality wants confirmation In our stoves the plants grow freely in loamy soil, and are increased by large cuttings with their leaves on in a moist heat

2096 *Stratiotes* From στρατος, a camp, in English, water-soldier, both names alluding to the military appearance of the plant, with its long sword like leaves, and flowers which may be liked to plumes of white feathers An aquatic plant, remaining the greatest part of the year immersed in water, but rising to flower It increases with such rapidity as to become a troublesome weed in artificial pieces of water in which it is planted

2097 *Hyænanche* From *hyæna*, and αγχω, pain, because the fruit is used at the Cape of Good Hope to poison hyænas A small tree, six or seven feet high, also called Toxicodendron capense The flowers grow in axillary branched yellowish panicles, and are succeeded by smooth nuts, which, being pounded, are used to poison the carcases of lambs, by which the hyænas are infallibly destroyed

2098 *Euclea* From ευκλεια, glory or beauty, in allusion to the permanent beauty of the neat evergreen foliage of the plants Shrubs or small trees, natives of the Cape of Good Hope Of one species the berries are brought to the market of Cape Town for sale, and is the only kind of native fruit, except that of Cissus capensis, which is there eaten Ripened cuttings root in sand under a glass.

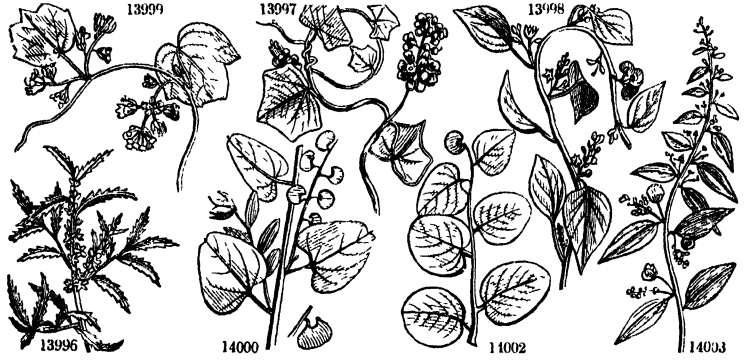
2099. DATI'SCA. *W*	DATISCA					*Resedaceæ*	*Sp* 1—2							
13996 cannabina *W*	Hemp-like	♆	△	or	4	jl s	Y	Candia	1640	D	co	Alp exot t 298		
2100 MENISPER'MUM *D*	MOON SEED					*Menispermeæ*	*Sp* 3—6							
13997 canadénse *W*	Canadian	♃		or	10	jn jl	G y	N Amer	1691	R	s p	Bot mag 1910		
13998 virginicum *W*	Virginian	♃		or	20	jn jl	G y	N Amer	1732	R	s p	Dil el t 178 f 219		
13999 similacinum *Dec*	Smilax-leaved	♃		or	10	...	G y	Carolina	1776	R	l p	Jac ic 3 t 629		
Cissampelos smilacina W														
2101 COC'CULUS *Dec*	COCCULUS					*Menispermeæ*	*Sp* 4—46							
14000 Plukenétii *Dec*	officinal	♃		or	10	...	G y	E. Indies	1790.	R	l p	Pl man t.345 f 2		
14001 carolínus *W*	Carolina	♃		or	4	jn jl	G y	N Amer	1810	R	s p			
Wendlandia populifolia														
14002 orbiculátus *Dec*	round-leaved	♃		or	6	...	G y	E. Indies	1790	R	l p	Pluk al t 384 f 6		
14003 villósus *Dec*	villous	♃		or	6	...	G y	E Indies	1800	R	l p	Plu am t 384 f 3		
β hirsútus Dec	*hairy*	♃		or	6	...	G y	E. Indies	1800	R	l p	Plu am t 384 f 7		

ICOSANDRIA.

2102 FLACOURTIA *W*	FLACOURTIA					*Tiliaceæ*	*Sp* 4—7					
14004 Ramóntchi *W.*	shining-leaved	♣		fr	12	jn jl	W	Madagasc	1775	C	p l	L'Hé stir 59 t 30
14005 flavéscens *W*	yellow-flower'd	♣		fr	15	..	W	Guinea	1780	C	p l	
14006 cataphracta *W*	many-spined	♣		fr	4	...	W	E Indies	1804	C	p l	
14007 sápida *W*	esculent	♣		fr	10	..	W	E Indies	1800	C	p l	Roxb cor 1 t 69
2103 PEU'MUS. *Pers*	PEUMUS					.....	*Sp* 1.					
14008 frágrans *Pers*	fragrant	♀		ft	30	..		Chili	1824	C	p l	Feuillée, 3 t 6
2104 GELO'NIUM *Roxb*	GELONIUM					*Euphorbiaceæ*	*Sp* 1—2					
14009 bifárium *Roxb*	oval-leaved	♣		un	6	jn au	Ap	E Indies	1793.	C	p l	
2105 ROTTLE'RA *Roxb*	ROTTLERA					*Euphorbiaceæ*	*Sp* 1.					
14010 tinctória *Roxb*	dyer's	♣		un	15	..	Ap	E Indies	1810	C	p l	Roxb cor 2 t 168

POLYANDRIA.

2106 CLIFFORTIA *W*	CLIFFORTIA					*Rosaceæ*	*Sp* 11—24				
14011 cuneáta *W*	wedge-leaved	♣		or	3	ap	G w	C G H	1787	C	p l
14012 ilicifolia *W*	Ilex-leaved	♣		or	3	my s	G	C G H	1714	C	p l
14013 tridentáta *W*	three-toothed	♣		or	3	my s	G w	C G H	..	C	p l
14014 ruscifólia *W*	Ruscus-leaved	♣		or	3	jn jl	G w	C G H	1772.	C	p l
14015 cinérea *W*	cinereous	♣		or	4	jn jl	G w	C G H	1800	C	p l
14016 pulchélla *W*	beautiful	♣		or	1½	ap my	G w	C G H	1795	C	p l
14017 crenáta *W*	notched-leaved	♣		or	3	jl au	G w	C G H	1791	C	p l
14018 ericæfólia *W*	Heath-leaved	♣		or	3	jl s	G w	C G H	1799	C	p l



History, Use, Propagation, Culture,

2099 *Datisca* A word the meaning of which is unknown The plant is of no beauty, and of the easiest culture

2100 *Menispermum* From μην, the moon, and σπερμα, seed, on account of the crescent-like form of the fruit All the species are of the easiest propagation and culture

The M palmatum produces the famous Colombo root, which is so remarkable for the intenseness of its bitter taste, and valuable on this account in dyspepsia, diarrhœa, dysentery, and as a wash for putrid sores

2101 *Cocculus* This word is derived from *coccus*, the name of the well-known dyers' insect, and has been applied to this genus on account of the resemblance which has been found to exist between that insect and the scarlet berries of the plant A genus with the habit of Menispermum

Cocculus Plukenetii produces berries and bunches like grapes, but smaller, first white, then red, and finally blackish purple In the East Indies they are made up into a paste, and used to intoxicate fish, birds, and different sorts of vermin

2102 *Flacourtia* Named in honor of Etienne de Flacourt, a director of the French East India Company, and the commander of an expedition to Madagascar in 1648, of which he afterwards wrote an account, containing considerable details upon the botany of the country L'Heritier dedicated to him the first species of the genus, which was found by him in Madagascar, where it is called *Ramontchi* It is a thorny shrub or tree, with leaves and fruit resembling those of the plum The fruit is green when young, of a beautiful red when ripe, and finally of a dark violet color the skin is very thin, and the flesh transparent red, of the same consistence with our common plums in the middle are a dozen or fourteen small kernels, the size of those in the apple, and nearly of the same shape, they are bitterish like our apricot kernels, and covered with a tender shell The natives eat the fruit, it is sweet, but leaves a slight sharpness in the mouth An island on the coast of Madagascar is covered with these trees, and because they resemble the European plum-tree, the sailors have named the island *Isle aux Prunes*, or Plum-tree Island. All the species grow freely in a mixture of loam and peat, and cuttings root in sand, plunged and covered

2103. *Peumus* The Chilian name of this plant is *Peumo* It is the Ruizia of the Flora Peruviana, and forms an evergreen tree among the woods upon the sandy shores of Chili; it is valuable for its wood, which is very fragrant

13996 Stem smooth

13997 Leaves peltate cordate roundish angular
13998 Leaves peltate cordate lobed
13999 Leaves peltate smoothish cordate-roundish bluntly angular glaucous beneath, Racemes simple

14000 Leaves ovate subcordate at base bluntly truncate at end with a little point, Fem racemes axillary simp
14001 Leaves cordate villous beneath

14002 Leaves orbicular subcordate obtuse 5-7-nerved mucronulate ash-colored beneath, Peduncles very large
14003 Leaves ovate or lanceolate 3-5-nerved younger villous, old ones downy, Branchlets vill Pedicels few fl

ICOSANDRIA.

14004 Leaves roundish ovate acute crenate
14005 Leaves oblong obtuse serrated narrowed at base
14006 Leaves ovate oblong acuminate serrated
14007 Leaves elliptical bluntish repand serrated obtuse at base

14008 Leaves ovate oblong with pellucid dots, Racemes short pellucid

14009 Leaves elliptical sharp-pointed

14010 Leaves alternate oblong elliptical acute at each end

POLYANDRIA.

14011 Leaves alternate cuneiform truncate 5-toothed at end streaked with veins
14012 Leaves altern roundish ellipt amplexicaul from the middle to end mucronate toothed streaked with veins
14013 Leaves alternate oblong cuneiform entire and 3-toothed nerved downy beneath
14014 Leaves altern te lanceolate smooth nerved terminated by a spine floral 3-toothed, Branches downy
14015 Leaves conn te ovate 3-cornered hoary
14016 Leaves opposite orbicular entire appressed many-nerved
14017 Leaves opposite or ternate orbicular appressed toothletted 7-nerved
14018 Leaves fasciculed rounded furrowed smooth



and Miscellaneous Particulars

2104 *Gelonium* So named by Roxburgh, but it is not known with what meaning East Indian trees, with alternate leaves, the tubular stipular of a Ficus, and axillary flowers

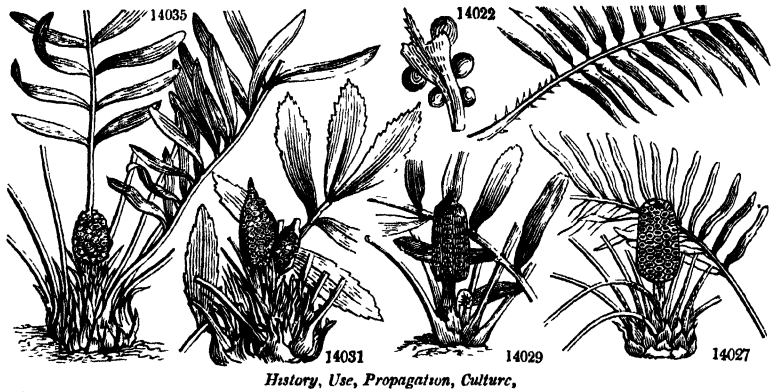
2105 *Rottlera* Named by Roxburgh, in honor of the Rev Dr Rottler, an East Indian botanist of reputation, who resided many years at Tranquebar in the character of a Danish missionary Rottlera tinctoria is a native of the inland mountainous parts of the Circars of Hindostan, flowering in the cold season Dr Roxburgh never found it any where else This is a middle-sized, erect, branching tree Leaves alternate, stalked, elliptic, oblong, acute, entire, from four to eight inches in length, three-ribbed, and veiny, nearly smooth above, downy beneath, furnished at their base with two brown glands Footstalks round, downy, from one to three inches long Flowers small, in clusters about the tops of the branches, axillary, and terminal, the latter branched Capsules the size of a small cherry, clothed with abundance of deep red granular powder, easily rubbed off This powder is a valuable article of commerce, being much esteemed, especially among the Moors, for dyeing silk of a deep, bright, very beautiful and durable, full orange or flower color. When the capsules are ripe, in February or March, they are gathered, and the powder carefully brushed off It is preserved without any further process, and is sold to the merchants trading to Hydrabad and other inland parts This substance is but little acted upon by water, except with the admixture of alkaline salts, when it gives out a very deep blood-red color To spirits it communicates a rich, deep, reddish flame color, but in neither instance does it dissolve, the grains remaining entire, like sand The inhabitants know this powder by the name of *Wassunta-gunda*, and use it in the following manner — To four parts of *Wassunta-gunda* are added one of alum, and two of salt of soda, native barilla These are rubbed well together, with a portion of expressed oil of Sesamum, so small as hardly to be perceived When well mixed, the whole is put into boiling water, in quantity proportioned to the silk which is to be dyed, and kept boiling smartly, more or less time, according to the shade required The silk is turned frequently, to render the color uniform

2106 *Cliffortia* Named in honor of George Cliffort, a Dutch gentleman; a great lover of plants, and one of the earliest of Linnæus's patrons He had a superb garden at Hartecamp, of which Linnæus published the catalogue in one volume folio, in 1737 Shrubs of little beauty, except C pulchella, which is exceedingly pretty, they are easily cultivated in a good greenhouse

14019 obcordáta *W*	heart-leaved		or	3	jn au	G w	C G H	1790	C	p l		
14020 trifoliáta *W.*	three-leaved		or	10	ap jl	G w	C G H	1752	C	p.l	Pluk.al. t 319 f 4	
14021 sarmentósa *W*	twiggy		or	4	jn au	W	C. G H	1793	C	p l		
2107 CY'CAS *W*	Cycas.				*Cycadeæ* *Sp* 2—4							
14022 circinális *W.*	broad-leaved		cu	3	...	Ap	E. Indies	1700.	Sk	r m	Rh mal 3.t 13 21	
14023 revoluta *W*	narrow-leaved		cu	3	jl au	Ap	China	1737.	Sk	r m	Lin trans 6. t 29	
2108 ZA'MIA *W.*	Zamia				*Cycadeæ* *Sp* 15.							
14024 pungens *W*	needle		cu		...	Ap	C G H.	1775.	Sk	l p	Till pis 129 t 45	
14025 cycadifolia *W*	Cycas-leaved		cu		...	Ap	C G H	1775.	Sk	l p	Ja frag 1 t.25, 26	
14026 angustifolia *Jac*	narrow-leaved		cu		jl au	Ap	Bahama I. ...		Sk	p l	Jac ic 3 t 636	
14027 média *Jac*	intermediate		cu		jl au	Ap	W Indies ...		Sk	p l	Bot. mag 1838	
14028 débilis *W*	long-leaved		cu		jl au	Ap	W Indies 1777		Sk	p l	Bot. cab 155	
14029 intégrifólia *W*	dwarf		cu		jl au	Ap	W Indies 1768		Sk	p.l	Bot mag 1851	
14030 pygmæ'a *B M*	least		cu		my	Ap	W Indies ...		Sk	p l	Bot mag 1741	
14031 furfurácea *W*	broad-leaved		cu	3	jl au	Ap	W Indies 1691.		Sk	p l	Bot mag 1969	
14032 spirális *W*	spiral		cu	3	jl au	Ap	N S. W	1796	Sk	p l		
14033 hórrida *W*	gray		cu	3	...	Ap	C G H	1800	Sk	p l	Jac fr 27 t 27, 28	
14034 Cycádis *W*	Cycas-like		cu	3	. .	Ap	C G H	1775	Sk	p l	Th act ups 2 t.5	
14035 púmila *B M*	pygmy		cu	1½	...	Ap	C G H.	1812.	Sk	p l	Bot. mag 2006	
14036 lanuginósa *W*	woolly		cu	3	. .	Ap	C G H	1812	Sk	p l	Jac frag t 27,28	
14037 longifólia *W*	long-leaved		cu	7	...	Ap	C G H	1818	Sk	p l	Jac fragm. t. 29	
14038 tridentáta *W*	three-toothed		cu	2	...	Ap	C G H.	1814	Sk	p l		

MONADELPHIA.

2109 LATA'NIA *J*	Bourbon Palm				*Palmæ* *Sp* 2							
14039 rúbra *W*	red		or	15	...	G w	Mauritius	1788.	S	co	Jac frag 13 t. 8	
14040 borbónica *W.*	common		or	20	...	G w	Bourbon	1816.	S	co	Jac frag t 11 f 1	
2110 LEPTOCA'RPUS *R Br*	Leptocarpus.				*Restiaceæ* *Sp* 1—7							
14041 ténax *R Br*	tough		un	2	...	Ap	N. Holl	1823	D	co	Lab no hol.t.229	
Schænódum ténax Lab												
2111 RUS'CUS *W*	Butcher's Broom				*Asphodelcæ* *Sp* 7—7							
14042 aculeátus *W.*	prickly		or	1	jn d	G	England	thick	Sk	co	Eng bot 560	
β láxus L. T	*loose*		or	1	ja jn	G	Portugal	. .	Sk	co		
14043 Hypophýllum *W.*	broad-leaved		or	1	my jn	G	Italy	1640	Sk	co	Bot mag 2049	
14044 Hypoglóssum *W*	double-leaved		or	1	ap my	G	Italy	1596	Sk	co	Sch han 3 t 340	
14045 andrógynus *W*	climbing		un	3	ap my	G w	Canaries	1713	R	p l	Bot mag 1898	
14046 racemósus *W*	Alexandrian Laurel		or	4	jn	G s	Portugal	1713.	Sk	co	Dend brit. 145	
†*2112 ARAUCA'RIA *J*	Araucaria				*Coniferæ* *Sp* 2—3							
14047 imbricáta *W*	Sir J Banks's		tm	150	...	Ap	Chili	1796	C	p l	Lam ill t 328	
§14048 excélsa *H K*	Norfolk Island		tm	100	...	Ap	Norfolk I	1793	C	p l	Lam pin t 39, 40	



History, Use, Propagation, Culture,

2107 *Cycas* A name employed by the ancients to designate a little palm which grew in Ethiopia The modern plant is analogous to it This genus, which seems intermediate between palms and ferns, produces the nutritive granulated powder called sago, from *sagu*, the name of a sort of bread made from the pith of the trunk in Tonquin It is cultivated in China and Japan, and the fruit is eaten in the latter country The tree, however, is chiefly valued for the pith of its trunk, which is full of white pith like that of the elder. The tree being cut down, this pith is beaten with a wooden pestle in a great mortar or trough, it is then strained, and the sediment, without farther preparation, constitutes sago. The native Indians live wholly upon it for three or four months in the year That which is transported is dryed and granulated In our stoves these plants require the culture common to all the palm tribe, a rich loamy soil, plenty of pot-room, and a strong moist heat

2108 *Zamia* From ζημια, loss or damage Pliny applied the name to the pine-cones of the fir, which, when suffered to decay upon the tree, injured the succeeding crop The modern genus bears heads of flowers very like pine cones

2109 *Latania.* The name of this plant in the Isle of Bourbon is *Latanier* L borbonica is a middle-sized palm with plaited fan-like fronds, which from the elongation of the axis and terminal lobe, seems as if pinnate When young their middle nerve is downy, it afterwards becomes naked The stalks of the leaves are spiny. The other species, L rubra, is a much smaller plant, and is remarkable for its red livid leaves

2110 *Leptocarpus* From λεπτος, smooth, and καρπος, fruit, with reference to the polished surface of the seeds Rushy plants allied to Restio, and all natives of New Holland and the South Seas

2111 *Ruscus* Anciently *bruscus*, and derived, it is said, from *beus*, box, and *kelem*, holly, in Celtic; box-holly The French at this day call one species *buis-épineux* and *petit-houx* R aculeatus has thick white twining roots, which strike deep into the ground, and send out fibres like those of asparagus The stem is suffruticose, tough, stiff, and dark green, having many stiff sharp prickly pointed leaves From the middle of the leaf above, comes out a single flower, on a very short pedicel: when it first appears it is the size and shape of a small pin's head, when expanded, composed of three outer calyxed leaves, and three inner ones con-

14019 Leaves ternate veinless smooth roundish elliptical the middle one smaller obcordate
14020 Leaves ternate fascicled veiny hairy lateral lanceolate entire, middle one obovate 3-toothed
14021 Leaves ternate linear villous

14022 Fronds pinnated, Leaflets lanceloate linear acute 1-nerved flat
14023 Fronds pinnated, Leaflets linear mucronate 1-nerved revolute at edge

[unarmed
14024 Fronds pinnat Leafl subul spread straight rigid mucron · outer margin of base rounded, Stalk roundish
14025 Fronds pinnated, Leaflets linear mucronate distichous lower opposite, Stalk ½-round channelled downy
14026 Fronds pinnated, Leaflets linear entire with a callous end twice emarginate obtuse, Stalk ½-round
14027 Fronds pinnated, Leaflets linear lanc blunt obsoletely serrulate at end and flat, Stalk 3-cornered smooth
14028 Fronds pinnated, Leaflets lanc acute pointless serrated at end, Stalk 3-cornered smooth
14029 Fronds pinnat Leafl lanc rounded blunt narrow at base serrul on outside at end, Stalk smooth nearly sq
14030 Very smooth, Leaflets of 16 pairs ovate oblique imbr serr at end, Stem round, Ament ovate nodding
14031 Fronds pinnated, Leafl lanc ac pointless serrat from middle to end chaffy beh Stalk roundish spiny below
14032 Fronds pinnated, Leaflets in 30-40 pairs falciform outwards with 3 or 4 prickly teeth at the end [smooth
14033 Fronds pinnat Leafl frost. glauc lanc ac point with spiny teeth in midd on outside, Stalk sq and trunk
14034 Leaflets oblique linear-lanceolate subulate hairy curved with 1 or 3 spines at the end and none on stalk
14035 Leaflets linear entire obtuse of 20 pairs, Stem round unarmed scurfy at base [woolly
14036 Leafl oblique lanc acute mucron in midd on outside with 2 spiny teeth smooth, Stalk squ smooth, Trunk
14037 Leaflets oblique lanceolate distichous acute pointless entire, Stalk smooth bluntly 4-cornered
14038 Leaflets oblique linear somewhat sulcate 3-toothed at end smooth, Stalk ½ round channelled

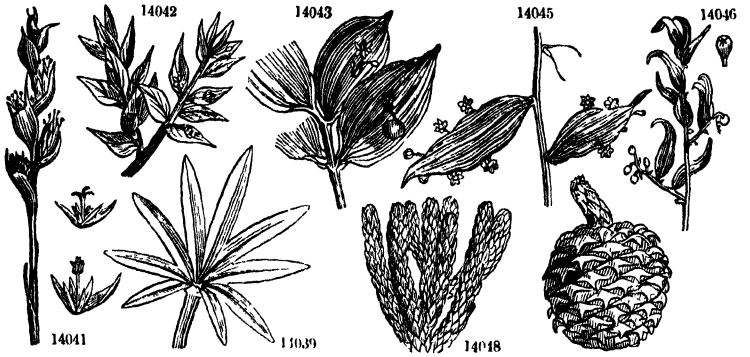
MONADELPHIA.

14039 Fronds plaited flabelliform, Leaflets spiny serrulate, Stalk unarmed
14040 Fronds plaited flabelliform elongated in the middle, Leaflets smooth at edge, Stalk spiny

14041 Spike divided, Catkins oblong somewhat squarrose, Scales cartilaginous acuminate, Culm simple

14042 Leaves mucronate pungent flower-bearing on their upper side and naked
β Leaves elliptical acute at each end, Branches weak
14043 Leaves bearing flowers on their underside naked
14044 Leaves bearing flowers on their upper side under a leaflet
14045 Leaves bearing flowers at their edge
14046 Raceme terminal hermaphrodite

14047 Leaves about 8 imbricated ovate-lanceolate mucronate perennial
14048 Old leaves closely imbricated inflexed pointless



and Miscellaneous Particulars.

sidered as petals Mr Woodward remarks, that the flower does not properly grow out of the leaf, but on a pedicel from the bosom of the leaf, which is immersed beneath the outer coat, whence it may with ease be dissected The female flowers are succeeded by red berries, almost as large as some cherries, they are sweet tasted, with two large orange-colored seeds in each The green shoots were formerly used by butchers for sweeping their blocks, whence the common English name of the plant It is still made into besoms in Italy The tender growths, soon after they have sprung up from the root in spring, have been gathered and eaten by the poor like those of asparagus, and the branches, with the ripe fruit on them, were formerly stuck up in sand, with the stalks of Peony and Iris, displaying their capsules of ripe seeds, the three together made a sort of winter nosegay for rooms In landscape gardening the plant is valuable as an evergreen, which will grow under the shade and drip of other trees It harmonizes well with Daphne Laureola, and Ulex nana, and Vaccinium vitis idæa R hypophyllum has the flowers on the under side of the leaves, which are succeeded by small red berries about the size of those of Juniper R racemosus is an elegant evergreen shrub, by some supposed to be the plant with which the ancients crowned their victors, but the more general opinion is in favor of Laurus nobilis All the species are readily increased by suckers from the root

2112 *Araucaria* The inhabitants of Chili call this noble ornament of their forests *araucanos* A. excelsa, the Norfolk Island pine, is a most superb plant, growing to an enormous size, and never losing the bright imperishable foliage with which it is covered, as with a coat of mail This genus, Sweet observes, " may be termed the handsomest genus of plants with which we are acquainted A. imbricata, in particular, is certainly one of the grandest plants known It will thrive well in the open air, with the protection of a mat or two in very severe weather, and when got pretty large, will, no doubt, be perfectly hardy A. excelsa, or Norfolk Island pine, is also a beautiful tree, but will not do without the protection of a greenhouse An equal mixture of sandy loam and peat will suit them very well, and cuttings may be rooted, though with difficulty, taken off at a joint in ripened wood, and planted in a pot of sand, which must be put under a hand-glass, in the propagating house but not plunged in heat " (*Hot Cult* p. 136)

2113. JUNI'PERUS. *W* Juniper — *Coniferæ* *Sp* 14—17.

14049	thurifera *W*	Spanish		or	10	my jn	Ap	S Europe	1752.	L	s l	
14050	bermudiána *W*	Bermudas Cedar	△	tm	20	my jn	Ap	Bermudas	1683	S	p l	Herm. lug t.347
14051	chinénsis *W*	Chinese	△	or	10	my jn	Ap	China	1804	L	p l	
14052	excélsa *W*	tall		tm	20	...	Ap	Siberia	1806	L	s l	
14053	Sabina *W*	Common Savin		or	4	my jn	Ap	S Europe	1548	L	s l	
	β *tamariscifólia*	*Tamarisk-lvd do*		or	4	my jn	Ap	S Europe	1562	L	s l	
14054	prostráta *P S*	prostrate		or	3	my jn	Ap	N Amer	...	S	s l	
14055	dauríca *Pall*	Daurian		or	8	jn au	Ap	Dauria	1791.	L	s.l	Bot rep 534
14056	virginiána *W*	Red Cedar		tm	30	my jn	Ap	N Amer	1664	S	s p	Mich arb 3 t 5
14057	communis *W*	common		tm	15	my jn	Ap	Britain heaths		S	s l	Eng bot 1110
	β *suecica*	*Swedish*		or	15	my jn	Ap	N Europe	...	L	s l	
14058	nána *W*	mountain		or	2	my jn	Ap	Siberia	...	S	l.p	Pa.r 2 t 54 f A B
14059	Oxycédrus *W*	brown-berried		or	15	my jn	Ap	Spain	1739	C	s l	Duh arb 1 t 128
14060	phœnícea *W*	Phœnician		or	15	my jn	Ap	S Europe	1683	C	s l	Pall ross 2 t 57
14061	lýcia *W*	Lycian		or	10	my jn	Ap	S Europe	1693	L	s l	Pall ross 2 t 56
14062	barbadénsis *W*	Barbadoes Cedar	└┘	or	20	...	Ap	Florida	1811	L	s l	Pluk al t.197 f 4

†2114. TAX'US *W* Yew-Tree — *Coniferæ* *Sp* 1

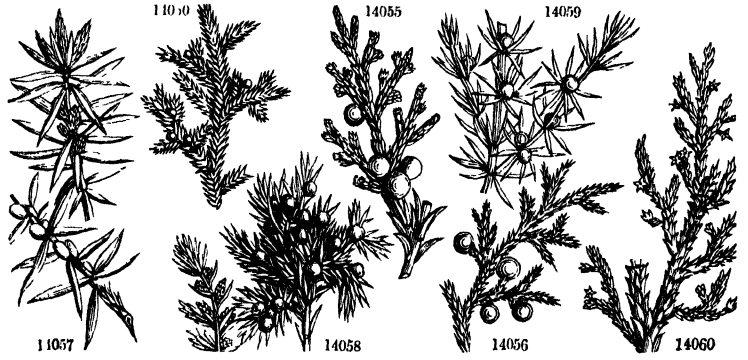
14063	baccáta *W.*	common		or	20	f ap	Ap	Britain	m wo	S	co	Eng bot 746
	β *hibérnica* Hooker	*Irish*		or	12	...	Ap	Ireland		C	p l	

2115. EPHE'DRA *W* Ephedra — *Coniferæ* *Sp* 3—5

14064	distáchya *W*	great		cu	2	jn jl	Ap	France	1570.	L	co	Sch han 3 t 339
14065	monostachya *W*	small		cu	2	s n	Ap	Siberia	1772	L	co	Dend brit 142
14066	altíssima *Desf*	lofty	└┘	cu	24	...	Ap	Barbary	1825	L	co	Desf atl t 253

2116. CISSAM'PELOS *Dec* Pareira Brava Root — *Menispermeæ* *Sp* 3—28

14067	Parèira *Dec*	genuine	⊠	or	6	jl au	G	S Amer	1732	C	s p	Lam ill t 830



History, Use, Propagation, Culture,

2113 *Juniperus* From the Celtic *jeneprus*, which signifies rough, or rude *Sandarach*, the name of a resin produced by the Juniper, is, according to Gelius (p 125), an alteration of the Arabic word *sandaroûs* The species, with only one or two exceptions, are close conical-growing evergreen shrubs or trees The timber of J Barbadensis and Bermudiana is imported from the West Indies under the name of Bermudas Cedar J Virginiana grows in the West Indies, the North American continent, and in Japan It is one of the highest timber trees in Jamaica, affording very large boards of a reddish brown color, close and firm contexture, shining, very odoriferous, and bitter to the taste It is imported into this and various other countries for the purposes of the cabinet-maker, as it is offensive to most insects. J communis is common in all the northern parts of Europe, in fertile or barren soils, on hills or in vallies, in open sandy plains, or in moist and close woods On the sides of hills its trunk grows long, but on the tops of rocky mountains and on bogs it is a tufted shrub In England it is found chiefly on open downs in a chalky or sandy soil In Scotland it is found in granite, trap and schistous hills and mountains, but not in the highest summits of the latter In the south of Europe it is only found in elevated situations, it abounds in the Alps of Switzerland, but is not very common in the Appennines In our shrubberies it forms a respectable looking conical bush, grouping and combining very well with cypresses, American cedars, and various species of the pine and fir tribe It is easily transplanted, and bears cropping Grass will not grow beneath it, but the Avena Pratensis is said to destroy it The wood is hard and durable, the bark may be made into ropes, and ardent spirits, impregnated with the essential oil of these berries, forms the true Juniper water or gin Various insects feed on this shrub, and it is eaten by horses, sheep, and goats, when they can get nothing better A gum oozes spontaneously from the trunk of old plants, which is Sandarach, and in its powdered form is known under the name of pounce Juniper berries require to remain two years on the tree before they are fully ripe The greater quantity of those which are used in Britain, are brought from Germany, Holland, and Italy They have a peculiar aromatic odor, and a sweetish, pungent, bitterish taste when chewed. In distillation with water, they yield a volatile terebinthinate oil of a greenish color, on which their virtues depend The flavor and diuretic properties of hollands depend on this oil, it is also supposed to be used for flavoring English gin, but for this purpose oil of turpentine is used Medicinally, Juniper berries are diuretic and cordial They have been long known as a remedy in hydropic affections, but they cannot be depended on alone, although they form an excellent adjunct to foxglove and squill. The tops yield the same essential oil as the berries, and may therefore be substituted for them (*Thom Lond Disp*)

J suecica is by some considered only a variety J sabina seldom produces flowers or seeds in our gardens Professor Pallas says, that in the Chersonesus Taurica, where it is very common, the savin is often found a foot and a half diameter, that it grows upright there, like a cypress, whereas by the Tanais it is procumbent the branches extending on the sand several fathoms, that the wood very much resembles that of J lycia, but has a more cadaverous smell, and the leaves are more fetid The leaves and tops of common savin have a strong, heavy, disagreeable flavor, and a bitter hot taste, with a considerable degree of acrimony These qualities depend on an essential oil, which is obtained in considerable quantity by distillation with water Both water and alcohol extract its active principles, and Lewis found that on inspissating the spirituous tincture, there remains an extract consisting of two distinct substances, of which one is yellow, unctuous or oily, bitterish, and very pungent, the other black, resinous, tenacious, less pungent, and subastringent Medicinally, savin is a powerful stimulant, possessing diaphoretic, emmenagogue, and anthelmintic properties It has certainly, however, a considerable effect on the uterine system, but, on account of its stimulating properties, is suited to those cases only of amenorrhœa which are unattended by fever, and in which the circulation is

14049 Leaves imbricated in 4 rows acute
14050 Lower leaves ternate · upper binate decurrent subulate spreading acute
14051 Leaves decurrent imbricated spreading closely packed, of the stem in threes of the branches in fours
14052 Leaves opposite bluntish glandular in the middle imbricated in 4 ways, Stem arborescent
14053 Lvs opp blunt glandular in the middle imbricated in 4 ways. the younger acute and opp Stem shrubby

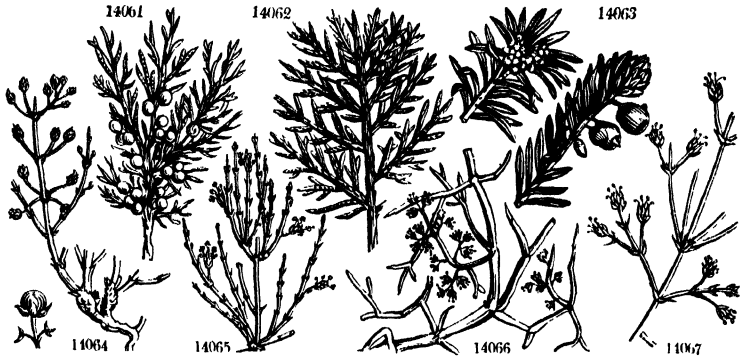
14054 Leaves opp acute imbricated in about 4 rows smooth glaucous, Branches horizontal prostrate
14055 Leaves opposite acute imbricated decurrent occasionally spreading and subulate
14056 Leaves in 3s adnate at base younger imbricated, old ones spreading
14057 Leaves ternate spreading mucronate longer than the berry

14058 Leaves ternate falcate somewhat imbricated the length of berries
14059 Leaves ternate spreading pointed shorter than berry
14060 Leaves ternate obliterated imbricated blunt
14061 Leaves ternate imbricated all ways ovate blunt
14062 Leaves all imbricated in 4 rows younger ovate, old ones acute

14063 Leaves thickly set linear distichous flat, Male receptacles globose

14064 Sheaths of joints 2-toothed blunt, Catkins 2–3 opposite stalked, Peduncles shorter than catkins
14065 Sheaths of joints 2-toothed blunt, Catkins solitary scattered or opposite, Peduncles longer than catkin
14066 Sheaths of joints bifid acum Male catkins clustered sessile or stalked, Fem solit stalk Branches spreading

14067 Leaves peltate subcordate ovate-orbicular silky beneath, Female racemes longer than leaves



and Miscellaneous Particulars

languid In plethoric habits, its use should be preceded by repeated bleedings, and at all times its internal exhibition requires caution It has been given in gout and worm cases also, but is seldom used. As an external local stimulant or escharotic, the dried leaves in powder are applied to warts, flabby ulcers, and carious bones, and the expressed juice diluted, or an infusion of the leaves, as a lotion to gangrenous sores, scabies, and tineæ capitis, or mixed with lard and wax as an issue ointment (*Thom. Lond Disp* p 342)

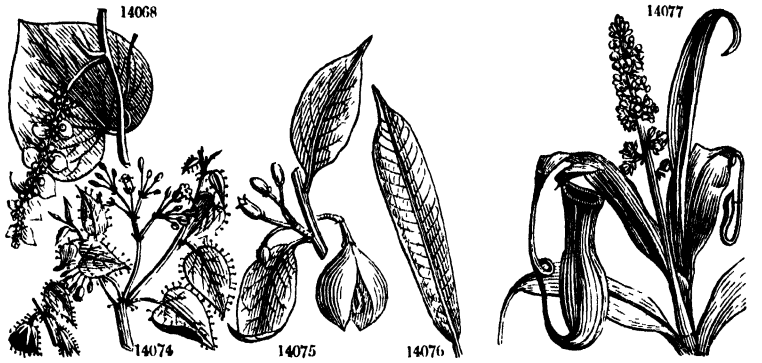
J. Lycia, which greatly resembles the savin, is commonly thought to produce the gum resin called Olibanum, though Dr Thomson and others consider the Boswellia Serrata of Roxburgh as the true plant Olibanum is supposed to have been the incense used by the ancients in their religious ceremonies, it is much employed by the Roman Catholics in their churches, and generally as a perfume in sick rooms

2114 *Taxus* According to Vossius this word is derived from *τοξος*, an arrow, because that weapon was formerly poisoned with the juice of the plant Yew seems to be an alteration of the Celtic *iw*, green T baccata inhabits mountainous woods in Europe, North America, and Japan Cæsar mentions it as very common in Gaul and Germany In Britain and Ireland there was formerly great abundance in a wild state, and planted in church-yards Ray says that our ancestors planted the yew in church-yards because it was an evergreen tree, as a symbol of that immortality which they hoped and expected for the persons there deposited Hence a custom, which still exists in a few places of Wales and Ireland, of carrying twigs of this and other evergreen trees in funerals, and throwing them into the grave with the corpse According to some, the yew was planted in church-yards on account of its utility in making bows, but this is by no means likely, when the tree was so common in a wild state, and when a single one would have afforded so very scanty a supply The bow was considered an engine of military warfare, at least up to the time of Henry VIII, so great was the demand for yew in the days of archery, that our own stock could not supply the demand; it was obliged to be imported, and various laws were passed concerning it from the time of Edward IV to Elizabeth The wood of the yew is red and veined, very hard and smooth, used by turners, cabinet-makers, millwrights, and a variety of other artisans. Flood-gates for ponds made of it, are said to be of incredible duration The twigs and leaves of yew, eaten in a very small quantity, are certain death to horses and cows, but deer, it is said, will crop these trees with impunity, and sheep and goats are said by Linnæus to eat them. Turkeys, peacocks, and other poultry and birds eat both the leaves and fruit A few of the berries are not deleterious to the human species, but the leaves are fatal The tree is very patient of the shears, and was much employed in the ancient style of gardening for verdant architecture and sculpture Allowed to take its natural shape, and when advanced to a considerable age, it forms one of handsomest of British evergreens, harmonizing admirably with the holly, the box, and the juniper The yew is generally propagated from seeds, which are either sown as soon as they are ripe, without clearing them from the pulp, or mixed with sand, and laid in a heap to be turned over two or three times during the winter, and in spring, the seeds from which the pulp will have rotted sown in beds, of light loamy soil By either mode, a part of the plants will come up the first season, and the remainder in that following The Irish yew is probably a distinct species

2115 *Ephedra* This was a name given by the Greeks to our Equisetum, which the plant now called Ephedra strongly resembles E. Distachya abounds in the southern parts of Russia, and from thence southwards to Persia and India The berries ripen in July and August · they are sweetish, mucous, and leave a little heat in the throat. They are eaten by the Russian peasants, and by the wandering hordes of all Great Tartary.

2116 *Cissampelos* From *κισσος*, the Greek name of the ivy, and *αμπελος*, vine, a plant partaking of the

14068 Caapéba *Dec*	nervous-leaved	♀	⧄	or	4	jl au	G	S Amer	1733	C	s p	Plum ic 67 f. 2
14069 capen'sis *Dec*	Cape	♀	▭	or	6	...	G	C G H	1775	R	p l	
2117 EXCÆCA'RIA *W*	Exæcaria					*Euphorbiaceæ*	*Sp*	1—6				
14070 serráta *H K.*	saw-leaved	♣	▭	or	6	f n	W	Chili	1796	C	p l	
2118 ADE'LIA *W*	Adelia					*Euphorbiaceæ.*	*Sp*	3—6.				
14071 Bernárdia *W*	villous-leaved	♣	▭	or	6	jl au	G	Jamaica	1768	C	p l	
14072 Ricinélla *W*	smooth leaved	♣	▭	or	6	jn au	G w	Jamaica	1768.	C	p l	
14073 Acidóton *W*	Box-leaved	♣	▭	or	3	jn jl	G.w	Jamaica	1768.	C	p.l	
2119 LOUREI'RA *W*	Loureira					*Euphorbiaceæ.*	*Sp*	1—2				
14074 glandulósa *B*	glandulous	♣	▭	or	6	...	...	Mexico	1799	C	p l	Cav ic. 5 t. 430
2120 MYRISTI'CA *W*	Nutmeg					*Myristiceæ*	*Sp*	2—14				
14075 moschâta *B*	true	♀	▭	clt	30	...	G w	E. Indies	1795	C	p l	Lam ill t. 832
14076 fátua *W*	tasteless	♀	▭	or	30	...	G w	Surinam	1812	C	p l	Pluk al t. 250 f 6
2121 NEPEN'THES *W*	Pitcher Plant					....	*Sp*	1—6				
14077 distillatória *W*	Chinese	♐	⧄	cu	2	ap my	G	China	1789	C	p l	Bur zeyl 42. t. 17
†2122 CLUY'TIA *W*	Cluytia.					*Euphorbiaceæ*	*Sp*	8—11				
14078 alaternoides *B*	narrow-leaved	♣	▭	pr	2	mr d	W	C G H	1692	C	p l	Bot mag 1321
14079 polygonoides *W*	Polygonum-like	♣	▭	pr	2	mr d	W	C G H	1790	C	p l	W hort ber 51
14080 daphnoides *W*	Daphne-leaved	♣	▭	pr	3	my jn	W	C G H	1731	C	p l	W hort ber 52
14081 ericoides *W*	Heath-leaved	♣	▭	pr	2	ap jn	W	C G. H	1790	C	p l	
14082 pohlfólia *W*	Poley-leaved	♣	▭	pr	2	ap jn	W	C G H	1790	C	p l	Jac schœ 2 t 50
14083 tomentósa *W*	tomentose	♣	▭	pr	3	ap jn	W	C G H	1812	C	p l	
14084 pulchélla *W*	broad-leaved	♣	▭	pr	2	ja jn	W	C G H	1739	C	p l	Bot mag 1945
14085 collina *W*	hill	♣	▭	pr	3	..	W	E Indies	1807	C	p l	Rox cor. 2 t 160



History, Use, Propagation, Culture,

nature of the former in its foliage, and of the latter in its fruit. The roots of several species are said to have powerful medicinal qualities That of the C pareira, or *Parcira brava*, is bitter, diuretic, and aperient, of C. caapeba more mucilaginous.

2117 *Excæcaria* From *excæcare*, to blind The juice of this plant is so acrid as to cause loss of sight whenever it touches the eyes Agallochum, the produce of one of the species, was the name given by the the Greeks to an aromatic wood they obtained from India In Arabia it is called, according to Gollius, *âghâloüdjy*

2118 *Adelia* From α, privative, and δηλος, visible The parts of fructification are so minute as to be hardly visible A Bernardia derives its name from having been considered a distinct genus, and dedicated to the celebrated Bernard de Jussieu Bernardia is the name which ought to have been adopted for the genus Ugly uninteresting shrubs

2119 *Loureira* Dedicated by Cavanilles to John de Loureiro, a Portuguese missionary, who travelled in China and Cochin-china, of which he published the Flora in 1790

2120 *Myristica* From μυρρα, myrrh, on account of the odor of the fruit. M. moschata produces spheroidal drupes, fleshy, smooth, and finally drying up into a coriaceous crust, and opening on one side Each berry contains an ovate, globular, serrated nut The arillus or cover, which is commonly called mace, is fleshy, coriaceous, and reddish-saffron colored Under this are two shells, the outer thin and brittle, and reticulated by the impressions of the mace the inner shell is membranaceous, and adheres very closely to the kernel The fruit would be a drupe was it not for the arillus

The nutmeg-tree yields three crops annually, the first in April, which is the best, the second in August, and the third in December, yet the fruit requires nine months to ripen it When it is gathered, the outer coriaceous covering is first stripped off, and then the mace carefully separated and dried in the sun The nutmegs in the shell are next exposed to heat and smoke for three months, then broken, and the kernels thrown into a strong mixture of lime and water, after which they are cleaned and packed up This process is necessary for their preservation, and with the same intention the mace is sprinkled with salt water There are several varieties of the tree, but that denominated the queen nutmeg, which bears a small round nut, is the best. They are imported in chests, which contain each from 100 to 140lbs weight, the mace comes in chests also of different sizes The essential oil which is obtained in Banda by the distillation of the nut is brought

14068 Leaves somewhat orbicular cordate at base 7-nerved or little downy, Fem racemes the length of leaves
14069 Lvs ovate bluntish smooth on short stalks, Racemes much branched, male ? scarcely longer than petiole

14070 Monœcious diandrous, Leaves oblong serrated

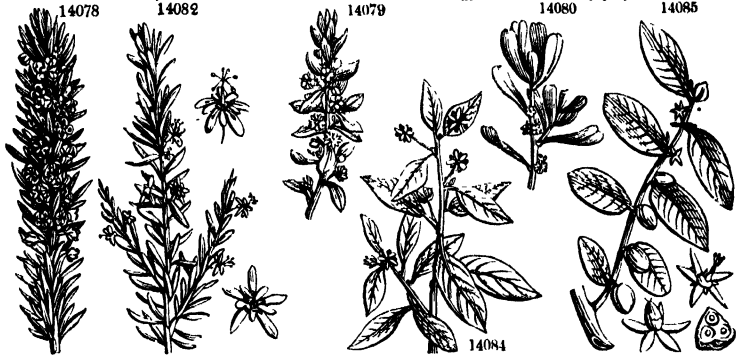
14071 Leaves oblong downy serrated
14072 Leaves obovate entire
14073 Leaves oblong blunt entire fascicled, Spines axillary

14074 Leaves cordate glandular on the limb

14075 Leaves oblong acuminate smooth, Veins simple, Fruit solitary smooth
14076 Leaves oblong lanceolate with starry down beneath, Veins simple, Fruit racemose downy

14077 Leaves sessile, Pitchers cylindrical, Flowers panicled

14078 Leaves sessile linear lanceolate acute, Flowers axillary solitary
14079 Leaves sessile obovate acute, Peduncles about 3-fl axillary
14080 Leaves subsessile lanceolate obovate, Flowers axillary solitary
14081 Leaves subsessile linear-lanceolate acute thickish, Flowers axillary twin
14082 Leaves stalked linear blunt mucronate revolute at edge, Flowers axillary subsolitary on long stalks
14083 Leaves elliptical blunt densely downy on each side, Flowers axillary solitary sessile
14084 Leaves stalked ovate acute smooth, Flowers n. 3s axillary
14085 Leaves stalked elliptical blunt somewhat retuse smooth shining, Flowers axillary polygamous about 3



and Miscellaneous Particulars

in bottles, and the expressed oil in stone jars Nutmegs are frequently punctured and boiled in order to obtain the essential oil, and the orifices afterwards closed with powdered sassafras The fraud is detected by the lightness of the nutmeg The nutmeg has a fragrant, agreeable, spicy odor, and a warm aromatic taste

As the medical properties of nutmeg and mace depend on the essential oil they contain, they agree in these circumstances, and both are stimulant, carminative, and, in large doses, narcotic Mace is more generally used as a culinary spice, but the nutmeg and its volatile oil are in frequent use to cover the disagreeable taste of other medicines, and are sometimes ordered in cases of languor, vomiting, and diarrhœa, and in flatulent colic On account of the narcotic property of the oil, nutmeg should be cautiously employed in apoplectic and paralytic habits. In India its dangerous effects have been frequently felt, and in this country instances have occurred in which the nutmeg, taken in large quantity, produced drowsiness, great stupor, and insensibility, and on awakening delirium, which alternated with sleep for several hours (*Thom Lond. Disp* p 395)

M fatua is a branching lofty tree, the branches long, tortuous and declining, the leafy and flowering branches downy and ferruginous, and the flowers in axillary and terminal clusters The fruit varies in size and form on different trees, but is generally oblong, and about as long as a pigeon's egg From the kernel is extracted a species of yellowish suet or fat, which serves for various medical and economical purposes, and is made into candles From the wounded bark flows a red acrid juice The plants are at present rare in British collections · they grow in light loam and peat, and may be increased by cuttings in sand under a bell-glass.

2121. *Nepenthes* The name under which Homer speaks of a substance, which appears to have been opium. It is impossible to conceive in what sense the word has been applied to the plants now bearing the name They are the famous pitcher-plants of China and the East Indies, which bear leaves, the extremities of which are hollowed out into cup-like appendages, which are generally filled with water, which seems as if confined within them by a little lid, by which the pitchers are surmounted The cultivation of the plants is extremely difficult. It requires a very damp atmosphere, much heat, and perhaps, not much light. They are managed more successfully by Loddiges of Hackney, than by any cultivators in this country

2122. *Clugtsa* Named by Boerhaave, after Outgers Cluyt, or Augier Clutius, a Dutchman, and professor of botany at Leyden. He published, in 1634, a little tract upon the Cocoa-nut of the Maldives, which he called nux-medica The species are of little beauty or interest, and of the easiest propagation and culture



Class XXIII. — POLYGAMIA.

Flowers either male, female, or hermaphrodite, upon the same or different plants.

This class differs from the two preceding in having not only the sexes in different flowers upon the same individual as in Monœcia, or upon separate individuals as in Diœcia, but also combined in one flower, mixed among those which are unisexual It may, therefore, be considered to contain those genera which are in a state of transition from the common hermaphrodite structure to absolute unisexuality

To the first of its orders are referred several grasses, which are excluded from the early classes *on* account of the separation of their sexes, it also contains the numerous tribe of Mimosas, so well known for *their* various properties as objects of food, of ornament, of medicine, or of curiosity The maple is also stationed in the first class, as are a few genera of palms

The most important genera of the second class, besides the poetical Palmetto, are the ash and the fig Gleditschia and Ceratonia, two families of Leguminosæ, are valuable, the former for its light, airy, elegant foliage, and the latter for its sweet pods, which are used in Spain, in great quantities, as fodder for cattle

Order 1 MONŒCIA  Flowers monœcious

2123 *Inga.* Hermaphrodite Cal 5-toothed Cor tubular, 5-fid Stam 100, monadelphous Pod 2-valved Seeds enwrapped in pulp, or in an arillus Male Cal 5-toothed Cor tubular, 5-fid Stam. 100, monadelphous

2124 *Mimosa* Hermaphrodite Cal 5-toothed Cor O or 5-toothed Stam 8 Pod separating into one-seeded joints Male Cal 5-toothed Cor O or 5-toothed Stamens 8

2125 *Schrankia* Hermaphrodite Cal 5-toothed Cor 5-fid Stamens 8-10 Pod 4-valved Male Cal 5-toothed Cor 5-fid Stamens 8-10

2126 *Desmanthus* Hermaphrodite Cal 5-toothed Cor 5 petals Stamens 20 Pod 2-valved Male Cal 5-toothed Cor O Stamens 20

2127 *Acacia* Hermaphrodite Cal 5-toothed Cor 5-fid. Stamens 4-100 Pod 2-valved Male Cal 5-toothed Cor. 5-fid Stamens 4-100.

2128 *Veratrum* Hermaphrodite Cal O Cor 6-petalous Stamens 6 Ovaries 3 Caps 3, many-seeded Male Same as hermaphrodite, but no ovary

2129 *Andropogon* Hermaphrodite Cal 1-fl Paleæ glume bearded, either at base or tip Stamens 3 Styles 2 Seed 1 Male Ovary none

2130 *Chloris* Flowers 1-sided. Cal 2-valved, with 2 or 6 florets one sessile, hermaphrodite, the other stalked, male Hermaphrodite Paleæ with a terminal beard Stamens 3 Styles 2 Seed 1 Male Cal O, Paleæ one or two, bearded Stamens 3

2131 *Sorghum* Flowers panicled Glume coriaceous-cartilaginous, 2-flowered closed Paleæ of the hermaphrodite bearded, of the neuter single, beardless Male Glume 1-fl stalked Paleæ 2, beardless

2132 *Holcus* Hermaphrodite Cal glume 1-2-flowered Paleæ bearded under the end Stamens 3 Styles 2 Seed 1 Male Cal glume 2-valved Paleæ O or 2 Stamens 3

2133 *Ischæmum* Hermaphrodite Cal glume 2-flowered Paleæ 2 Stamens 3 Styles 2 Seed1 Male Cal and palea as in hermaphrodite Stamens 3

2134 *Ægilops* Hermaphrodite Cal glume about 2-flowered, cartilaginous Palea terminated by a triple beard Stamens 3 Styles 2. Seed 1 Male Cal and pal of hermaphrodite Stamens 3

2135 *Manisuris* Hermaphrodite Glume 1-fl Paleæ 2 Stamens 3 Style bifid Male Glume 1-fl Paleæ 2 Stam 3 All the valves of calyx emarginate at end and sides

2136 *Valantia* Hermaphrodite Cal O Cor 4-parted Stamens 4 Style 2-fid Seed 1 Male Cal. O Cor 4-parted Styles 4

2137 *Parietaria* Hermaphrodite Cal 4-fid Cor O Stam 4 Style 1 Seed 1 Female Cal 4-fid Cor O Style 1 Seed 1

2138 *Atriplex* Perfect fl Perianth single, 5-partite, inferior Stam 5 Style bipartite Fruit depressed, 1-seeded, covered by the cal Pistilliferous fl Perianth single, 2-partite Stam O The rest as in the perfect flower

2139 *Rhagodia* Hermaphrodite Cal 5-parted Cor O Stamens 5, or fewer Acinus depressed Male Cal, cor, and stam of the hermaphrodite

2140 *Terminalia* Hermaphrodite Cal 5-parted Cor O Stam 10 Drupe inferior Male Cal five-parted Cor O Stamens 10

2141 *Fusanus* Hermaphrodite Cal 5-fid Cor O Stamens 4 Ovary inferior Stigma 4 A drupe Male Fruit abortive Cal, cor, and stam of hermaphrodite

2142 *Brabejum* Hermaphrodite Cor of catkin 4-parted Stamens 4 Style 2-fid Drupe with a fleshy round nut Male Cor of catkin 4-parted Stamens 4 Style 2-fid, abortive

2143 *Acer* Hermaphrodite Cal 5-fid Cor 5 petals Stamens 8 Styles 2 Samara winged at end, one-seeded Male Cal 5-fid Cor 5 petals Stamens 8

2144 *Negundum* Cal very small, unequally 4-5 toothed Pet O Male Flowers fascicled Anthers 4-5, linear, sessile Female. Flowers racemose

2145 *Celtis* Hermaphrodite Cal 5-parted Cor O Stamens 5 Styles 2 A drupe Male Cal six-parted Cor O Stamens 6

2146 *Gouania* Hermaphrodite Cal 5-fid, superior Cor O Stamens 5 Style 3-fid Fruit 3-cornered, 3-parted Male Cal 5-fid Cor O Stamens 5

2147 *Hermas* Hermaphrodite An umbel Cor 5 petals Stamens 5, sterile Male An umbel Cor 5 petals Stamens 5, fertile Styles 2 Seeds 2, inferior, cordate, orbicular

2148 *Bridelia* Hermaphrodite Cal 5-parted Petals 5, inserted in calyx Stamens 5, monadelphous Styles 2, bifid Berry 2 seeded Male Cal 5-parted Petals 5, inserted in the calyx Filam columnar, bearing 5 anthers Female Cal and corolla of male Styles 2, bifid Berry 2-seeded

2149 *Feronia* Hermaphrodite Cal 5-toothed Cor 5 petals Stamens 10 Style 1 Berry 5-celled, many-seeded Male Cal 5-toothed Cor 5 petals. Stamens 10

2150 *Ailantus* Hermaphrodite. Cal 5-parted Cor 5 petals Stamens 2-3 Ovaria 3-5 Styles lateral Samaras 1-seeded Male Cal 5-parted Cor 5 petals. Stamens 10 Female Cal 5-parted Cor 5 petals Ovaries 3-5 Styles lateral Samaras 1-seeded

2151. *Clusia* Hermaphrodite Cal 6-leaved Cor 4-6 petals Anthers clustered Stigmas 4 6 Caps 6-celled, many-seeded Male Cal 4-6-leaved Cor 6 petals. Stamens numerous

2152 *Ophioxylon* Hermaphrodite Cal 5-fid Cor 5-fid Stamens 3 Ovary 1 Male Cal 2-fid Cor 5-fid Stamens 2

2153 *Rhapis* Hermaphrodite Cal 3-fid. Cor 3-fid Stamens 6. Ovary 1 Drupe 1-seeded Male Cal. 3-fid. Cor. 3-fid Stamens 6

Order 2. DIŒCIA  Flowers dioecious

2154 *Gledtschia* Hermaphrodite Cal 4-fid. Cor. 4 petals Stamens 6 A pod Male Cal. 3-leaved Petals 3. Stamens 6 Female Cal 5-leaved Petals 5. A pod

2155 *Ceratonia* Hermaphrodite Cal 5-parted Cor O Stamens 5 Style 1 Pod coriaceous, many-seeded Male Cal 5-parted Cor O Stamens 5 Female Cal about 5-toothed Cor O Style 1 Pod coriaceous, many-seeded

2156 *Fraxinus* Hermaphrodite Cal O or 4-parted Cor O or 4 petals Stamens 2 Samara 1-seeded Female Cal O or 4-parted Cor O or 4 petals Samara 1-seeded

2157 *Brossmum* Hermaphrodite Catkin globose, with a solitary ovary at end Cal a scale Cor O Anthers peltate, solitary Style 2-fid Female Cal O Cor O Ovary imbricated with scales. Style 2-fid Berry coated, 1-seeded

2158 *Diospyrus* Hermaphrodite Cal and cor. 4-fid. Stam 8. Style 4-fid Berry 8-seeded Male Cal and cor 4-fid Stamens 8

2159 *Myrsine* Cor half 5-cleft, conniving Ovary filling the corolla Drupe 1-seeded Nut 5-celled

2160. *Nyssa* Hermaphrodite Cal 5-parted Cor O. Stamens 5 Ovary 1 Drupe interior Male Cal 5-parted Cor O Stam 10

2161 *Hamiltonia* Hermaphrodite Cal. 5-fid Cor O Nect. a 5-toothed disk Stamens 5 Ovary 1 Drupe interior Male Cal 5-fid Cor O Nect a 5-toothed disk Stamens 5

2162 *Laurophyllus* Hermaphrodite Cal 4-leaved Cor O Stamens 4 Ovary superior Style 1 Male Cal 4-leaved Cor O Stamens 4

2163. *Bursera* Hermaphrodite Cal 5-toothed Petals 5 Stamens 10 Style O Caps 3-valved, one-seeded. Male Cal 5-toothed Petals 5 Stamens 10

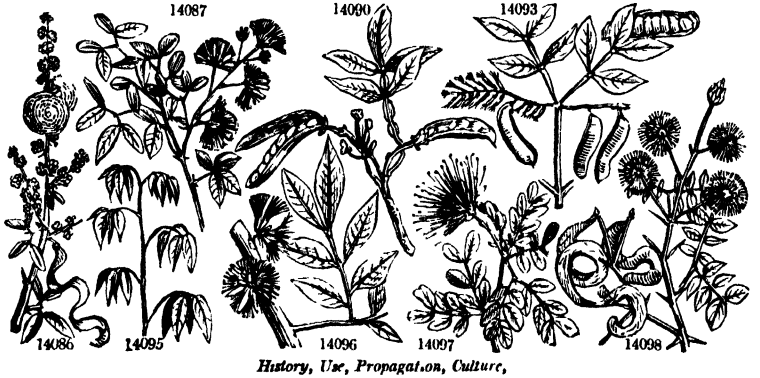
2164. *Arctopus* Male An umbel Petals and stamens 5. Hermaphrodite An umbel Petals 5. Styles 2. Seeds 2 Involucre very large

2165 *Panax* Hermaphrodite An umbel Cal 5-fid Petals 5 Stamens 5 Styles 2. Berry 2-seeded Male An umbel Cal entire Petals 5 Stamens 5

2166 *Ficus* Common receptacle turbinate, closed, fleshy Female Cal 5-parted Cor O Ovary 1 Seed 1 Male Cal 3-parted Cor O Stamens 3

MONŒCIA.

2123 IN'GA *W*	Inga				*Leguminosæ*		*Sp.* 13—112					
14086 dúlcis *W*	sweet	♀	☐	or	20	... *	Pk	E. Indies 1800.	C	p l	Roxb. cor 1. t 99	
14087 Unguis-Cáti *W*	four-leaved	♀	☐	or	20	...	Pk	W Indies 1690	S	p l	Jac schœ 3 t 302	
14088 bigloból̃sa *W*	two-headed	♀		fr	30	...	Pk	Martinq. 1823	S	p l	Ja.am t.179 f 87	
14089 macrophýlla *W*	large-leaved	♀	☐	or	20	...	Pk	Cumana 1815.	S	s p		
14090 vera *B*	common	♀	☐	or	30	jl au	W	W Indies 1739	S	s p	Sl jam.2 t 183 f 1	
14091 rhoifolia *W cn.*	villous	♀	☐	or	12	...	...	Brazil 1815	S	s p		
14092 álba *W*	white	♀	☐	or	20	...	W	E. Indies 1804	S	p l		
14093 margináta *W*	margined	☿	☐	fr	20	...	Pk	W Indies 1752	S	s p	Pluk al t 141 f 2	
14094 mellífera *W*	honey-bearing	☿	☐	or	20	...	Pk	Arabia 1822	S	p l		
14095 nodósa *B*	knobbed	♀	☐	or	20	...	Pk	Ceylon 1690	S	s p	Pluk al t 211 f 5	
14096 latifólia *B*	broad-leaved	♀	☐	or	10	mr ap	Pu	W Indies 1768	S	p l	Plum. ic t 9	
14097 purpúrea *W*	Soldier Wood	♀	☐	or	6	mr ap	Pu	W Indies 1733	C	p l	Bot reg 129	
14098 circinális *B*	spiral-podded	♀	☐	or	10	...	Pu	W Indies 1726	C	p l	Plum ic t 5	
* 2124 MIMO'SA *W*	Mimosa				*Leguminosæ*		*Sp* 12—71					
14099 viva *W*	lively	☿	△	or	1½	jl s	Pu	Jamaica 1739	S	p l	Sl jam 2 t.182.f7	
14100 cásta *W.*	chaste	♃	☐	pr	2	jl	Pa Y	E Indies 1741	S	p l	Com hort 1 t 28	
14101 sensitiva *W*	Sensitive Plant	☿	◎	cu	1½	ap s	Pk	Brazil 1648	C	s p	Bot reg 25	
14102 latispinósa *Lam*	broad-spined		☐	el	3	s	W	Madagasc 1823	S	s p		
14103 obtusifolia *W cn*	blunt-leaved		☐	el	3	...	Pu	Brazil 1816.	S	s p		
14104 pudica *W*	Humble Plant	♃	☐	el	1	ap s	W	Brazil 1638	S	r m	Bot rep 544	
14105 polydáctyla *Humb*	many-fingered	♃	☐	el	1½	jn jl	Pu	Brazil 1822	S	r m	Kunth mim t 5	
14106 pigra *H K*	straight-spined		☐	el	2	jn jl	W	Vera Cruz 1733.	S	l p	Breyn. cent. t.20	
14107 rubicaulis *W*	Bramble-stalk		☐	el	3	jn jl	Pa Y	E Indies 1799	S	l p	Roxb cor 2 t 200	
14108 asperáta *B*	rough		☐	el	2	jn jl	W	W Indies 1823	S	l p	Dec legum t 63	
14109 concinna *B*	neat		☐	el	3	...	Pu	E Indies 1794	S	p l		
§14110 polystáchya *W cn*	many-spiked	⚳	☐	el	20	...	W	Martinico 1816.	S	p l	Dec leg tt 61,62	
2125 SCHRANK'IA *W*	Schrankia				*Leguminosæ*		*Sp* 2—5					
14111 aculeáta *W*	Vera Cruz	⚹	△	cu	2	jl au	Pk	Vera Cruz 1733.	S	p l	Mil ic 2 t 182 f 1	
14112 uncináta *W*	hooked	⚹	△	cu	2	jl au	Pk	N Amer 1789	S	p l	Vent choix 28	



History, Use, Propagation, Culture,

2123 *Inga.* This is an American name adopted by Marcgraaf A fine genus of plants, remarkable for their beautiful foliage and flowers, but in cultivation they seldom blossom I purpurea is a remarkably elegant plant, and so is Inga bigloboso I unguis-Cati, the Cat's claw, Mimosa, is so called from the form of its curved spines. All the species require the greatest heat of the bark stove, they increase very slowly by cuttings

2124 *Mimosa* Said to be derived from *μιμος*, a buffoon, because the leaves of the sensitive species appear as if to play with the hand that touches them

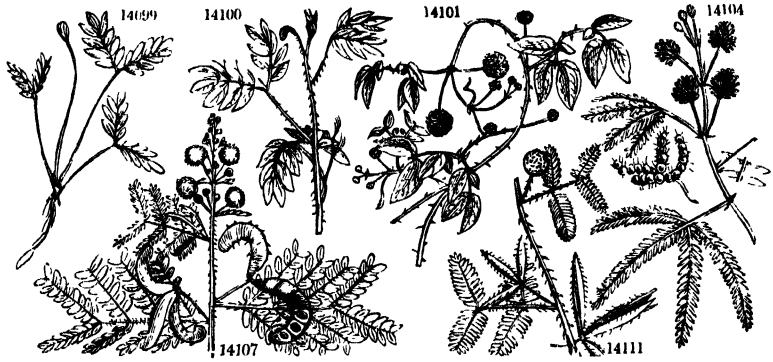
The cause of the well known motion in the leaves of the sensitive plant, has been the subject of many ingenious explanations, but it has not been treated by any botanist with so much ingenuity and address as by Dr Dutrochet, whose theory we give, as explained by Mr Lindley in the Botanical Register M Dutrochet states, that having ascertained hot nitric acid to possess the power of separating and reducing to its simplest form the whole mass of vegetable tissue, and that the action of the same acid produced other effects equally advantageous for the examination of the most obscure parts of vegetable structure, he was induced to give his attention to that of the Mimosa pudica, in the hope of gaining some evidence respecting the cause to which its sensibility is to be ascribed Beginning with the pith, he observed a considerable number of minute globules of a greenish color, intermingled among the cells, and adhering to them in an irregular manner After attempting to shew the probability of these globules having deceived M. Mirbel in various points of his analysis of vegetation, and especially in regard to the pores, which that botanist supposes to exist in the cellular tissue of plants, Dr Dutrochet proceeds to remark, that the application of hot nitric acid to these globules renders them perfectly opaque, whence he concludes, that they are, in fact, minute cells filled with a particular fluid, which is subject to become concrete by the application of acids Now, it is known, that such fluids as are thus altered by acids, are usually dissolved and liquefied again by the application of alkalies A few drops, therefore, of a solution of hydrate of potash were suffered to fall upon a portion of the pith on which nitric acid had been acting, and the mixture was exposed to the heat of a lamp Being examined after a few minutes, the globules were found to have resumed their natural appearance This curious fact indicated, in the opinion of Dr Dutrochet, a strong and unexpected point of analogy between plants and animals According to the microscopical researches of some modern observers, it has been ascertained that all the organs of animals are composed of a conglomeration of minute corpuscles, similar to those just described, the corpuscles which constitute the muscles are soluble in acids, but those which compose the nervous system are insoluble in the same acids, and only soluble in alkalies Now, as the chemical properties and the external appearance of the particles scattered among the cellular tissue of plants, and constituting the nervous system of animals, are the same, the author is induced to infer, that the spherical particles of plants are, in fact, the

MONŒCIA.

14086 Spines stipulary very short straight, Leaves of two pairs halved oblong obt. Panicle simple long terminal
14087 Spines stipulary straight, Leaves of two pairs roundish elliptical halved emarginate, Raceme terminal
14088 Unarmed, Leaves bipinnate, Spike double of two globes pendulous
14089 Unarm Lvs bipin of 2 pairs, Leafl ov ac smooth shining above, Glands betw every pair, Petiole winged
14090 Unarm Lvs pinn of about 5 pairs, Leafl ov obl acuin smooth, Gland between every pair, Petiole winged
14091 Leafl of 5 pairs obl acumin hairy above and shining villous beneath, Branches covered with rusty down
14092 Unarmed, Lvs of 3 pairs, Leaflets obl acuminate equal smooth, Gland between each pair, Petiole winged
14093 Unarm Lvs pinn of 2 pairs, Leafl obl lanc acum smooth, Gland between each pair, Petiole wing at end
14094 Spines stipulary recurved, Leaves of 2 pairs, Leaflets halved obovate, Pod ensiform straight
14095 Unarm Lvs pinn of 2 pairs, Leafl obov obl unequal sided smooth, A gland between the lowest small ones
14096 Unarmed, Lvs conjugate pinnate, Leaflets ov obl term opp lateral alternate, Flowers in lateral umbels
14097 Unarmed, Lvs conjugate pinnate, Leafl obl blunt uneq at base, Petioles without glands, Heads stalked
14098 Spines stipular, Lvs conjugate pinnate, Pinnæ of 3 pairs, Leaflets ovate acute smooth, Pods spirally twisted

14099 Unarmed herbaceous, Leaves conjugate pinnate, Pinnæ 4 pairs, Leaflets roundish, Pods with one joint
14100 Prickles of branches and stems scattered hooked, Lvs bipinn ciliat and rough, Sutures of pods very spiny
14101 Stem and petioles prickly, Leaflets nearly halved ovate acute hairy beneath smooth above
14102 Spines of petiol scatter very broad compr straight, Lvs. bipinn finally smooth without glands, Leafl 10-15
14103 Stem and petioles prickly, Leaflets halved cordate ovate blunt smooth
14104 Stem prickly more or less hispid, Leaves digitate-pinnate, Pinnæ 4 of many pairs, Leaflets linear
14105 Stem aculeate smooth hairy upwards, Leaves digitate-pinnate, Pinnæ 5 of many pairs, Leaflets linear
14106 Like M asperata, but less hairy
14107 Prickles of branches and stems scattered hooked, Leaves bipinnate, Pinnæ of 5 pairs, Leaflets 20-25 lin
14108 Leaves bipinnate, Pinnæ of 8-12 pairs, Leaflets of many pairs bristly ben Peduncles twin as long as head
14109 Prickly, Leaves bipinnate partial of 6 pairs, proper of many pairs cultrate, Gland of petiole depressed
14110 Lvs bipinnate terminated by a tendril, Pinnæ of 2-3 pairs, Leaflets oval emarg Spikes numerous fascicled

14111 Prickly, Leaves bipinnate partial of 3 pairs, proper of many pairs, Pods acute, Stem 4 cornered
14112 Prickly, Leaves bipinnate partial of 6 pairs, proper of many pairs, Pods acute, Stem 5-cornered



and Miscellaneous Particulars

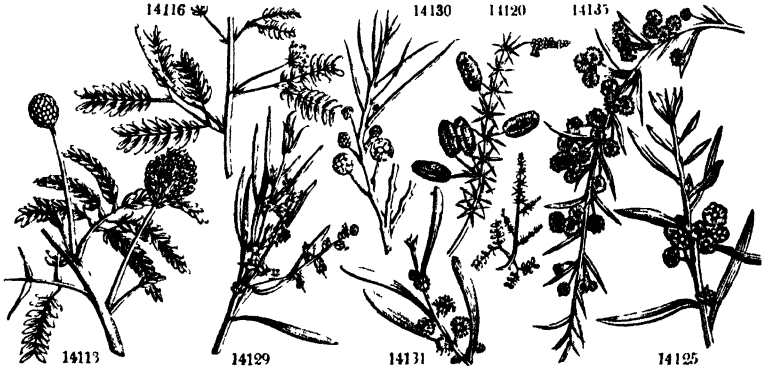
scattered elements of their nervous system This hypothesis receives additional strength from the great similarity which exists between the medullary substance of the brain of Mollusca Gasteropoda and the cellular medullary tissue of plants In pursuit of this idea, Dr Dutrochet made a variety of experiments upon the sensitive plant, the results of which seem to be these — The principal point of locomotion, or of *mobility*, exists in the little swelling which is situated at the base of the common and partial petioles of the leaves, this swelling is composed of a very delicate cellular tissue, in which is found an immense number of nervous corpuscles, the axis of the swelling is formed of a little fascicle of tubular vessels. It was ascertained by some delicate experiments, that the power of movement, or of contraction and expansion, exists in the parenchyma and cellular tissue of the swelling, and that the central fibres have no specific action connected with the motion It also appeared that the energy of the nervous powers of the leaf depended wholly upon an abundance of sap, and that a diminution of that fluid occasioned an extreme diminution of the sensibility of the leaves Prosecuting his remarks yet further, the author ascertained, that in the motion of the sensitive plant, two distinct actions take place, the one of locomotion, which is the consequence of direct violence offered to the leaves, and which occurs in the swellings already spoken of, the other of nervimotion, which depends upon some stimulus applied to the surface of the leaflets, unaccompanied by actual violence, such as the solar rays concentrated in the focus of a lens As in all cases, the bending or folding of the leaves evidently takes place from one leaf to another with perfect continuity, it may safely be inferred, that the invisible nervous action takes place in a direct line from the point of original irritation, and that the cause by which this action of nervimotion is produced, must be some internal uninterrupted agency This was, after much curious investigation, determined by the author to exist neither in the pith, nor in the bark, nor even in the cellular tissue filled with nervous corpuscles, and on which, he supposes, the locomotion of the swelling at the base of petioles to depend It is in the ligneous part of the central system, in certain tubes supplied with nervous corpuscles, and serving for the transmission of the sap, that Dr Dutrochet believes he has found the true seat of nervimotion, which he attributes to the agency of the sap alone, while he considers the power of locomotion to depend upon the nervous corpuscles alone

Some of the species ripen seed, others may be increased by cuttings from the points of the young shoots planted in sand and kept closely covered.

The pods of M fagifolia contain a sweet whitish pulp, which the natives of Martinique suck, they call the tree and its fruit *Pois Doux*, or sweet pea.

2125 *Schrankia* Named by Willdenow, in honor of his countryman, Francis de Paula Schrank, a well known German botanist. Herbaceous prickly shabby-looking plants, with the habit of Mimosa.

2126. DESMANTHUS. *W* Desmanthus.					*Leguminosæ.*		*Sp.* 7—19					
14113 nátans *W*	floating	un	2	jl.s	W	China	1800	C	p.l	Bot. rep 629		
14114 plénus *W*	double-yellow	un	2	jl s	Y	Vera Cruz	1733	C	p.l	Mil ic.2 t 182.f 2		
14115 diffusus *W*	prostrate	un	3	jl.au	W	W Indies	1731	C	p l	Pluk.al. t 307 f 3		
14116 virgátus *W*	long-twigged	un	3	jl.au	Y	W Indies	1774.	S	p l	Bot mag 2454		
14117 punctátus *W*	spotted-stalked	un	3	jl au	W	Jamaica	1686.	C	p l	Com hort 1 t 31		
14118 cinéreus *W*	Ash-colored	un	3	jn jl	W	E. Indies	1739	C	p l	Rox.cor 2 t.174		
14119 divergens *W cn*	divergent	un	6	jn jl	W	Abyssinia	1816.	C	p.l	Bruce Abys. t. 6		
†*2127 ACA'CIA *B*	Acacia.				*Leguminosæ*		*Sp* 83—238					
14120 verticillata *W*	whorl-leaved	or	10	mr my	Y	V Di Isl	1780	S	s p	Bot. mag 110		
14121 juniperina *B*	Juniper-leaved	or	6	mr jn	Y	N S W	1790	C	s p	Bot. cab 308		
14122 acicularis *H K*	needle-leaved	or	6	mr au	Y	N S W	1796	S	s p			
14123 genistifólia *Link*	furze-leaved	or	3	mr.au	Y	N. S. W.	1825	S	s p			
14124 sulcáta *H K*	furrowed-leav	or	2	my au	Y	N Holl	1803	S	s p	Bot. reg. 928		
14125 suaveólens *W*	sweet-scented	or	4	f jn	Y	N S. W	1790.	C	s p	Bot cab 730		
14126 glaucéscens *W*	blunt-leaved	or	3	f jn	Y	N S W	1790	S	s p			
14127 floribúnda *W*	many-flowered	or	6	my jn	Y	N S. W.	1796.	C	s p	Vent choix 13		
14128 linifólia *W*	Flax-leaved	or	3	my jn	Y	N S. W	1790	S	s p	Bot mag 2168		
14129 lineária *B M*	linear	or	3	my jn	Y	N S W	1820	S	s p	Bot mag 2156		
14130 calamitófola *Lindl*	reed-leaved	or	3	my jn	Y	N S. W	1819	S	s p	Bot reg 839		
14131 stricta *W*	double-headed	or	2	f my	Y	N S W	1790	C	s p	Bot rep 53		
14132 longifólia *W*	long-leaved	or	10	mr my	Y	N S W	1792.	S	s p	Bot mag 2166		
14133 falcáta *W*	sickle-leaved	or	6	my jn	Y	N S W	1790	C	s p			
14134 laurifólia *W*	Laurel-leaved	or	4	my jn	Y	Tanna	1775	S	s p			
14135 diffusa *B Reg.*	diffuse	or	2	my jn	Y	N S. W	1818		s p	Bot reg 634		
A prostrata Bot. Cab. 631												
14136 longissima *Wendl*	longest-leaved	or	4	my jn	Y	N S W	1819		s p	Bot reg 680		
14137 undulata *Lindl*	wavy-leaved	or	4	o n	Y	N S W	1817.		s p	Bot reg 843		
14138 melanóxylon *H K*	black-wooded	or	8	ap jn	Y	V Di Isl	1808.	S	s p	Bot mag 1659		
14139 Sophóræ *H K*	Sophora-podd	or	10	ap.jn	Y	V Di Isl	1805	S	s p	Lab no h 2.t 237		
14140 marginata *H K*	marginate-leav	or	4	ap.jn	Y	N S. W	1803	S	s p			
14141 myrtifolia *W*	Myrtle-leaved	or	3	f my	Y	N. S. W	1789	C	s p	Bot mag 302		
14142 lunata *Dec*	lunate	or	2	ap my	Y	N S. W	1810	S	s p	Bot cab 384		
14143 angustifólia *Wendl*	narrow-leaved	or	2	ap my	Y	N S W	1816	S	s p	Bot cab 763		
14144 hispidula *W*	little harsh	or	2	ap my	Y	N S W	1794	S	s p	Bot cab 823		
14145 decipiens *H K*	paradoxical	or	3	mr jn	Y	N Holl	1803	C	s p	Bot mag 1745		
14146 biflora *H K*	two-flowered	or	3	mr jn	Y	N Holl	1803	S	s p			
14147 armáta *H K*	simp lv -prick	or	6	ap jn	Y	N Holl	1803	S	s p	Bot mag 1653		
14148 aláta *H K*	wing-stalked	or	6	ap jl	Y	N Holl	1803	C	s p	Bot reg 596		
14149 vestita *B Reg*	clothed	or	6	ap jl	Y	N Holl	1820	S	s p	Bot reg 698		
14150 scándens *W*	climbing	or	10	...	Pu	India	1780	S	s p	Rh mal 8 t 32 34		
14151 Lambertiána *B Reg*	Cowan's	el	6	my jn	Pu	Mexico	1818	S	s p	Bot. reg 721		
14152 ciliata *H K*	ciliate winged	or	8	mr jn	Y	N Holl	1803	S	s p			
14153 nigricans *H K*	unequal-wing	or	8	my jl	Y	N Holl	1803	S	s p	Bot mag 2188		
14154 guianénsis *W*	Guinea	or	40	..	W	Cayenne	1803	C	l p	Aub gui 2 t 357		
14155 Houstoni *W*	Houston's	or	10	s.n	Pu	Vera Cruz	1729	C	p.l	Bot reg 98		
14156 odoratissima *W*	fragrant	ft	40	...	W	E Indies	1790	S	p l	Rox cor 2 t 120		
14157 venusta *W cn*	charming	or	6	..	Pk	S Amer	1816	C	l p			
14158 arbórea *W*	tree	or	40		Pk	Jamaica	1768	S	p l	Plu al 6 t 251 f 2		
14159 Julibrissin *W*	Silk tree	or	20	au	W	Levant	1745	C	l p	Scop in 1 t. 8		



History, Use, Propagation, Culture,

3126. *Desmanthus* From δεσμος, a bond, and ανθος, a flower, on account of the fascicles of flowers, which seem as if bound up together These plants are chiefly aquatic, a few are prickly, and they all have the habit of Mimosa D natans is used in China as a pot-herb, and is described by Loureiro, under the name of Neptunia oleracea Willdenow, the author of the genus, observes, that the neuter florets have always a different color from that of the hermaphrodites, whence the spikes appear parti-colored, by which character the genus may be known at a distance Culture as in Mimosa D natans should be grown in water

2127 *Acacia* This was the Greek name of some plant of the present genus, and not being appropriated, was taken by Willdenow, in his reformation of the old genus Mimosa, as the designation of one of his new divisions This is one of the most ornamental families of the greenhouse plants, and some are curious as well as beautiful A Julibrissin, the *Gul chruschum*, or rose of silk of the Persians, and the Gazia of Italian gardeners, is an elegant hardy tree with beautiful tufts of pink colored flowers, which resemble tassels of silken threads.

A Catechu and vera are used in medicine The inner wood of the former tree is of a brown color, from which the catechu is thus prepared "After felling the trees, the manufacturer carefully cuts off all the exterior white part of the wood The interior colored part is cut into chips, with which he fills a narrow-mouthed unglazed earthen pot, pouring water upon them until he sees it among the upper chips, and when

14113 Unarmed, Leaves bipinnate: partial of 3 pairs; proper of many pairs, Spikes ovate, Pedunc. with bractes
14114 Unarmed, Leaves bipinnate partial of 3 or 4 pairs · proper of 12 pairs, Spikes ovate, Stem prost. compres
14115 Unarmed, Lvs bipinnate · partial of 4 or 5 pairs; proper of 12 pairs, Spikes few-fl capit pentand Pods lin
14116 Unarmed, Lvs bipinnate · partial of 4 pairs, proper of 12 pairs, Spikes few-fl capitate decand. Pods linear
14117 Unarmed, Leaves bipinnate; partial of 4 or 5 pairs; proper of many pairs, Spikes ovate, Pods obl. blunt
14118 Spines solit. Lvs bipinn partial of about 9 pairs, proper of many pairs, Spikes cylind atten at base cernu
14119 Spines solitary, Leaves bipinn. . partial of 8 pairs, proper of many pairs, Spikes cylindrical twin pendulo.

1. *Leafless.*

14120 Unarmed, Petioles linear subulate mucronate rigid pungent whorled, Spikes cylindrical solitary
14121 Unarmed, Petioles linear subulate mucronate rigid pungent alternate clustered, Spikes globose solitary
14122 Petioles round subulate mucronate scattered rigid, Stipules deciduous, Spikes globose solitary
14123 Stipules spiny very minute, Petioles linear subulate-pungent close together, Peduncles solitary
14124 Petioles filiform furrowed on each side point harmless, Heads twin, Pods wavy
14125 Unarmed, Petioles linear narrowed at base mucron Spikes globose stalked racemose, Branches 3-cornered
14126 Unarmed, Petioles lanceolate subfalcate narrowed at base blunt about 2-nerved glaucous, Spikes axillary
14127 Unarm Petioles lin narrowed at each end mucron arcuate striat. Fls. interruptedly spik Branches round
14128 Unarm Petiol lin narrow at base straight mucron Spikes glob. stalk racem Racemes nearly as long as lvs.
14129 Petioles narrow lin very long 1-nerved erect entire, Spikes several axillary generally branched
14130 Stip scarcely any, Petioles filiform compressed cernuous spreading with an incurved point, Pods torulose
14131 Unarmed, Petioles linear lanceolate narrowed at base obtuse, Spikes globose axillary stalked double
14132 Unarmed, Petioles lin lanc narrowed at each end 3-nerved striated, Spikes axillary double cylindrical
14133 Unarmed, Petioles oblong falcate narrowed at base acute veiny, Branches 2-edged
14134 Unarmed, Petioles ovato-acute many-nerved, Spikes globose stalked, Pods falcate
14135 Stip very small decidu Petiol lin 1-nerved with an oblique point, Branches procumb diff smooth angul.

14136 Petioles very long filiform 1-nerved spreading, Spikes several axillary generally branched
14137 Petioles half oblong wavy. their inner edge a little truncate, Stipules spiny, Branches smooth
14138 Petioles lanceolate oblong nerved somewhat falcate, Heads racemose, Young shoots furred
14139 Petioles oblong equal sided nerved, Spikes twin sessile, Corollas 4-petals, Pods torose
14140 Petioles long lanc somewhat falcate edged 1-nerved the anterior edge with 1 gland, Heads racemose 4-fl
14141 Unarmed, Petioles oblong acuminate veiny, Spikes globose stalked racemose
14142 Petioles half obl somew falcate tapered at base with a little gland on the convex side, Branches smooth
14143 Petioles linear tapered at base acute mucronate 1-nerved entire, Heads racemose many-flowered
14144 Unarmed, Petioles sessile oblong cuspidate toothletted scabrous, Spikes globose solitary axillary
14145 Petioles triangular. outer angle spiny, inner bearing glands, Stip setaceous caducous, Branchlets smooth
14146 Petiol triangul outer angle spiny, inner bearing glands, Stip setaceous spiny persist. Branchlets downy
14147 Petiol halv obl smooth mucronul 1-nerv · never parallel with inner edge, Stip veiny, Branches hirsute
14148 Stem winged two ways, Petioles decurrent 1-nerved terminated by a spine, Stipules spiny
14149 Petioles half elliptical lanceolate mucronate aristate 1-nerved in middle and branches hispid

2 *Leafy*

* *Unarmed*

14150 Leaves conjugate pinnate terminated by a tendril, Pinnæ of 4 pairs, Spikes filif Petals 5, Stem climbing
14151 Unarmed, Leaves bipinnate partial of 2 pair, proper of 2 pair vill Petiole without glands, Head globose
14152 Unarmed hairy, Lvs bipinnate partial of 2 pair, proper of 2 or 3 pair, Stip somew setaceous deciduous
14153 Unarmed smooth, Leaves bipinnate partial of 2 pair, proper of 2 to 7 pair, Stip subulate setaceous
14154 Lvs bipinnate partial and proper of 10 pairs ellipt blunt, Gland of petiole convex, Spikes filif solit. axill
14155 Leaves bipinnate partial of about 6 pairs, proper of many, Petioles downy, Spike terminal interrupted
14156 Leaves bipinnate partial of 4 pairs, proper of 10-12, lowest very minute, Spikes globose term panicled
14157 Unarmed, Leaves bipinnated, Pinnæ of 3 or 5 pair, Leaflets of 15 or 20 pair falcate acute smoothish
14158 Lvs bipinn partial of 7 pair, proper of 17 pair halv acute, Spikes glob stalk axill Pods arcuate twisted
14159 Lvs bipinn partial of 11 pair, proper of many pair halved acute, Spikes subglobose terminal aggregated



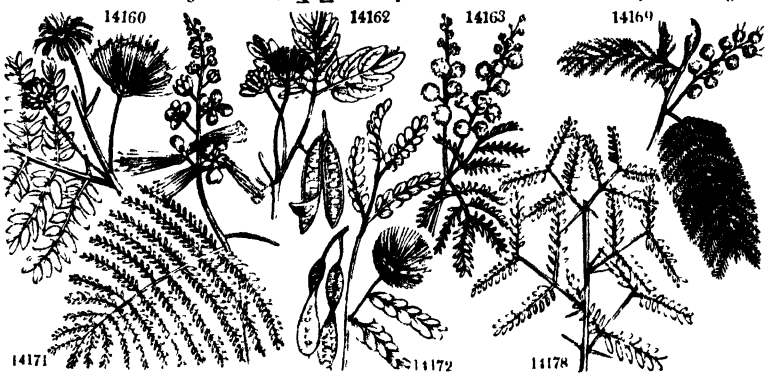
and Miscellaneous Particulars.

this is half evaporated by boiling, the decoction, without straining, is poured into a flat earthen pot, boiled to one-third part, and then set in a place to cool for one day The decoction is afterwards evaporated by the heat of the sun, stirring it several times in the day, and when it is reduced to a considerable thickness, it is spread upon a mat or cloth, which has previously been covered with the ashes of cowdung The mass is lastly divided into square or quadrangular pieces by a string, and completely dried by turning them in the sun, until they are fit for sale This extract, when first introduced as a medicine into Europe, was named Terra Japonica, from the supposition that it came from Japan and was an earth "

Medicinally catechu is one of the most valuable of the vegetable astringents, and as the dark colored contains the greater quantity of tannin, on which its astringency depends, it is to be preferred for medicinal use It is employed with the best effects in dysentery and diarrhœa, when the use of astringents is admissible, in alvine and uterine hæmorrhages, leucorrhœa, gleet, and in obstinate catarrhal affections. As a local astringent, it is used in sponginess of the gums, and aphthous ulcerations of the mouth and fauces, and we have found the slow solution of a small piece of it in the mouth, a certain remedy for the troublesome cough induced by a relaxed uvula hanging into and irritating the glottis. Dr. Paris recommends it as a dentifrice, especially when the gums are spongy

A vera produces the gum arabic of the shops. The tree is found in almost every part of Africa, but those

14160 speciósa *W*	splendid	♣	or	10	au s	Pu	E. Indies	1742.	C	l p	Jac ic 1 t. 198
14161 latisiliqua *W*	broad-podded	♣	or	10	mr jn	Pk	W Indies	1777.	C	l p	Plum ic 3 t 6
14162 Lebʼbeck *W*	Egyptian	♀	or	20	mr jn	Pk	Egypt	1823	C	l p	Pl man p 331 f 1
14163 discolor *W*	two-colored	♣	or	10	mr jn	Y	N S W	1788	S	s p	Bot rep 235
14164 pubéscens *H K*	hairy-stemmed	♣	or	10	mr jn	Y	N S W	1790	R	s p	Bot mag 1263
14165 lophántha *W*	two-spiked	♣	or	6	my jl	Y	N Holl	1803	S	s p	Bot mag. 2108
§14166 brachýloba *W*	Illinois	♣	or	2	...	W	N. Amer	1803	C	s p	
§14167 glandulósa *W.*	glandulous	♣	or	2	...	W	N. Amer	1806	C	s p	Vent. choix. 27
14168 decurrens *W*	decurrent	♣	or	6	my jl	Y	N S W.	1790	S	s p	
14169 mollis *B Reg*	soft	♣	or	6	jl au	Y	N. Holl	1810	C	s p	Bot. reg. 371
14170 peregrina *W*	white-flowered	♣	or	8	jl	W	S Amer	1780	C	s p	
14171 grandiflora *W*	great-flowered	♣	or	10	jn s	Pu	E. Indies	1769	C	p l	Bot rep 592
14172 glauca *W*	glaucous	♣	or	5	jn au	W	America	1690	S	s p	Cat car 2 t 42
14173 leucocéphala *Pers*	white-headed	♣	or	5	jn au	W	S Amer	1823	S	s p	
14174 portoricénsis *W*	Portorice	♣	or	6	jn au	W	S Amer	1824	S	s p	Jacq. ic. t. 633
14175 quadrangulária *Link*	quadrangular	♣	or	4	jl s	W	.....	1825	S	s p	Bot mag 2651
14176 dealbáta *Link.*	whitened	♣	or	4	...	Y	... ..	1824	C	s p	
14177 strombulifera *W*	spiral-podded	♣	or	8	. .	...	Peru	1825	S	s p	
14178 reticulàta *W en*	netted	♣	or	10	...	W	C G H	1816.	C	s p	Pluk al t 123 f 2
14179 pulchélla *H K*	zigzag spiny	♣	or	4	ap jl	Y	N Holl	1803	S	s p	Bot cab. 212
14180 juliflóra *W*	long-flowered	♣	or	3	. .	W	Jamaica	1793	C	s.p	
14181 Sénegal *W*	Arabian	♀	or	20	...	W	Arabia	1823	C	s p	Alp aegypt t 15
14182 Giráffæ *W. en.*	camelopard's	♀	or	40	...	...	C G H	1816.	S	p l	
14183 Cáfra *W.*	Hottentot	♀	or	12	...	Y w	C G H	1800.	S	s p	
14184 Chundra *W.*	hook-spined	♀	or	15	...	...	E Indies	1789.	C	s p	
14185 Cátechu *W.*	medicinal	♀	m	40	...	Pa Y	E Indies	1790.	S	p l	Rox cor 2 t 175
14186 leucophlæ'a *W*	panicled	♀	or	12	...	Pa Y	E. Indies	1812.	C	p l	Rox cor 2 t 150
14187 cornígera *W*	Cuckold Tree	♀	or	15	..	Pa Y	S Amer	1692.	C	p l	Plu al 3 t 122 f 1
14188 eburnea *W*	ivory-thorned	♣	or	5	...	Y	E Indies	1792	C	p l	Rox cor 2 t 190
14189 hæmatóxylon *W en*	hoary	♀	or	20	...	Y w	C G H	1816	C	p l	
14190 farnesiána *W*	Sponge Tree	♀	ft	15	jn au	Y	St Domin	1656.	S	p l	
14191 véra *W*	Egyptian Thorn	♀	or	12	jl	W	Egypt	1596	C	p l	Pluk al t 123 f 1
14192 arábica *W*	Gum Arab tree	♀	ec	20	. .	W	E Indies	1820	S	p l	Pluk al t 251 f 1
14193 cæ'sia *W*	gray	♀	or	15	.	Y	E. Indies	1773	S	p l	Pluk t 330 f 1
14194 pennáta *W*	fine-leaved	♀	or	12	...	Y	E Indies	1773	S	p l	Burm zeyl 2 t 1
14195 l'ntsia *W*	angular-stalked	♀	or	12	..	Y w	E. Indies	1778	S	p l	Rheed mal 6 t 4
14196 Ceratónia *W*	round-leaved	♀	or	3	. .	W	S Amer	1800	S	p l	Plum ic t 8
14197 tamarindifólia *W*	Tamarind-lvd	♣	or	4	. .	W	W Indies	1774	S	p l	Jac schœ 3 t 306
14198 hórrida *W*	horrid	♣	or	6	...	...	Africa	1823	S	p l	Pluk al. t.121 f 4
14199 flexuósa *W.*	flexuose	♣	or	6	. .	...	Cumana	1824	S	p l	
14200 brachvacántha *W en*	short-spined	♣	or	4	...	...	S Amer	1824	C	p l	
14201 ciliáris *W en*	ciliated	♣	or	4	...	. .	S Amer	1822	C	p l	
14202 peruviána *W en*	Peruvian	♣	or	6	..	...	Peru	1820	C	p l	
*2128 VERA'TRUM *W*	Veratrum					*Melanthaceæ*	*Sp* 5—7				
14203 álbum *W*	white	♃	m	5	jn au	L Y	Europe	1548	Sk	p l	Fl dan 1120
14204 viride *W*	green-flowered	♃	or	5	jl au	G	N Amer	1742	Sk	p l	Bot mag 1096



History, Use, Propagation, Culture,

which yield the gum which is exported from Barbary to Great Britain, grow principally in the Atlas mountains It is a hard withered looking low tree, with a crooked stem, and a grey bark The gum exudes naturally from the bark of the trunk and the branches, in a soft, nearly fluid state, and hardens in the air without losing its transparency It is collected about the middle of December It has a faint smell when first stowed in the warehouses, and is heard to crack spontaneously for many weeks

Medicinally gum exerts no action on the living system, but is a simple demulcent, serving to lubricate abraded surfaces, and involve acrid matters in the primæ viæ In the solid form it is scarcely ever given, unless to sheath the fauces, and allay the tickling irritation which occasions the cough in catarrh and phthisis pulmonalis; in which cases a piece of it is allowed to dissolve slowly in the mouth It is chiefly used in a state of mucilage.

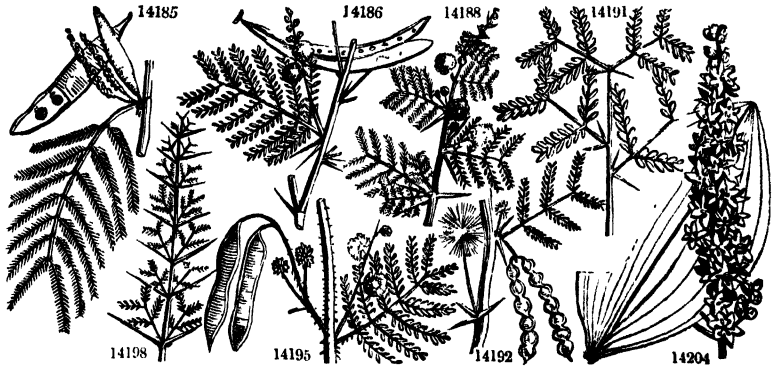
According to Sweet, all the species of Acacia are of easy culture Those of the hothouse he recommends to be grown in loam and peat "Cuttings," he says, "of most kinds will strike root From the strongest growing kinds, take off large cuttings at a joint, and plunge them in a pot of sand under a hand glass in the bark-bed

14160 Lvs. bipinn : partial of 4-5 pair : proper of 7-11 pair halved blunt smooth, Spikes subcapitate axill aggregate
14161 Lvs. bipinn : partial of 5 pair, proper of 10 pair elliptic blunt, Spikes globose stalked termin with bracteæ
14162 Lvs. bipinn : partial of 4 pair, proper of many pair oblong halved blunt, Spikes subglobose term aggregate
14163 Lvs bipinn · partial of 5 pair, proper of about 10 pair discolored beneath, Spikes globose stalked racemose
14164 Lvs. bipinn partial of 8 pair, proper of about 15 pair, Racemes axillary solitary, Heads globose stalked
14165 Lvs bipinn. . partial of 9-12 pair, proper of 20 pair lanc. veinless, A gland on stalk and betw 2 term petiol
14166 Lvs bipinn. . partial of 8 pair, proper of many pair, A gland between the lowest pair of the partial ones
14167 Lvs. bipinn. · partial of 12 pair, proper of many pair, A gland betw. every pair of partial ones, Spikes glob
14168 Lvs bipinn. part of 11 pair, prop of many pair, A gland betw every pair of part ones, Part. petiole marg
14169 Lvs bipinn partial of 8-18 pair, proper of many pair lin very close downy, A gland between every pair
14170 Lvs. bipinn partial of 16 pair, proper of about 40 pair, A gland on petiole, Spikes glob stalked axill. in 3s
14171 Lvs. bipinnate partial of 17 pair, proper of about 40 pair, Spikes subcapitate stalked racemose terminal
14172 Leaves bipinnate : partial 5-6 pairs, proper of 18 distant pair, Spikes globose stalked axillary
14173 Leaves bipinnate, Pinnæ of 4 or 5 pair, Leaflets of 12 or 15 pair oblong linear acute, Petiole downy
14174 Lvs bipinn partial of 5 pair, proper of many pair lin acute, Spikes glob axill about 3, Cal ciliat at edge
14175 Lvs of 5 pair, Pinnæ of many pairs, Leafl lin acute ciliat Rachis of lvs. downy, Heads axill on long stalks
14176 Leaves of 15 pair, Pinnæ of many pair, Leaflets equal-sided minute downy, Racemes lateral

* *Spiny*

14177 Spines stipulary, Leaves conjugate pinnate, Pinnæ of 4-6 pair, Pods spirally twisted
14178 Spines stipul straight almost length of leafl Leaflets oblong linear obtuse dist Petiole with a gland at end
14179 Lvs conjugate pinnate, A stalked gland betw pinnæ which consist of 5-7 pair, Stip spiny as long as leaves
14180 Spines stipulary twin, Lvs bipinn partial of 2 pair, proper of 20 pair, Spikes axill 2-3 cylind pendulous
14181 Spines stipul in 3s · midd one reflex Lvs bipinn part of 5 or 6 pair prop of many pair, Spikes axill cylind
14182 Spines stipul twin con as long as lvs Lvs bipinn Pinnæ 3 or 6 pair, Leafl 20 pair, Gland betw every pinnæ
14183 Spines stipulary twin incurv Lvs bipinn partial of 12 pair, proper of many pair, A gland on the petiole
14184 Spines stipulary twin hooked, Leaves bipinnate · partial of 9-13 pair, proper of many pair, A gland on the petiole and between the three terminal outer leaflets
14185 Spines stipulary twin hooked, Leaves bipinnate partial of 10 pair, proper of many or downy, A gland on the petiole and between the two terminal outer leaflets
14186 Spines stipulary twin connate, Leaves bipinnate partial of 6-10 pair, proper of many, A gland between the 2 pair of partial leaves
14187 Spines stipulary connate compressed, Leaves bipinnate partial of 6 pair. proper of 20 pair smooth, A gland on the petiole
14188 Spines stipul connate twin, Leaves bipinnate partial of 4 pair, proper of 6 pair, Spikes globose aggregate
14189 Spines double slender and branches smooth, Branchlets, leaves, peduncles and fls hoary
14190 Spines stipulary setac dist Lvs bipinn partial 10 pair, proper many pair, A gland on petiole and between 2 term pair of partial leaves
14191 Spines stipulary twin spreading, Leaves bipinnate partial of 2 pair, proper of 8-10 pair, A gland betw each pair of partial leaves
14192 Spines stipul twin spread Lvs bipinn partial of 5 pair, proper of many pr Spikes globose axill. stalked
14193 Prickly, Lvs bipinn : partial of 7 pair, proper of 16 pair, A gland on petiole, Spikes globose panic term.
14194 Prickly, Lvs bipinn partial and proper of many pr A gland on petiole, Com ped and petioles prickly at
14195 Prickly, Leaves bipinnate partial of 6 pair, proper of about 12 pair incurved, Petioles prickly [base
14196 Prickly, Leaves bipinnate partial of 5 pair, proper of 3 pair obovate 3-nerved
14197 Prickly, Leaves bipinnate partial of 5 pair, proper of 15 pair, Gland on petioles stip and bractes cordate
14198 Spines stipul twin nearly as long as lvs Lvs bipinn of 2 or 3 pr partial of about 10 pr Spikes glob stalked
14199 Spines stipulary twin connate, Leaves bipinnate partial of 16 pair, proper of many pair, A gland on the petiole and between the two terminal pair of partial leaves
14200 Spines stipulary twin hooked, Leaves bipinnate, Pinnæ of about 10 pair, Leaflets of 10 or 12 pair ciliated
14201 Spines stipul twin straight subulate, Leaves bipinnate, Pinnæ of 3 or 4 pair, Leaflets of 13 pair ciliated
14202 Spines stipulary setaceous double, Leaves bipinnate, Pinnæ of 2 pair, Leaflets of 11-15 pair blunt smooth

14203 Racemes panicled, Bractes of branches oblong partial as long as downy peduncle, Flowers erect
14204 Racemes panicled, Bractes of branches oblong-lanceolate partial longer than downy petiole



and Miscellaneous Particulars.

Of the smaller kinds take younger cuttings, and put them under a bell-glass, also plunged in heat. The sooner the plants are potted off after they are rooted the better If they stay too long, the sand injures their roots they should be kept under a close glass, and shaded for a few days after potting off, and exposed to the air by degrees" (*Bot Cult* 11)

The greenhouse species are particularly valuable as flowering for the most part in winter, or early in spring, they are very hardy and grow freely in loam, peat, and sand well drained Cuttings of most kinds, Sweet observes, will root pretty freely, taken off in the young wood and planted in sand, under a bell-glass, and plunged in a little bottom heat. The kinds that do not root readily from cuttings may be increased by taking off roots, as large pieces as can be spared, and planting them in the same kind of soil as the old plants, when they should be plunged under a hand-glass in a little bottom heat. Most of the kinds might be propagated by that means. (*Bot Cult.* 126.)

2128 *Veratrum* Said by Lemery to be so called, because its root is *vere-atrum*, truly black. V album has a fleshy fusiform root, beset with strong fibres, gathered into a head, this root and every part of the plant is

§14205 virgínicum *H K* Virginian ☿ △ or 2 jn jl Br N Amer 1768. D 1 p Bot mag 985
14206 nígrum *W* dark-flowered ☿ △ or 3 jn jl D. Pu Siberia 1596. D p l Bot. mag 963
14207 parviflórum *W* small-flowered ☿ △ or 2 jn jl G Carolina 1809. D p.l

*2129 ANDROPO'GON *W* Andropogon. *Gramina* *Sp* 6—66.
§14208 striátus *W* nerve-glumed ⅄ ⧍ un 1½ au Ap E Indies 1793 D co
§14209 contórtus *W.* twisted ⅄ ⧍ un 2 jl s Ap E. Indies 1779. D co Sch ha.3 t 342 a
§14210 Schænánthus *W* Lemon-grass ⅄ ⧍ ft 1½ . Ap E. Indies 1786 D co Ru am 5. t 72 f 2
§14211 distáchyos *W* two-spiked ⅄ △ un 1½ jl au Ap S Europe 1805 D co Fl græc. 1 t 69
§14212 múticus *W* smooth-spiked ⅄ △ un ½ jl s Ap C G H 1794 D co
14213 Ischæ'mum *W* woolly ⅄ △ un 1 au Ap S. Europe 1768. D co Sch gram 2 t 33

*2130 CHLO'RIS *W.* Chloris. *Gramineæ* *Sp* 5—24
§14214 petræ'a *W.* flat-stalked ⅄ ⧍ pr ½ jl au Ap Jamaica 1779 D co Vah symb 2 t 27
14215 ciliáta *W* ciliated ⅄ ⧍ pr ⅝ jl s Ap Jamaica 1779 D co
14216 radiáta *W* many-spiked ⅄ ◎ pr ½ au s Ap W Indies 17.9 S co Moris.s 8.t.3 f 15
14217 barbáta *W* bearded ⅄ ◎ pr 1 jn jl Ap E Indies 1777 S co
§14218 curtipéndula *W* short-spiked ⅄ △ pr ½ jn au Ap Illinois 1808 D co

2131 SOR'GHUM. *W en* Sorghum *Gramineæ* *Sp* 5—9
14219 bicolor *W en.* two-colored ⅄ ○ clt 5 jl Ap Persia 1731. S co M ac he 8 t 4 f 4
14220 vulgáre *W en.* Indian Millet ⅄ ○ clt 4 jl Ap India 1596 S co M ac he.8 t 4 f 3
14221 rubens *W en.* red-seeded ⅄ ○ clt 3 jl Ap Africa 1817. S co
14222 saccharátum *W en* yellow-seeded ⅄ ◎ clt 6 jl au Ap India 17.9 S co A ac pa 1 t 4 f 2
14223 halepénse *P S.* panicled ⅄ △ un 3 jl au Ap Syria 1691 D co Fl græc 1 t 68

*2132. HOL'CUS *W en* Soft-Grass *Gramineæ* *Sp* 6—8
§14224 Gryllus *R Br.* purple-flower'd ⅄ △ un jn jl Ap S. Europe 1791 D co Fl græc 1 t 67
14225 móllis *W* creeping ⅄ △ ag 2 jl au Ap Britain corn fi D h l Eng bot. 1170
14226 lanátus *W* meadow ⅄ △ ag 3 jn jl Ap Britain me pa. D h l Eng bot. 1169
§14227 avenáceus *W en.* Oat-like ⅄ △ ag 5 jn jl Ap Britain me pa D co Eng bot. 813
§14228 bulbósus *W en.* bulbous-rooted ⅄ △ ag 3 jn jl Ap ... . D co
§14229 odorátus *W* sweet-scented ⅄ △ ft 1½ jn jl Ap N Amer. 1777 D co

2133 ISCHÆ'MUM *W.* Ischæmum *Gramineæ* *Sp* 2—21
14230 aristátum *W* bearded ⅄ ⧍ un 2 jn jl Ap E Indies 1803 D co
14231 rugósum *W* rough ⅄ ◎ un 2 jl au Ap E Indies 1791. S co Sal stir rar 1 t 1



History, Use, Propagation, Culture,

extremely acrid and poisonous It is used in medicine, and its properties are found to depend on veratrine, the same alkaline principle which is the active ingredient of colchicum Medicinally it is violently cathartic and sternutatory. When taken internally, even in moderate doses, its operation is violent and dangerous, producing besides hypercatharsis, with bloody stools and excessive vomiting, great anxiety, tremors, vertigo, syncope, sinking of the pulse, cold sweats, and convulsions, terminating, if the dose be large, in death Its external application to an ulcerated surface also produces griping and purging Notwithstanding these effects, Veratrum has been exhibited internally, and with advantage, in mania, epilepsis, scabies, lepra, and obstinate herpetic eruptions. But the most ordinary use of white hellebore is as a local stimulant. When taken internally as a poison, the best antidote is a strong infusion of nut-galls (*Thom Lond Disp* p. 545)

V. nigrum is very nearly allied to album, but differs in color, and seems not to be so strong and acrid in its qualities, for when both sorts are placed near each other, snails will entirely devour the leaves of this species, when they will scarcely touch those of the other.

2129 *Andropogon* From ἀνηρ, a man, and πωγων, a beard. A hyperbolical comparison of the little tuft of hairs upon the flower to the beard of a man A. schœnanthus has an agreeable smell, with a warm, bitterish, not unpleasant taste It was formerly brought over from Turkey in bundles about a foot long, and kept in the shops to be employed as a stomachic and deobstruent, but it is now little used All the species are of the easiest culture

2130 *Chloris* Derived from χλωρος, green, on account of the color of its herbage. Pretty little grasses, with beautiful one-sided spikes of silky flowers

2131 *Sorghum* *Sorghi* is the Indian name, according to Bauhin S vulgare, *grand millet*, Fr, *Saggena or Sorgo*, Ital, and *alcandia*, Span, is much cultivated in Arabia and most parts of Asia Minor It has been introduced into Italy, Spain, Switzerland, and some parts of Germany; also into China, Cochin-China, and the West Indies, where it grows commonly five or six feet high or more, and being esteemed a hearty food for labourers, is called Negroe Guinea corn. Its long awns or bristles defend it from the birds In England, the autumns are seldom dry and warm enough to ripen the seeds well in the field In Arabia it is called Dora or Durra. The flour is very white, and they make good bread of it, or rather cakes, about two inches in thickness The bread which they make of it in some parts of Italy is dark and coarse. In Tuscany it is used chiefly for feeding poultry and pigeons, sometimes for kine, swine, and horses Brooms are made of the spikes, which are also sent to this country for the same purpose. The Indian millet, as well as the common sort (Panicum), is cultivated in some parts of North America, and has been tried in this country, but it is only in the warmest autumns that it ripens its seeds. It might probably, however, be acclimated.

14205 Racemes panicled, Bractes shorter than peduncle, Petals with 2 glands at base
14206 Racemes supradecompound panicled, Bractes of branches linear-lanceolate very long
14207 Racemes panicled, Petals bearing the stamens on their claw

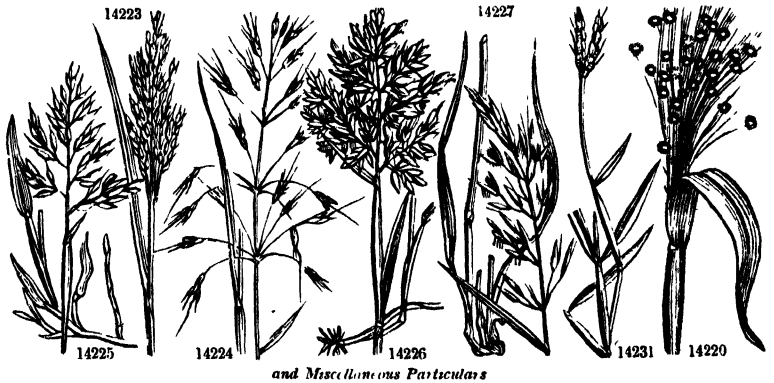
14208 Spike simple, Flowers twin hermaphrodite sessile awned, male stalked, Outer valve of cal nerved
14209 Spike simple, Lower flower beardless, Male and hermaphrodite calyxes hairy, Awns very long hirsute
14210 Spikes imbric conjug panic bract Fls in 3s midd. hermap beard. : beard smooth. lat. stalk male beardl
14211 Spikes twin terminal, Florets twin bearded hermaphrodite sessile, male bearded, Culm undivided
14212 Spikes digitate about 3, Florets alternate sessile beardless
14213 Spikes digitate about 8, Florets twin woolly at base. hermaphrodite sessile bearded; male stalked bearded

14214 Spikes 4-5-6 straight erect, Florets imbric. nearly smooth beardless, Outer valve of cal beard Culm compr
14215 Spikes digitate about 5 erect, Glumes ciliated
14216 Spikes many fascicled nearly erect, Florets subulate smooth
14217 Spikes many fascicled, Glumes ciliated bearded, Male valves ventricose bearded
14218 Spikes many alternate panicled pendulous, Spikelets 4-flowered

14219 Panicle contracted ovate, Florets strigose with down black, Seeds white round
14220 Panicle contracted oblong, Florets obovate shining hairy, Seeds compressed
14221 Panicle spreading, Florets oblong acute shining ciliated
14222 Panicle effuse, Branches spreading, Florets villous oblong, Leaves broad lanceolate
14223 Panicle spreading, Branches rough, Florets lanc. acute silky shining, Leaves lanceolate rough at edge

14224 Panicle effuse spreading, Branches whorled 3-fl Peduncles bearded, Leaves and sheaths hairy
14225 Glumes 2-fl hermaphrodite, Sessile floret beardless stalked bearded, Beard longer than flower
14226 Glumes 2-fl · hermaphrodite beardless, Beard of the male much shorter than flower recurved
14227 Male flowers with a jointed beard twice as long as calyx, Joints of culm smooth, Root nodose
14228 Male flowers with a jointed beard twice as long as calyx, Joints of culm villous, Root bulbous [Gm.
14229 Panicle spread. Glumes 3-fl. beardl Flor heaped hermap in midd dland.; male triand ciliat. *Hierochloe*

14230 Leaves lanc Florets naked, Outer valve of cal with 2 nodules on each side, Beard of cor long twisted
14231 Leaves lanceolate, Neuter florets intermediate wrinkled across two lateral smooth



and Miscellaneous Particulars

2132 *Holcus.* From ὀλκω, to extract. It was a popular notion among the ancients, that the leaves of the plant they called Holcus, which seems to have been a grass of some kind, had the property of extracting thorns from the flesh H. mollis is distinguished by its creeping roots, which, when once in possession of the soil, as Mr Sinclair observes, can hardly be again expelled without great labor and expence It is the true couch-grass of light sandy soils, and underground stolones have been found five feet in length, the growth of a few months only These root-shoots contain a very considerable quantity of nutritive matter, which has the flavor of new made meal. Pigs are very fond of the roots, and dig them up with eagerness, but the herbage is disliked by cattle, more than that of any other species of the genus, being extremely soft, dry, and tasteless. The best mode of banishing this weed from light arable lands, is to collect the roots with the fork after the plough. (*Sinclair, Hort Gram* 167)

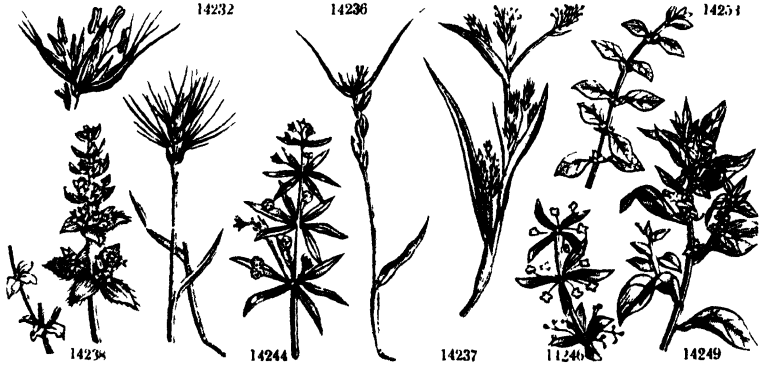
H. lanatus has a fibrous root, and grows on all soils from the richest to the poorest, but attains to the highest degree of luxuriance on light moist peaty soils Cattle prefer almost any other grass to this, it is seen in pastures with full grown perfect leaves, while the grasses that surround it are cropped to the roots. Its nutritive matter consists entirely of mucilage and sugar, while the nutritive matters of grasses most liked by cattle are either sub-acid or saline Mr Sinclair suggests, that this grass might probably be made more palatable to cattle, by being sprinkled over with salt (*Hort Gram* 164)

H avenaceus, the Avena elatior of Linnæus, Curtis, and Host, is a bulky productive grass, eaten by horses, cattle, and sheep, but less nutritious than many other grasses. It pushes rapidly after being cropped; and though later in flowering than many other species, produces an early and plentiful supply of herbage in the spring These properties would entitle it to rank high as a grass adapted for the alternate husbandry, but its nutritive matter contains too large a proportion of bitter extractive and saline matters to warrant its cultivation, without a considerable admixture of different grasses, and the same objection extends to its culture for permanent pasture It is always present in the composition of the best natural pastures, and, as before mentioned, eaten in common with other grasses. It does not, however, constitute a large proportion of the herbage, but rather the least of any of the more valuable grasses that have been mentioned. (*Hort Gram.* p 171) This grass and Triticum repens are the two species eaten by dogs to excite vomiting One variety has bulbous roots, and is a noxious weed in arable lands

H odoratus is one of the earliest flowering grasses, but it is tender, the spring produce of herbage is inconsiderable, and its powerful creeping roots render it unfit for agricultural purposes. (*Hort Gram.* 169)

2133 *Ischæmum* From ισχω, to stop, and αιμα, blood Pliny says, that the Thracians first discovered that the woolly seed which is borne by the Ischæmum, if introduced into the nostrils, has the power of stopping the bleeding at the nose Useless grasses.

2134 *Æ'GILOPS. W*	HARD-GRASS.				*Gramineæ*		*Sp 5.*						
14232 ovâta *W*	oval-spiked		O	un	⅔	jn jl	Ap	S. Europe	1683.	S	co	Fl græc. 1. t 93
14233 triunciâlis *W*	long-spiked		O	un	1	jl au	Ap	S. Europe	1739	S	co	Sch gr 1. t 10 f 1
14234 cylindrica *W*	cylindrical		O	un	1	jn jl	Ap	Hungary	1805.	S	co	Host gram 2. t.7
14235 squarrosa *W.*	rough-spiked		△	un	1½	jn jl	Ap	Levant	1794.	S	co	Sch.gr 2 t 27 f 2
14236 caudâta *W.*	Cretan		O	un	1	jn jl	Ap	Candia	1739	S	co	Fl. græc. 1. t. 95
2135 MANISU'RIS. *W*	MANISURIS.				*Gramineæ.*		*Sp 1—2*						
14237 granulâris *W.*	round-grained		⊡	cu	1½	jn jl	Ap	E. Indies	1784.	S	co	Roxb.cor 2.t 118
2136 VALAN'TIA *W.*	VALANTIA.				*Rubiaceæ*		*Sp 10*						
14238 Cruciâta *W.*	Crosswort		△	or	1½	my jn	Y	Britain	...	D	co	Eng bot. 143
14239 murâlis *W*	wall		O	un	¼	my jl	G	S Europe	1739	S	co	Col. ecph. t. 297
14240 hîspida *W*	bristly		O	un	1	my jl	G Y	S Europe	1768.	S	co	
14241 nîtiformis *W.*	least		O	un	¼	jl s	G Y	Canaries	1780.	S	co	
14242 pedemontâna *W*	Piedmont		O	un	¼	jl	G.Y	Hungary	1799	S	co	Pl rar hu.1 t 33
14243 Cucullâria *W*	hooded		O	un		mv.jn	G Y	Levant	1780.	S	co	Bu cen.1 t 19 f 2
14244 Aparine *W*	warty-fruited		O	w	⅔	jn au	G.Y	Britain	...	S	co	Eng. bot. 2173
Galium verrucósum E B												
14245 articuláta *W.*	jointed		O	un	1	jl au	G Y	Egypt	1752.	S	co	
14246 glâbra *W*	smooth		△	un	1	jl au	G	S Europe	1731.	D	co	Pl rar.hu.1. t. 32
14247 áspera *W*	rough		△	un	⅔	jn jl	G.Y	Siberia	1804.	D	co	
2137 PARIETA'RIA *W*	PELLITORY				*Urticeæ.*		*Sp. 7—19*						
14248 Indica *W*	Indian		⊠	un	1½	ap my	G	E. Indies	1790	D	co	
14249 officinâlis *W*	wall		△	w	1	jn s	G	Britain	walls	D	co	Eng bot 879
14250 judâica *W*	Basil-leaved		△	un	1	jn s	G	Germany	1758	S	co	Sch.hand.3.t.346
14251 pensylvânica *W*	Pensylvanian		O	un	¼	jl	G	Pensylva.	1821	S	co	
14252 urticæfolia *W*	Nettle-leaved		⊡	un	1	jn s	G	Bourbon	1700	S	co	
14253 lusitanica *W*	Chickweed-lvd.		O	un	¼	jl au	G	Spain	1710	S	co	Boc.sic.t.24.f. B.
14254 polygonoides *W*	Polygonum-lvd		O	un	¼	jl au	G	Armenia	1728.	S	co	
2138 A'TRIPLEX *W*	ORACHE.				*Chenopodeæ*		*Sp 15—37*						
14255 Hâlimus *W*	tall shrubby	♃		or	5	jl au	G	Spain	1640	C	co	Par thea 724 f 2
14256 portulacoides *W*	dwarf shrubby	♃		or	2	jl au	G	Britain	mud s.	C	co	Eng. bot. 261
14257 glauca *W*	glaucous	♃	⌊	un	2	jl au	G	S. Europe	1732	C	s l	Dill.elt. t.40. f.46
14258 álbicans *B*	white	♃	⌊	un	2	jn jl	G	C G H.	1774	C	s.l	
14259 rósea *W*	Rose		O	un	1½	jn jl	G	S. Europe	1759	S	co	Sch hand.3 t.350
14260 sibírica *W*	Siberian		O	un	2	jl au	G	Siberia	1783.	S	co	S h 3 p 538 t 350
14261 tatárica *W*	Tartarian		O	un	2	jl au	G	Tartary	1778	S	co	S. h 3 p 539.t.349
14262 hortênsis *W.*	garden		O	cul	6	jl au	G	Tartary	1548	S	co	
β rúbra	*red garden*		O	cul	6	jl au	G	Tartary	1548	S	co	
14263 laciniâta *W.*	frosted sea		O	w	1½	jl au	G	Britain	san sh	S	co	Eng bot 165
14264 pátula *W*	spreading		O	w	⅔	jn s	G	Britain	dungh	S	co	Eng bot. 936
14265 angustifôlia *W*	narrow leaved		O	w	⅔	jn au	G	Britain	rub	S	co	Eng bot 1774
14266 erécta *W*	upright		O	w	1½	au	G	England	fields	S	co	Eng bot. 2223
14267 littorâlis *W.*	Grass-leaved		O	w	1	au s	G	Britain	mud.s	S	co	Eng bot 708
14268 pedunculâta *W*	pedunculated		O	w	1½	jl s	G	England	sal m	S	co	Eng. bot. 232
14269 microspérma *W*	small-seeded		O	un	1½	jl s	G	Hungary	1800.	S	co	
2139 RHAGO'DIA *R Br*	RHAGODIA.				*Chenopodeæ*		*Sp 1—7*						
14270 hastâta *R Br*	halberd-leaved	♃	⌊	un	2	jn jl	G	N S. W	1803.	C	l.p	



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2134 *Ægilops* From αιξ αιγος, a goat, and οψ, the eye. The ancients believed that the plant they named Ægilops had the power of curing a disease of one corner of the eye, which seems to have been what we call Fistula lachrymalis. The *Ægilops ovata* is a common Sicilian grass, when ripe, it is gathered by the peasantry, who tye the heads up in bunches, and set them on fire; they burn with rapidity, and so give the grains a slight roasting, which are then considered agreeable food.

2135. *Manisuris* Said to be so called, from μανος, relaxed, and ουρα, tail, or, in botanical langnage, a head of grass; because the spikes are loose, and not compact. A curious little plant remarkable for its wrinkled grains.

2136. *Valantia.* Miserable weeds of no beauty or use, called by their present name by Linnæus in reference to Sebastian Vaillant, a learned and excellent French botanist, who died in 1722 The author of the name would have employed his time better in considering the botanical writings of Vaillant, than in identifying with the most worthless part of vegetation an author whose merits he was not able to understand. No man was more given to sneers of this kind than Linnæus, and yet his followers manifest a most extraordinary degree of sensitiveness whenever he is retorted upon in a similar way, although few ever deserved criticism in some things in a higher degree than himself

2137. *Parietaria.* From *paries*, a wall. Weeds which are commonly found upon old walls, or rubbish heaps. P. officinalis presents some curious anomalies in its inflorescence and fructification. To obtain a perfect idea of

14232 Spike ovate, Cal. all with 4 beards scabrous, Culms ascending
14233 Spike cylind. Lower cal with 2 beards the rest with 3, Beards of 2 terminal florets longer than the rest
14234 Spike cylindrical, Cal with 1 beard, Cor beardless, Terminal beards very long
14235 Spike cylindrical, Cal 2-toothed beardless, Co.r with 1 beard
14236 Spike cylindrical, Cal 2-toothed : teeth unequal beardless, Valves of terminal floret with 1 valve only

14237 Valves of female fl. globose tessellated warted, Culm erect branched, Sheaths hairy

14238 Leaves 4 ellipt obl 3-nerved netted hispid, Peduncles branched smooth bracted, Fruit smooth
14239 Leaves 4 elliptical netted smooth, Male fl trifid attached to the base of the hermaphrodite
14240 Leaves 4 obovate-oblong veinless roughish, Male fl trifid attached to the base of the hermaphrodite
14241 Leaves 4 oblong ciliate toothletted netted smooth, Ovary oblong chaffy longer than pedicel
14242 Leaves 4 oblong ciliate hispid, Peduncle subbifid ciliated, Male fl trifid, Ovary smooth
14243 Leaves 4 oblong, Peduncles protected by the ovate deflexed bractea, Stem erect
14244 Leaves 6 linear lanceolate hispid at edge, Peduncle 2-fl naked, Male fl. trifid, Fruit warted

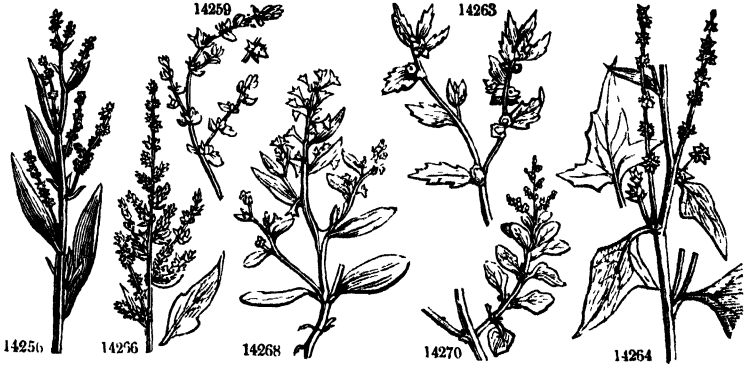
14245 Male fl. 4-fid, Peduncle dichotomous leafless, Leaves cordate
14246 Leaves 4 elliptical ciliated, Peduncle branched naked and fruit smooth
14247 Leaves 6 linear very rough at edge, Stalk and fruit hispid

14248 Leaves lanceolate, Stem erect
14249 Leaves oblong ovate acuminate at each end with pellucid dots, Peduncle dichotomous, Cal 2-leaved
14250 Leaves ovate, Stem erect, Involucre 3-flowered, Male corollas long cylindrical
14251 Leaves oblong lanceolate veiny with opaque dots, Involucre longer than flowers
14252 Leaves opposite stalked ovate serrated veiny downy, Flowers axillary
14253 Leaves roundish ovate obtuse the length of petiole, Stems uniform procumbent
14254 Leaves linear lanceolate subsessile hairy, Involucre longer than flower

14255 Stem shrubby, Leaves alternate or opposite oblong subrhomboid entire
14256 Stem shrubby, Leaves obovate-lanceolate entire silvery white
14257 Stem half-shrubby procumbent, Leaves ovate sessile entire lower a little toothed
14258 Stem shrubby erect, Leaves hastate entire acute, Spikes terminal
14259 Stem herb spreading, Leaves triangular hoary unequally toothed, Cal of fruit quadrangular toothed
14260 Stem herbaceous spreading, Leaves rhomboid somewhat toothed, Cal of fruit muricate toothed
14261 Stem herbaceous erect, Leaves oblong sinuated cuneate at base hoary beneath, Cal of fruit toothed
14262 Stem herbaceous erect, Leaves triangular toothed whole-colored, Cal of fruit ovate netted entire

14263 Stem herbaceous diffuse, Leaves ovato-deltoid dentato-sinuate very mealy beneath [tuberculat. at side
14264 Stem herb spreading, Lvs triang hast glab above irregul tooth · upp ones ent Cal of fr more or less
14265 Stem herb spread Lvs lanc ent lower ones somew hast Cal of fruit hastate slightly tuberculat at sides
14266 Stem herbaceous erect, Leaves ovate-lanceolate, lower sinuated, Cal of seeds muricated
14267 Stem herbaceous erect, Lvs all linear ent or toothed, Perianth of fruit sinuated and muricated on back
14268 Stem herbaceous flexuose spreading, Leaves obovate entire, Female flowers stalked cuneiform
14269 Stem herbaceous erect, Leaves triang hastate acutish a little toothed, Cal of fruit ovate acute entire

14270 Branches diffuse, Leaves nearly opposite rhomboid-hastate entire smooth, Spikes terminal leafless



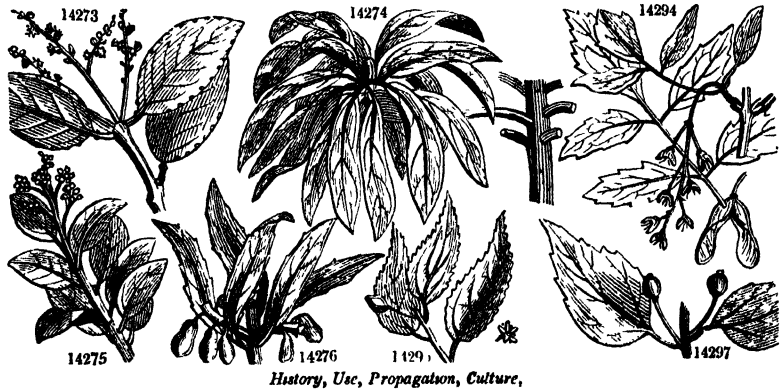
and Miscellaneous Particulars

the manner in which this is carried on, the flowers should be examined at a very early period of their expansion. The manner in which the stamens shed their pollen is curious. The filaments on their first appearance all bend inwards; as soon as the pollen is arrived at a proper state to be discharged, the warmth of the sun, or the least touch from the point of a pin will make them instantly fly back, and discharge a little cloud of dust. This process is best seen in a morning, when the sun shines on a plant in July or August: if the plant be large, numbers will be seen exploding at the same instant. Mr Curtis remarks, that the same degree of cold (thirty-one Fahrenheit) which strips the mulberry of its leaves, will destroy the herbage of Parietaria. The ashes of the plant are said to contain a considerable quantity of nitre.

2138. *Atriplex.* The same name as Atraphaxis, which see. A. Halimus (ἅλιμος, maritime) grows on the sea-coast of the south of Europe, and in this country its silver-colored foliage adds to the variety of our shrubberies. A portulacoides requires to be planted on a poor gravelly soil, in its native state it prefers the seashore and salt marshes. A hortensis, sometimes called mountain spinach, was formerly cultivated as a culinary herb, and is still grown to a considerable extent in the neighbourhood of Paris, and the leaves gathered as spinach. There are several varieties more or less tinged with red or purple. The leaves of all the species may no doubt be used as pot-herbs.

2139 *Rhagodia.* From ῥαγώδης, bearing berries. New Holland shrubs with alternate leaves, and flowers growing in racemose spikes.

2140 TERMINA'LIA	*W*	Terminalia.				*Combretaceæ.*	*Sp* 4—11.							
14271 Catáppa *W*		broad-leaved	♀	▭	or	20	...	W.G	E. Indies	1778.	S	p.l	Jac ic. 1 t. 197	
14272 moluccána *W*		Moluccá	♀	▭	or	20	...	W.G	E. Indies	1804	C	p l		
14273 Chébula *W*		oval-leaved	♀	▭	or	20	...	W.G	E. Indies	1796.	C	p l	Rox cor 2 t.197	
14274 angustifólia *W*		narrow-leaved	♀	▭	or	20	...	W.G	E. Indies	1692.	S	p l	Jac vind.3. t 100	
2141 FUSA'NUS *L*		Colpoon				*Santalaceæ*	*Sp.* 1.							
14275 compréssus *L*		flat-stalked	♀	⌴	un	1½	...	G w	C G H.	1776	C	l p	Ber ca 38 t 1.f 1	
2142 BRABE'JUM *W.*		African-Almond.				*Proteaceæ.*	*Sp* 1.							
14276 stellátum *Thunb*		common	♀	⌴	or	15	mr ap	W	C G H.	1731	C	l p	Breyn.cent 1 t 1	
†2143. A'CER. *W*		Maple				*Acerneæ*	*Sp* 17—30.							
14277 heterophýllum *W*		evergreen	♀		or	4	my jn	G	Levant	1759.	S	co	W arb 10 t 1 f 1	
14278 tatáricum *W.*		Tartarian	♀		tm	20	my jn	G	Tartary	1759	L	co	Dend brit 160	
14279 Pseúdo-Platánus		Sycamore	♀		tm	50	ap my	G	Britain	hed	S	co	Eng bot 303	
14280 rubrum W		Red or Swamp	♀		tm	20	ap my	R	N Amer	1656.	L	s l	Mich arb 2 t 14	
14281 dasycárpum *W.*		Sir C Wager's	♀		tm	25	ap my	G v	N Amer	1725	L	s l	Mich arb 2 t 13	
14282 barbátum *Ph*		bearded	♀		tm	15	ap my	G	N Amer.	1812.	S	s l		
14283 saccharinum *W*		Sugar	♀		tm	40	ap my	Y	N Amer	1735	S	s l	Mich arb 2 t 15	
14284 nigrum *Ph.*		black	♀		tm	40	ap my	G	N Amer	1812	S	s l	Mich arb 2. t 16	
14285 platanoides *W.*		Norway	♀		tm	50	my jl	G	Europe	1683	S	co	Schm arb 1 t 3,4	
β laciniátum		*cut-leaved*	♀		tm	30	my jl	G	Europe	1683.	L	co	Schm arb 1 t. 5	
14286 striatum *Ph*		striped-barked	♀		or	20	my jn	G	N Amer	1755	L	co	Mich arb 2 t 17	
14287 montánum *Ph*		mountain	♀		or	25	ap my	G	N Amer	1750	L	s.l	Schm arb 1 t 11	
14288 campéstre *W.*		common	♀		or	25	my jn	G	Britain	hed.	S	co	Eng bot 304	
14289 O'palus *W.*		Italian	♀		or	50	my jn	G	Italy	1752	L	co		
14290 opalifólium *Vill*		Guelder-rose-lv	♀		or	12	my jn	G	S France	1823.	L	co	Tra arc 1 n 13.ic	
14291 monspessulánum *W*		Montpelier	♀		or	8	my	G	France	1739	L	co	Schm arb ½ t 14	
14292 obtusátum *Kit*		blunt-leaved	♀		or	8	my	G	Hungary	1825	L	co	Tra arc 1 n 14 ic	
14293 créticum *W*		Cretan	♀		or	4	my jn	G	Levant	1752.	L	co	Schm arb.1 t.15	
*2144. NEGUN'DIUM. *Dec*		Box-Elder				*Acerneæ.*	*Sp* 1—2.							
§14294 americánum *Dec*		Ash-leaved	♀		or	35	ap	G	N Amer.	1688.	L	s.l	Schm.arb 1 t.12	
2145 CEL'TIS. *W*		Nettle Tree				*Ulmaceæ*	*Sp* 9—19							
14295 austrális *W.*		European	♀		or	40	my	G	S Europe	1796	S	co	Dend brit. 105	
14296 Tournefórti *W*		Tournefort's	♀		cu	8	...	G	Levant	1739.	S	co	Tourn it 2 t 141	
14297 occidentális *W*		American	♀		or	20	ap my	G	N Amer	1656	L	co	Dend. brit. 147	
14298 lævigáta *W*		polished	♀		or	20	ap my	G	Louisiana	...	L	co		
14299 crassifólia *W*		Hoop-Ash	♀		or	20	ap my	G	N Amer	1812	C	co	Duha. arb 2 t 9	
14300 pumila *Ph*		dwarf	♀		cu	6	my	G	N Amer.	1812.	C	co		



History, Use, Propagation, Culture,

2140 *Terminalia.* Because the leaves grow in bunches at the *termination* of the branches. The species grow in loam and peat, and ripened cuttings, with their leaves on, will root in sand closely covered.

2141 *Fusanus* The ancient name of the Euonymus. This plant resembles it in foliage A little Cape shrub, formerly included in Thesium

2142 *Brabejum.* From βραβεῖον, a sceptre The elegant racemes of splendid flowers may well be compared to a sceptre

2143. *Acer* A Latin word signifying vigorous or sharp The wood was formerly manufactured into the heads of pikes and other weapons The species consist of trees, most of them yielding a saccharine juice from the trunk, branches, and leaves A Pseudo-Platanus, *Plane tree*, Scot, grows wild in Switzerland, Germany, Austria, and Italy It is remarkably hardy, and will grow with an erect stem, exposed to the highest winds, or to the sea-breeze It is in leaf by the middle of April, and on their first appearance the leaves are of a pleasant green, but they exude a clammy juice so abundantly, that they attract a variety of insects, which soon perforate and disfigure them. The flowers of none of the species are of any beauty The shade of the tree is said to do less damage to pasture than most trees The timber was formerly much used by the turner, and is still in repute by the saddle-tree maker and the millwright. In spring and autumn, if the trunk be pierced, it yields abundance of juice, from which a good wine may be made, or sugar to a certain extent procured by evaporation A rubrum grows in swamps in Pennsylvania, where the natives use it for almost all sorts of wood-work, with the bark they dye a dark blue, and make a good black ink The Canadians tap the tree for the juice, of which they make sugar and treacle The scarlet flowers of this species come out in spring before the leaves, they are without petals, and have not more than six stamens

A saccharinum bears a considerable resemblance to A platanoides, especially when young. From this tree, and probably also from other species, the inhabitants of North America make a very good sort of sugar The trees are tapped in February, March, and April, during warm days and frosty nights The incision is made with an axe or auger, or about two inches deep A spout of sumach or elder is introduced, through which the sap flows, from four to six weeks, into a trough, whence it is carried daily to a larger receiver, from which it is conveyed after being strained to the boiler The boiling and refining process is or should be carried on in the same manner with that for the cane sugar in the West Indies A tree of an ordinary size yields in a good season from twenty to thirty gallons of sap, from which are made from five to six pounds of granulated sugar

A platanoides grows on the mountains of the northern counties of Europe, descending in some places of

14271 Leaves obovate without glands at base blunt obsoletely toothletted · beneath soft with down
14272 Leaves obovate without glands at base blunt entire smooth on each side
14273 Leaves obovate oblong blunt entire smooth on each side, Petioles with 2 glands above
14274 Leaves linear-lanceolate repand downy beneath

14275 The only species

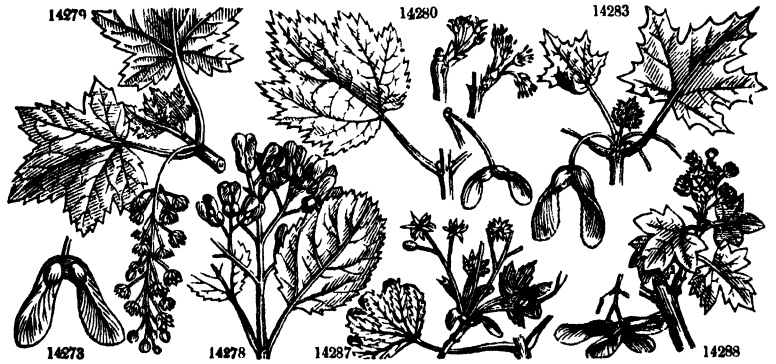
14276 The only species

14277 Leaves evergreen entire and 3-lobed obsoletely toothletted smooth on very short stalks
14278 Leaves cordate somewhat cut unequally toothed, Corymbs erect, Fruit smooth
14279 Lvs cord 5-lobed glauc and smooth beneath lobes unequally tooth Racemes pendulous, Fruit smooth
14280 Lvs on long stalks subcordate 5-fid smooth glauc beneath segm acuminate cut-toothed, Umbels erect
14281 Lvs cordate 5-fid whitish and smooth beneath. segm acuminate cut toothed, Fl. in capitate umbels
14282 Lvs shortly 3-lobed serrated smooth on each side male peduncles branched, female simple
14283 Lvs subcord. acutely 5-lobed downy beneath. lobes nearly entire, Corymbs before the lvs. loose nodding
14284 Lvs cordate 5-lobed downy beneath, Corymbs sessile nodding, Fruit smooth
14285 Lvs. cordate 5-fid smooth segm acuminate cuspidate somewhat toothed, Corymbs nearly erect

14286 Lvs. cordate 3-fid acuminate serrated smooth, Racemes simple long pendulous, Branches striated
14287 Lvs about 5-lobed acute serrated downy beneath, Racemes compound erect
14288 Lvs cord bluntly 5-lobed shining smth beneath lobes nearly ent. Corymbs erect, Wings of fruit divaricat.
14289 Lvs on long stalks round coriac bluntly 5-lob pale ben lobes bluntly tooth Corymbs erect, Fruit smth
14290 Lvs cord. 5-lobed glauc beneath netted. lobes blunt crenate-tooth Umb pendul Pedun and fruit smooth
14291 Lvs annual cordate 3-lobed lobes nearly entire equal, Corymbs few-flowered erect, Fruit smooth
14292 Lvs cordate slightly and very bluntly 5-lobed downy beneath lobes repand, Umbels pendulous
14293 Lvs evergreen tapered at base 3-fid segments toothletted, lateral shortest, Corymbs few-flowered erect

14294 Leaves ternate and pinnate cut serrate, Male flowers corymbose · female racemose

14295 Leaves oblong-lanceolate acumin finely serrated scabrous above beneath soft with down unequal at base
14296 Leaves ovate acute serrated unequal at base roughish above younger somewhat cordate
14297 Leaves ovate acuminate serrated unequal at base rough above hairy beneath
14298 Leaves unequally cordate acuminate nearly entire smooth on each side
14299 Leaves ovate acuminate serrated unequally cordate at base subcoriaceous rough on both sides
14300 Leaves unequal at base ovate acuminate serrated smoothish on each side



and Miscellaneous Particulars.

Norway to the sea-shore It abounds in the north of Poland and Lithuania, and is common through Germany, Switzerland, and Savoy On a tolerable soil it attains a large size, and the leaves being smooth and of a shining green, as large or larger than those of the sycamore, and being seldom eaten or defaced, because the tree abounds in a sharp milky juice disliked by insects, they have a much better appearance than those of the sycamore, and in the spring, when the flowers are out, which are of a fine yellow color, this tree has great beauty Hanbury observes, that in the autumn the leaves die to a golden yellow color, which produces a good effect at that season, when the different tints of the decaying vegetable world are displayed He says further, that it is a quick growing tree arrives at a great bulk, and is one of the best trees for sheltering habitations. Linnæus recommends it for sheltering walks and plantations, as yielding a juice from which sugar may be made, if it be wounded in the winter, and as cutting out into a white smooth wood, fit for the stocks of guns, the joiner and the turner Dr Hunter observes, that it is a quick grower, arrives at a great bulk, and answers all the purposes of the sycamore, the raising it for use, as well as ornament and variety, should not be neglected (*Mill Gard Dict*)

A striatum has a slender stem, with a smooth bark beautifully varied with green and white stripes, the boughs of a shining red in winter The thickness of the shade, the beauty of the bark, and the tree not being liable to insects, render it very desirable for ornamental plantations; the only objections to it are, that it is subject to be injured by storms, and that the abundance of its foliage and seeds occasions a great litter in autumn

A campestre forms a very picturesque little tree, and the timber is said to be far superior to that of the beech or the sycamore for the purposes of the turner It is also frequently substituted for that of the holly and box by the mathematical instrument maker

A Opalus is a noble tree, with large and beautiful foliage, throwing an extensive shade, it is much prized in Italy for planting by avenues and public walks All the species are easily raised from seed, though the ash-leaved and some other species are occasionally propagated by layers and cuttings, the cuttings should be cut off at a joint, and, as in the case of most hardy trees and shrubs, they succeed best when planted in the autumn in a sheltered situation in the open ground

2144 *Negundum* A genus obviously distinguished from Acer by its pinnated leaves. A fine ornamental tree, called in North America black ash There is another species in China.

2145 *Celtis* One of the names anciently given to the Lotus Tournefort first applied the name to the modern genus, which may be said to resemble both in fruit and foliage the shrubby Lotus of the ancients.

14301 sinénsis *Pers*	Chinese		or	12	...	G	Asia	1820.	L	p l	
14302 micrántha *W.*	smooth		or	10	au.s	G	Jamaica	1739.	C	p l	Plum.ic.t.206.f.1
14303 aculeáta *W*	prickly		or	10	...	G	Jamaica	1791.	C	p l	
2146. GOUA'NIA *W*	Gouania				*Rhamneæ*	*Sp* 2—20					
14304 domingénsis *W*	Chaw-stick		or	10	...	G	W Indies	1739	C	p l	Pluk.al t.201 f 4
14305 tiliæfólia *W*	Lime-tree-lvd		or	10	...	G	E. Indies	1810.	C	p.l	Rox. cor. 1 t. 56
2147 HER'MAS. *W*	Hermas.				*Umbelliferæ*	*Sp* 2—5					
14306 depauperáta *W*	hairy		cu	2	jn jl	G	C G H	1795	D	l p	Bur afr t.71. f.2
14307 gigantéa *W*	gigantic		cu	4	jn jl	G	C G H.	1794.	D	l.p	T.in.ac p.14.t.11
2148 BRIDE'LIA *W.*	Bridelia				*Euphorbiaceæ*	*Sp* 1—5					
14308 spinósa *W*	prickly		or	6	jn jl	Ap	E. Indies	1823	C	l p	Roxb. cor t. 172
2149 FERO'NIA. *Correa*	Elephant Apple				*Aurantiaceæ*	*Sp* 1					
14309 elephántum *Corr*	Indian		ft	40	...	W	E Indies	1804	C	l p	Rox. cor 2 t.141
2150 AILAN'TUS *W*	Ailantus.				*Terebintaceæ*	*Sp* 2—4					
14310 glandulósa *W*	Chinese		or	20	au	G	China	1751.	R	l p	Dend brit 104
14311 excélsa *W*	Indian		or	50	...	G	E. Indies	1800	C	s p	Rox cor 1 t. 23
2151 CLU'SIA *W*	Balsam Tree.				*Guttiferæ*	*Sp* 4—16					
14312 rósea *W*	Rose-colored		or	30	jl.au	R	Carolina	1692	C	r m	Cat. car 2 t.90
14313 álba *W*	white-flowered		or	30	...	W	S Amer	1752.	C	l p	Jac amer t 166
14314 flava *W*	yellow-flower'd		or	30	s	Y	Jamaica	1759.	C	r m	Bot. rep 223
14315 venósa *W*	veiny-leaved		or	20	...	...	S. Amer	1733.	C	r m	Plum ic 87 f 2
2152. OPHIO'XYLON. *W*	Ophioxylon				.....	*Sp.* 1—3.					
14316 serpentinum *W*	red-flowered		or	3	my jn	W	E. Indies	1690	R	r m	Bot mag 784
2153 RHA'PIS. *W*	Rhapis.				*Palmæ*	*Sp.* 2.					
14317 flabelliformis *W*	creeping rooted		or	6	au	G	China	1774	R	p l	Bot mag. 1371
14318 arundinácea *W*	simple-leaved		or	6	s	G	Carolina	1765	R	p l	



History, Use, Propagation, Culture,

C australis, sometimes called the lote tree, is reckoned among the largest timber trees of the south of Europe. The wood is one of the hardest we are acquainted with, it is also very tough and flexible. In France, the forked branches are peeled, and cut so as to resemble rude hay-forks, and in that state used for various agricultural purposes. The leaves have a cheerful light green color, the berries are the size of a small cherry, first yellow and then black, they are eaten by birds and children

C occidentalis bears a great resemblance to the first The leaves come out late in the spring, but they are also the latest in fading of any of the deciduous sort, the timber is tough and pliable, and imported by coachmakers for the frames of their carriages It grows more freely in this country than the European species, and in some years bears abundance of fruit.

C orientalis is a low-spreading tree or bush, the timber is white, and yields a gum like that of the cherry

C. aculeata is an inelegant little tree, with a drupe double the size of a pea, which is eaten by the natives of the Caribbee Islands and the neighbouring continent All the species are easily increased by layers or seeds

2146. *Gouania* Antoine Gouan was professor of botany at Montpellier in the middle of the eighteenth century, and was a good botanist. The species are increased by ripened cuttings under a hand-glass in heat

2147 *Hermas* A name, the meaning of which is wholly unknown An inconspicuous starved-looking plant of no known use, whence it is called *depauperata*

2148 *Bridelia* Named in honor of Professor Bridel, the celebrated muscologist. Small bushes or trees, with little beauty to recommend them

2149 *Feronia* Elegantly named by the classical Correa de Serra, after Feronia, the goddess of the forests This is a noble Indian timber tree, bearing a fruit not unlike an orange, to which it is botanically related

2150 *Ailantus* Derived from *Ailanto*, the name of one species in the Moluccas The usual way of writing it, Ailanthus, is therefore incorrect. A glandulosa is a tree which may be compared to a gigantic stag's-horn sumach, it has very large leaves, unequally pinnate, with foot-stalks from one to two feet in length, and numerous flowers in a terminating pedicel, which exhale a disagreeable odor The tree grows very fast, and on very poor soil, especially if it be calcareous If the bark be wounded, a resinous juice flows out, which hardens in a few days The wood is hard, heavy, glossy like satin, and susceptible of a very fine polish It is propagated by cuttings of the roots In general the trees bear only male flowers, but in France it has produced both male and female flowers, and fruit twice in ten years.

2151 *Clusia* So called, in honor of the celebrated Charles de l'Ecluse, born at Artois in 1526, and died in 1609 He was one of the most excellent botanists who ever lived, and author of many works whose value will only cease with the world But he is not more known for his mental excellence, than for his personal calamities In his early youth he undertook to travel through Portugal, Spain, England, Hungary, and other countries in pursuit of plants, no easy task in those days By excessive fatigue he contracted, so soon as in his twenty-fourth year, a dropsical complaint, of which he was afterwards cured with chicory by the celebrated

14301 Leaves broad ovate acuminate serrate smooth on each side
14302 Leaves ovate oblong acuminate serrulate unequally cordate at base rough above hairy beneath
14303 Leaves ovate oblong acuminate equally cordate at base entire obsoletely serrated at end smooth, Branches prickly

14304 Leaves ovate acuminate bluntly serrated smooth
14305 Leaves cordate-ovate with glandular serratures roughish, Racemes terminal downy

14306 Stem downy, Leaves oblong sessile toothed downy beneath
14307 Leaves lanceolate ovate woolly above downy beneath entire

14308 Shrubby erect spiny, Leaves ovate entire acute glabrous

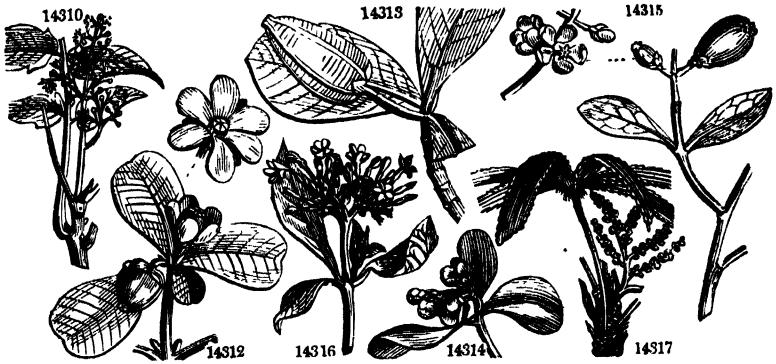
14309 The only species

14310 Leaves pinnated with an odd one, Leaflets toothed at base, Teeth glandular
14311 Leaves abruptly pinnated, Leaflets serrated

14312 Leaves obovate blunt veinless, Cor hexapetalous twice as large as calyx
14313 Leaves obovate blunt veinless, Cor 5-7 petalous half as large again as calyx
14314 Leaves obovate blunt veinless, Cor 4-petalous twice as large as calyx
15315 Leaves obovate blunt veiny, Flowers tetrapetalous

14316 Leaves in fours

14317 Fronds palmate plaited, Plaits and margins prickly
14318 Fronds simple 2-parted, Lobes acute plaited, Plaits roughish



and Miscellaneous Particulars

Rondelet See Rondeletia. At the age of thirty-nine he broke his right arm, during one of his botanical rambles; and a short time afterwards his right thigh When fifty-five, he dislocated his left ancle while at Vienna, and eight years after his right hip. Having been unskilfully treated, he was ever after obliged to walk with crutches The consequent deprivation of his natural exercise brought on other diseases, among not the least distressing of which were calculus and hernia After having been the director of the Imperial Gardens of Vienna for fourteen years, he finally returned to his native country, Flanders. He was named professor of botany at Leyden, where he gave botanical lectures for sixteen years, when he died overwhelmed by the multitude of his bodily infirmities, but retaining his faculties unimpaired to the last.

The species are trees abounding in a tenacious glutinous juice, of a balsamic flavor, whence the English name C rosea has handsome flowers, in which the stamina and pistillum are covered with a gelatinous gluten. The fruit is green and of the size of a middling apple, with eight lines running, like meridians on a globe, from the stalk to the crown of it. When it ripens, it opens at these lines, and divides into eight parts, disclosing many mucilaginous scarlet seeds, resembling those of the pomegranate The whole tree is exceedingly beautiful, and the structure of the fruit is a most exquisite piece of mechanism. It grows on rocks, and frequently on the trunk and limbs of trees, occasioned by birds scattering or voiding the seeds, which being glutinous, like those of the misletoe, take root in the same manner; but the roots not finding sufficient nutriment, spread on the surface of the tree till they find a decayed hole, or other lodgment, wherein is some small portion of soil, the fertility of this being exhausted, a root is discharged out of the hole till it reaches the ground, where it fixes itself, and the stem becomes a large tree Roots have been known to do this at forty feet from the surface The resin is used to cure sores in horses, and instead of tallow for boats.

C alba is an elegant tree, and epiphytical on other vast trees, like the foregoing, the trunk is frequently a foot in diameter, and supports a spreading head The whole abounds in a balsamic juice, of a green color, but becoming of a brownish color on being exposed to the air The flowers are white, and of no great beauty, the fruit scarlet, with a scarlet pulp, the birds are very fond of them, hang over them on the wing, and pluck out the seeds with the pulp adhering.

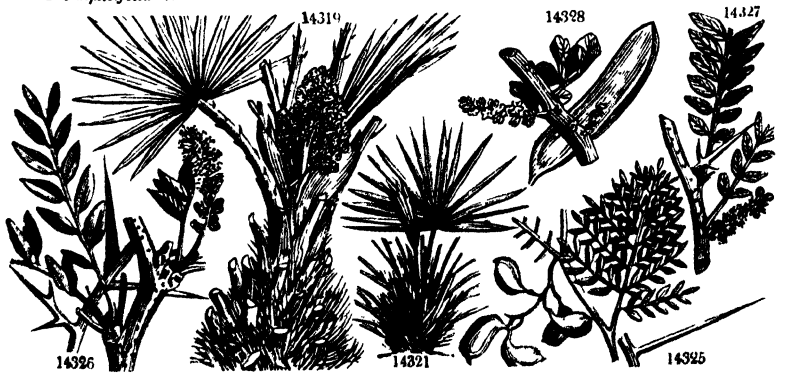
C flava bears in all respects a considerable resemblance to the former. A very good idea of the progress of culture since Miller's time, may be formed by comparing his directions for propagating this plant, and those of Sweet Mr Miller says, the best way is to have them brought over in tubs from the West Indies: according to Sweet, the pots should be well drained, the soil for rooted plants should be a light sandy loam, and "cuttings root very freely in sand under a hand-glass."

2152 *Ophioxylon.* From ὄφις, serpent, and ξύλον, wood. In Ceylon they employ the plant in cases of the bite of serpents. It grows freely in a mixture of loam and peat, and may be increased by cuttings in sand under a hand-glass.

2153 *Rhaphis* So named by Loureiro, from ῥαφίς, a needle, on account of the acute awns of the corolla, which stick into the clothes. Culture as in the other palms; that is, abundance of heat and room, both for the roots and top.

DIŒCIA.

2154. CHAMÆ'ROPS *W* Chamærops					*Palmæ*	*Sp* 4.						
14319 húmilis *W*	Dwarf fan Palm	♀	△	or	10	f mr	G w	S Europe	1731.	Sk r.m		Bot. rep. 599
14320 serrulàta *W*	saw-leaved	♀	△	or	10	...	G w	N Amer	1809	Sk r m		
14321 Hystrix *Ph*	Porcupine	♀	△	or	10	...	G w	Georgia	1801	S r m		
14322 Palmet'to *W*	smooth-stalked	♀	△	or	20	...	G w	Carolina	1809	S r m		
2155 GLEDITS'CHIA *W* Gleditschia					*Leguminosæ.*	*Sp* 5—7						
14323 triacánthos *Ph*	Honey-locust Tree	♂		or	30	jn jl	G	N Amer	1700	S	s l	Dend brit 138
β inérmis	*smooth*	♂		or	30	jn jl	G	.....	...	S	s l	
14324 brachycárpa *Ph*	curved-spined	♂		or	30	jn jl	G	N Amer	...	S	s l	
14325 monosperma *Ph*	Swamp Locust Tree	♂		or	20	jn jl	G	N Amer	1723	S	p l	Cat car 1 t 43
14326 hórrida *W*	strong-spined	♂		or	10	jn jl	G	China	1774	L	p l	Dend brit 75
14327 sinénsis *P S*	Chinese	♂		or	10	...	G	China	1812	L	p l	
2156 CERATO'NIA *W.* Carob Tree					*Leguminosæ*	*Sp* 1						
14328 Siliqua *W*	St John's Bread	♀	△	ec	15	s o	R v	Levant	1570	S	s l	Bot rep 567
2157 FRAX'INUS. *W* Ash Tree.					*Oleinæ*	*Sp* 34—37						
14329 americána *W*	white	♂		tm	20	my	G	N Amer	1723	G	co	
14330 acuminàta *Lam*	Green	♂		tm	40	my	G	N Amer	1723			
14331 juglandifólia *W*	Western black	♂		or	40	my jn	G	N Amer	1783	G	co	Du Roi ed 2 t 1
14332 carolinàna *W.*	shining	♂		or	30	my jn	G	N Amer	1783	G	co	Catesb car t 80
14333 pubéscens *W*	Red or black	♂		or	20	my	G	N Amer	1811	G	co	
nigra Duroi		♂										
14334 pannósa *Vent*	cloth-leaved	♂		tm	30	my	G	Carolina	1820	G	co	
14335 epíptera *W.*	cut-winged	♂		tm	30	my	G	N Amer	182	G	co	
14336 quadrangulàta *W.*	Blue	♂		or	30	my	G	N Amer	1822	G	co	
14337 platycárpa *W*	broad-fruited	♂		or	30	my	G	N Amer	1820	G	co	
14338 expánsa *W*	expanded	♂		or	30	my	G	N Amer	1824	G	co	
14339 mixta *Bosc*	mixed	♂		or	30	my	G	N Amer	1824	G	co	
14340 pulverulénta *Bosc*	powdered	♂		or	30	my	G	N Amer	1824	G	co	
14341 rubicunda *Bosc*	pink-veined	♂		or	30	my	G	N Amer	1824	G	co	
14342 longifólia *Bosc*	long-leaved	♂		or	30	my	G	N Amer	1824	G	co	
14343 viridis *Bosc*	green	♂		or	30	my	G	N Amer	1824	G	co	
14344 cinérea *Bosc*	ash-colored	♂		or	30	my	G	N. Amer	1824	G	co	
14345 álba *Bosc*	white	♂		or	30	ap my	G	N Amer	1823	G	co	
14346 Richárdi *Bosc*	Richard's	♂		or	30	ap my	G	N Amer	...	G	co	
14347 ováta *Bosc*	ovate	♂		or	30	ap my	G	N Amer	...	G	co	
14348 ellíptica *Bosc*	elliptical	♂		or	30	ap my	G	N Amer	1825	G	co	
14349 nigra *Bosc*	black-branched	♂		or	30	ap my	G	N Amer	...	G	co	
14350 fusca *Bosc.*	fuscous	♂		or	30	ap my	G	N Amer	1823	G	co	
14351 rufa *Bosc*	rufous	♂		or	30	ap my	G	N Amer	1822	G	co	
14352 pállida *Bosc*	pale	♂		or	30	ap my	G	N Amer	...	G	co	
14353 excélsior *W*	common	♂		tm	80	ap my	G	Britain	woods	S	s l	Eng. bot 1692
β péndula Hort	*weeping*	♂		or	20	ap my	G	.....	...	G	co	
γ jaspidea W en	*yellow-barked*	♂		or	30	ap my	G	.....	...	G	co	
δ atrovirens P S.	*green cultd-lv*	♂		or	4	ap my	G	.....	...	G	co	
14354 verrucósa *Lmk*	warted	♂		or	60	ap my	G	England	Norf	G	co	
14355 heterophýlla *Vahl*	various-leaved	♂		tm	30	ap my	G	England	woods	G	s l	Eng bot. 2476
F simplicifólia W		♂										



History, Use, Propagation, Culture,

2154. *Chamærops* This word is said by etymologists to be synonymous with χαμαιδρυς, or χαμαιδρυη, a dwarf oak The modern genus consists of ornamental palms, which are fine hardy greenhouse plants.

2155 *Gleditschia* Called in honor of John Gottlieb Gleditsch, a native of Leipsig, and member of the academy of Berlin, and the author of several works, among which his Arrangement of Fungi, published in 1753, and his Botanical System, are the most remarkable G triacanthos, the honey locust of North America, attains the size of a large tree, but very seldom flowers and ripens its seeds in this country All the species grow in common garden soil, and are generally raised from seeds

2156. *Ceratonia* This name has been derived from κερας, a horn, in allusion to the long horn-like pods of this plant, which contain a sweet fœcula, for the sake of which they are often imported from Spain under the name of the Algaroba bean This last word is a slight alteration, by the prefix of the article *al*, of the Arabic name of the tree, *Kharroub*, whence also our English name *Carob-tree* This is generally considered the locust-tree of scripture, and in Spain, where the seeds are eaten, it is called Saint John's bread. Ignorance of eastern manners and natural history, Professor Martin observes, induced some persons to fancy that the locusts on which John the Baptist fed, were the tender shoots of plants, and that the wild honey was the pulp of the pod of the Carob, whence it had the name of Saint John's bread. There is better reason to suppose, he adds, that the shells of the carob pod might be the husks which the prodigal son desired to partake

DIŒCIA.

14319 Fronds palmate with spiny stalks, Spathe simple
14320 Fronds palmate with spiny stalks, Caudex creeping
14321 Stem creeping, Stalks with very long entangled prickles, Fronds palmate
14322 Fronds palmate with unarmed stalks, Spathes double, Stem arboreous

14323 Branches spiny, Spines thick triple, Leaflets linear oblong, Pods many-seeded

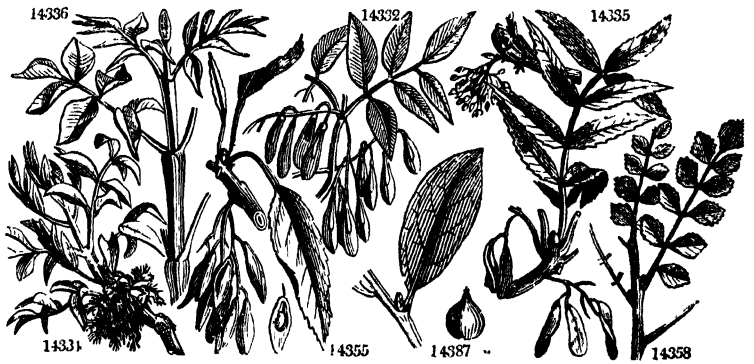
14324 Spines short thick triple, Leaflets oblong blunt, Pods oblong short
14325 Branches somewhat spiny, Leaflets ovate-oblong, Pods 1-seeded
14326 Trunks spiny, Spines branched, Leaflets oval-oblong
14327 Spines robust alternately branched, Leaflets elliptical smooth

14328 The only species

14329 Leaflets stalked oblong shining acuminate entire glaucous beneath, Buds yellowish
14330 Leaflets quite entire with long points glaucous beneath, Buds tawny
14331 Leafl stalked ovate opaque serrated glaucous ben Axils of veins downy, Branches smooth, Buds fuscous
14332 Leaflets stalked lanceolate serrulate shining smooth, Branches smooth, Buds fuscous
14333 Leaflets stalked elliptical ovate serrated beneath with the petioles and branchlets downy

14334 Lvs of 3 pair shining above vill with down ben Leafl stalk ov ent taper toward each end, Buds tawny
14335 Leaflets oblong lanceolate subserrated, Wing of fruit stalked cuneate emarginate, Buds fuscous
14336 Leaflets subsessile lanc. ellipt. serrated downy beneath, Branches square with winged angles, Buds grey
14337 Leaflets subsessile serrated outwardly and fruit lanceolate elliptical
14338 Leaflets ovate oblong unequally serrate about 11 smooth stalked, Branchlets smooth, Buds fuscous
14339 Leaves of 5 pair smooth above, Veins above hairy, Leaflets oblong subsessile unequally toothed
14340 Lvs of 6 pair somew downy ben Leafl on long stalks oblong acute sinuated, Petioles somew powdery
14341 Lvs of 3 pair cordate a little downy ben Leafl obl acute somewhat toothed, Veins and petioles ben pink
14342 Lvs of 3 pair shining above ben with the petioles downy, Leaflets obl lanc acuminate, Branches hirsute
14343 Lvs of 3 pair shining above with veins downy ben Leaflets oblong acute finely serrated, Branches green
14344 Lvs of 3 pair smooth, Veins ben rather hairy, Leaflets lanc unequally toothed, Buds hin cinereous hairy
14345 Lvs of 3 pair beneath and petioles hirsute, Leafl lanc unequally and finely toothed acum Branches grey
14346 Lvs of 3 pair smooth, Veins ben rather hairy, Leafl obl acute toothed, Branches cinereous hairy at base
14347 Leaves of 3 pair downy beneath, Leaflets ovate acute equally toothed, Buds tawny
14348 Lvs of 3 pair hairy ben Leaflets oblong mucronate somew toothed, Branches brownish-black, Buds tawny
14349 Leaves of 3 pair smooth, Leaflets oblong acute subsinuate toothed, Branches blackish
14350 Lvs of 3 pair smooth above, Veins beneath villous, Leafl obl mucron equally toothed, Branches fuscous
14351 Leaves of 2 pair with rufous hairs beneath, Leaflets lanceolate acuminate cuspidate unequally toothed
14352 Leaves of 3 pair smooth, Leaflets subsessile ovate lanceolate toothed, Branches yellow
14353 Leaflets somewhat stalked lanceolate acuminate serrated smooth cuneate at base, Branches flat smooth

14354 Leafl somewhat stalked lanceolate acuminate serrate smooth, Branches found warted
14355 Leaves simple and compound tooth-serrated, Buds black



and Miscellaneous Particulars

of with the swine The tree is very common in the south of Spain, and the seeds or beans, as they were there called, often formed the principal food of the British cavalry horses during the war of 1811 and 1812 In our greenhouses the plant seldom flowers, but it grows very well in loam and peat, and ripened cuttings root in sand under a hand-glass

2157 *Fraxinus* The origin of this word is far from certain Linnæus says, it has been taken from the Greek φραξις, a separation, in allusion to the facility of splitting its wood De Theis remarks, that M. A Dureau de la Malle has proved, in a learned dissertation published in 1804, that the Fraxinus of the Latins and the Melia of the Greeks are our Ornus europæus, while the Ornus of the Latins and the Boumelia of the Greeks are, in fact, our Fraxinus excelsior, or common ash. *Le Frêne*, Fr, *Esche*, Ger, and *Frassno*, Ital. The English name is from the Celtic *æsc*, a pike. F excelsior is one of the most useful of our native timber trees It is peculiarly adapted for implements of husbandry, and the coachmaker and wheeler, it makes excellent fuel, with very little smoke, good hop-poles and hoops, excellent handles for tools, and very good walking-sticks Its period of leafing is very late, being seldom earlier than the last week of April, and not unfrequently about the middle of May the leaves have been used to adulterate tea, they are bitter, and said *to communicate a rank taste* to the milk and butter of cows which eat them The roots spread to a great extent and lie very near the surface, and these, together with the shade of the head, are found very injurious to hedges and pastures. The variety of this species, F pendula, was first discovered in a field at Gamblingay,

14356	macrophýlla *Thouin*	large-leaved	♀	or	40	ap.my	G	.....	1823.	G	co	
14357	parvifólia *W*	small-leaved	♀	or	20	ap.my	G	Levant	1822	G	co	Willd.arb t 6 f 2
14358	lentiscifólia *W*	Aleppo	♀	or	6	my.jn	G	Aleppo	1710	G	co	Pluk.al. t.182.f.4
14359	argéntea *Lois*	silvery	♀	or	15	my jn	G	Corsica	1825.	G	co	
14360	sambucifólia *W.*	Water	♀	or	30	my jn	G	N Amer.	1800.	G	s l	
14361	nána *Bosc*	dwarf	♀	or	6	my jn	G	.....	...	G	co	
14362	oxycárpa *W*	Caucasian	♀	or	20	...	G	Caucasus	1815.	G	co	
	β oxyphýlla F	*narrow-leaved*	♀	or	20	...	G	S Europe	1821	G	co	

†2158 BRO'SIMUM *W* Bread Nut ..... *Sp.* 2—4.

14363	Alicástrum *W*	Jamaica	♂	or	6	...	Ap	Jamaica	1776.	C	r m	S fl i oc.1.t.1.f 1
14364	spurium *W*	Milkwood	♂	or	6	...	Ap	Jamaica	1789	C	r m	

2159 DIOSPY'ROS *W* Date Plum *Ebenaceæ* *Sp* 12—29.

14365	Lótus *W*	European	♀	clt	20	jn jl	Y G	Italy	1596.	L	s l	Mill ic t 116
14366	virginiána *W.*	American	♀	clt	20	jn jl	Y G	N Amer	1629	S	s l	Dend. brit 146
14367	pubéscens *Pk*	pubescent	♀	clt	20	ap	Y G	N Amer.	1812.	C	s l	
14368	sylvática *W*	wood	♀	or	20	...	W	E. Indies	1812	C	s l	Roxb cor 1 t 47
14369	Ébenum *W.*	smooth	♀	tm	30	...	W	E. Indies	1792	C	s l	Ro m ac ha 2 t 5
14370	Káki *W*	Japan	♀	fr	12	...	W G	Japan	1789	L	r m	Kæm amœ t 806
14371	Embryópteris *Pers*	polyandrous	♀	or	25	jl	W.G	E. Indies	1818	L	r m	Bot. reg 499
14372	vaccinioides *Lindl*	Vaccinium-like	♂	pr	2	ap my	W	China	1823	C	r m	Hook. ex fl. 139
14373	discolor *W.*	Mabolo-fruit	♀	fr	20	...	...	Philippin	1823	C	r m	
14374	montána *W.*	mountain	♂	or	6	...	W G	E. Indies	1822.	C	r m	
14375	cordifólia *W*	heart-leaved	♀	or	15	...	W G	E. Indies	1794.	G	co	Roxb cor.1. t.50
14376	obováta *W.*	four-seeded	♀	or	15	...	W G	W Indies	1796.	G	co	Jac schœ 3.t.312

2160 MYRSI'NE. *R Br.* Myrsine. *Myrsineæ* *Sp* 4—13

14377	africána *W.*	African	♂	or	2	mr my	Br	C G H	1691	C	p l	Com hort.1 t 64
14378	retúsa *W*	round-leaved	♂	pr	2	jn	W G	Azores	1778	C	p l	Vent cels 86
14379	Samára *R Rr*	oval-leaved	♂	pr	3	f n	W G	C. G H	1770	C	l p	
	Samára pentándra W											
14380	melanóphleos *R Br*	Laurel-leaved	♂	pr	3	...	W G	C G. H	1783	C	l p	Jac.vind.1 t 71
	Sideróxylon melanóphleum W											

2161 NYS'SA *W* Tupelo *Santalaceæ ?* *Sp* 5—9

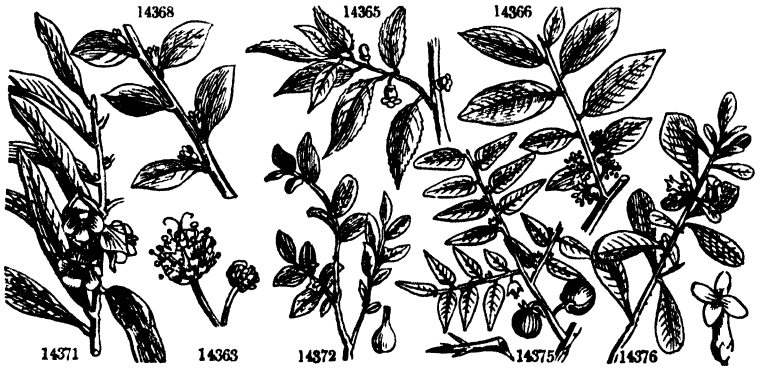
14381	villósa *W*	Sour-gum	♀	or	10	my	G	N Amer	1806	L	s l	Mich. arb. 21
14382	bifióra *W*	mountain	♀	or	10	ap my	G	N Amer	1739	C	s l	Mich. arb. 22
14383	capitáta *H K*	round-headed	♀	or	10	...	G	N Amer	1806	C	s.l	
14384	tomentósa *W*	downy	♀	or	15	ap my	G	N Amer	1818	C	s.l	
	grandidentata Mich											
14385	can'dicans *W*	Ogechee lime	♀	or	20	...	G	N. Amer	1812.	C	s l	Mich arb 20
14386	denticuláta *W.*	water	♀	or	30	...	G	N Amer	1735	L	s.l	Cat. car. 1. t. 60

2162 HAMILTO'NIA *W* Oil Nut . ..... *Sp* 1

14387	oleífera *W*	Olive-bearing	♂	or	6	...	G t	N Amer	1800	C	s.l	
	Pyrulária púbera Mich											

2163 LAUROPHYL'LUS. *W* Laurophyllus ... . *Sp* 1

4388	capénsis *W*	Cape.	♂	or	6	.	G	C G H	1801	L	p l	



History, Use, Propagation, Culture,

in Cambridgeshire There are other varieties with curled leaves, striped leaves, variegated bark, &c and some consider F simplicifolia only a variety F Americana is a lofty tree, in few respects different from the common ash Those species which do not produce seeds are readily increased by grafting

Little is known of the qualities of the greater part of the numerous varieties of American ash, distinguished by Bosc They probably all form fine trees, the young plants in our gardens grow freely, and exhibit indications of valuable properties as ornamental trees.

2158 *Brosimum* From *βρωσιμος*, good to eat B Alicastrum is common in the woods of Jamaica. The timber is not despicable, but the leaves and younger branches are more useful, and a hearty fattening fodder for all sorts of cattle. The fruit, boiled with salt fish, pork, beef, or pickle, has been frequently the support of the negroes and poorer sort of white people in times of scarcity, and proved a wholesome, and not unpleasant food, when roasted, it eats something like our European chestnuts, and is called bread-nut. The leaves and younger shoots are full of gum, which renders them disagreeable to most cattle at first, but they soon grow very fond of them.

B spurium is also common in woods in the West Indies, but its timber is of little value In our stoves both species thrive well, and like loamy soil, and old cuttings, with their leaves on, root in sand in moist heat

2159. *Diospyros.* From *Διος πυρος*, the fruit of Jove, or heavenly fruit It has been fancied that the European species of this plant produced that famous fruit, which, according to ancient romancers, caused oblivion. D. Kaki is a valuable Japanese tree, which bears the fruit sometimes received from China in a dried form under the name of dates D discolor also bears a fine fruit. D lotus produces fruit the size of a

14356 Leaves simple blistered ovate coarsely serrated dark-green quite smooth
14357 Leafl. ovate subsessile acute mucronate serrate smooth cuneate at base
14358 Leafl. oblong stalked acute at each end mucronate serrated smooth
14359 Leaves unequally pinnated of 3 pair, Leaflets stalked lanceolate acuminate serrated silvery
14360 Leafl sessile ovate lanc. serrated rugose-shining rounded at base unequal, Axils of veins villous beneath
14361 Lvs. of 3 pairs smooth, Leafl obl. acum tooth Com petiole winged at base, Branches ciner Buds blackish
14362 Leaflets subsessile lanc. acuminate serrated smooth, Fruit lanc narrowed at each end with a long point

14363 Leaves ovate lanc evergreen, Catkins globose stalked twin axillary, Fruit coated
14364 Leaves lanceolate-ovate acuminate, Catkins subsessile ovate axillary twin, Fruit soft

14365 Leaves obl acuminate downy beneath, Buds hairy inside
14366 Leaves ovate bluntish shining smooth netted with veins, Petioles downy, Buds smooth
14367 Leaves obl acute downy beneath, Petioles long, Fruit few-seeded
14368 Lvs obl acute at base and end smooth on each side, Fl. trigynous erect, Hermaphrodite cor. as long as ca
14369 Leaves ovate-lanc. acuminate, Buds hairy
14370 Leaves ovate-elliptical acuminate acute at base downy beneath, Branches downy
14371 Leaves lanc oblong, Flowers axillary polyandrous, Berry 8-seeded
14372 Lvs. simple fleshy nerveless cover. on each side with scatter stell scales, Sterile obl.-lanc. Fert lin.-lanc
14373 Leaves oblong acute rounded at base acute at end smooth above, silky and glaucous beneath
14374 Leaves oblong rounded at base acute at end smooth on each side
14375 Spiny, Leaves oblong acuminate cordate downy beneath
14376 Leaves obovate blunt smooth on each side

14377 Leaves obovate elliptical acute serrated at end, Pedunc umbelled axillary, Stamens exserted
14378 Leaves obovate retuse toothletted, Flowers axillary clustered, Stamens included
14379 Leaves ellipt Corymbs axillary aggregate

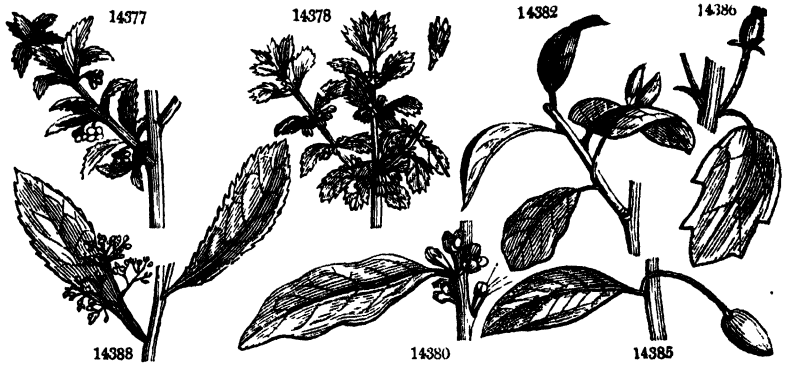
14380 Leaves oblong lanc subcoriaceous entire, Flowers axillary clustered

14381 Leaves oblong entire acute at each end, Petiole middle rib and edge villous, Female peduncles about 3-fl
14382 Leaves ovate-oblong entire acute at each end smooth, Female peduncles 2-flowered
14383 Leaves cordate ovate slightly serrated glaucous beneath, Flowers in globose heads, Drupes oblong
14384 Leaves on long stalks obl acuminate remotely serrate downy beneath, Female peduncles 1-flowered

14385 Leaves on short stalks obl nearly entire cuneate at base whitish beneath, Female peduncle 1-fl
14386 Leaves on long stalks obl. acuminate remotely serrated smooth on both sides, Female peduncle 1-fl

14387 Leaves oval-oblong acuminate entire

14388 Leaves stalked oblong acute serrated coriaceous veiny smooth



and Miscellaneous Particulars

cherry, yellow when ripe, sweet, and somewhat astringent, they are recommended as a cure for the diarrhœa. D virginiana has a white brittle wood, covered with a dark brown bark. The fruit is in form and bigness like a date, very firm, like that fruit, and almost as sweet, with a large kernel.

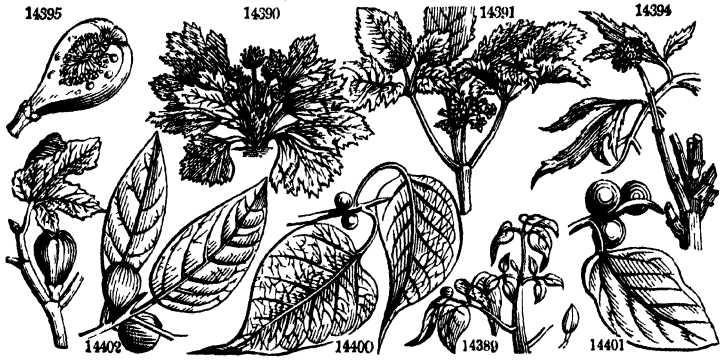
2160 *Myrsine* A Greek word synonymous with Myrtle Modern botanists have applied the name to a genus of African myrtle-like shrubs The species grow freely in loam and peat, and are increased by young cuttings in sand under a hand-glass

2161 *Nyssa* A name of a nymph, according to Linnæus The species are large shrubs, which grow freely in any soil or situation, but prefer moisture. N denticulata grows naturally in wet swamps in Carolina and Florida, and rises there to the height of eighty or hundred feet. Marshall, in his American Grove, describes it as a tree of great singularity and beauty It produces fruit about the size and shape of small olives, which are preserved like them by the French inhabitants of the Mississipi, where it greatly abounds, and is called the olive-tree The timber is white and soft when unseasoned, but light and compact when dry, which renders it very proper for the carver and turner. All the species are readily propagated by layers or seeds.

2162. *Hamiltonia.* Dedicated by Muhlenburg, to Mr. Hamilton, an American botanist. A shrub growing to the height of from three to six feet The flowers grow in terminal racemes from an inch to an inch and a half long.

2163 *Laurophyllus* An hybrid name created by Thunberg, to express the resemblance of the leaves, φυλλα, to a laurel A shrub with stalked, oblong, acute, serrated, coriaceous leaves, and minute flowers growing in panicles three or four inches long.

						Terebintaceæ. Sp. 1.							
†2164. BURSE'RA *W*	Bursera	♀	▭	or	20	...	W G	W. Indies	1690	S	p.l	Jac. amer t 65
14389 gummífera *W*	Jamaica											
						Umbelliferæ. Sp. 1.							
2165 ARC'TOPUS *W*	Arctopus	☿	▭	m	1	my.jn	G	C. G H.	1774	D	p.l	Bot. reg. 705
rough												
						Araliaceæ Sp 4—16							
2166 PA'NAX *W*	Panax												
14391 quinquefolium *W*	Ginseng	☿	△	pr	1½	jn	L Y	N Amer	1740.	D	s p	Bot. mag. 1333
14392 trifólium *W*	lesser	☿	△	pr	½	my jn	G	N Amer	1759.	D	s p	Bot mag 1334
14393 aculeátum *W*	prickly	☿	▭	m	1½	n	G	China	1773	C	s p	Jac ic 3 t 634
14394 fruticósum *W*	shrubby	♄	▭	pr	6	au s	G	Ternate	1800	R	r m	Bot. rep 595
						Urticeæ Sp 47—143.							
2167 FI'CUS *W*	Fig Tree												
14395 Cárica *W*	common	☿	▭	fr	15	jn jl	Ap	S. Europe	1548	C	co	Tre ehret t.73,4
14396 rubrinérvia *Link.*	red-nerved	♄	▭	or	10	...	Ap	Brazil	1824	C	co	
14397 aquática *W*	rough-leaved	♄	▭	or	10	...	Ap	E Indies	1758.	C	l p	Rhee mal.3. t.62
14398 nymphæifólia *W.*	Water-lily-lvd	♄	▭	or	10	...	Ap	E. Indies	1759	C	p.l	
14399 crassinérvia *W.*	thick-nerved	♄	▭	or	10	...	Ap	S Amer	1823.	C	p l	
14400 religiósa *W*	Poplar-leaved	♄	▭	ec	25	...	Ap	E. Indies	1731	C	p l	Rhee mal 1 t 27
14401 benghalénsis *W.*	Bengal	♄	▭	or	25	ap	Ap	E. Indies	1690	C	p l	Rhee mal.1 t.28
14402 venósa *W*	vein-leaved	♄	▭	or	10	...	Ap	E Indies	1763	C	p l	W.ho.ber.1 t. 36
14403 Bras'sii *Sabine*	Brass's	♄	▭	or	20	...	Ap	S. Leone	1822.	C	p l	
14404 coriácea *W*	leathery-leaved	♄	▭	or	10	...	Ap	E Indies	1772	C	p l	
14405 lasiophylla *Link*	woolly-leaved	♄	▭	or	10	...	Ap	.... .	1820.	C	p l	
14406 costáta *W*	rib-leaved	♄	▭	or	10	...	Ap	E. Indies	1763.	C	p l	
14407 lúcida *W*	shining-leaved	♄	▭	or	10	...	Ap	E. Indies	1772.	C	p l	
14408 oblongáta *Link.*	oblong-leaved	♄	▭	or	6	...	Ap	C G H	1825	C	p l	
14409 martinicénsis *W*	round-fruited	♄	▭	or	10	...	Ap	W Indies	1759	C	p l	Sloa jam 2 t 223
14410 infectória *W*	veiny	♄	▭	or	15	...	Ap	E. Indies	1763	C	p l	Rhee mal 3 t 64
14411 superstitiósa *Link*	superstitious	♄	▭	or	6	...	Ap	.. ..	1763	C	p l	
14412 pedunculáta *W*	Willow-leaved	♄	▭	or	6	...	Ap	S Amer	1776	C	p l	Pluk al t 178 f 4
14413 ulmifólia *W.*	elm-leaved	♄	▭	or	4	...	Ap	Phillipin	1813	C	p l	
14414 cordáta *W*	heart-leaved	♄	▭	or	6	...	Ap	C G H	1802	C	p l	Thunb diss e ic
14415 macrophýlla *P S*	large-leaved	☿	▭	or	14	...	Ap	N Holl	..	C	p l	
14416 obtusáta *Link*	blunt	♄	▭	or	4	...	Ap	... .	1821	C	p l	
14417 Mun'tra *Link*	doubtful	♄	▭	or	4	...	Ap	N Holl	1822	C	p l	
14418 australis *W*	ferruginous	♄	▭	or	6	mr jn	Ap	N S W	1789	C	p l	Ven malm t 114
14419 elástica *Rox*	Elastic-gum	♄	▭	or	20	...	Ap	E Indies	1815	C	p l	
14420 microcárpa *Vahl*	small-fruited	♄	▭	or	20	...	Ap	Guinea	1819	C	p l	
14421 ciliolósa *Link*	ciliated	♄	▭	or	4	...	Ap	... ..	1823	C	p l	
14422 stipuláta *W*	trailing	♌	▭	or	½	...	Ap	China	1771	C	p l	
14423 púmila *W*	dwarf	♌	▭	or	½	...	Ap	China	1759	C	p l	Kæm amœ t 804
14424 tinctória *W*	Otaheite	☿	▭	or	15	my jn	Ap	Society I	1793	C	p l	
14425 brasiliénsis *Link*	Brazilian	♄	▭	or	4	.	Ap	Brazil	1823	C	p l	
14426 benjámina *W*	oval-leaved	☿	▭	or	10	. .	Ap	E. Indies	1757	C	p l	Rhee mal 1 t 26
14427 Lichtensteínii *Link*	Lichtenstein's	♄	▭	or	3	...	Ap	C G H	1824	C	p l	
14428 pertusa *W*	Laurel-leaved	♄	▭	or	8	...	Ap	S Amer	1780	C	p l	
14429 nítida *W*	glossy-leaved	♄	▭	or	6	mr jn	Ap	E Indies	1786	C	p l	Hook ex fl. 111
14430 indica *W*	Banyan Tree	☿	▭	or	30	...	Ap	E. Indies	1759	C	p l	Rhee mal 3 t 63
14431 popul'nea *W*	poplar-leaved	♄	▭	or	12	...	Ap	S Amer	1812	C	p l	
14432 lævigáta *Vahl*	polished	♄	▭	or	6	...	Ap	W Indies	1823	C	p l	
14433 racemósa *W*	clustered	♄	▭	or	4	...	Ap	E Indies	1759	C	p l	Rhee mal 1. t.25
14434 retúsa *W*	blunt-leaved	♄	▭	or	2	...	Ap	E Indies	1793.	C	p l	
14435 répens *W*	creeping-stem	♌	▭	or	¼	..	Ap	E. Indies	1805	C	p l	
14436 pendula *Link*	pendulous	☿	▭	or	12		Ap		1824	C	p l	



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2164 *Bursera* So called after Joachim Burser, a disciple and friend of Caspar Bauhin, and professor of botany at Sara, in Naples He is said to have left behind him an Herbarium, in twenty-five volumes B gummifera is a large tree with a fine leafy head, and abounds in copious watery balsamic fluid, which soon becomes inspissated by exposure to the air The root is said to possess the same properties as Quassia. Hedges are made of it by the Spanish residents in South America, who call it *Almacigo*

2165. *Arctopus* Literally, bear's foot, ἄρκτος πους An inconspicuous prickly umbelliferous plant. The roots are used with success at the Cape, in cases of siphilis, but upon trial here some years since, they were found to be less efficient than Sarsaparilla

2166. *Panax* A high-sounding title, meaning little less than that the plant which bears it is the long sought *universal elixir*, the name has been taken from πανν, and ακος, a remedy, a remedy for all things. P. quinquefolium is a native of Chinese Tartary, and also of North America In the former country it has been gathered as an invaluable drug from time immemorial The roots, which are said to bear some resemblance to the human form, are gathered and dried, and enter into almost every medicine used by the Tartars and Chinese Osbeck says, that he never looked into the apothecaries' shops, but they were always selling Ginseng, that both poor people and those of the highest rank made use of it, and that they boil half an ounce in their

14389 Racemes axillary, Leaves pinnated with an odd one, Leaflets ovate acute

14390 Leaves prickly with stellate spines

14391 Stem herbaceous, Leaves ternate or quinate, Leafl ovate acuminate serrated
14392 Stem herbaceous, Leaves ternate or quinate, Leafl oblong lanc serrated
14393 Leaves ternate the upper near the flowers clustered simple, Petioles and branches prickly
14394 Leaves supradecompound toothed-ciliated, Stem shrubby

14395 Leaves cordate 3-5-lobed repand-toothed · lobes blunt rough above downy beneath
14396 Leaves ovate with a short point netted beneath very smooth
14397 Leaves oblong 3-lobed and sinuated entire rough on each side
14398 Leaves cordate roundish mucronate entire glabrous glaucous beneath
14399 Leaves ovate oblong entire acute blunt at base smooth
14400 Leaves subcordate ovate with very long points
14401 Leaves ovate entire very blunt rounded at base subcordate 5-nerved
14402 Leaves oblong ovate entire acute subcordate at base impressed with dots on the upper surface
14403 Leaves oblong pointed smooth on both sides widely toothed, Branches covered with brown hairs
14404 Leaves oblong smooth narrowed at base cordate coriaceous, Veins immersed
14405 Leaves ovate blunt soft with down beneath
14406 Leaves ovate-cordate with a deep narrow sinus quite entire smooth acute green on each side
14407 Leaves ovate-cordate entire smooth blunt 3-nerved at base, Branches erect
14408 Leaves cordate oblong with a short point obtuse smooth with parallel nerves
14409 Leaves oblong-lanc entire narrowed and acute at end rounded at base with white dots above
14410 Leaves obl quite entire narrowed and acute at end rounded and subcord at base · with punctures above
14411 Leaves ovate tapered at the base with a long point
14412 Leaves ovate-obl entire acuminate blunt obsoletely cordate at base
14413 Leaves ovate unequal-sided toothed acuminate rough on each side
14414 Leaves ovate-lanc entire slightly cordate at base
14415 Leaves cordate oblong entire nerved shining
14416 Leaves ovate-oblong bluntly serrate crenate hairy on each side
14417 Leaves oval acute serrated rough above soft beneath
14418 Leaves ellipt entire rounded at each end smooth young ones rusty with down beneath
14419 Leaves smooth elliptical entire shining very large
14420 Leaves oblong ovate blunt smooth, Fruit twin globose sessile
14421 Leaves oblong acuminate blunt tapered at base netted beneath, Stipules scarious
14422 Leaves ovate blunt entire cordate unequal at base, Stipules membranous twin persistent, Stem creeping
14423 Leaves ovate bluntish entire netted beneath
14424 Leaves obliquely ovate blunt
14425 Leaves broad lanc with a short point tapered at base shining very smooth netted beneath
14426 Lvs ellipt obl ent narrow at base bluntly acum at end with fine parallel veins, dotted with white above
14427 Leaves cordate lanc repand toothed obtuse downy beneath
14428 Leaves obl acuminate entire narrowed at base about 3-nerved with parallel veins
14429 Leaves obovate entire with very short points and fine parallel veins shining smooth
14430 Leaves ovate acuminate entire acute at base
14431 Leaves obl with short points entire smooth
14432 Leaves cordate ovate acuminate veiny very smooth, Fruit stalked globose smooth
14433 Leaves oblong-lanc acute quite entire somewhat narrowed at base 3-nerved veiny dotted beneath
14434 Leaves obovate entire blunt smooth, Branchlets furrowed
14435 Leaves cordate ovate acute serrated unequal at base scabrous above hairy beneath, Stem creeping
14436 Leaves oblong acuminate tapered at base, Branches pendulous



and Miscellaneous Particulars

tea or soup every morning, as a remedy for consumption and other diseases Jartoux relates, that the most eminent physicians of China have written volumes on the medicinal powers of this plant, asserting that it gives immediate relief in extreme fatigue, either of body or mind, that it dissolves pituitous humours, and renders respiration easy, strengthens the stomach, promotes appetite, stops vomiting, removes hysterical, hypochondriacal, and all nervous affections, giving a vigorous tone of body even in extreme old age The French in Canada use this root for curing the asthma, and as a stomachic After all, our physicians say, that we have no proofs of the efficacy of Ginseng in Europe, and that from its sensible qualities it seems to possess very little power as a medicine The hardy species thrive well in light rich soil, the others grow in loam and peat, and are increased by cuttings in sand under a hand-glass

2167. *Ficus* It is not known what the derivation of this word is; but in most languages it is nearly the same In Greek it is *συκη*, in Latin *Ficus*, in Celtic *Figuezen*, in Teutonic *feige*, in Sclavonic *jige*, in Hungarian *fuge*, in Anglo-Saxon *fic* The species are trees or shrubs, abounding in a milky juice. The fruit is turbinate, fleshy, soft, and hollow within. All the species are natives of warm countries F Carica, *le figuier*, Fr, *Feigenbaum*, Ger, and *Fico*, Ital, is supposed to be originally from Caria, in Asia, though it is now acclimatized, and in some respects naturalised in the Levant and

14437 myrtifólia *Link*	Myrtle-leaved	♣ ☐	or	4	...	Ap	.....	1824.	C	p l	
14438 áspera *W*	rough-leaved	♣ ☐	or	3	mr jn	Ap	N. Holl.	1807	C	p l	
14439 oppositifólia *W*	opposite-leaved	♣ ☐	or	4	...	Ap	E. Indies	1802.	C	p l	Roxb cor.2 t.124
scábra P S											
14440 arbutifólia *Link*	Arbutus-leav'd	♣ ☐	or	3	...	Ap	.....	1825.	C	p.l	
14441 capénsis *W*	Cape	♣ ☐	or	4	...	Ap	C. G H	1816.	C	p l	

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the south of Europe. In these countries the fruit green and dried forms an important part of the food of the inhabitants In this country it is cultivated as a fruit tree, but not generally or extensively It is only in very warm situations that it will ripen its fruit in the open air, even though trained against a wall, though there are one or two exceptions in Sussex on the sea-coast, where it ripens its fruit on standards The only certain mode, however, is to grow it in houses built on purpose No tree is more robust or more prolific Even plants in pots or tubs kept in a temperature adapted for the orange-tree will fruit freely, and ripen two crops a year Kept in the temperature of the pine-apple, Mr Knight has proved, that the fig will go on growing and ripening fruit without intermission A variety of curious and important matter respecting this tree will be found in the Transactions of the Horticultural Society, and in the Encyclo-

Class XXIV. — CRYPTOGAMIA.

Sexual organs hidden, either imperfect, or not existing

This class differs essentially from all the preceding in the peculiar conformation of the organs of reproduction, which are not formed of male and female parts, like those of the higher classes of plants, but are of a nature altogether different, consisting either of buds under a particular form, or of vessels containing vegetable substances analogous to seeds, but differing in not being the result of impregnation, and in having the power of striking root indifferently from any point of their surface The internal composition of these vegetable substances, which are denominated sporules, is, on account of their extreme minuteness, unknown. Willdenow describes Cryptogamous plants to be vegetables *without any visible flower, and differing from other plants in* their external characters, in which respect they also differ from each other By more modern botanists they are said to be distinguished from other plants by the absence of lymphatic vessels, and of pores of the epidermis, but the latter character has been disputed, and neither apply to the three first orders of Cryptogamia For the purposes of this work, which follows the system of Linnæus, the definition, if it can be so called, of Willdenow is most applicable. In the arrangement of the orders of Cryptogamia, it has been found advisable to adhere to the divisions of modern writers, who, by extensive observations, and great powers of perception, have brought this most abstruse part of botany to a considerable degree of perfection.

The orders which are here adopted, are

I Filices. Reproductive organs uniform Thecæ naked, or covered by an involucre, placed on the back of a frond, which is either foliaceous, or contracted in such a way as only to cover the clusters of thecæ, and always circinate when young

II. Equisetaceæ. Reproductive organs uniform, in terminal spikes, composed of peltate, several-sided scales, producing on their under surface 4-7 elongated involucres containing the seeds. Branches whorled, rigid

III Lycopodineæ. Reproductive organs axillary, sometimes apparently spiked Thecæ? of two kinds, the one containing granules, the other larger bodies Stems covered with many small leaves.

IV Marsileaceæ. Reproductive organs radical, uniform Sporules? contained in roundish, one or many-celled indehiscent heads Plants simple, aquatic

V Musci Reproductive organs of two kinds Thecæ many-seeded, solitary, furnished with an operculum and columella Plants leafy

VI Hepaticæ. Reproductive organs of two kinds 1st Thecæ without an operculum, either naked or sessile, or furnished with a veil, through which they are, more or less, protruded. Sporules naked, or mixed with spiral threads 2d. Minute, roundish, or oblong bodies variously situated Plants frondose, of a cellular structure, not submersed

VII Algæ. Reproductive organs of two kinds 1st Thecæ or tubercles variously situated. 2d Sporules or granules naked, or immersed in the frond Plants always aquatic, and submersed

VIII Lichenes. Reproductive organs uniform Sporules deposited in receptacles of various forms, distinct in substance from the thallus, which is either pulverulent, crustaceous, membranous, foliaceous, or branched and shrub-like

IX. Fungi. Reproductive organs uniform Sporules arranged in tubular cells, placed in some part of the external surface Substance various, mostly thick and fleshy, sometimes vesicular Thallus none.

A few other divisions, such as Hypoxyla, &c., which have been proposed by some writers of authority, not having appeared to possess characters of sufficient importance, are here merged in others

In consequence of the wide difference which exists between the lower orders of vegetables and the higher, and the impossibility of subjecting the former to cultivation, it has been found requisite, with the exception

14437 Leaves oblong acute subcordate at base netted beneath
14438 Leaves ovate unequal-sided sinuate-toothed cordate at base rough on each side
14439 Leaves opp obovate oblong serrated acute scabrous above hairy beneath

14440 Leaves oblong acuminate blunt tapered at base netted beneath, Stipules scarious smooth
14441 Leaves ovate-oblong acute sinuate toothed smooth

and Miscellaneous Particulars

pædia of Gardening (§ 5268) F elastica as well as some other plants produce the gum known as India-rubber

F. indica is an immense tree, spreading very wide, the branches ash-colored, and throwing down roots into the soil Marsden mentions one of these growing near Memgee, twenty miles west of Patna, in Bengal, which was in diameter 370 feet, the circumference of the shadow at noon was 1116 feet, and there were fifty or sixty stems It is called the priest's tree, and held in so much veneration by the Gentoos, that if any one cuts or lops off a branch, he is looked upon with as great abhorrence as if he had broken a cow's leg F religiosa is so called, because it is sacred to the idol Vishnu The horizontal branches root into the soil like the other, all the species are of remarkably easy culture, and root easily from large cuttings.

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of Filices and their nearest allies, to introduce some alterations into the form of the pages of this work These alterations commence with Musci

The orders of Cryptogamia being equal in importance to the classes of flowering plants, they will be treated of as the classes have hitherto been treated Each order will, therefore, stand by itself, and will have its genera and species arranged under it, without immediate connection with any other order.

Order 1.  FILICES.

Reproductive organs uniform Thecæ naked, or having an involucre placed on the back of a frond, which is either foliaceous, or contracted so as only to cover the clusters of thecæ, and always circinate when young

This is the most beautiful of all the orders of Cryptogamic plants, and has always been a favorite tribe, to which the most celebrated botanists of all modern times have given their attention Till some time, however, after the death of Linnæus, ferns shared the fate of all other departments of botany, being viewed rather as objects of elegant form than of scientific examination Sir James Edward Smith was the first author who attempted to distribute them into genera, by characters derived from a minute inspection of their organs of reproduction, and his arrangement, however imperfect it may now be considered, is certainly that upon the principles of which the more precise divisions of recent authors have been effected He was succeeded by Swartz, Willdenow, Brown, and many others, and lastly by Dr George Frederick Kaulfuss, Professor of Botany at Halle, whose arrangement of 1824 is chiefly here adopted as being the most recent which has been published

The principal distinction which exists between ferns and other orders of Cryptogamous plants is found in the situation of what are called their *sori*, or patches of reproductive organs, which are in all cases inserted upon the back surface of the leaf, or, as it is called in ferns, the frond, sometimes appearing only in the form of little spots, sometimes covering the whole of the under side of the frond, and sometimes contracting the substance of the frond, so as to give it the appearance of a single mass of fructification, bursting in a determinate manner, as in Ophioglossum, Schizæa, &c Besides this character, the fronds are always rolled up in a circinate manner when they are first developed.

That part of the frond which occupies the place of the petiole of a compound leaf is called the *rachis* The groups of thecæ forming the organs of reproduction are called *sori* (*a*), which are either naked or covered with an involucrum, or, as it is more frequently termed, *indusium*. (*b*) This latter organ, when present, either bursts outwardly towards the margin of the frond, or inwardly towards the midrib or rachis. It may also be either single or double, the latter term signifying, that there is a cover on each side the sorus. The bodies which are called *thecæ* by some authors, and capsules by others, are constructed in two ways; they are either surrounded

by an elastic furrowed ring, when they are called *Annulatæ* (*c*), or they are destitute of such a ring, in which case they are termed *Exannulatæ* (*d*) They contain the minute powdery matter, which is that by which ferns are reproduced, the constituent parts of this matter are called *sporules* (*e*), and are analogous to seeds in more perfect plants.

Tribe I. POLYPODIACEÆ.

Thecæ 1-celled, with an articulated, elastical, longitudinal ring, bursting across in an irregular manner.

2168 *Polybotrya* Thecæ closely covering the whole surface of the pinnules of an altered frond. Indusium none.
2169 *Acrostichum* Thecæ scattered, occupying all the lower surface of the frond, or a part of it. Indusium none
2170 *Hemionitis* Thecæ seated on the reticulated veins of the frond Indusium none
2171 *Gymnogramma* Thecæ seated on the forked veins of the frond Indusium none.
2172 *Meniscium* Sori linear, lunulate, somewhat parallel, placed across the spaces between the veins of the fronds Indusium none
2173 *Xiphopteris* Sori oblong, oblique, placed on the reflexed points of the frond. Indusium none.
2174 *Celerach* Sori linear, transverse, concealed under paleæ Indusium none
2175 *Polypodium* Sori in little round scattered convex spots Indusium none
2176. *Tænitis* Sorus linear, longitudinal, placed between the midrib and margin of the frond under the end. Indusium none
2177 *Nothochlæna* Sori almost marginal, continuous, covered by the scales, setæ, or hairs of the frond Indusium none
2178 *Onoclea* Sori globose, inserted upon columnar receptacles, inclosed within the berry-like pinnules. Indusium double common placed on the edge of the pinnule, and united into the form of a berry, proper membranous enwrapping the sori
2179 *Struthiopteris* Sori linear, crossing, inserted upon crested receptacles, included in a double row within the somewhat articulated pinnæ Indusium double common marginal opening inwards in a rugged manner, proper membranous, and resembling a partition
2180 *Allosorus* Sori placed on the transverse forked veins of spike-like pinnules, finally becoming confluent. Common indusium very narrow, arising from the revolute margin which is rolled inwards
2181 *Ellobocarpus* Thecæ globose, irregularly attached to the longitudinal veins of the frond Indusium transparent, discolored, arising from the revolute edge of the frond, continuous, and opening by a longitudinal suture
2182. *Lomaria* Sori linear, continuous, occupying the surface of the linear pinnæ of a particular frond Indusium marginal or submarginal, conniving, involute
2183 *Blechnum* Sori linear, continuous, (sometimes interrupted) contiguous to the midrib Indusium membranous, superficial, continuous, opening inwards
2184 *Woodwardia* Sori oblong, distinct, in rows, parallel, contiguous to the midrib Indusium membranous, superficial, vaulted, opening inwards
2185 *Doodia* Sori lunulate, distinct, parallel with the midrib Indusium membranous, superficial, flat, separating inwardly
2186. *Asplenium* Soli linear, placed upon lateral veins Indusium membranous, flat, separating inwardly
2187 *Allantodia* Sori oblong, oblique with respect to the midrib Indusium membranous, vaulted, cylindrical, adhering to a vein, opening inwards, finally spreading outwards.
2188 *Scolopendrium* Sori linear, oblique, opposite, double, parallel Indusia membranous, opening in opposite pairs
2189 *Diplazium* Sori linear, double alongside the veins Indusia double, narrow, placed between the sori, fixed lengthwise by the middle, with their exterior margin separate
2190 *Pteris* Sori continuous, linear, marginal Indusium from the inflexed edge of the frond, opening inwards

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POLYPODIACEÆ.

2168 POLYBOTRYA *H & B* Polybotrya *Sp* 1—17
14442 cervina *Kaulf* hart's-tongue ⧺ ☒ or ⅋ ap my Br Jamaica 1823 D l p Petiv fil t 8 f 3

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2168 *Polybotrya* So called in allusion to the numerous bunches of the fertile divisions of its frond, from πολυς, many, and βοτρυς, a bunch Handsome species of West Indian and South American ferns. The genera of ferns are not very dissimilar in habit, so that it will be seldom that any remarks upon that subject will be found in these notes, which must necessarily consist chiefly of the etymology of the names The medical properties are probably the same in all the genera, such as appear of any consequence are, however, inserted in the proper places We will here take occasion to remark, that the cultivation of ferns is nearly the same in all cases, and that the soil best adapted for their growth is light peaty earth with a little loam They are propagated by division of the roots, or by seeds or sporules The latter plan has been practised at Liverpool,

2191. *Vittaria.* Sori solitary, continuous, linear, marginal or submarginal, immersed. Indusium double, superficial.
2192 *Lonchitis* Sori lunate, marginal, placed under the recesses of the frond. Indusium from the margin of the frond, inflexed, opening inwards.
2193 *Antrophyum* Sori linear, continuous, immersed in the reticulated veins of the frond Indusium double, opening in the middle
2194 *Adiantum* Sori inserted into the indusium, linear, contiguous, or roundish Indusium marginal, opening inwards, either nearly continuous, or squamiform, or reniform
2195 *Cheilanthes* Sori dot-like, separate, marginal in the recess of the indusium. Indusium either reflexed crenules of the frond, or squamiform, membranous, and arising from the margin, or nearly continuous, opening inwards.
2196 *Davallia* Sori roundish, nearly terminal and marginal, distinct Indusium superficial, attached inwards, and opening outwards
2197 *Dicksonia* Sori dot-like, marginal, solitary in the recesses of the frond Indusia membranous, nearly globose, marginal, adnate, opening unequally with lacerated orifices, and spreading back in all directions
2198 *Balantium.* Sori oblong-linear, nearly terminal and marginal, transverse Indusium coriaceous, reniform, 2-valved, opening outwards upper valve marginal, patera-shaped, lower nearly flat
2199 *Aspidium* Sori roundish, scattered Indusium solitary, orbicular, peltate, or reniform
2200 *Woodsia* Sori dot-like, scattered Indusium membranous, placed under the sori, somewhat patera-shaped and ciliated.
2201 *Cyathea* Sori globose, scattered, inserted upon an elevated receptacle, which arises from a division the vein Indusium spherical, opening in the middle, and finally becoming patera-shaped
2202 *Trichomanes* Sori marginal, inserted upon a long setaceous receptacle Indusium erect, campan
2203. *Hymenophyllum* Sori marginal, inserted upon a claviform receptacle Indusium erect, 2-valve

TRIBE II. OSMUNDACEÆ.

Thecæ without a ring, netted, pellucid, with radiating striæ upon their top, bursting lengthwise on one side

2204 *Todea* Sori oblong, seated upon forked veins of an unchanged frond Thecæ globose, stalked, netted, opening from their base as high as a pellucid dorsal projection Indusium none
2205 *Osmunda* Sori nearly globose, alternately arising from the margin of a frond, which becomes changed into a panicle Thecæ globose, stalked, netted, opening from their base as high as a pellucid dorsal projection Indusium none.
2206 *Lygodium* Thecæ oblong-ovate, striated at the end in a radiate manner, seated in two rows upon 1-sided marginal spikelets, fixed by their backs and opening lengthwise in front Indusium funnel-shaped, covering up each capsule
2207 *Anemia* Thecæ ovate, striated at the top in a radiated manner, disposed in compound unilateral spikes, attached by the base, and opening lengthwise. Indusium none

TRIBE III OPHIOGLOSSEÆ

Thecæ 1-celled, adnate at base, roundish, coriaceous, opaque, without a ring, not vascular, sometimes fastened together, half-bivalved.

2208 *Botrychium* Thecæ naked, globose, distinct, attached to the rachis of a compound spike, half 2-valved, opening nearly at one side
2209 *Ophioglossum* Thecæ naked, connate in a distichous jointed spike, half 2-valved, opening at the side
2210. *Marattia* Sori oval, somewhat marginal Thecæ united in a double row, opening inwards by a cleft. Indusium arched, opening lengthwise above, 2-valved, inclosing on each side a row of thecæ

POLYPODIACEÆ.

14442 Ster fronds pinnat Pinn ov lanc. ent margin Fert fr. bipinn Pinnæ lin. Pinnul. obl flatt. runn together

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by Mr H Shepherd, with so much success, that his method has been made the subject of a communication to the Horticultural Society, of which the following is an extract. "Having provided a common garden-pot four and a half inches in depth, and three and a half wide, let the bottom part, to the height of one inch, be filled with fragments of broken pots, by way of drain Over these should be spread a stratum of such soil as is commonly used for potting greenhouse plants, of the depth of two inches, the remaining inch and half should be filled with brown loamy earth sifted through a hair-sieve, the surface being made perfectly smooth, and on this the seeds are to be scattered as evenly as possible Care must be taken that the wind be not suffered to blow the seeds away, leaving nothing but empty capsules. The seeds being sown, no other covering is

2169. ACROSTICHUM *L* Acrostichum				*Sp* 5—42						
14443 simplex *W*	simple	£	⧄ or	1	...	Br	Jamaica 1793.	D	l p	Bot cab. 709
14444 crinitum *W*	hairy	£	⧄ or	½	...	Br	W. Indies 1793.	D	l p	Plum fil t. 125
14445 alcicórne *W*	Elk's-horn	£	⧄ cu	½	au o	Br	N. S. W. 1808	R	a p	Bot reg 262-3
14446 sorbifólium *W*	Sorbus-leaved	£	⧄ or	1½	...	Br	W. Indies 1793	D	l p	Plum. fil t. 117
14447 aúreum *L*	golden	£	⧄ or	4	au	Br	W. Indies 1815	D	l p	Plum. fil. t. 104
2170 HEMIONI'TIS *L* Hemionitis.				*Sp.* 1—5						
14448 palmáta *L*	palmated	£	⧄ el	½	jn au	Br	W Indies 1793.	D	l p	Hook ex. fl. 33
2171 GYMNOGRAM'MA. *Desv* Gymnogramma				*Sp* 6—26.						
14449 pedátum *Kaulf*	pedate	£	⧄ pr	½	jn jl	Br	N Spain 1822	D	l p	Sw syn fil t.1 f 3
14450 rutum *Desv*	rusty-haired	£	⧄ pr	½	jn au	Br	Jamaica 1793	D	l p	Schk fil t 17 21
Hemionitis rúfa W										
14451 trifolátum *Desv*	three-leaved	£	⧄ or	1	jl au	Br	Jamaica 1810	D	l p	Plum fil. t 144
14452 sulphúreum *Desv*	sulphury	£	⧄ el	1	jn jl	Br	Jamaica 1808	D	l p	Schku crypt. t 4
14453 tartáreum *Desv*	whitened	£	⧄ el	1	au	Br	W. Indies 1817	D	l p	
Hemionitis decalbáta W										
14454 calomélanos *Kaulf*	mealy	£	⧄ el	1	jl au	Br	W Indies 1790	D	s p	W hort. ber 41
Acrostichum calomelanos W										
2172 MENIS'CIUM *Schreb* Meniscium				*Sp* 1—6						
14455 reticulátum *Schr*	netted	¥	⧄ el	½	ap my	Br	Martinico 1793	D	l p	Plum fil t 110
2173 XIPHOPTERIS *Kaulf* Sword-Fern				*Sp* 1—2						
14456 serrulata *Kaulf*	serrulate	£	⧄ pr	½	jn jl	Br	W Indies 1823	D	l p	Schku crypt t 7
Grammitis serrulata W										
2174 CE'TERACH *W* Ceterach				*Sp* 1—4						
14457 officinárum *W*	common	£	△ m	½	my o	Br	Britain cal ro	D	l p	Eng bot 1244
2175 POLYPO'DIUM *L* Polypody				*Sp* 27—160						
14458 piloselloídes *W*	Mouse-ear	♣	⧄ or	¼	au	Br	W Indies 1793	D	l p	Plum fil t 118
14459 lycopodioídes *W*	Club-moss	♣	⧄ or	½	jl	Br	W Indies 1793.	D	l p	Schk. fil t 8 c p
14460 phyllitidis *W*	Hart's-tongue	¥	⧄ or	2	jn s	Br	W Indies 1793	Sk	s p	Plum fil t 130
14461 Lin'gua *W*	tongue-leaved	¥	⧄ or	1	my jl	Br	China 1817	D	l p	Thunb jap t 38
14462 aúreum *W*	golden	£	⧄ or	3	mr ap	Br	W Indies 1742.	Sk	s p	Plum fil t 76
14463 vulgáre *B*	common	¥	△ or	1	my o	Br	Britain sha ba	D	l p	Eng bot 1149
β cámbricum	*Welsh*	¥	△ cu	1	my o	Br	Britain ...	D	l p	Bolt fil t 2 f 5 a
14464 virginiánum *W*	Virginian	¥	△ or	1	jl	Br	N Amer ...	D	l p	Plum fil t 77
14465 pectinátum *W*	comb-leaved	£	⧄ or	1½	jn s	Br	W Indies 1793	Sk	s p	Bot. cab 748
14466 asplenifólium *W*	Spleenwort-lvd	£	⧄ or	2	jl	Br	Martinico 1790	Sk	s p	Plum fil t 102 A
14467 incánum *W*	hoary	¥	△ or	½	jl	Br	N Amer 1811	D	l p	Schk fil t 11 b
14468 Phegópteris *W*	Sun-fern	¥	△ or	¼	jn jl	Br	Britain moun	D	l p	Eng bot 2224
14469 hexagonópterum *W*	triangular	¥	△ or	1	jl	Br	N Amer 1811	D	l p	Pluk.al t 284 f 2
14470 pruinátum *W*	white-leaved	¥	⧄ or	2	s	Br	Jamaica 1793	D	l p	
14471 effúsum *W.*	spreading	£	⧄ or	3	n	Br	Jamaica 1769	Sk	s p	Slo jam 1 t 57 f 3
14472 Dryópteris *W*	tender-branch	¥	△ or	1	jn s	Br	Britain mo pl	D	l p	Eng bot 616
14473 calcáreum *W*	rigid-branched	¥	△ or	½	jl	Br	Britain cal ro	D	l p	Eng. bot. 1525
14474 crassifólium *W*	thick-leaved	£	⧄ or	3	au s	Br	W Indies 1823	D	l p	Plum fil t. 123



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required than a bell-glass, which should just fit within the rim of the pot, so as to exclude all air The pot is then to be kept in a pan always half full of water, and set in a shady part of the stove or hot-house, being always regularly watered as above directed When the young plants have acquired their second leaf, it is proper to give them a little air, by placing a small piece of wood under the edge of the glass, at one side In a short time afterwards the glass may entirely be removed "

The vegetation of ferns appears to be less tardy than botanists have supposed Specimens of Gymnogramma tartareum having been brought from Jamaica to Liverpool, on the tenth of July 1817, a few seeds were brushed off them and sown immediately. Several plants thus obtained perfected seeds by the fifth of August 1818, which being committed to the earth, had produced young plants, covering the surface like a fine moss, by the eighth of September following Specimens of Pteris cretica, and another marked Pteris acrostichoides, from William Jackson Hooker, Esq , afforded seeds which have vegetated and produced very fine plants of both species Dr William Carey sent from Serampore specimens of Polypodium giganteum, and what appears to be a new Diplazium. These reached Liverpool, July the tenth 1818 , their seeds being immediately sown, had produced young plants by the eighth of September A small fern from Sicily, with several others of this tribe, collected in the Brazils by William Swainson, Jun , Esq , afforded ripe seeds, which being sown in the spring of 1818, had partly vegetated, and in September had produced Polypodum decumanum, as well as Gymnogramma calomelanos Mr Shepherd obtained two plants of the latter from seeds brushed from the specimens in the Herbarium of Dr John Reinhold Forster, now belonging to the botanic garden at Liverpool, and perhaps fifty years old. He made the experiments on other ferns in that collection, but without success, which, indeed, is not wonderful.

The seeds of this order of plants are of course liable to damage from damp or other accidents, like those of plants in general. It seems, moreover, that they are very soon shed by the bursting of their capsules, so that

14443 Fronds lanceolate tapered each way smooth · fertile linear lanceolate, Stalks very short naked
14444 Fronds elliptical obtuse at each end hairy villous at the edges, Stalk villous
14445 Ster fronds reniform somew lobed entire horizontal · fert erect palmate dichotom bearing fr on lanc segm
14446 Fronds pinnated pinn lanc acumin serr cuneate at base, Fert pinn pinn linear entire, Stem climbing
14447 Fronds pinnated : pinn. altern obl lanceolate ent. cuneate and equal at base, all acum . the upper fertile

14448 Fronds cordate 5-lobed toothed ciliated, Stalk long

14449 Fronds pinnate pinnæ pinnatifid acuminate hairy
14450 Fronds pinnate pinnæ oblong acutish subcordate subserrate on each side as well as the stalk hairy

14451 Fronds pinnate pinnæ ternate in pairs and solitary stalked lin crenul , fertile yellow with meal beneath
14452 Fronds bipinnate : pinnulæ pinnatifid , segm. cuneate truncate at end toothletted yell with meal beneath
14453 Fronds bipinnate upper pinn confluent obl obt serrul , lower somew pinnatif white with meal beneath

14454 Fronds bipinnate pinn lanc. white with meal beneath , lower pinnatifid auricled at base, upper confluent

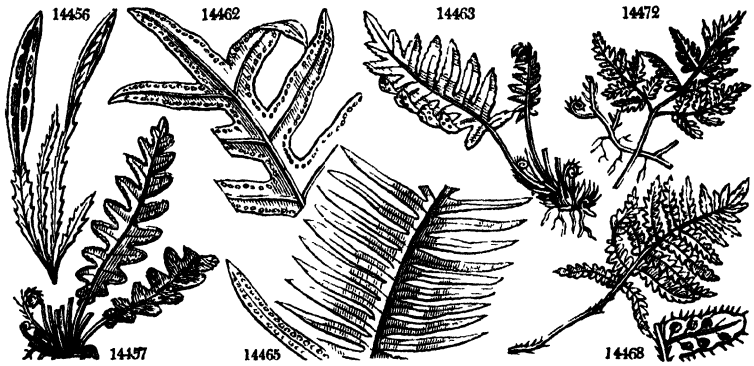
14455 Fronds pinn · pinn. lanc acuminate cuneate at base all repand lower opposite, Stem none

14456 Fronds linear toothed when fructifying entire at the end, Stem filiform ascending simple

14457 Fronds pinnatifid segm oblong obtuse chaffy with entire paleæ beneath

14458 Fronds hairy : sterile oblong ovate entire ; fertile lanceolate, Sori solit Stem filiform rooting chaffy
14459 Fronds lanceolate entire smooth, Sori solitary, Stem filiform creeping with bristly paleæ
14460 Fronds lanceolate margined acute tapered at base smooth, Sori in two rows
14461 Fronds oblong obtuse entire smooth above rusty with down beneath, Sori contiguous copious
14462 Fronds deeply pinnatifid glaucous segm lanc acuminate entire, Lower sori scattered , upper solitary
14463 Fronds deeply pinnatifid segm lin lanc blunt crenul contig upper smaller by degrees, Sori solitary

14464 Fronds deeply pinnatifid segm lanc blunt entire contig , upp smaller by degrees, Sori solit Stalk naked
14465 Fronds deeply pinnatifid segm lanc acute entire parallel smooth , upper and lower smallest, Sori solitary
14466 Fronds pinnatifid hairy segments half ovate blunt, Sori solitary
14467 Fronds deeply pinnatifid segm altern lin ent obt. , upper smaller by degrees ben. as well as stalk chaffy
14468 Fronds bipinnatif 2 lower pinnæ defl , segm lin-lanc blunt ent ciliat Veins hairy, Sori solit. marginal
14469 Fronds downy and ciliated bipinnatifid, Membranes connecting the opposite pinnæ oblong hexagonal
14470 Fronds 4-pinn Branches and branchlets lanc Pinnæ lanc pinnatifid, Segm ovate acute glaucous beneath
14471 Fronds 3-pinn pinnulæ pinnatif , segm lin serrat acute, Rachis edged naked, Sori solit Stalk smooth
14472 Fronds ternate bipinnate spreading deflexed segments blunt nearly entire, Sori marginal, Root filiform
14473 Fronds ternate bipinnate straight rigid segments bluntish nearly entire, Sori marginal confluent
14474 Fronds oblong smooth entire margined acute at each end, Sori in rows



and Miscellaneous Particulars

they are more likely to be found in such specimens as are just beginning to turn brown in their fructification, than in others more advanced

2169 *Acrostichum.* Said to be formed from the words ακρος στιχος, the commencement of a verse, and to have been so called because the reverse of their leaves indicates traces of lines, resembling the beginning of lines of poetry These are fine, chiefly tropical, ferns, one of which, A. aureum, sometimes grows to the height of five or six feet.

2170 *Hemionitis* Said by Dioscorides to be so called from the resemblance of its nature to that of a mule, ἡμιονος , it was always considered sterile, bearing neither flowers nor fruit.

2171 *Gymnogramma* Named by Desvaux from γυμνος, naked, and γραμμα, writing, in allusion to the disposition of the naked sori upon the forked veins of the frond, whence they seem to resemble Roman letters. The specie have been separated from Hemionitis and Acrostichum

2172 *Meniscium* From μηνη, the moon, the sori are crescent-shaped These ferns are remarkable for the arrangement of their veins The little veins which unite the transverse veins of the sterile frond are usually at right angles, and generally united with each other by a little branch which sets off from one or other of their angles In the fertile fronds the veins on which the sori are placed are either curved or straight

2173 *Xyphopteris.* Divided from Grammitis by Kaulfuss, who seems to have named it from ξιφος, a sword, and πτερις, a fern, on account of the sword-like form of their fronds

2174 *Ceterach* The name employed by the Arabian and Persian physicians for this plant was *Chetherak* (*Gazoph Ling Pers* p 577) They employed the plant in obstructions of the viscera, for the jaundice, and for disorders of the spleen

2175 *Polypodium.* From πολυς, many, and πους ποδος, a foot, on account of the multitude of the roots which form close entangled patches Many of the species of this genus are noble plants They are mostly epiphytic

14475 decumánum *W.*	tall	¥ ⍓	el	5	au	Br	Brazil	1818	D l.p	
14476 fraxinifólium *W*	ash-leaved	¥ ⍓	el	2	au	Br	Caraccas	1817	D l p	Jacq ic. t 639
14477 lanceolátum *W*	lanceolate	¥ ⍓	or	1	au	Br	W Indies	1812	D l p	Plum fil t 137
14478 phymatódes *W*	red	¥ ⍓	or	½	jn au	Br	E. Indies	1823	D l p	Plu phyt 404 f 5
14479 quercifólium *W*	oak-leaved	¥ ⍓	or	1½	s	Br	E. Indies	1824.	D l p	Rumph 6. t 36
14480 répens *W*	creeping	⁂ ⍓	pr	2	my jn	Br	W Indies	1810	D l p	Plum fil t 134
14481 sérpens *W*	gliding	⁂ ⍓	pr	¼	my jn	Br	W Indies	1816	D l p	Plum fil 121
14482 tæniósum *W*	jointed	⁂ ⍓	pr	2	my jn	Br	S Amer	1815	D l p	
14483 pertúsum	bored	⁂ ⍓	pr	½	ja d	Br	China	1821	D l p	Hook ex. fl. 162
14484 crenátum *W*	crenate	¥ ⍓	pr	1½	au	Br	Jamaica	1823	D l p	

2176 TÆ'NITIS *Sw* Tænitis. *Sp* 1—5

14485 lanceoláta *Kaulf*	lanceolate	⁂ ⍓	pr	1	au	Br	W Indies	1818	D l.p	Plum fil t 132

2177 NOTHOCHLÆ'NA *R Br* Nothochlæna *Sp* 1—16.

14486 lanuginósa *Desv* *Acrósticum vellæum* W	woolly	¥ ⍋	or	¾	au s	Br	Madeira	1778	R s p	Desf atl 2 t. 256

2178 ONOCLE'A *L* Onoclea *Sp* 2

14487 sensibilis *W*	sensitive	¾ △	or	1½	au	Br	Virginia	1799	D l p	Schk fil t 102
14488 obtusilobáta *Schk*	obtuse-lobed	¾ △	or	1	jl	Br	N Amer	1812.	D l p	Schk fil t 103

2179 STRUTHIOPTE'RIS *W* Struthiopteris *Sp* 2

14489 germánica *W*	Russian	¾ △	or	2	jl au	Br	Europe	1760	D l p	Schk fil t 105
14490 pensylvánica *W*	Onoclea-like	¾ △	or	2	au	Br	N Amer	1812.	D l p	Schk fil t. 111

2180 ALLOSO'RUS *Bernh.* Allosorus. *Sp* 1

14491 crispus *Bernh* *Pteris crispa* L	curled	¾ △	cu	½	jl au	Br	Britain	sto hi	D l.p	Eng bot. 1160

2181 ELLOBOCAR'PUS *Kaulf* Pod-Fern *Sp* 1—2.

14492 oleráceus *Kaulf*	eatable	¥ ⍋	or	1½	au	Br	Tranqueb	1818	D l p	Plu alm t 215 f 3

2182 LOMA'RIA *W* Lomaria *Sp* 1—20

14493 longifólia *Kaulf*	long-leaved	⁂ ⍋	or	2	jn jl	Br	W Indies	1810	D l p	Pl fil t.117 *dextr*

2183 BLECH'NUM *L* Blechnum *Sp* 3—29

14494 boreále *W*	northern	¾ △	pr	¾	jl	Br	Britain	hea	D l p	Eng bot 1159
14495 austrále *W*	Cape	¥ ⍋	pr	¾	mr s	Br	C G H	1691	R s p	Schk fil t 110 b
14496 occidentále *W*	American	¥ ⍓	pr	1	mr s	Br	S Amer	1777.	R s p	Jac ic 3 t 644

2184. WOODWAR'DIA *Sm* Woodwardia. *Sp* 2—7

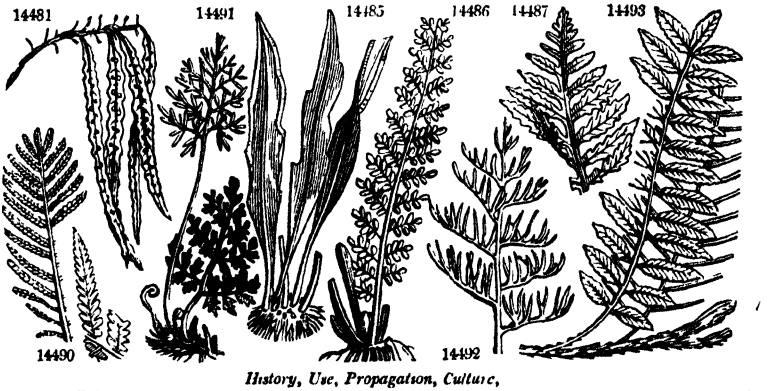
14497 rádicans *W*	rooting-leaved	¥ ⍋	or	1½	s	Br	Madeira	1779	R s p	Schk fil t 112
14498 virginica *Ph*	Virginian	¾ △	or	1	au s	Br	N Amer	1774.	D l p	Plu alm t 179 f 2

2185 DOO'DIA *R Br* Doodia *Sp* 1—3

14499 áspera *R Br.*	rough-stalked	¥ ⍋	pr	¾	mr s	Br	N S W	1808	R s p	

2186 ASPLE'NIUM *L* Spleenwort *Sp* 27—117

14500 fontánum *R Br* *Aspidium fontánum* E B	smooth rock	¾ △	el	¾	jn au	Br	England	w & r	D l p	Eng bot 2024
14501 Filix-fœ'mina *R Br*	female	¾ △	or	2	jn s	Br	Britain	w sh pl	D l p	Eng bot 1459
14502 Adiántum-nígrum *W*	black	¾ △	pr	1	ap o	Br	Britain	sha pl	D l p	Eng bot 1950
14503 montánum *W*	mountain	¾ △	pr	¼	jl	Br	N Amer	1812	D l p	
14504 lanceolátum *W*	lanceolate	¾ △	pr	⅛	jn s	Br	England	rocks	D l p	Eng bot 240
14505 frágrans *W*	fragrant	¥ ⍓	el	¾	jl	Br	Jamaica	1793	D l p	Plu alm t.282 f 1
14506 Ruta-murária *W*	Wall-rue	¾ △	cu	¼	jn o	Br	Britain	sh roc	D l p	Eng. bot. 150



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upon trees. Polypodium vulgare is sometimes burnt for the sake of its ashes, which contain a large proportion of carbonate of potash, which is employed in the fusion of flint for some kinds of glass-ware

2176 *Tænitis* From the resemblance of the interrupted line of sori to the *tænia* or tape-worm.

2177 *Nothochlæna* From νοθος, spurious, and χλαινα, a cloak So called because the sori are not enclosed in a genuine indusium, but are frequently covered over by the paleæ of the frond A genus extracted by Mr. Robert Brown from the ancient Acrostichum

2178 *Onoclea* A name given by Dioscorides, Pliny, and Galen, to a Boragineous plant, and strangely applied by the moderns to a genus of ferns O sensibilis has been so called from the delicacy of its frond, which is so impatient of injury as to perish with almost the least violence

2179 *Struthiopteris* Named from στρουθος, an ostrich, and πτερις, a fern, on account of the similarity between its fine fronds and the feathers of an ostrich A genus divided from Osmunda by Willdenow.

2180 *Allosorus* From αλλος, various, and *sorus*, a name contrived by Bernhardi, in a paper printed in Schrader's Journal, we presume in allusion to the different states of the sori at different periods A curious little rock plant.

2181. *Ellobocarpus* Named by Kaulfuss, from αλλοβος, enclosed in a pod, and καρπος, fruit, in allusion to the pod-like form of the divisions of the fronds on which the sori are placed.

14475 Fronds deeply pinnatifid glaucous: segments lanceolate acuminate repand serrate, Sori in rows
14476 Fronds pinnate, Leaflets lanceolate acuminate repand wavy distant
14477 Fronds lanceolate entire smooth or somewhat scaly rigid erect, Sori solitary
14478 Fronds simple 3-lobed and pinnatifid segments lanceolate acuminate opposite, Sori scattered immersed
14479 Sterile fronds sessile ovate sinuated: fertile pinnatifid, segments lanceolate
14480 Fronds on a creeping stem lanceolate acuminate entire sublucid with flexuous veins, Sori scattered
14481 Sterile fronds oblong entire fertile linear lanceolate repand, Sori solitary, Stem paleaceous rooting
14482 Fronds linear lanceolate much tapered at the base somewhat repand quite smooth, Sori scattered
14483 Ster. fronds obl. lanc. taper. at base fert. lin.-lanc bear sori on upp half, Sori oval immers. in dense wool
14484 Fronds pinnate, Pinn. somewhat stalked oblong acuminate coarsely and bluntly serrated, Sori in rows

14485 Fronds simple lanceolate acute at each end nearly entire fructifying at end

14486 Fronds bipinnate woolly pinnules elliptical obtuse covered all over with long wool

14487 Pinnæ lanceolate acute cut toothed pinnules and rachis smooth
14488 Pinnæ pinnatifid with rounded lobes pinnules villous, Rachis scaly

14489 Sterile fronds bipinnatifid: segments entire acute equal
14490 Sterile fronds bipinnatifid segments entire obtuse, lower long acute

14491 Fronds supradecompound, Pinnæ alternate roundish cut

14492 Alternate pinnæ pinnulate on the upper-side linear lower 2-parted

14493 Sterile pinnæ long-lanceolate acuminate cuneate at base repand-toothed fertile linear

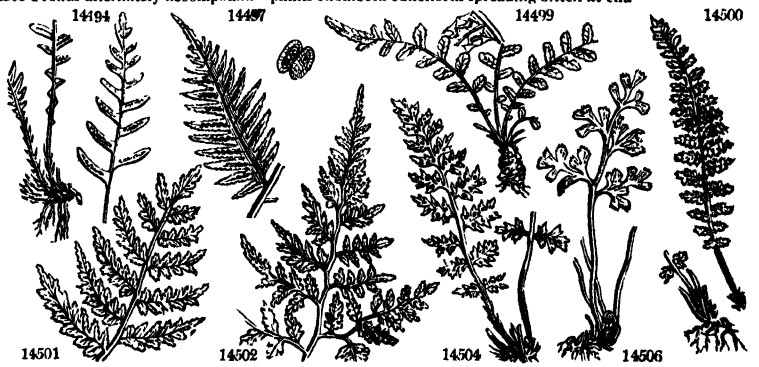
14494 Fronds pinnated smooth, Pinnæ linear bluntish entire nearly equal at base
14495 Fronds pinnated, Pinnæ linear-lanceolate mucronate auricled at base scabrous at edge
14496 Fronds pinnated, Lower pinnæ opposite lanceolate entire subcordate at base, upper alternate united

14497 Fronds pinnate-pinnatifid segments lanceolate acuminate somewhat repand finely serrulate
14498 Fronds very smooth pinnate, Pinnæ sessile lanceolate pinnatifid, Segments oblong blunt crenulate

14499 Fronds lanceolate pinnatifid segm. linear ensiform acuminate spinulose, Sori lanceolate in two rows

14500 Fronds pinn. pinnæ cordate pinnatifid, segm. ovate rather acute, lower and terminal usually 3-lobed

14501 Fronds bipinn. pinnules obl. lanc. cut serrated serratures 2 or 3-toothed nearly acute, Sori obl. straight
14502 Fronds bipinn: pinnæ obl. lanc. acute, pinnules oblong pinnatifid cut, Sori becoming confluent
14503 Fronds bipinn. pinnules pinnatifid, segments 3 or 2-toothed
14504 Fronds bipinn. pinnules obovate blunt cuneate at base acutely toothed at end, Sori becoming confluent
14505 Fronds bipinn. pinnules oblong acute at each end serrated at end upper confluent
14506 Fronds alternately decompound pinnæ rhomboid cuneiform spreading bitten at end



and Miscellaneous Particulars.

2182 *Lomaria* From λωμα, an edge, on account of the marginal position of the indusia. These are fine plants, resembling Acrostichum in habit.

2183 *Blechnum.* One of the Greek names of the fern was βλιχνος. Athenæus writes it βλεχνος, and derives it from ϐλαξ, powerless, insipid

2184 *Woodwardia.* Named by Sir James Smith, after his friend Thomas Jenkinson Woodward, Esq., a good practical English botanist. One of the species produces little hairy bulbs at the axillæ of the leaves, which either fall off and strike root in the ground, or vegetate while attached to the parent plant. This property is common to many other ferns, and in one instance, the young plants so produced have been mistaken in Pteris cornuta for parasites by an acute cryptogamic botanist

2185. *Doodia.* So called in honor of Samuel Doody, a London apothecary, who was almost the first investigator of British cryptogamic plants. Small rough-leaved ferns of rigid texture.

2186. *Asplenium.* From α, privative, and σπλην, the spleen. This plant was formerly held to be a sovereign remedy for all diseases of this organ, and to be so powerful as even to destroy it if employed in excess.

14507	*præmórsum W.*	snip-leaved	⚷	⧄	el	½	au	Br	Jamaica	1793	R s p	Plu.alm t.73 f.5
14508	*striátum W*	striated	⚷	⧄	pr	1	jn.au	Br	W. Indies	1793.	R s p	Plum.fil. t.18, 19
14509	*rhizóphorum W*	root-bearing	⚷	⧄	pr	1	au	Br	Jamaica	1793.	D l.p	Sl.ja. l.t.29,30 f 1
14510	*viride W*	green	⚷	△	pr	½	jn s	Br	Britain	al roc	D l p	Eng. bot. 2257
14511	melanocaúlon *Pk*	black-stalked	⚷	△	pr	½	jl	Br	N Amer	1812	D l p	
14512	Trichómanes *W*	Maiden-hair	⚷	△	pr	½	my o	Br	Britain	sh roc	D l p	Eng bot. 576
14513	alternifólium *Sm*	alternate-leav'd	⚷	△	cu	½	jn o	Br	Scotland	...	D l p	Eng bot. 2253
14514	ebéneum *Pk*	ebony-stalked	⚷	△	or	½	s	Br	N. Amer.	1779	D l p	Schk. fil. t 73
14515	monánthemum *W.*	one-flowered	⚷	⧄	cu	1	jl	Br	C G H	1790	D l p	Smith ined. t. 73
14516	Nidus *W*	Bird's Nest	⚷	⧄	el	2	au	Br	E. Indies	1820	D l p	Breyn. cent t.99
14517	marinum *W*	sea	⚷	△	or	½	jn o	Br	Britain	rocks	R s p	Eng bot 392
14518	angustifólium *W*	narrow-leaved	⚷	△	el	1	jn jl	Br	N Amer	1812	D l p	Schk.fil t 67 69
14519	scptentrionále *W*	forked	⚷	△	or	½	jn o	Br	Britain	rocks	D l p	Eng bot 1017
14520	rhizophýllum *W.*	rooting-leaved	⚷	△	cu	⅝	jn jl	Br	N Amer	1680	D l p	Pluk al t 105 f 3
14521	serrátum *W*	saw-leaved	⚷	⧄	pr	1½	...	Br	W Indies	1793	D l p	Schk. fil t 64
14522	bisectum *Swz*	split	⚷	⧄	or	1½	au	Br	Jamaica	1821	D l p	
14523	púmilum *B*	pygmy	⚷	⧄	pr	½	jn jl	Br	W Indies	1823	D l p	Plum.fil t 66 A
14524	zamæfólium *W*	Zamia-leaved	⚷	⧄	cu	1½	jn s	Br	Caraccas	1820	D l p	
14525	acútum *W*	acute	⚷	⧄	or	2	ap my	Br	Teneriffe	1818	D l p	
14526	palmátum *W*	palmate	⚷	⧄	or	⅝	au s	Br	S. Europe	1816.	D l p	Bot cab. 868

2187 ALLANTO'DIA *R Br* Allantodia *Sp 2—3*

14527	axillária *Kaulf*	axillary	⚷	⧄	or	2	jn s	Br	Madeira	1779	D l p	
14528	umbrósa *R Br.*	Madeira	⚷	⧄	or	4	jn s	Br	Madeira	1779	D l p	Schk. fil t. 61
	Polypodium umbrósum H K											

2188 SCOLOPEN'DRIUM *Smith* Hart's Tongue *Sp 1*

14529	officinárum *Swz*	common	⚷	△	cu	1½	jl au	Br	Britain	m s pl	D l p	Eng bot. 1150
	β *crispum*	*curled-leaved*	⚷	△	cu	1½	jl au	Br	Britain	...	D l p	
	γ *undulátum*	*wave-leaved*	⚷	△	cu	1½	jl au	Br	Britain	...	D l p	Plu phyt 248 f 1
	δ *multifidum*	*clustered*	⚷	△	cu	1½	jl au	Br	Britain	..	D l p	
	ε *ramósum*	*branching*	⚷	△	cu	1½	jl au	Br	Britain	..	D l p	Plu phyt 248 f 1

2189 DIPLA'ZIUM *Swz* Diplazium *Sp 2—13*

14530	grandifólium *B*	large-leaved	⚷	⧄	or	2	au	Br	Jamaica	1793	D l p	
14531	auriculátum *Kaulf*	auricled	♀	▭	or	10	au	Br	Caraccas	1820	D l p	

2190 PTE'RIS *L* Brake *Sp 15—37*

14532	longifólia *W*	long-leaved	⚷	⧄	or	2	jl s	Br	W Indies	1770	Sk s.p	*J sch 3 t.399,400*
14533	grandifolia *W*	large-leaved	⚷	⧄	or	2	au	Br	W Indies	1793	Sk s p	Schk fil t 89
14534	serrulata *W*	various-leaved	⚷	⧄	pr	1½	au s	Br	India	1770	Sk s p	Schk fil t 91
14535	atropurpurea *W*	purple	⚷	△	pr	½	au s	Br	N Amer	1770	D l p	Schk fil t 101
14536	arguta *W*	sharp-notched	⚷	⧄	el	1	au s	Br	Madeira	1778	D l p	Plu alm t 290 f 2
14537	aculeáta *W*	prickly-stemm	⚷	▭	or	10	au s	Br	W Indies	1793	D l p	Plum fil t 5 et 11
14538	esculénta *Swz*	esculent	⚷	⧄	or	5	au s	Br	N S W	1815	D l p	La n hol 2 t 244
14539	caudáta *W*	American	⚷	△	pr	2	s d	Br	N Amer	1777	D l p	Jac ic 3 t 645
14540	aquilina *W*	common	⚷	△	or	3	jl au	Br	Britain	hea w	D l p	Eng bot 1670
14541	podophýlla *W*	pedated	⚷	⧄	pr	1½	jn jl	Br	Jamaica	1793	D l p	Brow jam 89 t 1
14542	crética *W*	Candian	⚷	⧄	cu	1	jl au	Br	Candia	1820	D l p	Schku crypt t 90
14543	hastáta *W*	hastate	⚷	⧄	or	2	jl s	Br	C G H	1823	D l p	Pl phyt t 403 f 1
14544	palmáta *W*	palmate	⚷	⧄	or	¾	jn au	Br	Caraccas	1821	D l p	
14545	pedáta *W*	pedate	⚷	△	or	½	jl au	Br	Virginia	1820	D l p	Plum fil t 152
14546	Plumiéri *Link*	Plumier's	⚷	⧄	or	2	jl	Br	S Amer	1818	D l p	

2191 VITTA'RIA *Sm* Vittaria *Sp 1—10*

14547	lineáta *W*	linear-leaved	⚷	⧄	cu	2	au	Br	America	1793.	D l p	Schk fil t 101 b

2192 LONCHI'TIS *L* Lonchitis *Sp 1—5*

14548	hirsuta *W*	hairy	⚷	⧄	pr	1	jn s	Br	W. Indies	1793	D l p	Schk fil t. 86

2193 ANTRO'PHYUM *Kaulf* Antrophyum *Sp 1—8*

14549	lanceolátum *Kaulf*	spear-leaved	⚷	⧄	or	⅝	jl s	Br	W. Indies	1793	D l p	Schk fil. t 6
	Hemionitis lanceolata L.											



History, Use, Propagation, Culture,

2187 *Allantodia* So named from ἀλλαντος, a sausage, or sort of small pudding, to which the cylindrical arched indusia bear considerable resemblance

2188. *Scolopendrium* On the lower surface of the fronds of this plant are to be seen little marks which bear a likeness to the insect called Scolopendra It is probable that the supposed varieties of this plant are distinct species One of them has been ascertained not to alter in being raised from seed.

2189 *Diplazium* From διπλασις, double, the indusia are double Handsome ferns of large size; one forms a small tree.

2190. *Pteris* The Greeks called ferns in general by this name, because they generally resemble plumes, πτερὸν, in their light and divided appearance Pteris aquilina is the common brake, well known as an excellent covert for game, and for serving for many household purposes in the north of England. It is used as litter for

14507 Fronds pinnated: pinnæ cuneate ovate acute deeply pinnatifid, segments lanc cuneate unequally toothed
14508 Fronds pinnated: pinnæ stalked oblong acuminate pinnatif, segm. obl obt. sharply serrat. Sori parallel
14509 Fronds pinnated: pinnæ ovate repand somew auricled, term. remote small entire, Fronds rooting at end
14510 Fronds pinnated. pinnæ alternate elliptical roundish crenate, Rachis flattened beneath
14511 Fronds pinnated: pinnæ roundish blunt crenated cuneate at base, Stalk discolored
14512 Fronds pinnated. pinnæ ovate-roundish crenate, Rachis shining keeled beneath
14513 Fronds pinnated: pinnæ alternate cuneiform erect eroded at end
14514 Fronds pinnated: pinnæ sessile lanceolate serrulate cordate at base auricled upwards
14515 Fronds pinnated: pinnæ lanceolate blunt equally and bluntly serrated, Sorus one on each pinna
14516 Fronds broad-lanceolate subsessile, Sori very near parallel contiguous to the midrib
14517 Fronds pinnated. pinnæ ovate oblique serrated obtuse unequal at base cuneate
14518 Fronds pinnat. pinnæ altern, upp usually opp lin-lanc. subrepand truncat. at base above rounded below
14519 Fronds pinnated trifid: pinnæ alternate linear torn at end
14520 Fronds lanceol stalked rather crenate auricled cordate at base at the end very long linear-filiform rooting
14521 Fronds lanceolate on short stalks acuminate serrated tapered at base and entire, Sori contiguous parallel
14522 Fronds pinnate pinnæ lanceolate taper-pointed at end pinnatifid, segments bind, Stalk shining glabrous
14523 Fronds ternate middle leaflet pinnatifid, lateral 2-parted toothed
14524 Fronds pinnated pinnæ obl lanceolate acuminate coriaceous serrated at end tapered at base, Stalk chaffy
14525 Fronds 3 pinnated pinnæ oblong lanceolate with very long points, Sori becoming confluent
14526 Frond 5-lobed cordate, Three middle lobes acuminate

14527 Fronds bipinnate pinnules oblong pinnatifid, segments lanceolate finely bidentate, Sorus schit. at base
14528 Fronds 3-pinnate. pinnules lanceolate decurrent cut serrated, Sori contiguous finally becoming confluent

14529 Frond simple cordate-lingulate smooth beneath

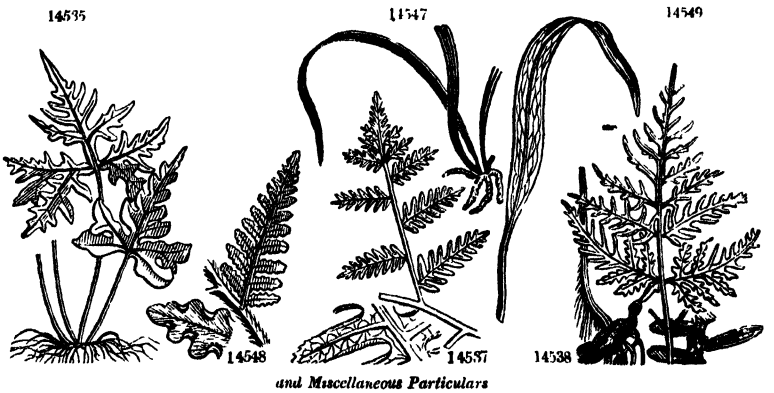
14530 Fronds pinnat pinnæ lanc serrat at end truncate at base above rounded and somew wedge-shaped below
14531 Fronds pinnat pinnæ lanc coarsely toothed, teeth rounded serrated at end tapered and finely toothed

14532 Fronds pinnated: pinnæ linear auricled cordate at base serrulate, Stalk and rachis paleaceous hairy
14533 Fronds pinnated pinnæ oblong lanceol on short stalks entire cuneate at base, Stalk and rachis smooth
14534 Fronds pinnated pinnæ lin decurrent, lower 3-parted, Sterile acutely serrated fertile ent serrul at end
14535 Fronds decompound lower bipinnate, pinnules lanceol retuse at base, terminal longer, Stalk pubescent
14536 Fronds bipinnatifid, Lower branches twin 2-partite below, Pinnules lanceolate subfalcate sharply serrated
14537 Fronds supradecompound pinnæ broad-lanceolate pinnatifid, Stem and branches prickly
14538 Fronds tripinnate pinnules linear decurrent downy beneath, those at the end longest, Rachis smooth
14539 Frond 3-parted, Branches bipinnate, Pinnules linear elongated blunt entire lower bipinnatifid
14540 Frond 3-parted, Branches bipinn Pinnules lin lanc upper undivided, lower pinnatif Segm obl blunt
14541 Frond pedate, Branches pinnate, Pinnules obl lanceolate acumin pinnatifid, Segm oblong acute serrated
14542 Fronds pinnat pinnæ lanc acum on short stalks tapered and serrated at base, lowest 2-parted or ternate
14543 Fronds bipinn pinnules somew stalked ovate-lanc blunt crenulate, lower hastate 3-lobed, Stalk smooth
14544 Fronds deeply 5-lobed palmate, Lobes pinnatifid segments linear lanceolate acumin Recesses rounded
14545 Fronds deeply 5-lobed palmate, Lobes pinnatifid segments linear lanceolate acute, Recesses acute
14546 Pinnæ opposite pinnatifid, Nerve above a little strigose, Pinnules lanceolate blunt entire, Petiole smooth

14547 Fronds linear very long pendulous, Sori solitary within the margin

14548 Fronds bipinnate hairy pinnæ pinnatifid acuminate, segments blunt, Stalk and rachis villous

14549 Fronds linear-lanceolate tapered at each end ribbed, Sori reticulated



and Miscellaneous Particulars

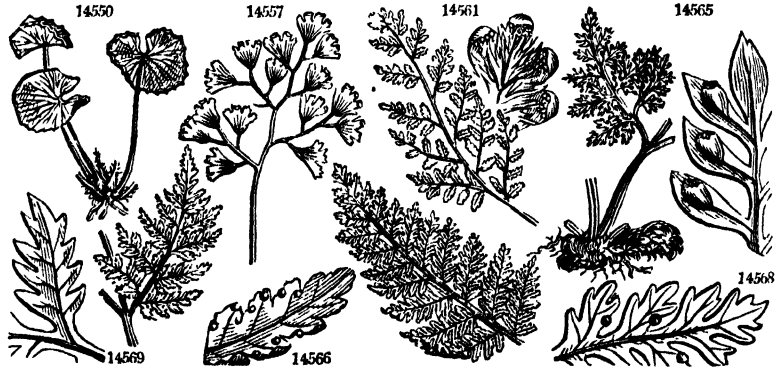
cattle, and very frequently for the purpose of thatching cottages The ashes are employed in the manufactory of soap and glass Its astringent quality has recommended it in dressing and preparing kid or chamois leather. The country people take it medicinally to destroy worms, and a bed made of the green plant is esteemed a sovereign cure for the rickets in children

2191. *Vittaria* From *vitta*, a ribband, on account of the narrow ribband-like appearance of the fronds Small simple-leaved grass-like plants, of difficult cultivation

2192 *Lonchitis.* From λογχη, a lance, on account of the form of the fronds of some species The Greeks had a plant named λογχιτις, but it must have been very different from that of the moderns.

2193. *Antrophyum* A genus divided by Kaulfuss from Hemionitis, and named from αντρος, a cavern, and φυω, to grow, in reference to its native places of habitation

2194 ADIAN'TUM. *W.*	Maidenhair				*Sp* 10—63							
14550 reniformе *W*	Kidney-leaved	¥	⧊	pr	¾ jn s	Br	Madeira	1699	R	s p	Bot cab 841
14551 radiátum *W*	radiated	¥	⧊	pr	¾ ap au	Br	W Indies	1776	D	l p	Plum fil t 100
14552 macrophýllum *W*	large-leaved	¥	⧊	pr	1 jl au	Br	Jamaica	1793	D	l p	Bro jam t 38 f 1
14553 pedátum *W*	Canadian	¥	△	el	1 au s	Br	N Amer	1640	R	s p	Schk. fil. t 115
14554 villósum *W*	hairy-stalked	¥	⧊	or	1 jn s	Br	Jamaica	1775	D	s p	Schk fil. t. 120
14555 pulverulèntum *W*	dusty	¥	⧊	el	1½ jn s	Br	W Indies	1793.	D	s p	Schk. fil. t. 119
14556 trapeziformе *W*	rhomb-leaved	¥	⧊	el	1½ jn jl	Br	W Indies	1793	R	s p	Schk. fil. t. 112
14557 Capillus-véneris *W*	true	¥	△	el	¾ my s	Br	Britain rocks		R	s p	Eng bot 1564
14558 ténerum *W*	tender	¥	⧊	el	1 jl	Br	Jamaica	1793	D	s p	Pluk. al t 354 f 1
14559 serrulátum *W*	serrulate	¥	⧊	or	1 au	Br	Jamaica	1822.	D	l p	Pluk al. t 125 f 2
2195 CHEILAN'THES *Swz*	Cheilanthes.				*Sp* 4—30							
14560 pteroides *W*	Pteris-like	¥	⧊	pr	½ jl s	Br	C. G H	1775	D	l p	Ho n his t 96, f 3
14561 vestita *Swz*	hairy	¥	△	pr	½ au	Br	N Amer	1812	D	l p	Schk fil t 124
14562 frágrans *W.*	sweet-scented	¥	⧊	pr	¾ au	Br	Madeira	1778	D	l p	Sw syn fi t 3 f 6
14563 lentigera *Swz*	chaffy	¥	⧊	pr	½ jn au	Br	N Spain	...	D	l p	
2196 DAVAL'LIA *Sm*	Davallia				*Sp* 2—39							
14564 pyxidáta *W*	shining	¥	⧉	or	¾ ap s	Br	N S W	1808.	D	l p	
14565 canariénsis *W*	Hare's-foot	¥	⧊	or	1½ ap s	Br	Canaries	1699	R	s p	Jac. ic. 1 t 200
2197 DICKSO'NIA *L'Her*	Dicksonia				*Sp* 3—23							
14566 arboréscens *W*	tree	♆	□	or	15 jn d	Br	St. Helena	1786	D	l p	
14567 dissécta *W*	cut-leaved	¥	⧊	pr	3 s o	Br	Jamaica	1793	D	l p.	
14568 pilosiúscula *W*	hairy	¥	△	pr	2 jl s	Br	N Amer.	1811.	D	l p.	Schk fil t. 131
2198 BALAN'TIUM *Kaulf*	Balantium				*Sp* 1—2							
14569 Culcita *Kaulf* *Dicksónia Culcita* W	smooth-stemm	¥	⧊	or	3 au	Br	Madeira	...	D	l p	
2199 ASPI'DIUM *Swz*	Shield Fern				*Sp* 30—160							
14570 dentátum *W*	toothed	¥	△	or	¾ jl	Br	Wales rocks		D	l p	Eng bot 1588
14571 bulbíferum *W*	bulbiferous	¥	△	or	1 jl au	Br	N Amer	1638	D	l p	
14572 frágile *W*	brittle	¥	△	el	¾ jn au	Br	Britain walls		D	l p	Eng. bot 1587
14573 régium *W*	laciniated	¥	△	el	¼ jn	Br	Britain al roc		D	l p	Eng. bot 163
14574 rhæticum *W*	stone	¥	△	el	¼ jn jl	Br	Britain rocks		D	l p	
14575 irriguum *E B*	brook	¥	△	or	1 jn jl	Br	Britain w sh p		D	l p	
14576 æmulum *W*	dwarf	¥	⧊	or	2 au	Br	Madeira	1779	D	l p	
14577 trifoliátum *W*	three-leaved	¥	⧊	or	1½ ap au	Br	W Indies	1769	D	l p	Jac ic 3 t 638
14578 Lonchítis *W*	rough Alpine	¥	△	or	¾ my au	Br	Britain al roc		D	l p	Eng bot. 797
14579 auriculátum *W*	eared	¥	⧊	or	¾ jl	Br	E. Indies	1793	D	l p	
14580 exaltátum *W*	lofty	¥	⧊	or	4 jl	Br	Jamaica	1793	D	l p	Schk fil t 32 b
14581 unitum *W*	smooth	¥	⧊	or	2 au	Br	E. Indies	1793	D	l p	
14582 propinquum *Kaulf*	pubescent	¥	⧊	or	2 au	Br	E. Indies	1793	D	l p	
14583 pátens *W*	downy	¥	⧊	or	2 jl s	Br	Jamaica	1784	D	l p	Schk fil t. 334
14584 noveboracénse *W*	river-side	¥	△	or	1½ jl	Br	N Amer	1812	D	l p	Schk fil t. 4o
14585 Oreópteris *W*	Heath	¥	△	or	3 jl	Br	Britain hea		D	l p	Eng bot 1019
14586 Thelypteris *W*	Lady-fern	¥	△	or	1 jl au	Br	Britain mar		D	l p	Eng bot 1018
14587 cristátum *W*	lesser-crested	¥	△	or	1½ jn au	Br	England bog h		D	l p	Eng. bot 2125
14588 aculeátum *W.*	com.-prickly	¥	△	or	2 jn au	Br	Britain sha pl		D	l p	Eng bot 1562
14589 marginále *W*	marginal-flow	¥	△	or	2 jn s	Br	N Amer	1772	D	l p	Schk fil t 45 b
14590 Filix-mas *W*	Male-fern	¥	△	w	jn au	Br	Britain sh t pl		D	l p	Eng bot 1458
14591 lobátum *W*	close-leaved	¥	△	or	2 jn au	Br	England sha pl		D	l p	Eng bot 1563



History, Use, Propagation, Culture,

2194. *Adiantum* From ἀδιαντος, dry In vain you plunge the Adiantum in water, says Pliny, it always remains dry. The prettiest of all ferns, on account of the delicate slender stalks on which the pinnules are balanced in the air; one species on this account is called Capillus Veneris, or in English, Maiden's Hair

2195 *Cheilanthes* From χειλος, a lip, and ανθος, a flower, in allusion to the lip-like form of the indusium Pretty plants, formerly referred to Pteris.

2196 *Davallia* Named by Sir James Smith, after his friend M Davall, a Swiss botanist, who sent him large collections of plants. D canariensis is popularly called the hare's-foot fern, on account of the peculiar form of its rootstock, which curves over the side of the pot in which it grows, and, being covered with close brown hairs, resembles very perfectly the foot of a hare.

2197 *Dicksonia* In honor of the late Mr James Dickson, a celebrated British cryptogamic botanist. A noble genus containing several arborescent species, among which the tree-fern of St. Helena is placed This plant is often brought in a living state to this country, but the mode of cultivating it being unknown, it rarely survives more than a few months

2198. *Balantium* A genus of Madeira ferns, divided from Dicksonia by Kaulfuss, on account of its transverse two-valved indusium, and named from βαλαντιον, a purse, on account of the form of the indusium.

14550 Fronds simple reniform-orbicular crenate, Both diameters equal
14551 Frond digitate, Branches pinnate, Pinnæ linear-oblong obtuse nearly halved crenate, Stalk smooth
14552 Fronds pinnate · pinnæ ovate acuminate cuneate at base toothed at end, Sori continuous upon each edge
14553 Frond pedate, Leaflets pinnate, Pinnæ rhomboid-oblong somewhat lunate cut-lobed
14554 Fronds bipinnate · pinnules trapezoid-obl blunt, Sori oblong at the end of the upper edge, Stalk villous
14555 Fronds bipinnate · pinnules rhomboid oval serrated at end, Sorus lin solitary on upper edge, Stalk hairy
14556 Fronds supradecomp pinnules trapezoid acum cut crenate towards end of upper edge, Sori on crenatures
14557 Frond alternately decompound pinnules stalked cuneiform lobed
14558 Fronds supradecompound: pinnules rhomboid blunt cut lobed on upper edge, Lobes toothl. bearing sori
14559 Fronds pinn or bipinn. pinnæ obl lanc. halved truncate at base serrul. Sori on upper edge, Stalk smooth

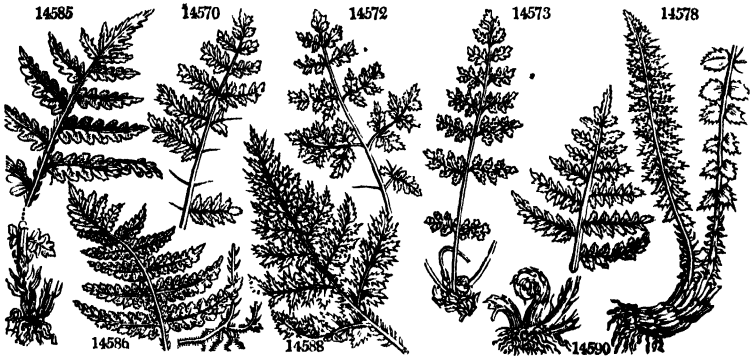
14560 Fronds bipinnate, Lower pinnæ bipinnate · pinnules ovate-ellipt obtuse obsoletely subcordate crenulate
14561 Fronds bipinn hairy on each side pinnules pinnatif, segments obl blunt entire, Stalk and rachis hairy
14562 Fronds bipinnate smooth pinnules obl lanc. obtuse pinnatifid cut, segments subbifid, Stalk paleaceous
14563 Fronds tripinnate somewhat villous, Leaflets orbicular very small

14564 Fronds bipinnate alternate, Leaflets lanceolate pinnatifid, Sori linear oblong
14565 Fronds 3-parted alternately decompound segments lanceolate, those bearing sori obovate

14566 Fronds supradecompound villous, Leaflets nearly entire, Stem arboreous
14567 Fronds tripinnate pinnæ tapered, pinnules oblong blunt pinnatifid, Segments blunt toothed
14568 Fronds bipinnate: pinnæ pinnatifid, segments toothed, Rachis somewhat hairy

14569 Fronds tripinnate smooth pinnules ovate oblong cuneate cut-toothed

14570 Fronds pinnate pinnæ ovate-oblong pinnatifid, segments oblong blunt toothletted
14571 Fronds pinnate remotish · pinnules oblong serrated bulb-bearing beneath, lower pinnatifid
14572 Fronds bipinnate pinnules oblong blunt cut-serrated, Serratures blunt toothletted, Rachis winged
14573 Fronds bipinn · pinnules ov obl lobed pinnatif, segm linear-oblong blunt nearly entire, Rachis winged
14574 Fronds bipinn pinnules lanceolate acuminate pinnatifid, segments linear acute serrated, Rachis winged
14575 Frond lanceolate pinnate pinnæ deeply pinnatifid cut toothed, Rachis quadrangular, Sori lateral
14576 Fronds tripinnate pinnules pinnatifid, segments linear toothed at end
14577 Fronds simple cordate 3-lobed or ternate middle larger, lat ral auricled at base
14578 Fronds pinnate pinnæ ciliate serrate, Stalk strigose
14579 Fronds pinnate pinnæ falcate lanceolate serrate truncate at base auricled above [marginal
14580 Fronds pinn pinnæ lanc. subfalcate cordate at base gibb and somew serrul. on upper edge, Sori solitary
14581 Fronds pinnate pinnæ ensiform serrated, Serratures half ovate ovate nerved
14582 Fronds pinn pinnæ ensiform attenuated at end downy ben cut pinnatif Sori almost marginal contiguous
14583 Fronds pinn pinnæ pinnatif, segm lanc ac Lowest of last pinnæ longest pinnatif cut, Veins hairy ben
14584 Pinnæ pinnatifid somewhat linear pinnules oblong nearly entire, Sori in rows near the edge of pinnæ
14585 Fronds pinnate pinnæ lanceolate glabrous resinous glandulose beneath pinnatifid, the segm lanceolate obtuse entire, lowermost ones longer, Sori marginal
14586 Fronds pinn pinnæ lin-lanc pinnatif glab segm ov ac ent Sori marginal contigu at length confluent
14587 Fronds pinnate pinnæ subcordate oblong pinnatifid, segments oblong obtuse dentato-serr Stalk chaffy
14588 Fronds bipinnate pinnules rigid ovate sublunate acum aristate oblique and cuneate at base and decurr, the margins faintly serrated spinulose with a tooth near the base on upper side, Stalk and rachis chaffy
14589 Fronds bipinnate pinnules oblong obtuse decurrent crenate Crenatures at base deepest, Sori marginal
14590 Fronds bipinn · pinnules obl obt serrat mutic Sori near the central nerve, Stalk and rachis chaffy
14591 Fronds bipinnate pinnules scarcely rigid ovate rather obt aristate truncate at base which has a lobe on the upper margin shortly petiolate, the margin deeply serrated and spinulose, Stalk and rachis chaffy



and Miscellaneous Particulars.

2199 *Aspidium* From *ασπις*, a little buckler, on account of the form of the indusia *Fougère*, Fr, *Johannis wurtzel*, Ger, *Felì Maschia*, Ital, and *Polypodio Helecho Masculino*, Span The male fern is common to Europe, in shady places and woods The root consists of many matted fibres, forming a turfy or cæspitose head, of the thickness of the finger, blackish and scaly. It has been celebrated from time immemorial as a specific for worms It appears to have been used as such by Theophrastus, Dioscorides, and Galen, but seems to have been neglected by the moderns, with the exception of empiric practitioners, until the publication of Madame Nufer's specific for the tape-worm by the French government again brought it into notice According to her plan of administering it, from one to three drachms of the powdered root were directed to be taken in a large cupful of water in the morning, while the patient was in bed, and two hours afterwards, a strong cathartic of calomel and gamboge, proportioned to the age and strength of the patient, was given, and if necessary, the further operation was promoted by a dose of purging salts, nothing but broth being taken till the worms came away If this, however, did not happen on the same day, the process was ordered to be repeated on the next day. In the present state of medical science, oil of turpentine is considered a certain specific for expelling tæniæ. (*Thom Lond Disp.* 186)

Aspidum Baromez is the famous Scythian lamb, of which so many fables have been related Although it

14592 spinulósum *W*	crested-prickly	♃	△	or	1	jn au	Br	Britain mar	D	l p	Eng bot 1460
14593 dilatátum *W*	great-crested	♃	△	or	2	jn au	Br	Britain w sh p.	D	l.p	Eng. bot. 1461
14594 elongátum *W*	cut-leaved	♃	◺	or	2	jl au	Br	Madeira 1779	D	l.p	
14595 villósum *W.*	villous	♃	⧄	or	3	jl	Br	W Indies 1793	D	l p	Schk fil t 46 b.
14596 mólle *W.*	soft	♃	⧄	or	2	au s	Br	Caraccas 1824.	D	l p	Jacq ic. t 640
14597 acrostichoides *W*	Acrostichum-like	♃	△	or	1½	jl au	Br	N. Amer. ...	D	l p	Schk crypt. t 90
14598 intermédium *W.*	intermediate	♃	△	or	2	jn s	Br	N Amer 1823.	D	l p	
14599 asplenioides *W*	Asplenium-like	♃	△	or	1½	jn s	Br	N. Amer. 1823.	D	l.p	Schk crypt. t 78

2200 WOOD'SIA *R Br* Woodsia — *Sp* 2—4

14600 hyperbórea *R Br*	hairy Alpine	♃	△	el	½	jl s	Br	Scotland al roc	D	l p	Eng bot 2023
14601 ilvénsis *R Br*	rock	♃	△	el	½	jn jl	Br	N Amer 1812.	D	l p	Schk. fil t. 19

2201 CYATHE'A *Sm.* Cyathea. — *Sp* 1—22

14602 arbórea *W.*	tree	♀	□	or	15	...	Br	W Indies 1793.	D	l.p	Plum fil. l. t.1,2

2202 TRICHO'MANES. *L* Trichomanes. — *Sp.* 1—40

14603 brevisétum *H K* *Hymenophýllum alatum* E. B.	short-styled	♐	△	el	½	my jn	Br	Britain mou ro	D	l p	Eng. bot 1417

2203 HYMENOPHYL'LUM *Sm.* Filmy-Leaf — *Sp.* 1—38

14604 tunbridgénse *W*	Tunbridge	♐	△	el	½	my jn	Br	Britain mou ro	D	l p	Eng bot 162

OSMUNDACEÆ.

2204 TO'DEA *W* Todea — *Sp* 1

14605 africána *W*	African	♐	◺	or	2	my au	Br	C. G. H 1805.	D	l p	Schk. fil t 147

2205 OSMUN'DA *L* Osmunda — *Sp* 5—8

14606 cinnamómea *Ph*	woolly	♃	△	or	2	jn	Br	N Amer 1772	D	l p	Schk fil t 146
14607 regális *W*	Flowering-Fern	♃	△	or	2	jl au	Br	Britain sha.bo	D	l p	Eng bot 209
14608 Claytoniána *W*	Clayton's	♃	△	or	2	au	Br	N Amer 1772	D	l p	
14609 interrúpta *W*	interrupted	♃	△	or	2	jn jl	Br	N Amer ..	D	l p	Schk fil t 144
14610 spectábilis *W.*	showy	♃	△	el	2	jl	Br	N Amer 1811	D	l p	Plu alm t 184 f 4

2206 LYGO'DIUM *Swz* Snake's-Tongue — *Sp* 3—18

14611 scándens *Swz*	climbing	♌	◺	el	3	my s	Br	E Indies 1793	D	l p	Bot cab 742
14612 circinátum *Swz*	circinate	♌	◺	el	3	au	Br	E. Indies 1823	D	l p	Rum amb 6 t 33
14613 palmátum *Swz*	palmate	♌	△	el	3	au s	Br	N. Amer ...	D	l p	Ac E.1802 t 1 f 2

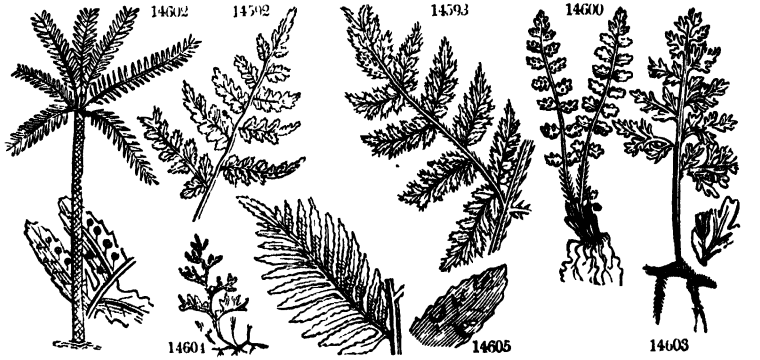
2207 ANE'MIA. *Swz.* Anemia — *Sp* 2—19

14614 hirsúta *Sw*	hairy	♀	◺	or	3	...	Br	Jamaica 1794	D	l p	Plum fil t 162
14615 adiantifólia *Sw*	Maiden-hair-lvd	♀	◺	or	3	au s	Br	W Indies 1793.	D	p l	

OPHIOGLOSSEÆ

2208 BOTRY'CHIUM *Swz* Moonwort — *Sp* 5—10

14616 Lunária *W*	common	♃	△	cu	½	my jn	Br	Britain hil pa	D	p l	Eng bot 318
14617 fumarioides *W*	Fumitory-leav	♃	△	cu	½	jl au	Br	Carolina 1806	D	p l	Schk fil t. 157
14618 dissectum *W*	cut-leaved	♃	△	cu	½	jl	Br	N Amer 1806	D	p l	Schk fil t. 158
14619 virginicum *W*	Rattlesnake Fern	♃	△	cu	1	au	Br	N Amer 1790	D	p l	Schk. fil. t. 156
14620 obliquum *W*	oblique	♃	△	cu	½	au	Br	N Amer. 1821	D	p l	



History, Use, Propagation, Culture,

is often brought in a fresh state to the markets of Macao, as an article of medicine, no plants have ever reached this country alive Its name has arisen from the resemblance which its brown hairy rootstalk bears to a little rufous dog couching, and the belief in its animal nature has been confirmed by the color of the juice, which is of a rich blood color, and soon becoming thick by exposure to the air It is needless to add, that the stories about no plant being able to grow near it are mere fables Kæmpfer says, that *boranetz* is the name which the people on the borders of the Caspian Sea give to a kind of sheep of that country

2200. *Woodsia* Small ferns formerly referred to Polypodium, Aspidium, and Nephrodium, by various writers, and distinguished from all these by Mr. Brown, who named the genus after Mr Joseph Woods, an ingenious British botanist

2201 *Cyathea* From κυαθος, a cup, on account of the cup-shaped form of the indusia A fine tropical genus of ferns, which does not appear to have been well understood by its author, who confounds it with little British plants referred by all other botanists to Aspidium Nearly all the species are arborescent, and arrive at the greatest height of which ferns are susceptible. C glauca forms a lofty tree in the Island of Bourbon, and C speciosa and excelsa are not less than twenty-four feet in height

2202 *Trichomanes* From θριξ τριχος, hair, and μανια, excess The Greeks gave this name to the plant now called Asplenium trichomanoides, on account of its fine shining stems, which resemble hairs. Elegant plants with almost transparent foliage.

14592 Frond somew bipinn. pinnules decurrent ellipt pinnatifid serrul. spiny, Rachis smooth, Nerves flexuose
14593 Fronds bipinnate pinnules oblong distinct inciso-pinnatifid, segments mucronato-serrate, Stalk chaffy
14594 Fronds bipinnate: pinnæ pinnated bipinnatifid below; pinnules lanc blunt, Segments ovate toothletted
14595 Fronds 3-pinnate pinnules oblong blunt hairy above, toothed, Stalk and rachis bristly chaffy
14596 Fronds pinnate pinnæ lanc hairy on each side pinnatifid, segm oblong blunt entire, lowest nearly equal
14597 Fronds pinn. pinnæ altern subsess subserr ciliat auric. at base on upp edge, Upp pinnæ bear sori, Stalk
14598 Fronds bipinnate pinnules lin pinnatifid cut, segm mucronate serrate at end, Stalk chaffy [chaffy
14599 Fronds bipinn. pinnules lin lanc. cut serr Serrat 2 or 3 toothed. those at end most ac Sori obl lunate

14600 Frond lanceolate pinnate pinnæ cordate pinnatifid hairy on each side, Lobes rounded repand
14601 Fronds bipinnatifid: pinnæ oblong blunt, lower repand, upper entire

14602 Fronds bipinnate: pinnules lanceolate serrate sharpish, upper confluent, Stalk smooth, Stem arboreous

14603 Frond tripinnatifid lobed smooth. segments linear entire, Stalk winged, Columella included

14604 Frond alternately bipinnatifid segments and invol serrated, Sori solitary axillary

OSMUNDACEÆ.

14605 The only species

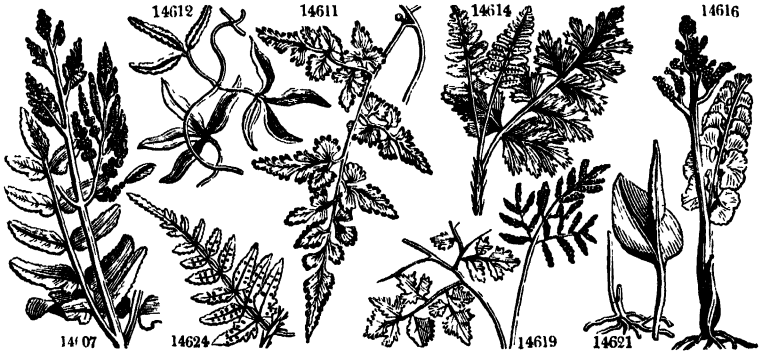
14606 Fronds pinnat ster bipinnatif, segm ov obl obt entire, Stalk woolly, Fertile fronds bipinnate woolly
14607 Frond bipinnate bearing the spike at end pinnules cordate-lanceolate smooth
14608 Fronds bipinnatifid rusty with down contracted and fertile at the end
14609 Fronds bipinnatifid entire smooth interrupted in the middle by 3 pair of fertile pinnated racemes
14610 Fronds bipinn pinnules lanc. sharply serrat cune at base, all altern A tert bipinn panic at end of frond

14611 Stem flexuose round, Fronds conjugate pinnate, Leaflets bearing spikes on each edge
14612 Stem flexuose climbing, Fronds conjugate 3-4-lobed palmate, Lobes lanceolate acute entire
14613 Stem flexuose climbing, Fronds conjugate cord 5-lobed palmate, Lobes lanc. ent obt obscurely sinuated

14614 Frond bipinnatifid hirsute segments cuneate lined blunt and serrated at end
14615 Frond 3-pinnatifid triangular segm ovate acute toothletted at end, beneath and the rachis downy

OPHIOGLOSSEÆ.

14616 Scape with a simple frond above, Frond pinnate pinnæ lunate entire
14617 Scape none, Fronds radical 3-parted bipinnate pinnules lunate crenate
14618 Scape with a simple frond at bottom, Frond 3-parted bipinnatifid segm linear 2-parted 2-toothed at end
14619 Scape frondose in midd Frond subtern 3-parted bipinnatifid, Leaflets cut pinnatif Segm obtuse 3-toothed
14620 Scape with a simple frond at bottom, Frond mostly bitern Leaflets obl lanc serrul. unequally cord at base



and Miscellaneous Particulars

2203 *Hymenophyllum* From ὑμην, a membrane, and φυλλον, a leaf, in allusion to the tenuity of the foliage. This and the last are the most elegant of all ferns, they generally grow in damp shady places among moss, and have hitherto refused cultivation under any plan which has been devised

2204 *Todea* Named after Tode, an experienced mycologist, author of Fungi Mecklenburgensis Mr. Brown unites this genus to Osmunda, but Kaulfuss keeps them distinct.

2205 *Osmunda* A word said to be of northern origin, and to have received its name on account of its potential qualities in medicine Osmunder was one of the names of Thor, a Celtic divinity, and *mund*, in Anglo-Saxon, is expressive of force or power These are noble species of hardy ferns. O regalis is the finest of all our native species

2206. *Lygodium.* From λυγος, a band The species are elegant twining plants, which bind together the grass or small shrubs near which they chance to grow L. palmatum, although a North American plant, must have the protection of a good frame

2207 *Anemia* From ανεμων, naked, in allusion to the naked spikes of inflorescence; whence some authors write the word Aneimia

2208. *Botrychium.* Derived from βοτρυς, a bunch, on account of the bunch-like form of its fructification Botrychium virginicum is the largest of the American kinds, and is called the rattle-snake fern, from the circumstance of its generally growing where these venomous reptiles are usually found.

2209. OPHIOGLOSSUM *L*	Adder's-tongue			*Sp* 3—9							
14621 vulgátum *W*	common	♃ △	cu	½	my jn	Br	Britain	m me	D	p l	Eng bot. 108
14622 reticulátum *W*	netted	♃ △	pr	½	my jn	Br	W. Indies	1793.	D	p l	Plum fil t. 164
14623 bulbósum *W*	bulbous	⁂ △	pr	½	jl au	Br	N. Amer.	...	D	l p	
2210 MARATTIA *Swz.*	Marattia.			*Sp.* 1—6.							
14624 alàta *W*	winged	♃ △	or	1½	au	Br	Jamaica	1793.	D	l p	Sm. ined t. 46

History, Use, Propagation, Culture,

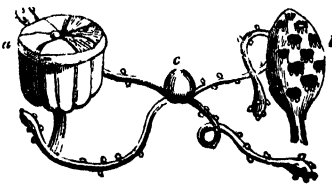
2209 *Ophioglossum* From ὄφις, a serpent, and γλῶσσα, a tongue The little green narrow-pointed leaves, seated on a narrow stalk or neck, and peeping up from among the grass, may be not unaptly compared to a snake's tongue

14621 Frond ovate veinless
14622 Spike cauline, Frond cordate acute reticulated
14623 Spike cauline, Frond subcordate ovate obtuse, Root bulbous

14624 Fronds bipinnate: pinnules acutely serrate, Rachis scaly. partial winged

and Miscellaneous Particulars.

2210 *Marattia* in honor of J. F Maratti, a writer upon ferns. He lived at Vallombrosa, in Tuscany. Kaulfuss considers this, Danæa, and Angiopteris as constituting a particular tribe, which he calls Marattiaceæ, but of which he has not given the characters.



Order 2. EQUISETACEÆ.

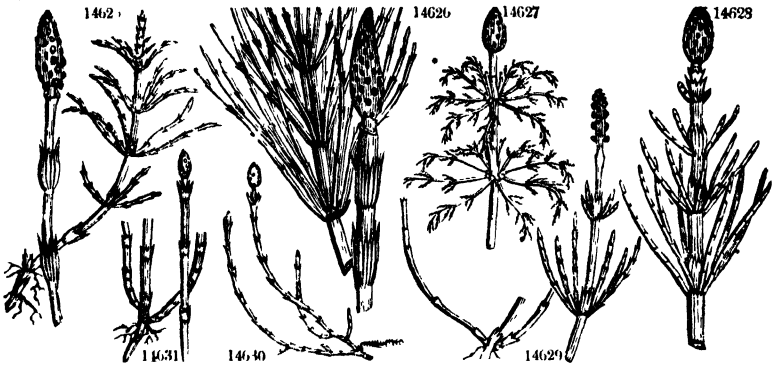
Reproductive organs uniform, in terminal spikes, composed of peltate, several-sided scales, producing on their under surface 4-7-elongated involucres containing the seeds Branches whorled, rigid

This order contains one genus only, which is among the most puzzling of all the anomalous formations which are so frequently met with among the lower orders of vegetation Both the stems and branches are regularly articulated, and arise from a tubular sheath There are no leaves, and the reproductive organs are arranged in a terminal spike (*b*), on all sides of which are inserted many peltate scales (*a*) with several sides or angles Several wedge-shaped hollow bodies project from the surface of these scales, and bursting inwardly, discharge their contents, which are not yet well understood. They consist of a number of green roundish bodies, surrounded by minute granules, and furnished at the base with four elastic filaments (*c*), thickened at their apex. By some observers the granules have been considered pollen, the filaments stamens, and the green bodies ovaries, by others the granules have been called naked seeds, by Kaulfuss the wedge-shaped hollow bodies are considered capsules, and the green bodies, seeds It is probable that none of these theories are true.

2209 *Equisetum* Character the same as of the order

2211 **EQUISETUM.** *L* Horse-tail *Sp* 7—18

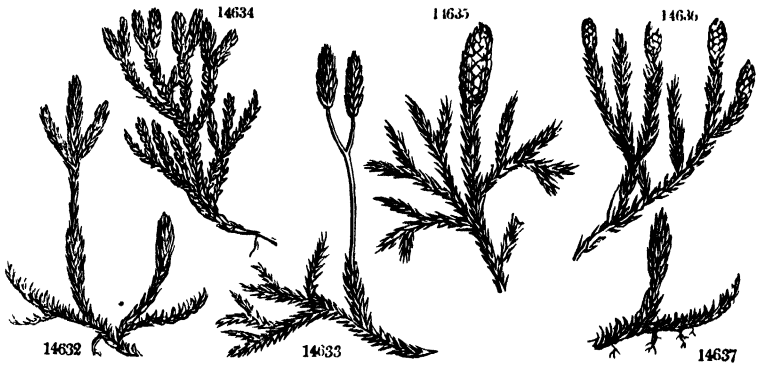
14625 *arvense W.*	corn	♃	△	w	½	mr	ap	Br	Britain	moi fi	D	p l	Eng bot 2020
14626 fluviátile *W*	great-water	♃	△	w	6	ap	my	Br	Britain	wat pl	D	p l	Eng bot 2022
14627 sylvátícum *W*	wood	♃	△	w	1	ap	my	Br	Britain	m s pl	D	p l	Eng bot 1874
14628 limósum *W*	smooth naked	♃	△	w	2	jn	jl	Br	Britain	wat pl	D	p l	Eng bot 929
14629 palustre *W*	marsh	♃	△	w	1½	jn	jl	Br	Britain	bog pl	D	p l	Eng bot 2021
14630 variegátum *W*	variegated	♃	△	or	½	jn	jl	Br	Scotland	sc sh	D	p l	Eng bot 1987
14631 hyemále *W*	Dutch Rush	♃	△	ec	1½	jl	au	Br	Britain	moi w	D	p l	Eng bot 915



History, Use, Propagation, Culture,

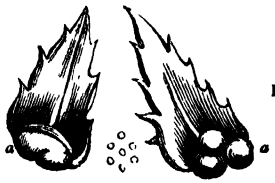
2211 *Equisetum* Literally, horse-hair, from *equus*, a horse, and *seta*, hair, so called, in allusion to the fine branches of all the species The first five species are noxious weeds on deep loamy soil, especially such as has been gained from rivers or lakes E. fluviatile rises three or four feet high, the thickness of a finger, with numerous branchlets or leaves proceeding from the whorls, according to Haller, this species was eaten by the common people among the Romans. Linnæus affirms, that rein-deer, who refuse hay, will, however, eat this,

14625 Ster stems decumb with simp branches, which are rough tetragon. fertile ones erect simp their sheaths cylind incise-dentate
14626 Sterile stems with very numerous simple branches, which are roughish octagonal fertile ones simple, the sheaths infundibuliform lacinato dentate, their teeth setaceous
14627 Sterile and fertile stems with their branches comp roughish deflexed 4-sided, Branchlets subtriquetrous
14628 Stems branch upw with branches about 12 in a whorl simple pentagon smooth, Spike or catkin terminal
14629 Stems branched glabrous sulcate, Branches simple pentagonal, Spike terminal
14630 Stems naked very rough branched at base, Sheaths black with white membran lanc teeth, Spike terminal
14631 Stems simple erect very rough bearing spikes at the extremity, Sheaths whitish black at base and summits, Teeth aristate deciduous



and Miscellaneous Particulars

that it is cut as fodder for kine, but that it is not so acceptable to horses E hyemale is the best species for polishing wood and metal, and is imported from Holland for that purpose under the name of Dutch rushes. It is much used by whitesmiths, cabinet-makers, and comb-makers, and formerly it was in demand for scouring pewter and wooden things in the kitchen.

Order 3.  LYCOPODINEÆ.

Reproductive organs axillary, sometimes apparently spiked Thecæ? of two kinds, the one containing minute granules, the other larger bodies Stems covered with many small leaves

The reproductive organs of these plants are always axillary, the apparently spiked arrangement which they occasionally present being caused by the partial abortion of the leaves, at the base of which they are seated The thecæ (*a*)? the nature of which is very doubtful, and which have accordingly been called by different writers *capsulæ*, *conceptacula*, and *cocci*, are formed of from one to three valves, and of a similar number of cells, and contain either a mass of minute powdery granules, or some corpuscles of a larger size The nature and properties of both these are uncertain Decandolle imagines that one may be the means of fertilizing the other

2210. *Lycopodium.* Thecæ reniform, 1-celled, 2-valved, with many sporules Sporules very minute, powdery

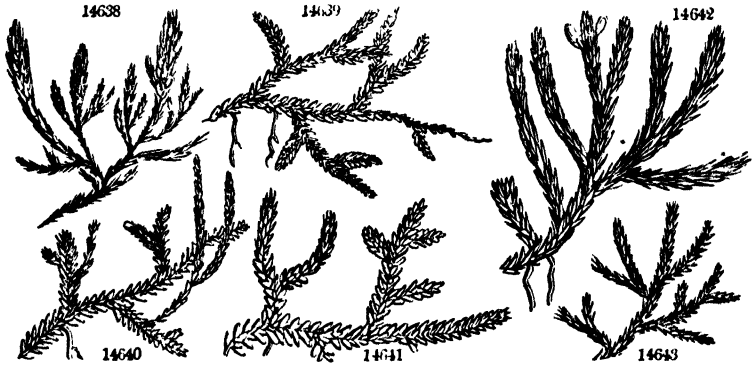
2211. *Psilotum.* Thecæ 3-coccous, 3-celled, cells opening upwards, half 2-valved.

2212. LYCOPO'DIUM *L* Club-Moss. *Sp* 15—114

14632	clavátum *W*	common	△	cu	½	jl au	Br	Britain hea	D	p l Eng bot 224
14633	complanátum *W*	Arbor-vitæ-lvd	△	cu	⅔	jl au	Br	N Amer 1770	D	p l Fl dan 78
14634	alpinum *W*	Savin-leaved	△	cu	½	au	Br	Britain al bogs	D	p l Eng bot 234
14635	dendroideum *W*	fan	△	cu	⅔	jl	Br	N Amer 1770	D	p l Hook ex fl 7
14636	annotinum *W.*	interrupted	△	cu	⅔	jn au	Br	Britain al hea	D	p l Eng bot. 1727
14637	mundátum *W*	marsh	△	cu	½	jn jl	Br	Britain tur bo.	D	p l Eng bot 239
14638	Selaginoides *W*	prickly	△	cu	½	au	Br	Britain w al h	D	p l Eng bot 1148
14639	ornithopódioides *W*	Bird's-claw	△	cu	½	jn au	Br	 1812	D	p l Dil M t 66 f 1 B
14640	helvéticum *W*	Swiss	△	cu	1in	...	Br	Switzerl 1779	D	p l Dill M t 64 f 2
14641	denticulátum *W.*	toothed	△	cu	1in	jl	Br	Switzerl. 1779	D	p l Dil M t 66 f 1 A
14642	Selágo *W.*	Fir	△	cu	½	au	Br	Britain w.al h.	D	p l Eng bot 233
14643	rupéstre *W*	rock	△	cu	½	au	Br	N Amer ...	D	p l Schk fil t 165
14644	lucidulum *W.*	glittering	△	cu	½	au	Br	N Amer 1823.	D	p l Schk fil. t 159
14645	apódum *W*	stemless	△	cu	½	au	Br	N Amer 1819	D	p l Dill mus. t 64 f 3
14646	alopecuroides *W*	Walking Fern	△	cu	½	au	Br	N Amer 1821	D	p l Dill mus t 62 f 6

2213 PSILO'TUM *Swz.* Psilotum. *Sp* 1—3.

14647	triquetrum *Swz.*	triangular	⊠	cu	½	jl au	Br	W Indies 1793.	D	p l Schk. fil t 165 b.

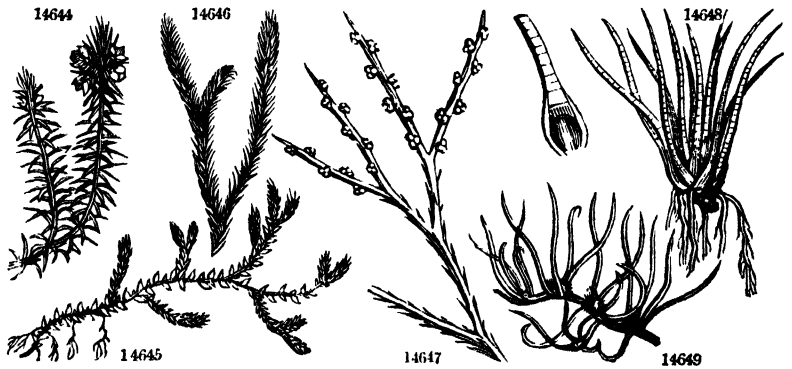


History, Use, Propagation, Culture,

2212 *Lycopodium* From λυκος, a wolf, and πους, a foot, on account, as Dalechamp assures us, of the resemblance the roots bear to a wolf's foot Selago is an ancient word applied to some succulent plant, and derived, according to De Theis, from the Celtic *sel*, sight, and *jach*, salutary, as being useful for complaints in the eyes. From the same root *sel*, was formed *selma*, the name of Fingal's hall, which in modern language would be called *Belle-vue*. The species are neat little evergreen moss-like herbaceous plants, some of which are found in all parts of the world L helveticum is a pretty prostrate plant, with small bright green leaves, for the beauty of which it is often cultivated in hothouses on the edge of the aquarium, or in pots set in pans of water. L. Phlegmaria is a fine species found in various parts of the East Indies, but hitherto a stranger to our gardens. It is a parasite upon the trunks of trees, whence it hangs down in tufts from six inches to a

14632 Stem creeping, Branches ascending, Leaves scattered incurved and hair-pointed, Spikes geminate cylindrical pedunculate their scales ovate acuminate eroso-dentate
14633 Stem erect, Branches altern dichotom Leaves bifarious connate spreading at end, Spikes 4 round cylind
14634 Stems prostrate, Branches dichotomous and fasciculated, Leaves quadrifarious oblong convex acute appressed, Spikes terminal solitary sessile short cylindrical
14635 Stem erect, Branches alternate compact dichotomous spreading, Spikes solitary terminal sessile
14636 Stem creeping, Branches ascending dichotomously branched, Branchlets simple, Leaves in 5 rows linear lanceolate mucronate serrulate patent, Spikes oblongo-cylindrical solitary sessile terminal
14637 Stem creeping, Branches simple solitary erect with a single sessile leafy spike at its extremity, Leaves linear scattered acute entire curved upwards
14638 Stem creep Branches ascend simple, Lvs scattered lanc subpatent ciliato-denticul Spikes term solitary
14639 Leaves bifarious spreading ovate acute of the surface distichous ciliated flat, Spikes roundish sessile
14640 Lvs bifar ½-cord blunt of surface altern distichous ovate-obl blunt, Spikes stalked term mostly in pairs
14641 Lvs bifarious ovate s- bicord acute toothletted of surface altern ovate acute, Spikes terminal short sessile
14642 Stems dichotomously branched erect fastigiate, Leaves scattered in 8 rows linear-lanceolate acuminate entire imbricated rigid, Capsules scattered not spiked
14643 Stem creeping branched, Leaves scatt imbric ciliated with a hair at end, Spikes solitary sessile terminal
14644 Leaves in 8 rows linear-lanceolate toothletted acute spreading reflexed, Stem ascending bind
14645 Lvs bifarious roundish ovate acute flat toothl Stem branched rooting at base, Spikes term sess subsolit.
14646 Branches nearly simple long ascend with one spike at top, Lvs lin.-subul toothed at base, Spike sess leafy

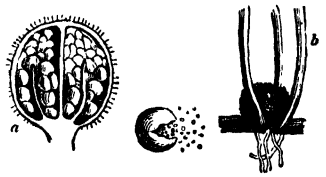
14647 Stem dichotomous, Branches 3-cornered



and Miscellaneous Particulars.

foot in length L. Selago is used in Skye, and some other places, to fix colours in dying, instead of alum. The Highlanders employ it in infusion as an emetic and cathartic, but it operates violently, and, unless taken in a small dose, brings on giddiness and convulsions Linnæus says, the Swedes use a decoction of it to destroy lice on swine and other animals All the species may be cultivated in a light peaty soil, but they require an abundance of moisture.

2213. *Psilotum* From ψιλος, naked This is a little bushy evergreen herbaceous plant of no beauty Its branches are 3-cornered, and altogether destitute of leaves The theca appear from the little indentations of the branches, and are of a whitish-yellow color. It is easily cultivated in a little peat and sand, but it has no ment except as an object of curiosity.



Order 4. MARSILEACEÆ

Reproductive organs radical, uniform. Sporules contained in roundish one or many-celled indehiscent heads. Plants simple, aquatic

Very few plants are found in this order Their vegetation is various, they are at most a few inches high, and are more or less aquatic In Isoetes the leaves resemble those of a young rush The organs of reproduction are always near the root, and are variable, and their nature is by no means understood In Pilularia (*a*) it consists of a roundish head, divided internally into 1-4-cells, each cell containing small bodies of two kinds In Isoetes (*b*) the fructification is even less known and understood

2214 *Isoetes* Head membranous, not opening, immersed in the base of the frond, 1-celled. Sporules angular, inserted upon many filiform receptacles

2215 *Pilularia* Heads imbricated, solitary, nearly sessile, globose, coriaceous, 4-celled. Cells containing two kinds of bodies

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2214 ISOETES. *L*	Quillwort			*Sp* 1—2							
14648 lacústris *W*	marsh	♒	△	cu	½	myo	Br	Britain	al lak	D	p l	Eng bot 1084
2215 PILULA'RIA *L*	Pillwort			*Sp* 1.							
14649 globulifera *W*	Pepper-grass	♃	△	cu	½	ju s	Br	Britain	moi h	D	p l	Eng. bot 521

History, Use, Propagation, Culture,

2214 *Isoetes* From ἴσος, equal, and ἔτος, the year, a plant which remains the same through all the seasons A very curious little submersed aquatic, which grows at the bottom of some of the Scotch lakes The leaves are long and cylindrical, whence the English name Quill-wort.



Order 5. MUSCI

Reproductive organs of 2 kinds Theca many-seeded, solitary, furnished with an operculum and columella Plants leafy

Mosses are distinguished from all other similar plants, by the peculiar nature of the reproductive organs, which are of two kinds The principal and the most obvious is a theca (*a, b*), which is furnished with an operculum or lid (*c*), by means of which the sporules are retained in the theca, and a columella, or central axis, to which they are attached The other consist of minute spherical pedicellated organs, concealed in the axils of some of the leaves, and called anthers by Hedwig. The theca is either entire, or split into four valves, as in Andreæa, when in a very young state it is enclosed in an indusium, which is torn asunder as the theca is elongated, and being carried up with it, remains upon the summit of the theca in the form of a little extinguisher called

14648 Fronds subulate half-cylindrical, Heads roundish 2-celled

14649 Filiform branched creeping, Heads brown

and Miscellaneous Particulars

2215 *Pilularia* From *pilula*, a pill The little heads in which the reproductive organs are enclosed resemble pills An obscure little plant found creeping among grass in meadows in many parts of England, and especially in damp places which are overflowed during winter

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calyptra (*d*), if the calyptra is slit up one side it is called *dimidiate* (*d*), if divided at the base into many short clefts, it is termed *mitriform* (*e*) The orifice of the theca, when the operculum is removed, is either covered by a simple membrane, or by various processes called the *peristome* (*f*), either annular, or in the form of teeth, and arranged in a single or double row These processes vary in number, and in the manner of their division, from such differences excellent characters for the genera have been obtained

The minute attention which mosses have received in modern times has brought their arrangement to a degree of perfection unknown in other Cryptogamic orders This has been effected by the labor of Hooker, Greville, and Brown in our own country, and of Hedwig, Swartz, Bridel, Schwaegrichen, Palisot de Beauvois, Nees von Esenbeck, and Hornschuch abroad The arrangement of the two last authors is chiefly adopted here from their excellent Bryologia Germanica

With this order, the alteration in the form of our page, of which we have already spoken, commences The columns indicating the *habit*, *habitation in the garden*, *propagation*, and *soil*, are necessarily omitted, and their place is supplied by a more extended *popular character*, and more detailed references to plates. The heights indicated are to be understood as in inches, and not as feet, and the colors as the general color of the plant In the figures it has been also found necessary to represent the plants in many cases much magnified, whenever this has taken place, the figures which are larger than nature are distinguished by a * affixed to their number The popular synonyms of this and the succeeding orders have been rendered as complete as possible, especially with reference to Sowerby's English Botany, to which valuable work this will be a complete modern index even in Cryptogamia

TRIBE I EVAGINULATI

Theca entirely sessile; its receptacle stalked, and without perichætial leaves

2216 *Sphagnum* Receptacle of theca stalked Peduncle resembling a fruitstalk Theca sessile on the receptacle Mouth naked

TRIBE II. VAGINULATI OLOCARPI

Theca more or less stalked: with perichætial leaves; not valvular.

A. *Theca terminal*

* *Theca indehiscent*

2217. *Phascum* Theca entire, adnate with the persistent lid Calyptra shorter than the theca.

*** Theca dehiscent. Peristome absent.*

2218. *Schistostega.* Fruitstalks terminal, mouth of theca naked. Lid laciniated, with deciduous segments.
2219. *Gymnostomum.* Fruitstalk terminal Calyptra dimidiate. Mouth of theca naked.

**** Theca dehiscent Peristome present.*

† Peristome single.

2220 *Hymenostomum* Fruitstalk terminal. Peristome destitute of teeth, but having an inner horizontal membrane perforated in the middle
2221 *Tetraphis* Fruitstalk terminal Peristome of 4 erect teeth.
2222. *Encalypta* Fruitstalk terminal Peristome single of 16 teeth Calyptra cylindrico-campanulate, wholly concealing the nature of the theca.
2223 *Grimmia.* Fruitstalk terminal. Peristome single, of 16 entire or perforated rarely cleft teeth. Calyptra mitriform.
2224 *Weissia* Fruitstalk terminal. Peristome single, of 16 entire equidistant teeth Calyptra dimidiate.
2225 *Dicranum* Fruitstalk terminal. Peristome single, of 16 bifid equidistant teeth Calyptra dimidiate.
2226. *Trichostomum* Fruitstalk terminal. Peristome single, of 16 equal teeth divided to the base, or 32 in pairs. Calyptra mitriform
2227 *Cinclidotus* Fruitstalk terminal. Peristome single, of 32 filiform twisted teeth anastomosing at their base Calyptra mitriform
2228. *Tortula* Fruitstalk terminal. Peristome single, of 32 filiform twisted teeth, nearly free, or more or less united by a tubiform membrane. Calyptra dimidiate.
2229 *Pterogonium.* Fruitstalk lateral Peristome single, of 16 entire equidistant teeth Calyptra dimidiate
2230 *Didymodon.* Fruitstalk terminal Peristome single, of 16 bifid equidistant teeth. Calyptra dimidiate.
2231 *Splachnum.* Fruitstalk terminal Peristome single, of 8 geminate teeth. Theca with an evident apophysis Columella exserted, capitate Calyptra mitriform.
2232 *Conostomum* Fruitstalk terminal Peristome simple; teeth solitary, entire, separate at base, 16 in number, united at the tips

†† Peristome double

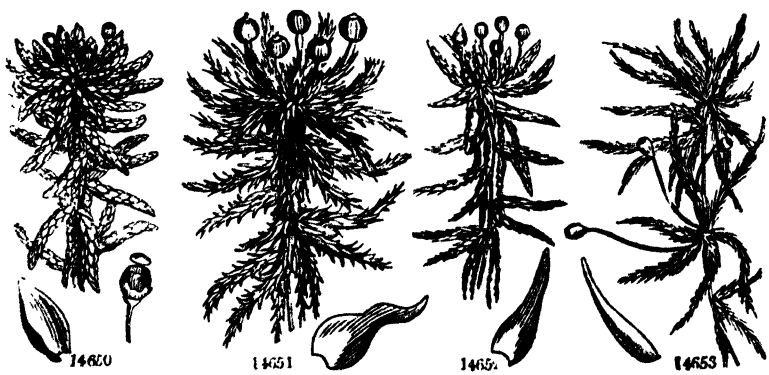
2233. *Orthotrichum* Fruitstalk terminal Peristome mostly double, outer one of 16 teeth, approaching in pairs, inner one of 8-16 ciliary processes or none Calyptra mitriform. Columella capitate
2234. *Zygodon.* Fruitstalk terminal Peristome double or simple, teeth in pairs Calyptra cucullate
2235. *Disphyscium* Fruitstalk terminal. Peristome always double, outer with 16 teeth: teeth obscure. Theca subsessile.

EVAGINULATI.

Systematic Name and Authority	English Name	Popular Character.	Length in inches.	Time of flowering, or when most conspicuous.	Color of the Plant.	Locality.	Reference to Figures
2216. SPHAGNUM *L*	Sphagnum			*Sp* 4—11			
14650 obtusifolium *Ehr*	blunt-leaved	aquatic	7	all months	Y G	bogs	Musc brit t 4
α vulgāris Hooker	*common*	aquatic	7	all months	Y G	bogs	Eng bot t. 1405
S latifolium E B							
β minus Hooker	*small*	aquatic	3	all months	Y G	bogs	Schwægr sup t 3
γ fluitans Turner	*floating*	aquatic	24	all months	Y G	bogs	
14651 squarrōsum *Web*	squarrose	aquatic	7	all months	Y G	bogs	Musc brit t 4
14652 acutifōlium *Ehr*	sharp-leaved	aquatic	6	all months	Y G	bogs	Musc brit t 4
capillifōlium E B							
14653 cuspidātum *Ehr*	cuspidate	aquatic	6	all months	Y G	bogs	Musc brit t 4

VAGINULATI OLOCARPI.

2217 PHASCUM *L*	Phascum.			*Sp* 11—39			
14654 serrātum *Schreb*	serrated	solitary	½	spring	Pa G	shady banks	Musc brit t 5
stolonīferum E B t 2106							



History, Use, Propagation, Culture,

2216. *Sphagnum* A name employed by Pliny to distinguish some kind of moss that grew upon trees In this genus the theca is sessile, being entirely destitute of a real fruitstalk That which appears like one is the footstalk of the receptacle, which in most of the Sphagna is so much lengthened out as greatly to exceed the verticillated leaves. All the species agree in the peculiar structure of the leaves, of which the reticulation is

2236 *Buxbaumia.* Fruitstalk terminal. Stem none Theca oblique, gibbous. Peristome double · outer one of many filiform, torulose processes, inner one of a conical plicate membrane Calyptra mitriform
2237. *Funaria* Fruitstalk terminal Peristome double, oblique, outer and inner ones each of 16 teeth, opposite to each other
2238 *Bartramia* Fruitstalk terminal Theca subglobose Peristome double. outer one of 16 teeth, inner one of a membrane cleft into 16 bifid segments Calyptra dimidiate.
2239 *Pohlia* Fruitstalk terminal Peristome double: teeth separate acute; membrane with 16 processes, which are entire at the end without cilia
2240 *Bryum* Fruitstalk terminal Peristome double · outer one of 16 teeth, inner one of a membrane cut into 16 equal segments, with filiform processes often placed between them Calyptra dimidiate
2241 *Polytrichum.* Fruitstalk terminal Peristome double outer one of 32 or 64 equidistant incurved teeth, inner one of a dense horizontal membrane connected with the outer teeth. Calyptra dimidiate

B *Theca lateral.*

2242 *Anictangium.* Fruitstalk lateral Calyptra mitriform Mouth of theca naked
2243 *Fissidens* Fruitstalk lateral Peristome simple Calyptra smooth Teeth bifid.
2244 *Leucodon* Fruitstalk lateral Peristome simple, with bifid processes
2245 *Fontinalis* Fruitstalk lateral Peristome double outer one of 16 teeth, inner one of 16 ciliary processes formed by transverse bars into a reticulated cone Calyptra mitriform
2246 *Anomodon* Fruitstalk lateral Peristome double the first of 16 teeth, the second of 16 ciliary processes arising from the teeth Calyptra dimidiate
2247 *Neckera* Fruitstalk lateral Peristome double outer one of 16 teeth, inner of 16 ciliary processes, connected only at the base by a short membrane Calyptra dimidiate
2248 *Daltonia* Fruitstalk lateral Peristome double membrane figured, with 16 cilia and reflexed teeth
2249 *Hookeria* Fruitstalk lateral Peristome double outer one of 16 teeth, inner one of a membrane cut into 16 entire segments Calyptra mitriform
2250 *Leskea* Fruitstalk lateral Peristome double Membrane with 16 entire processes Teeth erect or reflexed. Calyptra cucullate
2251 *Hypnum* Fruitstalk lateral Peristome double outer one of 16 teeth, inner of a membrane cut into 16 equal segments, with filiform processes often between them Calyptra dimidiate

TRIBE III VAGINULATE SCHISTOCARPI

Theca more or less stalked, with perichætial leaves, valvular

2252. *Andreæa.* Theca 4-valved · valves cohering at apex, and adnate with the persistent lid.

EVAGINULATI

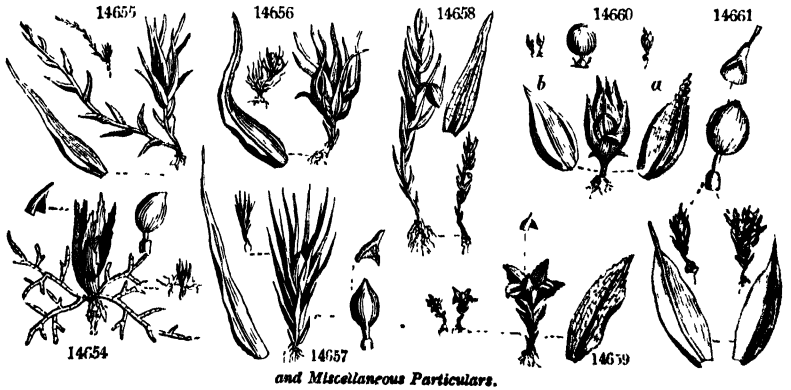
14650 Branches tumid, Leaves ovate obtuse
α Stems loosely tufted, Leaves closely imbricated

β Stems densely tufted, Leaves closely imbricated
γ Stems much lengthened, Leaves scattered remote
14651 Branches attenuated at their extremities, Leaves ovato-acuminate squarrose recurved
14652 Branches attenuated, Leaves ovate-lanceolate crowded

14653 Branches attenuated, Leaves lanceolato-subulate lax

VAGINULATI OLOCARPI.

* *Shoots creeping, leafless, articulated, branched*
14654 Shoots branched conferva-like, Perichætial leaves lanceolate serrated nerveless



and Miscellaneous Particulars.

large, and the interstices or areolæ oblong, interrupted by transverse lines. The leaves are always destitute of a nerve, and are of a singularly whitish color.
2417. *Phascum.* One of the ancient Greek names of the moss was φασκον. This genus contains species

14655 alternifólium *Dicks*	alternate-leav	solitary	⅛ spring	Pa G	moist banks	Musc brit t 5	
14656 cris'pum *Hedw*	crisp	solitary	¼ spring	Pa.G	banks and fi	Musc brit t 5	
multicap sulâre E B 618							
14657 subulátum *Lam*	subulate	small patches	⅛ spring	L G	dry banks	Musc brit t 5	
14658 axillâre *Dicks*	axillary	lax sol	¼ spr and sum	Y G	moist banks	Musc brit t 5	
strictum E B t 2093							
14659 patens *Hedw*	spreading	solitary	⅛ spr and sum	Pa G	clay fields	Musc brit t 5	
14660 muticum *Schreb*	pointless	solitary	⅛ spr and sum	Bt G	moist banks	Musc brit t 5	
α május Hooker	*large*	solitary	⅛ spr and sum	Bt G	moist banks	Eng bot t 2027	
β minus Hooker	*small*	solitary	⅛ spr and sum	Bt G	sea coast	Musc brit t 5	
14661 cuspidátum *Schreb*	cuspidate	solitary	¼ spr and sum	Gr	hed moi ba	Musc brit t 5	
α apiculátum Hooker	*pointed*	solitary	⅛ spr and sum	Gsh	hed moi ba	Eng bot t 2025	
Schreberiánum E B t 2026							
cuspidátum E B t 2259							
β piliferum	*pilíferous*	solitary	¼ spr and sum	Hoa	sandy downs	Eng bot t 1888	
14662 bryoides *Dicks*	Bryum like	solitary	¼ spr and sum	G	banks and fi	Musc brit t 5	
14663 rectum *Withering*	upright	solitary	⅛ spr and sum	L G	moist banks	Musc brit t 5	
14664 curvicollum *Hedw*	bent-necked	solitary	⅛ spr and sum	L G	moist banks	Musc brit t 5	

2218 SCHISTOSTE'GA *Mohr* Schistostega *Sp* 1

14665 pennáta *Hooker*	feathery	solitary	¼ spring	L G	banks, Dev	Musc brit t 8	
Gymnóstomum pennátum L B t 2219							

2219 GYMNO'STOMUM *Hedw* Gymnostomum *Sp* 13—47

14666 lappónicum *Hedw*	Lapland	dense tufts	1 spring	D G	alpine rocks	Musc brit t 6	
14667 æstivum *Hedw*	summer	thick tufts	1½ spring	Bt G	wet rocks	Musc brit t 6	
luteolum E B t 2201							
14668 viridis'simum L B	very green	tufts	⅝ summer	Bt G	trees & rocks	Musc brit t 6	
Grim'mia Forsteri E B 2225							
14669 curvirós'trum *Hedw*	bent-pointed	tufts	1½ spring	Pa G	moist rocks	Musc brit t 6	
stelligerum E B t 2202							
14670 rupes'tre *Schwægr*	rock	large tufts	1½ spr and sum	D G	moi mou ro	Schwæg sup t 11	
æruginósum L B t 2200							
14671 Griffithsiánum E B	Griffith's	little spots	¼ summer	Pa G	mountains	Musc brit t 7	
14672 ovátum *Hedw*	ovate	broad patches	½ all months	Gr	ba & wa tops	Musc brit t 7	
α vulgâre Hooker	*common*	broad patches	½ all months	Gr	ba & wa tops	Eng bot t 1980	
β gracile Hooker	*slender*	broad patches	½ all months	Gr	ba & wa tops		
14673 truncatulum *Haffm*	truncate	patches	⅛ all months	Bt G	fields & ban	Musc brit t 7	
intermédium E B t 1950							
14674 Hoimi *Hedw*	Hoim's	small patches	1 summer	Rsh	marit banks	Musc brit t 7	
oblíquum E B t 1407							
14675 cónicum *Schwægr*	conical	little spots	¼ summer	Pa G	fields, S Irel	Musc brit t 7	
14676 fasciculáre *Hedw*	bundled	patches	½ summer	Y G	clayey banks	Musc brit t 7	
14677 pyriforme *Hedw*	pyriform	dense patches	¼ summer	Bt G	moist places	Musc brit t 7	
14678 tenue *Hedw*	slender	little patches	1¼ spring	Bt G	sandst rocks	Musc brit t 7	
paucifolium E B t 2506							
14679 Dommánum *Smith*	Domm's	solitary	⅛ spring	Pa G	Scotch rocks	Musc brit t 7	

2220 HYMENO'STOMUM *R Brown* Hymenostomum *Sp* 1

14680 micro-tómum *R Br*	small mouthed	little-patches	¼ spring	Pa.G	banks	Musc brit t 7	
Gymnostomum microstomum E B t 2215							

2221 TE'TRAPHIS *Hedw* Tetraphis *Sp* 2—5

14681 pellucida *Hedw*	pellucid	wide tufts	1 all months	Pa G	dry banks	Musc brit t 8	
14682 Browniána *Greville*	Brown's	solitary	¼ all months	Ol G	roofs of caves	Musc brit t 8	
ovâta Hooker							
Grim'mia Browniana E B t 1422							



History, Use, Propagation, Culture,

which are not only amongst the minute of mosses, and often scarcely discernible to the naked eye, but also extremely dissimilar in appearance to each other

2218 *Schistostega* From σχίζω, to split, and στέγη, a covering, in allusion to the singular character of the lid splitting at the margin The only known station for this minute moss is said by Dr Hooker, from whose Muscologia Britannica, many of the remarks in this work upon the genera of mosses are borrowed, to be in the road from Zele to South Lawton church, near Okehampton, Devonshire

2219 *Gymnostomum* From γυμνος, naked, and στομα, the mouth, in allusion to the processes called teeth, from the orifice of the theca Very minute plants, many of which are barely distinguishable by the naked eye

** *Creeping shoots none*

14655 Leaves entire lanceolato-subulate, Innovations elongated
14656 Leaves lanceolato-subulate flexuose crisped when dry

14657 Leaves subulato-setaceous straight their nerve disappearing below the point
14658 Leaves lanceolato-subulate straight their nerve disappearing below the point, Fruit at length lateral

14659 Leaves patent narrow-ovate serrated their nerve disappearing below the point
14660 Leaves ovato-rotundate acuminate concave connivent, the nerve reaching to the point
α Leaves sharply serrated at point
β Leaves entire
14661 Leaves ovato-acuminate erect their nerve reaching to the point
α Leaves apiculate

β Leaves hair-pointed
14662 Leaves ovate apiculate, Thecæ elliptical
14663 Leaves ovate with a short point, Thecæ globose, Fruitstalk nearly erect
14664 Leaves narrow-ovate acuminated, Thecæ globose, Fruitstalk curved

14665 The only species

* *Stem long, branched.*

14666 Leaves linear lanceolate crisped when dry perichætial broadly ovate, Thecæ turbinate striated
14667 Lvs lanc twist. when dry the perichætial ones broadly ovate, their marg involute, Thecæ obl smooth

14668 Leaves broadly lanceolate, Thecæ ovate, Lid obliquely rostrate

14669 Leaves subulate, Thecæ turbinate ovate, Lid obliquely rostrate

14670 Lvs lin subul spreading flexuose twisted when dry, Thecæ ovate, Lid conical rost. shorter than thecæ

** *Stems short simple*

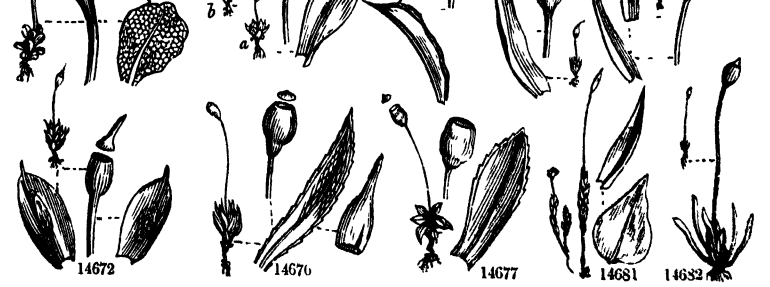
14671 Lvs obov-rotund reticul their nerve disappear below summit, Fruitstalk carnose thick, Lid hemispher.
14672 Lvs ovate erect concave piliferous their nerve furnished with a granuliferous membrane, Lid rostrate
α Thecæ ovate
β Thecæ oblong
14673 Leaves ovate apiculate patent nearly plane, Lid obliquely rostrate

14674 Leaves lanceolate serrated at the point, Thecæ ovato-oblong, Lid obliquely rostrate

14675 Leaves oblongo-obovate apiculate, Thecæ ovate, Lid conical obtuse
14676 Leaves oblongo-acum nearly plane subserrated margined, Thecæ pyriform, Lid plane submammillate
14677 Leaves ovato-acum concave serrated not margined, Thecæ roundish obovate, Lid convex shortly rost
14678 Stem scarcely any, Outer leaves very short ovate lanceolate inner ones linear lanceolate, all erect obtuse with a strong nerve disappearing below the summit, Thecæ oblong
14679 Stem very short, Leaves subulate straight, Thecæ turbinate

[subulate incurved
14680 Lvs broadly subul : marg involv. above flexuose crisped when dry, Thecæ ellipt. contracted at mouth, Lid

14681 Stems elongated, Leaves ovato-acuminate those of the perichætium lanceolate, Thecæ cylindrical
14682 Stems very short, Lvs few lin slightly incrassated upw those of perichætium ovate obtuse, Thecæ ovate



and Miscellaneous Particulars

2420 *Hymenostomum.* From ὑμην, a membrane, and στομα, a mouth. This genus differs from the last in having a membrane stretched across the orifice of the theca, a character first discovered by Mr Brown. Minute plants, with the habit of Gymnostomum.

2221 *Tetraphis* The peculiar character of this genus is to have four teeth (τετρα, four). The lid in the only known species of this genus is remarkably thin and scariose in texture, and the teeth are reticulated, not striated as in most mosses The calyptra is striated or furrowed, the leaves are rigid.

2222. ENCALYPTA. *Hedw* Encalypta — *Sp* 4—7

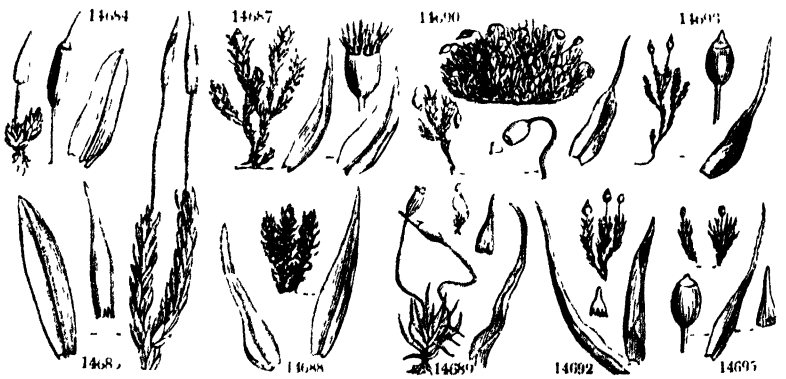
14683 streptocárpa *Hedw*	twisted-fruited	tufts	1½	all months	Bt G	moist rocks	Musc brit t.13
14684 vulgáris *Hedw*	common	wide patches	¼	all months	Dl.G	wall tops	Musc brit t.13
Bryum extinctórium E. B t 558							
14685 ciliata *Hedw*	ciliated	tufts	½	spring	Pa.G	mountains	Musc brit. t 13
α concolor Hooker	*whole-colored*	tufts	½	spring	Pa G	mountains	Eng bot t. 1418
β alpina Hooker	*alpine*	tufts	½	spring	Pa G	Scotch alps	Eng bot. t. 1419
14686 rhaptocárpa *Schwæg*	straight-fruit	tufted	¾	all months	D G	Scot. mount	Gre cryp fl.t.163

2223 GRIM'MIA *Hedw* Grimmia — *Sp* 9—29

14687 apocarpa *Hedw*	alpine	dense tufts	1½	all months	D Ol	rocks & trees	Musc brit t 13
α nigro-viridis Hooker	*dark-green*	tufts	1½	all seasons	D Ol	rocks & trees	Eng bot. t. 1134
β stricta Turner	*straight*	loose tufts	3	all seasons	Rut	mountains	Tu mu hi t 2 f 1
14688 maritima *Turn*	sea-coast	tufted	¾	spr and aut.	Br G	marine rocks	Musc brit t 13
14689 saxícola *Hooker*	rock	subsolitary	½	summer	Bt G	rocks	Musc brit t 13
14690 pulvináta *E B*	cushion	round tufts	¾	all seasons	Br G	house-tops	Musc brit t.1'
14691 leucophæ'a *Grev*	mottled	broad tufts	½	all seasons	D Ol	subalp rocks	Wer trans 4 t 6
14692 Davi'sii *Turn*	Welsh	little patches	¼	spring	Br G	marit. rocks	Musc brit t 13
Encalypta Davi'sii E. B t 1281							
14693 ovátа *Web & Mohr*	ovate	tufts	¾	spr and sum	D G	alpine rocks	Musc brit t.13
Dicránum ovále E. B t 2165							
14694 trichophýlla *Greville*	hair-leaved	tufts	¾	summer	Hon	stone w , Sc	
14695 Doniána *Smith*	Don's	little tufts	½	spring	D G	loose stones	Musc brit. t 13

2224 WEIS'SIA *Hedw* Weissia — *Sp* 19—54

14696 splachnoides *Schwæg*	Splachnu -like	broad tufts	3	summer	D G	Scotch bogs	Grev cryp fl 145
Grim'mia splachnoides E. B t 2164							
Splach'num lingulatum E. B t 2095							
14697 Templetoni *Hooker*	Irish	little patches	½	spring	L.G	banks, Irel.	Musc brit. t 14
Funária Templetoni E. B t 2524							
14698 nuda *Hooker*	naked	little patches	½	summer	L G	clayey soil	Musc brit. t 14
Grim'mia núda E. B t 1421							
14699 nigrita *Hedw*	dark-colored	tufts	¾	summer	Br G	mount. ban	Musc brit t 14
Grim'mia nigrita E. B t 1825							
14700 latifolia *Schwæg*	broad-leaved	tufted	½	autumn	Pa G	Scot mount	Grev cryp fl 140
14701 Starkeána *Hedw*	Starke's	little patches	½	spring	D G	banks and h	Musc brit t 14
Grim'mia Starkeána E. B t 1490							
14702 affinis *Hooker*	kindred	subsolitary	½	spring	Pa G	fields	Musc brit. t 14
14703 lanceoláta *Hook*	lanceolate	subsolitary	½	summer	L G	moist banks	Musc brit t 14
Grim'mia lanceoláta E. B t 1408							
14704 striáta *Hooker*	striated	round tufts	½	spring	Bt G	alpine banks	Musc brit t 15
α minor Hook	*small*	round tufts	½	spring	Bt G	alpine banks	Hed sp mus t 13
β major Hook	*larger*	round tufts	½	spring	Bt G	alpine banks	Schwæg sup t 19
14705 trichodes *Hooker*	hairy	minute patch	½	spring	Bt G	granite roc	Musc brit. t 15
Grim'mia trichodes E. B t 2563							
14706 cirráta *Hedw*	cirrhate	tufts	½	summer	L G	decay wood	Musc brit t 15
Grim'mia cirrata L. B t 2356							
Grim'mia Dicksoni L. B t 1420							
14707 curviróstra *Hook*	bent beaked	tufts	1	all seasons	R G	roc and ban	Musc brit t 14
Grim'mia recurviróstra E. B t 1458							
14708 cris'pula *Hedw*	crisp	dense tufts	½	sum and aut	D G	rocks	Musc brit t 15
Grim'mia cris'pula E. B t 2203							
14709 controversa *Hedw*	disputed	dense patches	½	all seasons	Bt G	banks	Musc brit t.15
Grim'mia controversa E. B t 1367							
14710 calcárea *Hedw*	chalk	subsolitary	½	spring	Ol G	chalk cliffs	Musc brit t 15
Bryum calcareum E. B t. 191							
14711 recurvata *Hooker*	recurved	solitary	½	spring	L G	rocks	Musc brit t 15
Grim'mia recurvata E. B t 1489							



History, Use, Propagation, Culture,

2222. ***Encalypta*** From εν, within, and καλυπτρα, a covering or extinguisher, on account of the unusual size of the calyptra, which entirely encloses the theca, a character by which the genus may be distinguished at first sight. Small plants, forming imperfect tufts of green among moist rocks, or on mud-capped walls

2223 ***Grimmia.*** Named in honor of J. J. C. Grimm, a German botanist, who published a Flora of Eisenach

[Calyptra toothed at the base

14683 Stems elong Lvs. elliptico-lanc somew obt. · nerve not produced beyond sum. Thecæ cylind. spiral striat
14684 Stems short, Leaves oblongo-elliptical obtuse their nerve produced a little beyond the summits, Thecæ cylindrical smooth, Calypt entire at the base
14685 Stems short, Lvs obl acum nerve produced considerably bey. summ. Thecæ cylind. Calyp. tooth. at base
α Leaves apiculate their points of the same color, Theca smooth
β Leaves much acuminate their points diaphanous, Theca smooth
14686 Leaves oblong acute nerve as long or longer than the leaves, Theca straight striated

** Fruitstalks scarcely any*

14687 Stems branched, Leaves ovato-lanceolate recurvo-patent · their margins reflexed, the perichætial ones having their nerve disappearing immediately below their summits, Thecæ ovate sess. Lid shortly rost.
α Leaves broad dark-green
β Stem long, Leaves narrow and rufous [running beyond summits, Theca ov sess Lid shortly rost
14688 Stems short pulvin Lvs lanc acum nearly erect crisp when dry marg. recurv ; perich ones with nerve

*** Fruitstalks longer than leaves*

14689 Stem scarcely any, Lvs lin -subulate crisped when dry, Theca ovate, Fruitst geniculate, Lid rost straight
14690 Stems short pulvinate, Leaves narrow elliptical their margins recurved, points diaphanous piliform, · Theca ovate striated, Fruitstalks curved, Lid conical acuminate
14691 Stem rather short, Lvs ov with long white pilifer points, Footst very short, Theca ov Lid obscurely rost
14692 Stems short, Leaves lanceolate acuminate carin entire much crisped when dry their margins recurved, those of the perichætium broad and convol Theca turbinate, Lid rostrate
14693 Stems slightly branched, Leaves lanceolate-subulate gradually produced into long diaphanous hair-like points their margin incurved, Theca ovate, Teeth of the per tome often perfora and split, Lid rost
14694 Lvs lanc subul carin recurv at edge with a hair-like point, Seta curv and flex Theca ov ellipt Lid rost
14695 Stems short, Leaves lanceolate-subulate produced into long diaphanous hair-like points. their margin incurved, Theca ovate, Teeth of the peristome quite entire, Lid shortly rostrate

** Theca with an apophysis*

14696 Lvs. lingul rounded at top. nerve disappear before summ Theca obov Apophy obcon. Lid convex acum

14697 Leaves ovato-lanceolate acute, Theca (with the apophysis) narrowly pyriform, Lid nearly plane

*** Theca destitute of an apophysis*

1 Leaves ovate or lanceolate

14698 Stems scarcely any, Leaves ovato-lanceolate nerveless, Theca ovate gibbous on one side cernuous

14699 Stems elongat Lvs lanc acum Theca obovate cernuous gibbous sulcate, Lid hemispheric obtusely point [erect-cernuous, Lid rostrate
14700 Stem simple short, Leaves broad and bluntly ov with a short point imbric Nerve shorter than leaf, Theca
14701 Stems very short, Lvs ov with an excurr nerve, Theca ov erect, Lid conical, Teeth of perist subul acute

14702 Stems very short, Lvs ov with an excurr nerve, Theca ov erect, Lid conic Teeth of perist subulate acute
14703 Stems somew elongat Lvs ov with an excurr nerve almost piliferous, Theca ovate, Lid obliquely rostrate

2 Leaves linear or subulate

14704 Leaves linear denticul crisped when dry, Theca ovato-turbinate sulcate erect, Lid obliquely subulate
α Leaves linear-subulate subserrulate
β Leaves broad-linear denticulate
14705 Stems scarcely any, Leaves subulato-setaceous entire, Theca ovate striated, Lid rostrate

14706 Leaves broadly subulate crisped when dry. their margins recurved, Theca ovate, Lid rostrate

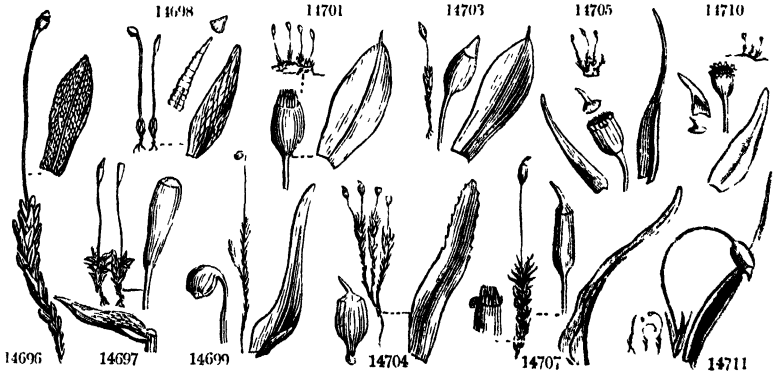
14707 Leaves linear-subulate, Theca ovate cylindraceous, Lid rostrate

14708 Stems divid Lvs from a broad base lanc -subul crisp when dry marg incurv Theca ov ellipt Lid rostrate

14709 Stems nearly simple, Lvs lin -subul crisp when dry their marg incurv Theca ovato-ellipt Lid rostrate

14710 Stems scarcely any, Lvs from a broad base lin obt thick with a very broad nerve, Theca turbin Lid rost

14711 Stems scarcely any, Leaves subulate, Theca broadly ovate, Fruitst ilks curved, Lid rostrate

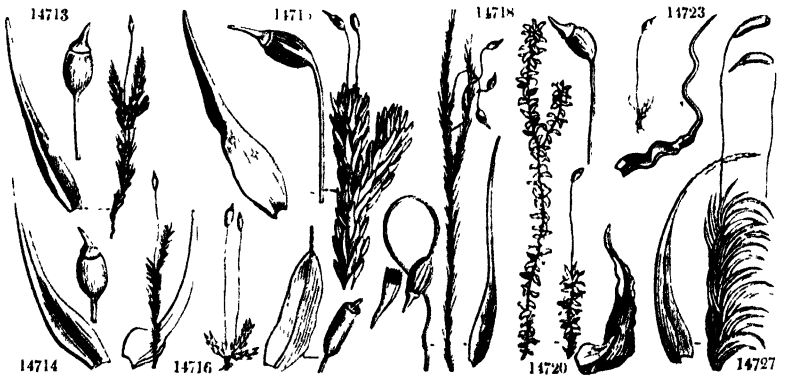


and Miscellaneous Particulars

Plants growing in roundish tufts, and nearly related to Trichostomum G pulvinata is the moss which forms those little cushion-like dark brownish green lumps which are so commonly spotted over the tops of old walls and houses

2224. *Weissia* In honor of J W. Weiss, a German cryptogamic botanist There was also a John

14712 pusilla *Hedw*	dwarf	dense patches	¼	spring	Bt.G	calcar rocks	Musc brit. t.15
Grim'mia pusilla E. B t 2551							
14713 verticillàta *Schwæg*	whorled	tufts	½	summer	Bt.G	moist rocks	Musc brit t 15
Grim'mia verticillata E B t 1258							
14714 acúta *Hedw*	acute	tufts	1	sum. and aut.	Ol G	moist rocks	Musc. brit. t.15
Grim'mia acúta E. B t 1044							
2225 DICRA'NUM *Hedw*	Dicranum			*Sp* 23—47			
14715 glaúcum *Hedw*	glaucous	broad tufts	4	autumn	W G	moors	Musc brit t 16
14716 latifolium *Hedw*	broad-leaved	subsolitary	½	spring	Bt.G	moun banks	Musc. brit. t.16
Trichóstomum pulíferum E. B 2536							
14717 longifolium *Hedw*	long-leaved	dense tufts	3	win and spr	Bt.G	wet rocks	Musc brit t 16
14718 flexuósum *Hedw*	flexuose	loose tufts	3	win and spr	D G	peat bogs	Musc brit t.16
14719 flavéscens *Smith*	yellowish	tufts	3	win and spr	Y G	river banks	Musc. brit t 17
14720 squarrósum *Schrad.*	squarrose	large masses	3	summer	Y	wet san pl	Musc brit t 17
14721 pellúcidum *Swz.*	pellucid	tufts	1½	spr and sum	D G	wet san pl	Musc brit. t 17
14722 spúrium *Hedw.*	spurious	dense masses	4	summer	Bt G	bogs	Musc brit t 17
14723 cris'pum *Hedw.*	crisp	loose patches	¼	all months	Bt G	moist banks	Musc brit t 17
14724 Scottiánum *Turn*	Scott's	large masses	2½	sum. and aut	Bt G	mount rocks	Musc brit t 18
flagellàre E B t 1977							
14725 polycárpon *Ehr*	prolific	round tufts	¼	all seasons	Bt.G	rocks	Musc brit t 18
Bruntón E. B t 2509							
14726 undulátum *Ehr*	wave-leaved	tufts	2½	summer	Bt G	woods & roc	Musc brit t 18
14727 scopárium *Hedw*	rock	patches	3	win and spr	Dp G	woods & ban	Musc brit t 18
α majus Hooker	*large*	patches	3	win and spr	Dp G	woods & ban	Eng bot t 354
β fuscescens Turner	*brownish*	tufts	2	spring	Brsh	heathy plac.	Eng bot t 1597
14728 varium *Hedw*	various	loose patches	¼	spring	D G	moist banks	Musc brit t 17
α viride Hooker	*green*	loose patches	¼	spring	D G	moist banks	Eng bot t 1215
callistomum Smith Fl Brit							
β rufescens	*brown*	loose patches	¼	spring	Rsh	moist banks	Eng bot t 1216
γ lividum Hooker	*livid*	loose patches	¼	spring	Lur		
14729 tulvellum *Smith*	tawny	dense tufts	¾	spr and sum	Bt G	crev of rocks	Grev cryp fl 188
1430 heteromállum *Hedw*	interrupted	large patches	¼	spring	Bt G	moist banks	Musc brit t 18
14731 subulátum *Hedw*	subulate	loose patches	¼	spring	Bt G	moist banks	Musc brit t 18
14732 cerviculátum *Hedw*	hooked	small spots	¼	spring	Str	bogs	Musc brit t 16
pusillum L. B t 2491							
uncinátum E. B t. 2261							
14733 virens *Hedw*	green	tufts	1½	all seasons	Bt G	mount mar	Musc brit t 17
14734 strumíferum *Smith*	thick-necked	tufts	1	all seasons	Bt G	mount mar	Musc brit t 17
14735 falcátum *Hedw*	falcate	large patches	2	spr and aut.	Bt G	alpine rocks	Hoo mus br t 17
14736 Schreberiánum *Hedw*	Schreber's	tufted	¼	spring	Bt G	mou pl , Scot	Grev cryp fl 116
14737 Stárkii *Web & Mohr*	Starke's	tufts	1	spring	Bt G	alpine rocks	Musc brit. t.17
2226 TRICHOSTOMUM *Hedw*	Trichostomum			*Sp* 9—18			
14738 pátens *Schwægr*	spreading	deep patches	6	all seasons	Hoa	mountains	Musc brit t 19
Dicranum pátens E B t 1990							
Tr obtúsum Fl Brit							
1430 lanuginósum *Hedw*	woolly	deep tufts	4	all seasons	Hoa	stony mount	Musc brit t 19
14740 canéscens *Hedw*	hoary	tufted creep	1½	all seasons	Y G	heaths	Musc brit t 19
T crinoides E. B t 1991							
14741 heterósticum *Hedw*	branched	broad tufts	1	all seasons	Hoa	ston on mo	Musc brit t 19
14742 microcárpon *Hedw*	small-fruited	deep patches	2	all seasons	Ol	rocks	Musc brit t 19



History, Use, Propagation, Culture,

Christopher Weiss, who published, in 1712, a Dissertation on the pomegranate These plants are chiefly found in wet places, most frequently in alpine countries, in habit they resemble Gymnostomum

2225 *Dicranum.* Named by Hedwig, from διχαινω, forked, in allusion to the division of the teeth. This is one of the finest genera of mosses, containing many species which form broad masses of turfy vegetation, giving a decided character to the face of the earth where they grow Like most of the genera of this order,

14712 Stems scarcely any, Leaves subulate, Theca ovate, Fruitstalks always erect, Lid rostrate

14713 Stems branched, Leaves broadly subulate nearly flat rather flaccid, Theca ovate, Lid rostrate

14714 Stems branched, Leaves subulate-setaceous subsecund rigid canaliculate, Theca turbinate, Lid rostrate

** Theca without a struma.*

14715 Stems branched fastigiate, Lvs erecto-patent ov lanc straight nerveless ent Theca ov cern Lid rostrate
14716 Stems short, Leaves oblong concave entire apiculate or piliferous, Theca erect ovato-oblong, Lid rostrate [nearly erect, Lid rostrate
14717 Stems elongat Lvs very long subul -setace falcato-secund serrul nerve very broad, Theca oblongo-ovate
14718 Stems nearly simple rigid, Leaves lanceolato-subulate acuminated straight their nerve very broad, Fruitstalks flexuose, Theca ovate striated, Lid rostrate
14719 Stems branched, Lvs long lanc serrul point in all directions crisp when dry, Theca obl erect, Lid rost
14720 Stems somewhat branched, Leaves from a broad sheathing base lanceolate obtuse recurved and patent directed to every side crisped when dry, Theca ovate subcernuous, Lid rostrate
14721 Stems branched, Leaves lanceolate their margins slightly undulated serrated rather obtuse pointing in all directions, Theca ovate subcernuous, Lid rostrate
14722 Stems elongated, Leaves fasciculated concave erecto-patent directed to every side ovate the superior ones lanceolate serrulate, Theca oblong curved, Lid rostrate
14723 Stems short, Leaves from a sheathing base setaceous nearly distichous flexuoso-recurved crisped when dry, Theca erect ovate, Lid with a long beak
14724 Stems branched, Leaves erecto-patent directed to every side subulate their margins plane subserrated crisped when dry, Theca ovate cylindraceous nearly erect, Lid with a long beak
14725 Stems branched, Lvs patent directed to every side lanceolate-subulate their margins recurved flexuose subserrulate crisped when dry, Theca obovate subcernuous, Lid rostrate
14726 Stems elongated, Leaves nearly plane lanceolate acuminate serrulate at the points transversely undul Theca cylindrac cernuous, Lid with a long beak
14727 Stems elongated, Lvs narr subul canaliculate sec Theca cylindrac arched cernuous, Lid with a long beak
α Leaves falcato secund
β Leaves subsecund narrow crisped when dry
14728 Stems short, Leaves narrow hastato-lanceolate, Theca ovate, Lid rostrate
α Leaves pointing all ways lanceolate green, Theca subcernuous

β Leaves subsecund lanceolate subulate reddish, Theca erect
γ Leaves subsecund subulate lurid, Theca subcernuous [stalk, Lid short rostrate
14729 Stem near simp Lvs very long subul setac nerve obsolete percurr Theca obov erect striat with a short
14730 Stems branched, Leaves subul falcato-secund nearly ent Theca ovate subcernuous, Lid with a long beak
14731 Stems branch Lvs from a broad sheath base subul setace sec ent Theca ov subcern Lid with long beak

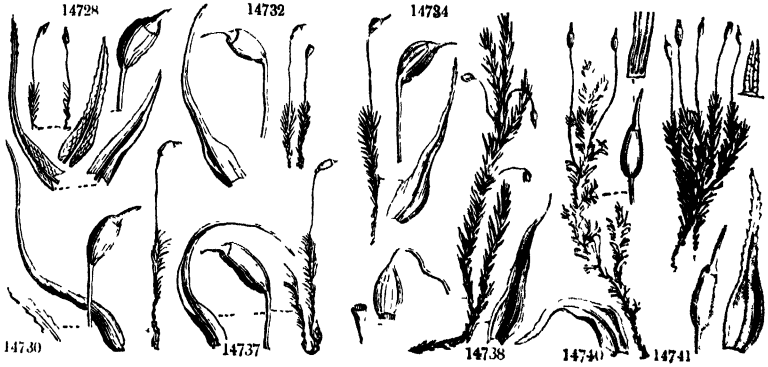
*** Theca with a struma*

14732 Stems short, Lvs lanc subul ent subsec . nerve very broad, Theca ovate subcern strumose, Lid rost

[tions, Theca furrowed oblongo-ovate subcern strum Lid rost
14733 Stems elongat Lvs from a broad sheath base subul ent marg plane crisp when dry pointing in all direc-
14734 Stems elongated, Leaves from a broad sheathing base subulate entire their margins plane crisped when dry pointing in all directions, Theca furrowed oblongo-ovate subcernuose strumose, Lid rostrate
14735 Stems nearly simple, Lvs long lanc subulate falcato-secund nearly ent Theca ov subcern strum Lid rost.
14736 Stem erect simple, Lvs spread long subul dilated and amplexic at base, Theca ov cernu strum Lid rost.
14737 Stems somew branch Lvs lanc subul falcato-secund entire, Theca oblongo-ov suberect strum Lid rost.

14738 Stems elongat Lvs. lanc acuminated carinated margins recurv Theca ovate, Fruitst curved, Lid conic

14739 Stems elongated subpinnate, Leaves lanceolato-subulate acuminate their long diaphanous points serrat, margins recurved, Theca ovate, Fruitstalk short on lateral branches, Lid rostrate
14740 Stems elongated irregularly branched, Leaves ovato-lanceolate their diaphanous acuminated points slightly serrated, Theca ovate, Teeth of the peristome very long and filif Lid subulate
14741 Stems elongated branched, Leaves ovato-lanceolate their diaphanous acuminated points slightly serrat Theca oblong, Teeth of the peristome rather short, Lid rostrate
14742 Stems elongated branched, Leaves lanceolate their diaphanous acuminated points slightly serrated, Theca oblong, Teeth of the peristome rather short, Lid rostrate

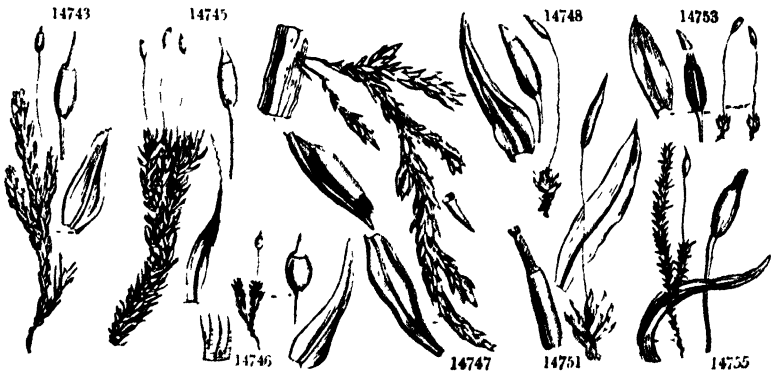


and Miscellaneous Particulars

there are species included in this which vary considerably from the common appearance of the group The most distinct of these forms is, however, removed, after the example of the German muscologists, to Dissodon, which see

2226 *Trichostomum* From θριξ τριχος, hair, and στομα, a mouth, the divisions of the mouth of the theca being very fine The species are for the most part dark green mountain plants, with hair-pointed leaves,

14743 aciculáre *Beauv* *Dicránum aciculáre* E. B t 1978	needle-pointed	loose tufts	1½	summer	Ol G	wet rocks	Musc brit t.19
14744 fasciculáre *Schrad*	bundled	broad patches	2	all seasons	Y G	moun rocks	Musc brit t 19
14745 polyphýllum *Schweg* *Dicránum polyphýllum* E. B. t. 1217 *Tr cirrátum* Fl Brit.	many-leaved	round tufts	¾	summer	Bt G	moun rocks	Musc. brit t 19
14746 ellipticum *Hook* *Dicránum ellipticum* E. B t 1901	elliptical	little tufts	¾	spr. and sum	Bt G	moun rocks	Musc brit t.19
2227 CINCLIDO'TUS *Pal de Beauv.*	Cinclidotus.		*Sp* 1				
14747 fontinaloides *Beauv* *Fontinalis minor* E. B t 557	water	floating	5	summer	D.Ol	in streams	Musc brit t. 11
2228 TORTULA *Ehr.*	Tortula		*Sp* 11—38				
14748 rigida *Swz*	rigid	small patches	¾	all seasons	D G	rocks & walls	Musc brit t 12
14749 murális *Hedw.*	wall	tufts	1	all seasons	D G	everywhere	Musc brit. t 12
14750 rurális *Ehr*	country	deep patches	2	all seasons	D G	trees & ban	Musc brit t.12
14751 subuláta *Hedw*	subulate	thick tufts	1½	all seasons	Y G	banks	Musc brit t.12
14752 cuneifólia *Roth.*	wedge-leaved	solitary	¼	spring	Y G	banks	Musc. brit t.12
14753 stellata *Smith*	stellate	solitary	½	spring	Y G	riv sides, Sc	Musc brit t 12
14754 tortuósa *Hedw.*	tortuous	broad masses	1½	spr and sum	L G	limest rocks	Musc brit t 12
14755 tállax *Swz* *T unguiculáta* E B t 2316 *T imberbis* E B t 2329	deciduous	tufts	1½	all seasons	L G	everywhere	Musc brit. t 12
14756 revoluta *Brid* *T nervósa* E B t. 2383	revolute	tufts	¼	spring	L G	banks	Musc brit t.12
14757 unguiculáta *Hooker* *T mucronulata* E B t. 1299 *T aristata* E. B t 2382 *T barbata* E. B t 2391 *T húmilis* E B t. 1663 *T apiculáta* E. B t. 2494	unguiculate	tufts	¼	spring	Dp G	ban & hedg.	Musc. brit. t 12
14758 convoluta *Swz*	convolute	loose patches	¾	spring	Y G	moist banks	Musc brit. t 12
2229 PTEROGO'NIUM *Swz.*	Pterogonium		*Sp* 3—7				
14759 Smith'ii *Swz.*	Smith's	creeping	3	all seasons	Bt.G	trees, S Eng	Musc brit t.14
14760 grácile *Swz*	slender	creeping	1½	all seasons	Bt G	subalp rocks	Musc brit t 14
14761 filiformе *Hedw* *P. cæspitósum* E. B t 2526	filiform	creeping	1½	all seasons	Bt G	mountains	Musc brit. t 14
2230 DIDY'MODON *Hedw*	Didymodon		*Sp* 10				
14762 purpúreum *Hedw* *Bryum bipartitum* E B t. 2357 *Dicránum strictum* E B t. 2204 *Dicránum Col'su* E. B t 2414 *Trichóstomum papillosum* E. B t 2533	purple	large patches	¼	all seasons	Rsh	moist rocks	Musc. brit. t 20
14763 inclinátum *Swz* *Grim'mia inclinata* E. B t 1824	inclining	spots	¾	spring	L G	moun rocks	Musc brit t 20
14764 nervósum *Hook* *Grim'mia atrovirens* E. B t 2015	nerved	loose patches	¼	spring	Dp G	dry banks	Musc brit. t.20
14765 flexifólium *Hook* *Trichóstomum flexifolium* E. B t 2490	bent-leaved	loose tufts	¾	spr and sum	Bt G	banks	Musc brit. 20
14766 rigidulum *Hedw* *Trichóstomum rigidulum* E. B t 2178	rigid	tufts	¾	spr and sum	Br	walls & roc	Musc brit t 20
14767 trifárium *Swz* *Trichóstomum trifárium* E. B t 1707 *Trichóstomum lanoides* E B t 2205	three-rowed	tufted	¾	spr and sum.	Bt G	moist banks	Musc. brit t 20



History Use, Propagation, Culture,

which give them the appearance of being hoary. The genus is nearly related to Grimmia both in natural and essential characters

2227 *Cinclidotus* So called from κιγκλίδωτος, grated, in allusion to the peculiar netted manner in which the cilia of the peristome are united in parcels A plant four to six inches long, growing on stones and wood in streams of water, in many places exceedingly common Its general appearance is that of Trichostomum, whilst the peristome more resembles that of a Tortula

2228. *Tortula* From *torqueo*, to twist, in allusion to the singular manner in which the teeth of the peristome are twisted together Small plants, frequently forming thick tufts, and common in almost all situations from

14743 Stems elongat branch Lvs lanc obt serrulat. at points: nerve vanish before summ. Theca obl Lid rost

14744 Stems elongat branch Lvs lanc ent. · summ never diaphan , margins recurv Theca ovato-obl Lid rost.
14745 Stems branch Lvs lanc -subul. marg recurv.serrat.above very much crisp when dry, Theca obl Lid rost.

14746 Stems short nearly simple, Lvs. lanc acum straight. nerve broad, margins plane, Theca ellipt. Lid rost.

14747 The only species

14748 Stems scarcely any, Lvs patent obl rigid · marg much inflex Nerve broad, Theca obl. Lid conic acum.
14749 Stems short, Leaves patent linear-oblong their margins recurved, Nerve produced beyond the leaf into a white hair like point, Theca oblong, Lid conical acuminate
14750 Stems elongated, Leaves oblong carinated patent and recurved, Nerve terminating in a long generally diaphanous serrated point, Theca oblong, Lid subulate, Teeth of the peristome united below in a tube
14751 Stems very short, Leaves oblongo-lanceolate acuminate the nerve excurrent often forming an apiculus, Theca cylindrical, Lid conico-subul Teeth of the peristome united nearly to the apex into a long tube
14752 Stems scarcely any, Lvs broadly obov conc Nerve terminating beyond top of leaf in a rather long and frequently serrulated point, Theca oblong, Lid shortly rost Teeth of the peristome united at the base
14753 Stems scarcely any, Leaves ovate concave, Nerve running beyond points, Theca ovate striated, Lid rost
14754 Stems elongat branch Lvs lin -subul carinate undulate much twisted when dry, Theca cylind Lid rost
14755 Stems elongat branch Lvs lanc subul pat or recurv . marg refl Theca obl Lid rost. nearly as long as theca

14756 Stems short, Leaves lanceolate acum. the margins of those of the stem remarkably revolute, perichætial leaves sheathing, their sides involute, Theca oblong, Lid rostrate shorter than the theca
14757 Stems branched, Leaves linear-lanceolate obtuse their nerve produced into an apiculus, the marg nearly plane, Theca oblong, Lid rostrate nearly as long as the theca

14758 Stems short, Lvs obl rather obt nerve not protruded, perichæt remarkably convol Theca obl. Lid rost.

[above half-way up, Fruitstalks very short, Lid rostrate
14759 Stems much branch Branches pinn Lvs lingul obt ent crisp when dry marg recurv , nerve reaching
14760 Branches fasciculed curved, Leaves broadly ovate acute concave their margins plane, summits serrated, faintly 2-nerved at the base, Lid conical
14761 Stems irregularly branched curved, Leaves ovate subacuminated concave their margins recurv. serrated; nerve single or forked shoots faint, Lid conical

14762 Stems scarcely branched, Leaves lanceolate acuminate carinate their margins recurved entire, Theca ovato-cylindraceous oblique substrumose furrowed when dry, Lid conical

14763 Leaves bifarious from a sheathing base subulate, Theca ovate inclined, Lid conical

14764 Leaves obovate shortly apiculate their nerve incrassated above, Theca ovate erect, Lid shortly rostrate

14765 Stems more or less elongat Lvs oblon -ov flexu strongly serrat at point, Theca erect cylindrac Lid rost

14766 Leaves closely imbricated on all sides lanceolate much acumin carinate with the rigid nerve running beyond the point, Theca oblongo-ovate erect, Lid rostrate
14767 Leaves rather distant somewhat trifarious linc rather obtuse carinated with the nerve scarcely reaching to the point, Theca oblongo-ovate erect, Lid rostrate



and Miscellaneous Particulars.

the banks of the sea shore to the limits of perpetual snow The character from which the genus has received its designation, will always indicate the species with perfect truth

2229 *Pterogonium.* A name altered by Swartz from the Pterigynandrum of Hedwig, which was contrived to express that the male and female flowers of this genus of mosses are both present on a pinnated stem. An elegant collection of species, generally found in subalpine countries, where they enliven the trunks of trees and rocks with their bright green trailing entangled stems, which have altogether the habit of Hypnum. P Smithii has only been found in this country upon trees in the southern counties, especially in Devonshire.

2230. *Didymodon* So called, by Hedwig, from διδυμος, double, and οδους, a tooth, in reference to the geminate

14768 capilláceum *Schrad* *Trichostomum capillàceum* E. B t 1152	hairy	dense tufts	4	all seasons	Bt G	moun banks	Musc brit. t. 20
14769 heteromállum *Hook* *Grim'mia heteromálla* E B t 1899	variable	patches	½	spring	Y G	mountains	Musc brit. t 20
14770 obscurum *Kaulf*	obscure	broad tufts	1	spr and sum	L G	alpine rocks	Grev crypt 193
14771 glaucéscens *Grevulle*	glaucous	closely tufted	1	sum and wm.	Gl	Scot. moun.	Grev crypt. 127

2231 SPLACH'NUM *L.* Splachnum *Sp* 7—19

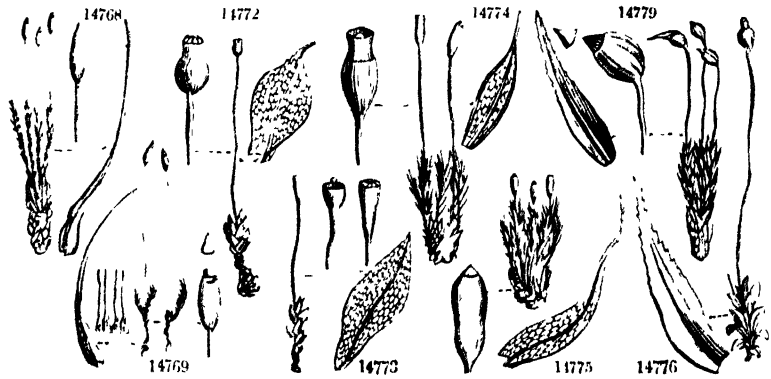
14772 sphæ ricum *Linn* *ovátum* E B t 1590 *rugósum* E B t 2094	spherical	solitary	2	summer	Pa.G	dung of ani	Musc brit. t. 9
14773 ténue *Ducks* *Grim'mia splachnoides* Fl Brit	slender	subsolitary	1½	summer	Pa G	Scot moun	Musc brit t 9
14774 mnioides *Linn*	clustered	tufts	2	all seasons	Bt G	mountains	Musc. brit t 9
α minus Hooker	*small*	tufts	1½	all seasons	D G	mountains	He sti cry 2 t 11
β május Hooker *fastigiatum* E. B t 786	*large*	tufts	2	all seasons	Pa G	mountains	He sti cry 2 t 38
14775 angustátum *Linn*	narrowed	tufts	½	spring	Pa G	cow-dung	Musc brit t 9
14776 ampulláceum *Linn.* *Turneránum* E B t 1116	bottle-headed	solitary	3	sum and aut	Pa G	bogs	Musc brit. t 9
14777 vasculósum *Hedw* *rugósum* E B t 2094 ?	vascular	tufts	2	spring	Pa G	mountains	Grev cryp t 1
14778 Frolichánum *Hedw* *reticulátum* E B t 2507	Frolich's	little tufts	1½	summer	Pa G	mountains	Musc. brit. t. 9

2232 CONOSTOMUM *Swz.* Conostomum *Sp* 1—4

14779 boreále *Swz.* *Grim mia conóstoma* E. B t 1135	northern	small tufts	1	summer	Bt G	moun , Scot.	Musc. brit t 10

2233 ORTHO TRICHUM *Hedw* Orthotrichum *Sp* 13—49

14780 Drummóndi *Hooker*	Drummond's	creeping	1½	summer	Drk	trun of trees	Grev crypt 115
14781 anomálum *Hedw*	anomalous	broad tufts	¾	all seasons	D Ol	rocks & walls	Musc brit t 21
14782 cupulatum *Hoffm* *nùtum* E B t 1325 *anomálum* E B t 1423	naked	tufted	1	all seasons	D Ol	wo & stones	Musc brit t 21
14783 crispum *Hedw*	crisp	round tufts	1	summer	Bt G	trees & ston	Musc brit t 21
14784 Ludwigii *Brudel*	Ludwig's	creep , branc	3	sum and aut	Pa G	smth branc	Grev crypt 133
14785 rupincolo *Funck*	rock	branched, lax	1	may to july	Br	rocks & walls	Grev crypt 107
14786 Hutchinsiæ *Smith*	Miss Hutchins s	tufts	1	spring	Br G	rocks	Musc brit. t 21
14787 affine *Schrad*	akin	tufts	1½	spring	Pa G	trun of trees	Musc brit t. 21
α május Hook	*large*	tufts	1½	spring	Pa G	trun of trees	Eng bot t. 1893
β pùmilum E. B	*dwarf*	tufts	½	spring	Pa G	trun of trees	Eng bot t 2168
14788 diáphanum *Schrad* *aristatum* Turn hib t 9 f 2	tran sparent	tufts	½	spr and sum	Hor	trees & walls	Musc brit t 21
14789 pulchellum *Smith*	pretty	tufts	½	all seasons	L G	trun of trees	Musc brit. t 21
14790 rivuláre *Turn*	rivulet	floating	2	all seasons	Ol G	roc in strea	Musc brit t 21
14791 striatum *Hedw*	striated	tufts	2	all seasons	Bt G	trees	Musc brit t 21
14792 Lyéllii *Hook*	Lyell's	branched	3	all seasons	Y G	trees	Musc brit t 22



History, Use, Propagation, Culture,

arrangement of the teeth of the theca In natural habit, the plants of this genus approach on the one hand to Weissia, and on the other to Dicranum With the former, Dr Hooker observes that two species are liable to be confounded, viz Didymodon inclinatum, and D heteromallum, each of which has but sixteen teeth, and their approximation in parts is with difficulty discoverable D inclinatum is a very rare plant, having been scarcely found any where in this country, except upon the mountains of Connemara, in Ireland

2231 *Splachnum* Σπλαχνος was one of the Greek names of moss Generally elegant little plants, with thecæ of exquisitely beautiful forms The annual species are usually found growing upon dung, while the perennial are found in more permanent situations They are in all cases of rare occurrence S Frolichianum was found on the summit of Ben High, in the Scotch Highlands

2232 *Conostomum* From κωνος, a cone, and στομα, a mouth, the teeth of the theca being always united at

14768 Stems elongated, Leaves nearly distichous subulato-setaceous, Theca erect ovato-cylindrace. Lid conical

14769 Stems rather short, Leaves subsecund subulate, Theca ovate cylindraceous, Lid conical

14770 Leaves lanceolate subulate tortuose when dry, Nerve strong, Theca suberect ovate, Lid obliquely rostrate
14771 Stem branched erect, Leaves lanc. acum. spreading, Nerve reaching apex, Theca oblong with a short lid

14772 Leaves obovato-rotundate acuminate slightly serrated, Apophysis ovate globose wider than the theca

14773 Leaves obovato-acuminate serrated, Apophysis obconical narrower than the theca, Columella exserted

14774 Leaves ovato-lanceolate much acuminat concave entire, Apophysis obovate nearly as narrow as the theca
α Deeper color with shorter stems
β Paler colo with longer stems

[than the leaves
14775 Lvs ovato-lanc much acuminat serrat Apophy obov somew narrow than theca, Fruitst scarcely longer
14776 Leaves ovato-lanceolate acuminated serrated, Apophysis inversely flagon-shaped twice as wide as theca

14777 Lvs rhombo-rotund obt · the nerve disappearing before point, Apophysis globose much wider than theca

14778 Lvs ov. rounded at points nerve disappear before summ Apophysis obovate much narrower than theca

14779 Stems rather short, Leaves lanceolate acuminated carinated slightly toothed

** Peristome without ciliary processes*

14780 Lvs obl lanc slightly curl Theca clav furrow Lid with a long beak, Teeth 16 simple, Calyptra very hairy
14781 Leaves lanceolate erecto patent, Fruitstalks exserted, Peristome of 8 double teeth, Calyptra slightly pilose
14782 Leaves lanc erecto-patent, Theca nearly sessile, Peristome of 16 double teeth, Calyptra slightly pilose

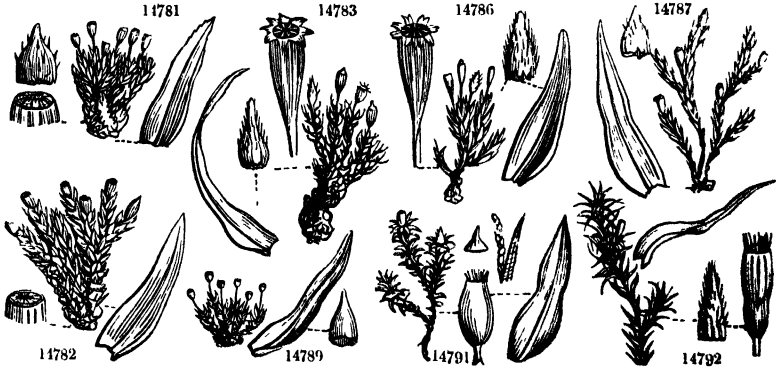
*** Peristome with 8 ciliary processes*

14783 Leaves lanceolato-subulate much crisped when dry, Fruitstalk much exserted, Theca striated, Peristome with 8 ciliary processes, Calyptra very pilose
14784 Leaves erect spreading narrow-lanceolate crisp when dry, Theca pyriform smooth plaited and contracted at orifice, Calyptra very hairy
14785 Lvs erect rigid broad-lanc Theca somew immersed striat toward mouth, Teeth 16, Calyptra very hairy
14786 Leaves lanceolate erect and nearly straight when dry, Fruitstalks much exserted, Theca striated, Perist with 8 ciliary processes, Calyptra very pilose
14787 Leaves patent broadly lanceolate, Theca sessile, Peristome with 8 ciliary processes, Calyptra subpilose

**** Peristome with 16 ciliary processes*

14788 Stems short, Lvs lanc acum points diaphan Theca sess Perist with 16 ciliary process Calypt. subpilose

14789 Stems short, Lvs pat narr lanc crisp when dry, Footst exserted, Perist with 16 slender ciliary processes, Calyptra subpilose
14790 Stems elongated much branched, Leaves broadly lanceolate obtuse, Theca sessile, Peristome with 16 slender ciliary processes, Calyptra smooth
14791 Stems elongated branched, Leaves lanceolate-patent slightly twisted when dry, Theca sess ovate smooth, Peristome with 16 torulose ciliary processes, Calyptra subpilose
14792 Stems elongated much branched, Leaves long linear lanceolate recurvo-patent much crisped when dry, Theca obl striat Peristome with 16 rather broad distinctly jointed ciliary processes, Calypt very hairy

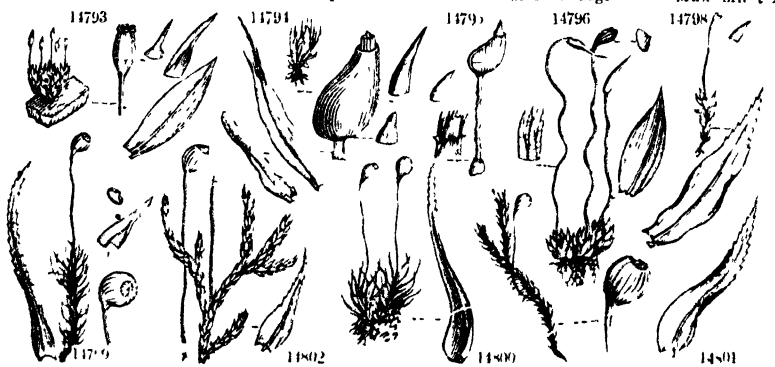


and Miscellaneous Particulars

the points A curious genus, first established by Swartz, in Schrader's Journal The British species approaches in habit to Bartramia fontana It is quite an alpine plant, not growing in Switzerland at a lower elevation than 7 or 8000 feet With us it inhabits the summits of the highest Scotch mountains, particularly in the Breadalbane district.

2233 *Orthotrichum* From ὀρθός, straight, and θρίξ τριχος, hair, on account of the straight, not twisted direction of the teeth of the peristome No genus can be more natural than this, notwithstanding some variations in the peristome of some of the species from the ordinary structure Thus O decipiens and anomalum have no ciliary processes, and O. striatum has them of a peculiar shape and beaded appearance Many of the plants referred to this genus are common occupants of the aged trunks of trees, where they vegetate among the soft earth which collects in the clefts of the dead bark. O Lyellii, which is the finest of our species, is only found on trees in the New Forest.

2234 ZY'GODON *Hook*	Zygodon		*Sp* 1				
14793 conoideum *Hooker*	conical	small tufts	½ spring	Pa.G	trun of trees	Musc. brit	t. 21
Mnium conoideum E. B t 1239							
2235 DIPHYS'CIUM *Mohr*	Diphyscium		*Sp* 1.				
14794 fohósum *Mohr*	leafy	matt patches	½ spring	D G	woods	Musc brit. t. 8	
Buxbaumia foliosa E. B t 329							
2236. BUXBAU'MIA *L*	Buxbaumia.		*Sp.* 1				
14795 aphýlla *L*	leafless	solitary	1 summer	Br	Fir-woods	Musc. brit. t 22	
2237 FUNA'RIA *Hedw*	Funaria		*Sp* 3.				
14796 hygrométrica *Hedw*	Hygrometrical	tufts	1½ winter	Pa G	everywhere	Musc brit. t 20	
14797 Muhlenbérgu *Turn.*	Muhlenberg's	tufts	¾ spring	Pa.G	rocks	Musc brit. t. 20	
14798 hibérnica *Hook*	Irish	tufts	¾ spring	Pa.G	cottage roofs	Musc brit t 20	
2238 BARTRA'MIA. *Hedw*	Bartramia		*Sp* 6—11				
14799 pomiformis *Hedw.*	apple-fruited	tufts	2 summer	Bt G	heaths	Musc brit t 23	
α minor Hooker	*small*	tufts	1½ summer	Bt G	heaths	Eng bot. 998	
β májor Hooker	*large*	tufts	2 summer	Bt G	alp heaths	E b 1526 *Bryss*	
14800 ithyphýlla *Brid.*	stiff-leaved	tufts	1 summer	Bt G	dry banks	Musc brit t 23	
14801 grácilis *Flærke*	slender	deep patches	3 summer	Dp G	alpine rocks	Musc brit t 23	
14802 fontána *Swz.*	fountain	thin tufts	summer	Bt G	wet places	Musc brit t. 23	
α májor Hooker	*large*	thin tufts	6 summer	Bt G	wet places	Dill mus t 44 f 2	
Brýum fontánum E. B t. 390							
β márchica Swz	*dwarf*	tufts	1 summer	Bt.G	wet places	Eng bot. t. 2074	
14803 Halleriána *Hedw*	Haller's	deep patches	6 sum and aut	Bt.G	moun rocks	Musc brit t 23	
14804 arcuáta *Brid.*	arcuate	loose tufts	4 sum and aut.	Bt G	mountains	Musc brit t 23	
2239 POH'LIA. *Hedw*	Pohlia		*Sp* 4—13				
14805 inclináta *Schwægr*	inclined	thin tufts	2 summer	Pa G	wet sandy pl	Musc brit. t. 29	
Brýum turbinátum E. B 1572							
Brýum nigricans E. B 1528							
14806 elongáta *Hedw*	long	subsolitary	1½ summer	Bt G	mountains	Musc brit t 30	
Brýum elongátum E. B t 1663							
14807 cæspiticia *Schw*	tufted	patches	1½ all seasons	Bt G	everywhere	Musc brit t 29	
α major Hooker	*large*	patches	1½ all seasons	Bt G	everywhere	Eng bot t 1904	
β minor Hooker	*small*	patches	1 all seasons	Bt G	everywhere	Eng bot t. 1601	
Br lucolor Eng Bot.							
14808 ventricosa *Schw*	ventricose	deep tufts	4 spr and sum	Br	mar ground	Musc brit t 30	
Brýum ventricósum E. B t 2210							
Brýum bimum E. B t. 1518							
Bryum cubitale E B t 2054							
2240 BRY'UM *Hedw*	Bryum		*Sp* 22—43				
14809 andrógynum *Hedw*	androgynous	patches	1 spring	Y G	wo and ban.	Musc brit t 28	
Mnium androgynum E. B t 1238							
14810 palustre *Swartz*	marsh	deep tufts	4 sum and aut	Pa G	bogs	Musc brit t 29	



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2234 *Zygodon* From *ζυγὸς*, a yoke, and *ὀδους*, a tooth, and so called, we presume, in allusion to the yoking together by pairs of the outer teeth, but the name is unexplained by its authors A singular plant, which was referred to Bryum by Dickson and to Mnium by Smith The stems grow in a tufted manner like Gymnostomum viridissimum, but rarely exceed half an inch in length The peristome is double, the outer consisting of sixteen short obtuse teeth approaching in pairs, which at length become recurved, inner of as many alternate ciliæ lying horizontally over the mouth of the theca

2235. *Diphyscium* From *δις*, twice, and *φυσκιον*, a vesicle, in allusion to the double nature of the shell of the theca A little plant found in woods, and on rocks in alpine situations The stems are exceedingly short, and grow in densely matted patches The theca is large, ovate, gibbous, and oblique Dr Hooker denies the existence of a double peristome, while Hornschuch asserts its presence

2236. *Buxbaumia* A very singular plant, destitute of apparent leaves, and resembling a minute fungus rather than a moss. It was named in honor of John Christian Buxbaum, a German botanist, who published, in 1728, an account of the plants of Asia Minor in five centuries of figures of little merit This plant was originally discovered in the vicinity of Astrachan, afterwards in a fir-wood near Norwich, and lately in two stations in Scotland Its minute size and want of foliage may have caused it to be overlooked

2237. *Funaria* From *funus*, a rope, in allusion to the twisted nature of the strongly hygrometrical fruit-stalk. This genus, though sufficiently characterized by the interior teeth or ciliæ being oblique and placed

14793 The only species

14794 The only species

14795 The only species

14796 Leaves very concave ovate apiculate entire, Nerve excurrent, Fruitstalk curved flexuose
14797 Stems short, Lvs conc ov suddenly acuminat serrat · the nerve disappear. below point, Fruitst straight
14798 Stems elongat Lvs plane ov -lanc gradually acuminat serrat Nerve disappear bel point, Fruitst. straight

** Fruitstalks long, not curved*

14799 Leaves patent subulate strongly serrated the nerve reaching to the summit twisted when dry
α Leaves flexuose
β Leaves crisp [into the substance of the leaf straight when dry, Fruitstalks much elongated
14800 Stems short, Leaves rigid erecto-patent subulate-setaceous almost entire the nerve half-way up passing
14801 Stems elongated, Leaves recurvo-patent lanc candiculate serrat Fruitstalks lateral from innovations
14802 Stems fastig Lvs closely imbricat rig erect broadly ovate or l nc. acuminat nearly plane serr Fruitst lat.
α Leaves broad ovate acuminate [from innovations

*** Fruitstalks very short, curved*

14803 Stems much elongat prolifer Lvs long subul flexu serrat above, Fruitst lat from innov very short curv.
14804 Stems much elongated proliferous, Leaves horizontally patent ovato-lanceol acuminated serrat striated, Fruitstalks very short arcuate at length lateral, Theca smooth

14805 Stems short branched with innovations, Leaves ovate acuminated nearly entire · the margins slightly recurved, the nerve running beyond the points, Theca oblong-pyrif pendulous

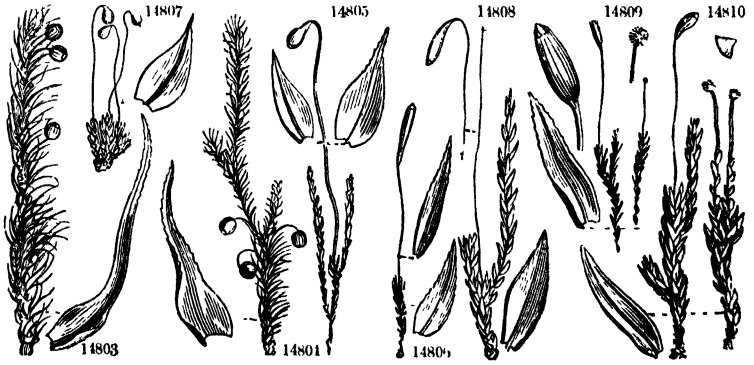
14806 Stems short, Lvs erect oblong-lanc acuminat serrat Nerve reaching to point, Theca elongato-elev inclined
14807 Stems short, Leaves ovate acuminated entire or very obscurely serrated at the points the marg slightly recurved, the nerve reaching to or beyond the point, Theca between ovate and pyriform pendulous

14808 Stems elongated branched with innovations, Leaves oblong acuminated scarcely serrul margins recurved nerve reaching beyond the point, Theca oblongo-obovate pendulous

** Theca sulcated*

14809 Stems nearly simple, Lvs. lanc serrat their marg recurv Theca nearly erect cylind sulcat. Lid conical

14810 Stems much branch Lvs lanc obt ent their margins revolute, Theca ovate oblique sulcat Lid conical



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opposite to those of the outer, is further remarkable in these teeth lying horizontally over the mouth of the theca In the male flowers of Hedwig, the succulent filaments are remarkably clavate, jointed, pellucid, the joints containing greenish granules Funaria hibernica has been found only on the roof of a thatched cottage at Blarney, near Cork, Ireland The long flexuose fruitstalk of F hygrometrica, one of the commonest of mosses in almost every situation, possesses strong hygrometrical qualities

2238 *Bartramia* So called in honor of John Bartram, an Anglo-American, to whose researches in North America the gardens of Europe owe many of their finest trees. He had a son William, who published in 1773, an account of a journey in the interior of North America. This is an elegant genus of mosses, remarkable for their fine capillary light green leaves, and spherical capsules. The genus approaches nearly to Bryum, but differs in almost every species having a spherical capsule, and the sixteen broad segments of the inner peristome, instead of being entire or only perforated, are cleft like the teeth of a Dicranum.

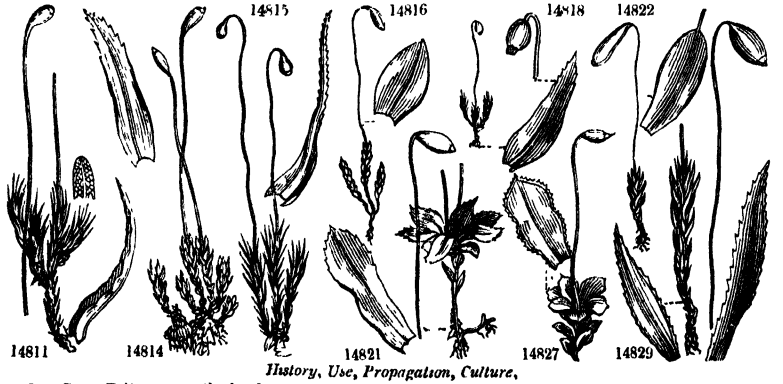
2239 *Pohlia* Named in honor of J E. Pohl, a German botanist. Small plants, often refered to Bryum, with which they entirely agree in habit

2240 *Bryum* One of the ancient Greek names of moss These are all dwarf plants producing capsules in abundance, and generally found growing in wet places In B palustre are found terminal capitular bodies, which much resemble what are called the anthers of B androgynum; but in B palustre they are considered gemmæ, and arise not only from the main stems, but also from the innovations B triquetrum has only been

14811 trichódes *L*	hair-pointed	patches	4	summer	Y G	highl moun	Musc brit t 28
14812 demissum *Hooker*	dwarf	small tufts	½	july, august	Y G	Scot moun	Grev crypt fl 92
14813 triquetrum *Turn*	three-cornered	loose patches	9	july, august	L G	bor. of lakes	Musc brit t. 28
14814 dealbátum *Ducks*	whitened	patches	1½	summer	Cæs.	mount bogs	Musc brit. t 28
14815 pyriformе *Swz* *B aurantum* E B t. 389	pyriform	patches	2	summer	Y G	rocks	Musc brit t 28
14816 juliáceum *Schrad.*	juliform	patches	1½	summer	Y.C	mountains	Musc brit t. 28
14817 crúdum *Huds*	simple	tufts	1½	summer	Bt G	rocks	Musc brit. t 28
14818 carneum *L*	carneous	patches	½	summer	L G	banks	Musc brit t 29
14819 argen'teum *L*	silvery	patches	⅛	spring	Gl	on ground	Musc brit t 29
14820 Ziérii *Ducks.*	Zier's	patches	⅛	spring	Gl	mountains	Musc. brit t 29
14821 róseum *Schreb*	rose-colored	tufts	2	summer	Pk	heaths	Musc brit. t 29
14822 capillare *L* *B stellare* E B 2434	capillary	patches	1	summer	Bt G	heaths	Musc brit t. 29
14823 nútans *Schreb* *Brýum compáctum* E B. t 1527?	nodding	little patches	3	summer	Bt.G	walls & hea	Musc brit t 29
14824 alpinum *L*	alpine	tufts	2	summer	Pu	subalp rocks	Musc brit t 28
14825 punctátum *Schreb*	dotted	solitary	3	sum and aut	L G	mar places	Musc brit t 30
14826 ligulátum *Schreb*	ligulate	solitary	4	sum and aut	L G	moist banks	Musc brit t 30
14827 rostrátum *Schrad*	rostrate	solitary	2	summer	L G	subalp coun	Musc brit t 30
14828 marginátum *Ducks*	edged	tufts	2	summer	Y G	shady banks	Musc brit t 31
14829 hórnum *Schreb*	lurid	deep tufts	5	summer	Y G	mar places	Musc brit t 31
14830 cuspidátum *Schreb*	cuspidate	subsolitary	2	summer	L G	wo & walls	Musc brit t 31

2241 POLYTRICHUM *L* Polytrichum *Sp* 10—22

14831 undulátum *Hedw*	wave-leaved	solitary	4	autumn	Ol G	moist banks	Musc brit t 10
14832 hercynicum *Hedw*	Hercynian	solitary	3	autumn	Ol G	mountains	Musc brit t 10
14833 piliferum *Schreb*	hair-pointed	solitary	3	autumn	Ol G	heaths	Musc brit t 10
14834 juniperinum *Willd* *P strictum* E B 2135	juniper	solitary	4	autumn	Ol G	heaths	Musc brit t 10
14835 septentrionále *Swz* *P sexangulare* E B 1906	northern	solitary	3	autumn	Ol G	Scot moun	Musc brit t 10
14836 commúne *L*	common	broad masses	9	all seasons	Ol G	heaths	Musc brit t 10
α yuccæfólium Fhr	*Aloe-leaved*	broad masses	9	all seasons	Ol G	heaths	Eng bot t 1197
β attenuátum Menz *P gracile* E. B t 1827	*narrowed*	broad masses	4	all seasons	Ol G	heaths	Eng bot t 1198
14837 alpinum *L*	alpine	patches	4	summer	Ol G	alp regions	Musc. brit. t 11
14838 urnigerum *Menz*	urn-bearing	scattered	4	summer	Gl	sides of strc	Musc brit t 11
14839 aloides *Hedw*	stiff-leaved	scattered	1½	autumn	Br G	heaths	Musc brit t 11
α májor Hooker *P rubéllum* E B t 1939	*large*	scattered	1½	autumn	Br G	heaths	Eng bot. t. 1649
β Dicksóni Turner	*Dickson's*	scattered	1	autumn	Br G	heaths	Eng bot t 1605



History, Use, Propagation, Culture,

found in Great Britain upon the borders of some lake in the north of Ireland By Mohr it is considered a distinct genus, and called Diplocomium.

** *Theca destitute of furrows*

A *Exterior peristome shorter than interior*

14811 Stems somew. branch Lvs lin obt ent reticulat Theca obovate recurved subcernu Fruitstalk very long
14812 Stems branched, Leaves ovate cuspidate reticulated shorter than nerve, Theca curved pyriform pendulous
14813 Stem elongat branch Lvs lanc carin ac serrated reticulat. Theca pyrif erecto-cernu Fruitst. very long
14814 Stems short, Leaves lanceolate acute plane serrated at the points reticulated, Theca pyriform nearly erect

B. *Peristomes equal*

§ 1 *Leaves without a thickened margin*

14815 Stems slightly branched, Leaves subul -setaceous flexuose serrated nerve very broad, Theca pyrif. pendul

14816 Stems branched, Leaves closely imbricated broadly ovate concave entire obtuse nerve running nearly to the point, Theca obovato-cylindraceous pendulous
14817 Stems simple, Leaves rigid lanceolate the upper ones the narrowest and longest, all of them plane serrul nerve disappearing below the summit, Theca oblong-subpyriform cernuous
14818 Stems simple, Lvs lanc reticulat slightly serrul at point nerve disappear bel summ Theca obov pendul
14819 Stems branched, Leaves closely imbricated broadly ovate suddenly and sharply acuminated subserrulate very concave nerve disappearing below the point, Theca ovato-pyriform pendulous
14820 Stems branch Leaves closely imbricated more or less broadly ovate acuminulate very concave reticulated entire nerve running nearly to the point, Theca clavate cernuous
14821 Lvs obovato-spathulate acute serrated undul nerve running to the point, Theca oblongo-ovate pendul
14822 Stems short, Leaves obovate twisted when dry entire their nerve produced into a hair like point, their margins slightly thickened, Theca oblong pendulous
14823 Stems short, Lvs erect lanc acuminated serrated above nerve reach to point, Theca oblon pyrif pendul

14824 Stems rig elongat branch Lvs closely imbricat erect lanc somew obt subserrul at apex marg revolute, nerve reaching to the points, Theca oblongo-ovate pendulous

§ 2 *Leaves with a thickened margin*

14825 Stems elongated, Leaves obovato-rotundate very obtuse reticulated their margins thickened entire, nerve disappearing below the point, Theca ovate pendulous, Lid shortly rostrate
14826 Stems elongated, Leaves undul ligul reticulated their margins thickened denticul, nerve reaching a little beyond the point, Theca ovate pendulous, Lid conical
14827 Stems elongated, Leaves broadly ovate reticulated their margins thickened denticulated, the nerve reaching a little beyond the point, Theca ovate pendulous, Lid rostrate
14828 Stems elongated, Leaves ovate acute reticulated their margins thickened serrated, nerve reaching a little beyond the point, Theca ovate pendulous, Lid shortly rostrate
14829 Stems elongated, Leaves lanceolate acute reticulated their margins thickened denticulate, nerve generally disappearing below the summit, Theca oblongo-ovate pendulous, Lid hemisph mucronulate
14830 Stems elongated, Leaves obovate acute reticulated their margins thickened denticulated above, nerve running beyond the point, Theca ovate pendulous, Lid conico-hemispheric obtuse

* *Calyptra naked*

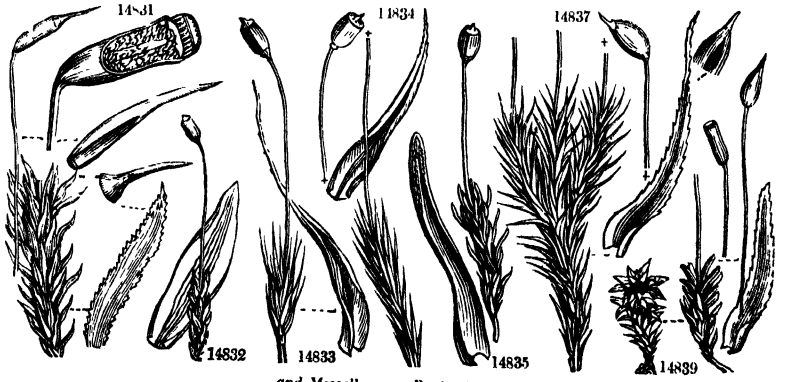
14831 Lvs lanc undul · their margins plane denticulat, their nerve winged, Theca cylind curved, Lid subul
14832 Lvs lanc rig ent their sides involute, their nerve broad impress with furr Theca obl suber Lid conical

** *Calyptra hairy*

14833 Leaves lanceolate-subulate their margins involute ent terminating in a pellucid hair-like point, Theca ovate obtusely quadrangular furnished with an apophysis, Lid conical
14834 Leaves lanceolate-subulate their margins involute entire, their points acumin colored subserrated, Theca ovate obtusely quadrangular furnished with an apophysis, Lid conical
14835 Leaves linear-subul obtuse their margins especially towards the top involute subserrulate, Theca ovate subangulate furnished with a minute apophysis, Lid conical acuminate
14836 Stems elongated, Leaves patent linear-subulate their margins plane serrated as well as the points of the keels, Theca erect ovate quadrangular with an evident apophysis
α Leaves with their margins of the same color
β Leaves shorter with their margins pellucid

14837 Stems elongated branched, Leaves patent subulato-lanceolate the margins plane serrated as well as the points of the keels, Theca subovate with an indistinct apophysis
14838 Stems elongated branched, Leaves erecto-patent lanceolate acute · their margins plane serrated. Theca erect cylindrical destitute of an apophysis
14839 Stems short, Leaves linear-lanceolate obtuse their margins plane serrated principally at the extremity and at the summit of the keels, Theca nearly erect cylindrical without an apophysis
α Fruitstalks 2 inches long, Stems simple

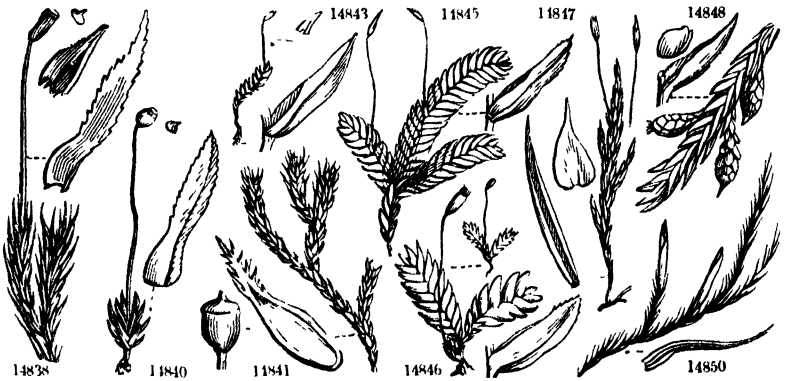
β Fruitstalks very short, Stems branched



and Miscellaneous Particulars

2241. *Polytrichum.* From πολυς, many, and θριξ τριχος, hair, on account of the numerous hairs of the calyptra. Easily distinguished by the rigidity of the leaves and the square form of the theca, which is some

14840	nānum *Hedw*	dwarf	scattered	1	autumn	Br.G	moist banks	Musc. brit t 11
	P subrotúndum E B t. 1624							
2242	ANICTANGI'UM *Hedw*	Anictangium		*Sp* 2.				
14841	ciliátum *Hedw*	ciliated	depress tufts	1	summer	Hoa	rocks	Musc. brit t 6
	Gymnóstomum ciliátum E B t 1179							
14842	imbérbe *Hooker*	beardless	depress tufts	1	summer	Pa G	Irish moun.	Musc brit. t 6
	Gymnostomum imbérbe E B t 2237							
2243	FIS'SIDENS *Hedw*	Fissidens.		*Sp* 4—11				
14845	bryoides *Hedw*	Bryum-like	patches	¼	spring	Pa G	moist banks	Musc brit. t. 16
	Dicránum bryoides E. B t 625							
	Dicránum viridulum E B t. 1368 ·							
	Dicránum osmundioides E. B t 1662							
14844	incurvus *Schwægr*	incurved	patches	¼	spring	L.G	moist banks	Schw suppl t.49
	Dicránum tamarindifólium Turner							
14845	adiantoides *Hedw*	Maidenha-lv	patches	2	summer	L.G	wet pastures	Musc brit t 16
	Hýpnum adiantoides E. B t 264							
14846	taxifólius *Hedw*	Yew-leaved	tufts	¾	summer	L G	moist banks	Musc. brit. t 16
	Hýpnum taxifólium E B t. 416							
2244	LEU'CODON *Schwægr*	Leucodon		*Sp* 1—17				
14847	sciuroides *Schwægr*	Squirrel-tail	creeping	3	summer	D G	trun of trees	Musc. brit.t. 20
	Dicránum sciuroides E. B t 1903							
2245	FONTINA'LIS *L.*	Fontinalis		*Sp* 3—9				
14848	antipyrética *L*	nerveless	floating	12	summer	Dl G	rivers	Musc brit t 22
14849	squamósa *L*	scaly	floating	6	summer	Ol G	rivulets	Musc brit t 22
14850	capillácea *Dicks*	capillary	floating	6	summer	Br G	alp rivulets	Musc. brit t 22
2246	ANO'MODON *Hooker*	Anomodon		*Sp* 2—8				
14851	curtipéndulum *Hook*	dark green	pinnate	8	summer	D Ol	roc & trees	Musc brit t 22
	Neckéra curtipendula E. B t 1444							
14852	viticulósum *Hook*	pale green	creeping	6	spring	Y G	trees & roc	Musc. brit. t. 22
	Hýpnum viticulosum E. B t 265							
2247	NECKE'RA *Hedw*	Neckera		*Sp* 3—24				
14853	pumila *Hedw*	pigmy	creeping	2	spring	Pa G	woods	Eng bot t 1443
14854	crispa *Hedw*	crisp	creeping	6	summer	Bt G	trees & roc	E b t 616 *Hypn*
14855	pennáta *Hedw*	feathered	flat-branched	3	spr and sum	Bt G	trun of trees	Gre sc cry t. 109
2248	DALTO'NIA *Hooker*	Daltonia		*Sp* 2—5				
14856	splachnoides *Hooker*	long stalked	tufts	¼	summer	L.G	Irish moun	Musc brit t 22
	Neckéra splachnoides E. B. t 2564							
14857	heteromálla *Hooker*	short-stalked	tufts	¼	summer	L G	trun of trees	Musc brit. t. 22
	Neckéra heteromálla E. B. t 1180							
2249	HOOKE'RIA *Smith*	Hookeria		*Sp* 2—27.				
14858	lúcens *Smith*	shining	procumbent	3	summer	Pa G	moist banks	Musc. brit. t 27
14859	læte-virens *Hook*	bright-green	procumbent	3	summer	Bt G	Irish bog	Musc. brit. t. 27
2250	LESKE'A *Ehrhart*	Leskea		*Sp* 10—43				
14860	trichomanoides *Hedw*	scymitar-shap	entangled	2	spring	Y G	trun of trees	Eng bot t 1493
14861	complanata *Hedw*	flattened	entangled	4	spring	Y G	trun of trees	Eng bot t. 1492



History, Use, Propagation, Culture,

rally covered by a very hairy calyptra · this organ is in some species smooth, by which character they have been distinguished by the accurate Ehrhart, under the name of Catharinea, but Dr Hooker is of opinion that the genus is not tenable

2242 *Anictangium* From *ανικτος*, open, and *αγγειον*, a vase, on account of the open nature of the theca, which is not enclosed by a peristome The only British species are two plants with nerveless leaves, and the habit of Trichostomum

2243 *Fissidens* From *fissus*, split, and *dens*, a tooth, in allusion to the structure of the peristome Plants generally referred to Dicranum by British botanists, but differing from that genus entirely in habit, and sufficiently in characters Dr Hooker remarks, that the structure of their leaves is highly curious, and totally unlike that of any other plant with which he is acquainted Besides being vertical, their upper half (taking the nerve for the line of separation) is, from the base beyond the middle, composed of two equal lamellæ, the lower part of which embraces the stem, and the rest very often embraces a portion of the leaf placed immediately above it.

2244. *Leucodon* Named from *λευκος*, white, and *οδους*, a tooth, from the color of the peristome. The only British species has occasionally been thrown among the Dicrana, Trichostoma, and Pterogonia, from any of which, an attentive consideration of the lateral fruit, deeply divided teeth, and dimidiate calyptra, will keep its genus distinct. The stems are long, and creeping over the bark of trees

2245 *Fontinalis* From *fons*, a fountain, in allusion to the places where it grows F antipyretica is a common plant, floating in large masses in rivers and pools of water The specific name was given it because

14840 Stems short, Lvs. lin lanc. : marg serrat. principally at extrem. as well as summit of keels, Theca nearly [erect subglobose

14841 Leaves ovate much lengthened out and diaphan at points. those of perichætium laciniated at extremity

14842 Leaves ovato-acuminate colored at the points. those of the perichætium serrated at the extremity

14843 Fruitstalks terminal, Perichætial leaves resembling the cauline ones

14844 Like the last, but theca drooping

14845 Fruitstalks lateral, Perichætial leaves ovate slightly convolute pointed

14846 Fruitstalks radicular, Perichætial leaves ovate sheathing involute pointed

14847 Leaves closely imbricated ovate-cordate acuminate striated, Theca oblong

14848 Leaves nerveless for the most part complicato-carinate
14849 Leaves nerveless plane or very slightly concave
14850 Leaves furnished with a nerve slightly concave

14851 Lvs ov acum serrul. : the nerve disappear below point, Fruitst twice as long as perichætium, Theca ov

14852 Leaves ovato lanceolate obtuse entire the nerve reaching to the point, Fruitst. very long, Theca cylind.

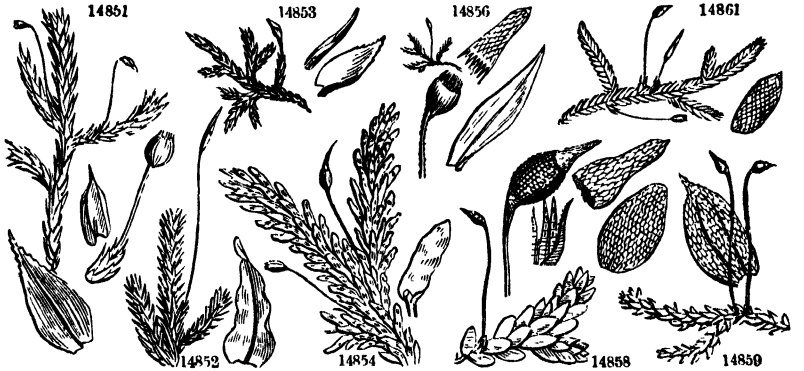
14853 Lvs ovato-acum slightly concave. marg recurv Fruitst scarcely longer than perichæt lvs Theca oblon -ov
14854 Leaves oblong acuminulate transversely rugose, Fruitstalks much exserted, Theca ovate
14855 Lvs bifar ov lanc transversely undul serrul at point, Theca ovate subsess shorter than perichætial lvs.

14856 Leaves oblongo-lanceolate, Fruitstalks long, Calyptra fimbriated at the base

14857 Leaves broadly ovate acute, Theca sessile impressed, Calyptra nearly entire

14858 Leaves broadly ovate entire obtuse nerveless
14859 Lvs ov acuminul margin very obscure serrat at extrem with 2 nerves nearly reach their whole length

14860 Lvs. broadly scymitar-shaped serrat at point nerve reach to middle of leaf, Theca ovate erect, Lid rost
14861 Leaves oblong apiculate entire nerveless, Theca ovate erect, Lid rostrate



and Miscellaneous Particulars

it is employed by the Swedes to fill up the spaces between the chimney and the walls, and thus, by excluding the air, to prevent the action of fire

2246. *Anomodon* So called by the authors of Muscologia Britannica, on account of the peculiar nature of the peristome, which has narrow fringed processes arising from the very same range, and from between the teeth, ανομος, irregular, and οδους, a tooth The stems are dark, almost blackish green, long, cylindrical, and straggling It is not uncommon on the wilds of Dartmoor

2247 *Neckera.* Named after N J. Necker, a German botanist, who published in 1791, his Elements of Botany, a work which contained more useful information than many of his detractors have been pleased to allow Beautiful mosses, found in woods and upon trees and rocks. N crispa has more the appearance of some fine tropical moss, than of those of our own country, where it is far from uncommon in mountainous districts, frequently covering a great extent of surface upon the trunks of old forest-trees.

2248 *Daltonia.* Named in honor of the Rev James Dalton, a skilful English muscologist. The nitriform calyptra separates this from Neckera. D splachnoides has only been found by the side of a streamlet on the Secawn mountain, near Dublin, where it grows sparingly in pale green tufts.

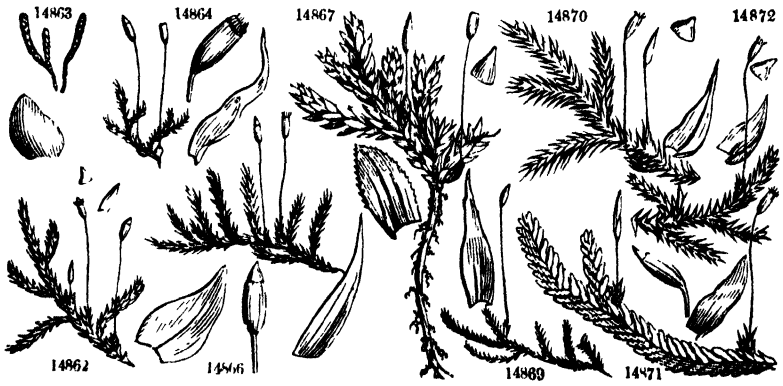
2249. *Hookeria.* This beautiful Hypnum-like genus was named by Sir James Edward Smith, in honor of Dr William Jackson Hooker, F R S, &c professor of botany in the university of Glasgow, one of the most distinguished of modern cryptogamic botanists, and a gentleman whose public reputation is only exceeded by his private excellence. The Hookera of Salisbury, must give way to this on every account. H læte-virens has hitherto been discovered only in a bog near Cork.

2250 *Leskea.* N G Leske was an obscure German botanist, of whom little is known, except that he gave

14862 polycárpa *Ehr*	many-fruited	entangled	3	spring	Lur.	trun. of trees	Eng bot t 1274	
Hýpnum médium E. B								
Hýpnum inundátum E. B t. 1922								
14863 julácea *Mohr*	round-leaved	prostrate	3	spring	Y G	ground	Eng bot t. 2525	
Pterogónum? rotundifolium E. B.								
14864 pulchélla *Hedw*	pretty	dense tufts	½	spr. and sum.	Bt. G	moist banks	Eng bot t. 2006	
14865 rufescens *Schwægr*	rufous	creeping	4	spr and sum	Rsh	moun rocks	Eng bot t. 2296	
14866 sericea *Hedw*	silky	entangled	3	spr and sum	Y G	roc. & trees	Eng bot. t. 1445	
14867 dendroides *Hedw.*	tree-like	erect	3	spr and sum.	Y G	wo. and bogs	Eng. bot. t. 1565	
14868 incurváta *Hedw*	incurved	procumbent	3	spr and sum	D G	trees & rocks	Eng bot. t. 2422	
Hýpnum atrovirens E B								
Hýpnum attenuátum E. B. t. 2420								
14869 polyántha *Hedw*	many-flowered	creep tangled	3	summer	Y G	trun of trees	Gre.cryp fl t.151	

2251 HYPNUM *L.* Hypnum *Sp* 53—119

14870 ripárium *L*	water	loose patches	4	sum and aut.	Bt.G	ban of dite	Eng bot t. 2060
14871 undulátum *L*	wavy	lax masses	6	sum and aut	W.G	heathy plac	Eng. bot t. 1181
14872 denticulátum *L.*	toothletted	prostrate	1½	sum and aut.	Bt.G	roots of trees	Eng bot. t. 1260
α *angustifólium* Hook	*narrow-leaved*	prostrate	1½	sum and aut.	Bt.G	roots of trees	Hed stı er 4 t 31
β *obtusifólium* Hook.	*blunt-leaved*	prostrate	1½	sum and aut.	Bt.G	mountains	Eng. bot. t. 1446
14873 tenéllum *Dicks*	delicate	dense patches	1	spring	Dp G	roc & old w	Eng bot t 1859
14874 sérpens *L*	creeping	patches	1	spring	Bt G	roots of trees	Eng bot. t. 1037
subtile E B t 2496							
14875 populeum *Hedw*	matted	entang patch	2	spring	D G	trees & ston	Tur mus hı. t 16
implexum E B t. 1584							
14876 reflexum *Weber & Mohr*	reflexed	loose masses	2	spring	D G	mountains	
14877 mólle *Dicks.*	soft	much tufted	3	sum and aut	Lur	alp rivulets	Eng. bot. t. 1992
14878 Schrebéri *Willd.*	Schreber's	lax tufts	9	summer	Rsh	wo and ban.	Eng bot. t. 1621
14879 catenulátum *Schwæg*	chained	close tufts	2	spr and sum	D G	wet rocks	Brid. mus t.5 f 4
14880 stramíneum *Dicks*	straw-colored	loose patches	1½	summer	Pa G	wet places	Eng bot. t. 2405
14881 murále *Hedw*	wall	patches	1½	all seasons	L.G	walls & ston	Dil mu. t 41 f 52
confértum E B t. 1038							
14882 púrum *L*	pure	broad masses	7	spring		wo and ban	Eng bot. t 1599
ulrecébrum E. B t. 2189							
14883 fluitans *L*	floating	aquatic	6	spr and sum	Var.	pools & stre	Eng bot t. 1448
14884 plumósum *L*	feathered	dense mat	4	spr. and sum	Y G	moist rocks	Eng bot. t. 2071
alpinum E. B t 1496							
14885 salebrósum *Hoffm*	smth stk shı.	decumb bran	4	summer	Bt G	roc & groun	Grev cryp fl 184
14886 lutéscens *Huds*	yellowish	patches	3	summer	Y G	trun of trees	Eng bot. t. 1301
14887 nítens *Schreb*	shining	branched	3	summer	Go Y	bogs	Eng bot. t 1646
14888 albicans *Neck*	whitened	patches	2	spring	W G	hea & bogs	Eng bot. t. 1300
14889 alopecúrum *L*	fox-tail	loose masses	3	spr and sum	D G	moist woods	Eng bot. t 1182
14890 curvátum *Swz*	curved	lax tufts	3	spr and sum	Bt.G	trees & roc.	Eng. bot t. 1566
14891 spléndens *Hedw*	glittering	lax tufts	9	all masses	Y G	hea & banks	Eng bot t 1424
14892 proliferum *L*	proliferous	loose patches	6	all masses	Du G	wo and ban	Eng bot t 1404
recognitum E. B t. 1495							
14893 prælóngum *L*	very long	loose tufts	6	all masses	Du G	woods	Eng bot. t 2035
Stokésii E B t 2036							
Swartzii E. B. t. 2334							



History, Use, Propagation, Culture,

occasion to Hedwig to name this genus after him It has entirely the habit of the next, with which it is frequently united.

14862 Leaves ovate obtuse concave entire : nerve reaching to the summit, Theca cylind. nearly erect, Lid conical

14863 Leaves closely imbricated rotundato-ovate obtuse very concave ventricose nerveless, Theca ov nearly erect

14864 Leaves loosely imbricated the upper ones subsecund, all of them lanceolate acuminate entire nerveless, Theca ovato-cylindrical nearly erect, Lid conical
14865 Lvs erecto-pat lanc acuminat ent striat faintly 2-nerved at base, Theca ovate nearly erect, Lid conical
14866 Leaves erecto-patent lanceolate acuminated entire striated, nerve running to three fourths of the length, Theca ovate cylindrical erect, Lid conical
14867 Stems erect below simple and naked fascicled above, Leaves ovate more or less lanceolate striated serrat. at the point nerve reaching nearly to the summit, Theca erect ovate cylindrical, Lid rostrate
14868 Stems variously branched procumbent, Lvs all of them slightly secund broadly ovate with an attenuated obtuse point. nerve running nearly to the summit, Theca ovate cernuous, Lid conical

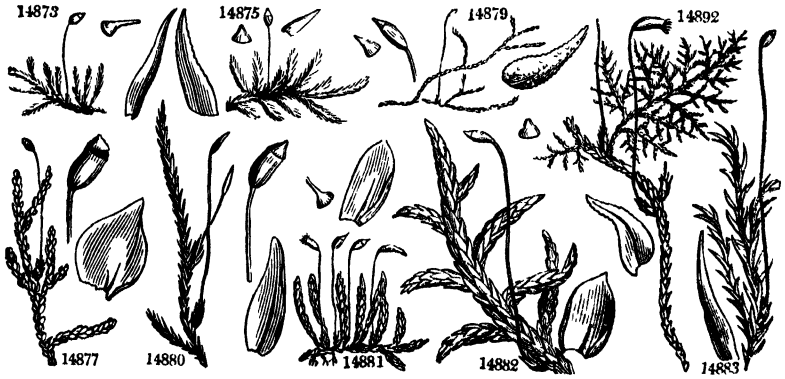
14869 Leaves 1-sided imbricated erect spreading ovate lanceolate acum entire obscurely 2 nerved at base, Fruitst. numerous, Theca erect ovate, Lid acutely conical

* *Stems plane*

14870 Lvs ov-lanc acuminat ent the nerve reaching nearly to summit, Theca oblong cernuous, Lid conical
14871 Lvs ov ac transversely undulat with two faint nerves at base, Theca obl furrow arcuato cern Lid rost
14872 Leaves ovate sometimes approaching to lanceolate more or less acuminated having two short nerves at the base, Theca oblongo-cylindraceous inclined, Lid conical
α Leaves ovate lanceolate distant quite plane
β Leaves ovate more or less obtuse slightly concave

** *Leaves spreading on all sides of the stem.*

14873 Lvs fascicul erect lanceolato-subul ent nerve reaching to summit, Theca ovate cernuous, Lid rostrate
14874 Leaves ovato-lanceolate rather obtuse patent entire their nerve for the most part reaching to the summit, Theca cylindrical curved cernuous, Lid conical
14875 Leaves lanceolate acuminated serrated margin slightly reflexed. nerve reaching to the point, Theca ovate nearly erect, Fruitstalks rough, Lid conical
14876 Leaves cordato-acuminate serrated their nerve reaching to the point, their margin slightly reflexed, Theca ovate cernuous, Fruitstalks rough, Lid conical
14877 Leaves loosely imbricated rotundato-ovate obtuse concave entire faintly two-nerved at the base or with one short nerve, Theca ovate cernuous, Lid conical
14878 Leaves closely imbricated nearly erect elliptical apiculate concave entire faintly two-nerved at the base, Theca ovate cernuous, Lid conical
14879 Leaves subpatent ovate subacuminated papillose on the back and margin with a very short nerve, Theca ovate inclined, Lid conical acuminated
14880 Leaves loosely imbricated erecto-patent oblongo-ovate obtuse entire their nerve reaching half way, Theca oblongo-ovate curved cernuous, Lid conical
14881 Leaves nearly erect imbricated oval with a very short point concave entire nerve reaching about half way up, Theca ovate cernuous, Lid rostrate
14882 Leaves closely imbricated oval with a very short point very concave their nerve reaching half way up, Theca ovate cernuous, Lid conical
14883 Leaves loosely imbricated, the upper ones falcate secund, all of them lanceol-subul scarcely serrated at their points their nerve reaching more than half way, Theca ovate obl curved cernuous, Lid conical
14884 Leaves erecto-patent the upper ones sometimes secund, all of them ovato-lanceolate acuminated sub-serrated the nerve reaching above half way, Theca ovate cernuous, Lid conical
14885 Lvs nearly erect lanc acum serrul tow end nerve disappear beyond end, Theca cern Lid acute conical
14886 Leaves erecto-patent lanceolate acuminated entire striated nerve disappearing below the point, Theca ovate cernuous, Fruitstalks rough, Lid conico-acuminated
14887 Leaves erecto-patent narrow lanceolate acuminated nearly entire striated nerve running nearly to the summit, Theca oblongo-ovate curved cernuous, Fruitstalks smooth, Lid conical
14888 Leaves erecto patent ovato-lanceolate acuminated striated entire nerve reaching half way up, Theca ovate cernuous, Fruitstalks smooth, Lid conical
14889 Stems erect below simple and naked, fascicled above, Leaves concave ovate ellipt acute serrated nerve running nearly to the point, marg reflexed, Theca ovate cernuous, Lid rostrate
14890 Branches fascicled curved, Leaves ovato-elliptical concave serrated at the points nerve disappearing beyond the middle, Theca ovate erect, Lid rostrate
14891 Stems tripinnate, Leaves ovate with a suddenly acuminated serrated point concave faintly two-nerved at the base margin below recurved, Theca ovate cernuous, Lid rostrate
14892 Stems tripinnate, Leaves serrated papillose on the back. the cauline ones cordato-acuminate striated with a nerve running nearly to the point, those of the branches more ov with a sing or double nerve at base
14893 Stems subbipinnate, Leaves distantly placed patent cordate or ovate acuminated serrated nerve disappearing below the summit, Theca ovate cernuous, Lid rostrate



and Miscellaneous Particulars

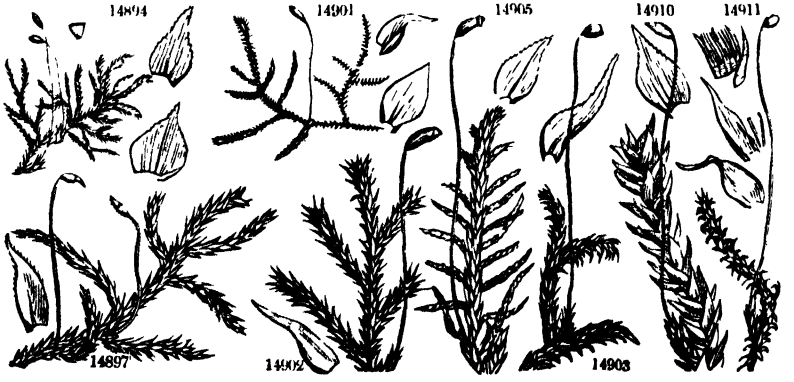
2251. *Hypnum.* One of the names of moss among the Greeks was ὕπνον This is the most extensive genus among mosses, and is readily known by its prostrate pinnated bright green branches, which form a thick mat-

14894 flagellâre *Dicks.*	shady	broad patches	6	summer	Bt G	alpine rocks	E.b t 2565 *H ume bratum*
14895 abietinum *L*	fir-leaved	straggling	6	summer	D.G	mountains	Eng. bot. t. 2037
14896 Blandóvii *Web*	Blandoff's	broad masses	5	spr and sum.	Bt G	alpine rocks	
14897 piliferum *Schreb*	hair-pointed	straggling	7	summer	D G	wo & banks	Eng bot t. 1516
14898 rutábulum *L* *crenulátum* E. B t 1261	poker	dense mats	3	all seasons	Bt.G	everywhere	E.b.t.1647 *H brevirostre*
14899 velutinum *L* *intricatum* E. B t. 2421	velvety	dense patches	1½	all seasons	Y G	hedge banks	Eng bot. t 1568
14900 Hallèri *L*	Haller's	creep dense	2	summer	Y Br	Scotch rocks	Grev cryp fl 174
14901 dimórphum *Brid.*	two-formed	lax procumb.	3	summer	Pa G	shady places	Grev.cryp fl 160
14902 stellátum *Schreb*	stellate	broad tufts	3	spr and sum	Y Br	marshes	Eng bot t 1302
β squarrósulum E. B.	*squarrose*	patches	1½	spr and sum	Dp G	stone walls	Eng bot t 1709
14903 lóreum *L*	strap-shaped	broad masses	9	spring	Bt.G	wo and hea.	Eng bot t 2072
14904 ruscifólium *Neck*	stiff-leaved	floating	6	spr and sum	D Ol	in rivulets	Eng bot. t 1275
14905 striátum *Schreb*	striated	loose tufts	6	spring	Bt G	woods	Eng bot t 1648
14906 confértum *Dicks* *H serrulatum* E B 1262	compact	small patches	1½	spring	Pa.G	trun of trees	Eng bot t. 2407
14907 cuspidátum *L*	cuspidate	loose tufts	5	summer	Y G	bogs	Eng. bot t 1425
14908 cordifolium *Hedw*	heart-leaved	loose tufts	4	summer	Pa G	bogs	Eng bot. t. 1447
14909 polymórphum *Hedw*	variable	matt patches	5	win and spr	Bt G	limest rocks	Hed sp mus t 66
14910 triquetrum *I*	three-cornered	branch tufts	9	all seasons	Y G	wo and ban	Eng bot t 1622
14911 squarrósum *L.*	squarrose	patches	7	all seasons	Bt.G	wo and hea.	Eng bot t 1953
14912 filicinum *L* *dúbium* E. B 2126 *fallax* E B	fern-leaved	small masses	3	spr and sum	Rsh	bogs	Eng bot. t. 1570
14913 palustre *L* *fluviatile* E. B t 1903 *adnatum* E. B t 2406	marsh	creeping tufts	2	spring	Li G	ban of stre	Eng bot t 1665
14914 aduncum *L*	hooked	broad patches	3	spr and sum	Var	bogs	E.b t 2073 *H revolvens*
β rugósum E B	*rugose*	broad patches	3	spr and sum	Var	bogs	Eng bot t 2250
14915 uncinátum *Hedw*	uncinate	thick patches	3	spr and sum	Y.G	moist banks	Eng bot t 1600
14916 rugulósum *Web*	wrinkled	dense tufts	3	spr and sum	Y G	heath places	Musc brit. t 26
14917 commutátum *Hedw*	changed	droop masses	9	all seasons	Dp G	marg. of stre	Eng bot t 1569
14918 scorpioides *L*	creeping	dense masses	9	summer	Rsh	wet bogs	Eng bot t 1039
14919 silesiánum *Beauv*	Silesian	broad patches	7	summer	Bt G	mountains	Eng. bot. t 2016
14920 cupressiforme *L* *nigrovirule* E. B t. 1620	Cypress-leaved	thick mass	4	all seasons	Bt G	trees & rocks	Eng bot. t 1860
β polyánthes E. B	*many-flowered*	thick mass	4	all seasons	Bt G	woods	Eng bot t 1664
14921 crista castrénsis *L*	crested	lax tufts	6	summer	Bt G	woods	Eng bot. t. 2108
14922 molluscum *Hedw*	soft	entangl tufts	2	summer	Y G	rocks	Eng bot. t 1327

VAGINULATI SCHISTOCARPI.

2252. ANDREÆ'A *Hedw* ANDREÆA *Sp* 4

14923 alpina *Hedw*	alpine	loose tufts	summer	D Br	rocks	Musc. brit. t. 8
14924 rupéstris *Hedw*	rock	dense tufts	½ summer	D Br	rocks & ston	Musc brit t 8
14925 Róthii *Mohr*	Roth's	dense tufts	½ summer	D Br	rocks & ston	Musc brit t. 8
14926 nivális *Hooker*	snow	deep patches	1½ summer	D Br	mountains	Musc brit t 8



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like covering to the surface on which they grow H crista-castrensis is at once the most beautiful and most rare of British species

2252. *Andreæa.* Named by Hedwig, in honor of J G R André, a German botanist, author of Letters upon Switzerland. There was also a Portuguese Andreas de Castro, who published in 1636, a work upon plants He was physician to one of the dukes of Braganza. There was besides a celebrated physician of antiquity

14894 Stems pinnate (or irregularly bipinnate), Leaves thickly set cordato-acuminate serrated very faintly two nerved at the base, Theca oblong cernuous, Lid conical
14895 Stems pinnate, Leaves serrated papillose on the back · the margins reflex , nerve running nearly to the point , the cauline ones cordato-acuminate · those of branches cord. ac Theca cylind inclined, Lid rost
14896 Stems pinn Lvs. serrated smooth on the back · marg. reflexed ; cauline ones cordato-acute with a short nerve, those of branches ovate acum. with nerve disappear bey midd Theca cylind inclin Lid conical
14897 Stems somewhat pinnate, Leaves ovate with a long narrow acumination serrated · nerve disappearing below the middle, Theca ovate cernuous, Lid rostrate
14898 Stems variously branched, Leaves patent ovate acuminated serrated at the points striated : their nerve reaching half way, Theca ovate cernuous, Fruitstalk rough, Lid conical
14899 Stems variously branched, Leaves erecto-patent ovate often approaching to lanceolate acuminat. serrated striated nerve reaching half way, Theca ovate cernuous, Fruitstalks rough, Lid conical
14900 Stems pinn Branches short erect, Lvs. all recurv cord acum. obsol 2-nerv at base, Lid obtusely conical
14901 Stems somewhat pinnate, Leaves serrulate two-nerved at base primary cordate acuminate , of branches broad ovate , Theca ovate cernuous, Lid conical
14902 Leaves loosely set squarrose cord much acuminated ent. nervel. Theca oblongo-ov curv cern. Lid conic

14903 Leaves recurved squarrose lanceolate much acuminated concave serrated striated faintly two-nerved at the base, Theca globoso-ovate cernuous, Lid conical
14904 Leaves loosely imbricated spreading broadly ovate acute serrated concave with a nerve nearly as far as the middle, Theca ovate cernuous, Lid rostrate
14905 Lvs spread cord -acum serrat striat nerve reach beyond midd Theca obl ovate cernu Fruitst smooth
14906 Lvs erect spread ov acum concave serrat their nerve reach. half way, Theca ov cernu Fruitst smooth

14907 Leaves loosely set ovate concave nerveless entire , lower squarrose , upper imbricated in a cuspidate point Theca oblong curved cernuous
14908 Lvs loosely set squarr cord -ov obt concave ent nerve running nearly to point, Theca obl curv cernu
14909 Lvs loosely set squarr cord much acum entire nerve disappear half way up, Theca obl ov curv cernu
14910 Lvs squarr cordato-acum serrat. faintly striated with two nerves at base, Theca globoso-ov Lid conical
14911 Leaves squarrose widely cordate very much acuminated and recurved serrated faintly two-nerved at the base, Theca ovato-globose cernuous, Lid conical

*** *Leaves secund*

14912 Stems subpinnate, Leaves especially the upper ones falcato-secund broadly ovate acuminated serrated : their nerve reaching to the point, Theca oblongo-ovate curved cernuous, Lid conical

14913 Leaves secund ovate somewhat acuminate concave entire margins incurved above , nerve short often forked sometimes obsolete, Theca oblongo-ovate cernuous, Lid conical

14914 Leaves falcato-secund lanceolato-subulate concave or almost semicylind entire the nerve disappearing below the summit, Theca oblongo-ovate curved cernuous, Lid conical
β Leaves wider less falcate [cernuous, Lid conical
14915 Lvs falcato-secund lanceolato-subul serrat striat nerve disappearing below point, Theca cylind curv
14916 Lvs sec ovato-lanc. serrat. nearly plane crisp transverse when dry marg recurv , nerve reach half way
14917 Stems pinnated, Leaves falcato-secund cordate very much acuminated serrated their margins reflexed , nerve disappearing below the summit, Theca oblongo-ovate curved cernuous, Lid conical
14918 Leaves secund broadly ovate ventricose obtuse ent nervel Theca oblongo-ovate curv cernu Lid conical
14919 Leaves loosely imbricated secund narrow-lanceolate acuminated serrated nerveless or very obscurely two-nerved, Theca subcylindrical erecto-cernuous, Lid conical obtuse
14920 Leaves closely imbricated more or less falcato-secund lanceolate acuminated entire, except at the points, which are usually serrated very faintly two-nerved at base, Theca cylind erecto-cernuous, Lid conical

14921 Stems closely pectinated, Leaves falcato-secund ovato-lanceolate acuminated serrulate striated faintly two-nerved at the base, Theca oblongo-ovate curved cernuous, Lid conical
14922 Stems pectinated, Leaves falcate secund cordate acuminated serrated not striated faintly two-nerved at base, Theca oblong ovate curved cernuous, Lid conical

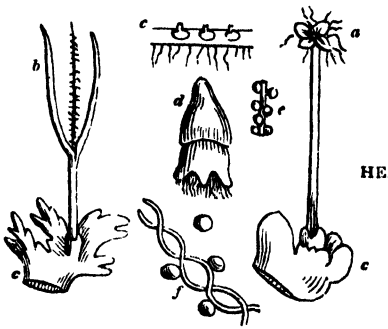
VAGINULATI SCHISTOCARPI

14923 Stems branched, Leaves obovate suddenly acuminate straight imbricating the stem on every side
14924 Stems branched, Leaves ovate gradually acuminated the upper ones falcate
14925 Stems almost simp Lvs lanc subul falcate secund fragile perichætial obl nervel , their marg involute
14926 Stems slightly branched, Leaves loosely imbricated lanc subfalcate secund perichætial similar to cauline



and Miscellaneous Particulars.

named Andreas, who was cited honorably by Pliny This remarkable genus differs from all other mosses, in having a theca which splits into four valves, cohering at their ends by means of the persistent lid , it agrees with Sphagnum in having no fruitstalk, but in its room an elongated receptacle, and appears to be a transition from Musci to Hepaticæ This is, however, only apparent All the species are natives of rocks or mountains, and are remarkable for their nearly black or dark brown color.



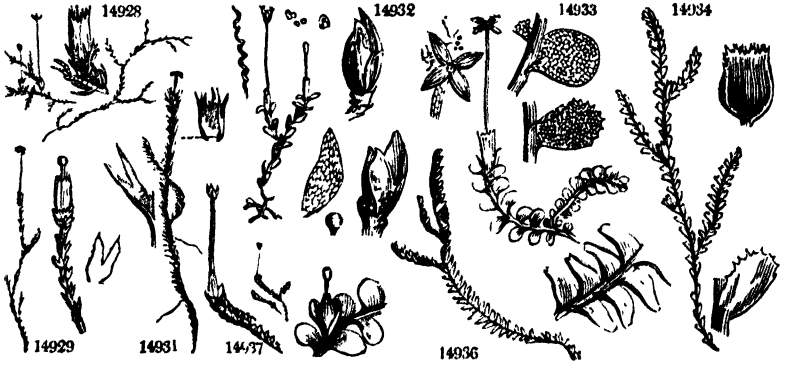
Reproductive organs of two kinds 1 *Theca without an operculum, either naked or sessile, or furnished with a veil through which they are more or less protruded. Sporules naked* (e), *or mixed with spiral threads* (f) 2 *Minute roundish or oblong bodies variously situated. Plants frondose of a cellulose structure not submersed*

This order is distinguished from Algæ, with which it was formerly united, by the nature of the theca (*a*, *b*), and of the foliaceous frond (*c*) which is never submersed, and which bears a greater affinity to that of Musci From

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2253 JUNGERMANNIA *L* Jungermannia *Sp* 81—159

14927 trichophýlla *Wahl*	hair-leaved	loose tufts	1½ summer	Br	turfy heaths	Hook jung t 7
14928 setácea *E B*	setaceous	dense tufts	2 spring	Pa,G	bogs	H ju t 8 sup t.1
14929 julácea *Hook*	creeping	dense patches	½ summer	Pa Ol	mountains	Hook jung t 2
14930 laxifólia *Hook*	loose-leaved	cush-like pat	½ spr and sum	Pa G	mountains	Hook jung t 59
14931 juniperina *Hook*	rigid	crowded tufts	3 summer	R Br	mountains	Hook jung t 4
14932 Hookéri *E B*	Hooker's	small patches	½ wint and spr	G	ditches	Hook jung t 54
14933 asplenioides *Hook*	Asplenium-like	loose patches	3 all seasons	Ol G	moist woods	Hook jung t.13
14934 spinulósa *Hook*	spinulose	crowded tufts	3 all seasons	Y G	mountains	Hook jung t 14
14935 decipiens *Hook*	deceitful	dense tufts	1 autumn	Ol G	Irish heaths	Hook jung t 50
14936 Doniána *Hook*	Don's	entangl tufts	2½ september	P.Br	Scot mount.	Hook jung t.39
14937 púmila *Hook*	dwarf	small patches	½ wint. and spr	Ol	rocks	Hook. jung t.17
14938 lanceoláta *Hook*	lanceolate	dense clusters	½ autumn	Pa G	damp woods	Hook jung t.18
14939 cordifólia *Hook*	heart-leaved	dense tufts	2 august	D Ol	mountains	Hook jung t 32
14940 Sphágni *Hook*	Sphagnum	entangl patc	3 autumn	Y G	marshy plac	H ju t.33 su. t 2
14941 crenuláta *Hook*	crenulate	matted patch	½ oct, novemb	R G	bogs	Hook. jung t.37
14942 sphærocárpa *Hook*	round-fruited	dense tufts	½ early spring	Pa G	Irish bogs	Hook jung t.74
14943 hyalina *Hook*	transparent	broad tufts	1 early spring	D G	bogs	Hook jung t.63
14944 compréssa *Hook*	compressed	dense tufts	4 june	Pu	rivulets, Irel	Hook jung. t.58
14945 emarginata *Hook.*	emarginate	large patches	½ may, june	Br	wet pl. on m	Hook jung t 27
14946 concinnata *Hook.*	notched	thick tufts	½ may, june	Sil	wet pl on m.	Hook jung t 3
14947 orcadénsis *Hook*	Orcades	loose patches	1 may, june	Bt.G	mountains	Hook jung t 71
14948 inflata *Hook.*	inflated	dense patches	½ jan to july	Ol G	boggy places	Hook jung t 38
14949 excisa *Hook.*	bitten	scatter patch	½ spring	D G	shady woods	Hook jung t 9
14950 ventricósa *Hook.*	ventricose	dense patches	½ aug, novem	Pa G	woods	Hook jung t 28



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2258 *Jungermannia.* Named by Ruppius, to perpetuate the memory of Louis Jungermann, a German

these Hepaticæ differ in being destitute of an operculum or lid to the theca and, with the exception of Marchantia (*d*) and Jungermannia, of a calyptra. The order is composed of seven genera, all very different from each other, and forming an assemblage which is only natural in regard to the organs of vegetation It does not appear possible to reconcile those of reproduction The herbage consists of a variously dilated frond lying flat upon the substance on which it grows, generally naked, but in many Jungermannias covered with small leaves, which are often divided, but never really nerved, so that, in fact, they should rather be considered dilatations of the frond the substance is generally loosely cellular, sometimes compact, as in Marchantia, in which Hooker asserts that pores of the epidermis exist.

2253 *Jungermannia* Theca 4-valved, supported on a peduncle longer than the calyx Valves free
2254. *Marchantia* Theca on the under surface of a common peltate pedunculate receptacle. Anthers imbedded in the disk of distinct peltate pedunculate or sessile receptacles
2255 *Riccia.* Theca spherical, immersed in the frond (not opening), crowned with the style, which is alone protruded
2256. *Anthoceros* Theca stalked, linear, 2-valved, with a central columella to which the sporules are attached
2257 *Targionia* Perianth ? globose, arising from the underside of the extremity of the frond, at length opening vertically into 2-valves Theca globose, nearly sessile, included in the perianth, opening irregularly at the extremity, and filled with spiral filaments
2258 *Sphærocarpus* Thecæ minute, spherical, seated upon obpyriform receptacles, and filled with minute sporules unmixed with filaments.

A *Leafy*
† *Stipules none*
* *Leaves inserted many ways*

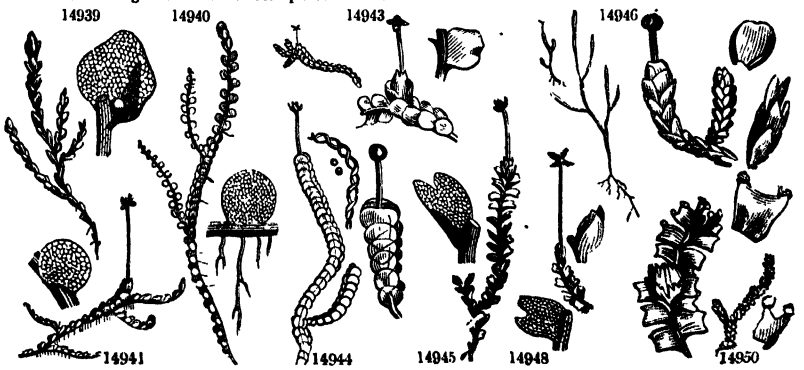
14927 Stem creep irregul branch Lvs imbricated on all sides setace joint straight, Fr term · mouth contract
14928 Stem creep pinnated branch Lvs imbricat on all sides setace joint incurv. Fr term mouth expanded
14929 Leaves quadrifarious ovate closely imbricated erect acutely bifid, Theca terminal plaited at end
14930 Stem erect nearly simple filif Lvs dist quadrifar ov somew keel acutely bif Fr term Cal somew plait
14931 Lvs quadrifarious falcato-secund lin-lanc bipart · segments straight acum Fr terminal, Cal. ovate leafy
14932 Leaves imbricated on all sides ovate or oblong-ovate here and there lobed and angled, Fr term Cal none

** *Leaves bifarious*
a Leaves undivided

14933 Leaves obovate roundish ciliate toothed subrecurved, Fruit term and lateral, Cal obl compressed oblique
14934 Lvs obl recurv with margin on one side and apex dentato-spinul Fr lat. and axill Cal round compr.
14935 Stem erect flexuose nearly simple, Lower leaves smaller ovate entire upper rounded-ovate or nearly square, with one or more spuniform teeth
14936 Stem erect nearly simple filiform flexuose, Leaves closely imbricated nearly horizontal oblong ovate concave 2-toothed at end falcate 1-sided
14937 Leaves elliptical ovate, Fruit terminal, Cal. oblong ovate acuminate · mouth contracted denticulated
14938 Leaves spreading ovate-rounded, Fruit terminal, Cal oblong cylindrical depressed and flat at the extremity mouth much contracted cut and toothed
14939 Lvs erect concave cord circumvol Fr. term. and axill Cal obl ov subplicate mouth minute toothed
14940 Lvs orbicul Fr upon short prop branches, Cal obl attenuat. at each extrem mouth contracted toothed
14941 Lvs orbicular margin Fruit term Cal obov compressed longitudin quadrang. mouth contract. toothed
14942 Stem ascending simple, Leaves orbicular, Fruit terminal, Cal obl ovate cylind quadri Theca spherical
14943 Stem ascending flexuose dichotomous, Leaves rounded somewhat wavy, Fruit terminal, Cal ovate angul. with a contracted 4-toothed orifice
14944 Stem erect divided, Leaves orbicular · upper reniform appressed, Fruit terminal, Cal immersed oblong fleshy with an open 4-toothed orifice

b Leaves emarginate or bifid : segments equal

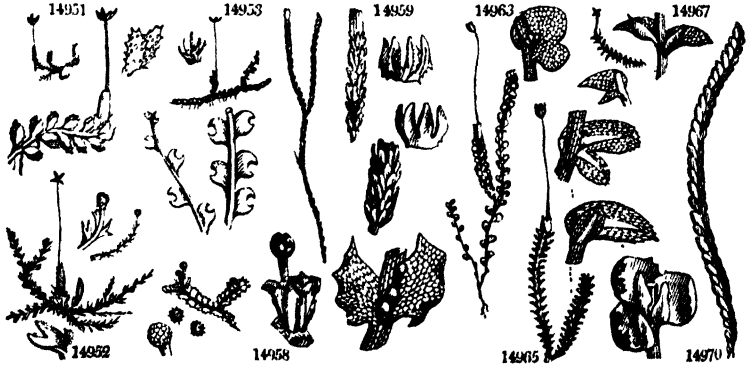
14945 Leaves loosely imbric. spreading obcordate emarginate, Fruit term Cal ovate toothed immersed in lvs.
14946 Leaves very closely imbricated erect concave ovate obtuse emarginate, Fruit terminal, Cal O
14947 Leaves closely imbric erect or spreading cordate ovate plane notched at extremity · their marg recurv.
14948 Lvs roundish concave acutely bifid segm straight obt. Fruit term Cal obpyrif , mouth contract tooth
14949 Leaves spreading subquadrate deeply emarginate. Fruit terminal, Cal oblong mouth plaited toothed
14950 Leaves spreading subquadrate obtusely and broadly emarginate. their sides incurved, Fruit terminal, Cal oblong mouth contracted plaited toothed



and Miscellaneous Particulars.

botanist, who was born in 1572, and died in 1653, after having published a catalogue of the plants of the neigh-

14951 Turnéri *Hook*	Turner's	small patches	½	march	Pa.G Irish rivul	Hook. jung. t.29
14952 bicuspidáta *Hook*	two-pointed	large tufts	1	march, april	Pa.G damp banks	Hook. jung t 11
14953 bysácea *Hook*	Byssus-like	dense tufts	½	march, april	D Ol heaths	Hook jung t 12
14954 connívens *Hook*	connivent	loose patches	½	april, may	Y G wet places	Hook. jung. t.15
14955 curvifólia *Hook*	curve-leaved	small patches	½	april, may	Dp.P mountains	Hook jung t 16
14956 capitáta *Hook*	capitate	very smll pat	½	septem., jan	Pa G bogs	Hook jung t 80
14957 incísa *Hook*	cut	sml dense pat.	½	july	Pa G heaths	Hook jung t 10
14958 pusílla *Hook*	dwarf	sol. or thk pat	½	october, may	Bt G moist banks	Hook jung t.69
14959 setifórmis *Hook*	bristly	dense tufts	2	spring	G Br mountains	Hook. jung. t.20
14960 nemorósa *Hook*	grove	matted tufts	2½	july, october	Pu woods	Hook jung t.21
14961 planifólia *Hook*	flat-leaved	crowded patc	2	.....	Din Brmountains	Hook jung. t 67
14962 umbrósa *Hook*	shady	dense tufts	½	march, april	G Br shady places	Hook jung t.24
14963 undulata *Hook*	wavy	large tufts	3	may, june	Bt G wet places	Hook. jung t.22
14964 resupináta *Hook*	resupinate	very sml tufts	½	may, june	Br.G heaths	Hook jung t 23
14965 álbicans *Hook*	whitish	broad tufts	1½	april, july	Pa G hedge banks	Hook. jung t.25
14966 obtusifólia *Hook*	blunt-leaved	little tufts	½	march, april	Pa G damp places	Hook jung t 26
14967 Dicksóni *Hook*	Dickson's	dens mat tuf	½	august	Ol Br mountains	Hook jung t 48
14968 minuta *Hook*	minute	loose patches	¾	spr and sum	Ol Br mountains	Hook jung. t 44
14969 exsécta *Hook.*	scooped out	small patches	½	summer	Pa.G heaths	Hook. jung t.19
14970 cochlearifórmis *Hook*	cup-shaped	large patches	4	summer	R.Br mount bogs	Hook jung t.C8
14971 complanáta *Hook*	flattened	cush.-like pat.	1½	summer	Pa G trun of trees	Hook. jung t.81
14972 anómala *Hook*	anomalous	loose patches	2	oct , novem.	Br G bogs	Hook jung t 34
14973 Taylóri *Hook*	Taylor's	large patches	3	summer	Pk mountains	Hook jung t.57
14974 scaláris *Hook*	scaly	broad patches	½	summer	Pa G loamy soil	Hook jung t.61
14975 polyánthos *Hook*	many-capsuled	loose patches	1½	april, may	Pa.G wet places	Hook. jung t 62
14976 cuneifólia *Hook*	wedge-leaved	parasitical	½	summer	Br inland	Hook jung t 64
14977 viticulósa *Hook.*	wiry	loose patches	1½	spring	Y Br ear damp pl	Hook jung t 60
14978 trichómanis *Hook*	twisted	large patches	1½	summer	Bt G moist places	Hook jung t 79
14979 bidentáta *Hook*	two-toothed	crowded patc	1½	oct , novem.	Pa.G moist places	Hook. jung. t 30
14980 heterophýlla *Hook*	various-leaved	small tufts	½	april, novem	Pa.G stems of trees	Hook jung t.31
14981 stipulácea *Hook*	large-stipuled	cush.-like tuf	½	summer	Pa.Ol shady places	Hook. jung t 41
14982 Francísci *Hook*	Francis's	crowded patc	½	april, july	Pk moist places	Hook. jung. t.49
14983 barbáta *Hook*	bearded	crowded patc.	1½	spring	Ba.G woods & hea.	Hook jung t.70
14984 albéscens *Hook*	whitened	loose patches	½	summer	Pa G Ben Nevis	H.jun t.72 su t 4
14985 réptans *Hook*	creeping	dense tufts	1	summer	Pa G woods	Hook jung t.75
14986 trilobáta *Hook*	three-lobed	large patches	3	summer	Ol G rocks	Hook. jung t.76
14987 platyphýlla *Hook*	broad-leaved	wide patches	2	march, aug	Br G old walls	H jun t 40 su t 3
14988 lævigáta *Hook.*	polished	loose tufts	2½	summer	Br Ol woods	Hook. jung t 35
14989 ciliáris *Hook*	ciliated	dense patches	2	spr and sum	R.Br rocks & hea.	Hook jung t 65
14990 Woódsii *Hook.*	Woods's	crowded tufts	5	spr. and sum.	R.Br Irish mount.	Hook. jung t 66
14991 tomentélla *Hook*	downy	broad patches	3	march, oct.	Pa.G moist places	Hook. jung t.36
14992 Mackáii *Hook*	Mackay's	dense patches	1	febr., novem.	Bk.G trees & rocks	Hook. jung t 53



History, Use, Propagation, Culture,

bourhood of Altdorf, and a work called Cornucopia Floræ Giessensis A genus of obscure plants, forming by their creeping stems little patches upon trees or rocks, or on the earth in damp places. The British

14951 Stem procumbent flexuose branched in a starry manner, Leaves broad-ovate acutely 2-parted : segments folded together with spiny teeth, Fruit terminal
14952 Lvs. subquad acutely bifid segm acute straight ent. Fruit terminal, Cal obl plaited : mouth toothed
14953 Leaves subquadrate obtusely bifid · segments acute, Fruit terminal, Cal oblong plaited mouth toothed
14954 Lvs orbicul concave at extrem lunul emarg. Fruit term upon short prop. central branches Cal obl ov
14955 Lvs. round very conc. bif. : segm long acum incurv. Fr. term upon short prop. branch Cal obl subplicate

c Leaves 3-4-fid · segments equal

14956 Stem prost nearly simp. Lvs round, square lower bifid, upp 3-4-fid, Fr term Cal obl ov somew plait.
14957 Leaves subquadrate waved subtrifid, segm equal here and there toothed, Fruit terminal, Cal obovate
14958 Leaves spreading horizontally quadrate waved obtusely bitricrenate, Fruit terminal, Cal. campanulate, Theca spherical bursting irregularly
14959 Leaves bifarious closely imbricated erect quadrate quadrifid their inferior angles here and there spinul. toothed, Fruit terminal and lateral, Cal oblong plicate · the mouth open

d Leaves bifid segments unequal folded together.

14960 Lvs unequally 2-lobed 4-bifid tooth cili Lobes fold together, lower ones larger obov, upp subcord obt
14961 Stem erect nearly simple, Leaves unequally 2-lobed as deep as base tooth ciliated, Lobes folded together
14962 Lvs. uneq 2-lob Lobes folded together serrated at extrem acute lower ones larger ov, upp round. ov.
14963 Leaves unequally 2-lobed wavy entire, Lobes roundish folded together, lower ones largest, Fruit term. Cal oblong incurved compressed
14964 Leaves roundish nearly equally 2-lobed entire, Lobes folded together, Fr term Cal obl incurv compres.
14965 Leaves unequally 2-lobed folded together with a pellucid line in the middle serrated at the extremity Fruit terminal, Cal obovate cylindrical
14966 Lvs unequally 2-lobed folded together obtuse entire, Fruit term Cal. obov · mouth contracted toothed
14967 Lvs unequally 2-lobed folded together narr ov acute, Fr term Cal ov plaited mouth contract. toothed
14968 Leaves horizontally spreading somewhat folded together upper equally, lower unequally 2-lobed, All the lobes rather acute, Cal obovate
14969 Stem prostrate nearly simple, Leaves unequally 2-lobed, Lobes folded together. lower larger ovate concave acute, upper minute tooth-like
14970 Leaves imbricated on the upper side unequally 2-lobed folded together upper lobes the larger convex bifid and toothed at the extremity
14971 Lvs distich. imbricat above unequ 2-lobed upp lobes larger orbicul, lower ov appres flat, Cal truncat.

†† Furnished with stipules

** Leaves entire or rarely emarginate*

14972 Leaves orbicular and ovate acuminate, Stipules broadly subulate
14973 Lvs all rounded, Stip broadly subul Fruit term Cal ovate compressed at the extremity truncate 2-lipped
14974 Lvs round concave entire and emarg Stipules broadly subul Fruit terminal, Cal immersed in the leaves
14975 Lvs horizontal rounded quad plane ent. and emarg Stip obl bifid, Fr upon very short proper branches
14976 Stem creeping simple, Lvs rather rem cuneiform ent. or bluntly emarg at end, Stip minute ovate bifid
14977 Leaves horizontal plane ovate entire, Stipules broadly ovate toothed lam. Fr lat. Cal subterr obl fleshy
14978 Leaves horizontal convex ovate ent Stipules round lunate-emarg Fruit lat. Cal subterr obl. fleshy hairy

*** Leaves 2 or 3 cleft segments equal*

14979 Leaves broadly ovate decurrent bifid at the apex segm very acute entire, St pules bitrifid and laciniate
14980 Stem creeping branched, Leaves round-ovate decurrent rarely acutely often obtusely emarginate or entire, Stipules bitrifid, Fruit terminal, Cal ovate
14981 Leaves round acutely emarginate segments acute straight, Stipules large ovate acuminate with a single tooth at the base on each side
14982 Stem nearly erect simple or branched, Leaves ovate concave acutely emarginate, Stipules minute ovate bifid, Fruit terminal, Cal oblong cylindrical little plaited
14983 Leaves rounded quadrate 3-4-fid, Stipules lanceolate acutely bifid their margins lacerated
14984 Lvs very concave nearly hemispherical emarg Stip ovate lanc obtuse, Fruit term. upon short branches
14985 Leaves imbricated above subquadrate incurved acutely 4-toothed, Stip broadly quad 4-tooth. Fr radical
14986 Lvs. imbricat above ov convex obtusely trident Stip. broadly subquad. cren. Fr from lower part of stem

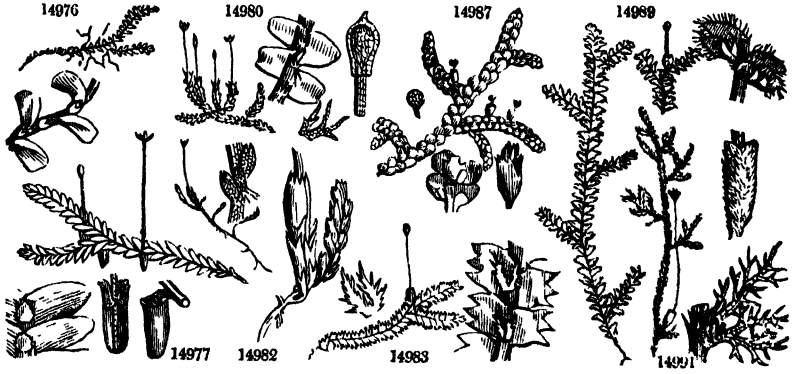
*** Leaves bifid. segments unequal folded together.*

a Lower segments or smaller ones flat

14987 Lvs. unequal lob · upper lobes round ov nearly ent., lower and stip ligulate quite entire, Fruit lateral
14988 Lvs. unequal 2-lobed spinul-toothed upper lobes roundish ov, lower ligul Stip obl quad spiny toothed
14989 Leaves very convex unequally 2 lobed lobes and lobules ovate bipart. fringed with long and slender ciliæ
14990 Stem procumbent bitripinnate, Leaves very convex unequally 2-lobed upper lobes 2-parted spiny toothed, lower very minute oblong entire
14991 Leaves nearly flat unequally 2-lobed cut into numerous capillary segments upper lobes 2-partite, lower minute, Stipules subquadrate laciniate

b Lower segments or smaller ones involute

14992 Stem creeping unequally branched, Leaves unequally 2-lobed upper lobes rounded, lower minute involute Stipules large rounded obcordate



and Miscellaneous Particulars.

species have been admirably illustrated by Hooker, to whose Monograph no other botanical work can be compared.

14993 serpyllifólia *Hook*	thyme-leaved	imbric masses	½	april, june	Pa G	trun of trees	Hook. jung t.42
14994 hamatifólia *Hook*	hook-leaved	very smll pat.	½	spring	G	rocks	Hook jung t.51
14995 minutissima *Hook*	very minute	little patches	½	april, may	Y G	bark of trees	Hook jung. t 52
14996 calyptrifólia *Hook.*	calyptra-leav.	little tufts	½	summer	Pa G	on Ulex nan.	Hook jung t 43
14997 Hutchinsiæ *Hook.*	Miss Hutchins's	loose patches	1	summer	D Ol	damp pl, Ir.	Hook jung t. 1
14998 dilatáta *Hook*	dilated	round patches	⅝	winter	Br P	trun of trees	Hook jung t 5
14999 Tamarisci *Hook*	Tamarisk	large patches	3	april, sept.	Br G	on the earth	Hook. jung t 6
15000 pinguis *Hook*	fat	loose patches	2	summer	Pa G	moist sha pl	Hook jung t 46
15001 multifida *Hook.*	many-cut	crowded tufts	1	spring	Pa G	moist pl hea	Hook jung t 45
15002 Blásia *Hook*	Blasia	patches	1	spring	D G	moist heaths	H jun t 82,83,84
15003 epiphýlla *Hook*	epiphyllous	large patches	3	spr and sut	Pa G	moist hedges	Hook jung t 47
15004 furcáta *Hook*	forked	large patches	½	oct., march	Pa G	trun of trees	Ho jung t.55,56
15005 pubéscens *Hook*	downy	patches	1	spring	Gl	rocks	Hook. jung t 73
15006 Lyéllii *Hook*	Mr Lyell's	loose patches	1	may	Pa G	bogs	Hook jung t 77
15007 hibérnica *Hook*	Irish	loose patches		april	Pa G	shores of Ir.	H ju. t.78 s t4.f 1

2254 MARCHAN'TIA *Mich* Marchantia *Sp* 4—7.

15008 polymórpha *E B*	variable	broad patches	2	winter	D G	moist rocks	Eng bot. t. 210
15009 hemisphæ'rica *E B*	hemispherical	broad patches	1¼	winter	D G	moist rocks	Eng bot t 503
15010 cónica *E B*	conical	broad patches	2	winter	D G	shady banks	Eng bot t 504
15011 andrógyna *E B*	androgynous	broad patches	1½	winter	Pa G	wet rocks	Eng bot t. 2545

2255 RIC'CIA *E B* Riccia *Sp* 4

15012 glaúca *E B*	glaucous	patches	½	spring	Gl	rocks	Eng. bot t 2546
15013 nátans *E B*	swimming	floating	½	spring	G	ditches	Eng bot t 252
15014 flúitans *E B*	floating	floating	½	spring	Pa G	ditches	Eng. bot t 251
15015 spúria *Dicks*	spurious	patches	½	spring	Pa G	mount mar	Dick cr t 11.f 16

2256. ANTHO'CEROS *E B.* Anthoceros *Sp* 3—5

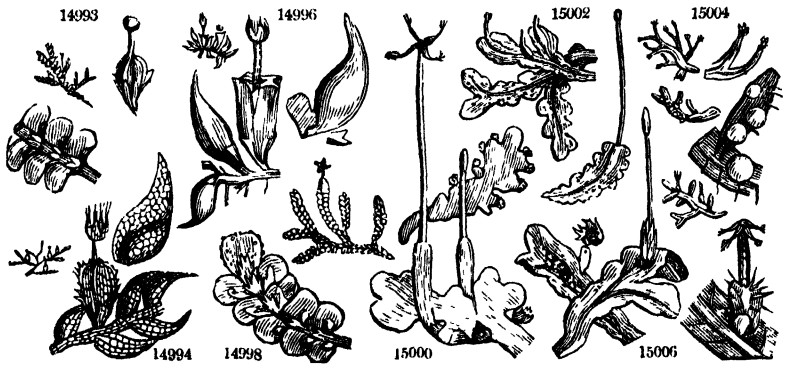
15016 multifidus *Dicks*	multifid	patches	½	summer	G	crev in roc	Dill mus.t.68.f 4
15017 punctátus *E B.*	dotted	patches	1½	spring	Pa.G	damp places	Eng bot t. 1537
15018 májor *E B*	large	broad patches	½	spring	D G	damp places	Eng bot. t 1538

2257 TARGIO'NIA *E B* Targionia *Sp* 1—3

15019 hypophýlla *E B*	flat-leaved	broad patches	½	wint and spr.	D G	wet places	Eng bot t. 287

2258 SPHÆROCAR'PUS. *E B* Sphærocarpus *Sp* 1—4

15020 terréstris *E. B.*	earth	spots	½	winter	Bt G	damp places	Eng bot t 299



History, Use, Propagation, Culture,

2254 *Marchantia* Named by Nicholas Marchant, in honor of his father John Marchant, the first botanist whom the Academy of Sciences of Paris admitted among its members, in 1666 Soft-leaved creeping plants, with green cellular fleshy fronds spreading over the surface of the ground in wet places M hemisphærica and polymorpha are often the pest of the florist, whose flower pots are overrun by them, and continually disfigured

2255 *Riccia* Pietro Francisco Ricci, was a Florentine botanist, who left some of his works to the academy of Florence Little, generally floating, simple plants, of the nature of which very little is known Only one kind has been observed in fructification, and that is of a very ambiguous character. The thecæ, or the organs so called, are little round bodies immersed in a cavity of the frond, and containing minute sporules

2256 *Anthoceros* From ἄνθος, a flower, and κέρας, a horn, on account of the horn-like form of the theca, which old botanists considered to be the flower Minute frondose plants, with a linear 2-valved theca, containing a columella to which the sporules are attached. In habit they resemble Jungermannia.

14993 Lvs. unequal, 2-lobed upper lobes rounded; lower minute invol Stip roundish acutely bifid, Fruit lateral
14994 Lvs unequally 2-lobed upper lobes ovate-acum mostly curved at extremity, lower ovate acutely bifid
14995 Stem creeping unequally branched, Leaves unequally 2-lobed upper lobes hemispherical, lower minute almost obsolete, Stipules ovate rounded bifid, Fruit lateral
14996 Stem creeping branched, Leaves unequally 2-lobed: upper lobes larger calyptriform, lower bluntly square circumvolute, Fruit lateral

c Lower segments or smaller ones saccate

14997 Stem creeping branched, Leaves unequally 2-lobed upper lobes ovate spiny-serrated: lower minute saccate generally 1-toothed at base, Fruit lateral
14998 Lvs unequally 2-lobed: upper lobes ovate rounded, lower rounded saccate, Stip rounded flat emarginate
14999 Lvs. unequally 2-lobed. upper lobes ovate roundish, lower minute obov. saccate, Stip subquadrate emarg.

§ 2 Frondose

† Nerveless

15000 Frond obl decumb nervl fleshy nearly plane above swell ben; irregularly branch. The margin sinuated
15001 Frond lin nerveless fleshy compressed branched in a pinnated manner, Fruit marginal, Cal very short

†† Nerved

15002 Frond obl submemb dichot costate having scattered scales on the underside, Cal and calyptra within frond
15003 Frond obl submembranous irregularly divided obsoletely ribbed the margin entire or lobed and sinuated, Fruit from upper part of frond near the apex
15004 Frond lin dichotomous membranous costate glabr above more or less hairy beneath and on the margin, Fruit from the lower surface of the nerve
15005 Frond lin dichotomous membranous costate pubescent in every part [of the fronds
15006 Frond obl somew branch memb costate the margin nearly entire, Fruit arising from the superior surface
15007 Frond obl dichotomous membranous costate with the margin entire, Fruit arising from the upper surface of the frond

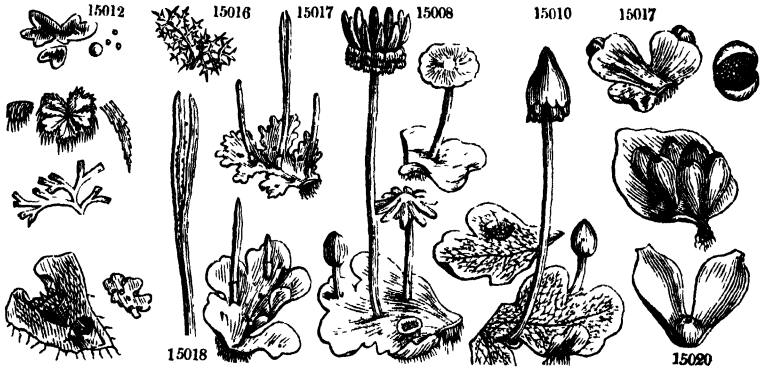
15008 Recept. of theca deeply cut in a stellated manner into about ten narr segm that of the anthers pedunculat.
15009 Recept of thecæ hemispherical cloven into about 3 oval segments
15010 Recept of thecæ entire conical ovate somewhat angular that of the anthers sessile
15011 Recept of thecæ hemispherical half 4-cleft of 4 cells

15012 Frond small obl somew divid the segments 2-lobed at the end fleshy glaucous dotted on the surface
15013 Frond triangular cordate covered with long linear lanceolate segments on one side
15014 Frond membranous dichotomous, Lobes retuse
15015 Fronds membranous lobed pellucid, Theca beneath the sinuses of the lobes solit exserted turbinate tooth.

15016 Fronds bipinnatifid linear
15017 Fronds multifid lobed sinuated, Theca subulate half bifid
15018 Fronds lobed rounded flat, Theca short

15019 Frond flat imbricated lobed, Lobes rounded retuse

15020 Frond simple ovate, Thecæ pyriform clustered at the base of frond

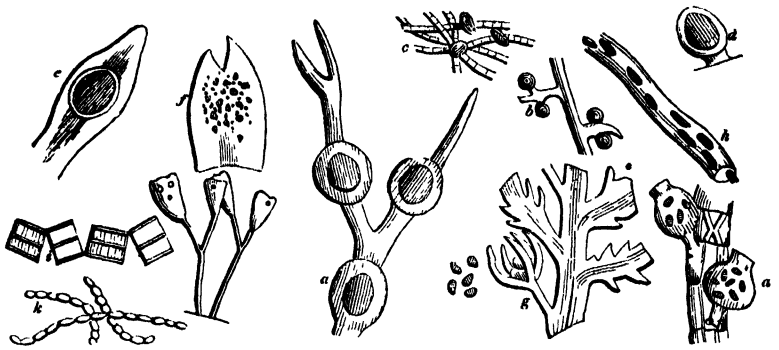


and Miscellaneous Particulars.

2257 *Targionia* So called in remembrance of John Anthony Targioni, a meritorious Florentine botanist, who published in 1754 a work for the purpose of shewing the importance of botanical lectures, with reference to a course of studies in medicine There was also another Florentine physician called John Targioni Tozzetti, after whom Tozzettia has been named. This genus consists of only one species, which is frondose and lobed. The theca is concealed and almost sessile within the involucre, globose, bursting at the apex, and discharging its sporules mixed with spiral filaments This genus is very near Jungermannia

2258 *Sphærocarpus* From σφαῖρα, a globe, and καρπός, fruit, in allusion to the form of the fruit. The plant consists of a roundish delicate membranous frond, bearing on its disk a cluster of obpyriform receptacles, each of which has a globose transparent finely membranous seed-vessel, filled with minute sporules unmixed with elastic filaments.

Order 7. ALGÆ.



Reproductive organs of two kinds 1 *Theeæ or tubercles variously situated.* 2 *Sporules or granules naked or immersed in the frond Plants always aquatic and submersed*

This order is constituted of the sea-weeds of our ocean, and of the floating scum-like substances of our ditches and rivers Little is known of the functions which what are called their reproductive organs perform The nature and structure of those organs are so various as to render it improbable that they should all be destined for the same purposes The bodies which are called sporules are variously situated, now filling distinct theeæ (*a*), or even tubercles (*b*), which are either free (*b, c, d*), or imbedded in the substance of the frond (*e, f*), now appearing to be naked and surrounded by an involucre (*g*), now scattered or arranged in some determinate manner in the interior of the frond (*h*) The fronds are either cylindrical (*h*), or plane (*i*), sometimes little more more than a mere membrane, sometimes hard and horny, and extended to the length of many feet Many are articulated (*i, k*) their line of separation is then called a joint, and the space between two joints an articulation

Professor Agardh, of Lund, one of the most celebrated of modern cryptogamists, and whose disposition of Algæ is adopted here, in his latest work, called Systema Algarum, published at Lund, in 1824, defines the order thus

"Aquatic plants destitute of cotyledons and of sexual organs, gelatinous, membranous, or coriaceous, filamentous, laminose, or even leafy, in color green, purple, or olivaceous, jointed or continuous, bearing sporidia" (little transparent bodies containing sporules), "either included in pericarps or scattered over the surface"

The Algæ form one of the three forms of the lowest order of vegetation, Lichens and Fungi the two other Of the former, many are considered by some botanists to be animalcula, and others, to be the young seedling plants of mosses

Tribe I DIATOMEÆ

Bodies of various forms, flat and crystalline, and separating into fragments.

2259 *Achnanthes* Frond stalked, vexilliform *Marine*
2260 *Diatoma* Filaments jointed, hyaline, rigid, simple, united in pairs longitudinally, at length separating into articulations cohering by their alternate angles
2261 *Fragillaria.* Filaments jointed, simple, gelatinous, compressed, fragile, separating at the joints.
2262 *Meloseira* Filaments jointed, contracted at the joints, very fragile, and easily separating.
2263 *Desmidium* Filaments transversely and densely striated, mucous, flexible, green, half separated into articulations, and in that state pinnatifid.
2264 *Schizonæma.* Filaments bead-like, composed of narrower cohering filaments inclosing elliptical granules, into which they are finally dissolved *Marine*

Tribe II NOSTOCHINÆ.

Individuals numerous, globular or filiform, suspended in a gelatine of a definite form.

2265 *Palmella.* Minute or small, somewhat diaphanous gelatinous plants, filled with solitary granules unmixed with filaments
2266 *Echinella* A roundish gelatine crammed with elliptical radiant corpuscles. *Marshy*
2267 *Alcyonidium* A spongy fleshy lobed frond filled with granules *Marine*
2268 *Nostoc* Plants roundish or shapeless, gelatinous Substance composed of curved moniliform simple filaments, lying irregularly in a gelatinous nidus.
2269 *Coryncphora* A gelatinous roundish puckered frond filled with jointed filaments, bearing here and there clavate processes
2270 *Rivularia* A gelatinous subglobose frond filled with filaments, radiating from a common centre, continuous, placed on a globule, and marked with annulations inside
2271 *Chætophora* Plant elongated or globose gelatinous Substance composed of branched articulated filaments
2272 *Scythymenia* A coriaceous tough stratum, formed of fibres and granules mingled together.

Tribe III CONFERVOIDEÆ

Filaments jointed either externally or internally, separate, and not combined in any definite form.

2273 *Byssocladium* Filaments like cobwebs, scattered externally with sporidia *Slightly inundated*
2274 *Mycinema* Filaments membranous, opaque, tenacious, colored (usually tawny). *Slightly inundated*
2275 *Chroolepus* Filaments rigid, nearly solid, opaque, crumbling into powder, torulose *On rocks or bark*
2276 *Trentepohlia* Filaments flexible, colored, bearing capsules, which generally proceed from the last articulation, which is inflated *Inundated or fluviatile*
2277 *Scytonema* Plant not gelatinous, coriaceous Filaments short, forming dark dense tufts, beaded internally, or filled with annular transverse bodies *On rocks or inundated, rarely marine*
2278 *Stigonema* Filaments continuous, coriaceous, naked, marked inside with dots disposed in rings *On rocks*
2279. *Protonema.* Filaments somewhat jointed, rooting very minute
2280 *Hygrocrocis* Filaments hyaline, arachnoid, obsoletely articulated, floating in a shapeless gelatine or in a colored membrane
2281 *Leptomitus.* Filaments hyaline or slightly colored, arachnoid, obsoletely articulated, separate, erect, not entangled.

2282 *Mesoglœa.* Frond filiform, cylindrical, gelatinous, with compact somewhat moniliform branches radiating from a medullary pith, and bearing capsules.
2283 *Batrachospermum* Frond filiform, gelatinous, sending out from the primary filament moniliform gemmiferous branches
2284 *Draparnaldia.* Filaments green, jointed, very gelatinous. Ramuli penicillate fascicled Fructification a granular mass in the articulations of the main filaments.
2285 *Oscillatoria* Plants gelatinous Filaments simple, continuous, membranaceous, filled internally with transverse parallel striæ
2286. *Calothrix* Filaments destitute of a mucous matrix, stiffish, straight, motionless, with a continuous tube annulated inside
2287 *Lyngbya.* Filaments without a mucous matrix, freely floating, flexible, motionless, with a continuous tube annulated inside
2288 *Bangia* Filaments capillary, mostly simple, tubular, continuous. Fructification, granules disposed in regular transverse series or strata
2289 *Zygnema* Filaments jointed, simple, gelatinous, compressed, fragile, separating at the joints
2290 *Mougeotia* Filaments articulated, connected like a net, with irregularly placed granules, and theca attached to the angles of the meshes
2291 *Hydrodictyon* Filaments articulated, connected like a net Articulations viviparous, including young individuals
2292 *Conferva* Filaments uniform, jointed, membranaceous, simple or branched, mostly green Fructification, granules scattered in the articulations *Salt and fresh water*
2293. *Bulbochæte* First filament articulated, sending out from the apex of the articulations an accessory branchlet Thecæ alternating with the accessory branches *Marshy*
2294 *Nitella* Filaments consisting of a single tube, membranous, jointed, with whorled branches Organs of fructification twofold and separate, first nucules spirally striated, without bractes, and not crowned, second, colored globules *Sea and marshes*
2295 *Chara.* Filaments spirally striated, jointed, with whorled branches Organs of fructification twofold, and close together, first, nucules spirally striated, furnished with bracteæ, and crowned, second, colored globules *Sea and marshes*
2296. *Ceramium* Filaments jointed, subdichotomous, red, articulations veined or diaphanous Fructification, capsules with an involucre of short ramuli *Marine*
2297 *Griffithsia* Filaments jointed, rose red, branched Articulations marked with one broad tube-like line, the joints pellucid Fructification, pedunculated capsules on the ramuli *Marine*
2298 *Chætospora* Filaments obsoletely articulated, rosy, covered by axillary articulated fruit-bearing branches, which either include in the middle a globe of sporules, or change to a lanceolate receptacle covered with setæ, among which the sporules nestle *Marine*
2299 *Polysiphonia* Filaments jointed, longitudinally striated, with internal parallel tubes. Fructification, double ovate capsules, and granules in swollen branchlets *Marine*
2300 *Rytiphlœa* Frond flattened, distichous, transversely striated, becoming black when dry, with incurved ramenta Fruit twofold, first, spherical capsules with pyriform sporidia, and second, lanceolate pods with roundish sporidia *Marine*
2301 *Ectocarpus* Filaments jointed, much branched, fuscous. Fructification, lanceolate pods or ovate capsules solitary or racemose *Marine*
2302 *Sphacellaria* Filaments jointed, branched, olivaceous, distichous or dichotomous, apex of the branches sphacellate or hyaline, abrupt Fructification, granules in the sphacellated apex, or capsules *Marine*
2303 *Cladostephus* Plant olivaceous Main filaments opake, inarticulate, branches jointed, mostly whorled with ramuli Fructification, capsules *Marine*

TRIBE IV ULVACEÆ.

Frond membranous, continuous, tubular or flattened, never ribbed, herbaceous, or very rarely purple. Fruit a heap of sporules, either naked, or forming scattered granules covered by conocystas

2304 *Vaucheria* Filaments dichotomous or irregularly branched, somewhat rigid Fructification, a granulated mass within the frond, and external dark vesicles variously situated
2305 *Codium* Frond spongy, of a determinate figure formed of filaments densely packed, which are tubular and continuous, and colored by a granular green powder Conocystas clustered at the surface of the frond
2306 *Bryopsis* Root minutely scutate Filaments tubular, continuous, aggregated, branched, pinnate, or imbricated upwards with branchlets Fructification a dark internal granular mass.
2307 *Solenia* Frond tubular, membranous, with a striated areolated surface Sporidia very minute and compact
2308. *Ulva* Root scutate Frond plane, ribless, flabelliform or wedge-shaped, or linear and dichotomous Fructification naked immersed, granules distributed in fours throughout the frond
2309 *Porphyra* Frond flat, purple, with the membrane of equal texture Fruit twofold, first, sori of oval sporidia collected in a disorderly manner, second, two parallel lines marked on each side by a globule

TRIBE V FLORIDEÆ

Frond cortaceous or rarely membranous, flat or filiform, continuous, purple or pink Sporidia purple, included in capsules or clustered in sori

2310 *Polyides.* Frond filiform, fastigiate, cartilaginous, softish, composed of radiating fibres Fruit, spongy warts composed of fibres supporting sporidia
2311 *Ptilota* Root scutate Fronds compressed or plane, pinnate Fructification; a cluster of naked granules surrounded by a linear cleft involucre
2312 *Rhodomela* Frond either flat or foliaceous, and somewhat ribbed or filiform Fruit twofold, first, lomenta filled longitudinally with globules of sporaceous matter, second, capsules with a few pyriform sporidia sessile in the capsule (blackish when dry)
2313 *Chondria* Frond continuous, gelatinoso-cartilaginous Fructification double, naked granules immersed in the substance of the ramuli and external tubercles
2314 *Sphærococcus* Root scutate Frond submembranaceous or cartilaginous. Fructification uniform, tubercles or capsules
2315 *Halymenia.* Frond flat or tubular, somewhat membranous. Fruit, dot-like tubercles half immersed in the lamina of the frond
2316 *Bonnemaisonia* Frond filiform, compressed, pectinate, ciliated Fruit, capsules with pyriform sporidia fastened together in a chain-like manner
2317 *Delesseria* Root scutate Frond plane, membranaceous, with or without ribs. Fructification double, tubercles and clusters of naked immersed granules

TRIBE VI. FUCOIDEÆ.

Frond coriaceous, rarely membranous, continuous, olive-green, flat or filiform Sporidia black, included in capsules, which are either ovate, and surrounded by a hyaline border, and nestling in a peculiar receptacle, or pyriform, and immersed in the frond

2318 *Lemanea* Frond filiform, torulose, tubular Chains of sporæ adhering to the inner surface of the filament, pencilled moniliform. *In fresh water.*

2319. *Chordaria* Root scutate. Frond filiform of an olive color and cartilaginous substance. Fructification, clavate, pyriform, concentric filaments constituting the whole frond

2320 *Scytosiphon* Root scutate Frond filiform, tubular, subcoriaceous Fructification; naked pyriform granules covering the whole frond

2321 *Sporochnus* Root mostly scutate Frond plane, with distichous branches, bearing, in most instances, delicate pencil-like deciduous tufts of confervoid filaments. ("Receptacles composed of concentric, clavate, articulated corpuscules")

2322 *Halicera* Frond flat, linear, ribbed, membranous Capsules heaped in sori

2323 *Encælium* Frond tubular or bladdery, dotted Fruit, the tips of the frond filled with a black sporaceous matter

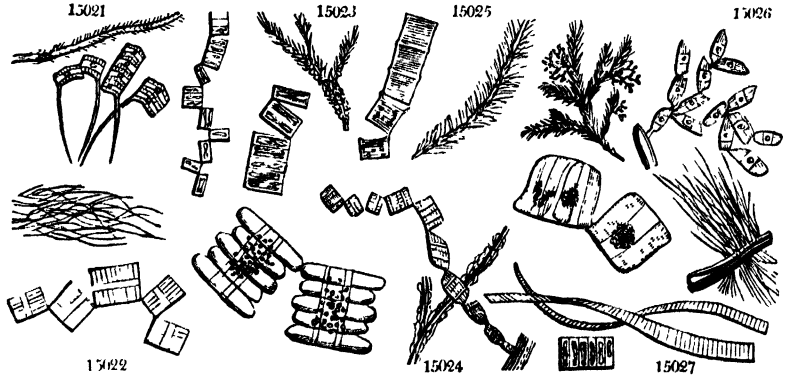
2324. *Zonaria.* Root downy Frond plane, ribless, flabelliform or wedge-shaped, or linear and dichotomous. Fructification, adnate tubercles collected into parallel lines on the frond.

DIATOMEÆ.

2259	ACHNAN'THES *Agh*	Achnanthes.		*Sp* 1—2.				
15021	lóngipes *Ag*	long-stalked	fine down	½	july	Gsh	dit, sea coast	E b t.2488. *Conf stipitata*
2260	DIA'TOMA *Ag*	Diatoma.		*Sp* 5—16.				
15022	flocculósum *Ag*	floccose	fine film	½	sum	Y Br	ditches	E bot t. 1761 *Conferva*
15023	marinum *Ag*	marine	little tufts	½	febr	Y,G	ocean	E b t.1883 *Conf tænieef*
15024	Biddulphiánum *Ag*	Miss Biddulph's	short down	½	nov d	G	sea coast	E bot t 1762 *Conferva*
15025	striátulum *Ag*	striated	short down	½	april	G	ocean	E bot t 1928 *Conferva*
15026	obliquátum *Ag*	oblique	minute branc.	½	sum	Lt Br	ocean	E bot t 1869 *Conferva*
2261	FRAGILLA'RIA *Ag*	Fragillaria		*Sp* 2—3.				
15027	pectinális *Ag*	silvery	loose tufts	½	march	Y G	on wat. plan.	E bot. t 1611 *Conferva*
15028	hyemális *Ag*	winter	dense fl tufts	3	april	O Br	rivulets	Lyngb phyt dan t 63
2262	MELOSEI'RA *Ag*	Meloseira		*Sp* 3—5				
15029	nummuloides *Ag*	necklace	down-like	½	march	Ysh	salt marshes	Eng bot t 2287
15030	lineáta *Ag*	striated	short down	½	march	Ysh	rivulets	Dil con 24 t B *Conferva*
15031	discígera *Ag*	cup-bearing	short down	½	sum	Brsh	lvs of aquat	Di co 25 t B *C nummul*
2263	DESMI'DIUM *Ag.*	Desmidium.		*Sp* 1—2				
15032	Swártzii *Ag.*	pinnatifid	loose masses	1½	sum	G	still waters	E b t.2464 *Con dissiluens*
2264	SCHIZONE'MA *Ag*	Schizonema		*Sp* 5—9				
15033	Smithii *Ag*	Smith's	slipp threads	¾	sum	Brsh	sea coast	E. b t 2101 *Conf fœtida*
15034	lacústre *Ag*	lake	slipp threads	¾	sum	Brsh	lakes	
15035	Dillwýnii *Ag*	Dillwyn's	entangl tufts	1½	sp su.	Ol G	sea coast	Di co t.104 *Conf fœtida*
15036	apiculátum *Ag*	pointed	lax tufts	¾	spring	Y G	sea in basins	Grev crypt. t. 30
15037	dichótomum *Grev.*	dichotomous	erect tufts	1	sum.	Y G	sea in basins	

NOSTOCHINÆ.

2265	PALMEL'LA *Ag*	Palmella		*Sp* 6—12				
15038	protúberans *Ag*	lobed	mass	½	sp aut.	G	rocks	Eng. bot. t 2583 *Ulva*
15039	botryoides *Ag*	bunched	thin skin	...	aut.	G	damp places	
15040	adnáta *Ag*	adnate	gregarious	½	aut	Y Br	mount. rocks	Lyngb phyt. dan t 69



History, Use, Propagation, Culture,

2229 *Achnanthes* From αχνη, the froth of the ocean, and ανθος, a flower Marine productions, separating into fragments, but by degrees. In the middle of each articulation are one or two crystalline points.

2230 *Diatoma* From διατομη, incision, in allusion to the curious manner in which the filaments are divided into joints cohering alternately by their angles

2231. *Fragillaria* So named on account of their fragile nature, which is more remarkable than that of other Conferve The filaments when complete are flat and composed of little fragments glued together crosswise. These are very narrow, and when once separated do not cohere again

2232 *Meloseira* From μηλος, a membrane, and σειρα, a chain, with reference to the form of the filaments This genus differs from the last, as Conferva from Oscillatoria

2263 *Desmidium* From δεσμος, a bond, in allusion to the singular manner in which the parts cohere when in a state of dissolution At that period the articulations become half separated one from the other in such a way as to represent a pinnatifid appearance

2264 *Schizonema* From σχιζω, to divide, and νημα, a filament; the filaments are finally divided into compound granules. These plants have entirely the habit and flexible substance of Confervæ When fresh they are sparkling and brown, when dry olive-green, and very shining They are composed of many filiform individuals, which include nearly the same corpuscles as are visible in the foreign genera Frustulia and Meridion.

2225. *Laminaria.* Root fibrous. Stipes dilated into a plane frond. Fructification, naked granules immersed and forming irregular groups in the frond.
2226. *Lichina.* Fronds minute, tufted, greenish-black when growing. Fructification solitary tubercles with a pore, at length scutelliform
2227 *Furcellaria* Frond cylindrical Fructification concealed in the swollen extremities of the frond, capsules in the centre, and pyriforme granules in the circumference.
2228. *Fucus* Root scutate Frond plane or compressed, (rarely filiform) dichotomous Fructification, tubercles contained in a common mucose receptacle, and filled with sporules and filaments
2229 *Cystoseira.* Root scutate Stipes cylindrical Lower leaves plane, upper ones filiform, furnished with pinnate vesicles. Fructification, tubercles in common receptacles, the receptacles with several loculaments

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DIATOMEÆ.

15021 Articulations with one dot, Stem long

15022 Filaments striated, Articulations nearly equal in diameter with parallel striæ
15023 Articulations half as long again as wide granular transversely
15024 Filaments greenish, Articulations square striated
15025 Filaments arcuate transversely striated, Articulations nearly square with pellucid joints
15026 Articulations half as long again as wide oblique marked with a pellucid transverse band and a dot

15027 Filaments tapering very rigid with parallel transverse dense striæ
15028 Filaments tapering orange-colored, Articulations twice as short as their diameter

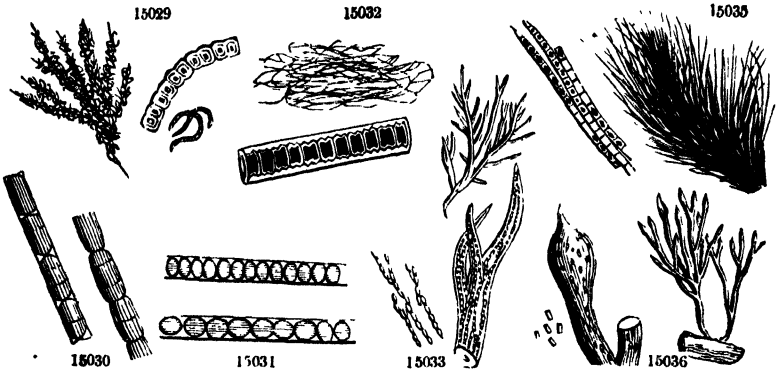
15029 Filaments unequal containing nearly circular moniliform globules in rows
15030 Joints contract Articulations transversely striat with 1 or 2 very fine lines about 3 times as long as wide
15031 Articulations shorter than broad finally changed into somewhat oval close moniliform heaps

15032 Filaments after copulation punctatifid traversed by a longitudinal green streak, Articulations 2-toothed

15033 Filaments somewhat branched cæspitose acute, Granules parallel clustered
15034 Filam somew branched cæspitose acute, Granules clustered appressed, Membrane of filam inconspicuous
15035 Filaments densely branched virgate, Granules elliptical
15036 Filaments minute continuous erect branched containing cylindrical oblong scattered granules
15037 Filaments slender erect dichotomous, Branches swollen here and there into roundish knobs · interior gelatinous with numerous cylindrical oblong granules

NOSTOCHINÆ.

15038 Frond thick angular-lobed, Granules elliptical
15039 Fronds aggregate minute globose, Granules globose
15040 Frond deformed rugose, Granules globose brown



and Miscellaneous Particulars

2265 *Palmella* Apparently a diminutive of *Palma*, a little palm; but the application of the name is not obvious in that sense The plants are found in marshy or inundated places, and consist of globules nestling in a gelatine, in which respect the genus differs from Protococcus, the Red Snow plant. It is supposed that many of the species are only the ova of animalcules.

The Red Snow plant, which, as we have just said, is nearly related to this genus, has not hitherto been noticed in this country, but as it has been found in many countries similar to our own regions of snow, it is so probable that it exists in Great Britain, that we insert some particulars of it here, especially as it may be considered to have been *introduced* at least in 1819, by Captain Ross's expedition to the North Pole. When viewed under the highest powers of a simple microscope, it appears to consist of globules containing a red fluid. We select the following observations upon its history, from a communication made to the News of Literature and Science, on the twenty-first of January, 1826

"Our scientific readers will remember the interest which was excited on the subject of this natural production, upon the return of Captain Ross from his Polar expedition, some years since At that time it was examined by three of the most acute observers in this country, especially of microscopical objects, Wollaston, Brown, and Bauer, who all formed a similar conclusion in one respect, that it was of vegetable origin, but were of different opinions as to its precise nature · Dr. Wollaston supposing it to be the seed of a moss, Mr Brown, a substance belonging to Algæ, and nearly related to Tremella cruenta, a common British plant, and Mr.

15041 rósea *Lyngb.*	rosy	gregarious	... sum.	Pk	on lichens	Grev crypt t. 51	
15042 montána *Ag*	mountain	leaf-like	1½ sum.	R.G	alpine rocks	Eng bot t 2195. *Ulva*	
15043 cruénta *Ag*	bloody	thin crust	... all sea	R.Br	shady places	E. bot t 1800 *Tremella*	

2266. ECHINEL'LA *Ag* Echinella. *Sp* 1—3

15044 articuláta *Ag*	jointed	thin film	... jn jl	G	lakes	E.b t.1378. *Echinuata*	

2267 ALCYONI'DIUM *Ag* Alcyonidium *Sp* 3—7

15045 diáphanum *Ag*	transparent	fleshy mass	6 sum	Y	ocean	Eng bot t. 263 *Ulva*	
15046 flavéscens *Ag*	yellowish	fleshy mass	3 sum	Y	ocean	Fl dan t. 1245 *Ulva*	
15047 defractum *Ag*	broken	vermicular	4 sum	Y.Pk	ocean	Eng. bot. t. 1626 *Ulva*	

2268 NOS'TOC *Ag* Nostoc. *Sp* 4—22

15048 commúne *Ag*	common	lobed mass	2 sum	Ol.G	damp places	E. bot. t 461. *Tremella*	
15049 pruniförme *Ag.*	plum-shaped	little balls	¼ sum	Ol.G	lakes		
15050 sphæ'ricum *Ag*	spherical	little balls	½ sum.	Ol G	still waters		
15051 verrucósum *Ag*	warted	gregarious	1 april	Ol.G	rocks		

2269 CORYNE'PHORA *Ag* Corynephora. *Sp* 1

15052 marina *Ag* *Rivularia tuberiformis* E. B.	marine	lobed mass	1½ aug.	Br	sea shore	Eng bot. t. 1956	

2270 RIVULA'RIA. *Ag* Rivularia *Sp* 3—11

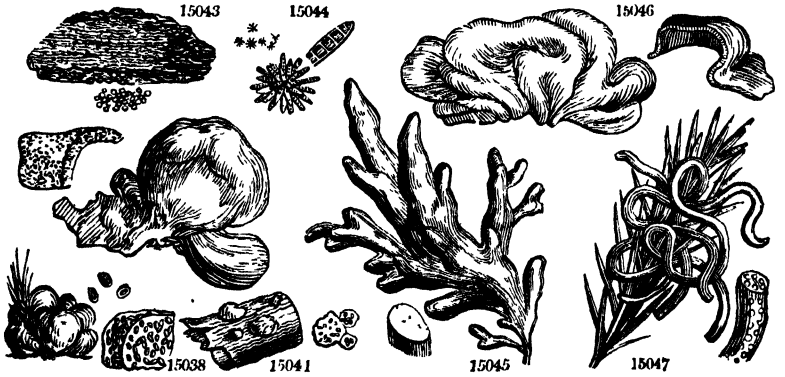
15053 átra *Ag*	dark	minute dots	½ oct	D G	sea plants	Eng bot t 1798	
15054 angulósa *Ag*	angular	little balls	¼ sum	Dl G	ditches	Eng bot. t. 968	
15055 calcárea *E B* *Lanckia dura* Lyngb	calcareous	conflu mass	1½ all sea	G	lakes & mar	Eng bot. t. 1799	

2271 CHÆTO'PHORA *Ag* Chætophora *Sp* 2—12

15056 tuberculósa *Ag*	warty	balls	¼ sept	G	ditches	E. bot t 2366 *Rivularia*	
15057 endiviæfólia *Ag*	endive-leaved	branched	2 sum	G	still waters	Lyngb phyt dan t. 60	
β crassa Ag.	*thick-leaved*	branched	2 sum	G	lakes	E b t. 967 *U incrassata*	

2272 SCYTHYME'NIA *Ag* Scythymenia. *Sp* 1.

15058 rupéstris *Ag*	rock	broad mass	24 sum.	Br	rocks	Eng bot t 2194	



History, Use, Propagation, Culture,

Bauer refering it to a genus of Fungi, called Uredo We have lately seen a curious paper upon this subject, by Professor Agardh, of Lund, whose opinions upon all matters connected with the lower orders of vegetation demand deep attention

"That snow occasionally assumed a red color, had long been a fact of which there could be no doubt, and that water was also under particular circumstances stained with red, we have the popular traditions of showers of blood, and water changed to blood, to attest In the year 1608, a shower of blood fell near Aix, in France, which was examined by Peirese, and found to be caused by insects, and to the same cause was undoubtedly to be ascribed the bloody rain that fell at Schonen, in 1711, which the learned Bishop Swedberg looked upon as a supernatural phenomenon, and a direct sign of the anger of the Divinity The red pools which are occasionally met with, even in this country, are generally stained by the presence of an immense number of animalcules, called Daphnia Pulex, or Cyclope quadricornis The red stains sometimes seen upon the seashore are occasioned by a particular sort of Fucus Professor Agardh proceeds to observe, that the red snow is very common in all the alpine districts of Europe, where it is probably, for the most part, of the same nature as that brought from the North Pole by Captain Ross Saussure saw it in abundance upon Mount Brevern, in Switzerland, and elsewhere, Ramond found it on the Pyrenees, and Sommerfeldt in Norway In March, 1808, the whole country about Cadore, Belluno, and Feltri, was in a single night covered to the depth of twenty centimetres with a rose-colored snow, at the same time a similar shower was witnessed on the mountains of Valtelin, Brescia, Carinthia, and Tyrol But the most remarkable red-snow shower was that which fell on the night between the 14th and 15th of March, 1813, in Calabria Abruzzo, in Tuscany, and at Bologna, and upon the whole chain of the Appennines We may add, that both snow and ice were seen stained with red, green, and blue by the late expedition under Baron Wrangel to the Frozen Ocean

"With this information before him, Professor Agardh proceeds to consider the nature of this remarkable substance, which he concludes, with Brown, to be referable to the lowest order of Algæ, and to stand as a distinct genus, which he calls Protococcus, upon the very limits of the animal and vegetable kingdoms Saussure, indeed, from finding that the red snow of the Alps gave out, when burnt, a smell like that of plants, concluded that it was of vegetable origin; but he supposed it to consist of the farina of some plant, although he could neither account for its having ascended to such elevated regions, nor mention a plant whose farina was of that color

"Besides the plant called Palmella cruenta, which is similar in its structure to the red-snow plant, other low vegetable productions have been noticed by different authors, as possessing a similar color Such are the Lepraria Kermesina, which, by the way, is considered only a particular state of the red-snow plant itself, and the Byssus cobaltiginea. These are always found in situations in which they are exposed to the intense action of light, such as vast plains of snow, or masses of glittering limestone Whence it is inferred, that the color of the red snow is attributable to the action of light, modified in some mysterious manner, by the nature of the body on which it strikes In confirmation of which hypothesis, it is remarked, that when the Lepraria

15041 Minute roundish soft rose-colored containing extremely minute sporules
15042 Frond deformed rugose, Granules ovate red
15043 Frond crust-like crimson

15044 Corpuscles radiant lanceolate jointed

15045 Branches elongated
15046 Branches short obtuse
15047 Frond filiform simple

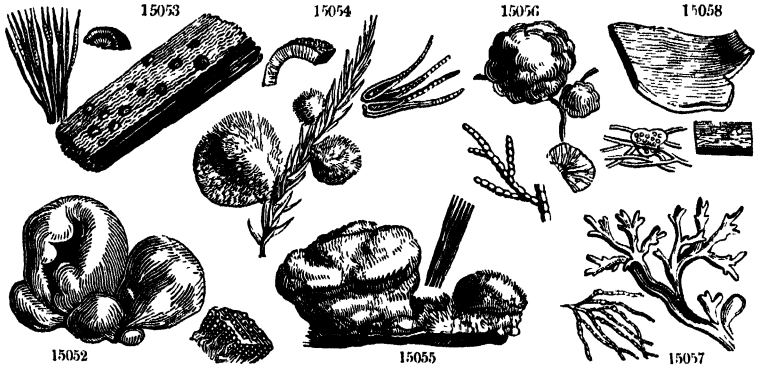
15048 Frond expanded deformed plaited wavy
15049 Frond globose watery inside, Integument coriaceous very smooth
15050 Frond globose solid smooth
15051 Frond bladdery subcoriaceous hollow plaited smooth

15052 The only species

15053 Frond hemispherical hard, Filaments very dense branched by apposition
15054 Frond globose hollow, Filaments simple
15055 Filaments intermingled with calcareous particles hard and crustaceous when dry

15056 Frond tubercular hollow, Filaments distributed in many little orbs
15057 Frond linear flattish dichotomous at base much pinnated at end
β Branches very short

15058 The only species



and Miscellaneous Particulars

Kermesina is found under stems, stones, or in crevices of limestone, where light can scarcely gain admittance, its color gradually passes from red to green

" The only difficulty in the way of this explanation of its nature is in the statements of so many observers, that the red snow falls from the air But Professor Agardh shrewdly remarks, that all the persons agree that it fell in the night, *which is as much as to say, that no one saw it fall* He is of opinion that the Protococcus, or Red Snow, is called into existence by the vivifying power of the sun's light, after its warmth has caused the snow to dissolve, and accompanied by that incomprehensible power in white snow, of producing a color, and, moreover, that it first attracts the eye when there is a considerable quantity, in the same way that we do not see the color of drops of water till they have accumulated in the ocean "

2266. *Echinella* From *echinus*, an hedgehog, in allusion to the bristly appearance presented by its radiant particles Many naturalists believe the bodies referred to this genus to be animalcula

2267 *Alcyonidium* So called, from αλκυονιδιον, the foam of the sea, among which the plants referred to this genus are naturally produced. This also is supposed to be the nidus of animalcula Lamouroux who originally fixed it here, afterwards referred it to Zoophytes, in which last opinion Gaillon agrees with him, declaring that he has actually seen the animalcula nestling in it D'Orbigny and Ellis consider it the ova of a testaceous animal

2268 *Nostoc* A name first used by Paracelsus, without an explanation of its meaning Agardh thinks this singular substance changes into the genus Collema among the Lichens.

2269 *Corynephora* From κορυνη, a club, and φερω, to bear, in allusion to the clavate filaments which are found on different parts of it The species are found in the ocean."

2270. *Ruvularia* So named on account of the places in which the species grow. They have a globose frond, of a gelatinous but toughish texture Their color is dark-green, and not as in the next genus, pale-green The filaments are very singular, seated on a globule, simple, cylindrical, and terminated by a very fine point, they are densely compact, continuous, and filled with a green annular matter

2271. *Chætophora.* From χαιτη, a bristle, and φερω, to bear, the filaments are terminated by a bristle-like point This genus is chiefly distinguished from Conferveideæ by its gelatine The color is bright green, and the texture softer than in the preceding The manner of propagation, which has been noticed in so small a number of Algæ, has been observed by Agardh in two species of this genus. In Chætophora pisiformis little hard crystalline corpuscles, like grains of sand, may be seen, which separate from the mother plant and produce young filaments But in C. clavata, the points of the filaments fall off and sink to the bottom of the water, where they unite by three, four, five, or by a greater number at a time, in a common point, which is first green, afterwards blackish, and apparently inorganic From this beginning new individuals arise

2272. *Scythymenia.* Derivation unknown A very singular plant, formerly referred to Ulva. It has the habit of a fungus, and grows upon damp walls. It is supposed to be most nearly related to Palmella.

CONFERVOIDEÆ.

2273. BYSSOCLA'DIUM *Ag* Byssocladium

15059 fenestrále *Ag*	window	fine tuft	*Sp* 1—3. ½	all sea	G	on windows	Dillw conf. t 94

2274 MYCINE'MA *Ag* Mycinema

15060 arachnoideum *Ag.*	cobweb	patch	*Sp* 5—6 ⅓	all sea	Pa G	dead trees	Dillw conf t C *Conferva*
15061 fulvum *Ag*	tawny	down-like	⅓	aut	Br	rotten wood	
15062 rubiginósum *Ag*	rusty	patch	½	all sea.	Rust	rotten wood	Dillw conf t 68 *Conf*
15063 phosphóreum *Ag*	phosphoric	patches	⅓	all sea.	V	rotten wood	Dillw conf t 88 *Conf*
15064 pulvéreum *Ag*	powdery	thin crust	⅓	all sea.	G	rotten wood	Dillw conf 78 t D *Conf*

2275 CHROOLE'PUS *Ag* Chroolepus

15065 Jólithus *Ag*	purple	patches	*Sp* 5—6 ⅓	all sea	Pu	rocks	Fl dan t 899 f 1
15066 odorátus *Ag*	sweet-scented	patches	⅓	wint	Br	trees	Lyngb hydrop dan t 57
15067 lichenícola *Ag*	Lichen	down	⅓	sum	R O	on lichens	Eng bot. t 1609
15068 ruberrimus *Ag*	pink	patches	⅓	sum	R Br	bark of ap tr	
15069 ebéneus *Ag*	ebony	patches	¼	all sea	Bk	rocks	E b t 702 *Byssus nigra*

2276 TRENTEPOHLIA *Ag* Trentepohlia

15070 purpúrea *Ag*	purple	patches	*Sp* 3—4 ⅓	all sea	Pu	sea coa , roc	Eng bot t 192 *Byssus*
15071 aurea *Ag*	golden	patches	⅓	all sea	Y	roc & sub w	Eng bot t 212 *Byssus*
β ilicícola Ag	*Holly*	branch pate	⅓	spring	Y	holly bark	Eng bot t 1619 *Conferva*
15072 pulchélla *Ag*	pretty	downy tufts	½	spring	R Br	on Confervæ	Eng bot t 2485 *Cinana*
β chalýbea Ag	*iron*	tufts	¼	sept	D Ol	fresh water	Eng bot t 1996

2277 SCYTONE'MA *Ag* Scytonema

15073 compáctum *Ag*	compact	tufts	*Sp* 5—17 1	sum	Bksh	mountains	Lyngb hydrop dan t 28
15074 byssoídeum *Ag*	byssus-like	tufts	1	sum	B	rocks	Dillen t 1 f 18
15075 myochróus *Ag*	mouse-skin	slimy coat	1	sum	D Br	rocks	
β ocellátum Ag	*mottled*	slimy coat	1	sum	D Br	aquat plants	Eng bot t 2530
γ inundatum Ag	*inundated*	slimy coat	1	sum	D Br	mund places	Eng bot t 1555
15076 Bángii *Lyngb*	spiral	compact tufts	1¼	sum	Ærug	sub dp b nks	Lyngb hydrop dan t 28
15077 Sowerbyánum *Ag*	Sowerby's	short down	⅛	sum	Ol Br	ocean	E b t 2219 *C mirabile*
15078 comoídes *Ag*	tufted	broad patches	⅛	oct	Rs br	ocean	Eng. bot t 1700 *Conf.*

2278 STIGONE'MA *Ag* Stigonema

15079 atrovírens *Ag*	dark green	bushy tufts	*Sp* 1—3 ½	sum	Bk G	rocks	Dillw conf. t 25 *Conf*

2279 PROTONE'MA *Ag* Protonema

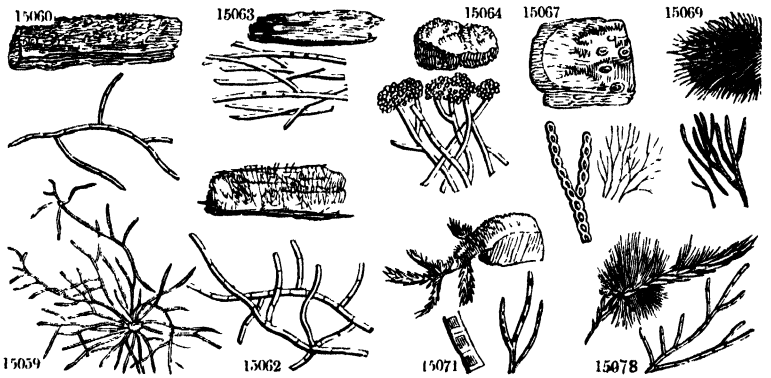
15080 répens *Ag*	creeping	patches	*Sp* 7—10 ¼	sum	G	pots in hoth	
15081 umbrósum *Ag*	shady	patches	⅛	sum	G	on the earth	Dillw conf t 61 *Conf*
15082 velutinum *Ag*	velvety	patches	¼	nov	G	on the earth	Dillw conf t 77 *Conf*
15083 frágrans *Ag*	fragrant	patches	¼	nov	G	on the earth	Eng bot t 1556 *Conf*
15084 crvptárum *Ag*	vault	patches	¼	sum	G	caverns	Eng bot t 2488 *Conf*
15085 Orthotrichi *Ag*	Orthotrichum	dense tufts	¼	sum	Br	on Orthotr	E b t. 1638 *C muscicola*
15086 muscícola *Ag*	moss	minute down	⅓	april	Br	on mosses	E b t 1701. *Con castanea*

2280 HYGROCRO'CIS *Ag* Hygrocrocis

15087 barýtica *Ag*	Barytes	fine tufts	*Sp* 7—9 ⅛	all sea	Tr	sol of mur B	
15088 atraménti *Ag*	ink	fine tufts	⅓	all sea	Wsh	surf of ink	Lyngb hydroph t 57
15089 typhlodérma *Ag*	Gum Arabic	fine tufts	⅛	all sea	Ol	in sol. g arab	Dillw conf t 83. *Conf*
15090 pállida *Ag*	pallid	fine tufts	⅛	all sea	Y	sol of ochre	Dillw. conf t 78 *Conf.*
15091 Rósæ *Ag*	Rose-water	fine tufts	⅓	all sea	Tr	rose water	
15092 sanguínea *Ag*	blood colored	fine tufts	¼	all sea	C	isinglass size	
15093 vini *Ag*	Wine	fine tufts	⅛	all sea	Y	in Mad wine	

2281 LEPTOMI'TUS *Ag* Leptomitus

15094 minutissimus *Ag*	very minute	little tufts	*Sp* 4—15 ⅓	all sea	Tr	on mar. algæ	
15095 lácteus *Ag*	milky	patches	⅓	wint.	Tr	pools	Dillw conf t 79 *Conf*



History, Use, Propagation, Culture,

2273 *Byssocladium* From *byssus*, a kind of fungus, and *κλαδος*, a branch; the filamentous branches of this plant being very similar to those of Byssus These plants grow in places occasionally overflowed with water

2274. *Mycinema* From *μυκης*, a kind of minute fungus, and *νημα*, a thread, in allusion to the resemblance of the filaments to those of some Fungi

2275. *Chroolepus* So called on account of the change which is undergone by the exterior membrane which changes to powder, from *χροος*, skin, and *λεπω*, to decorticate

2276. *Trentepohlia* So named, in honor of an obscure German botanist This is an ill-defined genus, which is much in need of reformation

2277. *Scytonema* From *σκυτος*, leather, and *νημα*, a filament, in allusion to the coriaceous nature of the filamentous frond. The species grow chiefly on stones in inundated places, and are rarely found in salt water

CONFERVOIDEÆ.

15059 Filaments appressed very minute short radiant cobweb-like branched sinuous wavy

15060 Filam thin entangled in a cobweb-like membr Branches scatter rem simp Articulat of various lengths
15061 Filam decumb long membran equal branched entangled in a soft layer, Articulat thrice as long as broad
15062 Filaments much branched rigid erect entangled in a nearly solid mass, Articulat 4 times as long as broad
15063 Filam branch ascend. very short entangled in a dense unif crust, Articulat about ½ as long again as broad
15064 Filam. branch. dichotom. creeping very minute having caps at end and ærugin Dissepiments nearly obsol

15065 Filaments cæspitose erect very short dichotomous, Articulations half as long again as broad
15066 Filaments cæspitose branched short erect, Branches spreading stiffish, Articulations as broad as long
15067 Filaments erect fascicled alternately branched rigid, Articulations tumid as broad as long
15068 Filam cæspit rig short ascend curved densely branched, Artic as broad as long by a line except granules
15069 Filaments cæspitose branched erect rigid somewhat cartilaginous obtuse, Articulations as broad as long

15070 Filam dichotomous cæspitose entangled very minute, Artic about twice as long as broad
15071 Filam flexu collect in a dense soft cushion-like tuft, Branch long spread rig Artic twice as long as broad
β Much smaller, Articulations as broad as long
15072 Filaments virgate cæspitose, Branches straight, Artic twice as long as broad, Thecæ racemose

15073 Filaments decumbent rigid flexuose branched entangled in a crustaceous layer, Branches appressed
15074 Filaments simple erect very short flexuose-crisp entangled in a black layer
15075 Tuft with olive-yellow filaments, Branches double 1-sided

15076 Filaments simple erect flexuose spirally twisted into pointed masses greenish above brownish below
15077 Tuft loose, Filaments netted branched, Branches divaricating
15078 Tuft loose, Filaments flexuose, Branches solitary remote ascending

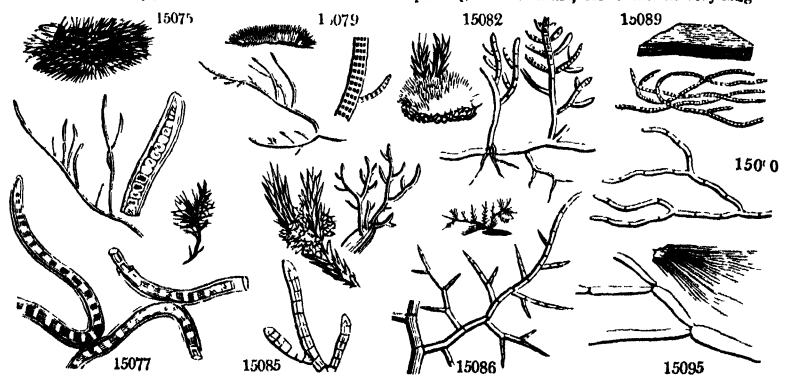
15079 Filaments rigid branched, Branches slender, Granules disposed in rings

15080 Runner creeping transparent emitting round green erect branches, Artic cylindrical, Joints obsolete
15081 Layer velvety, Filaments erect obtuse clustered brittle, Articulations gibbous
15082 Layer velvety, Runner creeping rooting sending out erect obtuse branches, Artic cylind Joints obsolete
15083 Layer velvety, Filaments erect blunt rigid, Branches alternate, Articulations oval twice as long as broad
15084 Filaments dichotomous, Branches divaricating acuminate, Artic thrice as long as broad
15085 Filaments olivaceous branched blunt erect in a cushion-like tuft, Artic about as broad as long
15086 Filaments branched, Branches alternate divaricating subulate, Artic three times as long as broad

15087 Tuft globose, Filaments very fine like cobweb hyaline much entangled without joints wavy branched
15088 Filam dichot branch very min decumb very densely entang in a whit. layer, Artic twice as long as broad
15089 Filam somewhat branched densely entangled in an olive-green pellicle, Artic as broad as long
15090 Filam dichot curved flexuose entangled in a coriaceous gelatin pellicle, Axillæ round, Artic very long
15091 Filam hyalin somew branch entang cobw-like entang in a pucker cloud-like membr or a comp gelatine
15092 Filam branched densely entangled in a gelatin pellicle, Branches divaric Artic half as long again as broad
15093 Filaments hyaline entangled branched, Branches tapered acute, Artic as long as broad

* *Growing on vegetables*

15094 Filam somew. branched minute hyaline, Branches scattered forked blunt-ish, Joints obsol Artic various
15095 Filam at every joint branched and clustered in a shapeless gelatinous mass, Articulations very long



and Miscellaneous Particulars.

2278. *Stigonema* So named in allusion to the regular annular dots of the filaments, from στιγων, dotted, and νημα, a thread This genus is similar in habit to the Lichens. The color is opaque and brown; the filaments are branched with spines, and marked internally with distinct dots.

2279 *Protonema* It is uncertain whether this genus is not rather the young state of germinating mosses, it is named in allusion to the simplicity of its structure, from πρωτος, first, or primary, and νημα, a thread

2280 *Hygrocrocis* From ὑγρος, any thing belonging to water, and κροκις, a little tuft. These plants are found in chemical solutions of vegetable matter, as in ink, &c.

2281 *Leptomitus* Substances floating in the water, and produced by animal matter in a state of decay They consist of exceedingly fine intertangled filaments, whence the name, λεπτος, slender, and μιτος, a thread.

15096 nánus *Ag*	dwarf	like down	⅟₁₂	aut	G	rotten algæ	Dillw. conf t 30 *Conf*
15097 clavátus *Ag*	clavate	minute	⅟₁₂	aut	Tr	dead fishes	Lyngb hydroph t. 22

2282 MESOGLO'IA *Ag* Mesogloia — *Sp* 5—8

15098 multífida *Ag*	multifid	tufts	3	aut	R	Germ ocean	Lyn hy t 1669 *Chordar*
15099 Hudsónı *Ag*	Hudson's	branched	6	aut.	R	ocean	E b t 1627 *Ulva rubra*
15100 coccínea *Ag*	scarlet	bushy	4	sum.	R	ocean	Eng bot t. 2466
Rivularia vertuliata E B							
15101 capillāris *Ag*	capillary	turfs	3	sum.	R	ocean	Lyngb hydroph t 12
15102 vermiculāris *Ag*	vermicular	bushy	5	august	Brsh	oc an	Lyngb hydroph. t 65
β coriacea Ag	*leathery*	bushy	5	august	Brsh	ocean	Eng bot t 1819
Rivularia vermiculata E B							

2283 BATRACHOSPER'MUM *Ag* Batrachospermum — *Sp* 2—6

15103 vágum *Ag*	turfy	fine tufts	1½	may	Bsh	ditches	Lyngb hydroph t. 64
β tenuissimum Ag	*very slender*	fine tufts	1½	may	D Ol	ditches	E. bot. t. 690 *Conf atra*
15104 monilíforme *Ag*	necklace	fine tufts	1	sum	G	fresh waters	
α stagnále Ag	*pool*	fine tufts	1	sum	G	pools	Dillenius, t 7 f 44
β simplicius Ag	*simple*	fine tufts	1	sum	B	pools	Dillenius, t 7 f 45
γ purpurásccns Ag	*purple*	fine tufts	1	sum	Pk	sea shore	Dillenius, t 7 f 40
δ detérsum Ag	*knotted*	fine tufts	1	sum	D Ol	pools	Dill con t.11. *Conf atra*

2284 DRAPARNAL'DIA *Ag* Draparnaldia — *Sp.* 3—6

15105 ténuis *Ag*	fine	fine tufts	¾	all sea	Dl G	pools	Dill con t 67 *C protensa*
15106 plumósa *Ag*	feathery	broad tufts	6	sum	Bt G	rivulets	E bot t 2087 *C lubrica*
15107 glomeráta *Ag*	heaped	gelatin tufts	4	sp su	Bt G	pools	E. b. t 1746 *C mutabilis*

2285 OSCILLATO'RIA *Ag* Oscillatoria — *Sp* 11—47.

15108 tenuissima *Ag*	very fine	patches	⅛	sum	Pa G	warm springs	Eng bot. t 2584 *Conf*
15109 autumnális *Ag*	autumnal	slimy mass	1½	sum	Ol G	on the earth	
β vaginăta Ag	*sheathed*	slimy mass	1½	sum	Ol G	on the earth	Dillw conf t 99
15110 nigra *Ag*	black	floating tufts	¼	sum	D G	still waters	Dil co t 64 *O fontinalis*
15111 Córium *Ag*	leather-like	broad layer	½	spring	Ysh	rocks in wat	
15112 subfusca *Ag*	brownish	tufts	1	all sea	Br V	stones in riv	
15113 splendida *Grev*	splendid	thin masses	1½	all sea	Pa B	wat in both	
15114 ténuis *Ag*	fine	slippery layer	⅛	spring	Pa G	still waters	Dill conf t 20 *C limosa*
15115 limósa *Ag*	mud	floating mass	6	all sea	Ærug	mud bot po	Fl dan t 1549 t 2
15116 cyánea *Ag*	blue	thin film	...	all sea	B	church walls	E bot t 2578 *Conferva*
15117 decórticans *Ag*	unbarking	thin flakes	⅛	march	B G	damp wood	Dillw conf t 20
15118 ochrácea *Lyngb*	ochre-colored	gelat masses	⅛	all sea	Och	pools	Dill conf t 62 *Conferva*

2286. CA'LOTHRIX *Ag* Calothrix — *Sp* 7—12

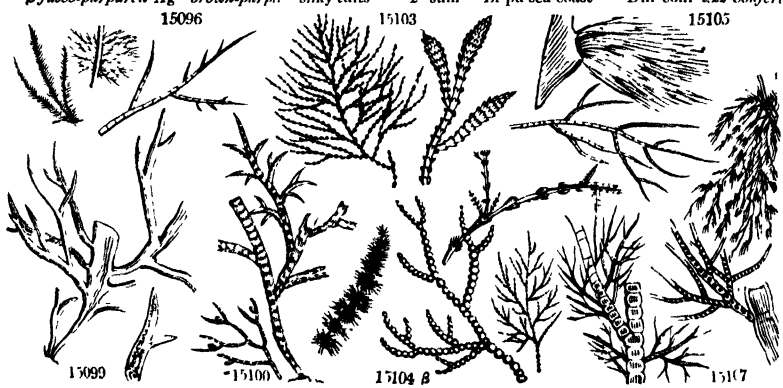
15119 nivea *Ag*	snowy	fine tufts	⅛	all sea.	Pa Y	sulph sprin	Dill conf. t C *Conferva*
15120 confervicola *Ag*	conferva	minute tufts	½	sum	Gla	marine algæ	E bot t 2576 *Conferva*
15121 scopulórum *Ag*	rock	patches	⅟₁₂	sum	Pa G	marine algæ	E bot t 2171 *Conferva*
15122 fasciculáta *Ag*	fascicled	tufts	½	sum	Y G	roc on sea c	Dillw conf
15123 mirábilis *Ag*	wonderful	little patches	⅛	sum	Ærug	on H fluitans	Dill conf t 96 *Conferva*
15124 distorta *Ag*	distorted	floating patc	1½	sum	B G	lakes	E bot. t 2577 *Conferva*
15125 lanáta *Ag*	woolly	floating patc	1½	sum	G	springs on st	
β fuscéscens Ag	*fulvous*	floating patc	1½	sum	Taw	pools	E bot t 2577 fig simstr

2287 LYNG'BYA *Ag* Lyngbya — *Sp* 1—7

15126 murális *Ag*	wall	patch	⅟₁₂	all sea	G	damp earth	Eng bot t 1554

2288 BAN'GIA *Ag.* Bangia — *Sp* 2—5

15127 laminárıæ *Ag*	Laminaria	broad tufts	⅟₁₂	sum	G	on L escul	Lyngb hydrop dan t 24
15128 atropurpúrea *Ag*	dark-purple	silky tufts	2	sum	D Pu	marine rocks	Dill con t 103 *Conferva*
β fusco-purpúrea Ag	*brown-purple*	silky tufts	2	sum	Br pu	sea coast	Dill conf t.22 *Conferva*



History, Use, Propagation, Culture,

2282 *Mesogloia* From μεσος, the middle, and γλοιος, viscid. the spines of little branches radiating from a common centre, and forming what appears to be a solid mass These plants were formerly referred to Chætophora, from which they differ in the want of any fixed gelatine

2283 *Batrachospermum* From βατραχος, a frog, and σπερμα So called in allusion to the places in which the species grow, they are mostly found in marshes, less frequently in the sea

2284 *Draparnaldia* James Philip Ralph Draparnaud, was a French botanist, who wrote some memoirs on the subject of botany in the beginning of this century He is also known for his acquaintance with fresh-water Confervæ.

2285 *Oscillatoria* The singular motion of these curious plants has suggested their generic name The oscillation of the filaments seems almost of an animal nature, although it frequently arises from mechanical

15096 Filam. branched very minute, Branches and branchlets acuminate, Joints pellucid, Artic cylindrical

** *Growing on animals*

15097 Filaments simple hyaline clavate at end

15098 Frond dichotomous, Axillæ rounded upper spreading
15099 Frond virgate with all the branches divaricating
15100 Frond somewhat moniliform virgate filiform, Branches scattered obtuse spreading

15101 Frond much branched, Branchlets tapering at each end divaricating
15102 Frond yellowish-brown, Branches divaricating

15103 Frond dichotomous cylindrical equal, Branches thickened at end
β Frond setaceous minute
15104 Frond moniliform much-branched, Branches rather acute, Cauline whorls nearly distinct globose
α Filaments thick, Whorls of stem confluent those of the branches distinct
β Thinner bluish with distant whorls

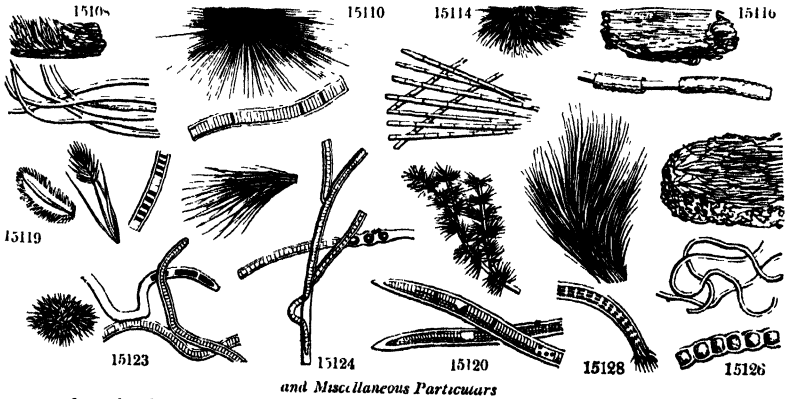
15105 Branches simple clustered, First filament nearly homogeneous
15106 Pencils of branches lanceolate acute erect
15107 Pencils of branches ovate blunt spreading

15108 Filaments hyaline very fine tufted entangled in nearly parallel lines
15109 Filaments rigid straight entangled in a gelatinous black layer which has short rays
β Filaments twisted in bundles
15110 Filaments rigid straight entangled in a gelatinous black layer with long rays
15111 Filaments stiffish curved entangled in a compact somewhat coriaceous layer
15112 Filaments transparent rigid straight entangled in a compact brownish-violet layer with short rays
15113 Filaments very minute densely entangled transverse striæ wholly invisible
15114 Filaments stiffish straight entangled in a gelatinous green layer with short rays
15115 Filaments rigid rapidly oscillating straight entangled in a gelatinous layer with long rays
15116 Filaments covered with a deciduous crust entangled in a blue layer
15117 Filaments very slender flexuose densely interwoven into thin masses
15118 Filaments very slender simple greenish lying in a thick very tender fragile ochraceous stratum

15119 Filaments very fine rigid snow-white packed in a dull-yellow tuft
15120 Filaments glaucous erect minute subulate fascicled at base separate at end
15121 Filaments curved-wavy erect minute entangled in a dense layer
15122 Filaments stiffish erect acuminate simple at the beginning finally branched
15123 Filaments curved variously united entangled in a lax globule
15124 Filaments mucous stiffish erect branched tufted
15125 Filaments stiffish erect branched packed in a dark-green tuft

15126 Filaments stiffish curved wavy thickish with lax rings

15127 Filaments tufted fastigiate equal, Bands approximating in pairs many-dotted
15128 Filaments dark-purple straight, Bands 5-dotted



and Miscellaneous Particulars

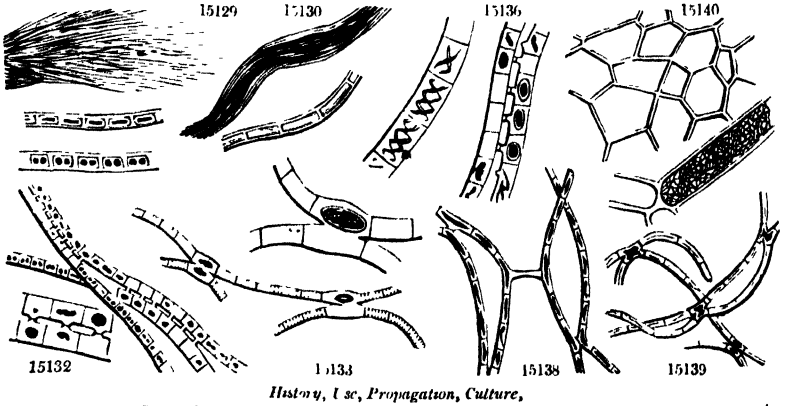
causes, as from the elasticity of the filaments, from the motion of minute animalcula Agardh, however, declares that O curviceps has naturally the motion of an animal, but of a creeping not oscillatory nature

2286 *Calothrix* From καλος, beautiful, and θριξ, hair, in allusion to the beauty of the entangled filaments; the latter appear as if branched, by the singular juxta-position of small filaments

2287 *Lyngbya* H C Lyngbye, a Danish botanist, is the author of an excellent work on Algæ, which he calls Hydrophytologiæ Danicæ Tentamen, published at Copenhagen, in 1819, in one volume quarto This genus differs from Oscillatoria in the absence of a mucous matrix, and from Calothrix in being curved and quite distinct In habit it approaches Conferva

2288 *Bangia* So called in honor of Christian Frederick Bang, the author of a dissertation upon the plants of sacred history, published in 1767

2289. ZYGNE'MA. *Ag*	Zygnema		*Sp* 9—21				
15129 cruciátum *Ag*	crossed	entangl mass	¼ april	Y G	ditches		E.b t 2463. *C bipunctata*
β longi-articulatum Ag	*long jointed*	entangl mass	¼ april	Y G	ditches		Dillw conf t 2 f A
γ brevi-articulátum Ag	*short jointed*	entangl mass	¼ april	Ysh	rivulets		Dillw. conf t 2 f B
15130 decussátum *Ag*	decussate	floating tufts	1½ sum	G	ditches		Dillw cont. No 39
15131 bicolor *Ag*	two-colored	floating tufts	3 sum	G	sto in rivul.		E b t 2288 *Conferva*
15132 pectinátum *Ag*	pectinate	patches	1½ march	G	rivulets		E b.t 2463 f B *Conferva*
15133 curvátum *Ag*	curved	patches	1½ march	G	rivulets		E.b t 2463 A *C stictica*
15134 quininum *Ag*	quinate	large masses	¼ sp su	Dl G	still waters		Vauch conf. t 5 f. 1
15135 decúmínum *Ag*	decimate	large masses	¼ sum	Bt G	still waters		Di co t.4 f A B. *C nitida*
15136 nítidum *Ag*	shining	float patches	2 sum.	Bt G	ditches		E. b t 1656 *C spiralis*
15137 punctátum *Ag*	dotted	floating cloud	¾ sum.	Bt G	pools		Dill conf t 51 *Conferva*
2290 MOUGEO'TIA. *Ag*	Mougeotia		*Sp* 2—6				
15138 genuflexa *Ag*	knee jointed	entangl mass	¼ april	Y G	ditches		Dill conf t. 6 *Conferva*
15139 cæruléscens *Ag*	blueish	pale patches	1½ july	Pu B	ditches		E b t. 2457 *Conferva*
2291 HYDRODICTYON *Ag*	Hydrodictyon		*Sp* 1—2				
15140 utriculátum *Ag*	bladdery	floating web	6 jn sep	G	riv. & lakes		E.b t.1687. *C reticulata*
2292 CONFER'VA *Ag*	Conferva		*Sp* 52—130				
15141 ericetórum *Roth*	heath	fine web	¼ sp su	Br pu	dry bogs		E b t. 1553 *Conferva*
15142 alpina *Bory*	alpine	fine web	¼ sp su	Br	mountains		Lyngb hydrop dan t 47
15143 fasciáta *Dillw*	banded	fine web	¼ spring	Pu br	dit on carr		Dill conf t. B *Conferva*
15144 bombycina *Ag*	silky	floating cloud	¾ sum.	G	pools & dit.		Dill con t.60 *C sordida*
15145 floccósa *Ag*	floccose	float masses	1½ spring	G	ditches		E b t 2303 *C sordida*
15146 mucósa *Mert*	mucous	float masses	1½ spring	G	bogs		Dill conf t. B *Conferva*
15147 zonáta *Web & Mohr*	zoned	long tuft	3 all sea	G	sto in rivul		Dill cont t 47 *C lucens*
15148 dissiliens *Dillw*	elastic	floating tufts	3 sum.	G	ditches		Eng bot t 2461
15149 implexa *Dillw*	entangled	broad mat	3 sum	G	sea-shore		E b t 2309 *C implexa*
15150 tumídula *E B*	tumid	fine film	1 march	G	pools		E. b t 1670 *C inflata*
15151 vesicata *Ag*	blistered	float. masses	6 march	G	ditches		E b t 2304 *C alternata*
β fusciéscens Ag	*brownish*	float masses	6 march	G	ditches		Dillw conf t B.
15152 rivulária *L*	rivulet	long tufts	24 sp su	G	rivers		Eng bot t 1654
β anglica Ag	*English*	long tufts	24 sp su	G	ditches		Dillw cont t 79
15153 capillária *Ag*	capillary	long tufts	¼ sp su	G	ditches		Dillenius, t 5 f 25 B
15154 linum *Roth*	Flax	long tufts	¼ sp su	G	ocean		Lyngb hydroph t 50
15155 intricáta *Grev*	matted	small tufts	¼ spring	G	sea shore		
15156 tortuósa *Dillw*	tortuous	crisp masses	2½ april	G	sea shore		Eng bot t 2220
15157 crássa *Ag*	thick	crisp masses	1 april	G	salt marshes		Dillw conf t 9
15158 melagónium *Web*	black-jointed	tufts	4 sum	G	ocean		Dillw conf t B.
15159 æ'rea *Dillw*	very grease	long tufts	6 all sea	G	ocean		Dillw conf t 80
15160 Youngána *Dillw*	Young's	minute tufts	½ sum	G	sea shore		Dillw conf t 102
15161 hormoides *Lyngb*	pencilled	minute tufts	¼ sum	G	sea shore		Lyngb hydroph t 49
15162 collábens *Ag*	slippery	floating tufts	4 sum	G	Germ ocean		Eng bot t 1929 *C ærea*
15163 flácca *Dillw*	flaccid	tufts	2 all sea	G	on Hutchins.		Dillw cont t 49
15164 isogóna *E B*	equal-jointed	float patches	1 spring	G	on F vesicul		E b t 1930 *C youngana*
15165 fucórum *Roth*	Fucus	tufts	¼ sum	Brsh	on Fuci		Dill.con t.C *C flaccida*
15166 flaccida *Lyngb*	drooping	tufts	½ may	Brsh	on Fuci		Eng bot. t. 2310
15167 ferruginea *Roth*	rusty	tufts	1 all sea	Rus	on Fuci		Dill con t 66 *C fucicola*
15168 curta *Dillw*	cropped	minute tufts	½ sum	Ol Br	on Fuci		Dillw conf t 76
15169 carnea *Dillw*	pink	tufts	1½ aut	Pk	on Algæ		Dillw conf t. 84
15170 æruginósa *Huds*	copperas	tufts	1½ sum	Bt G	sea shore		Dillw conf t E.
15171 Brównii *Dillw*	Brown's	patches	½ spring	G	Irish caverns		Dillw cont t D



History, Use, Propagation, Culture,

2289 *Zygnema* From ζυγος, a yoke, and νημα, a filament, in reference to the singular manner in which the filaments are jointed together in pairs

2290 *Mougeotia.* Named in honor of J B Mougeot, the coadjutor of Nestler, in the publication of their useful work, the Stirpes Cryptogamæ Vogeso-Rhenanæ, which, we believe, is still continued.

* *Two dotted*

15129 Articulations twice as long as broad, Stellæ roundish, Fruit spherical
β Articulations thrice as long with two approximated stellæ in the middle
γ Articulations about as long as broad
15130 Articul 4 times as long as broad in fruit convolute, Sporaceous matter continuous obscure on each side
15131 Articulations about as broad as long, Stellæ transversely linear-oblong parallel, Rays obsolete
15132 Filam adnate, Articul half as long again as broad, Stellæ transversely oblong pectinated, Fruit spherical

** *Marked with spires*

15133 Filam equal curved and flexuose conjugate at angles and twice as long as broad, Spires simple
15134 Filam equal, Spires contracted in beginning, at length arcuate, Artic 3 times as long as broad
15135 Artic 4 times as long as broad in fruit elliptical, Spires cruciate lax, Crosses about 4, Fruit elliptical
15136 Articulations about as broad as long, Spires cruciate thin contracted, Fruit elliptical
15137 Filaments simple slippery very fine, Dissepiments obscure, Articulations shortish cylindrical

15138 Filaments knee-jointed, Articulations six times as long as broad
15139 Filaments purple-blue, Sporidia of the crosses of the filaments green

15140 Spots 5-cornered

A *Simple*

1. *Floating, arachnoid, colored.*

15141 Filaments simple creeping entangled in a brownish purple layer, Joints half as long again as broad
15142 Filaments simple very fine adnate straight brown, Articulations four times as long as broad
15143 Filam simple fine mucous, Articulations about as long as broad marked in the middle with a narrow band

2 *Floating, arachnoid, mucous, green*

15144 Filaments arachnoid simple very long in an uniform packed layer, Artic thrice as long as broad when young dotted in the middle
15145 Filam arachnoid simple very much entangled in a packed red layer, Artic about as long as broad or ½ as long again
15146 Filam simple mucous slippery capillary, when dry traversed by a longitudinal band, Artic as long as broad
15147 Filaments simple fine gelatinous tapered marked by a transverse band, Artic about as long as broad
15148 Filaments simple very fine gelatinous equal, Articulations twice as broad as long
15149 Filaments simple fine curled entangled smooth, Artic half as long again as broad

3 *Capillary or setaceous Articulations filled with globose granules, when dry alternately compressed*

15150 Filaments simple fine, Artic 5 times as long as broad inflated elliptical
15151 Filaments simple fine, Artic half as long again as broad with globular mutations at intervals

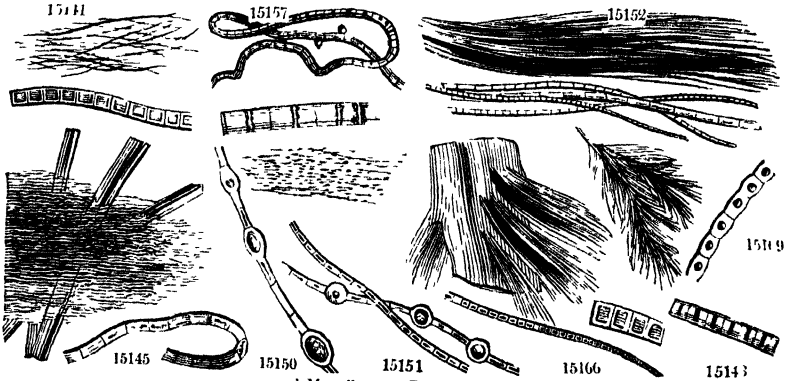
15152 Filam simp capill very long straight equal, Artic grain-bear 2 or 4 times as long as broad shin when dry
β Artic half as long again as broad
15155 Filam simple variously bent and loosely entangled, Artic about as long as broad, Granules scattered
15154 Filam simple filiform rigid crisp loosely entangled, when dry variegated, Artic turgid dotted
15155 Filam simple very short and minute entangled tortuous, Artic twice as long as broad
15156 Filam simple stiffish curled entangled fine, Artic 3 times as long as broad [moniliform
15157 Filam simple filif rigid crisp loosely entang when dry variegated, Artic about as long as broad, when dry
15158 Filam simple thicker than a bristle adnate straight rigid erect, Artic elliptical when dry
15159 Filam simple thicker than a bristle adnate rigid erect, Artic cylindrical 3 times as long as broad
15160 Filam simple very fine adnate stiffish curved, Artic about as long as broad somewhat moniliform
15161 Filam simple very fine adnate straight pendulous, Artic about as long as broad moniliform
15162 Filam simple fine adnate mucous, Artic as long as broad and variable, Interstices pellucid
15163 Filam simple very fine, Artic rather shorter than broad, Joints pellucid
15164 Filam simple very fine adnate mucous straight, Artic as long as broad, Interstices pellucid
15165 Filaments simple straight minute, Articulations oval half as long again as broad
15166 Filaments simple very fine adnate rigid tapered, Lower artic shorter than broad upper as long as broad

4 *Adnate, pencilled, fastigiate, colored*

15167 Filaments simple rigid fastigiate, Artic twice as long as broad
15168 Filaments simple fascicled rigid short attenuated at each end, Artic somewhat longer than broad
15169 Filam simple fine short, Artic torose about 3 times as long as broad, Sap contained in a central globule

B *Branched*

15170 Filam. branched flexuose short, Branches scattered spreading blunt, Artic half as long again as broad
15171 Filam branched densely tufted rigid short, Branches 1-sided, Artic generally thickest at the end about 3 times as long as broad

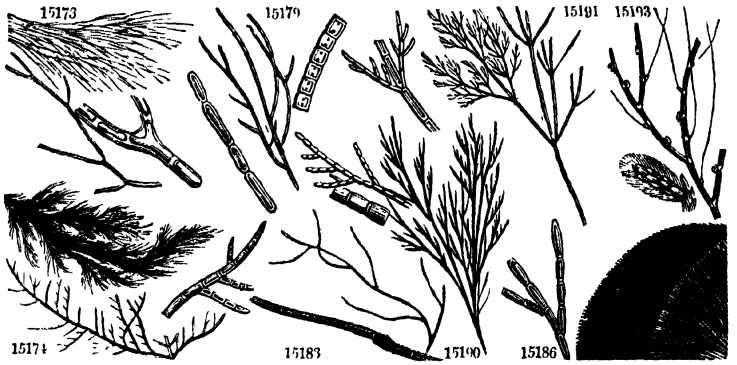


and Miscellaneous Particulars

2291 *Hydrodictyon* From ὕδωρ, water, and δίκτυον, a net, water-net, so named on account of its singular reticulated structure.

2292 *Conferva.* A syncope of the Latin *conferruminare*, to consolidate Plants of this kind were formerly

15172 **stellária** *Fl Dan.*	starry	floating tufts	2	sum.	G	ins of wa ves.	Fl Danica, t. 660. f 1
15173 ripária *Dillw*	bank	floating tufts	3	sum.	G	salt ditches	Eng. bot. t 2100
15174 glomeráta *L*	clustered	bushy tufts	1	sum.	Bt G	riv on stones	E.b t. 1854 *C lateviren*
15175 crispáta *Roth*	curled	patches	2	sp su.	G	lakes	Eng bot t 2350
15176 frácta *Dillw*	broken	large tufts	6	sp su	G	pools	Eng bot t. 2338
15177 pátens *Ag*	spreading	large tufts	½	sum	G	ditches	
β prolifera Ag	*proliferous*	large tufts	½	sum	G	ditches	Dil.con.t.10 *C flexuosa*
15178 congregáta *Ag.*	heaped	tufts	1	sum.	G	roc sea coa.	Ly hy d t.56 *C. uncialis*
15179 lanósa *Ag*	woolly	tufts	1	sum	G	on Algæ	Dillw conf t E.
15180 flavéscens *Dillw*	yellowish	tufts	6	sum.	Y G	salt ditches	Eng bot t 2088
15181 sericea *Huds*	silken	shining tufts	3	sum	Y G	sea shore	
15182 retrácta *Roth*	whitish	crisp ent tufts	4	jn jl	Pa.G	ocean	E. b t. 2327 *C albida*
15183 as pera *Ag*	rough	tufts	¾	all sea	G	ocean	Dil con t.E *C nigricans*
15184 heterochlóa *Ag*	dense	tufts	¾	all sea	D G	ocean	
15185 rupéstris *L*	rock	dense tufts	¼	sum	Gl	ocean	Eng bot t 1699
15186 ægogrópila *L*	VegetableBalls	soft ball	3	sum	G	lakes	Eng bot t. 1377
15187 arc ta *E B*	close	floating tuft	3	sum	Tran	ocean	Eng bot t 2098
15188 Vauc heriæfórmis *Ag*	mucous	branched	1½	sum	G	ocean	Dillw conf t E. *C. arcta*
15189 catenáta *L*	chain-like	patches	1	sum	Br	ocean	Dillenius, t 5 f 27
15190 Hutchínsiæ *Dillw*	Miss Hutchins's	dense tufts	4	sum	Gl	ocean	Dillw conf t 109
15191 pellúcida *Huds*	pellucid	finely branch	5	august	Pa G	ocean	Eng bot t 1716
15192 distans *Ag*	distant	loose bundles	6	aut	Pa G	ocean	Dill con t 21 *C diffusa*
2293 BULBOCHÆ'TE. *Ag*	Bulbochæte		*Sp* 1				
15193 setigera *Ag*	setigerous	delicate tufts	6	aut	Dl G	lakes & riv	Dil conf t 59 *C vivipara*
2294 NITEL'LA *Ag.*	Nitella		*Sp* 5—11				
15194 translúcens *Ag*	transparent	branched	2	sum	Y Ol	pools	Eng bot t 1855 *Chara*
15195 fléxilis *Ag.*	flexible	branched	1	sum	Y Ol	pon & rivul	
15196 opáca *Ag*	opaque	branched	1	jl aug	Y Ol	pools	E.b t 1070 *Chara flexilis*
15197 nidífica *Ag.*	nest-like	branched	1	jl aug	Y Ol	pools	Eng b t 1703 *Chara*
15198 grácilis *Ag*	slender	much branch	¾	sept	Y Ol	pools	Eng b t 2140. *Chara*
2295 CHA'RA *L.*	Chara.		*Sp* 2—16				
15199 híspida *L*	hispid	branched	1½	jl aug	Y G	ponds	Eng bot t 465
15200 vulgáris *L*	common	branched	1½	july	Y G	ponds	Eng. bot t 336
2296 CERA'MIUM *Ag*	Ceramium		*Sp* 21—38				
15201 lanuginósum *Ag*	woolly	fine down	1½	all sea	Br	on Algæ	Dill conf t 45 *Conferva*
15202 floridulum *Ag*	flowering	little tufts	½	all sea.	Pa G	roc sea shor	Dillw conf t. F
15203 répens *Ag*	creeping	short down	7½	july	Pk	on large Alg	E b 4 1608 *Conferva*
15204 plúma *Ag*	feather	fine tufts	½	sum	R	on large Alg	Dillw conf t t
15205 Daviésii *Ag*	Davies's	small tufts	½	july	R	sea shore	Eng bot t 2329
15206 Róthii *Ag*	Roth's	broad tufts	½	sum	Vi	sea shor roc	Eng bot t 1702
15207 diáphanum *Ag*	diaphanous	diffuse	5	sum	Var	ocean	Eng bot t 1742
β pilósum Ag	*pilose*	diffuse	5	sum	Var	ocean	E. b t 2423. *Conferva*
15208 rúbrum *Ag*	red	solitary weak	10	sum	Pu	ocean	E. b. t 1166 *Conferva*
15209 tetragónum *Ag*	square	tufts	3	sum	R	ocean	Eng bot t 1690
15210 pedu ellátum *Ag*	stalked	dense tufts	4	sum	Or	sea shore	Dillw conf t 108
15211 Hookéri *Ag*	Hooker's	fine tufts	1½	sum	Pa br	sea shore	Dill conf t 106
15212 arbúscula *Ag*	little tree	bushy tufts	3	all sea	D R	sea shore	Eng bot. t 1916



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held to be efficacious in healing fractured limbs Pliny declares, he was witness to a cure of this kind. Some of the species of this genus are believed to be merely the young of mosses.

2293 *Bulbochæte* From $\beta o\lambda\beta o\varsigma$, a club, and $\chi\alpha\iota\tau\eta$, a bristle, in reference to the bristly end of the primary filaments

2294 *Nitella* From *nitco*, to shine. A genus separated by Agardh from Chara, because the stem is composed of a simple tube, and not of one spirally striated. The plants have the habit of Chara

2295 *Chara* The origin of this word is unknown It first occurs in Cæsar's Commentaries, where it is mentioned as the name of a plant, the root of which was used by the Roman soldiers as food. That plant could have had no relation to the plant of the moderns Various opinions have been held with regard to the station of this genus Linnæus referred it to the perfect plants, and he has been followed by many botanists. Dr Hooker and Mr Lindley, in the former's Flora Scotica, formed it into a particular order, placed between Algæ and Hepaticæ, and with this opinion Dr Greville coincides But Professor Agardh thinks it cannot even be separated from true Algæ, in the midst of which he has placed it. The nature of the fructification is so paradoxical, that it is scarcely possible to trace an analogy between it and the fructification of any other plant.

15172 Filam. branched very minute equal parallelly exserted from an orbicular base
15173 Filam branched remotely capillary very long, Branches short divaricating, Artic. twice as long as broad
15174 Filam. branched capillary, Branches alternate those at the end clustered one-sided erect, Artic cylind. about twice as long as broad
15175 Filam. branch Branches altern rem. Artic. cylind 6-10 times as long as broad alternately compr when dry
15176 Filam branch. capill Branch divaricat. 1-sid upp. numer somew recurv. Artic. 4 times as long as broad
15177 Filam branched capillary. Branches spreading somewhat alternate, Artic. 3 times as long as broad
β Artic. elliptical proliferous, Pullulating filaments very fine

C *Heaped*

15178 Tufts fascic clav form. a hemisphere, Filam intric branch Branch ascend Artic about as long as broad
15179 Filaments tufted, Branchlets long remote, Artic oblong oval 3 times as long as broad
15180 Filaments much branch capillary, Branches spreading somew alternate, Artic 6 times as long as broad
15181 Filaments much branch capillary dichotom at base, trichotom in middle, Artic 5 times as long as broad
15182 Filam much branch capill Branches divaricat. somew recurv very numer Artic twice as long as broad
15183 Filam dichotom setac rigid finally becoming blackish, Branc erect rem Artic 3 times as long as broad
15184 Filaments opposite much branched, first branches blackish, second greenish [as broad
15185 Filam much bran setac when dry dot with black, Bran erect, Joints pelluc Artic cylind 3 times as long
15186 Filam from a common centre forming a globe rigid branched obtuse, Artic 5 times as long as broad
15187 Filam branch straight virg capil Branch erect somew hyal and thicken at end, Artic of various lengths
15188 Filam branched straight virgate capillary mucous, Branches erect when dry black at the ends
15189 Filam more than bristly trichotom shin when dry dott with black at joints, Artic 3 times as long as broad
15190 Filam much branch flexuose somew cartilaginous fragile, Branches and branchl scatter Artic torulose
15191 Filam much branched straight rigid, Branches generally in threes obtuse, Articul very long
15192 Filam. setac dichotom flexuose, Branch rem Branchl short blunt, Artic cylind 4 times as long as broad

15193 The only species

15194 Stem long, Branchlets blunt, Nucules nearly naked in heaps at the joints of the stem
15195 Stem trichotomous pellucid, Branchlets forked, Nucules axillary solitary
15196 Stem 2-3-chotomous opaque, Branchlets forked or with broken joints, Globules solitary
15197 Fruit branches filiform with other long jointed ones between, Nucules clustered axillary
15198 Stem slender long, Branches acute forked, Fruit solitary

15199 Stem twisted furrowed strigose, Strigæ reflexed, Bractes aculeate
15200 Stem twisted ash-colored, Branches not jointed, Bractes linear twin thrice as long as nucule

1 *Filaments short, fastigiate*

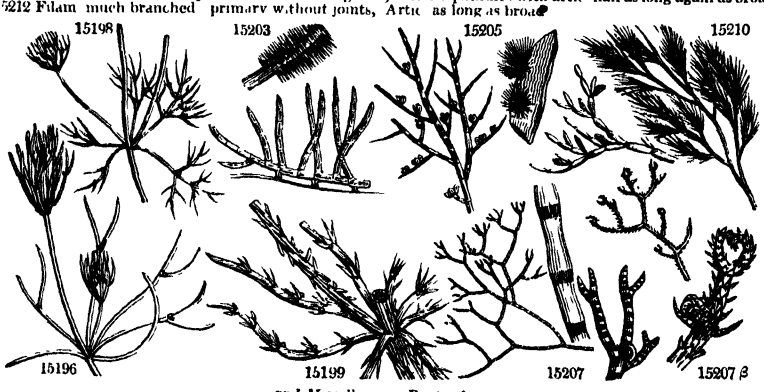
15201 Filam somew branch minute ferrug Branch scatter blunt, Artic pellue in mid 3 times as long as broad
15202 Filam branched fine tufted, Branches scattered simple remote, Articul 3 times as long as broad
15203 Filam creeping rooting densely entangl much branch Joints somew contract Artic narrowest in middle
15204 Filam creeping minute branched, Branches erect naked at base pinnat upw Artic twice as long as broad
15205 Filam much branch fastig short, Branc erect acute, Artic thrice as long as broad, Caps lateral clustered
15206 Filam short cæspitose pulvinate, Branches and branchlets fastigiate erect, Artic twice as long as broad

2 *Filaments dichotomous, Branchlets forked, Joints obscure, Theeæ involucred*

15207 Filam dichotom much branched somewhat membranous variegated with purple and hyal Joints elevated
β Joints hairy
15208 Filam dichotom much branched somewhat cartilaginous, Branchlets forked, Artic ovate opaque

3 *Branches furnished with branchlets, which are more or less dense and shortened.*

15209 Filam branched virgate, Primary articulations twice as long as broad
15210 Filam setaceous dichotomous, Artic thickened upwards about 5 times as long as broad
15211 Filam much branch prim thick and contiguous, Altern pinnules with artic half as long again as broad
15212 Filam much branched primary without joints, Artic as long as broad



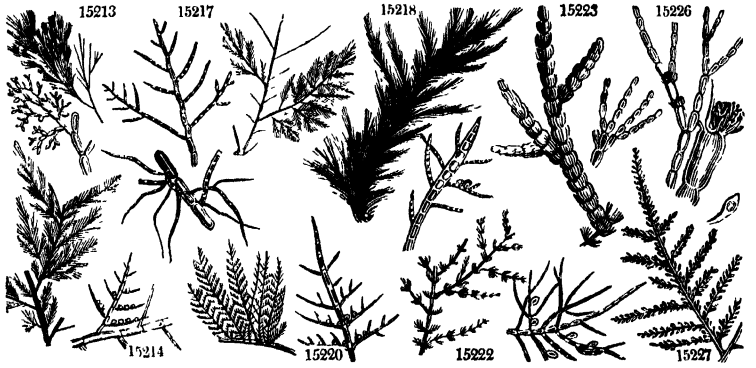
and Miscellaneous Particulars

Greville observes, "This is a most curious tribe of plants, whose structure, I am convinced, is by no means well understood. At present, I have only minutely examined the fruit of C vulgaris Under a high power of the microscope, the globule is found to consist of seven triangular scales, which in maturity separate from each other, and produce the dehiscence of the globule. Each of these scales has a vacant portion in its centre, but the margin, which has a fluted appearance under a small magnifier, consists of a number of parallel, linear-oblong, hyaline, hollow tubes, placed at small intervals from each other, those forming the angles of the scale being branched Within these tubes are a profusion of orange, globular, minute bodies (exactly similar to the sporules of many cryptogamic plants), arranged in no order, and escaping on the least injury to the tubes. It is these little bodies which give the orange color to the globule Within the globule is a mass of elastic white filaments, much convoluted, and distinctly either jointed or transversely rugose"

The calcareous matter of the stem and branches is not an adventitious incrustation, but is the result of some peculiar economy in the plant itself, as it evidently originates from within, and is covered with the cuticle It is supposed to be analogous to the siliceous deposit beneath the cuticle of Equisetum

2296 *Ceramium* So called from κεραμος, a little measure, in reference to the appearance of the capsules. All the species are found in the sea, and among the substances cast up upon the shore.

15213 corymbósum *Ag*	corymbose	little tufts	1½ july	R	sea shore	Eng bot t. 2352
15214 róseum *Ag*	rosy	finely branch	1½ sum	R	ocean	Dillw cont t. 17
15215 thujoides *Ag*	Arbor Vitæ	finely branch	6 july	R	ocean	E b t 2405 *C. purpurea.*
15216 versicolor *Ag*	changeable	fine tufts	3 sum	Pu R	on Fuci	Eng bot t 966 *C rosea*
15217 Borréri *Ag*	Borrer's	little patches	1½ oct	Or R	ocean	Eng bot t. 1741
15218 tétrum *Ag*	livid	tufts	6 spring	Dl pu	sea shore	Eng bot. t 1915
15219 interruptum *Ag*	interrupted	little tufts	½ july	Dl pu	sea shore	Eng. bot. t 1838
15220 Turnéri *Ag*	Turner's	delicate bran	2 sp su	Pk	sea shore	Eng bot t 2339
15221 plúmula *Ag*	feather-like	delicate bran	2 sp su	Pk	sea shore	E.bot t 1637. *C. Turneri*
2297 GRIFFI'THSIA *Ag*			*Sp* 5—7			
15222 multífida *Ag*	multifid	fine tufts	3 july	R	sea shore	E bot t 1816 *Conferva*
15223 equisétifolia *Ag*	equisetum-lv'd	sponge-lik tuf	6 sum	R	sea shore	Eng bot. t 1479
15224 setácea *Ag*	bristly	lax tufts	4 all sea	R	sea shore	Eng bot t 1689
15225 barbáta *Ag*	bearded	floeculent	1½ july	C	sea shore	Eng bot. t 1814
15226 corállina *Ag*	coralline	branch tufts	3 july	Or R	sea shore	Eng bot. t. 1815
2298 CHÆTOSPO'RA *Ag*			*Sp* 1			
15227 Wig'gii *Ag*	Wigg's	finely branch	5 sum	R Br	sea shore	Eng bot. t. 1165. *Fucus*
2299 POLYSIPHO'NIA *Grev*			*Sp* 18—49			
15228 parasítica *Ag*	parasitical	small patches	1½ sum	R Br	on Fuci	E. bot t 1429 *Conferva*
15229 spinulósa *Grev*	rough-stemmed	small patches	1½ sum	R Br	sea shore	Grev crypt 90
15230 coccínea *Ag*	scarlet	bushy tufts	4 all sea	S	ocean	E bot t 1055 *Conferva*
15231 divaricáta *Ag*	divaricating	tufts	3 sum	R	ocean	Lyngb hydroph t 34
15232 grácilis *Ag*	slender	long tufts	4 all sea	Pu	ocean	Dill conf t 40 *C. structa*
15233 violácea *Ag*	violet	little bushes	9 sum	Vi	ocean	Lyngb hydrop dan t 35
β major Ag	*large*	bushy tufts	6 sum	D Pu	sea shore	Eng bot t 2340 *C nigra*
15234 nigréscens *Ag*	blackish	fine tufts	6 sum	D Pu	ocean	E. bot t 1717 *Conferva*
β pectinata Ag	*pectinate*	little tufts	1½ sum	D Pu	ocean	E bot t 1239 *C fibrata*
15235 urceolata *Ag*	urceolate	long branches	8 all sea	R Br	ocean	Dill con t G *Conferva*
15236 elongáta *Ag*	elongated	shrubby	8 all sea	R Br	ocean	Dill con t 33 *Conferva*
15237 allochróa *Ag*	various	small tufts	1½ all sea	Vi	ocean	Dill con t G *C fibrata*
15238 Brodiæi *Ag*	Brodie's	large tufts	15 all sea	D R	ocean	Dill con t 107 *Conferva*
15239 atrorubéscens *Ag*	dark red	long tufts	6 sum	Bl R	marine roc	Dill con t 70 *Conferva*
15240 fastigiáta *Ag*	fastigiate	little bushes	2 sum	D Br	ocean	E b t 1764 *C polymorpha*
15241 badia *Ag*	brown	fine tufts	3 sum	D Br	ocean	Dill con t G *Conferva*
15242 recúrva *Ag*	recurved	fine tufts	3 sum	D Br	sea shore	Dill con t G *C patens*
15243 byssoides *Ag*	byssus-like	slender tufts	6 spring	R	sea shore	Eng bot t 597 *Conferva*
15244 fruticulósa *Ag*	shrubby	finely branch	4 sum	Br	ocean	Eng bot t 1686 *Fucus*
15245 filamentósa *Ag*	filamentous	branch tufts	4 march	R	ocean	E b t 2312 *C Griffith*
2300 RYTIPHLÆ'A *Ag*			*Sp* 1—3			
15246 tenétoria *Ag*	dyer's	masses	6 all sea	Ol G	ocean	Turn fuci, t 224 *Fucus*
2301 ECTOCAR'PUS *Ag*			*Sp* 4—8			
15247 siliculósus *Ag*	podded	bushy	6 spring	D G	ocean	Dillw conf t E *Conf*
β atrovirens Ag	*dark-green*	bushy	6 spring	Rus	ocean	E. b t 2319 *C siliculosa*
γ ferrugineus Ag	*ferruginous*	bushy	6 spring	Rus	ocean	E b t 2290 *C littoralis*
15248 brachiátus *Ag*	brachiate	floating tufts	3 april	Pa br	ocean	E. bot t 2571 *Conferva*
15249 granulósus *Ag*	granular	floeculent	3 july	Ol G	on Fuci	E bot t 2351 *Conferva*
15250 tomentósus *Ag*	downy	fine down	¼ july	Br	ocean	Dillw conf t 56 *Conf*



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2297 *Griffithsia* Named after Mrs Griffiths, of Devonshire, whose many discoveries in marine vegetation truly entitle her to this distinction the highest which one botanist can bestow upon another

2298. *Chætospora* From χαιτη, a bristle, and σπορα, a sporule the latter are placed upon fine capillary divisions of the filaments

2299 *Polysiphonia* From πολυς, many, and σιφων, a siphon, in reference to the numerous little canals by which the colored matter is carried from one end of the plant to the other Agardh calls these plants

4 Branches pinnulate, Pinnulæ alternate

15213 Filam branch Branches virg. surround by short corymbose fastig branchl Artic 3 times as long as broad
15214 Filam branched, Branchlets alternate rigid spreading subulate, Artic 3 times as long as broad
15215 Filam branched, Branchlets scattered decompound-pinnate, Artic 3 times as long as broad
15216 Filam branched, Branchlets scattered virgate, Artic 8 times as long as broad
15217 Filam virgate with many simple or multifid pencilled ramuli, Artic 3 times as long as broad
15218 Primary filaments downy, Branches straight decompound pinnate, Artic 3 times as long as broad
15219 Filam much branch Artic. 4 times as long as broad by degrees becoming thickened, Caps. stalked ellipt.

5 Filaments pinnated, Pinnæ opposite.

15220 Filam pinnated, Pinnæ opposite nearly simple, Artic many times longer than broad
15221 Filam with irregular branches, having at each joint short slender opposite spreading recurved branchlets

1 Branches fascicled

15222 Filam branched, Branchlets subternate distant short multifid, Artic much longer than broad [broad
15223 Filam branch cover all over with somew whorl imbricate short multif branchl Artic much longer than

2 Dichotomous, chained.

15224 Filam dichotom straight, Branches erect long, Articulations cylindrical about 5 times as long as broad
15225 Filam dichotom Fibrils multifid very fine, Articulations thickened upwards about 5 times as long as broad
15226 Filaments dichotomous slippery, Articulations thickened 2-4 times as long as broad

15227 The only species

a Purple or scarlet, flat, somewhat pinnated

15228 Filaments bipinnate veiny rigid, Pinnæ and pinnules alternate, Articulations rather shorter than long
15229 Dark-red, Branches divaricate rigid, Articulations 3-tubed as long as broad Stem rough with tubercles
15230 Filam very much branch Primary not jointed, Branches decomp-pinn Pinnules heterogen multif fascic.

b Creeping, Branches divaricating, often one-sided

15231 Filaments entangled with scattered branches, Branches divaricating, Articulations twice as long as broad

c Purple, waxy-colored, adhering to paper

15232 Filaments nearly equal branched virgate, Branches erect, Lower articulations 5 times as long as broad

d Pencilled, black above, generally rose-colored above, adhering to paper

15233 Filam much branched diffuse, Branches virgate spread Lower artic obsol Artic much longer than broad

15234 Filaments much branched at end diffuse, Lower articulations very short when dry nodulose upper about as long as broad with 3 veins

β Filaments short somewhat pectinated, Branches nearly simple

15235 Filaments much branched diffuse, Branchlets spreading short, Articulations half as long again as broad
15236 Filam dichotom pencilled much branched, Articulations shorter than long netted veiny lower obsolete
15237 Filam much branched diffuse, Lower artic 5-veined 4 times as long as broad upp 3-veined twice as long
15238 First filament not jointed spirally veiny, Articulations as long as broad, Capsules axillary
15239 Filaments branched veiny, Branches long, Artic of stem long, of the branches thrice as short

e Black or blackish-brown when dry, rigid, scarcely adhering to paper

15240 Filam dichotomous nearly equal fastigiate Artic shorter than broad with a black point in the middle
15241 Filaments dichotomous irregularly branched at end, Branches and branchlets very straight upper artic 3 times as long as broad
15242 Filam much branched long diff Branchl short spread squarr recurved, Lower artic long upper short

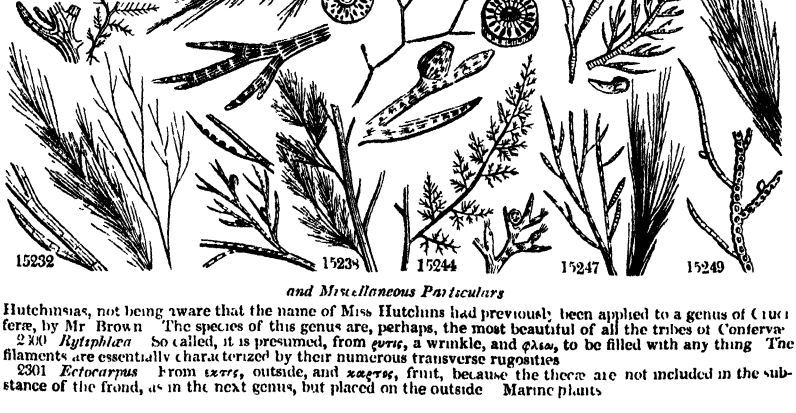
f Branchlets lateral, short, fascicled

15243 Filaments decompound pinnated, Branchlets very short and fine, Articulations 3 times as long as broad
15244 Filaments branched virgate, Branch alternately pinnated, Branchlets short multifid, Theca sessile ovate
15245 Filam much branched covered with heterogeneous hair-like simple branchlets, Artic very short obsolete

15246 Frond somewhat cartilaginous compressed transversely rugose bipinnated, Pinnules in fruit incurved

15247 Filam nearly separate, Branches erect subulate, Artic rather longer than broad, Pods linear subulate

15248 Filam much branched very fine, Branches and branchlets opposite spreading attenuated acute, Artic half as long again as broad
15249 Filam much branch Branches scatt spread taper ac at tips hyal Artic as long as broad finally tumid
15250 Frond ros like somew spongy d into branches Filam dr Artic 4 times as long as broad



and Miscellaneous Particulars

Hutchinsias, not being aware that the name of Miss Hutchins had previously been applied to a genus of Cruciferæ, by Mr Brown The species of this genus are, perhaps, the most beautiful of all the tribes of Conferva

2300 *Rytiphlæa* So called, it is presumed, from *ῥυτις*, a wrinkle, and *φλοια*, to be filled with any thing The filaments are essentially characterized by their numerous transverse rugosities

2301 *Ectocarpus* From *ἐκτος*, outside, and *καρπος*, fruit, because the thecæ are not included in the substance of the frond, as in the next genus, but placed on the outside Marine plants

2302. SPHACELLA'RIA. *Ag*	Sphacellaria			*Sp* 6—14				
15251 racemósa *Grev*	racemose	tufts	1	febr	Ol.G	sea shore		
15252 cirrhósa *Ag*	cirrhous	dense tufts	1	sum	Ol G	ocean		Dillw. conf. t. 86. *Conf.*
15253 radícans *Ag*	rooting	fine tufts	½	sum.	Br Ol	marine roc		Dillw. conf t. C. *Conf.*
15254 plumósa *Ag*	plumose	flaccid	3	spring	G Br	ocean		E bot. t 2330. *C pinnata*
15255 Mertensii *Ag*	Mertens's	elegant tufts	4	sum	Ol.Br	sea shore		E. bot t 999 *Conferva*
15256 scopária *Ag*	rock	dense tuft	3	sum	Br	ocean		E. bot t 1552. *Conferva*
2303 CLADOSTE'PHUS. *Ag*	Cladostephus.			*Sp* 2—7				
15257 spongiósus *Ag*	spongy	rigid tuft	3	sum	G	ocean		E b t 2427 f 1 *Conferva*
15258 myriophýllum *Ag*	many-leaved	rigid tuft	5	sum.	G	ocean		E b t.1718 *C.verticulata*

ULVACEÆ.

2304 VAUCHE'RIA *Ag*	Vaucheria			*Sp* 6—29.				
15259 dichótoma *Ag*	dichotomous	large tufts	12	sum	D G	ditches		E. bot. t 932 *Conferva*
β submarina Ag.	*submarine*	large tufts	12	sum	D G	submar ditc		Lyng hydrop dan t 20
15260 Dillwynn .Ig	Dillwyn's	thin mat	1	sp su	D G	on the earth		Dill conf t 16 *C frigida*
15261 radicáta *Ag*	rooting	patches	½	sept	D.G	dry ditches		E b t.324 *Trem gi anul*
15262 geminâta *Ag*	double	large masses	6	sum	D G	still waters		Eng bot t 1766
15263 racemósa *Ag*	racemose	large masses	4	su au	D G	ditches		Lyng hydrop dan t 23
15264 multicapsulâris *Ag.*	many-fruited	patches	7½	su au	D G	dry banks		Dill cont. t 71 *Conferva*
2305. CO'DIUM *Ag*	Codium.			*Sp* 2—7				
15265 tomentósum *Ag*	downy	coralloid	6	june	G	ocean		Eng bot t. 712 *Fucus*
15266 Bur'sa *Ag*	purse	spongy mass	3	all sea	G	ocean		Eng bot t 2183. *Fucus*
2306 BRYOP'SIS. *Ag*	Bryopsis			*Sp* 1—7				
15267 plumósa *Ag*	feathery	fine tufts	2	sept	Dp.G	ocean		E.b. t 2375 *Ulv plumosa*
2307 SOLE'NIA *Ag*	Solenia			*Sp* 4—18				
15268 intestinális *Ag*	intestinal	simple	24	sum	G	ditches		
β max'ima Ag	*very large*	simple	24	sum	G	ditches		Dillenius, t 9 f 7
15269 Lin'za *Ag*	crisp	simple	18	sum	G	ocean		Dillenius, t 9 f 6
β lanceolâta Ag	*lanceolate*	simple	18	sum	G	ocean		Dillenius, t 9 f 5
15270 compréssa *Ag*	compressed	simple	12	sum	G	ocean		Eng bot t 1739 *Ulva*
β crinita Ag	*crinite*	compound	12	sum	G	ocean		Dillenius, t 2 f 7
15271 clathráta *Ag*	grated	branched	3	sum	Ysh	fresh water		Dil con t F *C pavonina*
β uncinata Ag	*hooked*	irregul branc	3	sum	Ysh	ocean		E b t 2137 *Ulv ramul*
2308 ULVA *L.*	Ulva			*Sp* 3—12				
15272 lactúca *L*	Green Laver	soft leaves	12	su au	G	ocean		Eng bot. 1551
15273 bullósa *Roth*	puckered	soft leaves	6	su au	G	ditches		Eng bot 2320
15274 crispa *Lightf*	crisp	broad mass	½	sum	G	on the earth		Dillenius, t 10 f. 12
2309 POR'PHYRA *Ag.*	Porphyra			*Sp* 2—3				
15275 laciniáta *Ag*	torn	soft leaves	2	sum	Pu	sea shore		Lightf fl scot t 33
15276 purpúrea *Ag*	purple	soft leaves	2	sum.	Pu	sea shore		

FLORIDEÆ.

2310 POLYI'DES *Ag*	Polyides			*Sp* 1				
15277 lumbricális *Ag*	Worm-like	coralloid	6	nov	Br	ocean		E.b. t 1738 *Fucus rotund*
2311 PTILO'TA *Ag.*	Ptilota			*Sp* 1—4				
15278 plumósa *Ag*	feathery	fine tufts	4	su au	R	ocean		Eng bot t 1308. *Fucus*
β tenuissima Ag	*delicate*	fine tufts	4		R	sea shore		



History, Use, Propagation, Culture,

2302 *Sphacellaria* This name has been suggested by the *sphacelated* appearance of the truncated extremities of the shoots, in which the reproductive organs are immersed

2303 *Cladostephus* From κλαδος, a branch, and στεφος, a crown, in allusion to the manner in which the first stem is crowned as it were by the little compound whorled branches

2304 *Vaucheria* So named, in honor of M Vaucher, of Geneva, an indefatigable collector of submersed Algæ

2305 *Codium* From κωδιον, a skin, with reference to the appearance of the second species

2306 *Bryopsis.* The filaments of this genus form little pinnated or imbricated branches, resembling bits of moss, whence the name has been formed, from βρυον, a moss, and οψις, resemblance.

15251 Filam twice or thrice dichotom Artic as long as broad, Tubercles ovate racemose on branched peduncles
15252 Filam much branched fine striated, Branches alternate somew pinnated, Articulations as long as broad
15253 Filaments branched rooting straight rigid, Branches scattered simple erect obtuse tapering at the base, Artic about twice as broad as long
15254 Primary filaments branched not jointed surrounded by pectinated spreading branchlets
15255 Filaments bipinnate very fine, Pinnæ and pinnules opposite, Artic very short, Theca ovate stalked
15256 Stem covered with confervoid filam Branches somew. bipinnate, Pinnæ pectinate, Altern. pinnules subul

15257 Setæ simple densely imbricated
15258 Setæ incurved forked or crested imbricated

ULVACEÆ.

15259 Filaments setaceous dichotomous fastigiate, Thecæ globose sessile solitary
β Filaments finer, Thecæ lanceolate and ovate
15260 Filaments flexuose, Thecæ sessile lateral globose
15261 Filaments descending rooting, Thecæ solitary terminal globose
15262 Filaments dichotomous, Thecæ obovate stalked opposite on a common cornute pedic
15263 Filaments branched cæspitose, Thecæ racemose
15264 Filaments branched creeping, Branches erect nearly simple, Thecæ heaped towards the tips

15265 Frond dichotomous fastigiate cylindrical
15266 Frond globose hollow

15267 Filam branched naked below, pinnated in the middle, Branchlets opp nearly simple approximating

15268 Frond tubular inflated simple

15269 Frond lanceolate ensiform much tapered at each end wavy crisp

15270 Frond tubular lined clathrate branched filiform compressed, Branches simple tapering at base

15271 Frond tubular irregularly clathrate filiform, Branches tapered

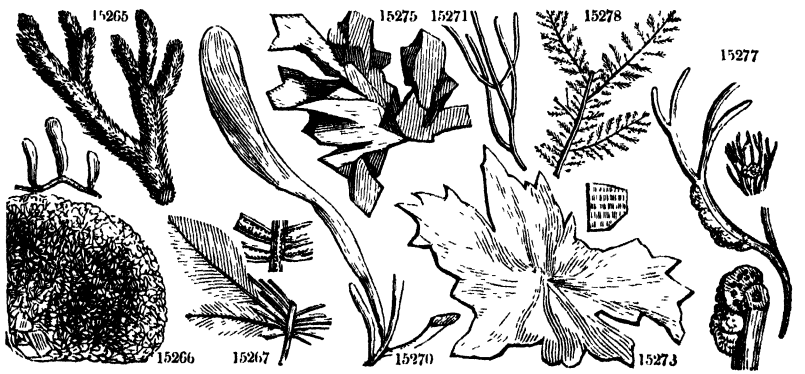
15272 Fronds obovate or lanceolate flat wavy laciniate-crisp
15273 Frond obovate slippery sinuous blistered finally expanded
15274 Fronds blistered plaited-crisp rugose heaped in an expanded layer

15275 Frond flat with numerous dilated segments
15276 Frond flat ovate lanceolate flat wavy crisp at the edge

FLORIDEÆ.

15277 The only species

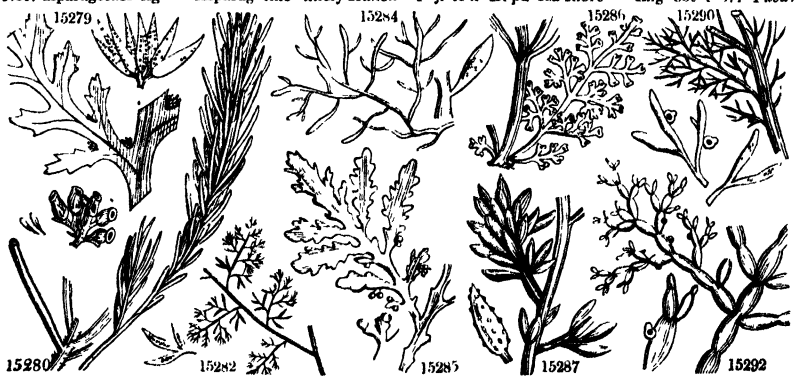
15278 Jugament filiform compressed, Pinnules opposite pectinate-cut



and Miscellaneous Particulars

2307. *Solenia.* So called, from σωλην, a tube, in allusion to the tubular nature of the frond.
2308 *Ulva* This was the common name applied by the Latins to all kinds of marine plants. The word is said to have been derived from the Celtic *ul*, water The green laver which, stewed with lemon juice, is so much esteemed in England, is the U. lactuca.
2309 *Porphyra* This genus has received its name from πορφυρεος, purple, on account of its being remarkable among Ulvaceæ for possessing that color
2310 *Polyides* From πολυειδης, multifarious, in allusion to the diversity of appearance of the single species.
2311. *Ptilota.* Named in allusion to the form of the frond: from πτιλωτος, pennated.

2312 RHODOME'LA. *Ag* Rhodomela.				*Sp* 5—21				
15279 dentáta *Ag*	toothed	flat branched	4	sum	Ol Br	sea shore	Eng bot. t 1241.	*Fucus*
15280 lycopodioides *Ag*	lycopodium-like	coralloid	6	sum	Ol Br	ocean	Eng bot t. 1163	*Fucus*
15281 subfusca *Ag*	brownish	finely branch	6	sum	Ol Br	ocean	Eng bot t. 1164	*Fucus*
15282 scorpioides *Ag*	amphibious	feathery	4	sum	R Pu	ocean	Eng bot t. 1428	*Fucus*
15283 pinastroides *Ag*	Pine-like	acicular	3	sum	Br	ocean	Eng bot t. 1042	*Fucus*
2313. CHON'DRIA. *Ag* Chondria				*Sp* 9—38				
15284 pusilla *Hook*	dwarf	entangled	¾	sum	Psh	marine roc	Greville crypt t 79	
15285 pinnatifida *Ag*	Pepper dulse	bushy	6	sum	Psh	ocean	Eng bot t 1202	*Fucus*
15286 obtúsa *Ag*	blunt	bushy	4	sum	Y Pk	ocean	Eng bot t 1201	*Fucus*
15287 ovális *Ag*	oval	rigid branch	4	sum	Br	ocean	Eng bot t 711	*Fucus*
15288 dasyphýlla *Ag*	thick-leaved	Sedum-like	4	all sea	Pu	ocean	Eng bot t 847	*Fucus*
15289 tenuissima *Ag*	slender	asparagoid	6	all sea	Pa Ol	ocean	Eng bot t 1882	*Fucus*
15290 clavellósa *Ag*	clavellose	gelatinous	9	jl aug	Pa pk	ocean	Eng bot t 1203	*Fucus*
15291 Kalifórmis *Ag*	Kalitorm	coralloid	5	june	Dl P	ocean	Eng. bot t. 640	*Fucus*
15292 articuláta *Ag*	jointed	much bracch	6	sum	R Pk	ocean	Eng bot t 1574	*Fucus*
2314 SPHÆROCOC'CUS *Ag.* Sphærococcus.				*Sp* 17—128				
15293 rúber *Ag*	red	tufts	4	wint	Psh	ocean	Eng bot t 1053	*Fucus*
15294 Brodiæ'i *Ag*	Brodie's	proliferous	4	su au	Psh	ocean	Lyngb hydrop dan t.3	
15295 membranifólius *Ag*	membranous	branched	6	oc jan	R Pu	ocean	Turn fuci, t 74	*Fucus*
15296 palmétta *Ag.*	Palmetto	flat branched	3	sum	Dl P	sea shore	Eng bot t 1120	*Fucus*
15297 crispus *Ag*	crisp	branched	4	s my	R Br	ocean	Turn fuci, t 216	*Fucus*
15298 mammillósus *Ag*	teated	branched	4	all sea	R Br	ocean	Eng bot t 1054	*Fucus*
15299 ciliátus *Ag*	ciliated	flat lobed	6	wint	R Br	ocean	Eng bot t 1069	*Fucus*
β palmátus Ag	*palmated*	flat lobed	6	wint	R Br	sea shore		
γ jubátus Ag	*maned*	finely cut	6	wint	R Br	sea shore	Lin trans 3 t 17 f 2	*Fuc*
δ angústus Ag	*narrow*	finely cut	6	wint	R Br	sea shore		
ε spinósus Ag	*spiny*	finely cut	6	wint	R Br	sea shore		
15300 gigartinus *Ag*	branched	coralloid	3	all sea	R Br	sea shore	Eng bot t 908	*Fucus*
15301 córneus *Ag*	corneous	finely pinnat	3	sum	dp pk	ocean	Eng bot t 1970	*Fucus*
β pinnátus Ag	*pinnated*	finely pinnat	3	sum	dp pk	sea shore	Turn fuci, t 257 f d	
γ pulchellus Ag	*pretty*	finely pinnat	3	sum	dp pk	sea shore	Turn fuci, t 257 f p	
δ Neredeus Ag	*graceful*	finely pinnat	3	sum	dp pk	sea shore		
ε clávifer Ag	*club-bearing*	finely pinnat	3	sum	dp pk	sea shore	Turn fuci, t 257 f 9	
15302 cartilagíneus *Ag*	cartilaginous	finely pinnat	8	all sea	dl Br	ocean	Eng bot t 1477	*Fucus*
15303 coronopifólius *Ag*	buckshorn-lvd	rigid bushy	6	sum	Dp R	ocean	Eng bot t 1478	*Fucus*
15304 lacinátus *Ag*	jagged	flat lobed	3	f may	Pk	ocean	Eng bot. t 1068	*Fucus*
15305 bifidus *Ag*	bifid	bushy lobed	2	f may	pu pk	sea shore	Eng bot t 773	*Fucus*
15306 cristátus *Ag*	crested	small tuft	1½	sum	Pk	ocean	Greville crypt t 85	
15307 confervoides *Ag*	conferva-like	much branch	6	aut wi	Ol G	ocean	Eng bot t 1068	*Fucus*
15308 plicátus *Ag*	plaited	coarse bush	5	all sea	Ol Br	ocean	Eng bot t 1089	*Fucus*
15309 purpurascens *Ag*	purplish	thinly branc	6	all sea	Pa Y	ocean	Eng bot t 1243	*Fucus*
2315 HALYME'NIA *Ag* Delesi				*Sp* 7—21				
15310 reniformis *Ag*	reniform	broad leaves	8	aut	R	sea shore	Turn fuci, t 113	*Fucus*
15311 édulis *Ag*	true	broad leaves	8	aut	Dl R	ocean	Eng bot t 1307	*Fucus*
β média Ag	*intermediate*	broad leaves	8	aut	R	sea shore	Turn fuci, t 113 f g	
15312 palmáta *Ag*	common	broad leaves	8	oc ap	psh R	ocean	Eb t 1306	*F palmatus*
β marginifera Ag	*margined*	broad leaves	8	wint	Pu	ocean	Stackhouse, fuci, t 12	
γ sarniénsis Ag	*Guernsey*	broad leaves	8	wint	Pu	sea shore	Turn fuci, t 44	*Fucus*
15313 liguláta *Ag*	strap-shaped	lobed fronds	4	wint	Pu	ocean	Eng bot t 421	*Ulva*
15314 furcellata *Ag*	forked	much lobed	3	wint	Pu	ocean	Eng bot t 1881	*Ulva*
15315 opuntia *Ag*	Indian Fig	matted	1	sp aut	Pa pu	ocean	E. bot t 1868	*Rivularia*
15316 purpurascens *Ag*	purple	much branch	6	sum	Psh	ocean	Eng bot t 641	*Ulva*
2316 BONNEMAISO'NIA *Ag* Bonnemaisonia				*Sp* 1—3				
15317 asparagoides *Ag*	Asparag.-like	finely branch	4	jl to n	Dl pu	sea shore	Eng bot t 571	*Fucus*



History, Use, Propagation, Culture,

2312. *Rhodomela* From ῥοδος, red, and μελος, a limb, in allusion to the color of the fronds

2313 *Chondria.* The fronds of this genus are particularly cartilaginous, on which account its name has been formed from χονδρος, cartilage. C pinnatifida is eaten in Scotland, it has a pungent flavor

2314. *Sphærococcus* From σφαιρα, an orb, and κοκκος, fruit The theciæ of the genus are round, and contain a globose nucleus full of round sporidia

15279 Frond flat obsoletely ribb alternately bipinnatifid, Pinnæ linear cuneate, Pinnules cut, Thecæ urceolate
15280 Stem filiform covered with setaceous densely imbricated ramenta
15281 Frond filiform much branched, Branchlets setaceous subulate pinnate fascicled
15282 Frond filiform attennuate flexuose branched, Branches bipinnate. upper involute
15283 Frond filiform equal, Ramenta simple about one-sided clustered involute

15284 Frond compres filif somew. contract. here and there, Fructif either min tubere or scatter spor in ramuli
15285 Frond compressed 2-3-pinnate, Pinnæ alternate, Pinnules obtuse callous
15286 Frond round filiform many-times pinnated, Pinnæ opposite cylindrical clavate short horizontal
15287 Stem roundish filiform dichotomous, Ramenta elliptical scattered much attenuated at base
15288 Stem round filiform much branched, Ramenta clavate much attenuated at base
15289 Stem round filiform irregularly branched, Ramenta setaceous much tapered at base
15290 Stem filiform much pinnated, Ramenta linear-lanceolate distichous tapering at base
15291 Frond filiform contracted in joints tubular, Branches whorled
15292 Frond filiform cham-like in joints tubular, Branches fastigiate dichotomous and whorled

15293 Stem scarcely any, Laminæ chained obsoletely ribbed cuneate 2-forked or lanceolate, Thecæ rugose sessile in the disk of the frond
15294 Stem filiform somewhat dichotomous, Branches terminating in oblong 2-forked somewhat proliferous laminæ, Theca spherical subulate terminal
15295 Stem filiform dichotom Branches expanded in cuneiform multifid laminæ Theca stalked ovate cauline
15296 Stem filif nearly simple expanded into a cuneif palm lamin segm ligulate, Thecæ hemisph sess in disk
15297 Frond flat dichotomous, Segments linear cuneiform, Theca hemispherical sess on the disk of the frond
15298 Frond somew channel dichotom segm lin cuneif Thec sphæric scatter on short stalks on disk of frond
15299 Frond membran leathery flat somew lanc somew branched crhat Ciliæ subulate bearing theca at end

15300 Frond cartilagin compressed lin somew dichotom Segm cuhated, Cilæ bear thecæ either at sides or ends
15301 Frond cartilagin corneous distich branched, Segm compressed flat linear bipinn Pinnæ opp spread obt

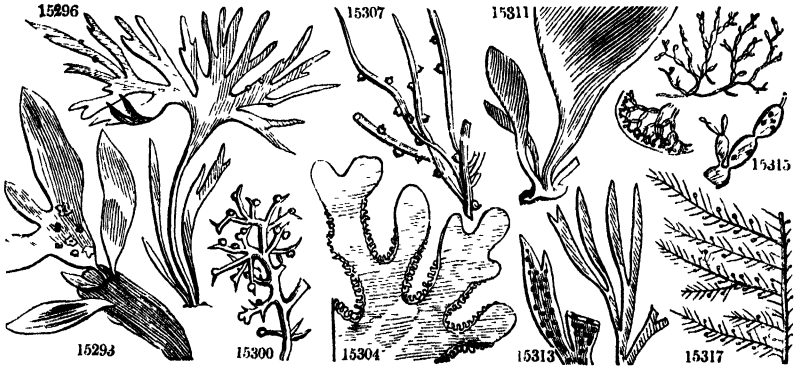
15302 Frond cartilagin filif compres decomp pinnated, Pinnæ horizontal altern Pinnules bearing thecæ at end
15303 Frond cartilaginous much branched dichotomous pinnated, Segments tapered at base lower compressed 2-edged, the last furcate acute
15304 Frond cartilaginous membranaceous dichotomous or palmate, Segments obtuse somewhat proliferous, Theca immersed in minute unequal processes
15305 Frond membranous dichotomous, Theca spherical marginal sessile
15306 Frond membranous dichotomous, Segm linear upper palmate crested entire, Theca margin immersed
15307 Frond cartilagin round filif Branch long simp surround by little branch Theca hemispher sess scatter
15308 Frond filif corneous rigid equal with entang Branches, Branches horizontal 1-sided cluster forked at end
15309 Fronds filif much branch Branchl setaceous tapered at each end setac Theca sperm attach to branchl

15310 Stem filiform, dilated into a cartilaginous reniform or orbicular entire frond
15311 Frond fleshy flat simple cuneiform tapered at base into the footstalk rounded at end

15312 Frond coriaceous flat palmate entire, Segments cuneate oblong nearly simple

15313 Frond membranous tubular flat dichotomous, Axillæ rounded, Segments linear narrow by degrees sending out from the margin many simple ramenta
15314 Frond gelatinous coriaceous dichotomous, Segments filiform end membranous dilated elliptical lunceol
15315 Frond filiform with contracted articulations
15316 Frond subgelatinous filiform, Branches remote long, Sporules naked in the substance of the branches

15317 Frond filiform compressed much branched, Branchlets setaceous distichous simple pectinate on each side



and Miscellaneous Particulars.

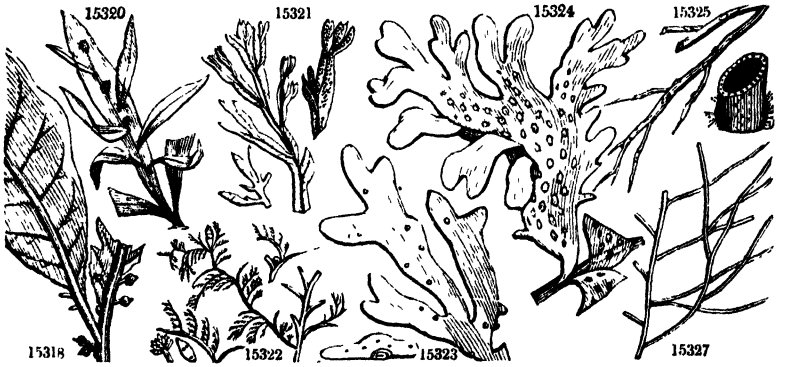
2315 *Halymenia* From ἁλς, the sea, and ὑμην, a membrane Marine plants with flat or tubular membranous fronds. H. edulis is the true Dulse, and H palmata the common Dulse, both of which are eaten in Scotland

2316 *Bonnemaisonia* So called in honor of M Bonnemaison a French cryptogamic botanist, who particularly attended to Confervæ.

2317. DELESSE'RIA *Ag*	Delesseria		*Sp.* 7—24.						
15318 **sanguínea** *Ag*	blood-colored	bushy	6	ja. my.	Fi	Pk	ocean		Eng bot t. 1041. *Fucus*
15319 **ruscifólia** *Ag*	ruscus-leaved	flat lobed	4	ja. feb	Ri	pu	ocean		Eng bot. t 1395 *Fucus*
15320 **hypoglóssum** *Ag*	proliferous	tufts	3	jn sep	Ri	pk	ocean		Eng bot t. 1396. *Fucus*
15321 **alâta** *Ag*	winged	finely branch	6	jan au.	dp	pk	ocean		Eng bot. t. 1387. *Fucus*
β dilatáta Ag	*dilated*	finely branch.	6	jan au.	dp	pk	sea shore		
γ angustissima Ag.	*very narrow*	finely branch	6	jan au	dp	pk	sea shore		
15322 **plocámium** *Ag.*	scarlet	finely branch	4	su aut.	dp	pk	ocean		E. b t 1242. *F coccineus*
15323 **lacerâta** *Ag.*	torn	nearly simple	6	jl oct.	Pa	R	ocean		Eng. bot. t. 1067. *Fucus*
15324 **punctáta** *Ag*	dotted	very tender	4	sum.	Bt	pk	sea shore		Eng. bot. t. 1573 *Fucus*

FUCOIDEÆ.

2318 LEMA'NEA *Ag*	Lemanea		*Sp* 2—5					
15325 **fluviátilis** *Ag*	fluviatile	lax tufts	6	sum	Dl	G	stones in riv	
β médua Ag	*intermediate*	lax tufts	6	sum	Dl	G	rivers	E. bot. t 1763 *Conferva*
15326 **torulósa** *Ag*	torulose	tufts	4	aut	Dl.	G	rivers	Act holm. 1814. t 2. f 1
2319 CHORDA'RIA *Ag*	Chordaria		*Sp* 1—5					
15327 **flagelliformis** *Ag.*	flagelliform	long masses	24	sum	Ol	G	ocean	Eng bot t 1222. *Fucus*
2320 SCYTOSI'PHON. *Ag*	Scytosiphon.		*Sp* 2					
15328 **filum** *Ag*	cord	simple	240	sum	Br	Ol	ocean	Turn fuci, t. 86. *Fucus*
β Thrix Ag.	*hair*	simple	24	sum	Br	Ol	ocean	Stackh fuci, t 12 *Fucus*
γ tomentósus Ag.	*downy*	simple	60	sum	Br	Ol	sea shore	Lyng hydroph dan t 19
δ fistulósus Ag	*fistular*	simple	120	sum	Br	Ol	ocean	Eng bot t 642 *Ulva*
15329 **fœniculáceus** *Ag.*	fennel-leaved							Tu fuci, t. 234 *F subtilis*
2321 SPOROCH'NUS *Ag*	Sporochnus		*Sp* 6—14					
15330 **pedunculátus** *Ag*	stalked	downy	6	sum	Lt	G	sea shore	Eng bot t 545 *Fucus*
15331 **aculeátus** *Ag.*	aculeate	much branch	24	sp su	Ol	G	ocean	Turn fuci, t 187 *Fucus*
15332 **viridis** *Ag*	green	very finely br	18	sum	Ol	G	ocean	Eng bot t. 1669 *Fucus*
15333 **villósus** *Ag*	villous	downy	6	sum	Pa	Y	sea shore	Eng bot. t 546. *Conferva*
15334 **rhizódes** *Ag*	warted	smth branch	2	sum	Y	Br	ocean	Lyngb hydrop dan t 13
β major Ag	*large*	smth. branch	3	sum	Y	Br	ocean	E.b t 1688 *C verrucosa*
15335 **ligulátus** *Ag*	ligulate	much branch	48	sum	Ol	G	ocean	Eng bot t. 1636 *Fucus*
2322 HALI'SERIS. *Ag*	Haliseris		*Sp* 1—5					
15336 **polypodioides** *Ag*	polypodi -like	flat branched	6	all sea	Ol	G	ocean	E.b t 1758 *F. membran*
2323. ENCŒ'LIUM *Ag*	Encœlium		*Sp* 1—4					
15337 **bullósum** *Ag*	blistered	simple tubul	6	sum	Ol	G	sea coast	E. b t. 2570 *U. Turneri*
2324. ZONA'RIA. *Ag*	Zonaria		*Sp* 3—34					
15338 **pavónia** *Ag*	Turkey feath	flat lobed	3	sum	Br	G	ocean	Eng bot. t 1276 *Ulva*
15339 **dichótoma** *Ag*	dichotomous	branched	4	sum	Ol	G	ocean	Eng bot. t 774 *Ulva*
15340 **multífida** *Ag*	multifid	flat cut	3	aug	Pa.	Ol	ocean	Eng. bot. t. 1913. *Ulva*
2325 LAMINA'RIA *Ag*	Laminaria		*Sp* 6—25					
15341 **agárum** *Ag*	perforated	large masses	60	sum	Br		ocean	Turn fuci, t 75. *Fucus*
15342 **esculénta** *Ag*	esculent	large masses	60	sum	Br		ocean	Eng. bot t 1759 *Fucus*
15343 **digitáta** *Ag*	digitate	large masses	60	all sea.	Ol	G	ocean	Eng bot t 2274 *Fucus*
15344 **bulbósa** *Ag*	bulbous	large masses	60	all sea	Ol	Br	ocean	Eng bot t 1760. *Fucus*
15345 **saccharina** *Ag.*	saccharine	large masses	48	all sea	Ol	G	ocean	Turn fuci, t 163 *Fucus*
β bullâta Ag	blistered	large masses	48	all sea	Ol	G	ocean	E. b t 1576 *F saccharı*
15346 **phýllitis** *Ag*	tender	simple	12	sum	Bt	G	ocean	Eng bot t. 1331. *Fucus*



History, Use, Propagation, Culture,

2317 *Delesseria.* The most beautiful of the Fucus tribe, so named in honor of M Benjamin Delessert, a distinguished French patron of botany, and now holding the same station among the scientific men of Paris, as was lately occupied in London by Sir Joseph Banks

2318 *Lemanea* Named in honor of M Leman, a French botanist, who possessed a considerable knowledge of Algæ. This genus is the puzzle of writers upon Algæ It differs from all the Nostochinæ in its substance, being in no way gelatinous, and in its compound structure, and separate fruit; from Confervoideæ it is distinguished by its continuous frond, olivaceous color, and leathery texture To Fucoideæ it most nearly related in color, substance, and structure, but it is akin to no other genus, and its habits are entirely different from those of Fucoideæ, the species being all found floating in fresh water.

2319 *Chordaria.* So called from the cord-like appearance of the species

2320. *Scytosiphon.* The fronds of this genus are tubular and coriaceous; whence the name has been contrived, from σκυτος, leather, and σιφων, a siphon.

15318 Stem distinct, Leaves ovate stalked entire costate, Nerves transverse parallel
15319 Stem winged, Leaves linear oblong subsessile proliferous from the costa, Veins diaphanous nearly parallel
15320 Stem winged, Leaves linear-lanceolate costate veinless proliferous from the midrib netted
15321 Frond ribbed obsoletely nerved linear dichotomous alternately pinnatifid towards end, Pinnæ rather lingul

15322 Frond pinnated dichotomous much branched, Last branches falcate inwards and pectinate
15323 Frond very fine linear irregularly split entire at end, Segments rounded at end not veined, Sori marginal
15324 Frond very thin veinless roundish irregularly split at the end, Sori on the disk of the frond

FUCOIDEÆ.

15325 Filaments simple papillose, Papillæ usually ternate, Articulations 5 times as long as broad
β Branched torulose in a moniliform manner here and there
15326 Filaments simple moniliform incurved 1-colored

15327 Frond much branched, Branchlets virgate somewhat distichous spreading at base

15328 Frond quite simple

15329 Frond setaceous branched in an irregular manner

15330 Receptl elliptical lateral as long as peduncle
15331 Branches spiny alternate
15332 Frond many times pinnated, Pinnæ opposite capillary
15333 Frond many times pinnated nodose, Pinnæ opposite, Nodi villous
15334 Frond irregularly branched, torulose and rugose in every direction

15335 Frond flat membranous scarcely nerved bipinnate, Pinnæ and pinnules oppo ite linear tapering at base

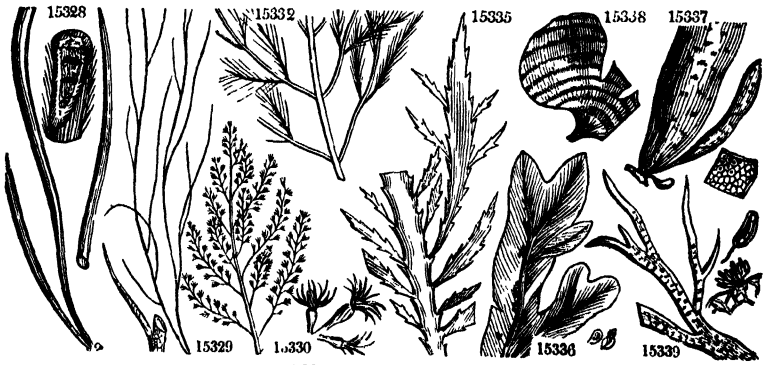
15336 Frond linear dichotomous entire, Sori heaped about the costa

15337 Frond inflated clavate

15338 Fronds reniform flabelliform smooth membranous, Zones concentric
15339 Dichotomous entire, Segments erect linear rounded blunt, Theca scattered on the disk
15340 Frond dichotomous entire, Segments long slender acute

15341 Stalk running through the lamina which is riddled with holes
15342 Stalk winged with pinnæ and running through the ensiform lamina
15343 Stalk round expanded into a roundish digitate split entire lamina
15344 Root inflated-bulbous, Stalk flat expanded into a digitate split entire lamina
15345 Stalk compressed expanded into an entire linear-oblong laminæ

15346 Stalk compressed expanded into a thin linear-lanceolate entire lamina



and Miscellaneous Particulars.

2321 *Sporochnus* The meaning of this word is not explained The genus is remarkable for the nature of the reproductive organs, which consist of a minute receptacle formed by some clavate corpuscles, which are jointed and arranged in a concentrical manner, and crowned with tufts of hair

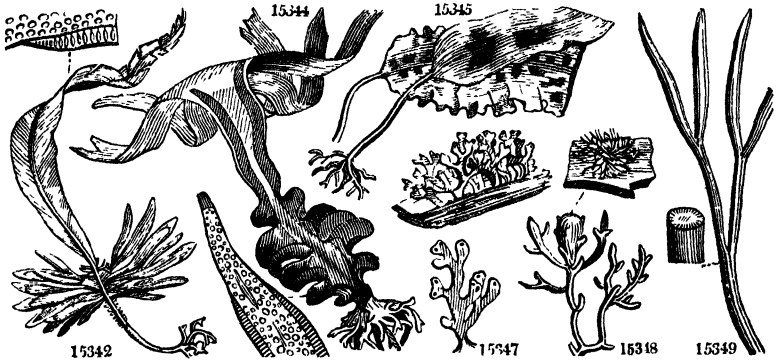
2322. *Halisecris.* This name literally signifies sea-cabbage; from ἅλς, the sea, and σικυς, a sort of cabbage The broad membranous fronds are not unlike the leaves of cabbage

2323. *Encœlium* From ἐν, within, and κοιλος, hollow. The fronds are all tubular and bladdery.

2324. *Zonaria* Beautiful marine plants marked with transverse *zones* or lines, in which the organs of reproduction are supposed to exist

2325 *Laminaria* The reproductive organs of this genus are situated in the form of large sori upon the *lamina* of the frond L esculenta is eaten in Scotland, where it is called *Badderlocks* From L saccharina, when dried in the sun, exudes a dry white sweetish substance, which is eaten as sugar by the poor inhabitants of Iceland. L buccinalis furnishes the singular vegetable production called the sea-trumpet.

2326. LICHI'NA *Ag*	Lichina			*Sp* 2						
15347 pygmæ'a *Ag*	pygmy	small patches	¼	sum	G	Bl	roc. on se co	Eng	bot. t 1332.	*Fucus*
15348 confl'nis *Ag*	allied	small patches	⅓	sum.	G.	Bl	roc on se co.	Eng.	bot. t.2575.	*Lichen*
2327 FURCELLA'RIA *Ag*	Furcellaria			*Sp* 1.						
15349 fastigiáta *Ag*	fastigiate	much branch.	9	aut	sp	R	Ol ocean	E.b	t 824	*F lumbricalis*
2328 FU'CUS *L*	Fucus.			*Sp* 8—18						
15350 nodósus *L*	knotty	leathery bran	36	dec		Ol	G ocean	Eng	bot t 570	
β Mackáii Turn.	*Mackay's*	leathery bran	24	dec		D	Br ocean	Eng	bot t 1927	
15351 vesiculósus *L*	bladdery	loose masses	24	sp	su	Ol	G ocean	Eng	bot. t. 1056	
β longifrúctus Ag	*long-fruited*	loose masses	24	sp	su	Ol	G ocean			
γ linearis Ag	*linear*	loose masses	24	sp	su	Ol	G ocean	Esper	fuci, t 146	
15352 ceranoides *L*	horn-like	bushy	12	sp	su	Ol	G ocean	Eng	bot. t. 2115	
15353 dis'tichus *L*	distichous	bushy	12	sp	su	Ol	G ocean	Turner	fuci, t 4	
15354 serrátus *L*	serrated	masses	36	sp	au	D	Ol ocean	Eng	bot. t 1221	
15355 canaliculátus *L*	channelled	small masses	6	sp	au	Y	Ol ocean	Eng	bot. t. 823	
15356 tuberculátus *Esp*	warted	branch wart.	6	june		Y	Ol ocean	Eng	bot. t. 726	
15357 lóreus *L*	strap-like	masses	36	sum		D	Ol ocean	Eng	bot. t. 569	
2329 CYSTOSE'IRA. *Ag*	Cystoseira			*Sp* 5—45						
15358 ericoides *Ag*	heath-like	coralloid	6	su	au	Ol	Br ocean	Eng	bot t 1968	*Fucus*
15359 barbáta *Ag.*	bearded	much branch	6	su	au	Ol	Br ocean	Eng	bot t 2179	*Fucus*
15360 dis'cors *Ag*	variable	bushy	6	su	wi	Ol	Br ocean	Eng	bot t 2131	*Fucus*
15361 fibrósa *Ag.*	fibrous	bush deform	6	su	wi	Ol	Br ocean	Eng.	bot t 1969	*Fucus*
15362 siliquósa *Ag*	podded	loose masses	24	au	sp	D	Ol ocean	Turn	fuci, t 159	*Fucus*
β minor Ag	*small*	loose masses	8	au	sp	D	Ol ocean	Stackh.	fuci, t 11.	*Fucus*
γ denudáta Ag	*naked*	loose masses	24	au	sp	D	Ol ocean			



History, Use, Propagation, Culture,

2326. *Lichina* So called in allusion to its supposed convertibility into some one of the Lichen tribe. Sir James Smith has made one species a Lichen and the other a Fucus

2327. *Furcellaria* Named on account of the dichotomous forked or *furcellate* arrangement of the fronds.

2328 *Fucus* So called by the Greeks In Latin, the word signifies paint of any kind, a pigment staining red is afforded by certain species of Fucus Fucus vesiculosus is much employed in the manufacture of kelp. It is common in great variety upon all the sea-coasts of these islands. It is known at first sight by its spherical vesicles filled with air When the plant is dried, it becomes brittle, and of a dull black color, and sometimes it is covered with a saline efflorescence. Medically it is considered deobstruent, and has been found efficacious in scrofulous swellings. (*Thom. Lond. Disp.* 308.)

15347 Frond flat with spherical tubercles
15348 Frond roundish with elliptical tubercles

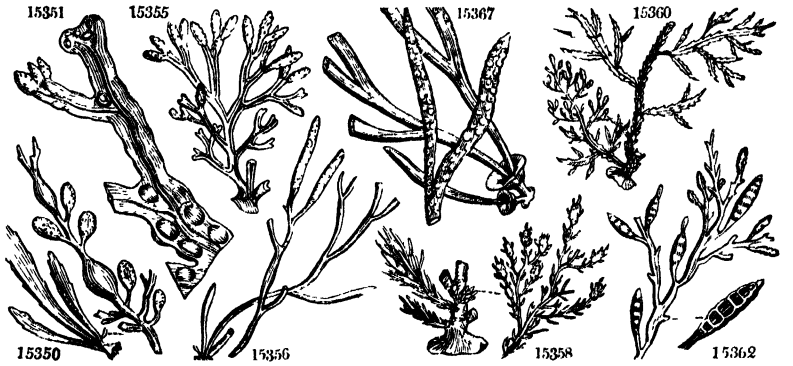
15349 The only species

15350 Stem compressed here and there inflated with internal vesicles, Receptacles lateral distic stalk. pyriform

15351 Frond flat ribbed lin dichotom entire, Vesicles spherical innate upon frond in pairs, Recept. term elliptical

15352 Frond lin. costate ent somew dichotom without vesicles, Lateral segm narrowest multif fruit-bearing
15353 Frond linear entire dichotomous without vesicles ribbed, Receptacles linear-elliptical
15354 Frond dichotomous ribbed serrated, Recept. solitary flat serrated
15355 Frond linear nerveless channelled dichotomous, Recept. terminal
15356 Frond filiform somewhat dichotomous, Recept terminal cylindrical
15357 Cup radic. circular plano-convex emitt. from its centre a frond terminat. in a very long dichotom recept.

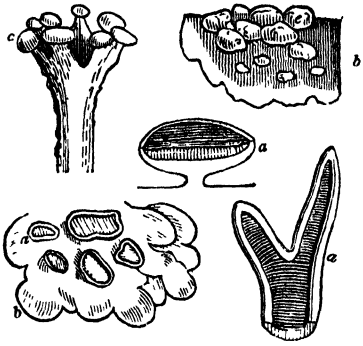
15358 Lvs densely spiny all over, Vesic ellipt somew term crown solit Recept warty from inflat. base of spines
15359 Lvs filiform dichotom unarmed, Vesicles lanceolate chained, Recept. terminal ovate ellipt mucronate
15360 Lower leaves thin costate pinnate, Pinnæ lanceolate crenulate, Vesicles lanceolate somewhat solitary
15361 Lvs unarmed filif much branched, Vesicles innate ovate-elliptic somew chained, Recept. filif terminal
15362 Stem compressed pinnated, Leaves distichous flat linear entire, some bearing vesicles, others receptacles



and Miscellaneous Particulars.

For rural economy, this and other species of Fucus are burned for their ashes, which produce the kelp or potash of commerce On those shores of the sea where these plants do not abound, and where the water is sufficiently saline, the different species of fucus are raised artificially, by depositing stones at regular distances, on which the fuci spring up of themselves, and in four years yield a crop fit for cutting Those who are interested on this subject will find ample information in the Transactions of the Highland Society of Scotland (vol viii), and in Headrick's Survey of Forfarshire. A condensed view of what is known on the subject will be found in the Encyclopædia of Agriculture *in loco*

2329 *Cystoseira.* From κυστις, a bladder, and σειρα, a chain. The upper parts of the frond have the appearance of little bladders chained together.



Order 8. LICHENS.

Reproductive organs uniform Sporules deposited in receptacles of various forms, distinct in substance from the thallus or frond, which is either pulverulent, crustaceous, membranous, foliaceous, or branched and shrub-like

This, Algæ, and the collateral order Fungi, may be said to exhibit the lowest stage of vegetable developement, and to contain the simplest forms of which plants are susceptible Indeed it seems that each is resolved into the other when in the least stage of composition Of this order, the lowest tribe, Pseudo-Lichenes, are considered Fungi by some authors, and have been formed into a distinct order by others, under the name of Hypoxyla. Here it seems best to consider them Lichens.

The fructification is usually in the form of shields or cup-like receptacles (*a*), dispersed over the surface of the frond or *thallus* (*b*), and bearing various names according to their nature *Apothecia* is the common term used to designate the fructification *Podetia* are the stalk-like processes of the frond (*c*), which bear the apothecia on their summit *Scyphæ* are cup-like apothecia *Cyphellæ* are pale tubercular spots on the under side of the frond *Lacunæ* are small hollows or pits on the upper surface of the frond *Soredia* are little heaps of free, pulverulent bodies, mostly of a whitish color, placed on various parts of the frond (*c*) *Pulvinuli* are spongy, excrescence-like bodies arising from the frond, and often resembling minute trees *Nucleus proligerus*, or kernel, is a distinct cartilaginous body coming out entire from the apothecia, and containing sporules *Lamina proligera* is a distinct body containing the sporules, separating from the apothecia, often very convex and variable in form, and mostly dissolving into a gelatinous mass. The arrangement of Acharius, which is the most celebrated, is here followed.

Tribe I IDIOTHALAMI.

Apothecia differing in color from the rest of the plant, and formed of a distinct substance.

§ 1. *Apothecia simple, entirely formed of a sub-uniform, pulverulent, or cartilaginous substance* Homogenei

* *Apothecia destitute of a raised margin.*

2330 *Spiloma* Plant crustaceous, spreading, plane, adnate, uniform Apothecia composed of minute bodies, collected into a compact, homogeneous, subpulverulent, naked, and shapeless colored mass

2331 *Solorina* Plant foliaceous, coriaceous, lobed, separate beneath, and veiny or fibrous with down Receptacle adnate, roundish, not edged, covered by a colored membrane, and containing a solid, cellular, bladdery parenchyma.

** *Apothecia with a raised border*

2332 *Lecidea* Plant various, crustaceous, spreading, adnate, and uniform or foliaceous Apothecia scutelliform, sessile, surrounded by a cartilaginous membrane, the disk of the same nature as the raised border

2333 *Caliceum* Plant crustaceous, plane, spreading, adnate, uniform Apothecia cup-shaped, sessile, or stipitate, cartilaginous, containing a compact pulverulent mass, plane or convex, and forming a naked disk

2334 *Gyrophora* Plant foliaceous, coriaceous, or cartilaginous, peltate, mostly monophyllous, free beneath Apothecia subscutelliform, sessile, or adnate, covered with a black cartilaginous membrane, the disk warty or plaited in circles, and bordered

§ 2. *Apothecia subsimple, included, formed of a single covering, containing a capsular body or nucleus* Heterogenei.

2335 *Endocarpon* Plant crustaceous, adnate, of some determinate figure, or foliaceous and peltate Apothecia globose, concealed in the substance of the plant, surrounded by a thin membrane, furnished with a slightly prominent orifice, and containing a nucleus

Tribe II CŒNOTHALAMI

Apothecia partly formed from the substance of the plant

§ 1 *Apothecia included in wart-like processes, formed from the substance of the plant.* Physmatoidei

2336 *Thelotrema* Plant crustaceous, cartilaginous, plane, spreading, adnate, uniform, with wart-like receptacles, furnished with a wide pore, and bordered Apothecia included, and containing a nucleus within a double covering

2337 *Pyrenula* Plant crustaceous, plano-expanded, adnate, uniform Receptacle wart-like, formed of the thallus, enclosing or surrounding at the base a solitary thalamium, with a simple, thick, papillose peritheciun, containing a globose cellular nut

2338 *Variolaria* Plant crustaceous, plane, spreading, adnate, uniform Apothecia wart-like, formed from the crust (resembling soredia), submarginate, white, including a naked nucleus

§ 2. *Apothecia scutelliform, subsessile, the disk of a peculiar color different from the border, which is formed from the crust* Discoidei

2339 *Urceolaria* Plant crustaceous, spreading, adnate, uniform Apothecia shield like, the disk concave, colored, immersed in the crust, border formed from the crust, and the same color

2340 *Lecanora* Plant crustaceous, spreading, adnate, plane, uniform Apothecia shield-like, thick, adnate, and sessile, the disk plano-convex, colored, border thickish, somewhat free, formed from the crust, and the same color

2341. *Parmelia.* Plant foliaceous, between coriaceous and membranaceous, spreading, appressed, orbicular, lobed, and stellate, variously divided, fibrous beneath Apothecia shield-like, attached by a central point, the disk concave, colored, with a border formed from the crust.

2342 *Borrera* Plant cartilaginous, branched, and laciniate, the segments free, channelled beneath, and ciliate at the margin Apothecia shield-like, with a colored disk, the border formed from the frond

2343 *Cetraria* Plant cartilagino-membranaceous, ascending or spreading, lobed, smooth, and naked on both sides Apothecia shield-like, obliquely adnate with the margin, the disk colored, plano-concave, border inflexed, derived from the frond.

2344 *Sticta* Plant foliaceous, coriaceo-cartilaginous, spreading, lobed, free and pubescent beneath, with little cavities or hollow spots Apothecia shield-like, fixed by a central point, the disk colored, plane, border formed from the crust

2345 *Peltidea* Plant foliaceous, coriaceous, spreading, subadnate, lobed, with woolly veins beneath Apothecia orbicular, adnate, on produced portions of the frond, the disk colored, border very thin, formed from the frond

2346 *Nephroma* Plant foliaceous, coriaceous, membranous, expanded, lobed, beneath separate, and naked or villous. Receptacles resupinate, formed of the ascending lengthened lobes of the thallus Fertile lamina reniform, entirely attached to the thallus and its lower side, and surrounded by an elevated inflexed margin

2347 *Roccella* Plant coriaceous, cartilaginous, branched, laciniated, round or flat, erect or pendulous, woolly inside Receptacles shield-like, thick, growing into the thallus Fertile lamina forming a disk, plano-convex, colored, and cartilaginous, in the inside hyaline, and of a similar nature, surrounded by a margin, which is elevated, sessile, and as deep as the disk, and which contains a compact black powdery mass, which is hidden within the substance of the thallus

2348 *Evernia* Plant branched, laciniate, angular, or compressed, suberect or pendulous, with a central filament within Apothecia shield-like, sessile, the disk concave, colored, border formed the frond

§ 3 *Apothecia subglobose, terminating the branches or podetia, or scattered, sessile, and emarginate.*
CEPHALOIDEI

* *Apothecia covered by the mass of the fructification*

2349 *Cenomyce* General receptacle subcartilaginous, foliaceous, laciniate, subimbricated, free (rarely adnate, uniform, or wanting) Apothecia on podetia, orbicular, immarginate at length, capituliform, bearing thick colored masses of fructification

2350 *Becomyces* Plant crustaceous, spreading, plane, adnate Apothecia on short, soft, solid, simple podetia, capituliform, solid, immarginate, colored, convex, reflexed at the margin

2351 *Isidium* Plant crustaceous, plane, spreading, adnate, uniform Apothecia on very short solid podetia, orbicular, convex, solid, terminal, the disk submmersed, having a border formed from the substance of the podetia.

2352 *Stereocaulon* Plant shrubby cartilaginous, branched Apothecia turbinate, sessile, solid, plane above, at length subglobose, with a border formed from the frond

** *Apothecia clothed with the substance of the frond, and containing a pulverulent mass*

2353 *Sphærophoron* Plant cartilaginous, fibrous within, solid, shrubby, branched Apothecia sessile, terminal, subglobose, bursting irregularly, and containing a black, globular, pulverulent mass

TRIBE III HOMOTHALAMI

Apothecia entirely formed of the substance of the frond, and of a similar color

2354 *Alectoria* Plant cartilaginous, subfiliform, fibrous, and somewhat fistulose within, branched, prostrate, or pendulous Apothecia shield-like, thick, sessile, bordered, wholly formed from the frond

2355 *Ramalina* Plant cartilaginous, fibrous, and nearly solid within, branched, somewhat shrubby, mostly sorediferous Apothecia shield-like, thick, subpedicellate and subpeltate, plane, bordered, wholly formed from the substance of the frond

2356 *Cornicularia* Plant cartilaginous, fibrous, and nearly solid within, branched, shrubby Apothecia orbicular, terminal, obliquely peltate, at length convex, somewhat inflated, the border dentate

2357 *Usnea* Plant much branched, filiform, mostly pendulous, furnished within with a bundle of elastic fibres Apothecia orbicular, terminal, peltate, often ciliate at the border

2358 *Collema* Plant subgelatinous, homogeneous, crustiform, foliaceous, or somewhat branched, membranaceous or cartilaginous when dry Apothecia shield-like, bordered, formed from the substance of the frond, the disk sometimes differing in color when dried

TRIBE IV ATHALAMI

Lichens destitute of apothecia, and whose fructification is unknown

2359. *Lepraria.* Whole plant crustaceo-pulverulent, spreading, adnate, uniform Apothecia unknown

TRIBE V PSEUDO-LICHENES

Apothecia black, corneous, imbedded in a receptacle Sporules in slender tubular cells, lying in a pulp, not spontaneously emitted

2360 *Opegrapha* Plant crustaceous, flat, expanded, adnate, uniform Receptacle oblong and elongated, sessile, covered with a cartilaginous dark membrane, enclosing a solid parenchyma Disk linear, edged on each side

2361 *Verrucaria* Plant crustaceous, plane, expanded, adnate, uniform Receptacle hemispherical, roundish at the base, growing into the thallus, with a double perithecium, exterior somewhat cartilaginous and thick, having above a little pimple or perforation, inner very fine, and membranous Kernel cellular

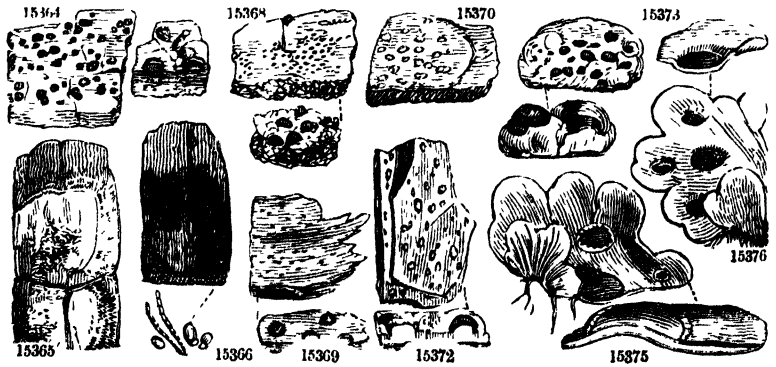
2362 *Porina* Plant crustaceous, cartilaginous, plano-expanded, adnate, uniform Receptacle wart-like, formed out of the thallus, and not margined Thalamium imbedded in the substance of the wart, with a simple very thin perithecium, and a colored orifice thicker at the surface of the wart. Kernel roundish, cellular

2363 *Arthonia* Plant crustaceous, plano-expanded, adnate, uniform Receptacle innate, sessile, of an irregular roundish figure, without an edge, covered by a somewhat cartilaginous membrane, and containing a solid uniform kernel

2364 *Graphis* Plant crustaceous, plano-expanded, adnate, uniform Receptacle long, immersed in the thallus, with a simple cartilaginous perithecium, which forms an edge all round the linear kernel, which is naked at top and bottom, and cellular inside

IDIOTHALAMI.

2330 SPILO'MA *Ach*	Spiloma			*Sp* 12—20					
15363 tumidulum *Ach*	tumid	thin skin	4	all sea	O	bark of trees	Eng	bot.	2151
15364 versicolor *Ach*	changeable	spotted crust	3	all sea	Gr	bark of trees	Eng	bot.	2070
15365 microclónum *Ach*	fine-branched	cloudy	1½	all sea	Wsh	aged oaks	Eng	bot.	2150
15366 melanópum *E. B*	sooty	sooty spots	2	all sea.	Bl	apple trees	Eng	bot	2358
15367 microscópicum *E B*	microscopic	obl. patches	1½	all sea	Sea G	old boards	Eng.	bot.	2396
15368 murále *E B*	wall	crust	3	all sea	Ysh	old mortar	Eng	bot.	2297
15369 dispérsum *E B*	scattered	even crust	1	all sea	Gr	old rails	Eng	bot.	2308
15370 decolórans *E B*	staining	lobed patches	1½	all sea.	Gr	old wood	Eng	bot.	2399
15371 punctátum *E B*	dotted	crust	2	all sea	Gr	old oaks	Eng	bot	2472
15372 variolósum *E B*	speckled	cracked crust	2	all sea	Wsh	old trees	Eng	bot	2077
15373 aurátum *E B*	golden	tumid crowd	1½	all sea	Wsh	old walls	Eng	bot.	2078
15374 tuberculósum *E B.*	warted	even patch	3	all sea	Cæs.	sandst. rocks	Eng	bot.	2556
2331 SOLORI'NA. *Ach*	Solorina			*Sp* 2—10					
15375 crócea *Ach.*	yellow	leafy frond	1½	sp su	Ol G	tops of mou	Eng	bot.	t 498
15376 saccáta *Ach*	bagged	leafy frond	2	sum	Grsh	on the earth	Eng	bot	t. 288
2332 LECIDE'A *Ach*	Lecidea.			*Sp* 66—183					
15377 atro-cinérea *E. B*	dark-grey	close patches	1½	all sea.	Bl	rocks	Eng.	bot	2096
15378 corácina *Ach.*	raven	tessellated	2	all sea	Gr Bl	granite rocks	E b t	2335	*L coracinus*
15379 atro-álba *Ach.*	black & white	cracked crust	3	all sea	Bl	rocks	Eng.	bot. t	2336
15380 fusco-átra *Ach.*	dark-brown	thin crust	2	all sea	Bl	rocks	E.b t	1734.	*L dendritic*
15381 fumósa *Ach*	smoky	tessellated	3	sum	Br Gr	alpine rocks	E.b t	1830	*L cechumen*
Lecken athrocarpus E. B 1829									
15382 lapicida *Ach*	stone-splitting	broad patches	3	all sea	G	brick walls	E. bot	821	*L contiguus*
15383 petræ'a *Ach*	rock	thin crust	1½	all sea	W	roc & stones	Eng	bot	246
15384 cónfluens *Ach*	confluent	tartareous	2	aut.	Gr Br	rocks	Eng	bot	1964
15385 parasćma *Ach*	black-fruited	membranous	3	aut	Wsh	bark of trees	Eng	bot.	1450
15386 sanguinária *Ach*	red-fruited	rugose crust	2	all sea	Wsh	rocks	Eng	bot	155
15387 sabuletórum *Ach.*	heath	thin cuticle	1½	all sea	Wsh	bark of trees			
β geochróa Ach	*earth-skin*	thin cuticle	1½	all sea	Gr	bark of trees	E. b	1450	*L.parasemus*
15388 miscélla *Ach*	mixed	lobed crust	2	all sea	Pa Ol	whinst rocks	Eng	bot	1831
15389 escharoides *E B*	scarred	granul crust	1½	june	D Br	earth & rocks	Eng	bot	1947
15390 aromática *Ach*	aromatic	lobed crust	1½	all sea	Ol	old walls	Eng	bot	1777
15391 dolósa *Ach*	rusty spongy-crust.	broad cuticle	4	all sea	Cæs	rocks	Eng	bot.	2581
15392 atro-virens *Ach*	dark-green	thin coat	2	all sea	Bl	rocks			
β geográphica Ach	*geographical*	figured crust	3	all sea	Y Ol	rocks	Eng	bot	245
15393 silácea *Ach*	flint	tessellated	2	all sea	Y R	rocks	Eng	bot	1118
15394 Œderi *Ach*	Œder's	tessellat.powd	2	all sea	Rsh	rocks	Eng	bot.	1117



History, Use, Propagation, Culture,

2330. *Spiloma.* This word signifies in Greek, a spreading discoloration of the cuticle, and well expresses the general character of the genus.

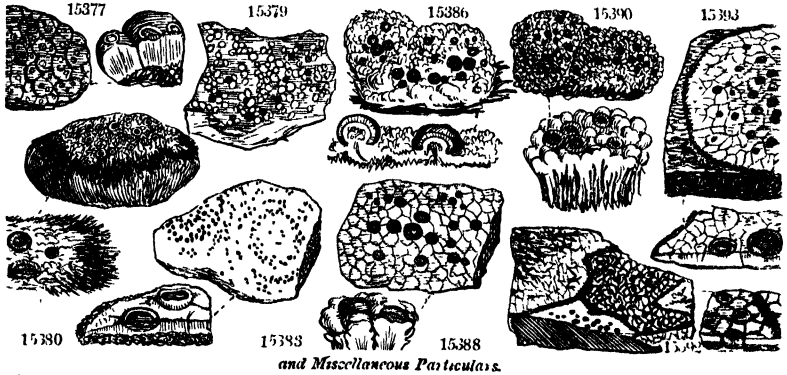
IDIOTHALAMI.

15363 Crust somewhat cartilaginous whitish, Apothecia crowded tumid oblong varying in figure roughish reddish at length brownish black and somewhat prunose
15364 Crust somewhat cartilaginous powdery cracked variegated with cinereous and yellow, Apothecia immersed superficial roundish finally confluent
15365 Crust very thin glauc Apothecia burst. forth min convex cluster and confluent somew branch dark-color
15366 Crust very thin greyish, Apothecia flat diluted irregular somewhat confluent black
15367 Crust spread widely very thin membran greyish, Apothecia dot-like very min black lead-color when dry
15368 Crust obsolete or white, Apothecia very minute black confluent without bristles
15369 Crust filmy very thin green grey, Apothecia mostly dispers hemispher sooty internally yellowish green
15370 Crust spreading widely very thin, for the most part membranous greyish white, yellowish green when rubbed, Apothecia minute flat confluent blueish grey
15371 Crust thin somew. powd. white, Apoth scatter min dot-like solid black with superfic. dark-brown powder
15372 Crust tartar. rugg greyish-white cracked, Apothecia convex round very black their centers often decid
15373 Crust tartar rugged greyish or greenish-white, Apothecia convex rounded black orange-colored within
15374 Crust calcareous greenish-white, Apothecia scattered somew confluent unequal elevated granulat black

15375 Thallus green (brown when dry) lobed ben veiny and of a fine saffron-col Apothecia somew. tum brown
15376 Thallus lobed grey-green whiter and fibrous ben Apothecia at length sunk into deep pits or hollows brown

† *Thallus crustaceous reniform.*
* *Apothecia constantly black, naked, (not prunose).*

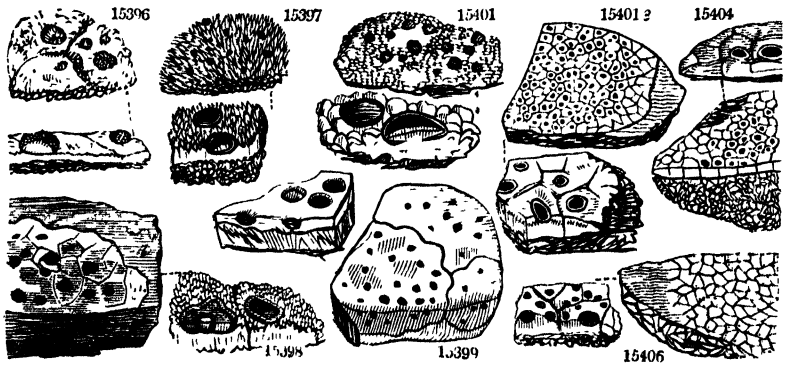
15377 Crust tessellated greyish-black smooth, Apothecia several together depressed brownish-black with a paler border, at length crowded elevated the border being obliterated
15378 Crust continued tessellat greyish-black, Apothecia immersed between the areolæ plane at length convex somewhat angular black of the same color within
15379 Crust spreading very thin cracked black with swelling whitish scattered areolæ, Apothecia plane or slightly convex often in the interstices black, of the same color within
15380 Crust very thin black cracked and tessellated areolæ chesnut-brown plane marginated shining scattered, Apothecia rather convex black margined white within
15381 Crust subcartilaginous tessellat smoothish brownish grey, Apothecia buried in the crust plane margined at length convex clustered and losing their margin black within greyish-black
15382 Crust tartareous cracked whitish ash-color, Apothecia within the spaces of the crust depressed flat finally convex somewhat confluent dark with a thin edge
15383 Crust thin roundish very finely cracked somewhat powdery white, Apothecia grown into the crust thick protuberant somewhat concentrical dark-colored with a tumid elevated contracted margin
15384 Crust tartareous somew spreading tessellated nearly even greyish-brown, Apothecia sessile at length irregular convex subglobose confluent black emarginate within having a thin greyish stratum ben disk
15385 Crust thin submembranaceous greyish-white bordered with black at length spreading somew granulated, Apothecia nearly plane sessile margined black blackish within
15386 Crust rugose and warted greyish-white, Apothecia at length convex hemispherical somew tuberculated black horny and black within having beneath a powdery bright red stratum
15387 Crust scattered granular irregularly lobed cinereous whitish, Apothecia clustered convex sessile plano-convex hemispherical somewhat confluent dark powdery inside
β Crust scattered granular somewhat cohering white cæsious or cinereous brown, Apothecia hemispherical somewhat globose often clustered shining
15388 Crust tartareous broken into cracks with wart-like smooth cracked cinereous areolæ, Apothecia deeply immersed convex aggregate scarcely edged dark-colored
15389 Crust tartareous brownish ash-colored composed of granulated warts, Tubercles convex irregular black with an obsolete black border
15390 Crust somewhat cartilaginous scaly granular glaucous cinereous, Granules flattish crenulated, Apothecia sessile plano-concave edged finally wavy
15391 Crust rugose somewhat granular ferruginous ash-colored, Apothecia superficial flat edged finally flexuose and convex, Edge finally obliterated
15392 Crust spreading thin black scattered with planeish subcontiguous bright-yellow areolæ, Apothecia plane or slightly concave black of the same color within
β Areolæ bright-yellow plane angular black between and with a black margin
15393 Crust tartareous tessellated yellowish-red, Apothecia sessile plane at length convex irregular confluent black internally cernuous and black
15394 Crust granulated and tessellated somewhat pulverulent ochraceous red, Apothecia minute elevated with the margin tumid the disk depressed black nearly of the same color internally



and Miscellaneous Particulars.

2331 *Solorina* From σολες, solid, and ενος, a skin, in allusion to the firm texture of the fond.
2332 *Lecidea.* An unexplained name contrived by Acharius for the Lichenes tuberculati of Linnæus whose shields have no border from the substance of the frond or crust

15395 alba *Ach.*	white	membranous	3	aut.	W	bark of trees	E. bot. 1349 *Lepraria*
15396 citrinélla *Ach*	lemon-peel-crust	cracked coat	3	spring	Y.G	sand. ground	Eng bot. 1877
15397 uliginósa *Ach*	marsh	whole colored	3	spring	Bl	sandy heaths	Eng bot. 1466
15398 scabrósa *Ach*	rugged-shield	lobed patches	2	all sea	Pa.G	tiled roofs	Eng. bot. 1878
15399 immérsa *Ach.*	immersed	even crust	4	all sea.	Pa Y	calcar rocks	Eng. bot. 193
15400 rivulósa *Ach*	rivulet	broad incrust.	6	all sea.	Br Ol	rocks	Eng. bot. 1737
15401 albo-cæruléscens *Ach*	whitish-blue	tartare. crust	3	sum.	Wsh	Scotch alps	E. b t 2244 *L pruinosus*
β túrgida Ach	*turgid*	sinuated crust	3	sum	W	stone walls	E.b t.820. *L multipunct*
15402 abietina *Ach*	pine-tree	pruinose	2	all sea	Gl	trunks, Abies	
15403 spéirea *Ach.*	wavy	sinuated crust	4	spring	W Y	flint pebbles	Eng bot. 1864
15404 epapólia *Ach.*	thick	tartare crust	2	sum	W	Scotch alps	Eng bot. 1137
15405 corticola *Ach.*	black & white bark	small verruc.	1	aut.	Cæs.	old trees	Eng bot 1892
15406 conspurcáta *E B.*	dusty	rimose crust	1½	aut.	Cæs	old walls	Eng bot 964
15407 Lightfoótii *Ach*	Lightfoot's	sinuat patch	¼	all sea.	Pa G	smooth bark	Eng bot. 1451
15408 quérnea *Ach*	oak	thin crust	3	all sea	Y G	clefts of bark	Eng bot. 485
15409 viridéscens *Ach*	greenish	thin crust	1½	all sea	Pa G	dead trees	
15410 incána *Ach*	hoary	leprous	2	aut	Gl	trun of trees	Eng bot. t 1683
15411 sulphurea *Ach.*	sulphur	cracked crust	2	aut	Sul	rocks	Eng bot t 1186
15412 orósthea *Ach*	downy	toment crust	3	all sea	Lt G	trees & pales	Eng bot t 1549
15413 decolórans *Ach*	discoloring	granular	2	sum.	Grsh	on earth	
β granulósa Ach *Lichen cycharoides* E B 1247	*granular*	granular	2	sum	Grsh	on earth	E b t.1185 *L quadricol*
15414 anómala *Ach*	anomalous	spotted patch	3	aut	Pa Ol	on earth	E b t 2155 *L cyrtellus*
15415 rupéstris *Ach*	rock	tartareous	2	sum	Grsh	rocks	Eng bot. 2345
Lichen calvus E. B 948							
15416 luréola *Ach*	yellowish	thin crust	3	all sea	Wsh	bark of trees	Eng bot 845 *L vernalis*
15417 carnéola *Ach.*	horny-cupped	papillose crust	3	all sea	Wsh	on oaks	Eng bot 965 *L corneus*
β arcentina Ach	*Griffithian*	smooth coat	2	all sea	W Br	bark of trees	E bot 1735 *L Griffithis*
15418 fusco-lutea *Ach*	yellow-brown	thin crust	3	sum	Grsh	mountains	Eng bot 1007
15419 cinéreo-fúsca *Ach*	cinereo -brown	cracked crust	3	all sea	Grsh	trun of trees	
15420 anthracina *Ach*	dark	scaly crust	2	sum	D Br	rocks & trees	E. bot t.432 *L byssinus*
15421 cæ'sio-rufa *Ach*	bluish-brown	tessellat crust	3	sum	D Gr	rocks & trees	E.b 1670 *L ferrugineus*
15422 icmadóphila *Ach*	Heath	leprous crust	2	all sea	G W	on ear in he	E b t 372 *L cinctorium*
15423 marmórea *Ach*	marbled	thin crust	3	all sea.	Gr W	bark of trees	Eng bot t. 739
15424 alabástrina *Ach*	Alabaster	thin crust	2	sum	Gr W	Scotland	E bot t 1651 *L roscellus*
15425 melvea *Ach*	yellow-shield.	cracked crust	1½	spring	Y Ol	moss trunks	Eng bot 1263 *L luteus*
15426 Ehrhartiána *Ach*	Ehrhart's	cartilag crust	2	all sea	Gsh	rocks	Eng bot 1136
15427 polýtropa *Ach.*	variable	tessellated	2	all sea	Pale	rocks	Eng bot. 1264



15395 Crust membranaceous white with a greyish or whitish-grey powdery substance scattered over it in small clusters, Apothecia minute appressed plane black
15396 Crust leprous granul powdery green -yell Apothecia sess margin finally convex dark of same col inside
15397 Crust granular somewhat gelatinous greenish-brown, Apothecia appressed marg.ned finally hemispherical clustered dark of the same color inside
15398 Crust globose warted powdery cinereous yellowish, Apothecia convex scabrous

** *Apothecia black, naked when moistened becoming-red or brown*

15399 Crust thin whitish, Apothecia plano-convex immersed in the stone margined dark: disk prunose; when moistened crimson, white inside
15400 Crust cracked into areolæ brownish ash-color edged with dark lines, Apothecia sessile flat becoming convex edged irregular black

*** *Apothecia black with a grey bloom.*

15401 Crust tartareous contiguous even at length somewhat tessellated and whitish, Apothecia sessile and elevated plane black with a grey bloom and a black smooth border
β Crust of a regular figure contiguous whitish cæsious, Apothecia immersed disk depressed hollowish
15402 Crust spreading very thin smooth glaucous. fructification subsessile plane black with a grey bloom, the border raised and swelling
15403 Crust tartareous contiguous very white, Apothecia sessile thick black powdery margined becoming convex with an ash-colored layer under the disk
15404 Crust tartareous defined tessellated white areolæ swelling, Apothecia sessile hemispherical with a grey bloom black within with a thin persistent margin
15405 Crust somewhat tartareous granular areolated uneven very white, Apothecia minute somew. immersed cæsious becoming subglobose not margined dark cinereous inside
15406 Crust thick greyish-white cracked rugose at length mealy very white within, Apothecia numerous scattered minute at first prominent and pale-brown, then concave and black

**** *Apothecia black-brown, brownish, or deadened by some other color*

15407 Crust somewhat effuse granular cinereous greenish, Apothecia appressed flat dark-brown. inside dirty-white with a thin flexuose edge paler than the disk
15408 Crust lep granul pale yellow -brown, Apoth somew immers becom conv not margin brown and black
15409 Crust thin granulat somew farin green or green brown fructific conv rug irregul conflu black -brown
15410 Crust spread leproso farin soft uneven glauc green, Apothecia scatter sess brown with marg ent paler
15411 Crust tartareous cracked and broken uneven smoothish pale sulphur-color, Apothecia adnate plane scarcely margined brown and scarcely paler in the margin, at length irregular and convex
15412 Crust cracked areolated uneven somewhat powdery sulphureous, Apothecia minute sessile convex not margined whole-colored becoming hemispherical
15413 Crust granulated greyish-white, Granules becoming pulverulent, Apothecia nearly plane red flesh-colored livid or brown with the elevated margin paler, at length flexuose

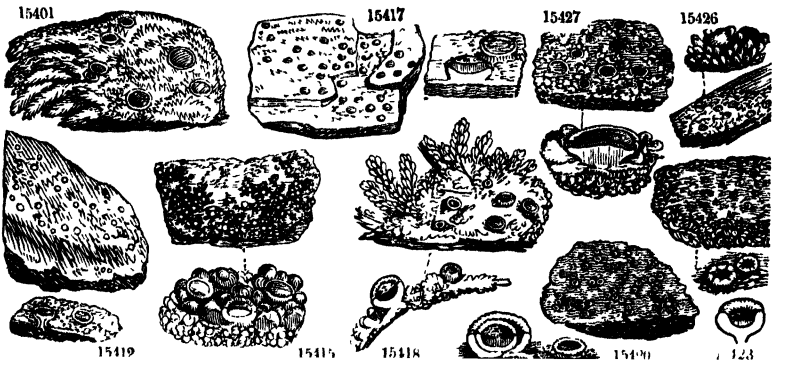
15414 Crust firmer granulat and subpapill Apothecia at length hemispheric rug brown -black and black conflu.
15415 Crust thin tartareous contiguous greyish-white, Apothecia immersed plane margined, at length convex: the margin persistent glabrous reddish-brown, of the same color within
15416 Crust thin whit cover. with somew globul pale gran at length grey Apoth sess becom conv yel -brown
15417 Crust thin membranous hoary finally granular powdery, Apothecia sessile concave thick tumid brown flesh-colored with an edge of the same color
β Crust very thin naked whitish, Apothecia flattish scarcely margined waxy purple brown and black
15418 Crust spreading very thin membranaceous white or greyish somew shining subgranulose, Apothecia plane yellow-brown, at length red-brown with the margin paler elevated, at length flexuose
15419 Crust thin somewhat cracked uneven greyish-white fructification plane, at length angular and irregular yellowish or reddish-brown, the border narrow persistent
15420 Crust spreading somewhat scaly uneven roughish darkish-brown, Apothecia minute plane reddish yellow with the margin paler, at length somewhat convex and brownish

***** *Apothecia dark-red, or whitish flesh-color*

15421 Crust tessellated rugose darkish-grey, Apothecia plane rusty orange the margin sometimes crenulate, at length convex with the margin obsolete blackish-red
15422 Crust leprose uneven somewhat granulated greenish-white, Apothecia nearly sessile plane flesh-colored, at length waved roughish in the disk margin scarcely any
15423 Crust thin grey.-white, Apothecia somew glob at length urceol white disk flesh-color, marg tum ent
15424 Crust thin smoothish minutely granulated greyish-white, Apothecia slightly convex entire whitish rose-color paler at the margin

****** *Apothecia pale, yellowish, waxen or orange-colored*

15425 Crust thin white powdery, Apothecia plano-convex smooth edged pale-yellow
15426 Crust cartilaginous cracked rugoso-plicate granulated white or greenish, Apothecia nearly sessile plane at length slightly convex waved unequal clustered pale yellowish
15427 Crust subtartareous tessellated pale, Apothecia nearly plane with the margin lobed waved clustered, at length subglobose destitute of margin yellowish flesh-color



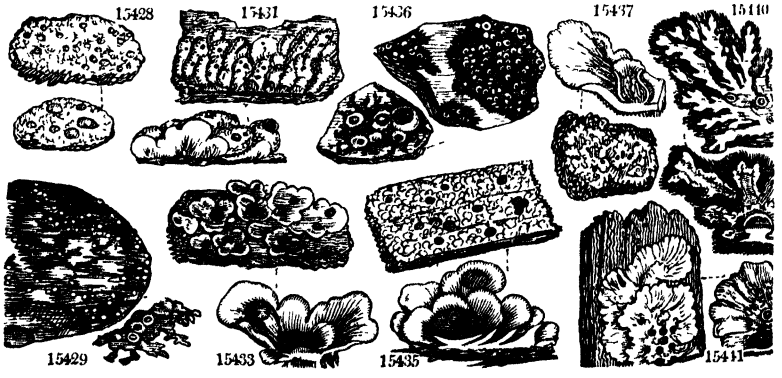
15428 lácida *Ach*	shining	soft crust	2	sum	G Y	rocks	Eng	bot. 1550
15429 atro-flava *Ach*	black & yellow	ragged crust	2	all sea.	Br	expos flints	Eng.	bot 2009
15430 luteo-álba *Ach*	yellow-white	smooth crust	1½	all sea.	W	rocks	Eng	bot. 1426
15431 cándida *Ach.*	hoary	sinuous	3	all sea.	Wsh	old walls	Eng.	bot 1138
15432 vesiculáris *Ach.*	blistered	imbricated	3	sum.	Br Bl	Highl. rocks	E.b.1139	*L cæruleo-nig.*
15433 lurida *Ach*	lurid	imbricated	3	sum.	G Br	Scotch alps	Eng	bot. 1329
15434 atro-rufa *Ach*	red-brown	imbricated	4	sum	Br	red san gro	Eng	bot. 1102
15435 scalaris *Ach*	scaly	imbricated	3	aut wi	Pa Ol	rocks & earth	Eng	bot. 1501
15436 verruculósa *E. B*	warted	irregul patch.	1	aut wi	Bl	hard rocks	Eng	bot. 2317
15437 rubiformis *Ach.*	blackberry	patches	¾	wint.	Pa. G	turfy earth	Eng	bot. 2112
15438 decipiens *Ach.*	deceitful	imbricated	2	spring	F	earth	Eng.	bot 870
15439 pholidióta *Ach.*	scaly	leafy crust	4	spring	Cæs.	quartz rocks	E. b 1955	*L. glebulosus*
15440 microphýlla *Ach.*	small-leaved	broken patch	2	spring	Gr. G	trees	Eng.	bot 2128
15441 canéscens *Ach.*	hoary	round patch	1½	spring	W	bark of trees	Eng.	bot. 582
15442 dædálea *E B.*	intricate	leafy lobed	¾	spring	Y G	rocks	Eng.	bot. 2129

2333 CALI'CIUM *Ach* Calicium. *Sp* 17—29.

15443 tigillare *Ach*	rail	soft crust	2	aut	Gl	trees	Eng	bot 1530
15444 stigonéllum *Ach.*	black sessile	pimpled	3	aut.	Pa Ol	on Lichens	Eng	bot 2520 *C sessile*
15445 microcéphalum *Ach.*	small-headed	cloudy streaks	¾	dec	Ol G	oak rails	Eng	bot 1865
15446 claviculáre *Ach*	club-headed	granul crust	¾	aut.	Grsh	naked wood		
15447 sphærocéphalum *Ach*	pin-headed	thin crust	½	spring	Grsh	old pales	Eng	bot 414
15448 hyperéllum *Ach.*	convex	irregular coat	2	spring	Bl G	old oak	Eng	bot 1832
15449 chrysocéphalum *Ach*	yellow-head.	patches	3	aut	Lem	trun of trees	Eng	bot. 2501
15450 trabinéllum *Ach*	brown	dense granul	4	aut.	Br Ol	boards	Eng	bot 1540
15451 cantheréllum *Ach*	cinnamon	obscure crust	½	aut.	Wsh	decay wood	Eng	bot 2557
15452 capitellátum *Ach*	sulphureous	regular patch	½	july	G Y	sandy soil	Eng	bot 1539
15453 aciculáre *Ach.*	acicular	irreg incrust.	3	sum.	Ol	Scotch firs	Eng	bot 2.85
15454 ferrugineum *E B*	rusty	lobed crust	4	aut	Pa Ol	pales	Eng	bot. 2473
15455 m'quinans *E B*	sooty-knobbed	tessellat. crust	4	wint	W Br	dead wood	Eng	bot 810
15456 róscidum *E B.*	grained	mealy coat	4	all sea	G	old boards	Eng	bot. 1464
15457 débile *E B.*	weak	close-set patc	½	aut	Br	old timber	Eng	bot 2462
15458 æruginósum *E B*	verdigrease	granular	1½	wint	Dl G	old boards	Eng	bot. 2502
15459 cúrtum *E B*	short stalked	crowd patch	1½	wint	Dl G	decay wood	Eng.	bot 2503

2334 GYRO'PHORA *Ach* Gyrophora *Sp* 8—19

15460 glábra *Ach*	smooth	leafy thallus	2	sum	D Ol	rocks		
β polyphýlla Wahl	*many-leaved*	leafy thallus	2	sum	D Ol	rocks	Eng	bot t 1282
15461 proboscidea *Ach.*	snouted	netted frond	3	spring	Smo.	rocks	Eng	bot. t 2483
β arc'tica Ach.	*arctic*	smooth lobed	1½	wint	Br	rocks	Eng	bot 2485
15462 cylindrica *Ach*	cylindrical	folded frond	2	spring	Gr Ol	rocks	Eng.	bot 522



History, Use, Propagation, Culture,

2333. *Calicium.* From καλυκιον, a little cup, well expressing the appearance of the organs of reproduction. All the species form grey, white, or yellow patches, of various extent, on old wrought wood, or boards exposed to the weather.

2334. *Gyrophora.* So named, from γυρος, a circle, and φερω, in allusion to the concentric circles, more or less

15428 Crust thin leprose powdery soft pale green -yellow, Apothecia slightly convex pale yellowish · marg obsol
15429 Crust thin effuse somew granul black, Apothecia min. cluster flat yellow with an elevat. ent. paler marg.
15430 Crust thin smooth white, Apoth crowd at length convex hemispher. margin. orange-color. white within

†† *Thallus crustaceous, of a regular figure or leaf.* Lepidoma.

15431 Crust somewhat imbricated white hoary, Lobes crenate reflexed tumid, Apothecia appressed black glaucous, edge finally wavy
15432 Crust somewhat imbricated brownish-black covered with a greyish powder, Lobes entire swelling, Apothecia black naked, at length hemispherical with the margin obsolete
15433 Crust imbricat. green -brown, Lobes round cren paler ben Apothecia plane, at length somew. conv black
15434 Crust somewhat contiguous lobed areolate and imbricated cinereous brownish-lurid, Lobes becoming flexuose cut-crenate, Apothecia appressed not edged flattish finally confluent
15435 Crust imbricated pale olive-green, Lobes distinct reniform nearly erect beneath and the margin powdery, Apothecia plane margined glaucous black
15436 Crust indeterminate very thin fibrous black with white convex crowded smooth warts, Apothecia solitary in each wart depressed coal-black with a border of the same color
15437 Crust somewhat imbricated, Lobes rounded crenate livid-brownish white beneath surrounding the apothecia, which are hemispherical clustered reddish not margined
15438 Crust subimbricated, Lobes distinct subpeltate roundish flesh-colored and red brown whitish beneath, Apothecia in their border convex and subglobose black margin obsolete
15439 Crust imbricated glaucous white, Lobes minute rounded convex, Apothecia convex rufous brown becoming blackish margin thin entire
15440 Thallus slightly imbricated fragmentary grey.-green on a dense black fibrous cushion its segm somewhat linear lobed crenate and granular at the margin, Apothecia scattered tawny paler at the marg at length convex brown obliterating the margin
15441 Crust orbicul rugose plait hoary lobed-plait in circumfer Apothecia central plano-convex dark-colored
15442 Closely imbricated radiated membranous very smooth brownish-grey pale with black fibres below · its segments linear obtuse undulated, Apothecia black with a black border of their own substance

15443 Crust areolated-warted smoothish wavy, Apothecia sessile dark opaque, Disk flat tumid at edge
15444 Crust somewhat contiguous unequal whitish or none, Apothecia sessile subglobose dark smooth: disk dot-like becoming flattish with a thin shining margin
15445 Crust somewhat tartareous contiguous wrinkled olive-green, Apothecia roundish dark shining: disk depressed opaque, and stalks short whole-colored
15446 Crust effused greyish somewhat pulverulent fructification subglobose, at length flattened greyish-black with a cylindrical thickish-black peduncle
15447 Crust very thin grey smooth, Apothecia subglob disk dark-brown; margin greyish, Stripes filif black
15448 Crust cartilaginous areolate rugose smooth yellow-green, Apothecia lentiform ferruginous powdery, Stems short cylindrical dark-pitch color thicker at base
15449 Crust lemon-yellow granulated and conglomerated fructification subturbinate, disk brown convex, the border yellow and pulverulent, Peduncle filiform blackish and shining at the base
15450 Crust thin white ash- olor Apothe becom lentif disk black -brown cmer prum with a yell -green marg
15451 Crust thin whitish powdery, Apothecia lentiform disk flesh-colored becoming brown powdered, Stalks filiform naked pale becoming brownish or black
15452 Crust effuse powdery greenish-yellow, Apothecia globose, and stalks filif. very long flexuose yellow -green
15453 Crust leprous powdery pale yellowish-green, Apothecia hemispherical globose and stalks tapering upwards straight powdered with fulvous
15454 Crust thin granulated tartareous rusty white, Apothecia on short stalks thick black often compound with a pale rusty disk
15455 Crust white granulat Tuber. a little prominent round flatt gray -black powdery with a smooth black edge
15456 Crust granulated smooth greyish-white, Tubercles scattered roundish black polished wrinkled irregular without a border mostly sessile
15457 Crust membran very thin white, Tuber black convex with recurv marg on long slend. wavy black stalks
15458 Crust thin tartareous somewhat granulated of a verdigrease-grey, Apothecia on slender black stalks black hemispherical with a convex brownish-black disk
15459 Crust filmy very thin whitish, Apothecia on thickish black stalks obovate or hemispherical black with black prominent loose powder

15460 Thallus smooth blackish-green ben smooth black and naked, Apothecia at length conv rough and plait.
β Thallus of many lvs or lobes variously fold black -green quite black ben. on each side naked and smooth
15461 Thallus membranaceous with elevated reticulations, at length of a smoky ash-color rough smoother paler and subfibrillose beneath, Apothecia turbinate, at length convex variously plaited
β Thallus thick hard rigid with elevated dots rugose olive-brown becoming black naked smooth pale-yellow beneath, Apothecia globose
15462 Thallus somewhat naked dark greenish-grey folded and lobed strongly ciliated beneath smooth pale with branching fibres, Apothecia elevated nearly plane with concentric and plaited lines



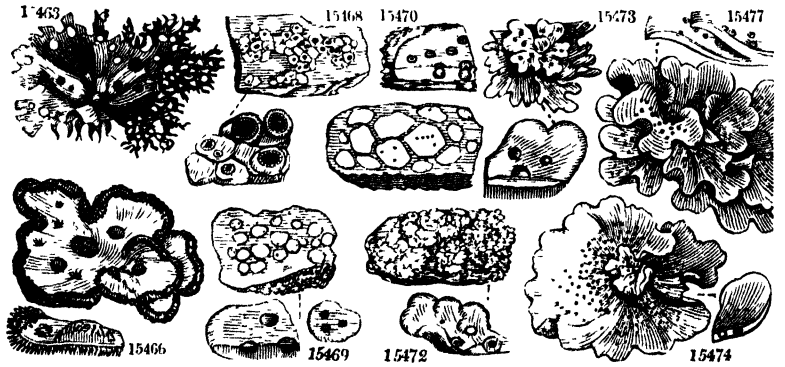
and Miscellaneous Particulars

complicated, observable in the disk of the receptacles of the shields. The species grow chiefly upon exposed alpine rocks, chiefly on granite or volcanic stones. The vitrified forts in the Highlands of Scotland produce some of them.

15463 erósa *Ach*	knawed	ragged	3	all sea	Ol.Br	rocks	Eng. bot. 2066
15464 deústa *Ach*	scorched	rough leafy	3	all sea	Ol Br	rocks	Eng. bot 2483
15465 pustuláta *Ach*	pimpled	blister'dfrond	2	spring	Cin.G	rocks	Eng bot. 1283
15466 pellíta *Ach*	furred	sinuated	2	all sea.	G.Br	rocks	Eng bot. 931
15467 murina *Ach*	mouse-skin	irregular lob.	1	all sea	Br	rocks	Eng. bot. 2486
2335. ENDOCAR'PON	*Ach* Endocarpon.			*Sp.* 10—22			
15468 simplicum *Ach.*	cracked	tessellat mass	1	sum	Or	schist	Eng bot. 177
15469 smarágdulum *Ach.*	yellow	little patches	¾	sum.	Y G	rocks	Eng bot 1512
15470 tephroides *Ach*	brownish	little patches	1	sum	Gl	earth	Eng bot 2013
Lichen fuscellus E. B 1500							
15471 Hedwigii *Ach*	Hedwig's	crowd patch	½	sum	Ol	on the earth	E. b.t.595 *L. thapezifor*
β lachnéum Ach	*black-woolled*	crowd patch	½	sum	D G	on the earth	Eng bot 1698
15472 pállidum *Ach.*	pallid	finely lobed	¾	all sea	Pa Ol	rocks	Eng bot 2541
15473 parasíticum *Ach*	parasitical	round patch	¾	sum	Cop.	on Lichens	Eng bot 1866
15474 minútum *Ach.*	vermilioned	thick crust	1	all sea.	Grsh	rocks	Eng bot 593
15475 leptophýllum *Ach*	fine-leaved	round patches	¾	spring	Br	rocks	Eng bot 2012
15476 complicátum *Ach.*	entangled	coriaceous	¾	all sea	Grsh	rocks	E.b 593 f 2 *L amphibius*
15477 Webéri *Ach*	Weber's	cartilaginous		win sp	G Br	wet rocks	E. bot. 594 *L aquaticus*

CŒNOTHALAMI.

2336 THELOTRE'MA	*Ach* Thelotrema			*Sp* 5—19			
15478 lepadínum *Ach*	enclosed	smooth crust	1½	all sea	Wsh	holly bark	Eng bot 678 *L. inclusus*
15479 exanthemáticum *Ach*	pallid	tartareous	2	all sea	Grsh	calcar rocks	Eng bot 1184
15480 variolarioides *Ach*	Variolaria-like	tessellated	2	all sea.	Pa Ol	bar of trees	
β agelæ'um Ach	*inelegant*	tessellated	2	all sea	Pa Ol	bar of trees	Eng bot 1730
15481 melaleúcum *E B*	brownish	obscure crust	3	all sea	Y	young oaks	Eng bot 2461
15482 hyménium *E B*	wrinkled	granular	4	all sea	G	old oaks	Eng bot. 1731
2337 PYRE'NULA *Ach*	Pyrenula			*Sp* 4—34			
15483 nítida *Ach*	shining	cartilaginous	1½	all sea		bar of beech	Weig obs t. 2 f 14
15484 nigréscens *Ach*	blackish	tartareous	1½	all sea	Br Bl	rocks	E. b. 1499 *Ver umbrina*
1548.› tesselláta *Ach*	tessellated	circular dots	2	all sea	Ol G	slate rocks	E b 2455 *L viridulus*
15486 umbonáta *Ach*	nipple shielded	even coat	1½	all sea	Br	rocks	E b 2153 *L thelostomus*
2338 VARIOLA'RIA	*Ach* Variolaria			*Sp* 9—46			
15487 veláta *Ach*	veiled	sinuous surf	1½	aut	Gl	ash trees	Eng bot. 2062
15488 multipúncta *Ach*	much dotted	granular	2	win	Gl.	beech trees	Eng bot. 2061
15489 globulífera *Ach*	globuliferous	uneven crust	1½	all sea	Grsh	trees & rocks	Eng bot 2008



History, Use, Propagation, Culture,

2335. *Endocarpon* From ἔνδον, within, and καρπος, fruit, because the receptacles of the sporules are deeply imbedded in the substance of the frond The species form small roundish or angular plants, commonly closely sessile upon earth or stone, of a grey or olive hue, their fructification appearing like little black dots over the surface.

2336. *Thelotrema* From θηλη, a nipple, and τρημα, an orifice The protruberances of the thallus are perforated. This genus has been reduced to Endocarpon by Sir James Smith.

15463 Thallus rugged olivaceous brown, its circumference perforated and laciniated dark-grey: beneath glabrous somewhat granulated and fibrous, Apothecia somewhat convex variously plaited
15464 Thallus roughish olivaceous brown with a brown scattered dust smooth beneath with pits and reticulations naked of the same color, Apothecia plane with circular plaits, at length convex
15465 Thallus blistered and warty greenish ash-color ben. deeply pitted smooth palish-brown naked, Apothecia few plane margined disk somewhat even papillose and plaited
15466 Thallus smooth sinuato-lobate of a greenish coppery-brown beneath black with dense pulvinate fibres, Apothecia sessile, at length somewhat globose variously plaited intricate
15467 Thallus very rig mouse-col. ben. black-brown rough with elevat. paler spots, Apoth. conv. various. plait.

15468 Thallus crustaceous cracked into areolæ figured somewhat lobed greenish rubiginous depressed at the circumference, Orifices depressed black
15469 Thallus crustaceo-cartilaginous somewhat foliaceous minute subpeltate appressed plane roundish entire yellow-green, Orifices of the apothecia depressed reddish-brown
15470 Thallus crustaceous submembranaceous spreading and subfoliaceous contiguous wavy cracked glaucous ash-col irregul lob and crenat at marg ben black somew spongy, Orifi elevat conv black perforat
15471 Plant subcartilaginous roundish or somewhat angular lobed of an olive-green beneath pale at margin; the rest blackish and fibrillose, Orifice of the fructification subprominent dark-brown
β Lobes of thallus aggregat somew imbricat. margin elevated repand-lobed wavy with black wool beneath
15472 Thallus coriaceous membranous pallid leafy greenish crenate-lobed becoming irregularly ragged, Orifices hemispherical pale with a black dot
15473 Thallus coriaceous convex rounded lobed copper-colored, at length rugged black and shaggy beneath, Orifices scattered sunk minute coal black, at length convex
15474 Thallus thick crustaceo-cartilaginous foliaceous orbicular peltate greyish spread at marg somewhat lobed and waved beneath smooth, at length rugose and tawny, Orifices minute slightly prominent brownish
15475 Thallus cartilaginous foliaceous orbicular peltate brown or greyish the border spread and wavy smooth naked rough and black beneath, Orifices of the apothecia very minute slightly prominent black
15476 Thallus coriaceo-cartilaginous lobed greyish beneath brownish-black, the lobes nearly erect rounded plicate and convolute, Orifices of the apothecia numerous convex black
15477 Thallus cartilagineo-coriaceous lobed greenish-brown olivaceous beneath rather tawny or blackish on both sides smooth, the lobes laciniated waved plaited and crisped crowd. Orifices rather convex black

CŒNOTHALAMI.

15478 Crust smooth whitish, Warts of the apothecia smooth somewhat cone-shaped with the margin of the aperture thin simple somew inflexed and contracted covered at bottom with a membrane which bursts
15479 Crust subtartareous thin contiguous greyish, Warts of the apothecia convex halt immersed whiter, Orifices much contracted radiated with fissures concealing the flesh-colored apothecia
15480 Crust nearly regular smooth rugulose cinereous, Warts of apothecia clustered irregular whitish with a large black aperture and a thick somewhat angular lacerated edge
β Crust white powdery with granul and min soredia, Warts of apothecia appres few and immers in crust
15481 Crustaceous cream-colored with scattered rather convex warts opening by an irregular inflexed orifice, Apothecia immersed depressed brown
15482 Crust cartilaginous uneven somewhat polished greenish-grey, at length extremely tumid and uneven, Apothecia elevated crowded hollow very irregular

15483 Crust cartilaginous membranous polished pale brownish cinereous, Warts of apothecia closed closing surrounding the upper projecting part of the thalamium
15484 Crust tartareous somewhat tessellated unequal brownish-black, Warts of the apothecia spreading at the base depressed somewhat rugose surrounding the greater part of the prominent apothecia
15485 Crust tartareous unequal cracked into areolæ cinereous yellowish, Warts of apothecia enlarged at their base depressed closed clustered about the edged orifice
15486 Crust tartareous regular finely cracked cinereous rufous, Warts of apothecia smooth reddish depressed above forming a margin to the papilla-like prominent orifice

15487 Crust determined somewhat cartilaginous smooth very white plaited in rays, Warts of apothecia polished compressed tumid kernel covered with a thin powdery skin
15488 Crust subcartilaginous cracked into areolæ granular cinereous, Warts of apothecia convex clustered granular, kernel lentiform enclosed
15489 Crust subcartilaginous greyish uneven with granules and soredia scattered in an irregular manner, Warts of fructificat subglob smooth, at length depressed above and soredifer and contain a concave nucleus



and Miscellaneous Particulars.

2337. *Pyrenula.* A diminutive of πυρην, a kernel, in allusion to the manner in which the receptacle is enclosed in the thalamium, as a kernel within its shell Crustaceous plants, found chiefly upon the bark of trees

2338 *Variolaria* The shields of these plants resemble the eruptive spots of the variolæ or measles The whole genus was referred by Linnæus to his Lichen fagineus and lacteus. The species are of a crustaceous nature, found upon the trunks of trees, rocks, walls, or the ground.

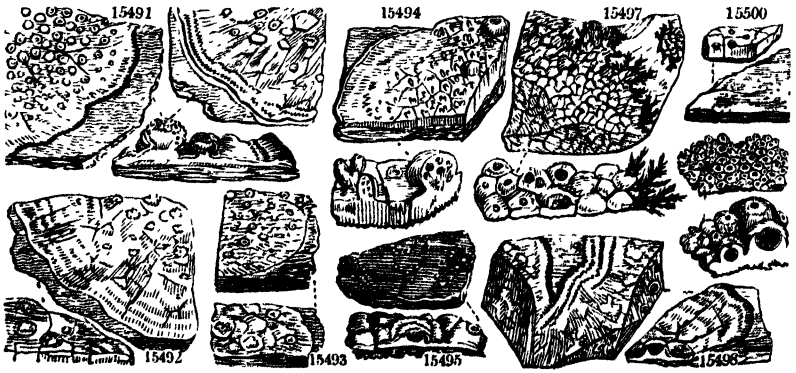
15490 communis *Ach*	common	radiated	1½	all sea.	Dl W	trees		
β *aspergilla* Ach	*sprinkled*	radiated	1½	all sea.	Y.Ol	rails	Eng bot. 2401	
15491 amára *Ach.*	bitter	cracked crust	2	all sea.	Grsh	bark of trees	Eng b.1713	*L. fagineus*
β *discoidea* Ach	*discoid*	pulverulent	2	all sea	W	bark of trees	Eng bot. 1714	
15492 láctea *Ach*	milky	tartar crack.	1½	wint.	W	rocks	Eng. bot. 2410	
15493 griseo-virens *E B*	greyish green	tubercular	1½	aut.	D Ol	smooth bark	Eng bot. 2400	
15494 dealbáta *E. B*	whitened	cracked crust	3	all sea.	Lt.Br	hard rocks	Eng bot. 2519	
15495 cinérea *E B*	cinereous	tubercular	2	all sea.	Ol G	whinstone	Eng. bot. 2411	

2339 URCEOLA'RIA *Ach* Urceolaria. *Sp* 6—23

15496 Achárii *Ach*	Acharius's	cracked crust	2	all sea	Pa R	rocks	Eng bot 1087	
β *cyrtáspis* Ach.	*red*	tessellat. crust	2	all sea.	Rsh	rocks	Eng b 450	*L. punctatus*
15497 gibbósa *Ach.*	gibbous	fringed patch	3	all sea	Br	flints	Eng b. 1732	*L. fibrosus*
15498 cinérea *Ach*	cinereous	concent zones	3	all sea.	G Br	flints	Eng bot 1751	
15499 scrupósa *Ach.*	rock	solid crust	1	all sea.	Grsh	rocks	Eng. bot. 266	
15500 Gágii *E B*	Gage's	obscure crust	1½	all sea	Pa Y	rocks	Eng. bot. 2580	
15501 calcárea *Ach*	calcareous	crowd warts	1½	all sea.	W	roc. & stones		
β *Hoffmánni* Ach	*Hoffmann's*	sinuous pate	1½	all sea	Cæs.	roc. & stones	Eng bot. 1940	

2340 LECANO'RA *Ach* Lecanora *Sp* 46—79.

15502 átra *Ach*	dark	granulated	1½	all sea.	Grsh	bark of trees	Eng bot. 949	
15503 argópholis *Ach*	pallid	warted crust	2	sum	Pale	rocks		
15504 oculáta *Ach*	mottled	smooth crust	2	spring	W	roc & earth	Eng bot 1833	
15505 coarctáta *Ach.*	contracted	broad patches	4	all sea	Br	brick walls	Eng bot. 534	
15506 periclea *Ach*	rough	little spots	¼	all sea	Wsh	old posts	Eng bot. 1850	
β *exigua* Ach.	diminutive	little spots	¼	all sea	Br	old pales	Eng bot. 1849	
15507 sophódes *Ach*	obscure	mealy crust	1½	aut	G	on trees	Eng bot. 1791	
15508 subfusca *Ach*	brownish	cartilaginous	2	all sea	Grsh	trun. of trees	Eng. bot. 2109	
15509 ventosa *Ach*	exposed	warted	2	all sea	Y G	rocks	Eng bot. 906	
15510 frustulósa *Ach.*	broken	tartareous	¾	all sea	Var	rocks	Eng bot. 2273	
15511 effúsa *Ach*	scattered	thin coat	⅓	aut	G	bark of firs	Eng bot. 1863	
15512 chlorotéica *Ach*	whitish green	Leprous	1½	sum	W	mountains	Eng bot 1373	
15513 vária *Ach*	variab shield	crowded	¾	all sea	Lt G	old walls	Eng bot. 1660	
15514 apocræ'a *Ach*	leprous	cloudy crust	1½	wint.	Lt.G	old posts	Eng. b 2075	*Sp. Vitiligo*



History, Use, Propagation, Culture,

2339 *Urceolaria* From *urceolus*, a little pitcher, with reference to the form of the shields, which are sunken in the crust Natives of hard stones occasionally inundated, or upon naked exposed rocks, occasionally upon the trunks of trees The crust of U esculenta, a native of Tartary, is eatable.

2340. *Lecanora.* An unexplained name Lecanora perellis affords a purple dye, and is called in the south of France, where it is employed in lieu of the L tartarea, *Perelle d'Auvergne*, whence the specific name, as Smith

15490 Crust cartilaginous polished whitish becoming unequal and ash-colored scattered with white soredia having no margin, Warts of apothecia spheroidal powdery
β Crust tartaceous cartilaginous determined glaucous with a polished radiated cracked circumference, Soredia scattered superficial flat not margined
15491 Crust rugose cracked uneven subpulverulent white or greyish, Warts of the apothecia appressed plano-concave margined bearing soredia of the same color as the crust
β Crust pulverulent white, at length greyish naked, Soredia crowded, at length spreading waved plano-concave with the margin raised swollen
15492 Crust tartareous distinctly bordered cracked smooth white: the circumference somewhat zoned crenato-lobate, Warts of the apothecia crowded margined very white and pulverulent
15493 Crust elliptical thin slightly tartareous rugged grey scarcely limited, Apothecia rounded with a narrow border, Powder greenish
15494 Crust tartareous thickish greyish-white cracked tumid papillary and rugged obscurely zoned at the circumference, Apothecia orbicular prominent white
15495 Crust orbicular tartareous thin ash-colored cracked: its circumference indeterminate, Apothecia orbicular very small white with an elevated margin and flesh-colored disk

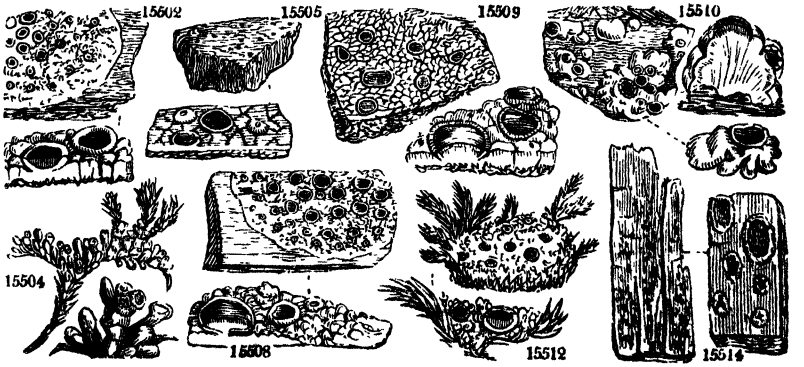
15496 Crust with a rather decided edge smooth with narrow cracks pale brick-colored: disk redd., marg tum.
β Crust bordered smooth tessellated reddish, at length white, Apothecia becoming elevated with the disk rather convex reddish-brown reaching the margin of the crust
15497 Crust papillose warted polished white ash-color disk concave black immersed in the tip of the warts, Border contracted protuberant crenated entire
15498 Crust cracked areolate warted cinereous bordered with black: disk somewhat concave dark immersed among the warts becoming elevated, Border thickish projecting
15499 Crust rugoso-plicate granulated white or greyish fructification urceolate, the disk black, the border swelling inflexed subrugose covering the disk
15500 Crust continued calcareous smooth brownish-white irregularly cracked when dry, Apothecia very minute blackish sunk in the crust
15501 Crust determined finely cracked somewhat powdery very white becoming cinereous disk minute concave black powdered with white, Border prominent discoid thin
β Crust thin cracked into areolæ equal dull ash-colored, Fertile areolæ raised in the middle whitish lead-color. disk somewhat concave dark cæsious powdery

† *Thallus adnate uniform* RINODINA.
* *Disk of apothecia constantly dark and black.*

15502 Crust with a somewhat decided edge granulated and cracked greyish-white, Disk of the apothecia plane at length swelling and black the margin free raised, at length waved and crenulate
15503 Crust smooth uneven warted pale, Warts at length subimbricated somewhat lobed and deformed, Disk of the fructification concave brownish-black the border sharp crenulate contracted
15504 Crust glab papill and branch white, Apothecia scss scattered disk slightly concave black, marg tumid
15505 Crust effuse thin cracked rugose unequal cinereous, Disk of apothecia somewhat immersed finally elevated flat dark with an elevated inflexed powdery border
15506 Crust thin somewhat leprous and dispersed whitish, Disk of apothecia plano-convex dark dotted rough, Border obscure powdery
β Crust uneq obscure cinер. black Apothecia min aggreg flat with a white cren border and brown. edge

** *Disk of apothecia black, naked, brownish when moistened*
15507 Crust verrucose-granular from cinereous brownish-green, Apothecia heaped with a flat coarse dark disk brown when moistened, Border tumid inflexed entire

*** *Disk of apothecia black, brown, brownish, or clouded with other colors, naked.*
15508 Crust cartilaginous smooth, at length granulated unequal white or greyish, Disk of the apothecia plano-convex brown or almost black, margin tumid entire, at length waved and crenate
15509 Crust tessellated with tumid warts yellow green or grey, Apothecia appressed, at length irregular with the disk plane or swelling red brown, at length rising above the entire margin
15510 Crust tartareous very much cracked variegated with black and white (yellowish-white in dispersed tumid warts), Apothecia pale-brown, at length convex dark-brown. margin white
15511 Crust effuse thin powdery cinereous æruginous, Apothecia minute appressed. disk flat becoming convex pale-brown, Border thin obscure
15512 Crust thin leprose white, Apothecia crowded elevated disk plane olive, the margin waved
15513 Crust unequal granular somewhat warted pale-green, Apothecia clustered disk flat pale-brown and variegated, Border raised inflexed finally crenulate
15514 Crust effuse very thin polished whitish sometimes bearing soredia, Apothecia sessile; disk flattish pale livid-brown, Border pale becoming crenulate



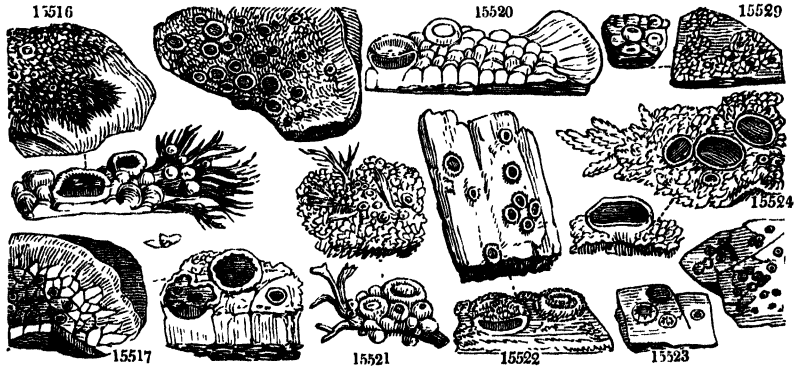
and Miscellaneous Particulars.

tells us, though generally spelled Parellus. L. Turneri is probably only a variety growing upon the bark of trees.

Lecanora candelaria derives its name from the circumstance of the Swedes employing it to stain the candles that are used in their religious ceremonies.

Lecanora tartarea is the famous Cudbear (so called after a Mr. Cuthbert, who first brought it into use)

15515 rubricósa *Ach.*	red shielded	round patch	1	all sea	Grey	old walls	E.b.1040. *L. cæsio-rufus*
15516 tuberculósa *Ach.*	warted	warted fring.	3	all sea.	D.Ol	rocks	Eng bot. 1733
15517 glaucóma *Ach.*	glaucous	tessellated	2	all sea.	D Ol	rocks	Eng bot. 2156
15518 Hagéni *Ach*	Hagen's	spotted	½	wint.	D.Ol	bark of trees	Hagen. hist lich t.1 f.5
β crenulàta Ach	*crenulated*	small spots	½	wint.	Dl.G	limest rocks	Eng bot. 930
15519 albélla *E. B*	cream-colored	obscure crust	1½	wint.	Wsh	smooth bark	Eng bot. 2154
15520 parélla *Ach.*	equal	warted	2	all sea.	W	rocks	Eng bot. 727
15521 upsaliénsis *Ach*	Upsal	membranous	2	all sea.	Gl.W	rocks	Eng bot 1634
15522 Turnéri *Ach.*	Turner's	mealy crust	3	aut.	Dl G	old trees	Eng bot. 857
15523 carneo-lútea *Ach*	yell.-flesh-col	cracked crust	1	sum	Wsh	trun of elms	Eng bot 2010
15524 tartárea *Ach*	Cudbear	tartareous	2	all sea	Grsh	rocks	Eng bot. 156
β frígida Ach	*northern*	thin crust	2	aut	Gl	earth	Eng bot 1879
15525 cerina *Ach*	waxen	oblong patch	2	wint	G	trun of trees	Eng bot. 627
1552*b* Stónei *Ach*	Stone's	oblong patch	1½	wint	G	trun of trees	
15527 vitellina *Ach*	yolk of egg	granular	1½	all sea	Y	pales	Eng bot. 1792
15528 salicina *Ach*	Willow	granular	1½	spring	Br	on trees	Eng bot 1905
15529 erythrélla *Ach*	reddish	crack rugose	2	all sea	Gsh	stone walls	Eng bot. 1993
15530 rúbra *Ach*	red	membranous	1½	sum	W	trun. of trees	Eng bot.t 2218. *L Ulmi*
15531 hæmatom ma *Ach*	bloody spotted	powdery	2	sum	Wsh	rocks	Eng bot 486
β porphýrea Ach	*smooth*	thin crust	2	sum	Gl	rocks	Eng b 223. *L coccineus*
15532 epigéa *Ach*	earth	plaited	1½	all sea	W	earth	E b 1778 *L candicans*
15533 lentigera *Ach*	white	round patch	1½	all sea	Wsh	dry heaths	Eng bot 871
15534 saxícola *Ach*	rock	scaly crust	2	all sea	Pa G	roc & walls	Eng bot 1695
15535 murórum *Ach*	wall	cracked crust	1½	all sea	Y Or	rocks	Eng bot 2157
15536 élegans *Ach*	elegant	imbricated	1	all sea	Tawn	rocks	Eng bot. 2181
15537 ful'gens *Ach*	refulgent	small patches	½	sum	Y	rocks	Eng bot. 1667
15538 circináta *Ach*	circled	cracked crust	½	aut	Grsh	flat stones	Eng bot 1941
15539 gélida *Ach*	frozen	cracked crust	1	all sea	R Gr	rocks	Eng. bot. 699
15540 galáctina *Ach*	milky	rugose crust	1½	all sea.	Wsh	roc. & walls	
15541 cervina *Ach.*	grey	lobed scales	½	sum	Cinor	roc & stones	E.b.t.2011 *L squamulo*
15542 crássa *Ach.*	thick	scaly crust	⅝	sum.	Gsh	earth on roc.	Eng bot. 1893



History, Use, Propagation, Culture,

employed to produce a purple for dying woollen yarn, and no where, perhaps, used to so great an extent as in the manufactory of Mr Mackintosh, at Glasgow The manufacturers import it largely from Norway, where

15515 Crust cracked and arcolate somewhat granular whitish, Disk of apothecia rufous becoming brown, Border white or yellowish becoming flexuose

**** *Disk of apothecia black, cæsious, glaucous, or variously colored, always prunose*

15516 Crust greenish ash-color with roundish warts, Circumference fibrous, Apothecia mixed disk concave becoming flat blackish-glaucous, border elevated thick

15517 Crust tartareous tessellated even greyish-white, Apothecia immersed in the crust the disk plane, at length convex subglobose glaucous and powdery, margin entire afterwards obliterated

15518 Crust cartilaginous membranous whitish ash-color, Apothecia clustered minute disk flat becoming convex variegated with brown and black, border entire naked persistent

β Crust becoming unequal somewhat granular ash-colored or blackish, Apothecia much clustered disk flat brown and black, border crenulate powdery

15519 Crust thin leprous continuous cream-colored somewhat polished, Apothecia sessile whitish-buff uneven with a thin white wavy border

***** *Disk of apothecia somewhat flesh-colored, pale, testaceous, waxen, or orange-colored*

15520 Crust granulated or somewhat warted white, Apothecia thick crowded by pressure angular the disk concave, and as well as the tumid entire margin of the same color as the crust

15521 Crust very thin membranaceous smooth glaucous white bearing awl-shaped bristles, Disk of the apothecia at length spreading plane pale-yellowish

15522 Crust leprous granular powdery whitish-grey, Apothecia scattered thick powdery disk concave pale flesh-colored, border tumid entire and flexuose

15523 Crust thin polish hoary, Apothecia somew imm disk flat fleshy-vell, border thin somew inflex crenat

15524 Crust tartareous with clustered granules greyish white, Apothecia scattered disk plano-convex a little wrinkled flesh-color, the margin inflexed, at length waved

β Crust thin glaucous white running out into papillæ and spinuliferous branches [becoming black

15525 Crust granul emer Disk of apothecia flat convex yellowish wax-colored, border elevated inflexed hoary

15526 Crust leprous-tartareous granular powdery dirty-white, Apothecia scattered disk waxen covered by the powdery inflexed border becoming convex and dilated

15527 Crust granulated bright-yellow, Apothecia crowded the disk plane of the color as the crust, at length convex deeper colored and powdery, the margin elevated thin, at length waved pulverulent

15528 Crust granular unequal dirty-yellow, Disk of apothecia flat becoming convex somewhat orange-colored, border thin crenulated becoming entire and flexuose

15529 Crust cracked subrugose greenish-yellow, Apothecia at length subglobose deep orange shining when the entire margin becomes obliterated

****** *Disk of apothecia red, scarlet, or purple, and sanguine*

15530 Crust submembranaceous smooth, at length unequal pulverul and granular white, Apothecia crowded the disk concave red, margin tumid inflexed crenulate

15531 Crust tartareous pulverulent whitish, Apothecia imbedded scattered subconfluent the disk scarlet rather convex, the margin sometimes obliterated

β Crust tartar granul powd whit Apothecia sess disk flat deep sanguine, bord elevat thick rug persist

†† *Thallus adnate, radiate, stellate, and lobed in the circumference* PLACODIUM

15532 Crust plaited and wrinkled white the circumference smooth lobed, Disk of the apothecia at length rather convex brownish-black the margin thin entire

15533 Crust somewhat imbricated white, Lobes somewhat concave flexuose cut-crenate, Disk of apothecia flat yellowish-brown border elevated tumid

15534 Crust subimbricated scaly somew rugose uneven pallid-green radiated and lobed in the circumference fructification extremely crowded, the disk plane yellowish-brown or subochraceous with a border, at length crenate waved

15535 Crust plaited and lobed cracked bright-yellow orange pulverulent the circumference plicate and rayed, segm lin convex cut, Apothecia crowd disk at length convex of a deeper orange, marg ent waved

15536 Crust somew imbricated plaited and rugose tawny orange naked, Lobes lin lanc waved convex somew distant radiating, Disk of the apothecia concave of the same color with the crust marg somew inflex ent

15537 Crust somew contiguous pale yellow with a plaited lobed edge, Lobes flexuose flat, Apothecia scattered, Disk very red plano-convex

15538 Crust cracked greyish plaited and rayed in the circumference lin-lacinate, Apothecia much crowded at at length angular disk plane brownish black even with the margin of the crust

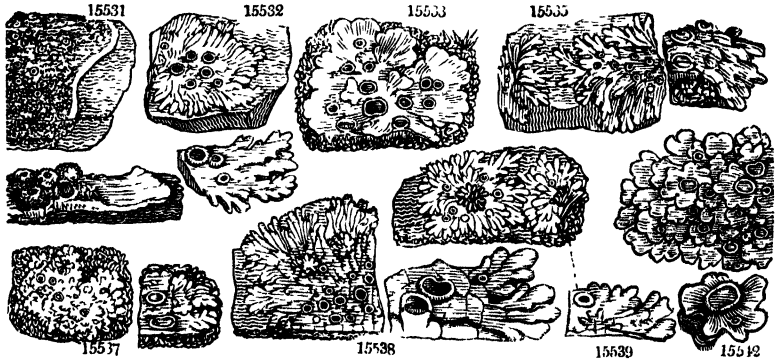
15539 Crust cracked pale reddish grey the circumference rayed and lobed having brown warts in the centre cracked and rayed disk of the apothecia depressed reddish margin thick elevated entire

15540 Crust subimbricat rugulose whitish lobed and cren at the circumference fructification crowd angular, the disk plane brownish flesh-color prunose with a raised and at length crenate flexuose border

††† *Thallus imbricated throughout*

15541 Crust with lobed scales of a brownish ash-color disk of the apothecia immersed nearly plane blackish brown with the margin at length prominent

15542 Crust scaly greenish, Lobes imbricated inciso-crenate waved irregular, Disk of the apothecia slightly swelling brownish orange margin thin entire at length obliterated



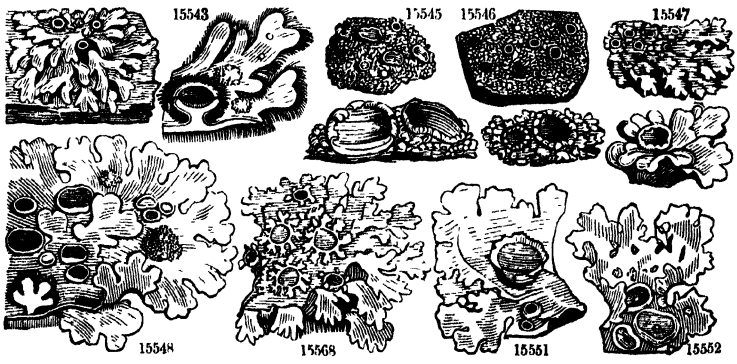
and Miscellaneous Particulars

it grows more abundantly than with us, yet, in the Highland districts, many an industrious peasant gets a living by scraping this Lichen with an iron hoop, and sending it to the Glasgow market When I was in the

15543 virèlla *Ach.*	greenish	multifid patc	1	all sea	Bt G	trees & pales	Eng	bot. 1696
15544 candelária *Ach*	Candle-dyeing	scaly crust	1	all sea	Y	trees & pales	Eng	bot. 1794
β polycárpa Ach	*many-shielded*	toothed lobed	½	all sea.	Gr Y	old posts	Eng	bot t 1795
15545 hypnórum *Ach*	Hypnum	scaly crust	1	wint.	Gr Br	woods	Eng	bot t 740
15546 brun'nea *Ach*	brown	lobed crust	1	spring	Cı Br	on the grou.	Eng	bot t. 1246
15547 Hookéri	Hooker's	imbricated	1	spring	Grsh	wet rocks	Eng.	bot. 2283

2341 PARMELIA *Ach* Parmelia *Sp* 38—77.

15548 glomulífera *Ach*	warted	round patch	1½	spring	Gl	trun of trees	Eng.	bot t 293
15549 caperáta *Ach*	wrinkled	round patch	¾	spring	Y G	trun. of trees	Eng	bot t 654
15550 scórtea *Ach*	leathery	lobed patches	1½	all sea	Br	trees & pales	Eng	bot. 2065
15551 perláta *Ach*	grey	round patch	2	all sea	Grsh	trun of trees	Eng	bot 341
15552 perforáta *Ach*	perforated	crisp patches	3	all sea	Y G	old trees	Eng	bot 2423
15553 herbácea *Ach*	herbaceous	round patch	1½	all sea	Bt G	trun of trees	Eng	bot 294
15554 corrugáta *Ach*	rugose	imbricated	3	all sea	D G	on trees	Eng	bot 1652
15555 olivácea *Ach*	olive	round patch	2	all sea.	Ol Br	rocks & trees	Eng	bot 2180
15556 parietina *Ach*	wall	round patch	2	all sea	Bt Y	trees & walls	Eng	bot 194
15557 elæína *Ach*	orbicular olive	small patches	½	all sea	Ol	bark of trees	Eng	bot 2158
15558 pitýrea *Ach*	scurfy	flat-warted	1½	july	Gl	walls	Eng	bot 2064
15559 clementiána *Ach*	Clementi's	flat radiated	1½	all sea.	W. Gr	trees	Eng	bot 1779
15560 tiliácea *Ach*	Linden	flat imbricat	6	sum	G	rocks	Eng	bot 700
15561 Borréri *Ach*	Borrer's	foliaceous	4	aut	Ol G	trun of trees	Eng	bot. 1780
15562 lanuginósa *Ach*	woolly	round patch	3	all sea.	Y W	rocks		
15563 plúmbea *Ach*	leaden	round patch	2	aut.	Bl Gr	trun of trees	Eng	bot t 353
15564 rubiginósa *Ach*	rusty	round patch	3	sum	Br Gr	trun. of trees	Eng	bot t 983
15565 omphaló*des* *Ach*	navel	shining dott	4	all sea.	Pu Br	rocks	Eng	bot. t. 604
15566 saxátilis *Ach*	rock	rough & pitt	2½	all sea	Grsh	stones	Eng	bot t 603
15567 fahlunénsis *Ach*	Iron mine	smth thallus	3	all sea	Pitch	rocks	Eng	bot t 653
15568 stýgia *Ach.*	pitchy	starry	2	sum.	Bl	mountains	Eng	bot t. 2048
15569 áquila *Ach*	lacerated	multifid lobes	4	sum	Br	rocks	Eng	bot. t 982
15570 encaústa *Ach*	grisly	stellated dott	3	sum	Pa Gr	rocks	Eng	bot t 2049
15571 recúrva *Ach*	recurved	warted	2	sum	Pa. G	rocks	Eng	bot t. 1375



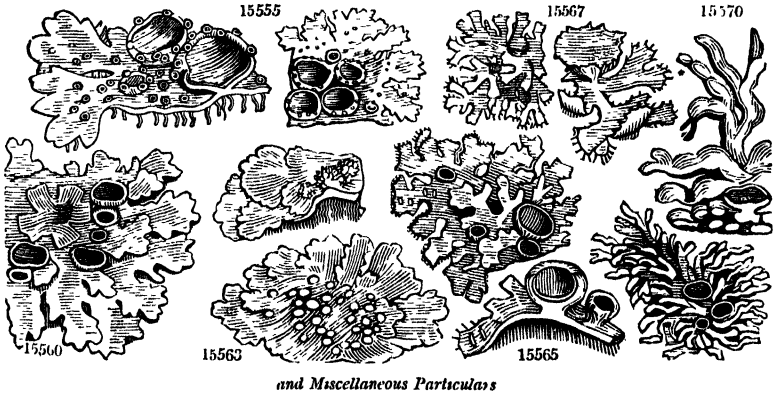
History, Use, Propagation, Culture,

neighbourhood of Fort Augustus, in 1807, a person could earn fourteen shillings per week at this work, sell the material at three shillings and fourpence the stone of twenty-two pounds The fructified specimens reckoned the best.

15543 Crust somewhat scaly greenish ash-colored becoming powdery, Lobes repand cut wavy with irregular margins, Disk of apothecia flat brownish black
15544 Crust scaly yellow, Lobes very much crowded cut and laciniated imbricated their margins minutely granular, Apothecia nearly of the same color as the crust margin elevated entire
β Crust formed of lobes with many crowded teeth and segments greyish yellow, Apothecia crowded waved: disk plane dilated of the same color as the crust at length fulvous and the margin crenulated
15545 Crust scaly greenish-brown, Lobes minute somew rounded with margin granular and crenulat Apothecia submembran · the disk concave at length dilated plane reddish brown the marg elevated inflex crenate
15546 Crust imbricated greyish lobed and granulated ash-colored brown, Apothecia imbedded in the crust crowded irregular disk rather convex red-brown the margin elevated crenulated persistent
15547 Crust imbricated greyish, Lobes minute appressed blunt, Disk of the apothecia plane black margin elevated and crenate

† *All the divisions of the thallus equal at end*

15548 Thallus cartilaginous rigid obicular livid and glaucous smooth bearing dark green scattered tufted excrescences tawny beneath and downy, the lobes waved and laciniated angular, Apothecia reddish brown rugose at the margin
15549 Thallus orbicular pale yellowish green rugose at length granulated black and hispid beneath the lobes waved laciniated round nearly entire, Apoth scatter brown their margin incurv entire at length pulverulent
15550 Thallus roundish subcoriaceous white smooth finely dotted with black hispid beneath Lobes longish sinuate-crenate cut, Apothecia rufous brown
15551 Thallus orbicular greyish white smooth blackish brown and hairy beneath, Lobes rounded cut plane their margin waved entire, Apothecia brown their margin thin entire
15552 Thallus orbicular glaucous green naked with black fibres on the under side, Lobes rounded cut flat somewhat plaited at the edge, Apothecia rufous
15553 Thallus orbicular membranaceous bright green above, beneath pale brown almost white and downy, Lobes waved and cut, the segments rounded subcrenate, Apothecia red, the margin inflex rugose and crenate
15554 Thallus orbicular membranaceous finely rugose glaucous green, beneath blackish brown fibrous, Lobes cut rounded lax plaited entire
15555 Thallus orbicular olive brown rugged with elevated points paler beneath and fibrous, Lobes radiating appressed plane dilated rounded and crenate, Apothecia dark-brown the margin crenulated
15556 Thallus orbicular bright yellow beneath paler and fibrillose, the lobes radiating appressed plane dilated round crenate and crisped at the extremity, Apoth of the same colour as the crust their margin entire
15557 Thallus orbicular somewhat membranous contiguous plaited umber-olive colored cut crenate in the circumference with flat somewhat truncate lobules
15558 Thallus orbicular cinereous powdery beneath white with black fibres, Central segments plaited eroded crisp powdery at edge, Apothecia concave blackish brown
15559 Thallus orbicular white hoary granular powdery beneath of the same color with obsolete blackish fibres, Segments of the circumference flat cut crenate, Apothecia appressed flat brownish black
15560 Thallus orbicular membranous glaucous ash-colored blackish brown beneath, Lobes sinuate-cut, the end ones rounded crenated, Apothecia brownish with an entire edge
15561 Thallus orbicul cinereous, Soredia grey margined, beneath brownish spongy and fibrous, Lobes concrete plaited those of the circumference rounded cut crenate, Apothecia red with a tumid edge
15562 Thallus orbicular yellowish white pulverulent greyish black and downy beneath, Lobes imbricated plane rounded slightly crenated, Apothecia reddish ("of the same color as crust") their margin pulverulent
15563 Thallus orbicul blueish-grey, beneath having a very thick spongy down, Lobes of circumference rounded and crenate, Apothec scattered at length convex rusty-brown, their margin of same color and entire
15564 Thall orbic brownish-grey, beneath having a blueish-grey spongy down, Lobes of circumf obtusely notched elevated pale, Apothecia plane crowded central reddish-brown with tumid incurv crenul whit margins
15565 Thallus orbicular dark purplish-brown shining dotted with black, beneath black and fibrillose the segments sinuate-multifid linear plane truncated crenate in the circumference, Apothecia dark-brown, the margin slightly crenulate
15566 Thallus orbicul greyish rough and pitted beneath black and fibrillose the segments imbricated sinuated plane subretuse, Apothecia bright chesnut-brown, their margin subcrenulated
15567 Thallus orbicular pitchy-brown smooth beneath black and scarcely fibrillose the segm sinuated multifid divergent plane or slightly grooved, margins elevat lacerat Apothec dark-brown, margin granulated
15568 Thallus stellated shining pitchy-black, beneath black and almost naked the segments nearly linear multifid and somewhat palmate convex, the margins and extremity recurved, Apothec of the same color at length black with the margin crenated
15569 Thallus orbic tawny-brown paler beneath with blackish fibres the segment multipartite nearly lin convex, those of the circumfer dilated nearly plane and crenate, Apothecia dark-brown, their margin crenated
15570 Thallus stellat pale-grey, beneath black uneq naked the segments often uniting convex and almost round lin multifid roughish dotted with black, Apothecia reddish-brown, their margin somewhat crenulated
15571 Thallus stellat pale-greenish bear powdery warts, beneath black with spongy fibres segments of circumference multifid very narrow convex and almost rounded, Apothecia reddish-brown, marg nearly ent



and Miscellaneous Particulars

2341 *Parmelia* Named from παρμη, a sort of small shield, and ωλεω, to enclose On the thallus of these plants scattered powdery warts are commonly found These Hedwig has determined to be anthers, apparently for no other reason than that they are powdery, and that he could fix the title to nothing better.

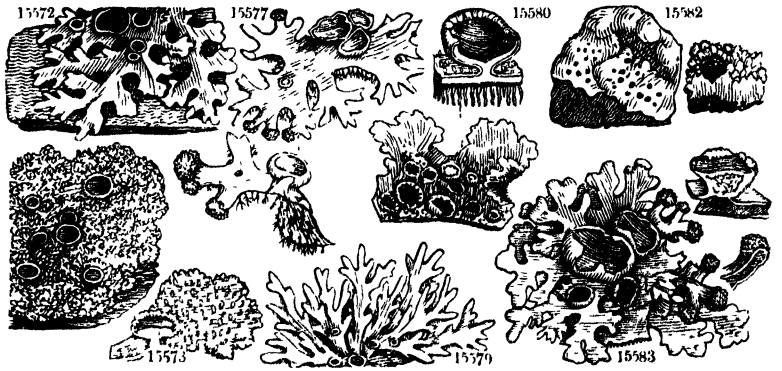
15572 sinuósa *Ach*	sinuous	starry	2	all sea	Pa Y	moorstones	Eng	bot. t 2050
15573 aleurites *Ach*	rugose	round patch.	3	aut wi	Pa Gr	trun of trees	Eng	bot t. 858
15574 ambígua *Ach*	ambiguous	starry warted	2	aut wi	Pa G	trun of trees		
15575 conspersa *Ach*	sprinkled	smth dotted	1½	all sea	Y	rocks	Eng	bot. t 2097
15576 speciósa *Ach*	shewy	starry glabr	2	spring	G W	woods	Eng	bot t 1979
15577 lævigáta *Ach*	polished	starry	3	spring	Grsh	on trees	Eng	bot t 1852
15578 pulverulénta *Ach*	powdery	prunose mul	2	spring	Dp G	trun. of trees	Eng	bot. t 2063
15579 stellíris *Ach*	stellate	rugged frond	2	spring	Grsh	trun of trees	Eng	bot. t 1697
15580 cæsia *Ach*	cæsious	sorediferous	¾	all sea	Grsh	roc & stones	Eng	bot t 1052
β dúbia Ach	*dubious*	granular	½	spring	Pa Br	boards	Eng	bot 2547
15581 cyclosélis *Ach*	circular	round patch	1	all sea	Li Gr	trees & pales	Eng	bot 1942
15582 diacápsis *E B*	twofold-shield	tumid crust	1½	all sea	Wsh	stones	Eng	bot 1954
15583 physodes *Ach*	bladdery	multif smth	2	all sea	Wsh	rocks	Eng	bot t 126
15584 diátrypa *Ach*	warted	multif smth	2	all sea	Gr G	wet rocks	Eng	bot t 1248

2342 BORRERA *Ach* Borrera *Sp* 7—23

15585 tenélla *Ach*	slender	branch segm	1½	all sea	Gl	bran of trees	Eng	bot 1351
15586 leucoméla *Ach*	black & white	dense tufts	1½	feb	Wsh	on the earth	Eng	bot 2548
15587 furfurácea *Ach*	mealy	farinaceous	1½	all sea	G Gr	trun of trees	Eng	bot 984
15588 chrysophthálma *Ach*	yellow-eyed	bushy	1	all sea	Or	apple trees	Eng	bot 1088
15589 flávicans *Ach*	yellowish	branched	1	all sea.	Y	trun. of trees	Eng	bot 2113
15590 ciliáris *Ach.*	ciliated	bushy	1½	all sea	Gl	trun of trees	Eng	bot 1352
15591 atlántica *Ach*	Barometry	bushy tufts	1½	april	G Ol	elms	Eng	bot. 1715

2343 CETRA'RIA *Ach* Cetraria *Sp* 5—14

15592 juniperina *Ach*	juniper	bushy	1½	all sea	Pa Y	trun of trees		
β pinástri Ach	*Pinaster*	bushy	1½	all sea	Pa Y	trun of trees	Eng	bot. t 2111
15593 sepincola *Ach*	hedge	bushy waved	1½	all sea	Ol Br	ston & trees	Eng	bot t 2386
15594 glaúca *Ach*	glaucous	bushy shining	2	all sea	Gl	on the grou	Eng	bot t. 1606
β fállax Ach	*fallacious*	bushy shining	1½	all sea	W	on the grou	Eng	bot t 2373



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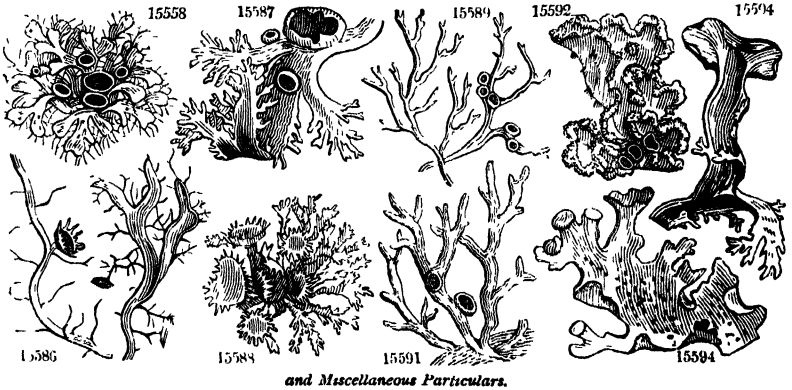
2342. *Borrera* Dedicated by Acharius, to Mr William Borrer, F L S, one of our most eminent British cryptogamic botanists This genus is very natural in habit, including the Linnean genus Lichen and its allies

2343. *Cetraria* An unexplained name. C islandica is common in Iceland and in the north of Germany, and is also found in the mountains of Asturias It grows to the height of two or three inches only, and has a rugged bushy aspect. In Iceland and Lapland it is used as an article of diet, being boiled in broth or milk, after being freed from its bitter by repeated maceration in water, or dried and made into bread It has of late years been brought in considerable quantities to this country for medicinal purposes The dried plant differs very little from its appearance in a recent state Medicinally it is tonic and demulcent, it has also been found useful in debilities after acute diseases, and in emaciations, particularly those arising from the great discharge

15572 Thallus stellat pale-yellowish grey smooth, black and fibrous beneath segments broadly lin sinuato-pinnatifid, their sinuses broad and circular, Apothecia nearly plane dark-brown, their margin thin entire
15573 Thallus orbicular continuous rugose pale-grey pulverulent, beneath of the same color with blackish fibres segments in the circumference distinct plane rounded waved incise-crenate, Apothecia plane reddish-brown, their margin at length crenulate and pulverulent
15574 Thallus stellated pale-yellow green smooth bearing powdery warts, beneath brownish-black and fibrillose the segments linear appressed plane dichotomous somewhat truncated, Apothecia subcentral small nearly plane brown, their margin entire
15575 Thallus orbicul greenish-yell smooth with blackish dots, brown and fibrillose beneath segments sinuato-lobate rounded crenate nearly plane, Apothecia central chesnut-brown with the margin nearly entire
15576 Thallus stellated glabrous greenish-white, beneath snowy-white with greyish fibres the segments imbricated linear plane cut and branched crenate, their extremities ascending and powdery, Apothecia central brown with a tumid singularly rough and crenate border
15577 Thallus stell smooth greyish-white, beneath black and fibrillose segm multif lin broader upwards cut divaricated acute in the circumfrence frequently bearing powdery warts, Apothecia concave chesnut color with the margin entire
15578 Thallus stellated deep glaucous green cæsious and prunose when dry, beneath black and downy and hispid the segment linear multifid in the circumference plane appress waved retuse at the extremities, Apothecia glaucous black, the margin entire and waved at length leafy
15579 Thallus stellat at length rugged and granulat greyish-green, beneath with grey fibres the segm sublin rather convex cut multifid, Apothecia glauc black, their margin entire, at length waved and crenate
15580 Stellate greyish-white and glaucous sorediferous, ash-colored beneath with black fibres segments linear cut multif convex but plane at extremities fructification subconcave black with a subinflexed border
α Thallus stellate cinereous segments branched separate recurved at edge roundish, some broader than the rest and powdery at the edge
15581 Orbicular greenish-grey, fibrous and black beneath, Lacinia imbricated nearly plane multif erosa-crenate somewhat ciliate the margin sometimes raised, fructification very dark, the border raised entire
15582 Crust blueish-white tartareous minutely undulated, Apothecia clustered somewhat sunk disk flat black or brown, margin thick externally black
15583 Thallus substellated glaucous white beneath brownish black, the segm sinuato-multifid convex glabrous inflated and ascending at the extremity, Apothecia red brown, their margin entire
15584 Thallus substellate greyish-green beneath rugose blackish and white, segments sinuato-multifid nearly plane smooth bearing powdery warts and perforated, the extrem inflated, Apoth redd marg. entire

15585 Thallus greyish white naked on both sides and of the same col substellat segm pinnatif ascend dilat. arched and ciliated at the extremity, Apothecia scattered disk plane cæsious black, its marg entire
15586 Thallus palish segments erect linear multifid attenuated ciliated beneath very white powdery and channelled, Apothecia with a flat black cæsious disk
15587 Thallus greenish-grey tartareous the segments linear attenuated branched grooved naked rugose and blackish beneath, Apothecia somewhat margined cup-shaped with their margin thin inflexed
15588 Thallus yellow naked and of the same color on both sides segments linear flattish pinnatifid branched fibrous at end, Apothecia somewhat terminal with an orange-colored disk
15589 Thallus yellow naked segments dichotomously branched slightly compressed attenuated divaricated complicated, Apothecia scattered their disk plane orange-red, their margin entire naked
15590 Thallus greenish segments linear branched attenuated ciliated at end whitish and channelled beneath, Apothecia somewhat terminal disk concave becoming flat with a fringed border
15591 Thallus pale rufous downy segm divaricating tortuous linear tapering channelled on the under surface, Apothecia scattered. disk flattish brownish-black with a thin entire border

15592 Thallus pale-yellow very yellow beneath the segments plane ascending erose crenate and crisped, Apothecia elevated their disk brown, the margin crenulated
β Thallus with segm depressed the lobes rounded crenate, margins crisped pulverulent and very yellow
15593 Thallus olive-brown paler beneath, the segments plane ascending lobed waved sinuate crenate, Apothecia elevated of the same color their margin rugose and crenulate
15594 Thallus glaucous somewhat shining sinuated and lobed brown beneath the segments cut and jagged curled ascending, Apothecia elevated chesnut-brown their margin wrinkled
β Thallus white on each side or with occasional black spots beneath

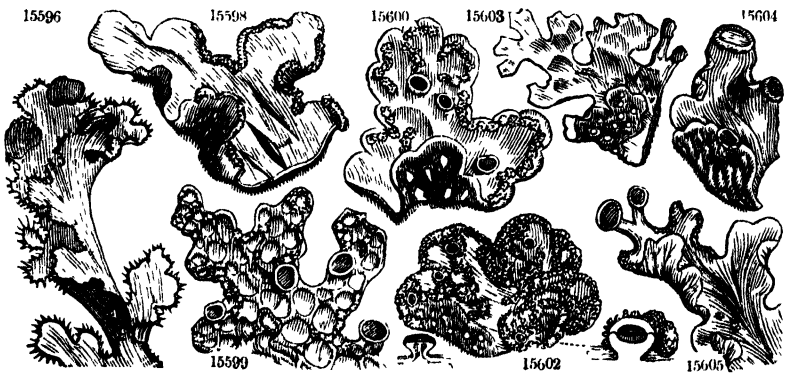


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of ulcers, and diarrhœas, dysentery, and hooping cough Its virtues, however, have been greatly overrated. (*Thom Lond Disp* 365)

Though plentiful with us, it is scarcely sufficiently so to form an article of commerce A great proportion of what comes to our shops, where it is in great request as a medicine in coughs, consumptions, &c is procured from Norway or from Iceland Immense quantities are gathered in the latter country, not only for sale, but for home consumption, as an article of common food The bitter and purgative quality being extracted by steeping in water, the lichen is dried, reduced to powder, and made into a cake, or boiled and eaten with milk, and eaten with thankfulness, too, by the poor natives, who confess "that a bountiful Providence sends them bread out of the very stones" An ample account of the nutritive qualities of this plant may be found in the Memoir of Professor Proust, inserted in the Journal de Physique, for August, 1804

15595 nivális *Ach*	snow	bushy tufts	2	all sea	Sul.	rocks	Eng bot. t 1994
15596 islándica *Ach*	Iceland Moss	bushy	2	all sea.	Ol.Br	rocky places	Eng bot. t. 1330
2344 STICTA *Ach*	Sticta			*Sp* 7—18			
15597 crocáta *Ach*	orange	yellow warts	3	all sea.	Gl.Br	rocks	Eng bot. 2110
15598 aurâta *Ach*	golden	foliaceous	6	all sea	Br	trun. of trees	Eng bot 2359
15599 pulmonácea *Ach*	liverwort	reticulated	2	all sea	Oliva	trun of trees	Eng bot. 572
15600 scrobiculâta *Ach*	pitted	roundish pat	3	all sea.	Grsh	trun of trees	Eng. bot 497
15601 limbâta *Ach.*	bordered	smooth lobed	4	all sea	Gl Br	rocks	Eng bot 1104
15602 fuliginósa *Ach*	smutty	round patch	3	all sea.	Lu gr	moist rocks	Eng bot 1103
15603 sylvática *Ach.*	wood	pitted fronds	3	all sea	Ru Br	shady woods	Eng bot 2298
2345 PELTIDE'A *Ach*	Peltidea			*Sp* 9—21			
15604 venósa *Ach*	veiny	much veined	2	sum	Gsh	on the earth	Eng bot 887
15605 scutâta *Ach*	shielded	crisp	1½	all sea	Cin	bark of trees	Eng bot 1834
15606 horizontális *Ach.*	horizontal	shining, cren	2	all sea.	Br G	shady rocks	Eng bot 888
15607 aphthósa *Ach*	Thrush	warted	2	aut	G	among moss	Eng bot. 1119
15608 ruféscens *E B*	brownish	incurved	2	all sea	R.Br	on the earth	Eng bot 2300
15609 canina *Ach*	dog	broad-lobed	2	all sea.	Grsh	on the earth	Eng bot 2299
15610 membranácea *Ach*	membranous	broad-lobed	1½	all sea	Grsh	thatch	
15611 spúria *E B*	imperfectly veined	lobed frond	1½	july	Ol Br	thatch	Eng bot 1542
15612 polydáctyla *Ach.*	multifid	smooth-hood	1½	july	Gl	on the earth	Jacq coll t 14 f 2
2346 NEPHRO'MA *Ach*	Nephroma			*Sp* 2—8			
15613 resupinata *Ach*	resupinate	short-lobed	3	all sea	Gr Br	among moss	Eng bot t 305
15614 párilis *Ach*	chocolate	foliaceous	3	all sea	Br	stone quarr	Eng bot 2360
2347 ROCCEL'LA *Ach*	Orchall.			*Sp* 2—7			
15615 tinctoria *Ach*	true dyer's	bushy tufts	1½	all sea	Y Br	marit rocks	Eng bot. 211
15616 fuciformis *Ach*	flat-leaved	bushy tufts	4	all sea	Gl	granite rocks	Eng bot 728
2348 EVER'NIA *Ach*	Evernia			*Sp* 1—6			
15617 prunástri *Ach*	Stag's Horn	multif segm	2	all sea	G W	heaths	Eng bot t. 859
L stæhelina E. B t 1553							
2349 CENOMY'CE *Ach*	Cenomyce			*Sp* 20—43			
15618 papillária *Ach*	pimpled	granul crust	½	wint	Grsh	dump earth	Eng bot 907



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2344 *Sticta.* From στικτος, dotted, on account of the numerous little pits on the under surface of the fronds. One of the most handsome genera of Lichens, growing almost wholly upon trees. Sticta pulmonacea is supposed to possess the same qualities as the famous Iceland moss, Cetraria islandica.

2345 *Peltidea* So called in allusion to the form of the shields, from πελτη, a target. Peltidea aphthosa, a large handsome species, has its name from the circumstance related by Linnæus, that the Swedish peasants boil it in milk as a cure for the aphtha, or thrush, in children

2346. *Nephroma* From νεφρος, a kidney, the apothecia are of a reniform figure N. polaris is remarkable for being common to both the arctic and antarctic circles

2347. *Roccella* This is a slight alteration of the Portuguese *Roccha*, signifying a rock, in allusion to the

15595 Thallus sulphur-colored orange at the base pitted and reticulated erect nearly plane laciniated its segm multifid crisped crenato-dentate and often warted at points, Apothecia plane flesh-col marg crenulat
15596 Thallus olive-brown paler beneath the segments erect sublinear multifid channelled smooth dentato-ciliate, fert. branches spreading, Apothecia appressed plane of the same color margins elevated entire

15597 Thallus dark glaucous brown pitted with broad rounded spreading entire lobes, having bright lemon-colored powdery spots upon the margin and on the elevated parts between the pits downy and tawny beneath with min lemon-colored little hollows, Apothecia scattered black.-brown their margin entire
15598 Thallus glaucous shining very broad woolly beneath, Soredia minute yellow segments rounded sinuated cut, margin wavy crisp inflexed yellow-powdery
15599 Thallus olivaceous pitted and reticulated downy beneath with smooth prominences the segm sinuato-lobate truncated, Apothecia submarginal plane reddish · their margin rugose
15600 Thallus suborbicular glaucous greyish-green very broad somew pitted and having mealy warts beneath downy tawny with white naked spots, the segments rounded and lobed irregular, Apothecia scattered nearly plane reddish-brown their margin somewhat crenate
15601 Thallus orbicular glaucous brown roundly lobed smooth grey and powdery at the margin downy beneath with white hollow spots, Apothecia brown
15602 Thallus orbicular dark lurid-grey rough with brown granules beneath grey-brown with white concave spots, the segments roundly lobed nearly entire, Apothecia scattered dark-brown their marg entire
15603 Thallus wide rusty brown naked and pitted brown and downy beneath with small pale excavations, segments lobed and obtusely cut unequal, Apothecia marginal dark-brown

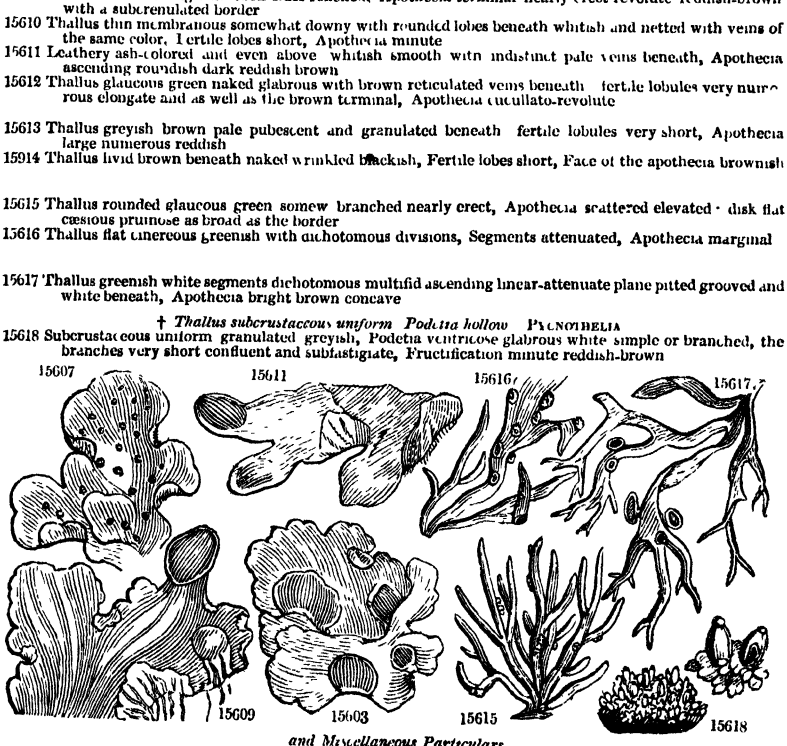
15604 Thallus greenish ash-color white beneath having dark brown prominent branched veins, Lobes rounded cut somewhat entire Apothecia marginal plane rounded swelling brown scarcely crenulate at the margin
15605 Thallus ash-colored whitish and veiny beneath the lobes roundish sinuated and cut crenate and crisped, fertile lobules very short, Apothecia orbicular ascending nearly plane brown somewhat entire
15606 Thallus glaucous and brownish green lobed crenate and shining pale beneath with numerous brown branching reticulated veins fertile lobules abbreviated, Apothecia terminal plane horizontal transversely oblong reddish brown with a nearly entire margin
15607 Thallus green smooth roundly lobed sprinkled with brown warts whitish beneath with brown branching veins · fertile lobules very long contracted in the middle their sides reflexed, Apothecia terminal large ascending red brown with a lacerated margin
15608 Thallus coriaceous concave even dark reddish-brown pale downy with obsolete veins beneath, Lobes rounded with numerous fruit-bearing processes
15609 Thallus greyish green with broad rounded lobes white beneath with brownish branching veins fertile lobules rather long with their sides reflexed, Apothecia terminal nearly erect revolute reddish-brown with a subcrenulated border
15610 Thallus thin membranous somewhat downy with rounded lobes beneath whitish and netted with veins of the same color, Fertile lobes short, Apothecia minute
15611 Leathery ash-colored and even above whitish smooth with indistinct pale veins beneath, Apothecia ascending roundish dark reddish brown
15612 Thallus glaucous green naked glabrous with brown reticulated veins beneath fertile lobules very numerous elongate and as well as the brown terminal, Apothecia cucullato-revolute

15613 Thallus greyish brown pale pubescent and granulated beneath fertile lobules very short, Apothecia large numerous reddish
15914 Thallus livid brown beneath naked wrinkled blackish, Fertile lobes short, Face of the apothecia brownish

15615 Thallus rounded glaucous green somew branched nearly erect, Apothecia scattered elevated · disk flat cæsious pruinose as broad as the border
15616 Thallus flat cinereous greenish with dichotomous divisions, Segments attenuated, Apothecia marginal

15617 Thallus greenish white segments dichotomous multifid ascending linear-attenuate plane pitted grooved and white beneath, Apothecia bright brown concave

† *Thallus subcrustaceous uniform Podetia hollow* PYCNOTHELIA
15618 Subcrustaceous uniform granulated greyish, Podetia ventricose glabrous white simple or branched, the branches very short confluent and subfastigiate, Fructification minute reddish-brown



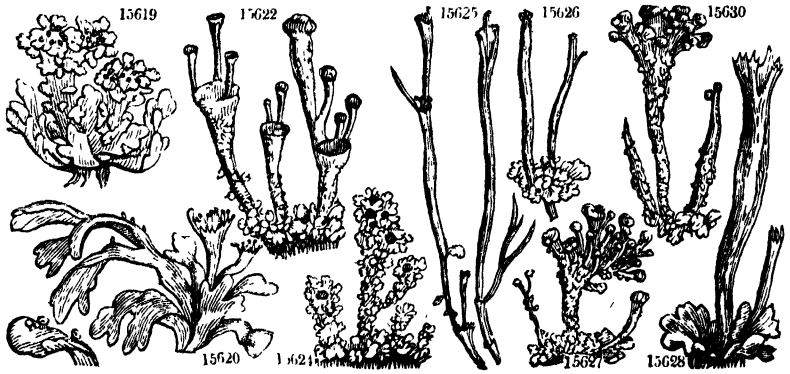
and Miscellaneous Particulars.

places where this plant is commonly found This plant is the Orchall or Argol of the dyers, so celebrated for yielding a fine purple color, for which Cudbear is but a poor substitute.

2948. *Evernia* Εὐέρνης signifies tall, or well branched. The name has been well contrived to express the habit of the species, which all form bushy, erect, or pendulous tufts.

2949 *Cenomyce.* From κενος, empty, and μυκης, a minute fungus, alluding to the hollowness of the little fungus-like receptacles Cenomyce rangeferina this is the Lichen which, for the greater part of the year, and especially in winter, is the support of the vast herds of rein-deer, in which consists all the wealth of the Laplanders No vegetable, Linnæus tells us, grows throughout Lapland in such abundance as this, especially in woods of scattered pines, where, for very many miles together, the surface of the sterile soil is covered with it as with

15619 alcicórnis *Ach.*	buckshorn	tufts	½	wint.	Gl.	heaths	Eng bot. t. 1392
15620 endiviæfólia *Ach*	endive-leaved	multifid tufts	⅔	wint	Y G	dry places	Eng bot. t 2361
15621 cervicórnis *Ach*	Stag's Horn	multifid tufts	1½	wint.	Gl	Pentlan hills	Eng bot t. 2574
15622 pyxidáta *Ach*	cupped	tufts	⅔	spring	Gl	banks	Eng. bot t. 1393
15623 fimbriáta *Ach.*	fringed	coralloid tufts	1½	spring	Gl	moors & hea	Eng. bot t 2438
β radiáta Ach	*radiated*	coralloid tufts	2	spring	Gl	on the grou	Eng bot 1835
γ cornúta Ach	*cornute*	coralloid tufts	1½	spring	Gl	moors & hea	Eng bot 1836
15624 gonoréga *Ach*	degenerating	tufts	1	sum	Cin	mountains	
β anomæ'a Ach	variable	brittle tufts	1	spring	Cin	hills	Eng bot 1867
15625 cemocýna *Ach*	leafy	fine tufts	⅔	spring	Gr	hea & moun	
β gráculis Ach	*slender*	fine tufts	⅔	spring	Gr	hea & moun	Eng bot 1284
15626 bacillária *Ach*	rod-like	branched	2	all sea	Wsh	woods	E. b t. 2028 *L.filiformis*
15627 digitáta *Ach*	fingered	powdery	1½	all sea	Y G	woods	Eng bot 2439
15628 deformis *Ach*	deformed	branch tufts	3	all sea	Sul.	roots of trees	Eng bot 1394
15629 coccífera *Ach*	coccus bearing	long tufts	3	wint	Gr G	moors & hea	Eng. bot. 2051
β cornucopioides Ach	*cornucopia-like*	short tufts	1½	wint	Gr G	moors & hea	
15630 bellidiflora *Ach*	daisy-flowered	stiff scaly	2	wint	Pale	lofty mount	Eng bot. 1894
15631 sparássa *Ach.*	ventricose	branch tufts	2	all sea	Gl	in woods	Eng bot. 2362
15632 delicáta *Ach*	delicate	mealy patch	½	wint.	G	rotten rails	Eng bot 2052
15633 racemósa *Ach*	racemose	loosely branc	1½	all sea	Gsh	heathe	Dill muse t 16 f 25
15634 furcáta *Ach*	forked	smooth tufts	2½	all sea	Lav br	woods	Dil muse t 16 f 27 A-D
β subulata Ach	*subulate*	slightly bran	2	all sea	Lav br	woods	Dil muse t 16 f 21 A B
15635 uncialis *Ach*	stiff	rigid smooth	1½	wint	Pa G	moors	Eng bot t 174
15636 rangifer'na *Ach*	rein-deer	much branch	2	all sea.	Hoa	woods	Eng bot t 173
β pun'gens Ach	*pungent*	branched tuft	2	all sea	Gr	commons	Eng bot 2444
15637 vermiculáris *Ach*	vermicular	little tufts	1	sum	W	high mount	Eng bot t 2029



History, Use, Propagation, Culture,

snow On the destruction of forests by fire, when no other plant will find nutriment, this Lichen springs up and flourishes, and, after a few years, acquires its greatest size Here the rein-deer are pastured, and whatever may be the depth of snow during the long winters of that climate, they have the power of penetrating it, and

†† *Thallus foliaceous Podetia fistular dilated upwards and fertile, or sterile and subulate Apothecia closed with a membrane* SCYPHOPHORA.

* *Apothecia fuscous or pallid.*

15619 Thallus foliaceous very pale glaucous green the segments subpalmated ascending obtuse and incurved, Podetia elongated turbinate all cup-bearing smooth the cups regular crenate with the margin at length leafy and proliferous, Apothecia brown

15620 Thallus foliaceous large glaucous yellow green white beneath the segments multifid waved crenate crisped, Podetia turbinate elongate mostly simple, Apothecia marginal reddish-brown

15621 Thallus foliaceous glaucous green segments erect multifid narrow repando-subdentate, Podetia cylindrical short glabrous dingy at length black all of them cup-bearing · cups small regular dilated entire nearly plane proliferous from the centre, Apothecia marginal sessile brownish-black

15622 Thallus foliaceous segments crenulated ascending, Podetia all turbinate elongate cup-shaped glabrous at length granulat warty rough grey green cups regular, the margin at length prolifer Apoth brown

15623 Thallus foliaceous · the segments small crenate, Podetia elongate cylindrical cup-bearing sometimes subulate slightly pulverul white cups regular their margins ent. and crenat. at length prolifer Apoth brown

β Podetia elongated powdery white, Scyphæ radiant at edge

γ Podetia elongate subulate simple or branched pulverulent white sterile or with reddish apothecia

15624 Thallus foliaceous, Segments broadish crenulate cut, Podetia longish smooth somewhat warted glaucous or whitish green, Apothecia irregular torn into rays proliferous at edge

β Thallus foliaceous ash-colored brittle segments imbricated minute crenate, Podetia cylindrical rough and foliaceous cups turbinate closed at length dilated and radiated, Apothecia marginal sessile or stalked brownish-black

15625 Thallus foliaceous, Segments small crenate, Podetia long subulate sterile and fertile smooth livid-brown, Apothecia cup-shaped toothed at edge occasionally proliferous

β Thallus foliaceous very minute, Podetia elongate subulate sterile and cup-bearing smth greenish brown: cups toothed at the margin at length proliferous, Apothecia brown

** *Apothecia scarlet or deep red*

15626 Thallus foliaceous small segm meriso-lobate crenate, Podetia cylindr simple and somew. branch at the extremity greenish white granulated rarely cup-bear, cups narr at length radiat Apoth minute scarlet

15627 Thallus foliaceous small segments expanded rounded crenate beneath as well as on the cylindrical yellow green cup-bearing, Podetia pulverulent cups narrow small at length large with the often branched numerous digitate or rayed prolifications tipped with the bright scarlet apothecia

15628 Thallus foliaceous minute segments broadish cut crenate naked beneath, Podetia long thick subventricose sulphur-colored slightly pulverulent cup-bearing cups narrow crenato dentate at length dilated and jagged, Apothecia sessile and pedunculate scarlet

15629 Thallus foliaceous minute segm rounded crenate nak beneath, Podetia elongated turbinate naked nearly pale yellow or greyish green all cup-bearing, cups with their margins spreading fertile, Apothecia large at length stalked scarlet

β Pode rather short cup-bearing cups dilat. crisp and foliac term by the scarlet stalk Apoth at leng prolif.

15630 Thallus foliaceous minute the segm meriso-crenate naked beneath, Podetia elongate cylindr rigid glabr foliaceo-squamose pale all cup-bear cups narr their margins fertile and prolifer Apoth crowd scarlet

††† *Thallus foliaceous Podetia fistular dilated upwards and fertile Apothecia pervious* SCHISMARIA

15631 Thallus foliac minute lobed and crenated, Podetia elongated branch. subventr granulat rough with leafy scales cup-bearing cups irregular pervious dentato-radiate proliferous, Apothecia stalked pale brown

†††† *Thallus foliaceous Podetia somewhat fistular, cylindrical, simple, split at end or digitate. Rays all fertile.* HELOPODIA

15632 Thallus foliaceous with minute granular lobes, Podetia smooth granular pallid divided at end: divisions very short, Apothecia clustered brownish black

††††† *Thallus foliaceous, scarcely any Podetia cartilaginous, rigid, fistular, all tapering subulate branched. Axillæ generally bored through* CLADONIA

15633 Podetia elongated smooth at length scaly greenish white inflated curved branched, Branches lax subsecund their extremities divergent spinulose, Apothecia pale brown

15634 Podetia elongated smooth livid brown dichotomous, Axils not perforated, Branches narr. subulate curved the extremities forked divergent · fertile ones with brown apothecia

β Podetia elong slender sparingly branch Branches nearly erect fertile bran with brown capitate apoth

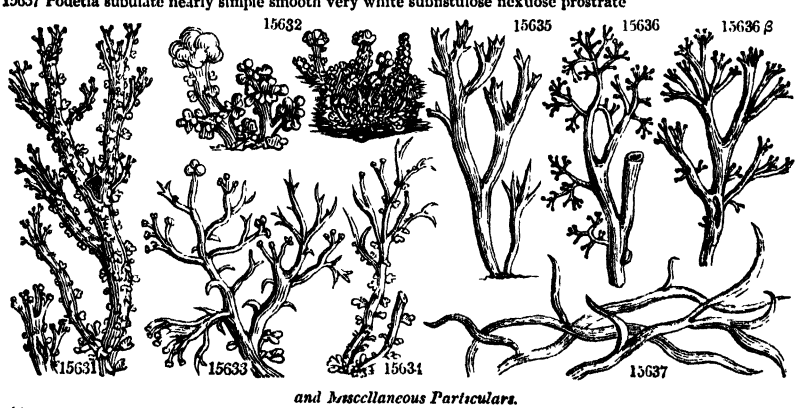
15635 Podetia elongate glabr pale dichotomous the axils perforated open, extremities of the branches patent short acute and rigid, Apothecia small terminal brown

15636 Podetia elongate cylindr erect roughish hoary branched axils often perforated, Branches scattered very much divided spreading the ultimate ones subradiate or drooping, Apothecia subglobose clustered brown

β Podetia cinereous dichotomously branched rigid forming a cushion-like tuft, Axillæ not bored through, End of branches mucronate diverging brownish

†††††† *Thallus none Podetia soft, subsolid, subulate, somewhat branched Axillæ not bored through* CERANIA.

15637 Podetia subulate nearly simple smooth very white subfistulose flexuose prostrate



and Miscellaneous Particulars.

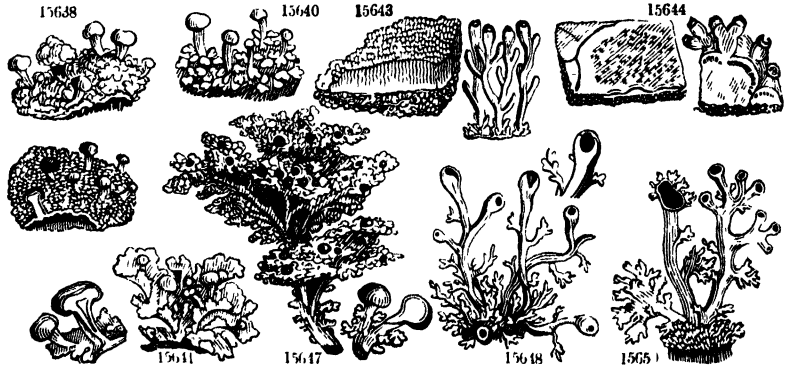
obtaining their necessary food Linnæus has given a beautiful description of this Lichen, and of the animals whose support it is, in the Flora Lapponica, p 332

C. pyxidata is sometimes employed by the poor in the cure of the hooping-cough

2350 BÆO'MYCES. *Ach* Bæomyces				*Sp* 4—10				
15638 róseus *Ach*	rosy	granulated	½	sum	Gsh			Eng bot. t 374
15639 rútus *Ach*	rufous	powdery	½	sum	Gsh			E bot. t.373 *L byssoides*
15640 microphýllus *E B*	small-leaved	imbric patch	3	wint.	D G	wet heaths		Eng bot 1782
15641 cæspitítius *E B*	turfy	leafy tuft	3	aut.	Pa G	oaks		Eng bot. 1796
2351 ISI'DIUM *Ach* Isidium				*Sp.* 5—11				
15642 microstictícum *Hoo*	small	tartareous	¼	aut.	Brsh	rocks		Eng bot. 2243
15643 corállinum *Ach*	coralloid	crowded patc	¼	aut.	Grsh	rocks		Eng bot 1541
15644 Westrin'gii *Ach.*	Westring's	cracked crust	¼	aut	Grsh	rocks		Eng bot 2204
15645 phymatódes *Ach*	bladdery	powderycrust	3	wint	Pa Su.	stems, old tr.		
β phragmæ'um Ach	*buff*	powderycrust	3	wint	Y Ol	stems, old tr		E.b 1529. *Lepr lut'escens*
15646 coccódes *Ach*	cracked	powderycrust	2	aut.	Pa Ol	park pales		Eng bot 1511
2352 STEREOCAU'LON *Ach* Stereocaulon				*Sp* 1—6				
15647 paschále *Ach*	Easter	branch tufts	2	all sea	Grsh	mountains		Eng bot. 282
2353 SPHÆRO'PHORON *Ach* Sphæropheron				*Sp* 3—14				
15648 coralloides *Ach.*	coralloid	bushy	1½	all sea	Pa Br	rocks		Eng bot t 115
15649 frágile *Ach*	brittle	bushy	1	all sea	Grsh	rocks		Eng bot. t 2474
15650 compréssum *Ach.*	compressed	bushy	1	all sea.	Wsh	rocks		E bot t 114 *L fragilis*

HOMOTHALAMI.

2354 ALECTO'RIA *Ach* Alectoria				*Sp* 2—7				
15651 jubáta *Ach*	mane-like	long tufts	3	wint	Br	on fir trees		Eng bot t 1880
β chalybiformis Ach		long tufts	3	wint	Gr Bl	on fir trees		
15652 sarmentósa *Ach*	sarmentose	much branch	2½	wint	Pa Y	mountains		Eng bot. t 2040
2355 RAMALI'NA *Ach.* Ramalina				*Sp* 5—19				
15653 fraxínea *Ach*	ashen	loose tufts	2	all sea	Grsh	bran of trees		Eng bot. t 1781
15654 fastigiáta *Ach*	clustered	loose tufts	2	all sea	Gl	rocks & trees		Eng bot t 890
β calicáris Ach	*calyx-like*	loose tufts	1½	all sea	Gl	rocks & trees		
15655 scopulórum *Ach*	ivory	loose tufts	1½	all sea	Y Gr	marinerocks		Eng bot t 688
15656 farináceа *Ach*	mealy	bushy tufts	2	all sea	Grsh	trun of trees		Eng bot. t 889
15657 pollinária *Ach*	powdery	bushy patch	3	all sea	Bt G	old oaks		Eng bot 1607
2356 CORNICULA'RIA *Ach* Cornicularia				*Sp* 7—16				
15658 trisétis *Ach*	dingy	shrubby	1½	all sea	Dp Br	alpine rocks		Eng bot t 720
15659 aculeáta *Ach*	prickly	shrubby	1	all sea	Ches	Highl mou		
β spadicea Ach.	*brown*	shrubby	1	all sea	Ches	Highl mou		L. bot t 452 *L hispidus*
15660 bícolor *Ach*	two-colored	shrubby	1	all sea	Bl	Highl mou		Eng bot t 1853
15661 ochroleúca *Ach*	pale-yellow	shrubby	1½	all sea	Pa Y	Highl mou		Eng bot t 2574



History, Use, Propagation, Culture,

2350 *Bæomyces* From βαιος, small, and μυκης, a fungus, a name well applied to this genus, which much resembles some minute kinds of Agaricus or Helvella

2351 *Isidium* From ισος, equal, in allusion, we presume, to the small difference which exists in size between the podetia and the substance of the frond

2352 *Stereocaulon* From στερεος, hard, and καυλος, a stem, a name well adapted to express the peculiarities of this genus Its firm branching frond is fitted to occupying the interstices of crumbling granite, and the cells of volcanic scoriæ. It is the first of its tribe which clothes the lava of volcanoes in a state of decay

2353 *Sphærophoron.* From σφαιρα, a globe, and φερω, to bear, in reference to the globular fructification The most elegant genus of Lichens, at once known by its branched bushy smooth habit, like that of a coralline.

15638 Crust unif granulat. greenish white, Podetia very short cylindr. Apoth. subglob wrinkl. pale flesh-color
15639 Crust uniform rugose granulat and pulverulent greenish white, Podetia very short somewhat compressed, Apothecia flattish at the top sometimes conglomerate reddish brown
15640 Leaves minute somewhat imbricated rounded nearly entire, Podetia simple tubular smooth
15641 Thallus clustered ascending leafy pinnatif cut and crisped . bright green above , white beneath, Tubercles from the disk of leaves convex reddish brown

15642 Crust tartareous cracked smoothish nearly even of a brownish cream-color thinner towards the edges, Podetia scattered short hemispherical simple of the same color as the crust, Apothecia brownish
15643 Crust tartareous greyish white, Podetia at length elongat round. simple or branch Apoth brownish-grey
15644 Crust tartareous thin unequal cracked and greyish, Podetia subglobose at length cylindrical simple and branched, Apothecia dark-brown
15645 Crust cracked areolate warty a little powdery unequal pale sulphur-color, Podetia becoming cylindrical simple and branched, Apothecia yellowish brown
β Crust powdery sulphureous-green, Podetia roundish of the same color, Apothecia pale yellow
15646 Crust somewhat cracked powdery and hoary, Podetia subglobose papillæform very close together, Apothecia brown hoary

15647 Thallus greyish branch and rough with granulat. excrescences, Branches crowded and very much divided, Apothecia scattered and terminal at length convex conglomerate blackish brown

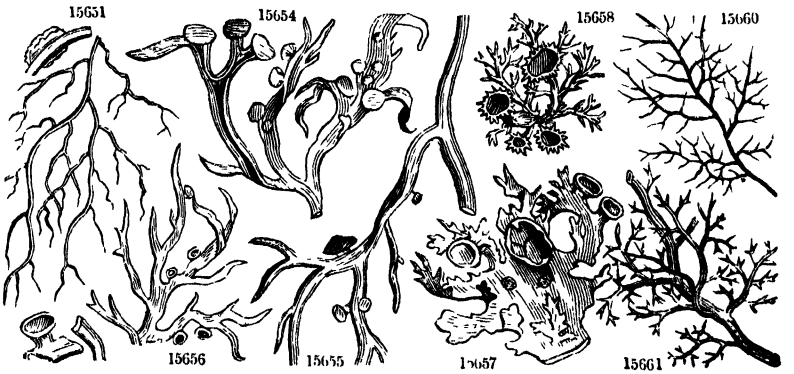
15648 Thallus pallish-brown, Branches lateral elongate lax divaricat and forked acumi Apoth subglobose smth
15649 Thallus greyish branched, Branches dichotomous short crowded fastigiate naked rounded rather obtuse, Apothecia globoso-turbinate somewhat warted
15650 Thallus whit branch Branc. compress ramulose subfibrill naked, Apoth subglob depress and smth above

HOMOTHALAMI.

15651 Thallus rounded somewhat shining livid-brown very much branched, Branches filiform compressed at the axils, Apothecia of the same color, at length convex entire at the margin
β Thallus and subsimple branches flexuose or tortuose complicated rather rigid greyish-black decumbent
15652 Thallus roundish angular somewhat pitted dichotomous pale-yellowish the extremities much branched lax and slender, Apothecia rather concave livid prunose, at length flattened

15653 Thallus plane linear laciniated greyish-white glabrous but rugose and pitted subreticulated · the ultimate branches attenuated, Apothecia mostly marginal plane pale flesh-colored
15654 Thallus compressed glabrous pitted branched glauc white, Branches thickened and fastigiated upwards, Apothecia numerous terminal peltate subsessile white
β Thallus and branches elongated, Branchlets cylindrical attenuated pitted and channelled, Apothecia subterminal appendiculated beneath
15655 Thallus compressed glabrous somewhat pitted branched yellowish-grey, Branches linear attenuated, Apothecia scattered on short stalks of the same color as the thallus
15656 Thallus compressed glabrous somewhat pitted bearing powdery warts rigid branched greyish or greenish-white, Branches linear attenuated, Apothecia scattered on short stalks plane somew margin whitish
15657 Thallus flat somewhat membranous smooth a little pitted white torn, occasionally powdery with dilated flat soredia, Apothecia nearly terminal very large

15658 Thallus deep pitchy-brown rounded or subcompressed smoothish distichously dichotomous, Branches fastigiate black above, Apothecia plano-convex blackish-brown somew marginated entire and toothed
15659 Thallus glabrous chesnut-brown round angular pitted and subcompressed naked, Branches and branchl divaricated flexuose aculeated, Apothecia reddish-brown the circumference somewhat toothed
β Thallus glabrous chesnut-colored plano-compressed somewhat pitted with the margins denticulate, Branches and branchlets short patent attenuated, Apothecia spinose-radiate reddish-brown
15660 Thallus black rounded capill suberect branched, Branches fine short scatter pat · extrem curved grey
15661 Thallus glabrous pale yellowish-white roundish suberect branched, Branches short attenuated blackish at the points, Apothecia brownish pale in the circumference



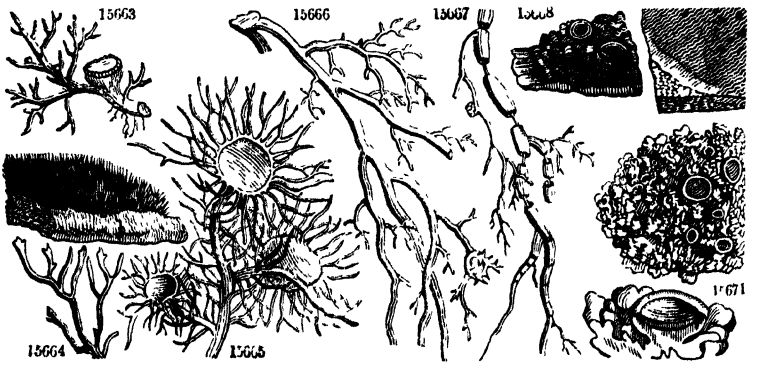
and Miscellaneous Particulars

2354. *Alectoria*, seems to derive its name from ἀλέκτωρ, unmarried, because nothing has been made out respecting the male flowers A usneoides is a species which grow on trees in warm countries, such as Asia, Africa, and America, hanging down in branches from six to eighteen inches long it was used by the Arabian physicians as a cordial, and also for the purpose of procuring sleep A jubata occasionally supplies the reindeer with food , for which purpose the Laplanders cut down the trees, that the Lichen may be devoured from the topmost branches

2355 *Ramalina* This name does not appear to have any obvious meaning The species are little bushy tufts generally covered with soredia. They are found in all parts of the world upon trees and rocks , but chiefly upon the former

2356 *Connucularia* So called in allusion to the multitude of little horn-like divisions into which the thallus is divided. Crustaceous branched tufts, with a solid axis.

15662 lanáta *Ach.*	woolly	shrubby	⅔	all sea	Gr Bl	rocks	Eng bot t 846	
15663 pubéscens *Ach*	pubescent	entangl tufts	3	aut	Bl	rocks	Eng bot. t 2318	
15664 heteromálla *E B*	variable	rough patch	3	aut	Bl	bark of trees	Eng bot. 2246	
2357 US'NEA *Ach*	Usnea			*Sp* 3—10				
15665 flórida *Ach*	flowering	erect	2½	wint	Gsh	old trees	Eng bot t. 872	
15666 plicáta *Ach*	plaited	pendulous	4	wint.	Gsh	old trees	Eng bot t. 257	
β hirta Ach	*hairy*	nearly erect	2	wint	Gsh	old trees	Eng bot. t 1354	
15667 barbáta *Ach*	bearded	pendulous	4	wint	Gsh	old trees	Eng bot t 258 f 2	
β articuláta Ach	*jointed*	pendulous	4	wint	Gsh	old trees	Eng bot t 258 f 1	
2358 COLLE'MA *Ach*	Collema			*Sp* 27—41				
15668 nígrum *Ach*	black	regular patch	3	wet w	Bl G	calcar rocks	Eng bot 1161	
15669 cheileum *Ach*	lipped	round patch	1½	wet w	Bl G	roots of trees		
15670 frágrans *Ach*	fragrant	small patches	½	wet w	D Ol	trun of elms	Eng bot 1912	
15671 crispum *Ach*	crisp	round patch	½	wet w	Gl	on the grou	Eng bot 834	
15672 tenax *Ach*	tough	lobed tuft	1	wet w	G	moist places	Eng bot 2349	
15673 plicátile *Ach.*	plaited	lobed tuft	1	wet w	Ol G	wet rocks	Eng bot 2348	
15674 fluviále *Ach*	floating	many-parted	½	wet w	Br	calcar rocks	Eng bot 2039	
15675 melæ'num *Ach*	blackish	starry	½	wet w	Br			
β marginále Ach	*marginal*	imbric lobes	1	sum	Ol	Highlands	Eng bot. 1924	
15676 fasciculáre *Ach*	fascicled	roundish	2	aut wi	Br	trun of trees	Eng bot. 1162	
15677 cretáceum *Ach*	cretaceous	minute dots	⅟₁₆	wint	Br	chalk stones	Eng bot 738	
15678 corrugátum *Ach*	wrinkled	small patches	½	wint	D G	rocks, sea co	Dillenius, t 19 f 19	
15679 palmátum *Ach*	palmated	lobed patch	1	spr su	Br	sand, ground	Eng bot 1635	
15680 granulátum *E B*	granular	imbric patch	1½	wet w	Br	gravel walks		
15681 multipartítum *E B*	many-parted	lobed patch	3	sum	Ol G	rocks & walls	Eng bot 2582	
15682 saturninum *Ach*	dingy	leafy	2	all sea	Bl G	trun of trees	Eng bot 1980	
15683 Burgéssii *Ach*	Burgess's	leafy	2	all sea	Gl	trun of trees	Eng bot 300	
15684 nigréscens *Ach*	blackish	leafy	2	all sea	D G	trun of trees	Eng bot t 345	
15685 flácc idum *Ach*	flaccid	leafy smooth	2	all sea	D G	Scotland	Eng bot t 1653	
15686 fúrvum *Ach*	rough	rugose memb	2	all sea	D G	trun of trees	Eng bot. t. 1757	
15687 scotinum *Ach*	naked	flat patches	1½	sum	Ol	old walls		
β sinuatum Ach	*sinuous*	flat patches	1½	sum	Ol	old walls	Eng bot 772	



History, Use, Propagation, Culture,

2357 *Usnea.* This word is said to have originated in the Arabic *achneh* or *áchnéa*, which is, according to Golius, the name by which the Arabian physicians designate Lichens in general. Crustaceous branched tufts, usually hanging down from the substances on which they grow.

15662 Thallus decumbent rounded smoothish dichotomous greyish-black, Branches and branchl flexuose intricate forked at the extremity, Apothecia somew margined plane circumference naked and granulated
15663 Thallus decumbent rounded roughish black, Branches intricate capillaceous: the ultimate ones simple, Apothecia of the same color entire in the circumference
15664 Minutely shrubby densely tufted erect entangled cylindrical corymbose black with palish notched tips

15665 Thallus nearly erect roughish greenish-grey with very numerous fine horizontal fibres, Branches patent subsimple, Apothecia plane very broad whitish ciliated the ciliæ radiating long
15666 Thallus pendulous smooth pale, Branches lax much divided subfibrillose the ultimate ones capillaceous, Apothecia plane broad ciliated, Ciliæ slender very long
β Thallus nearly erect somewhat shrubby pale greenish-white very much branched subpulverulent and roughish, Branches very much divided flexuose intricate attenuated subfibrillose
15667 Thallus pendulous smoothish rounded thickish pale greenish-grey, Branches divergent here and there fibrillose capillary at their extremity articulated below
β Thallus glabrous greenish-grey glabrous, Branches elongate dichotomously divided articulated, Articulations swelling distinct ultimate branches capillary fibrillose

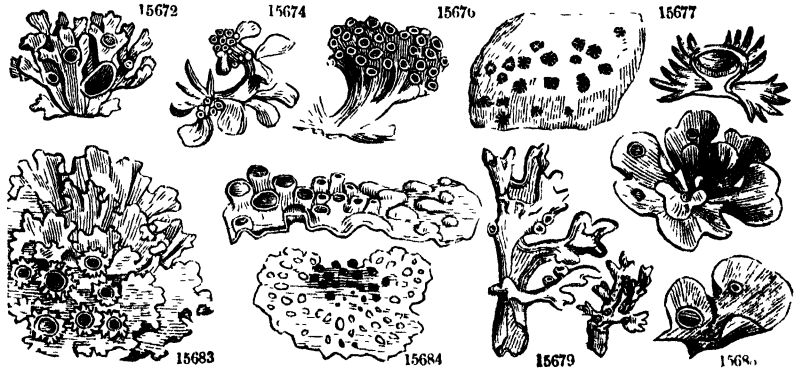
† *Thallus crust-like, irregular, or uniform* Placynthium
15668 Thallus crustaceous roundish brown-black lobes of the circumference cut crenate, central granular a little branched, Apothecia becoming convex black-edged

†† *Thallus imbricated, plaited, roundish, composed of minute lobes, becoming very turgid when wet* Enchylium
15669 Thallus suborbicular imbricated lobes thick, all minute rounded crenulated ascending, Apothecia nearly plane aggregated of the same color as the thallus the margin crenulated subevanescent
15670 Thallus roundish lobes rounded expanded naked thickened at edge crenate ascending, Apothecia scattered minute concave dull yellow-brown, exterior margin tumid and unequal
15671 Suborbicular the central lobes somewhat erect granulated, those of circumference depressed larger obt crenulate, Fructification scattered rather concave reddish with a granulated margin
15672 Suborbicular imbricated lobes thickish flat incumbent roundish cut lobed and crenulate, Apothecia scattered immersed in the lobes and concave rufous with an entire edge
15673 Suborbicular imbricated lobes all thick rounded lobed plaited in circles wavy suberect entire, Apothecia scattered concave whole-colored
15674 Thallus cushion-like formed of thick close blunt complicated lobes, Apothecia somew marginal roundish whole-colored disk urceolate with a double edge
15675 Thallus orbicular somewhat stellated imbricated lobes cut and laciniated, margins elevat waved crisp and crenulated, Apothecia marginal nearly plane of same color as thallus their margin granulated
β Lobes of the thallus deeply laciniated narrow multifid spreading flexuose nearly plane crenate and lobed, Apothecia marginal and scattered dark-brown their margin entire
15676 Thallus suborbicular imbricato-plicate plaits central erect flexuose, Lobes of the circumference rounded meso-crenate, Apothecia marginal turbinate fasciculate disk rather convex reddish
15677 Thallus lobed starry dark green, Apothecium central elevated brownish pink with a paler entire margin
15678 Thallus thick dark-green with elevated intestine-like convolutions

††† *Thallus somewhat foliaceous irregular, formed of naked, expanded, thick, turgid, naked lobes* Scytinium
15679 Thallus subfoliaceous green-brown-glaucous lobes thick close palmate cut, segments somewhat linear round, Apothecia rufous brown
15680 Leafy gelatinous fleshy granulated on both sides of a blackish-olive color, its lobes crowded rounded plaited crisp and cut, Apothecia scattered dark brown
15681 Frond radiating fleshy · segments repeatedly forked fan-shaped crenate convex above concave beneath, Shields prominent at length blackish and flat

†††† *Thallus foliaceous · lobes rounded, downy or fibrous beneath* Mallotium
15682 Thallus foliaceous blackish-green glaucous and downy beneath, Lobes rounded waved entire, Apothecia scattered elevated plane reddish their margin entire
15683 Thallus foliaceous somew imbricated glauc greenish-brown pubescent and somew spongy beneath Lobes rounded sinuated crenulat and crisped, Apoth depressed plainsh brown their margin foliaceous crisped

††††† *Thallus foliaceous · lobes somewhat membranous, lax, naked, dark-green* Lathagrium
15684 Thallus foliaceous membranous submono-phyllous orbicular depressed plaited rounded and lobed black-green, Apothecia central crowded at length convex reddish brown their margin entire
15685 Thallus foliaceous membranaceous smooth blackish-green lobes distinct rounded entire lax waved, Apothecia scattered nearly plane reddish their margin thin entire
15686 Thallus foliaceous membranaceous somew wrinkled complicate blackish-green granulated on both sides lobes round unequal waved and crisp ent Apoth scattered plane dark-brown their margin entire
15687 Thallus foliaceous membr unbr naked black lobes small roundish cut nearly entire suberect plaited, Apoth scattered sessile whole-colored with an entire edge
β Lobes sinuate cut crisp toothletted



and Miscellaneous Particulars.

2358. *Collema* A Greek word signifying a glutinous substance. All the species are gelatinous and are supposed by Fries to be Algæ in a Lichenform state Nostoc cæruleum has been positively stated to be convertible into Collema limosum

15688 tremelloïdes *Ach*	tremella-like	half transpar	1	spring	Lead	rocks	Eng. bot t 1981
15689 lácerum *Ach*	lacerated	half transpar	1½	spring	Gl	earth	Eng bot t. 1982
15690 súbtile *Ach*	subtle	starry	1½	sum	D G	earth	Eng bot. t 1008
15691 tenuíssimum *Ach*	very fine	flat patch	2	jul au	D Ol	dry banks	Eng bot 1427
15692 Schradéri *Ach*	Schrader's	small tufts	½	june	Y G	old walls	Eng bot. 2284
15693 muscícola *Ach*	moss-covering	cushion-like	¾	spring	Br	among moss	Eng bot 2264
15694 spongiósum *Ach*	spongy	large fruit	3	all sea.	Ol.Br	rocks	Eng. bot. 1374

ATHALAMI.

2359 LEPRA'RIA *Ach* Lepraria *Sp* 4—13

15695 chlorína *Ach*	brimstone	cushion-like	2	wint.	Sul	rocks	Eng bot 2038
15696 fláva *Ach*	yellow	thin coat	2	wint	Bt Y	old pales	Eng bot 1950
15697 ochrácea *E B*	ochre-colored	scatter warts	½	wint	G Y	old trees	Eng bot 2408
15698 virescens *E B*	greenish	granular	¾	wint.	Y G	elm trees	Eng bot 2149

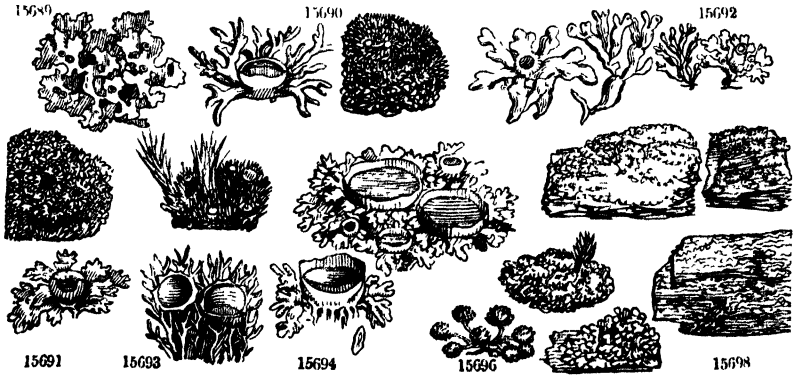
PSEUDO-LICHENES.

2360 OPE'GRAPHA *Ach* Opegrapha *Sp* 10—35

15699 nimbósa *Ach*	cloudy	variegated	1½	all sea	Pa Y	old trees	Eng bot 2346
15700 venósa *E B*	veiny	flat patch	1½	all sea	pa Oc	beeches	Eng bot 2454
15701 Persoónii *Ach*	Persoon's	tartareous	2	all sea	Wsh	stones	
β apórea Ach	*rough*	leprous	2	all sea	Wsh	slate & stones	
15702 calcárea *Ach*	limestone	angular dots	⅛	all sea	Bl	mort, old w	Eng bot 1790
15703 maculáris *Ach*	spotted	largish spots	½	all sea	Brsh	bark of trees	E bot 2282 *O epiphega*
15704 herpética *Ach*	eruptive	dotted crust	1	all sea	Pa Ol	bark of trees	Eng bot 1789
β disparáta Ach	*reddish*	mealy crust	1	all sea	Pa Ol	bark of trees	E bot 2347 *O rubella*
15705 vulgáta *Ach*	common	scaly	1½	all sea	G W	bark of trees	Eng bot 1811
15706 epipásta *Ach*	dotted	smooth skin	3	all sea	Gr	smooth bark	Eng bot 1828
β microscópica Ach	*microscopical*	smooth skin	3	all sea	Ol	smooth bark	Eng bot. 1911
15707 stenocárpa *Ach*	narrow-fruited	smooth patch	1½	all sea	Ol	smooth bark	
β denigráta Ach	*black*	smooth patch	1½	all sea	Pa G	smooth bark	Eng bot. 1753
15708 nótha *Ach*	spurious	dotted crust	3	all sea	Wsh	old trees	Eng bot 1896
β diaphora Ach.	*various-fruited*	dotted crust	3	all sea	Gr	trun of trees	Eng bot 2280

2361 VERRUCA'RIA *Ach* Verrucaria *Sp* 11—56

15709 maúra *Ach*	black moor	cracked crust	2	aut	Bl	rocks	Eng bot. t. 2456



History, Use, Propagation, Culture,

2359. ***Lepraria.*** Because the plants upon which these substances grow have the appearance of being diseased with leprosy.

2360. ***Opegrapha*** From οπη, a chink, and γραφω, to write. The shields or apothecia are cracks upon the surface of the thallus resembling Hebrew or oriental characters upon a pale ground

†††††† *Thallus foliaceous : lobes rounded, membranous, thin, naked, cinereous, glaucous, somewhat transparent Apothecia slightly stalked* LEPTOGIUM

15688 Thallus foliaceous membranaceous thin subdiaphanous lead-color obsoletely rugose and dotted lobes rounded somewhat cut, Apothecia scattered subpedicellate plane reddish-brown, their margin pale
15689 Thallus nearly erect foliac membr subdiaphan subrugose with obscure reticulations glauc lobes small subimbr. cut and lacimat. and somew fringed, Apoth scattered rather concave red their margins pale

††††††† *Thallus very finely lacinated and branchletted*

15690 Thallus substellate · the segments very narrow linear appressed very much branched obtuse, Apothecia central nearly plane of the same color as the crust their margin thin entire
15691 Thallus subimbricated : segm minute linear multifid unequal granular acute much clustered, Apothecia scattered fleshy rufous margined
15692 Thallus subcæspitose : segm linear flat irregularly subdivided rugose obtuse, margins repand obsoletely crenated, Apothecia scattered of the same color
15693 Thallus pulvinate brown, Branches rounded nearly erect flexuose uneven subfastigiate rather obtuse, Apothecia nearly terminal plane brown margined
15694 Thallus dull-green segm aggregate branched granular cylindrical obtuse, Apothecia scattered concave brown externally spongy and pale with an erect thin margin

ATHALAMI.

15695 Crust thick pulvin bright sulphur-color composed of a dust-like substance collect into somew hairy glob
15696 Crust spreading equal thin somewhat cracked bright-yellow composed of subglobose granules
15697 Crust not discernible, Fructification of an ochrey-yellow collected into thin scattered patches
15698 Crustac granulated continuous somewhat gelatin. greyish dull-green when dry, bright-green when wet

PSEUDO-LICHENES.

† *Disk of apothecia very narrow, crack-like, somewhat covered in by the conniving tumid margins* HYSTERINA

15699 Crust somew cracked unequal very white, Apothecia clustered minute oval-oblong turgid disk closed
15700 Crust tartareous determined reddish-white, Clefts immersed convex without any elevated border repeatedly branched curved parallel and equidistant
15701 Crust tartareous smoothish cohering uneven whitish, Apothecia innate oblong disk resembling a cleft, at length rugose waved plaited dissimilar rather confluent with the disk irregular somewhat dehiscent
β Crust tartareous or leprose uneven pulverulent, Apothecia roundish dissimilar waved plaited tortuose and variously expanded in the disk
15702 Crust tartareous powdery very white, Apothecia longish straight swelling opaque collected in a stellate manner disk like a crack
15703 Crust very thin brownish-black, Apothecia minute much crowded roundish elliptical, at length rugose irregular disk very narrow
15704 Crust somewhat membranous very finely cracked rugose roughish cinereous-brown, Apothecia minute innate clustered convex elliptical oblong straight with a crack-like disk
β Crust membranous smoothish pale-olive or green and rufous-brown, Apothecia variable roundish oblong straight and curved
15705 Crust between cartilaginous and membranaceous somewhat scaly smoothish greyish-white, Apothecia sessile long or roundish waved somewhat shining with the disk very narrow
15706 Crust very thin of a regular figure polished cinereous, Apothecia innate minute convex rugulose opaque various · smaller dot-like, longer very slender flexuose somewhat branched
β Crust very thin shin pale-olive, Apothecia subellipt simp somew parallel becoming stellate and angular
15707 Crust membranous polished somewhat bordered whitish, Apothecia sessile various the smaller globose or oblong, larger very long narrow roundish flexuose
β Crust regular membranous whitish, Apothecia sessile close together somewhat shining longish flexuose simple and branched disk somewhat channelled

†† *Disk of apothecia concave, channelled, or flat, appearing between the separated margins* ALYXORIA

15708 Crust cartilagin lep white, Apothecia scatter. sess round and oval deform disk flat becoming convex
β Crust cartilaginous membranous dirty-white ash-color, Apothecia variable sessile oblong and tapering at each end opaque disk flat

††† *Thallus cartilaginous, membranous, contiguous, polished* LICOPHLEA

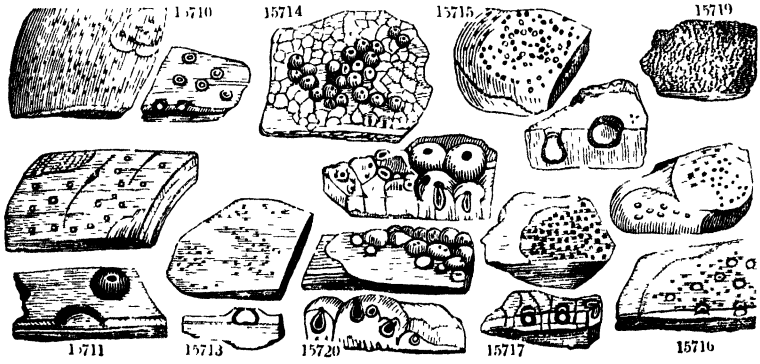
15709 Crust very thin smooth much cracked very black, Apothecia very minute subglobose immersed ; the extremity prominent umbilicated, nucleus blackish



and Miscellaneous Particulars

2361 *Verrucaria.* Thus called, from *verrucа*, a wart, on account of the verrucose nature of the shields. Schrader says, this genus differs from the similar Eudocarpon in having the shields always closed, while the latter explodes its contents by a small but distinct orifice

15710 punctiformis *Ach*	dot-like	thin coat	2	all sea.	Br	sm. ash bark	Eng	bot	2412
15711 analépta *Ach*	little-dotted	thin coat	3	all sea	Br	sm oak bark	Eng	bot	1848
15712 epidérmidis *Ach*	Epidermis	thin coat	1	all sea	W	birch bark			
15713 stigmatélla *Ach*	cinereous	thin coat	3	all sea.	Pa. Br	smooth bark	Eng	bot	1891
15714 ceuthocárpa *Ach*	cracked	tessellated	4	all sea	Pa Ol	slate rocks	Eng	bot.	2372
15715 Schradéri *Ach*	Schrader's	dotted crust	4	all sea	Wsh	calca stones	Eng	bot	1711
15716 Harrimánni *Ach*	Harrimann's	small patches	1	all sea	Br Ol	hard rocks	Eng	bot	2539
15717 plúmbea *Ach*	lead-colored	lobed patches	1½	all sea	Ol	limest. rocks	Eng	bot.	2540
15718 striátula *Ach*	striated	cloudy spots	¾	all sea	Pa G	flints			
β acrotélla Ach	*dingy*	cloudy spots	¾	all sea	Pa G	flints	Eng.	bot	1712
15719 epigéa *Ach*	ground	mealy tessell.	1½	all sea	G	dry banks	E. b	1681	*L. terrestris*
2362 PORI'NA. *Ach*	Porina		*Sp* 1—19						
15720 pertúsa *Ach*	bored	crust	½	aut	Cin.	bark of trees	Eng	bot	677
2363 ARTHO'NIA *Ach*	Arthonia		*Sp* 4—14						
15721 impolita *E B*	dull	spotted patch	½	all sea	Wsh	trun of trees	Eng	bot	981
15722 Swartziána *Ach*	Swartz's	cracked crust	1½	all sea	Wsh	smooth bark	Eng	bot	2079
15723 astroidea *Ach*	astroid	membranous	½	all sea	Cin	smooth bark	Eng	bot	1847
15724 obscúra *Ach*	obscure	warty	3	all sea	D Ol	bar of old tr	Eng	bot	1752
15725 lýncea *Ach*	speckled	broad masses	3	all sea	Wsh	bar of old tr	Eng	bot	809
2364 GRA'PHIS *Ach*	Graphis		*Sp* 5—16						
15726 scripta *Ach*	written	shining crust	1½	all sea	Grsh	smooth bark	Eng	bot	1813
β pulverulénta Ach	*powdery*	thin crust	2	all sea	Pa Y	trees	Eng	bot	1754
γ Cérasi Ach	*Cherry-tree*	thin crust	3	all sea	Y	old cher tre	Eng	bot	2201
15727 dendritica *Ach*	Tree-like	smooth patch.	1½	all sea	Y	smooth bark	Eng	bot	1756
15728 serpentina *Ach*	serpentine	even crust	3	all sea	Pa Ol	smooth bark	Eng	bot	1755
15729 Lyélli *Ach*	Lyell's	cracked crust	4	all sea	Pa Ol	rugged bark	Eng	bot	1876
15730 élegans *Ach.*	elegant	uneven crust	3	all sea	Pa Y	smooth bark	Eng	bot	1812



History, Use, Propagation, Culture,

2362 *Porina* From πωρινος, any thing that crumbles away, a name applied in consequence of the nature of the crust of these plants, which, indeed, is common to them with other Lichens

2363 *Arthonia.* A name, the meaning of which is unexplained The species are similar in habit to Spiloma and Opegrapha.

15710 Crust very thin determined polished brown Apothecia min. hemisph glob without orifices: kernel white
15711 Crust membranous determined shining somewhat olive-colored, Apothecia subsessile scattered hemispherical conoid papillose: kernel compressed somewhat membranous white
15712 Crust exceedingly thin spreading quite white, Fructification minute roundish subelliptical, Tubercles semi-immersed · the interor white
15713 Crust thin cartilaginous membranous polished becoming cracked whitish, Apothecia minute hemispherical clustered subconfluent with scarcely any orifice

†† *Thallus nearly solid, somewhat gelatinous* Blennorina

15714 Crust somewhat gelatinous roundish broken dark crenate cut radiated in the circumference, Apothecia subglobose immersed papillose at end

††† *Thallus subtartareous, crustaceous, contiguous, cracked into areolæ, or powdery* Lithocia

15715 Crust tartar contig whitish, Apothecia minute clustered immersed subglobose dirty transparent inside
15716 Crust tartareous contiguous bordered finely dotted mouse-color, Apothecia minute subglobose immersed with a prominent papilla · dirty-white inside
15717 Crust tartareous contiguous finely cracked subrugose lead-color, Apothecia subglobose innate finely becoming depressed and scutelliform
15718 Crust with the figure of a tree greenish-black bordered, Areolæ nearly separate somewhat branched radiating, Apothecia conoid becoming concave above
β Areolæ of the crust dispersed deformed brownish-black

†††† *Thallus soft, cottony, somewhat spongy, or thin and arachnoid* Inoderma.

15719 Thallus thin somew fibrous uneq. pale-yell Apothecia minute globose immersed with a prominent orifice

15720 Crust equal polished whitish ash colored, Warts of apothecia subglobose, Orifices several depressed black

15721 Crust white powdery and cracked, Tubercles numerous depressed oblong irregular obtuse yellowish-brown clothed with deciduous mealiness
15722 Crust cartilagin membr white, Apoth sess broad tum round rep irreg and confl dark with elevat dots
15723 Crust membr pale cinereous and glaucescent, Apoth flatten upon the crust plane angular substell black
15724 Crust membr somew olive-col. Apoth min flat concav somew membr oval ellipt and remif wrink dark
15725 Crust thin subtartareous equal somewhat cracked white, Apoth clustered flat somewhat immersed round oblong and curved black cæsious

15726 Crust membranac smooth somew shining white or greyish-brown bordered with black, Apothecia half immersed naked flexu simple or branch disk very narr marg formed of the thallus raised membranac
δ Crust effuse membr whitish, Apoth emerging flexuose with a channelled dehiscent cæsious disk with an elevated tumid margin
γ Crust very thin hoary glaucous shining, Apothecia emerging straight long nearly simple acuminate somewhat parallel disk channelled
15727 Crust somewhat cartilaginous unequal very white, Apothecia immersed flexuose branched black branches divergent forked acute, Disk broad flat naked
15728 Crust cartilaginous membranous unequal rugulose of a regular figure white and cinereous, Apothecia immersed long clustered flexuose nearly simple and branched
15729 Crust membranous polished pale-olive, Apothecia clustered nearly simple curved turgid obtuse: disk broad convex cinereous pruinose with a thick powdery white margin
15730 Crust orbicular granular smooth white, Apothecia immersed scattered short straight nearly simple: margin of the perithecium with a longitudinal furrow



and Miscellaneous Particulars

9364. *Graphis* From γραφω, to write The apothecia are extremely similar in form to the characters of some strange language It is very near Opegrapha from which it does not at all differ in habit.

Order 9 FUNGI



Reproductive organs uniform Sporules (e) arranged in tubular cells (f) placed in some parts of the external surface Substance various (g), mostly thick and fleshy, sometimes vesicular Frond none

In speaking of the eighth order, Lichens, it has been observed, that they, Algæ and Fungi, might be considered collateral. But perhaps Fungi should be estimated as still lower in the scale of creation than Lichens From some passages in the writings of a celebrated Swedish author upon Fungi, Mr Fries, whose mode of arrangement is almost entirely adopted here, it would seem as if he considered the three orders to consist of the same beings altered by the material on which they grow, and organized according to the different elements upon which they depend for support Algæ, he observes, which are much extended in their native element, water, when exposed to the air, contract and become Lichens Thus Nostoc muscorum becomes Collema limosum, &c., and Sir James Smith has even decided, that Lichina pygmæa when growing under water is an Alga, and when above water a Lichen But the differences between Fungi and Algæ, or Lichens, are greater, and arise out of their essence, that of Fungi being always reproductive, of Algæ primitive In Algæ, the thallus is the most essential part, and the reproductive organs of secondary importance, in Fungi, the whole plant is generally a mass of reproductive matter, and the thallus always accidental Fungi always grow upon dead vegetable matter, Lichens always upon living vegetation The bark which, when living, bears Lichens, produces Fungi as soon as it begins to decay and even on the same half-dead branch, the living side will be found occupied by Lichens, and the dead by minute Fungi The lowest Fungi are considered by Fries, to bear the same relation to plants as Entozoa to animals, for which reason, he is of opinion, that all infusorial plants are Fungi, and not Algæ But this may be doubted The number of Fungi which may be conceived to exist is incalculable Multitudes have been discovered by the researches of modern observers, and multitudes still remain to be detected, especially in extra-European countries In Sweden, in the small space of a square furlong, where the number of Phænogamous plants was 420, and of Lichens and Algæ 430, Fries discovered more than 2000 species of Fungi

The most celebrated writers on Fungi are Micheli, Schæffer, Bulliard, Bolton, Sowerby, and Greville, for figures, and Persoon, Link, Nees von Esenbeck, Fries, and Greville, as systematists

Link defines the essence of a Fungus to be sporules disposed in a series, in elongated tubular cells, the cells situated in some part of the external surface The part in which the reproductive organs are placed is called the *hymenium* (*a*), the hollow base from which the stem or *stipes* (*a*) arises is named the *volva* (*b*) or *wrapper*, the upper part is the cap or *pileus* (*c*), which is provided on the inferior surface with thin radiating expansions, which are termed gills or *lamellæ*, among which the sporules are situated Many Agarics have a delicate fringe connecting the margin of the pileus at a certain age with the stem, this is called the veil (*d*), and is either general (*universale*), when adnate with the surface of the pileus, but becoming obsolete with age, or it is partial when it extends only from the margin of the pileus to the stipes The *annulus* (*d*) is a kind of veil, which is sometimes fixed to the stem, at others free and capable of being moved upwards and downwards The Peridium, Perithecium, or Perisporium, are different names for the envelope immediately enwrapping the sporules

Tribe I. HYMENOMYCETES.

Hymenium naked.

Class I Hymenini v Agaricinæ.

Hymenium distinct. Receptacle long or expanded, superior

Division I. *Pileati.*

Receptacle dilated, occasionally branched, having a tendency to an orbicular form Hymenium inferior Asci fixed.

2365 *Agaricus* Hymenium in lamellæ. Lamellæ simple, parallel.

* *Stem central, with a veil. Gills unchangeable. Sporidia white*

§ 1 *Amanita* Veil double, universal separate, partial annular somewhat persistent
§ 2 *Lepiota* Veil simple, universal, concrete, annular, somewhat persistent

Observations

Tribe I *Hymenomycetes* This tribe is readily distinguished from the others by its hymenium containing sporules within the surface, and not naked, from the *Pyrenomycetes* by the want of a perithecium and a reproductive nucleus, from *Gastromycetes* by the want of a peridium inclosing the sporules, which constitute the mass of the fungus, and from the *Hyphomycetes* and *Conomycetes* by the sporidia not being exposed

Division I. *Pileati.* This constitutes the most extensive division in Fungi, and includes almost every thing which was known to the ancients Dioscorides mentions one or two species distinctly, comprehending the remainder among his eatable and unwholesome kinds Pliny talks of the very numerous kinds of fungi, but describes very few. C. Bauhin knew about sixty, which he chiefly obtained from Clusius, Tournefort had two genera and eighty-seven species; Micheli six genera and about 800 species; Linnæus three genera and fifty species, Persoon, in his Synopsis, mentions nine genera and 683 species, finally, Fries describes more than a 1000 species arranged under many genera and subgenera.

The species are widely scattered over all Europe, but the extra European fungi, with the exception of those

§ 3. *Armillaria.* Veil simple, partial, separate, annular, somewhat persistent.
§ 4. *Limacium.* Veil very fugacious, viscid Lamellæ adnate, decurrent.
§ 5. *Tricholoma.* Veil very fugacious, flocculose, marginal. Lamellæ emarginate or rounded.

** *Stem central, naked. Gills unchangeable Sporidia white.*

§ 6 *Russula* Pileus fleshy, becoming depressed. Lamellæ equal, juiceless
§ 7. *Galorhæus* Pileus fleshy, becoming depressed. Lamellæ unequal, milky
§ 8 *Clitocybe.* Pileus fleshy, when young convex. Lamellæ unequal, juiceless.
§ 9 *Collybia* Pileus fleshy-membranous, flattish *Small, dry*
§ 10 *Mycena* Pileus membranous, campanulate *Slender. Stipes hollow*
§ 11. *Omphalia.* Pileus membranous or fleshy-membranous, when young umbilicated

*** *Stem out of the centre, none Gills unchangeable. Sporidia white*

§ 12. *Pleurotus.* Pileus out of the centre or lateral.

**** *Stem always central Veil 0 Gills changing color Sporidia rose-colored*

§ 13 *Mouceron.* Pileus fleshy, becoming depressed Lamellæ long, decurrent. *Odor of new flour*
§ 14 *Clitopilus.* Pileus fleshy, convex
§ 15 *Leptonia.* Pileus fleshy, membranous, from convex becoming plane *Small.*
§ 16 *Nolanea* Pileus membranous, campanulate *Slender Stipes hollow*
§ 17 *Eccilia* Pileus umbilicate. *Lamellæ adnate*

***** *Stem always central. Veil like cobweb Gills changing color, becoming dry. Sporidia ochre-colored*

§ 18 *Telamonia* Veil annular, woven, somewhat persistent Lamellæ distant
§ 19. *Inoloma* Veil fugacious Lamellæ emarginate. Stipes bulbous *Color something of violet*
§ 20 *Dermocybe.* Veil fugacious. Lamellæ closely packed Stipes equal.

****** *Veil distinct, not like a cobweb. Gills discolored, somewhat persistent. Sporidia ferruginous*

§ 21 *Pholiota* Veil dry, annular
§ 22 *Myxacium.* Veil viscid, fugacious Lamellæ affixed
§ 23. *Hebeloma* Veil marginal, fugacious Lamellæ emarginate

******* *Veil very fugacious or spurious, not like a cobweb Gills discolored, somewhat persistent Sporidia ferruginous*

§ 24 *Flammula* Pileus fleshy, convex, smooth, somewhat viscid *Lamellæ not emarginate*
§ 25 *Inocybe* Veil formed of the longitudinal fibres of the fleshy convex pileus *Lamellæ whitish*
§ 26 *Naucoria* Pileus fleshy, membranous, flattish, squamulose *Small Lamellæ cinnamon-colored*
§ 27 *Galera* Pileus membranous, campanulate *Slender Stipes hollow.*
§ 28 *Tapinea* Pileus umbilicate, villous at edge.
§ 29. *Crepidotus* Pileus out of the centre or sessile

******** *Veil present, not unlike a cobweb Gills becoming discolored, cloudy, dissolving Sporidia brownish-purple*

§ 30 *Volvaria* Veil universal, separate *A volva.*
§ 31 *Psalliota* Veil annular
§ 32 *Hypholoma* Veil marginal, fugacious Lamellæ emarginate *Stipes bulbous*
§ 33 *Psilocybe* Veil very fugacious Pileus somewhat fleshy, and stipes equal, tenacious
§ 34 *Psatyra* Pileus somewhat membranous, and stipes brittle
§ 35 *Coprinarius* Lamellæ with a tendency to deliquesce Veil partial *Sporidia black*

2366. *Coprinus.* Hymenium in lamellæ, which finally become deliquescent Asci separate with sporidia in four rows
2367 *Gomphus* Hymenium in lamellæ, which are long branched and decurrent. Pileus turbinate, umbonate
2368 *Cantharellus* Hymenium veined Veins dichotomous, subparallel, sometimes anastomosing
2369 *Merulius* Hymenium veined Veins flexuose, or forming very irregular pores. Plants sessile, resupinate or effused
2370 *Schizophyllum* Hymenium in lamellæ Lamellæ bifid, lengthwise revolute
2371 *Dædalea* Hymenium sinuous, composed of anastomosing lamellæ or flexuose elongated pores
2372. *Polyporus* Hymenium porous, not separable from the substance of the pileus nor the pores from each other. Pores sometimes lacerating in age Pileus very rarely with a central stipes
§ 1 *Favolus* Pores ample, with four or six angles resembling an honeycomb
§ 2 *Microporus* Pores minute, roundish
§ 3 *Polystucta* Dots superficial only
2373. *Boletus.* Hymenium tubular Tubes separable from the pileus and from each other Pileus always with a central stipes
2374 *Fistulina.* Hymenium tubular Tubes loose, the young ones closed
2375 *Hydnum* Hymenium subulate Subulæ loose
2376. *Sistotrema* Pileus carnose, irregularly stipitate Hymenium composed of dentate, interrupted lamellæ.
2377 *Phlebia* Hymenium rugose, formed of long or confluent papillæ
2378 *Thelephora* Plant with very few exceptions more or less adnate, thin, coriaceous, very rarely infundibuliform. Hymenium covering the outer surface
2. *Phylacteria.* Sporidia four in a row *Resupinate and growing on the earth*
3 *Himantia.* Effuse resupinate, when young byssoid Sporidia few, innate in the hymenium, which is smooth and naked in the middle
4 *Leiostroma* Resupinate, somewhat contiguous, smooth, or with spurious papillæ. Asci none

Observations

on the coasts of Barbary, and a few from North America, are almost universally distinct from the European kinds. They are found growing on the earth, or in decayed wood, or similar substances, never upon rocks. Those which have been described as natives of vaults and places underground, are believed to be mere monstrous formations They are in greatest perfection in warm rainy weather, being chiefly the creations of summer and autumn; a few only appear in the spring, and scarcely any in the winter The duration of the pileate fungi is often only ephemeral; some last from a week to a fortnight; and a few for a longer time The Dædaleæ and Polypori are often called perennial, but it is the opinion of Fries, that their substance decays, and is only covered yearly by a fresh layer of pores The roots of many of those which grow upon trees is perennial; of others merely annual

When crude they are mostly poisonous, with a mucilaginous taste, which is often acrid, but they become less dangerous by cooking The dangerous qualities of some of the kinds is attributable to the larvæ with which they are infested

Division II. *Clavati.*

Receptacle long, simple, or branched, with a tendency to a cylindrical form, not margined Hymenium superior Asci fixed

* *Hymenium occupying the whole surface Asci distinct No distinct stem*

2379 *Clavaria* Plant carnose, cylindrical, simple or branched Hymenium smooth, occupying almost the whole surface, confluent with the stipes

2380 *Calocera.* Plant branched or simple, cylindrical, homogeneous, corneous, gelatinous, viscid. *Growing on wood*

** *Hymenium only occupying the end Asci long. Head separate from stem, simple*

2381 *Geoglossum.* Hymenium short, club-shaped, mostly compressed, stipitate. Stipes elongated, smooth or hairy Plants black or dull green

2382 *Spatularia* Hymenium club-shaped, separate, compressed, running down the stipes on each side, bearing the asci at the upper end

2383 *Mitrula* Hymenium clavate, ovate, closely surrounding at the base the stipes, which is distinct.

*** *Hymenium only occupying the end. Asci obsolete Head separate from stem.*

2384 *Typhula.* Hymenium thin, subcylindrical, persistent, terminating the capillary stipes

**** *Hymenium covering the whole surface, but bearing sporules at the end only, without asci*

2385 *Pistillaria* Simple, contiguous, linear or clavate Sporidia emerging at end.

Class II Uterini v Elvellaceæ.

Hymenium distinct, superior, marginal Receptacle urceolate or reflexed, always inferior

Division I *Mitrati*

Receptacle pileiform, bullate, never closed Hymenium neither margined nor discoid.

2386. *Morchella* Pileus lacunose, confluent with the stipes either at the margin or a little above it Hymenium occupying the whole outer surface

2387 *Helvella* Pileus submembranaceous, irregular, smooth on each surface, deflexed at the sides Hymenium occupying the whole outer surface

2388 *Verpa* Pileus conical-deflexed, equal. Hymenium smooth or rugose

2389 *Leotia* Pileus ovate-conical or orbicular, wholly occupied by the hymenium, the margin free, but closely embracing the stipes.

Division II *Cupulati*

Receptacle cupulate, equal Hymenium discoid, when young somewhat closed, surrounded by the margin of the receptacle

2390 *Peziza* Pileus mostly carnose, sessile or stipitate, more or less cup-shaped at length sometimes plane Hymenium occupying the disk

§ 1 *Aleuria* Fleshy, or fleshy-membranous, prunose or scurfy with flocculent matter, *Usually on earth.*

§ 2 *Lachnea* Waxy, hairy or villous externally *Usually on wood*

§ 3 *Phacidea* Waxy or membranous, rarely gelatinous, smooth, naked *On wood*

§ 4 *Helotium* Plano-convex *On wood*

2391 *Ascobolus* Pileus carnose, cup-shaped or hemispherical Sporuliferous cells in the disk, forming prominent points filled with a fluid intermixed with the eight sporules

Observations

Division II *Clavati* Scarcely any traces of these fungi can be discovered in the writings of the ancients Clusius described a few Fourneifort confounded them with corals and Lycoperdons. Holmskiold and Persoon are the principal modern writers upon this tribe

Almost all the species of which there is any certain knowledge are European The genuine kinds are terrestrial, those which are found upon wood, being transitious to other orders In vaults or caverns they become unusually developed, and the asci, on account of the excessive supply of moisture, expand and become flocculent Most are found in the autumn, the branched kinds are often what are termed meteoric, that is to say, spring up suddenly after heavy falls of rain They seldom last more than fourteen days

In qualities they are mild, some having a bitter taste, but the greatest number are almost entirely destitute of smell, color, or taste Many of the large kinds are used in cookery, and are eaten by various herbivorous animals

Class II *Uterini* The natural form of the receptacle is cupulate, but in the most perfect kinds, the cupula is reflexed, and is called a *mutra*, in the least perfect, which are innate in the matrix, the receptacle is almost wholly obliterated. The resupinate Pileati are distinguished from these by their immarginate form, and by their asci

Division I *Mitrati* A small division, apparently wholly unknown to the ancients The species are almost entirely European, a few are found in North America and Siberia. It is probable, however, from the evidence of Loureiro and others, that some peculiar genera and species exist within the tropics They are generally fond of a humid shady station None are found in subterraneous places If an individual is occasionally produced upon wood, it is upon such as is wholly decayed Many spring up in the autumn and spring; they are rarely meteoric, but some appear in greater abundance in one kind of season than in another. Most of them last for a fortnight, and retain their form when dry

Their qualities are generally mild, nutritive, and juiceless, one is said to be bitter They are little infested by larvæ Several are used as food

Division II *Cupulati* These are included in the Fungoides of the old botanists The species which are separate from their thallus and much developed, are little changed by the places in which they grow, and are therefore the same in the most remote countries, but the eruptive or innate species, which are more affected by the nature of the substance by which they are fed, are liable to greater changes when their matrix is altered For it is a general rule, that the more a fungus is innate in the substance which produces it, the more it is not only imperfect, but affected by its situation, and *vice-versâ* Hence Caoma, which is of a very low order, consists of as many species as the plants upon which it grows, just as a vowel forms as many distinct words as it is combined with distinct consonants

The Clavati and Pileati, which chiefly depend upon the access of light, are in perfection from spring to autumn, the Elvellaceæ from autumn to spring The Cupulati also depend much upon the operation of light, for in caverns or cellars they remain closed and sphæria-like Such is the case with Peziza cerina, which in dark places, undergoes many metamorphoses, and Cenangium under similar circumstances, when some obstacle is offered to the developement of its hymenium, becomes deliquescent. Generally the terrestrial sorts agree in habitude with the preceding divisions, but those which are eruptive are often in perfection for half a year together

Class III. *Tycmellini.* These are nearly akin to the Pileati and Clavati, especially to Thelephora and Calocera; and also to Elvellaceæ, more particularly to Hygromitra, Peziza, Mollisia, Bulgaria, and Ditiola, but they are distinguished without difficulty by the characters assigned to them.

Formerly all the genera were confounded under one, along with various species of Lichens and Algæ. These

2392. *Bulgaria.* Cupula closed at first Asci immersed, with paraphyses, becoming separate and bursting out *Gelatinous*
2393 *Dctola.* Hymenium becoming plaited and deliquescent Cupula open Veil universal *Corky*
2394 *Cenangium.* Hymenium smooth, persistent, rarely deliquescent. Cupula closed, but opening finally *Somewhat coriaceous*
2395 *Stictis.* Hymenium smooth, immersed. Cupula obliterated *Hymenium persistent*
2396. *Cryptomyces* Spreading, quite adnate, emerging, nearly plane, carnose. Hymenium covering the whole surface. Theca erect. Sporidia large, oval

Class III. TREMELLINI

Hymenium confounded with a gelatinous receptacle Sporidia separate Asci none

2397 *Tremella.* Receptacle gelatinous homogeneous, fructifying in all directions, without papillæ. Sporidia nearly emerging
§ 1 *Coryne* Fleshy gelatinous, somewhat clavate
§ 2 *Phyllopta.* Somewhat cartilaginous, expanded, leafy
2398 *Exidia.* Receptacle gelatinous, homogeneous, covered on the upper surface only by a papillose hymenium. Sporidia emitted with elasticity
2399 *Dacrymyces.* Receptacle gelatinous, homogeneous, filled with assurgent flocci, and sporidia placed in layers inside *When young compact, but finally deliquescent*
2400 *Agyrium* Receptacle spherical, smooth, compact, waxy, when humid gelatinous, finally crumbling away in sporidia
2401 *Hymenella* Receptacle flattened, adnate, smooth, like soft leather, very thin, persistent
2402 *Namatelia.* Receptacle gelatinous, surrounding a compact heterogeneous nucleus. Sporidia emerging

Class IV SCLEROTIACEÆ

Hymenium confounded both with the fleshy receptacle and the sporidia Asci none

2403. *Acrospermum.* Elongated, somewhat clavate, with a coat of a similar substance, distinctly fructifying at the end
2404 *Sclerotium* Subglobose, or without regular form within, homogeneous, vesiculose, carnose, or corneous Sporules unknown
2405 *Rhizoctonia.* Deformed, united with a similar persistent coat by means of root-like fibres proceeding from all points of its surface
2406 *Persoia.* Rootless, fleshy, covered entirely by a villous persistent coat
2407 *Acinula* Rootless, smooth, with a distinct farinaceous granular coat
2408 *Erysiphe* Sporangium epiphyllous, very minute, globose, furnished with white radiating subjacent filaments, and containing sporuliferous bodies

TRIBE II GASTEROMYCETES,

Fungus entirely closed, and bearing sporidia in the centre, and so forming an uterus

Class I ANGIOGASTRES.

Uterus finally bursting forth, separate from the receptacle Sporidia lodged in the receptacle

Division I *Phallodea*

Receptacle separate, open on account of the bursting of the uterus Sporidia placed in a mucous layer.

2409 *Phallus.* Stipes issuing from a volva Pileus furnished with large cells filled with a sporuliferous slimy substance

Observations

are by modern writers now referred to their proper stations The genus *Mycoderma* of Persoon, to which are referred those tough skin-like coatings which are found upon vegetable extracts enclosed in bottles, and which is generally placed among Tremellini, is thought by Fries to be not of a vegetable nature

The species at present known are found in Europe, Asia, and North America, but no material difference seems to be caused in them by their native country All the species, with one exception, are epiphytes, the most perfect bursting forth from the bark of trees, the least perfect occurring on decorticated wood, the stems of herbs, &c &c The more the wood is dried, the nearer the species approach to Lichens, the more it is humid to Algæ They are in perfection in the latter part of autumn, winter, and early spring, but scarcely any are found in the summer Some live for a month or more, others appear to be perennial When dry they are not to be recognized, they may nevertheless be preserved, and if moistened, they recover their original appearance It must be observed, that they are in all cases to be examined in a wet and tumid state

Their qualities are refrigerant, and but little known They are destitute of smell and taste, for which reason, and on account of their mucilaginous texture, scarcely any species is eatable Many of the large kinds were formerly used in medicine in cases of ophthalmia, under the name of the "Jew's ear" Vinegar in which they had been steeped was also used as a gargle in tumors of the throat, according to Clusius Tremella fimbriata is said to furnish a dye, and the sporidia of T. mesenterica to dye yellow. Dacrymyces destroys timber

Class IV. *Sclerotiaceæ* The affinity of this class is complex, for the lower we descend, the less differences are to be found between natural bodies Thus Sclerotiaceæ are not only closely connected with the preceding divisions, but have a more or less obvious relation to all the *hymenine* and epiphytous classes of other tribes

Before the time of Tode, a most sagacious observer, who was the first to distinguish the Sclerotia from other fungi, a very few species only were known, which were confounded with Lycoperdon, Sphæria, Tuber, and other genera. He was followed by various other mycologists, and especially by Decandolle, who described thirty-nine species Tode, Persoon, and Link, have been unable to detect any fructification, Decandolle, Ehrenberg, and Fries, declare that the sporidia are scattered through the whole mass of the fungus, and emerge from it like hoar-frost

Most of the known species are epiphytes, either upon living or recently dead plants When growing in cellars and subterraneous places they undergo no alteration, but they do not fructify They flourish most in the winter, late in the autumn, and early in the spring, and are exceedingly common just at the retreat of winter A very few Spermodia only are found in the summer Their odor and smell are either inconspicuous or nauseous. None of the species at least are eatable Those which grow on rotten seeds are exceedingly poisonous Some feed on the roots of living plants, which they destroy, others infest sickly herbs, whence they are a pest to the farmers

Tribe II. *Gasteromycetes* These fungi consist of concrete cells, they have a determinate figure and a tendency to a spherical form, at first they are closed, but finally are furnished with an orifice, or burst in an irregular manner, and emit an internal mass of reproductive matter, which either crumbles to pieces or deliquesces The integument is of various natures, either a volva, a peridium, or perithecium, of a somewhat bladdery texture, and is simple or double, but rarely multiple. They almost all, when young, are fluxile or soft, or have some part or another of a fluid nature, afterwards they become indurated and rigid, and assume their true forms.

Class I *Angiogastres* These are fungi of remarkable forms, and most unusual mode of fructifying, they were well known to Clusius, not to mention the celebrated Truffle of which Theophrastus had knowledge They are found in different climates, but the most perfect only in temperate regions. The latter are also

2410. *Batarrea.* Head hemispherical, crumbling to pieces under the vertex into a little tuft of hairs bearing sporules Stipes smooth. Involucrum triple, flowing with mucilage

Division II. *Tuberaceæ.*

Sporangia membranous, scattered in an hymenium which is often grated with veins, and inclosed in the uterus. Sporidia pulpy at first.

2411. *Tuber* Uterus closed, marbled with veins inside. Sporangia stalked, scattered among the veins. *Subterraneous*

2412. *Rhizopogon* Uterus sessile, bursting with irregularity, with anastomozing veins inside Sporangia sessile *Above ground*

Division III. *Nidulariaceæ.*

Uterus filled with separate sporangia.

2413 *Nidularia.* Common peridium simple. Sporangia lenticular, fleshy, with sporidia in heaps in the middle.

2414 *Myriococcum* Peridium simple, flocculent-furfuraceous, disappearing. Sporangia globose, with sporidia in round heaps

2415 *Polyangium* Peridium simple, membranous Sporangia oblong, filled with a grumous mass.

Division IV. *Carpoboli.*

Uterus protruding a solitary separate sporangium.

2416. *Atractobolus* Peridium cupuliæform, with a lid Sporangium fusiform, with mucous sporidia.

2417 *Thelebolus* Peridium sessile, urceolate-ventricose with an entire orifice. Sporangium papilliæform, with mucous sporidia

2418 *Pilobolus.* Stipes or receptacle pellucid, watery Peridium a roundish vesicle, bursting elastically, placed on the apex of the receptacle

2419 *Sphærobolus* Peridium double, both stellate, the inner membranous by inversion throwing out with elasticity a globose sporangium, bearing in the middle heaped sporidia.

Class II Pyrenomycetes.

Uterus genuine, forming the receptacle Sporidia disposed in asci in regular rows

Division I. *Sphæriacei*

Perithecium closed, perforated by an orifice, filled by an ascigerous somewhat deliquescent nucleus.

2420 *Xylaria* Receptacles stipitate, carnose or suberose Spherules immersed in the receptacle, and containing a gelatinous sporuliferous mass.

2421. *Stromatosphæria* Receptacle sessile, free, or bursting from beneath the bark of dead wood. Spherules immersed.

2422. *Cucurbitaria* Spherules tufted, free, fixed on a receptacle, rarely at first included Receptacle bursting through the bark.

2423. *Cryptosphæria* Receptacle O Spherules scattered or aggregate, lying beneath the epidermis or bark, orifice various more or less exserted

2424 *Heterosphæria* (See Notes)

2425. *Sphærsa* Receptacle O. Spherules sessile on the surface or slightly immersed

2426. *Lophium* Perithecium vertical, compressed, dehiscing by a longitudinal somewhat closed cleft Asci crumbling away

Division II *Cytisporei.*

Closed, perforated by an orifice. Asci none, sporidia surrounded by a little bag or thin cellule, deliquescent

2427 *Sphæronema* Perithecium opening by a pore, enclosing in a very thin bag some mucous sporidia, which burst forth and become indurated in a globose form. *Naked*

2428 *Septaria.* (See Notes)

2429. *Cytispora* Cellular-many-celled, cells deformed, membranous, united at ends. Nucleus gelatinous, filled with sporules, propelled through the common elongated orifice

2430 *Phoma.* Nucleus grumous, enclosed in a tubercle Sporidia emitted by a simple orifice without regularity.

Division III *Phacidiacei*

Perithecium finally bursting, with an open disk Asci erect, fixed

2431 *Dothidea.* Nucleus inclosing immersed cellules. True perithecium obliterated. Asci erect, remaining for a long time.

2432 *Rhytisma* Perithecium deformed, bursting into transverse fragments by means of a flexuose crack

2433. *Phacidium.* Receptacle O Perithecia sessile, depressed, bursting from the centre towards the circumference in several acute segments Sporuliferous cells elongated, fixed.

2434 *Hysterium* Perithecia mostly oblong, black, corneous, bursting by a longitudinal slit Sporuliferous tubes erect. (Crust none)

Division IV. *Xylomacei*

Asci obsolete Sporidia innate.

2435 *Actinothyrium* Perithecium buckler-like, with radiating fibres covering the fusiform sporidia

2436 *Leptostroma.* Perithecium uniform, without an orifice, but entirely separating and exposing a very thin disk

2437 *Xyloma* Black, corneous. Perithecia single, solitary and minute, or united and confluent, irregularly dehiscent.

Observations

terrestrial; the imperfect kinds being inhabitants either of plants or of the dung of animals. Many are meteoric, flourishing most in "Jove tonante, densisque cadentibus imbris," others are ephemeral, some exist for a month and more

The Phalloideæ are generally very fætid, cold, and venomous; one species is accounted in China a vulnerary, and also a food, but of doubtful quality The old physicians had some peculiar notions about their use in arthritis, &c but they are not worth repeating The Tuberaceæ have a peculiar smell, which is often grateful, their taste is irritating, their qualities esculent, nutritive, and aphrodisiacal.

Class II *Pyrenomycetes* The affinity of this class is very complex, for which reason there is much difference of opinion among authors as to its limits In fructification it approaches fungi of a higher degree of developement; on one hand resembling the Angiogastres, from which it is readily distinguished by its separate receptacle, on the other hand, the Cupulati, whose differences depend upon the definition of their perithecium. In point of vegetation it descends, first, to Sclerotiaceæ, which are entirely different, in the absence of an uterus and nucleus, secondly, to Perisporia, which have no distinct perithecium, and no asci; and thirdly, to several genera of Coniomycetes.

2438 *Lasiobotrys* (See Notes)
2439 *Asterina* Black, minute, epiphyllous. Receptacle radiate, filamentous, very adnate, at length tubercled here and there.

Class III TRICHOSPERMI.

Uterus genuine, forming a receptacle. Sporidia intermixed with flocci.

Division I. *Lycoperdinei.*

Uterus of a determinate figure, fleshy when young Flocci copious

2440 *Onygena.* Subglobose with a fibrous stipes Peridium crustaceous, fragile, with interwoven fibres Sporules naked, compactly clustered
2441 *Tulostoma* Globose stipitate Involucrum none. Peridium opening by a bordered pore in the summit. Sporules scattered in it.
2442 *Scleroderma.* Sporangium globose or prolonged into a stipes. Peridium single, coriaceous, mostly warty, bursting at the apex or subdehiscent Sporules collected into little contiguous distinct globules mixed with filaments.
2443 *Lycoperdon* Sporangium globose Peridium single, membranaceous, scaly, with warts or soft spines bursting irregularly at the apex, and containing a mass of sporules and filaments.
2444 *Bovista* Sporangium globose Peridium double, the outer one adnate, cracking, somewhat fugacious, inner one bursting at the apex, and containing a mass of filaments and pedicellated sporules
2445 *Geastrum* Globose sessile. Involucrum coriaceous, stellate Peridium membranous. Sporules on stalks from the first.

Division II. *Trichocisti.*

Uterus regular, when young pulpy Sporidia having numerous flocci scattered among them

2446. *Craterium.* Peridium oblong, stipitate, operculate, containing a cellulose, filamentous, sporuliferous mass
2447 *Stemonitis* Cylindrical or subglobose. Peridium fugacious Filaments forming a reticulated mass, perforated by the stipes to which they are attached Sporules intermixed
2448 *Cribraria* Globose stipitate Peridium crumbling to pieces at the summit in cracks.
2449. *Dictydium* Globose stipitate Peridium crumbling to pieces entirely or for the most part.
2450 *Arcyria* Mostly cylindrical Peridium fugacious, except a small portion at the base Filaments abundant, reticulated, fixed at the base Sporules intermixed
2451 *Leangium* Minute subglobose Peridium single, membranaceous, bursting into subregular, persistent, expanding segments Filaments attached at the base and surrounding a columella
2452, *Trichia* Minute subglobose or irregular Peridium single, membranaceous, bursting Filaments involute attached at the base, and expanding elastically
2453. *Diderma* Minute subglobose Peridium double, the outer one fragile and fugitive Sporules mixed with a few filaments and surrounding a roundish columella
2454 *Physarum* Sporangium minute, mostly stipitate, subglobose Peridium single, membranaceous, bursting and deciduous in distinct portions Sporules mixed with a mass of filaments
2455 *Leucarpus* Minute Peridium single, fragile, bursting, sessile or substipitate, containing a black mass of sporules mixed with a few filaments Columella O

Division III *Fuligmoides*

Uterus somewhat deformed, sessile, when young pulpy Sporidia separated by flocci.

2456 *Lycogala* Sessile globose or subirregular, pulpy when young Peridium single, fragile, variously dehiscent Sporules mixed with a few filaments
2457 *Spumaria* Form irregular, roundish, effused Peridium soft, at length membranaceous, fragile. Sporules contained in the folds of branched, elongated, membranaceous, persistent processes.

Division IV *Luceoides*

Flocci obsolete

2458 *Dichospormum* Flattened hemispherical Peridium membranous, coated with a layer of granules Sporules in globose masses
2459 *Licea* Peridium membranaceous, sessile, fragile, inclosing a pulverulent mass of sporules unmixed with filaments (No subjacent membrane)

Class IV MUCOROIDEI

Peridium formed of flocci loosely woven together, vanishing in the middle Sporidia in heaps

2460 *Mucor.* Peridium membranaceous, globose, stipitate, pellucid, at length opake Pedicel simple or branched, tubular, articulated
2461 *Thamnidium* Stipes branched at base, branches bearing solitary globules at their end Peridium globose
2462 *Ascophora* Peridium membranaceous, stipitate, bursting at length, turned inside out, convex and subpersistent. Pedicel simple or branched, tubular, pellucid, articulated

Class V PERISPORIA

Perisporium thin, somewhat membranous, bursting Sporidia immersed, scarcely distinct.

2463 *Eurotium.* Peridia membranous, subglobose, with an articulated floccose innate receptacle. Sporules naked in masses
2464 *Amphisporium* Subglobose Peridium membranous, thin Sporules naked of two forms.

Observations.

Its extent is very great, ascending from the most simple forms to those which are very compound, but at the same time connected with the former by the most strict natural ties The true place of the genera in the system has been a subject of doubt Many authors have taken them for fungi in the most perfect state Decandolle excludes them from fungi, and, with some analogous Lichens, refers them to a peculiar intermediate family

They are found in every part of the world in which vegetation exists; for every perfect plant and all its decaying parts nourish Pyrenomycetes The chief families of trees in the European Flora upon which they flourish are Coniferæ, Amentaceæ, Rosaceæ, Ericeæ, Rhamnoideæ, Aceriniæ, and Tiliaceæ, and of herbs, Gramineæ, Umbelliferæ, and Liliaceæ Many are peculiar to certain species of trees, and others are common to many species. For example, on the Betula alba may be found about ten peculiar species, and from forty to fifty which are common to it and other trees Their qualities are unknown Many species which are included by Fries under the name of Ectostroma, are probably not vegetables, and are here omitted.

Tribe III HYPHOMYCETES.

Thallus flocculent.

Class I. Cephalotrichi.

Receptacle distinct, covered over with flocci, with sporidia scattered among them.

2465 *Ceratium.* Filaments very short, pellucid, simple, minute, attached to a membranaceous, plicate simple or branched, filiform receptacle.

2466 *Isaria.* Filaments minute and pellucid, attached to an elongated, simple or branched, clavate, carnose receptacle.

Class II. Stilboidei.

Fibres grown together upon the receptacle. Sporidia inclosed in a separate naked head.

2467 *Stilbum* Minute Stipes slender, bearing a little round solid head, which is pellucid and semifluid at first, at length more dense and opake

Class III. Inomycetes.

Fibres genuine, somewhat separated by divisions. Receptacle none. Upon putrescent organic matter.

Division I. *Byssacei.*

Opake fibres, bearing sporæ inside, when fertile jointed, when sterile contiguous. Repel moisture.

2468 *Torula* Thallus composed of branched, rigid, fragile, moniliform, subopake filaments, the articulations minute, globose

2469 *Monilia* Fibres numerous, erect, opaque, distinctly articulated, permanent Articulations ovate.

2470 *Racodium* Thallus composed of branched, decumbent, interwoven, jointless, persistent, subopake filaments, among which are sometimes granules of moniliform filaments

2471 *Dematium.* Fibres decumbent or ascending, rigid, opake, branched, continuous in all directions, permanent.

2472 *Cladosporium* Thallus composed of erect, rigid, subopake, jointed, simple or branched, aggregate filaments Sporules ovate, attached in a series to the filaments, deciduous

2473 *Helicosporium* Fibres erect, rigid, nearly simple, opake Sporules spiral, remotely jointed, some that are fugacious scattered among them.

2474 *Ozonium* Thallus composed of decumbent, branched, entangled filaments: primary ones thick, irregular, ultimate ones fine-jointed

2475 *Rhizomorpha.* Receptacle much branched, elongated, coriaceous or ligneous. Perithecia arising from the branches, mostly clavate, dehiscent at the apex.

Division II *Mucedines*

Flocci pellucid, with dissepiments, bearing sporæ on the outside

2476 *Sepedonium* Thallus formed of entangled filaments, spreading within putrefying fungi Sporidia scattered, globose. (Bright yellow)

2477 *Acremonium* Thallus composed of decumbent, entangled, branched, pellucid filaments. Sporidia globose, solitary, pedicellate

2478 *Sporotrichum* Thallus minute, tufted or expanded Sporidia scattered among the branched, tubular jointed filaments

2479 *Trichothecium* Filaments minute, branched, forming a tufted thallus Sporidia scattered, subglobose, didymous

2480 *Acrosporium* Thallus composed of minute, tufted, pellucid, moniliform, simple filaments, the uppermost joints (sporidia) separating spontaneously

2481 *Botrylis* Thallus composed of decumbent, entangled, branched, pellucid filaments. Sporidia globose, solitary, pedicellate

2482 *Aspergillus* Thallus composed of minute, pellucid, scattered or tufted filaments, apex of the main filament mostly clavate, on which is a head of (often beaded) sporidia

2483 *Stachylidium* Thallus composed of tufted, pellucid filaments sterile ones procumbent, fertile ones erect, whorled, with ramuli near the top, among which the sporidia are collected.

2484 *Penicillium* Thallus composed of tufted, pellucid filaments sterile ones procumbent, fertile ones erect, bearing a terminal pencil-like tuft of erect ramuli, to which the sporidia are attached.

2485 *Trichoderma* Sporidia collected in the centre, free, the filaments woven into a web-like covering, at length opening at the apex and discharging the globose sporidia.

Class IV. Phylleriaceæ

Fibres spurious, contiguous, bearing sporæ inside Receptacle none On living leaves

2486 *Rubigo* Fibres infundibuliform or clavate, twisted, situated in patches upon sickly leaves

2487 *Erineum* Peridia flocciform, subdiaphanous, various, subsimple, aggregato-cæspitose, parasitic on living leaves Sporules sometimes, but rarely evident.

Tribe IV CONIOMYCETES

Sporidia naked, without any heterogeneous receptacle.

Class I. Tuberculariæ.

Sporidia naked, simple, scattered over the receptacle.

2488 *Tubercularia* Sporangium subglobose, sessile, or somewhat stipitate, carnoso-vesiculose (not gelatinous) Sporidia towards the circumference (color mostly red).

2489 *Fusarium.* Minute, subglobose, naked, almost wholly formed of fusiform, free, jointless sporidia.

2490 *Exosporium.* (See Notes.)

Observations.

Tribe III. *Hyphomycetes* Distinguished from other tribes by their flocculent thallus. In no other tribe do flocci occur in so perfect a state of developement, although they undoubtedly exist as subordinate organs in the Uterini and Hymenomycetes.

Class IV. *Phylleriaceæ.* These are perhaps morbid states of the outer integuments of plants. This at least seems obvious in Phyllerium Rubi, Gei, &c. which are nothing but the hairs of the leaves in a clustered and somewhat altered form. This also may be the reason why there are no sporidia

Tribe IV *Coniomycetes.* To this are referred those fungi in which the sporidia are of a more obvious nature than the other parts of the plant, and so constitute the essence of the fungus Hence they are more evolved than in any other class. The receptacle, if present, arises either out of united pedicels, or of united sporidia,

Class II. ENTOPHYTÆ.

Sporidia naked, separate, without a receptacle.

Division I. *Stilbosporei.*

Entophytes growing upon dead plants.

2491 *Fusidium.* Thallus plane, effused. Filaments short, branched. Sporidia fusiform, scattered.
2492. *Polythrincium.* (See Notes.)
2493 *Stilbospora.* Black. Receptacle O? or a pulverulent mass intermixed with naked sporidia, the whole bursting through the bark in the manner of a Stromatosphæria.
2494 *Sporidermium.* (See Notes.)
2495 *Næmospora* Receptacle O Spherules obvious, or somewhat obsolete, discharging sporuliferous pulp through the bark in the form of tendrils.

Division II. *Hypodermia.*

Parasites upon living plants.

2496. *Cylindrosporium* Very minute, parasitic on the surface of living leaves. Sporidia pellucid, cylindrical, truncate, free, not divided.
2497 *Uredo* Epidermis of the leaf forming a pseudo-peridium. Sporidia 1-celled, free, mostly globose.
2498 *Æcidium* Peridium membranaceous, bursting through the epidermis, and dehiscent at the apex, with a dentate or lacerate orifice
2599 *Puccinia.* Epidermis of the leaf forming a pseudo-peridium. Sporidia fixed by a pedicel, one or many-celled.

Observations

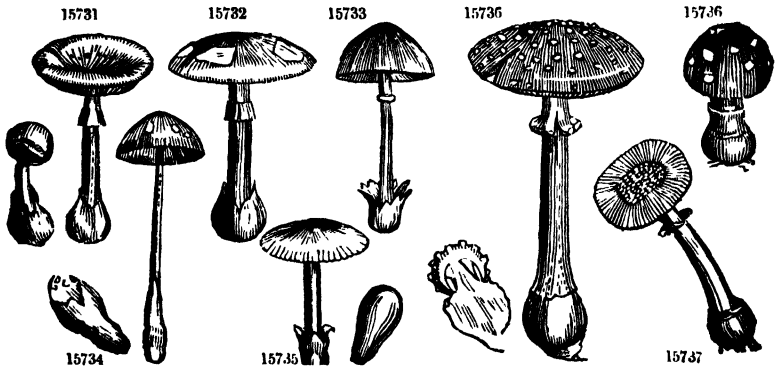
and is homogeneous with the immature sporidia The thallus is never flocculent. The organs of nutrition and reproduction are the same.

Division II. *Hypodermia* The genera of this division are furnished with a calículus, which must not be confounded with the receptacle or thallus, &c of other tribes, because it does not constitute part of the fungus, but is formed out of the epidermis of the plant on which the fungus grows.

HYMENOMYCETES.

Class I Hymenini — Div I. *Pileats.*

2365. AGA'RICUS *L*	Agaric.		*Sp.* 308—715.				
§ 1. Amani'ta *Pers.*							
15731 vérnus *Bull*	vernal	stinking	3-6 spr su.	W	woo ,dam pl.	Bulliard, t 108	
15732 phalloides *Fries*	Phallus-like	scentless	4 jul oct.	W	woody places	Bull t. 2 577	*bulbosus*
β verrucósus Fl Lond	*warted*	scentless	4 jul oct.	Y	woody places	Fl lo t 312 f dex	*verruc*
γ virescens Fl Dan	*greenish*	scentless	4 jul oct.	Pa Gr	woody places	Flora danica, t 1246	
15733 porphýrius *Fries*	porphyry	scentless	4 jul.oct.	Livid	among moss	Michel. gen t. 76 f 3	
15734 vaginátus *Bull.*	sheathed	eatable	6 aut.	W	waste places	Bulliard, t. 512	
α plúmbeus Schæff	*lead-colored*	eatable	6 aut.	Lead	waste places	Schæffer, tt. 85, 86	
γ hyalinus Schæff	*transparent*	eatable	6 sum	Cæs	waste places	Schæffer, t 244	
δ pulvinátus Bolton	*cushioned*	eatable	6 sum	Br	waste places	Bolton, t 49	
ε fúlvus Schæff.	*tawny*	eatable	6 sum.	Tawn	waste places	Bolt t 38 f 2	*trilobatus*
15735 nivális *Grev.*	alpine	delicate	5 aug	W	Scotch mou.	Greville crypt. t. 18	
15736 muscárius *L*	fly-blown	poisonous	4 au oc	Or R	woods	Greville crypt. t. 54	
15737 pantherinus *Dec.*	mottled	warted	3 au oc	Ol	moun woods	Schæff. t 90	*maculatus*
15738 rubéscens *Pers*	flesh-colored	nauseous	3 jul sep	F Col	heaths	Schæff. t 91	*pustulatus*
15739 ásper *Alb & Schw*	rough	stinking	3 jul oct	Rsh	open woods	Bull t 316	*verrucosus*
§ 2. Lepio'ta *Pers*							
15740 procerus *Scop.*	gigantic	esculent	10 au no	W Br	gardens	Sowerby, t 190	
15741 excoriátus *Schæff*	flayed	esculent	7 jul au	Wsh	fields	Schæff' t. 18, 19	
15742 clypeolárius *Bull*	buckler	insipid	2 au oc	Wsh	beech woods	Sowerby, t 14	
β fólinus Pers	*spotted*	insipid	2 au oc	Wsh	hot-houses		
γ meleágris Sowerb.	*variegated*	insipid	2 au oc	Wsh	pine woods	Sowerby, t 171	
15743 cristátus *Bolton*	crested	fœtid	1½ au no	Wsh	grassy places	Greville crypt 3 176	
15744 illinítus *Fries*	besmeared	mucilaginous	3 jul oct	Wsh	meadows	Fl dan. t. 600	



History, Use, Propagation, Culture,

2365 *Agaricus* This, the most extensive genus in the vegetable kingdom, derives its name from *Agaria*, a kingdom of Sarmatia. The species are determined upon various principles Some writers have mixed together species of the most different kinds, as Gleditsch, and a few writers only have really taken pains to ascertain the species If it is divided into many genera it would be necessary to break up Boletus also, which would scarcely be judicious An accurate and simple mode of division is, however, of the utmost moment, and several methods have been proposed, the greater part of which are artificial, and therefore objectionable, such, for example, as that of Villars, from the magnitude of the species, of Linnæus, from the color of the pileus, of Haller, from the color of the lamellæ or gills, of Withering, from the nature of the stipes and the color of the lamellæ taken together, or of Otto, from the position of the lamellæ The divisions of Fries, which are all named as subgenera, depend upon the characters of the veil, the lamellæ, the sporidia, and the pileus. Our notes will follow these in their order of succession

§ 1 *Amanita* This name was applied by Galen to some eatable fungus, and has been restored in modern days by Persoon Most of the species are poisonous They do not perish quickly, and are found for the most part on damp earth in shady woods, never upon wood or the dung of animals They are in perfection about the end of summer

A vaginatus is eaten by the Muscovites, but in the Jena Literary Gazette of 1819, it is declared to be poisonous A. ovoideus is said to be delicious

A muscarius, or reddish mushroon, has a large pileus, varying much in color, white, red, or crimson, convex, sprinkled with downy warts, which are raised, compact, and angular, or thin, flat, and ragged, turning up with age, from two to seven inches over, flesh white, reddish in decay · gills fixed, white, yellowish with age, mostly uniform, but a shorter one sometimes intervening, the shorter gills varying much in length, but rarely less than one-third the length of the long ones the stem solid and cylindrical, but the internal substance shrivelling with age leaves irregular hollows, scaly, bulbous at the base, from three to five inches high, and from three quarters to one and a half inch in diameter, ring broad, permanent, and turned down upon the stem. This plant rises out of the ground inclosed within its brown studded wrapper It is found in pastures. The juice rubbed on the walls and bed-posts destroys bugs, and in the North of Europe, the inhabitants infuse it in

HYMENOMYCETES.

Class I. HYMENINI.—Div. I. *Pileati.*

* *Volva loose: edge of the cap smooth.* UNWHOLESOME.

15731 Cap somewhat scaly: edge smooth, Stipes solid nearly equal, Volva loosely sheathed
15732 Cap somewhat scaly · edge smooth, Stipes hollow at top, Volva connate bulbous

15733 Cap naked: edge smooth, Stipes somewhat fistular equal, Volva booted

** *Volva loose edge of the cap striated* EATABLE.

15734 Cap furrowed at edge, Gills white, Stipes fistular tapering nearly naked, Volva sheathing

15735 Whole plant white, Cap plane or slightly umbonate · the centre often pale ochraceous; margin striato-pectinate, Lamella somewhat distant, Stipes solid naked bulbous

*** *Volva obliterated edge of the cap striated* POISONOUS.

15736 Margin of the cap striated orange-red shining warty rarely naked, Volva vanishing scaly, Stipes bulbous
15737 Cap equally warted edge striated, Stipes nearly solid equal, Volva booted adnate

**** *Volva obliterated edge of the cap smooth* UNWHOLESOME.

15738 Warts of cap mealy unequal · edge smooth, Flesh pink, Stipes solid somewhat scaly and bulbous
15739 Cap somewhat umbonate rough with acute warts edge smooth, Stipes solid somew. taper. squarrulose

* *Veil finally separate, Gills distant* EATABLE

15740 Large, Cap scaly, Lamella distant white, Stipes very long bulbous, Collar free
15741 Skin of cap contiguous, Lamella remote, Stipes equal, Collar free

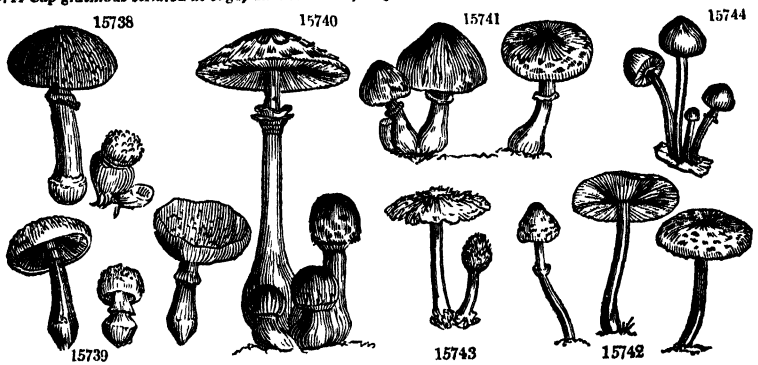
** *Veil fixed, Skin of the cap peeling off, Gills separate.*

15742 Inodorous, Cap with the epidermis broken into ferruginous scales, Lamella white numerous, Stipes subsquamose, Collar mostly fugacious

15743 Highly odor. Surface of cap white with reddish scales, Lamella distinct, Stipes smooth, Collar fugacious

*** *Veil fixed, Gills separate, Skin of the cap adhering*

15744 Cap glutinous striated at edge, Lamella loose, Stipes viscid on account of the veil



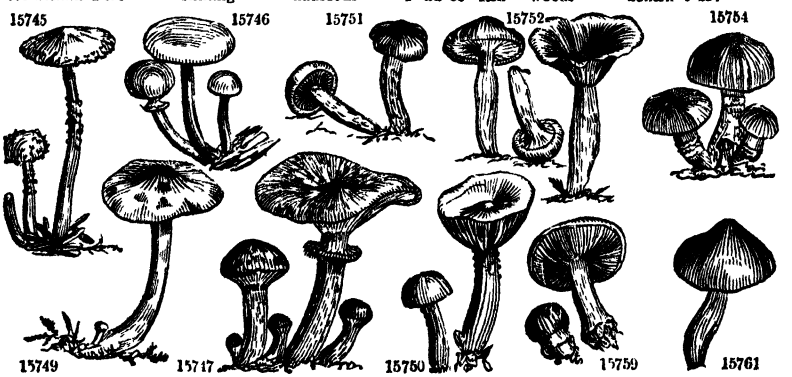
and Miscellaneous Particulars.

milk, and set it in their windows in order to poison the flies who taste it This is *moucho-more* of the Russians, Kamtchadales, and Koriars, who use it for intoxication They sometimes eat it dry, and sometimes immerse it in a liquor made with the epilobium, and when they drink this liquor, they are seized with convulsions in all their limbs, followed with that kind of raving which attends a burning fever They personify this mush-room; and if they are urged by its effects to suicide, or any dreadful crime, they pretend to obey its commands. To fit themselves for premeditated assassination, they retire to the use of the moucho-more A powder of the root, or of that part of the stem which is covered by the earth, is recommended in epileptic cases, and exter-nally applied for dissipating hard globular swellings, and for healing ulcers. The dose is from half a scruple to one, taken thrice a day in water, but a dram administered once a day in vinegar has been thought more efficacious *Murray, App. Med.* vol v. p 560 Dr Withering enumerates ten varieties of this species.

§ 2 *Lepiota* Terrestrial, solitary, persistent, autumnal fungi, none of which are noxious. Named from λεπις, a thin membranous layer or cuticle The A procerus, or tall mushroom, is not uncommon on hedge banks and dry pastures, and is sometimes exposed to sale in Covent Garden market. It may be distinguished from the genuine sort by the sponginess of its flesh, and from others by its fine and large horizontal ring The gills are white, uniform, and fixed to a collar, the pileus is a broad cone, bossed white-brown, and scaly; the stem is scaly, and the ring loose This plant, when preserved in pickle, is very apt to run into the vinous fer-mentation

A xerampelinus is the most splendid of all the agarics. Its gills are fixed, bright golden-yellow, and nearly orange under the edge of the pileus, regularly disposed four in a set, fleshy, brittle, and serrated at the edge with a paler cottony matter. the pileus is a fine lake-red, changing with age to a rich orange and buff, and every intermediate shade of these colors, which render it very beautiful; convex, center bossed, edge turned down, three to four inches in diameter, clothy to the touch; flesh pale-buff. stem solid, nearly cylindrical, but gradually tapering upwards, rich buff, shaded with fine rose-red, three to five inches high, half inch in diameter; flesh pale, buffy, spongy, and elastic. This is common in Italy, and brought to the markets for sale The ancient Romans esteemed it one of the greatest luxuries for the table. It was made the vehicle for poison to Claudius Cæsar by his wife Agrippina, and has therefore been celebrated by Juvenal and Martial.

15745 granulósus *Pers*	granular	muricated	2	jl. dec.	Y	heaths	Greville crypt. fl. 2. 104
A croceus Sowerb							
§ 3 Armilla'ria *Fries*							
15746 múcidus *Schrad*	mucid	glutinous	2	jl dec.	W	old trees	Fl. dan. t. 773. *nitidus*
15747 mélleus *Bolton*	honey-like	esculent	4	au oc	Dl Y	trun of trees	Sowerby, t. 101. *stipitis*
β laricinus Bolton	*Larch*	esculent	4	au oc	Dl Y	trun of trees	Bolton, t. 19
γ elásticus Bolton	*elastic*	esculent	4	au oc.	Dl Y	trun. of trees	Bolton, t. 15
§ 4 Lima'cium *Fries*							
15748 chrysodon *Batsch*	yellow-toothed	noxious	¼	sep oc.	Pa Y	beech woods	Batsch cent 2 f 212
15749 carnósus *Sowerb*	fleshy	noxious	3	sep oc.	Pa Pk	among grass	Sowerby, t. 246
15750 ebúrneus *Bull.*	ivory	shining	4	au no	W	woods	Sowerby, t 71. *nitens*
β nitens With.	*shining*	shining	4	au no	W	woods	Sowerby, t. 121 *cossus*
15751 oliváceo-álbus *Fries*	olive-white	viscid	4	jul oct	Ol	pine woods	Schæff t 312 *limacinus*
15752 hypothéjus *Fries*	slug	clustered	4	oc dec	Ysh	heaths	Sowerby, t. 8 *limacinus*
15753 aromáticus *Sowerb.*	aromatic	glutinous	3	oc.dec.	Pa.Br	woods	Sowerby, t. 144
§ 5 Tricholo'ma *Fries*							
15754 albo-brúnneus *Pers.*	whitish-brown	glutinous	3	au oc.	Br	fir leaves	Schæff t 38 *stratus*
15755 fúlvus *Dec.*	tawny	smells of flour	4	au sep.	Tawn.	thickets	Schæff t. 62. *incertus*
15756 ustális *Fries*	scorched	scentless	3	au oc	R.Br	beech wo &c	
15757 Rússula *Schæff*	rosy	delicious	2	aut.	Pk	woods	Schæff t 58
15758 auréntius *Schæff*	orange	bitter	3	aut	Or	pine woods	Schæff t 37
15759 prasinus *Schæff*	pea-green	tuberous	3	aut	Y G	mossy places	Schæff. t. 218
15760 fucátus *Fries*	painted	mild	2	sep oc.	Lurid	way sides	
15761 luridus *Schæff.*	lurid	gregarious	2	sep oc	Dl R	pine woods	Schæff. t. 69
15762 equéstris *L*	noble	mild	2	sep d	Y Br	way sides	Schæff t 41 *aureus*
15763 rútilans *Schæff*	glittering	splendid	3	au oc.	Y	roots of trees	Sow t 31 *xerampelinus*
15764 vaccínus *Schæff*	cow	scaly	3	oc dec	Ruf	damp places	Schæff t 25
15765 myomyces *Pers*	Mouse-mushr	smells of mice	3	oc no	Livid	plantations	Sowerby, t 76 *terreus*
15766 Columbétta *Bauh.*	white-headed	eatable	1½	au oc.	W	sandy places	Bulliard, t. 428 f. 1
15767 æ'stuans *Fries*	burning	very acrid	3	au sep	Y	among moss	
15768 sejúnctus *Sowerb*	white and yell	bitter	3	sep oc	Pa Y	dry pine wo	Sowerby, t 126
15769 virgátus *Fries*	streaked	bitter	3	sept	Gr	plantations	
15770 decástes *Fries*	sinuous	stipes naked	3	au sep.	Cin	beech woods	
15771 gambósus *Clus*	cracked	smells of flour	2½	my jn	Pale	chalk mead	
15772 personátus *Fries*	violet	variable	3	sep no.	Pu	woods	Sowerb t. 209. *violaceus*
15773 núdus *Bull.*	naked	wavy	2	sep no	Vi	gardens	Bulliard, t 439
15774 álbus *Schæff*	white	not spotted	3	sep no	W	woods	Schæff t 256
15775 spléndens *With*	metallic	juicy	3	july	Cop	alder stump	
§ 6. Rus'sula *Pers.*							
15776 alutáceus *Pers.*	tanned	eatable	2	au sep	R	shady woods	Bull t. 509
β xanthópus Fries	*yellow-stalked*	eatable	2	au sep	R	shady woods	
A aurátus Wither							
15777 lúteus *Huds.*	yellow	brittle	1½	au sep	Y	beech woods	
15778 nítidus *Pers*	shining	nauseous	1	au oc	Rsh	woods	Schæff t 254



History, Use, Propagation, Culture,

Schæffer and Clusius have recited several curious circumstances respecting it Dr Withering apprehends that these authors have mistaken the species, and that their account should be transferred to the A. deliciosus. The A. xerampelinus is eatable, but its taste is not at all agreeable. It is the A. cæsareus of Schæffer, and first found by Dr Withering's daughter on the red rock plantations at Edgbaston, July 6th, 1791, and afterwards in September 1793, and in July 1792, among moss in the fir plantations at Tettenhall, Staffordshire. Dr. W. enumerates five varieties.

§ 3. *Armillaria.* From *armilla*, a necklace Autumnal species, of permanent duration, firm, and esculent.

***** Veil fixed, Cap covered, Gills somewhat united*

15745 Cap with furfuraceous scales reddish-yellow, Lamella fixed white, Stipes subsolid covered below the veil with squarrose scales

** Cæspitose, Cap smooth.*

15746 Somew cæspit. Cap thin glutin Lamellæ annex dist. Stipes bulb. Collar reflex and then erect furrowed

*** Cæspitose, Cap not smooth*

15747 Cap dull-yell. rough with black. hairy scales, Lamellæ adnate-decurr dist. Stipes fibrous, Coll. tum. spread.

** Cap smooth, floccose at edge.* UNWHOLESOME.

15748 Cap smooth whitish, Margin and top of stipes yellow-flocculent with crisp lamellæ
15749 Cap smooth whitish-pink edge involute downy, Lamellæ straight, Stipes thickened upwards scaly

*** Cap smooth, Stalk scaly* EATABLE

15750 White, Cap smooth umbon. Lamellæ broad dist. very decur Stipes white scurfy solid becom holl in age

**** Cap finally depressed, Stalk spotted*

15751 Cap umbonate smooth olive-brown, Lamellæ connected white, Stipes solid mottled with brown [yellow
15752 Cap obt smooth yellow covered by an olive-colored gluten, Lamellæ distinct and stipes (which is spotted)
15753 Cap smooth cinnamon-col. Lamellæ somewhat decurrent and hollow, Stipes spotted rufous

** Cap truly fleshy, somewhat blunt, humid, viscid, with an involute downy edge, Gills white or yellow, emarginate, Stalk clothed, separate from the cap*

15754 Cap smooth viscid umber-col Lamellæ annexed white, Stipes solid smooth scaly at end
15755 Cap viscid virgate rufous brown discoidal, Lamellæ annexed yellow, Stipes hollow equal fibrous
15756 Cap smooth viscid red-brown, Lamellæ emarginate white, Stipes equal solid fibrous
15757 Cap somew. depress visc granul. and solid stipes eq scaly at end rose-color Lam somew separate white
15758 Cap somewhat scaly viscid yellow-orange, Lamellæ adnate white, Stipes solid covered with orange scales
15759 Cap scaly viscid yellow-green, Lamellæ separate yellow, Stipes solid thick tuberous
15760 Cap flexuose virgate viscid lurid, Lamellæ emargin broad and solid, Stipes somew scaly yellowish-white
15761 Cap flexuose smooth greenish ash-colored, Lamellæ emarginate narrow yellowish, Stipes solid scaly pallid

*** Cap always dry, scaly, with the young edge involute, downy, or villous, Gills separate or emarginate, Stalk scaly, separate from cap*

15762 Cap comp flexuose somew scaly yellow-brown, Lamellæ emarg comp and solid, Stipes scaly sulphure
15763 Cap obt convex deep-yellow more or less covered with crimson red squamulose fibres, Lamellæ rounded numerous yellow, Stipes solid or partly hollow streaked with red
15764 Cap umbon rufous, Skin torn with hairy scales downy at edge, Lamellæ affixed whit. Stipes holl fibrous
15765 Firm, Cap dry smooth a little scaly brownish-livid, Lamellæ emarg somew, dist whit Stipes solid uneq.
15766 White, Cap irregular becoming scaly and cracked, Lamellæ emargin compact, Stipes solid short smooth

**** Cap always dry, smooth, but often fibrillose, with a naked edge, Gills separate or emarginate, Stalk solid, smooth, striated, separate from the cap*

15767 Cap umbonate dry yellow-brown fibrous towards edge, Lamellæ emarg broad and solid striat Stipes yell
15768 Cap somew umbon dry yellow streaked with black hairs, Lamellæ emargin broad and solid, Stipes white
15769 Cap umbonate dry grey streaked with black, Lamellæ emargin broad hoary, Stipes solid striated whitish

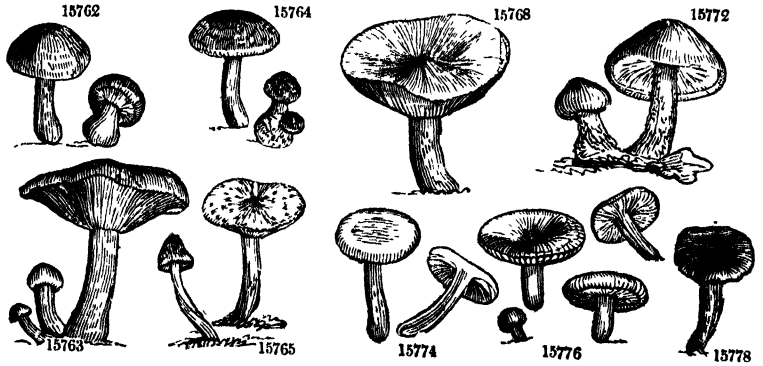
***** Cap always dry, smooth, with a thin, floccose, frosted, involute edge, Flesh soft, Gills rounded, clustered, obliterated in front, Stalk united with cap*

15770 Somew cæspitose, Pileus smooth unequal cinereous, Lamellæ round white, Stipes solid powdery at end
15771 Somew cæspitose, Pileus compact smooth mouse-colored, Lamellæ emarg and solid downy, Stipes white
15772 Cap somewhat compact smooth with a villous frosted margin, Lamellæ rounded loose and solid somew bulbous villous, Stem rather violet
15773 Gregarious, Cap thin smooth lilac-brown, Lamellæ rounded pale violet, Stipes solid equal naked
15774 White not spotted, Cap equal smooth, Lamellæ rounded dense, Stipes solid elastic
15775 Cap conical shining, Lamellæ loose white, Stipes solid white

** Gills all equal, Sporidia yellow*

15776 Cap somewhat compact: the margin finally furrowed, Lamellæ broad equal tanned
β Stipes yellow

15777 Middle-sized, Margin of cap smooth, Lamellæ narrow compact equal: the color of yolk of egg
15778 Cap thin with a sulcate margin, Lamellæ broad subdistant equal yellow



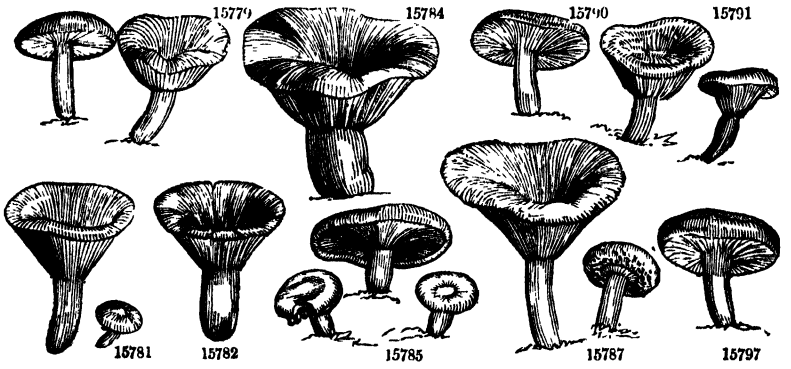
and Miscellaneous Particulars

They differ much in habit among each other. The annulus is either *superior*, that is reflexed from the top of the stipes; or *inferior*, that is contiguous to the middle; or even *proper*, being inserted above the middle

§ 4. *Limacium.* So called from *A. limacinus*, a name which has been indiscriminately applied to almost all the species of this subgenus. They are fungi of a middle size, solitary, terrestrial, autumnal, and permanent.

§ 5. *Tricholoma.* From θριξ, hair, and λωμα, a margin. The species are large, robust, and permanent, solitary or gregarious, and terrestrial. Many are eatable; some have an acrid bitter flavor. A Russula is said to be of excellent quality.

15779 **emético**us *Schaff.*	emetic	acrid	3	sum.	Rsh	woods	Sowerby, t. 201 *integer.*
β Georgii L.	*St. George's*	acrid	3	sum.	Y	woods	Bulliard, t. 509. f. K.
15780 depállens *Pers*	pallid	nauseous	1½	jul.sep.	R.Br	heaths	
15781 rúber *Lam.*	red	very bitter	2	jul.sep.	R	woods	Bulli t 42 *san uineus*
15782 fœ'tens *Fries*	stinking	rigid	2	au sep	Y	woods	Bulliard,t.292 *piperatus*
15783 furcátus *Fries*	forked	bitterish	2	au sep	G	woods	Bulliard, t 26 *bifidus*
15784 adústus *Pers*	scorched	very compact	2	jul oct.	Ol	woods	Bulliard,t 212 *nigricans*
β elephántinus Bolt.	*elephantine*	very compact	3	jul oct.	Y Br	woods	Sowerby, t. 36
§ 7 Galarhæ'us *Fries*							
15785 controvérsus *Pers.*	controverted	meteoric	2	sep oc.	Var.	beech woods	Bulliard, t 538. *acrus*
15786 scrobiculátus *Scop*	pitted	gigantic	4	au. oc	Y	damp woods	Schæff t. 227
15787 torminósus *Schæff*	bearded	dangerous	2	jn oc.	Pk	way sides	Sowerby, t. 103
15788 necátor *Bull*	destructive	poisonous	1	au oc.	Ol Br	woods	Bulliard, t. 14
15789 cilicioídes *Fries*	downy	very downy	3	sept.	Dl Pk	pine woods	
15790 lúridus *Pers.*	lurid	flattened	1½	sep oc	Lurid	heaths	Sowerb t 203. *zonarius*
15791 ácris *Bolton*	hot	very acrid	2	au no.	Ciner.	groves	Bolton, t. 60
15792 úvidus *Fries*	moist	brittle	1½	au oc	Li Pk	damp groves	
15793 viétus *Gleditsch*	variable	very acrid	2	au no.	Livid	woods	
15794 hýsgynus *Fries*	firm	variable	2½	au oc.	Pk	grassy places	
15795 blénnius *Fries*	verdigrease	very acrid	1½	jul oc	Gsh	beech woods	
15796 pállidus *Pers.*	pallid	gregarious	1½	au oc	Pa.Y	beech woods	
15797 deliciósus *L.*	delicious	eatable	1½	jul no	Or	pine woods	Sowerby, t. 202
15798 aurantiacus *Pers.*	orange	acrid	3	au oc.	Or	woods	Batarra, t. 16 f.
15799 mitissimus *Fries*	mild	sweet	3	au no	Or	woods	
15800 quiétus *Fries*	serous	sweet	3	aut	Pk	oak woods	Fl.dan. t 1069 *rubescens*
A serósus Wither							
15801 subdúlcis *Pers*	sweetish	nauseous	3	sum	Brsh	woods	Sower t. 204 *lactiflorus*
15802 thejogálus *Bull.*	yellow-milked	poisonous	2½	sep oc	Fulv	shady woods	Bulliard, t. 567 f A
15803 Tithymalinus *Scop*	testaceous	very milky	3	sep oc	Pa Y	shady woods	Bats cont.f 60 *ichoratus*
15804 rútus *Scopoli*	rufous	scentless	2	jul oc	Br	pine woods	
A rubéscens With.							
15805 hélvus *Fries*	intermediate	acrid	2½	jul no	R Oc	damp places	
15806 glycyósmus *Fries*	sweet-tasted	esculent	3	jul oc	Lurid	thickets	
15807 plúmbeus *Bull*	lead-colored	insipid	4	au sep	Lead	damp places	Sowerby, t. 245 *Listeri*
15808 pyrogálus *Bull*	red-milked	very acrid	1½	au oc	Livid	groves	Bulliard, t. 529 f 1
15809 flexuósus *Pers*	flexuose	compact	1	jul oc	Br	grassy places	Bul t 559 f 1. A *azonites*
15810 piperátus *Scop*	peppery	eatable	2	sep oc	W	woods	Bolton, t 21
15811 velléreus *Fries*	Lister's	gregarious	2	au. no	W	thickets	Sowerby, t. 104 *Listeri*
15812 dulcis *Hudson*	sweet	gregarious	2	au no	W	thickets	
15813 deprésSus *Wither*	depressed	variable	2½	au oc.	Pk	grassy places	
§ 8 Clito'cybe *Fries*							
15814 gigantéus *Leysser*	gigantic	very broad	6	sept	Wsh	thickets	Sowerby, t. 244



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§ 6. *Russula* So named from the *russet* color of the original species The species are all large, or of middle size, rigid, persistent, solitary, terrestrial, chiefly appearing in the autumn.

§ 7. *Galarhæus.* From γαλα, milk, and ῥεω, to flow, many of the species being lactescent; some are juiceless. These are fungi of the summer and autumn, possessing an aromatic smell and acrid flavor. They all grow upon the ground A. torminosus, in times of scarcity, is eaten by the Russians, mixed with salt, oil, and vinegar. *Buxb* A controversus is stated by Persoon to be eatable, but Fries thinks it must be in mistake. A. deliciosus has gills decurrent, flame-colored, narrow, regularly branched; pileus rich, red, brown, flesh nearly flat, but somewhat hollowed at the centre, and the edge turned in from one and a half to three inches over; orange-color, stem orange, solid, tapering downwards, from one to two inches high, and a quarter to three-eighths high: hollow with age. The juice is rich yellow, which soon turns green. It is found in the fir plantations of Scotland, and in those of the barren hills at Barr, in Staffordshire. Dr. Smith also found it at Hillingdon, Middlesex, under some fir trees, it also grows near Guildford. It is much esteemed in Italy, and exposed in the markets, and supposed to have been the A caesareus mentioned by some authors.

15779 Cap compact somew. depressed in centre with marg. at length sulcate, Lamellæ broad subeq. very white

** *Gills nearly equal, Sporidia white.*

15780 Cap deformed opaque pallid; margin finally striated, Lamellæ distinct whitish, Stipes finally cinereous

*** *Gills forked, and many of them halved.*

15781 Very hot, Cap very red · margin smooth, Lamellæ forked white
15782 Acrid stinking, Cap yellow margin warted furrowed, Lamellæ connected and hollow, Stipes white
15783 Scentless, Cap greenish · margin smooth, Lamellæ forked white [thick Stipes short solid very robust
15784 Large, Pileus depres ash color olive at length dark and as if burnt: marg smth Lam. uneq. dist. white
β Cap brownish-yellow, Lamellæ yellowish-white, Stipes solid white

* *Edge of the cap rolled inwards, downy* HOT POISONOUS.

15785 White, Pileus villous blood-red variegated downy at edge, Stipes solid
15786 Cap yellow without zones margin bearded, Milk yellowish, Stipes hollow spotted
15787 Cap glabr pale with a yellowish brownish or greyish tinge marg toment Stipes most holl in part smth.
15788 Cap smooth zoned olive-brown margin villous, Stipes solid
15789 Cap downy dull flesh-colored, Lamellæ yellowish, Stipes rather hollow

** *Cap smooth, viscid, with a naked edge* HOT EATABLE

15790 Cap viscid zoned lurid, Lamellæ white, Milk reddish, Stipes hollow
15791 Cap viscid not zoned cinereous-sooty, Lamellæ yellow, Milk turning red, Stipes solid
15792 Cap viscid not zoned fleshy livid or brownish, Lamellæ white, Milk whitish-lilac, Stipes hollow
15793 Cap thin smooth somew viscid not zoned livid pale, Lamellæ and milk whit Stipes somew hollow fragile
15794 Cap viscid not zoned smooth flesh-colored, Lamellæ and milk white, Stipes hollow spotted
15795 Cap viscid somewhat dripping not zoned greenish, Lamellæ and milk white
15796 Cap viscid smooth not zoned and stipes (which is short) hollow and firm pallid, Lamellæ and milk white
15797 Cap glutinous obscurely zoned dingy-orange or reddish very pale when dried, Lamellæ and juice orange, Stipes becoming hollow glabrous
15798 Cap somew viscid not zoned orango-colored, Lamellæ compact yellowish, Milk white, Stipes long smooth

*** *Cap dry, naked at edge, Gills close, when young white, afterwards yellow* EATABLE *but* ACRID.

15799 Sweet, Cap papillose smooth dry orange-colored, Lamellæ paler, Milk white, Stipes long hollow
15800 Sweet, Cap obtuse smooth dry opaque, Lamellæ testaceous rufous, Stipes solid firm brownish

15801 Cap glabrous polished reddish, Lamellæ flesh-colored at length ferruginous, Juice white not changing color, Stipes firm smooth becoming hollow
15802 Somewhat acid, Cap dry smooth somewhat zoned rufous brown, Milk yellow, Stipes solid
15803 Acrid, Cap dry smooth obsoletely zoned pale-yellow, Lamellæ pale flesh-color, Stipes solid
15804 Very acrid, Cap dry umbonate polished reddish-brown, Lamellæ rufous, Milk white, Stipes solid

15805 Acrid, Cap bluntish scaly dry red-ochre-colored, Lamellæ ochraceous, Stipes nearly solid
15806 Cap thin scaly dry opaque somewhat lurid
15807 Cap large dry zonless dark fuscous or deep dingy-grey, Lamellæ yellowish rather numerous, Juice white

**** *Cap dry, naked at edge, Gills not altering, Substance compact, tough* VERY ACRID

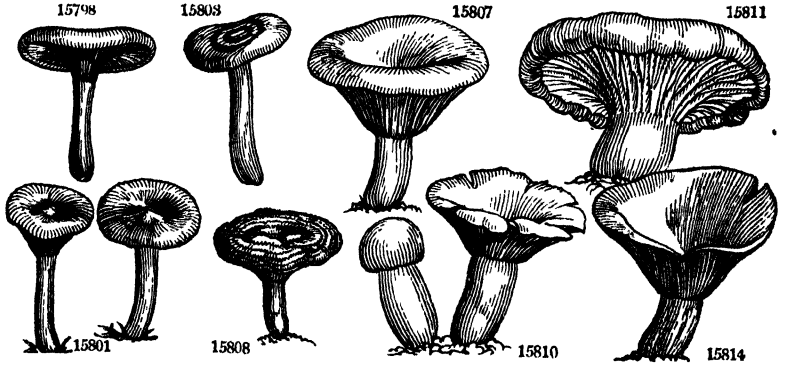
15808 Cap dry smooth somewhat zoned livid, Lamellæ distant yellow, Stipes hollow cinereous
15809 Cap repand dry smooth, Lamellæ distant pallid, Stipes short pallid [white very acrid
15810 Cap depress becom infundibulif glab whit Lamel very narrow crowded, Stipes solid white thick, Juice
15811 White, Cap umbilicate downy rigid, Lamellæ narrow distant, Milk white, Stipes solid thick
15812 All white sweet, Cap convex, Stipes long
15813 Seems to be a green variety of A hysgynus, with a solid stipes

A *Gills equally narrowed backward, acute*

1 *Cap dry, smooth, Gills close, decurrent or acutely adnate.*

* *Cap more or less fleshy, when young convex-deflexed, when older depressed, Gills truly decurrent*

15814 Very large whitish or very pale brown, Cap becoming infundibuliform, Lamellæ numerous decurrent becoming reddish, Stipes solid very thick



and Miscellaneous Particulars.

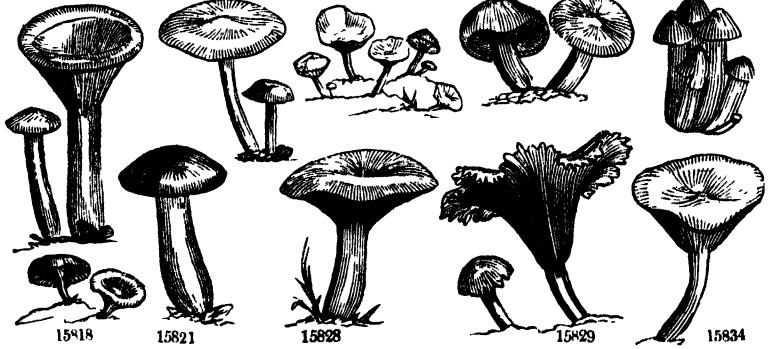
Dr. Withering enumerates three varieties, one of which affords, from every part of it when wounded, a copious discharge of yellow acrid juice. They are gathered in woods and dry pastures in September and October

Læsel asserts in his Flora Prussica, p 82., that "the juice of A. piperatus, mixed with the syrup of mallows, is a certain cure for calculus, and a powerful diuretic." Almost all the venemous fungi, and especially those of the present group, are said to be the favorite food of the goat, during the rutting season. It is sometimes monstrous and irregular Withering mentions their attaining the diameter of ten inches. The stipes is not unfrequently thicker than it is long It has been used in medicine, and thought useful in dissolving calculi, a property we may safely venture to deny it.

§ 8 *Clitocybe* From κλίτος, inclined, and κυβη, a head. Most of the species are harmless, and of the larger size A nebularis is eatable, so also is A fusipes A giganteus is one of the species which form those circles known by the name of *Fairy-rings*, the origin of which is still as obscure as ever

A areades has loose gills, with the part attached to the pileus jutting up very close to the stem, so as to give

15815 gil'vus *Pers*	cinnamon-col.	gigantic	3	au no	Dl.Y	among moss.	Grev crypt. 1. 41
A pulcolarius Sowerb							
15816 flaccidus *Sowerb.*	flaccid	pretty	3	sep oc.	W	woods	Bolton, t 185
15817 gibbus *Pers*	gibbous	fragrant	2	oct.	Br	plains	Bulliard, t. 573. 1. 2
15818 turfosus *Sowerb*	turfy	scentless	1	nov	Br	turf	Sowerby, t. 210
15819 diatretus *Fries*	perforated	tough	2	sep.no.	Pk	woods	
15820 nebularis *Batsch*	clouded	gregarious	3	sep oc.	Ciner	heaths	Bolton, t. 40. *mollis*
A cæsius With.							
15821 turgidus *Grev.*	turgid	solitary	2	aut.	Sooty	dry woods	Grev crypt. t. 9
15822 viridis *Withe*	green	slender	2½	aug	G	woods	Bolton, t 12 *cæruleus*
15823 odorus *Bull*	anise-scented	eatable	3	au no.	Ciner.	woods	Grev crypt. 1 28
15824 candicans *Pers*	hoary	shaggy	1½	au no.	W	dead leaves	Bolton, t 17
15825 dealbatus *Fries*	whitened	gregarious	¾	au no.	Wsh	meadows	Sowerby, t 123 γ
A agrestis Wither	*A variety*						
15826 grammopodius *Dec*	stinking	shaggy	3	oct	W	grassy grov	Sower t 281 *graveolens*
15827 millus *Sowerb*	Dog's-collar	depressed	3	jan.	Brsh	woods	Sowerby, t 184
15828 mornatus *Sowerb*	neat	pretty	2	aut.	Lav G	upon earth	Sowerby, t. 342
15829 fimbriatus *Bolton*	fringed	gregarious	1	au sep.	Wsh	rotten wood	Bolton, t 61
15830 lignatilis *Fries*	wood	irregular	2	au dec	Wsh	rotten wood	
15831 adhæsivus *Withe*	sticking	irregular	3	sept.	W Br	plantations	
15832 œdematopus *Schæff*	fusiform	tufted	2	sp aut.	Ruf.	woods	Schæff t. 259
β *corallodes* Dicks	*coralloid*	tufted	2	sp aut.	Ruf	hollow t. ees	Battarra, t. IX f F
15833 obesus *Withe.*	squat	tufted	1½	aug	W Br	pastures	
15834 opacus *Withe*	opaque	cracking	2	ap sep	W	among grass	Sowerby, t. 142
15835 pistillaris *Withe*	pistillary	crooked	¾	aug	Wsh	among grass	
15836 camarophyllus *Fries*	arched	brittle	4	au oc	Sooty	damp woods	Sowerby, t. 172 *elixus*
15837 pratensis *Pers*	meadow	eatable	1½	au no	Ysh	way sides	Grev. crypt. 2 91
A fulvus Wither							
β *clavæformis* With.	*clavate*	eatable	1½	au no	W	way sides	Schæff t 307
γ *cruceus* With	*heathy*	eatable	1½	sep no	W	heaths	Bull t 467 *cruentatus*
15838 virgineus *Wulfen*	virgin-white	eatable	2	sep no	W	heaths	Grev crypt. 3 166
15839 psittacinus *Schæff*	parrot-colored	pretty	2	oc no	Gsh Y	meadows	Grev crypt. 2 74
15840 ceraceus *Sowerb*	waxen	gregarious	2½	au no	Y	pastures	Sowerby, t 20
15841 conicus *Schaff*	conical	watery	4	my oc	Ysh	meadows	Sow t 381 *aurantiacus*
15842 puniceus *Fries*	crimson	beautiful	3	au oc	Or R	among grass	Bull t. 202 *coccineus*
15843 coccineus *Pers*	scarlet	beautiful	2	au oc	Sc	meadows	Sowerby, t 381
15844 baccatus *Scop*	varnished	handsome	2	jn nov	Ros R	on earth	Sower t 208 *farinaceus*
β *amethystinus* Huds	*amethystine*	handsome	2	jn nov	Viol.	shady places	Sowerby, t 187
15845 ovinus *Bull*	sheep	mild	2	au oc	Brsh	meadows	Bulliard, t 580
15846 sulphureus *Bull.*	sulphureous	fœtid	4	sep oc	Test	trees&woods	Sowerby, t 44
15847 tortilis *Bolton*	twisted	distorted	¼	aut	Br	gard mould	Bolton, t 41
15848 ovalis *With.*	oval	satiny	2½	sep oc.	R.Br	fir woods	



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them almost the appearance of being fixed, watery, brownish-white, two or four in a set, the small ones very minute, and the large ones sometimes splitting at the outer end; not numerous, rather broad for the size of the plant, frequently connected to the pileus by ligaments; pileus pale, buffy-brown, convex, irregular, with a sudden depression of the border at some distance from the centre, often giving the appearance of a large rounded boss in the middle, central color generally deeper; from one to one and three-quarters inch over, and the edge turning up with age: stem solid, white, changing to watery-brown, cylindrical, but thicker and flattened just under the pileus, very tough, mostly crooked, twisted when dry, rarely central, one and half inch high, and thick as a crow-quill This is the twenty-seventh fungus of Ray's Synopsis, ed. 3 p. 6.; A pratensis of Hudson, and coriaceus of Lightfoot There are two varieties; one with cream-colored gills, buff pileus, and mealy stem; and another with yellow-brown, more fleshy, and more regularly convex pileus, found in groves. Mr. Woodward says, that this species has a much higher flavor than the common mushroom, but he suggests,

15815 Large, Cap convex umbonate at length infundibuliform smooth firm yellowish-white, Lamellæ numerous decurrent whitish, Stipes straight solid subradicating
15816 Cap thin funnel-shaped obt smooth flaccid, Lamellæ decurr whit Stipes solid thickened at base villous
15817 Cap umbonate smooth becoming funnel-shaped, Lamel decurr white, Stipes solid elastic taper. upwards
15818 Cap depressed broad zoned brown irregular, Gills decurrent pallid, Stipes solid
15819 Cap flatt somew. umbilic smth. a lit flesh-color · when dry whit Lam decurr. and solid eq Stipes white

** *Cap closely fleshy, convex, opening out flat, Gills truly decurrent, Stalk strong* EATABLE
15820 Cap compact smooth cinereous, Lamellæ slightly decurrent compact whitish, Stipes solid tapering upw

15821 Cap plano-convex very smooth greyish-brown, Lamellæ narrow numerous pale, Stipes hollow stout

*** *Cap truly but not firmly fleshy, flattish or slightly depressed, Gills adnate, not properly decurrent, Stalk slender*
15822 Cap smooth green, Lamellæ adnate narrow, and stipes (which is solid and smooth) white
15823 Fragrant smooth dull bluish-green umbonate convex becoming plane, Lamellæ numer adnato-decurrent
15824 Shining-white, Cap smooth convex then umbonate, Lamel adnate then decurr Stipes fistulous smooth
15825 Scentless white, Pileus unequal thin smooth, Lamellæ adnate numerous, Stipes solid equal glabrous

15826 Cap obsoletely umbonate smooth, Lamellæ adnate close white, Stipes solid furrowed smooth
15827 Cap somew umbon smooth brown Lamel affixed with hind end recurv Stipes solid equal strigose
15828 Cap obtuse smooth somewhat repand greenish-livid, Lamellæ adnate, Stipes solid smooth [short
15829 Dirty-white, Cap becom funnel-form smth marg sinuat and lob Lam adnate very tender, Stipes solid

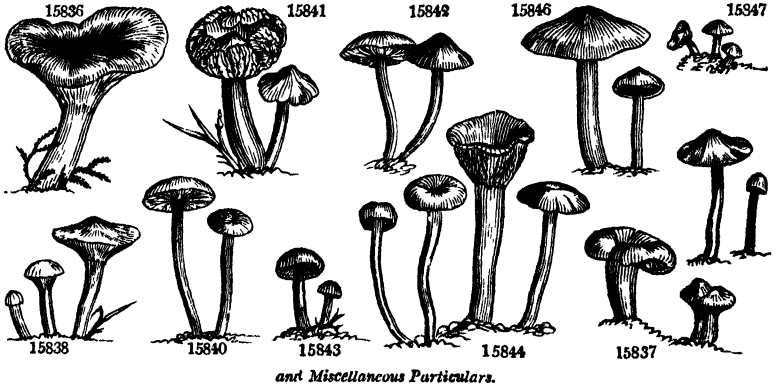
**** *Tufted, variable, some growing on wood, some on earth*
15830 Cap irregular rather out of centre vill whit Lamel adn compact white, Stipes solid flexu vill. at base
15831 Cap flat discoid viscid, Lamellæ decurrent and solid tapering, Stipes white
15832 Cap conical powdery rufous, Lamellæ decurrent and solid ventricose powdery, Stipes rufous

15833 Cap whit-brown, Stipes solid obconic scarcely broader at top than bottom, Lamel decurr. branch white
15834 Cap dead white nearly flat, Lamellæ white numerous, Stipes white with brown pith
15835 Whitish, Cap convex, Lamellæ decurrent, Stipes solid subconical

2 *Cap somewhat compact dry, Gills very distant, arcuate, decurrent*
15836 Cap somewhat compact streaked sooty, Lamellæ decurrent white-glaucous, Stipes long stout fibrous
15837 Firm, Cap compact convex becoming partially expanded smooth brownish-buff with a pink tinge, Lamellæ decurrent thick, Stipes short solid attenuated below
β All white
γ Cap thinner with a striated margin
15838 Viscid, Cap campanul expand when humid striated, Lamel adnate somew distant, Stipes equal smooth

3 *Cap thin, viscid, wet, Gills variable, Stalk hollow* TERRESTRIAL.
15839 Green chang to yell Pileus campanulate spreading, Lamellæ adnate rather distant, Stipes equal smooth
15840 Cap nearly plane slimy substriate yellow, Lamellæ adnate decurrent distant, Stipes rather unequal gradually attenuated towards the base
15841 Cap conical glutin mostly yell or crim Lamel crowd ventric attenuat and free, Stipes substriate splitt
15842 Cap campanul obt lob orange-red, Lamel affixed ascend yellow, Stipes thick ventricose white at base
15843 Cap conv expand visc becom depres Lam adn versicolor connect by decurr. tooth, Stipes compr scarlet

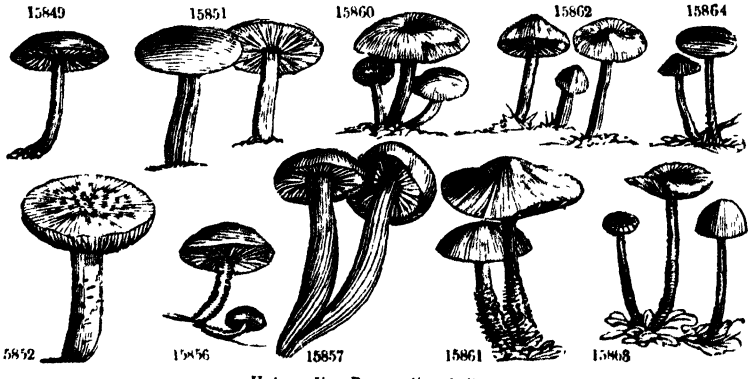
B *Gills unequal at the back, that is, toothed, or arcuate, decurrent, sinuate, emarginate, &c*
4 *Cap dry, minutely scaly, Gills generally arcuate, decurrent, rarely adnate* FIRM
15844 Gregarious, Cap scarcely fleshy tough farinaceous with minute scales pale or deep flesh-color disk depressed in age, Lamellæ distant, Stipes long elastic
β Cap convex becoming depressed somewhat squamulose purple, Lamellæ distant thick violet-purple, Stipes purple, hollow when old
15845 Cap fleshy plano-convex somew scaly brown Lamel arcuate affix connect whit Stipes solid short firm
15846 Cap fleshy somewhat umbonate slightly silky testaceous, Lamellæ arcuate adnate somewhat distant and solid equal, Stem sulphur-colored
15847 Lamellæ brown changing to purplish, Cap red-brown convex turning up with age, Stipes brownish
15848 Lamellæ brownish-white, Cap cinnamon bossed, Stipes brownish-white cylindrical



and Miscellaneous Particulars.

that from its leathery nature it is indigestible, except in the form of powder, in which it is admirable. Dr Withering, however, observes, that he has seen the pileus and gills of this agaric very brittle and tender when fully saturated with moisture in rainy seasons, and in that state it is sufficiently digestive Professor Martyn informs us that he has eaten these mushrooms for forty years without injury, and without perceiving that toughness, like leather, of which others have complained, except in very dry weather, or when they are in too advanced a state They should be gathered young, and early in a morning, and properly dressed They are found in hedge banks, upland pastures, and sheep commons, particularly in those patches called Fairy rings. Those that are found in woods and hedges are of inferior flavor to such as are gathered in dry pastures, which have a very pleasant smell and luscious flavor, either when stewed alone or in ragouts, &c This sort makes excellent ketchup, and is much valued in the form of powder It is in season during September and October, but may be dried so as to be in use for the table all the winter. Mr. Lightfoot supposes that this species is the

15849 pelioánthinus *Fries*	toothitted	beautiful	3	au.sep.	Pu	roots of trees	Bolt t.4 f 1. *denticulatus*	
15850 melaleúcus *Pers*	black & white	elegant	3	au. no.	Sooty	damp places		
15851 compréssus *With*	compressed	pellucid	3	june	Br	among grass	Sowerby, t. 66	
15852 murináceus *Bull.*	nitric-acid-scent	fragile	2	au oc	Ciner.	pastures	Sowerby, t 106	
15853 platyphýllus *Pers*	broad-headed	large	4	jul. oc.	Wsh	trun. of trees	Bul. t 594 *grammoceph.*	
15854 radicátus *Relh*	rooting	gigantic	½	jn sep	W	trun of trees	Grev crypt 4. 217	
15855 grácilis *With*	slender	more slender	1½	jn sep	W	trun of trees		
15856 velutipes *Ft Lond*	velvet-footed	cæspitose	2	oc. mr	Fulv.	trees	Sowerby, t. 384. f 3	
15857 fúsipes *Bull*	thick-footed	eatable	2	jul no	W	woods	Sowerb t 129. *crassipes*	
15858 cónfluens *Pers*	confluent	cæspitose	4	au oc	Wsh	shady woods		
15859 collínus *Scop*	hill	cæspitose	4	sep oc	Pallid	among grass	Bul t 403 *arundinaceus*	
15860 dryóphilus *Sowerb.*	oak-loving	cæspitose	2	oc. no	Wsh	heaps of lvs	Sowerby, t. 127	
15861 peronátus *Bolton*	woolly	changeable	2½	jul no	Test.	dead leaves	Sowerby, t. 37	
15862 oréades *Bolton*	twisted	eatable	3	my no	Pa Rf	grassy places	Sowerb. t 247 *pratensis*	
15863 pórreus *Fries*	Garlic-scented	stinking	3	oc no	W	plantations	Sowerb t 81 *alliaceus*	
15864 fúsco-purpureus *Pers*	brown-purple	cæspitose	2½	jul sep	D.Pu	beech leaves	Pers ic. t. 4 f 1	
§ 9 Collybia *Fries*								
15865 scorodónius *Fries*	Onion-scented	strong smell.	1½	au oc	Wsh	heaths	Schæff t 99 *alliatus*	
15866 cárneus *Bull*	flesh-colored	dwarf	1	au sep	R	grassy places	Bull. t 533 f 1	
puniceus With								
15867 esculéntus *Wulfen*	eatable	esculent	1½	ap my	Clay	way sides	Schæff t 59 *clavus*	
15868 tuberósus *Bull*	tuberous	gregarious	½	au no.	W	on fungi	Grev. crypt 1 23	
A alumnus Bolton								
15869 racemósus *Sowerb*	racemose	compound	½	aut	Gr	on fungi	Sowerby, t 287	
15870 clávus *Bull*	club	gregarious	1	au oc	Or R	dead branch	Bolton, t. 39 B	
15871 rameális *Bull*	branch-living	gregarious	½	all sea.	Wsh	dry branches	Bolt t 39. f D *candidus*	
15872 parasíticus *Bull*	parasitical	meteoric	½	au oc	Gr	on fungi	Sowerby, t. 343	
15873 Vaillántii *Fries*	Vaillant's	tough	1	au sep	W	dead branch	Vail bot par t.11 f 21-24	
Merúlius androsáceus With								
15874 Rótula *Scop*	black-footed	gregarious	1	all sea	W	woods	Sowerby, t 95	
15875 androsáceus *L*	Androsace-like	tough	1½	all sea	W Br	dead leaves	Bolton, t 32	
15876 fœ'tidus *Fries*	stinking	gregarious	1	au sep	Br	fallen branc.	Sow t.21. *Merulius fœt*	
15877 pérforans *Fries*	boring	stinking	1	all sea	Pallid	dead fir lvs	Sower t 94 *androsaceus*	
15878 epiphýllus *Pers*	shrivelled	gregarious	⅔	sep d	W	dead leaves	Sowerb t 98 *squamula*	
15879 Hudsónii *Pers*	Hudson's	hairy	⅔	aut	Wsh	holly leaves	Sowerb t 164 *pilosus*	



History, Use, Propagation, Culture,

mouceron of the French, who use it in ragouts instead of that, and acknowledge it to be equal in flavor, but more tough The mouceron, however, has a very thick and fleshy pileus, its gills are very narrow and numerous, and fixed to the stem, and the stem is thick and short. Dr Withering has carefully distinguished several other species from this fairy-ring agaric, or Scotch bonnets, as it is called by Mr. Ray

5. Cap smooth, somewhat humid, Gills arcuate at their connection with the edge, reticulated at their union with each other, with appendages at edge.

15849 Cap convex livid-purple striat. at edge, Lamel arcu.-annex. purple with black teeth, Stipes fistular equal

6 Cap thin, dry, Gills emarginate. BRITTLE

* *Cap fleshy, smooth, and stem regular* TERRESTRIAL.

15850 Cap fleshy soft flatt. smooth, Lamel clustered somew. ventricose white, Stipes somew. holl. long and thin

** *Cap somewhat fleshy, and stem, which has no roots, irregular.* TERRESTRIAL.

15851 Cap subcarnose irregular smooth thin fuscous, Lamellæ distant white, Stipes hollow-whitish compressed
15852 Cap fleshy deform. crack. scaly cinereous, Lamel glued together dist. and deform. holl. Stipes cinereous

*** *Cap somewhat fleshy, and stem, which has roots, regular* GROWING ON WOOD.

15853 Cap fleshy flat somew. streaked cinere -whit. Lamel. very broad dist. and solid equal striat Stipes white

C Gills equal, behind blunt

7 Cap fleshy, glutinous, Gills somewhat united, Stem rooted.

15854 Cap rugose glutinous tough, Lamellæ white, Stipes tall rigid with a long fusiform root
15855 More slender, Lamellæ sinuated with a decurrent tooth, Stipes very long [blackish towards base
15856 Cap nearly plane brown orange glutin Lamel ventric. yellow Stipes incurv. velvety and redd.-brown or

8 Cap tough, dry, Gills separate, close, white

15857 Gregarious, Cap fleshy loose, Lamel somew. separate serrat Stipes hollow ventricose furrow whit root.
15858 Confluent cæspitose, Cap somewhat fleshy whitish, Lamellæ loose compact, Stipes fistulous somewhat compressed red villous powdery
15859 Cap somew fleshy campanul expanded umbonate pallid, Lamel loose, Stipes fistulous smooth glabrous
15860 Variable, Cap thin watery smooth plane sometimes depressed, Lamellæ free soft, Stipes hollow splitting becoming thicker towards the base pinkish or yellowish-white more colored at the summit

9 Cap somewhat leathery, dry, Gills separate, distant, pallid.

* *Cap fleshy, Stem solid*

15861 Cap dry leathery convex at length plane, Lamellæ distant pale-reddish or buffish, Stipes solid clothed towards the base with a woolly or strigose mass
15862 Cap tough subumbonate reddish becoming buffish or very pale opake, Lamellæ distant whitish, Stipes solid firm cylindrical thickest under the pileus pale

** *Cap fleshy, Stem fistulous*

15863 Strong smell Cap somew fleshy smth and lamellæ somew loose white, Stipes fistular long downy rufous
15864 Cap somewhat fleshy wrinkled dark-purple becom pale, Lamellæ loose rufous, Stipes fistular rubiginous

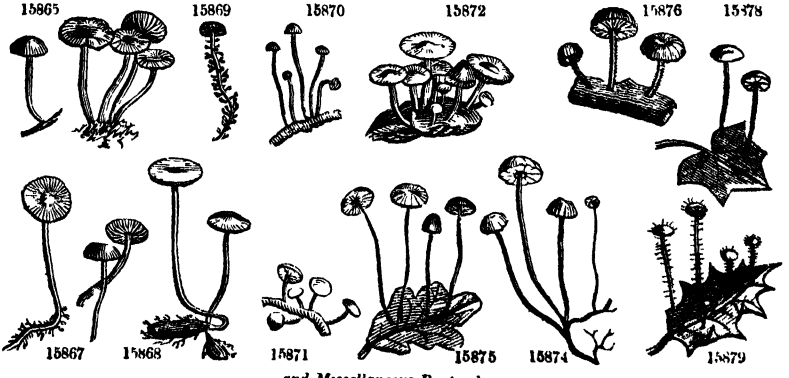
1 Cap slightly fleshy, smooth, scarcely umbilicate, Gills tenue, Stem hollow, or somewhat fistulous

15865 Strong smell Cap somew fleshy, and lamellæ adnate crisp whitish, Stipes fistular short glabrous rufous
15866 Cap somewhat fleshy smooth pinkish-red, Lamellæ attached white, Stipes nearly solid short scaly

15867 Cap somew. fleshy obt. clay-colored, Lamellæ attached lax white, Stipes fistular rooting smooth yellow
15868 Cap plane or somewhat umbonate, Lamellæ adnate numerous, Stipes subfistulose slightly tomentose at the base and springing from a reddish tuberous root
15869 Cap membranous papillose grey, Lamellæ white, Stipes racemose
15870 Cap plano-convex reddish-orange, Lamellæ white rather broad fixed, Stipes very slender subsolid whitish
15871 Gregarious, Cap nearly plane white sometimes changing to reddish, Lamellæ adnate white, Stipes short minutely furfuraceous marked within with a white line
15872 Cap somewhat fleshy convex becoming flat prunose pale-grey, Lamellæ attached thick distant more obscure, Stipes fistular villous

2. Cap thin, membranous, flat, becoming depressed, plaited, rugose, Gills veiny, of the same substance as the cap, Stem horny, black

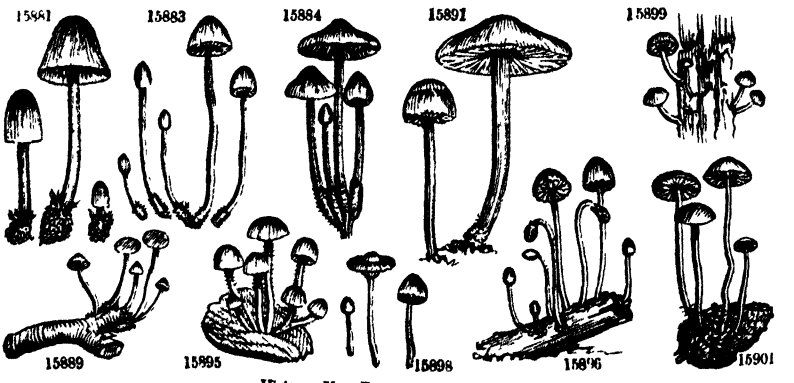
15873 Cap flat plaited, and lamellæ (which are very broad adnate and distant) white, Stipes solid smooth brownish thicker and paler towards the extremity
15874 Cap conv umbilic plicate, Lam attach to a collar surround stipes white, Stipes holl striate black below
15875 Cap convex plicate white sometimes tinged with brown, Lamellæ simple adnate white, Stipes hollow furrowed very glabrous purplish-brown or black except at the summit
15876 Cap convex umbilicated plicate redd -brown, Lamel adnate pale-yellow Stipes holl redd -brown velvety
15877 Cap flatt rugul pall Lam adnate simp many being halved, Stipes smth fistular velvety blackish-brown
15878 Cap nearly plane rugose, Lamellæ few adnate resembling white prominent veins, Stipes hollow very minutely velvety reddish-brown below
15879 Cap convex-expanded whitish and rufous, Stipes covered with straight red hairs, Lamellæ whitish



and Miscellaneous Particulars

§ 9. *Collybia* So called from κολλυβος, a kind of small money. Small and persistent, gregarious species, growing either on earth or wood. Some of the species may be used as food.

§ 10. Myce'na. *Pers.*							
15880 alliáceus *Jacq*	onion-scented	fœtid	6	jl nov	W.Br	dead leaves	Jacq austr. t 82
15881 atro-álbus *Bolton*	black-white	scentless	3	au no.	Blsh	damp places	Bolton, t. 137
15882 alcalinus *Fries*	alkaline	fœtid	2	my oc	Cin.	on earth	Vaill par t 12 f 1, 2
15883 galericulátus *Scop* *vários* With *prolíferus* Sower t. 169	various	scentless	3	my oc.	Brsh	trun. of trees	Sowerby, t. 165
15884 polygram'mus *Dec*	marked	cæspitose	6	sep d.	Cin	dead leaves	Bull t 518. *H fistulosus*
15885 gálopus *Pers.*	white-footed	scentless	4	au no	D Gl	woods	Fl danica, t 1550 f 2
15886 hæmátopus *Pers*	red-footed	cæspitose	2	au. oc	Pk	beech trunks	
15887 cruéntus *Fries*	bloody	solitary	3	au no	R	fir leaves	
15888 élegans *Pers*	elegant	fennel-scent.	2	au no	Liv Y	pine woods	
15889 strobilínus *Pers*	Pine-cone	gregarious	2	au no	Crim	pine woods	Sower t 197 *coccineus*
15890 róseus *Pers*	rosy	gregarious	2	au no	Rosy	pine woods	Pers syn t 3 f 5
15891 púrus *Pers.*	pure	gregarious	3	jn nov	Rosy	woods	Sowerby, t 72 *roseus*
15892 Adónis *Bull*	Adonis	various-color.	2½	sep n	Rosy	woods	Bulliard, t 560 f 2
15893 luteo-álbus *Bolton*	yellow-white	pretty	2	au sep	Y	among moss	Bolton, t 38 f 1
15894 lácteus *Pers*	milky	gregarious	1½	jl nov	W Y	heaths	Sower t 385 f 5. *tenuis*
15895 pilipes *Sowerb*	hairy-footed	cæspitose	2	aut	Pa Br	dead Agarics	Sowerby, t 249
15896 epip'terýgius *Scop*	nodding	variable	1½	au no	Cin	among moss	Sowerby, t 92 *nutans*
15897 vulgáris *Pers*	common	gregarious	1½	au no	Cin.	fir leaves	Fl danica, t 1678 f 2
15898 pellúcidus *Bull*	transparent	thick	1½	aut	Ruf	the ground	Bulliard, t. 550 f 2
15899 corticális *Bull*	bark	delicate	½	oc feb.	Ruf	bark of trees	Sowerby, t 243
15900 pterigenus *Fries* *roséllus* With	rosy	beautiful	⅓	au oc	Rosy	among moss	
15901 spínipes *Sowerb*	spiny-footed	gregarious	4	au oc	Br	pine cones	Sowerby, t. 206
§ 11 Ompha'lia *Pers*							
15902 stellátus *Fries*	stellate	gregarious	1	jl aug	W	hollow trees	Sower t 107 *buccinalis*
15903 fíbula *Bull*	button	slender	1½	my oc	Or Y	among moss	Sowerby, t 45
15904 pyxidátus *Bull*	box-like	variable	2	my no	Test	on earth	Bulliard, t. 568 f 2
15905 murális *Sow*	wall	subgregar	½	aut	Br	among grass	Sowerby, t 322
15906 ericetórum *Pers*	heath	variable	1	my no	W	damp heaths	Bull t 276 *androsaceus*
15907 caulicinális *Sower*	thick-stalked	solitary	2	jl oct	Perr	pine woods	Sowerby, t. 163
15908 epichýsium *Pers.*	dirty	tender	1	jl oct.	Cin	wall trunks	Pers ic pict t 13 f 1
15909 obliquus *Pers*	oblique	solitary	1	aut	Pa Cr	on earth	Pers. ic pict t. 13 f 3
15910 frágrans *Sowerby*	fragrant	anise-scented	1½	aug d	Livid	among grass	Sowerby, t 10
15911 cæspitósus *Bolt*	cæspitose	pellucid	1	aug d	Y	peat	Bolton, t 41 f C
15912 cyathiformis *Bull* *A clavatus* Wither	cyathiform	club-shaped	3	oc no	D Br	earth	Sowerby, t. 363 *sordidus*
15913 murinus *Sowerby*	mouse-scented	solitary	2	sept	G	earth	Sowerby, t 162
15914 tigrinus *Bull*	mottled	gregarious	1½	my jn	Wsh	trun of trees	Sowerby, t 68



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§ 10. *Mycena.* From *μυκης*, a kind of small fungus The species are of the smaller kind, at least they are thin and slender, and tolerably permanent. None of them are fit for food; many are distinguishable by their smell, which is always powerful.

1. *Dry, Cap generally umbonate, not depressed, Gills separate or adnate, not decurrent.*

* *Stem rooting, smooth, juiceless, Gills separate, whole-colored.*

15880 Cap becoming nearly plane subcoriaceous, Lamellæ free whitish, Stipes tall covered with a sort of bloom dark purplish-brown below velvety at the base

15881 Cap smooth blackish Margin and lamellæ loose whitish, Stipes tumid at base, strigose

** *Stem smooth, juiceless, somewhat rooting, Gills adnate, whole-colored.*

15882 Cap obtuse striated cinereous, Lamellæ adnate glaucous white, Stipes smooth firm villous at base

15883 Cap brown Lamel. whit adnate with a decurrent process, Stipes smth. tenacious strig at base and radicat.

*** *Stem juiceless, striated, Gills whole-colored.*

15884 Cap obscurely striate blue.-grey, Lamel attenuated and subadnate whit. Stipes long rigid striate glisten.

**** *Stem smooth, milky, somewhat rooting, Guls attenuated, united at the edge*

15885 Cap striated blackish glaucous, Lamellæ affixed white, Stipes filled with white juice

15886 Cap fleshy-membranous whitish-red, Lamellæ affixed, and stipes filled with dark-red juice

15887 Cap striated reddish-brown, Lamellæ adnate whole-colored at the edge, Stipes filled with red juice

***** *Stem smooth, juiceless, somewhat rooting, Gills adnate, discolored at edge.*

15888 Cap striated livid-yellow, Lamellæ adnate linear livid margin yellow, Stipes rigid smooth fibrous at base

15889 Bright-red, Cap acutely umbonate with a striate margin, Lamellæ fixed dilute reddish, Stipes firm strigose and pale at the base

15890 Cap between fleshy and membranaceous convex pale rose-purple, Lamellæ ventricose rather paler than pileus, Stipes smooth villous at the base

***** *Stem smooth, juiceless, scarcely rooting, Gills affixed, whole-colored* COLOR PURE

15891 Cap between fleshy and membranous obtuse somewhat rose-colored, Lamellæ round ventricose pallid, Stipes smooth villous at base

15892 Cap obtuse smooth, Lamellæ adnate white, Stipes smooth rootless

15893 Cap umbonate striated and slender, Stipes yellow, Lamellæ adnate white

15894 Cap somew umbonate striated yellowish-white, Lamel affixed distinct, and stipes rigid smoothish white

****** *Stem juiceless, rootless, but swollen at base into a globe, Cap blunt.*

15895 Pale-brown, Cap conical smooth, Lamellæ loose compact, Stipes thickish hairy

2 *Cap or stem viscid, Gills adnate or decurrent*

15896 Cap obtuse striated and elongated, Stipes yellow viscid, Lamellæ uncinate

15897 Cap umbonate becoming depressed striated cinereous, Lamellæ decurrent white, Stipes short firm viscid

3 *Dry, Cap finally depressed, Gills decurrent*

* *Firm, persistent, with a firm stem*

15898 Cap somewhat membranous campanulate striated at edge, Lamellæ decurr very broad, Stipes solid thin

** *Delicate, withering, with a capillary stem*

15899 Cap thin hemispher becom umbilicat and striat Lamel uncin decurr dist. Stipes short incurv smooth

15900 Thin rosy, Cap campanulate smooth, Lamellæ broad distant, Stipes capillary with a strigose bulb

15901 Slender, Stipes slender with stiff wool at base, Cap depressed hemispherical

1 *Cap somewhat membranous, Gills decurrent.*

* *Small, Cap membranous*

15902 White, Cap convex smooth, Lamellæ distant, Stipes attached to the base of a convex radiat membrane

15903 Cap convex glabrous orange-yellow, Lamellæ whitish distant, Stipes yellowish

15904 Testaceous rufous pallid, Cap funnel shaped disk smooth, Lamellæ narrow, Stipes firm

15905 Cap convex umbilicated striate, Lamellæ broad pale, Stipes solid short thickish [at the base

15906 Cap depress in centre marg turned down striate, Lamel dist rather broad white, Stipes short pubesc.

15907 Stipes solid thickened at base ferruginous downy

** *Large, Cap somewhat membranous*

15908 Tender cinereous blackish, Cap funnel-shaped striated, Lamel lin Stipes somew solid tough vill at base

15909 Thin pale cinereous, Cap somewhat funnel-shaped smooth oblique, Stipes thick

2 *Cap fleshy, membranous, Gills adnate*

15910 Odor Cap nearly plane pale yellow or brown-white when dry, Lamel numer whit Stipes holl white

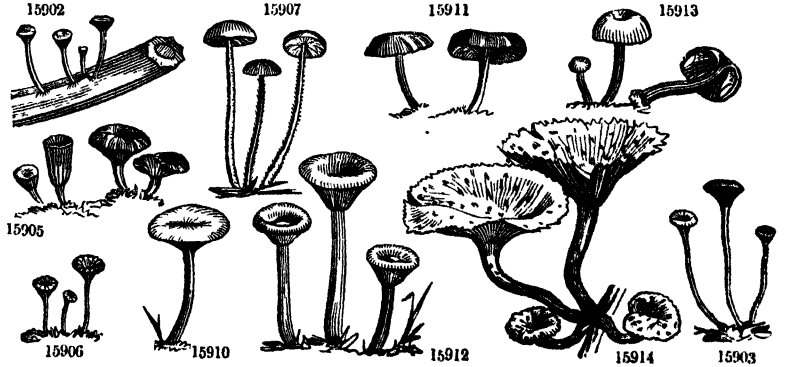
15911 Livid, Cap somewhat membranous plane striated, Lamellæ distant, Stipes fistular [attenuat above

15912 Cap somew fleshy funn-shap smooth dark-brown grey. marg reflexed, Lamel dist grey Stipes elastic

15913 Cap thin campanulate green at centre brown and plaited at margin, Stipes smooth hollow

3 *Cap fleshy, coriaceous, somewhat corky, soft, Gills decurrent*

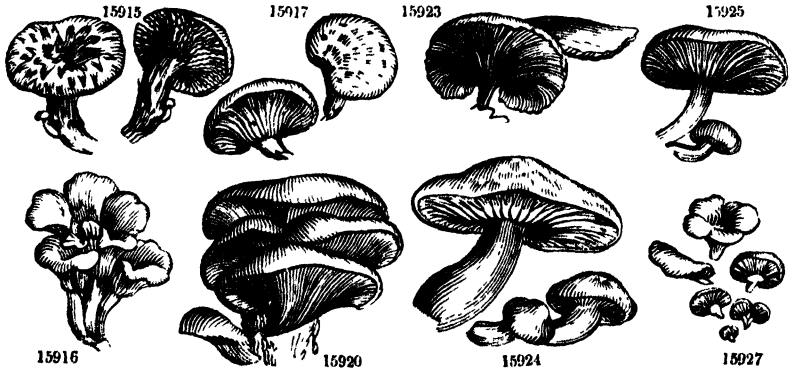
15914 Cap regular umbilicat whitish with black hairy scales, Lamel denticul white, Stipes thin minutely scaly



and Miscellaneous Particulars

§ 11 *Omphalia* From ομφαλος, the navel, in reference to the young form of the pileus. Many of the species are of the smallest size. None are eatable.

15915 lepideus *Fries*	scaly	variable	1	my. jn.	pa.Oc.	pine trunks	Schæff' t. 29 *squamosus*
ß monstrósus Fries	*monstrous*	deformed	3	my jn.	pa Oc.	pine trunks	Sower.t 382 *tubæformis*
15916 cochleátus *Pers*	cochleate	cæspitose	3	sp aut.	Wsh	old trunks	Sower. t. 168. *confluens*
§ 12 Pleu'rotus. *Fries*							
15917 dryínus *Pers.*	oak	solitary	1	au. no	Wsh	oak trees	Schæff't 233.*dimidiatus*
15918 torulósus *Pers.*	knotted	very tough	1½	jl. oct.	Rsh	birch trees	Nees pilze, f 176
15919 conchátus *Bull.*	shell-shaped	gregarious	1	jl. sep	Cinn.	birch trees	Bull t. 298
15920 ostreátus *Jacq.*	oyster	eatable	½	sp. aut	Cin.	trun. of trees	Sowerby, t. 241
15921 petaloides *Bull.*	petaloid	gregarious	½	sep. oc	Brsh	beech trees	Bulliard, t. 226. 557. f 2
15922 porrigens *Pers*	pine	imbricated	1	jl nov	W	pine trees	
15923 flabelliformis *Bolt*	flabelliform	thin	½	jl. nov.	Pa.Br	sides of trees	Bolton, t. 157
15924 ulmárius *Bull*	Elm	cæspitose	3	oc dec	Pale	trun of trees	Sowerby, t. 67
15925 palmátus *Bull*	palmate	cæspitose	2	oc dec	Br	oak trees	Sowerby, t 62
15926 serotinus *Pers*	late	dwarf	1	oc jan	Ol	trun of trees	Bux. cent. 5 t. 2. f 2
15927 stip'ticus *Bull*	stiptic	gregarious	½	oct jap	Tann	trun of trees	Sow t 109.*flabelliformis*
ficoides With							
15928 nidulans *Pers*	nestling	imbricated	1	oc dec	Ysh	fallen trees	
15929 mastrucátus *Fries*	prickly	imbricated	1	sep n.	Gr	beech trunks	Sower t. 99 *echinatus*
15930 móllis *Pers*	soft	gregarious	½	sep n	Y.Br	beech trunks	Sowerby, t 98
15931 variábilis *Pers*	variable	gregarious	½	sep n	W	beech trunks	Sowerby, t. 97. *niveus*
15932 laterális *Fl Dan.*	lateral	imbricated	1½	sum	Umb	birch trunks	Fl danica, t 1556. f. 2
15933 trémulus *Schæff*	tremulous	almost sessile	½	au dec	Gr	earth	Sowerby, t 242
15934 sep'ticus *Fries*	pubescent	delicate	½	au oc	W	decay trun	Sower t 321 *pubescens*
15935 applicátus *Batsch*	cup-shaped	delicate	½	aut sp	Cin	decay trun	Sowerby, t 301
§ 13 Mou'ceron *Bauh*							
15936 Prúnulus *Cæsalp*	French Mushr	esculent	1½	jn. oct.	W	woods	Sower t 143 *pallidus*
§ 15 Clitopi'lus. *Fries*							
15937 hortènsis *Fries*	garden	elastic	2½	aut	Sooty	gard on ear	
15938 rhodopólius *Fries*	repand	beautiful	3	jl nov	Livid	damp places	Bolton, t 6 *repandus*
15939 fértilis *Pers*	prolific	gregarious	3	aut	P Lv	hedge rows	Bulliard, t. 534
15940 sinuátus *Bull*	burnt sugar-sce.	fragrant	5	oct.	W Y	damp woods	Bulliard, t. 579 f 1
15941 maritimus *With*	seashore	small	1	oct.	W	damp woods	
15942 leoninus *Schæff*	tawny	fragile	3	au. oc	Y	beech woods	Schæffer, t. 48
15943 Pluteus *Batsch*	sooty	variable	3	my no	Sooty	trun of trees	Sowerby, t 108 *latus*
15944 phlebóphorus *Ditt.*	wrinkled	gregarious	4	jul.oct.	Ol	decay. wood	Grev. crypt. 3. 173
reticulátus With							
§ 15. Lepto'nia *Fries*							
15945 griseocyáneus *Fries*	blue-gray	solitary	1½	au sep	Lilac	grassy hills	Bolt t 41 *purpureus*
15946 chalýbeus *Pers*	dove-colored	pretty	2	jl sep	B	among grass	Sow t 161 *columbarius*
§ 16 Nolane'a *Fries*							
15947 majális *Fries*	early	cæspitose	4	spring	Cinn	fir woods	Sow t. 174 *mollisculus*
15948 pas'cuus *Pers*	meadow	variable	3	jan d.	Sooty	everywhere	Bolton, t 35 *fissus*
§ 17 Ecci'lia. *Fries*							
15949 asprélla *Fries*	roughish	gregarious	1½	sum.	Gr	grassy places	
15950 áquilus *Fries*	exposed	subsolitary	1	au sep	Umb	river sides	
15951 politus *Fries*	polished	gregarious	3	au oc	Livid	among grass	
15952 cárneo-álbus *With*	salmon-color'd	gregarious	1	au. oc	W	among grass	



History, Use, Propagation, Culture,

§ 12 *Pleurotus* From πλευρα, the side, the pileus is always inserted out of the centre. A tribe of perennial, innocuous, often eatable fungi, always found upon trees

§ 13 *Mouceron.* An old French name of certain eatable fungi This, no doubt, is the origin of our word Mushroom. A prunulus is said to be one of the very best of mushrooms; it is common in woods, among grass.

§ 14. *Clitopilus* A name analogous to Clitocybe, § 8, as the group is also Species of the middle size, nearly destitute of smell, mild, but not used as food.

15915 Cap compact unequal pale ochraceous, Scales spot-like more opaque, Lamellæ torn, Stipes stout scaly
β Stipes long curved, Cap small
15916 Cap tough somewhat lobed twisted smooth rufous, Lamellæ toothed pallid, Stipes firm furrowed rufous

1. Veil universal, Cap compact, horizontal

15917 Hard, Cap oblique smoothish whitish, Scales brownish, Veil fugacious

2. Veil none, Cap fleshy, Gills decurrent

* *Cap always entire*

15918 Cap tough depressed reddish tan-color, Lamellæ rather crisp paler, Stipes short grey downy

** *Cap entire or halved*

15919 Cap tough deformed pink cinnamon-color, Lamel entire and short irregul Stipes downy at base and pallid
15920 Tufted, Stipes sublateral or none, Cap smooth fleshy pale blueish-grey or brown, Lamellæ whitish often anastomosing at the base

*** *Cap always halved, somewhat ascending*

15921 Ascending, Cap spatulate whitish-brown, Disk and stipes somewhat villous, Lamel. compact lin. white
15922 White, Cap ascending sessile ear-like glabrous, Lamellæ narrow linear quite entire
15923 Cap flattish smooth pale-brown, Margin and lamellæ crenate, Stipes short or none

3 Veil none, Cap fleshy, when young horizontal, Gills terminating in a determinate manner.

15924 Cap compact smooth pale whitish, Lamellæ adnate or subdecurrent whitish, Stipes strong ascending incrassated at the base excentrical
15925 Cap smooth rufous, Lamellæ adnate of the same color, Stipes out of the centre smooth whiter
15926 Cap comp. somew. visc olive-green, Lamel. adnate comp pallid, Stipes short rather on one side sooty scaly
15927 Cap coriaceous reniform rather tan-colored, Epidermis separating into scurfy scales, Lamellæ veiny connected, Stipes lateral frosted

4 Cap fleshy, when young resupinate, Gills running together in a point out of the centre

15928 Cap fleshy reniform downy yellowish, Lamellæ orange-yellow
15929 Cap fleshy scaly mouse-color, Upper stratum gelatinous, Lamellæ greyish-white
15930 Cap soft smooth gibbous pale-yellow brown, Lamellæ pale reddish-brown somew ventricose, Stipes none
15931 Cap membranaceous white cottony at first subresupin at length reflexed, Lamel whit afterw pink buff
15932 Cap fleshy smooth umber-colored the upper layer gelatinous, Lamellæ pale becoming yellow

5. Cap membranous, Gills adnate, or running together in one point

15933 Cap reniform diaphanous, Lamellæ linear, Stipes marginal ascending villous [like Byssus
15934 Cap at first resupinate afterw reflex smooth downy, Lamel radiat Stipes thin incurved downy, Roots
15935 Cap subsessile. at first resupinate, afterwards reflexed frosted villous at base, Lamellæ lax

15936 Cap compact flattish white, Lamellæ white becoming pink

1 *Gills affixed* TERRESTRIAL

15937 Cap somewhat umbonate sooty black Lamel flat decurr twist whit Stipes hollow thickened downwards
15938 Cap somewhat umbonate silky livid, Lamellæ adnate whitish rose-colored, Stipes hollow smooth white
15939 Cap somew umbon smooth livid pale, Lamel annexed flesh-colored, Stipes solid smooth somew bulbous
15940 Broad, Cap smooth yellowish-white, Lamellæ loosely attached very broad rufous, Stipes solid equal white
15941 Small, Cap convex and stipes white, Lamellæ adnate

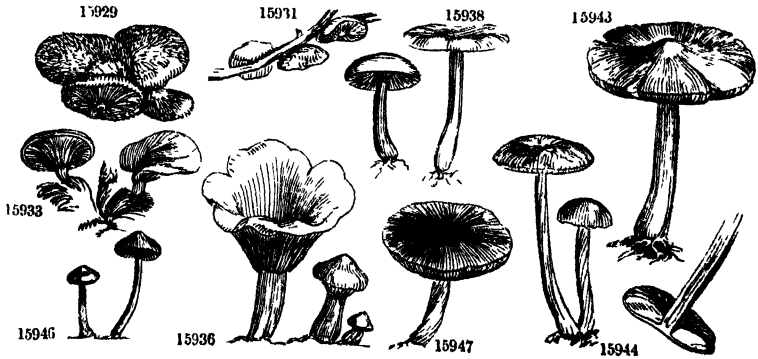
2 *Gills altogether distinct* UPON WOOD

15942 Cap somewhat membranaceous smooth yellow, Stipes solid striated
15243 Cap fleshy smooth blackish soot-color, Stipes firm with black fibres
15944 Cap convex at length plane clear olive or yellowish-brown smooth but minutely rug as if veined towards the centre, Stipes hollow rather twisted, Lamellæ ventricose

15945 Cap scaly grey-lilac colored, Lamellæ loose, Stipes hollow fibrous cæsious
15946 Cap somewhat squamose blue, Lamellæ bluish-white adnate at length purple, Stipes solid smooth bluish

15947 Cap irregular smooth somew. cinnamon-colored, Lamel. loose toothed rosy, Stipes hollow twisted striated
15948 Cap campanul. expanded black soot-color when dry paler and silky, Lamel. almost loose dirty flesh-col.

15949 Cap fibrous scaly livid-grey, Lamel adnate and fistular, Stipes (which is white with wool at the base) paler
15950 Cap squamulose umber-colored, Lamellæ sinuate affixed purplish, Stipes solid short
15951 Cap smooth with a striated edge and the fistular equal, Stipes livid, Lamellæ decurrent
15952 Lamellæ salmon-colored not numerous, Cap and stem white



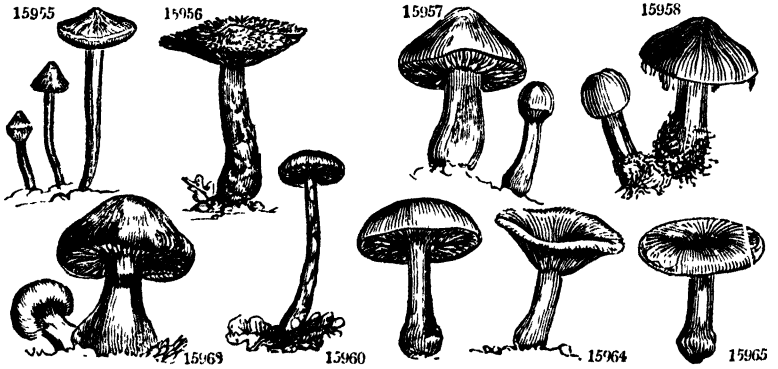
and Miscellaneous Particulars

§ 15 *Leptonia* From λεπτος, slender Small permanent, elegant, scentless, insipid, not used for food. They are in perfection at the end of summer

§ 16 *Nolanea* From *nola*, a bell. Terrestrial, various, of a thin watery substance, insipid, not eatable Easily distinguished by their habit.

§ 17. *Eccilia.* From εκκολαω, to excavate Small, terrestrial, inodorous, insipid.

§ 18. Telamo'nia *Fries*								
15953 tórvus *Fries*	tawny	strong scent.	4	jul oc.	Br	damp woods	Bull. t. 600.	*araneosus*
15954 brun'neus *Pers*	brown	weak scented	4	jl nov.	Pa U.	pine woods		
spongiósus With								
15955 everrúus *Fries*	dismal	solitary	5	jl nov.	Pu Br	pine woods	Sower. t 125	*impubes*
15956 sublanátus *Sowerb*	half-woolly	radish scent.	3	au oc.	Ol Br	woods	Sowerby, t 224	
15957 bulbósus *Sowerb*	bulbous	radish scent.	4	au. oc.	Br	among grass	Sowerby, t. 130	
§ 19 Inolo'ma. *Fries*								
15958 violáceus *L*	violet	shewy	4	au. oc.	Vi	groves	Bolton, t. 52	
15959 pholidius *Fries*	cobwebbed	solitary	4	au oc	Cin.	woods	Bul t 586 f 1	*psammocephalus*
15960 spilomêus *Fr.*	spotted	solitary	3	au.sep	Pa Br	woods	Sow. t.384 f 1	*araneosus*
15961 scabrus *Fries*	curved	soft	3	jan. oc	Ol	woods	Batsch cent. 2 f 184	
15962 callochróus *Pers*	fine-skinned	insipid	4	au oc	Psh	woods	Bat cent 1 f 71	*subpurp.*
15963 glaúcopus *Schæff*	blue-footed	gregarious	3	au oc.	Ol	woods & hea	Sowerby, t 223	
15964 várius *Schæff*	thick-footed	variable	4	au oc	Y	everywhere	Sower t. 102	*turbinatus*
15965 turbinátus *Bull.*	turbinate	soft	4	sep no.	Y	damp woods	Bulliard, t. 110	
§ 20 Dermo'cybe *Fries.*								
15966 sanguíneus *Wulf*	bloody	handsome	1½	jn nov.	Crim	woods	Sowerby, t 43	
15967 cinnamómeus *L.*	cinnamon	variable	3	jn dec	Cinn	everywhere	Sowerby, t 205	
15968 hel'volus *Pers.*	brownish	dirty	2	jn dec	Cinn.	woods	Sow. t 173	*hinnulcus*
15969 Cúcumis *Pers*	Cucumber-scented	strong smell	3	au. oc.	Pu Br	woods	Sower. t 344.	*fuscipes*
15970 Armeniacus *Schæff*	Apricot-color	softish	3	jl nov	Pa Br	woods	Schæff t 81	
15971 castáneus *Bull*	Chesnut-color	gregarious	2	jl. nov	Ches.	woods	Bulliard, t 268	
15972 hýbridus *Sowerby*	hybrid	variable	2	my no	Or	fir leaves	Sowerby, t 221	
15973 testáceus *Weth*	testaceous	crooked	4	sept	Y	plantations		
15974 flávidus *Sowerby*	yellowish	soft	2	sept	Ysh	among grass	Sowerby, t 366	
§ 21 Pholio'ta *Fries*								
15975 aúreus *Sowerby*	golden	subcæspitose	6	sep oc	Fulv	damp earth	Sowerby, t 77	
15976 caperátus *Pers*	pale	solitary	5	jul oct	Lem.	mount woo.	Fl dan t 1675	
15977 aurivéllus *Batsch*	filamentous	solitary	3	oc no	Y	old trees	Schæ t 209	*filamentosus*
15978 squarrósus *Pers*	squarrose	cæspitose	2	au.dec.	Ferr	roots of trees	Gre cryp fl t 2	*floccosus*
15979 flam'mans *Batsch*	flame-colored	elegant	3	jul oct	Y	pine trees	Batsch el f 30	
rheoides With								
15980 muricátus *Fries*	muricated	variable	2	jul.oct	Dl Y	commons		
scariósus With								
β *inæquális* Batt	*unequal*	variable	2	jul oct	Dl Y	commons	Bolt t 50	*luteus*
15981 mutábilis *Schæff*	changeable	eatable	3	my no	Pa Ci	on trees	Schæff t 9	
15982 constric'tus *With*	contracted	watery	½	sept	Y Br	rotten wood		



History, Use, Propagation, Culture,

§ 18 *Telamonia* So named on account of their gigantic stature The species are among Agarics what Ajax Telamonius was among men Large, terrestrial, firm species, none of which are eaten. The species of this and the next subgenus are extremely difficult to determine, not only on account of their size, but of their colors, which vary exceedingly at different periods of their growth, as well as according to their situation. Their colors are also intermediate between fulvous, testaceous, cinnamon, &c, which are very difficult to describe The most constant marks are, first, smell, second, surface of pileus being fibrous or viscid, third, the situation of the lamellæ, whether they are compact or distant, and fourth, their color in the young state, in which it must be observed, that they are always described

The A. bulbosus of Hudson and Ray is referred by Withering to A violaceus of Linnæus, which has fixed purple gills, numerous, eight in a set, long gills, sometimes cloven, and a few of them decurrent. purple pileus, soft, smooth, firm, convex, but centrally depressed with age, and cracking at the edge, which is somewhat turned down, from half an inch to five inches over stem solid, cylindrical, purple, bulbous at the base, from one to four inches high, and from a quarter to one inch in diameter, and curtain like a cobweb In maturity it plentifully emits a powder of the color of Spanish snuff It is not uncommon from October to December, in Edgbaston and Barr plantations, in the woods near Bath, and at Powick, near Worcester. With much broiling and duly seasoned, it is esteemed as delicious as an oyster Another variety, which is the A varius of Bolton, is found on grass-plats and new mown fields in July It has chocolate gills, from brown to black,

15953 Cap obt. fibrous hoary testac Lamellæ adn purple, An annulus sheath stipes which is violet at upp end
15954 Cap bluntly umbon somew. fibr pale umb.-col Lamel. adnate umb.-col Stipes somew bulb. striat paler

15955 Cap somew fleshy purp.-brown becom fibrous testac and hoary, Lamel violet-pur Stipes long eq violet
15956 Cap scaly testaceous olive-color, Lamellæ yellowish cinnamon, Stipes bulbous scaly, Veil fuscous
15957 Cap obtusely umbon smth bright-brown when dry testac. Lamel. cinnam Long bulb. stipes and veil white

1 *Cap always dry, scaly, or fibrous, obtuse or umbonate, never depressed*

15958 Cap very convex dull or brownish-violet, Lamellæ distant violet, Stipes spongy greyish violet within
15959 Cap umbonate squarrose with hairy sooty scales, Lamellæ compact violet becoming clay-colored, Stipes scaly transversely banded with black
15960 Cap umbon. smooth pale-brown, Lamel compact violet discolor Stipes taper varieg with brown scales

2 *Cap smooth, humid, viscid, always obtuse, finally depressed, Stem blue, becoming white.*

15961 Cap equal viscid, Lamellæ compact olive-purple, Stipes attenuated bulbous
15962 Cap equal viscid smooth, Lamellæ compact violet-purple, Stipes bulbous becoming white from violet
15963 Compact rounded, Cap olivaceous or brownish-grey glutinous while young, Lamellæ reddish-brown tinged with violet, Stipes thick tinged with violet
15964 Firm, Cap yellow somew scaly humid viscid, Lamel compact serrat whit.-cæsious, Stipes tapering white
15965 Cap smooth viscid yellow or tawny, Lamellæ compact quite entire yellowish-cinnamon, Stipes bulb. white

1. *Cap scaly or fibrous, Stem same color as the cap or paler.* GROWING ON THE EARTH

* *Cap fleshy, at first convex*

15966 Cap slightly fleshy somew. scaly, and stipes (which is thin and [illegible]) dull sang Lamel affix more dull-color.
15967 Cap glabrous subcarnose obtusely umbonate cinnamon-color, Lamellæ numerous adnate yellow-cinnamon, Stipes yellowish rarely straight
15968 Cap pale reddish-buff umbonate subfarinaceous, Lamellæ cinnamon-color broad numerous, Stipes whitish often with a few remains of the veil attached

** *Cap somewhat fleshy, at first campanulate.*

15969 Cap somew fleshy becom umbon smoothish brown-purple, Lamel affix ventric ferrugin. Stipes fuscous

2. *Cap smooth, but with a few surface-fibres, Stem white* GROWING ON THE EARTH.

15970 Cap bluntly umbonate pallid, Lamellæ compact cinnamon-colored, Stipes solid tapering upwards white
15971 Cap somewhat fleshy convex becoming bluntly umbonate chesnut-colored, Lamellæ affixed compact violet-testaceous, Stipes short firm

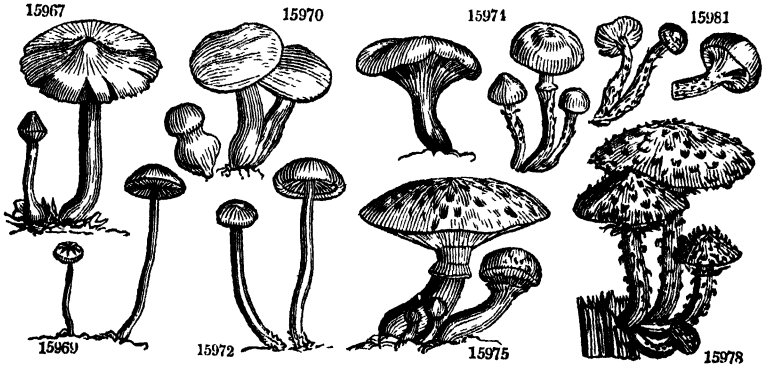
3 *Cap smooth, dry, Gills affixed.*

15972 Cap convex humid orange-colored or fulvous, Lamellæ yellow, Stipes hollowish
15973 Lamellæ brown-yellow, Cap deep-yellow bossed in the centre, Stipes scored yellow thickest downwards
15974 Lamellæ reddish-buff, Cap pale-yellow bossed, Stipes pale-yellow

15975 Fulvous, Cap fleshy scales few hairy, Lamellæ annexed, Stipes solid smooth, Annulus small
15976 Cap pitted lemon-colored hairs white, disk uniform with scatter scales towards disk, Stipes solid white
15977 Compact, Cap yellow scales scattered appressed, Stipes solid fibrous long-rooted
15978 Cap fleshy brownish or reddish-yellow scaly with fasciculat filam scales revol Stipes squarr with scales
15979 Cap fleshy dry yellow scales hairy scattered, Lamellæ at first yellow, Stipes equal squarrose

15980 Cap slightly fleshy obt fulvous-yellow vill with stalked scales, Lamel. adnate · at first yell. Stipes fistul.

15981 Cap scarcely fleshed glabrous striate when moist dull cinnamon-color becoming pale, Lamellæ subdecurrent numerous reddish-brown, Stipes hollow subincurved
15982 Cap yellow-brown bluntly conical, Lamellæ brown, Stipes brown scurfy, Veil permanent



and Miscellaneous Particulars

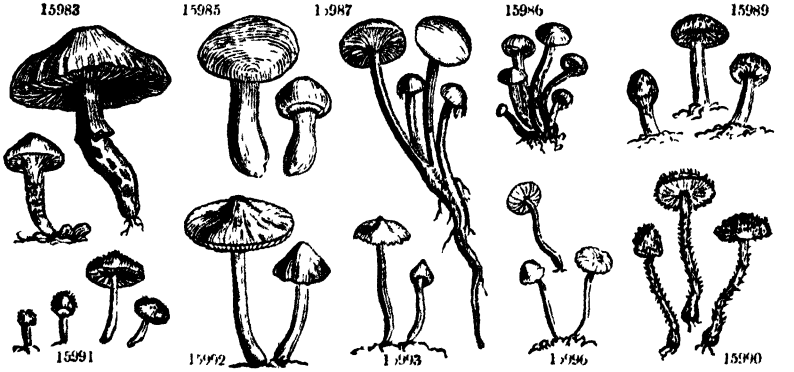
mottled, and in pairs, pileus mouse-color, conical, and pointed, stem of the same color, cylindrical, and firm This, though a common, is a very beautiful species In a summer morning it is covered with a bloom like that of a plumb, having often a glittering spangled appearance, its form is regular, and the fringe of the curtain peculiarly delicate. Another variety, with the stem of a dark mulberry color, is found in wet gravel where no grass grows, and sometimes on cow-dung, in which case the stem, under the shelter of long grass, is covered with a white hoariness which is easily rubbed off

§ 19 *Inoloma* A name with the same meaning as Tricholoma, § 5, to which the species are analogous. They are large, firm, somewhat succulent, autumnal, and terrestrial, but not as far as is known, eatable.

§ 20 *Dermocybe* From δερμα, a skin or membrane, and κυβη, a head, in allusion to the nature of the pileus. Analogous to Clitocybe, § 8 Of middle size, or small, scarcely eatable A cinnamomeus has gills, four in a set, broad about the middle, deep tawny red, and fixed by claws; pileus convex, but bossed, of a rich cinnamon color, from one and a half to three and a half inches diameter; the stem hollow, cylindrical, silky, shining, two inches high, thick as a goose-quill, of a fine full yellow color This is a species that is readily distinguished by its cinnamon color. It is found in woods in September and October, and has a good flavor

§ 21 *Pholiota.* From φολις, a scale Species of various habits. Some are terrestrial, others grow upon wood; some large, others of a smaller size.

§ 22. Myxa'cium *Fries*							
15983 collinitus *Sowerby*	besmeared	solitary	5	jl.nov	Or	woods	Sowerby, t. 9
15984 longicaúdus *Fries flexuósus* With	long-tailed	membranous	4	oct.	Tann.	pine woods	
§ 23 Hebelo ma *Fries*							
15985 fastíbilis *Pers*	multiform	stinking	2½	jl nov.	Wsh	everywhere	Schæff. t. 221. *gilvus*
§ 24 Flam'mula. *Fries.*							
15986 flávidus *Schæff*	yellowish	cæspitose	2	au.no	Ysh	trun of trees	Schæff t 35
15987 mopus *Fries connatus* With.	connate	subcæspitose	2	sep oc	Ysh	trun of trees	Bol.t.148 *radicato-ram.*
15988 spumósus *Batt.*	frothy	gregarious	3	au no.	Ysh	on earth, &c.	Battarra, t. 22. C.
§ 25 Ino'cybe. *Fries*							
15989 scáber *Sowerby*	rough	solitary	1½	aug	Sooty	pine woods	Sowerby, t 207
15990 plumósus *Bolton*	feathery	solitary	4	aut	Gr	woods	Bolton, t. 33
15991 lanuginósus *Bull.*	woolly	solitary	3	jul.sep	Brsh	way sides	Bulliard, t 370
15992 rimósus *Bull.*	cracked	variable	2	jn sep	Y Br	woods	Grev crypt 3 128
15993 geophýllus *Sowerby*	earth-leaf	variable	2	jul oct	Wsh	woods	Sowerby, t 124
15994 furfurósus *With*	scurfy	watery	1	june	Y Br	hedges	
§ 26. Nauco'ria *Fries*							
15995 conspérsus *Pers*	sprinkled	gregarious	1½	jn.oct.	Cinn	damp woods	Pers ic t 12 f 3
15996 furfuráceus *Pers virudarus* With	mealy	gregarious	2	au.oc	Cinn	dead lvs &c	Sch t.226 *pulverulentus*
15997 hippopinus *With.*	rounded	crooked	½	aut.	Pa Br	Sco. fir cones	
§ 27 Gale'ra *Fries*							
15998 colus *With*	campanulate	brittle	6	jl oct	Pa Br	hea of rubb	
15999 tener *Schæff*	tender	brittle	4	my no	Y Br	grassy places	Sowerby, t 33
16000 hypnórum *Schrank*	Moss	small	1	jl nov	Ferr.	among moss	Sch t 63 *campanulatus*
16001 atrorúfus *Bolton*	dark-brown	slender	3	aut	Br	pastures	Bolton, t 51 f 1
16002 núceus *Bolton*	hazel-nut	slender	4	oct.	Pa.Br	fir woods	Bolton, t 70
§ 28 Tapine'a *Fries*							
16003 involutus *Batsch adústus* With	involute	compact	3	au no.	Ferr.	woods	Sower t. 98 *contiguus*
§ 29 Crepido'tus *Fries*							
16004 aurantiofferrugi *Bull*	orange-brown	solitary	2½	aut	Or Br	roots of oaks	
16005 fœ'tidus *With*	fetid	solitary	2	aut.	Dl Br	old willows	
16006 vulpínus *Sow*	foxy	gregarious	2	aut	Tawn	hollow trees	Sowerby, t 361
16007 móllis *Schæff*	soft	solitary	¾	au oc	pa Cin	trun of trees	Sowerby, t 98
16008 haustellaris *Fries resupinátus* With	resupinate	small	¾	au oc	Pa tar	rotten branc	
16009 variábilis *Pers*	variable	solitary	¾	aut.	W	rotten trees	Sowerby, t 97 *niveus*
§ 30 Volva'ria *Fries*							
16010 bombycinus *Schaff*	silky	eatable	6	jl aug	W	trun of trees	Schæff t 98
16011 cepæ'stipes *Sow*	patchy	tufted	4	sum	W	bark of trees	Sowerby, t 2
§ 31 Psallio'ta *Fries*							
16012 cretáceus *Bull*	chalky Mushr	eatable	3	au no	W	meadows	Bull t 374
16013 campéstris *L*	comm Mushr	eatable	2	my oc	Wsh	meadows	Grev crypt. t. 161



History, Use, Propagation, Culture.

§ 22. *Myxacium* So called from μυξα, mucus, on account of the nature of its surface. The species are large, solitary, terrestrial, mucous, inodorous, and not eatable

§ 23 *Hebeloma* From ἡβη, down, and λωμα, a margin The only species has a nauseous taste. Its lamellæ are serrated, and distil drops of a peculiar fluid Its varieties are infinite Common in woods.

§ 24 *Flammula* So named in allusion to their color, which is a pale yellow, the color of a weak flame The species are gregarious, subcæspitose, firm, persistent, rather bitter, and all eatable A socialis and ilicinus are both eaten at Montpellier, where they are known by the names of *Prooulade d'rouse* and *Frigoule*

§ 25 *Inocybe* From ινα, fibres, and κυβη, a head. A tribe which can scarcely be compared to any other It consists of fungi of middle-size, or smaller, solitary, growing on the ground during the summer, and not known to be poisonous, although, on account of their nauseous odor, they are suspicious

§ 26. *Naucoria* Small gregarious epiphytous fungi, growing upon stipules, leaves, wood, and even muddy earth, fragile, and without any smell Their stature is that of Collybia, but their veil is of the same nature as that of Lepiota, resembling the kernel of a nut (*naucum*), whence they are named.

15983 Cap fleshy smth. orange-brown, Lamel pur : then ferrugin. Stipes part. across into bluish gelatin. scales
15984 Cap somewhat fleshy smooth, Lamellæ cinnamon-colored, Stipes long smoothish

15985 Cap somewhat repand opaque, Stipes scaly white, Sporidia clay-color

1. *Cap dry, Gills adnate, Tufted.* GROWING ON WOOD.

15986 Cap smooth yellowish, Lamellæ adnate yellow-ferruginous, Stipes fibrous
15987 Cap smooth yellowish, Lamellæ affixed yellow, Stipes fibrous pallid solid

2 *Cap viscid, Gills adnate, Not tufted.* GROWING UPON BOTH WOOD AND EARTH.

15988 Yellowish, Cap smooth viscid, Lamellæ adnate, Stipes hollow tapering at base

1. *Stem fibrous or scaly with fibres*

15989 Cap fleshy obtuse scaly brownish-grey, Lamellæ free or nearly so, Stipes solid fibrillose
15990 Cap somew fleshy hemispherical mouse-color, Stipes solid thin long scaly squarr. Lamel somewhat loose
15991 Cap somewhat fleshy convex scaly-villous, Lamellæ loose and solid then fibrous, Stipes solid

2. *Stem nearly at the top with white scales*

15992 Cap dry campanulate at length nearly plane surface splitting longitudinally pale shining-brown, Stipes solid somewhat tuberous at the base
15993 Cap conical at length expanded umbonate silky, Lamellæ subadnate, Stipes solid slender sprinkled with white pulverulent particles
15994 Cap yellow-brown scaly, Gills watery white irregular, Stem yellow-brown crooked scored

15995 Cap somew. fleshy scurfy scaly rufous cinnam.-color Lamel. emarg lin cinnam.-color Stipes scaly at end
15996 Cap somew. fleshy . then umbilicat. scaly or silky, Lamel somew decurr cinnam.-color Stipes fistul scurfy

15997 Cap dark-brown convex, Lamellæ light-brown, Stipes light-brown

15998 Cap somewhat membranous smooth pallid, Lamel somewhat loose saffron-color Stipes long villous white
15999 Cap obtusely conical stri when moist when dry smth ochrac Lamel adnate lin Stipes long glab fragile
16000 Minute, Cap campanulate striate when moist reddish-buff becoming pale, Lamellæ adnate rather broad distant, Stipes somewhat crooked filiform
16001 Cap somewhat conical when dry elastic, Lamellæ few trifid, Stipes very long and slender
16002 Cap globose chesnut-color lobed and incurved at edge, Lamel trifid wavy, Stipes slender white fistulous

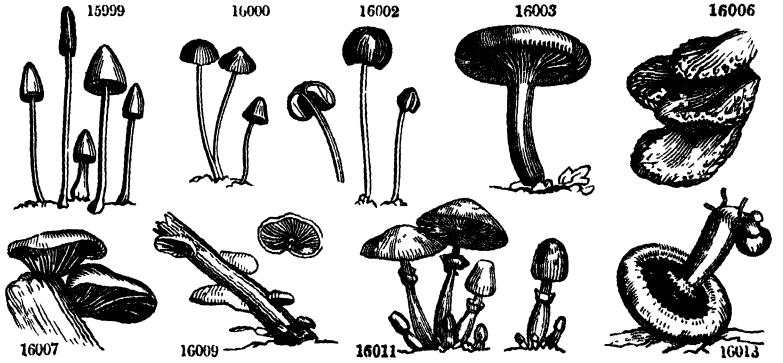
16003 Compact, Cap depressed ochrey-brown with a tomentose involute margin, Lamellæ mostly dichotomous, Stipes thick often excentrical

16004 Cap convex scaly cracked and irregular, Lamellæ orange-brown, Stipes stout somewhat lateral
16005 Cap conv viscid becom wrinkled dull-brown marg involute Lamel adnate yellow Stipes hard thick black
16006 Imbricated sessile tulvous, Cap fleshy obovate scaly towards the margin
16007 Cap subsessile smooth flaccid pale, Lamellæ watery cinnamon-colored
16008 Cap reniform villous pale tan-color, Lamellæ rounded ferruginous, Stipes lateral tapering upwards white

16009 Cap membranous reflexed silky downy white, Lamellæ whitish

16010 Cap silky white, Lamellæ flesh-colored, Stipes solid tapering incurved, Volva lax
16011 Cap campanulate with scattered scales, Stipes hollow ventricose smooth below

16012 White, Cap dry smoothish, Lamellæ loose broadest in front, Stipes hollow smooth, Annulus ascending
16013 Cap white fleshy dry subsquamose or sericeous, Lamellæ free ventricose pink changing to dark-fuscous Stipes solid white with an annular veil



and Miscellaneous Particulars.

§ 27 *Galera* From *galea*, a helmet, in reference to the figure of their pileus. The species are slender, fragile, tolerably permanent, mostly growing on the ground, and for the most part choosing humid stations. They have neither smell nor use

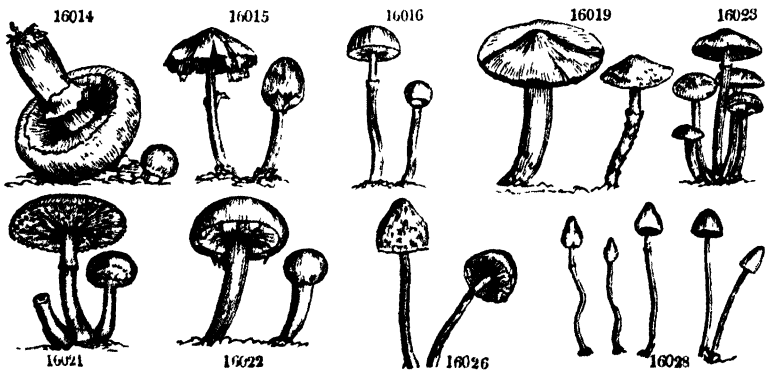
§ 28 *Tapinea* Fungi of various natures, deriving their name from ταπεινος, to depress. Mostly terrestrial and permanent, but scarcely fit for food.

§ 29 *Crepidotus* These plants form a transition to Pratella. They grow on wood or trees, and are hardly eatable A. olearius, a species which grows upon olives in the south of Europe, a poisonous species, exhibits a phosphoric appearance in the night. A translucens, a French species, is eaten by the poor of Montpellier

§ 30 *Volvaria.* So called from the magnitude of their *volva.* The species grow in fertile manured spots, or on wood, are soft and soon perishable The larger are fit for food

§ 31 *Psalliota* Mostly eatable Named from ψαλλιον, a chain-but, in the same sense as Armillaria. To this place belongs the common Mushroom, A. campestris, so called from *Mouceron*, the French name of another eatable kind. It is found all over Europe, the north of Asia, and of Africa, and in North America.

16014 Geórgii *Sowerby*	St. George's	eatable	4	aut.	Wsh	mead.& woo.	Sowerby, t 304
16015 præ'cox *Pers*	early	tufted	2½	spr su	Ysh	among grass	
β *appendiculátus* Sow.	*appendaged*	tufted	2½	spr su	Ysh	among grass	Sowerby, t 324
γ *delicátus* With	*delicate*	solitary	2	spr su	Ysh	among grass	Bolt t. 67 f 1 *durus*
16016 semiglobátus *Batsch*	half-rounded	gregarious	3	my no	Y	meadows	Sowerby, t. 248
16017 squamósus *Pers*	scaly	solitary	4	sep no	Y	woods	
16018 versicolor *With*	changeable-col	spongy	2	july	G Br	groves	
16019 æruginósus *Fl lond*	verdigrease	pretty	1½	au no	Y G	woods	Sowerby, t 264
16020 littóreus *With*	sea-shore	solitary	1	oct.	Y Br	woo & fields	
§ 32 Hypholo'ma *Fries.*							
16021 lachrymabúndus *Sow.*	weeping	fragile	2	au no	W Br	on ground	Sowerby, t 41
16022 lateritius *Schæff*	one-sided	cæspitose	2	my oc	Fulv.	trun of trees	Bolt t 5 *pomposus*
16023 fasciculáris *Huds.*	bundled	cæspitose	1½	my no.	Ysh	decay. trees	Sowerby, t. 285
§ 33 Psilo'cybe. *Fries*							
16024 myosótis *Fries*	olive	gregarious	3	sep no	G Ol	damp places	
16025 stercorárius *Schum.*	adnate	brittle	4	jul oct	Liv Y	cow dung	
adnatus Hudson							
16026 ericæ'us *Pers*	heath	variable	4	jul oct.	Br	damp places	Schæff t. 210 *helvolus*
16027 fusco-purpúreus *Wi*	brown-purple	twisting	2	aut	Pa.Br	among grass	
16028 callósus *Fries*	callous	gregarious	3	au no	Y	way sides	Sow t 248 f 1 *semiglob.*
β *várius* Bolton	*various*	gregarious	3	au no	Livid	way sides	Bolton, t 60 f 1
§ 34 Psathy'ra *Fries*							
16029 stipátus *Pers*	stalked	tufted	3	jl nov.	Br	trun of trees	Bolt t 15 *concinnus*
16030 tentáculum *Sower*	slender	fragile	3½	au no	Brsh	gardens	Sowerby, t. 385. f 1
16031 cuspidátus *Bolton*	cuspidate	thin	4	aut	R. Br	pastures	Bolton, t. 55
§ 35 Coprina'rius. *Fries*							
16032 semiovátus *Sowerby*	half-ovate	upright	6	sum	Wsh	cowdung	Sowerby, t. 131
coronátus With							
16033 fimiputris *Bull*	shield-headed	fragile	4	au oct	Ciner	horse dung	Bolt t 57 *clypeatus*
16034 papilionáceus *Bull*	butterfly	unpleasant	3	my no	Sooty	dunghills	Bulliard, t. 58
16035 Boltóni *Pers*	Bolton's	fragile	3	spring	Y	dunghills	Sower t 96 *flavidus*
16036 titubans *Bull*		delicate	3	au sep	Y	dunghills	Sowerby, t 128
16037 papyráceus *Pers*	papery	semitranspar	3	aut	Wsh	oak trees	Bolt t 11 *membranace*
16038 disseminátus *Pers*	scattered	gregarious	1	spr au	Ysh	trun of trees	Sowerby, t 166 *striatus*
2366 COPRI'NUS. *Link* Coprinus			*Sp* 10—24				
16039 comátus *Link*	maned	gregarious	2	au oct	W	gardens	Grev crypt fl t 119
A cylindricus Sowerby, t 199							
16040 plácens *Fries*	ventricose	subsolitary	5	sep oc	Wsh	shady woods	Sowerby, t 170
16041 atramentarius *Link*	inky	tufted	6	jn dec	Br	trun of trees	Sow t 188 *A fimetarius*



History, Use, Propagation, Culture,

Of all the species of agaric, one only has been selected for cultivation in our gardens, viz. the A. campestris, or common mushroon, or champignon The gills of this species are loose, pinky red, changing to a liver-color, in contact with the stem, but not united to it, very thick set, irregularly disposed, some forked next the stem, some next the edge of the pileus, some at both ends, and in that case generally excluding the intermediate smaller gills. The pileus is white, changing to brown when old, and becoming scurfy, regularly convex, fleshy, flatter with age, from two to four inches, and sometimes nine inches in diameter, and liquefying in decay, the flesh white The stem is solid, white, cylindrical, from two to three inches high, half an inch in diameter, the curtain white and delicate. When this mushroom first makes its appearance, it is smooth and almost globular, and in this state it is called a button. This species is esteemed the best and most savoury of the genus, and is much in request for the table in England It is eaten fresh, either stewed or boiled, and preserved either as a pickle, or in powder, and it furnishes the sauce called ketchup The field plants are better for eating than those raised on artificial beds, their flesh being more tender; and those who are accustomed to them can distinguish them by their smell But the cultivated ones are more sightly, may be more easily collected in the proper state for eating, and are firmer and better for pickling The wild mushrooms are found in parks and other pastures, where the turf has not been ploughed up for many years, and the best time for gathering them is August and September Dr Withering mentions four varieties.

The A Georgii of Linnæus resembles the former, but is much inferior to it in flavor. Its gills are yellowish white, the pileus yellow, convex, hollow in the centre, the stem yellow, thickish, and smooth, the juice yellow, which flows plentifully from it when wounded It is gathered in September in woods and pastures A variety of this is found on the sea-coast of Cornwall, of a large size, with the button as big as a potatoe;

16014 Cap very fleshy convex white or pale-yellowish mostly smooth, Lamellæ broad whitish at length deep purple-brown, Stipes thick with a persistent collar
16015 Cap fleshy smooth yellowish tan-color, Lamellæ annexed with a decurrent tooth pale-brown, Stipes nearly solid smooth white

16016 Cap hemispher. smooth glutin redd.-yell. Lamel. adnate mostly horizont. darkly mott. Stipes holl squam.
16017 Cap somewhat viscid yellow scales scattered concentrical, Lamellæ adnate blackish, Stipes solid
16018 Cap scaly greenish-brown, Lamellæ decurrent becoming rufous-brown, Stipes solid bulbous squamose
16019 Cap fleshy yell. but being cover with a blue slime appear green Lamel. adnate purple-brown, Stipes holl.
16020 Stipes solid white, Annulus persistent, Cap yellow-brown, Lamellæ adnate reddish-grey

16021 Cap fleshy very fibrous pale yellow-brown, Lamellæ dull reddish-brown exuding a thin grey fluid, Stipes hollow fibrillose thickest at the base
16022 Cap fleshy obt brown-orange, Lamel. slightly green Stipes filled with a spongy mass stained by the veil
16023 Cap somew fleshy umbon ochrace. or redd.-orange, Lamel green numer. Stipes holl rather long slender

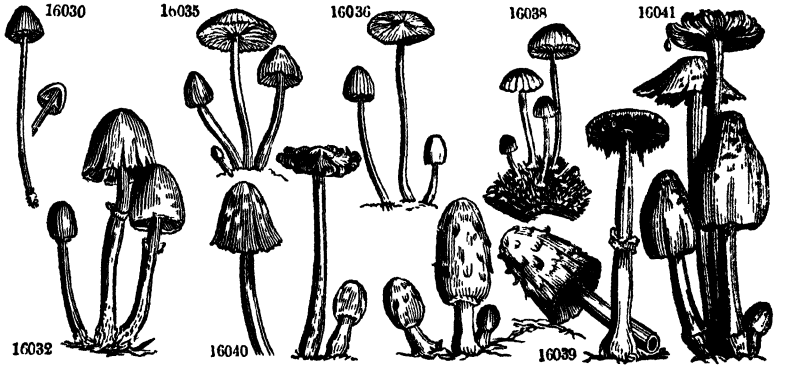
16024 Cap convex viscid, Lamellæ adnate whitish-brown, Stipes long fibrous
16025 Cap obtuse smooth viscid livid-yellow, Lamellæ broad decurrent brown, Stipes long naked

16026 Cap convex smooth shining, Lamellæ broad adnate blackish, Stipes long naked
16027 Cap light-brown semiglobular, Lamellæ purplish-brown broad th[illegible], Stipes reddish-brown
16028 Cap conical dry, Lamellæ adnate ascending dark-purple, Stipes tough smooth pale

16029 Cap somew fleshy smooth fuscous-brown pallid, Lamel adnate numer brown flesh-color Stipes smooth
16030 Cap somewhat membranous campanulate obtuse, Lamellæ very broad at back adnate cinereous-blackish . margin pink, Stipes thin smooth
16031 Cap cinnamon-color conical, Lamellæ dusky-brown, Stipes brownish cylindrical smooth

16032 Cap somewhat fleshy obtusely campanulate glutinous yellowish or brownish-white, Lamellæ adnate greyish-black, Stipes long white, Veil annular entire
16033 Cap somewhat fleshy campanulate humid cinereous pallid, Lamellæ adnate cinereous-black whole-colored at edge, Stipes long rufous, Annulus rugged
16034 Cap somewhat fleshy campanulate dry blackish soot-colored pallid, Lamellæ adnate cinereous-dark white at edge, Stipes long rufous striated at end
16035 Cap convex somewhat umbonate viscid yellow, Lamellæ annexed pallid, Stipes attenuated smooth yellow
16036 Cap membranaceous plicate viscous yellow, Lamellæ scarcely attached to the stipes pale purplish at length brown flesh-color, Stipes equal shining
16037 Cap hemispherical smoothish whitish, Lamellæ loose blackish-purple, Stipes naked white
16038 Gregarious small, Cap ovato-campan plicate, Lamel subadnate whit. at length grey, Stipes incurv glab

16039 Cap somewhat fleshy white scaly, Lamellæ white changing to red-purple and to black, Stipes subbulbous, Veil annular moveable
16040 Cap membranous white separating into broad scales, Lamellæ blackish, Stipes bulbous naked
16041 Tufted, Cap somewhat fleshy grey becoming reddish-brown smooth scaly at the apex, Lamel ventricose white changing to purplish-brown, Stipes equal naked



and Miscellaneous Particulars.

the expanded pileus eighteen inches over, the stem as thick as a man's wrist, the gills very pale, the curtain tough, and thick as leather, and the juice yellowish A plant of this kind, as Dr. Withering informs us, was gathered on an old hot-bed in a garden in Birmingham, which weighed fourteen pounds.

Greville says, "A Georgii derives its name, according to Parkinson, from springing up about the time of St George's day It is unquestionably the largest of the British agarics. It has been known to weigh fourteen pounds Mr Hopkirk mentions one that weighed five pounds six ounces, and measured forty-three inches in circumference; but Mr. Stackhouse found it to attain the enormous size of eighteen inches in diameter, which is fifty-four in circumference, having a stem as thick as a man's wrist. The best distinguishing marks are, the extreme paleness of the lamellæ at the *period of the bursting of the veil*, compared with the true mushroom, the greater convexity and thickness of flesh at the same period; and shortly afterwards, the more yellowish and tough pileus"

§ 32 *Hypholoma.* So called, from ὑφας, a cup, and λωμα, an edge Wood species growing in patches.

§ 33. *Psilocybe.* From ψιλος, thin, and κυβη, a head A very natural assemblage. The species are for the most part terrestrial, inhabiting fertile and somewhat fenny places, growing either solitary or in groups, not eatable, and subject to much variety of appearance.

§ 34 *Psathyra.* So called, from ψαθυρος, fragile, on account of their remarkable brittleness. Many species are found upon moist wood, and in grassy places on a fertile soil.

§ 35 *Coprinarius.* All the species are found on dung, whence their name, from κοπρια, dung.

236b *Coprinus* Named for the same reason as the last The species are gregarious and fugacious. They are found on dunghills, rich grassy places, and in the hollow trunks of decayed trees. The taste of the

16042 congregátus *Fries*	clustered	tufted	3	my. no.	Ferr.	trun. of trees	Sowerby, t. 261	
16043 niveus *Pers*	snowy	variable	3	au no	W	horse dung		
16044 cinéreus *Fries*	cinereous	solitary	4	jul oct.	Cin	dunghills	Bolt. t. 156	*tomentosus*
16045 doméstícus *Fries*	domestic	pretty	3	wet w.	Sooty	walls	Bolton, t 26	
16046 plicátilis *Fries*	plaited	tender	2	sum.	Cin	damp places	Sowerby, t 364	
16047 ephémerus *Pers*	ephemeral	fugacious	2	my. oc.	Br	dunghills	Sow. t 262.	*stercorarius*
16048 radiátus *Bolt*	radiated	very delicate	2	my. oc	Cin	dung	Bolton, t. 39. f. C.	

2367 *GOM'PHUS Frues.* Gomphus.

Sp 2—4.

16049 glutinósus *Fr.*	glutinous	solitary	3	jl nov	Pu	pine woods	Sowerby, t. 7	
16050 rútilus *Fr.*	sparkling	solitary	3	au oct.	Brsh	pine woods	Sowerby, t. 105	

2368. CANTHAREL'LUS. *Adans* Chantarell.

Sp 8—43

16051 umbonátus *Pers.*	umbonate	gregarious	3	au no	Cin	among moss	Jacq coll 2 t. 16 f 1	
16052 aurantiacus *Fr*	orange	poisonous	2	au no.	Or.Y	fields	Jacq coll 2 t 14 f 5	
16053 cibárius *Fries*	eatable	esculent	1½	jl nov	Y	fields	Sow t 46	*A cantharellus*
16054 cinéreus *Fries*	cinereous	tufted	1½	oct	Blsh	among moss	Bolt t 34	*infundsbularis*
16055 cornucopioides *Fries*	purplish	elastic	2	au. no	Br	woods	Sowerby, t 74	
Merúlius purpurátus With								
16056 undulátus *Fries*	wavy	tough	¾	all sea.	Pale	on ground	Sower t. 75	*floriformis*
16057 lobátus *Fries*	lobed	tough	½	spring	Brsh	humid places	Bot. t 177	*membranaceus*
16058 lutéscens *Fries*	yellowish	spirit-scented	2	jul. no	Ysh	humid places	Sow t 47	*A cantharelloi*

2369 MERU LIUS *Haller* Dry-Rot

Sp 1—10

16059 lácbrymans *Schum.*	common	parasite	4	all sea.	Y Br	decay wood	Sowerby, t 113	
β obliquus Bolton	*oblique*	parasite	4	all sea.	Y Br	decay wood	Bolton, t 74	

2370 SCHIZOPHYL'LUM *Fries* Schizophyllum

Sp 1

16060 commúne *Fr*	common	gregarious	2	wet w	Grsh	trun. of trees	Grev crypt t 61	

2371 DÆDA'LEA *Pers* Dædalea

Sp 7—30

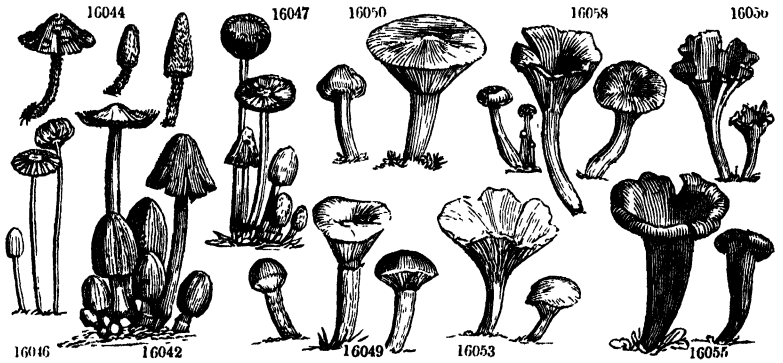
16061 quercina *Pers*	oak	variable	0	all sea	Pa Y	oak trees	Sowerby, t 181	
16062 biénnis *Fries*	biennial	three inch. br.	1	all sea.	Ferr	rotten wood	Sowerby, t. 190	
16063 betulina *Pers.*	birch	smaller	0	all sea	Pallid	birch trees	Sowerby, t 182	
16064 confragósa *Pers.*	broken	woody	0	all sea	Brsh	service trees	Bolton, t 160	
16065 unicolor *Fries*	whole-colored	imbricated	0	aut	Sooty	trun of trees	Sowerby, t 325	
16066 gibbósa *Pers*	gibbous	six inches br.	0	aut	Wsh	trun of trees	Sower t 194	*sinuosus*
16067 angustáta *Fries*	tapering	two inches br	0	aut	Cin	poplar trees	Sowerby, t. 193	

2372 POLYPO'RUS *Micheli.* Polyporus.

Sp 35—143

§ 1 Favo'lus *Beauv*

16068 squamósus *Fr.*	scaly	3-18 inc wide	2	jn nov	Ochr	trun of trees	Grev. crypt 207	
16069 heteróclitus *Fr*	variable	2½ inches wide	0	aut	Or	on earth	Bolton, t 164	



History, Use, Propagation, Culture,

European species is watery and nauseous, they are therefore not eatable But in the spice islands, two species, C moschocarvanus, which is found on the nutmegs, and C saguarius, which inhabits the pith of the Sago palm, are said to be most delicious. C cinereus is extremely rapid in its growth, attaining perfection and dissolving in the course of a few hours At its first appearance, it is covered with the delicate frosted remains of the veil

2367. *Gomphus.* So named from their form, from γομφος, a club Large Fungi, scarcely fit for food, with little taste or smell

2368 *Cantharellus.* An alteration of the French *Chantarelle* C cibarius is one of the best of our eatable mushrooms The best way of preserving the plants for use is to string them in rows, after they have become flaccid, and to hang them in a dry place where they can have plenty of air They then form a delicious ingredient in rich gravies, &c.

2369 *Merulius* A name applied by the ancients to the common morel, Morchella esculenta Natives of rotten wood, which they soften and finally destroy M lacrymans, the dry rot, is a pest to the wood of dwelling houses, which it speedily destroys It is said to be destroyed by a wash of diluted sulphuric acid. The whole plant is generally resupinate, soft, tender, at first very light, cottony and white When the veins appear, they are of a fine yellow, orange, or reddish-brown, forming irregular plicæ, most frequently so arranged as to have the appearance of pores, but never any thing like tubes. Sometimes the pileus or substance of the plant, from its situation, produces pendent processes like inverted cones "The whole fructification often forms a circle of 1—8 inches in diameter." Except in favorable situations, it does not produce fructification, and resembles a dry pithy cottony substance, whence it has been called the dry rot. When in a perfect state, its sinuses contain drops of clear water, which have given rise to the specific name

2370. *Schizophyllum* From σχιζω, to cut, and φυλλον, a leaf, in allusion to its lacerated appearance. Found

16042 Tuft Cap membranae furrow. furfurac. brown-orange, Lamel pale chang to black, Stipes equal fragile
16043 Cap campan farin with min scales, Stipes snow-white tomentose, Lamel narrow at length brown -black
16044 Cap furrowed subtomentose cinereous smooth on the summit, Lamel lin Stipes tall attenuated upwards
16045 Cap obtuse scaly scurfy wavy-furrowed sooty, Lamellæ numerous linear blackish, Stipes somewhat silky
16046 Very tender, Cap conical at length plane umbilicated plicate, Lamellæ not reaching to the stipes distant dark-grey, Stipes smooth weak
16047 Ovato-campanulate scaly while young afterwards glabrous becoming expanded and revolute grey or tinged with brown very thin splitting, Lamellæ distant
16048 Very delicate and fugacious, Cap grey furfuraceous at length splitting in a radiated manner glabrous brownish in the centre, Stipes filiform

16049 Cap obtuse glutinous purplish-brown, Lamellæ whitish cinereous
16050 Cap umbonate somewhat viscid rufous-brown, Lamellæ purple umber-colored

16051 Cap slightly fleshy umbonate cinereous-blackish, Stipes solid paler, Plaits straight white
16052 Cap fleshy rather depressed downy and solid, Stipes orange-yellow, Plaits straight orange-colored
16053 Rich buff yellow, Cap fleshy irregular smooth veins tumid, Stipes solid attenuated at the base
16054 Cap funnel-shaped pervious scaly and hollow, Stipes blackish, Plaits distant cinereous
16055 Cap tubeform pervious scaly black umber-color wrinkles obsolete

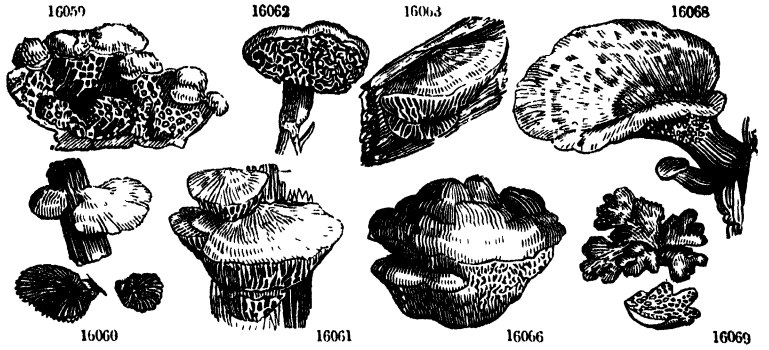
16056 Cap coriaceous membranous depressed wavy pallid rugose beneath, Stipes solid
16057 Horizontal sessile lobed membranaceous dilute brown, Veins branched
16058 Cap submembranac funnel-shap waved yellowish or olivac brown, Veins anastomosing, Stipes holl yell

16059 Effused large yellow ferruginous or deep orange margin white and cottony, Veins large forming irregular pores by their sinuosity

16060 The only species

16061 Sessile pale with a woody aspect, Cap suberose rugose glab Hymenium contorted sinuose anastomosing
16062 Cap somewhat corky depressed rather velvety subterruginous, Hymenium composed of labyrinth-like pores grey flesh-color, Stipes irregular central or nearly lateral
16063 Sessile pallid, Cap coriaceous banded downy, Lamellæ straight somewhat branched
16064 Sessile, Cap corky-coriaceous banded rough brownish, Recesses labyrinth-like cinereous
16065 Sessile cinereous, Cap coriaceous villous banded, Recesses unequal somewhat flexuose becoming ragged
16066 Sessile whitish, Cap corky villous projecting and gibbous at base, Pores linear straightish
16067 Sessile, Cap corky downy banded brownish-cinereous, Pores long narrow olive-yellow

16068 Large, Cap fleshy pale dirty-yellowish with broad dark-colored scales, Pores large angular whitish becoming mere reticulations at the base, Stipes very short
16069 Sessile orange-colored, Cap imbricated lobed villous, Pores large deformed



and Miscellaneous Particulars.

upon the trunks of leafy trees through all Europe and Asia, the Gold Coast, Cape of Good Hope, North America, the Antilles, and South America.

2371 *Dædalea.* So called from its sinuosities, which appear as if arranged with *Dædalean* art. Most of the species grow upon wood The dried substance of D quercina is a good styptic D suaveolens has, according to Bolton, a smell like aniseed; and Linnæus mentions, that the Laplanders carry it about them when they visit their mistresses, in order to render themselves more agreeable. From the powder of the plant is prepared an electuary which is said to have been used with success in cases of phthisis. The dose from a scruple to a drachm

2372 *Polyporus.* From πολυς, many, and πορος, a pore, on account of the multitude of pores which constitute its hymenium P squamosus is a common species on trunks of willows, oaks, walnuts, &c From this was extracted, by Braconnot, the Fungic acid. It is colorless, does not crystallize, has a very sour taste, and when evaporated to dryness, deliquesces upon exposure to the air The fungates of potash and soda do not crystallize, are very soluble in water, but not in alcohol The fungate of ammonia crystallizes in regular six-sided prisms. The fungate of lime is not altered by exposure to the air, and is soluble in about eighteen times its weight of water at seventy-three degrees.

P Tuberaster, a species common in Italy, in various parts of the kingdom of Naples, and the Pontifical states, is held in the highest esteem as an article of Neapolitan cookery P annosus, a Swedish species, is used by the peasantry as a cure for the bite of snakes Fries says, that he saw the blood which was flowing from the mouth of a kid which had been hurt stopped in a short space of time by its application From P. dryadeus, the Boletus pseudo-igniarius of Bulliard, Braconnot obtained his Boletic acid The color of this principle is white, it is not altered by exposure to the air, and its crystals are regular four-sided prisms. Its

§ 2. Micropo'rus. *Beauv*

16070 leptocéphalus *Jacq.*	small-capped	one inch wide	1	aut.	Gr	on wood	Jacq misc 1. t 12
16071 brumális *Pers*	winter	1-4 inch wide	2	all sea.	Sooty	trun of trees	Schæff t 281 *pileus*
16072 perénnis *Fr*	perennial	thin	3	aut	Cinn	trun of trees	Sowerby, t 192
16073 strobiliformis *Dicks*	cone-like	lumpish	2	aut	Br	trun of trees	Crypt brit. t. 3. f 2
16074 pellúcidus *With*	pellucid	two inch. br	¼	aug.	Br	old wood	
16075 variegátus *Sower*	variegated	patches	2	all sea	Br	trun of trees	Sowerby, t. 368
β *varius* Pers	*variable*	patches	2	all sea	Grsh	trun of trees	Grev. crypt 202
B lateralis Bolt 83							
γ *nummulárius* Bull	*moneywort*	patches	2	all sea.	Wsh	trun of trees	Sower. t. 368 fig min
16076 lucidus *Fr*	shining	variable	1½ or 0	sum	Ysh	trun of trees	Sowerby, t 134
16077 frondósus *Fr.*	leafy	broad patches	2	scp oc	Sooty	roots of oaks	Schæffer, t. 127
16078 velutinus *Fr.*	velvety	thin	2	spr au.	Wsh	trun of trees	
16079 gigantéus *Fr*	gigantic	tufts	24	sum	Pa Br	beech trees	Sow. t 86. *imbricatus*
16080 sulphúreus *Fr.*	sulphur-color.	tufts	24	sum	Rsh Y	oak trees	Grev crypt 113
16081 betulinus *Fr*	birch	acid	2	sum	Brsh	birch trees	Sowerby, t. 212
16082 spúmeus *Fr.*	frothy	thick	3	aut	Wsh	trun of trees	Sower t 211. *stipitatus*
16083 cæsius *Fr*	cæsious	very thin	2	aut.	Bsh	trun of pines	Sower t 226 *albidus*
16084 hispidus *Fr*	hispid	spongy	6	sum	Ferr.	oak trees	Grev crypt 14
Bol velutinus Sowerby, 345							
16085 cuticuláris *Fr*	cuticular	imbricated	3	aut	Ferr	trun of trees	Sower t 195 *impuber*
16086 adústus *Fr*	scorched	imbricated	2	aut.	Pa Br	trun of trees	Sower t 231 *carpinus*
16087 ulmárius *Fr*	elm	3-4 inch wide	0	aut.	Pallid	elm trees	Sowerby, t. 88
16088 suavéolens *Fr.*	Anise-scented	fragrant	3	aut	W	willow trun	Sowerby, t. 228
β *salicinus* Fr	*willow*	fragrant	3	aut	W	willow trun	Sowerby, t 227
16089 versicolor *Fr*	changeable	tufted	1	su aut	Bsh	trun of trees	Sowerby, t. 229
16090 radiátus *Fr*	radiated	imbricated	1	aut	Y Br	trun of trees	Sowerby, t 190
16091 pallescens *Fr*	pallid	imbricated	2	aut	pa Oc	trun of trees	Sow t 250 *pelleporus*
16092 abietinus *Fr.*	pine-tree	imbricated	1½	aut.	Wsh	dead pines	Dicks crypt t 9. f 9
16093 fomentárius *Fr.*	soft tinder	spongy	6	all sea	Sooty	beech trees	Sowerby, t 133
16094 igniárius *Fr*	hard tinder	hard	6	all sea	Ferr	trun. of trees	Sowerby, t 132
16095 spongiósus *Fr*	spongy	tufts	2	aut.	Ferr	trun of trees	Bolt t 165 *resupinatus*
16096 medulla pánis *Fr*	bread-crumb	thick	4	aut	W	fallen timber	Bolton, t 166 f 1
16097 vulgáris *Fr*	common	fragile	12	all sea	W	fallen timber	Bolt t 166 *proteus*
16098 ferruginósus *Fr*	rusty	unequal	1	sum	Ferr.	alder trees	Grev crypt 155
16099 molluscus *Fr*	slippery	variable	3	all sea.	W	dead trees	Sow t 326 *Medul panis*
16100 incarnátus *Fr.*	pink	firm	3	sum	Pk	pine wood	

§ 3 Polystic'ta

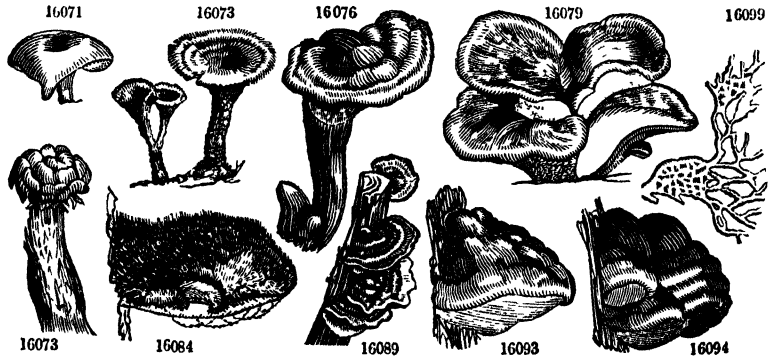
16101 reticulátus *Nees*	netted	very delicate	2	sum	W	pine wood	Nees crypt f 225
16102 carmichælianus *Gr*	min hon -com	crust-like	3	aut	W	decay trun	Grev crypt 224

2373 BOLE'TUS *Dull* Boletus. *Sp* 8—20

16103 lúteus *L*	yellow	3 inch broad	2	aut.	Y	old trees	Grev crypt. 183
16104 lactifluus *With*	milky	2-4 inches br.	2½	aut	Buff	pastures	
16105 piperátus *Bull*	peppery	2½ inch broad	1½	su aut	Ysh	woods	Sowerby, t. 34
16106 subtomentósus *L*	downy	cracked	2	sn oct	Ol	woods	Bulliard, t. 393
β *sanguineus* With	*bloody*	cracked	2	sn oct	Crim	woods	Sow t 225 *commutatus*
16107 luridus *Schæff*	lurid	6 inches broad	2	su aut	Ol G	groves	Grev. crypt 121
B rubeolus Sower 150							
16108 esculéntus *Per*	esculent	cracked	4	su aut	Sooty	woods	Sowerby, t. 111. *edulis*
16109 scáber *Fr*	rough	3 inches broad	4	su aut	W	woods	Bolt t 86 *procerus*
β *aurantiacus* Sow	*orange-colored*	3 inches broad	4	su aut	Ruf	woods	Sowerby, t. 110
γ *bovinus* Schæff	*glutinous*	3 inches broad	4	su aut	Sooty	woods	Sowerby, t. 175. *scaber*
16110 cyanéscens *Fries*	bluish	frosted	3	su aut	Straw	woods	Bulliard, t. 369

2374 FISTULI'NA *Bull* Fistulina *Sp* 1.

16111 hepática *Bull*	liver-like	patches	6	aut	Crim	oak trees	Sowerby, t 88



History, Use, Propagation, Culture,

taste is similar to that of tartar It is soluble in 180 times its weight of water, at a temperature of sixty-eight degrees, and in forty-five times its weight of alcohol. The aqueous solution reddens vegetable blues. It combines with the different bases forming boletates, which have been but little examined. The boletate of ammonia crystallizes in flat four-sided prisms, and is soluble in twenty-six times its weight of water at sixty-eight degrees. The boletate of potash is very soluble in water, and crystallizes with difficulty The boletate of lime crystallizes in flat four-sided prisms, and is soluble in about 110 times its weight of water at seventy-two and a half degrees. Polyporus fomentarius is much used on the continent for making Amadou; also very generally in the Highlands of Scotland for the same purpose by the shepherds, who manufacture it for themselves.

16070 Cap fleshy coriaceous thin smooth brownish, Pores very small roundish white, Stipes short pallid
16071 Cap soft fleshy somewhat umbilicated villous sooty pallid, Pores somewhat angular white, Stipes pallid
16072 Cap coriaceous velvety zoned, Pores minute at length lacerated, Plant cinnam -col. Stipes central
16073 An obscure species scarcely known
16074 Cap concave rich brown scaly, Pores white very short, Stipes whitish thick short
16075 Cap rigid glab smooth, Pores minute round pallid, Stipes short smooth pallid abruptly black downwards
β Cap rigid glab. smooth, Pores small round. pale, Stipes short smooth pale becom suddenly black at base

γ Cap yellow ochre-color or whitish
16076 Cap corky and stipes smooth shining, Pores minute round pale
16077 Much branched, Caps halved rugose sooty-grey, Pores white [Pores excessively short min round whit.
16078 Imbricated scarcely reflex whit. or brown -grey, Cap betw corky and coriac thin velvety obscure zoned,
16079 Imbricated multiplied, Caps very broad somewhat banded pale-brown, Pores unequal pale
16080 Multiplied subsessile, Caps broad imbricated smoothish reddish-yellow, Pores minute flat sulphur-colored
16081 Cap subsessile not dimidiate compact smooth pale whitish-brown, Pores white small unequal
16082 Whitish, Cap fleshy rugose hispid obtuse, Pores short roundish
16083 Cap fleshy subsericeous white changing to bluish, Pores minute white irregular lacerated
16084 Cap dumidiate large somew fleshy thick villous ferrugin Pores yellowish pale and fringed at the orifices

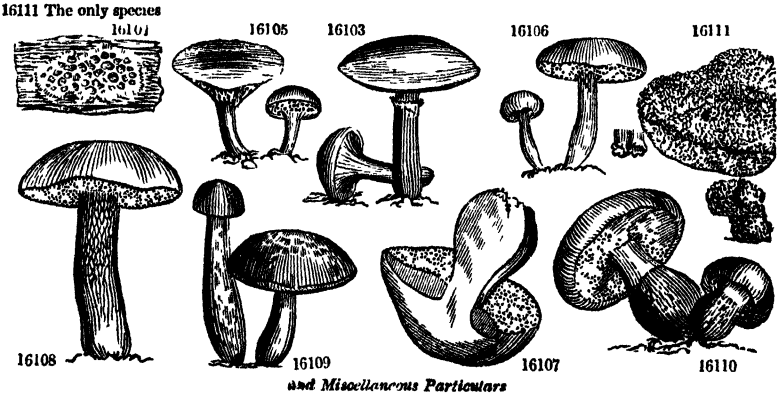
16085 Caps fleshy corky downy ferruginous, Pores shining greyish ferruginous
16086 Caps fleshy tough villous pale · margin straight blackish, Pores minute round cinereous
16087 Cap fleshy corky not banded glabrous pallid, Pores small equal
16088 Cap fleshy corky not banded villous white, Pores largish brownish [brown short irregular
β Sess. or dimid bet suber and coriac round smooth white at length brown Pores white becom yellow.-
16089 Cap mostly reflexed coriaceous villose variegated by zones of different colors, Pores round white short
16090 Caps coriaceous streaked in rays somewhat velvety brownish-yellow, Pores minute
16091 Caps coriaceous smooth not banded pale ochre-color, Pores equal [lacerating
16092 Effused but at length mostly reflex Cap thin coriac vill white, Pores violet at length brown and toothed
16093 Cap subtriangular glabrous dark brownish-grey soft within margin pale glaucous as well as the pores (which are very minute) but at length ferruginous
16094 Hard, Cap thick obtuse smoothish mostly ferruginous blackish at the base banded. margin convex, Pores minute greenish at length cinnamon-color
16095 Effused coriaceous spongy ferruginous, Pores straight round minute
16096 Effused somewhat wavy hard smooth dry white, Pores middle-size
16097 Broadly effused thin dry smooth white Pores minute subequal
16098 Effused thick portions sometimes growing out horizontally ferrugin Pores round very uneq Flesh none
16099 Effused thin soft white with a fibrous circumference, Pores thin unequal
16100 Effused coriaceous very thin submarginate, Pores orange flesh-color minute round subobblique

16101 Very fine resembling byssus fugacious white, Pores distant cupulæform powdery
16102 Effus. entirely resupin very thin white. marg membran laciniat Pores min subhexagonal very shallow

16103 Cap glutinous varying from bright-yellow to fulvous tubes adnate yellow, Stipes firm with an annular veil
16104 Cap red-buff, Pores yellow, Stipes bright-yellow, Juice like milk
16105 Cap redd. or brownish-yell smooth · tubes adnate somew decurr large ferrugin Stipes smooth deep-yell
16106 Cap round. dry subtoment. reddish or olivaceous tubes adnate large angul. yell. Stipes very firm smooth

16107 Cap convex subtomentose mostly olivaceous tubes nearly free round yellow, the orifices crimson-red, Stipes thick reticulated with crimson-red
16108 Cap convex smooth cinereous yellow or brown tubes nearly free roundish minute whitish at length yellowish, Stipes thick reticulated flesh white not changing color
16109 Cap convex glabrous tubes free round whitish, Stipes firm attenuated upwards scabrous
β Cap somewhat rufous with black scales
γ Cap slightly glutinous reddish-brown thin · tubes adnate compound yellowish, Stipes smooth
16110 Cap compact somewhat downy tubes loose round equal, Stipes solid smooth ventricose

16111 The only species

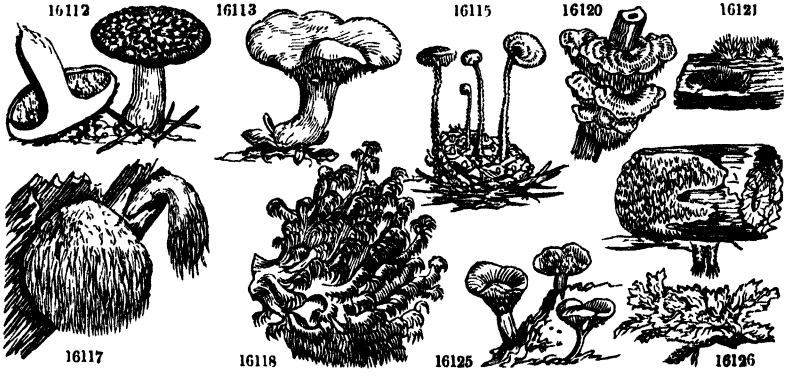


and Miscellaneous Particulars

2373. *Boletus* Pliny, Cæsalpinus, Porta, and others, call these plants Suilli The Boleti (from βωλος, a field, in allusion to the places where they are found) of the Romans were terrestrial Fungi, and more particularly Agaricus cæsareus By Tournefort these were called Phalloidei; by Micheli, Morchellæ. The species grow singly upon the ground, are succulent, and have their parts in the greatest perfection of any fungi. B. granulatus is eatable, according to Persoon, so is Boletus subtomentosus. Boletus edulis is excellent when cooked.

2374. *Fistulina.* So called from the *fistulous* nature of its tubes; the genus is just intermediate between Boletus and Hydnum, to the former of which it bears the same resemblance as Schizophyllum to Agaricus. There is only one species, and it is said, by Persoon, to be eatable.

2375. HYD'NUM. *L*	Hydnum			*Sp* 13—87.				
16112 imbricátum *L*	imbricated	esculent	1	sep. oc	Umb.	pine woods	Greville crypt. 71	
16113 repándum *L*	repand	esculent	1½	su aut	Ysh	woods	Greville crypt. 44	
β squamósum Fr	*scaly*	esculent	1½	su. aut	Ysh	woods	Bolton, t. 88. *imbricatum*	
16114 ruféscens *Pers*	brownish	eatable	3	su aut	Pksh	beech woods	Bolton, t. 89 *repandum*	
16115 auriscálpium *L*	ear-pick	curious	2½	all sea	Bl	pine cones	Greville crypt. 196	
16116 gelatinósum *Scop.*	gelatinous	curious	½	aut.	Fusc.	pine woods	Jacq aust. t 239	
16117 erináceum *Bull.*	Hedge Hog	variable	3	oct.	W	beech trees	Bulliard, t. 34	
16118 coralloides *Scop.*	coralloid	tufts	1	aut.	W	trun. of trees	Sowerby, t. 252	
16119 crispum *Schæff*	crisp	4 inches wide	0	oct	Brsh	dead wood	Schæff. t. 147 f. 1	
16120 ochráceum *Pers*	ochre-colored	variable	2	all sea	Ysh	pine wood	Sowerby, t 15. *Davisii*	
16121 minimum *Bolton*	least	curious	¼	aut.	Taw.	rotten oak	Bolton, t 171	
16122 membranáceum *Bull*	membranous	effused	0	sum	Ferr	pine wood	Sowerby, t 327	
16123 Bárba Jóvis *Bull*	Jew's Beard	12 inches wide	0	sum	Wsh	hollow trees	Sowerby, t 328	
16124 spatulátum *Fr*	spatulate	very delicate	0	all sea	W	pine trees	Nees syst. f. 231	
2376 SISTOSTRE'MA	*Fries* Sistostrema.			*Sp* 1				
16125 cónfluens *Pers*	confluent	gregarious	1	au no.	Wsh	way-sides	Sowerby, t. 112	
2377 PHLE'BIA *Fries*	Phlebia			*Sp* 1—4				
16126 vága *Fries*	wandering	membranous	2	sep no	Sul	alder trees		
2378 THELE'PHORA	*Ehr* Thelephora			*Sp* 33—75				
16127 pannósa *Fr*	cloth-like	gregarious	2	aut	Pallid	on ground	Sowerby, t 155	
16128 caryophyllæ'a *Fr.*	clove	tough	1½	aut	Psh	among grass	Schæffer, t. 325	
16129 terréstris *Fr*	terrestrial	gregarious	1½	aut	Brsh	on ground	Bul t 268 *caryophyllæa*	
16130 lacinláta *Fr*	ragged	gregarious	1½	aut	Ferr	on ground	Bol t 173. *caryophyllæa*	
§ 1 Merisma *Fr*								
16131 palmáta *Fr*	palmate	stinking	2	wet au	Psh	pine woods	Greville crypt fl. t 46	
β anthocéphala Fr	*flower-headed*	stinking	2	wet au	Ferr.	pine woods	Sowerby, t. 156	
16132 cristáta *Fr.*	crested	crust-like	3	au oct	Pallid	damp places	Sow t 158 *lacinata*	
16133 tuberósa	dwarf tuberous	solitary	1½	aut	Rsh	bare ground	Greville crypt 178	
16134 rubiginósa *Schr*	rusty	woody	2	all sea	Bt Br	old oaks	Sow t 26 *Au ferrugin*	
16135 tabacina *Fr*	Tobacco	elegant	6	su aut	Ferr.	bran of trees	Sowerby, t. 25	
Auric nicotiána	Bolton, t 174							
16136 hepática *Fr*	Liver	imbricated	4	aut	Dl Br	trun of trees	Sow t 388. f. 2. *Aur. lavis*	
16137 hirsúta *W*	hairy	firm	3	all sea.	Ysh	trun of trees	Sow t 27. *Au reflexa*	
16138 ochroleúca *Fr*	pale-yellow	membranous	3	aut	Wsh	trun of trees	Sow t 349 *Au papyrina*	
16139 purpúrea *Schum*	purple	wavy	3	aut	Pu	trun of trees	So t. 388. f. 1 *A persistens*	
16140 intybácea *Pers*	endive-like	very irregular	6	au spr	Rsh	stumps of tr		
16141 sinuans *Pers*	sinuous	gregarious	1	au wi	Y Br	oak branches		
16142 corýlea *Pers*	Hazel-Tree	imbricated	6	all sea	Ochr	decay hazel		
16143 córium *Pers*	leathery	thin	6	aut.	Buff	dead trunks	Greville crypt. 147	
16144 ochrácea *Fr*	yellow-ochre	very broad	12	aut.	Ochr	rotten trun		
16145 radiáto-rimósa *Grev*	cracked	confluent	4	aut.	R Br	damp fir tim.		
16146 sanguinolénta *Fr.*	bloody	very gregar.	2	nov	Psh	dead trees	Greville crypt 295	



History, Use, Propagation, Culture,

2375 *Hydnum* The Greeks had their ὑδνα and ὐδνα, tumours, which were analogous to the tubers of the Romans H coralloides is eatable; so is H leoninum, a Swedish species. A very extensive genus of fungi, chiefly found in moist situations upon the trunks of trees. The pileus is furnished on its lower surface with numerous awl-shaped bodies, which Linnæus compares to the prickles of a hedgehog; they are soft, solid, conical or cylindrical substances, emitting sporules from every part of their surface.

2376. *Sistostrema.* So named from συιστημι, *part* συιστως, compounded, and τρημα, an orifice, in allusion to the regular rows of pores Intermediate between the Agarics and Hydna. Gregarious, becoming concrete, fragile, scentless, white, becoming yellow in age. The pilei are thin, somewhat fragile, from half to one inch

1. *Stem perpendicular, Cap distinct, round, nearly entire* GROWING ON THE GROUND

16112 Cap fleshy flat tessellated scaly not banded umber-colored, Processes buffish-cinereous, Stipes short
16113 Cap fleshy smooth subrepand buffish, Subulate processes of hymenium unequal pale, Stipes unequal thick

16114 Cap fleshy orbicular somewhat tomentose brownish flesh-color, Processes nearly equal, Stipes thin equal
16115 Cap coriaceous tomentose, Stipes lateral tomentose

2. *Stem simple, somewhat horizontal, Cap halved, or out of the centre* FLESHY GROWING ON WOOD.

16116 Cap gelatinous papillose, Processes soft pyramidal glaucous, Stipes short lateral
16117 Very large heart-shaped white becoming rather yellow, Cap subsessile fibrous torn, Processes very long

3 *Cap confounded with the stem, obliterated* FLESHY GROWING ON WOOD

16118 Much branched white becoming yellow, Branches entangled tapering, Processes unilateral subulate

4 *Cap sessile, lateral* GROWING ON WOOD

16119 Cap coriaceous lobed scaly plaited rufous brown projecting behind, Processes imbricated pale rufous
16120 Effuse-reflexed, Cap coriaceous thin banded ochre-colored, Processes minute numer. ochre-flesh-colored
16121 Coriaceous woody spherical orange-color, Processes short erect

5 *Cap resupinate, effuse* GROWING ON WOOD

16122 Effused thin glabrous tawny-ferruginous, Processes in the middle straight
16123 Effused downy pale-white, Processes rounded pubescent at the end bearded with orange
16124 Effus white at length yellow with a byssoid marg Proc s of hymen. oblique subent. compr. vill at apex

16125 The only species

16126 Effused soft sulphur colored the circumference expanded and byssoid, Plaits distant irregular

1 *Cap entire, with a stem* TERRESTRIAL.

16127 Corky pale, Cap depressed scaly beneath smooth somewhat pilose
16128 Somew. tuft. stipit or sess. Cap irregul rarely quite ent striato-fibr purplish-brown · marg often laciniate

2 *Cap lateral, somewhat stipitate* TERRESTRIAL

16129 Irregularly tufted dark fuscous, Cap rather thick striato-fibrous sessile often imbricated sometimes with a very short lateral stipes
16130 Ferruginous brown, Caps fibrous scaly ragged and crisp at their edges

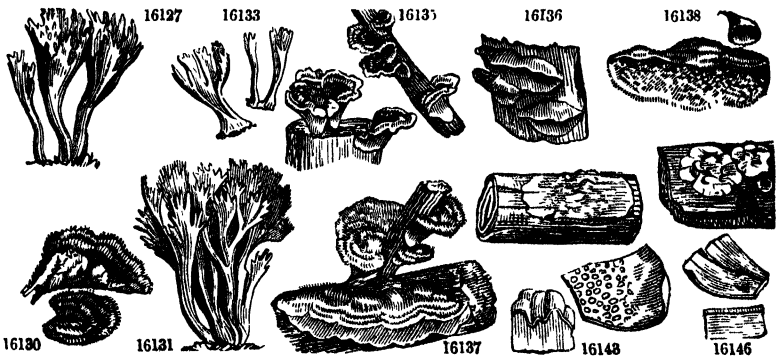
3 *Cap and stem confounded, running into compressed branches* TERRESTRIAL *Merisma* Pers

16131 Erect purple-brown, Branches compressed palmate folded paler at the summit
β Somewhat ferruginous, Branches glabrous obtusely ragged fastigiate
16132 Subdecumbent pale greyish or yellowish, Branches effused plane expanding fimbriato-laciniate
16133 Erect distinct stipitate reddish-grey, Cap with branches of nearly equal length, Stipes bulbous at base

4 *Cap sessile, lateral* GROWING ON WOOD

16134 Imbricated rigid somewhat zoned purplish reddish-brown glabrous, Hymenium papillose minutely velvety rubiginous paler at the margin
16135 Effuse-reflexed thin silky ferruginous margined downy beneath

16136 Somewhat imbricated bandless smooth on each side very smooth dull-brown
16137 Effuse-reflexed coriaceous strigose, Hymenium smooth yellowish or orange-buff
16138 Effuse-reflexed somewhat membranous striated pubescent beneath smooth and ochraceous
16139 Imbricated subcoriaceous zoned hirsute, Hymenium smooth purple
16140 Imbricated velvety zoned pale reddish-buff, Hymenium smooth irregularly papillose buffish at length ferruginous sometimes shooting out into rude stems anastomosing and producing irregularly caps
16141 Round thick often conflu Marg waved splitting, Hymenium tuberculose yellow or reddish-brown crack
16142 Broadly effused thickish, The margin slightly reflexed, Hymenium ochraceous uneven unequally papillose
16143 Coriaceous broad thin, Margin free with the surface tomentose, Hymenium smooth minutely reticulated buff becoming darker in age
16144 Effus very broad thin, Hymen somew of an ochrey pale-yell smth. or with scatter uneq false papillæ
16145 Resupinate, Margin free whitish hirsute, Hymenium fuscous smooth somewhat shining and faintly zoned towards the margin cracking in a radiated manner
16146 Circular effused, Margin sometimes free rarely reflexed, Hymenium pale whitish-brown prunose silky and minutely byssoid at the margin turning red when wounded



and Miscellaneous Particulars.

broad, somewhat depressed, flexuose, and apt to grow to one another. The only species is found in August and November by the side of sandy paths in pine-groves.

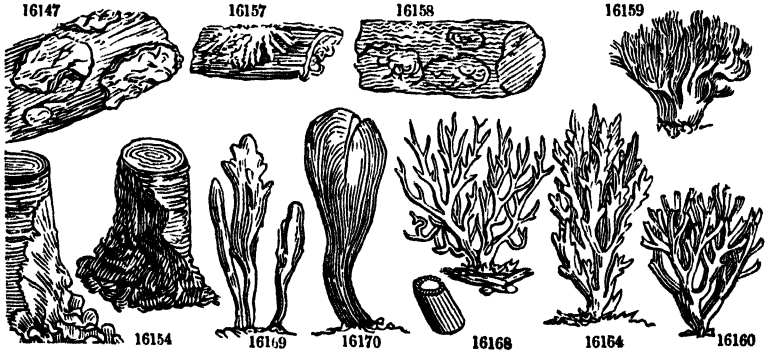
2377 *Phlebia* So called, from φλεψ, a vein. As the last was intermediate between Agaricus and Hydnum, so is this between Cantharellus and Thelephora. As that differed from Dædalea, does this from Merulius. The species are all found upon bark, late in the year No species was described before the writings of Fries P. merismoides is an elegant little plant, distinguished by its reddish-flesh-colored hues. It is found occasionally spreading over wood and smooth bark, and sometimes runs with its papillose veiny branches among mosses

2378. *Thelephora* So called, from θηλη, a nipple, and φερω, to bear, in allusion to the papillose surface of

16147 quercina *Pers*	oak	brittle	6	spr. au.	Bish	fallen oaks	Greville crypt. 142
16148 fraxínea *Pers.*	ash	thin	1	aut.	Grsh	dead ashes	
16149 Tiliæ *Pers*	lime	irregular	2	aut.	Cin.	woods	
16150 epidérmea *Pers*	bark	irregular	3	nov.	Pa Bu	dead trunks	
16151 incrústans *Pers*	incrusting	spreading	3	aut.	Ysh	earth, tr., &c.	
16152 cálcea *Pers*	chalky	cracked	6	aut.	W	decay wood	
16153 Sambúci *Pers.*	Elder Tree	membranous	4	aut.	W	decay elders	
§ 2. Phylacte'ria *Pers.*							
16154 biénnis *Fr.*	biennial	plaited	4	aut	Wsh	on ground	Bulliard, t. 436
§ 3 Himan'tia. *Pers*							
16155 doméstica *Pers.*	household	smooth	6	wet w.	Br	da. pla. in ho.	
16156 fúsca *Fr.*	brown	rugose	2	aut.	Vi Br	trun of trees	
16157 lácte *Fr*	milk-white	very thin	2	aut.	W	trun of trees	Sow t 387 f 1. *F stellata*
H cándida Pers.							
§ 4 Leiostro'ma. *Fr*							
16158 cinérea *Fr.*	cinereous	uneven	4	spr au	Cin.	elder tree	Sowerby, t. 388

Division II. *Clavati.*

2379. CLAVA'RIA. *Vaill.* Clavaria			*Sp* 23—66				
16159 Bótrytis *Pers*	bunched	much branch.	3	sum	Wsh	beech woods	Sch. t 176 *acroporphyria*
16160 fláva *Pers*	yellow	delicious	3	aug	Y	woods	Schæffer, t 175
16161 coralloídes *L*	coral-like	very smooth	3	aut	W	on ground	Sowerby, t 278. fig sup.
16162 abietína *Pers*	pine-wood	gregarious	3	aut.	Ochr	fir woods	Greville crypt 117
16163 cristáta *Pers*	crested	polymorph	2½	aut.	W	woods	Greville crypt. 190
16164 cinérea *Pers*	cinereous	tufted	3	sum	Cin	damp places	Greville crypt. fl t 64
16165 córnea *Pers*	corneous	gregarious	½	aut.	Y	dead fir trees	
16166 stricta *Pers*	erect	thin	1	au oc	Brsh	trunks	Schæffer, t 286 *pallida*
16167 praten'sis *Pers*	meadow	viscid	1	aut.	Y	meadows	Bolton, t 114 *muscoides*
16168 corniculáta *Schaff*	horned	solitary	3	aut.	Y	meadows	Sow t 157 *muscoides*
16169 rugósa *Bull*	rugose	toughish	2½	aut.	W	damp earth	So t 278 fig int *coralloi*
16170 pistilláris *L*	pistillary	largest	12	au no.	Ysh	beech woods	Sowerby, t 277
16171 Ardénia *Sowerby*	flexuose	opaque	6	sep	Brsh	bran of lime	Sowerby, t 215
16172 fusiformis *Sowerby*	fusiform	regular tufts	3	sep	Y	among grass	Sowerby, t 234
16173 ceranoïdes *Pers*	wrinkled	much tufted	3	aut	Ysh	upon trees	Sowerby, t. 235 *rugosa*
16174 inæquális *Fries*	unequal	gregarious	2½	aut	Y	meadows	Sow t 253 *vermicularis*
16175 frágilis *Pers*	brittle	gregarious	1	aut	Ysh	damp places	Greville crypt 37
C gracilis Sowerby, 232							
16176 acúta *Sowerby*	acute	gregarious	2	aut	W	upon trees	Sowerby, t 333
16177 fimbriáta *With*	fringed	polymorph	2	aut.	W	upon trees	
16178 hélvola *Pers*	pale-red	flexuose	1½	aut	Y	meadows	
16179 vermiculáris *Fries*	worm-like	crowded tufts	3	aut	W	mea & past	
16180 uncinális *Grev*	dwarf	very gregar	1	aut	W	rotten twigs	Greville crypt. 98
16181 sétipes *Grev*	bristle-footed	gregarious	½	aut	W	dead leaves	Greville crypt fl t 49
2380 CALO'CERA. *Fries.* Calocera			*Sp* 2—6				
16182 tuberósa *Fries*	tuberous	root roundish	2	aut	Y	und ba of tr	Sowerby, t 199
16183 córnea *Fries*	horny	tufted	¼	jl dec	Y	various trees	Sowerby, t 40
2381 GEOGLOS'SUM *Pers* Earth-tongue.			*Sp* 4—9			*Clavaria* Sow	
16184 hirsutum *Pers*	hairy	solitary	2	aut.	Bl	bogs & mea	Greville crypt 185



History, Use, Propagation, Culture,

of the pileus of all the species. T caryophyllæa is very common upon the exposed roots of old firs in the autumn. The substance is tough and somewhat woody, the color a chocolate brown. The plants often grow in masses, attached by their upper side to sticks, old bark, &c. and are from one to three inches in diameter.

2379. *Clavaria.* So called, from the simple clavate form of the species. Some are eatable; as for instance C. flava, which is said to be delicious, C cinerea, which is frequently eaten in France; C. pyxidata is said by Persoon to be tolerably good. Loureiro has also an eatable species found in Cochin-China, growing upon elephant's dung.

b Cap obliterated, resupinate. Growing on wood.

16147 Resupinate rigid nearly black beneath, Hymenium flesh-color rugose and papillose at length cracking
16148 Very thin effused cracking and becoming involute, very dark beneath. Hymen. brown-grey minutely farinaceous, papillate
16149 Effus. extremely thin, Marg appressed minutely villose. Hymen. purple-grey covered with small uneq papillæ
16150 Effused thin smooth, Margin delicate and byssoid, Hymenium whitish at first at length very pale-buff, Papillæ scattered or none
16151 Effused spreading over moss, &c, Margin fibrous, Hymenium very unequal tuberculose yellowish
16152 Effused unequal in thickness hard, Hymenium white glabrous cracked in different directions so as to be often tessellated obtusely papillose
16153 Effused membranaceous thin, Margin entire, Hymenium very white glabrous subpapillose

16154 Membranous smooth plaited at base whitish becoming blackish

16155 Effused membranous smooth pale beneath white with cobweb-like down
16156 Effused somewhat rugose soft of a violet-brown at the margin and beneath downy
16157 Mostly on dead leaves, Filaments very fine white radiating dilated at the extremities in a plumose manner

16158 Broadly effused thin dry smooth glabrous cinereous

Division II *Clavati*

* *Much branched, Stem thick*

16159 Deformed, Stipes decumbent very thick pale, Branches short somewhat wrinkled red at ends
16160 More erect, Stem thick white, Branches straight round fastigiate yellow
16161 White erect, Stipes thick, Branches elongated irregular unequal mostly acute
16162 Dull ochrey-yellow much branched white and tomentose at the base turning green when bruised, Branches erect crowded slightly rugose with acute often forked summits
16163 White or cinereous tuft branch smooth, Branch dilat at summ and jagged or shortly but acutely laciniate
16164 Grey often with a bluish or a purplish tinge much branched unequally incrassated rugose often subcompressed, Summits either very obtuse or somewhat acuminate
16165 Yellow half an inch high branched or nearly simple viscous, Stipes of several plants connected at the base

** *Branched, Stem thin*

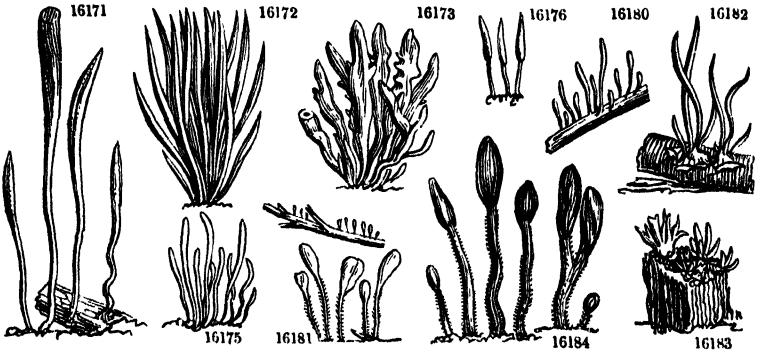
16166 Much branched pale brownish, Branches and branchlets straight appressed acute
16167 Yell tuft Stipes short producing numerous short geniculate divaricate branches the ramuli subfastigiate obtuse
16168 Yellow erect much branched in a dichotomous manner, Branches slender with acute summits
16169 White gregarious incrassated rugose simple or branched, Branches few short obtuse

*** *Simple, clavate*

16170 Solitary large glabrous yellowish-brown thickened upwards and obtuse
16171 Very long hollow thickened upwards brownish downy at base
16172 Heaped fascicled yellow, Branches nearly equal incurved yellow
16173 Fascicled unequal subdivided hollow yellowish-brown at end [irregular at the apex
16174 Yell or yell-white tuft, or gregarious fragile unequ ventricose deformed somewhat acuminate often bifurcate and
16175 Yellow or white gregarious sometimes subcæspitose solid or hollow very brittle rather firm attenuated at the base subrugose in age and often crooked
16176 Straight white, Head distinct round acuminate as long as stipes
16177 Stem slender villous, Branches long compressed, Branchlets numerous setaceous cut
16178 Yellow gregarious cylind equal smooth obtuse slender below and paler, apex frequently of a cinnamon-color
16179 Pure white tuft, crowded subul flexuose solid but with a small perforat. mostly somewhat connected at base
16180 White gregarious round club-shaped obtuse much attenuated at the base smooth not brittle
16181 White minute, Hymenium oblong or ovato-clavate passing suddenly into a filiform pilose stipes

16182 Tough yellowish nearly simple, Stem tuberous long-rooted
16183 Tufted smaller simple and branched viscid yellow connate at base

16184 Stipes hirsute deep black, Hymenium somewhat plicate



and Miscellaneous Particulars

2380. *Calocera* From καλος, beautiful, and κερας, a horn, in allusion to the divisions of the plants. They grow on wood, and are either brown or yellow; but their sporidia are generally white. C viscosa is at once distinguishable by its beautiful gold color Some of the species adhere to paper when dry.

2381. *Geoglossum* From γη, the earth, and γλωσσα, a tongue; earth-tongue: in allusion to the simple form of the species, which all grow upon earth, and are of a blackish or dark-green color. Fries considers the genus to be scarcely distinct from Clavaria.

16185 glábrum *Pers*	smooth	gregario	1	sum.	Blsh	among grass	Bolton, t 111 fi. f 2
16186 viscósum *Pers*	viscid	cylindric	1½	aut	Bl	moist meadows	Greville crypt. fl. t 55
16187 víride *Pers.*	green	gregario.	2	aut	G	moist meadows	Greville crypt 211

2382. SPATULA'RIA *Pers* Spatularia. *Sp* 1 *Clavaria* Sow

16188 flávida *Pers*	yellowish	variable	1½	aut.	Ysh	dead leaves	Greville crypt 165

2383 MI'TRULA *Fries* Mitrula *Sp* 1—5 *Clavaria* Sow *Leotia* Pers

16189 paludósa *Fries*	marshy	hollow	1	my au	Y	wet ditches	Sowerby, t 293
16190 minúta *Fries*	minute	gregario	½	sum.	Y	brac of Dips pilos	Sowerby, t 391
16191 abietis *Fries*	fir-wood	dry	½	aut.	Clnn	fir woods	Sow. t. 84 *ferruginea*
Leotia mitrula Grev 81							

2384 TY'PHULA *Fries* Typhula *Sp* 4—11 *Clavaria* Sow

16192 phacorhiza *Fr*	tuberous	flexuose	2	aut	W	woods	Sowerby, t 253
16193 erythropus *Fr*	red-footed	gregario	½	aut	W	sticks and leaves	Gre cry.43 *Phacorhiza*
16194 ténuis *Fr*	thin	gregario	½	sum.	Blsh	on wood	Sowerby, t 386 f 5
16195 filitor'mis *Fr.*	filiform	creeping	½	aut.	Cm.	dead leaves	Gre. cry 93. *Phacorhiza*

2385 PISTILLA'RIA. *Fries* Pistillaria *Sp* 1—7. *Clavaria* Sow

16196 quisquiliáris *Fr*	obtuse	gregario	½	aut	W	dead fern leaves	Sow t. 334 f. 1. *obtusa*

Class II Uffrini *v* Elvellaceæ. — Division 1 *Mitrati*

2386 MORCHEL'LA *Dill* Morel. *Sp* 3—14

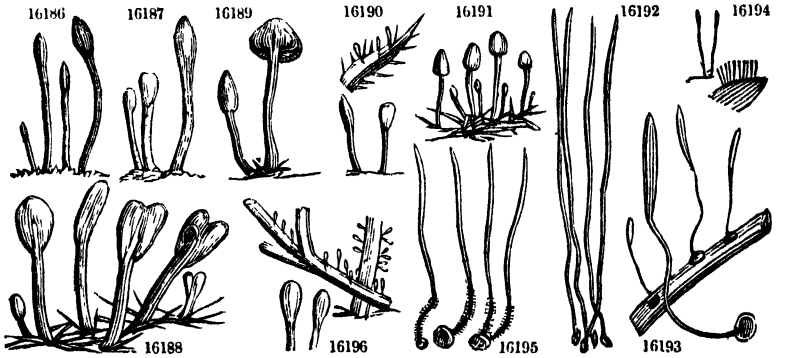
16197 esculénta *Pers*	esculent	eatable	3	spring	Wsh	on the earth	Greville crypt 68
α rotúnda Pers	*round*	eatable	3	spring	Wsh	on the earth	Sow t 51 fig sinistr
β vulgáris Pers	*common*	eatable	3	spring	Wsh	on the earth	Sower t 51 fig dextr
16198 pátula *Pers*	spreading	eatable	3	spring	Ysh	on the earth	Sower t 51 fig. med
16199 semilibera *Dc.*	half-separate cap brown		4	spring	Wsh	woods	Grev. crypt 89. *hybrida*

2387 HELVEL'LA *L* Helvella *Sp* 5—15

16200 crispa *Fr*	crisp	solitary	4	aut	Ysh	borders of fields	Gre cry 143 *leucophæa*
16201 lacunósa *Afz*	pitted	solitary	4	aut	Livid	hedge banks	Grev crypt fl t.36. *Mitra*
16202 esculénta *Pers*	esculent	eatable	3	mr my	Brsh	pine woods	Schæffer, t. 160
16203 In'fula *Schæff*	brown	eatable	4	aut	Cmn	damp scorch places	Flora danica, t. 835
16204 elástica *Fr*	elastic	slender	4	su aut	Blsh	damp places	Sower t. 154 *fulginosa*

2388 VER'PA *Swz.* Verpa *Sp* 1—6

16205 cónica *Swz*	conical	fistular	3	aut	Br	on ground	Sowerby, t 11. *Relhani*



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2382 *Spatularia* A very distinct genus, named from its *spatulate* form The only species known is an autumnal epiphyte, common on fallen leaves, decaying mosses, &c Its color is at first pallid, afterwards it becomes yellow and ferruginous but the stipes retains its paler color It is found in plantations in various parts of England In a state of perfect maturity, the head, on being touched, throws up its sporules in the form of smoke, which rises with elastic force, and glitters in the sunshine like particles of silver

2383 *Mitrula* So called from its *mitrate* form The species are small epiphytes with a simple stem.

2384 *Typhula*. A diminution of *Typha*, a well-known marsh plant, the heads of fructification of which this genus resembles in miniature All the species are delicate, and are found upon decayed leaves, or even occasionally upon Sclerotias

2385 *Pistillaria* So called from its *pistil*-like form. The species are all small, delicate epiphytes, appearing in the autumn

2386. *Morchella* A name altered by Dillenius from *Morchel*, the German name of the plant Fungi of a large size, appearing in the spring upon the earth. The eatable morel is one of the most valuable of fungi for purposes of cookery, but is more frequently used in a dried state for sauces, than when fresh It is found in greatest abundance in places where trees have been burned, which led in Germany to a practice of burning down masses of forests for the sake of the future morels. This practice proved so injurious, that it became necessary to suppress it by law The morel is subject to many variations of figure and color, which are all referable to four principal forms But there are also some legitimate species which have been distinguished by modern botanists Of these it is not ascertained which are natives of England, but it is probable, that they are all to be found if sufficiently sought for Without, therefore, absolutely inserting them in the list of British species, it cannot be otherwise than useful, considering the importance of an accurate knowledge of the eatable fungi, to enumerate the two principal in this place

1. M. Deliciosa is found in the spring, among grass and bushes by the sides of fields in France, and is said to be much superior in flavor to the M esculenta Its stipes is hollow, and shorter than the pileus, scarcely ever so much as an inch long, about three or four lines thick, nearly equal in the whole length, but sometimes thickened and compressed at the base, under a lens covered with a slight downiness Pileus is conical-cylindrical, from one inch to two inches and an half long, with nearly parallel ribs, which can scarcely be said to

16185 Glabrous dry blackish, Stipes somewhat scaly [thin and attenuated downwards
16186 Smooth very slimy in moist weather black, Hymen. cylind. round. at apex confluent with stipes which is
16187 Green somewhat fasciculate, Hymenium distinct, Stipes minutely scaly

16188 The only species

16189 Yellow subgregarious, Cap orange-yellow obtuse hollow · margin connate with the stipes
16190 Very small, Head lanceolate yellow, Stipes equal paler
16191 Gregarious solid, Hymenium ovate yellow cinnamon, Stipes slender dark-brown flexuose at the base

16192 White filiform elongated somewhat villose at the base radicular tuber dark fuscous lenticular
16193 Gregarious min Hymenium smooth white short terminat. in an elongated filiform dark pink-red stipes
16194 Simple smooth dark thickened at end
16195 Somewhat branched spadiceous, Heads thickened whitish

16196 Thickened towards the extremity white confluent with the stipes

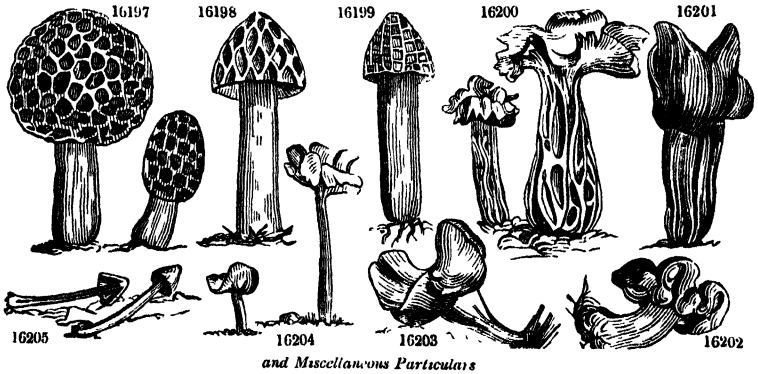
Class II Uterini v Elvellaceæ. — Division I *Mitrati*

16197 Cap round or oval · margin contract. round the stipes, Areolæ much hollow Stipes white dilat tow base
α Cap and areolæ round
β Cap oval, Areolæ quadrangular
16198 Cap obtuse separate as far as the middle, Areolæ rhomboid, Stipes smooth [thick white
16199 Cap short conic spread at base, Areolæ shall partly formed by longitudin parallel ribs, Stipes long equal

* *Cap waxy, membranous, at first united, afterwards wavy in plaits*
16200 Cap irregularly deflexed free often variously lobed yellow-white, Stipes deeply sulcate and lacunose white
16201 Cap dark-livid inflated deflex and partially adnate with stipes, Stipes deeply furrow and lacunose white
16202 Cap inflated deformed wavy wrinkled in circles brown, Margin villous adhering to the smooth stipes
16203 Cap deflexed lobed adnate about cinnamon-colored, Stipes smoothish villous pale

** *Cap somewhat membranous, smooth, always separate*
16204 Cap loose smooth inflated becoming sharply lobed, Stipes long thin tapering pruinose

16205 Cap campanulate smoothish fuscous somewhat sinuated at the edge beneath and the stipes yellow



and Miscellaneous Particulars

anastomose, but which are united by transverse rugosities The color is usually yellowish, rarely of a pale livid hue.

2 M elata has a longer stipes than the last, an inch and more thick, very hollow and brittle, with irregular cavities The pileus is ovate-conical, two or three inches long, but of a far more delicate texture than any of the others The longitudinal ribs are much elevated, membranous, flaccid, with very few anastomoses, but united by transverse costæ, which give the spaces between a sort of misshapen rhomboidal figure The color is a soft brown The flavor is watery and vapid, and in decay becomes so fetid as to be unfit for food. This is found in pine-woods, especially in humid places It is a rarer kind than the last and like it, appears in the spring

M patula and semilibera are readily known from the true morels by their pileus not being attached to the stipes by the base, but altogether separate from it They are distinguished from each other by the latter having a much longer stipes, and a shorter pileus, which is more conical and acute M patula is considered by Fries to have been confounded, in Mr. Sowerby's fine work on Fungi, with Helvella esculenta

2387 *Helvella* A name employed by Cicero, as the name of a fungus The species of the modern genus are permanent, somewhat fragile fungi, with little odor or taste, but always innocuous They grow on the earth or upon very wet wood, and are chiefly found in the autumn H crispa is excellent as an article of cookery. H lacunosa, which is confounded with it, is by no means so good H esculenta has a good flavor, and is commonly eaten, but is far inferior to Morchella esculenta Its qualities are nearly the same as those of the latter plant, and it is popularly confounded with it under the name, in Sweden, of *Stenmurkla*, and in Germany, of *Gemeine Morchel*, *Stumpf Morchel*, and *Stockmorchel* H infula, a large species, with an inflated smooth pileus of various hues of brown, is also esculent This last plant is the true H Mitra of Ruppius, and old botanists, a name which, having been applied by one writer or other to every species of Helvella, is now abandoned altogether in order to avoid further confusion

2388 *Verpa* An old Roman name synonymous with Phallus, and restored to modern science by Swartz The species are meteoric, terrestrial, and intermediate between the Morels and Leotia. The hymenium is covered, as is the case with many Mitrati, with a frost-like flocculence, which Swartz mistook for sporules, but which more recent observation has shewn to have been a mistake.

2389. LEO'TIA. *Hill* Leotia *Sp* 3—11.

16206	infundibuliformis *Fr*	funnel-form	solitary	3	oct.	Cm	on ground	Sowerby, t. 153
16207	nána *With*	dwarf	subsessile	½	aut.	W	on trees	
16208	lúbrica *Pers.*	slippery	gregario	2	aut.	Ol	moist woods	Greville crypt. 56

Division II *Cupulati*

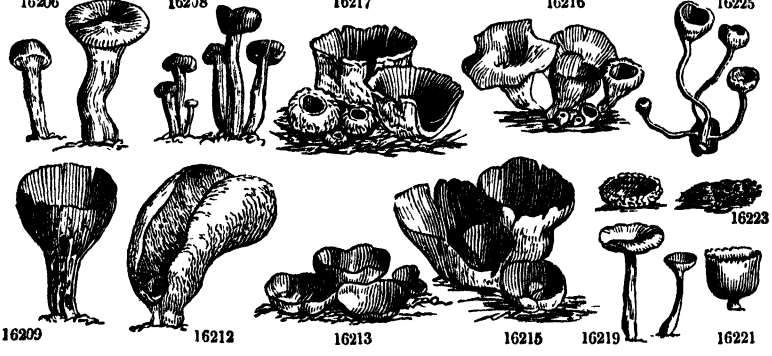
2390 PEZI'ZA *Dill* Peziza *Sp* 45—300

§ 1 Aleu'ria *Fries*

16209	acetábulum *L*	saucer	clustered	½	spring	Sooty	damp woods	Sowerby, t 59
16210	bádia *Pers*	brown	tufted	1	su. aut.	Br	grassy places	Bolton, t. 99 *cochleata*
16211	leporina *Batsch*	hare's-ear	gregario	1	aug oc	Brsh	on ground	Schæffer, t 156
16212	onótica *Pers*	rosy	gregario	1½	aug oc	Brsh	dead leaves	Sowerby, t 79 *leporina*
16213	aurántia *Fl dan.*	orange	beautiful	⅝	aut	Or	sandy places	Sowerby, t 78 *coccinea*
16214	concínna *Pers*	neat	very broad	1	sum	Lem	dead leaves	Bolton, t 175 *vesiculosa*
16215	cochleáta *Huds*	cochleate	brittle	2½	su aut	Y Br	fields	Sowerby, t 5
16216	cérea *Sowerby*	waxen	gregario	½	sum	Sooty	dunghills	Sowerby, t 3
16217	vesiculósa *Bull*	bladdery	crowded	2½	aut	Wsh	dunghills	Greville crypt 197
16218	repánda *Fr*	repand	fleshy	1½	aut.	Wsh	on ground	Greville crypt fl 59
16219	mácropus *Pers.*	large-footed	solitary	2	su aut	Cm	shady woods	Bolton, t. 96 *hispida*
16220	tuberósa *Bull*	tuberous	slender	2	mr ap	Br	shady woods	Sowerby, t 63
16221	cupulária *L*	cupped	fringed	¼	aut	Pa Br	scorched earth	Bull t 396. f 3
16222	argillácea *Sowerby*	argillaceous	scattered	¼	aut	Ysh	clay	Sowerby, t 148
16223	granuláta *Bull*	granular	gregario	⅓	sum	Or R	cow dung	Bull t 438 f 3
16224	reticuláta *Grev*	netted	very fine	¼	spring	Br	on ground	Greville crypt 156
16225	erécta *Sowerby*	erect	patches	⅛	aut	Ysh	shady woods	Sowerby, t 369 f 10
16226	humósa *Fries*	earth	scattered	⅛	aut	Crim	damp earth	Sowerby, t. 369 f 2
16227	fis'sa *Fries*	split	solitary	¼	wint	Br	hazel bark	

§ 2 Lach'nea *Fries*

16228	coccínea *Scop*	scarlet	subgrega.	¼	spring	W	dead branches	Greville crypt. 171
	P epidendra Sow							
16229	melas'toma *Sower*	blk -mouth	solitary	¼	feb mr	Pa.Br	heaths	Sowerby, t 149
16230	radiculáta *Sowe*	rooting	clustered	¼	su aut	Sul	earth in gardens	Sowerby, t 114
16231	hemisphæ'rica *Wig*	hemispheric	scattered	0	jn dec	Brsh	earth in woods	Sowerby, t 147 *hispida*
16232	hirta *Schum*	hairy	scattered	⅓	aug oc	Brsh	earth	Sow t 369 f 1 *hybrida*
16233	cerina *Pers*	smooth	much crowd	0	spr au	Ysh	decayed dry wood	
16234	scutelláta *L*	scutellate	beautiful	¼	spr au	Or	old cow dung	Sowerby, t. 24
16235	Nídulus *Pers*	bird's-nest	punctif	0	aut	Br	decayed stems	
16236	cærúlea *Bolton*	blue	punctif	⅛	aut	Bsh	pine trees	Bolton, t. 108. f.
16237	plano-umbilicáta *Gr*	plano-convex	hairy	0	su aut.	W	decayed nettles	
16238	stercórea *Pers*	dung	gregario	⅓	spr su	Taw	cow dung	Sowerby, t. 352. *equina*
16239	albo-spadícea *Grev*	pallid	handsome	⅓	aut	R Br	bare earth	
16240	sulphúrea *Pers*	sulphur	pretty	0	aut.	Y	decay herbac stems	Greville crypt fl 83
16241	virginea *Batsch*	virgin	solitary	⅓	aut	W	rotten sticks	Sowerby, t 65 *nivea*
16242	bícolor *Bull*	two-colored	beautiful	⅓	aut.	W	larch twigs	Sowerby, t 17
16243	variécolor *Fries*	variable	gregario	0	all sea	Ysh	rotten wood	Sower t 178 *hydnoidea*
16244	papilláris *Bull*	pimpled	gregario	0	all sea.	W	upon wood	Sowerby, t 177
16245	villósa *Fries*	villous	crowded	0	aut.	W	dead herbac stems	Sower t 389 f 1 *sessilis*
16246	plúmbea *Grev*	leaden	crowded	0	aut	Fu ol	rotten wood	Greville crypt fl. 11
16247	anómala *Pers*	anomalous	crowded	⅛	all sea	Dl Y	fallen branches	Sower t. 369 f 3 *rugosa*
16248	doméstica *Sowerby*	domestic	minute	0	all sea	Ruf	damp walls	Sowerby, t 351
16249	Wauchu *Grev.*	woolly	beautiful	⅓	aut	Pa Br	dead wood	Greville crypt. 139
16250	fúsca *Grev.*	brown	spots	0	ap my.	Gr	dead branches	Greville crypt 192



History, Use, Propagation, Culture,

2389. *Leotia.* Named by Sir John Hill, of famous memory, for no known reason Gregarious terrestrial substances of the middle size, appearing in summer or autumn, without smell or taste. They are most nearly akin to Helvella and Verpa, from which they differ in form and substance The species are not known to be eatable, with the exception of L. amara, a native of Cochin-China, which is capable of being deprived of its native bitterness by long stewing.

16206 Cap depressed cinereous livid smooth on each side, Stipes solid smooth
16207 Dwarfs, Cap rugose white beneath smooth brown, Stipes solid cylindrical white
16208 Tremellose, Cap tumid spread. olivac : margin rounded, Stipes orange-cylindr. or unequally compressed

Division II. *Cupulati.*

1. *Cupule always open, or when young connving, Vesl superficial, Sporidia with two smaller sporidia.*
HELVELLOIDEÆ

16209 Cyathiform sooty veiny on the outside arising from a short fistulous pitted stipes
16210 Subsess ent. flexuose brown, Margin at first involute externally pruinose paler and somew. olive-colored
16211 Substipitate lengthened on one side ear-shaped somew ferrugin mealy outside smooth inside at the base
16212 Substipitate lengthened on one side ear-shaped farinaceous outside pink inside becoming rugose at base
16213 Gregarious flexuose very brittle white externally, Hymenium fine orange
16214 Cæspitose large very brittle externally lemon colored becoming wrinkled pale flesh-color inside
16215 Gregarious cæspitose variously contorted externally yellowish-brown, Hymenium dull reddish-brown
16216 Large funnel-shaped repand yellowish villous and whitish outside and upon the stipes-like base [base
16217 Gregar cæspit glob at first with mouth conniv at length campan. splitt. externally whit and toment at
16218 Sessile solitary or somewhat tufted large at first hemispherical and concave at length nearly plane subrugose and brown within the outer surface farinose whitish, Margin crenate

2 *Cupule at first closed, Vesl innate, Sporidia simple* GEOPYXIS.

16219 Subgregarious large. the pileus hemispherical slightly hairy and verrucose ash-colored, the hymenium mouse-colored at length pale, Stipes very long incrassated below
16220 Thin, Cupule funnel-shaped brownish pallid, Stipes long seated on a black deformed root
16221 Subsessile thin globose campanulate brownish or pale mealy outside crenate at edge
16222 Sessile yellowish smooth at first urceolate afterwards cracked and torn with hairs about the root outside
16223 Sessile minute flattish orange-red externally granulated with pimples [Stipes usually short and thick
16224 Centre plicate and reticulat without whit. and prum. Cap invol. at margin variously split somew spread.

3. *Cupule a little fleshy, small, Vesl floccose only at the edge, or fugacious, Sporidia with a solitary little sporidium* HUMARIA

16225 Sessile clustered subcylindrical smooth somewhat yellow becoming dilated with an erect subciliated orifice
16226 Sessile fleshy plano-convex smooth crimson entire at margin

4. *Membranaceous, bursting forth with a separating veil, Sporidia simple* ENCŒLIA

16227 Subcæspitate sessile coriac membran Margin split ragged externally scurfy and brown, internally white

1 *Cupule fleshy, or fleshy-membranous Crust none* SARCOSCYPHE

16228 Stipitate large subinfundibuliform externally white and tomentose, Hymenium crimson-red

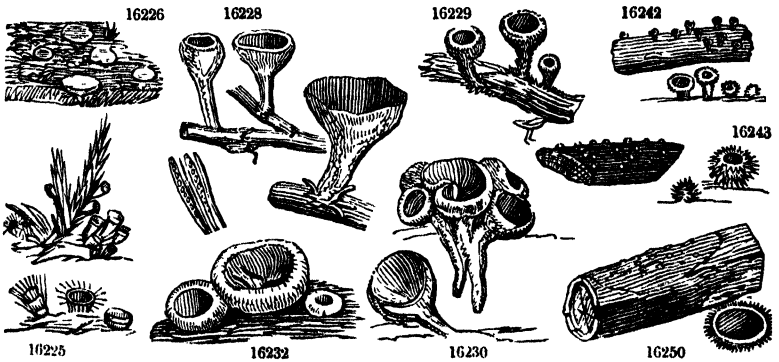
16229 Cupule fleshy, Disk urceolate black externally rubiginous-flocculent, Stipes short down dense dark strigose
16230 Subcæspit fleshy sess from hemispher becom flatten. Disk sulph external and thick root white and vill
16231 Sessile hemispherical wavy brownish externally covered by dense fascicled hairs, Disk glaucous white
16232 Sessile subhemispher externally fuscous hairy with a somewhat inflexed margin, Vermilion colored inside
16233 Min sess. or subsessile hemispher externally tomentose-pulverulent yellowish-olive, Hymen dull ochrac.
16234 Sessile gregarious or scattered nearly plane external surface of the margin hispid with black rigid hairs, Hymenium orange-red
16235 Sessile gregarious very minute orbicular somewhat depressed substrigose brown or nearly black
16236 Plane ciliated blackish externally, Hairs pale, Disk blue [at margin, Hymenium gently umbonate
16237 Small sess gregar whole plant white glob concave at length quite plane ciliate with horizont. white hairs
16238 Gregarious concave tawny externally surrounded near the edge with straightish brown hairs [white
16239 Sess gregar glob at length quite plane, exter surface and marg strig with redd.-brown hairs, Hymen
16240 Sessile gregarious small globose at length plane the strigose external surface yellow, Hymenium white

2 *Cupule waxy, dry, villous, Crust none* Epiphytes DASYSCYPHE

16241 Stipitate gregarious small, Stipes rather long, Pileus hemispherical subpatulose villous, whole plant white
16242 Subsess small gregar externally very white vill Mouth contract Hymen. varying from dil yell to orange
16243 Sessile hemispherical orbicular rather firm flocculent, Disk urceolate whitish
16244 Sessile distinct concave villous hairy milk-white on each side granulated at edge
16245 Sessile very minute gregarious white subglobose villous, Mouth more or less connivent
16246 Sessile minute gregarious depressed externally fusco-olivaceous villose, Hymenium smooth bluish-grey

3 *Cupule waxy or coriaceous, seated on a downy crust* TAPESIA

16247 Substipitate much crowded form a crust, Cupules turbinate vill light bistre-colored disk urceol whitish
16248 Sessile gregarious obovate strigose rufous
16249 Sessile gregarious ovate globose golden-yellow strigose with a subjacent woolly paler web
16250 Carn. sess Cup. concave brown at length plane grey marg glab attach by fibres to a wide toment wel



and Miscellaneous Particulars.

2390. *Peziza.* Pliny had a tribe of Fungi which he called Pezica, from which the modern name has been corrupted. The present genus is very extensive, but almost wholly of modern creation The species are found in various situations, but chiefly on decayed wood. They are remarkable for their leathery texture, and for emitting their sporules in the form of smoke from the bottom of their cup.

§ 3. Phia'lea *Pers*

16251 firma *Pers*	firm	gregario.	1	aut.	Oc.Br	rotten sticks	Sower t 115. *ochroleuca*
16252 Persoónii *Moug*	Persoon's	aggreg.	½	aut.	R	bogs on Equisetum	Greville crypt 162
16253 fructigéna *Bull.*	fruit	clustered	¼	aut.	Ysh	nuts, &c in woods	Sowerby, t. 117
16254 serotina *Pers*	late	clustered	¼	spring	Y	damp shady places	Bolton, t. 98
16255 inflexa *Bolton*	inflexed	gregario	¼	aut.	Wsh	rotten sticks	Sowerby, t. 306
16256 pedicellata *Sow*	stalked	solitary	½		Wsh	rotten sticks	Sowerby, t 369 f. 3
16257 tuba *Bolt.*	tubular	gregario.	½	aut.	Y	fallen branches	Bolton, t 106. f 1
16258 calyculus *Sow.*	cupped	gregario.	½	aut.	Or.Br	rotten wood	Sowerby, t 116
16259 aeruginosa *Fl dan.*	verdigrease	destruct.	0	su aut.	Bt.G	damp wood	Sowerby, t. 347
Ugglevid Swed							
16260 Aspegrénii *Fr*	Aspegren's	gregario.	½	aut.	Ysh	damp wood	Sower t 369 f 7 *bicolor*
16261 citrina *Batsch*	lemon-color.	crowded	½	aut.	Y	fallen branches	Sowerby, t. 150. *aurea*
cyathoides Wither.							
16262 pallescens *Pers*	pallid	numer	½	aut.	Pa.Y	old trees	Sowerby, t 151. *citrina*
16263 tricolor *Sow*	three-color.	scattered	0	aut.	Sooty	trunks of trees	Sowerby, t 369. f 6
16264 campánula *Nees*	bell	delicate	⅛	aut	W	dead twigs	Nees syst. t. 38. f 295
16265 cribrósa *Grev*	porous	curious	1	aut.	Bl	sandy places	
16266 clarofláva *Grev*	bright-yell.	punctif.	0	aut.	Y	decayed wood	
16267 punctáta *Grev*	dotted	punctif	0	aut	Y	dead leaves	Greville crypt fl. 63
16268 herbárum *Pers.*	Herb	crowded	⅛	aut	W	dead herbac stems	
16269 conigéna *Pers*	pine-cone	gregario	0	au. sp	W	pine cones	
16270 chrysócoma *Bull*	yellow-hair.	crowded	0	aut	Fu Or	posts & rails	Sowerby, t 152
16271 cinérea *Batsch*	cinereous						Sowerby, t. 64
16272 vulgáris *Frics*	common	patches	0	wint	Wsh	dry bark	
albella With							
β diáphana Sowerby	*transparent*	scattered	0	wint	Tran	rotten wood	Sowerby, t 389 f 7
16273 erúmpens *Grev*	Sycam -peti.	scattered	0	aut.	Cæs	stalks of Sycamore	Greville crypt 99
16274 ochrácea *Grev*	ochrey	puckered	0	aut.	Oc Br	fallen trunks	Greville crypt 5
16275 atrovirens *Pers.*	dark-green	crowded	0	aut.	G	rotten wood	
16276 Abbottiána *Sow*	Abbott's	scattered	0	aut.	Sea G	wood	Sowerby, t 389. f 8

§ 4 Helo'tium *Pers*

16277 fibulifórmis *Frics*	button-shap		½	aut.	Y	trunks of elms	Bolton, t 176
16278 aciculáris *Pers.*	needle-like	gregario	½	au dec.	W	hollow oaks	Sow t 57 *agaricaformis*

2391. AS'COBOLUS *Pers* Ascobolus. *Sp.* 1—11

16279 furfuráceus *Pers.*	scurfy	gregario	0	all sea	Brsh	old cow dung	

2392. BULGA'RIA *Frics* Bulgaria *Sp* 2—6

16280 inquinans *Frics*	dirty	gelatino	0	au wi	Umb	dead oaks	Sowerby, t 428
16281 sarcoides *Frics*	fleshy	polymor.	½	aut	Pu R	decaying trees	Bolton, t 101 f 2

2393. DITI'OLA *Frics.* Ditiola *Sp* 1—5

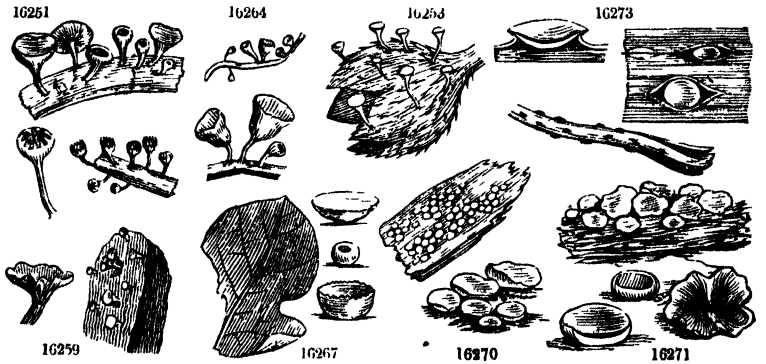
16282 radicáta *Fr*	rooting	gregario	¼	ap jn	Gold	barked pines	Fl dan t 1378 f 2

2394 CENAN'GIUM *Fr* Cenangium *Sp* 5—30

16283 quercinum *Fr*	oak	gregario	¼	all sea.	Cin	dead oak branches	Sowerby, t 373 f 3
Sphæ'ria collápsa Sow							
16284 Prunástri *Fr.*	Plum	crowded	0	aut	Bl	dead plum branches	
16285 Cérasi *Fr*	Cherry	crowded	0	all sea	R.Bl	dead cherry branches	
16286 Aucupáriæ *Fr*	Mount Ash	tufted	0	aut	Bl	dead mountain-ash branches	
16287 ferruginósum *Fr*	ferruginous	patches	0	aut	R Bl	Scotch fir branches	Greville crypt. 197

2395 STIC'TIS *Pers* Sictis *Sp* 1—23

16288 radiáta *Pers*	radiating	spots	0	au spr	W	bark of trees	Sowerby t. 16



History, Use, Propagation, Culture,

2391. *Ascobolus* From *ascus*, one of the forms of theca in which the sporules are retained among Fungi, and *βαλλω*, to emit, in allusion to the principal peculiarity of the genus Small gregarious soft plants, without roots, but not very perishable, growing upon dung, and most obvious during rainy weather

2392. *Bulgaria* An intermediate genus between Peziza and Exidia, named from *bulga*, a leather bag, on account of the saccate form of the species Scentless, insipid, mucilaginous, rootless, soft fungi, tolerably permanent, and generally breaking forth in clusters from the bark of trees during the winter and autumn Miller is said to have succeeded in obtaining glue from B. inquinans, but subsequent attempts have failed of success.

2393 *Ditiola.* From *δις*, double, and *ωλος*, down, in allusion to the nature of the pubescence of the velum. The species of this genus are gregarious, firm, permanent, without smell, flourishing upon dry wood from the

1. *Cupule somewhat membranous, distinctly stalked, Hymenium distinct.* Hymenoscyphi.

16251 Rather large ochrey-brown infundibulif. at length concavo-rep. or very plane, Stipes elongat. dark at base
16252 Cap smooth urceolate orange-color with a prominent membranous pale margin, Stipes cylindrical pink
16253 Gregar yell or redd.-white subinfundibulif surface of hymen plane, Stipes long subflexu and attenuat.
16254 Bright-yellow, Cupule plano-convex thinnish, Stipes short firm thickish
16255 Stipit glab white or yellow subinfundibulif Margin fringed with inflexed teeth, Stipes elongated curved
16256 Stipitate campanulate, Margin smooth, Stipes straight

2. *Cupule fleshy, waxy, firm, obconical, somewhat stalked, Hymenium distinct.* Calycinæ.

16257 Yellow, Cupule turbinate, disk flat, margin tumid, Stipes long slender
16258 Gregarious globoso-infundibulif slightly concave, Stipes rather short attenuat. whole plant ferrugin. [orange brown
16259 Æruginose, Cupule turbinate becoming expanded and flexuose. disk whitish, Stipes short

16260 Cupule subrepand smooth disk yellow exteriorly white as well as the somewhat ascending stipes
16261 Yell. crowd apparently sess. but having a short thick obconical stipes carnose, Hymenium plano-concave

16262 Crowded smooth pale-yellow or whitish, Cupule concave, Stipes short thickish pallid
16263 Hemispherical margined, Disk yellowish externally sooty, Stipes very short whitish
16264 Gregarious white rather small very membranaceous campanulate unequal, Stipes filiform short
16265 Black solitary rather large very concave, Hymen cribriform or full of lacerat. irregular pores or sinuses
16266 Yellow gregarious minute obconical at length somew plane, Margin raised obt. externally somew paler
16267 Yellow very minute gregarious punctiform globular at length plane or subconvex, Margin minutely cren
16268 White gregar carnose at length convex but sometimes depress in centre turning reddish in age and decay

3. *Cupule waxy, soft, watery, sessile or obconical, Hymenium confluent.* Mollisia.

16269 White gregarious excessively minute orbicular submarginate
16270 Fulvous orange gregarious crowded minute nearly plane subtremella-like
16271 Grey gregarious depressed waved subtremellose, Margin obsolete
16272 Sessile somewhat tufted membranous soft smooth whole-colored all over and whitish

β Scattered flattish-urceolate whitish transparent
16273 Minute ceraceous glab. sess grey connate within the semiputrid petioles of the Sycamore and burst. forth [in wet weather

4. *Cupule waxy, dry, sessile, flat at base or innate edged* Patellea

16274 Ochrey-brown min gregar carnose thick obconic Hymen minutely granul at length plane or subconvex
16275 Green gregarious minute subtremellose hemispherical at length plane becoming black in decay
16276 Sessile dry patellate cæsious on the outside, Disk yellow

16277 Firm, Head convex yellow black-brown beneath, as is the short thick villous stipes
16278 White smooth, Head convex, Stipes long equal

16279 Sessile gregarious somewhat concave olive-green or brownish externally furfuraceous

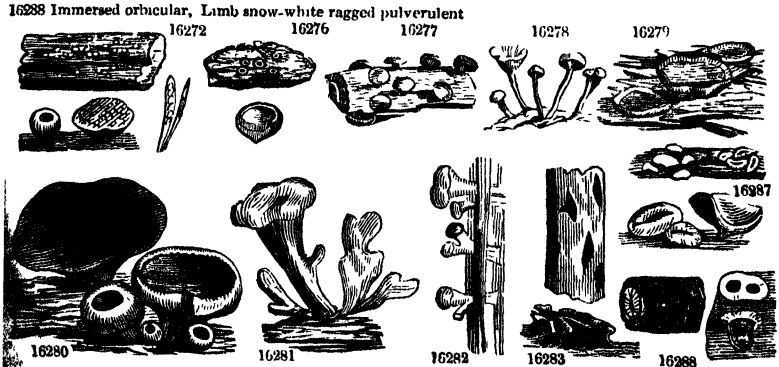
16280 Turbinate firm, externally rugulose scaly umber-colored, Disk flattish blackish
16281 Polymorphous cæspitose subgelatinous somew firm purplish-red externally subvenose, Hymen concave

16282 Disk flattish golden-yellow, Stipes thick villous white long-rooted

16283 Simp gregar long flexu. at first closed prun and blackish-cinereous, afterw open with a broad pale disk

16284 Substipitate opake rigid black marginate, Hymenium concave
16285 Coriaceous reddish-black at first closed at length expanded and plane
16286 In round. tufts, Cups stipit subturbin concave with round marg intermix with digit. or subul processes
16287 Gregarious between membrane and leathery subsessile rugose somewhat prunose, The orifice compressed inflexed: when moist spreading

16288 Immersed orbicular, Limb snow-white ragged pulverulent



and Miscellaneous Particulars.

tumn until the spring They are to be considered noxious fungi from the injury they bring to the timber on which they vegetate Their mucilaginous roots insinuate themselves between the fibres of the wood, d separate and soften them. Their tuberrles burst forth, and filling the wood with clefts, and rendering its terior accessible to wet, soon destroy it. D radicata is one of the species of dry rot.

2394 *Cenangium* From κενος, hollow, and αγγιον, a capsule or vessel, in allusion to the hollow nature of he receptacle Chiefly distinguished from Peziza by substance, and the coriaceous nature of the cupules. From Tympanis it is distinguished by its closed cupules and smooth permanent hymenium The species are small and deformed, growing upon the bark of trees, either singly or in tufts, and mostly produced in winter

2395 *Stictis* So named from the punctiform appearance of many of the species, from στικτος, a dot. Very simple, minute, gregarious fungi.

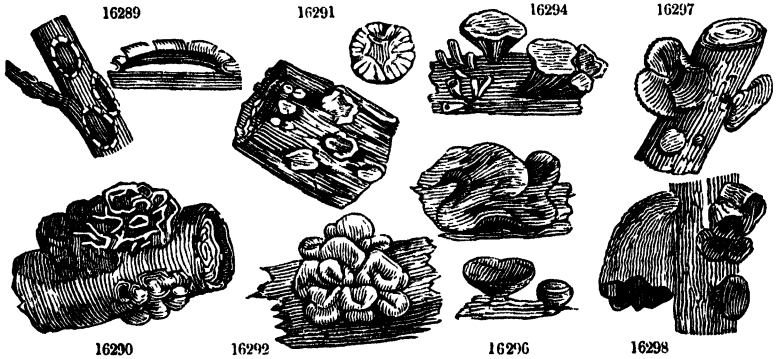
2396. CRYPTOMY'CES. *Grev*		Cryptomyces.			*Sp* 1.			
16289 Waúchii *Grev.*	Willow	firm	0	su. aut.	Br	willow branches		Greville crypt. 906

Class III. Tremellini.

2397. TREMEL'LA *L*	Tremella.			*Sp.* 4—18.			
16290 mesentérica *Rtz.*	Mesent.-like	subsolit.	2	aut. sp	Y	fallen branches	Eng bot. t 709
16291 al'bida *Huds*	whitish	clustered	1	aut.	Wsh	fallen branches	Eng. bot t. 2117
16292 intuméscens *E B*	tumid	twisted lobes	2	wet w.	Br	trunks of trees	Eng bot t. 1870
16293 clavariæfórmis *Pers.*	Clavar.-like	gregarious	1	su aut.	Dl.Or	juniper stems	Jacq. ic. t. 648
§ 1 Co'RYNE *Nees.*							
16294 sarcoides *Fries*	fleshy	clustered	½	aut.	Pu	rotten wood	Eng. bot. t. 2450
§ 2. Phyllop'ta. *Fries.*							
16295 biparasítica *Fries*	parasitical	deformed	½	sept.	Bl	dead Agaric	
2398. EXI'DIA *Fries*	Exidia			*Sp* 3—14			
16296 auricula Júdæ *Fries*	Jew's-ear	tufted	3	aut wi	Blsh	elder trunks	Bolton, t 107
β rubescénti-fúsca Fr	*redd.-brown*	tufted	3	aut wi	Rsh	elder trunks	Eng bot t 2447
16297 recísa *Fr*	cut-back	gregarious	¾	winter	Brsh	dead willows	E.b t.1819 *boletiformis*
16298 flaccida *E. B*	flaccid	thin	¾	winter	Dark	oak bark	Eng bot. t. 2452
16299 glandulósa *Fr.*	glandular	very gelat.	2	aut	Br	dead trees	E. b. t. 2448. *T arborea*
2399 DACRYMY'CES *Nees.*	Dacrymyces.			*Sp* 2—7			
16300 moriformis *Fr.*	mulberry-like	sessile	0	aut.	Bl	dead wood	Eng. bot. 2446
16301 stellátus *Nees*	trickling	very soft	½	all sea.	Or.Y	rotten wood	Grev. crypt. 159
T. deliquéscens Grev							
2400 AGY'RIUM *Fr*	Agyrium.			*Sp* 1—6			
16302 cæ'sium *Fr*	cæsious	punctif.	0	all sea.	Cæs	dead pine wood	
2401 HYMENEL'LA *Fr*	Hymenella			*Sp* 1—4			
16303 vulgáris *Fr*	common	tumid	½	aut	Blsh	nettle stems	
2402 NÆMATE'LIA *Fr*	Næmatelia			*Sp* 1—3			
16304 encéphala *Fr*	monstrous	deformed	½	aut.	Flesh	dead pine wood	

Class IV. Sclerotiacei

2403 ACROSPER'MUM *Tode*	Acrospermum.			*Sp* 2—5			
16305 cornútum *Fr*	cornute	gregarious	½	aut.	Ruf	putrid Agarics	Bulliard, t. 256
16306 compréssum *Tode* dk	narr.-stem	scattered	1/10	aut.	Blsh	dead herbac. plants	Grev. crypt. 182
2404 SCLERO'TIUM *Tode*	Sclerotium			*Sp* 12—60			
16307 sémen *Tode*	Mustard Seed	hard	½	wi spr	W Y	dead leaves	Grev crypt 144
β Bras'sicæ Bolt.	*Turnip Seed*	hard	½	wi spr	W Y	dead leaves	Sowerby, t. 393
16308 fungórum	Fungus	roundish	0	aut	Br	gills of dead Agarics	



History, Use, Propagation, Culture,

2396. *Cryptomyces* Upon this curious addition to the British Flora, Dr Greville has the following remarks "This very curious plant, I have little hesitation in placing as a new genus among the true Fungi It is difficult to say, with what it has nearest affinity In general habit, it might be supposed to resemble some species of Thelephora, but there the comparison stops Our plant, besides being produced under the epidermis, seems to belong to a more perfect group, when its structure is examined The hymenium is a quite distinct substance from that of the receptacle The fructification is fully and beautifully developed, a good deal similar to that of the Helvellæ The receptacle is carnose and white, and the whole exhales a very strong odor, precisely like what is universally known under the name of a fungus-like smell. Till the plant is perfected, it remains concealed beneath the epidermis, and on this account, I have named the genus Cryptomyces. The epidermis, in fact, scarcely seems to crack by the swelling of the fungus, more than by the natural consequence of being killed by its separation from the subjacent bark A cluster of willows, which was attacked in the beginning of the season by this plant, has been nearly destroyed by it, and, from the rapidity of its progress, I have no doubt that a whole plantation might, in the course of a couple of seasons, be rendered good for nothing At a little distance, the affected branches look as if they were dry, scorched, and rotten"

2397 *Tremella* Large or middle-sized fungi, rooting at the base, which is considerably contracted between the bark and the wood of trees. Dillenius named the genus on account of its soft, tenacious, tremulous substance, but his name was applied in a far more extensive sense than at present. The section called Phyllopta is an aberrant form of the genus, and should perhaps be separated

2398. *Exidia.* From ἐξυμι, to proceed from a thing; with reference to the manner in which the sporidia exude as it were from their receptacle This genus differs from Tremella, to which it is nearest, in its horizontal Peziza like receptacle, in its hymenium being superior, the lower surface being dissimilar and either

16289 Suborbicular olivaceous at length nearly black white within, Thecæ elongated obtuse

Class III. Tremellini.

16290 Sessile roundish orange-yellow variously lobed and plicate
16291 Sessile roundish or spreading and somewhat expanded obtusely lobed and plaited whitish
16292 Sessile clustered tumid plaited shining-brown
16293 Gregarious distinct tender gelatinous simple lingulate dull-orange pulverulent towards the apex

16294 Sessile gelatinous reddish-purple at first club-shaped then rounded lobed plaited or curled finally blackish

16295 Cartilaginous lobed somewhat wrinkled black

1 *Pezizoid, plicate, villous beneath, or dotted with roughness, Tubes half inferior, distinct* Auriculæ.
16296 Sessile concave flexuose blackish plaited on each side with veins beneath downy olive-grey

16297 Very soft truncate-flat subrepand fuscous beneath dotted scabrous, Stipes very short oblique out of centre
16298 Thin flaccid very dark, externally opaque, internally wrinkled

2 *Somewhat flattened, wavy, rugose beneath, Tubes half-inferior, obsolete* Glandulosæ.
16299 Sess round. rather spread thick not goyrose plicate ben. · the surface bear min white-headed processes

16300 Conglobated sinuous dark opaque fleshy and purple inside
16301 Gregarious entire round depressed pi tpy orange-yellow

16302 Gregarious nearly separate convex whitish cæsious

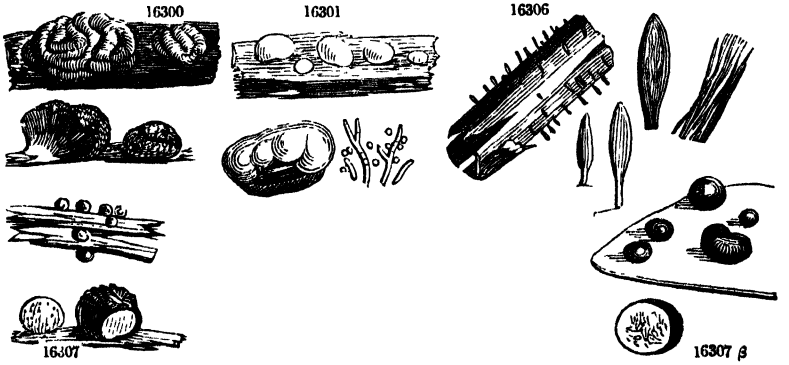
16303 Long various smooth whitish when dry becoming brown . the circumference adhering

16304 Subsessile pulvinate plaited-rugose pale flesh-color becoming dry

Class IV Sclerotiacei

16305 Horn-like smooth when dry furrowed rufous becoming paler at the end
16306 Stipitate mostly lanceolate somewhat obtuse subcompressed of a dark olivaceous color

16307 Separate spherical whitish-yellow becoming wrinkled and black, white inside
β Clustered somewhat immersed pale inside
16308 Deformed lobed smooth pale becoming tawny, whitish inside



and Miscellaneous Particulars

villous or rugose, and ribbed in a peculiar manner, in the conoid papillæ of the disk; in the tubes, which must be esteemed rudimentary asci, containing the sporules; and in the elastic manner in which the sporidia are produced. The species are simple, rarely growing in patches, of a large or middle size, and generally inhabiting wood, when dry they are membranous, but nearly regain their original form upon being moistened

2399 *Dacrymyces* From δακρυ, a tear, and μυκης, a fungus; in allusion to their deliquescent nature. Tremella deliquescens of Bulliard, a yellow confluent mass found chiefly upon pine-timber in the spring, is the type of the genus.

2400 *Agyrium* Apparently from αγυιεις, a crowd, in allusion to the clustered disposition of the individuals; although Fries, the author of the name, expressly declares that it has been named "ob superficiem nunquam non lævem." Small dot-like gregarious plants growing upon wood, perennial, seated upon a crust-like spot, and resembling some species of Lecidea.

2401. *Hymenella.* This genus consists of plants growing upon plants, generally upon the stem, having the habit of Sclerotium durum, but softer, more tender, and bearing sporidia within their surface, for which reason they seem as if they consisted only of a kind of elementary *hymenium*, whence their name.

2402. *Næmatelia.* From ναιμα, gelatine, and τιλεω, to enwrap, on account of the nucleus, which is of various figures, enclosed in the receptacle.

2403. *Acrospermum.* Minute fungi of a rigid habit, parasites upon decaying vegetables. From ακρος, the summit, and σπερμα, seed, on account of the apex of the plants becoming tumid, and emitting the sporules.

2404. *Sclerotium.* From σκληρος, hard, in allusion to the remarkably firm substance of the species. All the species are parasites upon other plants, and some are very destructive.

16309	muscórum *Pers.*	Moss	irregular	½	spring	Or Y	stems of mosses	G cr.101 *subterraneum*
16310	salicínum *Pers*	Willow	patches	0	aut wi	Rsh	Salix caprea leaves	
16311	popúlneum *Pers*	Poplar	patches	0	all sea	Rsh	Populus tremula lva.	
16312	Ptéridis *Pers*	Bracken	punctiform	0	aut sp.	Bl	dead Pteris aquilina	
16313	scutellátum *Alb*	shield-like	button-like	0	spring	Br	leaves of trees	Grev crypt. 144
16314	nitidum *Pers.*	shining	less crowd	0	wi spr	Bl	dead herb stems	
16315	dúrum *Fr*	hard	corneous	0	wi spr	Bl	dead herb stems	Grev. crypt. 1
16316	bullátum *Dec.*	blistered	confluent	0	aut.	Bl	rotten gourds	
16317	quercínum *Pers.*	Oak	scattered	0	aut	Bl	dead leaves	Grev. crypt. t. 77
16318	frúctuum *Grev.*	Fruit	crowded	0	aut.	Wsh	putrid fruit	

2405 RHIZOCTO'NIA *Dec* Rhizoctonia *Sp* 1—4

16319	crocórum *Dec* *Thanatóphyta crocórum* Nees	Crocus-blight	clustered	0	all sea.	Ruf	saffron roots	Nees syst. f. 135

2406. PERI'OLA. *Fr.* Peziola. *Sp.* 1—3

16320	tomentósa *Fr.*	downy	scattered	⅛	wi. spr	W	potatoe roots	

2407 ACI'NULA *Fr.* Ergot *Sp* 1

16321	Clávus *Fr.*	common	nauseous	0	sum.	Blsh	glumes of grasses	Dec mem t.14.f 8 *Sclerotium*

2408 ERY'SIBE. *Rebentisch* Mildew *Sp* 14—37

16322	Artemisiæ *Grev*	Wormwood	patches	0	aut	Wsh	Artemisia vulgaris	
16323	Trifólii *Grev.*	Clover	powdery	0	aut.	Bl	Trifolium	
16324	Berbéridis *Dec.*	Berberry	spots	0	aut	Rsh	berberry	
16325	Láthyri *Grev*	Vetch	powdery	0	aut.	R Br	Lathyrus pratensis	
16326	Bétulæ *Dec*	Birch	scattered	0	su aut	Blsh	birch leaves	
16327	Robiniæ *Grev.*	Acacia	powdery	0	aut.	Wsh	Robinia viscosa	
16328	Arc'tii *Grev*	Burdock	patches	0	su. aut	Rsh	Arctium Lappa	
16329	Aquilégiæ *Dec*	Columbine	spots	0	aut	Wsh	Aquilegia vulgaris	
16330	Alchemillæ *Grev.*	Lady's Mantle	powdery	0	su aut	Ysh	Alchemilla vulgaris	
16331	Pisi *Dec*	Pea	crowded	0	aut	W	garden pea	Grev. crypt. 134
16332	A'ceris *Dec*	Sycamore	scattered	0	aut	Blsh	maple & sycamore	
16333	Lonicéræ *Dec*	Honeysuckle	powdery	0	aut.	Glau.	honeysuckles	
16334	Asperifolárum *Grev*	Borage	powdery	0	aut	Wsh	Asperifoliæ	
16335	Ranunculi *Grev.*	Crowfoot	scattered	0	aut.	Wsh	Ranunculi	

GASTEROMYCETES.

Class I Angiogasters — Division I *Phalloideæ.*

2409 PHAL'LUS. *Mich* Phallus *Sp* 2—9

16336	impudicus *L*	Stinking Morel	very fetid	8	su aut	Wsh	woods and hedges	Gr cry 213, 214. *fœtulus*
16337	caninus *Huds*	scentless	smaller	4	au sep	Pk	rotten hazel trunks	Sow t 330 *inodorus*

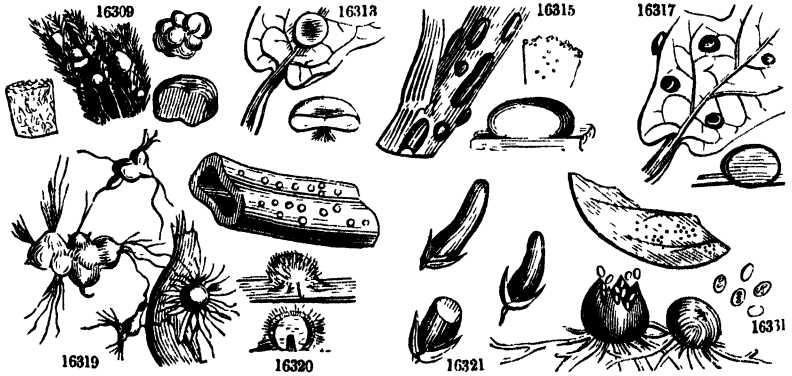
2410 BATAR'REA. *Pers* Batarrea *Sp* 1— .

16338	phalloides *Pers*	Phallus-like	long	3	au.	Br	banks	Smith specil. 1 t. 12

Division II *Tuberaceæ*

2411 TU'BER. *Plin.* Truffle *Sp* 2—6

16339	cibárium *Sibth*	common	esculent	1½	winter	Br	under ground	Nees pilz syst f 147
16340	al'bidum *Casalp*	pale	less fragrant	⅔	su aut	Wsh	under ground	



History, Use, Propagation, Culture,

2405 *Rhizoctonia* Subterraneous fungi, reposing upon the roots of living plants, which they destroy. The species appear in the summer or autumn, and are very destructive. They have received their name from their habits, ῥίζα, a root, and κτείνω, to destroy. They are very nearly related to the subterraneous Sclerotia. R. crocorum grows parasitically on the roots of the cultivated Saffron, Crocus sativus, in France, and is so pernicious as to have acquired the name of *la mort du safran.* It is very destructive, soon causing the bulb to perish, and spreading with great rapidity over a whole field of that valuable crop, if not speedily stopped by a trench fifteen to eighteen inches deep, to cut off the communication between the infected and the sound plants. The smallest quantity of earth from an infected field is said to be capable of communicating this plague, even if the ground were not planted with saffron till twenty years afterwards. "Hitherto this destructive parasite has not been heard of but in France. The plants are of an irregular knobbed figure, from half an inch to an inch long, of a light reddish brown, scarcely bursting; granular and paler within. Long branching capillary roots are sent out in all directions, propagating the plants very extensively and readily by offsets which attach themselves to the saffron, and multiplying in the substance of the bulbs soon destroy them." (*Smith.*)

2446. *Peziza.* From πέρι, about, and οὐλος, hairiness, in allusion to the appearance the species exhibit when growing upon the roots of plants, or decaying fungi.

16309 Gregarious roundish but very irregular tuberculose orange-yellow within and without or whitish
16310 Depressed epiphyllous scattered or very confluent reddish fulvous
16311 Minute on both sides of the leaf numerous dark mostly angular and subconfluent
16312 Black very minute roundish or oval numerous depressed
16313 Epiphyllous orbicul flattened at length somew concave in middle fixed ben. by a central filamentous point
16314 Minute somewhat scattered or partially aggregate very black orbicular depressed
16315 Deep-black oval or elongated cernuous at length substriate or rugose white within
16316 Roundish or oval confluent corneous externally and black paler within and concave
16317 Epiphyllous scattered globular or subdepressed smooth pale at length black, Substance very corneous
16318 Rounded or oblong sometimes confluent white at length brown or black corneous externally, within somewhat hollow and carnose

16319 Rufous, Filaments few spreading over the bulb in the form of a disk

16320 Round deformed downy white

16321 Horn-like cylindrical powdery and purple-black outside, white inside

16322 Very minute on both surfaces of the leaf, Filaments forming a dense whitish web
16323 On both sides of the leaf very globular nearly black, Filaments giving the leaf a farinose aspect
16324 On both sides of leaf form circular pulverul spots at length confluent Filam dichotom. at the extremities
16325 Red-brown minute, Filaments spreading over the whole leaf pulverulent
16326 On the under-surface scattered very visible blackish, Filaments few simple not rendering the leaf whitish
16327 On the upper-surface finely pulverulent, Receptacles minute congregated here and there
16328 On the under-surface thickly covering the whole leaf, Filam simple granuliferous · bodies pyriform small
16329 On both sides of the leaf forming a light pulverulent surface, Recept few scattered distinct
16330 On under-surface very numer min Filam few forming no filament or pulverul appear to the naked eye
16331 On both sides of the leaf so crowded as to darken its color, Filaments very long and slender
16332 On the under-surface scattered at length concave, Filaments elongated interwoven
16333 On both sides the leaf very numerous scattered minute, Filaments presenting a glaucous powdery surface
16334 On both sides the leaf scattered becoming confluent pulverulent, Recept aggregated here and there
16335 Chiefly on under-surface partially scatter Filam. long flexu Granuliferous cells oval contain mostly 4 gran.

GASTEROMYCETES.

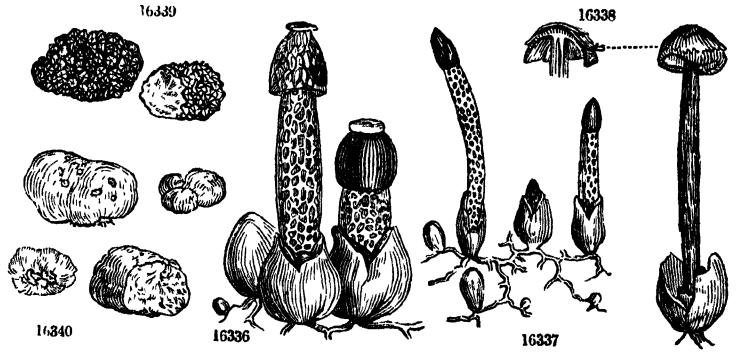
Class I. ANGIOGASTERS — Division I. *Phalloideæ*

16336 Volva large, Stipes very cellulose white, Cells of the head containing a fetid dull-green sporuliferous slime
16337 Head close to the stipes ovate warted impervious pink

16338 Stipes cylindrical straight mucilaginous

Division II *Tuberaceæ*

16339 Very rough with warts blackish
16340 Very rough with warts whitish



and Miscellaneous Particulars

2007. *Acinula.* Very similar to Sclerotium or Perisola, but distinguished by the diffluent coat, containing a nucleus resembling an *acinus* in a berry, whence the name A Clavus is the Ergot of corn.

2408. *Erysibe* A Greek name of mildew Most of the productions arranged under this head are known by the popular name of mildew. They are better characterized by the plants on which they grow, than by their peculiar differences, which, it is probable, depend very much upon the former circumstance.

2409 *Phallus.* Large terrestrial fungi, sometimes growing upon rotten wood, not clustered, appearing in the summer after thunderstorms, fetid, and highly poisonous. Their form is so similar to that of the φαλλος of the Greeks, as not to be overlooked.

2410. *Batarrea.* So named by Persoon, in honor of Antonio Batarra, professor of botany in the Lyceum at Rimini, and author of a Historia Fungorum Agri Ariminensis, published at Faenza, in 1759, in quarto, with forty plates A very curious plant found only in England, where, however, it is exceeding rare. The volva or wrapper is about the size of a hen's egg, originally of three slightly coriaceous layers, hollow internally, when a spongy stalk is formed which rises suddenly to its full height of about twelve inches. This stalk carries up on its summit full half the innermost layer of the volva, which is white and smooth within, and covered externally with copious brown sporules intermixed with fibres.

2411 *Tuber.* An ancient Roman name. T. cibarium is the famous truffle, so celebrated in the annals of

2412 RHIZOPO'GON *Fr* Rhizopogon. *Sp* 1—4.
16341 álbus *Fr.* white flocculent ½ aut. Rufes. way sides Bull. champ. t. 404
Lycopérdon gibbósum Dicks.

Division III *Nidulariaceæ.*

2413 NIDULA'RIA *Bull* Nidularia *Sp* 3—13.
16342 striáta *Bull* striated gregarious ½ au. no Brsh on rotten leaves Sow t. 29 *hirsuta*
16343 campanuláta *Sibth.* bell-shaped flocculent ½ su aut Ciner shavings of wood Sow t. 28
16344 Crucíbulum *Haffm.* crucible coriaceous ½ su aut Oc fer pine bark Grev crypt 34

2414 MYRIOCOC'CUM *Fr* Myriococcum. *Sp* 1.
16345 præ'cox *Fr.* early confluent ½ ear. sp W dead leaves, &c.

2415 POLYAN'GIUM. *Lk* Polyangium *Sp* 1.
16346 vitellínum *Lk.* yolk of egg gregarious 0 au oct Y damp trunks Nees syst t. 131

Division IV. *Carpobols.*

2416 ATRACTO'BOLUS *Tode* Atractobolus. *Sp.* 1.
16347 ubiquitárius *Tode* common powdery 0 th. sto. W wood,bones,stones,&c Fung meckl p 45 f 9

2417 THELE'BOLUS. *Tode.* Thelebolus. *Sp* 1—2.
16348 stercóreus *Tode* dung gregarious ⅓ w. aut. Ysh cow dung Nees syst f 363

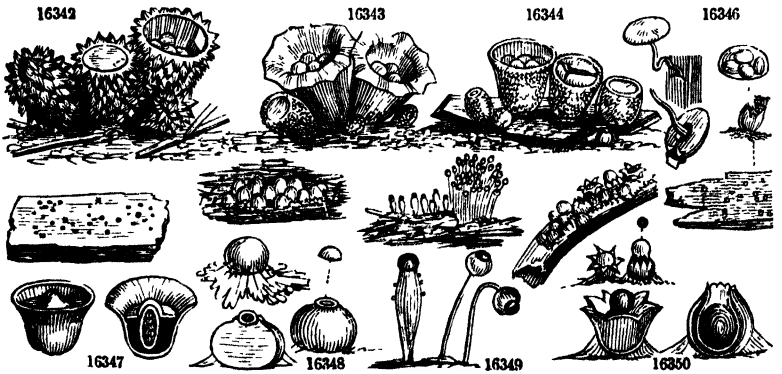
2418 PILO'BOLUS *Tode* Pilobolus. *Sp* 1—2.
16349 crystállinus *Tode* transparent very fugac ½ cool w. Bl horse dung Bolton, t. 133. f 1
β roridus Pers. *frosted* very fugac ½ cool w Pellu horse dung Bolton, t. 132. f. 4

2419 SPHÆRO'BOLUS *Tode* Sphærobolus. *Sp* 1—2
16350 stellátus *Tode* starry emerging 0 su aut Pa Y wood, &c Grev. crypt 158

Class II Pyrenomycetes. — Division 1 *Sphæriacei*

2420. XYLA'RIA. *Hill.* Xylaria. *Sp* 11—29
16351 hypóxylon *Grev* wood various 2 all sea Bl stumps of trees Sower t 55
16352 digitáta *Pers* fingered tufted 2 all sea Bl stumps of trees

16353 polymórpha *Grev* polymorph variable 2 aut. Bl stumps of trees Sow t 69 *digitata*
16354 grácilis *Grev* slender simple 3 aut. Br moist places Grev crypt 86
16355 entomorhiza *Dicks* insect-root stalked 2 aut Fusc dead larvæ of insects Dicks crypt 1 t. 3 f. 5
16356 capitáta *Holmsk.* capitate tufted 3 sep oc Br on Scler cervinum Sow t 354 *agaricæformis*
16357 alutácea *Pers* tan-like brittle 2½ au oct pa tan dead pine leaves Sow t. 159 *clavata*
16358 hypóxylon *Ehr* wood gregarious ½ aut sp Wsh old trunks
β cupressiformis Woody *cypress-like* gregarious ¼ aut sp Wsh old trunks Bolton, t 129 f. g
16359 punctáta *Sowerby* dotted gregarious ¼ all sea Sooty animal dung Sow t. 54



History, Use, Propagation, Culture,

cookery Dogs are taught to find this fungus by the smell, and to scratch it up out of the earth. An instance is recorded of a man having possessed this power It is brought to table either simply boiled, or stewed in various forms. It is reported to have a stimulating aphrodisiacal quality, which perhaps renders them more popular than their flavor, which is trifling Truffles are found under the surface of the ground in various parts of Europe, where the soil is light and dry; as well as in Japan and the East Indies. There are said to be numerous varieties of color

2412. *Rhizopogon* Large or middle-sized Fungi, emerging from the earth, and resembling potatoes, scarcely eatable; but, according to Gleditsch, possessing aphrodisiacal qualities. On the outside covered with netted corymbose rooting fibres, whence the name, from ῥίζα, a root, and πωγων, a beard.

2413. *Nidularia.* A diminution of *nidus*, a nest. The plants consist of a leathery cup containing several lenticular bodies supposed to contain sporules, and all together resembling a bird's-nest with eggs.

2414. *Myriococcum* From μυριος, a thousand, and κοκκος, a little capsule Related to Sclerotium The only species consists of superficial deformed confluent tubercles, 2-4-lines broad, at first sight resembling a white compound Sphæria with prominent brown orifices.

2415. *Polyangium.* Named by Link, from πολυς, many, and αγγιον, a capsule Easily distinguished from the last by the internal grumous substance, which Nees and Fries consider unequal sporidia

2416. *Atractobolus* From ατρακτος, a spindle, and βαλλω, to cast. The bladder which contains the sporules, is fusiform and closed, and is ejected from the base of the cupule as soon as the operculum is thrown off.

2417. *Thelebolus.* From θηλη, a nipple, and βαλλω, to emit. The uterus protrudes a globose papilliform vesicle This is found on the dung of swine, after rainy weather in June and July. Tode compares it to the

16341 Round somewhat rugose whitish-brown slightly fibrous at base

DIVISION III *Nidulariaceæ*

16342 Obconical hirsute bright-brown striated inside
16343 Campanulate villous cinereous-brown lead-colored and shining inside
16344 Campanulate-cylindrical truncate at each end somew. downy ochrey-brown smooth and pale-yellow inside

16345 Tubercles superficial deformed confluent, at first sight resembling some kind of compound sphœria

16346 About the size of a grain of sand

DIVISION IV *Carpoboli*

16347 Resembling to the naked eye flour scattered about

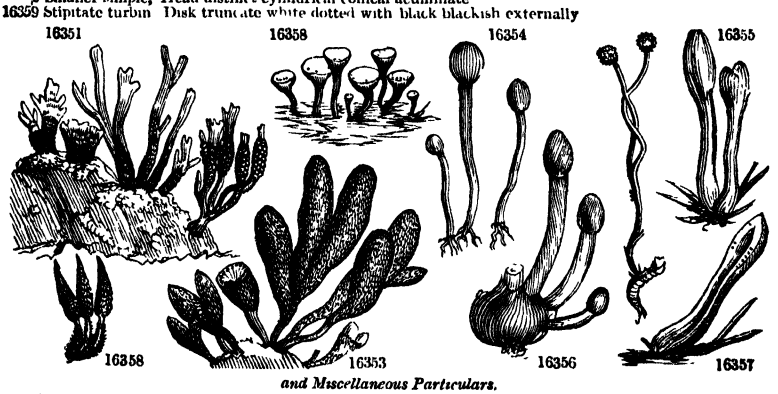
16348 Subglobose saffron-color gregarious sessile

16349 Stem-like receptacle inflated upwards (rarely filiform) Pointed capitular vesicle round depressed black
β Stem-like receptacle globose, Stipes oblong filiform, Capitular vesicle dot-like black

16350 Globose pale-yellow, Orifice regular stellate toothed

CLASS II PYRENOMYCETES — DIVISION I *Sphæriacei*

16351 Gregarious branched compressed black white and farinaceous towards the apex downy at the base
16352 Gregarious somewhat tufted black, Peduncles glabrous more or less united at their base, Receptacle cylindrical terminated by a sterile acuminate apex
16353 Black gregar simp or divid Pedunc pass into a ventric recept contain spherules ben its whole surface
16354 Stipes elongat. cylindr equal somew flexuose, Recept smooth roundish-ovate brown, Spherules obl. pale
16355 Fleshy, Head globose fuscous, Stipes thin very long
16356 Fleshy, Head ovate globose brown, Stipes yellow becoming blackish
16357 Fleshy soft, Head clavate pale tan-color confluent with the stipes
16358 Corky simple and branch compressed at first whitish powdery afterwards naked and black, Stipes villous
β Smaller simple, Head distinct cylindrical conical acuminate
16359 Stipitate turbin Disk truncate white dotted with black blackish externally



and Miscellaneous Particulars.

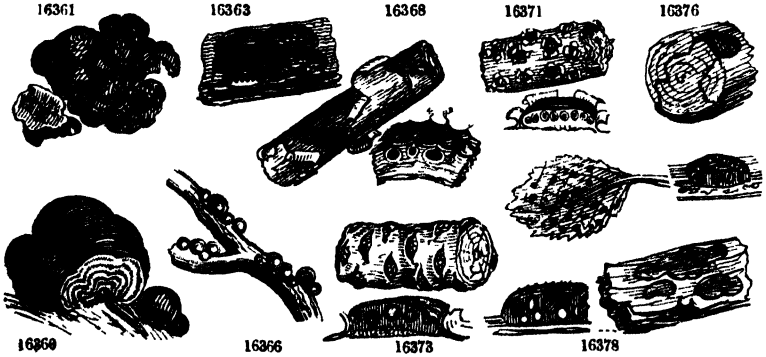
roe of a fish in appearance, and to poppy-seed in size The color is a tawny yellow. Each individual is globular, attached at the bottom by capillary roots, and crowned by a small papillary tubercle of a more orange or golden hue than the rest

2418 *Pilobolus* Named from πῖλος, a cap, and βαλλω. A very natural genus, consisting of gregarious little fungi of a very fugacious nature, inhabiting dung, appearing in the summer and autumn, when full grown they resemble species of Mucor, but in a younger state they are more evidently interwoven, and resemble Sphæria or Sclerotium

2419 *Sphærobolus* From σφαῖρα, a globe, and βαλλω The peridium is double, membranous inside, at length becoming elastically inverted, and emitting a globose solid sporangium, filled with sporidia clustered in the centre Epiphytous persistent plants, generally appearing in the autumn S stellatus is found in various parts of Europe in autumn upon rotten wood or branches of trees, heaps of sawdust, or in the tan-pits of hothouses In an early state each plant consists of a pale yellow globe larger than a mustard seed. Several such grow crowded in patches, bound down as it were by a fine cottony web After a while each plant bursts into several starry rays, and by a momentary explosion, projects to the distance of six or eight inches a whitish globular mass of powdery seeds from its internal cavity Sometimes this ball of seeds remains sticking to the points of the rays When fallen to a distance, the skin of this ball is found empty, the seeds having flown out, in its passage, through a hole in its base. (*Smith*)

2420 *Xylaria* From ξύλον, wood, in allusion to their station, or to their woody and durable texture. Once included in Sphæria.

2421. STROMATOSPHÆ'RIA *Grev*	Stromatosphæria.				*Sp* 24—58		
16360 concéntrica *Grev.*	concentric	suberose	1	aut.	Bl	ash trunks	Sow. t. 160. *fraxinea*
16361 deústa *Grev*	scorched	fleshy	¼	all sea.	Brsh	rotten stumps	Sow t. 338. *maxima*
16362 fúsca *Grev*	fuscous	suberose	0	all sea	Br	dead hazel	
16363 undulàta *Grev*	wavy	broad	⅓	aut.	Bl	decayed branches	Grev crypt 223
16364 striæformis *Grev.*	striated	gregarious	0	aut	Bl	herbaceous stems	
16365 múlticeps *Grev.*	many-head	masses	⅓	aut	Bl	dead branches	Sower t. 394 f. 8
16366 fragiformis *Grev.*	Strawberry-like	clustered	½	aut.	R.Br	dead beeches	Grev crypt. 136
16367 stigma *Grev*	spot	spreading	0	all sea	Bl	dead hazel, &c.	Grev crypt 223
16368 decorticàta *Grev*	decorticating	spreading	0	all sea.	Bl	dead hazel, &c	Sow t 137
16369 láta *Grev*	broad	spreading	0	all sea.	Bl	wood and deadtrees	Sow.t 373 f 9 *fuliginosa*
16370 ulmária *Grev*	Flm	punctiform	0	all sea	Gr Bl	elm leaves	Sower t 374 f 3
16371 discifórmis *Grev.*	disk-shaped	gregarious	0	all sea	D Br	dead hazel, &c	Sow t. 216 *depressa*
16372 emérsa *Sowerby*	emersed	gregarious	0	all sea	Dark	lime branches	Sow t. 372 f 10
16373 elliptica *Grev*	elliptical	gregarious	0	all sea	Ru Br	dead birches	Grev. crypt 114
16374 parállela *Sowerby*	parallel	deformed	0	all sea	Dark	dead oaks	Sow t 374 f 4
16375 ribésia *Grev*	Currant	furrowed	0	all sea	Dl Bl	dead currants	
16376 immérsa *Sowerby*	immersed	opaque	0	all sea	Bl	dead hazels	Sow t 374 f 1
16377 nigro-annulàta *Grev*	black ringed	beautiful	0	all sea	Bl	dead limes	
16378 rubiginósa *Grev*	purplish	crusts	0	all sea	Br	dead trunks	Grev. crypt. 110
16379 nívea *Grev*	snow-white	gregarious	0	all sea	W	dead oak branches	
16380 prunástri *Grev*	Plum	dense mass	½	all sea	Bl	dead sloe branches	
16381 quercina *Grev*	Oak	contiguous	⅓	all sea	Bl	dead oak branches	
16382 ferruginea *Grev*	rusty	subconfluent	0	all sea	Bl	decayed hazel	
16383 corniculàta *Grev*	horned	subcortical	0	all sea.	Bl	dead branches	
2422 CUCURBITA'RIA *Gray*	Cucurbitaria				*Sp* 5—13.		
16384 Berbéridis *Grev*	Berberry	crowded	⅓	all sea.	Bl	dead herb branches	Grev crypt fl t 84
16385 pinástri *Grev*	Pinaster	gregarious	0	all sea	R	dead spruce branch	Grev crypt fl t 90
16386 coccínea *Grev*	scarlet	variable	0	all sea	Sc	dead branches	
16387 decolórans *Grev*	discoloring	larger	0	all sea	Pa R	dead branches	Grev crypt 135 *cinnabarina*
16388 elongáta *Grev*	long black	cracks	0	all sea	Blsh	furze branches	Grev. crypt 195
2423 CRYPTOSPHÆ'RIA *Grev*	Cryptosphæria				*Sp* 30—48		
16389 fagínea *Grev*	Beech-wood	protruded	0	all sea	Bl	dead beeches	
16390 pulchélla *Grev*	pretty	broad pale	0	all sea	Bl	dead birches	Grev crypt fl t 67
16391 bifrons *Frics*	two-fronted	dry spots	0	wi spr	Bl	dry oak leaves	So t 373 f 4 *circumvallata*
16392 Gnómon *Grev*	Gnomon	yellow spots	0	all sea	Bl	hazel leaves	Sower 373 f 6
16393 Lonicéræ *Sowerby*	Woodbine	longit cracks	0	all sea	Bl	honeysuc branches	Sower t. 393 f 6
16394 acuta *Grev*	acute	very minute	0	all sea	Bl	dead nettle stems	
16395 Héderæ *Sowerby*	Ivy leaf	innate	0	all sea	Wsh	dry ivy leaves	Sower t. 371 f 5
16396 millepunctàta *Grev*	punctulated	punctiform	0	all sea	Bl	dead ashes	Grev crypt 201
16397 subcónfluens *Sower*	subconfluent	patches	0	spring	Bl	upon leaves	Sower t 370 f 7
16398 Táxi *Grev*	Yew	conv spots	0	all sea	Bl	dead yew leaves	Grev crypt. fl t 13



History, Use, Propagation, Culture,

2421. *Stromatosphæria* From στρωμα, a layer or bed, and σφαιρα, a globe, in allusion to the imbedded character of the species Apparently well divided by Dr Greville from Sphæria.

2422. *Cucurbitaria.* So named in reference to the form of the sporules, which resemble little flasks Sphæria

** Receptacle free, not bursting through bark*

16360 Large black somewhat hemispherical, Surface smooth, Orifices of the spherules scarcely at all raised within composed of regular concentric strata
16361 Large pale and carnose at length brownish-black and rigid spreading thick undulato-rugose the surface dotted with raised points
16362 Brown hemispher depress somew confluent when crowd interior of same col. Spher very slightly promin.
16363 Black thickish undulato-rugose whitish within, Mouths of the spherules round and somewhat prominent
16364 Black gregarious forming linear or oblong striæ smooth, Spherules very minute without obvious mouths
16365 Black irregular mostly free but sometimes bursting through the bark spreading confluent thickish-green within, Mouths of the spherules obtuse granulated prominent
16366 Globose purplish-red shining black within, Spherules in circumference with more or less promin. orifices

*** Receptacle bursting through bark*

a Orifices of the spherules plane, or slightly prominent

16367 Black plane spread. transversely on branch smooth inside whitish, Mouths of spherules not prominent
16368 Black plane spreading longitudinally white within, Mouths of the spherules somewhat prominent conical
16369 Black plane widely spreading somewhat rugose at first subdistinct at length confluent and united by a kind of irregular crust, Mouths of the spherules conical and angular
16370 Grey-black scattered plano-convex round parasitic on elm leaves, Surface papill with mouths of spherules
16371 Scattered distinct very gregarious round elevated plane dark-brown dotted with the orifices of the spherules, Orifices nearly plane
16372 Scatter broadly thin, Perithecia immers scatter cover with a dark membran crust, Orifices burst forth
16373 Scattered gregarious rather large elliptical rusty-brown smooth minutely pulverulent blackish and friable within, Mouths of the spherules quite concealed
16374 Short of a determinate figure emerging dark, Perithecia somewhat ovate, Orifices obtuse-unequal
16375 Rather small roundish elliptical dull-black bursting transversely through the bark depressed rugoso-sulcate, Surface minutely rough with the mouths of the spherules
16376 Innate-immersed effused smooth black, Perithecia ovate immersed, Orifices prominent somew depressed
16377 Gregar distinct bursting through the bark which is marked with a narrow black ring, Disk small covered by an evanescent membr ben white pulverul dott with the black orifices of the immersed spherules
16378 Thickish purplish-brown black within covered with a min pulverul substance, Spher conceal. Spor. oval

b. Orifices of the spherules more or less spinous

16379 Scattered very gregarious somewhat conical roundish the disk pulverulent white, Orifices of the spherules somewhat prominent and converging
16380 Deep black bursting transversely through the bark oblong elevated, Orifices of the spherules crowded level-topped acutely 4-sided and grooved
16381 Black round much elevated very gregarious the orifices thick irregular 4-sided
16382 Black gregarious sometimes subconfluent bursting transversely through the bark ferruginous within, Orifices of spherules erect straight cylindrical spinose
16383 Receptacle very small black, Spherules few crowded with thickish cylindrical elongated obtuse coarctate orifices umbilicate at their apex and piercing the bark

16384 Black ellipt-obl burst longitudin through the bark, Spher seat on recept crowd rugose somew tessellat
16385 Clustered, Spherules globose dotted red at length black at first immersed in the receptacle, Tubes containing the sporules attenuated at each extremity
16386 Very gregarious, Spherules minute clustered scarlet oval irregular in size smooth the mouth papilliform
16387 Dull pale-red scattered or crowded on the receptacle, Spherules globose tuberculated and rugose
16388 Black, Stroma very long, Perithecia at first immersed at length sessile crowded globose, Orifice papilliform with a circular depression around it

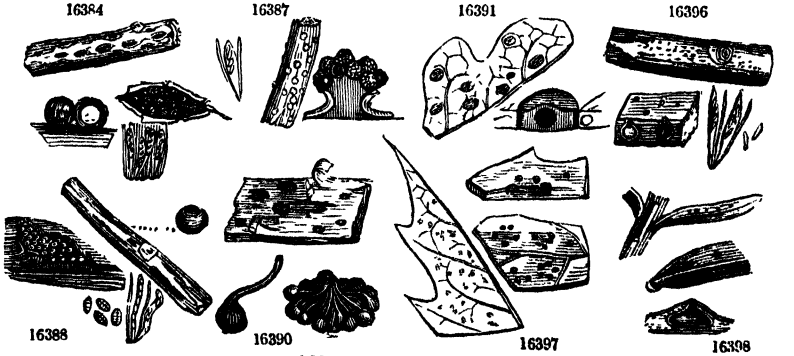
** Spherules collected into circular clusters*

16389 Black, Spherules few the mouths elongated rough converging
16390 Black spherules aggregated forming a dense circle, Mouths filiform flexuose converging depressed
16391 Innate grow on both sides, Leaf arrayed in round spots flat black, Perith convex promin becom bossed

*** Spherules more or less scattered, or simply aggregated*

a Spherules with an orifice

16392 Spherules few aggregated globose black the orifice suberect filiform shining style-like
16393 Gregar burst forth, Perithecia globose nearly separate fine black becom ragged and cup-shap Orifice simp
16394 Black shining very numerous ovate conical the mouth short thick cylindrical piercing the epidermis like a black point, After the decay of the epidermis the sphertules are naked
16395 Scattered, Perithecia prominent convex smooth black, Orifice open white
16396 Spherules black minute very numerous globose white within immersed in the substance of the bark the mouth very short scarcely piercing the epidermis which seems covered with innumerable dots
16397 Upon leaves, Perithecia innate prominent punctiform globose black clustered in unequal spots
16398 Minute scattered, Spherules depressed the mouth very short not exserted, Epidermis of the leaf convex and slightly ruptured Sporules naked extremely minute



and Miscellaneous Particulars

Cucurbitula of Tode, seems to have afforded the type of the genus, which contains most of the species constituting the seventh section of Sphæria in Persoon's system

2423. *Cryptosphæria.* A genus formed by Dr. Greville, to include those plants formerly retered to Sphæria,

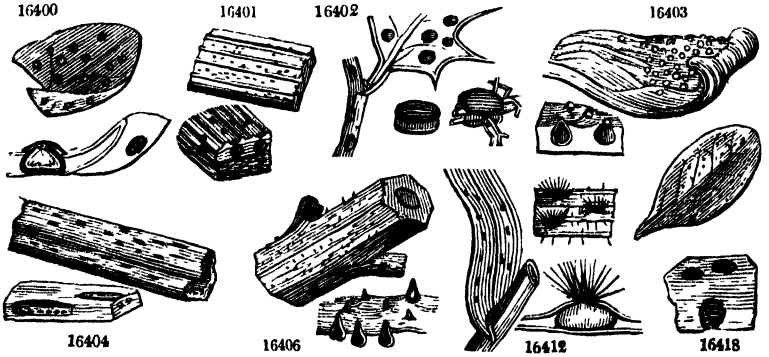
16399 strobilína *Grev.*	Pine-cone	uneven	0	all sea	Bl	dead fir cones	
16400 Laúri *Grev*	Laurel	scattered	0	all sea	Blsh	dead laurel leaves	Sower t. 371 f 4
16401 dúplex *Sowerby*	double	variable	0	all sea.	Bl	Spargan stems, &c.	Sower t 375 f 4
16402 bífrons *Grev*	two-fronted	scattered	0	all sea.	Bl	dead holly leaves	Sower t. 316
16403 aurántia *Grev*	orange	succulent	0	all sea	Ysh	dead fungi	Grev crypt 78
16404 Ptéridis *Sowerby*	Brake	confluent	6	spring	Bl	P aquilina stems	Sower t 394 f 10
16405 decompónens *Sow*	decomposing	spots	0	all sea	Bl	dead poplar branc	Sower t 217
16406 acumináta *Sower*	acuminate	very min	0	all sea.	Bl	thistle stems	Sower. t. 394 f 3
16407 curviróstra *Sower*	curv -beaked	very min	0	all sea	Bl	Umbelliter stems	
16408 Tamaricínis *Grev*	Tamarisk	patches	0	all sea	Bl	dead Tam german	Grev crypt fl t 45
16409 semi-immersa *Grev*	½-immersed	shining	0	all sea	Bl	dead honeysuckle	
16410 herbárum *Grev*	Herbaceous	punctif	0	winter	Bl	dead herbac plants	
16411 nebulósa *Grev*	cloudy	spots	0	winter	Bl	dead herbac plants	
16412 capillàta *Grev*	hairy	very min.	0	all sea	Br Bl	dead lvs of Holcus mollis	Grev crypt fl t 69
16413 Ægopódii *Grev*	Ægopodium	spots	0	all sea	Blsh	living lvs of Ægopod	Podagraria
16414 punctiformis *Grev*	dot-like	white spots	0	all sea	Bl	dead oak and other leaves	
16415 microscópica *Grev*	microscopic	eld -lik sp	0	all sea	Bl	dead Port laurel lvs	
16416 glauco-punctáta *Gr*	glauc dotted	eld -lik sp	0	all sea	B Bl	dead Rusc aculeat lvs	
16417 arundinácea *Sow*	Reed	minute	0	spring	Bl	reed stems	Sower t 336
16418 arbuticola *Sower*	arbutus	polymorp	0	spring	Bl	dead Uva ursi lvs	Sower t 370 f 6

2424 HETEROSPHÆ'RIA *Grev* HETEROSPHÆRIA *Sp* 1.

16419 patélla *Grev*	collapsed	shining	0	all sea	Bl	dead herbac stalks	Grev crypt 103

2425 SPHÆ'RIA *Haller* SPHÆRIA *Sp* 38—63

16420 spermoides *Pers*	seed-like	crowded	0	all sea	Bl	rotten wood	Grev crypt fl t 6
16421 Peziza *Pers*	cup	irregclust	0	all sea	R	dead dry wood	Grev crypt fl 186
16422 Doliolum *Pers*	tub	contiguous	0	all sea	Bl	dead herbac stalks	
16423 affínis *Grev*	red mouthed	pretty	0	aut.	R	on Bangia atrovirens	Grev crypt 186
16424 citrina *Pers*	yell web-like	byssoid	0	aut wi	Y	on rotten wood, &c	Grev crypt 215
16425 concéntrica *Bolton*	concentric	confluent	0	aut	Blsh	upon trees	Bolton, t 180
16426 tuberculósa *Bolton*	warted	superficial	0	all sea	Fusc.	bark of trees	Bolton, t 123 f 1
16427 serpens *Pers*	creeping	broad pat	0	spr wi	Bl	dead wood	Sow t 372 f 11 *crustacea*
16428 réptans *Sowerby*	branched	superficial	0	aut	Dark	dead wood	Sower t 395 f 1
16429 lævis *Sowerby*	smooth	immersed	0	aut	Bl	dead wood	Sower t 394 t 5
16430 nummulária *Fries*	moneywort	orbicular	0	aut wi	Dark	dead wood	Sower t 373 *diffusa*
16431 enterolenca *Fries*	white-heart	crustace	0	all sea	Wsh	dry branches	Sow t 120 *pezizaeformis*
16432 lepidæ'mia *Fries*	bordered	immersed	0	spr su	Pallid	dead oak branches	Sower t 218 *Saturnus*
16433 oblónga *Sowerby*	oblong	in circles	0	all sea	Bl	birch bark	Sower t 374 f 7
16434 convérgens *Sower*	converging	patches	0	all sea	Bl	smooth bark	Sower t 374 f 6
16435 Nidula *Sowerby*	bird's nest	spots	0	aut	Dark	bean roots	Sower t 394 f 2
16436 hydróphora *Sower* *S Peziza* Fode	pitcher	small	0	aut sp	Or R	soft beech wood	Sower t 23
16437 sanguínea *Sibth*	blood-red	minute	0	spring	Crim	naked wood	Grev crypt 175
16438 papillósa *Sowerby*	pimpled	gregarious	0	all sea	Dark	rotten wood	Sower t 236
16439 stercorária *Sower*	dung	middle sized	0	spring	Bl	dung	Sower t 357
16440 epispha'ria *Tode*	parasitic	dots	0	wi spr	R	Stromatosphæria	Grev crypt 175
16441 byssisèda *Pers*	byssoid	spread wide	0	all sea	Br Bl	dead branches	
16442 hirsúta *Pers*	hairy	shining	0	all sea	Bl	dead branches	
16443 pilósa *Pers*	pilose	shining	0	all sea	Br	dead branches	
16444 cálva *Pers*	bald	punctif	0	all sea	Bl	dry rotten branches	
16445 aurea *Grev*	golden	crowded	0	all sea	Or	decay large fungi	Grev crypt t 47
16446 rosélla *Alb*	rosy	spots	0	aut	R	red	Grev crypt. 138



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which are destitute of a receptacle and remain concealed (κευτος, hidden, whence the name) beneath the epidermis of vegetables, which is only perforated by their mouths. They are further characterized by having their spherules not enclosed in filiform tubes as in true Sphæria.

16399 Black roundish oblong scattered bursting through the epidermis, Orifice irregular papillose [minute
16400 Scatter rather min plano-convex black. splitt. Epider in centre and becom umbilicat Spor naked very
16401 Scattered, Perithecia immersed globose black concealed, Orifices dilated naked hemispherical
16402 Scattered black shining plane · the margin slightly raised, the epidermis united with the plant and bursting at the centre into 3-5 acute segments, Sporules naked oblong in 3-5 distinct masses
16403 Gregarious often crowded, Spherules yellowish globose somewhat fleshy, Orifices short cylindrical surrounded by an orange web
16404 Somew innate parallel confluent black burst. with paral. slits, Thallus black, Perith in rows connate
16405 Scattered, Perithecia immersed globose, Orifices min convex peeping out of a black spot becom. bossed
16406 Gregarious, Perithecia somewhat immersed ovate black, Orifice bursting conical acute
16407 Gregarious, Perithecia covered ovate black, Orifices bursting equal smooth longer
16408 Scattered under the epidermis which is very convex and ruptured in the centre, Mouth very short obtuse not exserted, Sporules oval in filiform tubes
16409 Scattered globose with a very short rounded umbilicated mouth · at first the mouth only visible at length the spherule itself semi-exserted falling out in decay and leaving a cavity
16410 Spherules minute scattered very numerous black round depress. Orifice papilliform piercing the epidermis like minute dots at length naked when it decays
16411 Spherules excessively minute scattered forming dark greyish cloud-like longitudinal spots on the smooth stalks of plants: the orifice somewhat acute penetrating the epidermis

b Spherules without an evident orifice

16412 Parasitic on the leaves of dead grasses scattered brown black white within flat hemispherical. the apex furnished with a tuft of black rigid diverging hairs
16413 Scattered or in small groups minute blackish roundish producing pale spots on the leaf
16414 Scattered very gregarious fructiform somewhat shining rarely dehiscent
16415 Excessively minute very gregarious so as to form dark cloud-like irregular spots on the leaf
16416 Spherules very numerous punctiform glaucous or blueish-black rendering the leaf pale
16417 Bursting forth lin black with hardly any thallus, Perithecia in 1 or 2 rows somew connate black inside
16418 Gregar conflu cover with a blackened epider Perith deform black disk finally burst forth and opaque

16419 Forming nearly equidistant spots upon the stems of large dead herbaceous plants, Very common

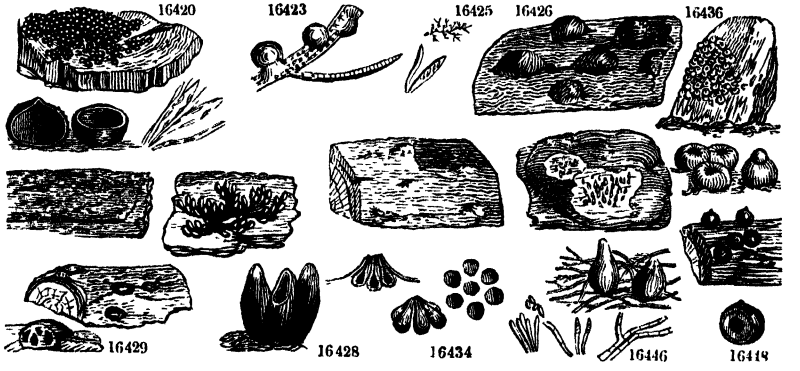
** Spherules with an orifice, not hairy*

16420 Black globose nearly smooth crowded the orifice minute slightly papilliform
16421 Fine red min smooth gregar glob with a very min papill orifice, Spher at length collapsed and concave
16422 Black scattered gregarious roundish ovate acute shining the mouth papilliform
16423 Subgregar or scattered sessile orange-colored smooth glob destitute of orifice whit and filament at base
16424 Perithecia glob submmers Orifices promin convex furnish with an effused filament strat of a yell color
16425 Globose deformed brownish-black banded within with concentric layers, Perithecia oblong immersed
16426 Convex pulvinate fuscous whole-colored inside, Perithecia globose, Orifices bossed
16427 Effused thin flattened black, Perithecia subglobose prominent pimpled
16428 Dark, Layer diffused branched, Perithecia oblong smooth pimpled
16429 Elliptical smooth black white inside, Perithecia immersed ovate without orifice
16430 Of a regular figure very flat contigu dark extern and internally, Perith immers. ov Orif glob promin
16431 Orbic conv separ Layer white, Perithecia min Orifices numer disengaged glob and rostell somew rug
16432 Pustular, Layer adhering to the bark and emerging, Disk palish, Orifices exserted oval and rostellate
16433 Perithecia subovate, Orifices long thickened at end united in an opaque disk bursting transversely
16434 Minute circinate, Perithecia about 6 ovate and converging, Orifices round somewhat tapering emerging
16435 Cæspitose growing to the surface, Perithecia stalked ovate acute smooth dark
16436 Gregarious soft, Perithecia globose smooth somew pimpled orange-red becoming concave by collapsion

16437 Scattered soft very small, Perithecia ovate smooth pimpled crimson
16438 Dark, Perithecia thin globose smooth, Orifice papillæform
16439 Black shining, Perithecia globose rigid smooth, Orifice papillæform
16440 Sess. min soft aggregated or scattered smooth blood-red, Perithecia subglob collapsing, Orifice papilliform

*** Spherules with an orifice, hairy*

16441 Rather large brownish-black shining globose with a papilliform orifice arising from a dense brown filamentous stratum which sometimes partly envelopes the sperules
16442 Gregarious somewhat clustered quite black, Spherules roundish ovate somewhat tuberculate with short rigid scattered hairs, Orifice obtuse
16443 Spherules minute crowded roundish when young appearing like one mass of diverging brown hairs at length almost naked towards the apex and black, Orifice minute papilliform
16444 Black gregar hemispher minutely granulat the apex naked somew shin, the base hairy, Orif papill
16445 Gregar very crowd ov somew acum orange, Orifice moist but the spherules escape in a pulverul form
16446 Gregarious rose-colored, Spherules ovato-globose subacute or papillose placed on a paler colored web



and Miscellaneous Particulars.

2424. *Heterosphæria.* From ἕτερος, various, and *Sphæria*, but we do not know in allusion to what peculiarity. A small black dot-like plant.

2425. *Sphæria.* In allusion to the *spherical* figure of the species, which are exceedingly numerous and diffi-

16447 biformis *Pers.* β *terréstris* Sow.	two-formed *terrestrial*	scattered clustered	0 0	spring spring	Bl Bl	rotten wood gravelly soil	Pers. syn t 2. f 14 Sower t 373. f. 7
16448 moriformis *Pers.*	Mulberry	contiguous	0	all sea	Bl	dead wood	Sow t. 337 *claviformis*
16449 lignária *Grev*	black wood	punctiform	0	all sea	Bl	dead wood	Grev. crypt. 82
16450 rugósa *Grev*	rugose	tessellated	0	all sea	Bl	dead Polypor abietinus	Grev crypt fl. t 39
16451 Pisi *Sowerby*	Pea	scattered	0	wi spr	Bl	dead pease haulm	Sower t 393 f 8
16452 púlvis-pyrius *Pers*	small black	seed-like	0	all sea	Bl	dead dry wood	Grev crypt 152
16453 irregulàris *Sower*	irregular	pulvinate	0	aut	Brsh	dead wood	Sower t. 374 f 9
16454 Vaccínii *Sower*	Cranberry	patches	0	wi spr	Dark	liveVacc Vitis idæa	Sower t 373 f 1
16455 myriocárpa *Fries*	minute-crowd	punctiform	0	aut	Bl	dead wood	Grev crypt 152
16456 verrucósa *Grev*	warty	areolated	¼	aut wi	Bl	cup of fungi	Grev crypt 39
16457 hirsúta *Sowerby*	hirsute	clustered	0	all sea	Bl	plaster	Sower. t 386 f 3

2426 LO'PHIUM *Fries* Lophium. *Sp* 2—3.

16458 elátum *Grev*	elongated	scattered	⅛	all sea	Bl	pine bark	Grev crypt 177
16459 mytilinum *Fr.*	muscle-shap	crustaceous	0	all sea	Bl	pine bark	Grev crypt. 177

Division II. *Cytispores*

2427 SPHÆRONÆ'MA *Fries* Sphæronæma. *Sp* 1—15.

16460 subulátum *Fries*	awl-shaped	spiculiform	⅛	aut.	Ciner	on Agarics	Grev crypt. 189

2428 SEPTA'RIA *Fries* Septaria *Sp* 1—2

16461 Ulmi *Fr*	Elm-leaf	stains	0	aut	Br	elm leaves	Grev crypt 112

2429 CYTISPO'RA *Ehrenb* Cytispora *Sp* 2—18 · *Sphæria* Sowerby

16462 Chrysospérma *Fr*	yellow-seed	spots	0	all sea	Blsh	poplar bark	Sow t 138 *curhata*
16463 Rosárum *Grev*	Rose twig	pustular	0	aut	Pallid	dead rose branches	Grev crypt. 20

2430 PHO'MA *Fr.* Phoma *Sp* 2—5 *Sphæria* Sowerby

16464 saligna *Fr.*	willow leaf	pimpled	0	wi spr	Brsh	dead willow leaves	Sow t. 372 f 1 *salicina*
16465 Pópuli *Fr.*	poplar leaf	pimpled	0	wi spr	Test.	dead poplar leaves	Sower. t 374 f 2

Division III *Phacidiacei*

2431 DOTHIDE'A *Fr* Dothidea *Sp* 7—54 *Sphæria.* Sowerby

16466 typhina *Fr* *Sphæria spiculifera* Sower 270	Bull-rush	encrusting	0	sum.	Y	live stems of grass	Grev crypt 204
16467 Ulmi *Fr*	Elm	spots	0	su aut	Blsh	elm leaves	Grev crypt. 200
16468 Robertiána *Fr* *Cryptosphæria nitida* Grev	shining	punctiform	0	su aut	Bl	live Geran Robertianum lvs	Grev crypt 146
16469 alnea *Pers* *Xyloma alneum* Pers	alder	punctiform	0	aut	Bl	live alder leaves	Grev crypt 146
16470 rubra *Fr*	red	patches	0	aut	R	leaves	Grev crypt 120
16471 fulva *Fr*	tawny	patches	0	aut	Br	leaves	
16472 betulina *Fries*	Birch-leaf	punctiform	0	su aut	Blsh	birch leaves	Grev crypt 200

2432 RHYTISMA *Fries* Rhytisma *Sp* 1—22

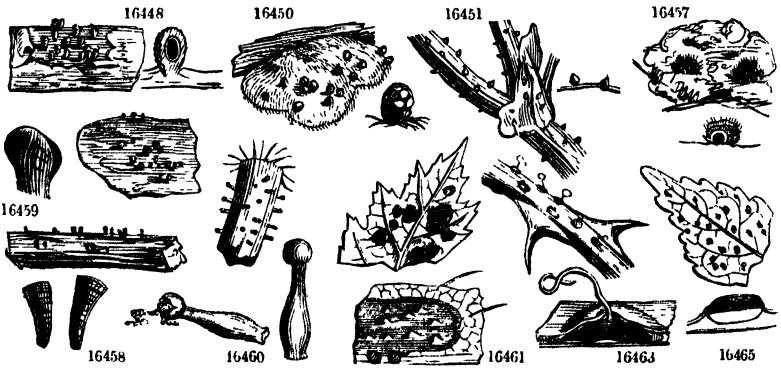
16473 corrugátum *Fr*	wrinkled	gregarious	0	all sea		crusts of lichens	E.b 1464 *L. graniformis*

2433 PHACI'DIUM *Fries* Phacidium. *Sp* 2—20

16474 coronátum *Grev*	crowned	black spot	0	all sea	Bl	dead oak leaves	Grev crypt fl t 52
16475 dentátum *Schm*	toothed	white spot	0	all sea	Bl	oak leaves	

2434 HYSTE'RIUM *Tode* Hysterium *Sp* 12—52

16476 lineáre *Fries*	linear	lines	0	all sea	Bl	dead wood	Grev crypt 167
16477 maculáre *Fries*	pale spot	blotches	0	aut.	Bl	dead leaves	Grev. crypt 129



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cult of determination Most of them are highly curious objects when minutely examined, and some even beautiful. Sphæria militaris is a fine species, about an inch in height, the head being ovate, of a beautiful scarlet, granulated like orange-peel

2426. *Lophium* So named from λοφος, a little elevation Differs from Sphæria in being completely evolved, dehiscent, compressed, without a veil, and having a nucleus crumbling to powder. The plants are very similar to the valves of a bivalved shell

2427 *Sphæronæma* From σφαιρα, a sphere, and νημα, gelatine, in allusion to the round mucous bag in which the sporules are enclosed The species are minute innate plants, generally growing on wood, very permanent, and often cohering by their base

2428 *Septaria* Growing upon dead leaves, in the form of clouds or spots Named upon account of the septa of the sporidia

2429. *Cytispora* From κυτις, a little chest, and σπωρα, a sporule. The species are very common, growing upon plants, immersed, soft, bearing fruit during damp weather, and even by watering only, within doors. The most essential character consists not in the cirrhi, common to many fungi, but in the deformed cellular perithecia, by which it may be easily known in any state.

16447 Perithecia somew ov. rather wart. black cover with strigose hairs of same col. Orifice rather lengthened
β Perithecia numerous seated on a little strigose villous crustaceous stalk

**** Spherules without an evident orifice*

16448 Gregarious obovate deep-black smooth tuberculated
16449 Spher minute solitary or somew cluster black ovate setoso-rugose mouthless, Spor. ovate in cylindr tubes
16450 Minute black scattered globose very rugose and tuberculated parasitic on the pileus of Polyporus abietinus
16451 Scatter Perith ellipt. rounded depress plaited lengthwise opaque black, Orifice hidden somew compress
16452 Spher black min very numer crowded roundish somew tuberculated and often with a transverse furrow
16453 Emerging prominent irregular brownish-black rutous brown internally, Orifices concealed
16454 Tufted innate on the surface, Perithecia subglobose solid without orifice at first villous afterwards naked
16455 Naked more or less crowd ovate-glob black shining, Perith very small smooth at first without an orifice
16456 Minute black scattered globose very warty, Parasitic on the cap of Polyporus abietinus
16457 Perithecia subglobose ovate tuberculate black covered with scattered hairs of the same color

16458 Stipit compress black transverse striat dilat gradual from stipes into an elongat wedge-shap. perithecl.
16459 Somewhat stalked dilated upwards striated across shining

Division II. *Cytisporei*

16460 Perithecia conico-subulate acute yellowish somewhat pellucid, Globule very pale

16461 Spherules aggregated, Sporidia 3 or 4 times divided. Cirrhi often becoming effused

16462 Cells impressed on the receptacle, Disk emerging blackish, Cirrhi yellow [with a cottony margin
16463 Sporulifer tendr. white simp Spher waved when divid horizontal manifest under epider Orifice black.

16464 One or many-celled convex brownish-black somewhat umbonate in the centre
16465 Generally many-celled roundish flat brownish-testaceous, Orifices obsolete

Division III *Phacidiaceæ*

16466 Long, surrounding the culms whitish becoming dark-yellow at length rendered granular by the orifices

16467 Epiphyll round confluent convex cinereous-black internally black with white cells, Orifices like granulat
16468 Epiphyllous subgregarious hemispherical smooth shining very black white within

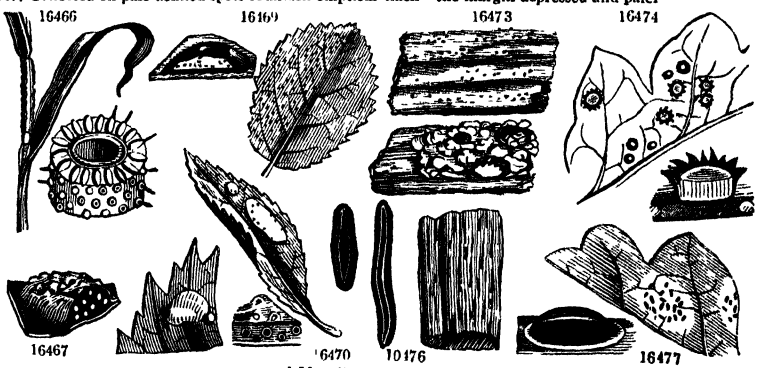
16469 On both sides of the leaf regularly scattered roundish black shining collapsed rugose and plaited

16470 Plane orange-red, Sporules unequal globose
16471 Plane pale fulvous
16472 Epiphyllous somewhat angular and irregular in form subconfluent tuberculose black shining black within the cellules white

16473 Minute innate on the surface rugose plaited opening with many flexuose cracks

16474 Orbicul subhemispher depressed black dehiscent in numer acute segm Disk pale greenish or yellowish
16475 Four-sided small black or whitish spots on the leaf splitting in 4-5 acute segments, Disk dingy

16476 Subimmersed crowded parallel linear black, Lips of the orifice tumid smooth, Disk linear
16477 Collected on pale defined spots roundish elliptical black the margin depressed and paler



and Miscellaneous Particulars

2430 *Phoma* Said by its author to be named in allusion to the pustular appearance of the plants, which are of a brownish color, and grow within the substance of leaves

2431 *Dothidea* A genus which has been named from δοθιην, a tubercle, and ειδος, similar, and appears to be very distinct. The species are numerous, growing upon plants, many of them are innate and dark, a few colored

2432 *Rhytisma* From ῥυτις, a wrinkle *R.* corrugatum, the Lichen graniformis of English botany, is a gregarious, subcorneous, shining flattish plant, referred to Lichens by Acharius, but considered by Fries and Ehrenberg to belong to Fungi It is common upon the crusts of Lichens and upon dry wood.

2433 *Phacidium* A name with the same meaning as Dothidea, from φακις, and ειδος Intermediate between Rhytisma and Hysterium, but differing from both in the manner of dehiscence The species are somewhat innate, epiphytous, tolerably permanent, blackish, and with a kernel which becomes softish

2434 *Hysterium.* From ὑστερησις, penury, in allusion, perhaps, to the diseased and squalid appearance which trees attacked by this fungus assume. Minute plants, resembling Opegrapha, and like that genus, found occupying the bark of trees, but destitute of a crust.

16478	Rúbi *Pers.*	Bramble-stem	lines	0	aut.	Bl	bramble branches	Grev. crypt. 24
16479	follicolum *Fries*	various	dot-like	0	spring	Bl	common ivy leaf	Grev crypt. 129
16480	melaleúcum *Fries*	blk & white	dots	0	aug.	Bl	Vacc Vitis idæa	Grev crypt. 88
16481	pulicáre *Pers*	flea-like	very grega.	0	all sea.	Bl	rugged oak bark	Grev crypt 167
16482	Fráxini *Pers*	Ash	corneus	0	all sea.	Bl	dead ash branches	Grev. crypt 72
16483	quercínum *Pers.*	Oak	gregarious	0	all sea	Gr.Br	dead oak branches	
16484	angustátum *Pers*	tapered	minute	0	all sea.	Dl B	dead wood & stumps	
16485	Pinástri *Pers*	Pinaster	scattered	0	all sea	Bl	dead Scotch fir lvs	Grev. crypt. fl. t 60
16486	Juniperi *Grev*	Juniper	spots	0	all sea.	Bl	dead juniper leaves	Grev crypt. fl t 26
16487	gramíneum *Pers.*	Grass	gregarious	0	all sea	Bl	dead grass leaves	Grev. crypt. fl t. 87

Division IV. *Xylomacei.*

2435 ACTINOTHY'RIUM *Kunz.* Actinothyrium. *Sp* 1

16488	gráminis *Kunz.*	grass	gregarious	0	spring	Bl	culms of grasses	Grev. crypt. 218

2436. LEPTOSTRO'MA *Fr* Leptostroma. *Sp* 1—9.

16489	scirpinum *Fr.*	Rush	spots	0	su.aut.	Bl	Scirpus lacustris	Fries obs. t. 1. f. 6

2437 XYLO'MA *Pers.* Xyloma. *Sp* 8—14

16490	acerinum *Pers.*	Maple	broad spots	0	all sea.	Bl	living sycamore leaves	
16491	salicínum *Pers.*	Willow	solid spots	0	all sea	Bl	living Sal capræa lvs.	Grev crypt 118
16492	salignum *Pers*	Sallow	yell. spots	0	all sea	Br	decaying Sal capræa lvs.	Grev crypt 118
16493	populínum *Pers.*	Poplar	small spots	0	all sea	Brsh	aspen leaves	
16494	Geránii *Grev*	Geranium	crowded	0	all sea	Dl Bl	living Geran sylv. lvs.	
16495	fagineum *Pers*	Beech	very min.	0	all sea.	Bl	dead beech leaves	
16496	concávum *Grev.*	concave	scatt. spots	0	all sea.	Bl	dead holly leaves	Sow t 317 *Sphæria*
16497	pezizoídeum *Pers*	Peziza-like	punctiform	0	all sea.	Bl	dead oak leaves	So t.118 *Pez comitialis*

2438 LASIOBO'TRYS *Kunze* Lasiobotrys *Sp* 1—?

16498	Lonicéræ *Kunze*	Woodbine	spots	0	sum.	Bl	honeysuckle leaves	Grev. crypt. 191

2439 ASTERO'MA *Dec* Asteroma *Sp* 2—?

16499	Ul'mi *Grev*	Elm	pale spots	0	all sea	Bl	living elm leaves	
16500	Alchemilla *Grev*	Lady's Mantle	pale spots	0	all sea	Bl	living Alchemilla lvs.	

Class III. Trichospermi. — Division I *Lycoperdinei.*

2440 ONYGE'NA. *Pers* Onygena. *Sp* 1

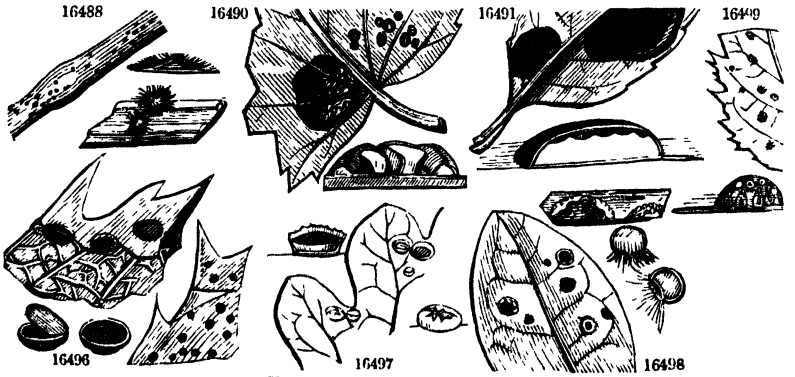
16501	equina *Pers*	horse-hoof	minute	½	aut.	Wsh	decaying hoofs, and similar substances	Willd. fl. berol. f. 20

2441 TULO'STOMA. *Pers* Tulostoma *Sp* 1—3

16502	brumále *Pers*	winter	subsolitary	1	au oct	W Br	pastures	Bulliard, t 471 f 2

2442 SCLERODER'MA *Pers* Scleroderma *Sp* 4—14

16503	verrucósum *Grev*	warty	handsome	5	aut.	Y Br	plantations	Grev crypt fl t 48
16504	cépa *Grev*	solid	surf variab	2	aut.	Y Br	plantations	Grev crypt fl t 66
	Tuber solidum With							
16505	citrínum *Pers*	Lemon-color	tessellated	2	aut.	Pa Y	about oak roots	Bolton, t 116
16506	spadiceum *Pers.*	brown	tessellated	1	sum	Pa Br	beech trunks	Schæffer, t 188



History, Use, Propagation, Culture,

2435 *Actinothyrium* So called from ακτις, a ray, and θυεος, to enclose, in allusion to the radiated integument of the sporidia. The only known species is innate, growing upon plants, orbicular, almost black, and appearing in the early part of the year

2436 *Leptostroma* From λεπτος, thin or delicate, and στρωμα, a layer, in allusion to the disk, which, when the perithecium separates, becomes naked and very thin.

2437. *Xyloma* From ξυλον, wood, and λωμα, a margin The species are innate coated tubercles, of a hard vesicular substance, but which does not produce fructification One of the most common kinds, X. acerinum, has a ragged border

2438 *Lasiobotrys* From λασιος, wool, and βοτρυς, a bunch This plant originates beneath the epidermis of the leaf, during its green and living state. When mature, it is of a very black color, and regular circular form, from one to two lines in breadth, very slightly convex, the surface uniformly granulated, and the whole generally situated on a paler or colorless portion of the leaf. On the bursting or laceration of the epidermis of the leaf, which takes place in the centre, our plant is found to consist of a multitude of distinct perithecia of a roundish form, closely arranged side by side, destitute of orifice, and the summits of which produce a granulated appearance to the naked eye or a small magnifier These perithecia are fixed to the leaf by a number of short filaments radiating from their base, and are not to be detached without some

16478 Ellipt or obl atten. each end black somew. shin. obscure striat. Sum. of sporulifer cells obtuse. club-shap.
16479 Innate scattered elliptical obtuse rather tumid smooth naked black with a longitudinal depression
16480 Minute black irregularly gregarious oval or roundish convex, Sporuliferous tubes club-shaped
16481 Gregarious black oblong or roundish-elliptical obtuse somewhat striate
16482 Convex tumid oblong-elliptical very black disposed in a subconcentric manner, Sporules large obl. yellow
16483 Bursting through the bark oblong elliptical flexuose somewhat ventricose greyish-brown
16484 Gregarious linear narrow parallel smooth of dull black
16485 Minute oval elliptical very black disposed in a subconcentric manner, Sporules large oblong yellow
16486 Very min. oval shin somew plane growing longitudinally on leaf, Sporulifer. tubes clavate acum. at apex
16487 Very minute linear elliptical black mostly on the ribs of the leaf or culm

Division IV *Xylomacei.*

16488 Scattered or gregarious orbicular ½ to ¾ line broad, very dark a little ribbed and elevated in the centre

16489 Orbicular opaque bossed in the centre at length entirely separating, Disk whitish

16490 Black spreading in large irregular spots which are either uniform or composed of somewhat distinct dots dehiscence irregular and rugose
16491 Large irregular very thick black white within
16492 Gregarious sometimes crowded roundish slightly convex brown at length blackish
16493 Gregarious rarely scattered over the whole surface flattish irregular smooth dull-brown
16494 Scattered black unequal in size plane the surface rugose and somewhat papillose in the centre
16495 Minute crowded often in circular groups round black shining plan. rugose
16496 Minute roundish regularly scattered black shining smooth the upper half separating
16497 Clustered orbicular black becoming open, Margin erect somewhat crenate, Disk pale

16498 Perithecia even much crowded black: the radiating fibres simple

16499 Filam black radiat subdichotom at length covered with confluent rugoso-plicate shining black tubercles
16500 Filam. very min. extremely fine branch at length subdist. black, Tubercles producing a pale spot on leaf

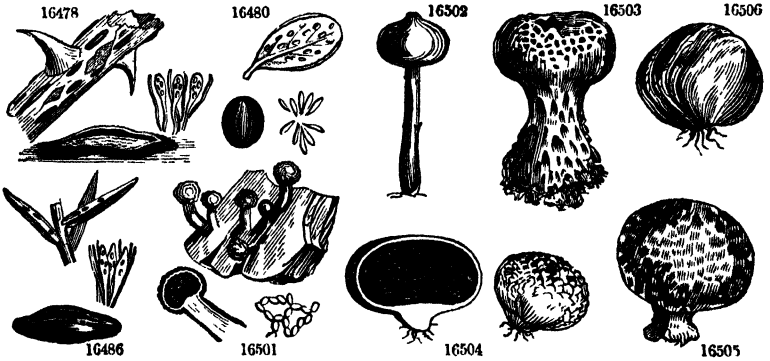
Class III TRICHOSPERMI — Division I *Lycoperdinei*

16501 Stipes short somewhat fibrous, Peridium scabrous always closed, Sporules ovate

16502 Stipes smoothish, Peridium globose, Orifice flat

16503 Large gregarious subglobose yellowish-brown, Scales small numerous, Stipes subelongated incrassated below lacunose and variously divided at the root
16504 Globose subdepressed very firm smooth or warty sess or with a very short thick stipes, Root scarcely any

16505 Middle-sized roundish long-rooted pale lemon-color obsoletely scaly, Scales thickish
16506 Gregarious smaller somewhat spotted smooth brown, Root hard fibrous



and Miscellaneous Particulars.

force Their surface is smooth black Within they are replete with a somewhat gelatinous granulose mass, containing subglobose sporidia. The above is a description of the usual appearance of this plant.

A variety, however, occurs in the form of a ring or annulus, the centre being unoccupied. Sometimes the perithecia are scattered in irregular groups, a few together, and may even occur solitary

2439 *Asteroma* So named by Decandolle; but we know not with what meaning Many of the substances referred to this genus are believed to be merely young states of various kinds of Dothidea, some are the black lines by which certain Pyrenomycetes are bounded, others are merely darkened veins of leaves. To this the whole of Actinonema of Persoon, and several of his Capillarias are to be referred

2440. *Onygena* So called from *ονυξ*, a hoof, and *γινομαι*, to be born, in allusion to the singular circumstance of the original and only species being always found on old horse-hoofs in shady woody places.

2441. *Tulostoma.* From *τυλος*, a wart, and *στομα*, the mouth, in reference to the nature of the orifice by which the seeds of this plant are dispersed. T brumale is found on the mossy tops of walls about London in the winter and spring It may easily be overlooked for some unexpanded Agaric.

2442. *Scleroderma.* So called from *σκληρος*, hard, and *δερμα*, skin, in allusion to the hardness of the coat of the species S. spadiceum is found on heaths in England, but is very rare, it is about the size of a chesnut, rather depressed at the top.

2443 LYCOPER'DON *Mich* Puff-ball. *Sp* 4—11.

16507	bovista *Pers*	large	turbinate	3	aut.	Wsh	pastures	Sower t. 332 *Proteus*
16508	praténse *Pers*	meadow	½ subterra	2	su aut.	W	pastures	Bulliard, t. 435 f 2
16509	excipuliförme *Pers.*		chan to br.	2	aut	W	pastures	Bulliard, t 450 f 2
16510	pyriforme *Pers*	pear-shaped	tufted	1½	su aut.	Pa Br	about tree stumps	Bulliard, t 435. f. 3

2444 BOVIS'TA *Pers.* Bovista. *Sp* 2—4

16511	nigréscens *Pers*	blackish	becom blk	2	su aut	W	pastures	Sower t 331
16512	gigantéa *Grev*	gigantic	cracking	12	su aut.	Y.W	pastures	Bulliard, t. 447

2445 GEAS'TRUM *Mich* Geastrum *Sp* 4—5

16513	coliförme *Pers*	purse-shap	subsolitary	2	aut.	Brsh	pastures	Dic cr t 3 f 4 *Lycoperd*
16514	Woodwárdi *Pers*	Woodward's	subsolitary	1	aut	D Br	dry banks	Bry hist. f 19 *Lycoperd*
16515	quadrifidum *Pers*	quadrifid	subsolitary	2	aut	Wsh	pine woods	Sch t 183 *L. fornicatum*
16516	stellátum *Bolt*	stellated	subsolitary	sp	aut.	Br	moors	Bolt t. 179 *Lycoperdon*
	Lycoperdon recolligens Woodw							

Division II. *Trichocists.*

2446 CRATE'RIUM. *Trent* Craterium *Sp.* 2—6

16517	leucocéphalum *Trent*	white-head	pretty	¼	aut		mosses, &c	Grev crypt t 65
16518	vulgáre *Dittm*	common	pretty	⅛	aut		mosses, &c	Sower t 239
	Cyathus minútus Sowerby							

2447 STEMONI'TIS *Pers* Stemonitis *Sp* 2—?

16519	fasciculáta *Pers*	fascicled	dense	¾	su aut	Bl Br	rotten wood	Greville crypt 170
	Trichia núda Sow.							
16520	papillata *Pers*	pimpled	scattered	¼	aut	D Br	rotten wood	Nees syst t 10 f 118

2448 CRIBRA'RIA *Schrad* Cribraria *Sp* 1—?

16521	micropus *Schrad*	small stalk	pinheaded	1/16	aut	Br	pine trunks	Schrad gen t 2 f 1-2

2449 DICTY'DIUM *Schrad* Dictydium *Sp* 1—?

16522	cérnuum *Nees*	cernuous	pinheaded	1/16	all sea	Bl	rotten wood	Greville crypt 153

2450 ARSCY'RIA *Pers* Arscyria *Sp* 2—?

16523	punicea *Pers*	crimson	gregar	¼	su aut	Crim	rotten wood	Greville crypt. 130
	Trichia denudáta Sowerb 29							
16524	nutans *Grev*	nodding	weak	½	su aut	Pa Y	rotten wood	Sower t 260 *Trichia*

2451 LEAN'GIUM *Link* Leangium *Sp* 2—?

16525	floriförme *Link*	flower-like	scattered	1/16	aut	Y	decaying trunks	Bulliard, t 371
16526	Trevelyáni *Grev*	Trevelyan's	scattered	1/16	aut	Pa Br	leaves of mosses	Grev crypt 132

2452 TRI'CHIA *Pers* Trichia *Sp* 3—?

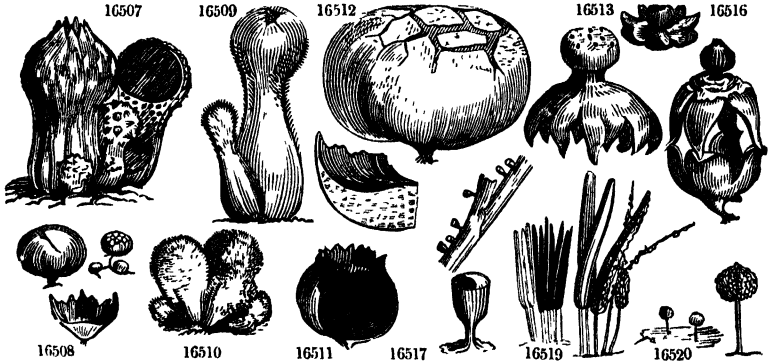
16527	reticuláta *Pers*	netted	pulpy	0	aut	Ysh	rotten wood	Nees syst t 10 f 111
16528	ováta *Pers*	ovate	crowded	0	aut	Y	rotten wood	Sower t 85 *turbinata*
16529	fallax *Pers*	deceitful	variable	0	aut.	Rsh	rotten wood	Sower t 279
	Sphærocárpus frágilis Sowerb							

2453 DIDER'MA *Pers* Diderma *Sp* 1—?

16530	globósum *Pers*	globose	clustered	0	aut	Cin	dead beech leaves	Grev. crypt. 122

2454 PHY'SARUM *Pers* Physarum *Sp* 6—?

16531	sulcátum *Link*	furrowed	weak	½	sp aut	Gr	rotten wood	
16532	nútans *Pers*	nodding	weak	¼	aut	Gr	rotten wood	Bull t 407 f 3
16533	nigripes *Link*	black stem	firm	¼	aut	D Gr	rotten wood	Sturm's Deuts fun t 42
16534	víride *Pers*	green	rather weak	¼	aut	Y G	rotten wood	Bull t 481 f 1
16535	leucopus *Link*	white stem	very stiff	½	aut	Gl	dead beech wood	
16536	aúreum *Pers*	golden yell	gregar	1/16	sp aut	Y	decaying trunks	Grev crypt



History, Use, Propagation, Culture.

2443 *Lycoperdon* So called by Tournefort, from λυκος, a wolf, and πεδω, to explode backwards, that author certainly having improved upon the foolish old name, Crepitus lupi, by making it less generally intelligible (*Smith*) These are roundish tuber-like plants, when ripe, exploding and emitting the sporules in the form of smoke, whence country people call the species puff-balls.

2444 *Bovista* A name of barbarous origin, having been formed by Dillenius, from the German *Bofist* Bovista furfuracea, an Italian species, is said by Micheli, to be common on heaths near Florence, where it is sold with others of its tribe, as an article of food Bovista gigantea is the largest of the genus, and, indeed, of the whole order, measuring not unfrequently nearly 2 feet in diameter Bulliard mentions having seen many of eighteen, twenty, and twenty-three inches in diameter, and on the authority of others, affirms them to attain the enormous bulk of nearly nine feet in circumference The flesh is at first white, afterwards of a greenish-yellow, lastly of a brown-grey The outer peridium cracks and peels off in large flakes on being handled.

2445 *Geastrum* So called from γης, the earth, and αστηρ, a star, in allusion to the stellate appearance of the species when burst and lying on the ground A genus formed by Micheli upon the Puff-balls with a stellated volva.

2446 *Craterium* So named from κρατηρ, a cup, in allusion to the form of the peridium, which in C. vulgare is formed like a small goblet. This is a minute subsolitary plant, with the habit of Calicium.

16507 Large obconical soft whitish plicate beneath, Scales broad often indistinct
16508 White soft hemispherical subsessile somewhat smooth, Warts scattered
16509 Large white variable, Peridium subglob cover with spinul. warts, Stipes somew smooth long and plicate
16510 Cæspit. pyrif umbon pale-brown, Scales in form of min. slender spin process. Root consist. of long fibres

16511 Large white becoming blackish-brown plicate beneath
16512 Almost sessile very large globular yellowish-white, with scattered nearly obsolete scales

16513 Volva multifid, Peduncles and oscula of the peridium numerous
16514 Smaller, Head flat above, Orifice acuminate with longer cilia
16515 Peridium globose stalked, Orifice hoary, Radii somewhat quadrifid arched
16516 Volva multifid spreading, Lacinia equal, Head depressed spherical sessile, Orifice acuminate

Division II *Trichocists.*

16517 Cup-shap redd.-brown, Operculum convex whit very thin evanescent, Filam. white, Sporules very dark
16518 Campanulate chesnut-color, Operculum firm white, Stipes orange, Sporules blackish

16519 Crowded cylindrical, Stipes black arising from a shining subjacent membrane, Peridia very fugacious blackish-brown, Stipes continued to the summit of the peridium
16520 Dark-brown globose stipitate, Stipes penetrating through the summit of the peridium

16521 Gregarious roundish, Stipes short blackish

16522 Gregar brownish-purple nodding umbilicated, Membrane of peridium deciduous, Flocci persistent robust

16523 Gregarious often cæspitose stipitate dull crimson, Sporules abundant crimson-red

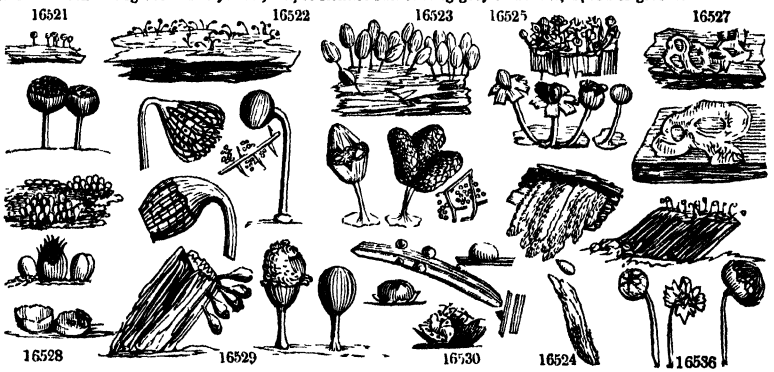
16524 Pale-yellow substipitate cylindrical long weak drooping

16525 Yellow globose stipitate, Peridium splitting into holes which are beautifully expanded and reflexed
16526 Sporangium sess Peridium splitting into many regular reflexed segm Colum very min Spor pedicellat

16527 Effused forming an irregular sort of reticulation yellowish or pale-brown
16528 Crowded obovate ochrey-yellow bursting at the summit
16529 Shortly stipitate reddish at length yellowish bursting at the apex plicate beneath

16530 Sessile subglobose smooth greyish-white both of the peridia fragile, Sporules globular

16531 Head globose flattish beneath grey inclined, Stipes rather long pale weak sulcate, Sporules dark-brown
16532 Head glob flatt ben blueish-grey nodd Stipes thin weak whit not furrow Spor and filam dark-brown
16533 Head globose dark-grey, Stipes long firm black, Sporules and filaments very dark
16534 Subglob umbilicate ben yellowish-green, Stipes slender rather weak brown Sporules and filam very dark
16535 Head globose depressed pale-glaucous, Stipes very short thick pale at length brownish
16536 Peridium subglobose fine yellow, Stipes slender rather long greyish-brown, Sporules globose



and Miscellaneous Particulars.

2447. *Stemonitis.* From στημων, a stamen, in allusion to the form of some of the species, which may be compared to the male organ of a flower, taking the stipes for the filament, and the head for the anthera

2448 *Cribraria* A genus formed by Schrader out of the Sphærocarpi of Bulliard. It has for its essential character, a peridium, the upper part of which has numerous apertures, whence the name, from *cribro*, to perforate All the species are found in autumn upon rotten wood.

2449 *Dictydium.* From δικτυον, a net, and ειδος, similar, the peridium appears like net-work fastened together by minute delicate ribs Very minute pinheaded plants, with the appearance of Calicium.

2450 *Ayscyria* From αγκυς, a net The sporules are fastened together by a net-work of fibres. Beautiful little minute fungi, found upon wood.

2451 *Leangium* From λυος, smooth, and αγγιος, a vessel, in reference to the smoothness of the peridium. Small wart-like plants, resembling a minute Lycoperdon

2452. *Trichia* From θριξ τριχος, hair, in allusion to the internal mass of elastic fibres gradually expanding after the head bursts These are pin-headed plants, growing upon old wood, and very rarely seen in this country

2453. *Didermа* From δις, double, and δερμα, a skin, on account of the double peridium

2454. *Physarum* So named, on account of the bladdery appearance of the peridium, from φυσα, a vesicle

2455. LEOCAR'PUS. *Link.* Leocarpus. *Sp.* 1—?.
16537 vernicósus *Link* varnished enc ½ aut. R,Br stems of grasses Grev. crypt. 111
Lycopérdon frágile Sowerb.

Division III. *Fuligmoides.*

2456. LYCOGA'LA. *Mich* Lycogala. *Sp* 3—?
16538 miniáta *Pers.* vermilion granular 0 sp aut. R rotten wood Grev. crypt. fl. t 38
16539 argéntea *Pers.* silvery fragile 0 aut. Wsh rotten wood Grev. crypt. t. 106
Reticulária Lycopérdon Sowerb
16540 minúta *Grev* minute gregario. 0 aut. W decayed leaves Grev. crypt. fl t. 40

2457 SPUMA'RIA. *Pers* Spumaria *Sp* 1—?
16541 álba *Grev.* white frothy 1 aut. Br rott wood,grass,&c Sow t. 280 *Reticularia*

Division IV. *Leccoidei.*

2458. DICHOSPO'RIUM *Nees* Dichosporium. *Sp* 1.
16542 aggregátum *Nees* clustered spots 0 aut. Bl bark of trees Nees syst. f. 99
Spumária physaroides Pers

2459 LI'CEA *Schrad.* Licea. *Sp* 2—?.
16543 circumscís'sa *Pers* pared like ovules 0 aut. Ysh between bark & wood

16544 fragiformis *Nees* strawberry-like pulpy 0 aut. Dl.R rotten wood Nees syst t. 8. f. 102

Class IV. Mucoroidei

2460 MU'COR. *Pers* Mucor. *Sp* 1—?.
16545 stercórea *Grev* common watery 2 wint. W dung
Hydróphora stercórea Tode

2461 THAMNI'DIUM *Link.* Thamnidium *Sp* 1—?.
16546 élegans *Link.* elegant whorled ⅛ aut Pale putrid substances Nees syst 75

2462 ASCO'PHORA *Tode* Ascophora *Sp* 1—?
16547 mucédo *Link* mouldy very slend ½ all sea W putrid substances Sow t 378 f 5,6,7 *Mucor*

Class V Perisporia

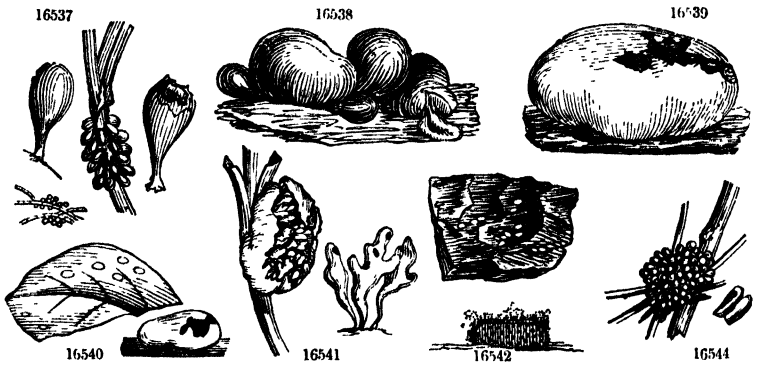
2463 EURO'TIUM *Link.* Eurotium *Sp* 2—?
16548 herbariórum *Link* herbarium punctiform 0 all sea Y dried plants Grev crypt 164
16549 Rosárum *Grev.* rose patches 0 sum. W rose bushes Grev crypt 164

2464 AMPHISPO'RIUM *Link* Amphisporium *Sp* 1
16550 versicolor *Link.* changeable spots 0 wint. Y hyacinths in glasses Nees syst 100

HYPHOMYCETES.

Class I Cephalotrichi

2465 CERA'TIUM *Albertini* Ceratium *Sp* 1—?
16551 hydnóides *Alb* Hydnum-like fugacious ⅛ aut. W dead wood Berl mag. v 3 t 1 f 33



History, Use, Propagation, Culture,

2455 *Leocarpus* A word with the same meaning as Leangium; which see L. vernicosus appears as if varnished over with vermilion The plants grow in clusters upon bits of rotten wood, and are each formed of a pear-shaped stalked peridium, bursting at the end, and letting fall out a nucleus of sporules held together by fibres

2456. *Lycogala* From λυκος, a wolf, and γαλα, milk, a genus of fungi whose internal appearance and substance in an early state are like a mass of thick cream. It is included under Mucor by Linnæus, Schreber, and others. L. argenteum is found upon rotten wood in the autumn It is about an inch or more in diameter, brown and pulpy when young, of a brilliant white when arrived at maturity, discharging, by one or more irregular accidental openings, a mass of rich dark snuff-colored powder

2457 *Spumaria* From *spuma*, froth S mucilago is spread in the autumn over the leaves and stems of living plants, or over dead branches, when it resembles in some measure stiffened foam or froth

2458 *Dichosporium* From δις, double, and σπορα, a seed, in allusion, we presume, to the double coat of the peridium, the innermost of which is formed of granules like sporules. The only species known is found upon the bark of the oak.

2459. *Licea.* The meaning of this word is unexplained The species have been referred to Trichia, Didy-

16537 Shortly stipitate obovate reddish-brown shining crowded, Stipes whitish

Division III. *Fuligmoidei.*

16538 Globular gregarious red changing to brown, Sporules orange-red at length purple-grey
16539 Large suboval very fragile silvery-white, Sporules profuse deep-brown, Filaments few

16540 Minute white roundish depressed rarely confluent fragile, Sporules black intermixed with a few filaments

16541 Effused frothy, Peridium furnished internally with horn-like grey processes inclosing brown sporules

Division IV. *Lycoidei.*

16542 The only species

16543 Gregarious sessile yellowish or chesnut-brown subglobose the upper half of the peridium separating like a lid, Sporules rarely mixed with one or two filaments
16544 Peridia cylindrical very fragile densely crowded forming a roundish or hemispherical mass dull-red changing to pale-brown, Sporules brown in the form of minute abundant dust

Class IV Mucoroidei

16545 Byssus-like white becoming yellowish, Stipes erect or lax simple bearing a minute subglobose head

16546 Filaments branched whorled, Peridium elevated

16547 Stipes simple, Heads inflated spherical dark-grey bursting close to the stipes which is long and filiform

Class V. Perisporia

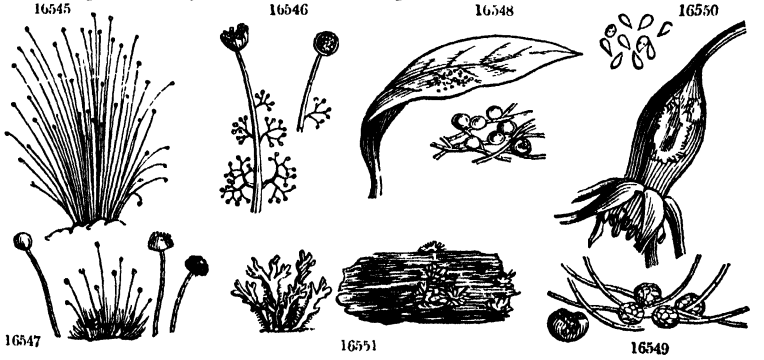
16548 Gregarious punctiform yellow, Filaments whitish branched
16549 Tufted, Peridia gregar. greenish covered by the filam which are elongat simple profuse somew erect in [centre

16550 Changes from yellow to grey

HYPHOMYCETES.

Class I. Cephalotrichi.

16552 Growing in small tufts, Filaments subconfluent simple or branched and fasciculated



and Miscellaneous Particulars.

mium, &c. by various writers They are minute productions scarcely bigger than pins' heads, found chiefly on rotten wood of the fir kind

2460 *Mucor* An alteration of *μυκης*, the name of a small fungus To this genus are referable the greater part of the substances which form the mould upon cheese and other materials.

2461 *Thamnidium* From *θαμνος*, a rod or twig, in allusion to the appearance of the plants under the microscope Minute plants, with a bushy branched stipes, and a head like that of Mucor

2462 *Ascophora* From *ασκος*, a term used by mycologists to denote a peculiar kind of receptacle of sporules, and *φερω*, to bear These are pin-headed fungi, with the habit of Mucor, from which they chiefly differ in their peridium being turned inside out after bursting, and being somewhat persistent.

2463 *Eurotium.* *Ευρως* was the Greek name of a sort of mouldiness, and has been with a sufficient reason applied to this genus of plants

2464 *Amphisporium.* From *αμφι*, double, and *σπορα*, a sporule. These organs are of two forms, either roundish with three dots in the middle, or ovate acuminate, and quite pellucid.

2465 *Ceratium.* So named from *κερας*, a horn, on account of the cornute appearance of the plants under a microscope.

2466. ISA'RIA *Pers* Isaria *Sp* 1—?
16552 microscópica *Grev* microscopic very min. 0 spring W Trichia clavata Grev. crypt. fl. t 3

Class II. Stilboidei

2467 STIL'BUM *Tode* Stilbum *Sp* 1—?.
16553 vulgáre *Tode.* common very min. 0 aut Wsh decayed stems Tode fun meckl t 2 f 16

Class III. Inomycetes. — Division I *Byssacei*

2468 TO'RULA. *Link.* Torula *Sp* 1—?
16554 herbárum *Link* herbaceous fragile 0 aut Bl dead stems

2469 MONI'LIA *Pers* Monilia. *Sp* 1—?
16555 aúrea *Pers* golden yell stalked ½ all sea Y rotten wood

2470 RACO'DIUM *Pers* Racodium *Sp* 1—?
16556 celláre *Pers* wine-cellar shaggy 3 all sea Sooty cellars Sower t 432
Fibrillária vindúa Sowerb

2471 DEMA'TIUM *Pers* Dematium *Sp* 1—?
16557 articulátum *Pers* articulated minute 0 aut Blsh stems of herbs Pers. disp t 4 f 2

2472 CLADOSPO'RIUM *Link* Cladosporium *Sp* 2—?.
16558 herbárum *Link* herbaceous very min. 0 su aut Ol G dead stems Nees syst t 5 f 64
16559 velutínum *Grev* velvety patches 0 spring G Bl rotten wood

2473 HELICOSPO'RIUM *Nees* Helicosporium *Sp* 1
16560 vegétum *Nees* quickening cloud-like 0 oct. Gr foot of trees Nees syst 66

2474 OZO'NIUM *Lk* Ozonium *Sp* 1—?
16561 auricomum *Link* yell-headed byssoid 3 aut. Or rotting wood

2475 RHIZOMOR'PHA *Roth* Rhizomorpha *Sp* 5—?
16562 subcorticális *Pers* subcortical net-like 72 all sea Br beneath bark Sow 392 f 1 & 2 *patens*
16563 divérgens *Grev* diverging creeping 24 aut Rsh beneath bark Grev. crypt 154
16564 farinácea *Grev* mealy much branc 36 all sea W decayed trunks
16565 subterránea *Pers* subterrane filament 24 all sea Bl mines
16566 medulláris *Sm* medullary much branc 144 all sea. W cellars Linn trans 12 t. 20

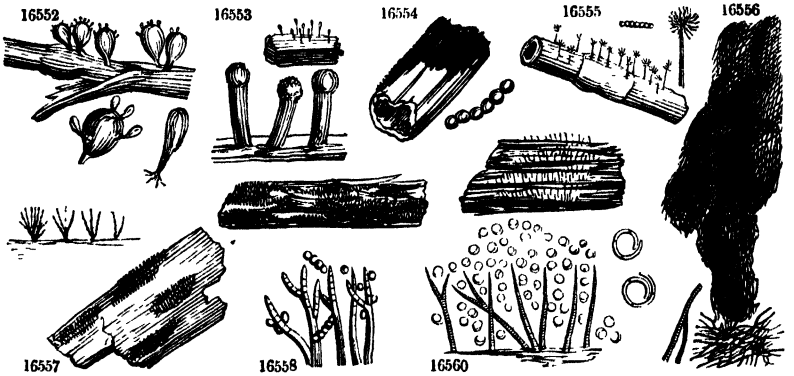
Division II *Mucedines*

2476 SEPEDO'NIUM *Link* Sepedonium *Sp* 1—?
16567 mycóphilum *Link* yellow cloudy 0 aut. Or dying fungi Grev crypt 198

2477 ACREMO'NIUM *Link* Acremonium *Sp* 1—?.
16568 fúscum *Schmidt* brown patches 0 aut Ol G dead sticks Schm mycol 1 t 2 f 23

2478 SPORO'TRICHUM *Link* Sporotrichum *Sp* 6—?
16569 macrospórum *Grev* large grained blotches 0 spr su Hoa apple leaves

16570 minútum *Grev* minute tufts 0 aut w W dung Wern trans 4 t 5 f
16571 sulphúreum *Grev* sulph.-color tufts 0 all sea Y casks in cellars Wern trans 4 t 5 f
16572 aurantiacum *Grev* orange-col tufts 0 all sea Or damp cellars Wern trans 4 t 5 f
16573 stercorárium *Link* dung tufts 0 all sea Or damp cellars
16574 tenuissimum *Grev* thin thin coat 0 aut W dead bark Wern trans 4 t 5 f 2



History, Use, Propagation, Culture,

2466. *Isaria* From ισος, equal, on account, perhaps, of the equality which exists among the filaments of the plants both in size and length

2467 *Stilbum* From στιλβος, shining The species are all found upon old rotten wood, and are at first watery or gelatinous, but become opake and turbid as they ripen

2468 *Torula* A diminutive of *thorus* or *torus*, a bed. This plant forms a thick compact bed or layer upon the plants on which it grows

2469 *Monilia* From *monile*, a necklace, with reference to the peculiar manner in which the filaments are articulated.

2470. *Racodium* Ρακιον was the name among the Greeks for a worthless worn-out ragged garment, and has been applied to the present genus, in allusion to the dirty interwoven cloth-like substance with which it clothes whatever it grows upon. R cellare is the black substance which overruns the bottles of the wine merchant, and which often hangs in long thick festoons from the sides and roof of his cellars

2471. *Dematium* A diminutive of δεμα, a bundle or parcel The filamentous thallus is often collected into bundles.

2472. *Cladosporium.* From κλαδος, a branch, because the sporules are attached to the branches of the fungi.

2473. *Helicosporium.* From *helix*, a spiral, in allusion to the manner in which the sporules are curved.

16552 Extremely minute scattered simple club-shaped very white, Filaments and sporidia indistinct

Class II STILBOIDEI.

16553 Head roundish whitish semifluid becoming firmer and yellowish, Stipes rather thick cylindrical

Class III INOMYCETES. — Division I. *Byssacei.*

16554 Filaments densely crowded so as to form a black crust

16555 Tufted gold color

16556 Very soft lax much interwoven of a greenish black color, Filaments intermixed with irregular granules

16557 Minute blackish fascicled, Bristles diverging sometimes jointed

16558 Tufted extremely minute of an olive-green color becoming blackish and rigid in old age
16559 Very minute spreading on old wood in wide velvety patches greenish-black, Filaments simple or branched jointed somewhat thickened upwards

16560 The only species

16561 Very irregular rigid diverging when young from a common centre, afterwards straggling, Filaments tawny orange-color compressed of various sizes

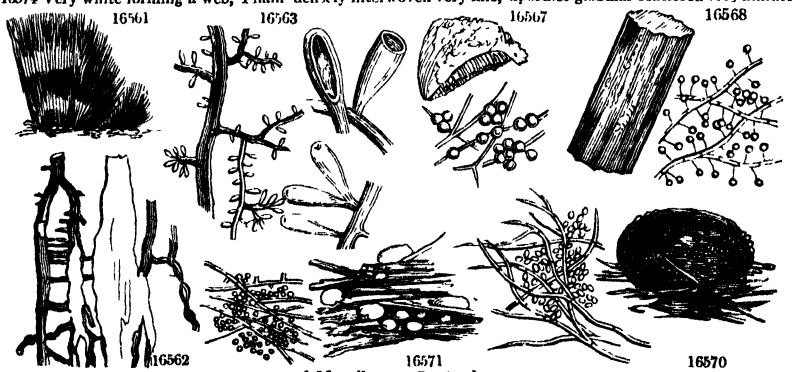
16562 Compressed brown or black shining anastomising often broad and very extensive [regularly patent
16563 Stem pale redd cylind subflex never anastomis Branches spread in all directions free, Fructific clavate
16564 Stems covered with a mealy substance
16565 Long branched roundish somewhat sep rate black
16566 Round much branched snow-white, cellular and yellow inside

Division II *Mucedines*

16567 Spreading widely within putrefying *Agarics* and *Bolets*, Filam. white, Spor profuse bright orange-yello

16568 Filaments spreading branched olive-brown, Pedicels of the sporules numerous alternate

16569 Forming a pulverulent hoariness interspersed with very minute tufts, Filaments few branched straggling, Sporules large obtusely oval
16570 Tufts roundish minute very white, Filaments loosely entangled, Sporules very numerous oval
16571 Tufts yellow irregular roundish, Filaments lax entangled, Sporules numerous subglobose
16572 Tufts of a reddish orange-color, Filaments very slender much entangled, Sporules glob. extremely minute
16573 Differs from the last, chiefly in its paler color
16574 Very white forming a web, Filam densely interwoven very fine, Sporules globular scattered very minute



and Miscellaneous Particulars

2474 *Oxonium* We presume, from ὄξος, a branch, in allusion to the manner in which the filaments branch or diverge from a common centre This genus has been extracted from Dematium by Link

2475. *Rhizomorpha* So called from its resemblance to the branching fibrous roots of various plants. All the productions referred to this genus are very obscure and uncertain R phosphorea, the Clavaria phosphorea of Sowerby, is a plant sometimes existing as a parasite between the wood and bark of trees, or in wine-cellars among saw-dust, and is, when fresh, remarkably luminous in the dark

2476 *Sepedonium* From σηπεδων, putrescence The species grow among the decaying parts of fungi, and other putrid substances

2477 *Acremonium* From ακρεμων, a branch, the thecæ are produced about the filaments in fascicles, as branches are about trees.

2478 *Sporotrichum* From σπορα, and θριξ, hair, in allusion to the filamentous nature of the sporules A very destructive parasite in some seasons, and probably of general distribution, for it has been detected on a great variety of plants To gardeners it is well known as a kind of mildew or blight, and is commonly taken for an insect The leaves of the peach-trees, even when protected by glass, are often attacked by it, nor does the fruit itself always escape, in which case it frequently drops off The leaves are more or less distorted by it As its production is probably the result of a peculiar state of the atmosphere, there is little chance of any means being discovered for its prevention.

2479 TRICHOTHE'CIUM *Link* Trichothecium. *Sp.* 1—?.
16575 róseum *Link* rose-colored tufts 0 aut. w W rotten wood

2480. ACROSPO'RIUM. *Nees* Acrosporium. *Sp* 2—?.
16576 moniliöides *Nees* Monilia-like spots 0 sp aut. W leaves of grasses Grev crypt. fl. t. 73
16577 fasciculátum *Grev* fascicled patches 0 spring Gl. rotten oranges

2481 BO'TRYTIS. *Mich* Botrytis. *Sp* 4—?.
16578 diffúsa *Alb* diffuse broad tufts ½ aut. W rotten herbac stems Wern. trans. 4.t. 5. f. 7
16579 agaricína *Link* Agaric wool.coat 0 aut. W decaying fungi
16580 effúsa *Grev* effused spots 0 aut. Pu, Gr underside of live lvs.
16581 parasítica *Pers* parasitic lax 0 spr su W on shepherd's purse Sower t.359

2482. ASPERGIL'LUS. *Mich.* Mouldiness. *Sp.* 4—?.
16582 glaúcus *Link* blue patches 0 all sea B rotten substances Berl. mag 3. t. 1 f. 23
16583 láneus *Link* white patches ⅓ aut. Wsh putrid fungi
16584 vírens *Link* green broad spots ⅓ aut Gsh putrid fungi [barium
16585 penicillátus *Grev* pencilled spots 0 all sea. D Gr damp specimens in Her- Grev crypt fl t.32

2483 STACHYLI'DIUM *Link* Stachylidium *Sp* 1—?
16586 cándidum *Grev* white spreading ⅓ aut. W dead wood Wern. trans. 4 t. 5 f 6

2484 PENICIL'LIUM. *Link* Penicillium *Sp* 2—?.
16587 spársum *Grev* scattered broad lines ⅓ aut. W rotten herbac stems Grev crypt fl. t 58 f 2
16588 glaúcum *Link* blue tufts ⅓ all sea. Gl rotten substances Grev. crypt. fl t. 58. f 1

2485 TRICHODER'MA *Pers.* Trichoderma *Sp* 1—?.
16589 víride *Pers.* green tufts 0 aut. w W rotten wood

Class IV. Phylleriaceæ.

2486 RUBI'GO *Link.* Rubigo *Sp* 1—?.
16590 al'nea *Pers.* alder spots 0 sum D Br under alder leaves Nees syst. 63

2487 ERI'NEUM *Pers.* Erineum *Sp* 9—?
16591 aúreum *Pers* golden velvety spots 0 sum Bt Y lvs. Populus nigra Edin phil jour 6 t 3 f 15
16592 gríseum *Pers* grey velvety spots 0 spr su Dl Pu under oak leaves Ed ph jo 6 t 3 f 17 *mnu*
16593 acerínum *Pers* Sycomore depress tufts 0 sp aut R.Br und sycomore lvs. Edin phil jou 6 t.2 f 1&6
16594 pyrínum *Pers* Pear depress tufts 0 aut. R.Br on crab-tree lvs. Grev crypt fl t 22
16595 tortuósum *Kunze* tortuous depress tufts 0 spr su Wsh on birch leaves Grev crypt. fl t 94
16596 Juglándis *Dec* Walnut depress tufts 0 sum Pale under walnut lvs. Ed ph jo 6 t 2, f 4 *subul*
16597 clandestínum *Kunz* concealed depress tufts 0 sum. W Pk und. hawthorn lvs Edin phil jour 6 t 2 f 8
16598 róseum *Kunze* rose-colored depress tufts 0 sum Crim. on birch lvs Grev. crypt. fl t 21
16599 betulínum *Rebent* Birch depress tufts 0 spr su Wsh on birch lvs. Edin. phil. jour 6.t 3 f.16

CONIOMYCETES.

Class I Tuberculariæ.

2488. TUBERCULA'RIA *Tode* Tuberculaeia *Sp* 3—?.
16600 vulgáris *Pers* common gregario ⅓ all sea Dp R decayed sticks Sower t 294
Clavária coccínea Sowerb
16601 cónfluens *Pers* confluent gregario 0 aut. sp F R dead sycomore branches
16602 granuláta *Pers* rough scattered ⅓ aut Br dead branches Grev crypt 187

16575 16576 16579 16585

16586 16588 16578 16589

History, Use, Propagation, Culture,

2479 *Trichothecium.* The thecæ are intermixed among a mass of hair-like filaments; whence the name.
2480. *Acrosporium* From ακρος, the top of any thing, and σπορα, a sporule; the latter occupying the summit of the simple filaments.
2481 *Botrytis* So called from βοτρυς, a bunch of grapes, in allusion to the clusters of little globular seeds or seed vessels.
2482 *Aspergillus.* This is the name of the brush with which the holy-water is scattered in Catholic ceremonies. The little plant, consisting of a stem and a cluster of sporules at the top, is not unlike a little brush with its handle
2483 *Stachylidium* From σταχυς, a spike, and ειδος, similar. The sporules are dispersed in a sort of spiked manner on the filaments.

16575 Tufted, Tufts distinct at length sometimes confluent, Filam white, Sporules pink very numerous oval

16576 Filaments simple forming white spots of one or two lines in length on the living leaves of grasses
16577 Filam. branched somew fasciculated erect in spreading tufts white at first at length a fine glauc color

16578 Very lax tuft white branch. Branch few long spread set with short patent ramuli bear round clust of spor.
16579 Tufted confluent white, Filaments one line high, Branches divaricate, Sporules numerous ovate large
16580 Pale purpl -grey spread. Filam branch towards summ t, Branch. divaric. short, Spor. large oval numerous
16581 Somewhat tufted lax white not much branched, Sporules roundish

16582 Tuft. min formed of white erect filaments with little heads at first white but when mature of a glauc color
16583 In dense tufts composed of whitish or yellowish suberect entangled filaments with yellowish heads
16584 Tufts rather dense, Filaments entangled suberect heads as well as the filaments greenish
16585 Filaments scattered gregarious about a line high supporting an elongated tuft of beaded sporidia

16586 Filaments branched erect remotely jointed scattered white, Sporules globular

16587 Barren filaments effused interwoven fertile ones simple somewhat scattered, Heads of sporules white
16588 Densely tufted spreading, Heads of sporules at length glaucou

16589 Tufted, Tufts roundish composed of snow-white interwoven filaments, Sporules profuse green at length giving the whole a green-color

Class IV PHYLLERIACEÆ

16590 Irregularly tufted or effused and confluent whitish at length reddish-brown, Peridia shortly branched, Branches thick bearing several round or ovate lobes

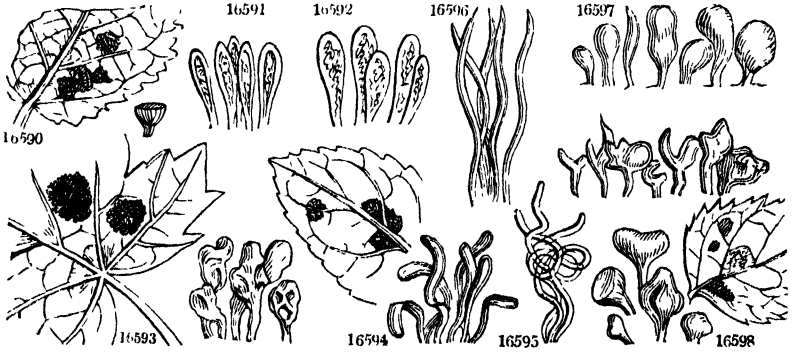
16591 On the surface of the leaf bright gold-color effused sometimes spreading over the whole leaf, Peridia simple crowded club-shaped, Sporules evident excessively minute yellow
16592 Hypophyllous, so minute as scarcely to be raised above the surface of the leaf pale obscure purple widely effused, Peridia simple obtusely club-shaped
16593 On the under surface of the leaf depressed distinct or confluent pale becoming reddish-brown, Peridia club-shaped very rarely turbinate flaccid, the upper half often inclined
16594 Mostly on the under surface of the leaf scattered subeffused rich reddish-brown, Peridia compressed in somewhat lax with the apex club-shaped and often truncate
16595 Mostly on the under surface irregularly tufted whitish becoming ferruginous, Peridia linear cylindrical twisted with rounded summits
16596 Hypophyll silky or tomentous pale or quadrangular, Peridia erect cylindric long and attenuated to a point
16597 On the under surface whitish-pink becoming subferruginous rarely in the form of spots or tufts but confluent at the margin of the leaf which is rolled inwards and conceals it, Peridia short
16598 Mostly on the upper surface unequally scattered confluent fine crimson, Peridia polymorphous turbinate club-shaped or capitate, the summit frequently truncate
16599 Mostly on the under surface whitish at length dark ferruginous often confluent, Peridia short polymorphous sometimes turbinate but generally with two blunt horn-like patent summits

CONIOMYCETES.

Class I TUBERCULARIÆ

16600 Gregarious deep-red rugose furnished with a very short thick pale stipes

16601 Gregarious confluent depressed flesh-red small somewhat plane
16602 Somewhat round somewhat shortly stipitate dull-red at length black, Surface tuberculate wrinkled



and Miscellaneous Particulars

2484 *Penicillium* A name with the same meaning as Aspergillus, to which genus this is extremely similar in appearance

2485 *Trichoderma* From θριξ τριχος, hair, and δερμα, a coat The threads to which the sporules are attached spread round, radiating through the powdery mass in little tufts from a subjacent membrane.

2486. *Rubigo* An ancient Latin name of blight There was a inferior deity whom the Romans acknowledged under the name of Rubigus, and whom they propitiated in bad seasons All the productions referred either are popularly called mildew or blight.

2487 *Erineum* So named in reference to its hispid appearance, which resembles the common hedge-hog, Erinaceus Found growing upon leaves in little tufts

2488 *Tuberculariæ* So named in allusion to its warted appearance

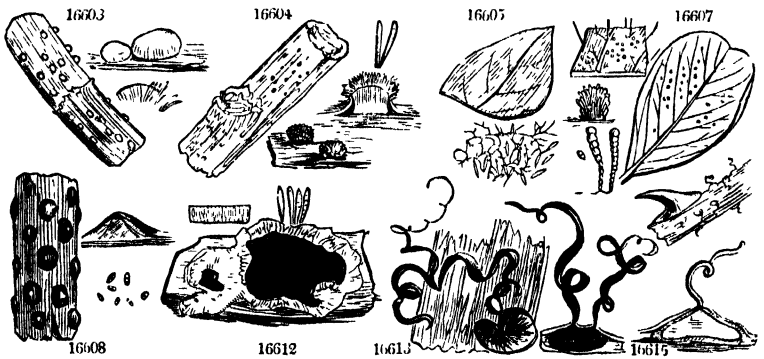
2489 FUSA'RIUM *Link* Fusarium					*Sp* 1—?				
16603 tremelloides *Grev*	gelatinous	very small	0	spring	Pksh	dead nettle stems	Grev. cryp fl t 10		
2490 EXOSPO'RIUM *Link* Exosporium					*Sp* 1—?				
16604 Tiliæ *Link*	Linden	punctif	0	sept.	Bl	linden branches	Grev. crypt. 208		

Class II. Entophytæ. — Division I. *Stilbospori.*

2491 FUSI'DIUM *Link* Fusidium					*Sp* 2—?				
16605 griseum *Grev*	grey	effus spo	0	aut	Wsh	dead beech leaves	Grev crypt fl t 102		
16606 flavo-virens *Dittm*	yellow-green	effus spo	0	aut	Ysh	dead beech leaves	Grev crypt fl. t 102		
2492 POLYTHRIN'CIUM *Kunze* Polythrincium					*Sp* 1				
16607 Trifolii *Kunze*	Trefoil	punctif	0	aut	Bl	clover leaves	Grev crypt 216		
2493 STILBOSPO'RA *Huffm* Stilbospora					*Sp* 4—?				
16608 profusa *Grev*	profuse	spots	0	spring	Br	sycamore branches	Grev crypt 212		
16609 microspérma *Pers*	small grain	emerging	0	all sea	Bl	dead beech bran			
16610 ovàta *Pers*	ovate	dots	0	aut	Br	dead branches	Grev crypt 212		
16611 bilocuiàta *Grev*	two-celled	emerging	0	all sea	Bl	dead furze branch			
2494 SPORIDER'MIUM *Link* Sporidermium					*Sp* 1—?				
16612 átrum *Link*	dark	parasitic	0	aut	Bl	on species of Thelephora	Grev crypt 194		
2495 NÆMASPO'RA *Pers* Næmaspora					*Sp* 3—?				
16613 Carpini *Sowerb*	Hornbeam	irregular	0	all sea	Bl	dead hornbeam	Sower t. 376		
16614 filamentósa *Grev*	filamentous	tortuous	0	all sea	Gr Bl	dead branches			
16615 Rosárum *Grev*	Rose	slightly prom	0	all sea.	Bl	dead rose branches	Grev crypt fl t 20		

Division II *Hypodermia*

2496 CYLINDROSPO'RIUM *Grev* Cylindrosporium					*Sp* 1—?				
16616 concéntricum *Grev*	concent spec	k-lik hea	0	my ju	W	cabbage leaves	Grev crypt fl t. 27		
2497 URE'DO *Pers* Uredo					*Sp* 45—?				
16617 Gerànii *Dec*	Geranium	scattered	0	sum	D Br	on Geranium lvs	Grev crypt fl t 8		
16618 Ficáriæ *Alb*	Pile-wort	pulverul	0	su aut	D Br	under Ficaria lvs			
16619 suavéolens *Pers*	odoriferous	fragrant	0	spr su	Pu Br	Cnicus arvensis lvs			
16620 Polygonorum *Dec*	Polygonum	spreading	0	su aut	Pa Br	under Polygonum lvs	Grev crypt fl t 80		
16621 Primulæ *Dec*	Primrose	scattered	0	sum	Pa Br	under primrose lvs			
16622 Cichoraceárum *Dec*	Syngenesious	spots	0	su aut	D Br	on Compositæ lvs			
16623 Heráclei *Grev*	Cow-Parsnep	patches	0	sum	Pa Br	under Sphondylium lvs			
16624 bifrons *Grev*	two-sided	spots	0	aut	Pa Br	both sides of sorrel leaves			
16625 Rúmicum *Dec*	Dock	small	0	aut	Br	on Rumex leaves			
16626 Fábæ *Pers*	Bean	patches	0	aut	Pa Br	on bean leaves	Grev crypt fl t 95		
16627 Labiatárum *Dec*	Mint	pustular	0	aut	Y Br	on mint leaves			
16628 intrúsa *Grev*	depressed	scattered	0	aut	R Br	on Alchimella lvs			
16629 oblongáta *Lk*	oblong	pustular	0	sum	R Br	on Luzula leaves	Grev crypt fl t 12		



History, Use, Propagation, Culture,

2489 *Fusarium* The sporules are remarkable for their regular *fusiform* figure.

2490. *Exosporium* So called by Link, from ἐξ, on the outside, and σπορος, a sporule, on account of their external situation Entire plant about one-third of a line in diameter, rarely larger, very gregarious, deep black, convex, bursting from beneath the epidermis, and appearing bristly under a pocket magnifier Sporidia very crowded, elongated, obtuse at the apex, subopake, divided transversely about five times, fixed at the base upon a roundish dark-colored, solid receptacle, and there persistent.

2491 *Fusidium* A name with the same meaning as Fusarium

2492 *Polythrincium* From πολυς, many, and θρυγχος, a little division To the naked eye, this little plant appears in the form of numerous minute black spots of unequal size Under the microscope, these spots are each found to consist of a number of distinct little roundish tufts of filaments, nearly equidistant from one another, and becoming smaller towards the circumference The filaments are densely crowded, semitransparent, gradually thickening upwards, somewhat moniliform from the numerous articulations, erect, simple, the sporidia oval, two-celled, scattered among the filaments.

2493 *Stilbospora* From στιλβω, to shine, and σπορος, a sporule. Asci or sporules naked, imbedded in a black substance flowing from the branches of trees

16603 Minute roundish or oval subgelatinous, Sporules long slender slightly curved

16604 Gregarious black minute convex, Sporidia elongated obtuse about 5 times transversely divided

Class II. ENTOPHYTÆ. — Division I. *Stilbosporei.*

16605 Mass thin irregular of a whitish or grey color
16606 Mass irregular thin bright-yellow or greenish

16607 The only species

16608 Heaps rather large, Sporidia extremely minute nearly equally 2-celled
16609 Black granulated irregularly ovate at length shapeless, Sporules ovate attenuated at each extremity
16610 Heaps small, Sporidia ovate umilocular
16611 Heaps roundish bursting through the bark, Sporules ovate obtuse 2-celled

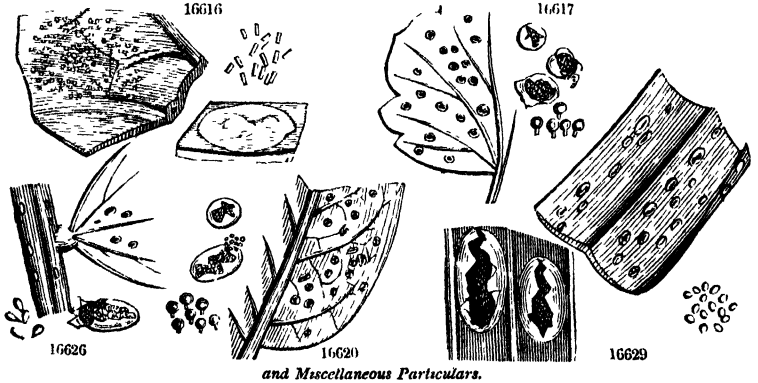
16612 Black very crowded, Filaments linear-oblong 4 or 5 times divided

16613 Spherules depressed black immersed, Sporules large ovate escaping in the form of thick black tendrils
16614 Spherules very small grey black, Sporules excessively minute dust-like under a high magnifying power escaping in the form of long capillary entangled dull-orange tendrils
16615 Spherules waved when divided horizontally elevating the epidermis, Orifice blackish with a cottony margin, Sporules very minute forming a single short slightly tortuous whitish tendrils

Division II *Hypodermia*

16616 The only species

16617 Hypophyllous scattered dark fuscous round very pulverulent sometimes confluent, Sporidia globose
16618 Aggregated deep-brown chiefly hypophyllous confluent, Sporidia oval sometimes with a very min stipes
16619 Hypophyllous scattered becoming confluent reddish or purplish-brown, Sporidia globose greenish under a high power of the microscope
16620 Hypophyllous circular scattered rarely disposed in a circle round a pale-brown centre, Sporidia globular
16621 Hypophyllous scattered single or disposed in a circle round a central one light-brown, Sporidia globular suboval and rarely furnished with a minute pedicel
16622 On both sides of leaf dark fuscous minute round scattered, Sporidia globular rarely with a minute pedicel
16623 Hypophyllous scattered sometimes subconfluent roundish light-brown girt by the remains of epidermis, Sporidia oviform sometimes furnished with a very short blunt pedicel
16624 On both surfaces of the leaf and opposite to each other scattered round light-brown girt with the remains of the epidermis, Sporidia globose
16625 On both surfaces of the leaf brown round minute often not bursting the epidermis rarely disposed in a circle, Sporidia ovoid sometimes with minute pedicels
16626 Scattered round depressed light-brown girt with the remains of the epidermis, Sporidia rounded or suboval rarely with minute pedicels
16627 Hypophyllous pale yellowish-brown sometimes disposed in a circle round a central one minute rarely confluent, Sporidia roundish or egg-shaped and rather hyaline
16628 Hypophyllous scattered or partially aggregated reddish-brown rounded somewhat prominent minute very unequal, Sporidia roundish or oval rarely pedicelled
16629 On both sides of the leaf scattered distinct oblong reddish-brown girt by the ruptured epidermis, Sporidia subglobose rarely subpedicelled



and Miscellaneous Particulars.

2494. *Sporidermium* From σπορος, a sporule, and δερμα, a skin, or coat. A plant of a very simple structure, composed entirely of linear-oblong or club-shaped semi-opake bodies, closely arranged side by side, exactly of the same height, and transversely divided by three or four dissepiments When viewed with the naked eye, it resembles an intensely black thin crust, creeping over the surface of Thelephora Specimens from Captain Carmichael, as well as those found by Dr. Greville, occurred on Thelephora vulgaris

2495 *Næmaspora* From νημα, a thread, and σπορα, a sporule. The species resemble distorted threads filled with minute sporules

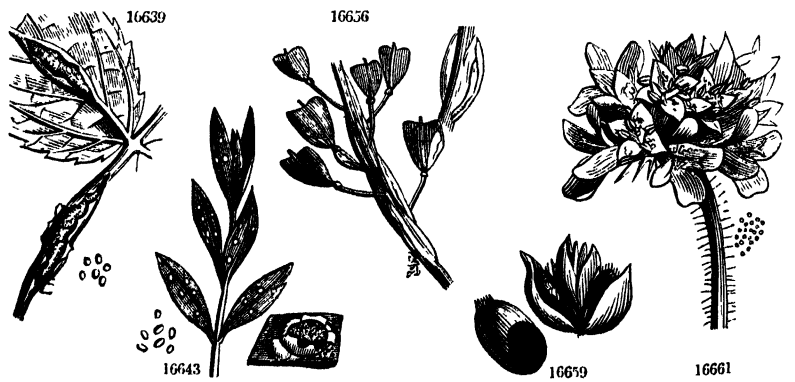
2496 *Cylindrosporium* In allusion to the cylindrical form of the sporules. Found on both surfaces of living cabbage leaves (Brassica oleracea) Frequent in May and June A very extraordinary plant, forming minute speck-like heaps of an oblong shape, but otherwise very irregular, and projecting into little angles and processes They are disposed in a concentric manner, are pure white, and change in decay to a dirty yellow. Sporules naked, very numerous, cylindrical, truncate at each extremity, pellucid.

2497 *Uredo* An old Latin name, from uro, to burn or scorch, applied to those occasional discolorations of the surfaces of plants which were attributed to blasts or injuries of the atmosphere or heavenly bodies, and are

16630 Sálicis *Dec*	Willow	mottled	0	aut	Y	under Salix pentandra lvs
16631 Vitellinæ *Dec*	Golden Osier	pimpled	0	my aut	Y	under Sal vitellina lvs
16632 farinósa *Pers*	powdery	mealy	0	aut	Pa Y	under Sal Capreæ lvs
16633 Tussuláginis *Pers*	Colt's-foot	gyrose	0	sum	Or	under coltsfoot lvs
16634 Senecióuis *Dec*	Ragwort	blotches	0	sum	Or	under Senecio lvs
16635 cónfluens *Pers*	confluent	gyrose	0	sum	Y	on Mercurialis lvs
16636 Potentillæ *Dec.*	Cinquefoil	powdery	0	sum.	Gol Y	on Fragaria sterilis lvs
16637 Rósæ *Pers*	Rose	mottled	0	sum	Or	under rose lvs
16638 Rubórum *Dec*	Bramble	very powd	0	sum	Gol Y	under bramble lvs
16639 effúsa *Grev*	effused	spreading	0	sum	R Or	under Rosaceæ lvs Grev crypt fl t 19
16640 gyrósa *Rebent*	concentric	gyrose	0	spr su	Y	on raspberry lvs
16641 Alchemillæ *Pers*	Lady's Mantle	spreading	0	my jn	Or	under Alchemilla lvs
16642 Rhinanthaceárum *Dec*	bt-yellow spots		0	su aut	R Y	Strophularineæ
16643 Lini *Dec.*	Flax	shining	0	sum	Or Y	Linum catharticum Grev crypt fl t 31
16644 Saxifragárum *Dec*	Saxifrage	brilliant	0	sum	Or	Saxifrage
16645 Campánulæ *Pers*	Campanula	bright	0	sum	Or	under Campanula lvs
16646 Pyrolæ *Grev*	Winter Green	minute	0	sum	Gold	under Pyrola lvs
16647 Helioscópiæ *Dec*	Euphorbia	round	0	aut	Gold	under Euphorbia lvs
16648 lineáris *Pers*	linear	very com	0	sp aut	Y	on grass leaves
16649 æcidiformis *Grev*	Æcidium-like	pustular	0	spring	Y	on Sphondylium lvs
16650 Cerástii *Grev*	Cerastium	punctif	0	sum	Gold	on Cerast viscosum lvs
16651 pustuláta *Pers*	pimpled	punctif	0	spring	Y	on Epilobium palustre lvs
16652 Sónchi *Pers*	Sow Thistle	spreading	0	sum	R Or	under Sonch olerac lvs
16653 Petasites *Dec*	Petasites	gyrose	0	aut	Or	under Petasites lvs
16654 Populina *Pers*	Poplar	beautiful	0	aut	Gold	under Populus nigra lvs Ann wett 2 t 11 f 5
16655 ováta *Strauss*	Aspen	spots	0	aut	Tawn	on Populus tremula lvs Ann wett 2 t 11 f 6
16656 cándida *Pers*	white	spreading	0	aut	W	Cruciferæ Sower t 340 *Thlaspi*
16657 ségetum *Pers*	Smut Brand	spreading	0	sum	Bl	within grains of corn
16658 urceolórum *Dec*	sedge	spreading	0	sum	Bl	on fructif of Carex
16659 cáries *Dec*	cankering	destroying	0	aut	Bl Br	within grains of wheat Deutschl fl t 34
16660 antherárum *Dec*	Anther	spreading	0	sum	Pu	on Caryophylleæ
16661 flosculosum *Dec*	Floret	spreading	0	sum	Pu Br	on Scabiosa arvensis Sow t 396 f 2 *Scabiosæ*

2498 ÆCI'DIUM *Pers* Æcidium *Sp* 21—?

16662 Pini *Pers*	Pine	scattered	½	sum	Pa Or	on Pinus sylvestris Grev crypt fl t 7
16663 Epilóbii *Dec*	Epilobium	beautiful	0	sum	W	on Epilobium montanum lvs
16664 Violárum *Dec.*	Violet	crowded	0	sum	Wsh	under Viola canina lvs
16665 albéscens *Grev*	whitish	beautiful	0	april	W	Adoxa moschatellina
16666 Taráxaci *Grev*	Dandelion	spreading	0	sum	W	under Leontodon Taraxacum lvs
16667 Periclýmeni *Dec*	Woodbine	large spot	0	sum	Ysh	under woodbine lvs.
16668 Búnii *Dec.*	Ground Nut	deformed	0	spring	Ysh	on Bunium lvs

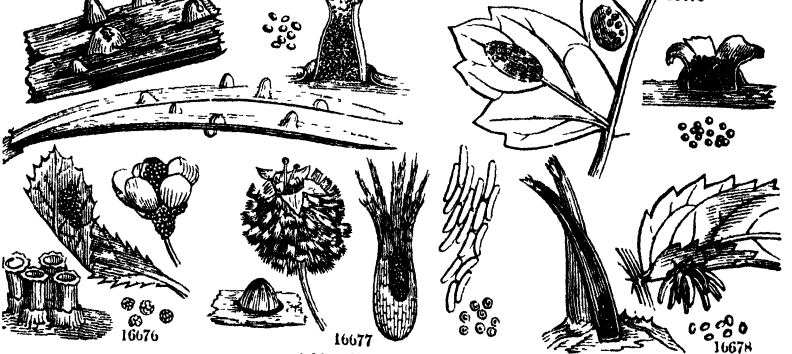


History, Use, Propagation, Culture,

called mildew or blight. All the species are obscure and require further examination They are in the hands of Bauer, whose knowledge and pictorial powers cannot be better employed than in illustrating this obscure part of vegetation.

16630 Hypophyl scatter very min rounded becom contigu but not confluent, Sporidia pyriform subpedicellate
16631 Hypophyl very min convex orbicular scattered becom confluent, Sporidia very min globul transparent
16632 Hypophyl pale ochrey-yell distinct at first soon bursting becom conflu and very pulverul Sporidia oval
16633 Hypophyllous bright orange-yellow prominent crowded generally forming circles and becoming very confluent, Sporidia very numerous obovate
16634 Hypophyllous orange-yellow oblong irregular becoming confluent, Sporidia numerous
16635 Hypophyllous depressed yellow oblong concentric becoming confluent, Sporidia nearly oval
16636 Chiefly hypophyllous golden-yellow scattered irregular convex becoming confluent, Sporidia subspherica.
16637 Hypophyllous small scattered effused orange-yellow, Sporidia suboval sometimes with a minute pedicel
16638 Hypophyllous golden-yellow suborbicular becoming effused, Sporidia very numerous irregularly spherical
16639 Bright reddish-orange broad pulverulent hypophyl and on nerves and petioles, Sporidia numer subglob.
16640 Epiphyllous much scattered rather large yellow thick elevated from the leaf and bursting in a gyrose manner, Sporidia subglobose
16641 Hypophyl lin obl crowded arranged in a subparallel manner orange-yell becom pale, Sporidia spherical
16642 Hypophyllous and on the petioles and calyx oblong thickish sometimes partly disposed in a circular manner and subconfluent deep reddish-yellow, Sporidia spherical
16643 On both sides of the leaf and stem suborbicular prominent bright orange-yellow scattered, Sporidia oval or even oblong transparent
16644 Hypophyllous and on the calyces rather large oval with an indurated disk after the sporidia have escaped, Sporidia bright orange spherical and granular within
16645 Hypophyllous scattered round depressed rarely confluent, Sporidia yellowish-orange spherical surrounded by the remains of the ruptured epidermis
16646 Hypophyllous punctiform scattered or collected into small clusters golden-yellow scarcely bursting, Sporidia ovate or oblong somewhat transparent and granular within
16647 Hypophyll golden-yell scatter distin surround by remains of ruptur epidermis, Sporidia subglob minute
16648 On both sides of the leaf oblong or lin sometimes forming long lines yellow becoming reddish or brownish in decay, Sporidia globular or suboval
16649 Hypophyllous and on the petioles somewhat aggregated but generally following the course of the veins, bullated yellow bursting in the centre
16650 Chiefly hypophyllous very minute regular numerous convex late in bursting golden-yellow, Sporidia roundish oval or even oblong
16651 Chiefly hypophyllous very minute pale-yellow subrotund convex scattered or collected into clusters scarcely bursting, Sporidia suboval
16652 Hypophyll depressed regular in form redd orange scattered becoming partially confluent Sporidia egg-shaped
16653 Hypophyllous depressed minute spreading somewhat aggregated subconfluent irregular in form of a deep orange or orange-red, Sporidia oval
16654 Hypophyllous scattered or crowded distinct convex roundish large compared with the following mostly closed pale becoming golden-yellow, Sporidia very long obtuse at each extremity
16655 Hypophyllous punctiform prominent or papilliform numerous tawny yellow mostly closed, Sporidia ovate
16656 Polymorphous of various forms sometimes disposed in a circular manner quite white frequently never bursting, Sporidia in great profusion globular
16657 Within the fruit and glumes of corn and various grasses spreading and in a short time filling the whole with a profuse black dust, which under the microscope consists of minute spherical sporules
16658 Attacking the fructification of Carices and forming a black compact slightly pulverulent mass composed of a pale solid nucleus surrounded by the naked sporidia which are small and globular
16659 Always inclosed within the grain and filling it with uniform dense fetid blackish-brown mass composed of very minute spherical sporidia
16660 Attack anth and ovary of the *Caryophylleæ*, fine purp Spori very plentiful pulverul min and globul
16661 Sporidia very min purpl-brown plentiful produc within florets and often filling them with pulverul mass

16662 Large oblong or conical much scattered pale-orange bursting with an irregular orifice, Sporidia excessively abundant bright-orange
16663 Hypophyllous numerous distinct, Sporidia very white toothed, Teeth beautifully rolled back brittle and vanishing, Sporidia pinkish-orange
16664 Hypophyllous and on the petioles scattered or subaggregated numerous, Peridia whitish split into many small deciduous teeth, Sporidia orange becoming obscure brown
16665 Hypophyllous and on the petioles scattered distinct, Peridia very white split into a few comparatively large teeth, Sporidia yellowish-white, Surface of the leaf blistered whitish
16666 Hypophyllous very numerous subsessile scattered or collected into little clusters, Peridia white split into subrevolute teeth, Sporidia fine orange
16667 Hypophyllous, Peridia distinct but decidedly clustered and crowded prominent becoming subelongated, the mouth with a few broad very delicate deciduous teeth, Sporidia fine orange
16668 Hypophyllous and on the petioles irregularly clustered and deforming the parts on which it grows, Peridia somewhat indistinct round prominent and yellowish with a subentire orifice

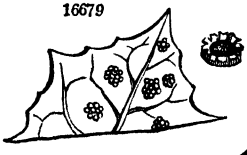


and Miscellaneous Particulars.

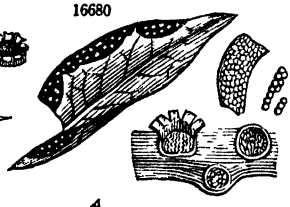
998 *Eucalyptus* These plants are found upon the leaves of other vegetables, and one of them is known to agriculturists under the name of Red Gum This species usually grows inside the glumes of the calyx, under the epidermis, which, when the plant is ripe, bursts and emits a powder of a bright orange color It does not

16669 Jacobæ'æ *Grev*	Ragwort	agglomerat.	0	sum.	Ysh	under Sen Jacobæa lvs.	
16670 Prenánthis *Pers*	Prenanthes	spots	0	sum	W	under Hierac. sylvat. lvs.	
16671 Urticæ *Dec*	Nettle	clusters	0	sum	Ysh	on Urtica dioica	
16672 confértum *Dec*	dense	clusters	0	sum	Wsh	on Ficaria	
16673 Grossulárieæ *Dec.*	Gooseberry	bright sp	0	sum	R	under gooseberry lvs. Grev crypt fl t. 62	
16674 Ranunculaceárum *Dec*	Crowfoot	clusters	0	sum	Wsh	under Ranunc lingua lvs	
16675 Cal'thæ *Grev.*	Caltha	bright	0	spring	Or	under Caltha palustris lvs.	
16676 Berbéridis *Pers.*	Berberry blight	spreading	0	sum	Or	on Berb vulgaris	Grev. crypt. fl t 97
16677 lacerátum *Dec*	ragged	swollen	0	sum	Br	on hawthorn	Grev. crypt 209
16678 cornútum *Pers*	cornute	spots	½	sum.	Y Br	on mountain-ash	Grev crypt 180
16679 Tussaláginis *Pers*	Coltsfoot	concentrical	0	sum.	Psh	under Farfara lvs	Sower t 397 f.
16680 rubéllum *Dec*	pink	concentrical	0	sum.	Crim.	under Rumex lvs.	Sow t 405 *Rumicis*
16681 Al'lii *Pers.*	Allium	concentrical	0	sum	Y	under All. ursinum lvs	
16682 Thalictri *Grev*	Thalictrum	clustered	0	sum	Or	Thalictrum alpinum	Grev crypt 4
2499 PUCCI'NIA *Mich*	Puccinia.				*Sp* 30—?		
16683 Rósæ *Grev.*	Rose	many-cell	0	aut.	Bl	under rose leaves	Grev. crypt fl t. 15
16684 Rúbi *Dec*	Bramble	many-cell	0	aut	Bl	under bramble lvs	
16685 grácilis *Grev.*	slender	many-cell	0	aut	Bl	under raspberry lvs.	
16686 Potentillæ *Pers.*	Potentilla	many-cell.	0	aut.	Bl	under Potentilla lvs	Grev. crypt fl. t. 77
16687 Aspáragi *Dec*	Asparagus	two-celled	0	aut	Bl	dead asparagus	
16688 Circæ'æ *Pers*	Circæa	two-celled	0	aut	Pk Br	under Circæa lvs	
16689 Chrysosplénii *Grev*	Chrysosplen	two-celled	0	may	Pa Br	under Chrys opp lvs	
16690 Aviculáriæ *Dec*	knot grass	two-celled	0	aut.	Bl	under Polygonum lvs.	
16691 Ægopódii *Strauss*	Ægopodium	two-celled	0	aut.	B Gr	on Ægopodium lvs	
16692 túmida *Grev*	tumid	two-celled	0	june	Br Gr	on Bunium Bulbocastanum	
16698 Men'thæ *Pers*	Mint	two-celled	0	spring	Bl	under Mentha lvs.	
16694 Polýgoni *Pers*	Polygonum	two-celled	0	aut	R Br	under Polyg amphib lvs	
16695 Centaurêæ *Dec*	Centaury	two-celled	0	aut	Bl	on Centaurea nigra	
16696 Umbelliferárum *Dec*	Umbellifer	two-celled	0	aut	Ve D	on Umbelliferæ lvs	
16697 Saniculæ *Grev*	Sanicle	two-celled	0	aut	Bl Br	under Sanicula lvs	
16698 variábilis *Grev*	variable	two-celled	0	aut	Blsh	on Leont. Taraxacum	Grev crypt fl t 75
16699 Heráclei *Grev.*	Cow Parsnip	two-celled	0	sum.	Blsh	under Sphondylium lvs	Grev crypt fl t 42
16700 Epilóbii *Dec*	Epilobium	two-celled	0	june	Br	under Epilobium palustre lvs.	
16701 Betónicæ *Dec.*	Betony	two-celled	0	aut	Ferr	under Beton offic lvs	
16702 pulverulénta *Grev.*	powdery	two-celled	0	sum.	D Br	under Epilobium lvs.	
16703 Adóxæ *Dec.*	Moschatel	two-celled	0	sum	D Br	on Adoxa Moschatellina	

16679

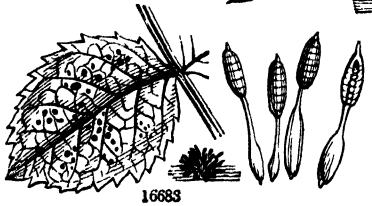


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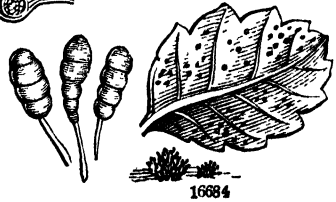


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16683



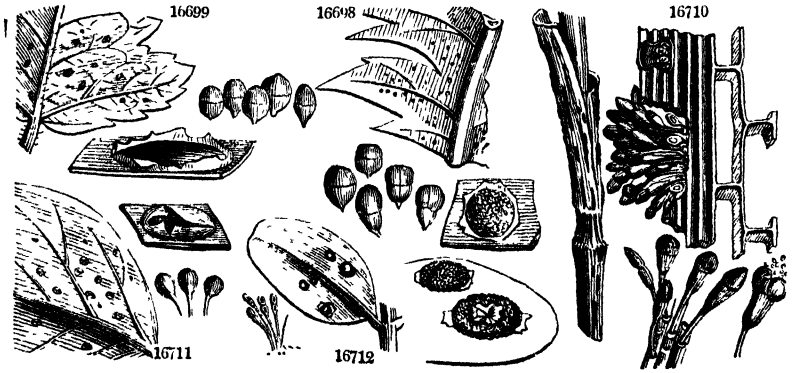
16684

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appear to be materially injurious to the grain, if at all. Ears full of it have been found with very plump grains; and it has also been found upon branded ears. Before the cuticle which covers the fungus bursts, it has much the appearance of a pustule upon the human body

16669 Hypophyllous at first prominent pustular soon becoming agglomerated very numerous, Peridia splitting into short brittle yellowish-white teeth, Sporidia pale-orange
16670 Hypophyllous in widely scattered agglomerated clusters but not very crowded, Peridia subsessile split into very white exceedingly brittle teeth, Sporidia pale
16671 Hypophyllous and on the petioles and stem, Peridia campanulate agglomerated rarely single split into many short recurved teeth, Sporidia ochre-yellow numerous ovate
16672 Hypophyllous and on the petioles, Peridia in dense agglomerated clusters whitish split into revolute teeth, Sporidia yellowish the leaf whitish around the clusters
16673 Hypophyllous upon a thickened portion of the leaf, which on the upper surface is of a fine red color with a yellow border, Peridia densely crowded splitting into yellowish-white teeth, Sporidia pale
16674 Hypophyllous, Peridia agglomerated in scattered clusters of various sizes whitish with a brittle dentated margin, Sporidia yellow
16675 Hypophyllous and on the petioles aggregated short somewhat campanulate with numerous very minute marginal teeth, Sporidia bright-orange subglobose or oval
16676 Hypophyllous and on the fruitstalk, seed-vessel, calyx, and even petals, Peridia short or elongated cylindrical densely crowded fine orange, Sporidia yellow under the microscope
16677 Hypophyllous and on the petioles and young fruit, Peridia elongated agglomerated brown splitting to the base in capillary segments, Sporidia numerous light-brown
16678 Hypophyllous, Peridia 2—12 long cylindrical slightly curved yellowish-brown springing from an orange-colored thickened portion of the leaf, Sporidia numerous greyish becoming brown
16679 Hypophyllous marked on the upper surface of the leaf by a yellow or purplish spot, Peridia partly immersed short splitting into white revolute teeth, Sporidia pink-orange
16680 Hypophyllous producing a crimson spot on the upper surface of the leaf, Peridia minute subimmersed splitting regularly into small revolute white teeth, Sporidia yellowish-white
16681 Hypophyllous marked by a pale spot on the upper surface of the leaf and a pale ring round the peridia, which are small not numerous splitting into small brittle yellowish-white teeth, Sporidia pale
16682 Hypophyllous somewhat clustered, Clusters of a roundish form, Peridia oblongo-cylindrical bright-orange, Mouth paler and bursting irregularly

16683 Hypophyllous, Sporidia mucronated 5-7-celled with a white filiform stipes incrassated towards the base which is furnished with a yellow gland
16684 Hypophyllous deep-black tufted, Sporidia 4-celled obtuse mucronate, Stipes slender incrassated at the base
16685 Hypophyllous tufted of various sizes black rather far scattered, Sporidia 7-9-celled somewhat attenuated mucronate with a slender stipes incrassated at the base
16686 Somewhat tufted scattered black, Sporidia cylindrical 3-4-celled obtuse never mucronated, Stipes filiform
16687 Round or ovoid scatter black somewhat convex, Sporidia densely crowded oblong obtuse firmly fixed by pedicels
16688 Hypophyllous deep pinkish-brown pruinose consist of a number of distinct aggregate tufts, Sporidia oblong acute
16689 Hypophyllous small of various sizes few together and confluent pale brown, Sporidia long somewhat waved much attenuated at each extremity with an elongated stipes
16690 Hypophyllous punctiform minutely tufted subrotund blackish-brown, Sporidia crowded obtusely egg-shaped with a long flexuose filiform pedicel
16691 Chiefly hypophyllous minute aggregated rendering the nerves and petioles swollen dark bluish-grey before bursting, Sporidia nearly black oval not contracted in the centre, Stipes short
16692 Hypophyllous and on the petioles conglomerated confluent brownish-grey before bursting, Sporidia nearly black obtuse scarcely contracted in the centre the upper cell sometimes divided
16693 Hypophyllous round scattered nearly black, Sporidia of an obtuse irregular figure with a short filiform stipes somewhat incrassated at the base
16694 Hypophyllous minute round very crowded reddish-brown upper cell of the sporidia thick globose, the lower one long and narrow, Stipes short
16695 On both sides of the leaf and on the stem in small nearly black scattered tufts surrounded by the remains of the ruptured epidermis, Sporidia oval the two cells nearly equal, Stipes very short
16696 Hypophyllous minute very dark scattered, Sporidia short with both cells obtuse and a short stipes
16697 Hypophyllous circular very variable in size blackish-brown scattered rarely confluent, Sporidia very obtuse with a subelongated stipes
16698 On both sides of the leaf in minute tufts nearly black circular bordered by the remains of the epidermis, Sporidia variable very obtuse rounded 2-celled both often subdivided, Stipes very short
16699 Hypophyllous blackish-brown irregular in figure girt by ferruginous remains of epidermis, Sporidia crowded obtuse divided but scarcely contracted in the middle, Stipes short
16700 Hypophyllous scattered closely over the whole surface small round brown depressed, Sporidia much contracted in the centre nearly resembling figure 8 the upper cell largest
16701 Hypophyllous very thickly scattered and becoming contiguous but very rarely confluent minute at first and ferruginous after bursting, Sporidia short upper cell obtuse, Stipes very short
16702 Hypophyllous dark-brown scattered or sub-confluent often concentric, Sporidia crowded pulverulent obtusely oval slightly contracted in the middle the lower cell terminating in an abrupt and short stipes
16703 On the leaf and petiole crowded confluent, Sporidia dark-brown pulverulent upper cell obtuse, Stipes somewhat lengthened

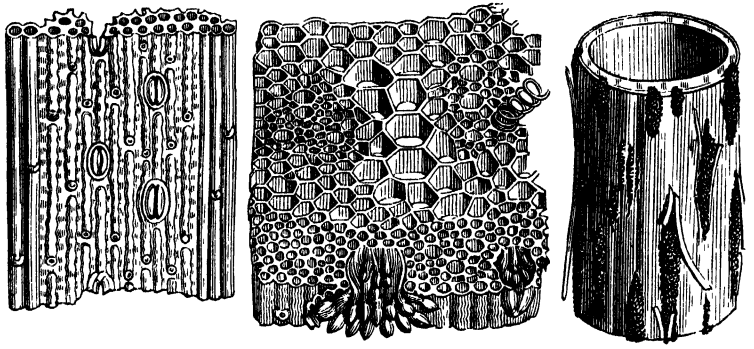


and Miscellaneous Particulars

2499 *Puccinia* A name of obscure meaning, possibly derived from πύκα, closely packed, in allusion to the crowded manner in which the little plants are placed P grámmis is a plant too well known to the farmer under the name of blight It attacks the stem and leaves of corn, at first having the appearance of orange-

16704 Primulæ *Grev*	Primrose	two-celled 0	sum	D Br	under primrose lvs	
16705 Violæ *Dec*	Violet	two-celled 0	sum	D Br	under Viola canina lvs	
16706 Valántiæ *Pers.*	Cross-wort	two-celled 0	sum	Dp Br	on Galium verum	
16707 glomeráta *Grev*	heaped	two-celled 0	spr su	Dp Br	under Senecio Jacobææ lvs,	
16708 Ulmáriæ *Dec.*	Ulmaria	two-celled 0	aut.	Pu Bl	under Ulmaria lvs	
16709 caricína *Dec*	Sedge	two-celled 0	aut.	Bl	on Carex leaves	
16710 Gráminis *Pers*	Grass	two-celled 0	aut	Bl	on corn & grasses	Sow t 140 *U Frume ti*
16711 globósa *Grev*	globose	one-celled 0	aut.	Bl	on bean leaves	Grev crypt. fl t 99
16712 Búxi *Sow.*	Box	two-celled 0	sum	Br	leaves of box	Grev crypt. fl t

16710



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coloured streaks, which afterwards assume a deep chocolate-brown colour The little plants chiefly attack the parenchyma, immediately below the stomata with which the cuticle abounds Each individual is so small, that any stoma on a straw will, according to Sir Joseph Banks, produce from twenty to forty fungi, and every one of them will, no doubt, produce at least one hundred reproductive particles, so that the progeny from a single stoma will be enough to infect a whole plant The period of a generation is supposed not to exceed a week, and as the reproductive particles are exceedingly light, they are wafted aloft in the air, which is thus loaded with clouds of animated dust, ready upon the first favourable occasion to carry blight and disease into all the neighbourhood The figures which illustrate this subject are copies of Mr Bauer's illustrations of blight, published in 1805 by Sir Joseph Banks *a* (preceding page), a piece of infected wheat stem, natural size, *b*, a highly magnified longitudinal cutting of the same, *c to n*, highly magnified representations of the Puccinia grámmis in various states, *o*, a piece of the cuticle magnified, and showing the stomata, *p*, a highly magnified transverse cutting of the straw, *q*, a magnified representation of the outside of the straw, *r*, a very highly magnified representation of a part of the same

The alarming state of the harvest of August 1804, from what is vulgarly called blight, induced Sir Joseph Banks to have some blighted stalks of wheat examined under a powerful microscope, and drawings made from them by Mr Francis Bauer These were published in a pamphlet in January 1805, the object of which, as we are informed in the advertisement, was to procure "actual observations on the origin and progress of the disease" from those "intelligent agriculturists, whose residence in the country enables them daily to examine, not only the progress of their crops, but the origin and advances also of all those obstacles which nature has opposed to the success of agricultural labours, as if to awaken the energies of reason, and to reward the farmer for the exertions of his intellectual faculties, by the satisfaction of surmounting them"

As we have here a space that would otherwise be unoccupied, we cannot do better than to fill it up by transcribing the whole of the pamphlet alluded to, there being still ample room for "actual observations" on that baneful disease

"Botanists have long known that the blight in corn is occasioned by the growth of a minute parasitic fungus or mushroom on the leaves, stems, and glumes of the living plant. Felice Fontana published, in the year 1767, an elaborate account of this mischievous weed*, with microscopic figures which give a tolerable idea of its form, more modern botanists† have given figures both of corn and of grass affected by it, but have not used high magnifying powers in their researches

"Agriculturists do not appear to have paid, on this head, sufficient attention to the discoveries of their fellow-labourers in the field of nature, for though scarcely any English writer of note on the subject of rural economy has failed to state his opinion of the origin of this evil, no one of them has yet attributed it to the real cause, unless Mr Kirby's excellent papers on some diseases of corn, published in the *Transactions of the Linnean Society*, are considered as agricultural essays

"On this account it has been deemed expedient to offer, to the consideration of farmers, engravings of this destructive plant, made from the drawings of the accurate and ingenious Mr Bauer, botanical painter to His Majesty, accompanied with his explanation, from which it is presumed an attentive reader will be able to form a correct idea of the facts intended to be represented, and a just opinion whether or not they are, as is presumed to be the case, correct and satisfactory

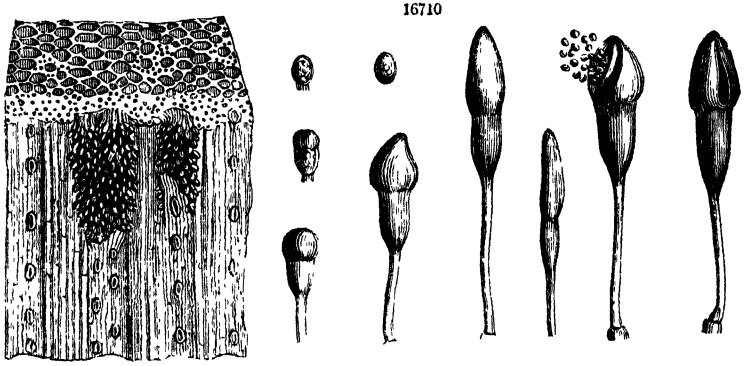
"In order, however, to render Mr Bauer's explanation more easy to be understood, it is necessary to premise, that the striped appearance of the surface of a straw, which may be seen with a common magnifying glass, is caused by alternate longitudinal partitions of the bark, the one imperforate, and the other furnished with one or two rows of pores or mouths, shut in dry, open in wet weather, and well calculated to imbibe fluid whenever the straw is damp Pores or mouths similar to these are placed by nature on the surface of the leaves, branches, and stems of all perfect plants, a provision intended, no doubt, to compensate, in some measure, the want of locomotion in vegetables. A plant cannot when thirsty go to the brook and drink, but it can open innumerable orifices, for the reception of every degree of moisture which either falls in the shape of rain and of dew, or is separated from the mass of fluid always held in solution by the atmosphere, it seldom

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"* Osservazioni sopra la Ruggine del Grano. Lucca, 1767. 8vo.
"† Sowerby's English Fungi, vol. ii. tab 140. Wheat; tab. 139. Póa aquática.

16704 Hypophyllous deep brown solitary scattered or concentric and subconfluent, Sporidia rather slender with the lower cell attenuated into a short stipes
16705 Hypophyllous minute scattered sometimes confluent irregular in form nearly black, Sporidia short obtuse small with a short stipes
16706 Hypophyll very min scatter deep-brown, Sporidia thick obt variable in shape with lower cell fusiform
16707 Hypophyllous tufts circular depressed broad dark fuscous composed of many smaller ones confluent at the centre, Sporidia oblong with lower cell somewhat attenuated
16708 Hypophyllous purplish black scattered in tufts, Sporidia variable generally very obtuse two rarely 3-celled frequently also divided perpendicularly, Stipes short
16709 Epiphyllous brown eventually black oval often confluent and forming long lines, Sporidia oblong with a white filiform stipes firmly fixed at its base
16710 Tufts dense oblong often confluent and forming long parallel lines changing from yellowish-brown to black, Sporidia elongated the upper cell the shortest, Stipes filiform
16711 Epiphyllous minute scattered nearly black, Sporidia globose with a filiform slender stipes
16712 Scattered reddish-brown round very convex surrounded by the ruptured epidermis, Sporidia oblong 2-celled yellow with a long filiform stem

16710



and Miscellaneous Particulars

happens in the driest season, that the night does not afford some refreshment of this kind, to restore the moisture that has been exhausted by the heats of the preceding day By these pores, which exist also on the leaves and glumes, it is presumed that the seeds of the fungus gain admission, and at the bottom of the hollows to which they lead (*b p*) they germinate and push their minute roots, no doubt (though these have not yet been traced), into the cellular texture beyond the bark, where they draw their nourishment by intercepting the sap that was intended by nature for the nutriment of the grain, the corn, of course, becomes shrivelled in proportion as the fungi are more or less numerous on the plant, and as the kernel only is extracted from the grain, while the cortical part remains undiminished, the proportion of *flour to bran*, in blighted corn, is always reduced in the same degree as the corn is made light Some corn of this year's crop will not yield a stone of flour from a sack of wheat, and it is not impossible, that in some cases the corn has been so completely robbed of its flour by the fungus, that if the proprietor should choose to incur the expense of thrashing and grinding it, bran would be the produce, with scarcely an atom of flour for each grain

"Every species of corn, properly so called, is subject to the blight, but it is observable that spring corn is less damaged by it than winter, and rye less than wheat, probably because it is ripe and cut down before the fungus has had time to increase in any large degree Tull says, 'that white core, or bearded white, which has its straw like a rush full of pith, is less subject to blight than lammas white, which ripens a week later' (See page 74) The spring wheat of Lincolnshire was not in the least shrivelled this year, though the straw was in some degree infected the millers allowed that it was the best sample brought to market. Barley was in some places considerably spotted, but as the whole of the stem of that grain is naturally enveloped in the hose or basis of the leaf, the fungus can in no case gain admittance to the straw, it is, however, to be observed, that barley rises from the flail lighter this year than was expected from the appearance of the crop when gathered in

"Though diligent enquiry was made during the last autumn, no information of importance relative to the origin or the progress of the blight could be obtained this is not to be wondered at, for as no one of the persons applied to have any knowledge of the real cause of the malady, none of them could direct their curiosity in a proper channel Now that its nature and cause have been explained, we may reasonably expect that a few years will produce an interesting collection of facts and observations, and we may hope that some progress will be made towards the very desirable attainment of either a preventive or a cure

"It seems probable that the leaf is first infected in the spring, or early in the summer, before the corn shoots up into straw, and that the fungus is then of an orange colour, after the straw has become yellow, the fungus assumes a deep chocolate brown each individual is so small, that every pore on a straw will produce from twenty to forty fungi, as may be seen in the plates, and every one of these will, no doubt, produce at least one hundred seeds, if then, one of these seeds tillers out into the number of plants that appear at the bottom of a pore (*b p*), how incalculably large must the increase be! A few diseased plants scattered over a field must speedily infect a whole neighbourhood, for the seeds of fungi are not much heavier than air, as every one who has trod upon a ripe puff-ball must have observed, by seeing the dust, among which is its seed, rise up and float on before him

"How long it is before this fungus arises at puberty and scatters its seed in the wind, can only be guessed at by the analogy of others, probably the period of a generation is short, possibly not more than a week in a hot season if so, how frequently in the latter end of the summer must the air be loaded as it were with this animated dust, ready whenever a gentle breeze, accompanied with humidity, shall give the signal, to intrude itself into the pores of thousands of acres of corn Providence, however, careful of the creatures it has created, has benevolently provided against the too extensive multiplication of any species of being, was it otherwise, the minute plants and animals, enemies against which man has the fewest means of defence, would increase to an inordinate extent. This, however, can in no case happen, unless many predisposing causes afford their combined assistance But for this wise and beneficent provision, the plague of slugs, the plague of mice, the plagues of grubs, wireworms, chafers, and many other creatures whose power of multiplying is countless as the sands of the sea, would long before this time have driven mankind and all the larger animals from the face of the earth

"Though all old persons who have concerned themselves in agriculture remember the blight in corn many years, yet some have supposed that of late years it has materially increased, this, however, does not seem to be the case Tull, in his *Horse-hoeing Husbandry*, p 74, tells us that the year 1725 'was a year of blight, the like of which was never before heard of, and which he hopes may never happen again,' yet the average

History, Use, Propagation, Culture, and Miscellaneous Particulars.

price of wheat in the year 1726, when the harvest of 1725 was at market, was only 26*s* 4*d*, and the average of the five years of which it makes the first, 37*s* 7*d*: 1797 was also a year of great blight, the price of wheat, in 1798, was 49*s* 1*d*, and the average of the five years, from 1795 to 1799, 63*s* 5*d*.

"The climate of the British isles is not the only one that is liable to the blight in corn, it happens occasionally in every part of Europe, and probably in all countries where corn is grown. Italy is very subject to it, and the last harvest of Sicily has been materially hurt by it. Specimens received from the colony of New South Wales show that considerable mischief was done to the wheat crop there, in the year 1803, by a parasitic plant very similar to the English one.

"It has been long admitted by farmers, though scarcely credited by botanists, that wheat in the neighbourhood of a barberry bush seldom escapes the blight. The village of Rollesby in Norfolk, where barberries abound and wheat seldom succeeds, is called by the opprobrious appellation of mildew Rollesby. Some observing men have of late attributed this very perplexing effect to the farina of the flowers of the barberry, which is in truth yellow, and resembles in some degree the appearance of the rust, or what is presumed to be the blight in its early state.

"It is, however, notorious to all botanical observers, that the leaves of the barberry are very subject to the attack of a yellow parasitic fungus, larger, but not otherwise different from the rust in corn.

"Is it not more than possible, that the parasitic fungus of the barberry and that of wheat are one and the same species, and that the seed is transferred from the barberry to the corn? Mistletoe, the parasitic plant with which we are the best acquainted, delights most to grow on the apple and hawthorn, but it flourishes occasionally on trees widely differing in their nature from both of these in the Home Park, at Windsor, mistletoe may be seen in abundance on the lime trees planted there in avenues. If this conjecture is well founded, another year will not pass without its being confirmed by the observations of inquisitive and sagacious farmers.

"It would be presumptuous to offer any remedy for a malady, the progress of which is so little understood, conjectures, however, founded on the origin here assigned to it, may be hazarded without offence.

"It is believed, but not dogmatically asserted (because Fontana, the best writer on the subject, asserts that the yellow and dark coloured blight are different species of fungi), to begin early in the spring, and first to appear on the leaves of wheat in the form of rust, or orange-coloured powder, at this season, the fungus will, in all probability, require as many weeks for its progress from infancy to puberty as it does days during the heats of autumn, but a very few plants of wheat thus infected are quite sufficient, if the fungus is permitted to ripen its seed, to spread the malady over a field, or indeed, over a whole parish.

"The chocolate-coloured blight is little observed till the corn is approaching very nearly to ripeness, it appears then in the field in spots, which increase very rapidly in size, and are in calm weather somewhat circular, as if the disease took its origin from a central position.

"May it not happen, then, that the fungus is brought into the field in a few stalks of infected straw uncorrupted among the mass of dung laid in the ground at the time of sowing? It must be confessed, however, that the clover leys, on which no dung from the yard was used, were as much infected last autumn as the manure crops. The immense multiplication of the disease in the last season seems however to account for this, as the air was no doubt frequently charged with seed for miles together, and deposited it indiscriminately on all sorts of crops.

"It cannot, however, be an expensive precaution to search diligently in the spring for young plants of wheat infected with the disease, and carefully to extirpate them, as well as all grasses, for several are subject to this or a similar malady, which have the appearance of orange-coloured or black stripes on their leaves, or on their straw, and if experience shall prove that uncorrupted straw can carry the disease with it into the field, it will cost the farmer but little precaution to prevent any mixture of fresh straw from being carried out with his rotten dung to the field.

"In a year like the present, that offers so fair an opportunity, it will be useful to observe attentively whether cattle in the straw yard thrive better or worse on blighted or on healthy straw. That blighted straw, retaining on it the fungi that have robbed the c[illegible] of its flour, has in it more nutritious matter than clean straw which has yielded a crop of plump grain, cannot be doubted, the question is whether this nutriment in the form of fungi does or can be made to agree as well with the stomachs of the animals that consume it, as it would do in that of straw and corn.

"It cannot be improper in this place to remark, that although the seeds of wheat are rendered, by the exhausting power of the fungus, so lean and shrivelled that scarcely any flour fit for the manufacture of bread can be obtained by grinding them, these very seeds will, except, perhaps, in the very worst cases, answer the purpose of seed-corn as well as the fairest and plumpest sample that can be obtained, and in some respects better, for as a bushel of much blighted corn will contain one third at least more grains in number than a bushel of plump corn, three bushels of such corn will go as far in sowing land, as four bushels of large grain. Eighty grains of the most blasted wheat of the last year that could be obtained, were sown in pots in the hot houses, of these, seventy-eight produced healthy plants, a loss of 10 per cent only.

"The use of the flour of corn in furthering the process of vegetation is to nourish the minute plant from the time of its developement till its roots are able to attract food from the manured earth, for this purpose, one tenth of the contents of a grain of good wheat is more than sufficient. The quantity of flour in wheat has been increased by culture and management calculated to improve its qualities for the benefit of mankind, in the same proportion as the pulp of apples and pears has been increased, by the same means, above what is found on the wildings and crabs in the hedges.

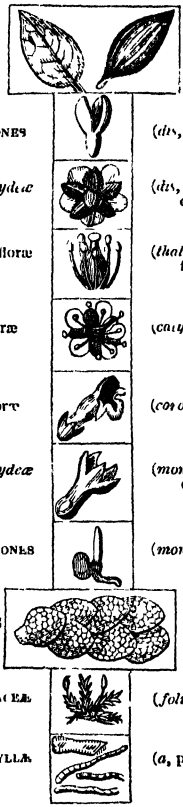
"It is customary to set aside or purchase for seed-corn, the boldest and plumpest samples that can be obtained, that is, those that contain the most flour, but this is unnecessary waste of human subsistence, the smallest grains, such as are sifted out before the wheat is carried out to market, and either consumed in the farmer's family or given to his poultry, will be found by experience to answer the purpose of propagating the sort from whence they sprung as effectually as the largest.

"Every ear of wheat is composed of a number of cups placed alternately on each piece of the straw, the lower ones contain, according to circumstances, three or four grains, nearly equal in size, but towards the top of the ear, where the quantity of nutriment is diminished by the more ample supply of those cups that are nearer the root, the third or fourth grain in a cup is frequently defrauded of its proportion, and becomes shrivelled and small. These small grains which are rejected by the miller, because they do not contain flour enough for his purpose, have, nevertheless, an ample abundance for all purposes of vegetation, and as fully partake of the sap, 'or blood, as we should call it in animals,' of the kind which produced them, as the fairest and fullest grain that can be obtained from the bottoms of the lower cups, by the wasteful process of beating the sheaves."

ENCYCLOPÆDIA OF PLANTS.

PART II.

NATURAL ARRANGEMENT.



First grand Division, VASCULARES (*vas*, a vessel, plants with woody fibre and cellular tissue).

First Class, DICOTYLEDONES (*dis*, two, and *cotyledon*, cotyledons two).

Subdivision I. *Dichlamydeæ* (*dis*, two, and *chlamys*, a coat or covering, calyx and corolla distinct)

Subclass 1 Thalamifloræ (*thalamus*, a bed or receptacle, and *flos*, a flower, stamens under the pistillum)

Subclass 2. Calycifloræ (*calyx* and *flos*, stamens on the calyx)

Subclass 3 Corollifloræ (*corolla*, and *flos*, stamens on the corolla).

Subdivision II. *Monochlamydeæ* (*monos*, one, and *chlamys*, a coat or covering, calyx and corolla not distinct)

Second Class, MONOCOTYLEDONES (*monos*, one, and *cotyledon*, cotyledon one)

Second grand Division, CELLULARES (*cellula*, a little cell, plants with cellular tissue only)

First Class, FOLIACEÆ (*foliaceus*, leafy, habit).

Second Class, APHYLLÆ (*a*, priv, and *phyllon*, a leaf, leafless)

THE difficulties connected with the adoption of the natural system of plants are these, that the characters of many of the orders are at present imperfectly known, and that they depend upon a consideration of many points of structure which are not to be determined without much labor and a considerable degree of practical skill in the use of the microscope and the dissecting knife But the facilities which the habit of viewing all natural bodies with reference to the relations they bear to other bodies, and not as insulated individuals merely possessing certain peculiarities by which they may be referred to some station in an artificial system, ultimately gives to the investigations of the naturalist, are so great, that difficulties of the nature just alluded to ought not to be suffered to influence the botanist in determining which line of study he will follow, whether that pointed out by Linnæus, or that traced by the hand of nature By the artificial system of Linnæus, indeed, no great difficulty exists in determining the number of stamens or styles possessed by a given plant, or the nature of their combination, and from the knowledge so obtained, in referring them to their class and order in the Linnæan system. But when this step has been gained, what more has been acquired than the bare knowledge that the plant in question possesses a certain number of stamens and styles? No possible notion can be formed of the relation it bears to other plants of the same nature, of the qualities it probably possesses, or of the structure of those parts not under examination, the fruit for example, and, finally, if it were wished to convey an idea of the plant to a stranger, no means would be in the possession of the Linnæan botanist of doing so, except by stating that the plant belonged to Pentandria Monogynia for example, which is stating nothing But what would be the condition of the student of the natural affinities of plants in a similar case? It is true he would be obliged to consult more characters than the two unimfluential ones of Linnæus—it would be necessary to ascertain if his subject was Vascular or Cellular, if Vascular, whether it was Monocotyledonous or Dicotyledonous, if Dicotyledonous, whether the leaves were opposite or

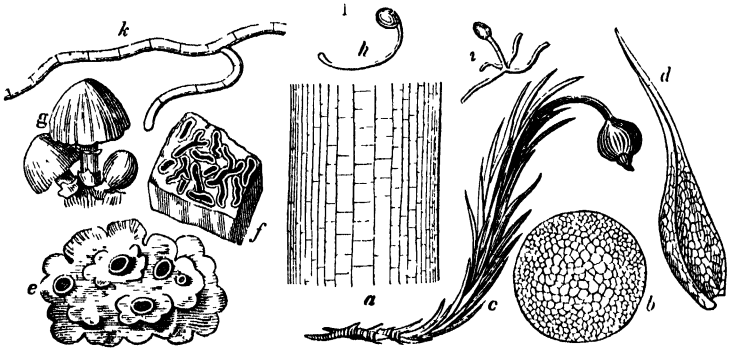
alternate, stipulate or exstipulate, whether the flowers were monopetalous, polypetalous, or apetalous, the nature and station of the stamens, the condition of the ovarium, and so on But when he *has* ascertained thus much, only let it be remembered, for a moment, how much he has gained indirectly as well as directly Perhaps he has discovered that his plant belongs to Rubiaceæ, he will then have learned that all vegetables with opposite entire stipulate leaves, and a monopetalous superior corolla, are also Rubiaceous, if a fragment of the leaves and stem only of such a plant were afterwards submitted to him for examination, he would recognise its affinities, and remember that it was Rubiaceous, and being aware of that fact, he would be able safely to infer that its calyx and corolla would be of a particular nature, that if the roots afforded any color for dying, it would be red, that the medicinal properties of the bark, if any, would be tonic, astringent, and febrifugal, and that its seeds would be of the same nature as those of coffee, and finally, its geographical position would be tolerably certain to him

The really important obstacle which exists in the way of acquiring this kind of knowledge, is undoubtedly the want of any introduction to the study of it, accompanied by the distribution and characters of the natural orders into which plants are divided It is to be hoped that English readers at least will not long have to regret this deficiency in their elementary works In this place, it must suffice to point out the characters upon which the great divisions depend, under which the orders themselves are arranged, and it is to be hoped, that even this small aid will be found to smooth the way, and to remove some of the obstacles that at present are supposed to exist at the very threshold of the temple

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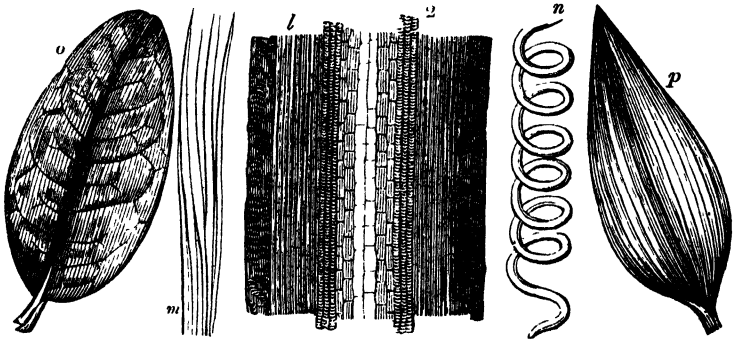
Plants considered with reference to their general structure, are separated into two grand divisions called CELLULARIS and VASCULARES

The Cellulares answer to the Linnæan Cryptogamia, and are also called Acotyledonous, the Vasculares answer to the rest of the Linnæan system, which is sometimes called Phanerogamia and Cotyledonous



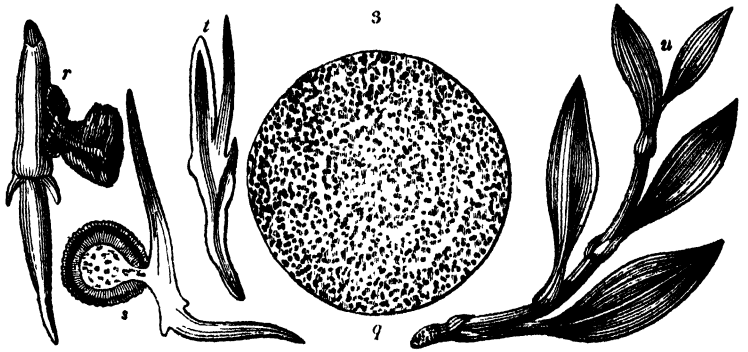
a, Longitudinal section of a stem.
b, Transverse section of a stem
c, Stem of a moss, with leaves and theca, or seed-case
d, Leaf of a moss, magnified
e, Leafy thallus of a lichen, with shields
f, Crustaceous thallus of a lichen, with shields
g, Fungi of the highest dignity
h, *i*, Fungi of the lowest rank
k, Conferva magnified

CELLULARES, CRYPTOGAMOUS, or ACOTYLEDONOUS plants are all, therefore, different terms denoting the same combination of vegetables The first term is here adopted in preference to the others as expressing the most obvious character upon which the division depends, namely, the cellular, not vascular, structure of the plants composing it Cellular plants are formed entirely of cellular tissue (*fig* 1), without woody fibre or spiral vessels, or in more familiar terms by having no veins in their leaves if foliaceous, and not forming wood, they also are destitute of perfect flowers The lower tribes, such as Fungi and Algæ, are destitute of leaves, and in some points approach the animal kingdom so nearly as to be scarcely distinguishable In the highest tribe, *Ferns*, apparent veins are formed in the leaves, but as they are imperfectly supplied with spiral vessels, they cannot be considered more than analogous to the veins of other plants Ferns, however, hold the intermediate station between Cellulares and Vasculares, and are chiefly retained among the former on account of their perfect accordance in other respects In the whole of Acotyledones, it is unnecessary to examine the seed for the purpose of determining whether it has one cotyledon, several cotyledons, or none, the structure of the perfect plant giving the most obvious and satisfactory evidence



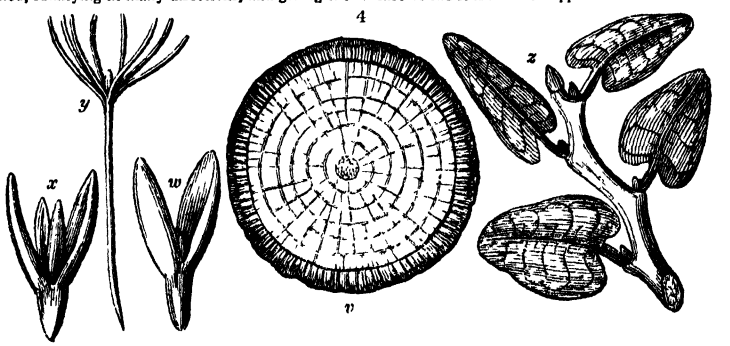
l, Vertical section of a vascular stem
m, Woody fibre
n, Spiral vessel
o, Leaf of a dicotyledonous plant
p, Leaf of a monocotyledonous plant.

VASCULARES, PHÆNOGAMOUS, or COTYLEDONOUS plants, are also separated into two great classes called Endogenes or Monocotyledones, and Exogenes or Dicotyledones, both which are distinguished as accurately by their obvious physical structure as they are by the minute and obscure peculiarities of the seed They are all formed with cellular tissue, woody fibre, and spiral vessels (*fig* 2), and their leaves are traversed by veins; the last character is sufficient for practical purposes, if it is remembered that they also bear perfect flowers, (that is, flowers furnished either with stamina, or pistillum, or both,) which will always prevent their being confounded with the highest tribes of Cellulares.



q, Transverse section of a monocotyledonous stem.
r, Germination of a monocotyledonous seed
s, Section of ditto, to show the cotyledon remaining in the testa
t, Section of a germinating embryo of a grass, to show the two alternate cotyledons of unequal size, the back and front lobes representing these, the middle lobe is the plumula
u, Stem and leaves of a monocotyledonous plant

Endogenes, or *Monocotyledonous* plants, are the first remove from Cellulares, and hold an intermediate rank between them and *Exogenes* or *Dicotyledonous* plants, in which vegetation acquires its highest form of development They were formerly characterised by having a single cotyledon, but this circumstance is not only not absolute but difficult of determination, except after minute analysis The real difference in the seed of them and Dicotyledones is this, that in Monocotyledones there is only one Cotyledon (*fig* 3 *s*), or, if two, that they are alternate with each other (*t*), while in Dicotyledones they are always opposite, and more than one, sometimes several, as in Pinus (*fig* 4 *y*) The physiological structure of the two classes is, however, that by which they are familiarly distinguished, and exhibits a beautiful proof of the harmony that exists between the great features of vegetation and their first principle, the seed from which they originate In *Endogenes*, or *Monocotyledones*, there is no distinction between wood and bark (*fig* 3 *q*), in *Exogenes*, or *Dicotyledones*, the wood and bark are distinctly separated (*fig* 4 *v*) In Monocotyledones the wood and cellular tissue are mixed together without any distinct annual layers of the former being evident, in Dicotyledones the wood and cellular tissue have each their particular limits assigned them, a distinct layer of the former being annually deposited In Monocotyledones there are no radiations from the medulla to the bark, in Dicotyledones the radiations are distinctly marked In Monocotyledones there is generally no articulation between the leaves and the stem, while in Dicotyledones the leaves are always jointed with the stem from which they fall off, leaving a scar behind In Monocotyledones the veins of the leaf pass in parallel lines from the base to the apex, in Dicotyledones they diverge from the midrib towards the margin at various angles, in the former they are unbranched, the principal veins being connected by nearly simple secondary veins, in the latter they are much branched, ramifying in many directions, and giving the surface of the leaf a netted appearance



v, Transverse section of a dicotyledonous stem
w, An embryo with two cotyledons
x, An embryo with four cotyledons
y, An embryo with many cotyledons
z, Stem and leaves of a dicotyledonous plant

Such are the very obvious distinctions of the two great classes of Phænogamous, or flowering, plants, and so far is it from there being any necessity for dissecting a seed in order to ascertain its structure, that this point is one of the most easy determination, and about which there cannot be in one case in five hundred the slightest cause of doubt or difficulty It is almost impossible to take even a morsel of a plant in the hand without instantly being in possession of the knowledge of the structure of its seed, with respect to the cotyledons.

Thus far have we advanced without a single obstacle to impede us In all farther investigation no greater degree of knowledge or application is requisite than what ought to be possessed by every one who would be able to ascertain the genus of a plant Many of the orders do not depend upon the minute characters of the seed so much as is believed, the structure of the ovarium and position of the ovula, are aids which frequently make amends for the absence of fruit: and the nature of the foliage and inflorescence are guides which, though sometimes treacherous, are often as faithful as the fructification itself But as it is not intended to give the characters of the orders in this place, neither is it necessary to advance farther in an explanation of the manner of determining them, upon that point each order would require a particular note It may, how-

ever, be confidently believed, that there are no greater impediments in the road to an acquaintance with the natural relations of plants than those that have been already removed, and that although neither the science of botany, nor any other science, is to be taken by storm, yet that the fortress is sure to be reduced by silent and patient approach

It only remains to explain briefly upon what principles the names of the orders, suborders, &c are formed It is usual, in the school of Jussieu, to give to a natural order a name derived from that of the genus which is understood to be the type of the order, as Ranunculaceæ from Ranúnculus, Rosaceæ from Rósa, and so on But several deviations from this principle had been admitted by Jussieu, in favor of certain groups of plants, long known by other popular names, derived from certain peculiarities, such as Labiatæ, because their corollas are labiate, Compositæ, because their flowers are what is commonly called compound, Guttiferæ, on account of the resinous juice in which they abound, and some others It would, perhaps, have been better, if uniformity in nomenclature had not thus been sacrificed to a dread of innovation, but it is now too late to remedy the evil, if such it be, nor would the advantage of alteration be at this day equivalent to the inconvenience For the purpose of making it at once apparent, whether, in speaking of a group of plants, reference is had to an order or a suborder, it has of late years been thought convenient to terminate the name of the natural order in *aceæ*, and of the suborder in *eæ* Thus, in speaking of the whole mass of which Ranúnculus is the representative, the word Ranuncul*aceæ* is used, but in speaking of the particular division, or suborder, of which Ranúnculus forms a part, the term Ranuncul*eæ* is employed This manner of speaking is, however, at present, very partial in its application, and is of little importance, except in a few cases, of which Ranunculaceæ is one of the most striking examples In those orders, the titles of which, necessarily, from their grammatical construction, end in *eæ*, as Orchideæ, it is obviously inapplicable, without a total change in a great part of the nomenclature of natural orders, a measure which cannot be too much deprecated.

It may, perhaps, be finally expected, that these remarks should be concluded by a recommendation of some work, from which those who are anxious to become fully acquainted with the principles and distinguishing characters of the Natural System of Botany, may derive the necessary information Unfortunately, however, such a work has at present no existence M Decandolle's Théorie Élémentaire de la Botanique explains the principles upon which the orders of plants are constituted, and M de Jussieu's Genera Plantarum contains their characters, as determined in 1789 but the latter is now too obsolete to be very useful to the tyro In our own language, the only work that can be consulted upon the subject with advantage, is the Flora Scotica of Professor Hooker, in which the characters of the natural orders of Scottish plants are concisely indicated by Mr Lindley We understand a work upon the subject is in preparation by the latter gentleman, by which this great desideratum in the science of Botany will be supplied. It may be expected to appear in the course of 1829, previously to which, however, the division Botany, in the forthcoming Encyclopædia of Natural History will have been published, in which much information may be expected upon this important subject.

I. VASCULARES.

Class I. DICOTYLEDONES.

Subdivision I DICHLAMYDEÆ

This subdivision comprehends all the Dicotyledonous plants, that have both a calyx and corolla, by which they are distinguished from Monochlamydeæ, in which the calyx only exists It is in consequence of this high developement of the floral envelopes, that the greater part of flowering trees and shrubs are found in Dichlamydeæ, it rarely happening that those with a single floral covering only have any brilliant coloring

Subclass I THALAMIFLORÆ.

Petals inserted into the receptacle

The insertion of the petals and stamens into the receptacle is the great character of this subclass, which, therefore, contains all the polyandrous plants of Linnæus, as the Calycifloræ contain the icosandrous genera of the same botanist.

Section 1 *Carpella numerous, or stamens opposite the petals.*

Order I RANUNCULACEÆ.

The greater part of the plants of this order are objects of interest with gardeners, containing, as it does, many of the most elegant or showy of the tribes of hardy plants It is here that the graceful Clématis, the lowly Anemóne, the glittering Ranúnculus, and the gaudy Pæony are found, differing, indeed, in external appearance, but combined by all the essential characters of the fructification It is remarkable, however, that the acrid and venomous properties of these plants are nearly as powerful as their beauty is great They are all caustic, and in many of them the deleterious principle is in dangerous abundance M Decandolle remarks, that its nature is extremely singular, it is so volatile, that, in most cases, simple drying in the air or infusion in water is sufficient to destroy it it is neither acid nor alkaline, but its activity is increased by acids, honey, sugar, wine, or alcohol, and it is, in reality, destructible only by water The crowfoots of our European pastures, and the Anemónes trilobáta and triternáta, of those of South America, are well known poisons of cattle Blistering plasters are made in Iceland of the leaves of Ranúnculus ácris The foliage of some species of Clématis is supposed to afford the means employed by beggars of producing artificial ulcers Some of the Aconites are diuretic, especially Napéllus and Cámmarum Delphinium Consolida is said to be an ingredient in those French cosmetics which are so destructive of the surface of the skin The Helléborus, famous in classical history for its drastic powers, and the Nigélla, celebrated in ancient housewifery for its aromatic seeds, which were used for pepper before that article was discovered, are both comprehended in Ranunculaceæ The range of this order, in a geographical point of view, is very extensive A great number has been discovered in Europe, but they are so abundant in all parts of the world that an order can scarcely be found more universally and equally dispersed It is singular, that, with the exception of the climbing species of Clématis and of Xanthorhíza, scarcely an instance occurs in Ranunculaceæ of a shrubby stem

Tribe 1 Clematideæ.

Clématis *L*

1228 Naravélia *Dec*

Tribe 2 Anemoneæ

1229 Thalictrum *W*
1226 Anemone *W*
1225 Hepática *W en.*
1241 Hydrástis *W*
1231 Knowltónia *Sal*
1230 Adónis *L*

Tribe 3 Ranunculeæ

707 Myosúrus *W*
708 Ceratocéphalus *P S.*
1233 Ranúnculus *W*
1232 Ficária *Pers.*

Tribe 4. Helleboreæ

1239 Cáltha *W*
1234 Tróllius *W*
1286 Eránthis *Sal*
1235 Isopyrum *W*
1237 Helléborus *W*
1239 Cóptis *Sal.*
1053 Garidélla *W.*
1209 Nigélla *W.*
1208 Aquilégia *W.*
1204 Delphínium *W.*
1205 Aconitum *W.*

Tribe 5. PÆONIEÆ.

1164 Actæ'a *Ph.* 1207 Cimicifuga *Ph* 1202 Pæónia *W.* 709 Xanthorhíza *W.*

Order II DILLENIACEÆ.

Fine plants, almost exclusively confined to tropical countries Dillénia speciósa, a native of India, is a most noble tree with large yellow flowers, rivalling those of a Magnólia Hibbértia volúbilis is a green-house plant well known for the beauty of its blossoms, and their powerfully fetid smell The medical properties of this order are scarcely known, a decoction of their leaves or bark is astringent, and used for gargles, and the acid juice of the fruit of some of the species of Dillenia is used in India, mixed with water, as a pleasant beverage in fevers The foliage of many of the species is extremely scabrous, whence the dried leaves are used for the same purposes as fish-skin and sand-paper in Europe, those of Trachytélla áspera are even employed in China for polishing works of metal.

1201 Curatélla *W.* 1206 Trachytélla *Dec.* 1203 Hibbértia *H K.*
1212 Tetrácera *L.* 1214 Dillénia *W* 1211 Colbértia *Sal.*

Order III MAGNOLIACEÆ.

No one is ignorant of the grandeur of Magnolias, or of the delicious, though sometimes dangerous, fragrance of their blossoms, but it is less generally known, that, from their affinity to the trees that produce the famous Winter's bark and Melambo bark, they possess medicinal qualities of no common power The bark of all of them is said to have a bitter flavor without any astringency, and combined with a hot aromatic principle In the United States, the bark of Magnólia glauca and Liriodendron tulipífera, is employed for the same purposes as Jesuit's bark, and from the fruit of Magnólia acuminata, a tincture is prepared which has some reputation for removing attacks of rheumatism The fruit of Illicium anisatum, is the material which flavors the liqueur called Anisette de Bourdeaux The Magnolias are exclusively inhabitants of Asia and America, no species having hitherto been found either in Europe or in Africa

1215 Illicium *W* 1216 Liriodéndron *W* 1217 Magnólia *W* 1218 Michélia *W.*

Order IV ANNONACEÆ

The plants of this order are closely allied to Magnoliaceæ, from which they are principally distinguished by the absence of stipulæ, and by the structure of their anther and seeds The latter consist of a hard mass of albumen, ruminated, as the botanists call it, that is to say, perforated by the substance of the seed-coat, in every direction They are all trees or shrubs, and chiefly inhabitants of the hottest parts of the tropics, but a few have been discovered straggling into the temperate zones of America The fruit of the Annona is in many species highly esteemed as an article for the dessert, especially that of the Cherimoyer, which has the reputation of being the finest fruit in the world, next to the Mangosteen The hard fruits of the species of Uvária are highly aromatic, those of one of them furnish the Piper æthiópicum of the shops The genus Asimina is the only one which contains any hardy species, and these are so delicate as to be seen very rarely in this country In Brazil, the bark of Xylópia sericea is used for cordage, for which it is admirably adapted

1219 Uvária *W* 1221 Artabótrys *R Br* 1223 Asímina *Ad*
1220 Annóna *P &* 1222 Guattéria *R & P* 1224 Xylopia *W.*

Order V MENISPERMEÆ.

The order of Menispermeæ consists entirely of twining shrubs with minute flowers They are extremely dissimilar in habit from the orders which are placed near them, and occupy their present station entirely on account of certain minute but important characters in their fructification With the exception of Schizándra coccínea none of them are worth cultivating as plants of ornament The berries of Lardizabala biternáta are sold in the markets of Chile, under the name of *Agualboqui*, *Gualhogui*, or *Coguil-l ochi*, according to different travellers The bitter, diuretic, and aperient sorts of Pareira brava, are produced by a species of Menispérmum, as is also the famous Columbo root, so much esteemed for its intense bitterness, and for its use in diarrhœa and dysentery The poisonous drug, called Cocculus indicus in the shops, is the seed of Menispérmum Cócculus. Several Brazilian species of Cócculus are said to possess powerful febrifugal properties No species of Menispermeæ is found in Europe, they are chiefly natives of tropical America and Asia.

858 Wendlándia *W.* 2100 Menispérmum *D* 2116 Cissámpelos *Dec.*
1972 Schizándra *W* 2101 Cócculus *Dec*

Order VI BERBERIDEÆ

With the exception of Bérberis this order does not contain any genus of much interest, most of the others are low, inconspicuous, herbaceous plants, Nandina is an elegant Japanese shrub The Berberises are all shrubs of much beauty and interest, especially the species with pinnated leaves, which are sometimes called Mahonias These are all inhabitants either of Europe, Asia, or North and South America, none have ever been seen in Africa or New South Wales Many of the finest species from Chile and India yet remain to be introduced The berries of the Berberises are acid and astringent, the latter quality is especially abundant in the stem and bark

297 Epimédium *W* 826 Caulophyllum *Mich* 829 Bérberis *W*
825 Leóntice *W* 827 Diphyllæa *Mich* 830 Nandina *W.*

Order VII PODOPHYLLACEÆ

Little interesting herbaceous North American plants, nearly related on the one hand to Nymphæaceæ, and, on the other, to the herbaceous genera of Berberideæ Their juice is held to be purgative.

1166 Podophýllum *W* 896 Jeffersónia *Ph*

Order VIII HYDROPELTIDEÆ

This order differs from Nymphæaceæ chiefly in having a definite number of seeds It consists of only two genera, each containing a single species Both are little floating plants of tropical and northern America. Nothing is known of their properties

1240 Hydropéltis *H K*

Order IX NYMPHÆACEÆ.

Like the last, these are all floating plants, and, to gardeners, possessed of great interest, on account of the elegant form and various hues of their flowers Three species are known as the lilies of our own streams and ponds, and the remainder occupy similar stations in other countries Some of the Indian species of Nymphæa are delightfully fragrant The holy Cyamus, or Pythagorean bean of antiquity, is the produce of the Nelumbium, a stately aquatic, which abounds in all the hotter countries of the East, where its roots are frequently used as an article of food The ditches, about Pekin and other Chinese cities, are literally choaked up with its abundance The pericarpia or beans are oblong, hard, smooth bodies, and possess the power of vegetating after having been dried for even thirty years The flowers and roots of the common white Nymphæa have been long celebrated for their sedative and antiaphrodisiacal qualities, which are, however, now considered doubtful In Sweden, in years of scarcity, the roots of Núphar lútea are pounded into cakes along with the inner bark of Pinus sylvéstris

This order has been the cause of much difference among botanists, as to its true station in a natural classification, its structure being of so doubtful a character as to leave room for disputing whether it belongs to Dicotyledones or Monocotyledones Upon this subject M Decandolle has the following remarks · " Gærtner declares that the embryo is undivided, and therefore monocotyledonous In 1802, I remarked in the Bulletin Philomathique, that the embryo both of Nymphæ'a and Núphar is enclosed in a peculiar integument, and that a dicotyledonous structure is apparent when that integument is removed, shortly after, M Mirbel declared that the embryo of Nelúmbium has two thick cotyledones, in 1806, M Turpin gave an accurate description of the fruit of Nelúmbium lúteum, without however removing the doubts about the real structure of the embryo, and two years afterwards his colleague, M Poiteau, described the seed and germination of the same plant, pointing out that the embryo consisted of two thick cotyledons enclosed within a stipular membrane, but destitute of radicula this was subsequently confirmed by M Mirbel after very minute anatomical examination, that observer compared the seed of Nelúmbium to the seed of Amýgdalus, and also to that of Piper and Saurúrus, and also demonstrated that the structure of the stem was analogous to that of exogenous or dicotyledonous plants A very different opinion was shortly afterwards held by M Correa de Serra, an observer of the highest order, who admitted indeed that Nymphæaceæ are exogenous, but contended that the parts which had been taken by previous observers for cotyledons were, in fact, a mere expansion of the radicle, and that cotyledons were as entirely absent in Nelúmbium as in Cúscuta In the meanwhile M de Jussieu adhered to the old opinion, that Nymphæaceæ are monocotyledonous, in which he was supported by the late Professor Louis Claude Richard, a name for ever memorable in the annals of Carpology, who published a new view of their structure, in which he differed materially from all his predecessors, this botanist considered the stipulary membrane of Poiteau a simple cotyledon, and the cotyledons of that writer the hypoblastus, or *body of the radicula*, he also refused to admit any evidence derived from the anatomical structure of the stem In this conflict of opinions, I have determined to station Nymphæaceæ among Exogenes, for the following reasons 1st, because the structure of their stem is that of Exogenes rather than of Endogenes, 2dly, because the two opposite bodies, enclosed within the little bag or stipulary membrane, described by Poiteau, appear to be undoubtedly cotyledons, which is confirmed by the presence of a plumula between them in Nelumbium, 3dly, because of the structure of their flower, which has a great affinity with that of Pæónia, Magnólia, and Papáver, 4thly, on account of the similarity between their fruit and stigma and that of Papáver, 5thly because of their milky juice and convolute leaves, two characters which are not known to exist among Endogenes " Those who are interested in pursuing this curious discussion any farther, will find many remarks and illustrative figures in the English edition of the Analyse du Fruit, published by Mr Lindley in 1819.

1174 Nymphæ'a *W* 1176 Núphar *H K* 1177 Eurýale *H K* 1213 Nelúmbium *J*

Section 2 *Carpella solitary or connate, Placentæ parietal*

Order X PAPAVERACEÆ.

These plants are better known for their medicinal properties than for their beauty. Some of them are the common pests of corn fields, and with grain have been disseminated over all the world Sanguinária is a neat little American plant well known for its crimson juice, and the emetic purgative powers of its roots Saracénnia is a genus of very doubtful affinity, consisting of curious little American marsh plants of difficult culture, and remarkable for the singular pitcher-like form of its leaves The peculiar power of the poppy is, as is well known, narcotic, a property which pervades all the order, although in a less intense degree in all than in the officinal P somniferum, from which exclusively the drug opium is obtained The Mexicans use the expressed oil of the seeds of Argemóne mexicána for polishing furniture

1170 Papáver *W* 1168 Roméria *Med* 1172 Argemóne *W* 1073 Boccónia *W*
1165 Sanguinária *W* 1169 Glaucium *J* 313 Hypécoum *W* ? 1173 Saracénia *W.*
1167 Chelidónium *W* 1171 Meconópsis *Vig*

Order XI FUMARIACEÆ

Tender herbs, with finely cut leaves and annual stems, abounding in a watery juice, without any appearance of milkiness. They are reckoned slightly diaphoretic and aperient, but their medical properties are trifling Formerly they were combined with Papaveraceæ, from which they are now universally distinguished. The greater part of them are natives of hedges or thickets in the cooler parts of the northern hemisphere, two are natives of the Cape of Good Hope Many of the species are beautiful ornaments of the flower-garden

1502 Corýdalis *Vent* 1504 Dicýtra *Dec* 1506 Sarcocápnos *Dec*
1503 Cysticápnos *W en* 1505 Adlumia *Raf* 1507 Fumária *P S*

Order XII CRUCIFERÆ

The importance of this order to mankind, and the singular nature of its botanical characters, render it expedient to speak very fully upon it in which the remarks of the learned M Decandolle, who has paid Cruciferæ particular attention, will be chiefly followed The order consists wholly of annual or perennial, often biennial herbs, occasionally assuming a suffrutescent habit, then, however, never exceeding the height of three feet The roots are either thick and perennial, or annual or biennial and slender, almost always perpendicular and undivided The young roots are tipped with a little sheath, called the coleorhiza, which is produced by the extended ruptured coat of the epidermis when the rootlet first appears This is a curious character, and deserves attention The stems are round or somewhat angular, branched, and often, even in the annual species, indurated at the base The branches proceed from the axille of the leaves, but the uppermost ones are abortive in most cases The racemes are always opposite to the leaves, sometimes the terminal branch is abortive when the raceme appears to be terminal, but this is merely owing to that circumstance The leaves are simple, generally radical or alternate, rarely opposite The flowers are either white, yellow, or purple, or in a few Cape species bright blue The fruit is called either a siliqua or silicula, the former being a linear pod containing many seeds, the latter a roundish pod containing one or very few seeds, whence this order, which is the same as the Linnæan class Tetradynamia, is divided by Linnæus into two parts, called Siliquosæ and Siculosæ In the seed, the radicle and cotyledons are applied to each other in different ways, from which the suborders of M Decandolle derive their characters When the edge of the cotyledons is pressed close to the radicula, so that a cross section would be thus ○ =, the cotyledons are said to be accumbent, as in all Pleurorhizeæ, when the side of the cotyledons is pressed to the radicula thus ○ ||, the former are called incumbent, as in Notorhizeæ If the cotyledons are incumbent, and at the same time half folded together or conduplicate, thus ○ > >, the suborder Orthoplocæ is formed, when the cotyledons are incumbent and spirally twisted, so that a section would resemble this ○ || ||, they constitute the suborder Spirolobeæ, and finally, when the cotyledons are incumbent, and doubled twice in their length, thus ○ || || ||, we have Diplecolobeæ

The whole order is preeminently European, 166 species are found in the north and middle of Europe, and 178 on the sea-shores of the Mediterranean, 45 are found between Mogadore and Alexandria, 184 in the countries of the East, that is to say, Syria, Asia Minor, Tauria, and Persia, 99 in Siberia, 35 in China, Japan, and India, 16 in New Holland and the South Sea islands, 6 in the Mauritius and adjacent countries, 70 at the Cape, 9 in the Canaries, 2 in Saint Helena, 2 in the West Indies, 41 in South America, 48 in North America, 5 in Kamtchatka and the bordering islands, and finally, 35 are common to several parts of the globe From this it appears that there are about 100 species in the southern hemisphere, and about 800 in the northern · or, if they are considered with reference to the zones of temperature, 206 are natives of the frigid zone of the northern hemisphere, 30 of the whole of the tropics, 548 of the temperate zone of the northern hemisphere, and 86 of the southern The forty-first degree of north latitude may be considered the equa-

torial line of Cruciferæ, about half being found on one side of it, and half on the other Their station is very variable; many inhabit open sandy places, some form the vegetation about the limits of the perpetual snows of lofty mountains, and many follow the footsteps of man through all parts of the world

The useful qualities of the turnip, the radish, the rape, and the cabbage, and its multiform varieties, are all well known The greater part of the order consists of plants possessing high antiscorbutic powers These appear to depend upon a certain acrid volatile oily principle, the chemical nature of which is imperfectly known It is particularly abundant in the seeds of mustard and the roots of horseradish, and the leaves of Lepidium latifolium, which latter exercise a violent influence upon the organs of digestion The same sort of acrimony, but in less degree, is found in the herbage of the scurvy-grass and the roots of the radish, which act much more mildly when taken inwardly, thus, when any cruciferous plants are found to be eatable, either from culture or other circumstances, it is to be understood to depend upon a reduction of this acrid principle The exciting powers of this last, are what render the horse-radish, the scurvy grass, and others, so remarkably useful as antiscorbutics; they are also believed to possess diuretic and diaphoretic properties It is to be remarked, that Cruciferæ are always eatable when their texture is succulent and watery, as in the roots of the radish and the turnip, and the leaves of the cabbage tribe A further diminution of the acrid principle is produced by blanching Cruciferæ are said to possess a greater share of azote than any other tribe of plants, as is apparent in their fetid smell when fermented The embryo of all the order abounds in oil, whence many species are employed with much advantage for expressing, either for eating or for feeding lamps Some of the species are extremely beautiful and fragrant, as the Stocks, the Gillyflowers, the Hesperides, the Candytufts, and many others The Hutchinsias, Drabas, Cardamines, &c are among the most interesting of alpine plants

SUBORDER I *PLEURORHIZEÆ* ○=

Tribe 1 ARABIDEÆ.

1381 Mathiola *R Br*
1382 Cheiránthus *L*
1383 Nastúrtium *R Br*
1384 Leptocarpæ'a *Dec*
1385 Notoceras *R Br*
1386 Barbarea *R Br*
1387 Braśa *Stern*
1389 Turritis *R Br*
1390 Arabis *L*
1388 Párrya *R Br*
1391 Macropódium *R Br*
1392 Cardámine *L*
1393 Pteroneuron *Dec*
1394 Dentária *L*
1395 Lunaria *L*
1396 Ricótia *L*
1397 Farsétia *Turr*
1398 Berteróa *Dec*
1399 Aubriétia *Adans*
1400 Vesicária *Lam*
1401 Alýssum *I*
1402 Clypéola *W*
1403 Peltaria *L*
1404 Petrocállis *R Br*
1405 Drába *L*
1406 Eróphila *Dec*
1407 Cochleária *L*.

Tribe 3 THLASPIDEÆ

1408 Thláspi *L*
1410 Hutchinsia *R Br*
1411 Teesdália *R Br*
1412 Ibéris *L*
1413 Biscutélla *L*

Tribe 4 EUCLIDIEÆ

1414 Euclídium *R Br*
1415 Ochthódium *Dec.*

Tribe 5 ANASTATICEÆ.

1416 Anastática *L*

Tribe 6 CAKILINEÆ

1417 Cakile *Tourn.*
1419 Chorispora *Dec.*

SUBORDER II. *NOTORHIZEÆ* ○ ||

Tribe 7 SISYMBRIEÆ

1420 Malcómia *R Br.*
1421 Hésperis *L.*
1422 Sisýmbrium *L*
1423 Alliária *Adans*
1424 Erýsimum *L*

Tribe 8. CAMELINEÆ.

1425 Camelina *Crantz*
1426 Nésha *Desv.*

Tribe 9 LEPIDINEÆ

1427 Corónopus *Sm*
1428 Lepidium *L*
1409 Capsélla *Mönch*
1429 Æthionéma *R. Br*

Tribe 10. ISATIDEÆ.

1430 Isátis *L.*
1431 Mýagrum *L*

SUBORDER III. *ORTHOPLOCEÆ* ○ > >

Tribe 11 BRASSICEÆ.

1432 Brássica *L*
1433 Sinápis *L.*
1434 Moricándia *Dec*
1435 Diplotáxis *Dec.*
1436 Erúca *Tourn.*

Tribe 12 VELLEÆ.

1437 Véila *L.*
1438 Carrichtéra *Adans.*
1439 Succówia *Mönch.*

Tribe 13 ZILLEÆ.

1440 Zilla *Forsk*
1441 Calepina *Adans.*

Tribe 14 RAPHANEÆ

442 Crámbe *W*
1418 Rapistrum *Desv*
1443 Ráphanus *L*

SUBORDER IV. *SPIROLOBEÆ* ○ || ||

Tribe 15 BUNIADEÆ.

1444 Bunias *L.*

Tribe 16. ERUCARIÆ.

1445 Erucária *Gærtn.*

SUBORDER V. *DIPLECOLOBEÆ.* ○ || || ||

Tribe 17. HELIOPHILEÆ.

1446 Heliophila *L*

Tribe 18 SUBULARIEÆ.
1447 Subulária *L.*

§ *Of doubtful station*
1380 Schizopétalon *Sims.*

ORDER XIII. FLACOURTIANEÆ.

A very small order formerly comprised in Tiliaceæ It is remarkable on account of the structure of its fruit, to the inner lining of which the seeds are attached upon a branched placenta. Nothing is known of the properties of the Flacourtias The berries of Flacoúrtia Ramóntchi are eaten in Madagascar. The order consists entirely of small tropical trees or bushes

2102 Flacoúrtia *W*

ORDER XIV CAPPARIDEÆ

These are nearly related to Cruciferæ, of the properties of which they partake Many are very pretty plants, especially Cleóme rósea, and the various species of Cratæ'va The common caper is an elegant bush, remarkable for its large white flowers and long purple stamens The species are found occasionally in various parts of the world The different kinds of Cápparis are reputed to be stimulating, antiscorbutic, and aperient The bark of the root of the common caper passes for a diuretic medicine Several species of Cleóme have an acrid taste, which has been compared by travellers to that of mustard The root of Cleóme dodecándra is employed as a vermifuge in the United States, and the leaves produce an inflammation of the skin, whence they are used in Cochin-china as a sinapism *Dec*

1162 Cápparis *W* 1086 Cratæ'va *W* 1448 Cleóme *W*

ORDER XV VIOLARIEÆ.

This is one of the most favorite orders with gardeners, consisting, as it chiefly does, of the Violet genus, from which most of the others are recent dismemberments The greater part are hardy herbaceous plants, some of which are remarkable for their perfume, others for their brilliant colors, and all for their neatness They are natives of the temperate or cold zones of both hemispheres, often growing at great elevations above the sea Among them is a tribe called Alsodineæ, consisting of suffrutescent tropical plants, but none of them have been introduced into the gardens of this country The attention of collectors should be directed to procuring the shrubby Violaceæ of Brazil, some of which possess great interest The medical properties of the order are found principally in their roots, which appear to possess, in all cases, emetic properties, in a greater or less degree One of the Ipecacuanhas is the root of a Brazilian violet M Decandolle has the following observations upon the affinities of the Violarieæ — They are very nearly akin, he observes, to the Polygaleæ and Droseraceæ, and especially to the Passifloreæ From the first they are distinguished by their unilocular fruit, leaves furnished with stipules and two-celled anthers, from Droseraceæ by their solitary style, lengthened embryo and stipulate leaves, the vernation of which is involutive, not circinate From Passifloreæ they differ in their fruit being capsular, not berried, in their albumen being compact and shining, not pitted, in their stamens being hypogynous, not perigynous, in their anthers being attached along their whole length, not fixed by their middle, finally, in their stigmas being one and not three The genus Calyptrion approaches Passifloreæ in its twining stem, and Hymenanthéra borders upon Polygaleæ on account of its monospermous pericarpium with solitary pendulous seeds

541 Ionídium *Vent* 540 Viola *W* 539 Sauvagésia *Jacq.*

ORDER XVI POLYGALEÆ

Most of the plants of this order are interesting, and deserving the attention of the gardener, some for their neatness, some for their beauty, and some for their use in medicine They are natives of most countries, and are either low herbaceous plants, occasionally less than an inch in height (small specimens of Polygala purpúrea), or shrubs varying from a dwarf, rigid, spiny habit, to a tall, graceful, drooping appearance Polygaleæ are remarkable for the union of their stamens into a single body, their one-celled anthers opening with a pore, and their irregular flowers, one of which is often keel-shaped, and beautifully crested or bearded The leaves have generally a bitter astringent taste, which is much more abundant in the roots, combined with an acrid and somewhat resinous flavour these properties are particularly sensible in P sénega, which is reputed a sudorific, diuretic, sialagogue, cathartic, or mild emetic, according to the manner in which it is administered The Yelhoi of South America, the root of a species of Monnina, has the same properties as P sénega, and is particularly used as a remedy for dysentery The well known Rattany, or Ratanhia root, of Chile, is the produce of a plant of this order, and possesses powerful tonic and astringent qualities According to the analysis of a French chemist, it contains gallic acid, but neither tannin nor resin

1508 Polýgala *W* 1509 Muráltia *Neck* 1510 Múndia *Kunth* 1511 Securidáca *L.*

ORDER XVII DROSERACEÆ

The order of sun-dews is a small group of plants, natives of marshes or inundated grounds in all the temperate parts of the world The species are very remarkable for the abundance of glandular hairs with which all the parts of the foliage are covered Only two species are in any degree frutescent The young leaves are always rolled up in the circinate manner, so remarkable in ferns Their medicinal properties appear to be trifling. the leaves have the power of curdling milk

702 Dróscra *W* 1009 Dionæ'a *W*

ORDER XVIII BIXINEÆ

The plants of this order are few in number, and not remarkable either for beauty or use The Bixa orellána is chiefly known for producing the seed called in the shops Arnotta (*Rocou*, Fr), and used for coloring cheese, the properties of the Arnotta are slightly purgative and stomachic They are all bushes or small trees, and mostly tropical. Azaras, Chilian shrubs with fragrant flowers, are not yet known in the gardens of Europe.

1178 Bixa *W* 1179 Prockia *L.*

ORDER XIX CISTINEÆ.

The common rock roses of our gardens give an accurate idea of this order, which contains little else. They are all very ornamental, and particularly well calculated for covering rockwork The species of Cistus and Helianthemum have been multiplied by Dunal in an extravagant manner, as has been well demonstrated by Mr Bentham. They are natives of most parts of the world in dry elevated places. The gum called Ladanum is the produce of some kinds of Cistus, it exhales a fragrant perfume when burnt, and possesses slightly tonic and stomachic properties.

1089 Hudsónia *W.* 1197 Cistus *J* 1198 Helianthemum *J* 222 Lechea *W*

Section 3. *Ovarium solitary Placenta central*

Order XX. CARYOPHYLLEÆ

These consist of herbs or low undershrubs, inhabiting the mountains and pastures of all parts of the world In Europe and Siberia they are particularly abundant, and least so in Africa and South America Many are *common* weeds, as most of the Cerástiums, Spérgulas, and others Several of the Silénes are very ornamental, and among the Arenárias are to be found some dwarf species of considerable elegance But it is in Diánthus that the pride of the order consists this genus is almost unrivalled for the brilliancy of its colors, the neatness of its foliage, and the perfume of its flowers From the finest of its species the title of the order has been derived The virtues of Caryophylleæ are slight Saponária officinális, and one or two others, have been praised for possessing antisyphilitic properties, the root of Siléne virginiána is reputed anthelmintic, and the Arenária peploides, being fermented, is used by the Icelanders for food.

Tribe 1 Sileneæ.

1044 Gypsóphila *W.*	1047 Cucúbalus *L*	1066 Agrostémma *W.*
1046 Diánthus *W*	1048 Siléne *L*	604 Velézia *W*
1045 Saponária *W.*	1067 Lýchnis *W.*	687 Dryýpis *W.*

Tribe 2 Alsineæ.

91 Ortégia *W*	931 Elátine *W*	1070 Spérgula *W*	1050 Arenária *W*
311 Buffónia *W*	225 Mollúgo *W*	1069 Larbréa *St Hil.*	1068 Cerástium *W*
319 Sagina *W*	691 Pharnáceum *W*	1049 Stellária *W*	1051 Cherléria *W*
920 Mœhringia *W*	220 Holósteum *W.*	688 Alsine *W*	

Order XXI LINEÆ

Separated by M Decandolle from Caryophylleæ, from which it is well distinguished by its fruit having several cells, or in the language of the botanist just named, being formed by the cohesion of several carpella Most of the species are pretty plants, bearing yellow, blue, or white flowers They are of immense importance in the world, on account of the tenacity of their fibre when made into flax The seeds of common flax are between mucilaginous and oily, the leaves of Linum cathárticum and L. selaginoides, the latter a native of Peru, are purgative

701 Linum *W* 321 Radiola *Sm.*

Order XXII TRANKENIACEÆ.

Distinguished from Caryophylleæ by the fruit not having a central separate placenta, but bearing the seeds on the inner margin of the valves The species are natives of arid situations in Europe, Africa, and South America They have not much beauty, and no known medical properties Besides the genus here recorded, there are two others mentioned by M Decandolle

835 Frankénia *W*

Order XXIII MALVACEÆ

Before this order was dismembered of Bombaceæ and Byttneriaceæ, it contained most of the grandest flowers in nature Even now, the splendour of the various species of Malva, Althæ'a, to which the hollyhock belongs, and Hibiscus, renders it one of the most remarkable groups of plants With the exception of the numerous genus Sida, nearly all Malvaceæ are objects worthy of the gardener's care, particularly those which are hardy In stoves or greenhouse, the softness of their branches and leaves render them peculiarly liable to the attacks of the red spider, mealy bug, and scale, from which few collections are free, a circumstance which makes them less generally esteemed than the surpassing beauty of many of them merits The greater part of the order is clothed with stellate pubescence, and a reniform one-celled anther is a character common to the whole These two peculiarities, together with the alternate stipulate leaves, distinguish Malvaceæ from all the rest of Dichlamydeæ All the species abound in a nutritive mucilage, a quality which renders the young heads of the Ochro, or Hibiscus esculéntus, an object of great value within the tropics, as an ingredient in soups In Brazil, the Abútilon esculentum serves the same purposes The emollient properties of Althæ'a officinális, or Guimauve of the French, are well known to physicians, as a remedy for catarrhs and pulmonary complaints A decoction of the leaves of Sphærálcea cisplatina is used for similar objects in Brazil A species of Pavónia is employed in the same country as a diuretic in the form of a decoction The straight shoots of Sida micrántha are employed as rocket-sticks at Rio Janeiro The chewed leaves of Sída carpinifólia allay the inflammation occasioned by the stings of wasps The tough fibres of many Malvaceæ are manufactured into cordage Their petals are astringent, whence those of Hibiscus Rósa sinénsis are used in China to blacken the eyelashes and the leather of shoes The fibrous threads in which the seeds of Gossypium are enveloped furnish the valuable cotton, an article of immense importance to the world, these threads when examined by the microscope, will be seen to be finely toothed, which explains the cause of their adhering together with greater facility than those of Bombax and several Apocineæ, which are destitute of teeth, and which cannot be spun into thread without an admixture of cotton

1471 Málope *W.*	1476 Maláchra *W*	1487 Sída *W*	1482 Redoutéa *Vent*
1472 Málva *W*	1477 Uréna *W*	1478 Pavonia *W*	1483 Palávia *W.*
1475 Lavatéra *W*	1484 Cristária *Cav*	1479 Achánia *W*	1488 Lagunéa *W*
1474 Althæ'a *W.*	1485 Anóda *Cav*	1480 Hibiscus *W.*	1481 Gossýpium *W*
1473 Kitaibéla *W*	1486 Peréptera *Dec*		

Order XXIV BOMBACEÆ

Distinguished from the last by the imbricate æstivation of the calyx, and the arrangement of the stamens in five sets, or, in Linnæan language, brotherhoods The species are mostly fine trees with large showy flowers, and natives of the tropics Some of them are among the largest trees in the world, Adansónia, the Baobab of Senegal, has been seen with a diameter of twenty-five feet, and specimens of Bómbax Ceíba, and Eriodéndron anfractuósum, are not uncommon an hundred feet in height The wood of all the species is light and soft, as in Malvaceæ, from which this order probably does not differ in its medicinal properties.

1458 Ochróma *W*	1490 Carolinea *W*	1492 Bómbax *W*
1466 Helicteres *W*	1491 Adansónia *W*	1493 Myródia *W.*

Order XXV BYTTNERIACEÆ.

Much the same kind of plants as those of the two last orders, from which they were not formerly distinguished, and from which they scarcely differ, except in their bilocular anthers Many of the Sterculias are fine umbrageous trees, the seeds of which are large and eatable, especially those of the famous Kola, which possess the property, being chewed, of rendering bad water pleasant to the palate The seeds of the Chicha, another and very noble species of the genus, are highly esteemed in Brazil for the dessert. Astrapæ'a, and several other genera related to it, are among the most beautiful in the world The flowers of a species of Pentapétes, called by the Indians, Machucunha, give out a mucilaginous refrigerant juice, which is employed in gonorrhœa Guazúma ulmifolia has its fruit filled with a pleasant mucilage, which is sweet and very agreeable, an extract of the bark of the same plant is used in Martinique to clarify sugar, its old bark is

employed in the form of a strong decoction, as a sudorific Walthéria Douradinha contains a great deal of mucilage, and is employed by the Brazilians as an antisyphilitic.

Tribe 1 STERCULIACEÆ

2036 Stercúlia *W* 2037 Heritiéra *W*

Tribe 2 BYTTNERIEÆ.

1607 Theobróma *W.* 1608 Bubróma *W* 704 Rulingia *R Br* 527 Ayénia *W.*
1609 Abróma *W* 703 Commersónia *W* 526 Buttnéria *W.* 1098 Kleinhófia

Tribe 3 LASIOPETALEÆ.

525 Seringia *Gay* 524 Thomásia *Gay* 523 Lasiopétalum *Sm*

Tribe 4 HERMANNIACEÆ

1445 Hermánnia *W* 1456 Melóchia *W.* 1454 Walthéria *W*

Tribe 5 DOMBEYACEÆ

1489 Ruízia *W* 1467 Dombéya *J.* 1469 Astrapæ'a *Lindl*
1468 Pentapétes *W* 1457 Melhánia *J* 1470 Pterospérmum *W*

ORDER XXVI TREMANDREÆ

A very small order containing only seven species, all small bushes, natives of New Holland, and remarkable for the peculiar neatness of their appearance In habit, they may be compared to heaths, with which they agree in the anthers bursting by a pore at the end Nothing is known of their properties.

879 Tetrathéca *Sm*

ORDER XXVII TILIACEÆ.

Trees, shrubs, or herbs, in general not remarkable for their beauty, the greater part of the last being the commonest weeds of the tropics. The Lime, from which the order derives its name, is a genus of fine trees with fragrant flowers, and Sparmánnia and Entelèa are handsome broad-leaved greenhouse arborescent plants The inner bark of Tília is tough and separable, and supplies the material whence the Russia mats used by gardeners and others are prepared Córchorus olitórius is cultivated in Egypt as a kitchen-garden vegetable, the fibres of the bark of Córchorus capsulàris are twisted into fishing lines, and the roasted nuts of the Lime tree are reported to bear some resemblance to chocolate

1087 Triumfétta *W* 1181 Apeiba *W* 1184 Muntíngia *W.* 1186 Tília *W*
1100 Heliocárpus *W* 1182 Sparmánnia *W.* 1185 Grèwia *W.* 1187 Córchorus *W.*
1180 Sloánea *W* 1183 Enteléa *R. Br.*

ORDER XXVIII ELÆOCARPEÆ.

These differ from Tiliaceæ in nothing except their lobed petals and anthers opening by two pores at the apex The flowers of some of the species of Elæocárpus are fragrant, the fruit eatable, and the hard rugose stones manufactured into necklaces

1192 Elæocárpus *W.*

ORDER XXIX SAPINDACEÆ

One of the distinctive peculiarities of this order consists in the petals having an additional lobe in the inside, or a tuft of hairs instead Nearly all the plants have compound leaves, and bunches of white flowers, a few of them are twining herbs, but the greater part are trees or shrubs, all natives of the warmer parts of the world, and in a great proportion, of the East The only genus which will bear the climate of England is Kolreutéria, a fine shrub or small tree, with panicles of white or pale yellow flowers Nephélium and Dimocarpus are both genera bearing excellent fruit The rind of the berry of Sapíndus saponária is of a soapy quality, as the name of the plant indicates The pulp of Melicócca, the arillus of Blighia sápida, and the kernel of Berthollétea and Pékea are all excellent eating

926 Sapíndus *W* 832 Ornithrophe *W.* 887 Kolreutéria *W* 925 Cardiospérmum *W*
1971 Nephélium *W* 884 Melicócca *W* 923 Paullínia *W* 897 Dodonæ'a *W*
883 Dimocárpus *W* 885 Blighia *H K* 924 Seriána *W.* 1991 Amiróla *Pers*
831 Cossignia *Juss* 886 Metáiba *Aubl*

ORDER XXX HIPPOCASTANEÆ

The only genus is Æ'sculus, from which some botanists have divided the smooth-fruited species under the name of Pávia The order is much valued for the grandeur of the foliage and flowers of most of the species, which are all hardy trees Their bitter fruit has sometimes been used as a sternutatory, it contains a large quantity of potash, and an abundance of starch. The bark is astringent, bitter, and febrifugal, and has been recommended as a substitute for Cinchona

866 Æ'sculus *W*

ORDER XXXI HIPPOCRATICEÆ.

Little is known of this order The species are tropical arborescent or climbing shrubs, with opposite simple leaves, and small inconspicuous flowers. The genus Tonsélla, of which there is none in cultivation, contains some species known in Sierra Leone as bearing poisonous fruit.

83 Hippocrátea *L.*

ORDER XXXII. MARCGRAAVIACEÆ.

Very curious half-climbing shrubs, all natives of hot countries Some of them bear among the flowers, which are large and showy, singular hollow bodies, like the pitchers of Sarracénia The order has been well illustrated by Professor Hooker, in the 160th article of his Exotic Flora.

1163 Marcgraávia *W*

ORDER XXXIII. ACERINEÆ.

Valuable trees, native of the woods of Europe, Siberia, and North America. Their flowers are in all cases inconspicuous, the breadth and rich color of their leaves constituting their beauty All the larger species abound in a very saccharine sap, from which sugar is prepared in North America, it is chiefly made from A'cer saccharinum and Negúndium, but may be obtained from many others.

2143 A'cer *W* 2144 Negúndium *Dec*

ORDER XXXIV MALPIGHIACEÆ

Undulated unguiculate spreading petals form one of the most obvious characters of this order, the species of which are all tropical, and are either trees or shrubs, often climbers. Many of the Malpighias are well known

for the prurient hairs produced on the surface of their leaves; their fruit is eatable, their timber of a deep red color, and their bark a febrifuge. Their showy pink or yellow flowers, and firm neat foliage, render all this order worthy of cultivation, except Aspicárpa, which is a weed

1054 Malpíghia *W* 1056 Hiræ'a *W.* 1007 Gærtnéra *W*
1055 Banistéria *W* 29 Aspicárpa *Rich*

Order XXXV HYPERICINEÆ.

The whole of these abound in a resinous juice, and are in most cases glandular in some degree. Their leaves are all dotted, and which is very remarkable, the dots are often black, even upon the yellow petals. These latter have a singular obliquity, which is not indicated by their outline, but by the arrangement of their veins. The juice just noticed as abundant in this order is yellow, viscid, rather bitter, often purgative or anthelmintic, and so very analogous to Gamboge, that the juice of Hypéricum baccátum, and some other Guiana species, has received the name of American Gamboge. Most Hypericineæ are bitter, and slightly astringent, whence they have been used as febrifuges. A small part of the order is tropical, but in its most genuine form it consists of herbaceous or undershrubby plants, delighting in the shade of groves and thickets in the cooler parts of Europe and Asia. Nearly all the flowers are yellow, those of H. cochinchinénse are dull red.

1617 Hypéricum *W* 1618 Ascýrum *W.* 694 Parnássia *W*

Order XXXVI GUTTIFERÆ.

Trees or shrubs found in the hottest parts of the world, and well known by their thick entire opposite leaves and resinous juice. In the countries where they grow they are of great importance. One, the Garcinia mangostána, bears a fruit, the equal of which is supposed not to exist. The well known Gamboge is the inspissated juice of Garcinia Gambógia, and, perhaps, other species; the juice of others is found an efficacious vermifuge, and also a remedy for the chiggers, one of the worst pests of equinoctial America. The bark and fruit of many Garcinias are astringent. The unripe fruits of Gri'a cauliflóra are pickled. The flowers of all the order being showy, the foliage good, and the properties interesting, every species deserves cultivation.

1079 Garcinia *W* 1190 Mammæa *W* 2151 Clúsia *W*
1085 Cancúla *W* 1616 Xanthochymus *Roxb* 1188 Gria *W*
1189 Calophýllum *W*

Order XXXVII VINIFERÆ.

The vine is the type and representative of this order. Cissus and Ampelópsis differ little from it in botanical characters, and not at all in habit. The common grape is the only species that bears really good fruit, the American kinds, with large fleshy berries, being spoiled by a disagreeable foxy flavor, which is not found to be removed by cultivation.

501 Vitis *P S* 502 Ampelópsis *W* 505 Cissus *W* 454 Leéa *W*

Order XXXIII GERANIACEÆ.

The Gerániums are well known to all gardeners for their beauty, and the facility with which hybrid varieties are produced among them. Geránium and Erodium are chiefly natives of the northern hemisphere, and Pelargónium of the southern. Different as they appear from Viniferæ in most respects, there are some points in which a curious resemblance may be found between the two orders. The young stems of both are articulated and separable at the articulations, and the lower leaves are opposite, while the upper ones are alternate. In Geraniaceæ no tendrils are produced, but the peduncles are opposite to the leaves, as in Vitis, and occupy the place of tendrils. M. Decandolle observes, that of the true Geraniaceæ, some are slightly acid, especially those of which the leaves and bark are succulent, several exhale a resinous smell which is sometimes agreeable, but occasionally so powerful as to be unpleasant. The resinous principle is so abundant in Geránium spinósum, that its stem burns like a torch, and exhales an agreeable perfume. The most common property of European geraniums is to be astringent, which is chemically determined by their juice being blackened by sulphate of iron, this is particularly remarkable in G. Robertiánum and sanguineum, which are both accounted vulnerary, and in G. moschátum, praténse, and others, in which it is united to a slight aromatic principle, whence they have been recommended for various purposes, and among others for removing calculous disorders. The astringent property of the geraniums is also present in G. maculátum, which grows in much abundance about Philadelphia, the root of this plant, boiled in milk, is used for the cholera in children. Barton is of opinion, that it would be a good substitute for gum kino in nephritus and obstinate diarrhœas.

1460 Eródium *W* 1461 Pelargónium *W* 1463 Geránium *W* 1465 Monsónia *W*

Order XXXIX OXALIDEÆ.

Formerly confounded with the last order. It is the opinion of modern botanists, that the species are more nearly allied to Rutaceæ or Zygophylleæ, and that their character and peculiar habit is quite sufficient to distinguish them. The beauty of the genus Oxalis is very great, and the readiness with which the species may be cultivated and caused to flower, would have been expected to make them universal favorites, they are not however, much seen in cultivation. Their properties are well known, all of them have a slightly acid taste, whence some have occasionally been employed as salad, their acidity is very agreeable and depends upon the presence of a small quantity of oxalate of potassa. In some of the species of equinoctial America oxalic acid exists in great abundance. Several species are employed in Brazil as a remedy for certain fevers of that country.

1064 Biophýtum *Dec* 1065 Oxalis *W* 1058 Averrhóa *W*

Order XL TROPÆOLEÆ.

These are climbing or trailing herbs with handsome solitary axillary flowers, and fleshy stems and leaves. They are distinguished from Geraniaceæ by their stamens being separate, and not agreeing in number with the petals, by their axillary flowers, and fleshy indehiscent fruit. It is very curious, that this is the only order in which the peculiar acrid flavor of Cruciferæ is found to exist. Tropæ'olum pentaphýllum, with probably other species, is a powerful antiscorbutic. All are natives of shady places in various parts of South America. The roots of some are fleshy and eatable.

875 Tropæ'olum *W*

Order XLI BALSAMINEÆ.

The flower of this order has been remarked by a learned botanist to be that of Fumariaceæ, the capsule of Oxalis, the embryo of Linum, and the habit peculiar. The well known elastic spring with which the seeds are ejected, constitutes a principal character of the order. All the species are annuals, with the exception of Impátiens frutéosa, they delight in moist hot situations, generally within the tropics, and are remarkable for the singularity and varied colors of their flowers.

538 Impátiens *W*

Order XLII. ZYGOPHYLLEÆ.

The hardness of the wood of the shrubby species of this order is most remarkable, if the softness of the stems of the herbaceous ones is remembered. To this the extreme difficulty of propagating Guaiacum is to

be attributed Zygophýllum Fabágo is employed as an anthelmintic, but it is in the Guaiacum that the great medical virtues of the order are found all the genus is extremely exciting, the wood and bark of Guaiacum officinále and sánctum have a rather bitter acrid flavor, and are principally used as sudorifics, diaphoretics, or alteratives, they have been found to contain a particular substance differing both from gum and resin, which has been called guayacine Many of the species bear beautiful flowers, especially the Tribuluses, which with their brilliant yellow Cistus-like blossoms, enliven many a barren rock in the tropics. None are found in the colder latitudes of the world

994 Zygophýllum *W.* 995 Fagónia *W.* 996 Tribulus *W* 993 Guaiacum *W.*

Order XLIII. MELIACEÆ

The nearest affinity of this order is probably with Sapindaceæ It is particularly distinguished by the stamens being united into a tube bearing the anthers. The leaves are usually pinnated, and most of the species, which are all either trees or shrubs, are natives of tropical forests Mélia bears bunches of fine lilac colored flowers, but few of the genera are interesting on account of their inflorescence The qualities of the different species are little known Canélla álba is aromatic, and is used in equinoctial America as a spice The bark of Guárea trichiloides is said by Aublet to be purgative and emetic The pulpy fruit of Mélia Azedarách is said to be poisonous, both this part and the inner bark have been used as anthelmintics either in substance or in decoction It is asserted by Michaux, that the pulp that surrounds the kernel is considered in Pekin a specific in scrophulous cases The oil expressed from the seeds of the same plant is said to have strong antispasmodic powers

888 Guárea *W* 988 Mélia *W* 991 Ekebérgia *W*
987 Trichília *W* 989 Quivísia *Cav* 992 Heýnea *Roxb.*

Order XLIV CEDRELEÆ

Some of the finest trees of the tropical regions of the globe are comprehended in this order, as the well known mahogany, and the New Holland cedar, which is a species of Cedréla Their winged seeds distinguish them from Meliaceæ The bark of Cedréla Fúna is employed in the East Indies as a febrifuge, as is also that of the mahogany in the West But the most powerful remedy for fevers in the whole order is the Soymida of the West Indies, which is the produce of Swieténia febrífuga, its taste is bitter and nauseous, and its virtues are extolled as equalling those of Cinchóna

990 Swieténia *W* 531 Cedréla *W.*

Order XLV AURANTIACEÆ

These are also known under the name of *Hesperideæ* They consist of trees or shrubs of the greatest beauty and utility The well-known orange and lemon are the representatives of the order, the characters of which are so well defined that there is no material deviation from the type afforded by those species The thick leaves, articulated with their petiole, and abounding in transparent reservoirs of odoriferous oil, are the most obvious peculiarities The flowers are fragrant, and the fruit in all cases fleshy, and generally eatable The wood is particularly close-grained The volatile oil contained in the reservoirs of the leaves and fruit possesses powerful tonic and stimulating properties M Decandolle thus explains the singular structure of the fruit of the orange In the opinion of this learned botanist it consists, first, of a thick, valveless, indehiscent indusium or coat, which is most likely to be considered a continuous torus Secondly, of several carpella, verticillate around an imaginary axis, often separable without laceration, membranous, and either containing seeds only, or filled with pulp, lying in innumerable little bags proceeding from the inner coats of the cells

500 Triphásia *Lour.* 1004 Glycósmis *Corr* 1005 Murraya *W* 1196 Æ'gle *Corr*
1003 Limónia *W* 1615 Citrus *W* 1006 Coókia *W.* 2149 Feronia *Corr.*

Order XLVI TERNSTROMIACEÆ.

A very small order, consisting wholly of trees or shrubs, bearing handsome white or yellowish flowers They are nearly related to Camellieæ, from which they do not differ at all in habit Nothing is known of their properties Noronha states that a species of Saurauja found in Java has a subacid fruit, in flavor resembling the Tomato, and that it is eaten by the Javanese under the name of Koleho

1083 Eúrya *Th* 1494 Gordónia *W* 1495 Stuártia *W*

Order XLVII CAMELLIEÆ

Camellias are too well known in our gardens to render it necessary to say much upon their peculiarities The Camellia is one of the most beautiful, and the tea one of the most useful, plants in the world Both are natives either of China, Japan, or Nepal The tea is well known for the stimulating influence of its decoction upon the nerves, which is attributed by Cullen to the presence of a narcotic principle The seeds of Camélia oleífera yield a fine oil None of the species bear fragrant flowers Their nearest affinity is with Ternstromiaceæ, from which they probably ought not to be separated

1496 Camélia *Ker*

Order XLVIII OLACINEÆ

Smooth trees or shrubs, with simple stalked exstipulate alternate entire leaves, and little axillary flowers Botanists doubt whether what is called a calyx is not rather an involucrum, in which case the corolla would become a calyx, and the station of the order among Monochlamydeæ, rather than in this place

890 Ximénia *W*

Order XLIX. RUTACEÆ.

An interesting and extensive, but rather heterogeneous, group of plants, natives of all countries and all situations The species are either fetid northern herbaceous plants, as the garden rue, or neat heath-like southern shrubs, with an aromatic odor, as the Cape Diósmas, broad or long-leaved Australasian shrubs, with a stellate pubescence, as Phebálium, or tropical trees with panicles of pallid minute flowers, as the Cuspárias and Xanthóxylums The order contains nearly 500 species, of which but a small proportion is in our gardens The medical properties of many genera are considerable Rúta and Péganum are eminenagogue, anthelmintic, and sudorific. Diósma abounds in a volatile oil of an agreeable smell, but acrid flavor, several of its species are reputed antispasmodics The Xanthoxylums are said to possess acrid, stimulating, or tonic qualities, Cláva Hérculis and fraxíneum are said, in America, to be powerful sudorifics and diaphoretics According to Barton, they possess a remarkable power of exciting copious salivation, not only when applied to the mouth, but even when taken internally, they have both been found powerful remedies in paralysis of the muscles of the mouth Xanthóxylum caribæ'um is regarded in Guiana as a detersive vulnerary and febrifuge The famous febrifugal Angostura bark is the produce of Cuspária febrífuga.

Tribe 1 Ruteæ.

998 Ráta *W* 1088 Péganum *W* 1293 Melánthus *W* 905 Jambolifera

Tribe 2 DIOSMEÆ.

997 Dictámnus *W* 999 Crówea *Sm.* 517 Diósma *W. en.* 520 Agathósma *W en*
528 Calodéndrum *W* 878 Horónia *Sm.* 518 Adenándra *W en.* 1965 Empleúrum *W*
880 Correa *W* 304 Ziéria *Sm* 519 Baryósma *W. en*

Tribe 3 ZANTHOXYLEÆ.

303 Fagára *W* 2066 Xanthóxylum *W*

Tribe 4 CUSPARIEÆ.

41 Galipéa *Aubl.* 1500 Monniéria *W.*

ORDER L. CORIARIEÆ

Five species constitute the whole of this order, distributed in South Europe, New Zealand, Peru, and Mexico They possess no beauty, and are only interesting on account of their problematical station in a botanical arrangement The leaves of C myrtifólia are astringent, and are employed in dying black Its berries are very poisonous On one occasion, during the Spanish war fifteen French soldiers were taken ill after eating them, and three died from their powerful narcotic effects.

2091 Coriária *W*

Section 4 *Fruit (gynobasic) inserted into a fleshy receptacle, with which the style is continuous.*

ORDER LI OCHNACEÆ

Beautiful yellow-flowered tropical shrubs or trees with lucid leaves The roots and leaves of Walkéra serráta, a Cingalese plant, are bitter, a decoction of them, either in water or milk, is used in Malabar as tonic, stomachic, and antiemetic The bark of Gomphia hexasperma is found useful in healing sores produced in cattle in Brazil by the stings of insects

1001 Gómphia *W* 1101 Ochna *W*

ORDER LII SIMARUBACEÆ

Thirteen plants, found in equinoctial America, constitute this order They are trees or shrubs, with an intensely bitter bark, a milky juice, and pinnated leaves The Quassia is well known as the most pure and intense bitter hitherto discovered, the same property exists, in a milder degree, in the rest of the order Quássia amára is a very ornamental plant, but rare, at present, in collections

1002 Quássia *W*

SUBCLASS II CALYCIFLOREÆ

Petals separate, inserted into the calyx

ORDER LIII CELASTRINEÆ

This order differs from the succeeding, in having the stamens alternate with the petals, the sepals imbricated in æstivation, and the ovarium wholly superior It consists entirely of shrubs or small trees, with simple, rarely compound, alternate or opposite leaves, and inconspicuous flowers of a greenish or white color Several are favorite ornaments of our shrubberies, as the Staphyléa, the Celástrus, and the Euónymus, the latter of which is valued on account of its beautiful-colored fruit The fruit of Euónymus europæus is a brisk purgative, as is also the inner bark, and in strong doses powerfully emetic The famous Paraguay tea is the foliage of a species of Ilex The bark of Prinos verticillátus possesses such active, astringent, bitter, tonic, and febrifugal qualities, that it is used in North America, with success, as a substitute for Cinchóna A decoction of the twigs of Maytenus boária is used to bathe the swellings produced by the poisonous shade of the tree Lithi

Tribe 1 STAPHYLEACEÆ

684 Staphyléa *W*

Tribe 2 EUONYMEÆ

509 Euónymus *W* 507 Celástrus *W* 91 Maytenus *Mol* 516 Flœodéndrum *W*

Tribe 3 AQUIFOLIACEÆ

682 Cassine *W* 605 Bumálda *Th.* 828 Prinos *W*
301 Hartógia *W* 314 Mygínda *W* 543 Plectrónia *W*
300 Curtísia *W* 315 Ilex *W* 514 Schrebéra *Retz*

ORDER LIV RHAMNEÆ

In habit, this altogether agrees with the last, from which the medical properties of the species are not widely different Throughout the order, as far as it has been examined, there is a remarkable agreement between the fruit and the inner bark, especially in Rhámnus catháricus, frangula, and others, in which they both are purgative and emetic Some, as the Jujuba, and the African Lote, nevertheless, yield a wholesome and agreeable fruit, and the berries, of the greater number, yield, under the chemist's hands, green or yellow dyes of much importance in manufactures The leaves of Rhámnus theézans are substituted for tea by the poorer sort among the Chinese The bark of Ceanóthus cæruleus is esteemed in Mexico as a good febrifuge

506 Zizyphus *W.* 503 Rhámnus *W* 542 Phylica *W* 532 Hovénia *Th.*
505 Paliúrus *Gært* 510 Ceanóthus *W* 2146 Gouánia *W* 2060 Schæffèria *W*
504 Œnópia *Mich.* 512 Pomadérris *W*

ORDER LV BRUNIACEÆ

Small heath like shrubs, all natives of the Cape of Good Hope, and extremely ornamental, both in flower and foliage Their properties are unknown

533 Brúnia *W* 511 Stáavia *W*

ORDER LVI SAMYDEÆ

Tropical shrubs or small trees, with entire, stipulate, alternate leaves, covered with pellucid dots, and axillary flowers of little show Some of the species of Samyda are pretty, but very rare Their properties are unknown M Decandolle remarks, that in their fruit they approach Bixineæ and Flacourtianeæ, but on account of the position of their stamens must be arranged in the vicinity of Rhamneæ and Rosaceæ

1034 Samyda *W*

Order LVII. HOMALINEÆ.

Evergreen handsome shrubs, with alternate leaves and deciduous stipulæ, they are readily known by their parietal placentæ, an unusual character among the orders that surround them Blackwéllia fagifólia has fine bunches of starry white fragrant flowers Aristotélia is an evergreen half hardy shrub, with eatable berries Little is known of their medical properties, the root of Homálium Racoúbea is used in Guiana as a cure for gonorrhœa

1108 Blackwéllia *Juss.* 873 Astránthus *L.* 1084 Aristotélia *W*

Order LVIII TEREBINTHACEÆ.

This order is, notwithstanding the labors of several botanists, in a very confused state, from want of sufficient knowledge of many of the genera, which have been hitherto imperfectly described, it is difficult either to determine the value of the characters assigned to the tribes, or the dignity of the tribes themselves. All the species are shrubs or trees, with alternate exstipulate leaves, and inconspicuous flowers, and abound in a balsamiferous resin, which is chiefly present in the leaves and bark, and from which the denomination of the order has been derived Notwithstanding the minuteness of their flowers, many of the species are valuable as ornamental plants, on account of the beauty of their foliage, others for the sake of their utility in arts or medicine, and others for their fruit The walnut, the Cashew nut, and the Pistachio are valuable for their nuts, which are well known articles of the markets of Europe The Spóndias and Mángo are equally famous in the tropics The well-known balsam of Tolu is the produce of the Toluifera, the balsam of Mecca, of the Amýris gileadensis, and balm of Acouchi, of the Icica acuchini, gum comes from Amýris elemifera and Icica leptophýlla, mastich from Pistácia atlántica and lentiscus, and Venetian turpentine from Pistácia terebínthus Schinus Mólle produces a resin which in Peru is used as a dentrifice, as myrrh is with us Some of the best varnishes are prepared from the exudation of Amýris guianénsis, Rhús vérnix, copallína, and others, the finest kinds of incense are also afforded by plants of this order, such as the wood and resin of the different species of Icica, of Amýris balsamífera, and of Canárium commúne, the Coumia, which is used in Guiana for such purposes, and finally, the Boswellia thurífera, which is the true frankincense of Indian temples But among the fragrant and wholesome plants of which the order chiefly consists, he concealed others in which acrid and poisonous qualities no less abound Such are several pieces of Rhus, the juice of which produces blisters upon the skin, and the Amýris toxífera, the juice of which is accounted poisonous To conclude this long list of the uses and dangers of Terebinthaceæ, the bark of Brúcea is used as an astringent in dysenteries, that of Rhus glábra as a febrifuge and as a mordant for red colors, and that of Rhus coriária as a powerful means of tanning skins of animals It is curious to remark how strongly Terebinthaceæ are connected with Amentaceæ through Júglans

Tribe 1 Anacardieæ

937 Anacárdium *W* 2067 Pistácia *W* 2067 Picramnia *W*
515 Mangifera *W* 85 Comocládia

Tribe 2 Sumachinæ

681 Rhus *W* 2093 Schinus *W*

Tribe 3 Spondiaceæ

1059 Spóndias *W*

Tribe 4 Burseraceæ

2164 Burséra *W* 1010 Garúga *Roxb*

Tribe 5 Amyrideæ

889 Amyris *W*

Tribe 6 Ptelleaceæ

298 Ptélea *W* 529 Toddália *Lam* 84 Cneórum *W* 683 Spathélia *W*

Tribe 7 Connaraceæ

1057 Cnéstis *Lam* 2061 Brucea *W*

Tribe 8 Juglandeæ

1999 Juglans *W*

Order LIX LEGUMINOSÆ

The family to which the various kinds of pulse belong is one of the most familiar to the world, and at the same time one of the most useful to mankind Their papilionaceous flowers characterise a large number, and their pods and pinnate leaves the remainder, with a few exceptions, which it is not necessary to particularise As objects of ornament, many are possessed of unrivalled beauty, for example, among hardy flowering trees, the Robinia and the Labúrnum, among shrubs, for decorating the borders of the flower-garden, the various tribes of Cýtisus, Caragána, Colutèa, Amórpha, and others, among hardy climbers, the far famed Glýcine of China, and its sister of North America, with the species of the herbaceous genera Vícia and Láthyrus, and, lastly, among hardy herbaceous plants, the numerous species of Lupínus and Astrágalus Great, however, as is the beauty of the Leguminosæ which can brave the inclemencies of the seasons of Northern Europe, it must give way before the splendor and elegance of their brethren of the tropics The flowers of the Erythrina, or Coral tree, are of the deepest crimson, and borne in profusion upon some of the loftiest trees of the forest The Bauhínias, with their snake-like stems and twin leaves, hang in festoons of flowers from branch to branch of other trees, and are only rivalled by the less vigorous and elegant, but more richly colored blossoms of the Carpopógons But all these, with their broad heavy foliage and gaudy colors, are far surpassed by the rugged trunks, trembling airy foliage, and golden flowers of the Mimósa, which cast a charm over even the most sterile deserts of burning Africa While the forests of hot countries are thus indebted to species of this order for their timber, the meadows and pastures of the same latitudes are enamelled with the flowers of myriads of Hedýsarums, and animated by the wonderful motion of sensitive plants As in our own country, the gayest part of our scenery is in many places indebted to the yellow flowers of our furze and broom, so in other countries the same effect is produced by other genera of Leguminosæ, by Lupária, Borbónia, and Aspálathus, at the Cape of Good Hope, and by the Pultenæ'as, Daviésias, Aótuses, and multitudes of similar genera in New Holland The wood of the order is very hard and durable, with a yellow tinge, sometimes changing into green, as in the Labúrnum of Europe, and in the better known Brazil wood of commerce, produced by Cæsalpínia The following useful remarks upon the properties of the order are made by M Decandolle —

"The family of leguminous plants, though established upon characters of primary importance, offers, nevertheless, so large a number of species and such singular botanical anomalies, that it is easy to foresee that its properties will exhibit little uniformity Still more exceptions may be anticipated if one reflects, that the chemical principle which is found most abundantly in every part of leguminous plants, and to which we must attribute their principal properties, is the extractive It is probable that this principle, either from its own nature, or from its peculiar power of uniting with different matters, or perhaps instead of being a simple principle, it is rather a compound of different matters, it is probable, I say, that the extractive principle exhibits

much less uniformity in its results than any other. It is, without doubt, to the presence of the extractive principle, in considerable quantities, that many leguminous plants owe their purgative properties, which are common to several extracts, and which many chemists attribute to the acetate of potash, which they are almost universally found to contain Thus the leaves and foliaceous pods of Cássia sénna *Lin.*, of Cássia lanceoláta *Forsk*, of Cássia emarginàta of the Antilles, of the Cássia marylándica employed in the United States, of Colùtea arboréscens, of Spártium púrgans, and perhaps also of Coronilla émerus, act as brisk purgatives, and often cause wind and pain in the bowels The juice of Coronilla vária excites vomiting, and may even become poisonous when taken in too large quantities It is, perhaps, from a different cause that the pulp which is contained in the husks of leguminous plants operates upon the human body, it purges gently without causing the least pain, and ought to be considered as laxative rather than purgative. Such is the character of the juicy pulp that exists in the Cássia fistula *Lin*, in the Tamarindus indica *Lin*, in the Ceratónia siliqua *Lin*, and probably in the Mimósa inga and the M fagifólia, which are eaten in small quantities in the Antilles, but which, taken more copiously, would have the same effect as our Carobs There are some fruits of Leguminosæ, for example, the Sophóra and the Gleditschia, with tumid pods, in which is found a juice which surrounds, it is true, the seeds, as in the plants just mentioned, but which differs from them altogether in its very astringent and nauseous flavor, the nature and properties of this juice deserve to be examined by chemists, and would undoubtedly throw some light upon the nature of Leguminosæ I am induced to think, that the astringent juice of the Sophóra is a secretion of the pericarp, whilst the sweet and purgative juice of the Cássia would be a secretion of the external part of the seed, but this hypothesis requires to be verified what leads me to this opinion, is the flavor commonly found in husks, in the Carobs, for example, the husk is astringent, and the pulp sweet and laxative But let us return to the properties which may be attributed to the extractive principle It is undoubtedly from some one of these modifications that the singular property of the Piscídia and many Galégas is derived, which are employed in America to stupefy fish, which are taken by this means as readily as with Nux vómica The decoction of the root of Galéga virginiána is considered in America as a powerful vermifuge It is, perhaps, indeed, to the very same cause that the rubefacient powers of the fresh leaves of some Leguminosæ are to be ascribed, which act readily upon the skin if applied as plasters, as, for example, in Ornithopus scorpioídes among ourselves, and Hyperanthera moringa elsewhere It appears to me, that it is to the greater or less considerable mixture of the extractive principle with the fæcula contained in the seed, that the different properties of the pulse of leguminous plants may be attributed. If found in small quantities, the seed may serve as food for man and animals, as we see in French beans, peas, lentils, chick peas, beans, and many others, &c If found in a more considerable quantity, it will render them purgative or emetic, as in the Cytísus labúrnum, the Anagýris fœtida, and even in most Coronillas It is remarkable that the botanical characters of Leguminosæ should so strictly agree with the properties of their seeds the latter may be divided into two sections, namely, first, those of which the cotyledons are thick and filled with fæcula, and destitute of cortical pores, and which, moreover, in germination do not undergo any change, but nourish the young plant by means of that supply of food which they already contain, secondly, those of which the cotyledons are thin, with very little fæcula, and furnished with cortical pores, and which change at once into leaves at the time of germination for the purpose of elaborating food for the young plant. All the seeds of the first section are employed as food in different countries, none of those of the second section are ever so employed, the Cajan, which has long been classed among the Cytísi, was apparently an exception to this general rule, but observation has proved the contrary Bearing in mind its known properties, I formerly paid particular attention to its structure, and I have shown in a note which accompanies my catalogue of the Montpelier garden, that the Cajan forms a particular genus much more nearly allied to the French bean than to the Cytísi, and that it, in fact, belongs to the first of the sections which I have just described. The seeds of Leguminosæ present also many other anomalies more difficult to reduce to any fixed laws thus some are found which contain a rather large portion of fixed oil, such as the seed of the Arachis hypogæa, lately introduced into European agriculture, and that of Guilandina moringa which produces oil of ben, there are some, of which the flavor and smell are rather powerful, as the seed of Dipterix or Coumaroúna odóra of Aublet, which, under the name of Tonquin bean, is used for perfuming snuff, there are others which, like the chick pea, have rather a bitter taste and exciting properties, and are on that account administered for the jaundice There are others again, like those of the Andira, which are so bitter as to be used in Java and Brazil as tonic, alexiteric, and vermifuge In a word, are not the aperient and diuretic properties which are observable in the herbage and the roots of many leguminous plants, such as broom, beans, Onónis, Guilandina ringa and moringa, Anthyllis crética, &c to be attributed to a modification of this extractive principle? There are, in another view, roots which are furnished with tubercles, that is to say, with reservoirs of fæcula which furnish mankind with wholesome food, as we see in the Láthyrus tuberósus, which is eaten in Holland, the Dólichos tuberósus, and the D bulbósus, which the Indians use as food The roots of the liquorice have a sweet and mucilaginous taste, which is well known by every body, and which, united to an acrid and rather exciting principle, causes it to be employed as a pectoral, the analysis of this root, published by M Robiquet, proves that independently of its woody skeleton, the same kind of amylaceous fæcula is found as in the tuberous roots of which we have just been speaking, it is thence seen that the acrid flavor of decoctions of liquorice depends on the small quantity of resinous oil which it contains, and that its sweet properties are by no means analogous to common sugar, since it is insoluble in cold water, soluble in warm water or in alcohol, not capable of fermentation, and does not yield to the action of nitric acid any of the known products of sugar It may here be added, that the sugary flavor of liquorice, and its other properties, are not confined to this genus, they are found equally in the roots of Tritolium alpínum, vulgarly called Mountain liquorice, in those of the Abrus precatórius, from which a pectoral draught is prepared in Hindoostan, called Velti, and in others The barks of some trees of the leguminous class, are remarkable for their bitterness, and are used as febrifuges, the different kinds of Geoffróya possess this bitter and febrifugal quality in a remarkable degree, in India, the bark of the Æschynómene grandiflóra and of the Cæsalpínia bonducélla are employed for the same purpose The barks of many leguminous plants are also remarkable for their astringent qualities, caused by the quantity of tannin which they are found to contain, this is observable in the Acácia Cátechu, and in the Acácia arábica, which is used for tanning leather, and elsewhere It is well known that almost all coloring matter proceeds from the extractive principle, and as it appears that this principle abounds in Leguminosæ, we ought to find in them a considerable number of the colors which are used by dyers: to this family, in fact, belong the principal blue colors, known by the name of indigo, extracted from every kind of Indigófera and from some Galégas, and the red colors, which are yielded by all the species of Cæsalpínia and of Hæmatóxylon We may add the red juice, which is drawn from the Pterocárpus dráco and Santalinus, under the name of sandal and of dragon's-blood, from Erythrina monospérma, under the name of gum lac; and also from Dalbérgia monetária These juices appear to differ in many particulars, but their history and analysis are at present so far from being known, that it is impossible to form a true estimate of the nature of their differences. But anomalies of this nature are far from being confined to the plants just mentioned Among the exotic drugs employed in the arts they are very common such, for example, are the balsam of Capivi, produced by the Copaífera, the balsam of Peru, which, Mutis says, is obtained from Myróxylon, the Cachou, which has been found to be almost pure tannin, and which is supposed to be produced by Acácia Cátechu, of the same character is that remarkable resin that is yielded by Hymenæa Courbaril, gum Arabic, produced by the bark and roots of Acácia senegalénsis, nilótica, arábica, and others; gum tragacanth obtained from Astrágalus créticus, gummífera, and vérus, and finally, *manna*, secreted by Hedýsarum alhági"

The arrangement of this tribe of plants has been found to be attended with much difficulty By Linnæus, and the writers who succeeded him, the number of genera was much smaller than those admitted by botanists of the present age, many additions have been made in consequence of the discovery of New Holland, and a large number of subdivisions in old genera have been from time to time introduced by one writer or another To combine these scattered improvements under one uniform system has lately been attempted by the learned botanist, from whom the foregoing extract has been taken This was not executed at the time when those parts of the present work, in which leguminous plants are found, were written, for which reason the names

of the suborders will not be found in the body of the work. M Decandolle's method, however, being here adopted, it will be useful to explain the principles upon which it is founded. He divides Leguminosæ into two grand divisions, the first of which consists of plants, the radicle of whose seed is curved back upon the edge of the cotyledons, and the second of those whose radicle and cotyledons are straight: the former are CURVEMBRIÆ, the latter RECTEMBRIÆ. In the *Curvembriæ*, certain diversities in the structure of the calyx and corolla again divide into two principal forms, one of which, comprehending all the genera with papilionaceous flowers, is called Papilionaceæ, and the other, consisting of a very small number of species, with one or two petals or more, and an obscurely lobed calyx, is called Swartzieæ. The last is not subdivided, but the Papilionaceæ resolve themselves into the two great tribes pointed out by M Decandolle, namely, those with fleshy cotyledons and eatable pulse, *Sarcolobæ*, and those with foliaceous cotyledons and seeds which are not eatable, *Phyllolobæ*. Each of these is divisible by three, upon slight differences in the fructification. In *Rectembriæ* two suborders, Mimoseæ and Cæsalpineæ, are formed upon variations in the æstivation of the calyx and corolla; in the former, it is valvate, in the latter, imbricated; the first constitute a single tribe, the latter divide into three, distinguished by less momentous peculiarities of structure. Having premised thus much, the following tabular explanation will be intelligible:

I CURVEMBRIÆ
- PAPILIONACEÆ.
  - *a.* Phyllolobæ
    - Tribe 1 *Sophoreæ*. Pod continuous. Stamens distinct.
    - Tribe 2. *Loteæ*. Pod continuous. Stamens united by the filaments.
    - Tribe 3. *Hedysareæ*. Pod with transverse articulations. Stamens mostly united by the filaments.
  - *b* Sarcolobæ
    - Tribe 4 *Viciæ*. Pod polyspermous, dehiscent. Leaves cirrhous, the first alternate.
    - Tribe 5 *Phaseoleæ*. Pod polyspermous, dehiscent. Leaves not cirrhous, the first opposite.
    - Tribe 6 *Dalbergieæ*. Pod one or two-seeded, indehiscent. Leaves not cirrhous.
- 2. SWARTZIEÆ. Tribe 7. *Swartzieæ*

II RECTEMBRIEÆ.
- 1 MIMOSEÆ. Tribe 8 *Mimoseæ*
- 2. CÆSALPINEÆ
  - Tribe 9. *Geoffreæ*. Sepals and petals imbricated in æstivation. Stamens variously connected by the filaments.
  - Tribe 10 *Cassieæ*. Sepals and petals imbricated in æstivation. Stamens distinct.
  - Tribe 11. *Detarieæ*. Sepals before expansion indistinct, calyx bladder-like. Petals 0.

SUBORDER I. *PAPILIONACEÆ*

Tribe 1 SOPHOREÆ

941 Sophóra *H K.*
940 Edwárdsia *Sal*
942 Ormósia *Jacks*
945 Virgília *Lam*
943 Anagýris *W.*
944 Thermópsis *R Br*
947 Baptísia *R Br.*
946 Cyclópia *R Br*
948 Podalýria *R Br*
949 Chorozémia *Lab*
950 Podolobium *H K*
951 Oxylóbium *H K*
952 Callistachys *Vent*
953 Brachysèma *H K*
954 Gompholóbium *H K.*
955 Burtónia *H K*
956 Jacksónia *H K*
957 Viminária *H. K*
958 Sphærolóbium *H K.*
959 Aótus *H K*
960 Dillwýnia *H. K.*
961 Eutáxia *H K.*
962 Sclerothámnus *H K.*
963 Gastrolóbium *H K*
964 Euchílus *H K*
965 Pultenæ'a *H K*
966 Daviésia *L T*
967 Mirbélia *L T.*

Tribe 2. LOTEÆ

Subtribe 1 *Genisteæ*

1536 Hóvea *H K*
1525 Platylóbium *Sm*
1531 Bossiæ'a *Sm*
1534 Goódia *R Br*
1532 Scóttia *R Br*
1533 Templetónia *H K*
1527 Ráfnia *Th*
1526 Borbónia *W*
1565 Lupária *W*
1584 Hálla *Th.*
1530 Crotalária *W.*
1523 Vibórgia *W*
1535 Loddigésia *B. M.*
1539 Lebéckia *W*
1529 Sarcophýllum *Th*
1528 Aspálathus *W*
1540 Ulex *W*
1537 Spártium *W*
1538 Genista *W*
1566 Cýtisus *W*
1541 Onónis *W*
1542 Anthýllis *W*

Subtribe 2. *Trifolieæ.*

1605 Medicágo *W*
1603 Trigonélla *W.*
1598 Melilótus *J*
1600 Trifólium *J*
1599 Lupináster *Ph*
1604 Dorýcnium *W.*
1601 Lótus *W.*
1602 Tetragonólobus *Roth*
1606 Hymenocárpus *W*

Subtribe 3 *Clitoreæ*

1597 Psorálea *W*
1589 Indigófera *W*
1556 Clitória *W*
1555 Galáctia *Mx*
1552 Glycine *L.*

Subtribe 4 *Galegeæ*

1501 Petalostémum *Mich*
1596 Dálea *P S*
1574 Glycyrrhíza *W.*
1575 Liquorítia *Monch.*
1591 Galéga *P S*
1590 Tephrósia *P S*
1545 Amórpha *W.*
1512 Nissólia *W*
1567 Mulléra *W*
1568 Robínia *W*
1581 Sesbánia *H K*
1524 Piscídia *W*
1569 Caragána *Royen*
1573 Colútea *L.*
1570 Swainsónia *H K*
1572 Lessértia *H K*
1571 Sutherlándia *H K*

Subtribe 5 *Astragaleæ*

1592 Phaca *W*
1593 Oxytropis *Dec*
1594 Astrágalus *Dec*
1595 Bisérrula *W*

Tribe 3 HEDYSAREÆ.

Subtribe 1. *Coronilleæ*

1579 Scorpiúrus *W*
1576 Coronílla *H K*
1578 Ornithopus *W*
1577 Hippocrépis *W*

Subtribe 2. *Euhedysareæ.*

1587 Zórnia *Mich*
1583 Stylosánthes *Sw*
1582 Æschynómene *H K*
1580 Smithia *Sal*
1588 Hedýsarum *W.*
1585 Lespedéza *Mich*
1586 Flemingia *Roxb*

Tribe 4. VICIEÆ.

1564 Cicer *W*
1561 Vicia *W.*
1562 Ervum *W.*
1563 Ervília *Lk*
1560 Pisum *W.*
1558 Láthyrus *W.*
1557 Orobus *W.*
1559 Ochrus *Bauh.*

Tribe 5 PHASEOLEÆ.

1643 Róthia *W*
1546 Abrus *W.*
1548 Terámnus *Browne*
1553 Kennédia *Vent.*
1547 Phaséolus *W.*
1549 Carpopógon *Roxb.*
1551 Stizolóbium *P. S.*
1550 Dólichos *W*
1544 Lupinus *W*
1554 Cylista *W.*
1521 Erythrina *W.*
1522 Bútea *W.*

Tribe 6. DALBERGIEÆ.

1514 Pongámia *Vent.* 1515 Pterocárpus *W* 1520 Amerimnum *W.*
1513 Dalbérgia *W* 1516 Ecastaphýllum *Rich*

SUBORDER II or Tribe 7 *MIMOSEÆ.*

2124 Mimósa *W* 2125 Schránkia *W* 982 Adenanthéra *W.* 2127 Acácia *W.*
2123 Inga *W* 2126 Desmánthus *W* 984 Prosópis *Roxb.*

SUBORDER III *CÆSALPINEÆ*

Tribe 8 GEOFFREÆ.

1543 Arachis *W.* 1517 Geoffroya *W* 1464 Brównea *W* 1518 Dipterix *W.*

Tribe 9 CASSIEÆ.

2155 Gleditschia *W* 985 Hæmatoxylon *W.* 974 Cássia *W* 1519 Parivóa *Aubl.*
2094 Gymnocládus *W* 976 Parkinsónia *W* 975 Cathartocárpus *P S* 972 Hymenæ'a *W*
979 Guilandina *H K* 983 Cádia *W* 971 Afzélia *Sm.* 970 Bauhinia *W.*
978 Cæsalpinia *H K* 2156 Ceratónia *W* 969 Schótia *W* 968 Cércis *W*
977 Poinciána *H K* 967 Jonésia *W* 986 Copaifera *W* 30 Codarium *Vahl*
981 Hoffmanséggia *Cav* 1449 Tamarindus *W* 973 Cynometra *W*

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980 Hyperanthéra *W.*

ORDER LX ROSACEÆ.

With the exception of Chrysobalanæ and Sanguisorbeæ, this order is so uniform in its appearance, that Rósa, the type from which all the other genera are to be considered variations, when justly understood, will be found to contain every form of structure which is essential to the order Having stated this, it will be at once obvious, that if the other genera have such close affinity to Rósa, they must also bear a great analogy in beauty And this is, indeed, the fact Amygdalus and Prúnus among trees, and Potentilla, Géum, and others, among herbaceous genera, rival the rose in their blossoms, and, in many particulars, surpass that most lovely of all flowers in foliage and general appearance But it is not for charms alone of smell, or blossom, or foliage, that this order has fixed itself so high in the estimation of mankind It has also the rare merit of comprehending all the most important of the fruits of the temperate regions of the world Thus the apple and the pear belong to Pyrus, the plum and the apricot to Prúnus, the peach and the nectarine to Amygdalus, Eriobótrya produces the loquat, Méspilus the medlar, and finally, the quince is borne by the Cydonia The medical powers of many plants of this order are not less active than their fruit is excellent The principal of these is the well-known Prussic acid, which exists in abundance in the leaves and kernels of many genera, especially of Prúnus and Amygdalus it is the basis of Laurel water, which, when taken in small doses, acts either as a violent purgative or as an emetic, and, in stronger doses, is said to destroy irritability without exciting inflammation; these properties, however, although thus dangerous in the distilled water of the laurel and other similar plants, can scarcely be said to exist in any important quantity in the plants in a state of nature The kernel of the bitter almond, for example, in which the Prussic acid is more abundant than usual, is used for many culinary and other purposes without any bad effect There are, however, cases in which it is said to be dangerous to eat the fresh leaves or kernels, as in the Prúnus virginiána, the leaves and fruit of which are reputed in the United States to be poisonous to certain animals Besides the Prussic acid, there are several other principles which abound in the order All Drupaceæ yield a gum which is nearly allied to gum Arabic, and which affords a strong evidence of the affinity that exists between Rosaceæ and Leguminosæ A great deal of astringency is found in many species, whence different parts have been occasionally employed as febrifuges, and as remedies for hæmorrhage, diarrhœa, and dysentery The root of the Tormentilla is used for tanning in the Ferro Isles, and that of the Capollin cherry in Mexico The bark of Prúnus virginiána is used as a febrifuge in the United States, Potentilla réptans has been praised for the same properties The root of Géum urbánum has been found, by Milandi and Moretti, to contain one eleventh of its weight of tannin, it has been used both in America and Europe as a substitute for Jesuit's bark The leaves of Dryas octopétala in the north of Europe, of Rúbus árcticus in Norway, of Prúnus spinósa and ávium, and of Rósa rubiginósa have been manufactured into a sort of substitute for tea The bark of the root of Gillénia trifoliáta is remarkable in having, in addition to the astringency already mentioned, an emetic property, on which account it is employed in North America as Ipecacuanha. It is said, that a similar power exists in other Spiræas

It must not be omitted, that the order Rosaceæ nearly answers to the Icosandria of Linnæus.

Tribe 1 CHRYSOBALANEÆ

1130 Chrysobálanus *W* 870 Parinárium *Juss.* 499 Hirtélla *W* 1080 Grangéria *Lam.*

Tribe 2. AMYGDALINEÆ.

1128 Amygdalus *W* 1129 Prúnus *W*

Tribe 3. SPIRÆACEÆ

1156 Kérria *Dec.* 1141 Spiræ'a *W.* 1142 Gillénia *Mönch.*

Tribe 4. NEURADEÆ.

1063 Grielum *W.*

Tribe 5. DRYADEÆ.

1159 Dryas *W* 1140 Waldsteinia *W* 1154 Tormentilla *L* 1101 Agrimónia *W.*
1161 Sievérsia *W* 1149 Rúbus *W* 1153 Potentilla *L* 1152 Comárum *W.*
1155 Géum *W* 1150 Dalibárda *Mich* 710 Sibbáldia *W.*
1160 Colúria *R Br* 1151 Fragária *W.*

Tribe 6. SANGUISORBEÆ.

255 Alchemilla *W* 1190 Potérium *W* 68 Ancistrum *L.*
256 Sanguisórba *W* 2106 Cliffórtia *W.*

Tribe 7. ROSEÆ.

1148 Rósa *W*

Tribe 8 POMACEÆ.

1132 Cratæ'gus *L.* 1137 Eriobótrya *Lindl* 1131 Méspilus *Lindl*
1136 Raphiolépis *Lindl.* 1139 Cotonéaster *Lindl* 1133 Pyrus *Sm.*
1135 Photínia *Lindl* 1138 Amelánchier *Lindl* 1134 Cydónia *Juss.*

Order LXI SALICARIÆ

Most of these are very showy plants, in particular the genera Lýthrum and Lagerstrœ'mia, which are the representatives of the order They are chiefly natives of temperate climates, on mountains and among bushes. Glaux and Péplis are common shore plants in England Heímia is remarkable for its yellow flowers Little is known of the properties of Salicariæ, they are mostly astringent, the common Salicária is used in inveterate diarrhœas, a species of Lýthrum is used in Mexico as a vulnerary and astringent, and Lawsónia, which is used by the Turkish women to stain their nails, is also supposed to possess similar properties. There is a plant of this order called Hanchinol in Mexico, which is said to possess much more remarkable powers than any of the preceding, its expressed juice, taken in doses of four ounces, excites violent perspiration and secretion of urine, and is said to cure venereal disorders in an incredibly short space of time

877 Grislea *W.*	1094 Lýthrum *W.*	302 Ammánnia *W.*	898 Lawsónia *W*
1097 Cúphea *Jacq*	1095 Nesæ'a *Kunth*	568 Glaux *W*	1031 Acisanthéra *J*
1195 Lagerstrœ'mia *W.*	1096 Heímia *Lk*	836 Péplis *W*	

Order LXII. MELASTOMACEÆ

All these are remarkable as handsome tropical shrubs or trees, with large purple or white flowers, and leaves with several costæ, or nerves as they are incorrectly termed The genera admitted in the body of the work are those received by the greater part of previous writers, they have been much increased, and apparently with great propriety, by Mr D Don The species are generally ill treated in collections, where they are not unfrequently to be found under the form of sickly stunted plants, instead of noble broad-leaved spreading shrubs, with masses of brilliant flowers To be grown well they require much heat, much moisture during the summer, and much pit-room and head-room The fruit of true Melástomas is a fleshy insipid juicy berry, which is for the most part eatable, and is often so deep a black as to dye the teeth and mouths of those who eat it. They are nearly related to Myrtaceæ, from which they differ in the want of essential oil, and of the dot like reservoirs of the leaves which contain it The juice of the leaves of M succósa and aláta is used as a lotion for recent wounds by the inhabitants of Guiana

899 Osbéckia *W.*	1029 Melástoma *W*	1075 Blákea *W*
900 Ithéxia *W.*	1030 Petalóma *W.*	

Order LXIII MYRTACEÆ

Dotted leaves, with marginal ribs, and an inferior ovarium and single style, are the great features of Myrtaceæ They are all fine evergreen shrubs or trees, generally bearing white flowers, and in the first section producing fleshy fruit It is there that the Allspice, the Clove, the Rose-apple, and the Guava find their station, by the side of the common myrtle and pomegranate of Europe. The section with capsular fruit comprehends, with the exception of the gigantic Eucalyptuses, almost wholly, handsome hard-wooded New Holland or South Sea shrubs, with white or crimson flowers and stamens, yellow flowers are very uncommon The volatile oil contained in the little reservoirs of the bark, the leaves, and the floral envelopes, gives these plants the fragrance which has caused them to be celebrated by poets of all ages It is very aromatic, a little acrid, and slightly tonic and stimulant, whether it is under the form of Cajeputi oil, the produce of Melaleúca leucadéndron, or of oil of cloves or of myrtle In the clove this oil is so abundant as to constitute nearly a fifth of the whole weight of the calyxes that produce it There is also a considerable proportion of astringent principle in these plants, in the bark of the pomegranate it is very obvious, and in Mýrtus régni and lúma of Chile, Eugénia malaccénsis, it is so abundant as to render a decoction of those plants of great use in cases of dysentery Eucalýptus resinífera produces an astringent resinous substance resembling gum Kino The leaves of the Chilian myrtles, Leptospérmum scopárium, and some other species, have been used as substitutes for tea

Tribe 1 Baccatæ

1193 Alángium *J*	1120 Caryophýllus *P S*	1123 Pimènta *Lindl*	1499 Cárcya *Roxb*
1118 Psídium *W*	1121 Mýrtus *W*	1124 Olýnthia *Lindl.*	1082 Decumária *W*
1119 Eugenia *W*	1122 Calyptránthes *W*	1127 Púnica *W*	

Tribe 2 Capsulares

891 Bæ'ckia *Sm.*	1117 Metrosidéros *W*	1611 Tristánia *Br*
1115 Leptospérmum *W*	1126 Eucalýptus *W*	1612 Calothámnus *Lab*
1116 Fabricia *W.*	1610 Melaleuca *H K*	1613 Beaufórtia *Br*

Tribe 3 Lecythideæ

1125 Stravádium *Juss*	1497 Barringtónia *W*	1498 Gustávia *W*

Order LXIV COMBRETACEÆ

Combrétum and Quisquális are among the most splendid of the climbing plants of the tropics, adorning the trees from which they depend with garlands of white and crimson, and yellow The bark of Bucida Búceras is used with success in Guiana for tanning leather The juice of Terminália vérnix is employed by the Chinese as a varnish, it is, however, caustic, and its exhalation dangerous, benzoin is the produce of Terminália Benzóin The kernel of several species is eaten as a nut, and the expressed oil has the remarkable quality of not becoming rancid

544 Conocárpus *W*	1027 Getónia *Rorb*	2140 Terminália *W*
916 Combrétum *W*	1028 Quisquális *W*	

Order LXV PASSIFLOREÆ

The beauty of Passifloras is well known, they are remarkable for the singular arrangement of the stamens and pistillum, upon a column surrounded by several lines of circumvallation, formed by as many rows of barren thread-like colored stamens, which are popularly called the rays The fruit of several species of passion-flower is filled with a pleasant acidulated pulp, on which account they are eaten as dessert fruit It is not known that they possess any medical properties The station of the order is not settled, it is undoubtedly very near Cucurbitaceæ

1459 Passiflóra *W*	2075 Modécca *Lam*

Order LXVI CUCURBITACEÆ

Here is the station of the gourd, the melon, and the cucumber, succulent climbing vegetables, the fruit of which administers to us many of our comforts and necessities The importance of the gourd in hot countries is of the highest degree, where, from the nature of the climate, few of those culinary vegetables that are so abundant in the north can be made to succeed Among these tribes of climbing annuals, the papaw tree is a remarkable deviation from the ordinary character of the vegetation. Its fruit, however, and flowers are in all respects those of Cucurbitaceæ The fruit is mostly sweet, watery, refreshing, and pleasant to the palate, but the coloquintida gourd, the spurting cucumber, and the Trichosánthes amára, are all possessed of violent bitter, drastic, purgative qualities, which are, indeed, to be found, in a slight degree, even in the mildest of the eatable gourds M Decandolle observes, that as the violent action of the Colocinth resin is much softened by the mixture with it of gum, it is probable that the difference in the fruits of the order depends upon the different proportions between these two substances The seeds of the gourd, like those of the

passion-flower, possess none of the properties of the pulp, they are sweet and nutty, and readily form an emulsion The roots of the bryony are purgative, but also contain a wholesome fæcula It is said that the roots of a species of bryony are eaten in Abyssinia, after being merely boiled There are some Cucurbitaceæ, the roots of which are intensely bitter, those of one of this description are used in Peru, to remove the pains attendant upon inveterate venereal disorders

551 Gronóvia *W* 2019 Trichosánthes *W* 2022 Cúcumis *W* 2024 Bryónia *W*.
1940 Anguria *W* 2020 Momórdica *W* 2023 Sicyos *W* 2095 Cárica *W*.
1976 Lúffa *Cav* 2021 Cucúrbita *W*.

Order LXVII LOASEÆ

Nothing is known of the qualities of this order It consists of succulent cut-leaved plants, generally covered with asperities or rigid stinging hairs, and yellow or white flowers They are all natives of America, and handsome annuals A very few of them are climbers

1113 Bartónia *Ph*. 1194 Mentzélia *W* 1619 Loása *L*

Order LXVIII HALORAGEÆ

Obscure weeds, chiefly distinguished from Onagrariæ, by their naked and solitary ovula They are natives of moist places or ponds, in various parts of Europe and North America Some of the species of Halorágis are tropical They are not known to possess any medicinal properties

23 Hippúris *W* 932 Halorágis *W* 1987 Myriophýllum *W* 309 Ludwígia *W*.
27 Callitriche *W*. 1908 Serpícula *W*. 258 Isnárda *W*

Order LXIX ONAGRARIÆ.

A very well defined order, generally known by its pollen cohering, by a sort of filamentous substance, an inferior polyspermous ovarium, a tetraspedalous tetrapetalous flower, with a definite number of stamens, and a single style From this form there are some anomalous variations, such as Circæ'a and Lopézia, which are, however, easily reconciled to the usual structure of the order Most of the genera are pre-eminently beautiful, as Epilóbium, Œnothéra, and Fúchsia, which are old favorites among gardeners The properties of Onagrariæ are little known, and probably very weak The leaves of Jussiæ'a peruviána are used as an emollient poultice, the seed of Trápa nátans as an eatable nut, and the root of Œnothéra biénnis as a sort of salad

71 Circæ'a *W* 903 Epilóbium *W* 1026 Jussiæ'a *W*
18 Lopezia *Cav* 904 Fúchsia *W* 901 Œnothéra *W*
902 Gaúra *W* 308 Trápa *W* 2064 Montínia *W*

Order LXX. FICOIDEÆ

These are all plants with a greater or less degree of succulence, the Mesembryánthemums and Hymenógyne are well-known dry-stove plants, many of which are beautiful in the highest degree Of the former of these two, the flowers are of all colors, many of the most vivid hues, and remarkable for expanding only beneath bright sunshine, this phenomenon, indeed, is common to the whole order Tetragónia expánsa, Sesúvium portulacástrum, and Mesembryánthemum edule, are excellent substitutes for summer spinach A large quantity of saline matter is contained in all of them, in Reaumúria vermiculáta, a substance is secreted, which has been found by chemical analysis to consist of muriate of soda and nitrate of potash The whole order grows in very dry or saline places, in the temperate regions of the world Four fifths of the whole are natives of the Cape of Good Hope The leaves of the different species of Mesembryánthemum, offer the most remarkable instances of figure known in the vegetable world

1090 Nitrária *W* 1143 Sesúvium *W* 1145 Tetragónia *W* 1147 Hymenógyne *Haw*
1107 Glinus *W* 1114 Aizóon *W* 1146 Mesembryánthemum *L*. 1210 Reaumúria *W*.

Order LXXI. PORTULACEÆ

With the exception of Turnéra, Támarix, Talinum, and a few species of Claytónia, the whole of this order consists of insignificant weedy plants, of no beauty, and little use Claytónia perfoliáta and common purslane, which are occasionally used as salads, being the only species of a useful kind They are chiefly herbaceous plants, frequenting dry barren situations, or the sea-shore of all parts of the world, all are insipid and inodorous, and destitute, as far as is known, of medicinal properties Some of the kinds of Támarix have an astringent tonic bark, and yield, when burnt, a large proportion of sulphate of soda Turnéra resembles a Cistus

224 Móntia *W* 1092 Talinum *Haw* 871 Limeum *W* 690 Corrigíola W.
537 Claytónia *W* 1093 Anacampséros *L* 692 Portulacária *W* 686 Turnéra *W*
689 Telephium *W* 1036 Triánthema *W* 1037 Scleránthus *W* 685 Támarix *W*.
1091 Portuláca *W*

Order LXXII CACTI

All succulent plants destitute for the most part of leaves, the place of which is supplied by fleshy stems of the most grotesque figure, some angular, and attaining the height of thirty feet, others roundish, covered with stiff spines, like the hedgehog, and not exceeding the stature of a few inches Their flowers are in many cases large and remarkably specious, varying from pure white to rich scarlet and purple, through all the intermediate gradations of colors The species are chiefly natives of the hottest and dryest parts of the tropics, and are cultivable with little care, in pots filled with rubbish, in a dry-stove Their fruit is fleshy and watery, and generally insipid, but it is eaten in their native countries for the sake of its refreshing moisture and coolness Two species of Opúntia are hardy in Great Britain The characters of this order and the next are very similar, although their habit is so widely different. Cacti are sometimes called Nopaleæ.

1111 Cáctus *W* 1112 Rhípsalis *Gært.*

Order LXXIII GROSSULACEÆ

Distinguished from the last by the definite number of their stamens and woody leafy stems. The utility and excellence of the gooseberry and currant are known to every one None of the other species equal these, although the fruit of several possesses considerable excellence The berry of most of these is sweet, watery, and acid, but that of Ribes nigrum, and a few more, is tonic and stimulant, which appears to have some connection with the presence of glands upon the leaves of those species.

550 Ribes *W*

Order LXXIV. SEMPERVIVEÆ.

Still another order of succulent plants, but with a habit very different from that of those which have gone before The species are often characterised by the rosulate or densely imbricated arrangement of their leaves, but this is not by any means a universal character They are natives, for the most part, of dry barren places in Europe, North Africa, and the Cape of Good Hope, and are cultivable with ease in pots of dry rubbish Many of them have extremely beautiful flowers, especially those of the genera Sempervivum and Crássula, which are either white, yellow, or deep rose color Their leaves are used medicinally as refrigerant and abstergent, they are also, in a slight degree, astringent, and in Sédum ácre so acrid, that, taken internally,

they operate violently both as purgatives and emetics. The leaves of Sédum teléphium are occasionally eaten as a vegetable, but they are always found to leave behind a slight and unpleasant taste of burning

1061 Sédum *W* 927 Vérea *W* 874 Séptas *W* 699 Crássula *W*
1110 Sempervívum *W* 698 Róchea *Dec* 1062 Penthórum *W*. 320 Tillæ'a *W*.
1060 Cotylédon *W*. 928 Bryophýllum *Sal*.

Order LXXV SAXIFRAGEÆ.

The whole of these plants constitute the glory and delight of the cultivator of alpine plants This is to be attributed to the neatness and perpetual verdure of their leaves, and the exquisite simplicity and elegance of their flowers, rather than to any striking attractions, of which they are wholly destitute their blossoms being generally white or pale pink, occasionally becoming brownish-purple All the genuine species are humble herbaceous plants, affecting mountainous situations, but occasionally found in marshes by the sides of springs, and even upon dry walls All are natives of cold regions, or of the most temperate mountainous situations of hot ones. They are slightly astringent, some of them, as Heuchéra americána, eminently so Infusions of the leaves have been reckoned lithontriptic, and the powdered root of the last-named plant is used with success in cancerous disorders. Hydrángea, which is shrubby, is not a legitimate inhabitant of the order.

1041 Saxífraga *W*. 1043 Mitélla *W* 930 Adóxa *W*. 1040 Chrysosplénium *W*.
1042 Tiarélla *W*. 606 Heuchéra *W*. 361 Gálax *W* 1039 Hydrángea *W*.

Order LXXVI. PHILADELPHEÆ

This consists at present of a single genus, which was formerly referred to Myrtaceæ, but which has lately been separated with much acuteness by Mr Don The species are hardy ornamental shrubs, natives of North America, with white flowers, in some cases fragrant Nothing is known of their properties

1114 Philadélphus *W*

Order LXXVII. CUNONIACEÆ

These were formerly included in Saxifrageæ, from which Mr Brown first distinguished them They are shrubs of the southern hemisphere, mostly with pinnated leaves and white flowers. Callicoma and Bauéra, which have simple leaves, are elegant green-house shrubs The bark of a species of Weinmánnia is employed in Peru for tanning leather, and is said to be also used for adulterating the quinquina Nothing is known of the properties of the remainder

1038 Cunónia *W* 1099 Callicoma *B R* 1199 Bauéra *H K* 919 Weinmánnia *L*

Order LXXVIII ARALIACEÆ.

Araliaceæ are a slight divergence from the well-known Umbelliferæ, with which they nearly agree in habit, except in being frutescent, and from which they are obviously distinguished by their 5-celled fruit Their flowers have no beauty, but the foliage of many is extremely fine, especially of the species of Actinophýllum, that of our common ivy must not be omitted Their medicinal properties are much the same as those of Umbelliferæ, except the fruit, which differs in virtues as it does in botanical structure Their bark exudes an aromatic gum resin, as in Arália umbellifera Their roots are tonic, with, in some cases, the flavor of parsnep The famous ginseng, which is produced by a Pánax, is reputed to have powerful tonic, restorative, and even aphrodisiacal qualities, but it is probable that these have been greatly exaggerated

607 Cussónia *L* 697 Actinophýllum *R & P* 1109 Gastónia *Juss*.
696 Arália *W* 549 Hédera *W* 2166 Pánax *W*.

Order LXXIX UMBELLIFERÆ

One of the least attractive groups of plants, and at the same time one of the most important to the world They are not more useful as food than they are dangerous as poison, while in their native ditches they are often suspicious lurid weeds, but under the influence of cultivation they lay aside their venom, and become wholesome food for man They are generally recognised by their hollow stems and cut leaves, with what botanists call a sheathing petiole, that is to say, with a petiole, the base of which wraps round the stem Their flowers are mostly white or greenish, rarely, as in Astrántia, some species of Caúcalis, and others, of a pink color The inflorescence is umbellate, and their fruit consists of two ribbed portions, improperly called seeds, which are held together by a common axis, and a thickened discus All are natives of damp ditches or way-sides, in cool parts of the world, in the tropics they are either extremely rare or wholly unknown, and when present, have generally a character unlike that of our European species The simplicity of their structure, and uniformity of their appearance, has rendered their classification a matter of very great difficulty It has been attempted in modern days by Lagasca, Sprengel, and Koch, all of whom have added something to our knowledge, but much still remains to be done The arrangement of Professor Sprengel, objectionable as it is many points, is here adopted as the most perfect, upon the whole, of any yet published The culinary and agricultural importance of many species is well known, the parsnep and carrot form a large part of the staple winter store of the inhabitants of Europe, as the Arracachas do of those of South America, and the Prangos of Thibet is supposed to be the most important and productive of any in the whole world, as a forage plant The medicinal properties of Umbelliferæ are not more powerful than they are at variance with each other While the seeds of some are aromatic, and stimulating in the highest degree, the fresh roots and leaves of others are not less narcotic This has been supposed to arise from the difference in the state of the sap in different parts of the plant, and it has been thought that the narcotic principle is only to be found in the ascending sap, while the aromatic stimulant properties are found in the juices, which are fully elaborated and matured It has been already observed, that their dangerous properties are often removed by cultivation, the common celery is a familiar instance of this, but the most remarkable, that of Œnánthe pimpinelloides, a most dangerous species when wild, which is cultivated about Angers for the sake of its roots, which are there called Jouanettes, and about Saumur, where they are known by the name of Méchons The roots of some Umbelliferæ contain a large proportion of sugar, those of the carrot, when dried, more than an eighth, those of the parsnep just an eighth, and those of the chervil about eight parts in 100 Galbanum, Opopanax, and Assafœtida, are all the produce of different species of Umbelliferæ

Tribe 1 Desciscentes.

2165 Arctópus *W* 622 Eryngium *W* 644 Actinótus *Lab* 637 Dóndia *Spreng*
548 Lagoécia *W* 624 Echinóphora *W* 623 Sanícula *W* 674 Astrántia *W*

Tribe 2. Hydrocotylina

658 Hydrocótyle *W* 659 Spananthe *Jacq*.

Tribe 3 Bupleurinæ

657 Bupleúrum *W* 2147 Hérmas *W*.

Tribe 4. Pimpinellæ.

635 Pimpinélla *W* 647 Sison *W* 656 Cnidium *Cuss* 651 Apium *W*
629 Ledebúria *Lk* 652 Ægopódium *W*. 632 Œnánthe *W*. 653 Méum *Jacq*
642 Séseli *W*. 655 Cárum *W* 636 Phellándrium *W*

Tribe 5. SMYRNIEÆ.

650 Smyrnium *W.* 677 Cáchrys *W* 641 Scúta *W.* 666 Hasselquistia *W*
633 Crithmum *W.* 678 Hippomárathrum *Lk* 661 Æthúsa *W.* 673 Tordýlium *W*
660 Ulospérmum *Lk.* 618 Coriandrum *W.*

Tribe 6 CAUCALINEÆ

626 Caúcalis *W* 628 Olivéria *Vent* 640 Búbon *W*
625 Daucus *W* 634 Athamánta *W* 631 Bunium *W*
627 Tórilis *Gært* 638 Trachyspérmum *Lk* 676 Rúmia *Hoffm.*

Tribe 7 SCANDICINEÆ

619 Scándix *P S.* 630 Myrrhis *P S* 621 Chærophýllum *P S* 620 Anthriscus *P. S.*

Tribe 8 AMMINEÆ.

639 Ammi *W.* 646 Sium *W* 665 Lagústicum *W.*
641 Cúminum 649 Cónium *W.* 645 Trinia *Hoffm.*

Tribe 9 SELINEÆ

663 Selinum *W* 675 Zosímia *Hoffm* 654 Angelica *W* 669 Laserpitium *W*
670 Peucédanum *W* 671 Pastináca *W* 667 Imperatoria *W* 667 Artédia *W*
672 Herácleum *W.* 668 Férula *W.* 643 Thapsia *W* 654 Anéthum *W*

ORDER LXXX RHIZOPHORÆ.

The mangroves are plants of arborescent stature, which are remarkable, in tropical countries, for growing upon the shores of the sea, even as far as low water The seeds have the singular property of germinating, while enclosed within the capsule, and adhering to their parent, and pushing forth a long thread-like radicle, which lengthens till it reaches the soil, where it takes root, and forms a new individual The bark of Rhizóphora gymnorhíza, which is very astringent, is used in India for dying black

1078 Rhizóphora *W*

ORDER LXXXI HAMAMELIDEÆ

Hardy American deciduous shrubs, with the appearance of Amentaceæ, to which they are undoubtedly closely allied notwithstanding their situation here, which must be considered quite artificial Nothing is known of their medicinal qualities

1200 Fothergilla *W* 312 Hamámelis *W*

ORDER LXXXII CAPRIFOLIACEÆ

This is an eminently beautiful order, consisting either of twining or erect shrubs with clusters of trumpet-shaped fragrant flowers, or of fine bushes having cymes of white blossoms. The honeysuckle is the representative of the former, the dogwood of the latter Here too is found the modest and delicate Linnæ'a, which, however inferior its attractions for the vulgar eye may be to those of its more ostentatious neighbours, yields to none of them in elegance or interest for the botanist All the genera have a more or less astringent bark, that of Lonicéra corymbósa is used in Chile for dying black, that of Córnus florida in North America in intermittent fevers, as is also the bark of Córnus sericea, which, according to Barton, is scarcely inferior to Quinquina The Elders are the link between honeysuckles and umbelliferous plants, to the latter of which they are allied by their stinking divided foliage and half herbaceous habit, their flowers are sudorific and soporific in a high degree, their leaves and inner bark are emetics and drastic purgatives Triósteum perfoliatum is intermediate between this order and Rubiaceæ, with the former of which it agrees in its purgative, and with the latter in its emetic, qualities, which resemble those of ipecacuanha All Caprifoliaceæ love shady cool places in both hemispheres, but few have been found in such as endure a very severe climate

474 Caprifólium *R S* 477 Diervilla *J* 306 Córnus *W*
475 Lonicera *R S* 478 Triósteum *W.* 679 Viburnum *W.*
476 Symphória *Ph* 297 Linnæ a *W* 680 Sambúcus *W*

ORDER LXXXIII LORANTHEÆ

None of these are cultivable, they are all genuine parasites rooting beneath the bark of the trees on which they grow, and deriving from their juices the whole of their nutriment The Viscums have little or no beauty, but the Loránthi are among the most lovely of plants, hanging in clusters of rich scarlet flowers from the branches of trees in the tropics, which they often clothe with a beauty not their own The misletoe of the Druids is supposed to have been the Loránthus europæ'us, the common Viscum never being seen upon the oak, while the Loránthus inhabits no other tree If this be so, the latter must have once existed in this kingdom although now extinct It has been suggested, that all vestiges of their religion were extirpated with the Druids, which will account for the Loranthus having disappeared wherever that religion formerly held its sway

2054 Viscum *W*

ORDER LXXXIV RUBIACEÆ.

Opposite entire leaves with intervening stipulæ, a monopetalous superior corolla, with a definite number of stamens and a bilocular ovarium, are the great characteristics of Rubiaceæ, an order of such extent that it embraces a very large proportion of the whole of phænogamous plants, including within its limits humble weeds and lofty trees, plants with important medicinal qualities and flowers of varied dyes, and herbs of neither value nor beauty as far as has yet been ascertained The sections into which the order has been divided are merely artificial, with the exception of Stellatæ, which are the representatives of the order in northern regions Among these the Rúbia, or madder, is the most important on account of its dye, Galium also possesses some qualities of minor consequence, which have been already indicated in the body of this work Among the other sections, the plants of beauty or value are innumerable: of the former description, the genera Ixóra, Bouvárdia, Catesbæ'a, Portlándia, Coutárea, Gardénia, Mussæ'nda, Hamélia, Cephaélis, Cephalánthus, and many others, are notable examples, to the latter, every genus has a contribution of one kind or another The root of Oldenlándia umbellàta is employed in India for staining nankin, that of Morinda umbellàta in the Moluccas, and of Morínda citrifólia in India, is used for dying red and brown The potent febrifugal properties of the Cinchóna need not be insisted on; it is less generally known that the bark of Pinckneya púbens, Macrocnémum corymbósum, Guettárda coccínea, and Portlándia grandiflóra, possesses similar, but weaker powers The bark and roots of Antirhóa are used, in the Isle of Bourbon, to stop hæmorrhage, and that of Morínda Róyoc is used for ink Astringent properties of a very marked character are found in the juice of Naúclea Gámbir of Hunter, and the Uncária Gámbir of Roxburgh, both which are often improperly confounded with Gum kino, which is the produce of a very different plant. Some of the species formerly comprehended under the genus Cinchóna, but since separated by the name of Exostémma, possess strong emetic powers. The same qualities exist in Psychótria emética Cephaélis, Ipecacuánha,

and Psychótria herbácea, which are often used as ipecacuanha. The seed of the Coffea furnishes the valuable beverage which is so much esteemed in Europe and the East, under the name of coffee

SECTION I. *STELLATÆ.*

266 Gálium *W.* 268 Aspérula *W.* 271 Crucianélla *W* 617 Phýllis *W*
267 Rúbia *W.* 269 Sherárdia *W.* 2136 Valántia *W*

SECTION II

270 Spermacóce *W.* 290 Pavétta *W* 479 Coffea *W.* 483 Psychótria *W*
285 Chomélia *W.* 291 Ernódea *Sw.* 480 Chiococca *W* 495 Plócama *W*
288 Ixóra *W* 294 Mitchélla *W.* 482 Canthium *Pers.* 833 Richárdia *L.*
292 Siderodéndrum *W.* 439 Pædéria *W.* 494 Webéra *W*

SECTION III.

287 Bouvárdia *H K* 456 Dentélla *W* 485 Posoquéria *Aubl* 489 Oxyánthus *Dec.*
261 Houstónia *W* 457 Macrocnémum *W* 458 Exostémma *Ruch* 490 Rándia *P S*
293 Coccocýpsilum *W.* 460 Rondelétia *W* 462 Portlándia *W* 491 Mussæ nda *W*
295 Oldenlándia *W* 455 Spermadictyon *Roxb* 461 Coutaréa *Aubl* 492 Pincknéya *Mich*
296 Manéttia *W* 832 Hillia *W* 487 Gardénia *P S* 481 Serissa *W*
406 Ophiorhiza *L.* 289 Catesbæ'a *L* 488 Genipa *P S*

SECTION IV

493 Erithalis *W* 486 Vanguiéra *W* 1981 Guettárda *W.*

SECTION V

484 Hamélia *W*

SECTION VI

497 Cephaélis *W* 498 Sarcocéphalus *Afz* 286 Adina *Sal* 459 Burchéllia *R Br*
496 Morinda *W* 521 Naúclea *W* 275 Cephalánthus *W* 2060 Anthospérmum *W.*

ORDER LXXXV OPERCULARINEÆ.

Exotic weeds, nearly related to Rubiaceæ Their properties are unknown M de Jussieu has remarked that their affinity to Valerianeæ is supported by the curious circumstance, that birds devour the young shoots of the Opercularias as they do those of the Corn-salads

250 Operculária *W* 251 Cryptospérmum *P S*

ORDER LXXXVI. VALERIANEÆ.

Small herbaceous plants, more interesting for the sake of their symmetry and neatness, than on account of any particular attractions they may be considered a connecting link between Rubiaceæ and Dipsaceæ Many of the Valerians, and all the Patrinias, are pretty plants The Valerianéllas are useful esculents, known under the name of corn-salads Their medicinal properties are of a decisive character. The roots of Valeriana officinális, Phu, and others, are bitter, tonic, aromatic, antispasmodic, and vermifugal, they are occasionally used as febrituges The odour of Valerian is not generally agreeable, but the Orientals collect with care, on the mountains of Austria, the roots of Valeriána célica, with which they perfume their baths, and the natives of India, at this day, employ the Valeriána jatamánsi, the spikenard of old times, as a perfume, and against hysterics and epilepsy.

20 Centránthus *Mich* 78 Valeriána *W.* 80 Valerianélla *Dec*
72 Fédia *Dec* 79 Patrinia *W.*

ORDER LXXXVII DIPSACEÆ

Very nearly akin to Compositæ, of which they have nearly the habit All are herbaceous plants with flowers growing in heads Some of the Scabiósas are very handsome, and popular border flowers The whole tribe is cultivated with great facility Some of the species of Scabiósa have been employed as diaphoretic and antisyphilitic, but are now neglected

70 Morina *W* 263 Cephalária *Schr* 265 Knaútia *W.*
262 Dipsacus *W* 264 Scabiósa *W*

ORDER LXXXVIII CALYCEREÆ

Obscure weedy South American plants, differing from Compositæ, chiefly in the position of their ovula.

1842 Acicárpa *Juss*

ORDER LXXXIX. COMPOSITÆ.

A most extensive and natural order, obviously characterized by the cohesion of their antheræ, and the arrangement of their florets in involucrated heads, or calathidia, as they are now called. Most of them may be said to be ornamental plants, and yet but a very few hold that station in the opinion of the public It is difficult to account for this circumstance, nor is this the place to enter upon such an investigation, certain, however, it is, that with the exception of Dáhlias, the varieties of Chrysánthemum sinénse, and a few Calendulas and Arctótises, and perhaps Tagétes, scarcely a single Composita now finds a place in a fashionable flower garden The prevailing color of the flower in the order is yellow, red, purple, or scarlet, being comparatively uncommon The species inhabit every part of the world, and in all, perhaps, in nearly equal proportions — in Europe and the north of the world they are chiefly herbaceous, but within the tropics, they are more frequently frutescent. Their medical properties are very important; Tussilágo fárfara, Chamomile, Inula, Solidágo Virgaúrea, Matricária Parthénium, Stévia febrifúga, and Eupatórium perfoliàtum, are instances of the presence of tonic and febrifugal properties, Tanacétum and Santolina are anthelmintic, Matricária and the Achilléas emmenagogue, some Eupatóriums, Achilléas, Artemísias, and Caléndulas, are sudorific; certain Liátrises are diuretic, and Erigeron philadélphicum is both sudorific and diuretic. Ptármica and Arnica are sternutatory, and Spilánthes, Siegesbéckia orientália, Anthemis pyréthrum, and others, powerfully excite salivation, finally, many Achilléas, Chamomile, Tanacétum, and Eupatóriums, are tonic and antispasmodic Others seem to possess all these properties combined, and are reckoned among the best alexiterics, as the Ayapana of Brazil, and the Guaco of Peru. Every one knows the excellent and refreshing flavor communicated to vinegar by Tarragon, the same effects are produced in the Alps by Achilléa nána, Artemísia glaciális, rupéstris, and spicáta Some species of Achilléa, Bellis, and Artemisia have been used as substitutes for tea The seeds of many Compositæ, as Mádia and Verbesina, yield a copious oil, and the fleshy roots of Helianthus tuberósus, a wholesome food for man. The juice of Lactúca virósa is highly narcotic, and has been even employed with extraordinary advantage as a substitute for opium. It is not necessary to mention the utility of the leaves of the lettuce, the endive, the succory, the cardoon, or the roots of Scorzonéra and Salsafis, as culinary productions, they must be familiar to all our readers, as also the fleshy receptacle of the artichoke and some other plants The flowers of Echinops strigósus are used as a kind of tinder, those

of the artichoke, the cardoon, and others, have the power of curdling milk The arrangement of Compositæ is attended with extreme difficulty, the greatest progress that has yet been made in reducing them to order has been with M Cassini, by whom they are called Synantheræ but unfortunately, the remarks of that learned botanist are so scattered and unconnected, that the public has hitherto been able to derive little benefit from his labors His general arrangement is here adopted, but for the reasons now given, his genera have not been enquired after, as, until they shall have been more completely systematized, the adoption of them would necessarily be full of errors, which would only add to the confusion that already too extensively exists Those who wish to make themselves masters of this very interesting and difficult branch of systematic botany, should consult the Opuscules phytologiques of M Cassini, and Mr Brown's elaborate essay on the structure of Compositæ, in the Transactions of the Linnean Society

SUBORDER I *INULEÆ.*

1767 Relhánia *W*
1765 Leyséra *W*
1764 Longchámpsia *W*
1722 Gnaphálium *W*
1848 Cassínia *H K*
1681 Ammóbium *R Br*
1713 Ixodia *H K*
1727 Astelma *R Br.*
1747 Podolépis *H K*
1725 Antennária *R Br*
1726 Metalasia *R Br*
1846 Stœ'be *W.*
1844 Œdéra *W.*
1723 Leontopódium *R Br.*
1728 Athrixia *Ker*
1730 Elichrysum *W*

Tribe 1 ARCHETYPÆ

1838 Filágo *L*
1724 Evax *Lam*
1839 Micrópus *W*
1734 Conyza *W*
1744 Inula *W*
1745 Pulicária *Gært*
1731 Carpésium *W*
1785 Columélia *Jac*
1710 Neurolæ'na *R Br*

Tribe 2. BUPHTHALMEÆ

1797 Buphthálmum *W*
1849 Sphæranthus *W*

SUBORDER II *LACTUCEÆ*

Tribe 3 PROTOTYPÆ.

1659 Scólymus *W*
1623 Arnopogon *W*
1636 Picridium *P S*
1627 Sónchus *L*
1628 Lactúca *W*

Tribe 4 CRIPIDEÆ.

1639 Helmínthia *J*
1634 Picris *W*
1651 Lapsána *W*
1653 Rhagadiolus *W*
1629 Chondrilla *W*
1632 Apárgia *W.*
1652 Zacíntha *W.*
1637 Borkhausia *Dec*
1636 Lagóseris *Lk*
1638 Crépis *W*
1640 Myóseris *Lk*

Tribe 5 HIERACIEÆ

1630 Prenánthes *W*
1635 Hieráceum *L*
1641 Tólpis *W*
1644 Krigia *W*
1649 Soldevílla *Lag*
1654 Moscária *Fl per*
1643 Róthia *W.*
1642 Andryála *W*

Tribe 6 SCORZONEREÆ

1647 Robértia *Roth*
1648 Serióla *W*
1650 Hypochæ'ris *W*
1620 Geropógon *W*
1621 Tragopógon *W*
1633 Thrincia *W*
1631 Leóntodon *W*
1624 Podospérmum *Dec*
1625 Scorzone'ra *W*
1622 Tróximon *Gært*
1645 Hyóseris *W*
1646 Hedýpnois *W*
1655 Catanánche *W*
1657 Cichórium *W*

SUBORDER III *ADENOSTYLEÆ*

1678 Palafóxia *Lag*

SUBORDER IV *EUPATORIEÆ*

Tribe 7 AGERATEÆ

1689 Stévia *W*
1687 Ageratum *W.*
1688 Cælestína *Cass*
1700 Lavénia *W*
1704 Piquéria *W*

Tribe 8 ARCHETYPÆ

1683 Mikánia *W*
1685 Eupatórium *W*

Tribe 9 LIATRIDEÆ.

1682 Liátris *W.*

SUBORDER V *AMBROSIEÆ*

Tribe 10. IVEÆ

1841 Iva *W*

Tribe 11 ARCHETYPÆ.

1974 Xánthium
1977 Ambrósia

SUBORDER VI *ANTHEMIDEÆ.*

Tribe 12 CHRYSANTHEMEÆ

1721 Artemísia *W*
1711 Hómea *Sm*
1835 Soliva *Fl per.*
1834 Hippia *W*
1774 Cénia *J*
1775 Cótula *W*
1718 Balsamita *W*
1776 Grángea *W*
1719 Pentzia *Th*
1720 Tanacétum *W*
1770 Pyréthrum *W*
1788 Chrysanthéllum *P S*
1769 Chrysánthemum *W*
1771 Matricária *W*
1773 Lidbéckia *W*

Tribe 13 SANTOLINEÆ

1717 Athanásia *W*
1715 Otánthus *Lk*
1714 Santolina *W.*
1777 Anacýclus *W*
1778 Anthemis *W*
1837 Eriocéphalus *W*
1781 Achilléa *W*
1806 Osmites *W*
1816 Sphenógyne *R Br*

SUBORDER VII. *ARCTOTIDEÆ.*

Tribe 14. GORTERIEÆ.

1812 Gortéria *W*
1813 Gazánia *H K.*
1811 Didélta *W*
1801 Galárdia *W.*
1809 Cullúmia *H K*
1810 Berckhéya *H. K.*

Tribe 15 ARCHETYPÆ.

1814 Cryptostémma *R Br*
1815 Arctothéca *W.*
1831 Arctótis *H K*

SUBORDER VIII *CALENDULEÆ*

Tribe 16 ARCHETYPÆ.

1830 Caléndula *W.*

Tribe 17. OSTEOSPERMEÆ

1832 Osteospérmum *W*

SUBORDER IX *MUTISIEÆ*

Tribe 18 ARCHETYPÆ

1748 Chætanthéra *Fl per*

Tribe 19 GERBERIEÆ

1750 Gerbéria *Burm* 1829 Chaptália *Vent* 1752 Perdícium *H K.*

SUBORDER X *TUSSILAGINEÆ*

1737 Tussilágo *W*

SUBORDER XI *NASSAUVIEÆ*

Tribe 20 TRIXIDEÆ

1686 Dumerília *Lag* 1825 Tríxis *Dec*

Tribe 21 ARCHETYPÆ

1656 Triptílion *Fl per*

SUBORDER XII *CARLINEÆ*

1671 Acárna *W* 1676 Cardopátum *Pers* 1677 Staehelína *W* 1729 Xeránthemum *W.*
1670 Atráctylis *W* 1669 Carlína *W* 1673 Stobæa *Th* 1674 Onobróma *Gært.*
1658 Bacázia *Fl per* 1662 Saussúrea *Dec*

SUBORDER XIII *CENTAURIEÆ*

1819 Centauréa *W* 1665 Cnícus *W.* 1817 Zœ'gea *W.*

SUBORDER XIV. *CARDUINEÆ*

1660 Arctium *W* 1668 Cynara *W* 1666 Onopórdum *W* 1661 Serrátula *W*
1663 Carduus *W* 1820 Galactites *P S* 1667 Berárdia *Vill* 1664 Silybum *Gært*
1675 Cárthamus *W* 1818 Leúzea *Dec*

SUBORDER XV *ECHINOPSEÆ*

1850 Echinops *W* 1699 Lagísca *Cav*

SUBORDER XVI *TAGETINEÆ*

1749 Arnica *W* 1763 Péctis *W* 1760 Tagétes *W*
1702 Kleínia *W.* 1766 Sellóa *Spreng* 1759 Bœbéra *W.*

SUBORDER XVII *HELIANTHEÆ*

Tribe 22 HELENIEÆ

1782 Trídax *W* 1690 Cephalóphora *W* 1692 Hymenopáppus *J*
1707 Cálea *W* 1792 Galinsógea *W* 1694 Marshállia *Ph*
1716 Caleacte *R Br* 1755 Helénium *W* 1762 Schkuhria *W*

Tribe 23 COREOPSIDEÆ

1697 Bidens *W* 1758 Dáhlia *Cav* 1824 Silphium *W*
1804 Coreópsis *W* 1761 Heterospérmum *W* 1791 Synedrélla *P S*
1803 Cosmea *W* 1840 Parthénium *W* 1753 Tetragonothéca *W*

Tribe 24 ARCHETYPÆ.

1793 Acmélla *P S* 1693 Melananthéra *Mi* 1780 Sanvitália *Cav* 1790 Verbesína *W*
1807 Enecília *Cav* 1709 Petróbium *R Br* 1805 Simsia *Pers* 1754 Ximenésia *W*
1798 Helianthus *W* 1698 Platýpteris *Kth* 1695 Spilanthes *W* 1768 Zínnia *W*
1708 Isocárpha *R Br* 1696 Sálmea *Dec*

Tribe 25 RUDBECKIEÆ

1823 Baltimóra *W.* 1709 Gymnolómia *Kth* 1795 Pascália *W* 1802 Tithónia *Desf*
1786 Eclípta *W.* 1796 Helópsis *P S* 1800 Rudbéckia *W* 1821 Wedélia *W*

Tribe 26 MILLERIEÆ

1852 Brotéra *W* 1827 Chrysógonum *L* 1735 Mádia *W* 1808 Sclerocárpus *W*
1712 Cæsúlia *W* 1854 Euxénia *Cham* 1828 Melampódium *W* 1789 Siegesbeckia *W.*
1787 Meyéra *Swz* 1847 Nauenbúrgia *H* 1822 Milléria *P S* 1794 Zaluzánia *P S*
1779 Centrospérmum *Spr* 1845 Flavéria *Juss* 1826 Polýmnia *W*

SUBORDER XVIII *ASTEREÆ*

1783 Améllus *H* 1732 Baccharis *W* 1757 Bíllium *W* 1784 Stárkea *W*
1743 Kaulfússia *Nees* 1733 Molina *Fl per* 1772 Boltónia *W* 1836 Psiádia *W*
1739 Aster *W* 1756 Bellis *W* 1705 Chrysócoma *W* 1746 Grindélia *W en*
1740 Solidágo *W* 1742 Calótis *R Br* 1736 Erigeron *W* 1679 Pterónia *W*

SUBORDER XIX *SENECIONES*

1701 Cacália *W* 1751 Doróniсum *W* 1738 Senécio *W.*
1741 Cinerária *W* 1833 Othónna *W*

SUBORDER XX *VERNONIEÆ*

1843 Elephantópus *W* 1851 Rolándra *W* 1706 Tarchonánthus *W.*
1703 Ethúlia *H* 1684 Sparganóphorus *Gærtn* 1680 Vernónia *W*
1853 Gundélia *W* 1672 Stokésia *W.* 1691 Ampheréphis *Kth*

Order XC CAMPANULACEÆ

These differ from the last in not having the flowers in heads, in their usually distinct antheræ, which are, however, syngenesious in Lobélia, in their polyspermous fruit, and also in exuding a milky juice All the genera are pretty, and some highly ornamental They are mostly herbaceous, and by far the greater number are extra-tropical, abounding especially in the woods and coppices of the North The roots of Campánula Rapúnculus are used as a vegetable under the name of Rampion The juice of some of the Lobéliaes is highly caustic and inflammatory, when taken internally, producing vomiting and even death nevertheless, the root of Lobélia siphilitica, in small doses, acts as a diaphoretic, in greater quantity as diuretic or purgative, and, if taken in considerable quantities, as an emetic An infusion of Lobélia inflàta is used in North America as a remedy for leucorrhœa, and the root of Lobélia cardinàlis is employed in the same country as a vermifuge

464 Lobélia *W* 466 Trachélium *W* 467 Roélla *W* 834 Canarina *W*
463 Campánula *W* 546 Lightfootia *L'Her* 545 Cyphia *W* 547 Jasione *W.*
465 Phyteuma *W* 895 Michauxia *W.*

Order XCI GOODENOVIÆ

New Holland and South Sea herbs or undershrubs, very nearly akin to the last, from which they differ more in artificial characters than in habit All of them are pretty, and deserving culture Nothing is known of their properties

468 Goodénia *R Br* 470 Dampiera *R Br* 473 Scæ'vola *R. Br*
469 Euthales *R Br* 472 Velleia *Sm.*

Order XCII STYLIDEÆ

Like the last, the properties of this very small but curious order are, if any, undiscovered All are inhabitants of New Holland, and either herbs or half-herbaceous shrubs They have pink flowers, ornamented with glittering glands, their stamens are united into a column, which is terminated by a sessile stigma, and which is irritable in so high a degree, that, if touched with a pin, it instantly starts from its place with great elasticity

1932 Stylidium *R Br*

Order XCIII GESNERIEÆ

Fine tropical herbs, with broad, fleshy, downy leaves, and purple or scarlet flowers They all require stove heat, and decayed vegetable soil, in their native country, which is chiefly equinoctial America, they are found growing in the woods, where the earth is little more than a bed of rotten leaves and bark

1290 Gesnéria *W* 1291 Cloxinia *W.*

Order XCIV ERICEÆ

These are distinguished from the neighbouring orders by their polyspermous fruit, aristate anthers, and dry shrubby habit Every genus is eminently beautiful, and worthy of the most assiduous cultivation The first tribe is a native of hill-sides and open plains, chiefly of the extra-tropical regions of the earth Some are famous for their beauty, some for their fragrance, and many for their foliage The heaths are the glory of the Cape, the Arbutuses of Europe, the Andrómedas of America, and Cléthra of the Canaries The second tribe is distinguished from the rest by its inferior berry, and is not less valuable for its fruit than conspicuous for its beauty The species are principally North American Monotropeæ stand in their systematic station as they grow in their native woods, lowly herbs among thickets of bushes and trees Rhodoraceæ, once considered a distinct order, are chiefly North American, their flowers are less tubular than those of true Ericeæ, but their habit is not materially different, here the Azálea the Kálmia, and the Rhododéndron, the pride of European gardens, as they are of their native woods, find their station The utility of the fruit of Vaccínium is well known, its bark is reckoned tonic, stimulant, and astringent, and their fruit slightly styptic The berries of Arbutus úva-úrsi are considered lithontriptic, its leaves have also been employed successfully in infusions in obstinate cases of gonorrhœa Extract of Chimáphila umbellata, in the form of pills, in doses of five scruples a day, has been found successful in cases of dropsy Some of the species are possessed of narcotic qualities, this is the case with Ledum, Rhododéndron chrysánthum, and especially Azálea póntica, honey obtained from the juice of which is said by Xenophon, to have caused the death of many soldiers in the famous retreat of the ten thousand An infusion of Rhododéndron máximum is used in America in cases of chronic rheumatism, and that of Rhododéndron póntieum in Asia, against gout and rheumatism

Tribe 1 ERICEÆ VERÆ

284 Blæria *W* 535 Itea *L* 1018 Gaulthéria *W* 1020 Cléthra *W*
892 Erica *W* 536 Cyrilla *L* 1019 Arbutus *W* 1021 Mylocárym *W en*
534 Brossæ'a *L* 1016 Andrómeda *W.* 1017 Enkiánthus *B M*

Tribe 2 VACCINIEÆ

906 Oxycóccus *P S* 907 Vaccínium *L*

Tribe 3 MONOTROPEÆ.

1022 Pýrola *W* 1023 Chimáphila *Ph* 1008 Monotrópa *W*

Tribe 4 RHODORACEÆ

403 Azálea *W* 1011 Kálmia *W.* 1014 Rhododéndron *W*
404 Chamælédon *Lk* 1012 Ledum *W* 1015 Epigæ'a *W*
893 Menziésia *Sm* 1013 Rhodóra *W.* 1076 Bejária *Ph*

Subclass III. COROLLIFLORÆ.

Petals cohering in the form of a hypogynous corolla, which is not attached to the calyx
To this subclass are to be referred all genera which have a monopetalous corolla, with the stamens inserted into it, and a superior ovarium

Order XCV MYRSINEÆ.

Showy shrubs, with evergreen undivided leaves, and cymes of white or red flowers Theophrásta is a very rare stove plant, with a simple stem, and undulated spiny toothed leaves The Ardísias are common in collections None are natives of Europe, but are found in the hot parts of Asia, Africa, and America. Nothing is known of their properties.

408 Theophrásta *L* 435 Ardísia *W.* 443 Bæobótrys *Vahl*
409 Clavija *Fl. per.* 2160 Myrsine *R Br.*

Order XCVI SAPOTEÆ.

These are also shrubs, which are mostly evergreen, and natives of the warmer regions of the world. Some of the Bumélias are found in the southern states of N America, but none of the order exists in Europe They are chiefly valuable for their fruit, which, in many cases, contributes richly to the dessert Mimusops clénqi, Imbricária malabárica, Sideróxylon spinósum, are all of this description, the star apples of the West Indies, the produce of several species of Chrysophýllum, and particularly of C cainito, are esteemed delicious, and the Medlars, Lucumas, and Sapotillas of equinoctial America, all the fruit of different kinds of A'chras, are among the most valuable productions of the western world The seeds of all the order are oily those of A'chras sapota are accounted diuretic and aperient Their oil is not fluid, but so concrete as to have the appearance and consistence of butter, whence the name of butter tree has been applied to different species both in Africa and India The most famous of this description is the Indian mava, mahva, or madhuca, the Bássia butyrácea of botanists, the seeds of which are so oleaginous, that a single tree has been known to produce three quintals of oil, the dried flowers of the same tree are mixed by some Indians with their food, and a kind of spirit is distilled from them by others. The juice of all the sapotas is milky, but not acrid and poisonous like that of most other lactescent orders, but, on the contrary, yielding a wholesome beverage or food Here is supposed to belong the famous Palo de Vaca, or Cowtree of South America, the trees of which are regularly milked by the inhabitants of the districts in which it grows According to Brown, the bark of some of the A'chrases is so astringent and febrifugal as to be substituted for quinquina

423 Buméla *W* 426 Jacquínia *W.* 434 Manglilla *Juss* 1024 Inocárpus *W.*
424 Chrysophýllum *W* 427 A'chras *W* 881 Mimusops *W* 1074 Bássia *W*
425 Sideróxylon *W* 433 Sersalisia *R Br*

Order XCVII SYMPLOCACEÆ

Shrubs with serrated leaves, turning yellow in drying, and small white flowers which are sometimes fragrant The leaves of most of them are astringent, those of Alstónia tinge the saliva greenish yellow, of Símplocos tinctória are used in America under the name of Sweet-leaf, for dying yellow

1614 Símplocos *L*

Order XCVIII. EBENACEÆ

Some of these are hardy trees or shrubs, with deciduous leaves and white flowers, natives of woods, mountains, and banks of streams in North America and Europe, others are tropical evergreens Among the former, the best known are the Snow drop tree, or Halesi, with pendent showy white blossoms, and the different species of Stýrax of the latter, many of the Diospyruses' produce are eatable fruit, as, for example, the Mabolo of the Philippine Islands, which is as big as a peach, and the Kaki of Japan, which resembles an apricot All these fruits are remarkable for their extreme austerity before maturity, and the necessity of letting them decay, like our medlars, before they are fit for table These are also distinguished for the excessive hardness of their wood, and for the black colour it sometimes acquires when old, as the Ebony The bark of Diospyros virginiána is used in North America in intermittent fevers

1035 Rovéna *W* 2159 Diospýros *W* 1081 Halésia *W*
2086 Mába *J* 1025 Stýrax *W* 1105? Visnea *W.*

Order XCIX OLEINÆ

The olives are known by their monopetalous corolla, with a valvular æstivation, two stamens alternate with the segments, a bilocular ovarium with no discus at the base, and pendulous collateral ovula They were formerly combined with the jasmines They have all simple opposite leaves, their flowers are either white, yellow, or purple, and frequently fragrant The Phillyréas are among our finest evergreens, and the Lilac or Syringa perhaps at the head of hardy deciduous bushes The ash is an anomalous genus which hardly belongs to the order The seed of the olive contains so large a proportion of fixed oil, that it has long been one of the most important objects of cultivation in the South of Europe The bark and leaves of many Olex are bitter and astringent, these properties are particularly apparent in the ash, which has often been employed successfully as a febrifuge From the exudation of many species of that genus, the mild purgative called manna is formed, it is most commonly found upon the O'rnus M Decandolle remarks, that in proof of the natural affinity of the plants here combined, and of the propriety of separating the jasmines from them, it has been found that all the olives as now restricted, will bud or graft upon one another, but not on the jasmines Thus the lilac will graft on the ash, the Chionánthus, and the Fontanesia, and even upon Phillyréa latifólia, and the olive will take upon the Phillyréa, and even on the ash

32 O'lea *W* 34 Chionánthus *W* 67 Linocíra *R P* 69 O'rnus *P S*
33 Phillyréa 36 Ligústrum *W* 66 Fontanésia *W* 2157 Fráxinus *W*
35 Noteiæ'a *B P* 37 Syringa *W*

Order C JASMINEÆ

Fragrance is the predominant property of the jasmine, and has made it for ages the favourite of poets and of the people, this arises from the presence of an oil which can be extracted so as to retain its perfume In medicinal qualities, the jasmines do not differ materially from the last, they are neatly distinguished by botanists by the direction of their ovula which are erect in Jasmineæ, and pendulous in Oleinæ.

38 Nyctánthes *W* 39 Jasminum *W*

Order CI APOCYNEÆ

We now turn from the contemplation of plants endued with mild and agreeable properties and fragrant flowers, and often bearing food for man, to others which are among the most dangerous and fatal poison, whose juices, milky indeed, like the Cowtree, are not a wholesome and delicious beverage like those of Sapotæ, but on the contrary acrid, caustic, or bitter They are readily known by the twisted direction of the segments of the corolla, which have been compared to the rays of a Catherine's wheel, whence they were called by Linnæus, Contortæ By far the greatest part of the order consists of tropical trees and shrubs a few Apocynums, Amsonias, and Vincas, are natives of the colder zones of the earth Many are elegant climbers, as the different species of Echites and Melodinus The splendid Oleánder belongs to Nérium, the different species of Plumeria, Cameraria, Strophánthus, and Arduina are stove plants of the greatest beauty The medicinal action of these plants is highly powerful The Strychnos, or nux vomica tree, is remarkable for its bitterness and acrid deleterious effects, which are indicated not only when introduced into the stomach, but still more violently when absorbed into the system by inoculation In general, the Apocyneæ are acrid, stimulating, and astringent, these principles, when in excess, act so powerfully on the nerves as to produce stupefaction The root of Ophióxylon is very bitter and purgative under the name of snake-root it is used in India as an antidote to the bites of serpents The bark of Cérbera Mánghas is purgative, of Echites antidysentérica, and the Wrightia of the same name, astringent and febrifugal, the leaves of the Vinca are so astringent, that they have been used successfully in tanning, those of Nérium oleánder are said to abound in free gallic acid The inspissated juice of a species of Cérbera, known in Mexico under the name of Yeotli, is a fatal poison

407 Allamánda *W* 411 Nérium *R Br* 413 Echites *R Br* 415 Plumiéria *W*
410 Vinca *W* 412 Wrightia *R Br* 414 Ichnocárpus *R Br* 416 Strophánthus *Dec*

417 Camerária *W*
418 Tabernæmontána *W*
2152 Ophióxylon *W*
419 Amsónia *Mich.*
420 Cérbera *W*
436 Arduina *W*
437 Strýchnos *W*
438 Carissa *W*
440 Gelsémium *J*
441 Rauwólfia *W.*
572 Apócynum *R B*
573 Melodinus *Forst*
299 ? Monétia *W*

Order CII ASCLEPIADEÆ.

These differ from the last only in having the stamens united into a sort of fleshy crown, and the pollen coherent in masses of a waxy substance like that of Orchideæ, their properties, habit and geographical range, are much the same Periplóca is a singular instance of an asclepiadeous plant being a hardy shrub, every other frutescent species of the order being natives of countries where frost is unknown Hoya comprehends climbing plants, with waxen, clustered, odoriferous flowers distilling honey Pergulária is valued for its fragrance, Ceropégia for its singularity, and Asclépias for beauty and hardiness But the most extraordinary genera of the order are Stapélia, Piaránthus, and Huérnia, in which the place of leaves is supplied by fleshy short stems of various forms, and whose flowers are not less singular for their curious and complex organization, than they are remarkable for their strange coloring and spotting, and offensive for their fœtor The root of Gymnéma vomitórium, Asclépias curassavica, Calótropis procera, and some others, is employed in different countries for ipecacuanha An infusion of the root of Asclépias decúmbens has the singular property of exciting general perspiration, whence it is successfully used in Virginia for pleurisy It is very singular that, in a tribe of plants so generally poisonous as these are, the young shoots of some species should be an article of food of this nature are Pergularia édulis, Periplóca esculénta, Apócynum indicum, and several more

574 Periplóca *R Br*
575 Cryptostégia *R Br*
576 Hemidésmus *R Br*
577 Secamóne *R B*
578 Microloma *R Br*
579 Sarcostémma *R Br*
580 Dæmia *R Br*
581 Cynánchum *R Br*
582 Oxystélma *R B*
583 Gymnéma *R Br*
584 Calótropis *R B*
585 Dischidia *R B*
586 Xysmalobium *R Br*
587 Gomphocarpus *R. Br.*
588 Asclepias *R Br*
589 Gonólobus *R B*
590 Pergulária *R B*
591 Marsdenia *R B*
592 Hoya *R B*
593 Ceropégia *Roxb*
591 Stapélia *R Br*
595 Piaránthus *R B*
596 Huérnia *R Br*
597 Brachystélma *R Br*
598 Caralluma *R B*

Order CIII GENTIANEÆ.

An order in some degree intermediate between Polemoniaceæ and Scrophularineæ, from both which it is distinguished both by habit and fruit, some of the genera border closely upon Apocyneæ The species are natives of cool or mountainous regions or pools in all part of the world The Gentians are mostly dwart herbaceous plants, with deep blue flowers, the bitter color, and different shades of orange, being the prevailing hues They are all pretty, and many beautiful in the highest degree, but, with a few exceptions, they are impatient of cultivation The medicinal properties of the root of Gentiána lutea, rubra, and purpúrea, are eminently tonic, stomachic, and febrifugal, their bitterness is second only to Quássia Similar, but more feeble virtues, are found in most of the order, especially in Villarsia ováta, Gentiána peruviána, Chirayíta, Frasera Walteri, &c Spigélia anthelmia is used as a vermifuge, and the root of Spigélia marylandica infused in water as anthelmintic, and in wine as febrifuge Potália amára is used in Guiana as an emetic A kind of spirit is distilled in Switzerland from the roots of Gentiána, macerated in water

281 Sebæ'a *R B*
282 Frasera *Walt.*
280 Exacum *W*
304 Chironia *L*
367 Eústoma *P L*
366 Erythræa *P S*
367 Sabbátia *P L*
894 Chlóra *W*
600 Gentiana *W.*
590 Swértia *W*
579 Spigélia *W*
578 Lisianthus *W*
568 Logánia *R Br*
562 Menyánthes *W.*
363 Villársia *R Br*

Order CIV BIGNONIACEÆ

The showy trumpet-shaped flowers and broad leaves of these plants, render them objects of general admiration The greatest number is found in the equinoctial regions, a few only passing beyond those limits to the north Bignónia rádicans is a hardy climbing plant, of exceeding beauty, and the Jacarandas are resplendent with flowers of blue or purple, and leaves which emulate the elegance of the Acácia Nothing important is known of their qualities Their wood is said to resist the attack of worms

64 Catalpa *Juss* 1294 Bignónia *W* 1295 Jacaranda *Juss*

Order CV COBÆACEÆ

A climbing genus with large purple flowers, recently separated from the Bignónias by Mr Don Nothing is known of its medicinal properties

588 Cobæ'a *Cav*

Order CVI POLEMONIACEÆ

Herbaceous plants with showy blue, red, or white flowers, and often with pinnated leaves They are natives of cool or mountainous parts in Europe and America Nothing is known of their properties

369 Phlox *W* 70 Polemónium *W.* 389 Cántua *W* 390 Hoitzia *Cav.*

Order CVII CONVOLVULACEÆ

Nearly the whole of these are twining plants, with showy flowers expanding beneath the influence of bright sunshine A few are shrubs, but the greater part are herbaceous, and very many annual They are frequently, also, weeds, which, from their creeping roots, are difficult to extirpate All parts of the world produce them, from the cold regions of the north to the burning soil of the equator Cúscuta is a singular parasite, wholly destitute of leaves The root of many is filled with a milky acrid juice, which is very purgative. Scammony, jalap, and some other drugs, are the produce of Convolvulaceæ The root of Convólvulus floridus and scopárius, and Ipomæ'a quamóclit, is stimulatory, that of Convólvulus batátas, which is the sweet potato of America and Southern Europe, and Convolvulus édulis are wholesome articles of food

Hydroleæ are little known, pretty, herbaceous plants, mostly with blue flowers, native both of cold and tropical countries, Diapensia lapponica being an inhabitant of Lapland mountains, and Hydrólea spinosa of West Indian marshes Their botanical characters are very nearly the same as those of Polemoniaceæ The roots of Hydrolea spinósa are reputed bitter, and slightly purgative

Tribe 1 GENUINÆ

383 Ipomæ'a *R Br*
384 Convólvulus *W.*
385 Argyrèia *Lour*
387 Calystégia *R Br*
602 Fálkia *L*
695 Evólvulus *L.*
310 Cúscuta *W*
603 Dichóndra *W*
391 Rétzia *Th*

Tribe 2 HYDROLEÆ

601 Hydrólea *W*
358 Diapénsia *W*
359 Pyxidanthéra *Mi*

Order CVIII BORAGINEÆ.

True Boragineæ are chiefly herbaceous plants, with alternate exstipulate leaves, the surface of which is covered over with minute asperities, and with flowers arranged in one-sided spikes or racemes, occasionally solitary Each flower has also four distinct little nuts or seeds, as they are commonly called Some Echiums

and a few more are shrubs They are found abundantly in Europe, Siberia, and the North of Africa, less commonly in India, and the equinoctial parts of the world, in some quantity in North America, and in tolerable abundance in New Holland Within the tropics the order is principally represented by Heliotrópiums and Tournefórtias, in colder latitudes by Anchúsas, Cynoglóssums, herbaceous E'chiums, and the like Some are mere weeds, quite unworthy of culture, others are eminently beautiful, as many E'chiums, Onósmas, Onosmódiums, Sýmphytums, and others In general they are mucilaginous and emollient, qualities which are especially abundant in the root of Sýmphytum and Cynoglóssum Pure nitre has been found in several plants of the order A red color is given out by Anchúsa tinctória, Lithospérmum tinctórium, and Onósma echioides, which is used in dying Several plants are employed on the same account in America The Hydrophylleæ are often considered as distinct, on account of their capsular fruit and cartilaginous albumen One or two of these are pretty plants, but most of them mere weeds

Tribe 1 ASPERIFOLIÆ

316 Coldénia *W*	330 Lithospérmum *W*	336 Cynoglóssum *W*	342 Asperúgo *W*
325 Heliotrópium *L*	331 Bátschia *Mich*	337 Omphalodes *Lehm*	343 Nónea *Monch*
326 Myosótis *B P*	332 Onósma *W*	338 Pulmonária *W*	344 Lycópsis *W*
327 Echinospérmum *Sw*	333 Anchúsa *W*	339 Cerinthe *W*	345 E'chium *W*
328 Máttia *Sch*	334 Sýmphytum *W*	340 Borágo *W*	346 Tournefórtia *R Br*
329 Tiaridium *Lehm*	335 Onosmódium *Mich*	341 Trichodésma *R Br*	347 Nolána *W*

Tribe 2 HYDROPHYLLEÆ

372 Hydrophýllum *W*	373 Phacélia *Mich.*	386 Nemóphila *Nutt*	432 Ellísia *W*

ORDER CIX CORDIACEÆ

Trees formerly referred to the last order, from which their habit, plaited cotyledons, and dichotomous style divide them Little is known of their properties, except that the flesh of their fruit is emollient and mucilaginous The nuts of Córdia Sebesténa are employed sometimes as laxatives

428 Córdia *W*	429 Varrónia *W*	430 Ehrétia *W*	431 Bourréria *Gert*

ORDER CX SOLANEÆ

The baneful nightshade represents this order, which participates very generally in its qualities, although they are frequently hidden beneath a fairer form, and often much mitigated, Many of the Solánums are very handsome The Verbáscums, Daturas, and Solándras are all plants of great beauty, although the former, on account of their frequency, are despised in gardens Cápsicums are famous for their pungent fruit and seeds, Brunsfélsias for their fragrance, and Nicotianas, or Tobacco, for their fœtor The leaves indeed of the whole order are disagreeably scented The usual effect of Solaneæ is narcotic, but it is thought that this has been exaggerated, on account of the intense and deleterious properties of A'tropa belladónna These, according to the observations of Vauquelin, depend upon the presence of a bitter nauseous matter which is soluble in spirits of wine, forming with tannin an insoluble compound, and giving out ammonia when decomposed by fire Notwithstanding the narcotic power of the roots of the Mandrake, the Belladónna, and others, those of the potato are found to contain an abundant fœcula, which is among the most valuable food of man The leaves of many Solaneæ are exciting and narcotic, but in very unequal degree, as in Tobacco, Physalis, Henbane, &c, those of the Nightshade excite vertigo, convulsions, and vomiting The juice of Stramónium is given in North America, in doses of from twenty to thirty grains, in cases of epilepsy The fruit of Physalis Alkekéngi is a veterinary diuretic, that of P édulis is used in tarts, that of Solánum Lycopérsicum, and Melongena, is served at table in various forms, under the name of Tomatoes and Aubergines

375 Verbáscum *B*	381 Hyoscyamus *L*	273 Withermgia *W*	1336 Crescéntia *W*
374 Ramónda *P S*	382 Nicotiana *B*	440 Lycium *W*	1375 Brunsfélsia *B*
1377 Alonsóa *H K*	446 A'tropa *W*	371 Vestia *W en*	445 Solándra *W*
1376 Celsia *B*	447 Mandragora *B en*	451 Solanum *W*	446 Cestrum *W*
376 Datúra *W*	448 Physalis *W*	452 Nyctérium *Lam*	1378 Anthocércis *R Br*
377 Brugmánsia *P S*	449 Saráeha *Pav*	453 Cápsicum *B*	1000 Códon *W*
380 Nicándra *J*			

ORDER CXI OROBANCHEÆ

Leafless parasites on roots, with brown or colorless scaly stems and flowers

1335 Orobánche *W*	1339 Lathræa *W*

ORDER CXII SCROPHULARINEÆ

A great part of Linnæus's Didynamia Angiospermia is found here, capsular fruit and didynamous stamens being among the most obvious characteristics of the order The species are generally herbs with opposite leaves, very rarely shrubs, and natives of mountains, valleys, ditches, woods, and wayssides, in all parts of the world The Personatæ have the palate so prominent as to close up the orifice of the corolla Ringentes have the palate open Some are highly ornamental, as Digitális, Pedicularis, Calceolária, &c, others are mere weeds, as is the case with a large proportion of them Most of them have a weak unpleasant smell, a bitterish taste, and acrid and suspicious properties, but this odor is sweet and aromatic in the Ambúlia of Lamarck, the taste is refreshing in Mimulus luteus, which is a culinary plant in Peru, and the ordinary acrid properties become emollient in some Antirrhinums The Rhinanthaceæ are remarkable for their astringent tonic bark and leaves The leaves and roots of Scrophulária aquática, Gratíola officinalis and peruviána, and Calceolaria, act as purgatives, or in strong doses produce vomiting these properties exist, in a high degree, in Digitális purpúrea The leaves of this plant, reduced to powder, excite vomiting and vertigo, excite urine and saliva, and lower the pulse in too strong doses they cause death, in moderate doses they are useful in scrophula, dropsy, asthma, &c

Tribe 1 PERSONATÆ (or RHINANTHACEÆ)

1343 Antirrhínum *J*	1346 Nemésia *Vent*	1342 Euphrásia *W*	1337 Castillója *Sm*
1344 Linaria *J*	1347 Maurándya *W*	1340 Rhinánthus *W*	1299 Tourréttia *J*
1345 Anarrhínum *Desf*	1349 Pedicularis *W*	1341 Bártsia *W*	1298 Chelóne *W*

Tribe 2 RINGENTES

40 Verónica *W*	1350 Erinus *W*	1359 Limosélla *W*	1368 Caprária *P S*
43 Gratíola *W*	1351 Mimulus *W*	1360 Browállia *W*	1369 Buchnéra *B P*
51 Calceolária *W*	1352 Hornemánnia *W. en*	1361 Stemódia *B*	1370 Manúlea *W en*
276 Scopária *W*	1353 Mázus *Lour*	1362 Trevirána *W en*	1371 Angelónia *Kth*
279 Búddlea *W*	1354 Isopléxis *Lindl*	1363 Colúmnea *W*	1372 Schizánthus *R & P*
1297 Pentstémon *W*	1355 Digitális *B*	1364 Russélia *W*	1373 Besléria *W*
863 Diándra *W*	1356 Scrophularia *B*	1365 Dodártia *B*	1 74 Teúdia *P S*
1338 Hallória *W*	1357 Vandellia *J*	1366 Lindérnia *R Br*	1379 Cymbária *W*
1348 Gerárdia *W*	1358 Sibthorpia *W*	1367 Herpestis *R Br*	

Tribe 3 MELAMPYRACEÆ

1315 Melampyrum *W.*

ORDER CXIII LABIATÆ.

A portion of Diandria Monogynia, and the whole of Didynamia Gymnospermia of Linnæus, make up Labiatæ, which are characterized by their didynamous stamens, four little nuts or naked seeds, single style, and irregular corolla. They are mostly natives of extra-tropical countries, although under the form of Hyptis, Anisoméles, Leúcas, O'cymum, &c, they are found in the hottest zones of the world Many are extremely odoriferous in the leaves, some bear handsome flowers, but by far the greater part are no better than weeds They are all remarkable for their tonic, cordial, and stomachic virtues · they contain both a bitter and an aromatic principle, in different proportions The bitterness which is given out in decoctions, resides in a gum-resinous secretion abounding in some Teúcriums, which are particularly employed as stomachics, and sometimes as febrifuges those which abound in essential oil, and which are consequently aromatic, are used as stimulants From the different degree of combination of these principles in different plants, they have obtained various uses, such as savory, thyme, marjoram, for seasoning of food, sage, balm, ground ivy for tea, marum, marjoram, lavender, and thyme, for sternutatories, others, such as lavender, mint, balm, and rosemary, for perfumes It is a remarkable fact, that the essential oil of all contains camphor, which exists in such quantity in sage and lavender, that it has been supposed that the separating of it might become an object of commerce

§ 1 *Diandræ*

55 Lýcopus *W* 58 Cúmila *P S* 61 Rosmarínus *W*
56 Amethýstea *W* 59 Hedeóma *P S* 62 Sálvia *W*
57 Ziziphora *W* 60 Monárda *W* 63 Collinsónia *W*

§ 2 *Tetrandræ*

1242 A'juga *W* 1254 Méntha *W* 1266 Marrúbium *W* 1278 Melissa *W.*
1243 Anisoméles *R Br* 1255 Perilla *W* 1267 Leonúrus *R Br* 1279 Dracocéphalum *W*
1244 Teúcrium *W* 1256 Hyptis *Pott* 1268 Phlómis *R Br* 1280 Melittis *W*
1245 Westringia *Sm* 257 Horminum *Ort* 1269 Leúcas *R Br* 1281 O'cymum *W*
1246 Satureja *W* 1258 Glechoma *W* 1270 Leonótis *R Br* 1282 Plectránthus *W*
1247 Thymbra *W* 1259 Lámium *W* 1271 Molucélla *W* 1283 Trichostéma *W*
1248 Hyssópus *W* 1260 Galeópsis *W* 1272 Chinopódium *W* 1284 Prostanthéra *R Br*
1249 Nepeta *W* 1261 Glechdolon, *E B* 1273 Pycnanthemum *Th* 1285 Scutellária *W*
1250 Elshóltzia *W* 1262 Betónica *W* 1274 Origanum *W* 1286 Prunélla *W*
1251 Lavándula *W* 1263 Stáchys *W* 1275 Thymus *L* 1287 Cleónia *W*
1252 Sidéritis *B* 1264 Zietenia *Pers* 1276 A'cynos *Pers* 1288 Prásium *W*
1253 Bystropógon *W* 1265 Ballota *W* 1277 Calamintha *Ph* 1289 Phrýma *W*

ORDER CXIV PEDALINÆ

Herbaceous plants, formerly included in Bignoniaceæ, from which they are distinguished by the small number of seeds in each cell of the fruit Natives of the tropics, with shewy trumpet-shaped flowers The seeds of Sésamum abound in oil, which is easily expressed, for which the common species is extensively cultivated in hot countries

1296 Sésamum *W* 1300 Martýnia *W* 1331 Pedálium *W.*

ORDER CXV MYOPORINEÆ

South Sea and New Holland shrubs, with scarcely any hair The leaves are simple, alternate, or opposite, with no stipulæ The flowers, scarlet, white, or blue, axillary without bracteæ These are very near Verbenaceæ Stenochílus is the handsomest genus of the order the Avicénnias are shore plants, growing in the place of the mangroves, and shooting their long roots to a great distance among the mud, sometimes to the length of six feet along the surface before they fix themselves Their medicinal properties, if any, are unknown

1323 Avicénnia *L* 1332 Myopórum *Forst* 1333 Stenochílus *R Br* 1334 Bóntia *R Br*

ORDER CXVI VERBENACEÆ.

A mixture of weeds and shewy herbs, of humble creeping plants and of lofty timber trees Some of the Viteces and Clerodéndrums are handsome shrubs Aloýsia is esteemed for the fragrance of its flowers, and Holmskiöldia for the refulgent scarlet of its enlarged calyxes Tectona produces the famous Indian teakwood No properties of consequence have been attributed, by medical men, to any plant of the order, those formerly ascribed to the vervain and chaste-tree being now disregarded The species are natives of waysides in Europe, and of woods and barren plains in the tropics

1322 Verbéna *L* 274 Ægíphila *W* 1313 Aloýsia *Ft per* 1325 Clerodéndrum *B P.*
54 Stachytárpheta *Vahl* 421 Téctona *W* 1316 Selágo *W* 1326 Volkaméria *H K*
1319 Zapánia *J* 1309 Hebenstretia *W* 1312 Lantána *W* 1327 Holmskiöldia *H K.*
1320 Priva *P S* 1310 Hósta *Jacq* 1311 Gmelina *W* 1328 Petréa *W*
1314 Lippia *L* 1317 Vitex *W* 1321 Spielmánnia *W* 1329 Citharéxylum *W.*
272 Callicárpa *W* 1318 Cornútia *W* 1324 Caldásia *W* 1330 Duránta *W.*
65 Ghinia *W*

ORDER CXVII ACANTHACEÆ

These are known by the elastic dehiscence of their capsules, and the hooked processes of the seeds. They are almost entirely tropical herbs or shrubs, with the pubescence, if any, simple or capitate, but never stellate Their leaves are opposite, occasionally arranged in fours, simple and undivided, or very seldom lobed The flowers are either in imbricated heads or open racemes, always enclosed in their bracteæ, and are white, blue, yellow, scarlet, or purple Some of the species are very shewy, but few of them are cultivated commonly, a large proportion are mere weeds The Thunbérgias are fine climbers, and the Acánthus móllis, the foliage of which gave rise to the classical acanthus of architecture, is, perhaps, except Morina pérsica, one of the most interesting of hardy herbaceous plants It is also one of the few species to which any medical properties are ascribed, being used sometimes as an emollient by reason of its mucilage Justícia biflóra is employed in Egypt as a poultice, J Ecbólium as a diuretic, and J pectorális as a vulnerary

45 Elvtrária *M* 49 Eránthemum *P B* 1304 Ruéllia *J.* 1306 Aphelándra *R Br*
46 Hypoéstes *R Br.* 1302 Barléria *W.* 1305 Bléchum *R Br* 1307 Crossándra *P L*
47 Justícia *W* 1303 Phaylópsis *Juss* 1301 Acánthus *W.* 1308 Thunbérgia *W.*
48 Diclíptera *W*

ORDER CXVIII LENTIBULARIÆ

Very pretty interesting aquatics, which are scarcely susceptible of cultivation, except in a few cases Pinguiculas are either European or North American, inhabiting elevated patches in bogs the Utric are floaters, found in most countries in marshes and little rills. their flowers, are white, yellow, or b

52 Pinguícula *W* 53 Utriculária *W*

Order CXIX PRIMULACEÆ

Beautiful dwarf herbs, inhabiting the mountains and meadows of all parts of the world, but especially in the northern hemisphere Nothing can be more lovely than the little delicate alpine Primulas, Androsáces, Aretias, and Soldanéllas, with their little modest blossoms, sometimes rivalling the whiteness of the surrounding snow, sometimes emulating the intense blue of the empyrean, as if the one had borrowed its hues from heaven, and the other from the spotless mantle of the earth Hottónia is a naiad of the stream, inhabiting several parts of England, in ponds and ditches, which are enlivened for many a month with its rosy flowers, peeping from among the sedge and under grass, by which it is environed All the genera are familiar to gardeners, except Centúnculus and Schwénckia, of which the former is singular in the order, as being an obscure minute weed, and the latter has inelegant green flowers, curious to the botanist but ungrateful to the florist The prominent botanical character is the one-celled fruit, with a central placenta, and the stamens opposite the petals. The properties of Primulaceæ are feeble and of little consequence, they appear to be slightly astringent and bitter, the root of Cyclamen is acrid, and only eaten by wild boars, the flowers of the primrose and cowslip are fragrant, and mildly sudorific and soporific Cortúsa Mathiola has been used in nervous disorders

350 Prímula *W*	352 Soldanélla *W*	356 Lysimáchia *W*	277 Centúnculus *W*
349 Androsáce *W*	353 Dodecátheon *W.*	392 Lubinia *Comm.*	42 Schwénckia *W.*
348 Arétia *W*	354 Cyclamen *W*	357 Anagállis *W*	471 Samólus *W*
351 Cortùsa *W*	355 Hottónia *W*	360 Córis *W*	862 Trientális

Order CXX GLOBULARINÆ

Pretty alpine plants with blue flowers The leaves of Globulária Alypum are very bitter and powerfully purgative, giving at the same time a tone to the stomach and intestines

260 Globularia *W*

Order CXXI. PLUMBAGINEÆ

These are properly placed at the limit between Monochlamydeæ and Dichlamydeæ, to either of which they are referable in the minds of some botanists, although it appears, upon the whole, to be most convenient to station them where they are now arranged They are low shrubs or herbaceous plants, with shewy red or blue flowers of an arid texture, inhabiting salt marshes and subalpine tracts, in the temperate latitudes of both the northern and southern hemispheres All the Statices and Armérias are fine plants worth cultivating The root of Statice Limónium is astringent and tonic, of the Plumbágos, the root and whole plant are acrid and caustic, and employed as vesicatories

324 Plumbágo *W* 705 Arméria *W en* 706 Statice *W en*

Subdivision II. MONOCHLAMYDEÆ.

Perianthium simple

The absence of corolla characterizes this subdivision of dicotyledonous vegetation, but as the term corolla is subject to frequent misunderstanding, it should be borne in mind, that whenever there is only one floral envelope, that envelope is to be considered calyx, whether green, as in most cases, or colored, as in the Marvel of Peru

Order CXXII PLANTAGINEÆ

Little inconspicuous herbs found in waste places all over the world The leaves are stellate, and occasionally ternate, the pubescence is jointed, the flowers are brownish, and arrayed in dense spikes Their leaves are rather bitter and astringent, their seeds mucilaginous and rather acrid, those of Plantágo arenária are imported in large quantities from the south of France, for the purpose of forming an infusion in which muslins are washed P média is sometimes cultivated by farmers under the name of ribgrass

278 Plantágo *W* 1967 Littorella *W*

Order CXXIII NYCTAGINEÆ

With the exception of Mirábilis, in which the colored calyx has a shewy effect, all the order consists of weeds, growing often among the loose sand on the sea coast of the tropics and western hemisphere, none are found in Europe The Abronias are curious, neat, and often fragrant The root of Mirábilis Jalapa was formerly considered the jalap, which is now known to be an error, it is however purgative, although in a less degree Boerhaávia tuberósa is also a reputed purgative

19 Boerhaavia *W.* 81 Calyménia *R P* 322 Mirábilis *W* 323 Abronia *Juss* 804 Pisónia *W*

Order CXXIV AMARANTHACEÆ

Upon this order Dr von Martius has the following remarks Leaves, especially when young, of a lax soft texture, abounding in saccharine, mucilaginous, and fibrous particles, and therefore fit for food The seeds are farinaceous, consisting chiefly of starch and mucus Their virtues are nutritive, emollient, demulcent, the root of Gomphréna officinális is tonic and stimulant. The species are either gregarious or solitary, mostly diffuse and villous, and existing in dry stony exposed places, or erect and reclining on other vegetables, with little pubescence, when found on the skirts of ancient forests, a few are found in saline coast places, finally, they are more common in low land, little elevated above the surface of the sea, than in mountainous regions They are met with in both hemispheres, rarely under the equator, but increasing both northwards and southwards as we recede from them, they are confined to no countries in particular, but are found to affect all regions of the world Among an abundance of weeds, we distinguish a few fine plants deserving cultivation, as the Globe Amaránthus, the Cockscombs, and a few species of Amaránthus, one of which, under the name of Love-lies-bleeding, is commonly reared for the sake of its long, tail-like, pendent masses of crimson flowers Amaránthus oleráceus, and a few others, are occasionally cultivated as potherbs

552 Achyránthes *W*	556 Alternanthéra *R. Br*	563 Deeringia *R Br*	918 Aphanánthe *I k*
553 Philoxérus *R Br*	560 Érua *Juss*	565 Celósia *R Br*	1975 Amaránthus *W*
554 Desmochæ'ta *Dec*	561 Lestibudésia *R Br*	566 Gomphréna *R. Br.*	2069 Irésine *W*

Order CXXV. ILLECEBREÆ

Weeds distinguished from Amaranthaceæ by their membranous stipules They are found in dry barren places, for which they are better fitted than for a garden, unless as objects of curiosity.

555 Illecébrum *Juss*	569 Móllia *W*	82 Loéflingia *W*	226 Minuártia *W.*
557 Paronychia *Juss*	614 Hermária *W.*	221 Polycárpon *W*	227 Quéria *W.*
559 Anychia *Mich*			

Order CXXVI CHENOPODEÆ

The habit of this order is a better distinction from Amaranthaceæ, than any artificial character which it is easy to point out While Amaranthaceæ have a dry perianthium with a dense inflorescence, Chenopodeæ on the contrary have a fleshy perianthium and a very effuse inflorescence In the former, the stamens are usually

inserted under the ovarium, in the latter into the calyx, but this mark is not constant None of them, unless Phytolácea is excepted, can be esteemed plants of ornament, on the contrary, they have a weedy uninviting appearance, which is not improved by the fetid smell of some of them But, although their appearance is less attractive than that of the Amaranths, their use to man is far more considerable Their qualities are very various, Camphorosma has the smell of camphor, Petivéria stinks like onions, Phytolácea roots, leaves, and berries, are violent purgatives and emetics, the latter are esteemed in North America nearly equal to Guaiacum, and are employed in chronic rheumatisms, and in rheumatic pains following venereal diseases, an extract of the berries has been employed in scrophula and cancerous ulcers, and the young shoots of the plant are eaten in the United States as asparagus Some of the Chenopódiums, as Ambrosioides, Bótrys, &c., possess antispasmodic and tonic properties, the leaves of Spinácia, and of many Chenopódiums, are eaten as spinach, as are those of Basella in China and India Salsóla and Salicórnia are often employed as pickles Beet roots are equally valuable as a culinary and agricultural production, and the leaves are an excellent vegetable when boiled But the most remarkable feature in the properties of the order is the abundant production of soda, which is obtained from many of the species, as from all the Salsólas, Salicórnias, Anabásis, many species of A'triplex, several salt marsh Chenopodiums, and others The seeds of Chenopódium anthelminticum are used as a vermifuge, those of A'triplex hortènsis excite vomiting, frequently attended with acute pain, those of Chenopódium quinóa are said to be used as rice To conclude this list of remarkable properties in one of the most vile of all assemblages of plants, the roots of beet yield an abundance of sugar

21 Pollichia *W*
22 Salicórnia *W*
92 Polycnemum *W*
611 Chenopodium *W*
609 Salsóla *W*
610 Kóchia *Roth*
612 Béta *W*
608 Anabásis *W*
558 Chenólea *W*
611 Búsea *W*
28 Blitum *W*
20 Corispérmum *W.*
253 Rivina *W*
254 Camphorósma *W*
693 Basélla *W*
855 Petiveria *W*
917 Galénia *W*
1071 Phytolácca *W*
1037 Ceratocárpus *W.*
1043 Axýris *W*
1064 Dictis *W.*
2070 Spinácia
2133 A'triplex
2139 Rhagódia *R. Br*
2072 Acnida *W.*

Order CXXVII POLYGONEÆ

Herbaceous or suffrutescent fleshy-leaved plants, chiefly natives of the northern hemisphere; a few Polýgonums and Coccolobas are found to the south, the former in barren places, the latter on sea shores A great part of the order consists of worthless weeds Some of the Polýgonums, and all the Eriogonums, are handsome plants, the Rheums are famous in medicine The root of Rheum is tonic and purgative, most of the Rumexes and Polýgonums are also tonics The juice of the Coccolóbas is very astringent The young leaves and shoots of several species of Rumex and Rheum are eaten either raw or baked, under the name of sorrel, French sorrel, and tart rhubarb For the sake of its seeds, Polýgonum Fagopýrum is cultivated by farmers under the name of buck-wheat, the seeds of P. aviculare are very emetic and purgative The fleshy calyx of the Coccolobas is colored, and, the fruit growing in clusters, the genus has received the name of the sea side grape

228 Kœnígia *W*
858 Atrapháxis *W*
856 Rumex *W*
857 Oxýria *Dec*
921 Polýgonum *W.*
922 Coccoloba *W*
937 Eriógonum *Mr*
958 Rheum *W*
1052 Brunnichia *W.*
1106 Calligonum *W*
2090 Tríplaris *W*

Order CXXVIII BEGONIACEÆ

The acid qualities, sheathing stipules, and alternate leaves of these tropical herbs approximate them to Polygoneæ, notwithstanding the very different structure of their fructification Most of the species are pretty, some very handsome, all requiring great heat and humidity to be grown in perfection

1980 Begónia *W*

Order CXXIX LAURINEÆ

Noble trees or shrubs with handsome foliage and inconspicuous flowers They are chiefly natives of hot countries, where they constitute some of the most valuable of the productions known under the name of spice By botanists they are readily recognized by the singular circumstance of their anthers having each four cells, the valves of which are hinged as it were to the upper edge of each cell, and do not open longitudinally like those of most other plants It is well known that the cinnamon is the produce of the Laurus Cinnamomum, and that its properties are eminently aromatic, warm, and stomachic The same peculiarities, but in a less degree, exist also in Laurus Cássia, L. malabathrica, and L. culilában, which are all occasionally substituted for true cinnamon, they are found in the leaves of Laúrus parvifolia, in the bark of the species which produces the Pichurim bean, in that of L. cupuláris, which is the Isle of France cinnamon, of L. quixos, which yields the Peruvian cinnamon, in L. Benzoin, which was used as spice in the United States during the American war, and finally, in the common bay tree of our plantations Laúrus sassafras yields the sassafras chips of the shops, but its bark is much more powerful The fruit of many Laurineæ are extremely aromatic, that of Laurus Pérsea is an agreeable West Indian fruit, called the alligator pear Camphor is the produce of Laurus cámphora, and of another or two, this substance is found indeed in small quantities in the roots of almost all the order, one of the cinnamons is even named Capuru Carundu, which signifies camphorated cinnamon

934 Laúrus *W*
936 Cassýtha *W*
1942 Hernándia *W*
1077 Agathophýllum *W*

Order CXXX MYRISTICEÆ

Closely allied to the last, especially in sensible properties The arillus of Myristica is the mace of the shops, and its nut, the famous nutmeg It is well known that this abounds with oil, in Viróla sebífera the oily secretion is so copious, that it is readily separated by immersion in boiling water under the form of fat.

2120 Myristica *W*

Order CXXXI PROTEACEÆ

Favorite shrubs with gardeners, both on account of the neatness of their foliage and the beauty of their flowers With very few exceptions, they are confined to the southern promontory of Africa, and to New Holland, where they adorn large tracts of country They are shrubby or arborescent plants with an arid habit The leaves are simple, evergreen, narrow, entire or serrated The flowers generally grow in clusters, and are green, yellow, or red, sometimes in true Proteas surrounded by colored bracteæ with dark hairy margins Their stamens are four, with distinct anthers, which rarely adhere together The pollen is triangular, the stigma undivided and usually oblique Their fruit is of various kinds, either a solitary nut or a sort of cone consisting of many nuts immersed among the indurated remains of abortive flowers Of their properties, little is known Some of the Rhópalas afford tolerable timber, the bark of Prótea speciósa and grandiflóra is astringent and useful in diarrhœas The seeds of Embóthrium tinctórium yield a powder which is employed for dying pink The Próteas of the Cape, and the Banksias and Dryándras of New Holland, are the finest plants of the order

229 Petróphila *R Br*
230 Isopógon *R Br*
231 Prótea *R Br*
232 Leucospérmum *R Br*
902 Aúlax *R Br*
2053 Leucadéndron *R Br*
233 Mimétes *R Br*
234 Serruria *R Br*
235 Nivénia *R Br*
236 Sorocéphalus *R Br*
237 Spatálla *R Br*
238 Persoónia *R Br*
239 Grevíllea *R Br*
240 Hákea *R Br*
241 Stenocárpus *R Br.*
242 Lambértia *R Br*
243 Xylomélum *R Br*
244 Telopéa *R. Br*
245 Lomátia *R Br*
246 Rhópala *R Br*
247 Bánksia *R Br*
248 Dryándra *R Br*
2142 Brabéjum *W*

Order CXXXII. THYMELÆÆ.

Nearly all shrubby plants, found in all parts of the world, but most abundantly in the south of Africa. The flowers are white yellow, or red, most commonly in clusters, and often fragrant, the foliage is entire, either smooth or silvery, and generally very neat Their wood is particularly soft, their inner bark easily separable, and in Daphne Lagetta, pulls out by the division of the vertical fibres into a sort of network resembling lace Their bark is extremely acrid, acting as a vesicatory when applied to the skin, and if chewed, producing extreme heat and torture in the mouth, a decoction of it has been used with some success in venereal diseases The seeds of these plants are poisonous to man, but birds eat them with impunity The fibres of Dirca and Lagétta are used for cordage, those of Daphne gnidium and Passerina tinctória are employed in the south of Europe for staining wool yellow, which is converted into green by the addition of Isátis

73 Pimeléa *B P* 910 Daphne *W.* 913 Stelléra *W* 915 Lachnæ'a *W.*
249 Struthíola *W* 911 Dirca *W* 914 Passerina *L* 1032 Dáis *W*
909 Lagétta *J* 912 Gnidia *W*

Order CXXXIII SANTALACEÆ.

Trees or dwarf herbs, with inconspicuous or unattractive flowers They are chiefly natives of the Cape, New Holland, and India, a few only being found in Europe and North America Their virtues are few The wood of Sántalum álbum has a sweet aromatic flavor, and a slightly bitter taste it is chiefly known as a perfume, although it is said to possess mild sudorific properties The leaves of Myoschílos are purgative, of Osyris japónica eatable as salad, Thésium is slightly astringent

307 Síntalum *W.* 908 Memécylon *W* 2051 Osýris *W* 2161 Nýssa *W*
569 Thésium *W* 1033 Bucida *W* 2141 Fusánus *L* 2162 Hamiltónia *W*

Order CXXXIV ELÆAGNEÆ

Hardy shrubs or small trees, with deciduous leaves, covered, as well as the bark, with minute silvery scales · their flowers are inconspicuous, but sometimes agreeably fragrant. They occupy but little space, a few inhabiting China and Japan, and the remainder Europe, North America, and Guiana. The berries of Hippóphae rhamnoides, which are slightly acid, are used as a kind of sauce by the Swedes

259 Elæágnus *W* 2057 Shephérdia *Nutt* 2058 Hippóphae *W*

Order CXXXV ARISTOLOCHIÆ

Here we are on the limits of Monocotyledones and Dicotyledones The species are herbaceous or half shrubby plants, with simple, often reniform, leaves, and mottled grotesque flowers, usually brownish purple Their roots are all bitter, and possessed of tonic and stimulating properties, but the degree in which they exist in different species is not at present ascertained The Aristolochias have been in former days praised as emmenagogues, and many are still used in South America as a remedy for the bite of serpents A'sarum europæ'um is a purgative and emetic when fresh, but its powers are much diminished by drying, its dried leaves are occasionally used by the country people in some parts of England as a sternutatory

1072 A'sarum *B* 1934 Aristolóchia *W*

Order CXXXVI EUPHORBIACEÆ

Weeds and lofty trees, of such varied appearance and property, that it is scarcely possible to frame a brief character by which they can be expressed Their vegetation in cold countries is mostly herbaceous, in hot countries frutescent or arborescent, their juice is milky, and their flowers mostly inconspicuous It is for their medicinal properties that they are chiefly known, and these are as various as their aspect, mostly, however, dangerous, and always to be suspected In a few of them, the smell and taste are aromatic, but in most, there is either no smell or it is nauseous, and the taste constantly acrid and pungent Some possess also an acrid limpid fluid, which is given out by the leaves when touched Many of them act strongly upon the kidneys, as several species of Phyllanthus, the leaves of Mercuriális ánnua, and the root of Ricinus communis Many are said to be powerful medicines in cases of dropsy The bark of several Crótons, the wood of Cróton Tiglium and Búxus, the leaves of the same, and also of Cicca disticha, several Euphorbias, and others, are recorded as sudorifics, and useful against syphilis, as emetics, we find the roots of the Euphórbias, the juice of Cómmia, A'nda, Mercuriális perénnis, &c A great number are purgative, especially the leaves of Búxus and Mercuriális, the juice of Euphorbia, Cómmia, Hura, the seeds of Ricinus, Cróton Tiglium, A'nda, and Jatropha The effects of some others are so dangerous, particularly Hippómane, that it is not advisable to administer them even in very small doses, even in many Euphórbias it is difficult to draw a line between the quantity in which they are poisonous, and that in which they are harmless or useful The nature of their poison is mostly acrid, occasionally, however, mixed with something narcotic, as is apparent from the effect of those which are used for poisoning or rather stupifying fish The purgative oil in which the seeds of many are found to abound, has been determined to reside wholly in the albumen, hence the embryo of some, as Omphálea diándra, is eaten as nuts Boiling or roasting has also the effect of dissipating their noxious effects, thus Játropha Manihot, than which there scarcely exists a more dangerous poison, affords a food when submitted to fire, called cassava, the flour of which is often used in London as a luxury for making puddings, than which few are reputed to be more wholesome But the most curious of all the products of Euphorbiaceæ is the Caoutchouc, that singular substance which, although the produce of dangerous acrid trees, possesses nothing whatever which has been found capable of acting upon the human system in whatever way applied, which is unalterable either in air, in water, or in spirits, although it softens at a high temperature It is chiefly produced by Siphónia elástica, but also exists in the juice of very many others, as Excæcária Agallócha, Hippomane Mancinélla, Húra crépitans, Sápium aucuparium, Plukenétia volúbilis, the Játrophas, Mábea, Ompháleas, and many others Tournesole, another curious chemical preparation, is the juice of Cróton tinctorium, but is also found in several others Many other properties belong to this order, which it would be too long to detail in this place. The curious reader will find ample information in the medical division of M Adrian de Jussieu's monograph of the order, from which most of the foregoing remarks are taken

Section I

1963 Pachysandra *Mi* 1957 Búxus *W* 1978 Securinéga *W* 2071 Flúggea *W*

Section II

1958 Cicca *W* 2092 Kiggelária *W* 2122 Cluytia *W*
Phyllánthus *W* 2025 Andráchne *W* 2148 Bridélia *W*

Section III

2032 Cróton *B* 2105 Rottlera *Rorb* 2034 Ricinus *W* 2028 Aleurites *W*
2118 Adelia *B* 2104 Gelonium *Rorb* 2033 Játropha *W* 2097 Hyænánche *H K*
2044 Borya *W* 2119 Loureira *W*

Section IV

2038 Acálypha *W* 2088 Mercuriális *W* 2040 Plukenétia *W* 1944 Trágia

SECTION V.

2031 Sapium *W* 2030 Hippómane *W* 2035 Hura *W* 2029 Omphálea *W*
2026 Stillingia *W* 1992 Acidóton *W* 2117 Excæcária *W*

SECTION VI

2039 Dalechámpia *W* 1103 Euphórbia *B* 1104 Pedilánthus *Neck.*

ORDER CXXXVII RESEDACEÆ

Weeds of no interest, except the Réseda odorata for its delicious fragrance R lutéola, a common annual in waste places, yields a yellow color fit for dying

1102 Réseda *W* 2099 Datisca *W.*

ORDER CXXXVIII CALYCANTHEÆ

Handsome grateful deciduous shrubs, with deliciously fragrant flowers, natives of North America and Japan They are not known to possess any medicinal virtues but their odour insures them a place in every garden, notwithstanding the uninviting look of the blossoms themselves

1157 Calycanthus *L* 1158 Chimonanthus *Lindl*

ORDER CXXXIX ATHEROSPERMEÆ

Allied to the last in sensible and botanical qualities they are shrubs, natives of America and New Holland, of which little is known either to gardeners or botanists

2103 Peúmus *Pers*

ORDER CXL EMPLEUREÆ

Dwarf heath-like shrubs, with obscure flowers and berries, natives of Europe and North America

2045 Empetrum *L*

ORDER CXLI URTICEÆ

Few are the objects in this order deserving the care of the cultivator, it is rather extraordinary, however, that those few are abundantly so Among worthless weeds and shabby half herbaceous shrubs, some of which are covered with rough points, and others defended by stinging hairs, we find the fig, the mulberry, the nemp, the hop, and the bread-fruit, all objects of the first consequence to the world Here also is placed the half fabulous Upas, with which lying travellers and credulous naturalists have long deluded Europe The Upas tree is now known to be the Antiáris toxicária, the inspissated juice of which is indeed a frightful poison, but the baneful effects of whose branches are purely imaginary Similar, though inferior, qualities have been found to exist in Ficus toxicária, and some of the Artocarpuses The root of the black mulberry is bitter, acrid, and purgative, of Dorsténia brasiliénsis, emetic, of D contrayérba, bitter, aromatic, hot, and stimulant A decoction, or the dried leaves, of hemp, is eminently narcotic, and forms the basis of the well known intoxicating Turkish drug called Bang or Haschisch The tenacious nature of the fibres of the hemp is also found in other plants of the order, especially Urtica cannabina, the hop, the bread-fruit tree, the common stinging nettle, and others

1962 Urtica *W* 1993 Phelygonum *W* 2043 Cecrópia *W* 75 Gunnéra *W*
1961 Pilea *Lindl* 2059 Broussonétia *W* 1969 Maclura *Nutt* 2158 Brósimum *W*
2157 Parietária *W* 2073 Cánnabis *W* 1959 Mórus *W* 1973 Franzéria *Cav*
1960 Bæhméria *W* 2074 Humulus *W* 1935 Artocárpus *W* 2063 Trophis *W*
983 Forskohlea *W* 2167 Ficus *W* 257 Dorsténia *W.* 2050 Stilágo *W*

ORDER CXLII AMENTACEÆ

Here is the group in which all the timber trees of Europe, and most of those of all cold countries, are stationed Every genus consists of plants important to the wants of man The alder, the birch, the willow, the poplar, the oak, the chesnut, the hornbeam, and the plane, are all collected in this place, to which they have been brought by the coincidence of similar fructification existing in all of them This similarity depends upon their producing flowers of one sex only, the males of which are always arrayed in catkins, of which the flowers are destitute of calyx or corolla, in the place of which is produced a single scale Their bark is furnished with an astringent principle, which has rendered them valuable either for staining black, as in the alder and the oak gall, or for tanning, as in the oak, or as febrifuges, as the alder, the birch, the oak, most of the willows, and also Populus tremuloides, which is well known in North America as a tonic and stomachic febrifuge The substance called tacamahaca was formerly supposed to be produced by some of the poplars, but it is now believed to be obtained from a very different plant, Fagára octándra The fruit of many Amentáceæ contains a considerable proportion of fecula, which renders it fit for the food of man and other animals, as the acorns of the oak, the mast of birch, the nut of Castanea and Córylus, &c

1955 Alnus *W* 2001 Liquidámbar *B* 1995 Ostrya *B* 1997 Fágus *W*
1956 Bétula *W* 2002 Platanus *W* 1996 Carpinus *W* 1998 Córylus *W*
2042 Salix *B* 2005 Salisburia *L T* 1994 Castanea *W* 2000 Quércus *W.*
2087 Populus *W*

ORDER CXLIII ULMACEÆ

Many of the observations upon the last order are also applicable to this, which differs rather in certain technical characters, than in any arrangement of nature The elm is its representative, from which the others only slightly differ

616 Planéra *Mich* 615 Ulmus *I* 2145 Céltis *W*

ORDER CXLIV CASUARINEÆ

These are nearly related to Coniferæ, than which they are dwarfer, and of far less importance By various writers they have been tossed about between Amentaceæ and Coniferæ, and have at last settled in a place by themselves The leaves of Comptónia asplenifolia are employed in the United States against diarrhœa The berries of Myrica cerifera yield, on boiling, an abundance of wax which is manufactured into candles, the nuts of Ephédra distáchya are eatable, the wood of some of the Casuarinas is remarkably hard and durable.

1936 Casuarina *W* 1941 Comptónia *W.* 2056 Nagèia *Gærtn.*
2115 Ephédra *W.* 2055 Myrica *W.*

ORDER CXLV CONIFERÆ

These bear the same relation in point of consequence to resinous trees, that Amentaceæ bear to those that are not resinous They are well known as lofty timber, yielding valuable wood and abundance of resin.

Among them is now numbered the loftiest tree in the world, a species of pine found by Mr. Douglas in California, which grows 220 feet high, with a circumference of 60 feet Pitch, turpentine, Venice turpentine, are produced by various species Gum Sandarach, by Thúja quadriválvis, a matter like olibanum, by Juniperus lýcia, a sort of liquid storax, by Altingia excélsa. The Juniperuses in which the resin is "incompletely oxygenized," are more fragrant, and also stimulating in a greater degree, as the savin for example The berries of many of these plants possess similar qualities Their seeds are all oily, those of Pinus Pinea, Cémbra, and Lambertiána, and Salisbúria adiantifólia, are eatable as nuts The fleshy fruit of the ivy, which is poisonous, is an exception to the general innoxious character of the order Coniferæ are mostly inhabitants of the northern parts of the world, where they form immense forests, and supply with their dense persistent leaves the place occupied by the evergreen trees of warmer climates A few are found in the southern hemisphere

2012 Pinus *W* 2017 Cupréssus *W* 2112 Araucária *J* 1970 Exocárpus *Lab*
2013 A'bies *Salisb* 2018 Thúja *W* 2010 Bélis *Salisb* 2016 Podocárpus *L'her*
2014 Lárix *Salisb* 2013 Juníperus *W* 2011 A'gathis *Salisb* 2114 Táxus *W*
2015 Schubértia *Mirb*

Order CXLVI. CHLORANTHEÆ

Obscure Asiatic weeds of no known use, and wholly destitute of interest for gardens

25 Chloránthus *W*

Order CXLVII PIPERACEÆ

The peppers are far more valuable in commerce than interesting in cultivation, their flowers being in all cases very insignificant, and their leaves so uniform in appearance, as to create but little variety Nearly the whole indeed of the herbaceous species or Peperomias, as they are sometimes called, are mere weeds The berry of the pepper is well known to be hot, aromatic, pungent, and stimulating, not only in the common peppers of the shops, but also in P cubeba, carpúnga, and heterophýllum The Piper amalágo yields a strong smell of anise, a decoction of its berries is used in Spanish America for washing ulcers The Piper Bétel and Sirihóa afford the Malays a powerfully acrid and exciting preparation, which, they suppose, invigorates and enables them to withstand the debilitating influence of their climate In the South Sea Islands, an inebriating beverage is procured by the mixture of the leaves and stems of P inébrians with water No pepper has yet been found beyond the limits of the tropics Saurúrus is the representative of the order in extra-tropical countries

77 Piper *W* 872 Saururus *W*

Order CXLVIII CYCADEÆ

The true station of this very curious order is extremely uncertain Although placed here in conformity with the common practice, it is to be supposed that its true station is in the immediate vicinity of ferns, with which the species agree in vernation, and in many curious particulars All are natives of countries beyond the reach of frosts, chiefly of the Cape of Good Hope and equinoctial America With a low trunk which rarely exceeds the height of a few inches, they have the fronds and appearance of pigmy palms, and the inflorescence of gigantic Equisétums The trunk of Cýcas contains a great quantity of fæcula, which is manufactured into a kind of spurious sago, and a similar substance, it has lately been ascertained, may be obtained from the stem of Cýcas (*Gard Mag*, vol iv)

2107 Cycas *W* 2108 Zámia *W*

Class II. MONOCOTYLEDONES.

The physiological peculiarities of this class of plants have been already explained in the general remarks which precede this arrangement of natural orders To what is there stated, little remains to be added, except that in these northern regions, every thing included in it is herbaceous, and that in hotter latitudes, few deserve the name of either bush or tree, except the palms, and a few Aroideæ and Asphodeleæ

Section I *STAMENS EPIGYNOUS*

Order CXLIX HYDROCHARIDEÆ

Floating white-flowered plants, of which Stratiotes is the most majestic They possess no known properties, but have the singular character in Monocotyledones of being in some cases lactescent. The species are natives of various parts of the world

308 Trápa *W*. 859 Damasónium *W* 2089 Hydrocháris *W* 2096 Stratiótes *W*

Order CL ORCHIDEÆ

Of all tribes of plants, this is the most singular, the most fragrant, and the most difficult of culture The flowers are often remarkable for their grotesque configuration, which has been likened to heads and bodies of animals, and for the strange character of their stems, which are sometimes attenuated into a degree of gracefulness scarcely equalled even among grasses, and sometimes contracted into a clumsy goutiness of figure such as is known no where else The species are found inhabiting the mountains and meadows of the cooler parts of the globe, or adhering by their tortuous roots to the branches of the loftiest trees of the tropical forest, to which their blossoms often lend a beauty not their own Vulgarly, this last description of plants is called parasitic, they are, however, not so, deriving no support from the juices of the plants on which they grow, but on the contrary, are epiphytes, merely adhering to other plants for support, and vegetating amidst the rich black soil which collects at the foot of all trees growing in a hot humid climate It is very singular that the pollen of these plants has no parallel, except among the very different and distinct order of Asclepiadeæ The only medical properties of the order exist in the roots of some of the Orchises, from which the nutritious substance called salop is prepared The Vanilla of the shops is the pod of the genus called Vanilla. From the boiled stems of some of the Brazilian species a tenacious glue is obtained, which is employed in many useful purposes

Tribe 1 Neottieæ *Lindl*

1870 Goodyéra *R Br* 1872 Ponthiéva *R Br*. 1876 Listéra *R Br* 1875 Stenorhýnchus *Rich*
1871 Diuris *Sw* 1873 Neóttia *L* 1874 Spiránthes *Rich*

Tribe 2 Arethuseæ. *Lindl.*

1877 Arethúsa *L* 1879 Pogónia *R Br* 1880 Epipáctis *Sw*
1878 Calopógon *R Br* 1881 Caleána *R Br* 1882 Corallorrhíza *Haller.*

Tribe 3 Gastrodieæ. *R Br*

1926 Prescotia *Lindl* 1930 Vanilla *Sw*

Tribe 4 OPHRYDEÆ. *Lindl*

1859 Orchis *L*
1863 Glóssula *Lindl*
1864 Anacámptis *Rich*
1860 Nigritélla *Rich*
1865 Aceras *R Br*
1866 Ophrys *L*
1869 Serápias *R Br*
1855 Disa *Sw.*
1861 Habenária *R Br.*
1858 Gymnadénia *R Br*
1857 Platanthéra *Rich*
1867 Chamorchis *Rich*
1868 Herminium *R Br*
1862 Bartholina *R Br*
1856 Satyrium *W.*

Tribe 5 VANDEÆ *Lindl*

1923 Calánthe *R Br*
1913 Octoméria *R Br*
1892 Maxillária *Fl per*
1901 Camaridium *Lindl*
1902 Ornithidium *Salisb.*
1904 Pholidóta *Lindl*
1910 Ornithocéphalus *Hook*
1909 Cryptarrhéna *R Br*
1917 Aérides *Sw*
1916 Vanda *R Br*
1915 Sarcánthus *Lindl*
1922 Aerántheς *Lindl*
1921 Angræcum *Pet Th*
1919 Ionópsis *Kth*
1918 Renanthéra *Lour.*
1885 Cymbidium *Swz*
1887 Lissochilus *R Br*
1888 Geodórum *Jacks.*
1895 Oncidium *Sw*
1898 Macradénia *R Br*
1886 Brássia *R Br*
1896 Cyrtopódium *R Br*
1889 Catasétum *Rich*
1920 Eulóphia *R Br*
1891 Xylóbium *Lindl*
1908 Polystáchya *Hooker*
1890 Trizeúxis *Lindl*
1883 Rodriguézia *Fl per.*
1884 Goméza *R Br*
1893 Notýlia *Lindl.*

Tribe 6 EPIDENDREÆ. *Lindl*

1911 Blétia *Fl per*
1914 Brassavóla *R Br.*
1907 Epidéndrum *L*
1906 Cáttleya *Lindl*
1905 Broughtónia *R Br*
1903 Isochílus *R Br*

Tribe 7 MALAXIDEÆ *Lindl*

1912 Eria *Lindl*
1900 Dendróbium *H K*
1899 Amsopétalum *Hooker*
1897 Cælógyne *Lindl*
1925 Malaxis *L*
1927 Microstylis *Nutt*
1928 Láparis *Rich*
1929 Calýpso *Salisb*
1894 Pleurothállis *R Br*
1924 Stélis *Sw*

Tribe 8 CYPRIPEDIEÆ

1931 Cypripédium *H*

ORDER CLI SCITAMINEÆ

These are distinguished from the last by their pollen not cohering in masses, their seeds not being winged, and their plurilocular ovarium. Their sensible qualities are also widely different. The species are natives only of the tropical parts of the world, where they form stemless or caulescent herbaceous plants, with long broad leaves, and flowers of white, yellow, or red, often possessing great fragrance, and generally much beauty. Their sensible qualities reside either in the root or the seeds. The former is the part used of the Ginger, the Galangale, the Costus, Turmeric, Zedoary, and others, all of which are more or less aromatic. The root of turmeric is also well known as affording a yellow dye, a property which it possesses in common with some others. The seeds of Cardamom are well known for their aromatic stimulating powers.

6 Hedýchium *W*
7 Roscóea *Sm*
8 Alpínia *W*
9 Helícnia *R Br*
10 Zingiber *Rosc*
11 Costus *Rosc*
12 Kæmpféria *W*
13 Amomum *Rosc*
14 Curcuma *W*
15 Globba *Rosc.*
16 Mantísia *Smns*

ORDER CLII CANNEÆ

Differing from the preceding, in the absence of aromatic principles, in the petaloid nature of the filament, and the single cell of their anther, they wholly resemble them in external appearance and geographical distribution. The Cannas are well known for their beautiful flowers, and the Maranta arundinácea is celebrated for the abundance of nutritive fæcula which is prepared from it, and imported to Europe under the name of arrow-root.

1 Canna *W*
2 Maránta *W*
4 Thália *W*
5 Phrynium *W*
3 Calathea *Meyer.*

ORDER CLIII MUSACEÆ

A noble order of plants, resembling the two last in appearance, but of far more gigantic stature, different geographical distribution, and sensible qualities. All the species, without exception, are among the grandest in the vegetable world, whether the breadth and beauty of their foliage, or the surpassing grandeur of their flowers, be considered. They are not, like Scitamineæ and Cannea, confined to the tropics, but approach in many points towards the cooler latitudes of either hemisphere. While the Strelitzias, resplendent with orange and scarlet and white, are peculiar to the Cape of Good Hope, the plantain is laden with its enormous masses of wholesome pleasant fruit, in the mild climate of Madeira, the Helicons and Urānias appear in the sultriest forests of Madagascar and Guiana. The fruit of the Músa is, as just stated, pleasant and wholesome, the leaves of the same plant form a valuable thatching for cottages, and the fibres of a particular species are manufactured into a fine hemp, from which the most delicate muslins of India are prepared.

570 Helicónia *W*
571 Strelítzia *H K*
721 Musa *H*
722 Urānia *W*

ORDER CLIV HÆMODORACEÆ

The name of this order, derived from αἷμα, blood, indicates its most striking peculiarity, the roots of several species of Hæmodorum, Wachendorfia, and Heritiéra yielding a brilliant crimson dye. The species have equitant leaves, and six stamens, with anthers turned towards the ovarium, in which last character they differ from the closely allied order of Irideæ. They are found, with very few exceptions, in the Cape of Good Hope and New Holland.

108 Xiphídium *W*
110 Wachendórfia *Ker*
111 Hæmodórum *Sm*
113 Dilátris *Ker*
718 Lophíola *B M*
719 Argolásia *Juss*
720 Anigozánthos *Lab*

ORDER CLV IRIDEÆ

The peculiarity of this order exists in the superior six-cleft perianthium, three stamens opposite the outer segments, and the anthers so inserted that the line of their bursting is towards the outside of their flower. Occasionally, they are still called by the old appellation of Ensatæ. Most of the species are extremely beautiful; and as they are generally very easily cultivated, they have become universal favorites in gardens. Many of the species are found by the side of streams, or in rich pastures in Europe, Siberia, and America, others adorn the most barren deserts of the same countries, with their perishable flowers, a third set, consisting for the most part of Sisyrinchium and its allies, are found in cool parts of the islands in the South Seas; and, lastly, a large proportion of the order contributes to the herbage of Southern Africa, that indescribable charm which has captivated all observers. Their medicinal virtues are trifling. Iris florentina and germánica have roots, which, when dry, smell like violets, and are slightly stimulant, acting as sternutatories or purgatives, according as they are employed. The stigmas of the Crócus form the well-known saffron, which differs from the general character of the order, in being aromatic, and possessing a valuable coloring matter, which has the singular property of entirely disappearing under the influence of the sun's rays.

93 Crócus *Ker*
94 Witsénia *Ker*
95 Ixia *Ker*
96 Trichonéma *Ker*
97 Geissorhíza *Ker*
98 Hesperántha *Ker*
99 Sparáxis *Ker*
100 Tritónia *Ker*

101 Watsónia *Ker*
102 Babiána *Ker*
103 Lapeyroúsia *Ker*
104 Melasphæ'rula *Ker*
105 Gladiolus *Ker*
106 Anomathéca *Ker*
107 Antholyza *Ker*
112 Aristæ'a *Ker*
115 I'ris *Ker*
116 Moræ'a *Ker*
117 Márica *Ker*
118 Pardánthus *Ker*
1450 Patersónia *R Br*
1451 Ferrária *Ker*
1452 Tigrídia *J*
1453 Galáxia *W.*

Order CLVI AMARYLLIDEÆ

Here we have another group of vegetation so lovely as to have excited admiration from the days of Solomon, who called them the lilies of the field, down to our own period Their roots are all bulbous In stature they seldom exceed a foot or two in Doryánthes, and some species of Crínum alone, much surpassing such a size, in foliage they possess a uniformity of figure which is very singular, in color they vary from white and yellow to deep scarlet and azure blue, in fragrance they vie with the violet and the primrose Some of the species are natives of thickets in the cooler provinces of Europe and Asia; others are found deep rooted in the burning shores of islands where scarcely a blade of grass interposes itself between them and the torrid rays of a scorching sun, many spring up in the gloomy, damp, and sultry woods of equinoctial America, and another set intermingles with the Ixias and Gladioluses of Southern Africa Several of the Narcissi, independent of their beauty, possess emetic qualities, from the viscid juice of Hæmánthus toxicárius, the Hottentots procure a poison wherewith to smear their arrows

711 Narcíssus *W*
712 Pancrátium *W*
713 Eucrósia *B Reg*
714 Fúrycles *Salisb*
715 Calostémma *R Br*
716 Chlidánthus *Herb.*
717 Chrysiphíala *Ker*
731 Hæmánthus *W.*
732 Galánthus *W*
733 Leucójum *W*
734 Strumária *Jacq*
735 Crínum *W*
736 Cyrtánthus *H K*
737 Brunsvígia *Heist*
738 Nerine *Herb*
739 Amarýllis *W*
740 Vallota *Herb*
741 Griffínia *Ker*
742 Sternbérgia *W*
743 Zephyránthes' *Herb*
744 Habránthus *Herb*
745 Doryánthes *R Br*
746 Gethýllis *H K*
748 Alstrœméria *W*
749 Conanthéra *Fl per.*

Order CLVII HYPOXIDEÆ

America, New Holland, the Cape of Good Hope, Polynesia, and the Indian Archipelago give birth to these plants, which have sweet yellow flowers and linear leaves, protected by long weak hairs Nothing is known of their medicinal qualities.

750 Hypóxis *W.* 751 Curcúligo *H K*

Order CLVIII DIOSCOREÆ

A climbing stem, and broad, cordate, or angular leaves, inconspicuous yellowish flowers, and a large fleshy root, are the obvious characteristics of this order, of which the yam is the representative, the roots of this plant yield one of the most important articles of food in the tropical countries

2083 Testudinária *Burch* 2084 Rajánia *W* 2085 Dioscórea *W*

Section II *STAMENS PERIGYNOUS*

Order CLIX HEMEROCALLIDEÆ

These are fine shewy plants, bearing their flowers in umbels or racemes, either white, yellow, red, or blue, they are mostly inhabitants of temperate zones, and are of little utility, with the exception of the Aloe, the purgative powers of which need not be insisted on This genus is, besides, remarkable among Monocotyledones for its fleshy leaves, in which, and its woody stem, it offers a striking deviation from the usual structure of these plants

747 Polánthes *L*
767 Agapánthus *W*
768 Blandfordia *R Br*
769 Hemerocállis *W*
770 Aloe *W*
776 Alétris *W*
777 Tr'toma *B M*
778 Veltheimia *H K*
779 Sanseviéra *W*
780 Tulbághia *W*
792 Brodiæ'a *Sm*

Order CLX ASPHODELEÆ

Different from Hemerocallideæ in their expanded flowers and dark crustaceous seed-coat, the only characters which have yet been discovered to distinguish them The species are all pretty, many very handsome, some bulbous, some with fasciculated roots, a few with arborescent stems They are uncommon in tropical countries, very abundant in temperate latitudes, and not unfrequent in the cooler regions of the world Among the prettiest are Gágea, Scilla, and Hyacinthus, the least interesting are Chlorophýtum and Zuccágnia Aspáragus and Dracæ'na have berried fruits, the former is diuretic, and when young is employed as a favorite food, the same properties are possessed by Scilla and Allium The stamens of Arthropódium are remarkable for their tuft of yellow hairs, of Dianélla for the thickening of the filaments Many of the Alliums are very pretty, and admired notwithstanding their unpleasant odor, their roots are all eatable, and those of some among the most useful articles of food Thysanótus, the fringed violet of New Holland, has rich purple blossoms, with long delicate fringes which sparkle in the sun, as if continually bedewed with minute particles of water From Phórmium tenax the strong fibrous substance called New Zealand flax is prepared Xanthorrhæ a has an arborescent stem which abounds in resin

808 Asphódelus *W*
807 Bulbine *W en*
806 Eremurus *Bieb*
809 Anthéricum *W*
810 Arthropódium *R Br*
811 Chlorophýtum *Ker*
812 Caísia *R Br*
813 Narthécium *B M*
814 Dianélla *Lam*
815 Eustréphus *R Br*
805 Massónia *W.*
803 Scilla *W*
804 Puschkínia *Bieb*
802 Ornithógalum *W*
801 Gágea *Sal*
800 Eriospérmum *W*
796 Allium *W.*
797 Albúca *W*
795 Sowerbæ'a *L T*
798 Xanthorrhœ'a *R Br*
791 Eucomis *W*
799 Thysanótus *R Br*
794 Aphyllánthes *W*
775 Phyllóma *B M*
774 Dracæ'na *W*
816 Aspáragus *L*
817 Drimia *Jacq*
818 Uropétalon *Ker*
819 Hyacínthus *B M*
820 Zuccágnia *Th*
821 Muscári *B M*
822 Lachenália *W.*
823 Phórmium *W*
824 Cyanélla *W*
793 Pelosánthes *B R*
2111 Rúscus *W*

Order CLXI SMILACEÆ

These scarcely differ from the baccate Asphodeleæ, except in their usually trifid style, and the membranous integuments of the seed Many are interesting plants, especially the lily of the valley, a species of Convallária, the odor of which is perhaps the most grateful in the vegetable kingdom Several others, as Uvulária, Smilacina, Polygonátum, and Trillium are objects of ornament Smilax is remarkable for its twining stems, and its leaves, which resemble those of Dicotyledones, the roots of several species form the sarsaparilla of the shops, a drug, the nature of which is mucilaginous and rather bitter, and which is employed as diaphoretic and diuretic Medéola is also an active diuretic The roots of Támus are purgative and dangerous

785 Uvulária *W*
786 Streptópus *M*
787 Convallária *Desf*
788 Smilacina *Desf*
789 Polygonátum *Desf*
790 Ophiopógon *Ker*
843 Myrsiphýllum
846 Medéola *W. en*
2081 Smilax *W.*
2082 Támus *W*
850 Trillium *W.*
729 Páris *W*

Order CLXII BROMELIACEÆ

Of these the eatable pine-apple is the representative, from which the other genera differ more in the want of a fleshy fruit than in general appearance Their habit is acid, their leaves rigid and toothed with spines, and covered with minute scales, their bracteæ often colored with scarlet, and their flowers either white or blue

They are all natives of tropical countries, with the exception of Tillándsia, which, in the humid woods of Carolina, forms dense festoons among the branches of the trees; this, like many others of the order, is an epiphyte, vegetating among the black mould that collects upon the bark of trees in hot damp countries; others are inhabitants of deep and gloomy forests, and others form, with their spiny leaves, an impenetrable herbage in the extensive pampas of Buenos Ayres and Brazil. From the Agáve mexicana a fermented beverage is prepared, from which a strong colorless spirit, resembling the best Scotch whiskey, is distilled.

726 Bromélia *W* 727 Guzmánnia *Fl per.* 723 Bonapártea *F P* 725 Furcræ'a *F.*
728 Pitcaírnia *W* 729 Tillándsia *W* 724 Agáve *H K*

Order CLXIII. LILIACEÆ.

It is doubted whether several of the preceding orders are not rather sections of this, until, however, the combination of these shall be effected by some hand yet more masterly than those by which they have been divided, it is best to let them remain as they are. The beauty of the plants composing the Liliaceæ, strictly so called, is universally acknowledged, the rich colors of the branching lilies, the vivid hues of the painted tulip, the modest graces of the humble Erythróniums, and the portly forms of the Yuccas are all attractions of which no good garden should be destitute. The species are all inhabitants of either cold or temperate latitudes.

771 Lilium *W* 773 Fritillária *W* 782 Erythrónium *W*
772 Túlipa *W* 781 Yucca *W*

Order CLXIV. MELANTHIACEÆ.

These, too, are pretty herbs, although destitute of the grandeur of the preceding, which, however, they far surpass in the potency of their virtues. The flowers of many are inconspicuous, and of a dull-green or yellow color, sometimes assuming a livid hue, which will bespeak the nature of their powers. A dangerous or poisonous acrid juice is their characteristic, which is particularly active in some of them, such as the Colchicum and Veratrum. The roots of the former are the basis of the eau médicinale, and are now used in cases of gout with much success. The root of Veratrum is believed to have been the hellebore of the ancients, an active drug, which, administered in small doses, is a drastic purgative, in more abundance a violent emetic. The root of Helónias dioica, infused in water, is anthelmintic, but, steeped in spirits, yields a bitter and tonic tincture. The leaves of Colchicum and Veratrum often produce vomiting and severe pain in the animals that eat them, the flowers of the first are also said to be poisonous, and its seeds to possess the same properties as the roots, but in a milder degree. Groves and pastures in Europe and Siberia and North America are the most frequented by Melanthaceæ, several are found at the Cape, and Gloriosa is a native of the woods of middle Africa.

851 Colchicum *W* 847 Xerophýllum *Mich* 819 Androcýmbium *W* 858 Nolina *Mich*
784 Bulbocódium *W* 842 Lichtensteinia *W* 844 Tofieldia *Hud* 2128 Verátrum *W*
845 Melanthium *L* 848 Wurmbea *L* 852 Helonias *L* 783 Gloriósa *W*

Order CLXV. BUTOMEÆ.

Fine water plants, of which Bútomus, by general consent the most beautiful of British plants, has purple flowers, and Limnocháris, a native of the marshes of Brazil, has yellow ones.

939 Bútomus *W* 1175 Limnocháris *Rich*

Order CLXVI. ALISMACEÆ.

Handsome water plants, with white flowers, and many ovaria. Some are common in our English ditches, others are found in similar situations in the tropics.

860 Actinocárpus *R Br* 1988 Sagittária *W* 861 Alisma *W*

Order CLXVII. COMMELINEÆ.

Mostly inhabitants of marshy ground, in either hemisphere, but not known in Europe except in cultivation. America is their grand station. Many are insignificant creeping plants, especially the Commelinas; others, as the Pontederias are very handsome, and the Dichorizandras are exceedingly noble caulescent plants, with large thyrses of blue flowers: this color is the prevailing one of the order.

85 Callisia *W* 89 Aneilema *B P* 730 Pontederia *W* 766 Dichorizándra *Haud*
88 Commelina *B P* 90 Cartonema *R Br* 765 Tradescántia *W*

Order CLXVIII. JUNCEÆ.

Inconspicuous, rigid, worthless weeds, for the most part, Xýris and Philydrum, which have pretty yellow flowers, if belonging to the order, being exceptions. They clothe barren ground in most parts of the world, and are the first approach to the formation of a regular perianthium, as we ascend in the scale of vegetation. Xerótes has the habit of a low palm.

86 Xýris *L* 761 Luzula *Dec* 2076 Xerótes *R Br*
760 Júncus *L* 839 Flagellária *W* 172 Philýdrum *R Br*

Order CLXIX. ERIOCAULEÆ.

Pretty interesting little bog plants, found in all parts of the world. The order consists of Eriocaúlon only, many of whose species are easily cultivated, though seldom seen in gardens. The Eriocaúlon septanguláre, found in a lake in the Isle of Skye, is, perhaps, the rarest of European plants. They are not known to possess any medical virtues.

223 Eriocaúlon *W*

Order CLXX. PANDANEÆ.

With the habit of palms and the inflorescence of Aroideæ, this fine order stands very distinctly separated from all others. The stem is an arborescent caudex, either growing to a considerable height, or weak, and lying on the ground. The leaves of some are formed into a coarse cordage, the flowers of P. odoratissimus, and the fruit of some others, are eaten. All are tropical.

2004 Carludóvica *Fl per* 2041 Pandánus *W.*

Order CLXXI. NAIADES.

Floating uninteresting plants, scarcely susceptible of cultivation; they form a close approach to Cellulares.

1938 Zannichéllia *W*

Order CLXXII. RESTIACEÆ.

Rigid, inelegant, often leafless plants, with split vaginæ, and the habit of some Cyperaceæ, or true Junceæ. They are all inhabitants of the southern hemisphere, especially of the Cape of Good Hope and New Holland.

2046 Willdenóvia *Th* 2047 Réstio *W* 2048 Elégia *W.* 2110 Leptocárpus *R Br*

Order CLXXIII. PALMÆ.

These were well named by Linnæus, the princes of the vegetable world, for they far surpass all other plants in the grandeur and majesty of their port. Their lofty stem, supported by a mass of fibrous roots, which frequently creep along the surface of the ground, consists of wood with longitudinal fibres, soft in the centre, but hard as horn itself at the circumference, it is almost always unbranched, bearing a tuft of leaves at the summit, in a very few cases it is dichotomous, always round, and it terminates by a single bud, by the fall of the petioles of the leaves, which sheath it in a greater or less degree at the base, it is covered with large scars The leaves, technically called fronds, are pinnate or flabelliform, never simple, and, in a young state, before they expand, they are folded up in plaits from the base to the apex The flowers are small, with bracteæ at their base, either sessile or seated in some cavity, of a pallid color, and contained in a large bag called a spatha, when they open, the mass of inflorescence, called a spadix, bursts suddenly through the under side of the spatha, generally evolving the most fragrant odors Impregnation takes place rapidly, through the injection of the pollen upon the humid surface of the stigmas, which gape open to receive it. The fruit is perfected in a period varying from six months to a year, when ripe it is a drupe or berry, with either a fibrous or fleshy coat, the mass of its kernel consists of only albumen, which, in the case of the cocoa nut, is soft enough to be eaten, but which in most species is as hard as horn Dr von Martius, the celebrated traveller in Brazil, to whom the world is indebted for nearly all that is known of these plants, concludes his remarks upon the characters of the order in the following words — "Palms, the noble offspring of Terra and Phœbus, are natives of those happy countries within the tropics, where the rays of the latter are ever beaming In all such climates they are to be found, with this limitation, however, that in the southern hemisphere they do not overstep the 35th degree of latitude, nor in the northern the 40th Most species are confined within fixed and narrow bounds, for it comes to pass that wherever a district is characterized by striking peculiarities of soil or climate, those species exist which are not found elsewhere, but few, on the contrary, extend over a large extent of surface, as the Cócos nucífera, Acrocómia sclerocárpa, Borássus flabelliformis, &c It is probable that the number of palms existing on the face of the earth, will be found by future travellers to amount to as many as a thousand species Most of them love the margins of springs and streams, but few establish themselves on the shores of the ocean, and yet a smaller number ascend into the alpine regions of their country, some collect in large forests, some are scattered singly or in clusters, among woods and plains In the most ancient periods of the world, when the genera of plants were beginning to be formed, palms scarcely existed, they were preceded in the creation by the more ancient Ferns, Cycadeæ, Grasses, and Equisetaceæ Some of their remains have, however, been found in variegated sandstone, and in limestone of the third order (fletzkalk), part of which belong to unknown species, and part to species still in existence But in the times succeeding the deluge, they appear, from the written evidence of historians and poets, to have followed the footsteps of man, to whom their fruit yielded food, drink, and oil, their stems houses, arms, utensils, flour, and wine, and their leaves cordage and roofs for habitations In cultivation their soil should be slightly saline, they are propagated by seeds more readily than by truncheons of the stem, when cultivated they undergo no alteration, except in producing more fleshy or stemless fruit it is extremely difficult to transplant them beyond their own country, naturally their migration is absolutely opposed by the barriers of the ocean"

762 Corýpha *W*	1982 Ságus *W.*	2008 Nípa *Th*	2079 Borássus *W*
763 Lacuála *W*	1983 Cócos *W*	2009 Arĕca *W*	2080 Mauritia *W.*
764 Thrinax *W.*	1984 Elate *W*	2049 Phœ'nix *W*	2109 Latánia *J*
855 Sábal *P S*	1985 Báctris *W*	2077 Eláis *W*	2153 Rhápis *W*
753 Calamus *W.*	2007 Caryóta *W*	2078 Chamædórea *W*	2154 Chamæ'rops *W*

Section III *STAMENS HYPOGYNOUS*

Order CLXXIV GRAMINEÆ

The order of grasses is beyond doubt the most natural of all that the ingenuity of systematic botanists has contrived, it is also the most numerous in species The inflorescence is very much alike throughout the order, and the floral envelopes, which are bracteæ in a progressive state to the form of calyx and petals, offer few striking characters by which the genera can be characterized Hence it is that the classification of the order, and its division into genera, has not only been found extremely difficult, but has given rise to much difference of opinion among botanists, some of whom, adhering to the synthetical arrangement of Linnæus, admit but a small number of genera, while others, admitting the analytical principles of modern science, divide it into a vast number The middle course in this, as in most other cases, is probably the just one A subdivision of the order into tribes, has been attempted by Palisot, Trimus, Dumortier, Raspail, Kunth, Link, and others, that of M Kunth is here adopted The general habit of grasses is so familiar to every one, that it may be passed over in silence They are remarkable for exhibiting, in no case, properties that are actually poisonous, possessing on the contrary, in almost all cases, wholesome and nutritive qualities These latter are especially obvious in their seeds, which always contain a farinaceous substance, mixed with a certain proportion of glutinous matter No one is ignorant of the various and important uses of the seeds of wheat, rye, barley, oats, maize, rice, and others, and in general of all the larger kinds of grass It must however be remarked, that if the smaller sorts are not employed in like manner, it is merely on account of their minuteness, and not on account of any difference in their nature, in fact, in times of scarcity, and in half cultivated countries, use has advantageously been made of Festúca fluítans, Zizánia aquática, Avéna fátua, Pánicum sanguinále, Avéna elatior, Brómus secalínus, and Elymus arenárius It is also to be noted, that the particular uses for which the seeds of certain grasses are employed, are not peculiar to them, but may be obtained from all the others, with slight modifications Thus beer is made, not only from barley but also from wheat, spirituous liquors not only from our European cerealia, but also from rice But it must be remarked, that a singular exception to the generally wholesome properties of grasses, appears to exist in Lólium temuléntum, the seed of which is reported to be narcotic and inebriating, and even poisonous, there is no doubt, however, that these qualities have been greatly exaggerated, for in the first place they disappear in bread or beer manufactured from Lólium temuléntum, and secondly, in times of scarcity, people have frequently lived upon it But even supposing all that has been stated upon the subject to be true, this plant will still be found to be little different from wheat, when long exposed to wet, so well, indeed, is this known by country people, that a belief exists, that in wet summers wheat is actually transmuted into rye grass The exciting properties of the oat, which are very unusual in this order, have been found to reside in the husk and not in the seed, and to depend upon the presence of a minute quantity of an aromatic principle, analogous to Vanilla, lying imbedded in the envelope of the seed, and capable of being extracted by aid of alcohol As to the deleterious effects of the ergot of rye, these do not depend certainly upon any such property in the rye itself, but is caused either by the ergot disease, or, as is believed, by the parasitic fungus, from the attack of which it arises Now let us pass from the seeds of Gramineæ to their stems, and we shall find a no less remarkable uniformity of nature in them They all contain, especially before flowering, a sweet sugary mucilage, which varies in quantity in different species The sugar cane, in which this is found in greatest abundance, not only constantly exists in the most favorable condition for producing it, as it rarely flowers, but is also one of the largest grasses known The maize also abounds in sugar, and the same substance is secreted in such abundance by the Sórghum saccharátum, that attempts have actually been made in Italy to cultivate it as the sugar cane The creeping roots of grasses, which are generally mucilaginous and demulcent, are sometimes used in medicine, but they are of more importance for retaining in banks the sand of the sea shore, so as to form artificial cliffs on flat coasts, to restrain the inroads of the sea. The stems of Andropógon schænánthus, the leaves of Andropógon citrátum, the roots of Andropógon nárdus, and the whole plant of all the species of Anthoxánthum, exhale an aromatic odor, and possess slightly tonic properties To conclude, the epidermis of grasses has been found to contain a considerable quantity of silex

Tribe 1 PANICEÆ

139 **Páspalum** *W*
140 **Axónopus** *P de B*
141 **Milium** *W.*
142 **Knáppia** *E B.*
143 **Digitária** *P S*
144 **Pánicum** *B P*
145 **Setária** *P de B*
146 **Echinochlóa** *P de B*
147 **Orthopogon** *P de B*
148 **Penicillária** *P. de B*
149 **Lappágo** *W*
134 **Céncbrus** *P S*
135 **Pennisétum** *Rich*

Tribe 2 STIPACEÆ

150 **Stipa** *W*
138 **Oryzópsis** *Mich*

Tribe 3 AGROSTIDEÆ

151 **Muhlenbérgia** *Schr*
152 **Chætúrus** *Lk*
153 **Lagúrus** *W*
154 **Polypógon** *W en*
155 **Gastridium** *P de B*
156 **Agróstis** *W*
157 **Trichódium** *Mi*
158 **Tristegis** *Nees*
159 **Sporóbolus** *B P*
160 **Airópsis** *Desv*
161 **Cinna** *P de B*
136 **Spartina** *W*
162 **Psámma** *P de B.*
163 **Crýpsis** *W*
133 **Cornucópiæ** *L*
164 **Alopecúrus** *W*
165 **Phléum** *W*
166 **Achnodónton** *P de B*
167 **Chilochlóa** *P de B*
168 **Phalaris** *W en*

Tribe 4 BROMEÆ.

169 **Coryn̆phorus** *P de B*
76 **Anthoxánthum** *W*
170 **Aira** *W.*
171 **Avéna** *P S*
172 **Trisétum** *P S*
173 **Danthónia** *P de B*
174 **Gaudínia** *P de B*
175 **Arundo** *Wulf*
176 **Chrysúrus** *P S*
177 **Sesléria** *P de B*
178 **Cynosúrus** *P S*
179 **Kœléria** *P S*
180 **Dáctylis** *W en*
181 **Glycéria** *R Br*
182 **Festúca** *W*
183 **Mygdalurus** *Lk*
184 **Brómus** *W*
185 **Brachypódium** *P de B*
186 **Uniola** *W*
187 **Tricuspis** *P de B*
188 **Diarrhéna** *P de B*
189 **Ceratochloa** *P de B*
190 **Schismus** *P de B*
192 **Beckmánnia** *Host*
193 **Mélica** *W*
194 **Molínia** *P de B*
195 **Briza** *W.*
196 **Póa** *W*
197 **Eragróstis** *P de B*
198 **Megastáchya** *P. de B*

Tribe 5 CHLORIDEÆ

199 **Sclerochlóa** *P de B*
200 **Eleusine** *R Br.*
201 **Dactylocténium** *P de B*
202 **Leptochloa** *P de B*
203 **Cynodon** *P S*
204 **Dinébra** *P de B*
205 **Echinária** *Desv*

Tribe 6 HORDIACEÆ (or CEREALES)

206 **Tríticum** *W*
207 **Lólium** *W*
208 **Elymus** *W*
209 **Secale** *W*
210 **Hórdeum** *W*
211 **Monochlóa** *R Br*
212 **Ophiúrus** *P de B*
213 **Monerma** *P de B*
137 **Nárdus** *W*

Tribe 7 SACCHARINEÆ.

214 **Perótis** *H K*
215 **Sáccharum** *W*
216 **Imperáta** *Cyr.*

Tribe 8 ORYZEÆ

217 **Leérsia** *R Br*
837 **Oryza**
754 **Ehrhárta** *W*

Tribe 9 OLYREÆ

1950 **Zéa** *W*
1951 **Cóix** *W.*
1952 **Tripsacum** *W*
1953 **Heteropogon** *Rich*
1954 **Olýra** *W*
1979 **Zizania** *W*
1980 **Phárus** *W*
2129 **Andropógon** *W*
2130 **Chlóris** *W*
2131 **Sórghum** *W en*
2133 **Ischæmum** *W*
2132 **Hólcus** *W en*
2134 **Ægilops** *W*
2135 **Manisúris** *W*

Tribe 10 BAMBUSACEÆ.

218 **Diarrhéna** *Mich*
131 **Remiréa** *Aub*
219 **Arundinária** *W*
752 **Bambusa** *W*

Station Uncertain

132 **Lygéum** *W*

ORDER CLXXV CYPERACEÆ.

The sedges, as these may be called in English, differ from grasses not only in their comparative worthlessness, and the different development of the parts of fructification, but also in the sheath, at the base of the leaves, being closed up, not slit As objects of ornament they are of no value, and as subjects of agricultural interest of but little, they are, moreover, of little utility to man They are chiefly valuable for covering, with the appearance of herbage, waste, and barren, marshy, or sandy tracts, in which little else will thrive The roots of Cárex arenária, disticha, and hirta, possess diaphoretic and demulcent properties, whence they are sometimes called German sarsaparilla Some of the Scirpuses and Cypéruses have eatable nutty roots, the stems of Scirpus lacustris, Eleocharis palústris, Cyperus téxtilis, and others, are manufactured into mats and the bottoms of chairs, the roots of Cypérus esculéntus abound in oil, a very unusual circumstance, the papyrus of the ancients was manufactured from the stem of Cypérus papyrus, finally, the roots of Cyperus longus, odorátus, and others, are fragrant

74 **Cládium** *Schr*
119 **Schœnus** *Vahl*
120 **Rhynchospóra** *Vahl*
121 **Fimbristylis** *Vahl*
122 **Isolépis** *R Br*
123 **Scirpus** *R Br*
124 **Eleócharis** *R. Br*
125 **Erióphorum** *P S*
126 **Trichóphorum** *P S*
127 **Cypérus** *W*
128 **Papyrus** *Lk*
129 **Kyllinga** *W*
130 **Mariscus** *Vahl*
1947 **Cárex** *W*
1948 **Cobrésia** *W*
1949 **Uncínia** *Rich.*

ORDER CLXXVI AROIDEÆ

Herbaceous, stemless, or caulescent plants, with broad fleshy leaves, approaching very nearly to those of Dicotyledons Their flowers are enclosed within a spatha, and are imbedded on a simple cylindrical spadix Some are natives of Europe and of similar latitudes, but the greater number inhabit the tropics, where they often climb by their rooting stems to the tops of lofty trees They have thick fleshy roots, which, when fresh, contain an acrid stimulating principle, which is so volatile that it passes off freely upon the application of heat, whence the roasted roots of many species are among the most common articles of negro food The leaves of Arum seguinum are so paralyzing, that if chewed they deprive one of the power of utterance, whence in the West Indies it is called the *dumb cane*, the leaves of Dracóntium pertusum are acrid, fresh gathered, and applied all over the surface of the body, they produce a slight inflammation and blistering, and are used in Demerara, by the natives, in dropsical cases The root of Arum triphyllum, boiled in milk, has been found efficacious in consumption The flowers of many species are highly fetid Typhineæ, or bulrushes are very like Cyperaceæ in habit Pistiaceæ are floating plants, in which the organs of fructification are reduced to the very simplest state Juncagineæ are obscure marsh or river plants

Tribe 1 GENUINÆ

252 **Póthos** *W*
755 **Acorus** *W*
756 **Oróntium** *W.*
758 **Tácca** *W*
2006 **Arum** *W*
2005 **Caládium** *W*
868 **Dracóntium** *W.*
869 **Cálla** *W*
876 **Roxbúrghia** *Dr*
769 **Aspidistra** *Ker*
757 **Tupistra** *B M*

Tribe 2. TYPHINEÆ

1945 Týpha *W* 1946 Spargánium *W*

Tribe 3 PISTIACEÆ

1939 Lémna *W.*

Tribe 4 JUNCAGINEÆ

109 Leptánthus *Mich* 840 Scheuchzéria *W* 841 Triglóchin *W*
854 Aponogéton *W* 317 Potamogéton *W*

ORDER CLXXVII FLUVIALES

With these the Vasculares and Monocotyledones terminate it has long been apparent that we have been descending in the scale of vegetation, and hence, the last order exhibited a structure the most simple of all vascular plants In the present order, Zostéra and Rúppia are so closely allied to Algæ, that they may be mistaken for them

24 Zostéra *L.* 318 Rúppia *W*

II. CELLULARES.

The characteristics of this division have already been explained in the preliminary observations upon the natural orders, and the remarks which were required for each natural order of Cellulares have already been given in Cryptogamia in the body of the work It has, therefore, been thought advisable to adopt from Professor Agardh such observations as he has made upon the orders, as a sort of contrast to those already given

CLASS I. FOLIACEÆ.

ORDER I FILICES

Of these the stem is perennial, often subterraneous and creeping, and occasionally becoming arborescent and leafy above the ground The fronds or leaves are usually pinnatifid, and more or less compound, sometimes nearly simple and entire, with reticulated veins The capsules are minute, one-celled, seldom many-celled, brown, membranous, and surrounded by a thick articulated elastic ring, irregularly bursting, and either clustered on the lower surface of the frond, or compound in spikes Their vernation is circinate, and some are propagated by bulbs The old botanists denied any fruit whatever to Ferns, believing the seeds of these plants to be so rare as to invest any body with invisibility who could collect them Afterwards, their capsules were believed to be their seeds Linnæus, and some others, doubted whether their fructification were seeds or pollen Finally, the experiments of Ehrhart and Lindsay proved, beyond all cavil, that they were really seeds As to the male organs nothing is known, some suppose them to be glands of the frond, others the elastic ring, some the indusium, and others the pores of the epidermis, lastly, Martius has supposed them to be the membrane including the spiral vessels Ferns are chiefly inhabitants of the torrid zone, becoming rarer as we approach the poles They delight in a humid soil, and they often grow parasitically upon trees The medicinal virtues of some are highly astringent, of others anthelmintic, of others purgative, some have acquired celebrity for their pectoral, others for their corroborant qualities The young leaves and roots of some constitute an article of food, beer is obtained from the roots of others, and, finally, Aspidium frágrans has been used as tea

Tribe 1 POLYPODIACEÆ

2168 Polybótrya *H & B*	2177 Nothochlǽna *R Br*	2186 Asplénium *L*	2195 Cheilánthes *Swz.*
2169 Acróstichum *L*	2178 Onoclea *I*	2187 Allantódia *R Bi*	2196 Davállia *Sm*
2170 Hemionitis *L*	2179 Struthiópteris *W*	2188 Scolopendrium *Sm*	2197 Dicksónia *L'Hér*
2171 Gymnográmma *Desv*	2180 Allosórus *Bernh*	2189 Diplázium *Swz*	2198 Balántium *Kaulf*
2172 Meniscium *Schreb*	2181 Ellobocárpus *Kaulf*	2190 Pteris *L*	2199 Aspidium *Swz*
2173 Xiphópteris *Kaulf*	2182 Lomária *W*	2191 Vittária *Sm*	2200 Woódsia *R Br*
2174 Céterach *W*	2183 Blechnum *I*	2192 Lonchitis *L*	2201 Cyathéa *Sm*
2175 Polypodium *L*	2184 Woodwardia *Sm*	2193 Antróphyum *Kaulf*	2202 Trichómanes *L*
2176 Taénitis *Swz*	2185 Doódia *R Bi*	2194 Adiántum *W*	2203 Hymenophýllum *Sm*

Tribe 2 OSMUNDACEÆ

2204 Týdea *W* 2205 Osmúnda *L.* 2206 Lygódium *Swz.* 2207 Anémia *Swz*

Tribe 3. OPHIOGLOSSEÆ.

2208 Botrýchium *Swz* 2209 Ophioglóssum *L* 2210 Maráttia *Swz*

ORDER II. EQUISETACEÆ

Marsh plants, with a verticillate arrangement of their branches, and a highly indurated epidermis Their seeds are remarkable for a hygrometrical movement The quality of some is said to be hurtful to cattle which is denied by others Formerly they were used in medicine as astringents and diuretics Equisétum hyemále has been employed for tea, and as a polishing material for furniture, under the name of Dutch rushes

2211 Equisétum *L*

ORDER III LYCOPODINEÆ.

With the habits of mosses they have the seeds of ferns They are herbaceous prostrate plants, with imbricated simple leaves Lycopódium complanatum, Selágo, and clavátum as used as dyes, the sporules of Lycopódium clavátum are said to be employed for ameliorating wine, and are also used in making fire-works, on account of their inflammable nature The herb of Lycopodium clavátum and Selágo is emetic, and produces abortion Lycopódium phlegmária is reputed an aphrodisiac

2212 Lycopódium *L* 2213 Psilótum *Swz.*

ORDER IV MARSILEACEÆ

Floating or erect simple-leaved plants of no known use The Marsileas, which are to some countries what Lémna is to this, are not known in cultivation

2214 Isoétes *L* 2215 Pilulária *L.*

Class II. APHYLLÆ

Order V MUSCI

Winter plants, reviving in humid air, abundant about the poles, rare at the equator They cover the mountains of the earth as high as the limits of perpetual snow, growing in patches, they clothe the most barren spots with verdure, preserve trees from heat and cold, prepare the earth for nourishing more perfect plants, and fill up bogs and morasses with vegetable matter To the economy of nature they are, therefore, more subservient than to the purposes of man Medicinal astringent properties were formerly ascribed to some few, but they are now neglected or forgotten

Tribe 1 Evaginulati

2216 Sphágnum *L.*

Tribe 2 Vaginulati Olocarpi

2217 Pháscum *L.*
2218 Schistostéga *Mohr*
2219 Gymnóstomum *Hedw*
2220 Hymenóstomum *R Br*
2221 Tétraphis *Hedw*
2222 Encalýpta *Hedw*
2223 Grimmia *Hedw*
2224 Weissia *Hedw*
2225 Dicránum *Hedw*
2226 Trichóstomum *Hedw*
2227 Cinclidotus *P de B*
2228 Tórtula *Ehr*
2229 Pterogónium *Sw*
2230 Didýmodon *Hedw*
2231 Spláchnum *L.*
2232 Conóstomum *Sw.*
2233 Orthótrichum *Hedw*
2234 Zygodon *Hook*
2235 Diphýscium *Mohr*
2236 Buxbaumia *L.*
2237 Funaria *Hedw*
2238 Bartrámia *Hedw*
2239 Póhlia *Hedw*
2240 Bryum *Hedw*
2241 Polytrichum *L.*
2242 Anictangium *Hedw*
2243 Fissidens *Hedw*
2244 Leúcodon *Schwægr.*
2245 Fontinális *L.*
2246 Anómodon *Hook*
2247 Neckéra *Hedw*
2248 Daltónia *Hook*
2249 Hookéria *Sm*
2250 Læskea *Ehr*
2251 Hýpnum *L*

Tribe 3 Vaginulati Schistocarpi

2252 Andræ'a *Hedw*

Order VI HEPATICÆ

Creeping small plants, with their leaves arranged in an imbricated manner They differ from Lichens in structure, color, and fruit, from Musci, in the dehiscence of their capsule Their qualities are mild, if any, some of them are fragrant

2253 Junger mannia *L*
2254 Marchántia *Mich*
2255 Riccia *E B*
2256 Anthóceros *E B*
2257 Targiónia *E B*
2258 Sphærocarpus *L B*

Order VII ALGÆ

Plants ascending from the simplest form known in vegetation to a very compound state The lowest are filiform, leafless, with their fructification immersed, the highest are leafy, with the fructification included in an indehiscent wart-like pericarpium Some copulate like animals, others have a spontaneous motion like worms Their color is lively, in the lowest grades green, in the highest red or purple Some are ephemeral and microscopical, annual or perennial, and others extend to the length of many fathoms They grow at the bottom of the sea, or in fresh water, the depths of which they clothe with vegetation, as the higher orders of plants cover the earth with forests They grow on stems in the water only, or on each other Some exhale oxygen, others are scented like violets Their taste is mild, their substance gelatinous, membranous, or corticeous, usually covered externally with mucus The structure of the lowest is articulated, of the highest fibrous

Tribe 1 Diatomeæ

2259 Achnánthes *Ag*
2260 Diátoma *Ag*
2261 Fragillária *Ag*
2262 Meloseira *Ag*
2263 Desmidium *Ag*
2264 Schizonéma *Ag*

Tribe 2 Nostochinæ

2265 Palmélla *Ag*
2266 Echinélla *Ag*
2267 Alcyonídium *Ag*
2268 Nóstoc *Ag*
2269 Corynéphora *Ag*
2270 Rivulária *Ag*
2271 Chætóphora *Ag*
2272 Scythyménia *Ag*

Tribe 3. Confervoidlæ

2273 Byssocládium *Ag*
2274 Mycinema *Ag*
2275 Chroolépus *Ag*
2276 Trentepohlia *Ag*
2277 Scytonema *Ag*
2278 Stigonéma *Ag*
2279 Protonema *Ag*
2280 Hygrocrócis *Ag*
2281 Leptomitus *Ag*
2282 Mesoglóia *Ag*
2283 Batrachospérmum *Ag*
2284 Draparnáldia *Ag*
2285 Oscillatoria *Ag*
2286 Calothrix *Ag*
2287 Lýngbya *Ag*
2288 Bángia *Ag*
2289 Zygnema *Ag*
2290 Mougeótia *Ag.*
2291 Hydrodictyon *Ag*
2292 Conferva *Ag*
2293 Bulbochæ'a *Ag*
2294 Nitélla *Ag*
2295 Chara *L.*
2296 Ceramium *Ag*
2297 Griffithsia *Ag*
2298 Chætospora *Ag*
2299 Polysiphónia *Grev*
2300 Rytiphlæa *Ag*
2301 Ectocárpus *Ag*
2302 Sphacellária *Ag*
2303 Cladostéphus *Ag*

Tribe 4 Ulvaceæ

2304 Vaucheria *Ag*
2305 Códium *Ag*
2306 Bryópsis *Ag*
2307 Solenia *Ag*
2308 Ulva *L.*
2309 Pórphyra *Ag.*

Tribe 5 Florideæ

2310 Polyides *Ag*
2311 Ptilota *Ag*
2312 Rhodoméla *Ag*
2313 Chóndria *Ag.*
2314 Sphærocócceus *Ag.*
2315 Halyménia *Ag*
2316 Bonnemaisónia *Ag*
2317 Delessória *Ag*

Tribe 6. Fucoideæ

2318 Lemánea *Ag*
2319 Chordária *Ag*
2320 Scytosiphon *Ag*
2321 Sporóchnus *Ag*
2322 Halíseris *Ag*
2323 Encœlium *Ag*
2324 Zonária *Ag*
2325 Laminária *Ag*
2326 Lichina *Ag*
2327 Furcellária *Ag.*
2328 Fúcus *L*
2329 Cystoseira *Ag*

Order VIII LICHENS

Lichens are not only most useful in the Œconomy of Nature, as preparing the surface of the earth for the reception of larger vegetables, but they are, moreover, of great utility to man Many, as Cetrária islándica, are eatable, having a bitter principle, and giving out a styptic tincture, if immersed in alcohol. Others, steeped in urine or salts, are used for dying, crustaceous species of this kind are Variolária orcina, Lecanóra tartárea, Leprária chlorina, &c., foliaceous species, Parmélia saxátilis, Sticta pulmonácea, Solorina crócea, Gyrophora deústa and pustulata, &c., and branched kinds, Roccélla tinctória (the common Orchal), Usnea plicáta, Alectória jubáta, and others In medicine, Cetrária islándica and nivális, Sticta pulmonacea, Alectória usneoides are tonic and nutritive, Parmélia parietína, Borréra purpurácea, Evérnia prunástri, &c., are astringent and febrifugal, Peltidéa aphthósa, anthelmintic, Evérnia vulpína, poisonous Some yield a gum, as Evérnia prunástri, Sticta pulmonácea may be employed for bittering beer instead of hops, and Ramalina

scopulorum instead of scap The various species give the grey hue to old walls and stones, cover desert heaths and mottle the bark of ancient trees

Tribe 1 IDIOTHALAMI

2330 Spiloma *Ach*
2331 Solorina *Ach*
2332 Lecidea *Ach*
2333 Calicium *Ach.*
2334 Gyrophora *Ach.*
2335 Endocarpon *Ach*

Tribe 2 CŒNOTHALAMI.

2336 Thelotrema *Ach*
2337 Pyrenula *Ach*
2338 Variolaria *Ach.*
2339 Urceolaria *Ach.*
2340 Lecanora *Ach.*
2341 Parmelia *Ach*
2342 Borrera *Ach*
2343 Cetraria *Ach*
2344 Sticta *Ach*
2345 Peltidea *Ach*
2346 Nephroma *Ach*
2347 Roccella *Ach*
2348 Evernia *Ach*
2349 Cenomyce *Ach*
2350 Bæomyces *Ach*
2351 Isidium *Ach*
2352 Stereocaulon *Ach*
2353 Sphærophoron *Ach*

Tribe 3 HOMOTHALAMI

2354 Alectoria *Ach*
2355 Ramalina *Ach*
2356 Cornicularia *Ach*
2357 Usnea *Ach.*
2358 Collema *Ach*

Tribe 4 ATHALAMI

2359 Lepraria *Ach*

Tribe 5 PSEUDO-LICHENES

2360 Opegrapha *Ach*
2361 Verrucaria *Ach*
2362 Porina *Ach*
2363 Arthonia *Ach*
2364 Graphis *Ach*

ORDER IX FUNGI

We have now reached the lowest station of vegetable existence, in arriving where the vesicles which compose the vegetable fabric are combined in various forms, according to the contingent circumstances under which they are developed The mould on the cheese, the ergot of corn, the rust of the rose, and the huge Bolétus, which, in Java, spreads out its many-handed body from the trunks of ancient trees like a vegetating demon, differ only in the number of the vesicles of which they are composed Many species are eatable, as Agáricus campéstris, others are deadly, as Bolétus scáber, some are used medicinally, as Dædálea suaveólens in coughs, Agáricus túba reginæ in diarrhœa, Agáricus piperátus in calculous disorders, Phállus Mokúsin against cancer, Polypórus annósus against the bites of serpents Some Coprini are used for healing ulcers, Polypórus officinális as a purgative, Polypórus igniarius as a styptic, Polypórus destructor, and a number of others, constitute dry rot. For the poison of fungi, the roots of garlic, the leaves of parsley, and tincture of lacmus, are said to be remedies. so also is common spirit Fungi swarm in all the coldest countries of the world, but as we approach the equator they are extremely rare, the place where they most flourish is Sweden, and the adjacent regions

Tribe 1 HYMENOMYCETES.

§ 1 Hymenini

Div 1. *Pileati*

2365 Agaricus *L*
2366 Coprinus *Ik*
2367 Gomphus *Fries*
2368 Cantharellus *Adans*
2369 Merulius *Haller*
2370 Schizophyllum *Fries*
2371 Dædalea *Pers*
2372 Polyporus *Michels*
2373 Boletus *Dill*
2374 Fistulina *Bull*
2375 Hydnum *L*
2376 Sistostrema *Fries*
2377 Phlebia *Fries*
2378 Thelephora *Ehr*

Div 2. *Clavati*

2379 Clavaria *Vaill*
2380 Calocera *Fries.*
2381 Geoglossum *Pers*
2382 Spatularia *Pers*
2383 Mitrula *Fries*
2384 Typhula *Fries.*
2385 Pistillaria *Fries*

§ 2 Uterini *v* Elvellaceæ

Div 1. *Mitrati*

2386 Morchella *Dill*
2387 Helvella *L*
2388 Verpa *Swz*
2389 Leotia *Hill.*

Div 2 *Cupulati*

2390 Peziza *Dill.*
2391 Ascobolus *Pers.*
2392 Bulgaria *Fries*
2393 Ditiola *Fries*
2394 Cenangium *Fr*
2395 Stictis *Pers.*
2396 Cryptomyces *Fr*

§ 3 Tremellini

2397 Tremella *L.*
2398 Exidia *Fries.*
2399 Dacrymyces *Nees*
2400 Agyrium *Fr*
2401 Hymenella *Fr*
2402 Nematelia *Fr*

§ 4 Sclerotiacei

2403 Acrospermum *Tode*
2404 Sclerotium *Tode*
2405 Rhizoctonia *Dec*
2406 Peniola *Fr*
2407 Acinula *Fr*
2408 Erysibe *Rebentisch*

Tribe 2. GASTEROMYCETES.

§ 1 Angiogastres

Div 1 *Phalloideæ*

2409 Phallus *Mich*
2410 Batarrea *Pers*

Div 2 *Tuberaceæ*

2411 Tuber *Plin.*
2412 Rhizopogon *Fr*

Div 3 *Nidulariaceæ*

2413 Nidularia *Bull*
2414 Myriococcum *Tr*
2415 Polyangium *Lk*

Div 4 *Carpoboli.*

2416 Atractobolus *Tode*
2417 Thelebolus *Tode.*
2418 Pilobolus *Tode.*
2419 Sphæroboulus *Tode*

§ 2 Pyrenomycetes

Div 1. *Sphæriacei.*

2420 Xylaria *Hill*
2421 Stromatosphæ'ria *Grev.*
2422 Cucurbitaria *Gray*
2423 Cryptosphæ'ria *Grev.*
2424 Heterosphæria *Grev.*
2425 Sphæ'ria *Haller.*
2426 Lophium *Fries*

Div 2. *Cytisporei.*

2427 Sphæronæ'ma *Fries* 2428 Septária *Fries* 2429 Cytispóra *Ehr* 2430 Phóma *Fr*

Div 3. *Phacidiacei*

2431 Dothidéa *Tr.* 2432 Rhytisma *Fries* 2433 Phacidium *Fries* 2434 Hystérium *Tode*

Div 4 *Xylomacei.*

2435 Actinothýrium *Kunz* 2437 Xylóma *Pers* 2439 Asteróma *Dec.*
2436 Leptostróma *Fr* 2438 Lasiobótrys *Kunz*

§ 3 Trichospermi

Div 1 *Lycoperdinei*

2440 Onygéna *Pers* 2442 Sclerodérma *Pers* 2444 Bovista *Pers*
2441 Tulóstoma *Pers* 2443 Lycoperdon *Mich* 2445 Geástrum *Mich*

Div 2 *Trichocistli*

2446 Cratérium *Trent.* 2449 Dictýdium *Schrad* 2452 Trichia *Pers* 2454 Phýsarum *Pers.*
2447 Stemonítis *Pers* 2450 Arcýria *Pers* 2453 Didérma *Pers* 2455 Leocárpus *Lk*
2448 Cribrária *Schrad* 2451 Leángium *Lk*

Div. 3 *Fuligineidei*

2456 Lycogála *Mich* 2457 Spumária *Pers*

Div 4 *Laceoidei*

2458 Dichospórium *Nees* 2459 Licea *Schrad.*

§ 4 Mucoroidei

2460 Mucor *Pers* 2461 Thamnidium *Lk* 2462 Astóphora *Tode*

§ 5 Perisporia

2463 Eurótium *Lk* 2464 Amphisporium *Lk*

Tribe 3 HYPHOMYCETES

§ 1 Cephalotrichi

2465 Cerátium *Albertini* 2466 Isária *Pers*

§ 2. Stilboidei

2467 Stilbum *Tode*

§ 3 Inomycetes.

Div 1 *Byssacei*

2468 Túrula *Lk* 2470 Racódium *Pers* 2472 Cladosporium *Lk* 2474 Ozónium *Lk*
2469 Monília *Pers* 2471 Demátium *Pers* 2473 Helicospórium *Nees* 2475 Rhizomórpha *Roth.*

Div 2 *Mucedines*

2476 Sepedónium *Lk* 2479 Trichothécium *Lk.* 2482 Aspergillus *Mich* 2484 Penicíllium *Lk*
2477 Acremonium *Lk* 2480 Acrospórium *Nees* 2483 Stachylidium *Lk.* 2485 Trichodérma *Pers.*
2478 Sporótrichum *Lk* 2481 Bótrytis *Mich*

§ 4 Phylleriaceæ

2486 Rubígo *Lk* 2487 Erineum *Pers.*

Tribe 4 CONIOMYCETES.

§ 1 Tuberculariæ.

2488 Tuberculária *Tode* 2489 Fusárium *Lk.* 2490 Exospórium *Lk*

§ 2. Entophytæ

Div 1 *Stilbosporei.*

2491 Fusídium *Lk* 2493 Stilbospóra *Haffm.* 2495 Næmaspóra *Pers*
2492 Polythrincium *Kunz* 2494 Sporidérmium *Lk.*

Div 2 *Hypodermia.*

2496 Cylindrospórium *Grev* 2497 Urédo *Pers.* 2498 Æcídium *Pers.* 2499 Puccínia *Mich.*

After the most perfect classification which the present state of botanical knowledge renders practicable, there still remain a few genera which are incapable of having their true station assigned to them, either in consequence of their structure being incompletely known, or of their affinity not having yet been discovered As far as this work is concerned, they are the following, all of which are Dicotyledones.

1965 Aúcuba *W* 1462 Aitónia *W.* 2121 Nepénthes *W.*
405 Bréxia *Nor* 2068 Antidésma *W* 2163 Laurophyllus *W*
442 Vallésia *Fl per* 2098 Eúclea *W.* 1986 Ceratophýllum *W.*

GLOSSARY

OF

TERMS USED IN THE GENERIC AND SPECIFIC DESCRIPTIONS, IN THE GENERAL OBSERVATIONS ON THE CLASSES, AND IN THE NOTES.

The figures between parentheses ( ) refer to the engravings at the bottom of the page
After each term a reference is given to an example of its application in the body of the work: in these references, g signifies genus, s species, p. page

A

A, in composition, signifies without, as *Aphyllus*, without leaves; *Acaulis*, without stem s 1330

Abbreviate (*abbreviare*, to shorten) Used in comparative descriptions, to indicate that one part is shorter than another Sálvia crassifólia, s 420

Aberrant, deviating from the natural or direct way; applied in Natural History to species or genera that deviate from the usual characters of their neighbours p 408

Abortion (1) signifies an imperfect developement of any given organ Cephaláuthus, g 275 p 78

Abraded, rubbed or worn off Acácia, g 2127 (note)

Abstergent, cleansing, having a cleansing quality Sapindus, g 926 (note)

Accessory, something added to the usual number of organs, or their parts Phálaris, g 168 p 32

Accretion, the growing of one thing to another p 748

Accumbent, lying on, prostrate, supine, this term is employed in Cruciferæ, to signify a radicle, which lies upon the edge of the Cotyledons p 536

Acerose, (2) needle-pointed, fine and slender, with a sharp point Bánksia pulchélla, s 1449

Accescent, sour, tart, acid Pinguícula, g 52 (note)

Acetarious, any thing belonging to the salad tribes of vegetables Lactúca, g 1628 (note)

Acetous, something that produces acidity Triticum, g 206 (note)

Acicular, (3) needle-shaped Leptospérmum triloculáre, s 6651

Acinaciform, (4) scimitar-shaped Ehrhárta, g 754 p 298

Acini, the small stones in grapes, strawberries, &c Cecropia, g 2043 (note)

Aculeate, (5) being furnished with aculei or prickles, as distinguished from spines Spartina polystachya, s 920

Aculei, prickles, sharp hard processes of the epidermis falling off when old, by which character they are distinguished from spines, which do not fall off Medicágo múrex, s 10910

Acuminate, (6) taper-pointed Cánna índica, s 2

Acutangular, (7) having sharp angles Corchorus acutángulus, s 7722

Adnate, (8) adhering to a thing Anthers are called adnate when they are attached to the filament by their whole length Anthoxánthum amárum, s 498

Adult, the full-grown of any thing full-grown leaves are adult leaves Prótea obtúsa, s 1318

Æruginous, having a color like that of ærugo or verdigris Curcuma æruginósa, s 82

Agglomerated, collected in a heap or head Æcídium Jacobææ, s 10669

Aggregate, (9) gathered together, usually applied to a dense sort of inflorescence Calyméria aggregáta, s 570

Agrumi, a name given by the Italians to any kind of lemons or oranges Citrus, g 1615 (note)

Akenium, (10) a hard pericarpium, containing a single seed, which does not adhere to it, it is the same as the Linnæan *nux* Hippophaë, g 2058 p 817

Albumen, the substance under the inner coat of the testa, surrounding the embryo, it is sometimes absent Réseda, g 1102 (note)

Alembick, a vessel used in distilling, or acting like a still Phœnix, g 2049 (note)

Alexipharmic, that which counteracts poisons, antidotal Maránta, g 2 (note)

Alexiteric, having the power of doing away poisons p 1065

Alkalescent, having the properties or effects of alkali Rúmex acetósa, g 856 (note)

Alkali, any substance which, when mingled with acid, produces fermentation Viola, g 540 (note)

Alveolate, (11) resembling a honeycomb Borkhaúsia, g 1637 p 661

Alvine, of or belonging to the intestines. Acácia, g 2127 (note)

Amentum, (12) a catkin, mode of inflorescence Aponogéton, g 854 p 240

Amplexicaul, (13) stem-clasping, the base of the leaf surrounding the stem Céstrum auriculátum, s 2465

Amylaceous, having the properties of starch p 1065

Anastomosing, (14) uniting, or inosculation, of vessels Cinchiótus, g 2227 p 896

Androgynous, producing both male and female sexes on the same root, or in the same flower. Uncínia, g 1949 p 758

Anfractuose, full of turnings and winding passages Ochróma, g 1458 p 560

Angular, (15) composed of, or furnished with, angles. Lopézia coronáta, s 105

Angulo dentate, (16) angularly toothed, or angular and toothed Lapsána communis, s 11324

Annulations, (17) rings or circles Rivulária, g 2270 p 925

Anterior, growing in front of some other thing Hákea acanthophylla, s 1434

Anthelmintic, capable of killing worms Geoffróya, g 1517 (note)

Antheriferous, (18) bearing anthers Lopézia, g 18 p 1

Antaphrodisiacal, any thing which checks the desire of sexual intercourse Vitex, g 1317 (note)

Anti-pestilential, efficacious against pestilence Angélica, g 664 (note)

Antiphrasis, the use of words in a sense opposite to that of some neighbouring parallel sentence Globulária, g 260 (note)

Anti-scrophulous, antiscorbutic, efficacious against scurvy Cynoglóssum, g 336 (note)

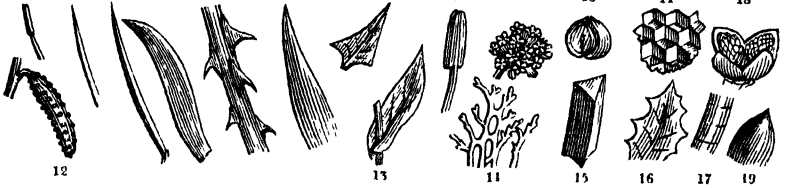
Antiseptic, efficacious against putrefaction Artemísia, g 1721 (note)

Aperient, having a slight purgative quality Curcuma, g 14 (note)

Apetalous, being without petals p 1

Apex, (19) the summit, generally applied to any thing terminating in a point Thália dealbáta, s 26

Aphrodisiacal, any thing which excites a desire for sexual intercourse. Justicia, g 47 (note.)



Aphthous, resembling something covered with little ulcers Acácia, g 2127 (note)

Apiculate, (20) terminating in an apiculus or little point Rósa microphýlla, s 7512

Apiculus, (21) a small point This term is generally used when the midrib projects beyond the leaf, forming a little point, or when a small point is very suddenly and abruptly formed Portula unguiculáta, s 14757

Apophysis, (22) a swelling beneath the theca of a moss Spláchnum, g 2231 p 896

Appendix, (23) that which is attached Sarracénia rúbra, s 7675

Appense, being hung up as a hat is upon a pin, an approach to pendulous Piménta, g 1123 p 400

Appressed, placed close upon something else, when hairs lie flat upon the surface of a plant, they are said to be appressed Stachytárpheta hirsutíssima, s 337

Approximated, near together Sálvia trunciáta, s 445

Apterous, without wings, or the membranous margins which botanists call wings Pinguícula, g 52 (note)

Aquatics, growing in or belonging to water p 1

Arborous, being a tree, as distinguished from frutescent or shrubby Pelargónium discípes, s 9633

Arborescent, having a tendency to become a tree Piper tomentosum, s 517

Arcuate, curved or bent like a bow Hypécoum procumbens, s 1815

Areolæ, (24) little spaces or areas on the surface of a thing the surface of crustaceous lichens is often cracked in every direction, the spaces between the cracks are the areolæ Lecidéa coracina, s 15378

Areolated, the adjective of the last term Solenia, g 2407 p 925

Aridity, dryness Xerótes, g 2076 (note)

Arillate, having that peculiar appendage called the Arillus The term is only applied to seeds p 751

Arillus, (25) a process of the placenta adhering to the hilum of seeds, and sometimes enveloping them Phrýnium, g 5 p 1

Aristate, bearded, as the glumes of barley Many grasses

Aroma, the spicy quality of a thing Justícia, g 47 (note)

Articulation, the place where one thing is joined with another, another word for joint Coryníphorus, g 369 (note)

Asci, (26) small tubes in which the sporules of Cryptogamic plants are placed p 978

Ascigerous, having asci p 982

Assurgent, rising upward Phlox amœna, s 2113

Attenuate, made thin or slender Lopézia racemósa, s 102

Auriculated, (27) having an ear-like base Jasminum auriculátum, s 174

Awns, the beard or arista of corn Salsóla muricáta, s 3404

Axil-flowering, flowering in the axilla Chionánthus axillária s 154

Axilla, literally the armpit, in plants applied to the angle formed by the union of the leaf and stem Dipsácus, g 202 (note)

Axillary, (28) placed in the axilla Pollíchia campéstris, s 113

Axis, the line, real or imaginary, that passes through any thing. Actinocárpus, g 860 (note)

B

Baccate, berried, having a fleshy coat or covering. Gmélina, g 1311 p 493

Bagged, resembling a bag or sack Ceanóthus, g 510 p 113

Ball, (29) the round central part of the flower of the Stapélia p 109

Bands, (30) or vittæ, are the spaces between the elevated lines or ribs of the fruit of umbelliferous plants Bubon, g 640 p 116

Barred, crossed by a paler color in spaces resembling bars Sanseviéra planci, s 1540

Beak, any thing which resembles the beak of a bird, hard short points Briza, g 195 p 53

Bearded, having long hair like a beard Wulfénia, g 50 p 9

Beardless, having small awns Cinna arundinácea, s 1010

Bicuspidate, (31) twice pointed Cárex lagopodioides, s 13081

Bidentate, (32) double-toothed, or having two teeth Alantódia axillaris, s 14527

Biennial, a plant is said to be biennial which requires two seasons to mature its fruit, and then dies Phílydrum, g 17 (note)

Bifarious, (33) placed in two rows Alpínia tubuláta, s 50

Bifid, (34) half divided in two, two cleft. Cánna lútea, s 4

Biglandular, double-glanded Malpighia glandulósa, s 6574

Bilabiate, (35) having two lips Dichptera, g 48 p 9

Bilobed, (36) divided into two lobes Oxalis filicaúlis, s 6618

Binate, growing two together Córnus suécica, s 1701

Bipartible, capable of being parted in two Prótea, g 231 p 77

Bipinnate, (37) a mode of foliation, twice pinnate Petrophila pulchella, s 1306

Bipinnatifid, (38) twice pinnatifid, a mode of foliation Verónica Jacquini, s 238

Bisaccate, having two little sacks, bags, or pouches Mathiola, g 1381 p 550

Biscutate, (39) resembling two bucklers (scuta) placed side by side Biscutélla, g 1413 p 537

Biternate, (40) divided in three twice over Chærophýllum Clavtoni, s 3491

Bi-tri-crenate, crenate twice or thrice Jungermánnia pusilla, s 14058

Bi-tri-pinnatifid, pinnatifid twice or thrice over Petrophila diversifolia, s 1407

Bi-tri-ternate growing in threes twice or thrice over Actæa americana, s 7649

Bivalved, two-valved p 877

Blanching, made white by being grown in a dark place Lactuca, g 1628 (note)

Bland, fair, beautiful Mesembryanthemum blándum, s 7148

Blight, a vague term, signifying a pestilence among plants caused by the attack of insects or of parasitical fungi, or by some endemical affection of the atmosphere Humulus, g 2074 (note)

Blistered, having the surface raised as the skin is when blistered Sálvia microphýlla, s 393

Bole, trunk of a tree Ornus, g 69 (note)

Boraginous, of or belonging to the natural order Boragineæ Rhexia, s 900 (note)

Brachiate, (41) having arms or branches usually placed opposite to each other, nearly at right angles with the main stem, and crossing each other alternately Phillyréa angustifolia, s 143

Bracteate, furnished with bracteæ p 445

Bracteola, little bracteæ Geropogon, g 1620 p 661

Bracteæ, (42) small leaves placed near the calyx Maránta obliqua, s 19

Branchlets, small branches Agróstis vulgaris, s 993

Bristles, rigid hairs Ornus, g 69 p 10

Bulbiferous, bulb-bearing Globba marantina, s 9b

Bulbous, having bulbs Cyperus, g 127 p 31

Bulbs, (43) underground buds resembling roots, and consisting of numerous fleshy scales placed one over the other Allium, g 795 p 272

Burry, covered with hooked stiff hairs, like the heads of Bur or Burdock Pisónia, g 864 (note)

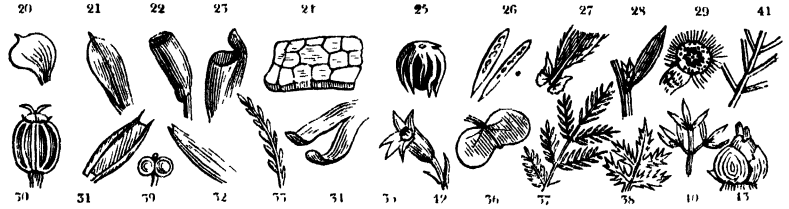
Byssoid, having the appearance of Byssus p 979

C

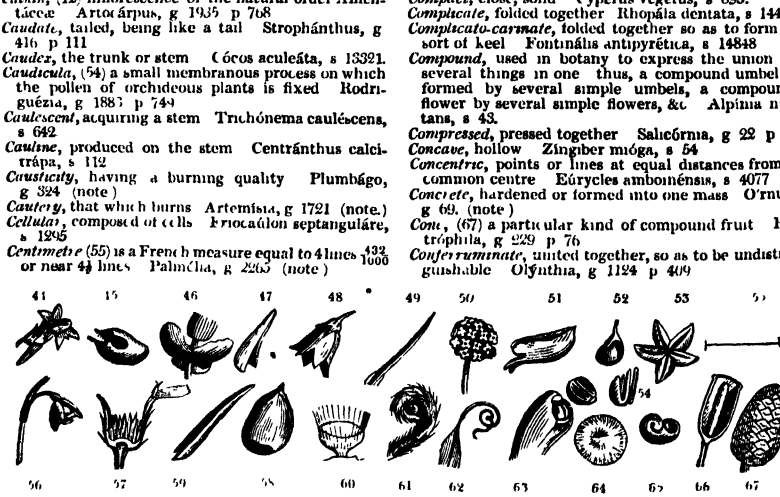
Caducous, falling off soon Epimédium, g 297 p 79

Cæsious, grey Curcúma cæsia, s 84

Cæspitose, growing in little tufts Ermus alpínus, s 8825



Calcarate, (44) spurred, or spur-shaped Alpínia cardamómum, s 48
Calcareous, chalky, or growing on chalk O'lea, g 32 (note)
Calceiform, (45) formed like a little shoe Pedilánthus, g 1104 p 393
Calli, small callosities, or rough protuberances Sálvia amarissima, s 397
Callous, hardened Brúnia ericoides, s 3005
Calycine, of or belonging to a calyx Cartonéma, g 90 p 20
Calyculated, (46) having bracteolæ resembling an external or additional calyx Myoseris, g 1640 p 661
Calyptra, (47) literally an extinguisher, applied to the body which tips the theca of a moss, and the like p 895
Calyptrate, having a covering resembling an extinguisher Erica coarctáta, s 5330
Calyptrate, having a calyptra Actinophýllum, g 697. p 117
Calyptriformis, shaped like a calyptra Marcgraávia, g 1163 p 456
Campanulate, (48) bell-shaped Cóstus, g 11 p 1
Canaliculate, channelled or furrowed Weissia acúta, s 14714
Cancellate, latticed, resembling lattice-work Trigonella cancellata, s 10882
Canescent, hoary, approaching to white Selágo canéscens, s 8662
Capillary, (49) very slender, resembling a hair Trichophorum, g 126 p 31
Capitate, (50) growing in a head Chloránthus, g 25 p 1
Capitulate, growing in small heads. Brýum, g 2240 (note)
Capitula, small heads Réseda, g 1102 (note)
Capituliform, formed like a small head Cenomýce, g 2449 p 949
Carbonised, burned to a coal Quércus súber, g 2000 (note)
Carina, (51) a keel like that of a boat, also the two lower petals of papilionaceous flowers Pongámia, g 1514 p 568
Carinate, keel-shaped Utriculária minor, s 329
Cariopsis, (52) a one-celled, small, indehiscent pericarpium adhering to the seed which it contains, as the grain of grasses Hydrástis, g 1241 p 459
Carious, decayed Juniperus, g 2113 (note)
Carminative, medicines which promote perspiration Pimpinélla ánisum, s 5562
Carnose, fleshy Gymnostomum Griffithsiánum, s 14671.
Carpella, (53) the small parts out of which compound fruit are formed Actinocárpus, g 860 (note)
Carpology, the science which treats of the structure of fruits and seeds p 1056
Cartilage, gristle Róchea odoratissima, s 3868
Cartilaginous, gristly Asparágus, g 29 p 1
Cataplasm, a plaster, or more properly a poultice Zingiber, g 10 (note)
Catarrhal, of or belonging to a cold Acácia, g 2127 (note)
Cathartic, purgative Gratiola, g 43 (note)
Catkin, (12) inflorescence of the natural order Amentáceæ Artocárpus, g 1935 p 708
Caudate, tailed, being like a tail Strophánthus, g 416 p 111
Caudex, the trunk or stem Cócos aculeáta, s 13321.
Caudicula, (54) a small membranous process on which the pollen of orchideous plants is fixed Rodriguézia, g 1883 p 749
Caulescent, acquiring a stem Trichónema cauléscens, s 642
Cauline, produced on the stem Centránthus calcitrápa, s 112
Causticity, having a burning quality Plumbágo, g 324 (note)
Cautery, that which burns Artemísia, g 1721 (note.)
Cellular, composed of cells Eriocaúlon septangulare, s 1295
Centimetre (55) is a French measure equal to 4 lines $\frac{432}{1000}$ or near 4½ lines Palmélla, g 2265 (note)
Centuriæ, hundreds Buxbaúmia, g 2236 (note)
Cephalic, medicinal to the head Kæmpféria, g 12. (note)
Ceraceous, wax-like Pezíza erúmpens, s 16273
Cernuous, (56) nodding, drooping, or pendulous Cánna iridiflóra, s. 17
Chaffy, (57) bearing processes resembling chaff. Eriophorum, g 125 p 31
Chalaza, (58) a spot on the seed, indicating where the vessels of the raphe terminate. Eriobótrya, g 1137 p 409
Channel-leaved, (59) folded together so as to resemble a channel for conducting water Trichonéma bulbocódium, s 640
Charlatanry, quackery Mandragóra, g 447 (note)
Charring, blackening by fire Quércus, g 2000 (note)
Chlorosis, the green sickness, a disease so called Anthemis, g 1778 (note)
Cilia, (60) hairs like those of the eyelash Plantágo subulata, s 1707
Ciliary processes, like eyelash hairs p 907
Ciliated, eyelash-haired Lopézia cordáta, s. 104
Ciliato-dentate, toothed and fringed with hairs like eyelashes Cactus heterophyllus, s 11405
Cinereous, ash-colored, grey Grevillea cinérea, s 1417
Cingalese, inhabitants of, or belonging to, Ceylon Plumbágo zeylanica, s 1861
Circinately, (61) curled round like a sharp crook p 539
Cirriferous, bearing tendrils Gloriósa superba, s 4574
Cirrhose, or *Cirrhous*, (62) tendrilled Bignónia únguis, s 8551
Clammy, viscid, sticky Boerhaávia viscósa, s 109
Clathrate, latticed, divided like latticework Solánia compréssa, s 15270
Clavate, club-shaped Curcúma comósa, s 85
Clavellose, clubbed, or having club-like processes Chóndria clavellósa, s 15290
Clavus, a name for the ergot, a disease in corn Festúca duriuscula, g 182 (note)
Claws, (269) the taper base of a petal Cánna limbáta, s 8
Clinandrum, (63) that part of the column of orchideous plants in which the anther lies Listéra, g 1876 p 749
Clypeate, (64) shaped like a Roman buckler. Tupístra, g 757 p 298
Cobwebbed, covered with loose hairs, as if with a cobweb Anacámpseros arachnoides, s 6630
Cochleate, (65) resembling the shell of a snail Rhéxia, g 900 p 300
Cohering, connected Protea, g 231 p 77.
Collapsion, the act of closing or falling together. Sphæria hydróphora, s 16436
Columella, (66) the axis of the fruit of mosses p 874
Columnar, formed like columns Pæonia tuciata, s 623
Comminuted, pulverised or pounded Linum, g 701 (note)
Cosmose, this term is used to express a kind of inflorescence, which is terminated by sterile bracteæ Maránta comósa, s 24
Compact, close, solid Cyperus vegétus, s 895.
Complicate, folded together Rhopála dentata, s 1447.
Complicato-carinate, folded together so as to form a sort of keel Fontinális antipyrética, s 14848
Compound, used in botany to express the union of several things in one thus, a compound umbel is formed by several simple umbels, a compound flower by several simple flowers, &c Alpínia nutans, s 43.
Compressed, pressed together Salicórnia, g 22 p 1
Concave, hollow Zingiber mióga, s 54
Concentric, points or lines at equal distances from a common centre Eúrycles amboinénsis, s 4077
Concrete, hardened or formed into one mass O'rnus, g 69. (note)
Cone, (67) a particular kind of compound fruit Petrophila, g 229 p 76
Conferruminate, united together, so as to be undistinguishable Olynthia, g 1124 p 409



Confervoid, like confervæ. Sporóchnus, g 2321 o 926.

Confluent, running into one another Jasminum grandiflórum, s 181

Conglobated, collected into a spherical form. Dacrymyces morifórmis, s 16300

Conical, (68) resembling a cone Hedýchium heteromállum, s 16300.

Conico-hemispherical, (69) between conical and round Brýum cuspidátum, s 14830

Conico-ovate, (70) between conical and ovate. Pinus sylvéstris, s 13302.

Conjugate, (71) joined in pairs a term chiefly applied to leaves Piper cuneifólium, s 524

Connate, (72) joined together at the base Calceolária parálii, s 320

Connivent, (73) converging Lœflíngia, g 82. p 30.

Conoid, cone-like Silène conoídea, s 6223

Constricted, (74) tightened or contracted in some particular place Salix lanceolata, s 13691

Converging, approaching together. Datúra férox, s 2164

Convex, rising in a circular form Piper rubéllum, s 543

Convexo plane, plane on one side, convex on the other Cárex vulpina, s 13384

Convolute, (75) rolled together Crócus, g 93 p 30

Coralloid, like coral Chóndria kalifórmis, s. 15291

Cordate, heart-shaped Canna variábilis, s 9

Coriaceous, leathery Chionánthus virginicus, s 152

Corneous, horny, of the consistence of horn Sphærocóccus córneus, s 15301

Corniculate, having processes like small horns. Mesembryánthemum procumbens, s 7251

Cornute, horned Eucalýptus cornúta, s 7003

Corona, (76) literally a crown applied in botany to the crown-like cup which is found at the orifice of the tube of the corolla in Narcissus, Pancrátium, and others Brodiǽa, g 114 p 31

Corpuscle, a small body, a particle of any thing Scamóne, g 577 p 114

Corroborant, strengthening, having the power to give strength Melíssa, p 1278 (note)

Corrosive, having the power of wearing away Sapindus, g 926 (note)

Corrugated, wrinkled or shrivelled Paspalum stoloníferum, s 926

Cortical, of or belonging to the bark Línum, g 701 (note)

Corymb, (77) a raceme or panicle in which the stalks of the lower flowers are longer than those of the upper, so that the flowers themselves are all on the same level Centránthus rúber, s 110

Corymbose, formed or arranged after the manner of a corymb Lopézia coronáta, s 103

Corymbulose, formed or arranged in many small corymbs Crássula corymbulósa, s 3887

Cosmetic, beautifying Dipsacus, g 262 (note)

Costæ literally ribs applied by botanists sometimes to the midrib of a leaf, and sometimes to any projecting round elevations having the same direction as the axis of the fruit Morchélla, g 2386 (note)

Costate, ribbed Jungermánnia furcáta, s 15004

Cotyledons, (78) seed leaves Hórdeum, g 210 (note)

Cowled-leaved, a thing is said to be cowled or cucullate when its end is curved inwards in such a manner as to represent the cowl or hood of a monk Lachenália bifólia, s 4898

Crenæ, notches Saxífraga umbrósa, s 6063

Crenate, (79) notched Cánna limbáta, s 8

Crenature, the notching Prasium mínus, s 8518

Crenulate, full of notches Sálvia pomífera, s 370

Crest, (80) applied to some elevated appendage terminating a particular organ a stamen is crested when the filament projects beyond the anther, and becomes dilated Kæmpféria, g 12. p 1.

Cribriform, riddled with holes like a sieve Peziza cribrósa, s 16265

Cribrose, perforated like a sieve Parnárium, g 870 p 297

Crisp, when leaves are very much undulated at the margin, they are called crisp or curled. Céstus villosíssimus, s 66.

Cruciate, (81) shaped like a Maltese cross: a flower is said to be cruciate when four equal petals are placed opposite each other at right angles. Gentiána septémfida, s 3360

Cruciferous, the name of a particular family of plants bearing cruciate flowers p 536.

Crustaceous, having a hard brittle shell Helléria, g 9 p 1

Crystalline, consisting of, or resembling, crystals Mesembryánthemum lanceolátum, s 7382

Cucullate, (82) hooded, cowled, see *Cowled* Calathéa, g 3 p 1.

Culm, the stem of grasses, scitamineous plants, and the like Maránta arundinácea, s 18

Culmiferous, producing culms Triticum spélta, s 1235

Cultrate, (83) shaped like a pruning-knife Crássula cultrata, s 3880

Cuneate, wedge-shaped Teúcrium cubénse, s 8117.

Cup, the same as corona, see that word, g 711. p 236

Cupule, (84) the cup of an acorn, and of all amentaceous plants p 1017

Cupuliform, or ***Cupulate***, shaped like a reversed bell p 982

Cuspidate, (85) like the point of a spear, a leaf is cuspidate, when it is suddenly tapered to a point. Tritónia rósea, s 664

Cutaneous, relating to the skin Scabiosa, g 264. (note)

Cuticle, the scarf skin, or epidermis Chára, g 2295 (note)

Cut-toothed, (86) cut and toothed at the same time. Plantágo macrorhíza, s 1708

Cyathiform, cup-shaped, concave Narcíssus pulchéllus, s 4025

Cylindraceous, having the form of a cylinder Dicránum Scottiánum, s 14724

Cylindrical, cylinder-shaped Salicórnia rádicans, s 116

Cylindrico-campanulate, cylindrically bell-shaped Encalýpta, g 2222 p 896

Cymbiform, (87) boat-shaped Vallísia glábra, s 2456

Cyme, (88) a mode of inflorescence, resembling a flattened panicle Scirpus lacústris, s 801

Cymose, flowering in cymes Róchea cymósa, s 3866.

D

Decandrous, having ten stamens Phytolácca abyssínica, s 6573

Deciduous, falling off Leaves which are shed annually are said to be deciduous as are also trees that annually lose their leaves Olea excélsa, s 141

Declinate, curved downwards Zingiber zerúmbet, s 56

Decoction, a preparation or digest by boiling water Cúnila, g 58 (note)

Decompound, (89) a leaf is said to be decompound when it is twice pinnated, a panicle when its branches are also panicled Linociéra compácta, s 474

Decorticated, disbarked. Amygdalus, g 1128 (note)

Decumbent, lying down Chloránthus inconspícuus, s 121

Decurrent, (90) running down Lopézia coronáta, s 103

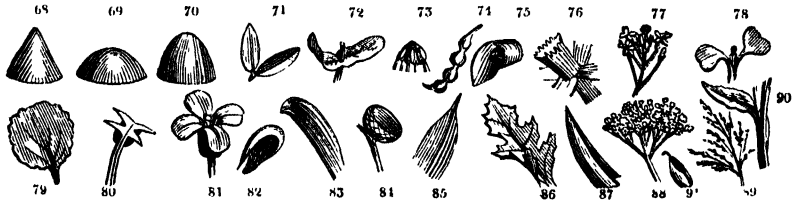
Decursive, having a tendency to run down Actinótus helánthi, s 3591

Decussated, when two right lines cross each other at right angles they are said to decussate, leaves are often placed in this position Ixóra parviflóra, s 1746

Deflexed, turned downwards. Schizánthus pinnátus, s 272

Dehiscent, (91) gaping, an expression applied to the mode in which the anthers or the fruit burst open and discharge their contents p 896

Delsquescent, melting away upon exposure to air p 979



Delta-leaved, Deltoid, (92) shaped like the Greek Δ Mesembryánthemum, g 1146 p 437

Demulcent, having the property of softening any thing Málva, g 1472 (note)

Dentate, (93) having the margin divided into incisions resembling teeth Veronica acúta, s 196

Dentato-ciliate, having the margin dentate and tipped with cilia Sonchus arvénsis, s 11106

Dentato-sinuate, (94) scolloped and toothed Hypochæ'ris glabra, s 11319

Denticulate, being finely dentate Circæ'a lutetiana, s 487

Denticulations, small toothings Bossiæ'a scolopéndrium, s 10121

Dentiform, tooth-shaped Barbaréa plantagínea, s 8980

Dentifrice, powder made to scour the teeth Acácia, g 2127 (note)

Deobstruent, having the power of removing obstructions, a term of medicine Agrimonia, g 1101 (note)

Dependent, hanging down Moræ'a spathácea s 826

Depressed, pressed downward Thália, g 4 p 1

Depurated, purified, cleansed Oxalis, g 1065 (note)

Despumate, to throw off in froth or scum Cecrópia, g 2043 (note)

Detergent, Detersive, having the power of cleansing Physalis, g 448 (note)

Diandrous, having two stamens Boerhaávia hirsúta, s 107

Diaphanous, transparent. Encalýpta ciliáta β alpína, s 14685

Diaphoretic, promoting perspiration Sambucus, g 680 (note)

Dichotomous, (95) a stem that ramifies in pairs Phrýnium dichotomum, s 28

Dicoccous, having two cocci p 78

Didymous, two united Príva mexicána, s 8675

Didynamous, (96) having two long stamens and two short ones in the same flower, each pair being oblateral. Stenochilus, g 1033 p 403

Dietetics, relating to food or diet Sáccharum, g 210 (note)

Difform, two forms, used to express irregularity Anacámpseros rotundifólia, s 6629

Diffuse, scattered, widely spread Verónica saxátilis, s 220

Diffusible, such as may be spread Amýgdalus, g 1128 (note)

Digitated, (97) fingered, shaped like the hand spread open Veronica digitata, s 255

Digitiform, formed like fingers Mesembryanthemum incomptum, s 7408

Digynous, two styles or female organs Sálvia crética, s 401

Diluent, something diluting Melissa, g. 1278 (note)

Dimidiate, (98) halved, divided into two parts p 89

Dioecious, when a plant bears female flowers on one individual, and males on another, it is called dioecious Valeriána dioica, s 544

Discoid (99) When in Compositæ the florets are all tubular, the head of flowers is said to be discoid In other cases, when the florets of the centre of a head of flowers are more perfect than the rest, they are called discoid Finally, when any thing is dilated into something which may be compared to a disk, the term discoid is also made use of Valerianélla discoídea, s 563

Discus, or *Disk,* the fleshy annular process that surrounds the ovarium of many flowers also the surface of a leaf, also the centre of a head of flowers of Compósitæ Ænópha, g 504 p 113

Discutient, having the power to scatter the matter of tumours Artemisia, g 1721 (note)

Dissepiment, (100) the partitions by which a seed vessel is divided internally Elytrária, g 45 p 9

Distichous, (101) two rowed producing leaves or flowers in two opposite rows Schœ'nus, g 119 p 31

Districhotomous, (102) divided in twos or threes, a stem continually dividing into double or treble ramifications Trichódium canínum, s 1001

Diuretic, having the power of promoting the flow of urine Bromélia, g 726 (note)

Divaricate, growing in a straggling manner Verónica pinnáta, s 219

Dodecandrous, having twelve stamens Rivina dodecándra, s 1511

Dolabriform, (103) axe-shaped Stizolóbium, g 1551 p 599

Dorsal, growing on the back Kæmpféria rotúnda, s 67

Drastic, applied to medicines which act violently Dictamnus, g 997 (note)

Drupe, (104) a kind of fruit consisting of a fleshy succulent rind, and containing a hard stone in the middle Olea, g 52 p 9.

Dyspepsia, difficulty of digestion Artemísia, g 1721 (note)

E.

Echinated, (105) covered with prickles like an echinus or hedgehog Amómum subulátum, s 79

Edible, eatable Eleusine, g 200 (note)

Effuse, (106) literally poured forth, applied to inflorescence, it means a kind of panicle with a very loose one-sided arrangement Juncus effúsus, s 4327

Electuaries, a medicine of conserves and powders in the consistence of honey Prunus doméstica, s 7045

Elephantiasis, a disease in which the limbs become prodigiously swollen and finally fall off Smilax, g 2081 (note)

Elliptoid, (107) like an ellipsis Nastúrtium amphíbium, s 8970

Elliptic-lanceolate, (108) a form between elliptical and lanceolate Olea americána, s 140

Elongated, lengthened Cánna gigantéa, s 6

Emarginate, (109) having a small notch in the end Canna coccínea, s 3

Embossed, (110) projecting in the centre like the boss or umbo of a round shield or target Prótea umbonális, s 1327

Embracing, (13) a leaf is said to embrace a stem when it clasps it round with its base Salvia amplexicaúlis, s 428

Emetic, that which produces vomiting Primula vulgáris, s 2020

Emmenagogue, any medicine that promotes menstruation Ligusticum, g 665 (note)

Emollient, softening Trumfetta, g 1087 (note)

Emulsions, medicines made of bruised oily seeds and water Amýgdalus, g 1128 (note)

Ensate, or *Ensiform,* (111) shaped like a sword with a straight blade Aloe cándicans, s 4444

Epidermis, the outer skin of the bark. Latrus, g 934 (note)

Epiphyllous, (112) growing upon a leaf Jungermannia epíphylla, s 15003

Epiphytes, plants which grow upon other plants without deriving any nutriment from them Catasétum, g 1889 (note)

Equidistant, equally distant Ægopódium, g 652 p 116

Equilateral, having equal sides Aloe reticulata, s 4392

Equitant, (113) a mode of vernation, or of arrangement of leaves with respect to each other, in which the sides or edges alternately overlap each other Moræ'a iridioides, s 827

Erecto-patent, between erect and spreading Dictamnum glaucum, s 14715

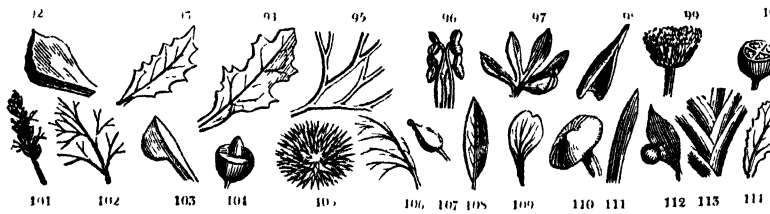
Eroded, (114) gnawed, bitten, a term used to express a particular kind of irregular denticulation Salvia pinnáta, s 377

Erosa-dentata, the toothing being eroded Lycopódium clavátum, s 14632

Errhine, promoting a discharge of mucus from the nostrils Asarum, g 1072 (note)

Escharotic, having the power to scar or burn the skin Juniperus, g 2113 (note)

Esculent, good for food Oxystélma esculéntum s 3226



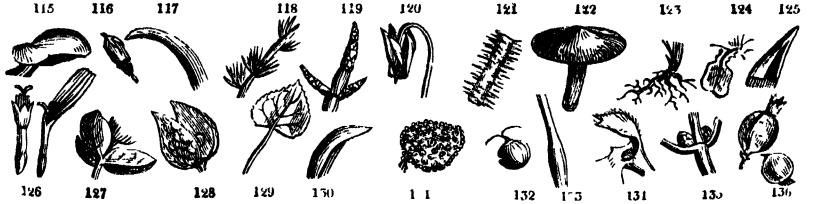
Estuaries, arms of the sea, mouths of a river Polygonum amphíbium, s 5568
Etiolated, whitened by being kept from air and light. Triticum spélta, p 70 (note)
Evanescent, quickly vanishing Heráclеum, g 672 p 117
Evolved, unfolded Aneuléma, g 80 (note)
Excavated, hollowed out Borágo, g 340 p 109
Excentrical, (115) flying off from the centre Agáricus ulmárius, s 15924
Excoriate, stripped of the bark or skin Broméliа Karátas, g 726 (note)
Excurrent, projecting or running beyond the edge or point of any thing. Tórtula subulàta, s 14751.
Exotic, foreign. p 1
Expectorant, any thing that promotes the discharge of mucus from the chest Sambúcus nigra, p 225 (note)
Exserted, (116) projecting beyond something else Jasminum revolutum, s 179
Exsuccated, dried up Papáver, g 1170 (note)
Extra-axillary, above or on the outside of the axils Mesembryánthemum, g 1146 (note)
Extra-foliaceous, away from the leaves, or inserted in a different place from them Echites bispinósa, s 2460
Exuvia, whatever is cast off by plants or animals Cactus, g 1111 (note)

F

Fecula, the nutritious powder of wheat or of other things Codárium, g 30 p 8
Falcate, or *Falciform*, (117) bent like a sickle Dactylóctenium, g 201 p 33
Falcato secund, bent on one side like a sickle. Dicránum longifólium, s 14717
Falsely two-valved, having two valves which are not of the same nature as other valves Hákea, g 240 p 77
Farinaceous, full of flour Triticum, g 206 (note)
Fascicles, parcels or bundles Maránta obliqua, s 19
Fasciculate, (118) arranged in bundles or parcels Aspálathus, g 1528 (note)
Fastigiate, (119) tapering to a narrow point like a pyramid Salicórnia procúmbens, s 118
Fauces, (120) the jaws, the gaping part or orifice of a monopetalous flower, Acácia, g 2427 (note)
Favose, (11) pitted or excavated like the cells of a honeycomb Thrincia, g 1633 p 661
Feathery, resembling a feather Arundinaria, g 219 p 35
Febrifuge, efficacious in moderating fever Swiеténia febrífuga, s 9807
Feculent, muddy, thick with sediment Aloe, g 770 (note)
Fecundation, the act of making fruitful Jasíone, g 547 (note)
Ferraces, (121) thickly set with spines, p 443
Ferruginous, iron colored, rusty Sidéritis, g 1252 (note)
Fibrillose, (122) covered with little strings or fibres p 989
Fibrous, (123) being composed of fibres Scírpus multicaulis, s 858
Fiddle-topped, (124) having a lip resembling the figure of a fiddle Zingiber pandurátum, s 53
Filiform, shaped like a thread Mantísia, g 16 p 1
Fimbriate, (125) fringed Eleusíne, g 200 p 33
Finger-parted, (97) divided into lobes having a fanciful resemblance to the five fingers of a human hand Verónica vérna, s 254
Fistular, or *Fistulous*, hollow like a pipe Monárda media, s 356
Flaccid, feeble, weak Cánna fláccida, s 15
Flexile, capable of being bent in different directions, pliable Paullínia, g 923 (note)
Flexuose, having a bent or undulating direction Alpínia cardamomum, s 48
Flexuose recurved, bent backward in a flexuose or undulated manner Dicranum crispum, s 14723
Flocci, little tufts like wool p 983
Floræ horologicæ, flowers which expand at particular hours, whence they are a sort of timekeepers Anagállis, g 357 (note.)
Floral envelopes, the calyx, bracteæ, and corolla, which envelope the inner parts of the flower are all so called p 1.
Florets, (126) little flowers, chiefly applied to those which constitute what were formerly called compound flowers Festúca vivípara, s 1093
Floriferous, that which bears flowers Cólchicum, g 851 (note)
Flosculous, compound flowers, consisting of many tubulose monopetalous florets Cárduus, g 1663 p 680
Foliaceous, (127) having the form of leaves. Pincknéya, g 492 p 113
Follicle, (128) a particular kind of seed-vessel Hákea, g 240 p 177
Footstalks, (129) the stalks of either flowers or leaves Avena, g 171 (note)
Fornicate, (130) arched Rosélea, g 7 p 1
Fragmentary, composed of fragments Lecidéa microphýlla, s 15440
Fringed, (131) having a border like a fringe Cánna glàuca, s 16
Frond, the leaves of palms Sábal, g 855 p 292
Frontal, that which is in front Kæmpféria rotúnda, s 67
Frosted, (131) covered with glittering particles, as if fine dew had been congealed upon it Anomathéca, g 106 p 31
Fructification, all those parts composing the flower and fruit of plants Póa alpina p 67 (note)
Frutescent, or *Fruticose*, shrubby Piper, g 77 (note)
Fugacious, that which lasts but for a short time Utricularia, g 53 (note)
Fulvous, tawny yellow or fox-colored Swietenia fulvo cincta, s 4545
Fungous, having the substance of fungi or mushrooms Cachrys, g 677 p 177
Funicle, (132) the little stalk by which a seed is attached to the placenta Cardámine, g 1392 p 536
Furcate, forked Ajuga furcáta, s 8000
Furfuraceous, scaly, mealy, scurfy Agaricus graminósus, s 13745
Fuscous, blackish-brown Bruma ericoídes, s 3005
Fusiform, (133) spindle-shaped Selinum palustre, s 3669

G

Galeate, (134) helmeted, the upper lip of a ringent corolla is the galea of that corolla Touréttia, g 1299 p 492
Gelatine, jelly, a term of chemistry p 994
Gelatinous, consisting of jelly Chrysophýllum, g 424 (note)
Geminate, doubled Didýmodon, g 2230 (note)
Gemmæ, (135) leafy buds is distinguished from alabastra or flower buds Bryum, g 2240 (note)
Geoponic, relating to agriculture Columéllia, g 1785 (note)
Germ, or *Germen*, the old name of the ovarium Muscári, g 821 (note)
Germen inferior, (136) fruit below the flower p 1
Germination, the first act of vegetation in a seed Triticum spélta, p 70 (note)
Gibbous, protuberant Maránta gibba, s 23
Glabrous, smooth Aspéruia lævigáta, s 1641
Gladiate, (111) shaped like a short straight sword Eryngium iguaticum, s 3495
Glandular, having glands Schwénckia, g 42 p 9
Glaucescent, or *Glaucous*, having something of a bluish hoary appearance Mesembryánthemum glaucéscens, s 7275
Glaucous, having a decided hoary grey surface Cánna glauca, s 16
Globose, or *Globular*, (136) round or spherical Pinguícula lusitánica, s 322



Glochidate, having hairs, the ends of which are split and hooked back, so that the hook is double Thrincia hispida, s 11175
Glomerate, (137) gathered into a round heap or head. Conýza glomeráta, s 11850
Glottis, the throat Acácia, g 2127 (note)
Glumaceous, plants are said to be glumaceous when their flowers are like those of grasses Cládium, g 74 p 11
Glume, (138) a part of the floral envelopes of a grass Anthoxánthum, g 76 p 11
Gluten, a chemical principle Tríticum, g 206. (note)
Glutinous, adhesive Sálvia glutinósa, s 398
Granoid, (139) the segments of the flowers of Rumex have tubercles which are called grains Rúmex patiéntia, s 4997
Graniform, formed like grains of corn Mesembryánthemum parvifólium, s 7441
Granular, covered as if with grains Gálium ánglicum, s 1616
Gregarious, herding together Agáricus fúsipes, s 15857
Grooved, furrowed, channelled, marked with grooves Cauc'lis, g 626 p 115
Grumous, clubbed, knotted, contracted at intervals into knots Aconitum napéllus, g 1205 (note)
Gynandrous, (140) having the stamens and style combined in one body O'rchis, g 1859
Gyrose, turned round like a crook Urédo gyrósa, s 16640

H.

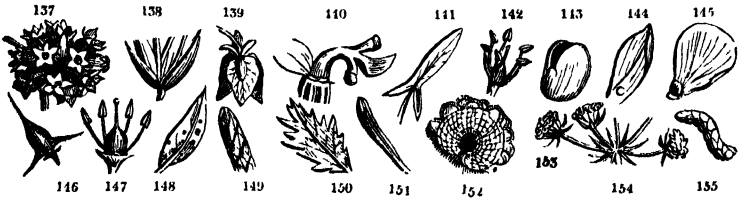
Habit, features or general appearance of a plant Dichptéris, g 48 p 9
Hæmorrhages, copious bleeding Acácia, g 2127 (note)
Hæmorrhoid, a kind of disease Ornithogalum, g 802 (note)
Hastate, (141) formed like the head of a halbert Sálvia canariénsis, s 372.
Hastato-lanceolate, between halbert shaped and lanceolate Dicránum várium, s 14728
Hastato-sagittate, between halbert-shaped and arrow-shaped A'rum maculátum, s 13472
Haulm, dead stems of herbs Dioscórea, g 2085. (note)
Helmet, (134) the same as *Galea*, see Galeate Monárda, g 60 p 10.
Herbaceous, a plant the stem of which perishes annually Maránta arundinácea, s 18
Hermaphrodite, consisting of two sexes. Hippúris, g 23 (note)
Hexagonal, six-sided I'ris ochroleúca, s 782
Hexandrous, (142) having six stamens Gardénia hexándra, s 2834
Hexangular, six-angled I'ris grammea, s 795
Hexapetalous, having six petals I'urcræ'a cubénsis, s 4105
Hilum, (143) the scar or mark on a seed which indicates the place by which it adhered to the placenta A chras, g 427 p 111
Hirsute, rough with soft hairs Pánicum miliáceum, s 918
Hispid, rough with stiff hairs Justícia cihária, s 288
Hoary, covered with white down O'lea oleáster, s 135
Homogeneous, having a uniform nature, or principle, or composition Draparnáldia ténuis, s 15105
Honey pore, (144) the pore in flowers which secretes honey Geissorhíza rochénsis, s 646
Honey-scales, (145) the scales in flowers which secrete honey Cotylédon, g 1060 p 341
Honey-spots, the spots in flowers which secrete honey Ruta, g 998 p 509
Hooded, (130) being curved or hollowed at the end into the form of a hood Hippocratéa, g 83 p 30
Horn, (146) any long subulate process in a flower is called a horn Zingiber, g 10 p 1
Husks, the dry envelopes of either flowers or fruits Sporóbolus, g 159 (note)
Hyaline, crystalline, transparent Diatóma, g 2260 p 924
Hybrid, mule, partaking of the nature of two species Syringa chinénsis ♂ rothomagénsis, s 161
Hydragogue, that which removes dropsy Euphórbia, g 1103 (note)
Hygrometrical, indicating the approach of moisture Avéna stérilis, p 60 (note)
Hypercathartic, a medicine that produces too powerful effects as a purgative. Verátrum, g. 2128 (note)
Hypocrateriform, salver-shaped. Galipéa, g 41 p 9
Hypogynous, (147) situated below the ovarium Serrúria, g 234 p 77
Hypophyllous, (148) under the leaf Erineum griseum, s 16592

I

Iced, (131) covered with particles like icicles. Mesembryánthemum pisifórme, s 7210
Ice drops, transparent processes resembling icicles Mesembryánthemum glaciále, s 7377
Imbricate, (149) laid one over another like tiles. Maránta oblíqua, s 19
Incised, (150) cut, separated by incisions Verónica austríaca, s 239
Incrassated, (151) becoming thicker by degrees Tétraphis Browniána, s 14682
Incurved, bending inward Roscóea, g 7 p 1
Incurve-recurved, bending inwards and then backwards Mesembryánthemum lineolatum, s 7302
Indehiscent, not dehiscing Néslia, g 1426 p 537
Indigenous, native of a country Crócus, g 93 (note)
Indurated, hardened Míhum, g 141 p 32
Indusium, (152) the membrane that encloses the thecæ of ferns Polybótrya, g 2168 p 876
Inflated, blown up Amómum sylvéstre, s 78
Inflexed, bending inward Dicliptera, g 48 p 9
Inflorescence, disposition of flowers Chloránthos, g 25 (note)
Infundibuliform, funnel-shaped Tritónia fenestráta, s 672
Innocuous, harmless Gomphocárpus, g 587 p 115
Inspissated, thickened, spoken of sap or other liquor A'tropa, g 446 (note)
Intenerating, having the power of making tender or softening Cárica, g 2095 (note)
Internodes, the space between the joints of plants Bambusa, g 752 (note)
Interpetiolar, between the petioles or leafstalks Microloma, g 578 (note)
Interstices, spaces between one thing and another Pimpinélla, g 635 p 116
Intramarginal, within the margin Listéra, g 1876 p 749
Inverse, inverted Sántalum, g 307 p 79
Involucels, (153) the partial involucra of umbelliferous plants Caúcalis platycárpos, s 3528
Involucral, having an involucre Ammóbium, g 1681 (note)
Involucrated, covered with an involucre Penicillária, g 148 p 32
Involucre, or *Involucrum*, (154) the bracteæ which surround the flowers of Umbelliferæ in a whorl. Caucalis platycárpos, s 3528
Involute, rolled inwards Moræ a, g 116 p. 31.

J

Joints, the places at which the pieces of the stem are articulated with each other Boerhaávia erécta, s 105
Julîform, (155) formed like an amentum or catkin Brýum iuláceum, s 14816



K.

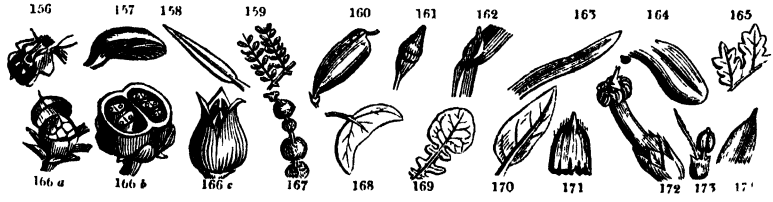
Kalyform, formed like Sálsola káli, a sea-coast plant Chóndria kalifórmis, s 15291
Keel, (51) when the midrib of a leaf or petal is sharp and elevated externally it is called a keel p 31
Kneed, or *Knee-jointed*, bent like the knee-joint. Aconitum tortuósum, s 7867

L.

Labellum, (156) the front segment of an orchideous or other flower Ionópsis, g 1919 p 750
Lacinæ, segments of any thing Parmelia cycloséhs, s. 15581
Laciniate, cut or divided into segments Phlómis lacinióta, s 8565
Lactescent, yielding milky juice. Maclúra aurantíaca, s. 13256.
Lacunæ, little pits or depressions p 948
Lacunose, covered with little pits or depressions Helvélla crispa, s 16200
Lævigated, smoothed Œnothéra glauca, s. 5459
Lamellated, (157) divided by plates internally Músa, g 721 (note)
Lamina, literally a plate, it is mostly applied to the leaf of a plant considered without its petiole. Béta cicla. p 207 (note)
Lanceolate, (158) lance or spear shaped Cóstus, g 11 p 1
Lanceolato-subulate, between lanceolate and subulate Sphágnum cuspidátum, s 14653
Lateral, on one side Alpínia nútans, s 43
Lax, loose, not compact Zingiber roseum, s 59
Leaflets, (159) small parts of compound leaves Codárium acutifólium, s 133
Legume, or *Legumen*, (160) a pod, the fruit of leguminous plants Gompholóbium, g 954 (note)
Leguminous, plants which bear legumes, such as the pea, the bean, the kidneybean p 8
Lenticular, shaped like a lens. Kyllínga, g 129 p. 31
Lentiform, in form like a lens Rivína, g 253 p 78
Leprous, covered with spots or scales Rhododéndron ferrugíneum, s 5923
Lid, (161) the calyx which falls off from the flower in a single piece Eucalyptus, g 1126 p. 409
Ligula, (162) the membrane at the top of the petiole of grasses and other plants. Zingiber pandurátum, s 53
Ligulate, (163) strap-shaped. Anelléma sínicum, s 595.
Limbate, having a colored or dilated surface Erica oppositifólia, s 5265
Linear, when the two sides are parallel. Cánna, g 1 p 1
Linear-ensate, long sword-shaped Márica califórnica, s 833
Linguiform, or *Lingulate*, (164) tongue-shaped Hæmánthus coccíneus, s 4149
Lipped, (156) having a distinct lip or labellum Roscóea, g 7 p 1
Lithontriptic, having the power of breaking the stone in the bladder p 1075.
Lobelets, (165) small lobes. Geránium sanguíneum, s 9644
Lochial, relating to the natural discharges consequent upon childbirth Aristolóchia, g 1934 (note)
Locomotion, motion from place to place. Mimósa, g 2124 (note)
Loculaments, partitions or cells of a seed vessel. Cystoséira, g 2329 p 927
Locular, (166) a fruit is called unilocular if it contains but one cell (*a*), bilocular if two cells (*b*), trilocular if three (*c*), and so on Fícus, g 72 p 11
Loment, (167) a kind of legume falling in pieces when ripe Mulléra, g 1567 p 597
Lomentaceous, bearing pericarpia, called lomenta. Erucária, g 1445 p 539
Lorate, (163) shaped like a thong or strap Pancratium littorále, s 4062
Lubricate, to make slippery. Acácia, g 2127 (note)
Lucid, bright, shining Sálvia lineatifólia, s 399
Lunate, or *Lunulate*, (168) shaped like a half moon. Cestrum auriculátum, s 2465.
Lurid, a color between purple, yellow, and grey. Moræ'a lurida, s 828
Lymphatic, of or belonging to lymph or sap p 874.
Lyrate, (169) lyre-shaped. Sálvia lyràta, s 450.

M.

Macerate, to decompose by steeping in water or other liquid Méntha, g 1254 (note)
Margined, relating to the margin Hellénia, g 9 p 1
Masticatory, grinding or chewing with the teeth Pimpinélla, g 635 (note)
Math, an old term for crop Alopecúrus, g 164 (note)
Matrix, a place where any thing is generated or formed Calothrix, g 2286 p 925
Medulla, the pith of a plant p 1053
Medullary, relating to the pith of plants Mimósa, g 2124 (note)
Melastomaceous, partaking of the nature or appearance of Melástoma p 300
Melliferous, honey-bearing Anchúsa, g 332 (note)
Membranaceous, or *Membranous*, having the texture of a membrane Chionánthus maritima, s 153
Menstruum, a liquor used as a dissolvent Ranúnculus, g 1233 (note)
Meshes, the openings in any tissue Mougeótia, g 2290 p 925
Micaceous, glittering, shining. Watsónia, g 101 (note)
Midrib, (170) the large vein which passes from the petiole to the apex of a leaf Póthos, g 252 (note)
Miliary, granulate resembling many seeds Citrus médica, p 655 (note)
Mitriform, (171) formed like a mitre p 895.
Mobility, the power of motion Mimósa, g 2124 (note)
Monadelphous, (172) having the filaments cohering in a tube. Lýxia monadélpha, s 629
Monandrous, (173) having one stamen Alchemilla Aphanes, s 1519
Moniliform, formed like a necklace, that is to say, with alternate swellings resembling beads and contractions Helióphila amplexicaúlis, s 9312
Monocotyledons, having one seed leaf p 236
Monœcious, having the one sex in one flower, and the other in another Schœ'nus monoícus, s 847
Monopetalous, having one petal p 9
Monosepalous, having one sepal or division of the calyx Pontedéria, g 730 p 237
Mordant, that which enables vegetable matter or tissue to receive dyes or coloring matter, and to retain them p 1064
Mottled, marked with blotches of color of unequal intensity passing insensibly into each other Syringa pérsica, s 162
Mucilage, a turbid slimy fluid Sálvia, g. 62 (note)
Mucronate, (174) pointed sharp Corispérmum intermédium, s 127
Mucronulate, having a little hard point Bánksia integrifolia, s. 1459
Mulch, a gardener's term for the placing manure about the roots of trees on the surface of the ground Rósa, g. 1148 (note)
Multifarious, very numerous, or arranged in many rows Aloe rígida, s 4387
Multipartite, much divided Pterónia stricta s 11492
Multiplex, much multiplied Selágo fasciculáta, s 8657
Muricated, covered with short sharp points Pánicum muricatum, s 949
Muricato-hispid, covered with short sharp points and rigid hairs or bristles Bryónia scabrélla, s. 13588



N.

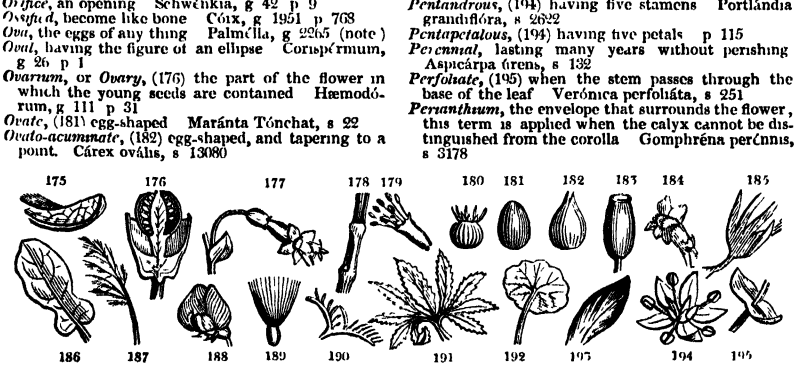
Naiades, nymphs of the springs and fountains, a particular order of Monocotyledonous plants. p 772
Narcotic, producing sleep or torpor Brómus, g. 184 (note)
Navicular, (175) boat-shaped. Airópsis, g 160 p 32
Neck, the upper tapering end of bulbs is called the neck Crínum sumatránum, s 4184
Nectariferous, bearing honey Swértia, g 599 p 115
Nectary, or *Nectarium*, (144, 145) that part of a flower which produces honey Alpínia Allúghas, s 51
Nerves, the strong veins upon leaves or flowers. Cánna rubricaulis, s 11
Nervimotion, the power of motion in leaves Mimósa, g 2124 (note)
Nervose, or *Nervine*, composed of nerves Eránthemum pulchéllum, s 312
Neuter, neither male or female Anthoxánthum, g 76 p 11
Nidulant, nestling; lying among any thing as a bird in its nest Samýda, g 1034 p 340
Nidus, the nest of any thing. Alcyonídium, g 2267 (note)
Nodding, (177) having a drooping position Verónica complicáta, s. 190.
Nodi, (178) the articulations of plants the place where one joint is articulated with another Sporóchnus villósus, s 15333
Nodose, having many nodi or knots Póa serótina, s 1187
Nodules, small hard knots Ischæ'mum aristátum, s 14230.
Notch-flowered, having the flower notched at the margin Verónica crenuláta, s 185
Nucamentaceous, producing nuts Búnias, g 1444 p 539
Nucleus, the kernel Myrica Fáya, s 13869

O

Ob is used in the composition of Latin technical terms, to indicate that a thing is inverted, for instance, obovate is inversely ovate, obcordate inversely cordate, and so on
Occidental, coming from the west Alpínia occidentális, s 42
Ochraceous, having the color of clay or yellow ochre Oscillatória ochrácea, s 15118
Octandrous, (179) having eight stamens Rivina octándra, s 1511
Octogynous, (180) having eight styles Phytolácca octándra, s 6572
Officinal, any thing that is, or has been, used in the shops Kæmpferia Galánga, s 68
Oleaginous, having the qualities of oil Rivina, g 253 (note)
Oleraceous, esculent, eatable Ranúnculus, g 1233 (note)
Olivaceous, having the qualities of olives p 924
Opercular, (161) covered with a lid p. 749
Operculiform, having the figure and position of a round lid of something Operculária, g 250 p 78
Operculum, (161) a lid p 874
Opiate, having the power of opium Dictámnus, g 997 (note)
Orbicular, or *Orbiculate*, a plane surface circumscribed by a circle Farsétia, g 1307 p 586
Orchideous, of or belonging to the natural order of Orchideæ p 748
Orifice, an opening Schwénkia, g 42 p 9
Ossified, become like bone Cóix, g 1951 p 768
Ova, the eggs of any thing Palmélla, g 2265 (note)
Oval, having the figure of an ellipse Corispérmum, g 26 p 1
Ovarium, or *Ovary*, (176) the part of the flower in which the young seeds are contained Hæmodórum, g 111 p 31
Ovate, (181) egg-shaped Maránta Tónchat, s 22
Ovato-acuminate, (182) egg-shaped, and tapering to a point. Cárex ovális, s 13080
Ovato-cylindraceous, (183) egg-shaped, with a convolute cylindrical figure Didýmodon purpúreum, s 14762
Ovato-deltoid, triangularly egg-shaped Bétula álba, s 13188
Ovato-rotundate, roundly egg-shaped Phásceum múticum, s. 14660.
Overlapping, when the margin of one thing lies upon that of another, it is said to overlap. Cyclámen vérnum, s 2051
Ovoid, (181) egg-like Psorálea Lupinéllus, s 10758.
Ovules, (176) the young seeds of plants contained in the ovarium Nemóphila, g 386 p 110

P

Palate, (184) the mouth of a ringent flower Pinguícula edéntula, s 327
Palcaceous, abounding with chaffy scales Brométia Karátas, s 4114 (note)
Palmated, or *Palmatifid*, (185) divided so as to resemble a hand Curcúma Zedoária, s 80
Pandurtform, (186) having the figure of a fiddle Kæmpféria pandurata, s 70
Paniculed, (187) loose-spiked. Maránta, g 2 p 1
Pannary, useful for making bread Tríticum, g 206 (note)
Papilionaceous, (188) butterfly-shaped flowers p 338
Papillose, producing small glandular excrescences like nipples Onosmódium hispidum, s 1930
Pappus, (189) the crown of the fruit of Compósitæ, and similar plants Centránthus, g 20 p 1
Papulose, producing small glands like pimples Mesembryánthemum parvifólium, s 7442.
Parabolically, in form like a parabola Aloe brevifólia, s 4435
Parenchyma, all the parts of plants which consist of cellular tissue only Solorina, g 2331 p 948
Parietal, being attached to the sides of an ovarium instead of its axis Glóbba, g 15 p 1
Patent, spread out or expanded Lycopódium annótinum, s 14656
Patent-reflexed, spread out and turned back Carex paucifióra, s 13069
Patulous, slightly spreading Centaurea babylónica, s 12613
Pectinate, (190) resembling the teeth of a comb Verónica orientális, s 237
Pectoral, relating to the breast Trápa, g 308 (note)
Pedatifid, (191) cut into lobes, the lateral ones of which do not radiate from the petiole like the rest Saxifraga pedatifida, s 6089
Pedicellate, slightly stalked. Cestrum tinctórium, s 2475
Pedicels, small footstalks of flowers Commelina coelestis, s 592
Peduncle, the common footstalk of flowers Cánna Lambérti, s 5
Pellicle, a thin skin Papyrus, g 128 (note)
Pellucid, bright, transparent Mesembryánthemum réptans, s 7278
Peltate, (192) when the petiole is fixed in the disk instead of the margin Piper peltatum, s 514
Pencilled, (193) marked in lines as if with a pencil Crócus lagenaeflórus γ penicillátus, s 612
Pendulous, drooping, hanging down Curcúma angustifólia, s 91
Pentagonal, having five angles Piquéria, g 1704 p 663
Pentagynous, (194) having five styles Phytolácca abyssínica, s 6573
Pentandrous, (194) having five stamens Portlándia grandiflóra, s 2622
Pentapetalous, (194) having five petals p 115
Perennial, lasting many years without perishing Aspicárpa árens, s 132
Perfoliate, (195) when the stem passes through the base of the leaf Verónica perfoliáta, s 251
Perianthium, the envelope that surrounds the flower, this term is applied when the calyx cannot be distinguished from the corolla Gomphréna perénnis, s 3178



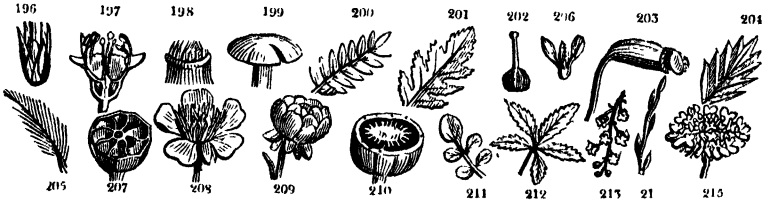
Pericarp, the seed vessel Decringia, g 503 (note)
Perichætial, (196) leaves which in mosses surround the base of the stalk of the theca p 895
Perigynous, (197) inserted into the calyx Larbræ'a, g 1069 p 341
Peristome, (198) the rim which surrounds the orifice of the theca of a moss p 895
Perithecium, ***Peridium***, or ***Perisporium***, different kinds of envelopes of the reproductive organs of fungi Pyrenula, g 2337 p 948
Persistent, remaining, not falling off Codárium, g 30 p 8
Pervious, having a passage through which anything can be transmitted Primula, g 350 p 110
Petaloid, like petal Damasónium, g 850 p 241
Petals, (194) divisions of the corolla p 1
Petiolate, having footstalks Alpinia malaccénsis, s 46
Petiole, footstalks of leaves Cissus heterophýlla, s 1780
Petiolules, little petioles Erythrina, g 1521 (note
Pezizoid, like a Peziza, a kind of fungus resembling a cup in figure p 1021
Phanogamous, such plants as are visibly furnished with sexual organs p 108
Phagedena, eating, corroding, a gnawing of the stomach, also applied to ulcerous sores Anthemis, g 1778 (note)
Pharmaceutical, relating to the art of pharmacy Astrágalus Tragacánthæ, p 667 (note)
Phthisis pulmonalis, consumption of the lungs Arum, g 2127 (note)
Pileate, (199) having a cap or lid like the cap of a mushroom Cassúvia clándica, s 1811
Pileus, the cap of a mushroom p 978
Piliferous, bearing hairs Sphenogyne dentata, s 12128
Piliform, formed like down or hairs Grimmia pulvinata, s 14690
Pilose, slightly hairy Momórdica Kalmiana, s 365
Pimpled, covered with minute pustules resembling pimples Saxifraga higuláta, s 6051
Pinnæ, or ***Pinnulæ***, the segments of a pinnated leaf Calceolaria pinnata, s 515
Pinnate, (200) a leaf is so called when it is divided into numerous smaller leaves or leaflets Codárium acutifólium, s 133
Pinnatifid, (201) a leaf is so called when it is divided into lobes from the margin nearly to the midrib Centranthus calcitrapæ, s 112
Piquancy, sharpness, pungency Spilánthes, g 1695 (note)
Pistacia, formed like peas Lagétta, g 909 p 300
Pistillum, or ***Pistil***, (202) the columnar body situate in the centre of a flower, consisting commonly of three parts, viz the ovarium, style, and stigma Knáppia, g 142 p 32
Pitchers, (203) hollow leaves so called Nepénthes distillatoria, s 14077
Pith medulla occupying the centre of a stem or shoot Melia, g 193 (note)
Pituitous, discharging mucus Pánax, g 2166 (note)
Plane, flat Matricaria, s 1771 p 664
Plano-compressed, compressed down to a flattish surface Pomcdána, g 977 p 339
Plethoric, having a full habit Juniperus, g 2113 (note)
Plicate, (204) plaited. Nicotiána repánda, s 2206
Plumose, (205) feathery, resembling feathers Centránthus, g 20 p 1
Plumula, (206) the young leaves in the embryo p 1053
Plurilocular, (207) having many cells p 1085
Pod, (160) a kind of seed vessel such as that of the pea tribe Epimedium, g 297 p 79
Polyandrous, (208) having more stamens than 20 Royéna ambígua, s 6037
Polygamous, a plant is said to be polygamous when some flowers are male, others female, and others hermaphrodite Rhagódia, g 562 p 114
Polygynous, (208) having numerous styles Royéna ambígua, s 6037
Polypetalous, (209) having many separate petals p 10
Polyspermous, (210) having many seeds p 1066
Pome, an apple Pyrus, g 1138
Pores, apertures in the cuticle through which transpiration takes place Lasiopétalum, g 523, p 113
Porrect, extended forward. Bauhinia aurita, s 5768
Pouch, a little sack or bag at the base of some petals and sepals Nigritélla, g 1860
Præmomen, the first name of several; in plants it is the same as the generic name Crócus, g. 93, note)
Precocity, ripe before the usual time Dáphne Mezéreum, p. 323 (note)
Prismatic, formed as a prism Polycnémum arvénse, s 599
Processes, protrusions either natural or monstrous. Orthotrichum, g 2283 p 896
Proliferous, a plant is said to be proliferous when it forms young plants in abundance about its roots. Scirpus Luzulæ, s 867
Prominences, protuberant risings from the surface Colutéa arboréscens, s 10484
Propendent, hanging forward and downward Cæ'sia vittáta, s 4831
Prurient, stinging p 1061
Pubescence, down, closely pressed to the surface. Eriganéa véca, s 7506
Pullulating, budding Conférva pátens β prolifera, s 1077
Pulverised, reduced to powder Crócus, g 93 (note)
Pulvinate, become cushion-shaped Grimmia pulvinata, s 14690
Pulvinuli, little cushions p 948
Punctiform, formed like points Peziza punctáta, s 16267
Pungent, stinging or pricking Corispérmum Redowskii, s 126
Pustular, or ***Pustulate***, covered with glandular excrescences like pustules Pelargonium pustulosum, s 9021
Pustules, pimples or little blisters Brunsvigia Rádula, s 4215
Pyriform, shaped like the fruit of a pear Paullínia pinnata, s 5612

Q

Quadrangular, four-angled Dorstónia Houstóni, s 1526
Quadrifarious, arranged in four rows or ranks Struthíola imbricáta, s 1487
Quadrifid, divided four times Plantágo, g 278 p 78.
Quadriglandular, having four glands. Malpighia glandulífera, s 6372
Quartz, a species of stone Laurus cinnamómum, s 5640
Quaternary, succeeding by fours p 76
Quaternate-pinnate, (211) pinnate, the pinnæ being arranged in fours Anthyllis tetraphýlla, s 10211
Quinate, in fives Póthos pentaphylla, s 1506
Quinquefid, (212) divided into five Cissus, g 305 (note)
Quintuple, five times multiplied Ephédra, g 2115 p 819

R

Racemes, (213) a particular arrangement of flowers, when they are arranged around a filiform simple axis, each particular flower being stalked Alpinia nutans, s 43
Racemose, flowering in racemes Verónica Barrelléri, s 212
Rachis, (214) that part of a culm which runs up through the ear of corn, and consequently the part that bears the flowers in other plants Páspalum, g 139 p 31.
Radiant, or ***Radiate***, (215) a flower is said to be radiant, when, in a cluster or head of florets, those of the circumference or ray are long and spreading, and unlike those of the disk Scabiósa canéscens, s 1569



Radical, proceeding from the root. Phrýnium capitátum, s 27

Radicant, producing roots from the stem. Marcgraávia, g 1163 (note)

Radicule, (216) that end of the embryo which is opposite to the cotyledons p 537

Radius, (217) the ray of compound flowers. Solidágo canadénsis, s 12066

Ramenta, little brown withered scales with which the stems of some plants, especially ferns, are covered Rhodoméla lycopodioides, s 15280

Ramentaceous, (218) covered with ramenta. Euphórbia tragífera, s 6793.

Ramifications, subdivision of roots or branches Eragróstis pilósa, s 1207

Ramose, branchy Ilex, g 315 (note)

Rami, twigs or small branches Draparnáldia, g 2284 p 925

Raphe, in seeds this is the channel of vessels which connects the chalaza with the hilum, in umbelliferous plants it is the line of junction of the two halves of which their fruit is composed Búbon, g 640 p 116

Rationale, the reason of a thing Solánum, g 451 (note)

Receptacle, (219) that part of the fructification which supports the other parts Pollichia, g 21 p 1

Recesses, the bays or sinuses of lobed leaves Sisýmbrium obtusángulum, s 9169

Rectangular, right-angled. Teúcrium asiáticum, s 8114.

Rectilinear, right-lined. Bómbax eriánthos, s 9942

Rectum, an intestine A'nthemis, g 1778 (note)

Recurved, bent backward Zíngiber, g 10 p 1

Recurvo-patent, bent back and spreading Grímmia apocárpa, s 14687

Reflexed, bent backward. Cánna gigantéa, s 6

Reflexed recesses, sinuses of leaves which are bent backward from the ordinary direction of the surface of a leaf p 165

Refrigerant, producing coolness Oxalis, g 1065 (note)

Reniform, (220) kidney-shaped Leptánthus reniformis, s 736

Repand, (221) a leaf having a margin undulated and unequally dilated is said to be repand Eránthemum bícolor, s 313

Repando-dentate, repand and toothed Doróni:um Pardaliánches, s 12189

Repellant, that which turns you away from any thing A'tropa, g 446 (note)

Replicate, folded back Cyclópia, g 946 (note)

Resolutive, or *Resolvative*, having the power to dissolve Argemóne, g 1172 (note)

Resolvent, having the power of dissolving Curcúma, g 14 (note)

Restringent, astringent Bérberis, g 829. (note)

Resupinate, inverted in position, so that that which was in front becomes at back Hedýchium, g 6 p 1

Reticulated, resembling a net. Hákea undulàta, s 1435

Retuse, (222) abruptly blunt Hedýchium flávum, s 36.

Revolute, rolled back Cánna speciósa, s 13

Rhomboidal, (225) like a rhombus Salvia mexicána, s 385

Rhomboid-ovate, rhomboidally egg-shaped Chenopódium atriplícis, s 3416

Rib, (170) the projecting vein of any thing Curcúma rubéscens, s 83

Rigid, stiff Notelæ a rigida, s 157

Ringent, (223) gaping Justicia, g 47 p 9

Ringing, making an incision resembling a ring all round a branch Liriodéndron, g 1216 (note)

Rotate, (224) a monopetalous corolla, the limb of which is flat and the tube very short, is called rotate Valerianélla discoídea, s 563

Rotundo-ovate, roundly egg-shaped Cárex fúlva, s 13123

Rubefacient, any thing which reddens the skin, or raises slight cutaneous inflammation Euphórbia, g 1103 (note)

Rudiment, when an organ is imperfectly developed, botanists call such developement a rudiment Molínia, g 194 p 33

Rufous, reddish orange-colored, or rusty Cánna glauca β rufa, s 16

Rugose, rough or coarsely wrinkled. Calceolária rugosa, s 317

Rugulose, finely wrinkled Sálvia chamædryoídes, s. 386

Runcinate, (226) hooked back, applied to the lobes of leaves Hésperis runcinata, s 9161

Runcinato-dentate, hooked back and toothed. Apárgia taráxaci, s 11166

Runners, (229) procumbent shoots which root at their extremity Ranunculus salsuginósus, s 8037

Rusty, rust-colored Curcuma ferruginea, s 87

S

Saccate, bagged, having a bag or pouch, as many petals Calótropis, g 584 p 115

Sagittate, (227) shaped like an arrow-head Dorsténia arifólia, s 1528

Salivation, a discharge of saliva from the glands of the mouth Plumbágo, g 324 (note)

Samara, (228) a kind of winged seed vessel, the same as what the English call key O'rnus, g 69 p 11

Sapid, agreeable to the palate Nelúmbium, g 1213 (note)

Saponaceous, soapy Æsculus, g 866 p 296

Sarmentose, (229) producing sarmenta or runners Echites biflora, s 2355

Sawed, resembling the teeth of a saw Coldénia procúmbens, s 1833

Scabrous, rough with little asperities Sálvia runcináta, s 459

Scales, any small processes resembling minute leaves, also the leaves of the involucrum of Compósitæ Pollichia, g 21 p 1

Scandent, climbing Piper, g 77 (note)

Scape, (231) a stem rising from the root and bearing nothing but flowers Maránta comósa, s 24

Scarious, or *Scarious*, membranous and dry Butónia tenuifólia, s 1813

Schistous, rocky, formed of the rock called schist O'lea, g 32. (note)

Scion, a shoot intended for a graft Camélha, g 1476. (note)

Scoriæ, cinders Camélha, g 1476 (note)

Scrobiculate, excavated into little pits or hollows Antennária, g 1725 p 663

Scrotiform, formed like a double bag Ellísia, g 432 p 111

Scurfy, covered with scales resembling scurf Egístoma, g 365 p 110

Scutate, formed like an ancient round buckler Ptiléta, g 2311 p 925.

Secund, (232) arranged on one side only · the same as unilateral, which is better p 917

Sedges, a tribe of marsh plants so called p 31.

Segments, parts of any thing p 1

Semi-, half

Seminal, belonging to the seed Scabiósa, g 201 (note)

Semination, seeding Crócus, g 93 (note)

Sepals, (233) the segments of the calyx Sebæ'a, g 281 p 98

Septa, (166) the partitions that divide the interior of the fruit Rulingia, g 704 p 118

Septiferous, bearing septa Ramónda, g 374 p 110

Serrated, (230) like the teeth of a saw Maytenus boária, s 134

Serrulations, notchings like those of a saw Agave yuccæfólia, s 4093

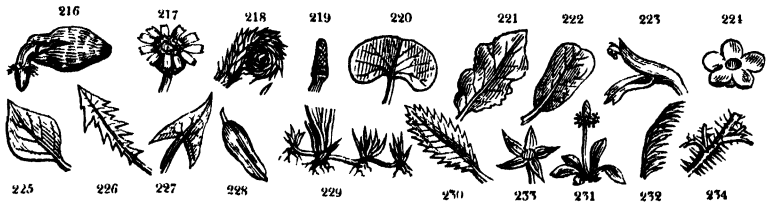
Sessile, without footstalks Zostéra, g 24 p 1

Setacco-rostrate, having a beak with the figure of a bristle Cárex ampullácea, s. 13162

Setaceous, resembling a bristle in shape Justícia nígricans, s 282

Setæ, bristles Schœ'nus nigricans, s 845

Setiform, (234) formed like a bristle. Rosa hibérnica, s. 7501.



Setigerous, or ***Setose***, covered with bristles Knáppia, g 142 p 32

Sheath, the lower part of the leaf that surrounds the stem Zostéra, g 24 p 1

Sherds, the fragments of potting employed by gardeners to drain their flower-pots Protea, g. 201 (note.)

Shield, (29) a broad table-like process in the flower of Stapélia and its allies. Huérnia clavigera, s. 3351

Sialagogue, having the power of exciting saliva p 536.

Silicated, coated or mixed with flint Astrágalus tragacántha, p 637 (note)

Siliceous, flinty Laurus cinnamómum, g 934 (note)

Silicle, (235) the small round pod of Cruciferæ. Lunária, g 1395 p 536

Silique, (236) the long taper pod of Cruciferæ Brássica, g 1432.

Simple, the reverse of compound p 1

Sinuate, or ***Sinuose***, (237) bending in and out. Lycopus europæ'us, s 358

Sinuato-dentate, sinuate and toothed. Leóntodon palústris, s 11156

Sinus, the bays or recesses formed by the lobes of leaves or other bodies Hamamélis virginica, s 1814

Soboliferous, (238) producing young plants from the root Aloe brévis, s 4415

Sodden, soaked Prótea, g 231 (note)

Somniferous, causing sleep Primula véris, s 2029

Soporific, causing sleep Humulus, g 2074 (note)

Soredi'ferous, (239) bearing soredia Ramalina, g 2355 p 949

Sori, (240) the patches of fructification on the back of the fronds of ferns p 625

Spadix, (240) a spike protracted from a spatha Zostera, g 24 p 1

Spatha, a broad sheathing leaf enclosing flowers arranged upon a spadix Hedýchium spicatum, s 34

Spathaceous, furnished with a spatha p 1

Spathulate, (241) shaped like a spatula, a knife so called Canna glaucéa, s 6

Sphacelate, withered or dead Senécio ægýptius, s 11911

Spherical, round like a sphere Alpínia nútans, s 43

Spheroidal, almost like a sphere Cactus latispínus, s 6852

Spherules, (242) minute spheres Stromatosphæ'ria concéntrica, s 16360

Spike, (244) flowers sessile upon a long rachis Maránta látea, s 20

Spines, indurated branches or processes formed of woody fibre, and not falling off from the part that bears them Ancistrum, g 68 p 10

Spiniform, formed like a spine Mesembryánthemum spiniforme, s 7363

Spinous, full of spines Alpínia córnua, s 44

Spinulescent, having a tendency to produce small spines Mesembryánthemum spinulíferum, s 7421

Spinulose, covered with small spines Rhéum Ribes, s 5667

Spiral, (253) circularly involved Cóstus spirális, s 65

Sporules, that part in Cryptogamous plants which answers to the seeds of other plants p 874

Sporuliferous, bearing sporules Phállus impudícus, s 16336

Spurious, counterfeit Iris spúria, s 781

Spurs, (243) long processes resembling horns produced by various parts of the flower Cureúma, g 14 p 1

Squamiform, like scales Sántalum, g 907 p 79

Squarrose, (244) spreading rigidly at right angles, or in a greater degree Zingiber squarrósum, s 60

Squinancy, an inflammation in the throat Aspérula, g 268 (note)

Stamen, (245) the male organ of a flower p 1

Staminiferous, producing stamina Campánula, g 465 p 112

Standard, (188) the upper segment of the flower of Leguminósæ Thermópsis, g 944 p 338

Stellate, in the manner of a star Schwénkia, g 42 p 9

Stellulate, resembling little stars. Onósma taúricum, s 1907

Sterile, barren. Amómum grandiflórum, s 74.

Sternutatory, qualities which provoke sneezing Primula vulgáris, g 850 (note)

Stigma, (246) the female organ of a flower. Cánna, g 1. p 1

Stimulating, exciting Cínna, g 161. (note)

Stimuli, stinging hairs Urtica árdens, s. 13230.

Stipes, (247) the stalk of Fungi p 978

Stipitate, having a short stalk. Aspidístra, g 759 p 238

Stipulaceous, having appendages called stipulæ Solánum peruviánum, s 2516

Stipulary, occupying the place of stipulæ. Palúrus austrális, s 2896

Stipules, (248) small scales at the base of the petiole of certain leaves Spermacóce stylósa, s 1653

Stoloniferous, (249) having creeping roots Sesléria elongáta, s 1075

Stolons, root shoots Agróstis, g 156 (note)

Stomachic, relating or agreeable to the stomach Kæmpféria, g 12 (note)

Strangury, a disease, and produced on plants by tight ligatures Ornithogalum, g 802 (note)

Strata, layers, beds Capsicum, g 453 (note)

Striæ, small streaks, channels, or furrows p 877.

Striated, having striæ Alpínia racemosa, s 41

Strigæ, little, rigid, unequal, irregular hairs Chára hispída, s 15109

Strigose, having strigæ. Lithospérmum arvénse, s 1895

Strophiolate, surrounded by protuberances. Hovea, g 156 p 599

Struma, a wen or protuberance p 903

Strumose, or ***Strumous***, covered with strumæ Mesembryánthemum grússum, s 7422

Style, (250) the stalk which intervenes between the ovarium and stigma, bearing the latter p 1

Styptic, having the power to staunch blood Rhús, g 681 (note)

Sub, in composition, signifies subordinate, or somewhat

Succedaneum, coming in the place of another Tacca, g. 758 (note)

Succulent fleshy and filled with juice Blítum, g 28 (note)

Sudorific, having the power of producing perspiration Sálvia, g 62 (note)

Suffruticose, shrubby in a slight degree Spermacóce suffruticósa, s 1656

Sulcate, furrowed Vibórgia, g 1523 p 599

Supernatant, floating on the surface of any thing Aloe, g 770 (note)

Suppurate, to generate matter Rhus, g 681 (note)

Supra-decompound, doubly compounded Scirpus sylváticus, s 868

Suculi, young shoots Erythrónium, g 782 (note.)

Suture, the line formed by the cohesion of two parts Mirbélia, g 967 p 338

Syngenesious, (251) belonging to the nineteenth class of the sexual system Phlóx, g 369 (note)

Synthetical, combining, opposed to analytical Gilénia, g 1142 (note)

Syphilitic, useful in the cure of syphilis Chenopódium, g 611 (note)

T

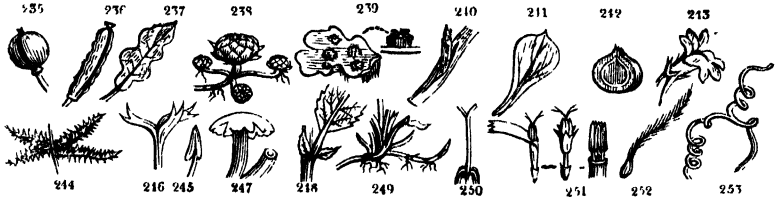
Tails, (252) the long feathery or hairy terminations of certain fruits Clématis chinénsis, s 7968

Tap-root, a root which penetrates deep and perpendicularly into the ground without dividing Crinum defixum, s 4182

Tartareous, consisting of tartar Lecidéa cónfluens, s 15384

Teated, resembling the figure of the teat of animals. Achras, g 427 p 111

Tendrils, (253) the curling twining organs by which some plants lay hold of others Vitis índica, s 2858



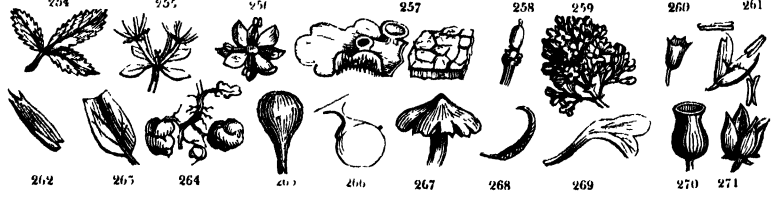
Tenesmus, a disposition to go to stool, without the power of evacuation A'nthemis, g 1718 (note)
Tepid, lukewarm A'nthemis, g 1778 (note)
Terebinthinate, consisting of turpentine A'bies balsámea, p 805 (note)
Terete, taper, round and long Hákea oblíqua, s 1423
Terminal, ending, or at the top Maránta lutea, s 20
Ternary, consisting of threes Valeriána, g 78 (note)
Ternate, (254) growing together in threes Hedýchium elatum, s 31
Tessellated, variegated by squares. Sarcocéphalus, g 498 p 113
Testa, the skin or integument of the seed Psídium, g 1118. p 409
Testaceous, having a pale brown color Mesembryánthemum testáceum, s 7430
Tetrachotomous, (255) a stem that ramifies in fours Euphórbia, g 1103 (note)
Tetrandrous, (256) having four stamens Collinsónia anisáta, s 469
Tetrapetalous, (256) having four petals p 1069
Tetraspalous, (256) having four sepals p 1069
Thalamus, (258) that part of a flower which rises from below the ovarium and sometimes supports the outer envelopes p 539
Thallus, (257) that part which bears the fructification of Lichens p 874
Theca, the cases that contain the sporules of Cryptogamic plants p 874
Threads, long delicate hairs Anacámpseros filamentosa, s 6632
Throat, (120) the orifice of a flower Justícia pícta, s 285
Thyrse, (259) a kind of dense panicle like that of the lilac A'juga turcáta, s 8099
Thyrsoid, resembling a particular kind of panicle called a thyrsus p 85
Tomentose, densely and closely hairy Thymus tomentosus, s 8414
Tomentum, dense close hair Grevillea buxifólia, s 1418
Tonic, bracing, corroborative Salvia, g 62 (note)
Toothed, (260) divided so as to resemble teeth Polýchia, g 21 p 1
Toothletted, furnished with little teeth Sálvia paniculáta, s 402
Topical, local, confined to some particular place Papáver, g 1170 (note)
Torose, uneven, alternately elevated and depressed Papáver hýbridum, s 7659
Tortuous, twisted Helianthemum Fumána, s 7773
Torulose, slightly torose Echites torosa, s 2557
Torus, (258) the same as thalamus, which see Sisýmbrium, g 1422 p 557
Trapeziform, in the shape of a trapezium Boróma serruláta, s 5091
Trapezoid, like a trapezium Adiántum villosum, s 14554
Triandrous, (261) having three stamens p 90
Trichotomous, (102) branches divided in threes Trichodium decumbens, s 1000
Tricuspidate, (262) having three points A'lium Pórrum, s 4617
Trifarious, arranged in triple rank A'loe tortuósa, s 4480
Trifid, divided in three Mantísia, g 16 p 1
Trilocular, (166) having three cells Leptospérmum trilociláre, s 6951
Tripetaloid, appearing as if furnished with three petals Tillandsia xiphioides, s 4144
Tripetalous, having three petals Elatine hydropíper, s 5635
Triquetrous, having three sides or angles A'loe reticuláta, s 4392
Triturated, reduced to powder by pounding, Amýgdalus, g 1128 (note)
Tropical, belonging to the torrid zone Conocárpus, g 544 (note)
Truncate, (263) blunt, as if cut off Hedýchium spicátum, s 34
Tuberculate, covered with knobs or tubercles Ranúnculus parviflórus, s 8073.
Tuberous, (264) bearing solid fleshy roundish roots like the potato Cánna édulis, s 12
Tubers, roots so called Curcuma, g 14 (note)
Tumid, swelling Secále orientále, s 1267
Tunic, a coat Crócus pusíllus s 606
Tunicated, having a coat A'lium Pórrum, s 4617.
Turbinate, (265) having the figure of a top Salvinórma, g 22 p 1
Turgid, swollen, puffed up Brómus praténsis, s 1132

U

Umbellules, (153) divisions of an umbel. Caúcalis daucoides, s 3524
Umbels, (154) the round tuft of flowers produced by the carrot, &c Boerhaávia scándens, s 108
Umbilicus, (266) the cord which attaches the seed to the receptacle Bérberis, g 829 p 239
Umbonate, (267) having a top in the centre like that of the ancient shield Cucúrbita Melopépo, s 13566
Unarmed, destitute of prickles or spines, which are the arms of plants Corispérmum hyssopifolium s 124
Uncinate, (268) hooked Piper adúncum, s 502
Unctuous, fat, oily Anchúsa, g 333 (note)
Undulate, waved Sálvia pomífera, s 370
Undulato-rugose, rugose or rugged and waved Stromatosphæ'ria deústa, s 16361
Unguiculated, furnished with a short unguis. Alpínia galánga, s 40
Unguis, (269) the taper base of a petal Diánthus, p 372 (note)
Unilateral, one-sided Brachypodium lobátum, s 1147
Unilocular, (166) one-celled Calepína, g 1441 (note)
Unisexual, being of one sex Prockia, g 1179 (note)
Urceolate, (270) pitcher-shaped. Camphorósma, g 254 p 78.
Uterine, belonging to the womb Acácia, g 2127 (note)
Uterus, the womb p 981
Utricle, or ***Utriculus,*** a little bottle or bladder. Salvinórma, g 22 p 1
Uvula, the gland of the throat Acácia, g. 2127 (note)

V.

Valvular, (271) or ***Valved,*** consisting of valves or seed cells p 895
Varicose, (272) swollen here and there Pterocárpus, g 1515 p 598
Vascular, (273) consisting of tissue in a very succulent enlarged state Potamogeton, g 317 (note)
Vaulted, (274) formed or placed like the roof of a vault Gladiolus namaquensis, s 709
Veneering, the art of covering one kind of wood with thin plates of another kind Spartium scopárium, p 611 (note)
Ventricose, (275) inflated Gastridium, g 155 p 92
Veratrine, the active principle of Verátrum Veratrum, g 2128 (note)
Vermifuge, that which expels worms Helléborus, g 1237 (note)
Vernacular, native Zingiber, g 10 (note)
Vernal, belonging to the spring Veronica vérna, s 254
Versatile, (276) swinging lightly on a stalk so as to be continually changing direction Sternbergia, g 742 p 237
Vertex, the uppermost point Roméria, g 1108 p 456.
Vertical, perpendicular Nivénia, g 235 p 77
Vertically compressed, that is depressed Salvinórma, g 22 p 1
Verticillaster, the same as rectilinear, in a straight line Viola campestris, s 3037
Vesicatorius, blistering plasters Ranúnculus g 12 3 (note)



Vesicles, (277) hollow excrescences resembling bladders, g 310 (note)
Vexillum, (188) a standard, the upper petal of a papilionaceous flower Petalostémum, g 1501 p 598
Villous, (278) shaggy, with long loose hair Costus villosissimus, s 66
Virescent, green, flourishing Mesembryánthemum viréscens, s 7275
Virgate, twiggy Verbáscum cúpreum, s. 2152.
Viscid, or *Viscous*, adhesive, clammy Boerhaávia viscósa, s 109
Vivacious, lively Cárduus, g 1663 (note)
Viviparous, (279) bearing young plants in the place of flowers and seed Maríca cærúlea, s 841
Vulnerary, useful in the cure of wounds Symphytum, g 334 (note)
Vulsiform, like a cleft with projecting edges Melampódium, g 1828 p 665.

W

Wattled, having processes like the wattles of a cock Rhinánthus alectorolóphus, s 8746
Welted, flaccid, drooping Cárduus acanthoides, s 11375
Whorls, (280) leaves inserted round a stem Hippúris, g 23 (note)
Wing, (281) in botany, signifies a membranous border, wherewith many seeds are supported in the air when floating from place to place Amomum dealbátum, s 77.

Z

Zones, (282) stripes or belts Zonária pavónia, s 15 38

○ signifies wanting or absent. p 79
○ ○, very numerous



TABLE OF SUCH

AS HAVE SYNONYMES IN

In this Index, the systematic names in col 1 are distinguished as classical, i e names memorative, by the terminating letter or letters being in Italic, as Bánks*ia*, and as the other names are formed, in almost every case, from the Greek, but sometimes from

Page		Nos. to Genera.	British or Systematic Synonymes.	English Names.	French	German
650	Abrôma *L*	1609	- - - - -	- - - - -	Ambrome	Die abrome
614	A'brus *L*	1546	- - - -	Wild liquorice	Liane à réglisse	Der abrusstrauch, *or* giftbohne
856	*Acacia Neck*	2127	Mimôsa			
814	*Acálypha L*	2038	- - - - -	Three-seeded Mercury	La ricinelle	Zeckel, *or* brennkraut
516	*Acánthus L*	1301	- - - - -	Bear's breech	Branc-ursine	Die barenklau
864	*Acer L.*	2143	- - - -	Maple	L'érable	Der ahorn
752	*Aceras R Br*	1865	*Ophrys*	Man orchis		
726	*Achillèa* L	1781	- - - - -	Milfoil	L'achilléo	Das achillenkraut
	A Millefolium L sp 12383		- - - - -	Yarrow	Milleteuille	Die schaafgarbe, *or* garbenkraut
150	*Achras L*	427	Nisberry tree	Sapodilla	Le sapotier	Der breyaptelbaum
190	Achyránthes *L*	552	- - - - -	- - - - -	Le cadélari	Die spreublume
834	Acnida *L*	2072	- - - -	Virginian hemp	Acnide de Virginie	Der Virginische hanf
474	*Aconitum Tourn*	1205	- - - - -	Wolf's-bane	L'aconit	Der sturmhut
256	*Acorus L*	755	*Calamus aromaticus*	Sweet rush	L'acore odorant	Der kalmus, *or* calmus
878	Acróstichum *L*	2169	- - - - -	- - - - -	L'acrostique	Der vollblühende farrn
460	*Actæa L*	1164	- - - -	Herb-Christopher	L'actée	Schwarzwurz
204	Actinocárpus *R Br*	860	*Alisma*			
508	*Acynos Pers*	1276	*Thymus*	- - - - -	Basilique sauvage	Kleine bergminze
592	Adansônia L	1471	- - - -	Ethiopian sour gourd, *or* monkey's bread	Le baobab, *or* le pain du singe	Die adansonie, *or* der affenbaum
850	Adèlia *L*	2118	- - -	- - - - -	L'adelie	Quästchen
180	Adenándra *W en*	518	Diósma			
350	Adenanthèra *L*	982	- - - -	Bastard flower fence	Le condori	Der drüsenbeutel
884	Adiántum *L*	2194	- - - -	Maidenhair	Adianthe	Venushaar
98	Adina *Sal*	286	Naúclea			
434	Adónis L	1230	- - - -	Pheasant's eye	Adonide	Die adonisblume, *or* adonisrose
328	Adóxa *L*	930	Musk crowfoot	Moschatel	Moscatelline	Das bisamkrautchen
862	*Ægilops L*	2134	- - - -	Hard grass	L'égilope	Das geissauge
96	Ægiphila *L*	274	- - - -	- - - - -	Ægiphile	Das ziegenbaumchen
468	Ægle Corr	1196	Cratæ*va*	Bengal quince	- - - -	Der schleimapfelbaum
216	Ægopòdium *L*	652	- - - -	Gout weed	Boucage	Geissfuss
762	Aérides *Sw*	1917	- - - -	Air plant	- - - -	- - - -
192	*Æruа* Forsk	560	- - - -	- - - -	Aerve	- - - -
630	Æschynomene *L*	1582	- - - -	Bastard sensitive plant	L'eschynoméne	Die unächte sinnpflanze
296	*Æsculus L*	866	Pàvi*a*	Horsechestnut	Le marronier d'Inde	Die rosskastanie
218	Æthùsa *L*	661	Lesser hemlock	Fool's parsley	Æthuse	Der gartenscherling
260	Agapánthus *Herit*	767	*Crinum africanum*	African lily	Crinole d'Afrique	Die Afrikanische hakenblume
986	*Agáricus L*	2365	- - - -	Mushroom	L'agaric	Der blatterschwamm
802	A gathis *Sal*	2011	*Pinus*	Dammar		
182	Agathósma *W en*	520	Diósma			
244	Agàve *L*	724	Aloe	- - - - -	L'agavé	Die baum-aloe
690	*Agératum Dec*	1687	- - - -	- - - - -	L'agérate	Das ageratum
398	Agrimònia *Tou*	1101	Laverwo t	Agrimony	L'aigremoine	Der odermennig
388	Agrostémma *W*	1066	- - - -	Rose-campion	La nielle	Der raden
56	*Agróstis L*	156	- - - -	Bent grass	Agrostis	Das straussgras
866	*Adiántus* Desf	2150	- - - -	- - - - -	Le langit	- - - -
58	*Aira L*	170	- - - -	Hair grass	Canche	Schmelen, *or* schmielen
428	*Aizoon L*	1144	- - -	- - - - -	La languette	Das immergrün
404	A'juga *L*	1242	- - - -	Bugle	La bugle	Günsel
274	Albùca *L*	797	- - -	Bastard star of Bethlehem	- - - -	Dass weissleder
88	*Alchemilla L*	255	- - - -	Ladies' mantle	L'alchimille	Der sinau
812	Aleurites *Forst*	2028	- - - -	- - - - -	L'aleurit	Der mehlbaum
294	*Alisma L*	861	- - - -	Water plantain	Le fluteau	Der froschloffel
146	Allamánda L	407	- - -	- - - - -	Liane à lait	

OF THE GENERA,

DIFFERENT LANGUAGES.

applied to plants by the ancients, by the first letter being in Italic, as *Abies*, as comaboriginal, or of uncertain derivation, by the whole word being in Italic, as *Æ'rua* All the Greek and Latin

Page	Dutch.	Italian	Spanish	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
614	Weegboontjes	- - -	Abro de cuentas de rosario	Berdeebeedeo *Otaheite* Olinda *Ceylon* Komm *Malab*
814	Netelkruid			
516	Beerenklaauw	Acanto	Acanto	Acanto *Port*
864	Ahorn	Acero	Arce	Acero *Port*
726	Duizendblad	Achillea	Aquilea	
	Hetgemeene duizenblad	Millefoglie		
150	Sapodilleboom	- - -	Sapote	Zapota menor *Port* Sapotilletræ *Dan.*
180	Kafbloem			
834	Kennip	- - -	Cañamo de Virginia	
474	Monnikskappen	Aconito	Aconito	Aconito *Port*
256	Kalmus	Acoro	Acoro calamo	Acoro calamo *Port* Waembu *Malab* Cassabel *Egypt*
878	Plakvaren	Acrostico	Acrostico	Acrostico *Port* Pletbrægne *Dan*
460	Kristoffelkruid	Actea	Actea	Actea *Port*
508	Vold mynte	- - -	Albahaca menor	Serpao *Port*
592	Meloenboom, aapenbrood boom, or baobaboom	- - -	- - -	Icibouica *Brazil*
350	Kherenbloem	Adenantera	Adenantera	Adenantera *Port.*
884	Venushaair	Adianto	Adianto	Adianto *Port* Cay Duôi chon *China*
484	Adonisbloem	Fiore d' Adono	Adonis	Adonis *Port*
328	Muskuskruid	Moscatellina	Moscatelina	Moscatelina *Port* Desmerurt *Dan* Desmansort *Swed*
862	Geitenoog	Egilope	Egilope	Egilopet *Port* Gedeoye *Dan* Getoga *Swed*
96	Het geitenboompje	Egifila	Egifila	Egiphila *Port* Ladet geedetræe *Dan*
468	Slymappelboom	- - -	- - -	Marmeleiro da India *Port* Covalam *Malab.*
216	Gerardskruid	Podagraria	Egopodio	Egopodio *Port* Snit *Russ* Podagrycznik *Pol.*
762	- - -	- - -	- - -	Fum-lân *China* Phaong lon *Cochinch*
192	- - -	- - -	- - -	Acrva *Arab fel* Sedjaret ennaghi *Cairo.*
680	Schaamboom			
296	Paardenkarstengeboom	L' ippocastano	Esculo castána de caballo	Esculo *Port* Kònskoi kastàn *Russ*
218	Tumscheerling	Cicuta minore	Cicuta menor	Cicuta menor *Port* Medwjéschei kòren *Russ.*
260	Afrikaanse haakjelie			
986	Kampernoelje	Agarico	Agarico	Agarico *Port* Fastacki *Jap* Bladsvamp *Dan & Swed*
244	Boomaloe	Aloe grande, *or* agave	Agave	Agave *Port* Den træaloe, *or* agave *Dan*
690	Geurkruid	Agerato	Agerato	Agerato *Port* Ageratum *Dan*, *&c.*
398	Agrimonie	- - -	- - -	Agrimonia *Port.* Daikon so *Jap* Repnik *Russ*
388	Koornvlam	- - -	- - -	Agrostema *Port* Drema *Russ* Firletka *Pol*
56	Struisgras	- - -	- -	Agrostis *Port* Hven *Dan & Swed*
866	- - -	- - -	- - -	Tong-yen-tsao, *or* Tchean-theum *China*
58	Rietgras	- - -	- - -	Sivegræs *Dan* Tatelen *Swed* Reyrgresc *Iceland*
428	- - - -	- - -	- - -	Aizoa *Port*
494	Senegroen	Bugola	- - -	Ædel vundurt *Dan* Karingkruka *Swed.*
274	Stiftbloem	- - -	- - -	Albuca *Port*
88	Leeuwenvoet	Alchimilla	Alchemila	Alchimilla *Port.* Maria käpa *Swed* Synov *Dan.*
294	Water weegbree	- - -	- - -	Guldblomme *Dan* Stackra *Swed*

Page		Nos. to Genera	British or Systematic Synonymes.	English Names.	French.	German.
272	*Allium L*	796	- - - -	Garlic	L'ail	Der lauch
	1. ascalónicum *L* sp 4604		- - - -	Shallot, *or* scallion	Echalote, *or* ail sterile	Die schalotte, *or* aschlauch
	2 *Porrum L.* sp 4617		- - - -	Leek	Porreau, *or* l'ail à tuniques	Der zahme lauch, *or* der Spanische lauch
	3 *Schœnoprasum L* sp 4688		- - - -	Chives	Ciboulette	Der binsenlauch, *or* schnittlauch
	4 *Cèpa L* sp		- - - -	Onion	L'oignon	Die zwiebel
780	*Alnus Tou*	1955	*Bétula Alnus*	Alder	L'aune	Die erle
534	Alonsòa R & P	1377	Hemimeris			
56	*Alopecúrus L*	164	- - - -	Fox-tail grass	Le vulpin	Der fuchsschwanz
518	*Alsine* Or.	1313	*Verbèna*			
228	*Alsine L*	688	- - - -	Chickweed	La morgeline	Der hühnerbiss
192	Alternanthèra *R Br*	556	- - - -	- - - - -	L'alternante	- - - - -
584	*Althæ'a L*	1474	- - - -	Marsh mallow	La guimauve	Der eibisch
544	*Alýssum L*	1401	Alysson	Madwort	L'alysse	Das steinkraut
786	*Amarántus L*	1975	Velvet flower	Amaranth	L'amaranthe	Der amarant
252	*Amarýllis* L	739	- - - -	Daffodil lily	L'amaryllis	Die narcissenlilie
788	*Ambrósia L*	1977	- - - -	- - - - -	L'ambrosie	Das traubenkraut
726	*Amèllus L*	1783	*Aster*	- - - -	L'œil de Christ	
20	*Amethýstea L*	56	- - - -	Blue amethyst	L'améthystée	Die amethystpflanze
214	*Ammi L*	639	- - - -	Bishop's weed	- - - -	- - - -
4	*Amòmum Rosc*	13	- - - -	Cardamoms	L'amome	Die kardamomen
614	*Amórpha L.*	1545	- - - -	Bastard indigo	L'amorpha	Der unform
148	*Amsònia* Walt.	419	Tabernæmontana			
420	*Amýgdalus Tou.*	1128	- - - -	Almond	L'amandier	Der mandelbaum
	A Pérsica L. sp 7020		- - - -	Peach	Le pecher	Der pfirschenbaum
304	*Amyris L.*	889	- - - -	Balm-tree	Le balsamier	Der balsamstrauch
204	*Anábasis L*	608	- - - -	Berry-bearing glasswort	L'anabase	Die salzbeere
334	*Anacárdium Rox*	935	- - - -	Cashew nut	L'acajou	Der acajoubaum
724	*Anacýclus L.*	1777	- - - -	Ring-flower	L'anacycle	Der scheibenring
128	*Anagallis L*	357	- - - -	Pimpernel	Le mouron	Das gauchheil
342	*Anagýris Tou*	943	- - - -	Bean trefoil	Le bois puant	Der stinkbaum
548	*Anastática L*	1416	- - - -	Rose of Jericho	La jérose hygrométrique	Die Jerichorose
120	*Anchùsa L.*	333	- - - -	Bugloss	La buglosse	Die ochsenzunge
810	*Andráchne L*	2025	- - - -	Bastard orpine	L'andrachne	Die spaltblume
860	*Andropògon W*	2129	- - - -	- - - - -	Le barbon	Das bartgras
126	*Androsàce L*	349	- - - -	- - - - -	L'androsacé	Das mannsschild
676	*Andrýala* L	1642	- - -	- - - - -	L'andriale	Derzuillich, *or* zuikl
886	Anèmia *Sw.*	2207	*Osmunda*			
482	*Anemòne L*	1226	Pulsatilla	Pasque-flower	L'anémone	Die anemone
218	*Anèthum L*	654	- - - -	Dill	Anith	Das dillkraut
220	*Angélica L.*	664	- - -	Herb archangel	Angelique	Die angelika, *or* engelwurz
912	Anictanglum *Hedw*	2242	Gymnostomum			
494	Anisomeles *R Br*	1243	*Nepeta*			
480	*Annona* Adan	1220	- - - -	Custard apple	Le corossol	Der flaschenbaum
912	Anomodon *Hook.*	2246	*Hypnum*			
724	*Anthemis L*	1778	- - - -	Chamomile	La camomille	Die kamille
280	*Anthéricum L*	809	- - - -	- - - - -	L'anthéric	Das spinnkraut
44	*Antholýza L*	107	- - - -	- - - - -	L'antholise	Die steinblume
832	Anthospérmum *L*	2062	- - - -	Amber tree	L'anthosperme	Der amberstrauch
28	*Anthoxánthum L*	76	- - - -	Spring grass	La flouve	Das ruchgras
208	*Anthriscus Pers*	620	*Scándix*	Rough chervil	Cerfeuil à fruits courts	Der rauhe kerbel
612	*Anthýllis L*	1542	- - - -	Kidney vetch	L'anthyllide	Die wollblume
834	*Antidésma L*	2068	- - - -	- - - - -	L'antidesme	Die schlangenbeere
526	*Antirrhinum L*	1343	Toadflax	Snap dragon	Le muflier	Der dorant
882	Antrophyum *Kaulf*	2193	Vittaria			
518	Aphelándra *R Br*	1306	*Justicia*			
272	*Aphyllanthes L*	794	- - - -	Lily pink	Jonciole	Die blattlose
	A monspeliensis L sp 4614		- - - -	- - - - -	Bragalou de Montpellier	
216	*Apium L*	651	- - - -	Parsley	Le persil	Die petersilie
	A graveolens L sp 618		- - - -	Celery	Céleri	Der celeri
104	*Apocynum L*	572	- - - -	Dog's bane	L'apocin	Der hundekohl
292	Aponogèton *Thun*	854	- - - -	- - - - -	L'aponoget	Der schwimmer
476	*Aquilègia L*	1208	- - - -	Columbine	Ancolie	Der ackeley
540	*Arabis L*	1390	- - - -	Wall cress	L'arabette	Der gansekraut
614	*Arachis L*	1543	Pindars, *or* ground nuts	Earth nut	L'arachide	Die erdnuss
230	*Aràlia L*	696	- - -	Angelica tree	L'aralie	Die aralie
360	*Arbutus I*	1019	Arctostáphylos	Strawberry tree	L'arbousier	Der erdbeerbaum
680	*Arctium I*	1660	Clot-burr	Burdock	Bardane	Die klette
872	Arctópus *L*	2165	- - - -	- - - - -	L'arctope	Der barenfuss
734	Arctothèca *Wnl*	1815	Arctótis			
740	*Arctótis L*	1831	- - - -	Bear's ear	L'arctotide	Das barenohr
800	*Arèca L.*	2009	- - - -	Cabbage tree	L'arec, *or* chou palmiste	Die arekapalme
378	*Arenària L*	1050	- - - -	Sandwort	La sablonière	Das sandkraut
462	Argemòne *Tou*	1172	- - - -	Prickly poppy	L'argemone	Der stachelmohn
766	*Aristolòchia L*	1934	- - - -	Birthwort	L'aristoloche	Die osterluzey
234	Armèria *W. en*	705	Statice Armèria	Thrift	Statice	Das seegras

Page	Dutch	Italian	Spanish.	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names
272	Look	Aglio	Ajo	Alho *Port* Tum *Indian* Sir *Pers* Tschesnok *Russ*
	1 Chalotte	Scalogni, *or* cipolle maligе	Escalonia, *or* chalote	Scalotlögen *Dan* Chalottenlök *Swed* Ossleych *Boh* Mogyoro-hagyma *Hung* Cay-nen *Cochinch*
	2. Prey, *or* porreye	Porro, *or* porreta	Puerro	Alho porro *Port* Purio *Swed* Pras *Russ* Plodriszek *Pol* Par-hagyma *Hung* Chazir *Heb* Korrat *Carro*
	3 Bieslook, *or* sny-prey	Cipolletta maligia	Cebollino de Inglaterra	Cebolinha de Ingalaterra *Port* Graslög *Dan* Luczei lupny, *or* Szczyporek *Pol*
	4 Uyen	Cipolla	Cebolla	Bhazal *Hebr* Pias *Pers* Sochan *Turk* Sogan *Tatar*
780	Elzeboom	Ontano	Aliso	Alemo *Port* Olcha *Russ* Olsza *Pol* Ell *Dan.*
56	Vossestaart	Alopecuro	Alopecuro	Alopecuro *Port* Ræverumpe *Dan* Raffvants *Swed*
228	Muur	Morgellina	Alsine	
192	- - -	- - -	- - -	Kivar el abid *Arab fil* Hâmel, *in Rosetta.*
584	De heemst	Altea	Althea	Althéa *Port*
544	Tanddraad	Alisso	Aliso	Alisso *Port*
786	Amaranth	Amaranto	Amaranto	Amaranto *Port* Krowawnick *Russ*
252	Lelie-narcis	Giglio narciso	Amaryli	Amaryllis *Port* Amaryllis *Dan & Swed*
788	Druifkruid	- - -	-	Ambrosia-Urt *Dan* Ambrosia-ort *Swed*
20	Amethystkruid			
214	- - - -	- - -	-	Asper skephalos *Turcados* Chælle *Egypt*
4	Kardamom	Cardamomo	Cardamomo	Cardamomo menor *Port*
614	Amorpha, *or* bastaard indigo	Indaco bastardo	Indigo, *or* anil bastardo	Anileira bastarda *Port* Bastard Indigo *Dan*
420	Amandelboom	Il mandorlo	Almendro	Hun ho gin *Chin* Mindalnoe derevo *Russ*
	Persikboom	Pesco, *or* persico	El melocoton	Scheptals *Russ* Baratsk-fa *Hung*
304	Balsemboom	Il balsamino	El balsamo	O balsamo *Port* Abu scham *Arab*
204	Zoutdruif			
334	Catsjoc-appelboom	Il albero acaju	Anacardio occidental	Anacardo da America *Port* Kapa-mava *Malab*
724	Ringbloem	Anacielo	Anacielo	Anacielo *Port* Ringblomster *Dan* Ringsk fvan *Swed*
128	Het guichelheil	Anagallide	Anagallide	Murriao *Port* Kurjatschja noga trawa *Russ*
342	Stinkboompje	Anagiride	Leño hedondo	Anagyro de Hespanha *Port* Bob kamienny *Pol*
548	Roos van Jericho	Rosa di Jerico	Rosa de Jerico	Rosa de Jerico *Port* Kaf marjam *Egypt* Roza Jervchonska *Pol*
120	Ossetong	Ancusa	Anchusa	
810	Andrachne	- - -	- -	Andrachne *Dan & Swed*
860	Baardgras	Andropogon	Andropogon	Andropogon *Port* Skæggegræs *Dan*
126	- - -	- - -	Cantarillos	Percloinaja trawa *Russ* Rzesa skalna *Pol* Hilsko *Sw*
676	Woldistel			
482	Anemone	Anemone	Anemone	Anemone *Port* Ollina gusa *Jap* Wjetremza *Russ.*
218	Dille	Aneto	Eneldo	Endro *Port*
220	Engelwortel	Angelica	Angelica	Angelica *Port* Angelika *Russ* Dziegiel ogrodny *Pol*
480	Annona	- - -	Annona	Guanambao *Port*
724	Kamille	La camomilla	La manzanilla	A macella *Port*
280	Antherieum	Anterico	Anterico	Anterico *Port* Kosatki *Pol*
44	Antholyza			
832	Amberstruik	Antospermo	Antospermo	AntospermoPort AmbratræDan Ambrabuske*Swed*
28	Geelbloem	Antoxanto	Antoxanto	Guul ax *Dan* Vårbradd *Swed.*
208	Wilde kervel			
612	Wundkruid	Antillide	Antillide	Vundurt *Dan* Ullbomster *Swed*
834	Vlaschboom	- - -	- - -	Cordueira *Port* Noeli-tali *Malab.*
526	Leeuwebek	Antirrino	Antirrino	Antirrino *Port*
272	Bies-anjelier			
216	Peterselie	Petroselino	Perejil	Baqdunis *Egypt* Petruschka *Russ* Pietruszka *Pol*
	Sellery	Appio	Apio hortense	Kerafs *Egypt* Selderi *Russ* Zelerya *Pol*
194	Hondsdood	Apocino	Apocino	Hundedod *Dan*
476	Akeley	Acquilegia	Pajarilla	Odamaki *Jap* Kolokòltschiki *Russ* Orlik *Pol*
540	Hongschub	- - -	Arabide	Gaaseurt *Dan* Akeleukojer *Swed*
614	Aardeikel	Pistacchio di terra	Mani	Amendumas *Port* Mundubi *Brazil* Cay dau phung *Cochinch.*
230	Aralia			
360	Arbutus	Arbuto	Madroño	Ljesnàja jablon *Russ* Jezowka wloska *Pol*
680	Klissen	Lappola	Lampazo	Lapa *Port* Lapuschnik *Russ* Lopian *Pol*
872	Gedoornd	- - -	- - -	Biörnefod *Dan*
740	Beerenoor	- - -	Arctotis	Arctotis *Port* Biorneore *Dan* Bjornóra *Swed*
800	De koolboom			
378	Zandmuur	Arenaria	Arenaria	Arenaria *Port* Sandurt *Dan* Sandort *Swed*
492	Klepheul	- - -	- - -	Pigvalmue *Dan.* Piggvalmoge *Swed*
706	Osterlucie	Aristolochia	Aristolochia	
234	Zeegras	Statice	Statice	Liden biergnellike *Dan* Strandblomster *Swed*

Page	Nos to Genera	British or Systematic Synonymes	English Names.	French	German
716	A'rnica *L*	1749	- - - -	- - - -	Le doronic	Die wolverley
696	*Artemisia* L	1721	- - - -	Wormwood	L'absinthe	Der wermuth
	A Dracúnculus L. sp 11739		- - - -	Tarragon	Estragon	Dragonkel
280	Arthropódium *R Br*	810	Anthéricum			
770	Artocárpus *L*	1935	- - - -	Bread fruit	Le jaquier	Der brodbaum
800	*A rum L*	2006	- - - -	Wake robin	Le gouet	Der aronswurz
74	Arundinária *Mx*	219	- - - -	Cane-brake		
60	*Arundo With*	175	- - - -	Reed	Le roseau	Das rohr
392	*A sarum L*	1072	- - - -	Asarabacca	L'asaret	Die haselwurz
196	Asclèpias L	588	- - - -	Swallow-wort	L'asclépiade	Die seidenfrucht
658	*A'scyrum L*	1618	*Hypéricum*	- - - -	- - - -	- - - -
480	*Asímina* Adan	1223	*Anòna*			
506	Aspálathus *L*	1528	- - - -	African broom	L'aspalat	Witschen
282	Asparagus *L*	816	- - - -	Sparrowgrass	L'asperge	Der spargel
124	*Asperùgo L*	342	Wild bugloss	German madwort	Le porte-feuille	Das scharfkraut
94	Asperula *L*	268	- - - -	Woodruff	L'aspérule	Das megerkraut
280	*Asphódelus L*	808	- - - -	Asphodel	L'asphodèle	Der affodil
	A lùteus L sp 4793		- - - -	- - - -	Baton-de-Jacob	
	A. ramòsus L sp 4795		- - - -	King's rod	Bâton royal	
884	Aspidium *Sw*	2199	- - - -	Shield fern		
880	*Aspléniun I.*	2186	- - - -	Spleenwort	La doradille	Der streifenfarren
706	*A'ster L*	1739	- - - -	Starwort	L'astere	Die sternblume
636	*Astrágalus L*	1594	- - - -	Milk vetch	L'astragale	Tragant
222	Astrántia *L*	674	- - - -	Masterwort	L'astrance	Astranz
212	*Athamánta L*	634	- - - -	Spignel	L'athamante	Die hirschwurz
696	Athanàsia *L'*	1717	- - - -	- - - -	L'athanasie	Die athanasie
686	*Atráctylis L*	1670	- - -	Distaff thistle	La quenouillette	Das spindelkraut
288	Atrapháxis *L*	838	- - - -	- - - -	L'atraphace	Die strauchmelde
862	*A triplex L.*	2138	- - - -	Orache	L'arroche	Die melde
154	Atropa L.	446	Deadly nightshade	Dwale	La belladone	Die wolfskirsche
828	Aúlax *Berg*	2052	Prótea			
58	Avèna *L*	171	- - - -	Oat grass	L'avoine	Der hafer
380	Averrhòa L	1058	- - - -	- - - -	Carambolier à fruits ronds	Zuurknoopboom
144	Azàlea *L*	403	- - - -	- - - -	L'azalée	Der felsenstrauch
42	*Babiàna* Ker.	102	*Ixia*			
702	*Baccharis L*	1732	- - - -	Plowman's spikenard	La bacchante	Die baccharis
884	Balantium *Kaulf*	2198	Dicksònia			
504	*Ballòta L*	1265	Black horehound	Stinking horehound	La ballote	Die zahnlose
696	Balsamita *Dcy*	1718	Tanacètum	Costmary	Coq des jardins	Die frauenmunze
256	*Bambùsa* Schr	752	*Arúndo Bámbos*	Bamboo cane	Le roseau d'Inde	Das bambus-rohr
342	Baptisia *Ven*	947	Polalyria			
540	Barbarèa R Br	1386	*Erysimum*	Winter cress	La barbarée	Die winterkresse
596	Barringtònia Forst	1497	Butónica	- - - -	Le butonic	
752	Bartholina R Br	1862	Arcthùsa			
524	Bártsia *L*	1341	- - - -	- - - -	Cocrete	- - - -
228	*Basélla* L	693	- - - -	Malabar nightshade	Baselle	Die beerblume
346	Bauhínia Pluk	970	- - - -	Mountain Ebony	Bauhine	Die bergebenholz
66	Beckmánnia Hort	192	Cynosurus			
802	Bèlis *Sal*	2010	*Pínus*			
718	*Bélli*s *L*	1756	- - - -	Daisy	La paquerette	Masslieben
684	Berárda Vil	1667	*Arctium*			
286	*Bérberis* L.	829	- - - -	Barberry	L'épine-vinette	Der sauerdorn
206	*Bèta L*	612	- - - -	Beet	Bette, *or* betterave	Mangold
502	Betónica *L*	1262	- - - -	Betony	Betoine	Die betonika
780	*Bétula L.*	1956	- - - -	Birch	Le bouleau	Die birke
692	Bidens *L*	1697	- - - -	- - - -	Le bident	Der zweyzahn
514	Bignònia L	1294	- - - -	Trumpet flower	La bignone	Die trompetenblume
546	Biscutélla *L*	1413	- - - -	Buckler mustard	La lunetière	Das doppelschild
638	Biserrula *L*	1595	- - - -	Hatchet vetch	La pélécine	Das sägekraut
64	*Bixa* L.	1178	- - - -	Anotta	Le rocouier des Indes	Der Orleansbaum
880	*Blechnum I.*	2183	- - - -	- - - -	Blégne	Der rippenfarrn
518	*Blèchum J*	1305	Rucélla			
762	Blètia R & P	1911	Limodorum			
302	Blighia H K	885	- - - -	Akee tree		
8	*Blitum L*	28	- - - -	Strawberry blite	Blète, *or* blite	Die beermelde
392	Boccònia L	1073	- - - -	Celandine tree		
6	Boerhaàvia L	19	- - - -	Hogweed	La tassole	Die burhavie
1008	*Bolètus Dil*	2373	- - - -	Spunk	La morille	Der lochershwamm
502	Bómbax *L*	1472	- - - -	Silk cotton tree	Le fromager	Der wol'same
524	Bónti*a* L	1334	- - - -	Barbadoes wild olive	Le daphnoi des Antilles	Der wilde olivenbaum von Barbados
122	*Borágo L.*	340	- - - -	Borage	Bourrache	Borago
836	Borássus *L.*	7079	- - - -	Fan palm	Le rondier	Die weinpalme
826	Bórya W.	2044	Adèlia, Bigeldvia			
206	Bòsea L	613	- - - -	Golden rod	Bosé	Der goldruthenbaum
886	Botrýchium *Sw*	2208	Osmunda	Moonwort	Lunaire	Die mondraute
152	Bourrèria Gae	431	Ehrètia			
98	Bouvárdia Sal.	287	Houstònia			
864	Brabèjum *L.*	2142	- - - -	African almond	Brabei	Der scepterbaum
762	Brasavòla R Br	1914	Epidéndrum			
756	Brássia R Br	1886	Maláxis			

Page	Dutch	Italian	Spanish	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
716	Valkruid	- - -	- -	Volverley *Dan* Fibler *Swed*
696	Alsem	Assenzio	Ajenjo	Polin *Russ* Malurt *Dan*
	Dragon	Dragoncello	Estragon	Torun *Pol.* Kigyótiang *Hung*
770	Broodboom	Artocarpo	Zuteo	Eoroo *Otaheite.* Brodtræe *Dan*
800	Kalfsvoet	Aro	Yaro	Munskesvands *Dan.*
60	Riet	Canna	Cana	Trost *Russ* Trcina *Pol* Ror *Dan & Swed*
392	Mans-oor	Asaro	Asaro	Wodolei *Russ* Kopytnick *Pol*
396	Zydevrught	Asclepiade	Asclepiada	
658	- - -	- - -	- - -	Ascyro *Port*
282	Aspergie	Sparagio	Esparrago	Sparsa *Russ*
124	Scherpkruid	Asperugine	Asperugo	Rapette, *or* brevtaske *Dan* Ormögen *Swed*
94	Ruuwkruid	- - -	- - -	Schwedopetschenaja trawa *Russ* Mysecka *Dan*
280	Affodil	Asfodelo	Affodelo	Asfalt *Russ* Kozle jayka *Pol* Beenbrud *Dan*
880	Miltkruid	Asplenio	Asplenio	
706	Sterrebloem	Astero	Aster	Stiernblomst *Dan* Stjernört *Swed*
636	Kootkruid	Astragalo	Astragalo	Hvirvelurt *Dan* Strutschkowaja trawa *Russ.*
222	Sterrekruid	- -	- - -	Astrancia *Port* Zapótza *Hung*
212	Beerwortel	Atamanta	Atamanta	Hiorterod *Dan* Sälkrot *Swed*
696	Duurbloen	Atanasia	Atanasia	Atanasia *Port*
686	Staalkop	Atrattile	- - -	Acarna de Creta *Port* Spindelurt *Dan*
288	Atraphaxis	- -	- - -	Atraphaxis *Dan & Swed*
862	Melde	Atrepice	Armuelles	Lebeda *Russ* Loboda *Pol* Molla *Swed*
154	Doodkruid	Atropa	Atropa	Belladonna *Port* Beschenaja wischnja *Russ*
58	Haver	Vena	Avena	Avea *Port* Owès *Russ* Owies *Pol*
380	Zuurknoopboom	- - -	- - -	Cneramela *Port* Bilimbi *Malab* Billinghas *Cey*
144	Azalea	- - -	- - -	Tsutsusi *Jap* Odur rshawnoi *Russ* Azalea *Dan*
702	Roerkruid			
504	Bilsete	Marrobio	Marrubia	Marroyo *Port* Szanta czarna *Pol*
696	Tumbalsam	Costo ortense	Hierba de Santa Maria	Balsamita *Port* Hanegræs *Dan* Svensk salvia *Swed*
256	Bamboesriet	Canna bambu	Cana bambos	E owhe *Otaheite* Ily *Malab* Bambusor *Dan*
540	Winterkers	Barbarca	Hierba de Santa Barbara	Herva de S Barbara *Port* Barbora *Pol.* Vinterkars *Dan*
524	- - - -	- - -	- - -	Bergskalle *Swed* Lokasioda broder *Iceland*
228	Beetklim	- - -	- - -	Murasakki *Jap* Loquei *Chin* Cay boung toi *Cochinch*
346	Bauhinia			
718	Madelieven	Margheritina	Maya	Bonina *Port* Barchatnaja zwietôschka *Russ.*
286	Berberis	Crespino	Berberis	Tomara soo *Jap* Barbariss *Russ* Ciernie biale *Pol*
206	Beete	Bieta	Acelga	Acelga *Port* Swekla *Russ* Cwikla *Pol.*
92	Betonie	Betonica	Betonica	Betonica *Port* Bukwiza *Russ*
780	Berk	Betulla	El abedul	Berésa *Russ* Brzoza *Pol* Birk *Dan.* Biork *Swed.*
692	Tandzaad	Bidente	Bidente	Bronsel *Dan* Brunskär *Sw*
514	Bignonia	Bignonia	Bignonia	Bignonia *Port* Jacaranda *Brazil*
546	Brilkruid			
638	Zaagpeul			
464	Orleane	- -	- - -	Urucu *Port* Achiotl *Mexico.* Bixa *Dan & Swed*
860	Ribvaren			
8	Bes-melde	Blito	Bledo	Zmiuda *Pol* Bærmeld *Dan* Barmolla *Swed*
6	Boerhaavia	- - -	- - -	Folhas de pitao *Port* Nuna-nuna *Otah* Vuddjef *Arab*
1008	Zwam	Boleto	Boleto	Boleto *Port* Grib *Russ* Grzyb *Pol.*
592	Kapokboom	- - -	Bombasi	Osttræe *Dan.* Osttrad *Swed.*
524	Barbadoesche wilde olyfboom			
122	Bernagie	Borragine	Borrija	Borragem *Port* Oguretschnaja trawa *Russ* Borak *Pol*
836	Wyngeevende palmboom	- - -	- - -	Palmeira macha brava *Port.* Ampana *Malab.*
206	Bosea	- - -	Hierba-mora	Bosea *Dan & Swed.*
886	Maankruid	Lunaria minore	Lunaria menor	Lunaria bastarda *Port* Bogoroditschka rutschka *Russ*
864	Kransboom	- - -	- - -	Brabyla *Port*

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552 *Brássica L*	1432	Cole, colewort	Cebbage	Le chou	Der kohl
B o α capitàta		- - - -	White	Chou cabus blanc	
B o β c rubra		- - - -	Red	Chou cabus rouge	
B o γ bullàta		- - - -	Savoy	Chou de Milan	
B o c bullàta		- - - -	Brussels sprouts	Chou de Bruxelles à jets	
B o δ acéphala		- - - -	Borecole	Choux verts	
B o ε Botrytis		- - - -	Cauliflower	Chou-fleur	
B o ζ ———		- - - -	Broccoli	*Chou-brocoli*	
B Nàpus L sp 9247		- - - -	- - - - -	Navet	
B Eruca		- - - -	- - - - -	Roquette	
B o vaccina		- - - -	- - - - -	Chou cavalier	
B o fimbriàta		- - - -	- - - - -	Chou frisé du nord	
B Nàpo-brássica		- - - -	- - - - -	Chou-naver	
B rutabàga		- - - -	- - - - -	Chou-rutabaga	
B o campéstris		- - - -	- - - - -	Chou-colza	
B Napus sylvestris		- - - -	- - - - -	Navette	
B Ràpa L sp 9246		- - - -	- - - - -	Navet turnep	
66 *Brìza L*	195	- - - -	Quaking grass	Brize	Das zittergras
246 Bromèlia L	726	Ananas	Pine-apple	L'ananas	Die ananas
64 *Bromus L*	184	- - - -	Brome grass	Brome, *or* droue	Die trespe
870 Brósimum *Sw*	2158	- - - -	Bread nut		
760 Broughtònia R Br	1905	Dendròbium			
134 Brugmansia Pers	377	*Datùra*			
250 Brunsvigia Heir	737	Amaryllis			
810 *Brydnia L*	2024	Wild hops	Bryony	Bryone, *or* couleavrée	Die zaunrube
214 *Bubon L*	640	- - -	- - - - -	Bubon	Der steineppich
650 Bubroma *W*	1608	Theobròma *Guazùma*	Bastard cedar	Orme d'Amerique	Der guazumabaum
364 Bucida *L*	1033	*Bùceras*	Olive-bark tree, *or* black olive	Le grignon	Die kätzchentragende mangle
270 Bulbocòdium *L*	784	- - - -	- - - - -	Campanette	Die uchtblume
558 *Bunias L*	1444	- - - -	Sea rocket	- - - -	Das zackenkraut
212 *Bùnium L*	631	- - - -	Earth nut	La terre-noix	Die erdnuss
728 *Buphthálmum L*	1797	- - - -	Ox eye	Le bupthalme	Das rindsauge
218 *Bupleùrum L*	657	- - - -	Hare's ear	Le buplèvre	Das hasenohrchen
182 Bursària *Cav*	530	- - - -	- - - - -	La bursaire	Der beutelwurm
872 Bursèra Jac	2164	- - - -	Jamaica birch tree	Le gomart d'Amerique	Die gummitragende bursere
336 Bùtomus *L*	939	Water gladiole	Flowering rush	Butome	Die blumenbinse
780 *Buxus L*	1957	- - - -	Box tree	Le buis	Der buchs
692 *Cacàlia L*	1701	- - - -	- - - - -	La cacalie	Die pestwurzel
224 *Cachrys L*	677	- - - -	- - - - -	L'armarinte	Die nussdolde
410 *Cáctus L.*	1111	- - - -	Cochineal fig	Le cactier	Die koschenillenpflanze
350 *Còdia* Forsk	983	- - - -	- - - - -	- - - - -	- - -
350 Cæsalpìnia (brasilénsis) *Pluk*	978	- - - -	Brasiletto	Le brésillet	Das brasilienholz
548 *Cakile* Tou	1417	*Bùnias*	- - - -	Caquille	Der meersenf
798 *Caladium* Ven	2005	*Arum*			
508 Calamintha *Ph*	1277	Melissa	Calamint	Le calament	Der kalamint
256 *Cálamus L*	753	Rotang	- - - -	Le rotin	Der rotang
18 Calceolaria *L.*	51	- - - -	Slipperwort	La calcéolaire	Die schuhblume
148, 520 Caldàsia W.	422, 1324	Bonplándia			
740 Caléndula *L*	1830	- - - -	Marigold	Le souci de jardin	Die ringelblume
298 *Calla L*	869	- - - -	- - - - -	Calle	Das schlangenkraut
96 Callicarpa *L*	272	- - - -	- - - - -	Callicarpe	Die wirbelbeere
406 Calligonum *L.*	1106	- - - -	- - - - -	Le calligon	Der hackenknopf
36 Callisia *L*	87	- - - -	- - - - -	Callise	Der zartling
8 Callitriche *W*	27	Vernal star-headed chickweed	Water starwort	Le callitric	Der wasserstern
466 Calophýllum *L*	1189	- - - -	American calaba	Le calaba	Der kalababaum
756 Calopògon *R Br*	1878	Limodòrum			
196 Calotropis *R Br.*	584	*Asclèpias*			
490 *Càltha L*	1239	- - - -	Marsh marigold	Le populage	Die sumpf-dotterblume
454 Calycánthus *L*	1157	- - - -	Allspice	Le calycant	Die kelchblume
764 Calypso *Sal*	1929	Limodòrum			
140 Calystègia *R Br*	387	Convólvulus	Bearbind	Le liseron des haies	Die zaunwinde
550 Camelina *Crz*	1425	*Myagrum*	Gold of pleasure	La cameline	Der leindotter
592 Camèllia L	1476	Japan rose	- - - -	La rose du Japon	Die sinesische, *or* japanische rose
148 Camerària L	417	- - - -	Bastard manchineel		
162 Campánula *L*	463	- - - -	Bell flower	La campanule	Die glockenblume
88 Camphoróma *L*	254	- - - -	- - - - -	La camphrée	Die kampferpflanze
288 Canarina *L*	834	- - - -	Canary bell-flower		
394 Canélla *P Br*	1085	- - - -	- - - - -	Cannelle blanche	Der weisse zimmet
2 *Cánna L*	1	Flowering reed	Indian shot	Le balisier	Das blumenrohr
834 *Cánnabis L.*	2073	- - - -	Hemp	Le chanvre	Der hanf (hampf)
458 *Cápparis L*	1162	- - - -	Caper tree	Le caprier	Die kapernstaude
532 Capsària *L.*	1368	Sweet weed	- - - -	Capraire	Die herzblume
170 Caprifólium *R & S*	474	Lonicèra	Honeysuckle		
546 Capsélla *Moen*	1409	Thlàspi	Shepherd's purse		
160 Cápsicum *L.*	453	- - - -	Guinea or Indian Pepper	Le piment	Der Spanische pfeff
626 *Caragàna* Lam	1569	Robínia	Siberian pea-tree	- - - -	- - - -
202 *Carallùma* R Br.	598	Stapèlia			

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552	Kaal	Cavolo	Berza	Verça *Port* Kapusta *Russ & Pol* Kaal *Dan.* Kál *Swed*
66	Trilgras	Briza	Briza	Bevegræs *Dan* Rafvegras *Swed.*
246	Ananas	Ananas	Pina de Indias	Ananas *Port* Kapa-tsjakka *Malab*
64	Zwenkgras	Bromo	Bromo	Bromo *Port* Kosterj *Russ* Hejre *Dan*
810	Bryone	Brioma	Nueza	Norca branca *Port* Przestep biały *Pol.*
214	Gomeppe	Bubon	Bubon	
650	Bastard-ceder			
364	Leertouwersboom	- - -	- - -	Mangle bastarda *Port*
270	Klokbol	- - -	Colchico de la primavera	
558	Knodsvrugt			
212	Aardnoot	Castagna di terra	Castano de tierra	Castanha de terra *Port* Jordolden *Dan* Jordnöt *Swed*
728	Koe-oog	Buftalmo	Buftalmo	Oxe-oye *Dan* Oxoga *Swed*
218	Haazenoor	Bupleuro	Buplero	Bupleuro *Port* Buplewr *Russ*
182	- - - - -	- - -	- - -	Pungen *Dan*
872	Gom elemniboom	- - -	Almacigo americano	
336	Zwaanebloem	Butomo	Butomo	Susak *Russ* Sit kwitnący *Pol* Blomstersiv *Dan*
780	Palm	Busso	El box	Schimschat *Persia* Samscht *Russ* Bukspan *Pol.*
692	Dokkeblad	Cacalia	Cacalia	Pestrod *Dan* Pestrot *Swed.*
224	Nootekroon	- - -	Tuero	Noddkrone *Dan* Nothrona *Swed*
410	Cochenilledraagende vygplant	Planta di coccinigha	Cardon de cochinilla	Cochenilheira *Port* Nupalnochezli *Mexico*
350	- - - - -	- - -	- - -	Kadi *Arab*
350	Brasilie-hout boom	Legno di Fernambuco	Fernambuco	Pao Brasil *Port* Ibiri-pitanga *Brazil*
548	Europische knodsvrugt	Cachile	Cakile	Strandkarse *Dan* Strandsenap *Swed*
508	Berg-kalaminth	Calaminta	Calaminto	Melissa *Russ* Melisa *Pol*
256	Rottinggewas	- - -		Rotang *Dan & Swed* Rotan *Malcj*
18	Klompbloem			
740	Goudbloem	Calendula	Calendula	Nogotki *Russ* Nogietek *Pol*
298	Slangekruid	Calla	Calla	Calla *Port* Smei trawa *Rus.* Mysse *Dan* Drakrot *Swe*
8	Sterrekruid	Callitrica	Calitriche	Callitriche *Port* Kaldunowa trawa *Russ*
466	Geele gom-appelboom			
490	Moerassig geelbloem	Sposa del sole	Hierba centella	Nogietek *Pol* Kabelcye *Dan.* Kalfieka *Swed* Malmequer dos brejos *Port*
454	Kelkbloem			
140	Haagwinde	Il vilucchio	Correguela	Trepadeira *Port*
550	Vlaschdotter	Miagro	Miagro	Ryschik *Russ* Krowia *Pol* Horrurt *Dan* Dodra *Swed*
592	Chineesche roos	- - -	- - -	Tsubakki *Jap.*
162	Klokjes	Campanella	Campanula	Kolokoltschik *Russ*
88	Kamferkruid	Canforata	Canforada	Campherplante *Dan* Kamphervask *Swed.*
2	Bloemriet	Canna	Caña	Cana *Port* Racua-canga *Brazil* Katu-bala *Malab*
834	Hennip	Canapa	Cañamo	Canhamo *Port* Konapli *Russ*
458	Kappers	Cappari	Alcaparro	Alcapparra *Port* Kapersowoy kust *Russ*
532	Geitenkruid	Capraria	Capraria	Capraria *Port* Hierteblomster *Dan* Hjertblomster *Swe*
160	Spaanschepeper	Il peperone	El pimentero	Pimentao *Port.* Vallia-Capo-Molago *Malab* Perec *Russ*
620	- - -	- - -	- - -	Gorochownik *Russ.* Karagan *Tartar*

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542 Cardámine *L*	1392	- - -	Lady's smock	Le cresson	Die gauchblume
328 Cardiospérmum *L*	925	Heart pea	Heart-seed	La corinde	Die herzsame
680 Cárduus *L*	1663	- - - -	Thistle	Le chardon	Die distel
774 Cárex *L*	1947	- - - -	- - - -	La laiche	Das riedgras
842 Cárica *L*	2095	- - - -	Papaw tree	La papayer	Der papayabaum
152 *Carissa* L.	438	*Carándas*	- - -	Le calac	
684 Carlina *L*	1699	- - - -	Carline thistle	La carline	Die eberwurz
592 Carolinea L	1490	- - - -	- - - -	Le pachirier	Der wilde kakao baum
702 Carp sium *L.*	1731	- - - -	Nodding starwort	La carpésie	Die kragenblume
792 Cárpinus *L*	1996	- - - -	Hornbeam	Le charme	Die hagebuche
686 *Cárthamus* L	1675	- - - -	Safflower	Le carthame	Die burstenpflanze
218 Carum *L*	655	- - - -	Caraway	Le carvi	Der kummel
416 Caryophýllus *L.*	1120	- - - -	Clove tree	Le giroflier	Gewurznaglein
800 Caryòta *L*	2007	- - - -	- - - -	Caryote	Die brennpalme
348 Cássia *L*	974	- - - -	- - - -	La casse	Kassien
792 Castànea *Tou.*	1994	Fágus	Chestnut	Le chataignier	Der kastanienbaum
772 Casuarina *L*	1936	- - - -	- - - -	Le filao	Der kasuarbaum
678 Catanánche *L.*	1655	- - - -	- - - -	La cupidone	Die rasselblume
100 Catesbæ'a W	289	- - - -	Lily thorn	La catesbée	
350 Cathartocárpus *Pers*	975	Cássia			
210 Caucalis *L*	626	Bastard parsley	Bur parsley	La caucalide	Die haftdolde
178 Ceanòthus *L*	510	- - - -	- - - -	Céanote d'Afrique	Die seckelblume
826 Cecròpia L.	2043	Trumpet tree	Snake-wood	Le coulequin	Der trompetenbaum
182 Cedrèla *L*	531	- - - -	Bastard cedar		
178 Celástrus *L.*	507	- - - -	Staff-tree		
192 Celòsia *L*	565	- - - -	Cock's comb	Le passevelours	Die celosia
534 Célsia *L.*	1736	- - - -	- - - -	- - - -	- - - -
864 Céltis *L*	2145	- - - -	Nettle tree	Le micocoulier	Der lotusbaum
52 Cenchrus *L*	134	- - - -	- - - -	La racle	Das klebgras
734 Centaurèa L.	1819	- - - -	Centaury	La centaurée	Die flockenblume
96 Centúnculus *L*	277	- - - -	Bastard Pimpernel	Centenille bassette	Der centunkel
96 Cephalánthus *L.*	275	- - - -	Button-wood	Cephalante d'Amerique	Der knopfbaum
388 Cerástium *L*	1068	- - -	Mouse-ear chickweed	Le ceraiste	Das hornkraut
772 Ceratocárpus *L*	1937	- - - -	- - - -	Ceratocarpe	Die hornfrucht
66 Ceratochlòa *Beauv*	189	- - - -	Horn grass		
868 Ceratònia *L*	2156	St. John's bread	Carob tree	Le caroubier	Die sodschoten
790 Ceratophýllum *L.*	1986	Pond weed	Hornwort	La cornille	Das hornblatt
148 Cérbera *L*	420	- - - -	Indian mango tree	L'ahouai	Der schellenbaum
346 Cércis *L*	968	- - - -	Judas tree	Le gaînier	Der Judasbaum
122 Cerínthe *L*	339	- - - -	Honeywort	Le mélinet	Die wachsblume
154 Céstrum *L*	445	- - - -	- - - -	Le cestеau	Der hammerstrauch
878 *Celterach* W	2174	*Asplenium*			
208 Chærophýllum *L*	621	- - - -	Chervil	Le cerfeuil	Der kalberkropf
868 Chamæ'rops *L*	2154	- - - -	Palmetto	Le palmier nain	Die zwergpalme
936 Cha'ra *L*	2295	- - - -	- - - -	La charagne	Der armleuchter
538 Cheiránthus *L*	1382	Gilliflower	Wallflower	La giroflée	Die leucoje
460 Chelidònium *Bauh*	1167	- - - -	Celandine	La chélidoine	Das schollkraut
516 Chelòne *L*	1298	- - - -	Tortoise flower	Galane, *ou* tortue	Die schildblume
206 Chenopòdium *L*	611	- - - -	Goosefoot	L'anserine	Der gansefuss
362 Chimáphila *Ph*	1023	Pýrola			
172 Chiococca *W*	480	- - - -	Snow berry	Chiocoque	Die schneebeere
12 Chionánthus *L.*	34	Snowdrop tree	Fringe tree	Chionante	Die schneeblume
316 Chlòra *L*	894	Perfoliate centaury	Yellow wort	La chlore	Das bikerkraut
670 Chondrilla *L*	1629	- - - -	Gum succory		
424 Chrysobalanus *L*	1130	- - - -	Cocoa plum	L'icaquier	Die ikakopflaume
694 Chrysócoma *L.*	1705	- - - -	Goldylocks	La crisocome	Das goldhaar
150 Chrysophýllum *L*	424	- - - -	Star apple	Le caimitier	Der sternapfel
366 Chrysosplènium *L*	1040	- - - -	Golden saxifrage	Dorine	Die goldmilz
624 Cicer *Tou*	1564	- - - -	Chick pea	Le pois chiche	Die kichern
678 Cichòrium *L*	1657	- - - -	Succory	La chicorée	Die cichorie
C Endivia *L* sp 11338		- - - -	Endive	La scarole	Die endivie
216 Cicùta *L*	648	Water hemlock	Cowbane	La cicutaire	Der wütherich
476 Cimicifuga *L*	1207	Bugbane	Bugwort	Cimicaire	Das wanzenkraut
904 Cinclidòtus *Beauv*	2227	- - - -	Fontinàlis		
712 Cineraria *L.*	1741	- - - -	Ragwort	La cineraire	Die aschenpflanze
26 Circæ'a L.	71	- - - -	Enchanter's nightshade	La circée	Das hexenkraut
848 Cissámpelos *L*	2116	- - - -	Wild vine	Liane à coeur	Die grieswurzel
102 Cissus *L*	301	- - - -	Wild grape	L'achit	Klimmen
468 Cistus *Tou*	1167	- - - -	Rock-rose	Le ciste	Das cistenröschen
520 Citharéxylum *L.*	1322	- - - -	Fiddle-wood	Le cotelet	Das geigenholz
652 Citrus *L*	1615	- - - -	Orange tree	L'oranger	Derpomeranzenbaum
26 Clàdium *Schr*	74	Schœ'nus			
1012 Clavària *Vail*	2379	- - - -	- - -	La clavaire	Der keulenschwamm
184 Claytònia W	537	- - - -	Purslan tree	Claytone	Der portulakbaum
482 Clématis *L*	1227	Traveller's joy	Virgin's bower	La clematite	Die waldrebe
558 Cleòme *W.*	1448	- - - -	- - - -	Le mosambei	Die pillenblume
520 Clerodéndrum *J*	1325	- - - -	- - - -	Le fortuné	Der losbaum
362 Clèthra *L.*	1020	- - - -	- - - -	- - - -	Die amerikanische else
506 Clinopòdium *L.*	1272	- - - -	Wild basil	Le clinopode	Die wirbeldoste
618 Clitòria *L.*	1556	- - - -	Clitoris flower	La clitore	Die klitorisblume
866 Clùsia *L.*	2151	- - - -	Balsam tree	- - - -	- - - -
544 Clypèola *Gae.*	1402	- - - -	Treacle mustard	Clypeole	Das schildkraut

Page	Dutch	Italian.	Spanish	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
542	Schumblad	Cardamindo	Cardamina	Lugobui kres *Russ.* Rzezucha polna *Pol*
328	Hartvrugt	Cardiospermo	Cardiospermo	Blære-erter *Dan*
680	Distel	Cardo	Cardo	Oskt *Russ & Pol* Tidsel *Dan.*
774	Rietgras	La caretta	El carex	O carriço *Port* Stærgræs *Dan* Starr *Swed*
842	Papajaboom	Il papaio	El papayo	Papayo *Port.* Pino-guacu *Brazil* Papaya-maram *Mal*
684	Everwortel	Carlina	Carlina	Kohutschka *Russ* Lepczyca *Pol.* Korstorn *Dan.*
592	- - - -	- - - -	- - - -	Xiloxochitl *Mexico*
702	Kraagbloem	Carpesio	Carpesio	Carpesio *Port* Kraveblomster *Dan* Krageblomster *Sw*
792	Haagbeuk	Carpino	Charmilla	Carpe *Port* Asad *Pers* Grab *Russ & Pol* Avenbög *Dan*
686	Saffloer	Cartamo	Cartamo	Cartamo *Port* Chartam *Arab* Polewoi *Rus* Krokos *Pol*
218	Karwey	Il carvi	Alcaravea	Alcaravia *Port* Timon *Russ* Karny *Pol* Kommen *Dan.*
416	Kruidnagel-boom	Il garofano aromatico	El clavo aromatico	Cravoaria *Port.* Chanke *Java* Gwosditschka *Russ*
800	Sagueerboom	- - -	- - -	Schunda-panna *Malab* Nibun *Malej* Kettule *Cey.*
348	Kassie	Cassia	Cassia	Chaiarxambar *Egypt* Cassie *Dan*
792	Kastanjeboom	Castagno	Castano	Ruts *Jap* Keschtan *Russ* Kasztan owoc *Pol.*
772	- - - -	- - - -	- - -	Kajo tyammara *Malej*
678	Dwangkruid	Catananche	Catananche	Catanauche *Port*
210	Doornzaad	Caucali	Caucalide	Beterlvus *Dan* Kaukalis *Swed.*
826	Trompetboom	Ambaiba	Ambaiba	Trompettræe *Dan* Trumpettrad *Swed*
178	- - - - -	- - - -	Celastro	Kuro gam *Jap* Celastertræe *Dan* Celastertrad *Swed*
192	Der hahnenkamm	Celosia	Celosia	Hanekam *Dan* Hankam *Swed*
554	- - - - -	Arturo di Candia		
864	Lotusboom	Il loto	El almez	Temur-agatsch *Pers* Lotustræ *Dan* Lotustrad *Swed*
52	Kleefgras	Cenero	Cenero	Cenero *Port* Burregræs *Dan* Borregras *Swed*
734	Santorie	Centaurea	Centaurea	
96	Zeer klein guichelmuur			
96	Kogelboom	- -	- - -	Knaptræe *Dan* Knapptrad *Swed*
388	Hoornbloem	- -	- - -	Hornurt *Dan* Hornort *Swed.*
772	Hoornvrugt	Ceratocarpo	Ceratocarpo	Ustelipole *Russ* Hornfrugt *Dan & Swed*
868	Karobenboom	Carobola	Algarrobo	Alfarroba *Port* Johannisbrod *Dan & Swed*
790	Hoornblad	Ceratofilo	Ceratofila	Ceratofilo *Port* Hornblad *Dan & Swed*
148	Rinkelboom			
346	Judasboom	Siliquastro	Algarrobo loco	Siliquastre *Port* Fanna suwo *Jap* Judastræe *Dan*
122	Waschkruid	Cerinte	Ceriflor	Chupamel *Port* Voxurt *Dan* Vaxört *Swed*
208	Kervel	Cerfoglio	Perifollo	Cerefolho *Port*
868	Laage palmboom	Palma di S Pier martire	Palmitos	Palmeira des vassoiras *Port* Dvergpalme *Dan* Dvargpalm *Swed*
936	Kaarskroon	Chara	Chara	Chara *Port* Armstage *Dan* Ljusarm *Swed*
538	Violier	Leucojo	Alheli	Goiveiro *Por* Nægeisi *Arab.* Gwosditschnuja halke *Rus.*
460	Schelkruid	Celidonia	Celidonia	Svalcurt *Dan*
516	Schildbloem	- - -	- - -	Skiolblomster *Dan.* Skoldblomster *Swed*
206	Ganzevoet	- - -	- - -	Guasefod *Dan.*
172	Sneeuwbesie	- - -	- - -	Sneebær *Dan* Snöbar *Swed*
12	Sneeuwbloem	Albero di neve	Arbol de nieve	Sneeblomster *Dan* Snöblomster *Swed*
424	Icacoprum	Albero icaco	Icaco arbol	Ikakoblomme *Dan.* Ikakoplommon *Swed*
694	Pronkbloem	Crisocoma	Crisocoma	Guldhaar *Dan*
150	Star-appelboom	Crisofilo	Chrysophyllo	Chrysophyllo *Port* Stiernæble *Dan* Stjernaple *Swed*
366	Goudveil	- - -	- - -	Gylden steenbrek *Dan* Gul stenbräck *Swed*
624	Cicers	Ceci	Garbanzo	Ervanço *Port* Ciecierzyca ogrodna *Pol* Muscært *Dan.*
678	Suikerey Endivie	Cicoria Endivia	Achicoria Endibia	Zikorija *Russ.* Endibia *Port* Andiwja *Russ* Sterbák *Boh*
216	Water-scheerling	- - -	- - -	Cegude *Por* Omeg *Rus* Vand-skarntyde *Dan*
476	Wantsdryver	- - -	- - -	Tægeurt *Dan.*
712	Aschkruid	- - -	- - -	Aske urt *Dan* Ask-ort *Swed.*
26	St Stevenskruid	- - -	- - -	Kaldunowa trawa *Russ* Czarownik *Pol.*
848	Touwdruif	- - -	- - -	Caapeba *Port.*
102	Boschtouw			
468	Veldroosje	Cistio	Jara	Cisto *Port* Cistusrose *Dan* Cistusros *Swed.*
520	Vedelhoutboom	- - -	- - -	Fiolntræe *Dan* Fioltrad *Swed*
652	Oranjeboom	Melarancino	Naranjo	Cay tam *Cochinch* Pomerancz *Russ*
1012	Knodszwam	- - -	- - -	Klubban *Swed.* Köllesop *Dan*
482	Clematis	Clematite	Clematide	Powoy *Pol* Clematis *Dan & Swed.*
558	Hederik	- - -	- - -	Tarenaya *Port*
520	Lotboom	- - -	- - -	Pinna *Cey*
362	Clethra			
506	Borstelkrans	Clinopodio	Albahaca silvestre	Clinopodio *Port* Bloschinza *Russ* Storzyszek *Pol*
618	Kittelbloem	Clitoria	Clitoria	Clitoria *Port* Clitorisblomster *Dan & Swed*
866	Lvmboom			
544	Schildzaad	Rotella	Hierba rodela	Escudinha *Port* Skiold-urt *Dan* Skeld-ort *Swed.*

Page	Nos. to Genera	British or Systematic Synonymes	English Names.	French.	German
36 *Cnèorum L*	84	- - - - -	Widow wail	La camelée	Der zeyland
682 *Cnicus W*	1665	- - - - -	Thistle	Le cnichaut	Das kratzkraut
778 *Cobrèsia* W	1948	*Carex*			
326 *Coccolòba L*	922	- - - -	Seaside grape	Le raisinier de mer	Die seetraube
844 *Cóculus Bauh*	2101	Menispermum			
546 *Cochlearia Tou.*	1407	- - - - -	Scurvy grass	Le cranson	Das losselkraut
788 *Cócos* L.	1983	- - - - -	Cocoa-nut tree	Le cocotier	Die kakospalme
10 *Codrium Vahl*	30	- - - - -	Black tamarinds		
170 *Coffèa* L.	479	- - - - -	Coffee tree	Le caffayer	Der kaffebaum
778 *Cóix L*	1971	- - - - -	Job's tears	Larmille	Das thranengras
476 *Colbértia* Sal.	1211	Hibbértia			
292 *Colchicum L*	851	- - - - -	Meadow saffron	Colchique d'automne	Die zeitlose
24 *Collinsònia* L.	63	- - - - -	Aniseed tree		
626 *Colùtea L*	1573	- - - - -	Bladder senna	Le baguenaudier	Der blasenbaum
452 *Cómarum L*	1152	- - - - -	Marsh cinquefoil	Le comaret	Das fünfblatt
36 *Comoclàdia L.*	80	- - - - -	Maiden plum	Comoclade à feuilles entières	Die astlose
934 *Conférva Ag*	2292	- - - - -	- - - - -	La conferve	Der wasserfaden
216 *Conium L*	649	- - - - -	Hemlock	La cigue	Der schierling
188 *Conocarpus Jac*	544	- - - - -	Button tree	Le conocarpe	Der zirbelbaum
270 *Convallària L*	787	May lily	Lily of the valley	Le muguet	Die mayblume
140 *Convólvulus L*	384	- - - - -	Bind weed	Le liseron	Die winde
702 *Conỳza L*	1734	- - - - -	Flea-bane	La comise	Die durrwurz
356 *Cookia* Sonn	1006	- - - - -	Wampee tree		
350 *Copaifera* L	986	- - - - -	Balsam of capevi	Le copaier	Der kopaivabaum
488 *Cóptis Sal*	1238	*Helléborus*			
756 *Corallorrhiza R Br*	1882	*Ophrys*			
466 *Corchorus L*	1187	- - - - -	Jew's mallow	La corete	Die muspflanze
150 *Cordia L*	428	Sebesten	- - - - -	Le sebestier	Der sebestenbaum
732 *Coreopsis Jac*	1804	- - - - -	Tickseed sunflower	La coriope	Das kappchen
208 *Coriándrum L*	618	- - - - -	Coriander	La coriandre	Der koriander
482 *Coriària L*	2091	- - - - -	Myrtle-leaved sumach	Le redoul	Der gerberstrauch
130 *Coris L*	360	- - - - -	- - - - -	Le coris	Der erdkiefer
8 *Corispérmum L*	26	- - - - -	Tickseed	Le corisperme	Der wanzensame
62 *Cornucòpiæ L.*	133	- - - - -	Horn of plenty grass	Le coquelucheole	Das tullhorngras
102 *Córnus L*	306	Cornelian cherry	Dogwood	Le cornouiller	Der kornelbaum
320 *Cornùtia* L.	1318	- - - - -	- - - - -	L'agnanthe	
628 *Coronilla L*	1576	- - - - -	Scorpion senna	La coronille	Die kronwicke
550 *Corondpus Sm*	1427	- - - - -	Wart cress, star of the earth		
228 *Corrigìola L*	690	Bastard knotgrass	Strapwort	La corrigiole	Das lingenkraut
128 *Cortùsa* L	351	- - - - -	Bear's-ear samicle	La cortuse	Die kortuse
600 *Corydalis Dec*	1502	Fumaria			
792 *Córylus L*	1998	Hazel nut tree	Nut tree	Le noisetier	Die haselstaude
58 *Corynéphorus Beauv*	169	- - - - -	Club grass		
258 *Córypha L*	762	- - - - -	Fan palm	Coryphe	Die schirmpalme
722 *Cotula L*	1775	- - - - -	Maywced	La cotule	Die laugenblume
382 *Cotylèdon L*	1060	Kidneywort	Navel-wort	Le cotylet, *or* cotyler	Die nabelflmze
556 *Crámbe Tou*	1442	- - - - -	Sea kail	Le crambe	Der meerkohl
230 *Crássula L*	699	- - - - -	- - - - -	La crassule	Das dickblatt
424 *Cratæ'gus L*	1132	- - - - -	Hawthorn	L'aubépine	Der hagedorn
396 *Cratæ'va* L	1086	- - - - -	Garlic pear	Le tapier	Der tapiabaum
674 *Crèpis W*	1638	- - - - -	Succory hawkweed	Crépide	Pippau
524 *Crescéntia L*	1336	- - - - -	Calabash tree	Le calabassier	Der kurbisbaum
240 *Crìnum L*	735	- - - - -	African lily	La crinole	Die hakenlilie
212 *Crithmum L*	633	- - - - -	Samphire	La bacille	Der meertenchel
36 *Crócus l*	93	- - - - -	Saffron	Le safran	Die safr npflanze
608 *Crotalària L*	1530	- - - - -	- - - - -	La crotalaire	Die klapperschote
812 *Croton L*	2032	Cascarilla			
94 *Cruciancilla L*	271	Petty madder	Crosswort	La crucianelle	Das kreuzblatt
734 *Cryptostémma R Br*	1814	*Arctòtis*			
372 *Cucùbalus L*	1047	- - - - -	Bladder campion	Le behen	Das behen
808 *Cucumis L*	2022	- - - - -	Cucumber	Le concombre	Die gurke
808 *Cucúrbita L*	2021	- - - - -	Gourd	La courge	Der kurbiss
732 *Cullumia* R Br	1809	*Berckhèya*			
214 *Cuminum L*	641	- - - - -	Cumin	Le cumin	Der kummel
806 *Cupréssus L*	2017	- - - - -	Cypress	Le cyprès	Die cypresse
6 *Curcuma* L	14	- - - - -	Turmeric	Le curcuma	Kurkuma
100 *Curtisia* H K	300	- - - - -	Hassagay tree		
104 *Cúscuta* L.	310	- - - - -	Dodder	Cuscute	Die flachsseide
286 *Cyanélla L*	824	- - - - -	- - -	La cyanelle	Das hangblatt
846 *Cycas L*	2107	- - - - -	Sago tree	Le cycas des Indes	Der sagoubaum
328 *Cyclamen L*	954	- - - - -	Sow bread	Cyclame	Die erdscheibe
426 *Cydònia Tou*	1145	*Pyrus*	Quince	Coignassier	Der quittenbaum
534 *Cymbària L*	1379	- - - - -	- - - - -	Cymbaire	Das nachenkraut
196 *Cynánchum L*	581	- -	Dog's bane	La cynanque	Der hundswurger
684 *Cynara L*	1663	- -	Artichoke	L'artichaut	Die artischoke
C Cardúnculus *L.* sp 11458		- -	Cardoons	Cardon	Kardonen
122 *Cynoglóssum L*	336	- - - - -	Hound's tongue	Cynoglosse	Die hundszunge
348 *Cynomètra L*	973	- - - - -	- - - - -	Le cynomètre	Die hundsschaum
62 *Cynosùrus L*	178	- - - - -	Dog's-tail grass	Crételle	Das kammgras
50 *Cypèrus L*	127	- -	- - - - -	Le souchet	Das cyperngras
C esculéntus *L* sp 896		- - - - -	- - - -	Amande-de-terre	

Page	Dutch.	Italian.	Spanish.	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
36	Chamaelea	Camelea	Olivilla	Citocacio *Port* Chamaelea *Dan & Swed*
682	Distel	- - -	- - -	Kradstidsel *Dan* Kratstistel *Swed*
326	Druiveboom	Grappoliere	Coccoloba	Druetræe *Dan* Drusvetrad *Swed.*
546	Lepelkruid	Coclearia	Cochlearia	Skee-urt *Dan*
788	Kokosboom	Albero del cocco	El coco	Inaiaguacuiba *Brasil* Cay dua *Cochinch*
170	Koffyboom	Il caffè	El café	Cay càphe *Cochinch* Kofé *Russ* Kawa *Pol*
778	Traangras	Lacrime di Giobbe	Lagrimas de Moises	Lagrymas de N Senhora *Port* Jobs taarer *Dan*
292	Wildi saffraan	Colchico	Villorita	Colchico *Port* Beswrémennoi zwjet *Russ* Rozsiad *Pol.*
626	Senneboom	Solatro	Espanta-lobos	Colutea *Port* Linsetræe *Dan* Linsetrad *Swed*
452	Rood waterbezie	- - -	- - -	Sabelnik *Russ* Pieciornik *Pol* Krakfottis *Swed*
56	Maagden-pruimboom			
934	Flap	- - -	- -	Thachboi *Cochinch* Vandtrad *Dan*
216	Scheerling	Cicuta	Cegueta	Boligolow *Russ* Swinia wesz *Pol* Skarntyde *Dan.*
188	Knopboom	- - -	- - -	Knaptræe *Dan* Knapptrad *Swed*
270	Lelietjes van den dale	Il mughetto	Azucena del valle	Landisch *Russ* Konwalia *Pol*
140	Winde	Il viluchio	La correguela	O liorao *Port* Snerli *Dan*
702	Tonderkruid	La conizza	La conizza	A conizza *Port* Cattuschiragum *Malab* Troldurt *Dan*
350	Balsem copayveboom	Copaiba	Copaiu	Copiba *Port* Covaiba *Brasil* Copaivatræe *Dan.*
466	Moeskruid	- - -	- - -	Melochia *Arab* Madurt *Dan*
150	Sebestenboom	Il sebesten	El sebesto	Sebesteira *Port* Vidi-maram *Malab* Sebestentræe *Dan.*
732	Wantszaad	- - -	- -	Tægetrø *Dan* Vagglushö *Swed*
208	Koriander	Coriandro	Cilantro	Coentro *Port* Koriander *Russ.* Ghad *Hebr*
482	Lederboom	- - -	Rulda	Lædertræe *Dan* Ladertrad *Swed*
130	Zeethym	Il cori	Hierba pinul	A corea *Port* Korisurt *Dan* Korisört *Swed*
8	Wantz-zaader	Corisperma	Corisperino	Vanggeluussaed *Dan*
52	Trechtergras	Cornucopia	Cornucopia	Krugthorn-græs *Dan* Fruckthorn-gras *Swed*
102	Kornoeljeboom	Il cornuolo	El cornizo	Cornisolo *Port* Kurosiejepnik *Russ*
428	Kroonkruid	Coronilla	Coronilla	Kroneurt *Dan* Kronört *Swed*
228	Riempjes	La corregiuola	La correguela	A correjola *Port* Remurt *Dan* Remört *Swed*
128	Kortusa			
712	Hazelaar	El nocciuolo	El avellano	Avelleira *Port* Frandik *Turk* Oreschnik *Russ*
258	Sariboeboom	- - -	- - -	Arvore dos sombreiros *Port* Codda-panna *Malab.*
722	Koedille	- - -	- - -	Luudblomster *Dan*
382	Navelkruid	Cotiledone	Ombliguera	Cotyledone *Port* Rzesa wietrzna *Pol*
556	Zeekool	Crambe marina	Col marina	Strø-kaal *Dan & Norw*
230	Dikblad	- - -	- - -	Tykblad *Dan* Tjockblad *Swed*
424	Haagdoorn	Bianco spino	Espino blanco	Bodlak *Pol* Bojarischnik *Russ*
390	Stinkappelboom	- - -	- - -	Tapia do Brasil *Port* Tapia *Brasil* Nurrvala *Malab*
674	Hondsbloem			
524	Kalabasboom	Cuiete	Cuiete	Cuiete *Port* Kalabastræe *Dan* Kalabastråd *Swed*
250	Haakleie	Crino	Crino	Crino *Port* Kroglihe *Dan*
212	Zeevenkel	Critmo	Hinojo marino	Funcho marinho *Port* Støefenkel *Dan* Sjofenkål *Swed*
56	Saffran	Zafferano	Azafran	Açafrão *Port* Zatiphra *Arab* Schafran *Russ* Szafran *Pol*
608	Rammelaar	Crotalaria	Crotalaria	Crotalaria *Port* Klapperbælge *Dan* Skallerskida *Swed*
94	Kruisblad	- - -	- -	Korsblad *Dan & Swed*
372	Wit been	Il been bianco	Colleja	Herva tracoeira *Port* Skum-neglike *Dan*
808	Komkommer	Cetriuolo	Pepino	Pepino *Port* Kira *Indian* Ogurzi *Russ* Ogorek *Pol*
808	Kauwoerde	La zucca	Calabaza	Abobara *Port* Kabak *Pers* Tikwa *Russ* Tykwia *Pol*
214	Komyn	Comino	Comino	Cuminho *Port* Timon *Russ* Kmin *Pol* Kummen *Dan*
806	Cypresseboom	Cypresso	Ciprés	Cypreste *Port* Elhanni *Arab* Kyparisnoe derewo *Russ*
6	Kurkuma	- - -	- - -	Mangella-kua *Malab* Gurgumeye *Dan*
104	Waikruid	- - -	- -	Pawliza *Russ.* Kania przedza *Pol*
846	Sagoeboom	Il sago	El sagu	O sagûeiro *Port* Todda-panna *Malab* Sagutræe *Dan.*
128	Varkensbrood	Ciclamine	Panporcino	Pao de porco *Port* Galteknappe *Dan* Svinbröd *Swed*
426	Kweeboom	Cotogno	Membrillero	Marmeleiro *Port* Haivah *Pers* Armud *Rus* Pigwa *Pol.*
574	Bootjesvrught			
196	Worgkruid	Cinanco	Cinanco	Cinanco *Port* Hundemorder *Dan* Hundstrypare *Swed*
684	Artisjok	Carciofo	Alcachofa	Artitschok *Russ* Karcziot *Pol* Ærteskok *Dan*
122	Hondstong	Cinoglossa	La vinebla	Lingua de cao *Port* Tscherednik *Russ* Psi iezyk *Pol.*
348	Teetjes-klink			
62	Vingerpluim	- - -	- - -	Hanekamsgræs *Dan* Kam-exing *Swed.*
50	Cypergras	Cipero	- - -	Cipergræs *Dan* Cipergras *Swed*

Page	Nos. to Genera.	British or Systematic Synonymes.	English Names.	French.	German
766 Cypripèdium *L.*	1931	- - - -	Ladies' slipper	Sabot de la Vierge, *or* Soulier de Notre Dame	Der Venusschuh
624 *Cytisus L*	1566	- - - -	Cytisus	Le cytise	Der geisklee
62 *Dáctylis L*	180	- - - -	Cock's-foot grass	Le dactile	Der knauelgras
718 *Dáhlia Cav*	1758	*Georgina*			
294 Damasònium *Schreb*	859	*Alisma*	- - - - -	Fluteau	Der froschlöffel
322 *Dáphne L*	910	- - - -	Spurge-laurel	Laureole	Der seidelbast
844 *Datisca* W	2099	Bastard hemp	- - - -	La cannabine	Das streichkraut
134 *Datùra* L	876	- - - -	Thorn apple	Stramoine	Der stechaptel
210 *Daucus L*	625	- - - -	Carrot	La carote	Die möhre
384 Davállia Sm	2196	*Trichómanes*			
192 Deeringia R Br	563	Celosia			
472 *Delphinium Tou*	1204	- - - -	Larkspur	La dauphinelle	Der rittersporn
370 *Diánthus L*	1046	- - - -	Pink	L'oeillet	Die nelke
154 *Dictámnus L*	997	- - - -	Fraxinélla	Dictame blanc	Der diptam
904 Didýmodon *Hedw*	2230	*Bryum*			
170 Diervilla Tou	477	Lonicèra	St. Peter's wort	La dierville	Die akadische lonizere
530 Digitàlis *L*	1355	- - - -	Fox-glove	La digitale	Der fingerhut
52 Digitària *Sco.*	143	- - - -	Finger-grass		
478 Dillènia L.	1214	- - - -	- - - -	Le siahl	Der rosenapfel
302 Dimocárpus *W.*	883	Longan	Litchi		
356 Dionæ'a L.	1009	- - - -	Venus's fly-trap	L'attrape-mouche	Venus die fliegen-fangerin
838 Dioscòrea L	2085	- - - -	Yam	Igname	- - - -
180 Diósma *Wnl*	517	- - - -	Bucku plant		
870 Diospyros *L*	2159	- - - -	Date plum	Le plaquemmier	Der pseudolotus
908 Diphyscium *Mohr*	2235	*Buxbaumia*			
90 Dipsacus *L*	262	Fuller's thistle	Teasel	Cardere à foullon	Die kardendistel
604 Dipterix *Schreb*	1518	- - - -	Tonquin bean		
324 Dirca *L*	911	- - - -	Leather wood	Le bois de cuir	Das lederholz
128 Dodecátheon *L.*	353	- - - -	American cowslip	Gyroselle de Virginie	Die göttergabe
616 Dólichos *L*	1550	- - - -	Horse-eye bean	Le dolic	Faseln
716 *Doronicum* L	1751	- - - -	Leopard's bane	Le doronic	Gemsenwurz
88 Dorstènia L	257	*Contrayerva*	- - - -	Dorstène	Die contrayerva
544 *Dràba L*	1405	- - - -	Whitlow grass	La drave	Das hungerblumchen
266 Dracæ'na *L*	774	- - - -	Dragon tree	Le dragonier	Der drachenbaum
510 Dracocéphalum *L.*	1279	- - - -	Dragon's head	Dracocéphale	Der drachenkopf
298 Dracóntium *L*	868	- - - -	Dragon	Draconte	Zehrwurz
232 Drósera *L*	702	- - - -	Sundew	Le rossolis	Der sonnenthau
454 Dryàs *L*	1159	- - - -	- - - -	Driade	Das silberkraut
228 Drýpis *L.*	687	- - - -	- - - -	La drypis	Das kronenkraut
210 Echinóphora *L*	624	Prickly parsnep	Sea-parsnep	L'echinophore	Die stacheldolde
746 Echìnops *L.*	1850	- - - -	Globe-thistle	Echinope	Die kugeldistel
146 Echites *L*	413	- - - -	- - - -	L'echite	Der klammerstrauch
124 Echium *L.*	345	- - - -	Viper's bugloss	La viperine	Der natterkopf
340 Edwárdsia Sal	940	*Sophora*			
152 Ehrètia L	430	- - - -	- - - -	Le cabrillet	
90 Elæágnus *L*	259	- - - -	Oleaster	L'olivier de Bohéme	Der wilde oelbaum
468 Elæocarpus *L*	1192	- - - -	- - - -	Le ganitre	Die ganiterbaum
180 Elæodéndrum *Jac*	516	- - - -	Olive wood		
836 Elais *Jac*	2077	- - - -	Oily palm	L'avoira de Guinée	Die oelpalme
790 Elate *L*	1984	- - - -	- - - -	L'indel asiatique	Die tannenpalme
328 Elatine *L*	931	- - - -	Waterwort		
48 Eleócharis *R Br*	124	*Scirpus*	Spike rush		
744 Elephantopus *L*	1843	- - - -	Elephant's foot	L'éléphantope	Der elephantenfuss
68 Eleusine Gae	200	Cynosùrus			
700 Elichrysum *Pers*	1730	Xeránthemum			
880 Ellobocárpus *Kault*	2181	*Ptèris*			
72 *Elymus L*	208	- - - -	Lyme grass	Elyme des sables	Das haargrass
826 Empètrum *L*	2045	Black-berried heath	Crow-berry	Camarine	Die rauchbeere
848 Ephèdra *L*	2115	- - - -	Shrubby horse-tail	L'uvette	Die seetraube
760 Epidéndrum *L*	1907	*Vanilla*			
358 Epigæ'a *L*	1015	- - - -	Trailing arbutus	L'epigée	Der grundstrauch
318 Epilòbium *L*	903	- - - -	Willow herb	L'épilobe	Der weiderich
100 Epimèdium *L*	297	- - - -	Barrenwort	Le chapeau d'evêque	Die bischofsmütze
890 Equisètum *L*	2211	- - - -	Horse tail	Prele	Das kannenkraut
68 Eragróstis *Beauv*	197	- - - -	Live grass		
18 Eránthemum *R Br*	49	- - - -	- - - -	L'eranthème	Die fruhblume
488 Eránthis *Sal*	1236	*Helléborus*	Winter aconite		
304 Erica *L*	892	Ling	Heath	La bruyère	Die heide
704 Erigeron *L*	1736	- - - -	- - - -	La vergerette	Das scharfe
426 Eriobótrya *Lindl*	1137	Mespilus	Loquat		
76 Eriocaúlon *L*	223	- - - -	Pipewort	La joncinelle	Der kantenhalm
742 Eriocéphalus *L*	1837	- - - -	- - - -	- - - -	Der wollkopf
50 Eriòphorum *L.*	125	- - - -	Cotton grass	La linaigrette	Das dungras
568 Erodium *Herit*	1430	- - - -	Heron's bill		
556 Erùca *Tou*	1436	- - - -	Rocket		
624 *Ervum L*	1562	True bitter vetch	Tare	L'ers ervillier	Die erve
E. Léns L. sp 10421		- - - -	- - - -	Lentillon	Die linse
558 Erucària *Gae*	1445	Condylocárpus			
210 Eryngium *L.*	622	Holly	Eryngo	Panicaut	Die krausdistel
550 Erysimum *L.*	1424	- - - -	Hedge mustard	Le vélar	Der hederich
604 Erythrina *L*	1521	- - - -	Coral tree	L'erythrine	Der korallenbaum

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766	Vrouweschoen	Pantoffola	Zueco	Calçado de Nuessa Senhora *Port.* Kokuschkiny Saposchki *Russ.*
624	Cytsus	Citiso	Citiso	
62	Krop-aair	Il dattilo	El dactilo	O dactylo *Port* Hvasgræs *Dan* Exing *Swed*
294	Water-weegbree	Damasonio	- - -	Damasonio *Port*
322	Zwart peperboompje	Laureola maschio	Laureola macho	Loureola macho *Port.*
844	Weedaart			
134	Doornappel	Stramonio	Estramonio	Estramonia *Port* Durman *Russ*
210	Peen	Carota	Zanahoria	Morkow *Russ* Marchew *Pol.*
472	Ridderspoor	Speronella	Espuela de caballero	Esporeira *Port* Kawalerskoi spor *Russ* Ostrozka *Pol.*
370	Anjelier	Garofano	Clavél	Cravino *Port* Gwosdika *Russ* Gozdzik *Pol*
354	Diptam	Dittamo bianco	Chitan	Dictamo branco *Port* Badan *Russ.* Dyptan *Pol.*
170	Akadische lonicera	Madreselva	Madreselva	Madreselva *Port*
530	Vingerhoed	Digitale	Dijital	Digital *Port* Naperstok *Russ*
478	Roosappelboom	- - -	- - -	Fruta estrellada *Port* Syalita *Malab.*
356	Vliegenknip	- - -	- - -	Moscapanha *Port*
838	- - - - -	- -	- - -	Oowhenote maowa *Otaheite.* Katsjil-kelengu *Malab.*
870	Basterd-lotus	- - -	- -	Loto de Italia *Port.*
90	Vollers kaarden	Dissaco	Cardencha	Cardo penteador *Port* Sukonnaja *Russ.* Szczeć *Pol*
324	Lederstruik			
128	Afgodskruid			
616	Slingerboon			
726	Wolverley	Doronico	Doronico	Doronico *Port* Geede-urt *Dan.* Vildget-ört *Swed.*
88	Contrajerva	- - -	Contrayerba	Contraerva *Port*
544	Taschkruid	Draba	Draba	Hungersblomst *Dan* Hungerblomster *Swed*
266	Draakboom	Dragone	Drago	Dragoneiro *Port.* Dragetræe *Dan*
510	Draakskop	Dragocefalo	Dragocefalo	Dragocefalo *Port.* Cay co co *Cochinch* Dragehoved *Dan.*
298	Speerwortel			
232	Zonnedauw	Rugiada del sole	Rocíada	A rossolina *Port* Solneznaja trawa *Russ*
454	Hertenkruid	- - -	- - -	Holta soleyg *Iceland* Schingari *Tungus.*
228	Kroondoorn			
210	Stekelkroon	Echinofora	Echinofora	Echinofora *Port*
746	Morgenster	Echinopo	Echinopo	Echinopo *Port.* Klottistel *Swed.*
146	Rooswinde	Echite	Echite	Echite *Port.*
124	Slangekruid	Echio	Hierba de la vibora	Viperina *Port* Rumian *Russ.*
90	Olyfwilg	Olivo di Boemia	Arbol de paraiso	Kalaf *Pers.* Lochowina *Russ.* Oliwa lésna polna *Pol*
468	Ganiterboom	- - -	- - -	Perin-kara *Malab.*
836	Palmietboom			
790	Wilde daadelboom	- - -	- - -	Tamara do mato *Port* Himindi *Cey* Katou-indel *Malab.*
744	Olyphants-poot			
72	Zandig koorngras	Elimo	Elimo	Elimo *Port* Sandhavre *Dan* Strandrog *Swed.*
826	Besheide	- - -	Camamnas	Camarinhas do reyno *Port* Wodaniza *Russ.*
848	Zeedruif	- - -	Hierba de las coyunturas	Stepnaja malina *Russ.* Kirsik *Kalmuk.*
358	- - -	- - -	- - -	Memecylo da Canada *Port.*
318	Basterd-wederik	Epilobio	Epilobio	Kiprei *Russ* Karamuk *Tartar.* Abragarest *Lapl.*
100	Muiltjesbloem	Epimedio	Epimedio	Epimedio *Port* Ikaniso *Jap.*
890	Akkerig paardestaart	Equiseto	Equiseto	Equiseto *Port.* Ma hoang *Cochinch* Chwostch *Russ.*
18	Vroegbloem	Erantemo	Erantemo	Erantemo *Port.*
304	Heide	Erica	Brezo	Weresk *Russ.* Wrzos *Pol.* Lyng *Dan.* Laung *Swed.*
704	Scherp fynstraal	- - -	Olivardilla	Blaa troldurt *Dan.*
76	Kanthalm			
50	Wolgras	Erioforo	Erioforo	Erioforo *Port.* Agerulд *Dan* angull *Swed*
624	Erven	Ervo	Yero	
	Lans	Lenticchia	Lenteja	Lentilha *Port.* Tschetschewiza *Russ.* Soczewika *Pol.*
210	Kruisdistel	Eringio	Cardo corredor	Sinaja golownik *Russ*
550	Steenraket	Erisamo	Jaramago	Gortschitza polewaja *Russ* Gorczyca polna *Pol*
604	Koraalboom	Arvore corallo	Arbol der coral	Arvore coral *Port* Koraltræe *Dan*

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270 Erythrónium *L.*	782	- - - -	Dog's-tooth violet	Le dent de chien	Der hundszahn
418 Eucalýptus *Herit*	1126	- - - -	Red gum tree	- - - -	- - - -
842 Euclea *L*	2098	- - - -	- - - -	L'euclé	- - - -
416 Eugènia L.	1119	- - - -	Rose apple	Jambosier	Der jambusenbaum
178 Euónymus *Tou*	509	- - - -	Spindle tree	Le fusain	Der spindelbaum
688 *Eupatórium* L	1685	- - - -	Hemp agrimony	L'eupatoire	Abkraut
400 Euphórbia L.	1103	- - - -	Spurge	L'euphorbe	Das euphorbium
526 Euphràsia *L.*	1342	- - - -	Eye-bright	L'eufraise	Der augentrost
228 Evólvulus *L.*	695	- - - -	- - - -	La liserole	Die kriechende winde
98 *Exacum L*	280	- - - -	- - - -	La gentianelle	Die kugelröhre
850 Excæcària *L.*	2117	- - - -	- - - -	L'agalloche	Der blendbaum
102 *Fagàra* L.	303	- - - -	- - - -	Le fagarier	Der fagara
354 Fagònia Tou.	995	- - - -	- - - -	- - - -	- - - -
792 Fàgus *L*	1987	- - - -	Beech	Le hetre	Die buche
542 Farsètia Turra	1597	*Alýssum*			
26 *Fèdia* Moen	72	*Valeriàna*	- - - -	La mâche	Der ackersalat
866 Feronia Corr	2149	- - - -	Elephant apple		
220 Férula *L*	668	- - - -	Giant-fennel	La férule	Das ruthenkraut
62 *Festuca* L.	182	- - - -	Fescue grass	La fétuque	Schwingel
484 Ficària *Dil*	1232	*Ranúnculus*	Pilewort	La petite chelidoine	Feigen-ranunkel
872 *Ficus L*	2167	- - - -	Fig tree	Le figuier	Der feigenbaum
742 Filago *L*	1838	Cudweed	Cotton rose	La cotonnière commune	Das filzkraut
912 Fissidens *Hedw.*	2243	Dicrànum			
290 Flagellaria *L*	839	- - - -	- - - -	La flagellaire	Die peitschenpflanze
630 Flemingia Rox	1586	*Hedysarum*			
912 Fontinàlis *L*	2245	- - - -	Water-moss	La fontinale	Das hullmos
452 Fragaria *Tou*	1151	- - - -	Strawberry	Le fraisier	Die erdbeerpflanze
288 Frankènia L	835	- - - -	Sea heath	La franquenne	
868 Fráxinus *L.*	2157	- - - -	Ash tree	Le frene	Die esche
206 Fritillària *L*	773	- - - -	Fritillary	La fritillaire méléagre	Das kiebitzey
F imperiàlis *L* sp 4513		- - - -	- - - -	Fritillaire imperiale	Die kaiserkrone
946 Fúcus *L*	2328	- - - -	Sea wrack	Varec	Tang
602 Fumària *Tou*	1507	Earth-smoke	Fumitory	La fumeterre	Der erdrauch
246 Furcræ'a Ven	725	Agàve	- - - -	- - - -	- - - -
276 Gagea Sal	801	*Ornithógalum*			
618 Galactia *Br*	1555	Clitòria			
248 Galánthus *L*	732	- - - -	Snowdrop	Perce-neige	Schneetropfchen
634 Galèga *Tou*	1591	- - - -	Goat's rue	Galega	Die geisraute
502 Galeobdolon *Sm*	1261	Galeópsis	Dead nettle	L'ortie morte des bois	Die gelbe hanfnessel
502 Galeópsis *L*	1260	Common dead nettle	Hemp nettle	Le galeope	Die taube nessel
92 Gàlium *L*	266	Ladies' bed-straw	Bed-straw	Le gaillet	Das labkraut
394 Garcinia L	1079	- - - -	Mangosteen	Le mangoustan	Der mangostanbaum
172 Gardènia L	487	- - - -	Cape jasmine	Le jasmin du Cap	- - - -
380 Garidélla Tou	1083	- - - -	- - - -	La garidelle	Die garidelle
40 Geissorhiza *Ker*	97	- - - -	Tile-root		
172 *Genipa* Tou	488	- - - -	Genip tree	- - - -	Der genipabaum
610 Genista *L*	1538	- - - -	Broom	Le genet	Der ginster
202 Gentiana L	600	- - - -	Gentian	La gentiane	Der enzian
756 Geodórum *Jac*	1888	Maláxis			
604 Geoffróya W	1517	- - - -	Bastard cabbage tree	- - - -	- - - -
578 Geránium *Herit*	1463	- - - -	Crane's bill	Le geramon	Der storchschnabel
606 Geropógon *L*	1620	- - - -	Old man's beard	- - - -	Der weissbart
454 Gèum *L.*	1155	Herb bennet	Avens	Benoite commune	Das nelkenkraut
42 Gladíolus *L*	105	- - - -	Corn flag	Le glayeul	Der schwertel
460 Glaúcium *Tou*	1169	Chelidónium	Horn-poppy	- - - -	Das gehornte schöl-kraut
194 Glaux *L.*	568	Sea milkwort	Black saltwort	Glauce	Milchkraut
502 Gléchoma *L*	1258	- - - -	Ground ivy	La terrete	Gundelreben
868 Gleditschia L	2155	Three-thorned Acacia	- - - -	Le févier à trois épines	Der honigdorn
406 Glinus *L*	1071	- - - -	- - - -	La glinole	Der glinus
6 *Glóbba* Rose	15	- - - -	Dancing girls	Globbe	- - - -
90 Globulària *L*	290	Blue daisy	Madwort	Globulaire	Die kugelblume
270 Gloriòsa *L*	783	- - - -	Superb lily	La méthomiqu	Die prachtlilie
518 Glycine *L*	1552	- - - -	Kidneybean tree	Glycine	Die glycine
628 Glycyrrhiza *Tou*	1574	- - - -	- - - -	Réglisse	Sussholz
518 Gmelina L	1131	- - - -	- - - -	Gmelin	- - - -
698 Gnaphalium *L*	1722	Cotton weed	Everlasting	Gnaphale	Die ruhrpflanze
324 Gnidia *L*	912	- - - -	- - - -	Gnidienne	Das schnabelkorn
196 Gomphocárpus *R Br*	587	*Asclèpias*			
194 Gomphrèna *L*	566	- - - -	Globe Amaranth	L'amaranthine globuleuse	Der kugelamaranth
754 Goodyèra R Br	1870	Neóttia			
592 Gordónia El.	1474	- - - -	Smooth loblolly bay		
588 Gossýpium *L*	1481	- - - -	Cotton	Le cotonnier	Die baumwolle
866 Gouània L.	2146	- - - -	Chaw-stick	La liane brulée	
16 Gratiola *L.*	43	- - - -	Hedge hyssop	La gratiole	Das gnadenkraut
466 Grias *L*	1188	- - - -	Anchovy pear	La grias	Die anschojeburn
384 Grèlum *L.*	1063	- - - -	- - - -	Le griel	Die kronranunkel
352 *Guaiacum* L	993	- - - -	Lignum-vitæ tree	Le gayac	Das franzosenholz
304 *Guàrea* L	888	- - - -	- - - -	Gouaré	- - - -
788 Guettárda L.	1981	- - - -	- - - -	Le guettard	- - - -
850 Guilandìna J	979	Yellow bonduc	Nicker tree	Le bonduc	Der schusserbaum
750 Gymnadènia *Rich*	1858	*Orchis*			
482 Gymnocládus *Lam*	2094	Guilandìna	- - - -	Le chicot de Canada	

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270	Hondstand	Dente di cane	Diente de perro	Dente de cão *Port* Kandik *Russ.* Hundetand *Dan. & Sw*
842	- - - -	- - - -	- - -	Xe lin tsu *Chin.* Cay nhaoe *Cochinch.*
416	Jamboesboom	Giambosa	Jambosa	
178	Paapenhout	Fusaggine	Bonetero	Bieslen *Bohm.* Swida *Russ.* Ukurgol *Tatar*
688	Boelkenskruid	Eupatorio	Eupatorio	Eupatorio *Port* Griwa konskaja *Russ.* Sadziec *Pol*
400	Euphorbium	Euforbio	Euforbio	Euphorbio *Port*
526	Oogentroost	Eufrasia	Eufrasia	Euphrasia *Port.* Otschnaja pomotsch *Rus* Swieczki *Pol.*
228	Kruipwinde			
98	Kogelpyp	Esaco	Esaco	Esaco *Port.*
850	Verblindboom			
102	Zadelboom	Fagara	Fagara	Fagara *Port*
354	- - - -	- - -	- -	Djæmdæ, Schoki *Arab*
792	Buikeboom	Il faggio	La haya	A faya *Port* Buk *Russ & Pol*
26	Sprinkhaandkruid	Valerianella	Canonigos	Balderjan *Russ* Kozlki *Pol*
220	Holstok	Ferula	Canaheja	Canafrecha *Port* Rusurt *Dan* Rusort *Swed*
62	Dravik	Festuca	Festuca	Mannagraes *Dan* Svingel *Swed*
484	Speenkruid	Celidonia minore	Ficaria	Celidonia menor *Port* Tschistiak menschoi *Russ*
872	Vygeboom	Fico	Higuéra	Figueira *Port* Tin *Arab* Finik *Russ.* Figa *Pol*
742	Beurkruid			
290	- - - -	- - - -	- -	Panambu valli *Malab* May boac *Cochinch*
912	Fonteinmoos	Fontinale	Fontinal	Fontinal *Port* Aaemoos *Dan* Lonkemossa *Swed*
452	Aardbezie	Fragaria	Fresera	Morangueiro *Port* Semljaniza *Russ.*
868	Escheboom	Frassino	Fresno	Freixo *Port* Jas *Russ* Jesion *Pol* Ask *Dan & Swed*
266	Kievitsbloem Keizerskroon	Fritillaria	La fritilaria	A fritilaria *Port* Vibeæg *Dan* Vipaagg *Swed.*
946	Zeeruy	Fuco	Fuco	Fuco *Port* Si sj *Jap* Tang *Dan & Swed.*
602	Duivekervel	Fummosterno	Palomilla	Fumaria *Port* Fingosakf *Jap* Semlanja orech *Russ.*
246	Boomaloe			
248	Wittertje	Galanto	- -	Hó virág *Hung*
634	Vlakkenkruid	Galega	Galega	Gallega *Por* Pestilentsrod *Dan* Pestilentsrot *Swed.*
502	Geelbloemige hondsnetel			
502	Knoopige hondsnetel	Ortica morta	Ortiga muerta	Ortiga morta *Port* Rasnozwetnaja kropiwa *Russ.*
92	Walstroo	Gaglio	Cuaja leche	Calhaleite *Port.* Roschodnik *Boh.*
172	- - - -	- - - -	- - -	Cay deanh tau *Cochinch* Cha tsu *Chin.*
610	Brem	Ginestra	Jinesta	Giesta *Port* Genista *Dan & Swed*
202	Gentiaan	La genziana	La jenciana	Goretschafka *Russ*
604	- - - -	- - - -	- -	Camarinhas, Camarinheira de Brazil *Port.*
578	Ojevaarsbek	Geranio	Jeremo	Geranio *Port* Schuratelinci nos *Russ* Pychawiec *Pol*
606	Grysbaard	Geropogon		
454	Gemeen nagelwortel	Erba benedetta	Islera	Cravoilha *Port* Grebnik *Russ.* Zarzyczka *Pol.* Nelikerod *Dan*
42	Gladiolus	Ghiagguiolo	Espadaña	Schpaschnaja trawa *Russ.* Mieczyk ziele *Pol*
460	Gehoorud schelkruid			
194	Melkkruid	- - -	- - -	Melecznik *Pol* Melkurt *Dan* Mjölkort *Swed.*
502	Aardveil	Ellera terrestre	Hiedra terrestre	Krotowik *Russ* Bluszcz poziemny *Pol*
406	- - - -	- - -	- - -	Haschfe *Arab*
6	- - - -	- - -	- - -	Jamma mjoga *Jap*
90	Kogelkruid	Globularia	Siempre enjuta	Globularia *Port* Kugleblomst *Dan* Bergskubba *Swed.*
270	Pragtige-lelliepraal	- - -	- - -	Methonika *Malab* Junglang *Java* Nienghala *Cey.*
618	Kruipboom			
628	Zoethout	Regolizia	Regaliz	Cam thao *Cochinc* Dubez solotkoi *Rus* Lakrycya *Pol.*
518	Heilpeeren	- - -	- - -	Tani *Malab.* Dematha *Cey* Doery radak *Java*
698	Droogbloem	Gnafalio	Gnafalio	
194	Rondbloem	- - -	Inmortal	Perpetua roxa *Port* Wadapu *Malab* Hoa nua ngai *Cochinch*
588	Katoen	Cotone	Algodon	Kopa *Indian* Chloptscha taja bumaga *Russ.*
16	Genadekruid	Graziola	Graciola	Licharodotschnaja trawa *Russ* Konjtrud *Pol*
384	Grootbloem			
352	Pokhout	Guaiaco	Guayacan	Guaiaco *Port* Bakaut *Russ.* Franzostræe *Dan*
304	- - - -	- - -	- - -	Jito *Brazil* Guara *Java*
788	- - - -	- - -	- - -	Tawhannov *Otaheite* Rava pou *Malab.*
370	Balletjestruik			

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878 *Gymnográmma Desv.*	2171	Grammítis			
368 *Gypsóphila L*	1044	- - - - -	- - - - -	La gypsophie	Die gypsblanze
752 *Habenária R. Br.*	1861	*Orchis*			
248 *Hæmánthus L.*	731	African tulip	Blood flower	L'hémanthe	Die blutblume
350 *Hæmatóxylon L.*	985	Campeachy wood	Logwood	Le campeche	Das campescheholz
394 *Halèsia* L.	1081	- - - -	Snowdrop tree	L'halesier	
524 *Hallèria* L.	1338	- - - -	African fly honeysuckle	L'haller	Die hallerie
630 *Hállia* Thun	1584	*Hedýsarum*			
104 *Hamamèlis L*	312	Black Virginian pistachia	Witch-hazel	L'hamamelis	Die zauberstrauch
870 *Hamiltònia* Mhl.	2162	- - - -	Oil nut		
188 *Hédera L.*	549	- - - -	Ivy	Le lierre	Der epheu
2 *Hedýchium Kon.*	6	- - - -	Garland flower	Le gandasuli	
630 *Hedýsarum L*	1588	- - - -	French honeysuckle	La sulla	Die sulla
H Onobrýchis L sp 10597		- - - -	Sainfoin	Le sainfoin	Esparzette
716 *Helènium* L.	1755	- - - -	Willow-leaved sunflower	L'helenie	
470 *Helianthemum Tou*	1198	*Cistus*	Sun rose		
730 *Helianthus L*	1798	- - - -	Sun flower	L'helianthe	Die sonnenblume
H *tuberòsus L.* sp 12439		- - - -	Jerusalem artichoke	Topinambour	Die erdapfel
194 *Helicònia L.*	570	- - - -	- - - - -	Le bihai	
580 *Helicteres L*	1466	- - - -	Screw tree	L'helictére	Der schraubenbaum
558 *Heliophila L.*	1446	- - - -	- - - - -	- - - - -	Die sonnenfreundin
118 *Heliotròpium L*	325	Heliotrope	Turnsole	L'heliotrope	Die sonnenwende
488 *Helléborus L*	1237	- - - -	Hellebore	L'hellebore	Die nieswurz
1014 *Helvélla L*	2387	- - - -	- - - - -	L'helvella en mitre	Der faltenschwamm
260 *Hemerocállis L*	769	- - - -	Day lily	L'hémerocalle	Die lilienaffodill
878 *Hemionitis L*	2170	- - - -	- - - - -	L'hemionite	Der gitterfarrn
480 *Hepática Dil*	1225	*Anemòne*	- - - - -	L'anémone hepatique	Die leberblume
222 *Heraclèum* L.	672	Hogweed	Cow-parsnep	La berce	Das heilkraut
814 *Heritièra* H K	2037	- - - -	Looking-glass plant		
866 *Hérmas* Thun.	2147	- - - -	- - - - -	- - - - -	Die stieldolde
754 *Herminium* R Br	1868	*Ophrys*	Musk orchis		
772 *Hernándia* L.	1942	- - - -	Jack in a box	L'hernandier	Die hernandie
208 *Hernària L*	614	- - - -	Rupture-wort	L'herniare	Das bruchkraut
532 *Herpéstis R Br*	1367	*Gratiola*			
40 *Hesperántha Ker*	98	*Ixia*	Evening flower		
548 *Hésperis L*	1421	Dame's violet	Rocket	La julienne	Die nachtviole
204 *Heuchèra* L.	606	- - - -	- - - - -	L'heuchère	
584 *Hibiscus L*	1480	- - - -	- - - - -	La ketmie	Hibiskus
672 *Hieràcium L*	1635	- - - -	Hawkweed	L'épervière	Das habichtskraut
628 *Hippocrèpis L*	1577	- - - -	Horseshoe vetch	Hippocrepe	Die hufeisenpflanze
812 *Hippómane L.*	2030	- - - -	Manchineel	Le mancenillier	Der manschinellbaum
832 *Hippóphae L.*	2058	Sallow thorn	Sea buckthorn	L'argoussier	Der haftdorn
6 *Hippùris L.*	23	- - - -	Mare's tail	Presse d'eau	Der schafthalm
174 *Hirtélla W.*	499	- - - -	- - - - -	L'hirtelle	Der krausler
860 *Hólcus L.*	2132	- - - -	Soft grass	Houque	Das darrgras
74 *Holósteum L*	220	- - - -	- - - - -	Holosté	Spurre
72 *Hórdeum L.*	210	- - - -	Barley	L'orge	Die gerste
128 *Hottònia* L.	355	Water milfoil	Water-violet	L'hottone aquatique	Die wasserviole
198 *Hóya* R. Br	592	*Asclèpias*			
202 *Huérnia* R Br	596	*Stapèlia*			
834 *Húmulus L.*	2074	- - - -	Hop	Houblon	Der hopfen
814 *Hùra* L.	2035	- - - -	Sandbox tree	Le sablier	Der streubüchsenbaum
546 *Hutchínsia* R Br	1410	*Cardámine*			
284 *Hyacinthus* L	819	- - - -	Hyacinth	La jacinte	Die hyacinthe
482 *Hyænánche H K.*	2087	- - - -	Hyæna poison		
1010 *Hýdnum L*	2375	- - - -	- - - -	L'erinace	Der stachelschamm
490 *Hydrástis L*	1241	Yellow root	- - - -	Hydraste	
842 *Hydrócharis L*	2089	- - - -	Frog-bit	Morene	Der froschbiss
208 *Hydrocótyle L.*	608	- - - -	Pennywort	Hydrocotyle	Der wassernabel
204 *Hydrólea L*	601	- - - -	- - - - -	Coutarde epineuse	Kleber
490 *Hydropítis L*	1240	*Brasènia*			
132 *Hydrophýllum L*	372	- - - -	Water-leaf	L'hydrophylle	Das wasserblatt
346 *Hymenæ'a* L.	972	- - - -	Locust-tree	Le courbaril	Der heuschreckenbaum
886 *Hymenophýllum Sm*	2203	- - - -	Filmy leaf		
898 *Hymenóstomum R Brown*	2220	*Gymnóstomum*			
136 *Hyoscýamus L.*	381	- - - -	Henbane	La jusquiame	Das bilsenkraut
676 *Hyóseris L.*	1645	- - - -	Swine's succory	Hyoséride	Der schweinsalat
104 *Hypécoum L*	313	- - - -	- - - - -	Le cumin cornu	Die lappenblume
350 *Hyperanthèra Vahl*	980	*Guilandina Moringa*	Horseradish tree	Le ben oléifère	Der behenbaum
656 *Hypéricum L.*	1617	- - - -	St. John's wort	Le millepertuis	Das Johanniskraut
914 *Hýpnum L*	2251	- - - -	Feather moss	L'hypne	Das astmos
676 *Hypochæ'ris L*	1650	- - - -	Cat's ear	La porcelle	Das saukraut
254 *Hypóxis L.*	750	- - - -	- - - - -	L'hypoxis	Der hürling
496 *Hyssópus L.*	1248	- - - -	Hyssop	Hysope	Der isop
546 *Ibèris L*	1412	- - - -	Candy tuft	L'ibéride	Die iberpflanze

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368	Gipsminner	- - -	- - -	Perekatipole *Russ.* Gipsurt *Dan* Gipsort *Swed.*
248	Tulp van de Kaap der Goede Hoope	Emanto	Flor de la sangre	Flor do sangue *Port.*
350	Kampéchehout	Legno di Campeggio	Palo de Campeche	Campecheeiro *Port.* Campeschetræe *Dan.* Campeschetrad *Swed.*
524	Afrikaansche kamperfoelie			
104	Toverhazelaar			
188	Klimop	Edera	Hiedra	Hera *Port* Bjcullu *Pers* Bljustsch *Russ* Bluszcz *Pol.*
630	Sierlyk haanekop Haanekammetjes	La sulla La cedrangola	Sulla Esparsita	Pipirigallo *Port* Esparset *Dan & Swed.*
730	Zonnebloem Aardpeeren	Girasole	Girasol	Soelblomster *Dan* Podsolneschnik *Rus*
580	Schroevenboom			
118	Zonnewende	Eliotropio	Heliotropio	Tornesol *Port* Sakrán *Egypt*
488	Nieskruid	Elleboro	Eleboro	Heleboro *Port* Nyseurt *Dan.* Prustrot *Swed*
1014	Tolzwam	Pasta sciringa terrestre		
260	Dagschoon	Emerocale	Lirio-asfodelo	Hemerocallia *Port* Bolschoi ladüsch *Russ.*
878	Oorvaaren	- - -	Mularia	
480	Leverkruid	Anemone fegatella	Anemone hepatica	Hepatica nobre *Port* Solotnikowa trawa *Russ*
222	Heilkruid	Sfondilio	Esfondilio	Canabraz *Port* Kulupar *Pers.* Putschki *Russ*
772	- - - -	- - -	- - -	Tooneenna *Otaheite*
208	Duizendgrein	Ermiaria	Milgranos	Hermiaria *Port* Sporyz trzeci *Pol.* Bridurt *Dan.*
548	Damast	Esperide	Hespero	Hesperina *Port* Natfiol *Dan* Nattfiol *Swed*
584	Hibiscus	Ibisco	Hibisco	Hibisco *Port*
672	Havikskruid	Ieracia	Hieracio	Hieracio *Port*
628	Hoefyzer	Ferro di cavallo	Hierba de la herradura	Ferradurina *Port* Hesteskoe *Dan* Hästsko *Swed.*
812	Mancenilieboom	- - -	Mancanila	
832	Duinbessen	- - -	Espino amarillo	Rakitnik *Russ* Haftorn *Dan & Swed.*
6	Kattestaart	Ippuride	- - -	Hesterumpe *Dan* Hästsvans *Swed*
860	Zorghzaad	- - -	- - -	Honninggræs *Dan* Myskgras *Swed.*
74	Heelbeen	Erba lucciuola		
72	Gerst	Orzo	Cebada	Cevada *Port* Jetschmen *Russ* Jeczmien *Pol*
128	Watervioliet	- - -	- -	Tisatschie Listnik *Russ.* Vandrollike *Dan*
834	Hoppe	Lupolo	Hombrecillo	Lupulo *Port* Hymel *Pers* Chmel *Russ* Chmiel *Pol.*
814	Ratelboom	- - -	- - -	Baruce *Indian*
284	Hyacinth	Il giacinto	Jacinto	Jacintho *Port* Hyacinth *Dan. & Swed.*
1010	Stekelzwamm	Stecherino	- - -	Braadsvamp *Dan.* Gaddsvamp *Swed.*
842	Vorschenbeet	- - -	- - -	Liaguschnik *Russ.*
208	Waternavel	- - -	Sombrera de agua	
204	Waterolyf	- - -	- - -	Xiong fung *Chin*
132	Waterblad			
346	Goni animé boom	- - -	- -	Jataiba, itaiba *Brazil.*
136	Bilsenskruid	Giusquiamo	Beleño	Meimendro *Port* Belena *Russ* Bielun *Pol.* Bulme *Dan*
676	Zwynensiaa	Trinciatella		
104	Lappenbloem	- - -	Zadorija	
350	Kellerboom	- - -	- - -	Moringa *Port*
656	St Jans kruid	Pilatro	Corazoncillo	Melfurada *Port* Swerobol *Russ*
914	Takmos	Ipno	Hipno	Hypno *Port.* Vægmosse *Dan* Väggmos *Swed*
676	Biggenkruid	- - -	Hierba del alcon	Kongpenne *Dan* Véres lapu *Hung*
496	Hysop	Isopo	Hisopo	Hyssopo *Port.* Esob *Heb* Isop *Dan & Swed.*
546	Bitter scheefbloem	- - -	Carraspique	

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146 Ichnocárpus *R Br*	414	*Apócynum*			
104 *Ilex L.*	315	Hulver	Holly	Le houx	Die stechpalme
192 *Illécebrum L.*	535	Whitloe wort	Knot-grass	Paronique	Das nagelkraut
478 Illicium *L*	1215	- - - -	Aniseed tree	Le badian de la Chine	Der sternanis
184 Impátiens *Riv*	538	Touch me not	Balsam	La balsamine	Der springsame
220 Imperatória *L.*	662	- - - -	Masterwort	L'impératoire	Die meisterwurz
634 Indigofera *L*	1589	- - - -	Indigo	L'indigotier	Die indigopflanze
854 *Inga* Plu	2123	Mimósa			
362 Inocárpus *Forst.*	1024	- - -	Otaheite chestnut	- - - -	- - -
714 *Inula L*	1744	- - - -	Elecampane	L'inule aunée	Der alant
188 Ionidium *Ven*	541	*Viola*			
138 Ipomœ'a *L.*	383	- - - -	- - - -	Le quamoclit	Die trichterwinde
834 Irésine *L*	2069	- - - -	- - - -	L'iresine	Die straussblume
44 *Iris L*	115	- - - -	Flower de luce	L'iris	Die iris
552 Isátis *Bauh*	1430	- - - -	Woad	Le pastel	Der farberwaid
760 Isochilus *R Br.*	1903	Epidéndrum			
894 Isoètes *L.*	2214	- - - -	Quillwort	L'isote des etangs	Der brachsemfarrn
48 Isólepis *R Br*	122	*Schœ'nus*			
80 Isopógon *R Br*	230	*Protea*			
744 *Iva L*	1841	Bastard Jesuit's bark tree	- - - -	Le faux quinquina	Der jesuitische rindenbaum
188 *Jasione L*	547	- - - -	Sheep's scabious	La jasione	Die jasione
12 *Jasminum L.*	39	Mogorium	Jasmine	Le Jasmin	Der jasmin
812 Játropha *L.*	2033	Barbadoes nut	Physic nut	Le medicinier	Die purgiernuss
298 Jonésia W	867	- - - -	Asoca tree		
794 *Júglans L.*	1999	Hickory	Walnut	Le noyer	Die wallnuss
258 *Juncus L*	760	- - - -	Rush	Jonc	Die binse
848 Juniperus *L*	2113	- - - -	Juniper	Le genévrier	Der wachholderstrauch
18 Justicia L	47	- - -	Malabar nut	La carmentine	Die malabarische nuss
4 Kæmpféria L	12	- - - -	Galangale	Zedoaire à feuilles obrondes	Der grosse galgant
356 Kálmia L	1011	- - - -	- - - - -	- - - -	Der loffelbaum
618 Kennédia Ven.	1753	Glycine			
668 *Lactùca L*	1628	- - - -	Lettuce	La laitue	Der salat
322 *Lagétta J.*	909	*Daphne*	Lace-bark tree		
188 Lagœ'cia *L*	548	- - - -	- - - -	Lagocie	Der wilde kummel
54 Lagurus *L*	153	- - - -	Hare's-tail grass	Lagure	Das sammetgras
502 *Lamium L*	1259	Dead nettle	Archangel	Le lamier	Die taubnessel
518 Lantana *L*	1312	- - - -	- - - -	Le camara	Der Surinamsche Thé
42 Lapeyroúsia Ker	103	*Ixia*			
678 *Lapsana L*	1691	- - - -	Nipplewort	La lampsane commune	Der rainkohl
806 *Larix Sal*	2014	*Pinus*	Larch	Le méléze	Der larchenbaum
220 *Laserpitium L*	669	- - - -	Laserwort	Le laser	Die laserpflanze
846 *Latania* Com	2109	- - - -	Bourbon palm		
524 Lathræ'a *L*	1339	- - - -	Toothwort	La clandestine	Die schuppenwurz
620 *Láthyrus L.*	1558	Vetchling	Tare	La gesse	Die platterbse
332 *Laurus L*	934	Bay tree	Laurel	Le laurier	Der lorbeerbaum
498 Lavándula *L*	1251	- - - -	Lavender	La lavande	Der lavandel
584 Lavatèra L	1475	- - - -	Tree mallow	Lavatere	Der malvenbaum
316 Lawsònia L.	808	- - - -	Henna bush	L'henné	- - - -
358 *Lèdum L*	1012	- - - -	Wild rosemary	Lédier	Der porsch
772 *Lémna L*	1939	- - - -	Duckweed	La lenticule	Die teichlinse
506 Leonùtis *R Br*	1270	*Phlòmis*	Lion's-tail	Queue de lion	Der löwenschwanz
286 Leontice *L*	825	- - - -	Lion's leaf	La leontice	Das lowenblatt
670 Leóntodon *L*	1631	Piss-a-bed	Dandelion	Le pissenlit	Der lowenzahn
700 Leontopòdium *R Br*	1723	*Gnaphàlium*	Lion's-foot		
506 Leonùrus *L*	1267	- - - -	Motherwort	L'agripaume	Das herzgespann
552 Lepidium *L*	1428	- - - -	Pepperwort	La passerage	Die kresse
L sativum L sp 9212		- - - -	Garden cress	Cresson alenois	Die gartenkresse
912 Léske*a* Ehrh.	2250	*Hypnum*			
626 Lessértia Dec	1572	*Colutea*			
102 Lestibudèsia R Br	561	Celbsia			
830 Leucadéndron *L.*	2053	*Protea*	- - - -	L'arbre d'argent	Der silberbaum
506 *Leucas R Br*	1269	*Phlòmis*			
912 Leucodon *Schwæ*	2244	Dicránum			
248 *Leucojum L*	733	- - -	Snow-flake	Nivéole	Das weisse veilchen
144 Leucopógon *R Br*	401	Styphèlia			
80 Leucospermum *R Br*	232	*Protea*			
188 Lightfoótia Herit.	546	Campánula			
220 Ligústicum *L*	665	- - - -	Lovage	L'angelique à feuilles d'ache	Libstöckel
12 *Ligústrum L*	36	Primprint	Privet	Troëne	Der liguster
264 *Lilium L*	771	- - - -	Lily	Le lis	Die lilie
298 *Limeum L*	871	- - - -	- - - -	Limeole	Der randknoten
356 *Limònia* L	1003	- - - -	- - - -	Le limonelier	Limonelle
532 Limosélla *L*	1359	Bastard plantain	Mudwort	La limoselle	Das sumpfkraut
526 Linaria *Tou*	1344	*Antirrhinum*	Toadflax	La linaire	Das flackskraut
514 Linnæ'a Gro	1292	- - - -	- - - -	- - - -	- - - -
232 *Linum Bauh.*	701	- - - -	Flax	Le lin	Der flachs
798 Liquidámbar *L*	2001	- - - -	Sweet gum	Le liquidambar	Der amberbaum
628 Liquoritia *Mönch.*	1575	Glycyrrhiza	Liquorice	La réglisse	Süssholz
478 Liriodéndron *W.*	1216	- - - -	Tulip tree	Le tulipier	Der tulpenbaum
754 Listèra R. Br.	1876	*Ophrys*			
120 *Lithospérmum L.*	330	- - - -	Gromwell	Le gremil	Der steinsame

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104	- - - -	Agrifoglio	Acebo	Azevinho *Port* Waesoscheld *Russ.*
192	Schubbig hardkelk	- - -	Nevadilla	
478	Steranys	Anice stellato	Anis de la China	Pa co huei hiam *Chin* Stierneanis *Dan*
184	Springzaad	Balsamina gialla	Balsama amarilla	Melindre naõ me toques *Port* Springurt *Dan*
220	Meesterwortel	Imperatoria	Imperatoria	Imperatoria *Port* Mestarurt *Dan* Mastererot *Swed.*
634	Indigo	Indaco	Indigo	Anileira *Port* Houer *Arab* Indigo *Dan. & Swed.*
362	- - - -	- - -	- - -	Hi *Otaheite*
714	Gewoon alant	Enula	Enula campana	Dewjatschik *Russ*
138	Trechterwinde	Ipomea	Ipomea	Ipomea *Port*
44	Iris	Iride	Iris	
552	Vertweede	Guado	Pastel	Ljetnjak *Russ* Simlo *Pol*
894	Priemkruid	- - -	- - -	Braksnagras *Swed*
188	Schaapskruid	- - -	Jasione	Jasione *Port* Monke *Swed*
12	Jasmyn	Il gelsomino	El jazmin	O jasmim *Port* Jasmin *Arab* Jasmin *Dan & Swed*
812	Purgeernooten	- - -	Piñones de Indias	Pinhoes do Brasil *Port* Munduy guacu *Brazil*
794	Ockernootenboom	Il noce	Nogal	Cay Hach dao *Cochinch* Grezkia orechi *Russ*
258	Biezen	Giunco	Junco	Junco *Port* Trostnik *Russ* Sit *Pol*
948	Geneverboom	Il ginepro	El enebro	Moschewelnik *Russ*
18	Adhatoda	- - -	- - -	Wanaepala *Malab* Adhatoda *Cey*
4	Smeesche galanga	- - -	- - -	Katsculi kulengu *Malab* Thien lien *Cochinch*
356	- - - -	- - -	- -	Skedtrad *Swed*
668	Salade	Lattuga	Lechuga	Alface *Port.* Handibe *Arab* Laktuk *Russ.* Salata *Pol.*
188	Wilde komyn	- - -	- - -	Cuminho bastardo *Port*
54	Haazestaart			
502	Doove netel	Ortica morta	Ortiga muerta	Kargasina *Pers* Rasnozwietnaja kopriwa *Russ*
518	- - - - -	- - -	- - -	Camara *Brazil*
678	Akkermoes	Lampsana	Lampsana	Brzoskiew polna *Pol*
806	Lorchenboom	Larice	Alerce	Listweniza *Russ* Lerketræe *Dan*
220	Laserkruid	Laserpizio	Laserpicio	Laserpicio *Port.* Laserurt *Dan* Laserört *Swed*
524	Schubwortel	- - -	La madrona	Dentaria bastarda *Port* Petrow krest *Russ*
620	Lathyrus	Latiro	Latiro	Latiro *Port*
332	Laurierboom	Alloro	Laurel	Bobek drzevo *Pol* Dafna *Tart*
498	Lavendel	Lavendola	Espliego	Alfazema *Port* Lawendul *Russ*
584	- - - - -	- - -	- - -	Malvaiscaõ *Port*
316	- - - - -	- - -	- - -	Alhenna *Arab*
358	Wilde rosmaryn	Ledo	Ledo	Bagulnik *Russ* Rozmarin *Pol* Vild rosmarin *Dan.*
772	Kroos	Lenticchia d'acqua	Lentejueala acuatica	Lentilha aquatica *Port* Riaska *Russ* Rzesa wodna *Pol.*
506	Leeuwestaart	- - -	Aguavientos	
286	Leeuwenblad			
670	Paardebloem	Piscia in letto	Amargon	Molotschai trawa *Russ.* Papawa ziele *Pol*
506	Hartgespan	Agripalma	Agripalma	Agripalma *Port* Dikaja kropiwa *Russ* Serdeczuik *Pol*
552	Peperkruid	Lepidio	Lepidio	
	Tuinkers	Crescione	Mastuerzo	Mastruço *Port* Kres *Russ* Nasturcya *Pol*
830	Zilverboom			
248	Tydeloos	Leucoio	Leucoio	Leucoio *Port* Tozek viola *Hung.*
220	Lavaskruid	Ligustico	Ligustico	Ligustico *Port.* Loestilk *Dan.*
12	Liguster	Ligustro	Alheña	Alfena *Port* Ibata *Jap* Schost *Russ* Ptasza zob *Pol*
264	Lelie	Giglio	Azucena	Lilieja *Russ* Lilia *Pol.*
356	- - -	- - -	- - -	Catutsjeri-Narregam *Malab.* San peng lac *Chin*
532	Slykertje			
526	- - - -	Linaria	Linaria	Linaria *Port* Dikol len *Russ*
514	- - - -	- - -	- - -	Marislegræs *Dan.* Vindgras *Swed*
232	Vlasch	Lino	Lino	Bad *Hebr* Len *Russ & Pol.* Hör *Dan.* Lin *Swed*
798	Amberboom	- - -	- - -	Liquidambreiro *Port.* Xochiocotzo-quahuitl *Mexic.*
628	Zoethout	Regolizia	Regaliz	Lakrycya *Pol.*
478	Tulpboom	- - -	- - -	Old wife's shirt *North Amer.*
120	Steenzaad		Lithospermo	Aljofar *Port* Worobiewa trawa *Russ.*

Page	Nos to Genera.	British or Systematic Synonymes.	English Names.	French.	German
784 Littorélla *L*	1967	Grass-leaved plantain	Shore weed	La litorelle	Der strändling
166 Lobèlia L.	464	- - - -	Cardinal's flower	Lobelie	Die kardinalsblume
70 Lólium *L.*	207	- - - -	Darnel	L'yvraie	Der jahrige lolch
L perénne *L* sp 1246		- - - -	- - - - -	Ray-grass d'Angleterre	- - - - -
84 Lonàtia *R Br*	245	Embóthrium			
882 *Lonchítis L*	2192	Aspidium	- - - -	La lonchite	Der buchtenfarrn
170 Lonicèra R & S	475	- - - -	Honeysuckle	Chevrefeuille	Das geisblatt
642 *Lótus L.*	1601	- - - -	Bird's-foot trefoil	Le lotier	Der schotenklee
542 Lunària *L.*	1395	Moonwort	Honesty	La lunaire	Die mondviole
640 Lupinàster *PA*	1599	Trifólium	Bastard lupine	Trefle à feuilles de lupin	Der sibirische lupinenklee
614 *Lupìnus Tou.*	1544	- - - -	Lupine	Le lupin	Die lupine
258 Lùzula *Dec.*	761	Júncus			
388 *Lychnis L.*	1067	- - - -	Batchelors' buttons	Lychnide	Die lychnis
156 *Lycium L.*	450	- - - -	Box-thorn	Le licet	Wolfsdorn
1034 Lycopérdon *Mx*	2443	Puff ball	- - - - -	La vesseloup	Der staubschwamm
892 Lycopódium *L*	2212	Wolf's claw	Club moss	Le lycopode	Kolbenmos
124 Lycópsis *L.*	344	- - - -	Wild bugloss	Lycopside	Der krummhals
20 Lycópus *L.*	55	- - - -	Water-horehound	Marrube aquatique	Wolfsfuss
52 Lygèum *L.*	132	- - - -	- - - - -	L'alvarde	Das spartogras
886 Lygódium *Swz.*	2206	- - - -	Snake's tongue		
128 *Lysimàchia L*	356	Willow herb	Loose-strife	Lisimaque	Der gelbe weiderich
398 *Lýthrum L*	1094	- - - -	Purple willow herb	Salicaire	Der braune weiderich
784 Maclùra Nut	1969	Osage orange	- - - -		
478 Magnòlia L.	1217	- - - -	Evergreen laurel-leaved tulip tree	Le magnolier	Der gurkenbaum
380 Malpighia L.	1054	- - - -	Barbadoes cherry	Le mourellier	Die malpighische pflanze
582 *Málva L.*	1472	- - - -	Mallow	La mauve	Die malve
466 *Mammèa* L	1190	- - - -	Mammee tree	Mamei d'Amerique	Der mamaybaum
154 *Mandrágora Tou*	447	A'tropa	Mandrake	La mandragore	Der schlafapel
180 Mangifera *L*	513	- - - -	Mango tree	Le mangier	Der mangobaum
2 Maránta L.	2	- - - -	Arrow root	Herbe à la flêche	
50 Mariscus *Vahl*	130	Schœ'nus			
504 *Marrùbium L*	1266	- - - -	Horehound	Marrube commun	Der weisse andorn
538 Mathìola R. Br	1381	Cheiránthus	Stock	Le giroflée	
722 Matricària *L.*	1771	- - - -	Feverfew	La matricaire	Das mutterkraut
290 Medèola L.	846	- - - -	- - - - -	Médéole	Das virginische krollkraut
646 Medic'ago *L*	1605	Lucern	Medick	La luserne	Der schneckenklee
M lupùlina *L* sp 1088		- - - -	Nonsuch	Lupuline	Die hopfinluzerne
652 Melaleuca *L*	1610	- - - -	- - - - -	Le cajeput	Der kajaputbaum
740 *Melampódium L*	1828	- - - -	- - - - -	- - - - -	Der geissfuss
520 *Melampyrum L*	1315	- - - -	Cow wheat	Le mélampire	Der wachtelweizen
364 Melástoma *L*	1029	- -	American gooseberry	Melastome	Der beerenbaum
352 *Mèlia L*	988	- - - -	Bread tree	L'azédarac bipinué	Der zederach
514 Melánthus *L*	1293	- - - -	Honey-flower	Melianthe	Die honigblume
66 Mélica *L*	193	- - - -	Melic grass	La mélique bleue	Das blaue perlgras
302 Melicócca *L*	884	- - - -	Honey berry	Le knépier bijugué	
640 *Melilòtus Tou*	1598	Trifólium	Melilot	Le mélilot commun	Der gemeine steinklee
508 Melissa *L*	1278	Calamint	Balm	La melisse	Die melisse
510 Melittis *L.*	1280	Balm-leaved archangel	Bastard balm	Le melissot	Das melissenblatt
322 *Memécylon L*	908	- - - - -	- - - - -	Le cornouiller de Zeylan	Der saffranbaum
844 Menispérmum *L*	2100	Wendland*ia*	Moon seed	Menisperme	Der mondsame
500 *Méntha* L.	1254	- - - -	Mint	La menthe	Die münze
130 Menyanthes *L*	362	Marsh trefoil	Buck bean	Meniante	Fieberklee
316 Menzièsia Sm.	893	Erica			
840 *Mercuriàlis* L.	2088	- - -	Mercury	La mercuriale	Das bingelkraut
430 Mesembryánthemum *L.*	1146	- - - -	Fig marigold	Ficoide	Die mittagsblume
424 Mespilus *L.*	1131	- - - -	Medlar	Le néflier	Der mispelbaum
216 Mèum *Tou.*	653	Æthùsa	Bawd money	Æthuse à feuilles capillaires	Barwurz
480 Michèlia L	1218	- - - -	- - - - -	Le champac	Der schampakkabaum
72 Microchlòa *R Br*	211	Rottbóllia			
196 Microlòma *R Br*	578	Cropègia			
744 Micròpus *L*	1839	- - - -	- - - - -	Micrope	Die falsblume
52 *Milium L.*	141	- - - -	Millet grass	Le petit millet	Das miliagras
82 Mimètes *R Br*	233	Prótea			
854 Mimòsa *L*	2124	Acàcia			
528 *Mimulus L.*	1351	Bastard fox-glove	Monkey flower	Mimule	Der gaukler
302 Minusops *L.*	881	- - - -	- - - - -	- - - - -	Die spitzenblume
118 Mirábilis *L.*	342	- - - -	Marvel of Peru	Belle-de-nuit	Die wunderblume
398 Mitélla *L.*	1043	- - - -	- - - - -	Mitelle	Die bischofsmütze
324 Mœhringia L.	920	- - - -	Mountain chickweed	- - - - -	Der bergmeyer
76 Mollùgo *L.*	225	- - - -	- - - - -	Molugine	Der weichling
506 Moluccélla *L.*	1271	- - - -	Molucca balm	La molucelle	Die molukkische melisse

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784	Oevergras	Litospermo		
166	Kardinaalsbloem	Fior cardinale	Escurripa	Cardealina *Port.*
70	Dolyk	Loglio	Joyo	Kukol *Russ.* Kakol *Pol.* Heyre *Dan* Darrepe *Swed*
	- - -	- - -	- -	Renrepe *Swed.* Pschanez *Russ.*
170	Kamperfolie	Madreselva	Madreselva	Madresylva *Port*
642	Rolklaver	Il loto	El loto	O loteiro *Port.* Kierringtand *Dan.*
542	Maankruid	Lunaria	Lunaria	Lunaria *Port.* Maaneviol *Dan.* Manefioler *Swed.*
614	Vygeboon	Lupino	Altramuz	Tremoço *Port.* Temus *Arab* Lupine *Dan.* Lupin *Swed.*
388	Lychnis	Licnide	Cruces de Jerusalem	Cruz de Malta *Port.* Tatarskajo muilo *Russ.*
156	Boksdoorn	- - -	Espino africano	
1034	Stuifzwamm	Licoperdo	Licoperdo	Licoperdo *Port* Stovsvamp *Dan* Klotsvamp *Swed.*
892	Wolfsklaauw	Licopodio	Licopodio	Licopodio *Port* Ulvefoed *Dan*
124	Wolfschyn	- - -	- - -	Uden oxetunge *Dan* Aakerstik, Stikgras *Norw*
20	Wolfspoot	Licopo	Licopo	Licopo *Port* Vandmarru *Dan.* Vargfot *Swed.*
52	Nootgras	- - -	Albardin	Espatto bastardo *Port*
128	Weiderick	Lisimachia	Lisimaquia	Lysimachia *Port* Werbuinik *Russ*
398	Partyke	Salicaria	Salicaria	Salicaria *Port.* Plakun *Russ.* Sju *Jap.* Wroina *Bohem*
478	- - - - -	- - -	- -	Köbus *Jap.*
380	Barbados kersen			
582	Maluwe	Malva	Malva	
466	Mammeboom	- - -	- - -	Mamoeira *Port.*
154	Appeldraagend doodkruid	Mandragola	Mandragora	Koldunowa trawa *Russ.* Pokrzyk ziele *Pol.*
180	Mangasboom	- - -	- - -	Mangueira *Port.* Amb *Arab* Can xu *Chin* Po *Java.*
504	Gemeene malrove	Marrobio bianco	Marrubio blanco	Maroyo branco *Port* Marrub ih schandra *Russ*
722	Maartel	Matricaria	Matricaria	Maruna ziele *Pol* Moderurt *Dan,*
646	Rupsklaver	Medica	Mielga	Medicagem *Port* Gunscha *Pers.* Snegleklever *Dan.*
	Hoppige rupsklaver			
652	Kajapoetie	- - -	- - -	Caju-kelan *Java.* Cay fiam *Cochinch*
520	Akkerig zwartkoorn	Malampiro	Trigo de vaca	Trigo de vacca *Port* Pwan *Russ* Koehvede *Dan* Skalle *Swed*
364	Bessenboom	- - -	- - -	Fruta da Gralha *Port* Muiva *Brazil.* Kadali *Malab*
352	Azedarach	Azedarac	El cinamomo	Amargoseira *Port* Zænzalacht *Arab* Jussura *Jap.*
514	Honigbloem	- - -	Flor de miel	Juki no fato *Jap*
66	Blaauwhavergras	- - -	- - -	Blaaetoppet græs *Dan* Blaaebunke *Norw* Blaslok *Swe*
640	Melote	Meliloto	Meliloto	Meliloto *Port* Tschimaeu *Pers* Gretscha dikaja *Russ*
508	Melisse	Melissa	Melisa	Melissa *Port* Melissa *Russ* Melisa *Pol*
510	Melissebladig kruisbloem	- - -	- - -	Melissa bastarda *Port* Vild hiertensfryd *Dan.* Sjuvo *Jap*
322	Saffraanboom	- - -	- - -	Walikaku *Cey.*
844	Gulpzaad			
500	Munt	Menta	Menta	Miata *Russ* Mietka *Pol.*
130	Driebladige ruigbloem	Meniante	Trifolio palustre	Trilistnik *Russ.*
840	Bingelkruid	Mercorella	Mercurial	Mercurial *Port* Proleska *Russ*
430	Middagbloem	Ficoide	Ficoide	Ficoide *Port* Ghasul *Arab* Jisplante *Dan.* Isört *Swed*
424	Mespelboom	Nespolo	Nispero	Nespereira *Port* Argil *Pers* Tschiski *Russ* Niesplik *Pol*
216	Beerwortel	Meu	Meu	Meon *Port* Medwjéschei koren *Russ* Olesnik *Pol.*
480	Sampaccaboom	- - -	- - -	Hapuphaha *Cey* Hoa su nam *Cochinch.*
744	Kleinpoot	- - -	- - -	Leonpodio do reyno *Port.*
52	Hirsgras	Gramigna migliaria	Mijo esparcido	Mijo esparcido *Port* Hirsegræs *Dan.*
528	Potzer	Mimulo	Mimulo	Mimulo *Port.*
302	- - - -	- - -	- - -	Elengi *Malab* Munamal *Cey* Kauki *Java.*
118	Wonderbloem	Fior di notte	Maravillas de noche	Maravilha do Peru *Port.* Hachal indi *Brasil.* Keso *Jap*
368	Ruigbloem			
324	Mosachtig muur			
76	Zagtblad			
506	Molukje	Momordica	Momordica	Momordica *Port.* Ballesan *Arab.*

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808	*Momordica L*	2020	- - - -	Male balsam apple	Momordique	Der balsamapfel
20	*Monárda* L	60	- - - -	Oswego tea		
356	*Monotropa L*	1008	Primrose-scented hypopithys	Yellow bird's-nest	Le sucepin	Der fichtensauge
76	*Montia* L.	224	Blinks	Chickweed	Montie	Die quellen-monti
174	*Morinda L.*	496	- - - -	Indian mulberry	Morinde	Der indianische maulbeerbaum
782	*Mórus L.*	1959	- - - -	Mulberry	Le mûrier	Der maulbeerbaum
464	*Muntingia* L.	1184	- - - -	- - - -	Calabure soyeux	- - - -
244	*Musa* L.	721	- - - -	Plantain tree	Le bananier	Der pisang
284	*Muscàri Desf*	821	*Hyacinthus*	Grape hyacinth	Jacinte botride	Die traubenhyacinthe
552	*Myagrum L*	1431	- - - -	Gold of pleasure	La caméline	Der leindotter
64	*Mygalurus Lk.*	183	- - - -	Mouse-tail		
362	*Mylocàryum W.en.*	1021	- - - -	Buckwheat tree		
118	*Myosótis L.*	326	- - - -	Scorpion grass	Gremillet ou scorpionne	Vergiss mein nicht
238	*Myosùrus L*	707	- - - -	Mouse-tail	Queue de souris	Das mausechwanzchen
830	*Myrica L.*	2055	- - - -	Candleberry-myrtle	Le cirier	Der wachsbaum
790	*Myriophýllum L.*	1987	- - - -	Water-milfoil	Le volant d'eau	Der federball
850	*Myristica L*	2120	- - - -	Nutmeg	Le muscadier	Die muskatmuss
212	*Mýrrhis* Mor	630	- - - -	Myrrh		
870	*Myrsine L*	2160	- - - -	- - - -	Myrsine d'Afrique	Die afrikanische myrsine
416	*Mýrtus L*	1121	- - - -	Myrtle	Le myrthe	Die myrte
832	*Nagèia* Gae.	2056	*Myrica*			
240	*Narcissus L*	711	- - - -	- - - -	Narcisse	Die narcisse
52	*Nárdus L*	137	- - - -	Mat grass	Le nard serré	Das borstengras
280	*Narthècium Mohr*	813	*Anthéricum*	Lancashire asphodel	Le brise-os	Das beinbrechgras
538	*Nasturtium R Br*	1383	*Sisýmbrium*	Water-cress	Cresson de fontaine	Die brunnenkresse
182	*Nauclea L*	521	- - - -	- - - -	- - - -	Der morgenstern
912	*Neckèra* Hedw.	2247	*Hýpnum*			
864	*Negúndum* Dec	2144	*Acer*	- - -	L'erable à feuilles de frêne	Der aeschenahorn
476	*Nelúmbium J*	1213	*Cyamus*	Sacred bean		
526	*Nemèsia Ven*	1346	*Antirrhinum*			
850	*Nepenthes L.*	2121	- - - -	Pitcher plant	Nepenthe	Der kannentrager
408	*Népeta L.*	1249	Nep	Catmint	Chataire	Die nepte
786	*Nephèlium W*	1971	- - - -	Rambutan		
146	*Nerium L*	411	Rose bay	Oleander	Le laurose	Der oleander
694	*Neurolæna R Br*	1710	- - - -	Halberd weed		
136	*Nicotiana* L.	382	- - - -	Tobacco	Le tabac	Dez tabak
476	*Nigélla Tou*	1209	Devil in a bush	Fennel flower	La nièlle	Der schwarzkummel
396	*Nitrària L*	1090	- - - -	Salt tree	Nitree	Der salpeterstrauch
82	*Nivènia* R. Br	235	*Prótea*			
880	*Nothochlæ'na R Br*	2177	*Acrostichum*			
540	*Notóceras R Br*	1385	*Erysimum*			
464	*Núphar Sm*	1176	*Nymphæ'a*	Yellow water lily	- - - -	- - - -
12	*Nyctánthes L*	38	*Jasminum*	- - - -	L'arbre triste	Der traurige baum
462	*Nymphæ'a Nack*	1174	Water rose	Water lily	Le nenuphar	Die seeblume
870	*Nýssa* L.	2161	- - - -	Tupelo	Le tupelo	Der tupelobaum
620	*O'chrus Pers*	1559	*Pisum*	- - - -	Ocre	Die ochererbse
762	*Octomèria R Br*	1913	*Dendróbium*			
510	*Ocymum L*	1281	- - - -	Basil	Basilic	Basilikum
212	*Œnánthe L.*	632	Wild parsley	Water dropwort	Oenanthe	Die rebendolde
318	*Œnothèra L*	901	Broad-leaved tree primrose	Evening primrose	L'onagre	Die nachtkerze
10	*O'lea L*	32	- - - -	Olive	L'olivier	Der oelbaum
122	*Omphalòdes Leh*	337	*Cynoglóssum*	Venus's navelwort		
758	*Oncidium Swz.*	1895	*Epidendrum*			
830	*Onoclèa L*	2178	*Osmúnda*	- - - -	L'orcanette sensible	Der fühlfarrn
612	*Ononis L*	1541	Cammock	Rest harrow	Bugrane	Die hauhechel
684	*Onopordum L*	1666	Woolly thistle	Cotton thistle	Le chardon commun	Die zellblume
120	*Onósma L*	332	- - - -	- - - -	L'orcanette jaune	Die ochsenzunge
888	*Ophioglóssum L*	2209	- - - -	Adder's tongue	Langue de serpent	Natterzunglein
272	*Ophiopógon Ker*	790	- - - -	Snake's beard		
144	*Ophiorhìza L*	406	- - - -	Snake root	Racine de serpent	Die schlangenwurzel
866	*Ophióxylon L*	2152	- - - -	Snake-wood	Bois de couleuvre	Das schlangenholz
72	*Ophiurus Beauv*	212	*Rottbollia*	Hard grass		
752	*Ophrys L*	1866	- - - -	Insect orchis	Ophrise	Die ophrys
750	*Orchis L*	1859	- - - -	Dogstones	Orquis	Die orchis
506	*Origanum L*	1274	- - - -	Marjoram	La marjolaine	Der majoran
760	*Ornithidum Sal*	1902	*Cymbidium*			
276	*Ornithógalum L*	802	- - - -	Star of Bethlehem	Ornithogale	Die vogelmilch
628	*Ornithopus L*	1578	- - - -	Bird's foot	Pied d'oiseau	Der vogelfuss
26	*Órnus Pers*	69	*Fráxinus*	Flowering ash	Le frene à fleur	Die bluhende esche
524	*Orobanche L*	1335	Strangle weed	Broom rape	Orobanche	Der erbsenwurger
618	*Orobus Tou.*	1557	- - - -	Bitter vetch	L'orobe	Die bergerbse
256	*Orontium L*	756	- - - -	Floating arum	L'oronce	Die schwimmaron
54	*Orthopógon R. Br.*	147	*Pánicum*			
288	*Oryza L.*	837	- - - -	Rice	Le ris	Der reis
886	*Osmúnda L.*	2205	- - - -	King fern	L'osmonde	Der traubenfarrn
792	*Ostrya Ma.*	1995	*Cárpinus*	Hop hornbeam	Charme à fruit de houblon	Der italienische hainbuche
828	*Oxýris Lam.*	2051	- - -	Post's cassia	Le rouvet	Die poetenkasia

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808	Balsemappel			
356	Europische bladloos	- - -	- - -	Lungört *Swed.*
76	Bronminnende montia	- - -	- - -	Mindste vand-arve *Dan* Montu-ört *Swed.*
174	Braamboozenboom	- - -	- - -	Coda-pilava *Malab.* Maccondou *Java* Baya *Macassar*
782	Moerbezieboom	Moro	Moral	Tatau-iba *Brazil* Tut *Pers.* Schelkowiza *Russ.*
464	Shaftbloem	- - -	- - -	Mallam-toddali *Malab*
244	Pisang	- - -	Bananas	Bananeira *Port* Meiya *Otaheite.* Palla *Pers* Bala *Malab.*
284	Druifhyacinth	Il giacinto	Jacinto	
552	Vlaschdotter	Miagro	Miagro	Miagro *Port* Ryschik *Russ.* Krowia *Pol* Horrurt *Dan.*
118	Kruidig muizenoor	Orecchio di topo	Miosota	Myosota *Port* Dukowka *Russ* Forgjæt mig ej *Dan*
234	Muizenstaartje	Corda di topo	Cola de raton	Cauda de rato *Port* Myschei chwost *Russ.* Ogonki myszi *Pol*
830	Waschboompje	- - -	- - -	Woskownik *Russ* Pors *Dan Norw & Swed.*
790	Vederkruid	- - -	- - -	Vingeurt *Dan* Fjaderört *Swed.*
850	Nooten moskaat	Noce moscada	Moscada	Moscadeira *Port* Muskad *Dan* Muskot-trad *Swed*
416	Myrtus	Mirto	Mirto	Ankaenda *Cey* Myrter *Dan* Myrten *Swed*
240	Narcis	Narciso	Narciso	Narcizo *Port* Narcisse *Dan* Narsiss *Swed.*
52	Borstelgras	Nardo	Nardo	Nardo *Port* Belous *Russ*
280	Beenbreekend	Anterico ossifrago	Anterico ossifrago	Anterico *Port* Kosatki *Pol.* Beenbrud *Dan.* Ilagraset *Swed*
538	Waterkers	Crescione	Berro	Agriaõ *Port* Wodanoia kress *Russ* Rzezucha *Pol.*
182	Bankalboom	- - -	- - -	Katu-tsjacca *Malab.* Cay gao *Cochinch.*
850	Kanoraager	- - -	- - -	Bandura *Cey*
498	Kattekruid	Gattaria	Gatera	Kurka *Malab* Koschitza mehta *Russ*
146	Oleander	Oleandro	Adelfa	Loendro *Port.* Tifiæ *Arab* Oleander *Dan & Swed.*
136	Tabak	Tabacco	Tabaco	Petume *Brazil* Tamaka *Indian.* Tabac *Russ & Pol. &c*
476	Nigelle	Nigella	Arañuela	Nigella *Port* Ozarnucha ziele *Pol*
390	Salpeterstruik	- - -	- - -	Solotucha *Russ* Diesengir *Kirgis* Sugak *Turcoman.*
464	- - - - -	- - -	- - -	Neckblad *Swed* Lekuta *Bohem*
12	- - - - -	- - -	- - -	Arvore triste *Port* Manja pumeram *Malab.*
462	Plompen	Nenufaro	Nenufar	Nautar *Egypt* Wodanoi lelei *Russ*
870	Amerikaansche waterboom			
620	Italische erwt	- - -	Tapizot	
510	Basilicum	Basilico	Albahaca	Alfavaca *Port* Rehan *Pers* Wasilik *Russ* Bazylika *Pol.*
212	Druivebloem	Enante	Enante	Enante *Port* Vand-steenbrek *Dan*
318	Tweejaarige	- - -	- - -	Idegen Sarga Viola *Hung*
10	Olyfboom	Ulivo	Olivo	Sejtun *Arab* Oliva *Russ* Oliwne drzewo *Pol.*
880	Gevoelig welkvaren			
612	Stalkruid	Ononide	Detiene-buey	Restaboy *Port* Iglischnik *Russ* Lisi ogon *Pol*
654	Witte wegdistel	Onopordo	Onopordo	Onopordo *Port* Tatarnik *Russ* Oset poylocany *Pol.*
120	Ezelsreuk	- - -	- - -	Bararnei jaszik *Russ.* Tambu *Kirgis* Targa atratzei *Hung*
888	Adderstong	Lingua serpentina	Lengua de sierpe	Lengua de serpente *Port.* Slangetunge *Dan* Laketunga *Swed*
144	Slangenwortel	Radice di serpe	Raiz de serpiente	Hampaddu-tanah *Malay.*
566	Slangenhout	Legno di serpe	Leño serpentino	Raiz de mongo *Port.* Ekawerya *Cey* Slangetræe *Dan*
752	Tweeblad	Ofri	Ophris	Ofrio *Port.*
750	Standelkruid	Orchide	Orchis	
506	Mariolein	Maggiorana	Mejorana	Mardakusj *Arab.* Maeran *Russ.* Maieran *Pol.*
276	Vogelmelk	Ornitogalo	Ornitogalo	Ornitogale *Russ.*
628	Vogelpoot	Piede d'uccello	Serradilla	Pé de passaro *Port.* Fuglefod *Dan.* Fogelfot *Swed.*
26	- - - - -	- - -	- - -	Orneiro *Port.*
524	Leeuwstaart	Orobanche	Orobanca	Zaraza *Pol* Löverumpe *Dan.* Skierfirö *Swed.*
618	Erven	Orobo	Orobo	Museerter *Dan.*
256	Dryvend kalfsvoet			
288	Ryst	Riso	Arroz	Arroz *Port* Dschawat *Ind.* Ptscheno *Russ* Rys *Pol.*
880	Trosvaren	Osmunda	Osmunda	
702	Italiaansche jukboom	Carpino nero	Carpe	Carpe *Port.* Asad *Pers.* Grab *Russ & Pol* Avenbog *Dan.*
828	Witte osyris	- - -	Retama blanca	Mamaku *Jap.*

Page	Nos. to Genera.	British or Systematic Synonymes	English Names	French.	German.
384 *O'xalis L.*	1065	- - - -	Wood sorrel	Surelle	Der sauerklee
172 Oxyánthus *Dec*	489	Gardènia			
820 Oxycóccus *Pers*	906	*Vaccinium*	Cranberry	La canneberge	Die moosbeere
636 Oxytropis *Dec*	1593	*Astrágalus*			
152 Pædèria *L*	439	- - - - - - - - - -		Danaide fétide	Die knackbere
472 *Pæònia* L.	1202	- - - -	Pæony	La pivoine	Die pæonie
178 Paliurus *Tou.*	505	*Rhámnus*	Christ's thorn	Epine de Christ	Der Christdorn
242 Pancratium *L.*	712	- - - -	Sea daffodil	Narcisse de mer	Die machtlilie
820 *Pandanus* L.	2041	- - - -	Screw pine	Le baquois	- - -
52 Panicum *L.*	144	- - - -	Panic grass	Le panic	Das panikgras
460 Papàver *Tou*	1170	- - - -	Poppy	Le pavot	Der mohn
48 Pardánthus *Ker.*	118	*Iris*			
862 Parietària *L.*	2137	Wall-wort	Pellitory	La pariétaire	Das glaskraut
328 Pàris *L*	929	- - - -	True love	Parisette	Die einbeere
350 Parkinsònia L.	976	- - - - - - - - - -		Le genet epineux	Der stachlichte gin. sterbaum
228 *Parnássia L*	694	- - - -	Grass of Parnassus	Fleur du Parnassus	Das einblatt
744 Parthènium *L.*	1840	- - - -	Bastard feverfew	Parthene	Die meidblume
52 *Páspalum L*	139	- - - - - - - - - -		Le paspal	Das pfannengras
324 Passerina *L*	914	- - - -	Sparrow wort	La passerine	Der vogelkopf
564 Passiflòra *L*	1459	- - - -	Passion flower	La grenadille	Die passionsblume
222 *Pastinàca L*	671	- - - -	Parsnep	Le panais	Die pastinake
328 Paullinia Schum.	923	- - - -	Supple Jack	Liane à persil	- - - - - - - - - -
100 *Pavétta* L.	290	Ixòra		- - - - - - - - - -	
524 Pedàlium *L*	1331	- - - - - - - - - -		Pedale	Der ostindische fussangel
528 Pediculàris *L*	1349	- - - -	Lousewort	La pédiculaire	Das lausekraut
406 Pedilanthus *Neck*	1104	- - - -	Slipper plant		
396 *Péganum L.*	1088	- - - -	Wild Syrian rue	Harmale	Die harmelstaude
468 Pelargònium *Herst*	1461	Geràmium	Stork's bill		
544 Peltaria *L*	1403	- - - - - - - - - -		Pellette alliaire	Das scheibenkraut
52 Pennisètum *Rich*	135	*Pánicum*			
580 *Pentapètes L*	1468	- - - -	St. Helena red wood	- - - -	Der scharlachrothe flügelsame
384 Penthòrum *W.*	1062	- - - -	American night-shade	- - - -	Die fünfspitze
514 Pentstèmon *W*	1297	Chelòne			
696 Péntzia Thun.	1719	Tanacètum			
288 *Péplis L.*	836	- - - -	Water purslane	Péplide	Die zipfelblume
716 Perdicium *Dec.*	1752	- - - - - - - - - -		- - - -	Bursten
198 Pergulària *L.*	590	- - - - - - - - - -		Pergulaire	Der laubenstrauch
502 *Perilla* W.	1255	- - - - - - - - - -		Perille	Die Indianische melisse
194 Periplòca *L*	574	- - - -	Virginian silk	Periploque	Schlingen
196 Petivèria L	865	- - - -	Guinea henweed		
694 Petrobium *R Br*	1709	- - - -	White wood		
644 Petrocallis *R Br*	1404	*Dràba*			
80 Petróphila *R Br*	229	*Prùtea*			
922 Peucedanum *L.*	670	Hog's fennel	Sulphurwort	Peucedane	Haarstrang
1016 *Peziza Dil.*	2390	- - - -	Jew's ears	Oreille de Judas	Der becherschwamm
636 *Phàca L*	1592	- - - -	Bastard vetch	Phaque	Das knollenkraut
58 *Phálaris L.*	168	- - - -	Canary grass	Alpiste de Canaire	Kanariengras
1022 Phállus *Mx*	2409	- - - -	Morel	Morille	Die morchel
896 *Phàscum L*	2217	- - - -	Beard moss	- - - -	Das bartmos
614 *Phaseolus L.*	1547	French beans	Kidneybean	Haricot commun	Die gemeine bohne, *or* phaseole
214 *Phellándrium L*	636	- - - -	Water hemlock	La ciguteire des marais	Pferdesaamen
414 Philadélphus *L*	1114	Mock orange	Syringa	Le seringat	Der pfeifenstrauch
192 Philóxerus *R Br*	553	*Gomphrèna*			
58 *Phlèum L.*	165	Timothy grass	Cat's-tail grass	Fléole des pres	Das wiesen-heuschgras
506 Phlòmis *L.*	1268	- - - -	Jerusalem sage	Phlomide	Die strauchartige phlomis
132 Phlóx *L.*	369	Bastard Lychnis	Lychnidea	Le phlox	Die flammenblume
828 Phœnix *L*	2049	- - - -	Date palm	Le dattier	Der dattelbaum
286 *Phórmium L*	823	- - - -	New Zealand flax		
510 Phyllanthus *L*	2027	- - - -	- - - - - - - - - -	- - - -	Die blatterblume
208 Phýllis *L*	617	- - - -	Bastard hare's-ear	Phyllide	Die schone phyllis
156 Phýsalis *L.*	448	Alkekengi	Winter cherry	Coqueret	Die judenkirsche
168 Phyteuma *L*	465	- - - -	Rampion	La raponcule	Der rapunzel
390 Phytolácca *L.*	1071	Mountain caloloe	Virginian poke	Morelle à grappes	Die scharlachbere
202 Piaránthus *R Br*	595	Stapèlia			
668 Picridium *Pers.*	1626	*Sónchus*			
672 Picris *L*	1634	Yellow succory	Ox tongue	Picride	Das bitterkraut,
782 Pilea *Lindl.*	1961	*Urtica*			
894 Pilulària *L.*	2215	Pepper grass	Pillwort	Pilulaire	Der pillenfarn
712 Pimpinélla *L*	635	Anise	Burnet saxifrage	Boucage	Kleine bibernel
20 Pinguicula *L.*	52	Yorkshire sanicle	Butterwort	Grassette	Das fettkraut
802 *Pinus L.*	2012	- - - -	Pine or fir	Le pin	Die kiefer
28 *Piper L.*	77	- - - -	Pepper	Le poivrier	Der pfeffer
606 Piscidia *L.*	1524	- - - -	- - - -	Le boisvivant	Der fischfänger
832 Pistàcia *L*	2065	Turpentine tree	Pistachia tree	Le pistachier	Der pistazienbaum
620 *Pisum Tou.*	1560	- - - -	Pea	Pois	Die erbse
96 Plantago *L.*	278	- - - -	Plantain	Plantain	Wegerich
798 Platanus *L.*	2002	Button wood	Plane tree	Le platane	Der platanus
606 Platylòbium *Sm*	1525	- - - -	Flat pea		
510 Plectránthus *Herit.*	1282	*O'cymum*			

Page	Dutch.	Italian.	Spanish.	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
384	Klaverzuuring	Alleluia	Aleluya	Koganne gusa *Jap.* Saitschaitschawel *Russ.*
320	Veenbessen	Ossicocco	Vacernia lagunosa	Glukwa *Russ.* Tranbar *Swed.*
152	Stinkende knapbessen	- - -	- - -	Fakobokon, Feifuri kadsura, Kusa panja *Jap.*
472	Peonie	Peonia	Peonia	Peonia *Port* Thuoc duoc *Cochinch.* Pionnaja rosa *Russ*
178	Christdoorn	Paliuro	Paliuro	Tæken-ágatch *Tart.*
242	Trosnarcis	Giglio marino	Amores mios	
820	- - - - -	- - -	- - -	Kalda *Malab.* Cay jua *Coch.* Kadi *Arab.*
52	Panik	Panico	Panizo	Proso *Russ & Pol* Panikgræs *Dan.*
460	Maankop	Papavero	Adormidera	Papoila *Port* Post *Ind* Mak *Russ & Pol* Valmue *Dan.*
862	Glaskruid	Parietaria	Parietaria	Parietaria *Port* Noc i dzien *Pol*
328	Wolfsbezie	Uva di volpe	Ubas de zorro	Parisetta *Port* Woronei glas *Russ*
350	Doornbremboom			
228	Parnaskruid	Parnasia	Parnasia	Parnassi. *l ort* Pereloi trawa *Russ.* Jednolist *Pol.*
744	Maagdebloem			
52	Raspgras			
324	Passerina	- - -	Mierdacruz	
564	Passiebloem	Granadiglia	Granadilla	Passionsblomster *Dan.* Passionsblomma *Swed*
222	Pinsternakel	Pastinaca	Pastinaca	Pustarnak *Russ* Pasternak *Pol* Pastinak *Dan*
328	Praatjes	- - -	- - -	Cururu-ape *Braz* Kaka-toddaly *Mal*
100	Scheelkoorn	- - -	- - -	Pavate *Cey* Pavetra *Malab* Ta sa *Chin.*
524	Oostindisch minkyzer	- - -	- - -	Patiraja *Cey* Kaki-mullu *Malab.*
528	Luiskruid	Pidocchiera	Gallarito	Piolheira *Port.* Luusurt *Dan.*
396	Harmel	Armora	Alharma	Harmala *Port* Hornaia routa *Russ.*
544	Schyfzaad			
580	- - - - -	-	- - -	Sjasmin *Malab.*
384	Vyfpunt			
288	Kleine moerasmuur			
716	Patryskruid			
198	Luiffelbloem	- - -	- - -	Huo muon, Fi si than *Chin.*
502	- - - - -	- - -	- - -	Cottam *Malab.*
194	Slingerplant	- - -	- - -	Sar modam *Tart. & Kalm*
222	Haairstreng	Peucedano	Peucedano	Peucedano *Port* Wolosjanka *Russ.* Wieprzymiec *Pol*
1016	Judas-oor	Orecchio di Giuda	Oreja de Judas	Orelha de Judas *Port.*
636	Bootpeul	Faca	Garvancilla	
58	Kanary	Falari	Alpiste	Arai *Jap* Kanariegræs *Dan* Kanariefro *Swed.*
1022	Morilje	Spugnola	Murguras	Morilha *Port* Smortschok *Russ.*
896	Baardmoos			
614	Turksche boonen	Fagiuolo	Fasoles	Feijaõ *Port* Torok mame *Jap.* Bobu tureskie *Russ.* Fazoli *Pol*
214	Waterkervel	Felandro acuatico	- - -	Kruszykamien-siele *Pol.* Stakra *Swed.*
414	Welriekende philadelphus	Siringa bianca	Geringuilla	Philadelpho *Port.* Tschubuschnik *Russ* Hvit schersmin *Swed.*
58	Weidig doddegras	- - -	- - -	Arjanétz *Russ* Donhammergræs *Dan.*
506	Heesterig vitkruid	- - -	Aguavientos	Wetrenaja sapja *Russ.*
132	Vlambloem			
828	Dadelboom	Palma dattilifera	Palma	Palmeira de igreja *Port.* Nachl *Arab.* Palma *Pol.*
810	Bladbloem			
208	Kanarische phyllis			
156	Blaaskruid	Alchechengi	Alcuequenjo	Miachounha *Russ* Boborelka *Boh.*
168	Raponsje	Raperonzolo	Rapunculo	Rapunculo *Port* Rapunsel *Dan. & Swed*
390	Lakplant	Pianta lacca	Hierba carmin	Kalalio *Surinam.*
672	Bitterkruid	- - -	- - -	Libbæjn *Arab.*
804	Pillenkruid	Pilularia	Pilularia	Pilularia *Port.*
212	Kleine bevernel	Pimpinella sassifraga	Pimpinella blanca	Pimpinella branca *Port* Bedrenez *Russ.*
20	Smeerblad	Pinguicola	Grassila	Grassetta *Port.* Vibefit *Dan.* Tetort *Swed.*
802	Pynboom	Il pino	El pino	Sosna *Russ*
28	Peper	Pepe	Pimienta	Pimenteira *Port.* Pilpil *Pers.* Perez *Russ*
606	Vischboom			
832	Pistacheboom	Pistacchio	Alfocigo	Alfostigo *Port* Fistuk *Arab*
620	Erwt	Piselli	Pesoles	Ervilhas *Port.* Wan *Jap.* Goroch *Russ* Groch *Pol*
96	Weegbree	Piantaggine	Llanten	Kamasch *Pers* Uschik *Russ.* Babka *Pol.*
798	Platanus	Platano	Platano	Platano *Port.* Tschinar *Russ* Tschandary *Georg*

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758	*Pleurothállis R Br*	1894	Epidéndrum			
118	*Plumbàgo L*	324	- - - -	Leadwort	Dentelaire	Bleywurz
148	*Plumièria* L.	415	- - - -	Red jasmine	Le franchipanier	Der rothe jasmin
66	*Poa L*	196	- - - -	Meadow grass	Paturin	Viehgras
342	Podalyria Lam	948	*Sophòra*	Duck's-foot	- - - -	Entenfuss
460	*Podophýllum L.*	1166	May apple			
756	*Pogònia R Br*	1879	*Arethùsa*			
908	*Pohlia* Hedw	2239	*Bryum*	- - - -	Poincillade	Der pfauenschwanz
350	*Poinciàna* L.	977	*Cæsalpínia*	Greek valerian	La valériane grecque	Das speerkraut
132	*Polemònium L*	370	Jacob's ladder	Tuberose	La tubéreuse	Die tuberose
254	*Polianthes L.*	747	- - - -			
876	*Polybótrya H & B*	2168	*Acróstichum*			
74	*Polycárpon L*	221	*Linum*	All-seed		
602	*Polygala Tou.*	1508	Rattlesnake root	Milkwort	Le polygale	Die kreuzblume
270	*Polygónatum Desf.*	789	Convallària	Solomon's seal	Le sceau de Salomon	Die weisswurz
326	*Polygonum L.*	921	Redshanks	Persicaria	Le persicaire	Flöhkraut
878	*Polypòdium L.*	2175	- - - -	Polypody	Le polypode	Der tupfelfarren
56	*Polypogon Desf*	154	*Agróstis*			
910	*Polytrichum L.*	2241	- - - -	Great golden maidenhair	La perce-mousse	Das haarmos
754	*Ponthièva* R. Br	1872	Neóttia			
840	*Pópulus L.*	2087	Abele tree	Poplar	Le peuplier	Die pappel
398	*Portulàca L.*	1091	- - - -	Purslane	Le pourpier	Der portulak
228	*Portulacaria Jac.*	692	*Claytònia*	Purslane tree		
106	*Potamogèton L*	317	- - - -	Pond-weed	Le potamot	Das saamkraut
452	*Potentilla L*	1153	- - - -	Cinquefoil	Quintefeuille	Das fünffingerkraut
790	*Potèrium L.*	1990	- - - -	Burnet	La pimp enelle	Die pimpernelle
88	*Pothos* L.	252	- - - -	- - - -	- - - -	Anhangsel
512	*Prásium L*	1288	- - - -	Hedge-nettle		Die nesselstande
670	*Prenánthes L.*	1630	- - - -	Wall lettuce	Condrille des murs	Die mauerprenanthe
126	*Primula W.*	350	- - - -	Primrose	La primevère	Die schlusselblume
286	*Prinos L*	828	- - - -	Winter berry	Apalanche	Die winterbeere
80	*Prótea L.*	231	- - - -	- - - -	L'arbre d'argent	Der silberbaum
512	*Prunélla* L.	1286	- - - -	Self-heal	Brunelle	Die prunelle
422	*Prùnus Tou*	1129	*Cérasus*	Plum	Prunier	Der pflaumenbaum
	P. Armeniaca		- - - -	Apricot	L'abricotier	Der aprikosenbaum
	P. Cérasus		- - - -	Cherry	Le cerisier	Der kirschbaum
	P. Padus		- - - -	Bird cherry	Le putiet	Die traubenkirsche
416	*Psidium L.*	1181	- - - -	Guava	Le goyavier rouge	Der kujava-apfel
638	*Psoràlea L*	1597	- - - -	- - - -	Trefle bitumineux	Der harzklee
100	*Ptilea L*	298	- - - -	Shrubby trefoil		
882	*Ptèris L*	2190	Female fern	Brake	Fougere femelle	Der saumfarren
192	*Pulmonària L*	338	Bugloss cowslip	Lungwort	La pulmonaire	Das lungenkraut
420	*Púnica W*	1127	- - - -	Pomegranate	Le grenadier	Der granatbaum
722	*Pyrèthrum Sm.*	1770	Matricària	Feverfew	La matricaire offi- cinale	Das mutterkraut
362	*Pýrola L*	1022	- - - -	Winter-green	Pyrole	Das wintergrün
424	*Pýrus L*	1133	- - - -	Pear	La poirier	Der birnbaum
	P Malus L. sp 7090		- - - -	Apple	Pommier	Der apfelbaum
354	*Quassia W*	1002	- - - -	Quassi wood	Bois de quassie	Die quassie
794	*Quercus L*	2000	- - - -	Oak	Le chene	Die eiche
364	*Quisquàlis L*	1028	- - - -	- - - -	Le quisqualier	Der sonderling
132	*Ramónda* Mx	374	*Verbáscum*			
174	*Rándia L*	490	*Gardènia*	Crowfoot	Renoncule	Die ranunkel
486	*Ranúnculus Bauh*	1233	Buttercups	Radish	Raifort	Der rettig
556	*Ráphanus L*	1443	Charlock	Indian hawthorn		
426	*Raphiolèpis Lindl*	1136	- - - -	- - - -	Le boislait	
154	*Rauwólfia* L.	441	- - - -	Mignonette	Le réséda	Die reseda
398	*Resèda L.*	1102	- - - -	- - - -	Gaude	Der wau
	R Lutèola L sp 6658		Dyer's weed			
828	*Réstio L.*	2047	- - - -	Rope grass		
176	*Rhamnus L.*	503	- - - -	Buckthorn	Le nerprun	Der kreuzdorn
334	*Rhèum L*	938	- - - -	Rhubarb	Rhubarbe	Rhabarber
318	*Rhéxia L*	900	- - - -	Virginian soapwort	Quadrette	Die ankerblume
524	*Rhinánthus L*	1340	Cock's comb	Yellow rattle	Cocréte des prés	Der hahnenkamm
414	*Rhipsalis Gae.*	1112	*Cáctus*			
358	*Rhododéndron L.*	1014	- - - -	Dwarf rosebay	Le rosage	Alprosen
224	*Rhús Tou*	681	- - - -	Sumach	Le sumach ordinaire	Der sumach
48	Rhynchóspora *Vahl*	120	*Schœ'nus*			
190	*Ribes* L.	550	- - - -	Currant	Le grosseiller com- mun	Die Johannisbeere
	R Grossulària		- - - -	Gooseberry	Le groseiller épineux	Die stachelbeere
814	*Ricinus L*	2034	- - - -	Palma-christi	Le ricin ordinaire	Der wunderbaum
626	*Robinia* L.	1568	- - - -	Locust tree	Acacie commun	Der acacienbaum
442	*Rósa Tou*	1148	- - - -	Rose	Le rosier	Die rose
22	*Rosmarinus L*	61	- - - -	Rosemary	Romarin	Der rosmarin
94	*Rùbia L*	267	- - - -	Madder	La garance	Die färberröthe
450	*Rubus L*	1149	Blackberry	Bramble	La ronce	Der brombeerstrauc
	R Idæ'us L sp 7524		- - - -	Raspberry	Framboisier	Der himbeerstrauch
292	*Rùmex L*	856	Sorrel	Dock	L'oseille	Der sauerampfer
846	*Ruscus L.*	2111	Knee holly	Butcher's broom	Le fragon piquant	Der mausdorn
354	*Rúta Tou.*	998	- - - -	Rue	La rue	Die raute
130	*Sabbàtia* Adan	367	*Chironia*			
74	*Saccharum L*	215	- - - -	Sugar-cane	Cannamelle	Das zuckerrohr
106	*Sagina L.*	319	Chickweed break- stone	Pearlwort	Sagine	Der vierling

Page	Dutch.	Italian.	Spanish.	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
118	Loodkruid	Piombaggine	Velcza	Dentellaria *Port.* Liigtorneurt *Dan.* Blyrot *Swed.*
66	Beemdgras	Poa	Poa	Faaregræs *Dan.* Gröe *Swed.*
460	Eendenpoot			
350	Paauwekuif	- -	- - -	Tsietti-mandaru *Malab* Hoa phung *Cochinch.*
132	Speerkruid	Polemonio	Valeriana griega	Valeriana grega *Port.* Grezkoe balderjan *Russ.*
254	Tuberoos	Tuberoso	Tuberosa	Hoa hue *Cochinch.* Tuberose *Dan* Tuberos *Swed*
602	Kruisbloem	Poligala	Poligala	Fima fagi *Jap.* Iztod *Russ* Wyczka konicza *Pol*
270	Salomons zegel	Il ginocchietto	El sello de Salomon	O scello de Salomão *Port* Kupena *Russ*
926	Persenkruid	Persicaria	Persicaria	Ramasch *Pers* Potschednaja trawa *Russ*
878	Boomvaren	Polipodio	Polipodio	Panna kalengo *Malab* Osokor *Russ* Paproc *Pol*
910	Haairmos	Politrico	Politrico	Politrico *Port.* Kokuschnik lenn *Russ* Jomfruehaar *Dan*
840	Abeelboom	Pioppo	Alamo	Topol *Russ* Topola *Pol* Poppel *Dan*
396	Porselein	Porcellana	Verdolaga	Beldroega *Port.* Cholsa *Pers* Schruka *Russ*
106	Fonteinkruid	Potamogeto	Potamogeto	Medwesche ucho *Russ* Rdest wodny *Pol*
452	Vyfvingerkruid	Cinquefoglio	Cinco en rama	Schabnik *Russ*
790	Gewoone pimpernel	Pimpinella	Pimpinela	Pimpinella *Dan.* Pimpernella *Swed*
88	Hangbast	- - -	- - -	Potha *Ccy* Ana-parua *Malab.* Cay ray leo *Cochinch*
670	Muurig knikbloem	- - -	- - -	Vild latuk *Dan & Norw*
126	Sleutelbloem	Primavera	Primula veris	Primavera *Port.* Bukwiza *Russ.*
80	Zilverboom			
512	Brunelle	Brunella	Brunela	Prunella *Port* Kago noso *Jap* Gortanaja trawa *Russ*
422	Pruimboom	Prugno	Ciruelo	Amexieira *Por* Barkuk *Arab* Sliwnik *Rus* Sliwina *Pol.*
	Abrikoos	Albercocco	Albarico-queira	Kuriga *Russ* Morela *Pol.*
	Kersenboom	Ciriegio	Cerezo	Wischnaja *Russ* Wisnia *Pol*
	Vogelkersen	Pado	Pado	Tocheremucha *Russ*
416	Gojaves-appel	- - -	- - -	Xalxocotl *Mexico.* Malacca pela *Malab.*
638	- - - - -	- - -	Culeno	Culeno *Chili.*
892	Randvaren	Felce femmina	Helecho femmino	Feto femea *Port* Warabi *Jap* Wodianoi popoротnik *Russ*
122	Longekruid	Polmonaria	Pulmonaria	Pulmonaria *Port* Meduniza *Russ* Pluenik *Pol*
420	Granaatboom	Granato	Granado	Romeira *Port* Rumman *Arab* Granatnik *Russ.*
722	Maartel	Matricaria	Matricaria	Matricaria *Port.* Matoschnaja trawa *Russ*
862	Wintergroen	Pirola	Pirola	Pirola *Port* Gruscha dikaja *Russ* Vintergron *Dan.*
424	Peereboom	Il pero	El peral	Kummitri *Arab* Gruscha *Russ* Gruszka *Pol*
	Appelboom	Melo	Manzano	Maceira *Port* Iablon *Russ* Tgffah *Arab*
854	Kwassiehout	Legno di quassia	Leño de quassia	Quassiatræe *Dan* Quassiatrad *Swed*
794	Eik	Quercia	Roble	Pélut *Pers* Dub *Russ* Dab *Pol* Eeg *Dan* Ek *Swed.*
504	Warstruik	- - -	- - -	Xi kiun ssu *Chin* Cay tlun *Cochinch*
486	Ranonkel	Ranuncolo	Ranunculo	Ranunculo *Port* Iutik *Russ* Ranunkel *Dan & Swed.*
556	Tamme radys	Rafano	Rabano	Daikon *Jap* Reddikke *Dan.* Rattika *Swed.*
398	Reseda	Reseda	Miñoneta	
	Wouw	Guadarella	Gualdu	Gauda *Port* Vau *Dan*
173	Wegedoorn	Ranno	Ramno	Escambroeiro *Port* Getappel *Swed*
334	Rhabarber	Rabarbaro	Ruibarbo	Ruibarbo *Port* Rhewen *Russ*
918	Ankerbloem			
524	Haanekam	Cresta di gallo	Cresta de gallo	Klopownik *Russ* Hanekam *Dan.* Skallergras *Swed*
228	Roozelaar	- - -	- - -	Pjanischnik *Russ* Sheri *Tart.*
224	Sumak	Sommaco	Zumaque	Sumagre *Port.* Koschewnoe derewo *Russ.*
190	Aalbezie	Ribes rosso	Ribes rojo	Groselheira vermelha *Port.* Smorodina krasnaja *Russ*
	Kruisbezie	Uva spina	Uva espina	Groselheira *Port* Krischownik *Russ*
814	Wonderboom	Ricino	Ricino	Nhambu guaçu *Brazil.* Charua *Arab.*
626	Zoethoutboom	- - -	Falsa acacia	Acacia bastarda *Port.*
422	Roozeboom	Rosajo	Rosal	Roseira *Port* Kim anh tu *Cock.* Rosa *Russ* Roza *Pol.*
22	Rosmaryn	Rosmarino	Romero	Rosmarinho *Port* Klil *Arab.* Rosmarin *Dan. & Swed.*
94	Mee	Robbia	Granza	Mariona *Russ* Marzana *Pol.*
450	Braamen	Rovo	Zarza	Jaschewika *Russ* Iezyny *Pol.*
	Braamboos	Rovo ideo	Zarza idea	Malinik *Russ.* Maliny *Pol.*
292	Veldzuuring	Acetosa	Acedera	Azedeira *Port.* Konnewoi schawel *Russ.*
846	Muisdoorn	Rusco	Brusco	Menschoi myschei tern *Russ.* Musetorne *Dan.*
354	Ruite	Ruta	Ruda	Schedab *Arab.* Ruta *Russ.* Rude *Dan* Vinruta *Swed.*
74	Suikerriet	Cannamele	Caña de azucar	Cana de assucar *Port.* Viba *Brazil.*
106	Vetmuur	- -	-	Takanostme *Jap* Grasarv *Norw*

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790 *Sagittària L.*	1988	Adder's tongue	Arrow-head	Sagittaire	Das pfeilkraut
S sagittifòlia L sp 13330		- - - - -	- - - - -	Flèchière commune	
788 *Ságus* Gae	1982	- - - - -	Sago palm	Le cycas des Indes	Der sagoubaum
6 *Salicórnia L*	22	Saltwort	Glasswort	Salicorne	Glasschmalz
798 *Salisbùria* Sm.	2003	- - - - -	Gingko tree		
820 *Salix L.*	2042	- - - - -	Willow	Le saule	Die weide
204 *Salsòla L.*	609	Glasswort	Saltwort	La soude	Die sodapflanze
22 *Sálvia L.*	62	- - - - -	Sage	La sauge	Die salbey
224 *Sambùcus L*	680	- - - - -	Elder	Le sureau	Der hohlunder
168 *Samblus L.*	471	Pimpernel	Brook-weed	Samole	Das samoskraut
460 *Sanguinària L.*	1165	- - - - -	Puccoon		
88 *Sanguisórba L.*	256	Burnet saxifrage	Great burnet	Le grande pimprenelle des prés	Der wiesenknopf
210 *Sanicula L*	623	- - - - -	Sanicle	La sanicle	Der sanickel
102 *Sántalum* W	307	Saunders	Sandal wood	Santal	Der santelbaum
694 *Santolina L.*	1714	- - - - -	Lavender cotton	Santoline	Das cypressenkraut
328 *Sapindus L*	926	- - - - -	Soap-berry	Savonnier	Die seifenbeere
370 *Saponària L.*	1045	- - - - -	Soapwort	La savonniere	Das seifenkraut
174 *Sarcocéphalus Afz.*	498	- - - - -	Guinea peach		
462 *Sarracènia L*	1173	- - - - -	Side-saddle flower		
496 *Satur̀ja L.*	1246	- - - - -	Savory	Sarriette	Die saturei
750 *Satyrium L.*	1856	*Orchis*	- - - - -	Le satyrion	Bocksgeilen
298 *Saurùrus L*	872	- - - - -	Lizard's tail	Lézardelle	Der eidechsenschwanz
366 *Saxífraga L*	1041	- - - - -	Saxifrage	Saxifrage	Der steinbrech
90 *Scabiosa Vaill.*	264	- - - - -	Scabious	La scabieuse	Die skabiose
208 *Scándix L*	619	Chervil	Cicely	Le cerfeuil	Der gartenkerbel
482 *Schinus L*	2093	Peruvian mastick-tree	- - - - -	Le mollé	Der mollebaum
898 *Schistostèga Mohr*	2218	Gymnóstomum			
48 *Schœ'nus L.*	119	- - - - -	Bog-rush	Le choin	Das knopfgras
806 *Schubértia* Mir	2015	*Cupréssus*	- - - - -	Cyprès distique	
278 *Scilla L*	803	- - - - -	Squill	La scille	Die meerzwiebel
48 *Scirpus R Br*	123	Bull-rush	Club-rush	Le scirpe	Die binse
366 *Scleránthus L*	1037	- - - - -	Knawel	Gnavelle annuelle	Der wilde knauel
68 *Sclerochlòa Beauv*	199	*Póa*	Hard grass		
882 *Scolopéndrium Sm*	2188	*Asplènium*	Hart's-tongue		
678 *Scólymus L.*	1659	- - - - -	Golden-thistle	L'épine jaune	Die golddistel
96 *Scopària L*	276	- - - - -	Wild liquorice	Le balai	Das besenkraut
628 *Scorpiùrus L.*	1579	- - - - -	Caterpillar	Chenille	Der skorpionschwanz
666 *Scorzonèra L.*	1625	- - - - -	Viper's grass	Scorsonere	Die skorzonere
530 *Scrophulària L*	1356	- - - - -	Figwort	La scrophulaire	Die braunwurz
512 *Scutellaria L.*	1285	Hooded willow-herb	Skull-cap	La toque	Das schildkraut
72 *Secàle L*	209	- - - - -	Rye	Le seigle	Der roggen
382 *Sèdum L*	1061	- - - - -	Stone-crop	La joubarbe	Das sedum
S álbum L. sp 6451		- - - - -	- - - - -	Trique-madame	
220 *Selinum L*	663	- - - - -	Milk-parsley	Le persil de marais	Die sumpfsilge
406 *Sempervivum L*	1110	- - - - -	Houseleek	Joubarbe	Die hauswurz
704 *Senècio L*	1738	Simpson	Groundsel	Le seneçon	Die kreuzpflanze
754 *Serápias L.*	1869	Helleborine	- - - - -	L'elleborine	Die serapie
680 *Serrátula L.*	1661	- - - - -	Saw-wort	Sarrette	Die farberscharte
82 *Serrùria R. Br.*	234	*Protea*			
514 *Sésamum W.*	1296	- - - - -	Oily-gram	Sésame	Der sesam
630 *Sesbània* Pers.	1581	*Æschynómene*			
214 *Séseli L.*	642	- - - - -	Meadow-saxifrage	Le seseli	Der sesel
60 *Sesèria* Sco.	177	*Cynosùrus*			
832 *Shephérdia* Nut	2077	*Hippóphae*			
94 *Sherárdia L.*	269	- - - - -	Field-madder	- - - - -	Die ackerröthe
810 *Sicyos L.*	2023	- - - - -	Single-seeded cucumber		
588 *Sida L*	1487	- - - - -	Indian mallow	L'abutilon	Die sida
498 *Sideritis L*	1252	- - - - -	Ironwort	La crapaudine	Das gliedkraut
100 *Siderodéndrum Jac*	292	- - - - -	Iron-tree		
150 *Sideróxylon L.*	425	- - - - -	Iron-wood	L'argan	Das eisenholz
374 *Silène L*	1048	- - - - -	Catchfly	Silene	Die silene
554 *Sinàpis Tos.*	1433	- - - - -	Mustard	La moutarde	Der senf
216 *Sison L.*	647	Stone parsley	Honewort	Berle aromatique	Amomlein
214 *Sium L*	646	- - - - -	Water parsnep	Berle	Wassermerk
S. Sisarum L. sp 3598		- - - - -	Skirret	Chervis	Die zuckerwurzel
270 *Smilacina Desf.*	788	Convallària			
836 *Smilax L*	2081	- - - - -	Rough bindweed	Le smilace	Die stechwinde
628 *Smithia* H. K.	1580	*Æschynómene*			
216 *Smyrnium L.*	650	- - - - -	Alexanders	Le maceron	Das smyrnenkraut
156 *Solànum L.*	451	- - - - -	Nightshade	Morelle	Der schwarze nacht schatten
S. Lycopérsicum *W.* sp 2517		- - - - -	Love apple	Tomate	Liebes apfel
S. tuberòsum *L.* sp. 2521		- - - - -	Potato	Pomme-de-terre	Die kartoffeln
128 *Soldanélla L.*	352	- - - - -	- - - - -	Soldanelle	Die drattelblume
710 *Solidàgo L.*	1740	- - - - -	Golden-rod	La verge d'or	Die goldruthe
668 *Sónchus L*	1627	- - - - -	Sow thistle	Le laiteron	Die saudistel
860 *Sórghum* W. en.	2131	*Hólcus*			
82 *Sorocéphalus R. Br.*	236	*Protea*			

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790	Pylkruid	Saetta	Saeta	Setta *Port* Bossai *Jap* Strelnaja *Russ* Pilurt *Dan*
778	Sagoeboom	Il sago	El sagú	O sagûeiro *Port* Todda-panna *Malab* Sagutræe *Dan*
6	Zoudkruid	Salicornia	Salicor	Salicornia *Port* Chræsi *Arab* Salturt *Dan* Saltort *Swed*
820	Wilg	Salcio	Sauce	Jeno ki *Jap* Wetla *Russ* Pil *Dan.* Pihl *Swed.*
204	Loogkruid	Soda	Sosa	Solianka *Russ* Saltyder *Dan* Soudaôrt *Swed*
22	Salie	Salvia	Salvia	Salva *Port* Schalweja *Russ* Szalwia *Pol.*
224	Vlierboom	Sambuco	Sauco	U chu yu *Chin* Busina *Russ* Bez *Pol.*
168	Strandpungen	- - -	- - -	Strandsamel *Dan.*
88	Sorbenkruid	Pimpinella maggiore	Pimpinela de Italia	Pimpinela de Italia *Port.* Tschernogolowka *Russ.*
210	Sanikel	Sanicola	Sanicula	Sanicula *Port* Zanikel *Pol* Sanikel *Dan*
102	Sandelboom	Sandalo	- - -	Sandalo *Port* Cay huynh da *Coch* Sandeltræ *Dan.*
694	Cypreskruid	Santolina	Santolina	Santolina *Port*
328	Zeepboom	- - -	- - -	Rarak *Java* Cay bon hon *Cochinch*
370	Zeepkruid	Saponaria	Jabonera	Saboeira maior ou ordinaria *Port.* Sæbeurt *Dan.*
496	Keul	Santoreggia	Ajedrea	Segurelha *Port* Tschabér *Russ* Ozabr *Pol* Saer *Dan.*
750	Bokskulletjes	Satyrio	Satyrio	Satyrio *Port*
366	Steenbreek	Sassifragia	Saxifragia	Saxifraga *Port* Steenbrek *Dan*
90	Schurftkruid	Scabbiosa	Escabiosa	Escabiosa *Port* Grudnaja trawa *Russ*
208	Tuinkervel	Cerfoglio	Perifollo	Cerotolho *Port* Kerwel *Russ* Trzebula *Pol* Körvel *Dan*
482	Heilboom	- -	Falso pimiento	Mulli *Peru*
48	Biesgras	- - -	Escheno	Avnknippe *Dan* Ag *Swed*
278	Zeeajuin	Scilla	Escila	Alvarrã *Port* Skille *Dan*
48	Bies	Scirpo	Cirpo	Scirpo *Port* Sitnik *Russ* Kogleax *Dan* Saf *Swed*
366	Jaarlyks hardbloem	- - -	- - -	Skléranse *Russ* Knavel *Dan.* Tandgrâs *Swed & Norw*
678	Varkensdistel	Scolmo	Cardillo	Escolymo *Port*
96	Bezemkruid	- - -	Escobilla menuda	Vassourinha do Brasil *Port* Tupeicava *Brazil*
628	Scorpioenstaart	Scorpioide	Escorpiuro	Escorpioa *Port*
666	Skorzoneere	Scorza nera	Escorzanera	Escorcioneira *Port* Skorzonere *Dan* Skorzonera *Swed*
530	Skrofelkruid	Scrofolaria	Escrofularia	Escrofularia *Port* Naryschnik *Russ*
512	Helmkruid	Terzanaria	Tercianaria	Tercianaria *Port* Schischak trawa *Russ* Feberurt *Dan*
72	Rog	Segale	Centeno	Senteio *Port* Rosch *Russ* Rez *Pol* Rug *Dan* Rag *Swed.*
382	Huislook	Sedo bianco	Uvas de gato	Steenpryd *Dan* Helleknoppar *Swed*
220	Wilde eppe	- - -	Apio lechal	Vandmerke *Dan* Finsk ingfára *Swed* Jert *Lapl*
406	Donderbaard	Sempreviva	Siempreviva	Sayaô curto *Port* Tschesnok dikoi *Russ*
704	Kruiskruid	Senecione	Hierba cana	Tasneirinha *Port* Krestownik *Russ*
754	Niesblad	Elleborina	Eleborina	Elleborinha *Port* Huullæbe *Dan*
680	Zaagblad	Serratola	Serratula de los tintoreros	Serratula *Port* Serp *Russ.* Jelenl trank *Pol*
514	Vygboonen	Sesamo	Ajonjole	Gergelim *Port* Kunschut *Pers* Sesam *Dan & Swed*
214	Bergvenkel	Seseli	Seseli	Seseli *Port* Seselurt *Dan* Seselort *Swed*
94	- - - - - - - -	- - -	- - -	Blaameader *Norw*
588	Hoornheemst	Abutilo	Abutilo	Abutilo *Port*
98	Yzerkruid			
150	Yzerboom			
374	Veldkaars	- - -	- - -	Svælgkranda *Dan*
554	Mosterd	Senepa	Mostaza	Kabar *Arab* Gortschiza *Russ* Gorczyka *Pol*
216	Kruiderige steeneppe	- - -	- - -	Amomo da Allemanha *Port*
214	Watereppe	Sio	Berrera	Rabaça maior ou des rios *Port*
	Suikerwortel	Sisaro	Chirivia tordesca	Sokkerod *Dan*
836	Steekende winde	Smilace	Esmilace	Salsaparilha *Port.*
216	Veldeppe	Macerone	Apio caballar	Olusatro *Port*
156	Zwarte nagtschade	Solatro nero	Hierba mora	Herva moira *Port* Enabeddib *Arab.*
	Appeltjes der liefde	Albergamo	Tomates	Tomateiro *Port*
	Aardappelen	Tartufibianci	Batatas inglezas	Batata da terra *Port.*
128	Soutenelle			
710	Goudroede	Verga d'oro	Vara de oro	Vara d'oiro *Port* Senbli *Jap* Solotoschnik *Russ.*
668	Haazenlatuw	Sonco	Cerraja	Tschistotél *Russ.* Mleczne *Pol* Svinetidsel *Dan*

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218 Spanánthe *Jac.*	659	Hydrocótyle			
40 Sparáxis *Ker*	99	*Ixia*			
774 Sparganium *L*	1946	- - - - -	Bur reed	Le rubannier	Die igelsknospe
610 Spártium *L.*	1537	- - - - -	Broom	Le genet	Die pfrieme
82 Spatálla *R Br*	237	Pròtea			
390 Spérgula *L*	1070	- - - - -	Spurrey	Spergule	Der ackerspergel
94 Spermacòce *L*	270	- - - - -	Button weed		
896 Sphagnum *L*	2216	- - - - -	Bog moss	Sphaigne	Das torfmos
734 Sphenógyne *R.Br*	1816	Arctòtis			
134 Spigèlia *L*	379	- - - - -	Worm grass		
690 Spilánthes *L.*	1695	- - - - -	- - - - -	Abeicédaire	
834 Spinàcia *L*	2070	- - - - -	Spinage	L'épinard	Der spinat
428 Spiræ'a *L*	1141	Queen of the meadows	Meadow sweet, &c	La reine des prés	Die wiesenkönigen
906 Spláchnum *L*	2231	- - - - -	- - - - -	Le splane	Der schirmmos
382 Spóndias *L*	1059	- - - - -	Hog plum	Le monbain	Der monbinbaum
56 Sporóbolus *R Br*	159	*Agróstis*			
504 Stáchys *L*	1263	- - - - -	Hedge nettle	Stachyde	Die rossnessel
20 Stachytárpheta *Vahl*	54	*Verbèna*	Bastard vervain		
226 Staphylèa *L*	634	- - - - -	Bladder nut	Staphilier	Die pumpernuss
234 Statice *L*	706	Thrift	Sea lavender	Statice	Das seegras
376 Stellària *L*	1049	- - - - -	Stitchwort	La stellaire	Das augentrostgras
324 Stellèra *L*	913	- - - - -	- - - - -	- - - - -	Die sperlingszunge
814 Stercùlia *L*	2036	- - - - -	- - - - -	La bois caca	Der stinkbaum
828 Stilago *L.*	2050	- - - - -	Chinese laurel	- - - - -	Der salamanderbaum
54 Stipa *L.*	150	- - - - -	Feather grass	Stipe	Das pfriemengras
616 Stizolòbium *P S*	1551	Dólichos	Cow-itch		
482 Stratiòtes *L*	2096	Water aloe	Water soldier	Aloides	Die wasserfeder
270 Streptòpus *Mx*	786	Uvulària			
880 Struthiópteris *W.*	2179	Osmúnda			
152 Strýchnos *L*	437	Núx Vómica	- - - - -	Noix vomique	Krahenaugen
362 Stýrax *L*	1025	- - - - -	Storax	Alibousier	Der storax
558 Subulària *L*	1447	- - - - -	Awlwort	Subulaire	Wasserpfriemen
626 Sutherlándia H.K	1571	Colutea			
352 Swietènia L	990	- - - - -	Mahogany tree	Le mahagon	Der mahagonibaum
170 Symphòria *Ph*	476	Lonicèra	St Peter's wort		
122 Sýmphytum *L*	334	- - - -	Comfrey	La consoude	Der beinwell
728 Synedrélla *Gac.*	1791	Verbesìna			
12 *Syringa* L	37	- - - - -	Lilac	Lilas	Der syringa
880 Tænitis *Swz*	2176	Ptèris			
718 Tagètes *L*	1760	- - -	African and French marigolds	Oeillet d'Inde	Die sammetblume
562 Tamarindus *L*	1449	- - - - -	Tamarind tree	Le tamarinier	Der tamarindenbaum
228 Támarix *L.*	685	- - - - -	Tamarisk	Tamarise	Tamarisken
838 Támus *L*	2082	- - - - -	Black bryony	Le tamier	Schwarzwurzel
696 Tanacètum *L*	1720	Costmary	Tansy	Tanaisie	Der rheinfarrn
694 Tarchonánthus *L*	1706	- - - - -	African fleabane		
848 Táxus *L.*	2114	- - - - -	Yew tree	If	Der taxus
148 *Téctona* L.	421	Indian oak	Teak wood	- - - - -	Der thekabaum
546 Tecsdàlia R Br.	1411	*Ibèris*			
228 Telèphium L	689	Sèdum			
84 Telopèa *R Br*	244	- - - - -	Waratah		
634 Tephrósia *Pers*	1590	Galèga	Fish poison		
864 Terminàlia *L*	2140	- - -	- - - - -	Le badamier de Malabar	- - -
898 Tétraphis *Hedw*	2221	Grimmia			
494 Teùcrium L.	1244	- - - - -	Germander	Germandrée	Bathengel
484 Thalictrum *L.*	1229	Feathered columbine	Meadow rue	Rue des prés	Die wiesenraute
214 Thápsia *L*	643	- - - - -	Deadly carrot	Tapsie	- - - - -
650 Theobroma *L*	1607	- - - - -	Chocolate nut	Le cacaoyer	Der kakaobaum
342 Thermópsis *R Br*	944	Podalýria			
194 Thèsium *L.*	569	- - - - -	Bastard toadflax	Thesium	Das leinblatt
546 Thlàspi *Dil*	1408	Treacle-mustard	Shepherd's purse	Bourse de pasteur	Die hirtentasche
806 Thùja *L*	2018	Tree of life	Arbor-Vitæ	L'arbre de vie	Der baum des lebens
508 Thymus *L*	1275	- - - - -	Thyme	Le thym	Der thimian
562 Tigridia *Jac.*	1452	- - - - -	Tiger flower	- - - - -	- - - - -
466 Tilia *L*	1186	Linden tree	Lime tree	Tilleul	Die linde
886 Todea W	2204	Osmunda			
222 Tordylium *L*	673	Hedge parsley	Hartwort	Le seseli de Crete	Das drehkraut
454 Tormentilla *L*	1154	Tormentil	Septfoil	La tormentille	Tormentil
516 Tourrétia Domb	1299	Dombèya			
168 Trachèlium *L*	466	- - - - -	Throatwort	Herbe aux trachées	Das halskraut
260 Tradescántia L	765	- - - - -	Spiderwort	Ephémérine	
666 Tragopógon *L*	1621	- - - - -	Goat's beard	Sersifi	Der bocksbart
104 Trìpa *L*	308	- - - - -	Water caltrops	Macre flottante	Die stachelnuss
1020 Tremélla *L*	2397	- - - - -	- - - - -	La tremelle	Die gallerte
532 Trevirània W en	1362	Cyrilla			
354 Tribulus *Tou*	966	- - - - -	Caltrops	Tribule	Burzeldorn
122 Trichodésma *R Br*	341	Boràgo			
56 Trichòdium *Mx*	157	*Agróstis*			
40 Trichonèma *Ker*	90	*Ixia*			
50 Trichóphorum *Pers*	126	Eriòphorum			
808 Trichosánthes *L*	2019	- - - - -	Snake-gourd	Anguine à fruits longs	Der sinesische kurbis
296 Trientàlis *L*	862	- - - - -	Winter-green	Trientale	Das sternblümchen
640 Trifolium *Tou.*	1600	Clover	Trefoil	Trefle	Der klee
290 Triglochin *L.*	841	- - -	Arrow grass	Troscart	Das salzgras

Page	Dutch.	Italian.	Spanish	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names.
774	Fgelknop	Spargamo	Platanaria	Pindsvünknoppe *Dan.* Träggan *Swed*
610	Bezembrem	Sparzio	Retama de escobas	Giesteira menor *Port* Gyel *Dan.* Pingstblomma *Swed.*
390	Akker-spurrie	Spergola	Espergula	Toriza *Russ.* Knægræs *Dan.* Fryle *Swed.*
896	Veenmoss	- - -	- - -	Rodmus *Dan.* Rodmossa *Swed.*
834	Spinagie	Spinaci	Espináca	Espinafre *Port* Spinasch *Russ* Szpinak *Pol* Spinat *Dan*
428	Reynette	Ulmaria	Ulmaria	Medunischnik *Russ*
906	Parasolmos	Splacno	Splacno	Spacno *Port* Skyggeknop *Dan* Parasolmossa *Swed.*
382	Varkensprium	- - -	Hobo	Acaja, Ibametara *Brazil* Oubou *Carib*
504	Andoorn	Stachy	Estaquis	Ortiga morta dos bosques *Port.*
226	Pimpernooten	Staffilodendro	- -	Klokotschka *Russ* Klokocina lesna krzak *Pol*
524	Zeegras	Statice	Statice	Strandblomster *Swed*
376	Oogentroostgras	- - -	- -	Ojentrost *Dan* Perer *Swed*
824	- - - - -	- - -	- -	Mounk-korene *Russ* Rudzik *Tungus.*
814	Stinkboom	- - -	- -	Satirião *Port*
828	Stinkmoerboom			
54	Kwispelgras	- - -	Esparto	Esparto *Port* Kawil *Russ* Fejér árva *Hung*
482	Ruiterskruid	- - -	- - -	Mudores bolschoi *Rus* Vandaloc *Dan* Vattu-aloe *Swed*
152	Braaknooten	Noce vomica	Mataperros	Noz vomica *Port* Canram *Malab* Brœknodd *Dan*
562	Storaxboom	Storace	Estoraque	Storaque *Port* Storax *Dan & Swed*
788	Lisskruid	- - -	- - -	Sylblad *Dan* Tyrtilje *Norw*
352	Nieuwblad-boom			
122	Smeerwortel	Consolida	Consuelda major	Consolda major *Port* Solnoi koren *Russ* Zywokost *Pol*
12	Syring	Sirmga	Lila	Lilaz *Port* Serik *Russ* Syreen *Swed*
718	Afrikaan	Tagete	Clavel de muerto	Tagecta *Port* Sammetsros *Swed*
962	Tamarindenboom	Tamarindo	Tamarindo	Tammer hendi *Arab* Tamarintræ *Dan*
528	Tamarisch	Tamarisco	Taray	Tamargueira *Port* Atl *Arab* Grebenschik *Russ*
858	Vrouwenzeegel	Bryonia nera	Tamo	Norça preta *Port*
696	Reinevaren	Tanaceto	Tanaceto	Tanasia *Port* Dikaja rialina *Russ* Wrotecz *Pol*
848	Taxisboom	Tasso	Tejo	Teixo *Port* Kja raboku *Jap* Tis *Rus* Cis *Pol* Id *Sw*
148	- - - - -	- - -	- -	Theka *Malab* Cay sao *Cochinch*
864	- - - - -	- - -	- - -	Adamaram *Malab*
494	Gamander	Camedrio	Germandrina	Carvalhinha *Port* Ozanka *Pol*
484	Waterruit	- - -	- - -	Zolotoucha *Russ* Wrzodowiec *Pol*
214	- - - - -	- - -	Zumillo	
650	Kakauboom	Cacao	Cacahual	Cucuhuaquahuitl *Mexico* Kakaotræe *Dan*
194	Vlaschblad	- - -	- - -	Linossisty tési *Russ* Horbladet naalebæger *Dan*
546	Herders-taschjes	Borsa di pastore	Bolsa de pastor	Neko no sansin *Jap* Jerschow glas *Russ*
806	Boom des levens	Albero di vita	Arbol de la vida	Arvore da vida *Port* Livets træe *Dan* Lifvets trad *Swe*
508	Gemeene thym	Timo	Tomillo	Tomilho *Port* Timiane *Russ* Tym *Pol* Timian *Dan*
502	- - - - -	- - -	- - -	Oceloxochitl *Mexico*
466	Linde	Tiglio	Tilo	Uglamur *Arab* Lipa *Russ, Pol, Bohem, Siber,* &c
222	Gemeen kruelzaad	- - -	- - -	Sesch de Creta *Port*
454	Tormentil	Tormentilla	Tormentila	Sabiasnoi koren *Russ* Kurze ziele *Pol.*
168	Halskruid	- - -	Hermosilla	
696	Boksbaard	Barba di becco	Barba cabruna	Barba de bode *Port* Kozlowa boroda *Russ*
104	Waternooten	Tribolo acquatico	Tribulo acuatico	Tribulo aquatico *Port* Panover-tsjeraua *Malab*
1020	Lilmos	- - -	- -	Levrehinde *Dan* Skyfall *Swed*
354	Voetangel	Tribolo terrestre	Tribulo terrestre	Tribulo *Port* Kotewki *Pol*
808	- - - - -	- - -	- - -	Tota-piri *Malab* Kualoonin *Jap* Muop saoc *Cochinch*
296	Vintergron			
640	Klaver	Trifoglio	Trebol	Trilistnik *Russ* Koniez *Pol*
290	Zoutgras	- - -	- - -	Trehage *Dan* Sälting *Swed* Saltgræs *Norw*

Page	Not. to Genera.	British or Systematic Synonymes.	English Names.	French.	German.
644 Trigonélla *L.*	1603	- - - -	Fenugreek	Fenu-grec	Das bockshorn
66 Tríodia *R Br.*	191	*Festùca*			
170 Triósteum *L*	478	- - - -	Feverwort		
60 Trisètum *Pers*	172	*Avèna*			
68 *Tríticum L*	206	- - - -	Wheat	Le froment, le bled	Der weitzen
T Spélta L. sp	1235	- - - -	Spelt	E peautre	
268 Tritòma *Ker*	777	Alètris			
40 Tritònia *Ker*	100	*Íxia*			
488 *Tróllius* L.	1234	- - - -	Globe flower	Trolle globuleux	Die kugelranunkel
302 Tropæ'olum *L.*	875	- - - -	Indian cress	La capucine	Die kapuzinerblume
832 Trophis *L.*	2063	- - -	Ramoon tree		
266 *Túlipa* L	772	- - - -	Tulip	La tulipe	Die tulpe
540 Turrítis *Dil*	1389	- - - -	Tower mustard	La tourette	Das thurnkraut
704 Tussílago *L*	1737	Butter-bur	Colt's foot	Tussilage	Der huflattich
774 *Týpha L*	1945	Reed mace	Cat's tail	Massette	Die rohrkolbe
612 *Ú'lex L*	1540	Whin	Furze	Ajonc	Der europaische stechginster
208 *Ú'lmus L.*	615	- - - -	Elm tree	L'orme	Die ulme
940 *Ú'lva L*	2308	- - - -	Laver	Ulve	Watt
778 Uncínia *Pers*	1949	*Carex*			
64 *Un'iola L*	186	- - - -	Seaside oat		
244 Urània *Schreb*	722	*Ravenàla*			
282 Uropétalon *Ker*	818	Zuccágnia			
782 *Urtica L*	1962	- - - -	Nettle	L'ortie	Die brennessel
20 Utriculária *L*	53	- - - -	Hooded milfoil	L'utriculaire	Der wasserschlauch
320 *Vaccínium L*	907	Bleaberry	Whortleberry	L'airelle	Der heidelbeere
34 *Valeriana* L	78	- - - -	Valerian	La valériane	Der baldrian
556 *Véla L*	1437	- - - -	Cress rocket		
268 Veltheímia Gled.	778	Alètris			
858 *Verátrum L*	2128	- - - -	White hellebore	Hellébore	Die nieswurzel
132 *Verbáscum L*	375	High taper	Mullein	Bouillon-blanc	Das wollkraut
520 *Verbèna L*	1322	Holy herb	Vervain	Verveine	Das eisenkraut
686 Vernònia Schreb	1680	*Serrátula*			
14 *Verónica* L	40	Fluellen	Speedwell	Véronique	Der ehrenpreiss
544 Vesicária *Lam*	1400	Alyssum	- - - -	Vesicaire	Die blasenalysse
132 *Véstia* W en.	371	Periphrágmos			
224 *Vibúrnum L*	679	- - - -	Wayfaring tree	Viorne	Der schlingbaum
622 *Vícia Tou.*	1561	Tare	Vetch	La vesce	Die futterwicke
130 Villársia Ven	363	Menyánthes	- - - -		
344 Viminária *Sm.*	957	- - - -	Rush broom		
146 *Vínca L*	410	- - - -	Periwinkle	La pervenche	Das sinngrün
186 *Víola Tou*	540	- - - -	Violet	Violette de mars	Das margveilchen
342 Virgília Lam.	945	*Sophòra*			
830 *Víscum L.*	2054	- - - -	Misseltoe	Le gui	Der mistel
520 *Vítex L*	1317	- - - -	Chaste tree	Gatilier	Der keuschbaum
174 *Vítis L*	501	- - - -	Vine	La vigne	Der weinstock
40 Watsònia Ker	101	Gladiolus			
294 Wendlándia W	858	Memispérmum			
886 Woódsia R Br	2200	Acrostichum			
146 Wrightia R Br	412	*Nerium*			
786 *Xánthium L*	1974	- - - -	Lesser burdock	Lampourde	Die spitzklette
236 Xanthorhíza *Herit*	709	- - - -	Yellow root		
834 Xanthóxylon *L*	2066	- - - -	Toothach tree	Le clavalier	Der zahnwehbaum
700 Xeránthemum *L*	1729	- - - -	Everlasting	L'immortelle	Die strohblume
878 Xiphópteris *Kaulf*	2173	Grammítis			
480 Xylòpia *L*	1224	*Anòna*			
268 *Yúcca* L.	781	- - - -	Adam's needle	Yuca	Die yukke
846 Zàmia *L*	2108	- - - -	- - - - -	- - - - -	Die keulpalme
520 Zapània J	1319	*Verbèna*			
778 Zea *L*	1950	Maize	Indian corn	Le mais	Der mays
4 Zingiber *Gaert*	10	- - - -	Ginger	L'amome des Indes	Der ingwer
788 Zizània *L*	1979	- - - -	- - - - -	- - - - -	Seehafer
20 Zizíphora *L*	57	- - - -	- - - - -	- - - - -	Zizifer
178 Zizyphus *Tou*	506	*Rhámnus*	- - - -	Jujubier commun	Die brustbeere
630 Zórnia Gm.	1587	*Hedýsarum*			
908 Zygodon *Hook*	2234				
352 Zygophýllum *L.*	994	- - - -	Bean caper	Fabagelle	Bohnenkapern

Page	Dutch.	Italian.	Spanish.	Portuguese, Danish, Russian, Polish, South American, Oriental, or other Names
544	Hoornklaver	Fienogreco	Alforva	Alforvas *Port.* Græskhoe *Dan* Fenugrek *Swed.*
68	Tarw	Grano	Trigo	Ptschenitza *Rus* Búza *Hun.* Budai *Tar* Hvete *Swe*
488	Drolbloem	- - -	- - -	Kupalnitza *Russ* Engblomme *Dan* Bullerblomster *Swe.*
302	Spaansche kers	Fior cappucino	Capuchinas	Mastruço do Peru *Port* Indiansk karse *Dan.*
266	Tulp	Tulipano	Tulipan	Tulipa *Port* Lalé *Turk* Tiulpan *Russ* Tulipa *Dan*
540	Turrekruid	- - -	- - -	Taarnspidse *Dan* Rockentrat *Swed* Hvassennep *Norw.*
704	Hoefblad	Tossilaggine	Tusilago	Tossilagem *Port* Dwoje listnik *Russ*
774	Laschdodde	Tifa	Espadaña	Tabùa *Port* Bo hoang *Cochinch* Paloschnik *Russ*
612	Heybrem	- - -	Aliaga	Tojo *Port* Tornblad *Dan.*
208	Olm	Olmo	Olmo	Olmo *Port* Kasagatsch *Turk* Ilim *Russ* Ilm *Pol.*
940	Watervlies	- - -	Ova	Morsko salo *Russ*
782	Brandenetel	Ortica	Ortiga	Ortiga *Port* Pokrzywa *Pol*
20	Neetekruid	- - -	- - -	Vindrollike *Dan* Vassrollike *Norw*
320	Blauwbessen	Mirtillo	Mirtilo	Myrtillo *Port* Tschernika *Russ* Borrowki czarne *Pol.*
34	Valeriaan	Valeriana	Valeriana	Valeriana *Port* Fatso *Jap* Balderjan *Russ* Kozlki *Pol*
858	Nieswortel	Elleboro bianco	Vedegambre blanco	Helleboro branco *Port* Tschemeriza *Russ* Hvit prustrot *Swed*
132	Wollekruid	Tassobarbasso	Gordolobo	Verbasco branco *Port* Zaarskii skipetr *Russ*
720	Yzerhard	Verbena	Verbena	Verbena *Port* Co rongua *Cochinch* Scheelsmik *Russ*
14	Ereprys	Veronica	Veronica	Veronica *Port* Weronika *Russ* Ærenprus *Dan*
544	Blaauw tanddraad			
224	Vorne	Viburno	Viburno	Germeschek *Turk* Gordowina *Russ* Hordewid *Pol*
622	Vamme vitsen	Vecce	Alverjanas	Mysthei goroch *Russ* Wyka *Pol*
146	Maagdepalm	Pervinca	Pervinca	Congossa *Port* Barwinek *Pol* Singron *Dan*
580	Vamme viool	Viola mamma	Violeta	Pachutschaja chalko *Russ*
830	Marentakken	Vischio	Liga	Visgo *Port* Omela *Russ* Jemiel *Pol*
520	Kuschboom	Agnocasto	Sauzgatillo	Anhocasto *Port* Dikoi perez *Rus* Kydskhedstræe *Dan*
174	Wyngaard	Vite	Vid	Æbæb *Arab* Winograd *Russ* Winna macica *Pol*
786	Kleine klissen	Lappola minore	Lampazo pequeño	Bardana menor *Port* Durkoman *Rus.*
700	Straalbloem	- - -	- - -	Perpetua larga *Port* Souchotzwet *Russ.*
778	Mays	Gran turco	Maiz	Tlaolli *Mexico* Tvrkisk korn *Dan*
4	Gember	Zenzero	Jenibre	Zenjebel *Arab fel* Imbir *Russ* Imbier *Pol*
788	Wild koorn			
178	Jobenboom	Giuggiolo	Azufaso	Macetra de anafega *Port* Unap *Turk* Frangulina *Russ.*
352	Haauwkappers	- - -	- - -	Stroutschkowatyè kapérsy *Russ.*

FIRST

ADDITIONAL SUPPLEMENT

TO

LOUDON'S ENCYCLOPÆDIA OF PLANTS:

COMPRISING

THE SPECIFIC CHARACTER, DESCRIPTION,

CULTURE, HISTORY, APPLICATION IN THE ARTS,

AND EVERY OTHER DESIRABLE PARTICULAR RESPECTING

ALL THE PLANTS

ORIGINATED IN, OR INTRODUCED INTO,

BRITAIN,

BETWEEN THE FIRST PUBLICATION OF THE WORK IN 1829,

AND

JANUARY, 1840.

PREPARED BY W. H. BAXTER, JUN., UNDER THE DIRECTION OF J. C. LOUDON,

AND REVISED BY GEORGE DON, F.L.S.

FIRST

ADDITIONAL SUPPLEMENT

TO

THE ENCYCLOPÆDIA OF PLANTS;

BRINGING DOWN THE WORK TO MARCH, 1839.

Prepared by WILLIAM H. BAXTER, under the Direction of J. C. LOUDON, and finally revised by GEORGE DON, F.L.S.

N B A † prefixed to genera or species indicates that such genera or species have been already registered, but are here repeated with more perfect details

Page 8. CLASS II — DIANDRIA 2 STAMENS.

Order I MONOGYNIA 2 Stamens. 1 Style

2500 47*a* ***Belopérone*** Calyx 5-parted Upper lip of corolla concave, lower one trifid Stigma subulate Capsule compressed from the base to the middle and empty, but swollen, and containing 4 seeds at top
2501 64*a* ***Streptocárpus*** Cal 5-cleft Cor tubularly funnel-shaped, Limb 5-lobed, nearly equal, oblique. Stam 4 2 front ones fertile, the other 2 tubercle-formed and sterile. Valves of capsule twisted Stigma 2-lobed Seed minute, naked.

Page 30 CLASS III. — TRIANDRIA 3 STAMENS.

Order I MONOGYNIA 3 Stamens 1 Style

2502. 80*a* ***Bétckia***. Cal 1-toothed, deciduous Cor funnel shaped, 5-lobed Caps 1-celled, 1-seeded
2503 94*a*. ***Streptanthera*** Perianth 6-parted, tube very short Anthers twisted round each other Ovar. 6-angled, also a little twisted. Ovula kidney-shaped
2504 107*a* ***Amsánthus*** Spathe 2-valved subringent Perianth unilabiate, limb equal, 6-parted, upper segment long, cochleariform Stigmas 3, dilated, entire Capsule triangular, 3-valved Seeds cumulated, winged.
2505 114*a* ***Dietes*** Flower 6-parted, equal, spreading. Stigmas petal-like bifid
2506 114*b* ***Leucocóryne*** Perianth salver-shaped, 6-parted, 3 fertile combined, and the 3 sterile on the limb, fleshy, and sometimes antheriferous Style terete Stigma simple
2507 114*c* ***Triteleia*** Perianth funnel-shaped, 6-cleft Stamens 6, upper ones opposite the petals. Stigma 3 lobed Ovarium many-seeded
2508 117*a*. ***Sisyrinchium*** Spathe 2-lvd Calyx 0 Petals 6 Filaments connate Style 1 Caps 3-celled, inferior
2509 117*b* ***Renealmia*** Perianth 6-parted Filaments connate or distinct Stigmas 3, involute, filiform, acute Capsule obovate. Seeds angular

Page 76 CLASS IV. — TETRANDRIA 4 STAMENS

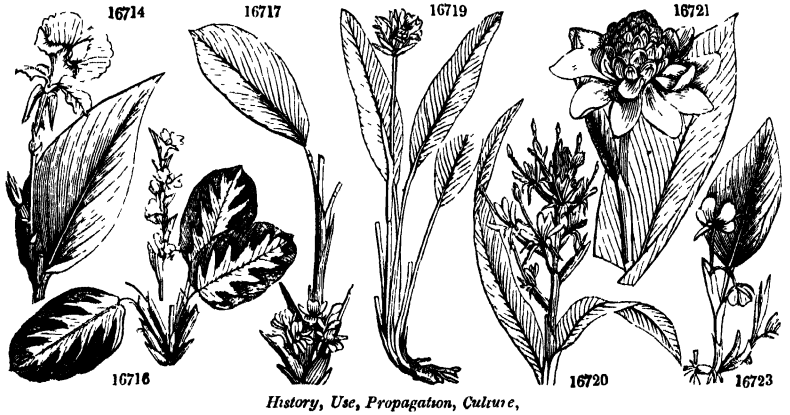
Order I. MONOGYNIA 4 Stamens. 1 Style

2510. 237*a* ***Conospermum***. Cal. ringent: Upper lip 2-lobed. Nut pappose, inversely cone-shaped
2511 237*b*. ***Botrýceras*** Cal 4-parted. Cor. 4-petaled Style arcuate. Nut subulate
2512 238*a*. ***Anadènia*** Calyx nearly regular. Gland 0 Follicle 1-seeded.
2513 238*b*. ***Agástachys***. Calyx regular. Filaments distinct. Stigma lateral. Ovary 1-seeded
2514 295*a* ***Tripóstoma***. Limb of cal. 4-parted Cor tubular at base, and ventricose at throat, bearded inside Stam inserted in throat. Style capillary Stigm. 2, subulate, hispid. Caps. globose, 2-celled, opercul, many-seeded, often 1-celled Seeds small, angular, scabrous.
2515 306*a* ***Benthámia***. Flowers disposed in heads. Involl of 4 petal-like parts. Cal 4-toothed Petals 4, fleshy Fruit constituted of many pomes grown together. Endocarp 2-celled. Seeds solit and pendul in each cell

Class I. — MONANDRIA.

MONOGYNIA.

	Systematic Name and Authority	English Name	Habit.	Habitation in the Garden	Popular Character.	Height in Feet.	Time of Flowering	Colour of the Flower	Native Country	Year of Introduction of Exotics, and Localities of British Species	Propagation.	Soil	Reference to Figures.
	1 CA'NNA.								Sp 20—38				
16713	*b*a discolor *Lindl*	various-cld.-*lvd*	℔	△	or	10	n	S	Trinidad	1827.	R	r m	Bot. reg. 1231
16714	15*a* Reevèsii Lindl.	Reeve's	℔	△	or	5	my	Y	China	? 1835.	R	r m	Bot. reg 2004
	16 glaûca												
	γ rùbro-lùtea *Hook*	yel &red *cld-fld*	℔	△	or	4½	au	Y.R	Jamaica	? 1834	D	r m	Bot mag 3437
16715 -	- *Achìras* Gill.	Achiras	℔	▭	or	4½	au	D.R	Mendoza	1829	D	r m	Bot reg 1358
	2. MARA'NTA.								Sp 8—15.				
16716	24*a* bicolor *Ker*	two-coloured	℔	△	pr	¾	ap n	W	Brazil	1823.	D	p l	Bo. reg 786
	3 CALA'THEA								Sp 3—10.				
16717	25*a* flavéscens *Lindl*	flavescent	℔	△	pr	1½	au	Y	Brazil	1822	D	s l	Bot reg 932
16718	25*b* grandifòlia *Lindl*	great-leaved	℔	△	or	2	year	Y	Rio Jan	1826	D	s l	Bot reg 1210
	5 PHRY'NIUM								Sp. 3—17				
16719 -	- colorâtum *Hook*	coloured	℔	△	or	2	ap my	O	Brazil	1828	D	s l	Bot mag 3010
	6 HEDY'CHIUM								Sp 10—22				
16720	35*a* cárneum *Carey*	flesh-cld-*fld*	℔	△	or	4	au	Pk	East Indies	1823	D	l	Bot mag 2637
	8 ALPI'NIA								Sp 14 —25				
6721 -	- magnifica *Boj*	magnificent	℔	△	spl	10	au	R	Mauritius	1830.	D	r l	Bot mag 3192
	12 KÆMPFE'RIA								Sp 8 —9.				
16722	68*a* Roscoeàna Rose	Roscoe's	℔	△	or	½	o	W	East Indies	1827	R	s l	Bot reg 1212
16723 -	- élegans *Wal*	elegant	℔	△	or	1		P	Pegu	1828	D	s l	Wal pl as ra 27



History, Use, Propagation, Culture,

16721 *Alpínia magnífica* Sir W J Hooker says of this species, that he contents himself " with laying before the

Class II. — DIANDRIA.

MONOGYNIA.

	31 *MAYTE'NUS*								Sp. 2—2.				
16724	134*a* chilénsis *Dec*	Chilian		▭	or	8	my	G.Y	Chile	1829	C	p.s l	Bot reg. 1702
	36 LIGU'STRUM								Sp 3—3				
16725	159*a* spicâtum *D Don*	spike-*flowered*			or	8	jn jl	W	Nepal	1823	C	p.l	Bot mag 2921
	37 *SYRI'NGA*								Sp 4—4				
16726	160*a* Josikæ'a Jac	Josika's			or	8	my jn	Dp Li	Germany	1833.	Sk	co	Bot mag 3278
	39 JASMI'NUM								Sp 19.—35.				
16727	179*a* pubigerum *D Don* Wallichiànum Lindl	down-bearing			or	10	mr o	Y	Nepal	1827	C.	l	Bot. reg 1409
	44. SCHIZA'NTHUS								Sp 5—5				
	272 pinnâtus												
	β hùmilis *Lindl*	dwarf		○	or	1	jn.o	Li C	Valpar.	1831	S	l t	Bot. reg 1562
16728	272*a* Hookeri D Don	Hooker's		○	or	2	jn o	Ro Li	Chile	1828.	S	s l	Bot mag 3070
16729	273*a* Grâhami Hook	Graham's		○	or	2	jn o	Va	Chile	.	S	l t	Bot mag 3041
16730	273*b* retûsus *Hook*	retuse-*petaled*		○	or	2	jn o	Va	Chile		S	l t	Bot. mag 3015
	47. JUSTI'CIA.								Sp 35 —45.				
16731	279*a* ventricòsa *Wal.*	ventricose		▭	or	3	jn jl	W R	China	1826	C	p.l.	Bot. mag 2766
16732	296*a* speciòsa *Ror.*	showy		▭	or	4	au n	P	East Indies	1826.	C	p l.	Bot. mag. 2722

CLASS I. — MONANDRIA.

MONOGYNIA.

Essential specific Character

16713 Lvs. discol Inf petals emargin Flws didymous peduncul Brac cuneate convol Inner limb of cor trifid
16714 Probably not distinct from *C* flaccida The lvs are shorter, less glauc Inner pet. distinctly cuspid. and unequal

16715 Lvs oblong-ovate abrupt acumin Flws mostly in pairs on short pedun Brac broad-ellip [membran deciduous concave rounded

16716 Stemless, Lvs elliptic blotched above, beneath purplish

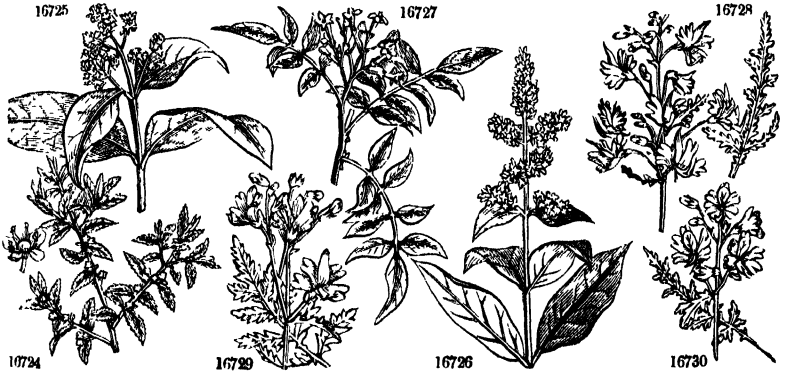
16717 Leaves oblong costately veined glaucous beneath, Heads sessile many-flowered
16718 Leaves distich spread horizont oblong apicul lucid little undul short th. petioles, Heads termin obl. Brac. obtuse undul loose short th flws

16719 Leaves oblong-lanceolate acuminate, Scape erect rigid terete

16720 Leaves acuminate 2-in broad, Bracteas ciliated 1-flowered

16721 Leaves few oblong-acute, Spike capitate, Bracteas of a fine deep rose-red colour margined with a white line

16722 Stemless, Lvs suborbicul acute varieg above, Flws few radic fascic erect sess Outer limb shorter, Inner [flat very spread, Segms obov obtuse
16723 Lvs oblong dimidiato-cordate petiolate, Spike termin Outer bract or spatha elegantly nerved transv striped



and Miscellaneous Particulars

public a figure and description, however imperfect, of one of the noblest plants that has graced the pages of the *Bot. Mag.*"

CLASS II. — DIANDRIA.

MONOGYNIA

16724 Leaves elliptic-oblong tapering to base taper-pointed with serrated edges

16725 Lvs oblong approach. ovate cordate glossy waved acumin Panic term Cal with 4 minute imbric. bract at [base

16726 Lvs ellipt.-lanceol. attenuated both extrem. white and veined below wrinkled, Branches very slightly wart [Twigs purple

16727 Lvs altern pinnate, Leafl. 7 ovato-lanceo. or oblong acumin Pedun elongate 1-flwd Segm. of cor. 5-6 [obtuse

16728 Pedic erect, Tube of cor. much longer than cal. Lower lip middle segm. bicornute lateral linear, Upper lip [long-acumin.
16729 Tube of cor. equal in length to cal. Lat. segm. equal in length to the middle which is bifid, Upper lip ov -acum
16730 Lateral segm of lower lip shorter than middle one which is sagittate, Upper segm rhomboid-oblong retuse

16731 Spikes terminal, Bract rounded convex entire veined, Tube of cor a little swollen upwards
16732 Pedun axill & term. often prolif. sometimes wanting, Bract. constituting dbl involucre Tube of cor very long curved remark twisted

16733	301*a* nodòsa *Hook*	knotty-*stmd*		or	2	s	R	Brazil	1820	C	p	l Bot. mag. 2914
16734	305*a* flavicoma *B R*	yellow-tufted		or	2	jl s	Y	Brazil	1825	C	p	l Bot reg 1027
16735 -	- cárnea *Lindl.*	flesh-*coloured*		spl	6	au s	F	Rio Jan.	1827.	C	l.p	Bot. reg 1397
16736 -	- guttàta *Wal*	spotted		or	1½	ap au	Y.spot	East Indies	1828	D	l.p	Bot. reg 1334
16737 -	- venùsta *Wal*	beautiful		or	5	s	P	Bengal	...	C	l p	Bot reg 1380

2500 47*a* BELOPE'RONE *Nees* (*Belos*, arrow, *peronc*, strap; connectivum) *Acanthàceæ*. Sp 1—1.

16738 - - oblongàta *Nees* oblong-*leaved* or 3 s Ro P Brazil 1832. C p l Bot. reg 1657

49 ERA'NTHEMUM Sp 4—11.

16739 - - fœcundum *Lindl.* *ever-blowing* or 1½ all sea Li Brazil ?1829. C p l Bot. reg. 1494

51 CALCEOLA'RIA Sp 26—32

318 Integrifòlia

	β angustifòlia *Lindl*	narrow-leaved		or	2	au s	Y	Chile	1822	C	l p	Bot. reg 1083
16740	318*a* viscosissima *Lindl*	clammiest		or	3	my o	Go Y	Chile	1832	C	p l	Bot reg 1611

Integrifòlia γ viscosissima *Hook* in Bot Mag 3214; rugòsa macrophylla *Hort*, rugòsa latifolia *Herb.*

16741	318*b* sèssilis *R & P*	sessile-*leaved*		or	1½	s	Y	Valparaiso	1832	C	s	p Bot. reg. 1628
16742	318*c* ascéndens *B R*	ascending		or	1	jl s	Y	Cordillier.	1826.	C	l p	Bot reg 1215
16743	319*a* Young*ii* Penny	Young's		spl	2	my o	Och D	Eng hyb	1830	D	r m	Bot. reg 1448

β pallidior *Penny* paler-*fld.* γ dilecta *Penny*, beloved, *bright-brown-fld* δ àtra *Penny*, dark-*fld*

16744	319*b* Wheeler*i* Swt	Wheeler's		or	1	my o	P	Eng hyb	1831	D	p.l	Sw fl gar. 2 s 130
16745	319*c* Martineaùæ Swt	Martineau's		or	1	ap au	Y spot	Hybrid	1831	D	lt.r.m	Sw.fl g 2 s 162
16746	319*d* purpùrea *Grah*	purple-*flowered*		or	1	jl s	P	Chile	1827	D	l p	Bot mag 2775
	β elegans *D Don*	elegant		or	1	jl s	Pa P	Chile	1832.	D	l p	Sw fl gar 2 s 199
	γ pícta *D Don*	painted-*cor*		or	1	su	W P	Eng gard.	?1832	D	lt r	Sw fl gar 2 s 241
16747 -	- thyrsiflòra *Grah.*	thyrse-flowered		or	1½	ju s	Y	Chile	1827	C	p l	Bot mag 2915
16748 -	- polifòlia *Hook*	Poly-leaved		cu	1	jl	Y	Chile	1826	D	l p	Bot mag 2897
16749 -	- connàta *Hook*	connate-*leaved*		or	3	jl au	Y	Chile	1824.	D	l p	Bot mag 2876

floribùnda *Lindl*, Bot reg 1214, paniculata *Herb*

16750 -	- arachnoidea *Grah*	cobweb-like		or	1	jn s	P	Chile	1827	D	l p	Bot. mag. 2874
	tinctòria *Gill.*											
	β álba *Hort*	white-*flowered*		or	1	jn s	W	.. ..		D	l p	
	γ refúlgens *D Don*	refulgent-*cor*		or	1	jn s	Bt Ru R	Eng hyb	?1833	D	r lt	Sw fl gar 2 s 227
16751	321*a* plantaginea *Sm*	Plantain-*lvd*		or	1	au	Y	Chile	1827	D	l p	Bot mag 2805
16752 -	- bícolor *Grah*	two-coloured		or	2	au s	Y Wsh	Peru	1829	C	lt	Bot reg 1374
16753 -	- angustifòra *R & P*	narrow-fld		or	1½	jn	Y	Peru	? 1830.	C	p	Bot mag 3094
16754 -	- Herbertiàna Lindl	Herbert's		or	2	my o	Y	Chile	1828	S	p	Bot reg 1313
	β parvifòra *Lindl*	small flowered		or	2	my	Y	Valparaiso	1832	C	p s l	Bot reg 1579
16755 -	- chiloénsis *Lindl*	Chiloe		or	2	au	Y	Chiloe	1830	C	r m	Bot reg 1476
16756 -	- crenatifòra *Cav*	notched-*lipped*		or	1½	jn s	Y spot	Chiloe	1831	S	p s l	Bot mag 3255
	β knypersliénsis *D Don*	Knypersley		or	¾	jn s	Y D B	Eng hyb.	?1834	D	lf m s	Sw fl g 2 s 262
16757 -	- Atkinsiana D Don	Atkins's		or	1½	jn o	Y R	Eng hyb	1830	D	p	Sw fl gar 2 s 168
16758 -	- mirábilis *K & W*	admirable		spl	2		P	Eng. hyb	1834	D	r m	Fl cab. n. 17

60 MONA'RDA Sp 15—19

355 fistulòsa

	β fl. maculàto *Hook*	spotted-*lipped*		or	3	su	P R spot	N Orleans	1832	D	co	Bot mag 3310
16759	364*a* Russelliàna Sims	Russell's		or	2½	s	W N	Amer	1823	R	p l	Bot. mag 2513
16760	367*a* aristàta *Nut*	awned		pr	2	jl au	Pa.Ro	N. Amer	1836	R	p l	Bot. mag 3526

62 SA'LVIA Sp 103—132

16761	384*a* strictifòra *Hook*	erect-flowered		or	3	d	Br R	Peru	1831	C	lt	Bot mag 3135
16762	387*a* involucràta *Cav*	involucrate		or	6	jl au	R	Mexico	1825	C	s l	Bot. mag 2872
16763	387*b* Grahàmi Benth	Graham's		or	4	jl o	R	Mexico	1829	C	s l	Bot reg 1370
16764	407*a* fúlgens *Cav*	fulgent		spl	5	my o	S	Mexico	1829.	C	s l	Bot reg 1356

cardinàlis *H B et K*, spléndens var nòva *G M* 5 p 577 f. 116

16765	407*b* dolichostàchya *Lag*	long-spiked		or	6	au o	S	Mexico	?1820			
16766	408*a* canéscens *Mey*	hoary		or	2	jn au	P	Caucasus		C	co	Bot. reg n s 36
16767	438*a* Simsiàna B R	Sims's		or	3	jn jl	Pa B	Russia	1820	D	p l	Bot reg 1003

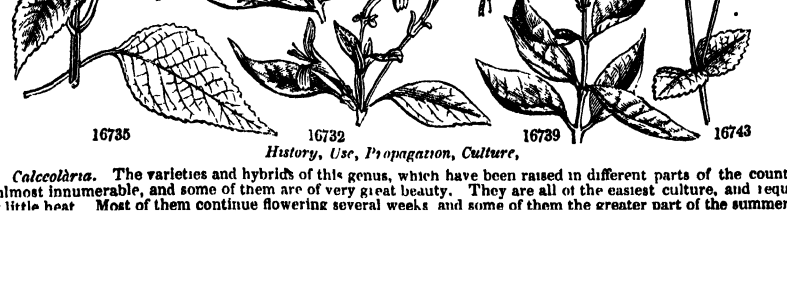
bracteàta *Bot. Mag*, 2320

16768 -	- folìosa *Benth*	leafy		or	1½	all sea	B	Mexico	1827.	S	co	Bot. reg. 1429

2501 64*a*. STREPTOCA'RPUS *Lindl* Streptocarpus (*Streptos*, twisted, *karpos*, fruit) *Bignoniàceæ* Sp 1—1

16769 - - Rèxii Lindl Rex's pr ½ year B C. G. H .. S p.l Bot reg 1173

Didymocárpus Rexii Bot. Mag



History, Use, Propagation, Culture,

51 *Calceolària*. The varieties and hybrids of this genus, which have been raised in different parts of the country, are almost innumerable, and some of them are of very great beauty. They are all of the easiest culture, and require very little heat. Most of them continue flowering several weeks, and some of them the greater part of the summer.

16733 Bran. swoll. at joints, Lvs ovate -acum obsc. serr Flws in short axil 2-3-flwd racem. erect, Bract 4-5 base each fl. lin -fil [Brac. and cal segms subul short. th cor
16734 Stem joints short tumid in middle, Lvs. obl -lan very acumin wavy minutely downy, Panic termin crowded,
16735 Lvs. on long pet ovate-atten at base sharply acumin. retic. Bract numer. outer ovate-lanceo inner lin Cor. very long, Up lip erect ent low, revol 3-toothed.
16736 Lvs obl. atten. both extrems acute subcrenul Racemes term. Flws fascic Cal & brac lin thd., Cor sptd
16737 Lvs. ovate acumin. crenat Panic large termin Flws remotely fasciculsubsess disposed in slender elongated racemes

16738 Spikes axill. Brac. bracteol. and leaves lanceolate, Anthers calcarate at base

16739 Lvs. subsess. obl.-lan. acumin. very entire, Brac small, Cal segms. obt Tube bent, Spike termin subsimp

16740 Lvs. larger & broader than those of C integrifolia The whole plant clothed with viscid pubescence

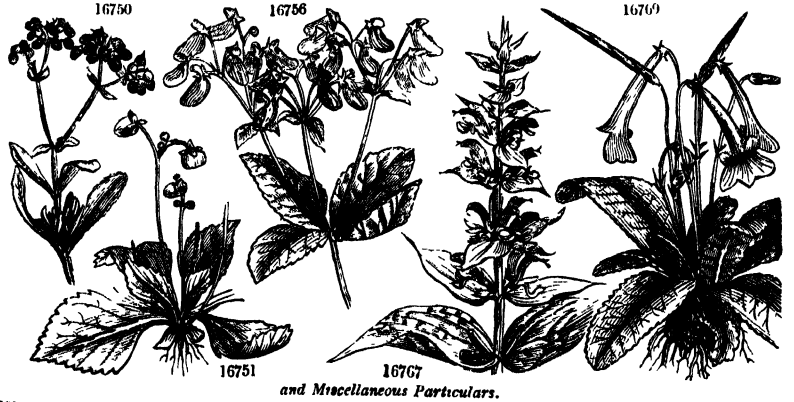
16741 Leaves lanceolate-acumin. canescent beneath, Corymbs panicled Pedicels elongated
16742 Leaves ovate petiolate denticulate pubesc lower ones acute at base Corymbs umbellate few-flowered
16743 A hybrid between C corymbosa and C arachnoidea, with orbraceous and dirty-purple flowers [ovate bluntish
16744 Lvs obl -ovate bluntish much veined & rugose, hispidly hairy, Stem erect, very hairy, Segm of cal broadly
16745 Lvs rather obtuse atten at base velvety above beneath clothed with long hairs and small scale-lk bists serr Cal peltate deeply 4 cleft
16746 Stem lvs cordate decuss upper ones smaller entire with few long scat hairs on their surfaces, Calyx downy [bellate
16747 Lvs linear atten at both ends lined distinct serr Teeth reflexed, 2-in long 2 lines broad, Pedun comp um-
16748 Whole plant clothed with white wool, Lvs ovate or oblong, Flws corymbose, Calyxes 3-nerved
16749 Lvs ovate acute waved nerved, Lower ones atten at base and connate, Upper ones nearly cord sessile, Pan spreading
16750 Herb clothed with white cobwebbed-wool, Lvs ligulately-oblong little toothed petioles 5-in long, Peduncles terminal twin

16751 Stemless, Lvs radical ovate rhomboid rosulate serrated nerved, Scapes generally 2-3-flwd. pilose
16752 Leaves ovate biserrated, Branches dependent bluntly tetragonal of a rusty purple colour
16753 Lvs ovate-lanceol sharply serr pubesc Pedun collected into term panic generally 4-flwd shorter than lvs
16754 Stem pilose, Lower lvs ovate-oblong obtuse petiolate, Upper ones sessile, Lower lip of cor very large [sess Infl cymose many-fl
16755 Stem cal & bract beset with glandul hairs, Stem lvs oblong-lanceol undul thd. upper ones ent ov acum
16756 Radical lvs many. stem lvs few 2 lower ones subpet upper ones sess Pedic racem. 1-flwd Caps papery [fulvous
16757 Rad lvs. obov rather spathul obtuse uneq thd Stem lvs ov pointed alm. ent. Corymbs forked 10-30-flo Ped
16758 Radical lvs. ovate somewhat obtuse, Corymbs few-flowered [thit clthd gland pubes.

[revol obsol 3-thd
16759 Lvs. ovate-acumin rounded at base. lower ones serr upper quite ent Lower lip much wider than upper
16760 Lvs obl.-lanceol. narrowed at base sharply & remotely toothed, Bract ciliated often purplish or yellowish [gland & viscid
16761 Lvs. ovate-cord 2-3-in long glabrous obtuse rather wavy, Flws erect oppos subsecund, Bract ovate acute
16762 Lvs cord -ovate acumin. toothed, Whorls 6-flwd Bract decid very large broadly ovate, nerved red
16763 Lvs. oval obtuse rounded or cuneated at base irreg crenated in middle nearly glabrous, Whorls 2-flwd Cal
16764 Lvs. cord -ovate crenated hoary beneath, Bract decid Galea villose [usually cld

16765 An undescribed species, introduced by Lagasca
16766 Racemes branched, Flowers fewer & smaller than those of *S phlomoides*
16767 Lvs. ovate acum crenate-sinuate upperm ent Fls in dist about 6-flwd whorls each wh supported by 2 ov -acum. awned concave streaked bracts
16768 Lvs petiol broadly ov acute subcord. at base, Rac loose verticill few-flwd Upper lip of cor. entire toothed. Lower acute

16769 The only species



and Miscellaneous Particulars.

2501. *Streptocárpus* This plant is very readily increased by seed, or by division of the root, and thrives best in a light rich soil. It is a very ornamental stove herbaceous plant, and well deserving of cultivation.

73. PIMELE'A Sp 15—24.

16770 491*a* ligústrina *Lab* Privet-like ▣ ▭ or 10 mr W V D L 1823 C s p Bot reg 1827
16771 491*b* intermèdia *Lindl* intermediate ▣ ▭ or 2 mr Wsh K G S 1825 C s p Bot. reg 1439
16772 492*a* hispida *R Br* hispid-*flowered* ▣ ▭ el 2 jn Bh N Holl. 1810 C s p Bot reg 1587
16773 492*b* lanàta *R Br* woolly ▣ ▭ el 6 my W V.D L 1834 C s p Botanist, 61
16774 492*c* longiflòra *R Br.* long-flowered ▣ ▭ or 4 jn W N. Holl 1831 C s p Bot mag 3281

16775 492*d* graciliflòra *Hook.* slender-*calyxed* ▣ ▭ or 3 my jn W K G S, 1830. C l p Bot mag 3288
16776 492*e* sylvéstris *R Br* wood ▣ ▭ el 2 jn Bh N Holl 1830 C l p Bot reg. 1582
16777 493*a* humilis *R Br.* humble ▣ ▭ or 1 my.jn W N Holl 1824 C s p Bot reg 1268
16778 493*b* nivea *Lab* white-*herb.* ▣ ▭ pr 6 W N Holl 1833 C s p Bot bot g 9 •
16779 493*c* arenària *Cun.* sand-*inhabit* ▣ ▭ pr 1 jl W N. Zeal. 1827. C sp Bot. mag 3270

16780 - - hypericina *Cun* Hypericum-*lvd* ▣ ▭ or 3 sp W K. G S 1830 C p Bot. mag 3330

CLASS III. — TRIANDRIA.

MONOGYNIA.

80. *VALERIANE'LLA.* Sp 12—20.

16781 568*a* congésta *Lindl* crowded-*flwd* ○ or 1 jn s R Columbia 1826 S co Bot reg 1094

2502. 80*a* BE'TCK*IA* Dec (*M Betcke*, who has described many sp of *Valerianélla*) *Valeriàncæ*. Sp 1—2
16782 - - major *Dec* larger ○ pr 1½ jn s. . . 1836 S co

93 CRO'CUS Sp 18—27

601 vérnus

Garden Varieties

§ 1 *Purple and Lilac*

1 puniceus *Sab*
2 purpùreus *Sab*
3 marginàtus *Sab*
4 Sablm Ander H. tr 7 11 17
5 grándis *Sab*
6 obovâtus *Sab*
7 concinnus *Sab.*
8 Phaethon Sab
9 grácilis *J C*
10 maculòsus *Sab*
11 plumòsus *J C*
12 turbinâtus *Sab.*
13 clavatus *Sab*
14 violàceus *Sab*
15 dùbius *Sab*
16 prunòsus *Sab*
17 fusiformis *Sab*
18 stylòsus *Sab*
19 plumbeus *Sab* H tr 7 11 10
20 inflàtus *Sab* B tr 7 11 13
21 *tulipàceus* Sab
22 pállens *Sab*
23 minùtus *Sab*
24 nànus *J C*
25 pallidus *Sab*
26 neapolitànus præ'cox *Sab*
27 *lilácinus* maculatus
98 *lilácinus* præ'cox *Sab*

§ 2 *Purple-feathered*

29 pictus *Sab* Bot reg 1440
30 lucàtus *Sab* H tr. 7 11.14

§ 3 *Spotted*

31 dorsàlis *Sab*
32 ùnguis *Sab*
33 unguis màjor *Sab*
34 leucorhynchus *Sab* Bot reg 1416

§ 4 *Lilac, striped*

35 pulchéllus *Sab* H tr 7 11 19
36 lineàtus *Sab.*
37 striàtus *Sab*

604 versícolor

Garden Varieties

§ 1 *Grey, striped*

1 Gáwleri Sab
2 negléctus *Sab*
3 similis *Sab*

§ 2 *Purple, striped*

4 purpùreus *Sab.* H tr 7 11 6
5 venustus *Sab*
6 élegans *Sab.* H tr 7 11 8

§ 3 *Lilac, striped.*

7 violàceus *Sab*
8 Hawórthii Sab
9 lineàtus *Sab.*

610 sulphùreus

Garden Varieties

3 álbidus *Sab* 4 isabellinus *Sab* 5 striàtus *Sab* 6 striàtulus *Sab*

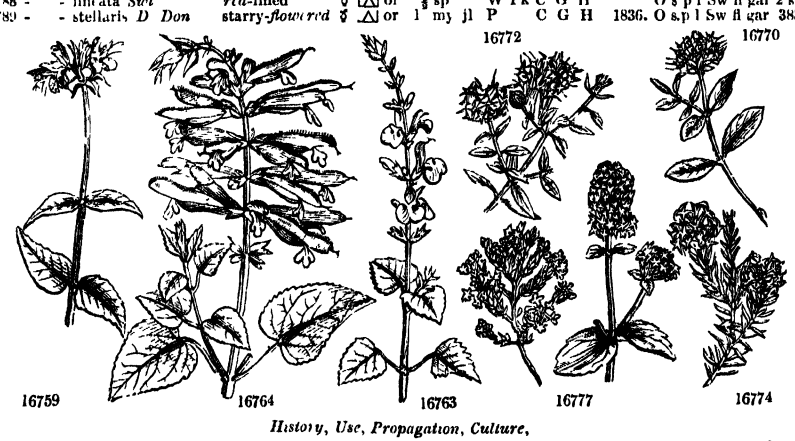
16783 610*a* lácteus *Haw* cream-cld-*fld* ♂ △ or ¼ f mr Pa Y Mœsia ? 1620. O co Sw.fl gar 2 s 194
β blue-streaked ♂ △ or ¼ f mr Y. B Mœsia . O co Sw.fl gar 2 s 194

2503 94*a* STREPTANTHE'RA *Swt* (*Streptos*, twisted, *anthera*, anther) *Irideæ* Sp 2—2
16784 - - élegans *Swt* elegant ♂ △ pr ½ my jn W B Y C G H 1827 O s p l Sw fl gar 209
16785 - - cùprea *Swt.* copper-coloured ♂ △ or ½ jn jl Cop C G H 1825 O p l Sw fl gar 2 s 122

99. SPARA'XIS Sp 8—10

16786 658*a* versícolor *Swt* party-coloured ♂ △ or ½ s P Y C G H 1825 R s l Sw fl gar 160
16787 661*a* péndula *Ker* pendulous ♂ △ or 1 jn D P C G H 1825 O s l Bot reg 1360
16788 - - linèata *Swt* red-lined ♂ △ or ½ sp W Pk C G H O s p l Sw fl gar 2 s 131
16789 - - stellaris *D Don* starry-*flowered* ♂ △ or 1 my jl P C G H 1836. O s.p l Sw fl gar 383

16772 16770



16759 16764 16763 16777 16774

History, Use, Propagation, Culture,

Plants with the habit of *Valerianélla* and requiring the same treatment The seeds may be sown

16770 Invol 4-lvd. Leafl ovate-oblong, Cor. pubescent, Leaves oblong lanceolate veined [within
16771 Invol. 2-4-lvd shorter than flws Lvs small lanceol acute at each end sess. Segm. of limb oblong obt smooth
16772 Invol. 4-lvd Leafl roundish-ovate, Lvs. obl lanceol & linear, Head before expand subglobose apiculated
16773 Invol 4-lvd Leafl. ovate with membran margin about equal in length to the head, Cor hairy, Lvs lanceolate
16774 No distinct invol Lvs linear-lanceol. hairy 3-nerved, Flws in globose heads, Perianth extern hairy, Tube very long and slender
16775 Invol 6-7-lvd Lvs lanceol acute dotted above, Tube of cor long slender glabrous slightly dilated upwards
16776 Leaves lanceol. acute smooth on both sides, Heads many-flwd termin. Perianth smooth, Tube infundib
16777 Leaves oblong-obtuse, Floral lvs oval, Calyx silky, Stem erect simple
16778 Leaves subrotund obtuse revoluto beneath as well as the calyx clothed with hoary tomentum
16779 Lvs decussate ovate acute nearly sess horiz or reflex. slightly downy above densely silky beneath, Per ext. silky, Tube contracted upw
16780 Invol 8-lvd 4 innerm often smaller, Lvs. distant on very short thick pet ellipt-obl oft narrower acute very smth. Flws. numer. polygam

CLASS III. — TRIANDRIA.

MONOGYNIA.

16781 Radic leaves obov or spathul Stem lvs broadly ovate sess subdent Flor ones lin oblong Flws. monœcious, Whorls cymose 2-parted male flws largest

16782 Radic leaves ovate acute, Stem leaves linear-lanceolate

Garden Varieties

§ 5 *Grey, striped*

38 Glorianélla *Sab*
39 Glorìana *Sab* H tr 7 11 18
40 élegans *J C*
41 speciòsus *J C*
42 variegàtus *Sab*
43 propínquus *Sab*
44 dentòsus *Sab*
45 decòrus *J C*
46 bicolor *Sab*
47 affinis *J C*
48 emarginàtus *J C*
49 tortuòsus *J C*
50 reticulàtus *Sab*

§ 4 *White, striped*

10 vittàtus *J C.*
11 floribúndus *Sab.*
12 pectinàtus *Sab*
13 spectábilis *J C*

51 grìseus *Sab*
52 pectinàtus *Sab*
53 incúrvus *Sab*
54 limcéllus *Sab*
55 obèsus *Sab*
56 spectábilis *J*
57 obtùsus *J C*

§ 6 *White, striped*

58 crássus *Sab*
59 Anderdòni Sab H tr 7 11 16
60 penicillàtus *J C*
61 stellàtus *J C.*
62 álbidus *J C*

Garden Varieties

14 striátulus *J C*
15 Morlèon *Sab*
16 inconspícuus *Sab*
17 stellàtus *Sab*
18 penicillàtus *J C*

63 párvulus *Sab*
64 unilineàtus *J C*
65 trilineàtus *Sab*
66 undulàtus *J C*
67 obsolètus *Sab.*

§ 7 *White.*

68 álbus màjor *Sab* H tr 7 11 18
69 álbus minor *Sab*

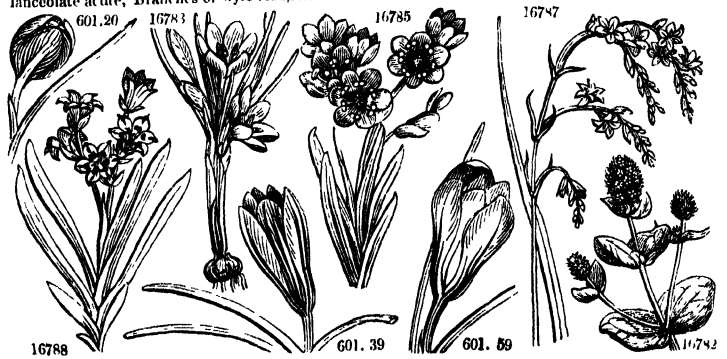
§ 8 *Purple, late flowering*

70 delèctus *Sab*
71 neapolitànus *Sab*
72 alpinus *Sab*
73 aprìlis *Sab*
74 tardiflòrus *Sab*

19 pulchéllus *J C*
20 propínquus *Sab*
21 affinis *Sab*
22 urbànus *Sab.* H tr 7 11 9.
23 pállidus *J C*

16783 Flowers unibracteate, Filaments incurvedly spreading puberulous geniculated above

16784 Leaves ensif bluntish cut in the middle, Scape 1-2-flwd Segments of perianth ovate bimaculate in the middle
16785 Lvs ensif acute mucron. striated, Scape smth 2-4-flwd Per 6-parted, segm of limb closely imbric ovate blunt keeled [of the perianth
16786 Stem leafy erect branched, Leaves nerved mucronate, Spike 2-4-flwd Spathe awned 3 times as long as the tube
16787 Spathes marked with linear spots, Segm of limb oblong, Scape many-spiked, Spikes pendulous
16788 Scape cylindric smooth 2-4-flwd Spathe 2-valved, Valves ov lacer membr veined, Segm 6 erect acute keeled
16789 Scape few-flowered longer than the leaves, Leaves acute, Perianth funnel-shaped, Tube filiform, Segments lanceolate acute, Branches of style elongated



and Miscellaneous Particulars.

he Horticultural Society's garden, and they are described at length in the Society's Transactions, where, also, many f the sorts are beautifully figured

105. GLADI'OLUS Sp 35—40

16790 715*a* hyálinus *Jac* glassy ♂ △ or 1 my jn Y.B C G.H. 1825 O s p.l Jac ic 2. 242
16791 715*b* tenéllus *Jac* tender ♂ △ or ½ my jn Va.Y C.G H. 1825 O s p l Jac. ic. 2.248
16792 715*c* Colvíllii Swt. Colvill's ♂ △ pr 1 jn jl S Y hybrid 1824 O l s Sw fl gar. 155
16793 717*a* cochleàtus *Swt* spoon-*lipped* ♂ △ or 1½ mr W.R C G H. 1829. O s p.l Sw.fl gar 2.s 140
16794 721*a* pudibúndus *Swt* blush-*flowered* ♂ △ or 3 ... Bh Eng. hyb ... O r.l Sw.fl.gar 2.s. 176

16795 728*a* natalénsis *Reinw.* Natal ♂ △ spl 4 au S Y Natal riv. 1830. O p.l Sw.fl.gar.2 s.281
psittacínus *Hook* in Bot Mag 3032, and *Lindl* in Bot Reg 1442
16796 - - Mortónius Herb ms. Morton's ♂ △ or 1½ .. .. S. Africa 1837. O s p Bot. mag 3680

106. ANOMATHE'CA Sp 2—2

16797 732*a* cruénta *Lindl.* bloody ♂ △ or 1 my s Bd C.G H. 1830 O s p l Bot reg. 1369

2504. 107*a*. ANISA'NTHUS *Swt.* ANISANTHUS (*Anisos*, unequal, *anthos*, a flower) *Irideæ* Sp 3—3
16798 - - spléndens *Swt* splendid ♂ △ spl 1½ my jn S C G.H 1825 O s p.l Sw.fl gar. 84
Nos 704. & 706. in p. 42. are also referable to this genus.

2505. 114*a*. DI'ETES *Sal.* DIETES (*Dis*, twice, *etes*, an associate, related to *Iris* & *Moræ'a*) *Irideæ*. Sp 3—3
16799 - - bicolor *Swt.* two-coloured ⚤ △ or 2 jl o Y B . . . D l p Bot. reg 1404
16800 - - catenulàta *Swt.* chain-*dotted* ⚤ △ or 1½ ap au W.B Madagas. 1826 D l p Bot. reg 1074
Moræ'a iridoides in p. 46. is also referable to this genus.

2506 114*b*. LEUCOCO'RYNE *Lindl.* (*Leukos*, white, *koryne*, a club, sterile anthers) *Asphodèleæ* Sp 3—3
16801 - - odoràta *Lindl.* sweet-scented ♂ △ or 1 au W Valparaiso 1826 O p l Bot reg 1293
No. 752 in p 44. is also referable to this genus

2507. 114*c* TRITELEI'A *Lindl* (*Treis*, three, *teleios*, complete, ternary arrangement) *Asphodèleæ* Sp 3—3
16802 - - grandiflòra *Lindl* great-flowered ♂ △ or 2 jl au ? W N America 1826 O p l
16803 - - láxa *Benth.* loose-*umbelled* ♂ △ or 1½ jn jl Dp.B California 1832 O p l Bot reg 1685
16804 - - unifiòra *Lindl.* one-flowered ♂ △ el 1 jn B B. Ayres 1836 O p.l Bot reg. 1921

115 I'RIS Sp 68—105

16805 755*a* Húmei G Don *Sir Ab* Hume's nepalénsis *B R.* not of *D Don* ⚹ △ or 2 ap my B Nepal 1822 D co Bot reg. 818
762 variegàta
β De Berg *H Bel* De Berg's ⚹ △ or 3 my jn Y BR Belgian hyb D co
γ Van De Will *H Bel* Van De Will's ⚹ △ or 3 jn jl Y BR. Belgian hyb D co
16806 793*a* longispatha *Frc.* long-spathed ⚹ △ or 3 jl P Siberia 1828 R co Bot mag 2528
16807 798*a* longifòlia *Swt.* long-leaved ⚹ △ or ¾ ap P Gsh Naples 1829 D lt Sw fl gar 2 s 146
16808 805*a* tènax *Don* tough ⚤ △ or 1 ap my P California 1826 D p l Bot reg 1218

16809 - - Hoóker's Penny Hooker's ⚹ △ or 1½ my jn P N Amer. 1826 D co Bot mag 2886

2508. 117*a* SISYRI'NCHIUM *L* SISYRINCHIUM (*Sys*, pig or hog, *rhynchos*, snout) *Irideæ*. Sp 15—26
16810 - - chilénse *Hook* Chilean ⚤ △ or 1 jn au B Chile 1826 D p l Bot. mag 2786
16811 - - graminifòlium *Lindl* Grass-leaved ⚤ △ or ½ ap my Y Chile 1825 D s p Bot reg 1067
β pùmilum *Lindl* dwarf ⚤ △ or ½ o Y Chile D s p Bot reg 1915
16812 - - pedunculàtum *Gill* stalked-*flwd* ⚤ △ or 1 s o Y Chile 1827 D s p Bot. mag 2965

16813 - - odoratissimum *L.* sweetest-scntd ⚤ △ or 1 jn W S America 1828 D s p Bot reg 1283
16814 - - maculàtum *Hook* spot-*petaled* ⚤ △ or 1 my Y spt Chile 1831 D l p Bot mag 3197
16815 - - speciòsum *Hook.* showy ⚤ △ or 1 jn B Chile 1836 D co Bot mag. 3544

16816 - - grandiflòrum *Don* large-flowered ⚤ △ or ½ my jn D p N America 1826 D p Bot. reg 1364
Nos 833 to 840 in p 48, are now referred to this genus

2509. 117*b* RENEA'LMIA R Br (*P. & M L Renealme*, the first a Fr phys, the other a bot) *Irideæ* Sp 1—3
16817 - - grandiflòra *R Br.* large-flowered ⚤ △ or 1½ ap W N Zealand 1822 R p l Sw fl gar 64



History, Use, Propagation, Culture.

105. *Gladiolus* Some valuable additions have been lately made to this beautiful genus, of which the most splendid is unquestionably *G.* natalénsis, which is also very hardy, and of as easy propagation and culture as the *G.* communis

16790 Lvs. 3-nerved, Scape few-flwd Segments of cor ringent even somewhat transparent
16791 Lvs. very narrow, Scape 2-flwd Tube equal to the spathe, Segments lanceolate obtuse
16792 Lvs linear ensif ribbed slightly glaucous, Tube scarcely equal to the spathe [hollow
16793 Lvs narrowly linear elong straight rigid promin 2-nerved, Lower segm of fl obovately ovate spoon-shaped
16794 Lvs. broadly ensif acumin. ribbed, Spike distich about 10-flwd Tube shorter than outer spathe, Segm ovate-oblong recurved and wavy
16795 Leaves ensif bicostate obscured nerved, Spikes term. 10-12 flwd Sheath dbl convolute, Tube ½ length of fl. campan spreading
16796 Lvs 8-9 green nerved acute twisted

16797 Nearly allied to A *funcea*, but differs in having longer tube to flower, greater irregularity of limb and form of spots at base of 3 anterior segments

16798 **Scape simple erect,** Lvs ensif linear acute smooth nerved, Flowers distichous

16799 **Lvs. equal linear ensif** Scape round branch at top
16800 **Lvs. distichous ensif.** spirally twisted, Scape branched compressed leafy many-flowered

16801 **Lvs. linear glaucous,** Limb laciniate lanceolate, Stamens sterile subulate obtuse

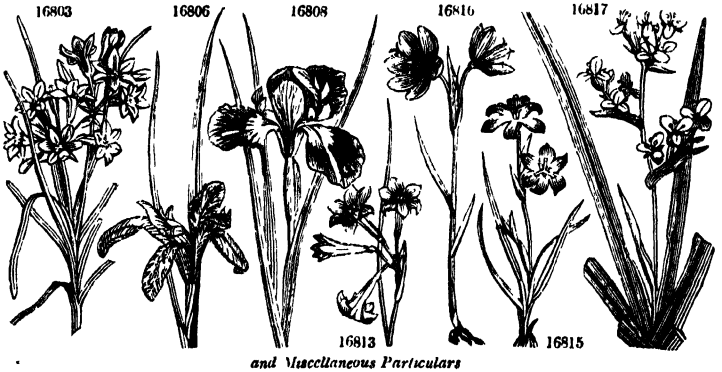
16802 **Lvs. ovate-lanceolate,** Limb linear-lanceolate
16803 **Lvs. linear glaucous,** Scape longer, Involucrum with pedicels twice as short, Umbel many-flwd
16804 **Lvs. linear,** Involucrum sheathed at top bifid, Peduncle filiform shorter

16805 **Crested,** Scape 2-flowered, Leaves falcate shorter, Spathe 2-leaved

[12 furrows and 12 obtuse angles
16806 Scape nearly round ltl flatt twist about 3-flwd Spathe 3-bracts outer nearly 1 it long very narr atten Germ
16807 Sheath radical long surrounding the leaves, Lvs very long thick quadrangular striated very glaucous
16808 Lvs in tufts rigid erect linear-ensif tough, Stem angul leafy, Ovar on long stalks not enclosed in flor. leaves somewh 3-cornered, Stigm 2-lbd short
16809 Stem 3-4-flwd Lvs. linear-ensif striat acumin slightly falcate, Peduncle shorter than foliaceous spathe

[mucron Caps. pear-sh pubes
16810 Lvs linear-ensif striat Pedunc 4-5 in long, Pedic 1¼ in long also very slender, Pet 6 oblong-spathul retuse
16811 Foliage minutely hairy, Scape erect longer than lvs somet divided bearing mostly 3 fascicles of flws Flws with little heart sh spot at base
16812 Pedun. solit or 2-4, Spathe diphyl Bract scariose convolute, Col of fl long densely covered with longish gland. yellow hairs [sever. very frag nodding
16813 Lvs very narrow glauc subul at apex, Spath consist of bract. membran at margin lowerm sharpest, Flws
16814 Stem remarkably compressed, Spathe lanceol condupl green with broad white membr margin Germ glandlr.
16815 Bulb ovate, Lvs mostly radic. dply. striat sheathing, Spathe 2 unequal lvs about 2-flwd Pedun. 1-in long curved, Ov oblong glabrous
16816 Stem terete simple, Lvs lanceol. veined, Spathe gener. 3-flwd Segm of cor spathulate, Root bulbous

16817 **Lvs. oval-oblong pointed smooth on both sides,** Flowers in long racemes



and Miscellaneous Particulars

16815 ***Sisyrinchium speciosum*** is a lovely species, found about Valparaiso, on sandy hills, to be brought to perfection, it requires to be planted in dry light soil, and placed in a warm sunny situation in the green-house

Class IV. — TETRANDRIA.

MONOGYNIA.

240 ISOPO'GON. Sp. 8—14

16818 1312*a* longifolius *R Br.* long-leaved ● ▭ or 3 jn jl Y N Holland 1823 C p l Bot reg. 900
16819 - - Baxteri R Br. Baxter's ● ▭ or 2 mr ap Ro N Holland 1831. S s p Bot mag 3539
16820 - - Loudoni R Br. Loudon's ● ▭ or 4½ sp P K G S 1830 S s p Bot mag. 3421
β linearis *R Br.* linear ● ▭ or 2 sp Pa.P K G S 1830. C s p Bot. mag. 3450

2510 237*a*. CONOSPE'RMUM *R Br* Conosperum (*Konos*, a cone, *sperma*, a seed) *Proteàceæ* Sp. 2—9
16821 - - ericifolium *R Br* Heath-leaved ● ▭ or 3 jn au W N Holland 1820 C s p Lin tr. 10 17. 1
16822 - . taxifolium *Sm.* Yew-leaved ● ▭ or 3 jn.au W N Holland 1824 C s p Bot mag. 2724

2511. 237*b* BOTRY'CERAS *W* Botryceras (*Botrys*, a raceme, *keras*, a horn) *Proteaceæ* Sp 1—1
16823 - - laurinum *W.* Laurel-like ● ▭ or 4 . .. . N Holland 1823 C p.s W.b m 10.10 1811

2512 238*a*. ANADE'NIA *R Br* (*A*, without *aden*, a gland, nectariferous wanting) *Proteàceæ*. Sp 1—1.
16824 - - pulchella *R Br.* neat ● ▭ or 2 ... Y N Holland 1824 C p l

2513. 238*b* AGA'STACHYS *R Br.* (*Agastos*, admirable, *stachys*, a spike) *Proteàceæ* Sp. 1—1.
16825 - - odoràta *R Br.* sweet-scented ● ▭ or 3 ap s Pa Y N Holland 1826. C s.p

239 GREVI'LLEA Sp 18—40
16826 1409*a* concinna *R Br* neat ● ▭ or 4 ap s P N S W 1824 C s p
1411 linearis
β incarnàta *B M* flesh-coloured ● ▭ or 4 ap s F N Holland ... C s p Bot. mag 2661
γ alba *Lod* white-*flowered* ● ▭ or 4 ap s W N Holland C s p Bot cab 1003
16827 1416*a* pubescens *Hook* pubescent ● ▭ or 4 ap s R N Holland 1822 C s p Hook ex fl 216
16828 1416*b* canescens *R Br* hoary-*leaved* ● ▭ cu 5 ... G. taw P Jackson 1824 C s p Bot mag 3185
16829 1420*a* Caleyi R Br Caley's ● ▭ or 5 jn s R P Jackson 1829 C l p Bot mag 3133
16830 1420*b* robusta *Cun* robust ↑ ▭ or 80 ... . . O Moreton 1830 C l p Bot. mag. 3184

261 HOUSTO'NIA Sp 3—6
16831 1541*a* serpyllifolia *Mx* Wild-Thyme-lvd £ △ pr ¼ jn au W N America 1826 D s p Bot. mag 2822

271 CRUCIANE'LLA Sp 10—16
16832 - - stylosa *Trin* long-styled ☓ △ or 1½ jn au Bt Pk Persia ? 1836 D co Bot reg n s 55

283. PEN*Æ*'A Sp 3—8
16833 1732*a* imbricata *Grah.* imbricate-*lvd* ● ▭ pr 2 jn jl Pk (G H 1824 C p l Bot mag 2869

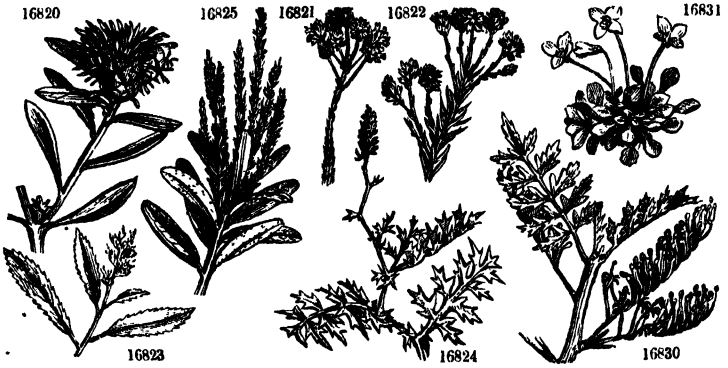
295 OLDENLA'NDIA Sp 3—1.
16834 - - Deppeana S & C. Deppe's ■ ▭ cu 1 year W Mexico 1835 C l p Flor Cab 1

2514 295*a*. LIPO'STOMA *D Don* (*Lepo*, to fall from, *stoma*, mouth; lid from capsule) *Rubiàceæ* Sp 1—1
16835 - - campanuliflora *D Don* bell-flwd ☙ ▭ pr ¼ jn au B Brazil 1825 C l p Bot mag 2830
Æginètia capitàta *Grah*, Hedyotis campanuliflora *Hook.*

296 MANE'TTIA. Sp 2—3.
16836 - - glabra *S & C.* smooth ☙ ▭ or 5 au d S B. Ayres 1831. C p.l Sw fl gar 2 s 251
cordifolia *Hook*, in Bot. Mag 3202

297 *EPIME'DIUM* Sp 4—5
16837 1763*a* diphyllum *Lod* twin-leafed ☓ △ pr ¾ my W Japan 1830 ? D lt l Bot. mag 3448
16838 1763*b* macranthum *Lindl* large-flowered ☓ △ pr ? 1 ? ap Li P Japan 1835 D s l Bot. reg. 1906
grandiflorum *Sieb.*
16839 1763*c* violaceum *Sieb* Violet-coloured ☓ △ or ¾ ap my V Japan 1835. D pl.

2515 306*a*. BENTHA'MIA Lindl (*George Bentham*, Secretary to the London Hort Soc) *Cornàceæ* Sp 1—1
16840 - - fragifera *Lindl.* strawberry-*fld* ❀ or 10 su Ysh E Indies 1825 L co Bot reg 1579



History, Use, Propagation, Culture.

2514 *Lipóstoma.* The species of this genus thrive in any kind of light soil, and cuttings root readily in the same under a hand-glass, in a little heat

2515. *Benthàmia.* A very desirable, nearly hardy shrub, which, perhaps, might be rendered hardier by grafting it

CLASS IV. — TETRANDRIA.

MONOGYNIA.

16818 Lvs. linear-lingulate upperm. quite entire · lower ones sub 3-fid Calyx silky, Stigma smooth
16819 Lvs. hard stiff glandul on both sides upper 1 or 2-trifid cune & 1 or 2ce twisted at base, Heads of flws. crowd.
16820 Lvs. coriaceous lanc -lingul. or subspathul. faintly 3-nerved, Branches & perianth smooth

16821 Lvs subulat -filif imbricated, Spikes shorter than the axillary peduncle
16822 Lvs lanceol.-linear acute mucron slightly pubescent somewhat obliquely twisted

16823 Leaves lanceolate coriaceous serrated, Panicle corymbose

16824 Lvs pinnatifid slightly hairy, Lobes cuneiform, Follicle viscid

16825 The only species

16826 Bran hoary slightly angul Lvs lin revol at edge with small mucro somet 2 or 3-fid at point densely hairy ben Cal extern silky

16827 Lvs spathulato oblong mucronate pubes on both sides, Racemes corymb Pedicels and calyx smooth
16828 Lvs oblong-obovate obtuse mucron above pubescent beneath very downy pale grey, Racemes recurved
16829 Lvs pinn segm altern lin -obl obt above downy with patent ferrug hairs below silky with adpressed hairs
16830 Lvs. pinnatif segm. acute smooth and veiny above hoary beneath, Racemes panic. Perian & pistil very smooth

16831 Cæspitose bearing many rooting stems, Lvs spathul rather hairy, Peduncle termin 1-flwd elongated

16832 Procumbent, Lvs 8-9 in a whorl & are as well as stems hispid, Style clavate much exserted bifid at apex

16833 Lvs sessile rhomb.-ovate acute very entire imbricated or spreading, Bract. few naked

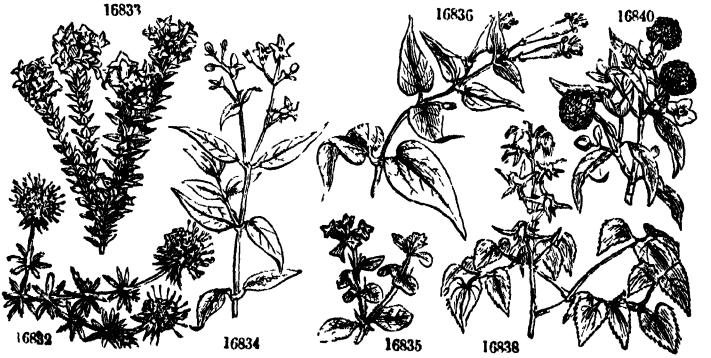
16834 Lvs petiol ovate-lanceol taper into petioles firm much acuminated rather revol, Stip white glandul downy setosely jagged, Panic. loose at ends of bran.

16835 Plant hairy, Lvs roundish undulated spreading

16836 Lvs. cordate-acumin. shining on both sides, Bract connate, Pedun axill 1-flwd Tube clavato-funn -shaped

16837 Petiol numer filiform dichot sparingly hairy more abund at swollen joints, Petals flat
16838 Lvs tritern leafl cord -ovate petiol hairy, Rac many-flwd Sep lin obt. Petals ov -lanc inner ones spurred twice long th outer ones
16839 Lvs. tritern. leafl ovate-oblong petiol smooth

16840 The only species



and Miscellaneous Particulars

on Cornus sanguinea. It is readily propagated, either by seeds or by cuttings The fruit, when ripe, somewhat resembles that of the arbutus, but is much larger The flesh is yellowish white, rather insipid, but not unpleasant, although a little bitter; and, as Mr. Royle informs us, it is eaten by the inhabitants of the hills in the Himalayas

Page 108. CLASS V. — PENTANDRIA. *5 STAMENS.*

Order 1. MONOGYNIA. 5 Stamens. 1 Style.

2516 *349a Douglásia* Caps cartilaginous, 1-celled, 5-valved Cor infundibuliform; tube ventricose; limb flat, 5-parted Stigma a minute depressed cup Seeds 2, peltate oblong, convex on outside, concave on inside.

2517 *369a. Collomia* Cal campanulate, 5-cleft Cor salver-sh, tube slender. Stam. inserted towards middle of tube Cells of caps 1-2-seeded.

2518. *371a Eutoca* Cor. deciduous Ovar pilose Placentas linear, 4, or many, ovulate. Caps. half 2 celled.

2519 *381a Nierembérgia.* Cor with long slender tube and equal dilated limb Stam. exserted; filamen. combined at base Stigm transverse or peltate

2520 *381b.* Petúnia Cor. with short tube and dilated rather uneq.-limb. Stam. unequal, enclosed.

2521. *384a. Phaseólus.* Ovarium 3-celled, cells 3-seeded

2522 *388a Gília.* Cal. campanul, 5-cleft. Cor funnel-sh or subcampan Stamens inserted in throat. Cells of caps many-seeded

2523 *388b. Ægóchloa* Cal. tubularly campanulate, 5-cleft. Cor. somewhat salver-shaped. Stams. inserted in the upper part of tube. Cells of caps many-seeded.

2524 *388c Linánthus* Cal tubular, with 5 strong green nerves, terminating in subul. recurv. teeth at apex Cor funnel-sh Anthers filiform, hardly sagittate at base

2525 *388d Hugelia* Cal. tubul. campanul. Cor funnel-sh Tube short, exserted Stam. inserted at throat Anthers linear sagittate

2526 *388e. Leptosiphon.* Cal. tubul campan, lobes linear, subulate Cor funnel-sh; tube very long, slender, limb campanul., 5-cleft, with oval very entire lobes Stams inserted at throat Cells of caps many-seeded

2527. *388f Fénzlia* Cal. tubul campanul, deeply 5-cleft, with membranous sinuses and linear acutish erect segms Cor somewh funnel-sh, tube short, limb 5-parted Anthers ovate-sagittate, a little exserted

2528. *394a Melíchrus.* Cal many-bracteate Cor rotate or urceolate, furnished with 5 fascicles of glands near the base inside, segments half-bearded

2529 *399a Sphenotoma* Cal bibracteate Cor salver-sh, with slender tube, coarctate throat, and blunt beardless limb Stam epipetalous Hypogynous scales 5 Placent hanging from top of central column

2530 *399b. Trochocárpa* Cal. bibracteate. Cor campanul, limb spreading, bearded Stam. exserted Ovarium 10-celled Drupe baccate.

2531. *400a Poncelètia* Cal foliaceous. Cor short, campanul, 5-cleft, beardless Stam, hypogynous Anther peltate below middle, with marginato dissepiment. Hypogynous scales 0 Placentas adnate to central column

2532. *400b Cosmelia.* Cal foliaceous Cor tubular. Stam. epipetalous, adnate to dilated tops of filaments Hypogynous scales 5. Placentas, adnate to central column.

2533 *413a Pachypódium* Stam enclosed Anthers nearly sess., adhering. ? Hypogynous scales 0. Cor. salver-sh, with equal, obtuse segments Follicles ovate

2534 *424a. Nyctérisition* Cal and cor 5-parted. Stam 5, all fertile. Ovarium 5-celled; cells 1-seeded Stigma obtuse, almost entire Seeds bony, albuminous

2535 *462a Wahlenbérgia* Cor 3-5-lobed at apex, rarely divided to middle. Stam. 3-5, free, filaments rather broadest at base. Style enclosed, pilose, most so towards upper part Stigmas 2-5 Ovar combined with tube of cal Caps 2-5-celled, each opening by so many valves at apex, which bear each a dissepiment in middle Seeds very numer. minute.

2536 *464x Prátia* Limb of cal. 5-toothed Cor cleft on back, even to base; limb 5-parted, unilabiate Stam combined above Anthers cohering; two lower ones mucronate Stigma 2-lobed Caps baccate, crowned

2537. *464y* Túpa Cal. spherical, 5-parted Cor. cleft on back almost to base, limb divided into 5 segms, which are all united at their tips Stams combined almost to base; anthers cohering, bearded. Stigma 2-lobed, protruding Caps. 2-celled, many-seeded.

MONOGYNIA.

323 ABRO'NIA.

									Sp 2—2					
16841	1859a mellífera *Dou*	honey-bearing	✱	△	pr	½ jn au	W	California	1826.	D	s p	Bot mag 2870		

332 ONO'SMA.

									Sp 9—21.					
16842	1909a tinctórium *Bieb*	dyers'	♀	△	el	½ ap jn	Y	Caucasus	1826	S	s p			
16843	1912a tricerospérmum *Lag*	3-horn-seeded	☿	△	el	½ ap jn	Y	Spain	1824	S	s p			

343 NO'NEA

									Sp 7—9					
16844	1966a flavéscens *Mey*	yellowish-*fwd*		○	or	1½ my.n	Ysh	Russia	1835.	S	co			

346. TOURNEFO'RTIA

									Sp 9—12.					
16845	1998a heliotropioides *Hook*	Heliotrope-lk	♃	□	or	2 my	Pa Li B	Ayres	1829.	C	l p	Bot mag 3096		

347. NOLA'NA

									Sp 3—5.					
16846	2006a paradóxa *Lindl*	paradoxical	✱	○	el	1½ au	B	Chile	1825	S	co	Bot reg 865		
16847	2006b atriplicifólia *D.Don*	Atriplex-leaved	✱	○	or	½ au	B.w Y	Peru	1824.	S	r l	Sw fl gar 2 t 305		



2538 464*z* *Siphocámpylos* Limb of cal 5-parted. Tube of cor. curved, undivided, ventricose in middle, limb 5-parted, bilabiate. Stams and anthers combined, anth. bearded Caps 2-celled, 2-valved, dehiscent
2539 467*a* *Lechenaultia* Calyx superior Cor with tube on upper side Anth at first cohering Stigma obsolete, bilabiate in bottom of indusium. Caps prismatic, 2-celled, 4-valved Seed cubical or nucamentaceous
2540 470*a* *Brunónia* Heads involucrate Cal 5-fid 4-bracted Cor monopetalous, infundibuliform; limb 5-parted. Stam 5, hypogynous Anth connate Ovar 1-seeded Seed exalbuminous.
2541 478*a* *Lygeseteria* Cal with an ovate tube, and 5-parted irregular limb, ciliated with glands Cor funnel-sh, tube gibbose at base, limb 5-parted and campanulate Stigma capitate. Berry roundish, 5-celled, crowned by calyx; cells many-seeded.
2542 491*a* *Lauólia.* Calyx 5-parted, segms foliaceous Cor. tubular; limb 5-lobed, imbricate in æstivation. Stigma bipartite Caps 2-celled. Seed samaroid, surrounded by jagged membranous margin
2543 496*a* *Uncária* Cal tubularly urceolate, 5-cleft Caps. pedicellate. clavate, attenuate at base. Flws less crowded than in Nauclèa
2544 509*a* *Colletia* Calyx campanulate, coloured Petals 0 Anth. 1-2-celled, reniform or ovate Disk cup-sh. Style simple, elongated Fruit dehiscent, containing 3 nuts.
2545 509*b* Retanilla Calyx urceolate, 5-cleft Petals cucullate, sessile Stam enclosed Anth reniform, 1-celled Disk covering bottom of calyx Style simple Fruit containing a 3-celled nut
2546 509*c* *Trevóa.* Cal turbinate, 5-cleft Petals cucullate Stamens enclosed Anthers 1-celled, reniform Disk almost wanting Style long, hairy. Caps membranous, 2-valved, 1-seeded
2547 518*a* *Colconèma* Cal 5-parted. Disk adnate to base of cal with 5-lobed margin. Petals 5, with spreading border Anth terminated by minute sessile gland Caps of 5 horned carpels
2548 529*a* *Escallónia* Tube of the calyx semiglobose, adnate to ovarium, limb 5-toothed or 5 lobed Petals 5, arising from calyx Stam 5 Anthers ovate-oblong Stigma peltate Style filiform, permanent. Caps baccate Seeds numerous
2549. 540*a* *Espèlton* In every respect the same as *Viola*, but the sepals are hardly drawn out at base, and the lower petal is not drawn out into a spur, but furnished with a small gibbosity Anth without appendages
2550 241*a* *Hymenanthèra* Sepals imbricate Petals at length reflexed Structure of stams. as in *Viola*, but joined at base into monadelphous disk, with a scale at back of each Caps rather baccate, 2-celled, cells 1 seeded
2551 565*a* *Oplothèca* Cal semi-5-fid, bibracteate Cor 0 Nectar tubular 5 toothed. Anth 5, sessile at mouth of tube of nectarium, and alternate with its teeth Utriculus 1-seeded Style undivided Stigma capitate.

Order 2 DIGYNIA 5 Stamens 2 Styles

2552 578*a* *Harrisónia* Cor urceolate, 5-toothed, throat naked Crown of stam of 5 pieces, each with a fleshy process or tooth
2553 578*b* *Tweédia* Calyx 5-parted Corolla campanulate Corona simple of 5 retuse exserted pieces opposite the petals Pollen masses ventricose. Stigma acuminated bipartite Gynostegium none
2554 579*a* *Philibertia* Corona double; outer one annular, entire, fleshy, undulated, inner one inserted on the top of the gynostegium of 5 entire fleshy segments. Cor urceolate, sinuately 5-lobed, furnished with small teeth between the segments
2555 590*a* *Physánthus* Cor tubular Tube inflato-ventricose, limb 5-fid, connivent
2556 592*a* *Tylophora* Corona simple, 5-lvd, leaflets depressed, fleshy, toothless inside, pressed to the gynostegium. Pollen masses transverse or ascending Cor. rotate.

Order 3. TRIGYNIA 5 Stamens. 3 Styles

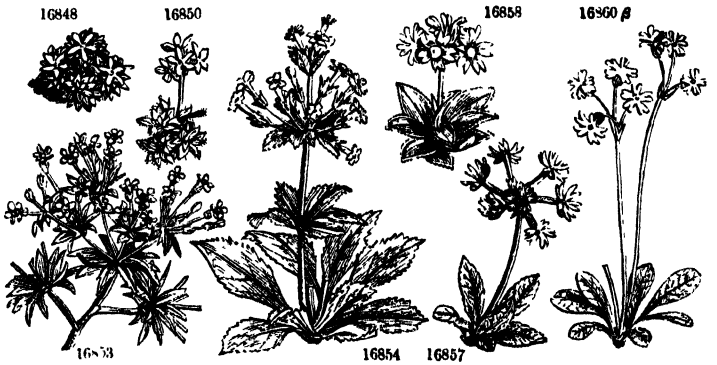
2557. 684*a*. *Stackhousia* Calyx 5-parted Petals 5, joined by the claws Stamens unequal, alternating with the petals Stigma acute, simple. Capsule tricoccous

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MONOGYNIA.

16841 Lvs ovate or ovato-oblong somewhat sinuated glutinous, Per. 1 in long, Tube glabr. Limb spreading waved
[Filams very short
16842 Tubercul hispid or strigose, hairs or strigæ spread Stem much bran Lvs. lanceol. upper ones dilat at base,
16843 Strigose, Flws drooping longer than calyx, Nut 3-horned

16844 Downy also beset with stiff bristles or strigæ, Stem diff or erect bran Lvs obl.-lan. ac ent caul. ones sess flor ones subcord, Cor. equal to calyx
[4-seeded
16845 Stem somewhat shrubby, Bran herbac hairy, Lvs ellipt obtuse pubesc on both sides waved, Berry 4-celled
[1-seeded
16846 Prostrate hairy, Lvs ovate obtuse pilose, Segms of cal triangul Cor. campanul.-funnel sh. Drupes cumul
16847 Procumbent rather villous, Cal. campanul segms ovate-lanceol acute connivent, Lvs spatul.: root ones large



348 ARE'NTIA. Sp 5—5

16848 2008*a* pubéscens *Dec* pubescent ♀ △ pr ½ my jn W Switzerl 1824 D s p Bot. cab. 1273
16849 2009*a* argéntea *Gar* silvery ♀ △ pr ½ my jn W Switzerl. 1826. D s p

349 ANDRO'SACE. Sp 13—17.

16850 2013*a* carinàta *Torrey* keeled ♀ △ pr ½ ap Y N Amer 1826 D p s Sw fl gar.2.s.106
16851 2015*a* macrocárpa *Led.* large-capsuled ○ pr ½ jn.au W Siberia 1827 S co
16852 2017*a* linearis *Grah* linear-*leaved* ♀ △ pr ½ ap my W N. Amer 1826 D s p

2516 349*a* DOUGLA'SIA Lindl DOUGLASIA (*David Douglas*, the lamented bot collector) *Primulàceæ* Sp.1—1.
16853 - - nivàlis *Lindl* snow-*inhabiting* ♀ △ pr ½ ap P Rocky M 1827 S s p Bot. reg. 1886

350. PRI'MULA Sp 31.—48.

2023 farinòsa
a small red-flowered, Sw fl g 2 s 65*a* β large pale-flowered, ditto 65*b* γ white-flowered, ditto 65*c*

16854 2025*a* verticillàta *Forsk* verticil *flwrs two* ♀ △ pr ½ mr Y Egypt 1826 D s p Bot mag 2842
16855 2025*b* suavèolens *Bert.* sweet-scented ♀ △ pr ½ mr my Y Italy 1824 D s l Fl nap 1 13
16856 2025*c* inflàta *Lch* inflated ♀ △ pr ½ mr my Y Hungary 1825 D s l Leb in 2
16857 2027*a* longiflòra *All* long-flowered ♀ △ pr ½ my jl R Europe 1825 D p l Fl au 5 46
16858 2033*a* glaucéscens *Moret* glaucescent ♀ △ or ½ jn jl Pk Switzerl 1826 D p l Sw fl gar 254
2036 sinénsis
β flòre álbo white-flowering ♀ △ pr ¾ ja o W China . S s p Sw fl gar 196
γ fimbriàta rósea frgd rose-*cld-fld* ♀ △ pr 1 ja o Ro gardens 1833 S s l
δ fimbriàta álba fringed white-*fld* ♀ △ pr 1 ja o W gardens 1833 S s l
16859 2039*a* amœ'na *Bieb* pleasing ♀ △ pr ½ ap jl P Caucasus 1823 D s l
16860 2040*a* sibírica *Jac* Siberian ♀ △ pr ½ my jl R Siberia 1818 D p l
β integérrima *Hook* very entire ♀ △ or 1 mr ap R Li Altaic M 1832 D p l Bot mag 3445
16861 - - venùsta *Host* neat ♀ △ pr ap my P Hungary 1833 D s l Bot reg 1983

353 DODECA'THEON Sp 2—2.

2046 Meà'lia
α *lilácina* Swt Lilac-*flowered* ♀ △ or 1 ap jn Li Virginia 1744 D l Bot mag 12
β albiflòra *Swt* white-flowered ♀ △ or 1 ap jn W gardens 1824 D l Bot cab 1489
γ élegans *Swt.* elegant ♀ △ or 1 ap jl Ro gardens 1827. D l Sw fl gar 2 s 60
δ gigantèa *Swt* gigantic ♀ △ or 2 ap jl Li gardens 1819 D l
16862 2046*a* integrifòlium *Mx* entire-leaved ♀ △ or ½ ap jn L P N Amer 1829. D l p Pluk al 76 6

354 CY'CLAMEN Sp 7—10

2049 pérsicum α inodòrum β odoràtum γ albiflòrum
2050 hederæfòlium α purpuráscens β álbidum
16863 2050*b* repándum *Sm* repand ✱ △ or ½ ap my R Greece 1816 S p l Sw. fl gar 117
16864 2050*b* neapolitànum *Ten* Neapolitan ✱ △ or ½ ap my R Italy 1824 S p.l

357 ANAGA'LLIS. Sp 6—13.

16865 2070*a* indica *Swt* Indian ○ pr 1 my.s R Nepal 1824 S co Sw. fl gar. 132
2073 Monélli
β *lilácina* D Don Lilac-*flowered* ♀ △ or 1 my. Li ..... 1836. C p l Sw fl gar 377
16866 - - Willmoreàna Hook. Willmore's ♀ △ or ½ au o P Bury Madeira 1834 C l t Bot mag 3380

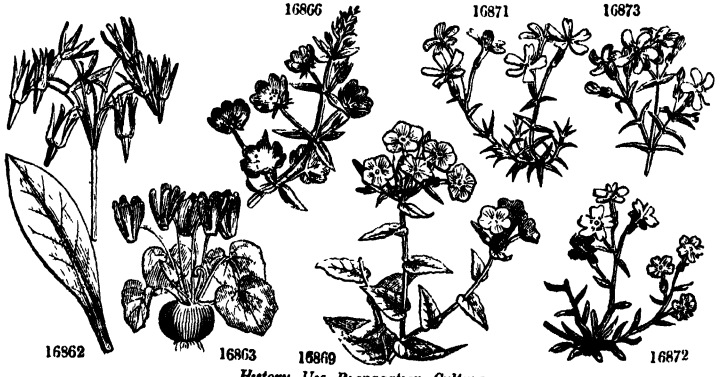
369 PHLO'X Sp 28—48

16867 2110*b* reflèxa *Swt* reflexed ♀ △ or 3 jl s R hybrid .. D p l Sw fl. gar 232
2111 pyramidàlis β pendulifiòra γ corymbòsa δ álba
16868 2111*a* cordàta *Ell* cordate-*leaved* ♀ △ or 3 . . Pa P Carolina 1827 D p.l Sw fl gar n s 13
16869 2109*a* Drummóndii Hook Drummond's △ ○ or 1 su aut Ro P Texas 1835 S& C lt l Bot mag 3441

16870 2118*a* canadénsis *Hort.* Canadian ♀ △ or 1 ap my B N Amer. 1825 D p l Sw fl gar 221
16871 2118*b* aristàta *B C* awned ♀ △ pr ½ ap W Carolina 1828 C p l Bot cab 1731
16872 2118*c* procúmbens *Lch.* procumbent ♀ △ or ½ my F N Amer. 1827. D p l Sw fl gar n s 7

16873 2118*d* speciòsa *Dou* showy ♀ or 1 F Columbia 1826. C s l Bot reg 1451
16874 2117*a* tardiflòra *Penny* late-flowering ♀ △ or 2 au o W N Amer 1825 D co Sw fl gar n s 31
longiflòra *Swt*
β purpùrea purple-*flwd* ♀ △ or 2 au s P hybrid 1836. D co
16875 2119*a* odoràta *Swt.* sweet scented ♀ △ or 3 au Li N Amer D p l Sw fl gar 224
16876 2110*c* scàbra *Swt.* scabrous ♀ △ or 3 au Li N Amer. . D p l Sw fl gar 248

2517 369*a* COLLO'MIA *Nut* COLLOMIA (*Kolla*, glue, flowers) *Polemoniàceæ* Sp 7—7
16877 - - heterophylla *Hook* various-leaved ○ or ½ jn s Pk N W Am 1826 S co Bot mag 2805



History, Use, Propagation, Culture,

369. *Phlóx.* All the phloxes are elegant plants; the lower-growing sorts are most ornamental on rockwork, and the taller kinds in beds or borders Of the latter by far the most splendid is P. Drummóndii, which, with *Verbèna chamædrifòlia*, ought to be in every flower-garden.

16848 Lvs ovate acuminate pubescent crowded on the stem
16849 Lvs ovate acuminate with a mucro at the point slightly pubescent and silvery

[nearly to base persist
16850 Lvs crowded ovate-lanceol. acute keeled on upper side ciliat Scape villous, Umbel many-flwd Cal. 5-cleft
16851 Lvs oblong acuminate smooth above and slight downy beneath, Capsule large
16852 Lvs linear mucron. slightly pubescent underneath

16853 Lvs. lin. obtuse subamplexic closely hairy, Bran rigid hoary subverticil, Flws subumbell on long pedunc

16854 Lvs oblong acute serrat powdery beneath, Flws verticill, Involl leafy, Tube of cor very long, Segms. entire
16855 Lvs lanceolate smooth
16856 Lvs. ovate oblong
16857 Lvs. ovato-lanceolate
16858 Lvs. oblong-lanceol. acute rigid cartilaginous margin beneath glaucous, Umbel few-flowered, Calyx acum thd

[than cal
16859 Lvs spathul obl rugose slightly hairy above densely woolly below, Umbel many-flwd Tube scarcely longer
16860 Lvs oval-subrotund petiol very ent or obtusely cren Umbel few-flwd loose nodding, Involl 4-lvd Leafl spurred at base
16861 Lvs obl obovate undul smooth repando dentic Flws umbellate nodding, Cal tubular 5-fid

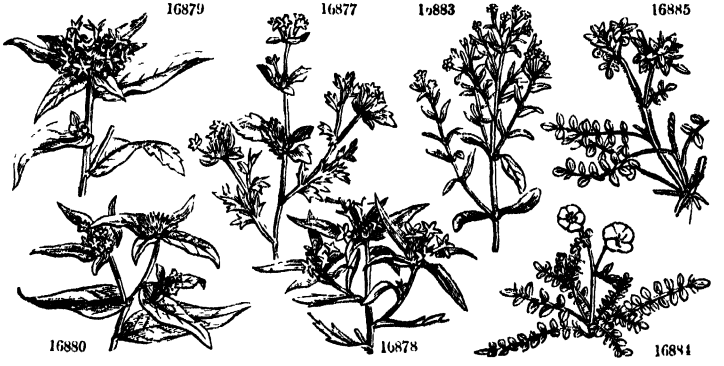
16862 Lvs oblong entire

16863 Lvs cordate minutely toothed, Segm of cor oblong obtuse
16864 Lvs variable either ivy-sh hastate heart-sh arrow-sh or lineg coriac alw plaited middle lobe sometimes much extend Cal. segs reflex short sharp ½ twist
16865 Stem ascending branched slightly winged, Lvs sessile cordate-ovate scabrous at the margins

16866 Differs from *A Monéilx* in the cor being of brilliant blue-purple above paler and redder ben the eye or centre yellow minutely and irregul crenat.
16867 Stems downy scabr spot Lvs refl glabr. shining above, lower narr lanceol, upper cordate acute, Teeth of cal lanceol mucron spread
16868 Lvs oblong-cordate acumin edges scabrous, Pedic and cal downy, Segms long awned
16869 Stem clothed with long pat hairs, Lvs lower oppos oblong-spath. upper altern oblong acute arist Segms. of cor very acumin reflexed
[Cal teeth subul lin Tube much long th cal
16870 Stem rather downy Upper lvs broadly lanceo oppos and altern lower ovate, Bran downy few-flwd compact,
16871 Procumbent, Panic loose fastigiate, Pedic generally twin Cal teeth very long subulate
16872 Bran. clthd with hair-lk down as well as pedun and cal Lvs. lan acute atten at base smoothish ciliat Tube hairy erect twice long than cal.
16873 Shrubby, Lvs lin acumin pungent dilated somewh ciliat at base edges callous Branches of corymb 3-flwd
16874 Stem roughish obscur spot Lvs lanc.-acumin glabr. both sides shining. upper ones broadest, Tube of cor 3 times longer than cal

[corymb form thyrsoid raceme
16875 Lvs lower linear. middle obl.-lan. upper cord.-ovate, Teeth of cal ovate shortly acumin erect, Bran of
16876 Stem glabr at bottom downy at top, Lvs obl.-lan. acute scabr above undul scabr edges, Panic loose, Cal teeth subul straight

[crowded shorter than involucre
16877 Prostrate, Lower lvs pinnatif. and cut, upper cuneate pinnatif. or cut, Involucre lvs oblong acute entire, Flws



and Miscellaneous Particulars.

2017. *Collomia* A genus of annual plants of the easiest culture, requiring only to be sown in the open ground in spring Some of the species are pretty, and deserving of cultivation.

16878 - - Cavanillèsii H & A Cavanilles's ○ or 1½ jn n R Y Chile 1832 S co Bot mag 3468
Philòx lineàris Cav not C lineàris *Nut* C coccinea *Lehm.* C laterìtia *D Don*
16879 - - grandiflòra *Dou* great-flowered ○ or 2 jn o Saf N.W Am 1826 S co Bot. reg. 1174
16880 - - linearis *Nut* linear-*leaved* ○ or 1 jn.o R N W Am 1826 S co Bot reg. 1166
16881 - - gilioìdes Benth Gilia-like ○ or 1 jn o Pk California 1833 S co
16882 - - glutinòsa *Benth* glutinous ○ or pr jn o Pk California 1833 S co
16883 - - gracilis *Dou* slender ○ or ½ jn s Pk N W Am 1826. S co Bot mag 2921

370 *POLEMO'NIUM.* Sp 5—12

16884 - - Richardsònii Grah Richardson's ⚹ △ or ½ jl o Pa B N Amer 1826 S co Bot. mag 2800
16885 - - pulchérrimum *Hook* prettiest ⚹ △ or ½ jl au B N Amer. 1827 S co Bot. mag 2979

373 PHACE'LIA. Sp 4—6

16886 2125*a* congesta *Hook* grouped *racem* ○ or 1½ jn Br psh B Texas 1835 S co Bot mag 3452
16887 - - tanacetifòlia *Benth* Tansy-leaved ○ or 2 jn au V Californ 1832 S co Bot reg 1696
16888 - - vitifolia *Part* Vine-leaved ○ pr 1½ au.o Bt B Texas 1831 S lt l Paxt mag 3 121

2518 373*a* EUTOCA *R Br* Eutoca (*Eutokos*, fruitful, number of seeds) *Hydrophyllèæ* Sp 6—6

16889 - - Franklinii R Br. Franklin s ○ el 1 ap jl Pk N Amer 1827 S s l Bot mag 2985
16890 - - multiflòra *Dou* many-flowered ○ el 1½ my jl Pk N Amer. 1826 S s l Bot reg 1180
Menzièsii D Don.
16891 - - sericea *Grah* silky ○ el 1 my jl B N Amer 1827 S s l Bot mag 3003
16892 - - divaricàta *Benth* straggling ○ pr my jn L V Californ 1833 S lt Bot reg 1784
16893 - - Wrangeliana Fis Wrangel's ○ el 1 au B Californ 1835 S s l Sw fl gar 2 s 362
16894 - - viscida *Benth* clammy-*haired* ○ el 2 jl B ro Californ 1834 S s l Bot reg 1808

377 BRUGMA'NSIA Sp 3—4

16895 2171*a* sanguinea *R & P* bloody ⚘ └┘ or 20 o n R o Peru 1833 C l Bot reg. 1739
bicolor *Pers*

378 LISIA'NTHUS Sp 5—11

16896 2174*a* Russelliànus Hook *D of Bedford's* ◯ or 3 l au P Mexico 1835 S lp Bot mag 3626

2519 381*a*. NIEREMBE'RGIA Kth (*J E Nierenberg*, a Spanish jesuit.) *Solandàceæ* Sp 4—4

16897 - - calycina *Hook* *large*-calyxed ⚘ △ or 1 jl o W Uraguay 1834 C lt r Bot mag 3471
16898 - - gràcilis ? slender ⚘ △ cl ½ jl Wsh Uraguay 1831 S lt r Bot mag 3108
16899 - - filicaulis *Lindl* thread-stemd ⚘ △ or 1 my Lt b Ayres 1832 C p Bot reg 1619
16900 - - aristata *D Don* awned-*calyxed* ⚘ △ or 1 au W P Parana 1832 C p s Sw fl gar 2 s 255

2520 381*b* *PETU'NIA* J Petunia (*Petun*, the name for tobacco in Brazil.) *Solandàceæ* Sp 4—4

16901 - nyctaginiflora *J* Mar of Peru-flwd ⚘ △ or 1 jn s W S Amer 1823 C co Sw fl gar 119
16902 - intermèdia *D Don* intermediate ⚘ △ or 1 au o P Y Parana 1832. S lt Sw fl gar 2 s.237
Salpiglossis lineàris *Hook* Nierembèrgia intermèdia *Grah*
16903 - phœnicea *D Don* purple-*flowered* ⚘ └┘ spl 2½ jn n C P B Ayres 1831 C s l Bot reg 1626
Salpiglossis integrifòlia *Hook* Nierembèrgia phœnicea *D Don* *Petùnia* violàcea *Lindl*
16904 - - Atkinsiàna D Don Atkins's ○ or 2 jl o Rich P Eng hyb. 1834 C lt Sw fl gar.2. s 268

382 NICOTIA'NA Sp 19—32

16905 2998*a* glaùca *Grah.* glaucous ⚘ └┘ or 20 au o Y G B Ayres 1827 C l p Bot mag 2857
16906 - - longiflòra *Cav.* long-flowered ○ or 4 jl s Pk Chile 1819 S co Fl per 2 130

16907 - - pérsica *Lindl* Persian ○ or 3 s o W G Persia 1831. S s lt Bot reg 1592
16908 - - acuminàta *Grah* acuminate-*lvd* ⚘ △ or 2 jn s W Chile 1827 S co Bot mag 291
16909 - - multivàlvis *B R* many-valved ○ or 2 jl au W Columb. 1826 S r m Bot reg 105

383. IPOMŒ'A Sp 57—116

16910 - - Aitòni Lindl Aiton's ⚳ ▭ or 10 ap o Pa P S C r.m Bot reg 1794
16911 - - Horsfàllii Hook. *Mrs* Horsfall's ⚳ ▭ spl 20 d ja Ro Africa 1833 C p l Bot mag 3315

16912 - - rùbro-cærùlea *Hook* reddish-blue ⚳ ▭ spl 8 s n B R Mexico ?1833 S p l Bot mag 3297
16913 - - bonariénsis *Hook* Buenos Ayres ⚹ ▭ or 10 au P B Ayres 1826 S r m Bot mag 3665

16914 - - bignonioìdes Sims Bignonia-like ⚳ ▭ pr 3 jl au P Cayenne 1834 C p l Bot mag 2645
Batàtas bignonioìdes Don's Mill

2521 384*a* *PHARBI'TIS* Chois Pharbitis (*Farbe*, colour, *Gei* ; beauty of flowers.) *Convolvulàceæ* Sp 4—
16915 - - diversifòlia *Lindl* various-leaved ⚳ ◯ pr 5 jn s B R Mexico ?1836. S lt r Bot reg 1988
Nos 2210 2211, and 2245 in p 138 are referable to this genus



History, Use, Propagation, Culture,

2518 *Eùtoca*. A genus of showy hardy annuals. They succeed best on rockwork, in dry, sandy, or gravelly soil

2519 *Nierembergia*. All the species are exceedingly elegant when in blossom In the open border they succeed well from May to Sep , and in large patches have a very pleasing appearance In the autumn it is necessary to pot a

16878 Lvs lanceol linear, upper one ovate lanceol entire or deeply 2-4-toothed at apex

16879 Lvs obl lanceol. entire shining ciliat. with glands, Cal. villous glandul. Cor. ventricose
16880 Lvs. ovate-lanceol quite entire opaque uniform upper ones downy beneath
16881 Lvs pinnate, Leafl. linear entire, Cal deeply 5-cleft, Stamens enclosed
16882 Procumb, Lvs deeply pinnatif almost pinnate, Segms oblong linear entire or slightly cut, Cal nearly 5-part
16883 Lvs lanceol-oblong obtuse, Cal clothed with black glands, Segments long, subulate

16884 Lvs pinnate, Leafl. ovate-roundish mucronulate, Segms of corolla obtuse crenulated
16885 Lvs pinnate, Leafl. ovate-obtuse glabrous, Segments of corolla ovate acutish

[lateral and term Rac corymb
16886 Lvs pinnate, Leafl altern very uneq obl. ovate some sess others petiol pinnatifl lobed & cut pubes. Pedunc.
16887 Lvs bipinnatifid, Leafl oblong dentately pinnatifid, Cal segments oblong-linear hispid
16888 Stem slender branching, Calyx linear 5-cleft, Corolla spreading 5 ovate obtuse lobes

16889 Lvs pinnatifid or bipinnatifid, Ovula 20 or more to each placenta
16890 Lvs linear or lanceol quite entire sometimes trifid or bipinnatif Placenta 20 or many ovulate

[several abortive
16891 Lvs silky on both sides pinnatif upper leaves linear entire, Stam 3 times as long as cor. Plac. many-ovul.
16892 Stem dichotomously divaricate, Leaves all ovate undivided, Placent 12-20-ovulate
16893 Lvs ovate acute quite entire, Cor about twice as long as calyx, Placenta 8-10-ovulate
16894 Herb clothed with clammy pili, Lvs cordate ovate rather angul serrat. Racemes elongated forked and simple

16895 Lvs sinuately lobed sub-tomentose as well as petiol. and bran Points of corolla elongated, Calyx 2-3-lobed

[of pedun Cal. dply. 5-partite
16896 Glabr. & glauc Lvs oppos. & connate ovate or ov-obl. 3-5-nrvd. very acute passing into subul bracts. at base

[segms obov 3-nerved
16897 Herb clothed with glandul pubesc Lvs oppos & altern. roundish-obov petiol Cal large campan foliaceous
16898 Herb downy, Lvs linear subspathul obtuse, Cal. segms linear bluntish much short than tube of corolla
16899 Herb glabrous erect filiform, Lvs lin-lanceol acute or obtuse, Tube of cor glandul as are the filaments
16900 Herb smoothish, Lvs linear acumin, Cal segms acumin much shorter than tube of cor

[times long than cal
16901 Lower lvs. altern ovate-oblong obt pubesc attenuated, Floral lvs sess cord-ovate oppos Tube of cor. 3-4
16902 Lvs. linear obt Cor funnel-sh tube scarcely longer than cal. Segms emarginate, Style clavate

16903 Lvs ovate on short petioles acute, Cor ventricose, Segms ovate acute, Flws axillary solitary pedunculate

[twice as long as cal.
16904 A hybrid between P nyctaginiflòra & P intermèdia, with ovate acutish lvs Cal segms ligulate, & tube of cor.

[cup-shaped
16905 Arboreous, Lvs uneq cord-ovate naked on long petiol Tube of cor slightly curv mouth contract limb small
16906 Lvs stem-clasping cord-lanc acumin. Tube of cor long filif 5 times longer than foliac cal Lobes of cor ovate-lanc acute

[Seg. ov obt emar somew uneq.
16907 Root lvs obl spathul stem lvs sess half-stem-clasp acumin hardly repand Cor salver-sh. Tube long clav.
16908 Lvs broad-lanc acumin undul on longish petiol Panic. few-flwd Tube of cor elong Segms roundish obt.
16909 Lvs fleshy ov-lan, lower petiol Flws axill solit Cal. many parted, Caps many-celled, Segms. of cor obt deeply veined

[thickened
16910 Lvs cord roundish 3-lbd. Lobes acute, Pedun many-flwd longer than petioles, Cor campanulate, Tube
16911 Lvs quinately digit leafl lanc quite ent margins undulat. Pedun as long as petiol Inflor cymose, Sep imbric obt eq Cor. funnel-sh

[to petiol Pedun axil 3-4-flowered somewh racem
16912 Lvs altern membran truly cord deep broad sinus at base sharply acumin wavy on surf much veined ab eq.
16913 Lvs cord petiol with very dp sinus at base 3-5-lbd. in palmated manner, lobes very uneq Petiol. much short. th lvs Pedun axill solit 5-7-flwd
16914 Tuberous, Lvs. trilob lower lobe rounded at base imbricated, Pedun axill many-flwd Petiol. short Cor. infundib limb crispate

16915 Lvs. cord-acumin pubesc ent & 3-lobed auricul divergent, Pedun leafy subbifl Sepals ovato-lanceol acute



and Miscellaneous Particulars

few plants of each species, and preserve them in the green house through the winter. They seldom ripen their seeds but are all readily propagated by cuttings, and thrive best in light rich soil.

2520 Petùnia. Culture, propagation, &c., same as that of Nierembérgia.

2521 Pharbitis. A genus of very showy, tender, twining annuals. They thrive best in light rich soil, or a mixture of loam and decayed leaves

386 NEMO'PHILA Sp 5—5

16916 2293a parviflòra *Don* small-flowered ○ or 1 jl au B N Amer 1826 S p l
†2294 phacelioides *Bart* Phacelia-like ✱ ○ cu 1½ jl au B N Amer 1822 S co Bot mag 2373
16917 2293b aurita *Lindl* ear-*leaved* ✱ ○ or 1 my au P Californ 1831. S p l Bot. reg 1601
16918 2294d insignis *Benth* showy ✱ ○ or 1 jn o B Californ 1843 S r m Bot reg 1713
16919 2294c atomària *Fis* speckled ✱ ○ el ½ jn o W.spot Californ. 1836. S p.l Bot. reg 1940

2522 388a GI'LIA Cav Gilia. (*P S. Gilio*, a Spanish botanist) *Polemoniàceæ* Sp 14—14.

I Dactylophy'llum — *Lower leaves opposite, all sessile and palmately cut. Flowers solitary on long footstalks. Corolla's tube very short, its limbs spreading Perhaps the species of this section are properly a genus* — Benth

16920 - - *linifiòra Benth* Linum-flwd ○ pr ½ ... ... Californ 1833. S s l
16921 - - *pharnaceoides* Benth. Pharnaceum-lk ○ pr ½ ... ... Californ 1833 S s l
16922 - - pusilla *Benth* dwarf ○ cu ½ ... .. Chile 1833 S s l

II Ipomópsis *Leaves alternate, pinnately cut or pinnatifid Flowers solitary or associated The corolla's tube lengthened and protruded far beyond the calyx*

†2300 coronopifòlia *Pers* Coronopus-lvd ○ spl 2½ jl s S Carolina 1726 C l p Bot reg 1691
Ipomópsis élegans *Sm* not of Lindl Bot reg 1281 nor Mx
16923 - - pulchélla *Don* pretty ○ spl 2½ jl s S NW Am 1826 C l p Bot reg 1281
aggregàta *D Don*, *Cùntua* aggregàta *Ph*
16924 - - tenuiflòra *Benth* slender-*corol* ○ or 2 au Ro V Californ 1833 S co Bot reg 1888
16925 - - arenària *Benth* sand-*inhab* ○ or 1 ... B Californ 18 3 S s l
16926 - - crassifòlia *Benth* thick-leaved ○ or 2 ... Ysh Chile 1832. S s l

III. Eugi'lia.—*Leaves alternate, pinnately cut or pinnatifid Flowers more or less strictly solitary, or more usually grouped in heads Corolla's tube as short as, or shorter than, the calyx*

†2301 inconspicua *Don* inconspicuous ○ or 2 au B N Amer 1793. S co Bot mag 2893
parviflòra *Sp* Ipomópsis inconspicua *Sm* *Cantua* parviflora *Ph*
16927 - - tricolor *Benth* three-cld-*cor* ○ or 1 jl s I ir Californ 1833 S co Bot reg 1704
β fl albi àntibus *D Don* whitish-flwd ○ or ½ jl s Wh O Californ 1833 S co Sw fl gar 2 s 264
16928 - - lachniàta *R & P* cut-*leaved* ○ cu ½ jl Pk Chile 1831 S co Fl per 123
16929 - - multicaùlis *Benth* many-stemmed ○ or 2 B Californ 1833 S co

16930 - - *achilleæfolia* Benth Milfoil-leafed ○ or 1½ au d P Californ 1833 S co Bot reg 1682
16931 - - capitàta *Don* headed-*inflor* ○ or 2½ jn n B N Amer 1826. S co Bot mag 2698
β corólla-alba *Dens* white-corollaed ○ or 2½ jn n W gardens 1829 S co

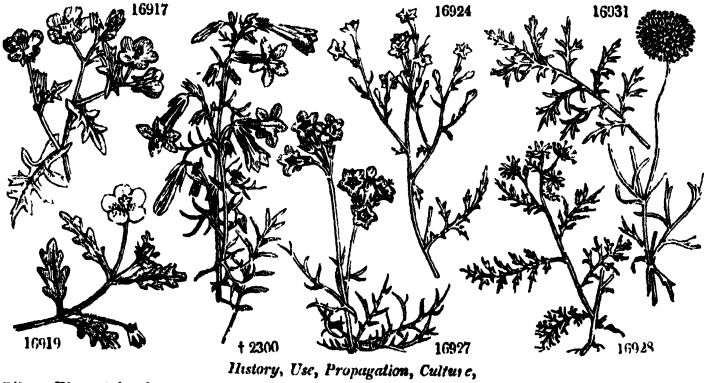
2523 388b ÆGO'CHLOA *Benth* (*Aix* a goat, *chloa*, a green herb, some species fetid) *Polemoniàceæ* Sp 1—6
16932 - - púngens *Benth* prickly-*leaved* ○ cu 1½ jn s B Californ. 1826. S s l Bot mag 2977

2524 388c LINA'NTHUS *Benth* (*Linum*, flax, *anthos*, flower, resemblance) *Polemoniàceæ* Sp 1—1
16933 - - dichótomus *Benth* forked-*bran* ○ or 1½ Pk Californ 1833 S co

2525 388d HUGE'LIA Benth Huge'lia (*Baron Chas de Hugel* of Vienna) *Polemoniàceæ*. Sp 4—4
16934 - - densifòlia *Benth* crowded-lvd ○ or ? ½ . B Californ 1833 S co
16935 - - elongata *Benth* elongated-*bran* ○ or ? l Dp B Californ 1833. S co
16936 - - virgàta *Benth* twiggy ○ or ? ½ Dp B Californ 1833. S co Hook ic 200
16937 - - lùtea *Benth* yellow-*flwd* ○ or ? ½ Y Californ 1833 S co

2526. 388e LEPTOSIPHON *Benth* Leptosiphon (*Leptos*, slender, *siphon* tube) *Polemoniaceæ*. Sp 5—5
16938 - - grandiflòrus *Benth* large-flowered ○ or 1½ au o B go Californ 1833 S co
16939 - - androsàceus *Benth* Androsace-like ○ or 1 au o Dp B G Californ 1833 S co Bot reg 1710
16940 - - lùteus *Benth* yellow-*flwd* ○ or 1½ au o Dp Y Californ 1833 S co
β pale-yellow-flwd ○ or 1½ au o Pa Y Californ 1833 S co
16941 - - parviflòrus *Benth* small-flowered ○ or ½ au Y Californ 1833. S co
16942 - - densiflòrus *Benth* clustered-flwd ○ el ½ ap o P Californ 1833 S co Bot reg 1725
β corólla àlba white-corol ○ el ½ ap o W Californ 1833 S co Bot reg 1725

2527 388f FE'NZLIA Benth Fenzlia (*Dr Fenzl*, author of a monograph of *Alsineæ*) *Polemoniaceæ* Sp 1—1
16943 - - dianthiflòra *Benth* Dianthus-flwd ○ or 1½ au P Y Californ 1834 S co Hook. ic 199



History, Use, Propagation, Culture,

2522. *Gília.* Elegant hardy annuals of the easiest culture, the seeds requiring only to be sown in the open border in spring. The larger the quantity of each grown together, the more showy their appearance.

2523. *Ægóchloa.* A genus of singular, but by no means showy, plants, requiring the same treatment as those of *Gília*.

2524. *Linánthus.* Culture, propagation, &c, the same as those of *Gília*.

16916 Lvs pinnatif. lobes few broad little-toothed, Cor scarcely longer than calyx, Placentas 2-ovulate
†2294 Nearly related to N parviflòra, but differs in flws. being twice the size & calycine append. being larger & longer
16917 Petioles auriculately dilat at base, Cor twice as long as cal Lvs. while oppos connate at base
16918 Lvs 3-4-lbd on each side entire or cut, Petiol without append. Cor twice as long as cal Placent 10-12-ovul.
16919 Lvs oppos pinnatif. lobes 5-9 alm. ent. Cor rotate very pilose bottom & obov. segms. Placent. about 10-ovul Seed strophiolate smooth

16920 Corolla 3 times longer than the calyx
16921 Corolla twice longer than cal Flws one half smaller than those of G. *linifòra*
16922 Corolla hardly exceeding the calyx, Habit of Arenària tenuifolia

[or ovate flat
†2300 Lvs pectin-pinn Leafl linear acumin Tube of cor. 5 times longer than cal Limb spread Segms acute obl
[acumin channelled
16923 Lvs. pectin-pinn clthd cobwebbed villi as are bract, Leafl or segms lin mucron Segms of limb ov.-lanc.

16924 Lvs. glabr bipinn Flws. usually solit Corymbs loose on long pedunc Cor 4 times longer than calyx
16925 Lvs pinnatif Lobes ovate, Flws somewhat glomer Cor 3 times longer than the cal
16926 Lvs pinnatif rather woolly at length glabr Segm. oblong lanc ent or cut, Flws nearly solit. divaric. panic Cor twice long. than cal

†2301 Lvs pinnatif lower ones bipinnate, Segms linear, Flws solit term panic Cor about twice length of calyx

16927 Lvs bipinnate, Leafl. or segms linear subul Corymbs 3-6-flwd virgately panic Corolla about 3 times longer than calyx
[Cal segms subul
16928 Lvs pinnatif Segms narrow obl sinuat, Pedun axill solit 1-3-flwd Cor tubular hardly long than cal
16929 Lvs somewh bipinnate smoothish, Segms linear, Corymbs 3-10-flwd Pedun very long, Cor hardly twice longer than cal. [than cor
16930 Lvs 2 or 3-pinn Segms or leafl linear subul Cal rather woolly, Cor twice longer than cal Stam shorter
16931 Lvs bipinnatif. Segms linear cut, Flws sess dispersed in dense heads, Cor longer than cal. Stam shorter than cor

16932 Lvs pinnate, Leafl ent or cut lobes lanc lin very acute spinose, Cal segms lanceol Flws glomerate termin.

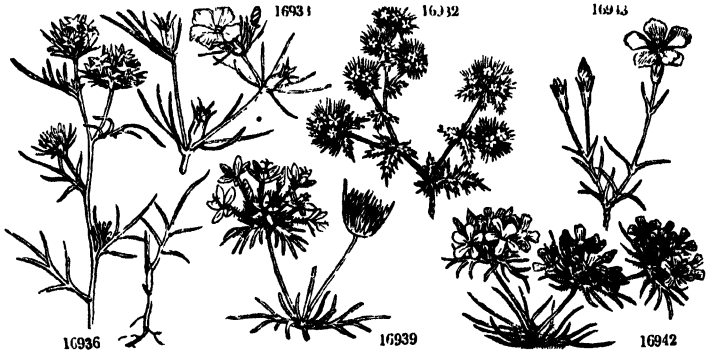
16933 Lvs opposite sessile palmate, with 3 to 5 linear-subulate segments

16934 Lvs numerous nearly all pinnatif glabr Tube of cor longer than cal Stam about equal in length to cor.
16935 Lvs short simple or furnished with 1-2-segm on each side tomen Tube of cor exserted, Stam exceeding cor.
16936 Lvs elongated simple or pinnatif clothed with loose white wool, Tube of cor. longer than cal Stam shorter than cor
16937 Lvs lower elongated simple glabr upper short pinnatif woolly, Tube of cor shorter than cal Stam equal to cor

16938 Lvs 7-11-cleft, Segms subul straight margins revolute, Tube of cor. hardly twice longer than limb, Filam very short
16939 Lvs 5-7-cleft, Segms oblong-linear, Tube of cor 2 or 3 times longer than limb, Stam 3 times shorter than limb of cor
16940 Lvs ditto, Tube of cor about 4 times longer than limb, Style scarcely equal to corolla

16941 Lvs ditto, Tube of cor 4 times longer than limb, Stams hardly ½ shorter than limb of cor Style little exserted
16942 Lvs 9-11-cleft, Segms subul erect margins revolute, Tube of corolla shorter than limb

16943 Herb nearly simple glabr or downy, Lvs oppos lin ent Flws 1-3 together pedunculate, Cor nearly 1 in long



and Miscellaneous Particulars.

2525 *Hugèlia.* Culture, propagation, &c., the same as those of *Gilia*
2526 *Leptosiphon* All the species of this genus are very pretty showy plants, and are well worth cultivating in every garden Culture, &c., of *Gilia*
2527 *Fènzlia.* Culture and propagation the same as those of Leptosiphon.

390 *HOI'TZIA* mexicàna *Lam*; syn *C.* coccínea *Poir* No. 2302. in p. 142., Lœsèlia coccínea *G Don*, *Cántua Hoitzia* W,

393 E'PACRIS. Sp 14—18

16944	2308*a* campanulàta *B C*	bell *flowered*	or	3	f.mr	Dp Bl	N.Holl	1830.	C	s	p	Bot. cab 1925
	β álba *B C*	white-*flwd*	or	2	mr	W	N S W.	1830	C	s	p	Bot cab. 1931
16945	2308*b* impressa *Lab*	impressed	or	3	ap jl	C	N.Holl.	1824.	C	s	p	Sw. au 4
16946	2308*c* variábilis *B C*	variable	or	2	ja f	Bk	N S W.	1829.	C	s	p	Bot cab 1816
16947	2308*d* nivàlis *B C.*	snowy-*flwd*	or	3	mr	W	N Holl	1829	C	s	p	Bot cab. 1829
16948	2308*e* ceræflora *Grah*	wax-flowered	or	2	mr.ap	W	V D L	1831	C	s	p	Bot. mag. 3243
16949	2309*a* paludòsa *R Br.*	marsh	or	3	ap jl	Pa.R	N Holl	1825.	C	s.p		
16950	2309*b* onosmæflòra *Cun.*	Onosma-flwd	or	2	ap jl	R	N Holl	1823.	C	s.p		
16951	2310*a* mucronulàta *R. Br*	small-pointed	or	3	ap jl	R	N Holl	1824.	C	s.p		

2528 394*a*. ME'LICHRUS *R Br* (*Melichros*, honey-coloured, glands of flowers) *Epacrideæ*. Sp 2—2.

16952 -	- rotátus *R Br.*	rotate	or	1½	ap au	S	N Holl	1824.	C	s.l	p	Cav.ic 4 349. 1
16953	- médius *Cun.*	middle	or	2	ap my	S	N Holl	1824	C	s.l	p	

2529. 399*a*. SPHENO'TOMA *Swt* (*Sphen*, wedge, *tome*, segment; corolla) *Epacrideæ*. Sp 2—2.

16954 -	- grácilis *Swt*	slender	or	2	ap my	W	N Holl	1823.	C	s	p	Sw au 44
16955 -	- capitáta *R Br.*	*spike*-headed	or	1	ap my	W	N.S W.	1830	C	s	p	Bot reg 1515

2530 399*b*. TROCHOCA'RPA *R Br* (*Trochos*, a wheel, *karpos*, fruit; cells) *Epacrideæ* Sp 1—1

16956 -	- laúrina *R Br.*	Laurel-*leafed*	or	25	ap au	W	N Holl	1823	C.	s	p	Bot mag 3324

2531 400*a* PONCELE'TIA R Br Ponceletia (*M. Poncelet*, a French botanist) *Epacrideæ* Sp. 1—1.

16957 -	- sprengeliòides R Br	Sprengelia-like	or	1	my jn	S	N.Holl	1826	C	s	p	

2532. 400*b*. COSME'LIA *R Br* Cosmelia (*Kosmeo*, to adorn, beauty) *Epacrideæ* Sp 1—1.

16958 -	- rùbra *R Br*	red-*flowered*	or	1½		R	N Holl	1826.	C	s	p	Bot reg.

†403 AZA'LEA *D Don* Azalea (*Azaleos*, dry, arid, habitation.) *Ericaceæ* Sp 1—1

†2339	procúmbens *Lk.*	trailing	or	½	ap my	Pk	Britain	sc mo	L	s	p	Eng bot 865

The genus Azàlea *W*, in p 144, is by modern botanists included under Rhododéndron, in p. 1190

2533. 413*a* PACHYPO'DIUM *Lindl* (*Pachys*, thick, *podion*, peduncle, footstalks) *Apocynàceæ*. Sp 2—2

16959 -	- tuberòsum *Lindl*	tuberous-*rooted*	or	1	su	W R	C G H.	1813	C	s	l	Bot cab 1679
16960 -	- succuléntum *Lindl*	succulent	or	1	ap jn	W R	C G H.	1820	C	s	l	Bot reg 1312

415 PLUMIE'RIA Sp 10—23

16961	2366*a* purpùrea *R & P*	purple	or	4	jl au	P	Peru	1820	C	r	m	Fl per 2 137
16962	2366*b* incarnàta *R & P*	flesh-*coloured*	or	5	jl au	F	Peru	1820	C	r	m	Fl per 2 138
16963 -	- Lambertiàna Lindl.	Lambert's	or	10	my.au	W	Mexico	1824	C	r	m	Bot reg 1378

418 TABERNÆMONTA'NA Sp 6—15

16964	2380*a* gratissima *Lindl*	most grateful-*scted*	or	6	my s	W	E Indies	1824	C	p	l	Bot reg 1084
16965 -	- densiflòra *Wal*	dense-flowered	or	4	jn	W	E Indies	1824	C	p	l	Bot reg 1273

2534. 424*a* NYCTERISI'TION *R & P* (*Nycteris*, a bat, *sition*, food, flower) *Sapòtæ* Sp. 1—1.

16966 -	- ferrugíneum *R & P*	rusty	fr	30	...	W	S Amer	1823	C	r	m	Fl. per. 2. 187

428 CO'RDIA Sp 10—23

16967 -	- grandiflòra *Lindl.*	great-flowered	or	...	au	W	S Amer.	1827	C	l	p	Bot reg 1491

435 ARI'SIA. Sp 14—25

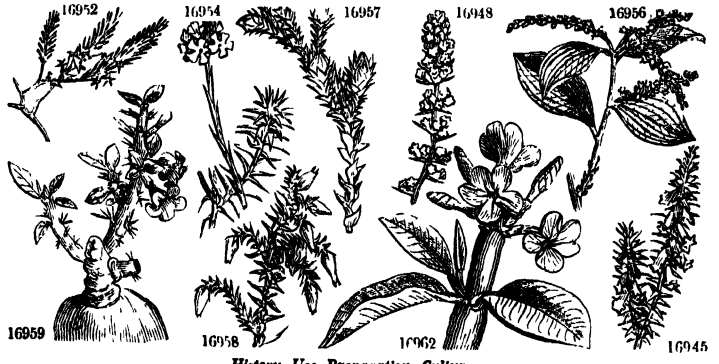
16968 -	- odontophýlla *Wall.*	tooth-leaved	or	6	jl	Pa Sal	Bengal	1834	C	s	p	Bot reg 1862

444 SOLA'NDRA. Sp 3—5

16969	2458*a* guttàta *D Don*	spotted-*flwd*	or	12	jn jl	Pa Y	Mexico	1830	C	r	m	Bot. reg 1551

451 SOLA'NUM Sp 84—153

16970	2521*a* etuberòsum *Lindl*	tuberless	or	2	jl o	Dp P	Chile	1833	D	co		Bot reg 1712
16971	2539*a* Tweedi*ànum* Hook.	Tweedie's	or	1½	o	W P	B Ayres	1833	S	co		Bot mag 3385
16972	2553*a* coriáceum *Hook.*	coriaceous	or	4	jl au	P B	.....	1820	C	p	l	Bot mag 2708
16973 -	- frágrans *Hook*	fragrant	cu	14	jn	P	S Brazil	1845	C	p	l	Bot mag 3684
16974 -	- Herberti*ànum* Hort	Herbert's	or	2	jn au	P.Y	.....	1833	C	l	s	Pax mag 5 269



History, Use, Propagation, Culture,

2528. *Mélichrus* Fine shrubs, bearing elegant flowers, and therefore desirable plants for all collections. They thrive best in an equal mixture of sand, loam, and peat, cuttings of the young wood root readily in sand under a bell-glass

2529. *Sphenótoma* Culture, &c., the same as those of E'pacris.

2530 *Trochocárpa* Culture and propagation as for Andersònia

2531. *Ponceléția*. Culture and propagation the same as for E'pacris

16944 Lvs. ovate reflexed, Flowers axill. whole forming spike, Cor 2-3 times longer than cal. campanulate
16945 Lvs lanc nearly sess. atten at apex mucron Pedun 3 times shorter than cal Tube of cor. prismatic twice [long than ciliat. cal.
16946 Lvs ovate sessile tapering to apex, Corolla 3 or 4 times longer than calyx
16947 Lvs ovate-lanceol very spreading, Flws. spicate axill. solit secund, Tube of cor. campan. much long. than segms of calyx
16948 Lvs lanceol very spreading, Flws. spreading axill solit secund, Tube of cor ovate segms of cal. acute ciliated
16949 Lvs narrow-lanceol acumin flat striat beneath margins scabr Cal segms very acute naked eq to tube of cor.
16950 Lvs. ellip.-lanc acumin cucull. concave 5-nrvd mucron petiol marg ciliat Cor cylind ventric. Tube exceed. very acute cal
16951 Lvs. lanceol. very acute erectly spread ending in pungent pellucid mucro, Cal segms. acute, margins naked

16952 Cor. rotate, Cal. villous, Lvs lanceol lin pilose on both sides and on margins
16953 Cor. urceol. Cal. pilose, Lvs. lanc atten very acute mucron concave many-nrvd with membran. dentic. edges [fringed with long hairs
16954 Flor. branch much long than ovate spikes Caul lvs lanc.-subul spread or recurv Bran lvs adpress. Lvs.
16955 Flor branch much long than ovate spikes. Caul lvs lanc.-ensif. erectish Branch lvs adpressed

16956 The only species

16957 The only species

16958 The only species

†2339 The only species

16959 Stems tuberous at base, Lvs oblong toment beneath glabr above, Prickles straight subulate
16960 Lvs. linear or lanceol. toment beneath glabr above, Prickles filiform setaceous

16961 Lvs oblong-ovate with revolute edges, Flws terminal cymose
16962 Lvs ovate-oblong acute, Flws cymose, Cymose subumbellate
16963 Lvs oblong-acumin flat, Segms of limb broad-rhomboid obtuse

16964 Lvs oblong-lanceol undul glabr Cal teeth or Segms of cor convex crenul Cymes divaricate
16965 Lvs. lanceol -acumin. approxim. sometimes 3 in a whorl Cymes many-flwd Cal segms & bract lin lanc acute

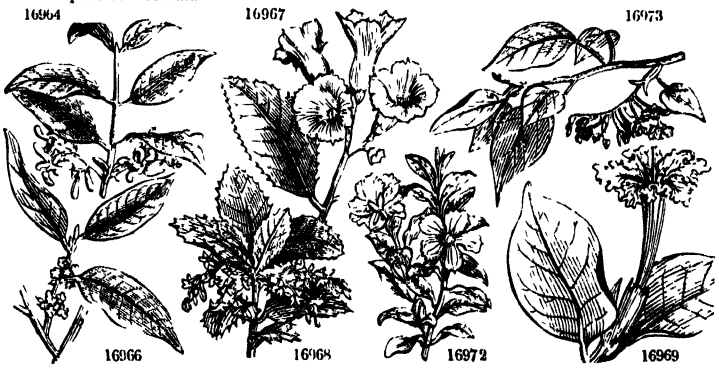
16966 Lvs. oblong-ovate with emarg. acumen shining ab clthd. with silky rusty down ben as are cal & branchlets

16967 Lvs ov -acumin narr. at base serr. clthd silky strigæ ab and dense fusces pil ben Heads glob on long pedun Stams enclosed

16968 Lvs lanc -obl acute both ends on long pet sharply toothed puberul Racemes axill much short than lvs. Pedic and Pedun velvety

16969 Lvs ellipt -obl acute downy beneath, Flws termin solit. Segms of cor crispately crenat spread Tube twice long than 3-lobed tubul cal

16970 Leafl uneq complic much undul approxim altern ones minute, Pedic articul Cal. & Cor 5-angled glabrous
16971 Plant clothed with clammy down, Lvs cordate angul toothed at base on long petioles, Racemes umbellate
16972 Lvs petiol obl coriac shining entire rather veiny, Pedun. term & axill gener 1-flwd . Lobes of cor. blunt and plicæ mucron long than lobes [campanul segms. reflex Stigma dilat concave
16973 Arborescent, Lvs twin ovate and cordate very entire, Rac solit from axill of bran secund Cor fleshy rotate.
16974 Shrubby evergreen, Stem erect, branched, ferrugin. pubescent, Lvs petiolate ovate-oblong blunt green above brownish pubescent beneath



and Miscellaneous Particulars

2532 *Cosmèlia* Culture and propagation resembling those of E'pacris
2533 *Pachypòdium.* Very pretty succulent shrubs. They succeed best in a mixture of lime-rubbish, sand, and loam Cuttings root readily in sand under a hand-glass The plants should be kept moderately dry, when in a dormant state
2534 *Nycteristition* Propagation and culture same as those of Chrysophyllum.

455. SPERMADI'CTYON Sp 2—2.

16975 9611*a* azûreum *Lindl* azure ▭ or 4 Ja -Pa.B Nepal 1823. C 1 p Bot. reg 1235

460 RONDELE'TIA. Sp 4—11.

16976 - - odoràta *Jac.* scented ▭ or 3 jl.au R W Indies 1836 C s p Fl cab 36

2535. 462*a* WAHLENBE'RGIA Sch (*G Wahlenberg, M.D.*, author of Fl Lap) *Campanulàceæ* Sp 6—6.

16977 - - rèpens creeping △ pr ¼ jn o Wsh ..... 1830. D co Dec. Camp 15

Nos 2634 2651 2671, 2672, and 2692 are also referable to this genus.

463. CAMPA'NULA. Sp 76—834

16978 2635*a* gargánica Mount St. Angelo △ or ½ jl au Pa.B M St A 1830 S p l Sw.fl gar 2.s. 252

2536 464*x* PRA'TIA Gaud (*M Prat-Bernon*, of the Fr navy, accomp Freycenet) *Lobeliàceæ*. Sp. 2—

16979 - - corymbòsa *B M* corymbose ▲ or ⅛ jn au R C G H 1824. D pl Bot. mag 2693

16980 - - begonæfòlia Wal. Begonia-leaved ▲ pr ¼ jn jl Pa B Nepal 1827. D co

2537. 464*y* *TU'PA* G. Don. (Name applied by the Indians of Chile to a sp of this gen) *Lobeliàceæ*. Sp 6.—

16981 - - blánda *D Don* charming ▲ or 3 ... Pk Chile ... D lt.l Sw fl.gar 2.s.308

16982 - - Feuillèi Gaud. Feuillée's ▲ spl 8 s.o S J. Fernan 1824. R co Bot. mag 2550

Lobèlia *Tupa* L.

16983 - - purpùrea *Lindl* purple ▭ or 1 jn o P Valpar 1825. C p l Bot. reg 1325

16984 - - argùta *B R* sharp-*notched* ▲ or 2 s Y Chile 1824 D l p Bot. reg 979

16985 - - Cavanillesiàna Cavanilles's ▲ yr 3 au o Bt C Chile 1831 D l p Bot mag 3207

16986 - - polyphýlla *H & A* many-leaved ▲ or 4½ s D P Valpar. 1829. D lt r Sw fl gar 2 s 242

2538. 464*z* SIPHOCA'MPYLOS *D Don* (*Siphon*, tube, *kampylos*, curved, corolla) *Lobeliàceæ* Sp 2—

16987 - - bicolor *D Don* two-coloured pr 3 ap R Y Georgia 1835 C s p Sw fl gar 389

No 2720 in p 166 is also referable to this genus

464 LOBE'LIA Sp 51—102.

16988 2076*a* robústa *Firs.* robust ▲ or 3 au P Hayti 1830. D s.l Bot. mag 3138

2719 syphilítica

β hybrida *Hook* hybrid △ or 2 jn o B English hyb D s p Bot mag 3604

L speciòsa and L Millerì Hort.

16989 2719*a* coloràta *Swt* coloured-*leaved* ▲ or 5 .. B o N Amer 1832 D p l Sw fl gar 2 s 180

16990 2741*a* cærùlea *B M* blue ▲ or 1½ jn jl B C G H 1824 D p l Bot mag. 2701

16991 - - Kraùsii Grah. Kraus's ▲ or 1½ ja f ... Dominica 1828 D l p Bot. mag 3012

16992 - - Bridgèsii Hook. Bridges's ▲ or 4 jn Pk Chile 1836 S p l Bot mag 3671

2539 467*a* LECHENAU'LTIA R Br (*M Lechenault*, a French bot. and trav) *Goodenòviæ* Sp 2—2

16993 - - formòsa *R Br.* handsome ▭ pr 1 jn S N Holl. 1824 C p l Sw au ic in

16994 - - oblàta *Swt* oblate ▭ pr 1 jn jl O N Holl 1824 C p l Sw au 46

Báxteri G Don, formòsa *B M* and *B R* not R. Br.

2540. 470*a*. BRUNO'NIA Sm (*Robt Brown, Esq*, a learned systematic bot) *Goodenòviæ* Sp 1—1

16995 - - austrâlis *R. Br* southern ▲ or 1 .. B N Holl 1834 2D 21 Bot. reg 1883

474 CAPRIFO'LIUM Sp 17—17

16996 2785*a* Douglàsii Lindl Douglas's or 20 jl s O N Amer 1824. C co

16997 2785*b* hirsùtum *Dcns* hairy-*leaved* or 20 my jn Y Canada 1822. C co Bot. mag 3103

16998 2785*c* occidentàle *Lindl.* western or 20 jn au O Ft Vancouv 1824 C co Bot reg 1158

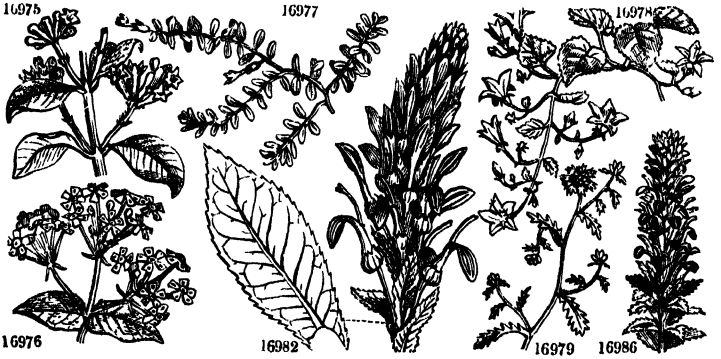
16999 2785*d* ciliòsum *Ph.* ciliated or 6 jn Y Missouri 1825 L co

17000 2789*a* longiflòrum *Sal* long-flowered or 20 jl s Y w China 1826 C co Bot. reg 1232

17001 - - hispidulum *Lindl* rather-hispid or .. jl Ro N W.Am 1827 C p l Bot reg 1761

2541 478*a* LEYCESTE'RIA Wal Leycesteria (*W Leycester*, chief judge at Bengal) *Caprifoliàceæ* Sp 1—1

17002 - - formòsa *Wal.* handsome ▭ or 4 au s W P Nepal 1824. C r m Bot mag 3696



History, Use, Propagation, Culture,

2535. *Wahlenbérgia*. The seeds of the annual sp. of this genus require to be raised on a hot-bed; and, when sufficiently strong, planted into the open border, in a sheltered situation. The perennial sp. grow freely in loam, peat, and sand, and strike root readily under a hand-glass

2536 *Prátia* Plants of this genus are readily increased by division of the root, or by seed; and thrive best in a mixture of loam, peat, and sand

2537. Tùpa. The species of this genus are deserving cultivation in every collection, on account of the beauty and singularity of their flowers They are generally raised from imported seeds; and, when the plants are sufficiently strong, may be planted in the border under a south wall, but require to be potted in the autumn, and placed in the green-house during winter *T* Feuillèi yields a dangerous poison in Chile

16975 Lvs. ovate-lanc. short-acumin scabrous on both surfaces rounded at base, Cal. segms linear villous

16976 Lvs. scarcely petiolate ovate or subcordate scabrous above and on the nerves beneath, Corymbs terminal

16977 Stem creeping

[Cor rotate
16978 Stems diffused, Lvs. reniform-cordate deeply serrated, Peduncle usually 2-flwd Segms. of calyx toothed,

16979 Glabrous, Stems branched, lower lvs roundish, upper ones linear spatulate deeply serrated, Pedunc corym.
16980 Stems filif creeping hairy, Lvs roundish-cord serr petiol hairy both surfs oblique at base, Pedic. solit. Cal. segms lin subul.

16981 Lvs lanceolate cuspidate, doubly serrated, decurrent at the base, Bracts convolute, Calyx toothed subulate, Anthers glabrous
16982 Stem erect thick suffrut at base simple leafy, Lvs ov-lanc sess decurrent clothed sof whitish down, Raceme term spicate
16983 Glabrous, Lvs lanceolate serrulated, Flowers racemose, Calyx spherical 5-toothed
16984 Stem suffrut simple glabr. Lvs lin-lanc serrul quite glabr both surfs Pedic axill shorter than lvs.
16985 Stem villous, Lvs sess ovate-oblong serrul mucron downy glauc Raceme short leafy, Cor downy
16986 Lvs. ov-lan mucron sharply serrat quite glabr Racemes term leafy, Tube of cor little long. than cal 2 lower anth beard

16987 Lvs. lan. acumin unequally serrated attenuated at base, Flowers axillary solitary pedunculate

16988 Lvs obovate-lanceol acumin coarsely toothed glabrous shining, Rac termin simple secund

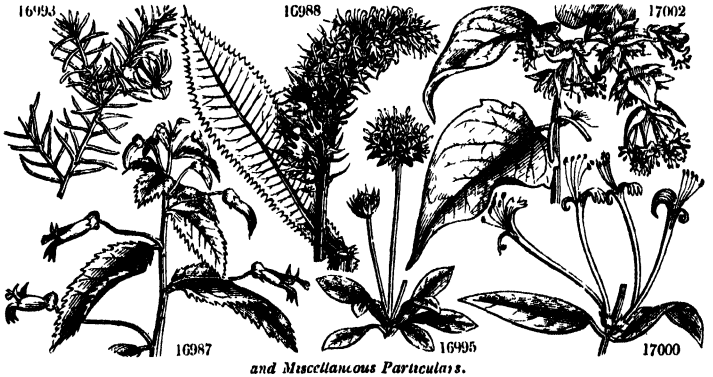
16989 Glabrous, Lvs lanceol. acumin erosely toothed, Raceme leafy, Peduncles naked, Segms of cal linear subulate
16990 Stem short decumb at base densely leafy, Lvs lanc dentately pinnatifi downy atten at base, Pedun term very long Segms of cor. long th lvs. [subul little toothed spread
16991 Lvs. sess lanceol decur. sharply serrat glabr Pedic axill solit long th lvs. Rac termin leafy, Cal segms.
16992 Lvs. 5-6 in long lanceol much acumin closely and acutely serrated

[cuneat Filam glabrous
16993 Flws axill solit bractless droop Cor bilabiate glabr upper lip of cor rounded ent lower tripart segms
16994 Flws axill and term bractless somewh. droop. Cor bilab downy outside, upper lip 2-lobed, lower tripart. Segms oblate

16995 Lvs undivided villous beneath as are scapes hairy spread Cal segms longitud. feathered apex somewhat acute

16996 Whorls capit Lvs oval acute both ends petiol glabr ciliat toment on outside upper ones connate
16997 Lvs large ovate-ellipt waved rath acute on short petiol upper sess lower connate-petiol downy glauc ben. ciliat on margin [beneath
16998 Flws in verticil heads, Cor glabr with elongated gibbous tube, Lvs oval almost sess glabr ciliat. glauc.
16999 Spikes approx vertic heads of nearly sess flws Tube of cor hairy ventric in middle, Lvs coriac retic ov. on short ped glauc ben ciliat
17000 Glabrous, Lvs petiol obl-lanc shining above pale ben Pedun short 2-flwd Tube of cor very long filiform
17001 Hispid-pilose, Umbels pedunculate, Lvs petiolate cordate ovate obtuse underneath glaucous

17002 The only species



and Miscellaneous Particulars.

2538 *Siphocampylos.* The sp of this genus have all large, showy, scarlet, or red flowers, and well deserve a place in every stove They are of easy culture A mixture of loam, sand, and peat soil suits them best, in which cuttings strike readily under a hand-glass in heat

2539. *Lechenaultia* Elegant plants when in blossom A mixture of turfy loam, peat, and sand suits them best, and cuttings of the young wood root freely in the same kind of soil under a hand-glass.

2540. *Brunsvia* Culture and propagation as for Scævola in p 169.

2541. *Leycesteria.* This is a beautiful shrub when in a flowering state, from the contrast between the deep green hue of its stem and lvs. and the reddish purple of its large bracteas and berries. It is easily propagated by cuttings, or by seeds, which it produces in abundance.

2542 491*a* *LUCU'LIA* Swt. Lucúlia. (*Lucuh Swa* of Nepal) *Rubiàceæ* Sp 1—1
17003 - gratissima *Swt* most grateful ● ▭ or 9 au.s R Nepal 1823 C p l Sw fl gar 11*

2543. 496*a* UNCA'RIA *Gae* Uncaria (*Uncus*, a hook, old petioles) *Rubiaceæ* Sp 1—2
17004 - *Gámbier* Wal Gambier ◭ ▭ or 10 . Pa.R E. India 1825. C p l Lin. tr 9 22

505 *PALIU'RUS* Sp 2—2
17005 2896*a* virgátus *D. Don* twiggy ⸙ or 15 au.s G Y Nepal 1817. L co Bot mag 2535

509 *EUO'NYMUS* Sp. 7—19
2912 europæ'us
β latifólius *Lo C.* broad-leaved ⸙ or 15 my jl W . . ... L s l
γ leucocárpus *Dec.* white-fruited ⸙ or 12 my jl W Britain .. L co
17006 2911*a* grandifórus *Wal* large-flowered ⸙ ▭ or 8 my jl W E Indies 1824 C s p
17007 2911*b* Hamiltonianus Wal Hamilton's ♀ ▭ or 20 mr W Nepal 1825. L r m

2544. 509*a* COLLE'TIA Com Colletia. (*Collet*, a French botanist) *Rhámneæ*. Sp 1—3
17008 - - hórrida *Brong* horrid ● ▭ cu . my jn Gsh. W P Chile 1832 S s.l Bot reg. 1776
fèrox *of Gill & Hook* in Bot misc, not the hórrida of *W*

2545 509*b* *RETANI'LLA* Brong Retanilla (Its name in Peru) *Rhámneæ* Sp 1—1.
17009 - - obcordàta *Brong* obcordate *leaf* ⸙ ▭ or 2 . Y Peru 1822 C l p Ven cels. 92

2546 509*c* TREVO'*A* Cav. Trevoa (*Trevo*, the name of some botanist) *Rhámneæ*. Sp 1—2
17010 - - triplinérvis *Gill.* triple-nerved ⸙ ▭ or 4 . G Y Chile 1828 C p l

510. CEANO'THUS Sp 9—23.
2925 azùreus
β flóre álbo *Hort* white-flowered ⸙ ▭ or 10 ap W ... . . C p l
17011 - - collinus *Dou.* hill ⸙ or 1 mr s Li N Amer 1827. C p l Bir bot. g 13

515 BILLARDIE'RA Sp 6—7
17012 2930*a* ovàlis *Lindl* oval-*leaved* ⸸ ▭ pr 20 my Gsh Y V D L 1833 S s p Bot reg 1719
17013 2937*a* heterophýlla *Lindl* various-leaved ⸸ ▭ or 5 jl B N Holl 1830 C p l Bot. reg 1466
Sólly*a* heterophýlla *Lindl.*

2547. 518*a* COLEONE'MA *B. & W* Coleonema (*Koleos*, a sheath, *nema*, a filament) *Rutàceæ*. Sp 1—2
17014 - - púlchrum *Hook* beautiful ⸙ ▭ or 6 ap.my Ro C G H P . C p l Bot. mag. 3340
Diósma angustifòlia *of the gardens.*

2548. 529*a*. ESCALLO'NIA Mutis. (*Escallon*, a Spaniard and American traveller) *Escalloniàceæ*. Sp 7—8
17015 - - discolor *Mutis* two-coloured-*leaf* ⸙ ▭ or 6 . . S Amer. 1820 C l p Ven. ch. 54
17016 - - montevidénsis *Dec.* Monte Videan ⸙ ▭ or 6 au W M. Video 1827. C p l Bot. reg 1467

17017 - - pulverulénta *Pers.* dusted ⸙ ▭ or 8 jl W Chile 1831 C p l Sw fl gar.2 s 310
17018 - - viscòsa *Lk & Otto* viscous ● ▭ or 5 W Mendoza 1829 C p l
17019 - - glandulòsa *Sm.* glandular ⸙ ▭ or 3 s R Chile 1827. C l p Bot cab 1291
17020 - - rùbra *Pers.* red-*flowered* ⸙ ▭ or 3 s R Chile 1827 C l p Bot mag 2890
17021 - - illinita *Presl* varnished ⸙ ▭ or 5 au s W Chile 1830 ? C p l Bot reg. 1900

540. *VIOLA*. Sp 54—112
3022 pedàta.
β flabellàta *D Don* fan-*leaved* ⸸ △ or ½ o Li P Georgia 1831 D p Sw.fl gar 2 s 247
17022 3029*a* præmórsa *Dou* bitten-rooted ⸸ △ or ½ my jl R Columbia 1826 D co Bot reg 1254
17023 3040*a* suàvis *Bieb* fragrant ⸙ △ fra ½ s Pa B Ukraine 1823. D co Sw.fl gar.2 s 126

17024 3042*a* flavicórnis *Sm* yellow-horned ⸙ △ or ½ my jl Y B Britain ch pl D co Eng. Bot 1736
17025 3064*a* palmaénsis *P. B W* Palma ⸙ ▭ or 1 my jl B Palma ? 1836. C l p

2549. 540*a* ERPE'TION *Swt* Spurless Violet (*Erpetos*, trailing, *ion*, a violet) *Violàceæ*. Sp 1—2
17026 - - reniformis *Swt* reniform ⸙ △ pr ½ my o P.B N. Holl 1823. D s p l Sw fl gar 170

2550 541*a* HYMENAN'THE'RA *R Br* (*Hymen*, membrane, *anthera*, an anther) *Violaceæ*. Sp 1—1
17027 - - dentàta *R Br* toothed-*leaved* ● ▭ or 6 ap my Y N Holl 1820 C p l Bot. mag



History, Use, Propagation, Culture

2542. Lucùlia *gratissima* It is impossible to conceive any thing more beautiful than this tree, when covered with its numerous cymes of fragrant flowers. A good rich light soil suits it best; and cuttings may, though with great difficulty, be rooted in sand, under a hand-glass

2543 *Uncaria* Gámbier Gambier is the Malay name of an extract prepared from the leaves of this plant, and one of the drugs, if not the only one, formerly called *Terra Japonica* in Europe It is chewed by the natives, mingled with betel leaf and areca, after the manner in which the cutch is used on the continent of India. (*Don's Mill*)

2544. *Colletia* A mixture of loam and peat appears to suit the plants of the genus best, and cuttings of the young wood will root freely in sand, under a hand-glass

2545. Retanilla Propagation, culture, &c., as for Collètia.

2546 *Trevoa*. For propagation, culture, &c, see Collètia.

17003 The only species.

17004 Lvs. ov-obl acute on short pet. smooth both surfs Stips. ovate, Pedun axill. solit. oppos , Bracteol in middle · lower sterile convert. int hooked spines

17005 Branches smooth, Lvs. obliq cord. or ellipt. 3-nerved shining, Wing of fruit entire

[as long as lvs 3-6-flwd.

17006 Bran. terete smooth, Lvs. obov.-obl obt acutely serrat tapering and ent. at base, Pedun slender flatten about
17007 Bran smooth terete, Lvs. lanceol. finely serrat. Pedun dichotom 6-flwd. Flws. tetrandrous, Petals 4-lanceol cordate

17008 Spines strong awl-sh., Fascicles scattered, Cal. oblong-cylindrical, Anth nearly sess

17009 Lvs obcord. quite entire 3-nrvd. Flws. sess. spiked rising from axillæ of scales

17010 Lvs. 3-nerved

17011 Lvs ovate roundish hairy

17012 Branchlets pubesc. Lvs. lin. obl obtuse, Peduncle 1-flwd glabrous, Petals straight bluntish
17013 Branchlets glabrous, Lvs. ovato-lanc. lower ones serrated upper ones quite entire, Cymes opposite the leaves

17014 Bran. twiggy pendent, Lvs filif acumin. flat above ben. semiterete, Flws axill. solit. on short pedun with several subul. imbric. bracts

[flwd. Cal puberul. Petals obovate

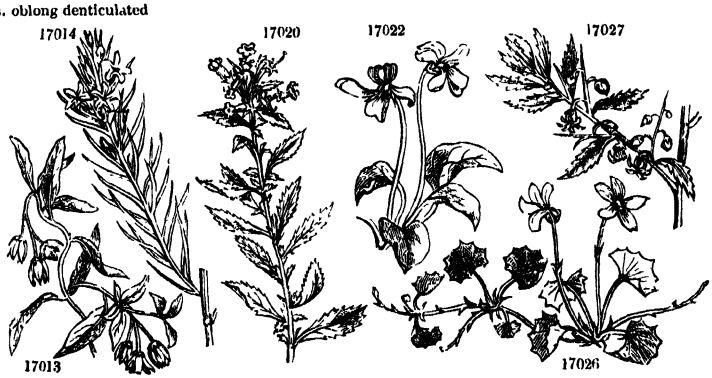
17015 Branchl rath. pubesc. Lvs cuneif-lanc. somewh crenul quite ent. middle nerve hairy, Panic. termin many-
17016 Lvs obl cuneate at base acutish finely serrat full of resin. dots ben. Panic term many-flwd. crowded intermixed with foliac bract. Petals obov.-obl. [term spike-formed erect, Petals obovate
17017 Hairy, Bran somewh trigon. Lvs ellipt obtuse on short petioles serrul. rather clammy above when young, Rac
17018 Lvs oblong hairy viscid
17019 Lvs oval acuminate smooth on both sides [Cor cylindrical, Limb revolute
17020 Lvs obov-lanceol acute doubly serrat glandul at the base tapering at petiole, Pedun simple or branched,
17021 Lvs oblong-lanceolate serrulate clammy varnished, Corymbs 3-flwd. racemose, Corol cylind. Limb spreading

[as long as lvs

17022 Stem simple erect, Lvs ovato-obl petiol entire hairy, Caps. pubesc Stip lanceolate ent Pedun about twice
17023 Distinguished from *V.* odorata by its paler green herb. larger and paler flws upper petals longer and narrower and lower broader and more distinctly emargin Stip also narrower
17024 Stem woody somew angul much bran Lvs cord coriac. smooth even, Stip and brac fringed, Sepals lanceol
17025 Lvs ovate acum lbd, smth. above and slightly hairy beneath. [Pedun. erect Caps short and round th *V.* canina

17026 Lvs crowded renif repandly toothed punct Stips. lin-awl-sh. acumin. Petals reflex. 2 lateral ones bearded on upper side

17027 Lvs. oblong denticulated



and Miscellaneous Particulars.

2547 *Coleonèma pùlchrum* A beautiful little shrub, which thrives in a mixture of peat and sand, with a little loam The tops of the young shoots, made into cuttings, and planted in sand under a bell-glass, root readily without heat

2548 *Escallònia.* The species are fine evergreen half-hardy shrubs, and thrive best in a mixture of peat, sand, and loam Cuttings strike readily in the same kind o. soil, or in sand under a hand-glass.

2549 *Erpètion* Elegant little plants, that deserve to be cultivated in every garden. They are well adapted for rockwork, and are easily increased by separating their runners. They require the protection of a frame during winter

2550 *Hymenanthèra* A mixture of loam and peat suits the species of this genus best, and cuttings root readily in sand under a bell-glass

†550 *RI'BES* L. (*Ribes* of the Arabian physicians, found to be the *Rhèum Ribes*.) *Grossulàceæ* Sp 41—41

I GROSSULA'RIÆ — *Gooseberries.*

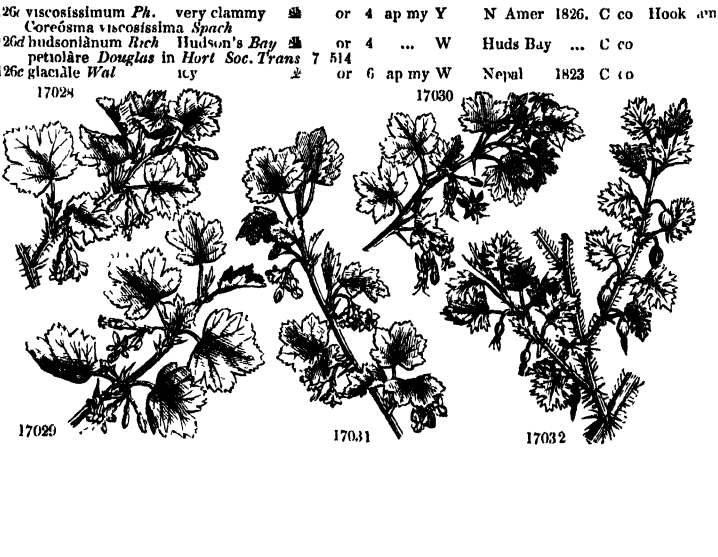
	3107 *oxyacantholdes L*	Hawthorn-*lvd*		or	3	ap my G w	N Amer	1705	C	co	Di el 139 166
17028	3107*a* setòsum *Lindl*	bristly		or	4	ap my G w	N Amer	1810	C	co	Bot reg 1237
	3108 triflorum *W*	three-flowered		or	4	ap my G w	N Amer	1812.	L	r l	W h. b 1 61
17029	3108*a* niveum *Lindl.*	snowy-*flowered*		or	5	ap my W	N Amer	1826.	L	co	Bot. reg 1692
	3109 *Cynósbati L*	Dog-bramble		or	4	ap W	Canada	1759	C	s l	Schm ar 98
17030	3109*a* divaricàtum *Dou*	spreading-*bran*		or	7	ap W	N Amer	1826	C	co	Bot reg 1359
17031	3109*b* irriguum *Dou*	well-watered		or	4	... G w	N Amer	1820	C	co	A b f 721
	Cynosbati, divaricàtum, and irriguum are probably only varieties of triflòrum.										
	3110 hirtéllum *Mx*	slightly hairy		or	4	ap my G w	Canada	1812	L	s.l	
	3111 gracile *Mx*	slender-*bran.*		or	4	ap my G w	N Amer.	1812.	L	s l	
17032	3111*a* aciculàre *Sm*	acicular-*spined*		or	.	W	Siberia	.	L	co	Led. fl alt 230
	3112 Grossulària *L. common* Gooseberry			fr	4	mr ap G w	Britain	hed	C	r m	Eng bot 1292
	β Uva-crispa *Eng bot* 2057 γ spinosissima *Berl ms* δ reclinàta *Berl ms* No 3126 of p 190 ε Besseriana Berl ms ζ subinérmis *Berl ms* η macrocárpa *Dec* ϑ bracteàta *Berl ms*										
17033	3112*a* speciòsum *Ph*	showy *flowered*		or	4	ap jn R	Californ	1829	L	r l	Sw.fl gar 2 s 149
	stammineum *Smith*										

II. BOTRYCA'RPA — *Plants intermediate between Gooseberries and Currants.*

	3113 orientàle *Pon.*	Eastern		or	4	my jn G v	Syria	1824	C	co	
17034	3113*a* saxátile *Pall*	rock		fr	4	ap my G	Siberia	1819.	C	co	Led. alt 239
	3114 Diacántha *L fil*	twin-prickled		or	4	my jn G v	Siberia	1781	L	r l	Schm ar 97
	3115 lacustre *Pour*	lake-*side*		or	4	ap my G v	N Amer	1812	C	p l	A b. f 724
	oxyacantholdes *Mx* and echinàtum *Douglas ms*										

III RIBE'SIA — *Currants*

	3116 rùbrum *L.*	*common* red		fr	4	ap my G	Britain	riv ba	C	r m	Eng bot 1289
	α sylvéstre *Dec* β hortènse *Dec* γ cárneum *Berl ms* flesh-cld-*berried* δ variegàtum *Dec* striped-*berried* ε álbum *Ait* white-*berried* ζ fòl lùteo variegat *Duh* η fol álbo variegat *Duh*										
	3117 alpinum *L*	alpine		or	3	ap my G	Britain	woods	C	co	Eng bot 704
	β pùmilum *Lindl*	dwarf		cu	2	ap my G			C	co	A. b f 726
	γ fòl variegàtis *Hort*	variegated-lvd		or	4	ap my G	Britain	gard	C	co	
	3118 petræum *Wulf*	rock		or	4	my R	England	mount	C	co	Eng bot 705
	3119 spicàtum *Robs*	spiked-*flwd*		or	4	ap my G	England	mo wo	C	co	Eng bot. 1290
17035	3119*a* carpáthicum *Kit*	Carpathian		or	4	ap my G	Carpathia	1818	C	co	
	3120 multiflòrum *Kit.*	many-flowered		or	5	ap my G	Hungary	1822	C	co	Bot mag 2308
	3121 procúmbens *Pall*	procumbent		or	½	my jn P	Dahuria	1804	L	m s	Pal ros 2 65
	3122 prostràtum *L.*	prostrate		or	½	ap my Y	Newfou.	1812.	L	s l	Schm ar 95
	β laxiflòrum *A. B.*, *R* laxiflòrum *Ph*, *R* affine *Douglas ms*										
	3123 resinòsum *Ph.*	resinous		or	3	ap my Y G	N Amer	1800	L	co	Bot mag 1583
	3124 trifidum *Mx*	trifid-*calyxed*		or pros		ap my	Quebec	1823.	L	co	Bot. mag 2368
17036	3124*a* albinérvum *Mx*	white-nrvd-*lvd*		fr	4	ap my G	N Amer.		C	co	
17037	3124*b* punctàtum *R & P*	dotted-*leaved*		cu	3	ap my G v	Chile	1826	C	co	Bot règ 1278
17038	3124*c* glandulòsum *R & P*	glandular-*cal*		or	6	ap my G v	Peru	1820	C	co	Fl. per. 233 b
	3125 nigrum *L.*	black		fr	5	ap my Wsh	Britain	m hed	C	r m	Eng bot 1291
	β bácca flávida *G M* γ bácca vírida *Hort* δ fòl. variegàtis *Hort*										
17039	3125*a* triste *Pall*	sad-*cld-flwd*		or	3	ap my Brsh.R v	Siber.	1820	C	co	Pal p 10
	3126 flòridum *Herit.*	flowery		or	4	ap my Y	N. Amer.	1729.	C	co	Di el 244. 315
	β grandiflòrum *Hort* syn *R* rígens *Mx* γ parviflòrum *Hort*										
17040	3126*a* inèbrians *Lindl.*	intoxicating		cu	3	ap Gsh W	N Amer	1827.	C	co	Bot. reg 1171
17041	3126*b* cèreum *Don*	waxy-*leaved*		or	2	ap W	N Amer	1827.	C	co	Bot reg 1263
17042	3126*c* viscosissimum *Ph.*	very clammy		or	4	ap my Y	N Amer	1826.	C	co	Hook am 71
	Coreósma viscosissima *Spach*										
17043	3126*d* hudsoniànum *Rich*	Hudson's *Bay*		or	4	... W	Huds Bay	...	C	co	
	petiolàre *Douglas* in *Hort Soc. Trans* 7 514										
17044	3126*e* glaciàle *Wal*	icy		or	6	ap my W	Nepal	1823	C	co	



i — *Flowers greenish white*

[Pedun short 1-2-flwd Berry glob glabr.
3107 Infra-axill prickl. larger most solit smaller ones scattered, Lvs glabr. lobes dent. petioles vill. rather hisp
17028 Prickles uneq sub. Lvs round-cord at base pub 3-5-lbd dply cren. Pedun. 2-flwd somet bract Berries hispid
3108 Infra-axill prickl solit. Lvs glabr. 3-5-lbd incisely dent Pedun 1-3-flwd Pedic. long. Bract membr sheathing, Petals spathul obcor
[Stam very prom conniv.
17029 Prickles solit in 2s or 3s Lvs glabr round ent. at base 3 blunt cren cut lobes, Ped abt. 2-flwd Sepals reflex
3109 Infra-axill prickles 1-2, Lvs 3-4-lbd softly pubesc Pedun 2-3-flwd Petals small much short th stigm and stam Berry prickly
[glabr Pedun 3-flwd Style and Stam exser.
17030 Bran divaric bristly at length naked, Spines 1-3 togeth axil deflex large, Lvs roundish 3-lbd dply thd. nrvd.
17031 Prickl axill ternary, Lvs. cord somewh 5-lbd thd ciliat pilose both surf nrvd. Pedun 3-flwd. glandul. Cal. segms equal to tube
3110 Spines infra-axill Branch spngly hisp with short hairs, Lvs small cleft ¼ down into 3 dent lbs Ped 1-flwd.
3111 Infra-axill spine very short, Lvs. on slend. stalks pub on bth sides lbs acute cut and toothed, Pedun slend upright about 2-flwd
[middle, Berries bractless
17032 Very prickly, Prickles stip 3-5-parted, Lvs rath pub nrly orbic 3-5-lbd Pedun usually 1-flwd bracteol in
3112 Prickles 2-3 under each bud, Bran otherw smth spread or erect, Pedic 1-2 flwd. Lvs. 3-5-lbd. rath vill. Bract close togeth. Style downy

ii — *Flowers red*

17033 Infra-axill prickl triple, Bran hisp Pedun longer than lvs 1-3-flwd Cal cylind. 4-parted, Pets eq to and Stams twice long than cal

[Bract long than flws
3113 Rather prickly, Lvs 3-5-lbd somew reniform orbic cut hairy, lbs rath deep obtuse, Racemes erectish few-flwd
17034 Prickles scat Lvs roundish-cuneif bluntly 3-lbd Racemes erect, Bract shorter th pedic Cal. flat scabr Sep small, Petals spathul.
[ovate or globose
3114 Stipul prickl twin, Lvs wedge-sh glabr parted into 3 dent lobes, Racemes erect, Brac length of flws. Berry
3115 Infra-axill prickl manifold, Stem hisp with minute prickl Lvs lbd beyond middle glabr ben. rath. pilose ab Pedun. 2-3-flwd

i — *Flowers greenish or greenish yellow, or reddish, and fruit, in a wild state, red*

3116 Lvs cord bluntly 3-5-lbd pubes. ben wh young usually rath toment glabr ab Racemes droop Petals obcord Fruit quite glabr.

3117 Lvs with 3-5-obt lbs hairy ab shining ben Racemes grouped, Brac lanceol inflat. sparingly glandul mostly larger than flowers
[racemes pendul Brac short than pedic
3118 Lvs acumin 3-5-lbd rath. cord dply. serrat on long pet pilose ab Racemes erect crowd pubes Fruit
3119 Lvs roundish-cord 3-5-lbd hairy above toment ben Racemes erect, Flws more or less pedicel Brac obt toment much short than pedic
17035 Stem erect, Lvs 5-lbd cord Racemes pendul pubesc as are calyxes, Petals flattish smaller than calyx
3120 Lvs 5-lbd cord toment beneath, Racemes very long pendul. Brac short. than flws Petiol length of lvs Petals wedge-sh.
[rising from cal
3121 Lvs bluntly lobed, Lobes serrat lateral ones little cut, Racemes erect, Peduncl long setaceous, Anther hardly
3122 Lvs dply cord 5 7-lbd glabr Lobes acutely cut, dbly serr. naked both surf Cal rotate, Pedic. germ. and berries beset with glandul bristles
3123 Glandul hairy, Lvs 3-5-lbd. roundish, Rac erect, Cal flattish, Petals bluntly rhomb Brac lin long. th pedic
[Petals spathul round at apex
3124 Lvs smooth moderately lbd Rac loose many-flwd pubesc Cal segms rath trilid, Berries hairy, Rac weak,
17036 Lvs short petiol dply & acutely lbd smoothish with white nerves, Rac recurved, Flws small, Ber glabr
17037 Lvs 3-lbd serrat beset with resin glands ben as are bracteas, Rac long than lvs droop or erect, Berries oblong hairy red & dotted
17038 Lvs cord bluntly 3-lbd dbly serrat rugged, Racemes short, Calyx glandular pubescent

ii. — *Flowers greenish yellow, sometimes with the tip of the sepals and petals red Fruit black*

3125 Lvs dotted from glands beneath, 3-5-lbd Rac. loose, Brac minute subul or obt much short th pedic Petals obl Cal segms reflexed
[flattish, Petals revolute, Root creeping
17039 Lvs 5-lbd Bran simple twiggy bearing lvs & flws at apex, Rac pendul both when in flw & fruit, Cor
3126 Lvs full of resinous glands 3-5-lbd cord dbly serrat Rac pendul pubesc Brac lin long th pedic Cal tub campanul glabr segms obt length reflexed
[Flws aggreg Cal tubul gland
17040 Lvs roundish dply 3-5-lbd & dply toothed truncate at base gland on both surf Pedun 3-5-flwd pendul
17041 Lvs small cord lbd serr glandul. pubescent glabr glauc full of white gland bove, Rac pendul. rath capit. Flws nearly sess cylind
[tubul campan segms spread obt
17042 Lvs cord obt. 3-5-lbd dply crenated viscid & gland pubesc glands on both surfaces, Rac. erect corymb. Cal.

17043 Lvs 3-lbd quite glabr above full of resin dots beneath villous as are petiol Germ dotted, Rac. erect pubesc Brac short, Berries glob glabr
[droop Petals long th cal
17044 Lvs glabr above with few scattered bristly hairs beneath cord at base 3-5-lbd at apex lobes acute serrat. Rac



17045 3126*f* sanguíneum *Ph.* bloody-*cld-flwd* or 6 ap.my Bd N Amer. 1826. C co Bot reg. 1349
malvàceum *Sm*, Calobótrya sanguínea *Spach*
β glutinòsum *Benth*, syn. *R.* angústum *Don. ms.* γ malvàceum *Benth* has dark pink flowers
δ àtro-rùbens *Hort* has dark red flowers.

IV. SYMPHO'CALYX.—*Calyxes tubular and yellow. Racemes many-flowered. Unarmed shrubs.*

3127 aúreum *Ph* golden-*flowered* or 8 ap my Y Missouri 1832. C r m Bot reg 125
α præ'cox *Lindl.* β villòsum *Dec.* syn. longiflòrum *Fraser's Cat* γ seróținum *Lindl* A b f 713
17046 3127*a* tenuiflòrum *Lindl* slender-flwd cu 6 ap my Y N Amer 1812 C co Bot. reg. 1274
aúreum *Colla*, flàvum *Bert.*, missouriénsis *Hort*, Chrysobótrya Lindley*àna* Spach.
α frúctu nigro *A B* black*ish*-berried β frúctu lùteo *A B* yellow-berried
17047 3127*b* flàvum *Colla* yellow-*flwd* cu 6 ap my Y N. Amer 1812 C co Col. h rip. l B
aúreum γ sanguíneum *Lindl.*, palmàtum *Desf*, aúreum *Ker* not Ph, Chrysobótrya intermèdia *Spach*

2551. 565*a* OPLOTHE'CA *Nut* (*Oplon*, armour, *theca*, a sheath; capsules.) *Amaranthaceæ* Sp. l— .
17048 - - floridàna *Nut* Florida ♆ △ or 3 s W N Amer. 1824. R p l Bot mag. 2603
No. 3180. in p 194 is also referable to this genus

570 HELICO'NIA Sp. 6—11
17049 3190*a* brasiliénsis *Hook.* Brazilian ♀ △ spl 8 au S Brazil 1820. D p l Hook ex. fl 190
17050 - - bicolor *Botanist* two-coloured ♀ △ cr 3 .. W.c Brazil ?1828. D p l Botanist, no. 101
17051 - - pulverulénta *Lindl* dusted-*leaved* ♀ △ or 2 jl G.b ?o.Amer. 1830 ? D p l Bot. reg. 1648

570*a*. not 721 MU'S*A*. Sp 5—10.
17052 4090*a* Cavendishi*i* Paxt. Cavendish's ♀ □ or 6 .. S China 1829 Sk r l Pax mag 3. 51
chinénsis *Swt.*

DIGYNIA.

2552 578*a* HARRISO'N*IA* Hook (*Mrs Harrison*, of Aighburgh, near Liverpool) *Asclepiceæ* Sp 1—1.
17053 - - lonicero*ides* Hook Lonicera-like ♚ □ or 6 jl au S Brazil 1825 C s l Bot mag 2699

2553 578*b*. TWEE'D*IA* Hook TWREDIA (*Mr Tweedie*, a botanical collector) *Scrophularineæ*. Sp 2—2.
17054 - - cærùlea *D. Don.* blue-*flowered* ♃ △ or 3 . B B Ayres 1837.*t* C s l Sw fl gar 407
versícolor *Hook*

2554 579*a* PHILIBE'RT*IA* Kth. PHILIBERTIA (*M Philibert*, a botanical author) *Asclepiadàceæ*. Sp. l—1.
17055 - - grácilis *D Don* slender ♃ △ el 6 jn Y.w B Ayres 1836. C s l Sw fl gar. 2 s 403
grandiflòra *Bot. Mag.* 3618

2555. 590*a*. PHYSIA'NTHUS *Mart* PHYSIANTHUS (*Physa*, bladder, *anthos*, flower) *Asclepiadàceæ* Sp 1—1
17056 - - álbens *Mart* whit'sh-*leaved* ♃ □ or 20 au W B Ayres 1830 S l p Mart br. 54 32

2556 592*a* TYLO'PHORA *R Br.* (*Tylos*, a wart, *phoreo*, to bear, lvs of corolla) *Asclepiadàceæ* Sp 1—1
17057 - - exilis *Colb* slender ♃ □ or 10 jn jl Pa P E Indies 1823. C p l Lin tr 12 16

600 GENTI*A'NA* Sp. 30—59.
17058 3365*a* quinquefiòra *Pers.* five-flowered △ or 1½ o Li N York 1834 ? S s l Bot mag 3496
17059 - - clavata *B M* studded ♃ △ el ½ .. B 1820. D p l Bot mag. 2303

606 HEU'CHER*A* Sp. 5—10.
17060 - - cylindràcea *Lindl.* cylindric-*panic* ♃ △ el 2 my G N Amer 1835. D l p Bot. reg. 1924

615 *U'LMUS.* Sp 16—21.
3460 campéstris

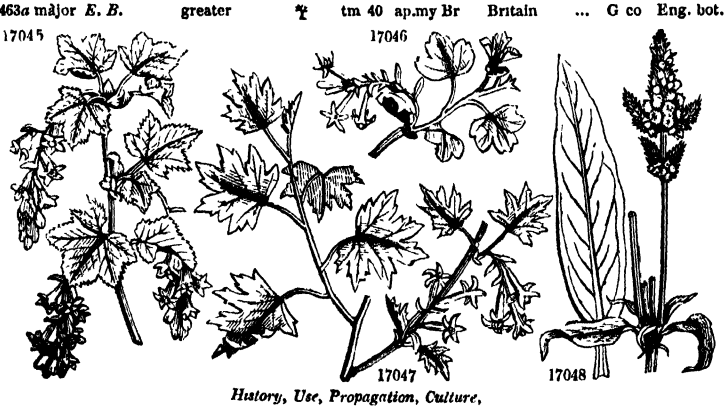
1. vulgàris *A B.*
2 latifòlia *Hort.*
3 álba *Mast*
4. acutifòlia *Mast.*
5 stricta *Hort.* A b f. 230
6. virens *Hort*, *The Kidbrook.*
7. cornubiénsis *Hort*, syn. *U.* stricta *L*
8. sarniénsis *A B.*
9 tortuòsa *A B*
10 fòl variег, *white* varieg.-lvd.
11 *betulæfòlia A B.*
12 viminàlis *A. B* A. b. pl. 231.

3461 suberòsa

1 vulgàris *A. B.* 2 fòl. variegatis *Lod.* 3 álba *A B.*, white-*barked.*

3463 glàbra

1 vulgàris
2 végeta, *Huntingdon*; syn. Chichester Elm, American Elm *of some*, ?Scampston Elm.
3 màjor *A B.*
4. glandulòsa *Lindl*
17061 3463*a* màjor *E. B.* greater ♆ tm 40 ap.my Br Britain ... G co Eng. bot. 2542



History, Use, Propagation, Culture,

2552 *Harrisònia.* A mixture of loam and peat suits this plant best, and ripened cuttings root in sand under a hand-glass.

iii — *Flowers deep red Fruit black.*

17045 *Lvs* cord somewhat 5-lbd serrat. veiny smthish. ab. toment. ben Rac drooping pubesc. twice length of lvs. Brac. obov. spathul Berries turbinate hairy

[pedic Tube slender, Segms. obl. obt.

3127 Quite glabr. Lvs 3-lbd. lobes divaric with few deep teeth short. th. petioles ciliat at base, Cal tubul. long th.

[glabr. long th pedic Petals quite ent

17046 Quite glabr. Lvs roundish 3-lbd. mealy lbs. bluntly toothed at apex, Brac. pendul. many-flwd Cal. tubul.

[short 4-5-flwd. Brac. elliptic

17047 Quite glabr. Young lvs. 3-lbd adult ones usually 5-lbd. dply toothed about eq to the ciliat. petioles, Rac.

17048 Stem erect, Spike crowded oppos. . lower spikes distant, Cal globose very densely woolly

17049 Lvs oblong smooth shining

17050 Lvs. narrow at base acuminate nerved, Spathe lanceolate scarlet 4-5-flwd

17051 Lvs blunt or cord at the base and acute at the apex powdery beneath, Spathes 3 few-flwd. shorter than the bracteal leaf

17052 Spadix nodding, Spathes spotted with white, Male flws. deciduous, Lvs obtuse, Stigma globose

DIGYNIA.

17053 The only species

17054 Lvs oppos on short petioles oblong cordato-hastate at base, Pedun axil bearing 3-4-flwd umbel, Cal. dply. cut into 5 erect lanceol segms

17055 Pubesc Cor rotately campanulate, Leaflets of corona gibbous beaked depressed at top, Stigma bifid

[shot cymose 4-8-flwd

17056 Lvs oppos very ent acute cordato-truncate below undulat & pruinose above, Pedun later rarely axil subdi-

[of corona broad ellipt very obtuse

17057 Glabrous, Lvs. ov lanceol acumin Panic large composed of umbels, Stigma apiculated

[5-fid, Lvs amplexic deltoid-cord 3-5-nerved

17058 Stem bran square winged, Flws clust at ends of stem & bran 3-5 together, Cal very short acute, Cor. clav.

17059 Lvs obov -obl 3-nrvd Flws termin aggreg Cal foliac uneq Cor ventric 5-fid

17060 Apetalous, Panics very much contracted

13. parvifòlia *A B* ; syn *U* microph *Pers* , pùmila *W*

14 planifòlia *A B* A b pl 232

15 chinénsis *A B*

16 cucullàta *Hort*

17. concavæfòlia *Hort*

18. fòl aûreis *Hort* , yellow-*varieg.*-lvd.

19 viscòsa *Hort*

20 nâna *Hort*

4. erécta *Lod*

5 var The broad-leaved Hertfordshire

6. var. The narrow-leaved Hertfordshire

5 latifòlia *Lindl*

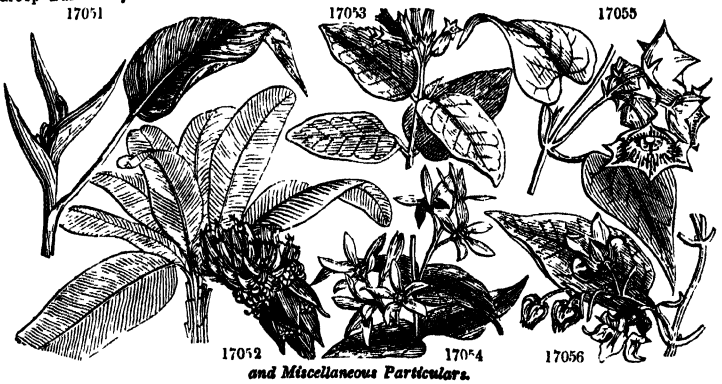
6 microphýlla *Lindl*

7 péndula *A B*

8. variegàta *H. S.*

9 ramulòsa *Booth.*

17061 Lvs. rough uneq & rather bluntly serrat. Flws. nearly sess 4-cleft. Samara obov slightly cloven glabr. Bran. droop Bark corky



and Miscellaneous Particulars.

2554 *Philibértia.* Culture, propagation, &c., as of Pergulària, in p. 198.

2556 *Tylóphora.* Culture and propagation as for Hóya, in p. 199.

3464 montàna
1 vulgàris *A B.* 3 màjor *Mast* A. b pl 238 cevennénsis *Host*
2 rugòsa *Mast.* 4 minor *Mast* 6 nigra *Hort., Irish* 7 australis *Hort.*

17062 3464*a* carpinifòlia *Lindl* Hornbeam-lvd ♆ tm 40 ap my Br Britain hed L co

17063 3464*b* effùsa *W.* spreading-*flwd.* ♆ tm 40 ap my Br Britain ... L co A. b. pl
3465 americàna
1 rùbra *Ait*, red-*branched.* 2 álba *Ait*, white-*branched*, syn.? *U* mollifòlia 3 péndula *Ph.*

657 *BUPLEU'RUM.*
Sp 23—37.
17064 364*a* aùreum *Fis* golden ♃ △ pr 1 my jn. Y Siberia 1820 D co

672 *HERACLE'UM.*
Sp 13—30
17065 3735*a* àsperum *Bieb.* rough ♃ ◯ or 12 jl W Caucasus 1818 S co
17066 3735*b* pubéscens *Bieb.* pubescent ♃ ◯ or 4 jl W Caucasus 1823. S co
17067 3735*c* gigantèum *Fis* gigantic ♃ ◯ or 12 jn jl W Siberia 1820 S co

TRIGYNIA.

679 *VIBU'RNUM*
Sp 25—29
17068 3763*a* cotinifòlium *D Don* Cotinus-lvd ♄ or 10 my jn W pk Himalay 1803? L l Bot reg 1650
17069 3774*a* orientàle *Pall* oriental ♄ or 10 jl W Caucasus 1827 L p l

2557 684*a*. STACKHOU'SIA R Br. Stackhousia (*M Stackhouse*, a British botanist) *Stackhoùsiæ.* Sp. 1—2.
17070 - - monógyna *Lab.* one-styled ♇ △ pr 1 ap Pk L V D L. 1835 D co Bot reg. 1917

PENTAGYNIA.

701 *LI'NUM*
Sp 28—49
17071 3918*a* monógynum *Forst* *concreti*-styled ♃ △ or 2 jn au W N Zeal 1832 S s l Sw fl gar 2 s.270
17072 3937*a* Cuming*i* B C Cuming's ♃ ⌴ or ¾ su Y Chile 1830. C p l Bot. cab 1969
17073 - - Berendièr*i* Hook Berendier's ○ or 2 au Y o Bojar 1835 S s l Bot. mag 3480

706 *STA'TICE*
Sp 33—61.
17074 3960*a* binervòsa *G E Sm* 2-nerved ♇ △ or 1 jn.s B England ch cl S l p Eng bot 2663



History, Use, Propagation, Culture,

2557 *Stackhoùsia* An interesting plant, as forming the type of a very small natural order bearing its name See Lindl *Nat. Sys* ed 2 p 118

Page 236. Class VI.—HEXANDRIA. 6 Stamens.

Order 1. MONOGYNIA. 6 Stamens. 1 Style.

2558 *Ismène* Perianth 6-parted Corona staminiferous, tube curved, cylindrical Filaments short. Seeds fleshy, round Scape solid

2559 *Chorètis* Perianth with a nearly straight cylindrical tube, and a spreading limb. Corona spreading Filaments converging Anthers versatile

2560 *Cobùrgia* Perianth drooping, with a long curved cylindrical tube, and a short half-spreading equal limb Filaments equal Stamens equal, connected by tubular membrane Stigma blunt Ovarium 3-sulcate Scape solid

2561 *Stenomésson* Flowers drooping Perianth with a nearly straight tube, constricted in the middle, and ventricose at the apex Limb short, regular Corona short Stamens straight Capsule ovate, 3-furrowed.

2562 *Barbacènia* Perianth funnel-shaped, 6-cleft, adnate to the ovarium Filaments bifid. Anthers fixed to the back of the filaments in the division Ovarium furnished with 6 rows of tubercles Capsule 3-celled, many-seeded

2563. *Pourrètia* Calyx 3 parted, inferior. Corolla 3-parted, naked at base Capsule 3-celled Seeds naked

2564 *Dyckia* Calyx 3-parted Segments concave Corolla urceolately campanulate Petals erect, fleshy at the base Stamens monadelphous at the base Ovarium tripartite. Cells many-seeded Stigmas fringed.

2565. *Bilbèrgia* Calyx 3-parted, umbracteate. Petals 3, convolute, with scales at the base Stigmas 3, convolute Capsule 3-celled, many-seeded.

2566 *Acis* Perianth drooping, campanulate, 6-parted. Stigma obsoletely 3-lobed. Capsule 3-celled. Seeds fleshy angular Spathe 2-valved.

2567. *Clivea.* Perianth tubular, 6-parted, deciduous. Segments imbricate; outer shorter than inner. Stam equal inserted in orifice of tube Anth versatile Ovarium inferior, 3-celled, many-seeded. Fruit berried indehiscent, 1-seeded from abortion Seeds very smooth, transparent.

2568 *Pyrolirion.* Flowers sessile, funnel-shaped, erect Segments equal, recurved at ends Spathe bifid, equal. Stamens spreading in the throat Ovarium 3-celled Segments of stigma dilated Scape 1-flowered, hollow

2569 *Hippeastrum* Perianth declinate, 6-parted, tube short, stamens declinate Capsule 3-valved, 3-celled Scape hollow, many-flowered

2570. *Sceptránthes.* Perianth funnel-shaped, with a long cylindrical tube, 6-parted spreading limb Capsule 3-gonal, seeds in two rows

8 péndula *A B* A b pl 239, syn *U* horizontâlis rûbra *H. S.* 9 fastigiàta *Hort Exeter*, syn *U* oniénsis & Fórdii Hort 10 crispa *A. B.*

17062 Lvs ov -acumin coriac strongly veined simply cren serr. slightly oblique & cord. at base. shining but rather scabr. ab, smooth ben Bran. near sm

17063 Lvs smooth on upper side uneq at base doubly serrat. Flws. on droop stalks, Stams. 6-8, Samara ellipt. dply. clav. strongly frin with coarse dense hairs

4 incisa *H S*, A b pl 242 5 fòlnis variegàtis *Hort*

[Involucels 5-lvd conform to those of involucr.

17064 Rad. lvs ov ov -oblong obov atten Stem lvs ov acute amplexic Involucrum 3-5-lvd ellipt orbicul. mucron [volucel, lvs setaceous

17065 Stem rough from strigæ, Lvs dply lbd serrat. acute scabrous above, pubes beneath, Umbels of 40 rays, In- [2-lvd Involucels short coriac few-lvd

17066 Stem lvs ternate, Leafl somewh palmately pinnatif toothed, Segms acute, Umbels many-rayed, Involucra l-

17067 Stem lvs ternate, Leafl pinnatifid deeply toothed, Umbels many-rayed, Stem from 10 to 12 feet high

TRIGYNIA.

[woolly

17068 Lvs roundish oval quite ent clthd with stellate tomentum both surfs grey ben as well as bran Corymbs term

17069 Lvs 3-lbd acumin coarsely & bluntly dent Petiol glandless glabr Corymbs termin not radiant, Fruit obl compressed

17070 Lvs linear-lanceolate, Spike cylindrical elongated at top acutely conical, Segments acute, Stamens unequal

PENTAGYNIA.

[longer than ovarium

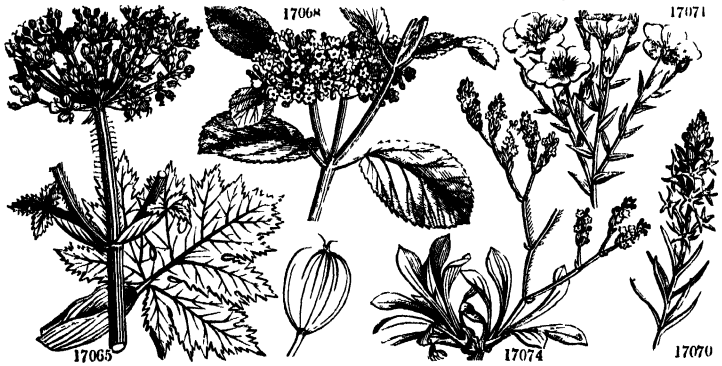
17071 Glabr erect, Lvs lanceol acute 3-nrvd Flws corymbose, Cal lvs ov-lanceol acute keeled, Styles connate

17072 Lvs oblong lanceolate slightly hairy [racem Brac & sepals lanceol-acumin

17073 Bran angul Lvs scat linear ¾in in length mucron glabr quite ent slightly glauc Flws subcorymb, Fruit

[Cal -ribs termin about base of 5 blunt membran segms

17074 Lvs spathul. 3-5-nrvd below coarsely reticul above, Panic bran bran. angul. in front rounded behind



and Miscellaneous Particulars

17067 *Heracleum giganteum*, when growing on deep loamy soil, and liberally supplied with water when it is sending up its flower stalk will attain the height of 12 to 15 feet.

2571 *Haylòckia* Perianth cylindrical, with a widened throat and a half-spreading limb. Stamens conniving. Stigmas 3, recurved at ends Capsules 3-gonal

2572 *Cunninghàmia* Perianth campanulate, 6-cleft, deciduous alternate Segments ciliated Anthers emarginate at the base, conniving. Stigma prunose dot Capsule 3-celled, few-seeded

2573 *Fúnkia* Perianth funnel-shaped, deciduous. Stamens and styles declinate Stigma clavate, 3-gonal Capsule 3-celled, many seeded Seeds disposed in two rows in each cell, winged at end

2574 *Cyclobóthra*. Flowers drooping Sepals glabrous, petals bearded, with a nectary, hollow in the middle Capsule 3-winged Seeds in single rows

2575 *Rhinopétalum* Perianth 6-leaved, deciduous, each leaf furnished with a naked nectariferous hollow at the base, upper one horned on the back Filaments bearded Ovarium 3-gonal, 3-celled, many-seeded.

2576 *Charlwoódia*. Perianth 3-parted Filaments thickened in the middle Stigma 3-cleft. Ovarium 3-celled

2577 *Calliprora* Perianth campanulate, 6-parted Filaments petaloid, 2-lobed Anthers sessile between the lobes Ovarium stipitate, 3-celled many-seeded Stigma 3-lobed Capsule 3-winged

2578 *Laxmánnia*. Corolla 6-parted, persistent Filaments subulate, smooth, inserted in the base of corolla. Anther peltate Capsule 3-celled Seeds sub-solitary, peltate

2579 *Barnardia*. Perianth 6-parted, spreading, persistent. Stamens dilated at base. Ovarium 3-celled, 3-seeded Stigma simple

2580 *Daubènya*. Inflorescence umbellate, sessile Perianth tubular. Limb bilabiate Upper lip short, 3-dentate, lower one tripartite Ovarium 3 celled

2581 Camássia. Perianth spreading, 6 lvd, upper leaf ascending, lower one deflexed. Stamens equal ascending Ovarium 3-celled, many seeded. Stigma 3-toothed Seed 6 in each cell

2582. *Trichopétalum* Calyx recurved. Petals bearded along the margins Stamens equal Stigma 3-angular Capsule 3-celled, many-seeded Seeds reniform.

2583 *Stypándra* Perianth 6-parted, spreading, deciduous Filaments curved, bearded, and swollen at top Stigma simple Capsule 3-celled, few-seeded

2584 *Tricoryne*. Perianth 6-parted, spreading, deciduous. Stamens bearded Ovarium tripartite, lobes 2-seeded. Stigma simple Pericarps 3, clavate, 1-seeded

2585. *Hessèa* Sepals 6, recurved. Style trigonal. Stigma sessile, 3-lobed, papillose Capsule 3-winged, 3-celled, many-seeded. Seeds winged.

2586 *Gethonoplèsium.* Perianth 6-parted, spreading, deciduous. Filaments curved at apex. Anthers sagittate, conniving, longer than the filaments Style 3-sulcate. Stigma simple Berry few-seeded Seeds nearly globose.

2587 *Mahònia* Sepals 6, guarded on the outside by 3 scales. Petals 6, without glands on the inside. Stamens furnished with a tooth on each side at top of the filament. Berries 3-9-seeded.

2588. *Schrádera* Cal with ovate tube, and short truncate or sub-denticulated limb Cor funnel-sh., tube terete. Anth. 5 8 sess lin inserted into throat of cor., hardly exserted. Style short, bifid. Berries pea-sh., 3-4-sided, 2-4-celled Cells many-seeded. Seeds minute.

MONOGYNIA.

711. NARCI'SSUS. Sp. 61—86.

17075 3990*a* stellàris *Haw.* starry-*sepaled* ☿ △ or 1 my W.c ... . 1629. O co Sw fl gar 2 s.132
17076 4008*a* Cỳpri *Haw* Cyprian ☿ △ or 1 mr ap W Y Cyprus O co Sw.fl. gar 2. s.92
β corònа plèna *Haw.* full-crowned ☿ △ or 1 mr ap W Y gardens ... O co
17077 4031*a* conspicuus *D Don.* conspicuous-*fld* ☿ △ or ½ my Y . . . . O co Sw fl gar 2 s 326
17078 4036*a* cérnuus *Haw.* drooping ☿ △ or 1 mr ap Crea W Spain ? .. O co Sw fl g 2 s.101 3
β corònа plèna *Haw.* full-crowned ☿ △ or 1 mr ap Crea W Spain ? ... O co Sw fl g 2 s 101 4
17079 4037*a* máximus *D Don* largest ☿ △ or 1 ap Y . . ... O co Sw fl gar 2 s 286
17080 álbicans *Haw* whitish ☿ △ or 1 ap W Spain ... O s l Sw fl gar 2 s 165

712 PANCRA'TIUM. Sp 25—29.

17081 4075*a* plicàtum *Lnv.* plaited-*lvd* ☿ ⊠ or 1 jl au W Mexico 1827. O r m Bot. mag 2908

2558. *712*a* ISME'NE Sal. Ismene (The daughter of Œdipus and Jocasta) *Amaryllidcæ* Sp 2—5.
17082 Knightìi K & W. Knight's ☿ ⊠ el 2 mr W Florida 1836 O r m Fl cab 251
17083 Macleàna Herb M'Lean's ☿ ⊠ or 2 jn W Lima 1837. O s p Bot mag 3675
Nos 4058, 4059, and 4060 in p 242. are also referable to this genus.

2559 *712 *b*. CHORE'TIS *Herb* Choretis. (*Choretes*, rustic.) *Amaryllideæ* Sp 1.
17084 glaúca *Herb* glaucous ☿ ⊠ or 1 au W Mexico 1837. O s p Fl cab. 2 101

2560 *712*c* COBU'RGHIA Swt. Coburghia (*Prince Coburgh*) *Amaryllidcæ.* Sp 1—2
17085 - - fúlva *Herb.* tawny-*flwd* ☿ ⊿ or 1 f Taw S Amer 1829. O l.r.m Bot. reg 1497

714 EU'RYCLES. Sp 3—4

17086 4078*a* Cunninghàmii Lindl. Cunningham's ☿ ⊿ el 1 mr ap W N Holl 1830. O p l Bot. reg 1506

2561 *717*a* STENOME'SSON *Domb* (*Stenos*, narrow, *messon*, middle , flower) *Amaryllidcæ.* Sp 1
17087 - - croceum *Rcd.* saffron-*cld* ☿ ⊿ or 1 my O Peru 1820. O s l Bot. mag 3615

720 ANIGOZA'NTHOS Sp 3—4

17088 - - Manglèsii D Don Mangles's ☿ ⊿ or 3 my G Sw River 1833. D p l Sw fl.gar 2 s 265
β angustifolia *Lindl* narrow-leaved ☿ ⊿ or 3 my s G R N Holl ? 1836 D p l Bot. reg 2012
17089 - - coccínea *Lindl* scarlet ☿ ⊿ or 5 jn S Sw River 1837 D p l Pax mag 5 271

2562 *720*a* BARBACE'NIA Vau Barbacenia. (*Barbacena*, gov of Minas Geraes.) *Hæmodoràceæ* Sp 1
17090 - - purpùrea *Hook* purple ☿ ⊠ or 1½ jl P Brazil 1825. D s l Bot mag 2777

728 PITCAI'RNIA Sp 12—16

17091 4128*a* flámmea *B R* flame-*cld* ☿ ⊠ or 2 n F R Janeiro 1825 Sk s p Bot reg. 1092
17092 4130*a* álbiflos *Herb* white-flowered ☿ ⊠ or 3 » W Brazil 1824 Sk p l Bot mag 2642
17093 4130*b* suavèolens *B R* sweet-scented ☿ ⊠ or 2 jl au Y Brazil 1824. Sk r m Bot. reg 1069

2563. *728*a.* POURRE'TIA R & P. Pourretia (*M Pourret*, a French botanist) *Bromeliàceæ* Sp 1—3
17094 - - pyramidàta *R & P.* pyramidal ☿ ⊠ or 1 jn jl Y Peru 1822 Sk s p Fl. per 3 257

2564 *728*b* DY'CKIA Sch fil (*Prince of Salm-Reifferscheid-Dyck*, a lover of gardening) *Bromeliàceæ* Sp 1
17095 - - rariflòra *Sch fil* scattered-flwd ☿ ⊠ or 2 jn O Brazil 1832 O S s p Bot reg 1782

729. TILLA'NDSIA. Sp 14—31

17096 4142*a* psittacina *Hook* parrot-lk-*flwd* ☿ ⊠ el 2 jl S R Janeiro 1826 Sk s p Bot mag 2841
17097 4144*a* acaúlis *Lindl* stemless ☿ ⊠ pr ½ au W R Janeiro 1826. Sk s p Bot reg 1157
17098 - - rósea *Lindl* Rose-*headed* ☿ ⊠ or 1 my Pk Brazil ... Sk s l Bot reg 1357



History, Use, Propagation, Culture,

17088. *Anigozánthus Manglèsii* is a singularly beautiful plant, for which, and for a number of other plants of rarity and beauty, the public is indebted to Robert Mangles, Esq , of Whitmore Lodge, Berks.

2589. *Stephània.* Cal. 2-lobed. Petals 4. Torus small. Ovarium stipitate, oblong.

Order 3. TRIGYNIA. 6 Stamens. 3 Styles.

2590. *Calochórtus.* Calyx 3-lvd. Petals 3, bearded inside. Stigmas petaloid. Capsule 3-valved, 3-gonal. Seeds flat, inserted by single rows.

2591. Merendèra. Perianth funnel-shaped, of 6 sepals. Petals on very long claws. Stamens inserted in the petals above the claws

2592. *Livistònia* Perianth double, both tripartite Ovaria 3. Styles 3, combined. Stigma undivided. Berry 1-seeded.

MONOGYNIA.

[crou tapering very much to base

17075 Perian petal-lk. tube bluntly tetragon thick, Segms spreadg. like star quite distinct at base, cuneat.-obov. mu-
17076 Scape slender 4-flwd Segms perian. obov. mucronate somewhat reflexed twice as long as the cup-shaped truncate yel corona

17077 Corona plicate repand longer than the segms. Style longer than the corona, Leafs erect, Scape compressed
17078 Lvs. lorately linear channelled on upper side keeled at back, Crown cylindr curled 6-lobd. Lbs. round entire, Segms. of perian obhq ovate

17079 Segms perian. ovate spreading, Corona funnel-shaped length of segms. Limb spreading deeply crenated
17080 Lvs 9-10 in long erect little spreadg glauc striat. and keeled at back upper side somewh. concave margin thickened, Segs of perian ov or obov -lanceol cup 2½ in long

17081 Lvs. expanded into a wing above the base, Wing plaited

[linear-lanceol. 6, Corona spreading rotate closely toothed

17082 Lvs. 8 or 10 linear-oblong striated, Scape 2-edged 10-12-flwd. longer than lvs. Spathe lanceolate Segms of perian
17083 Perian yellowish marked with green, Tube slender, Limb and Style exceeding the Corona, Ovarium pedicellate

17084 Glaucous, Scape 3-flwd. Tube long green, Limb white, Corona white rotate with a jagged border

17085 Lvs. glaucous acutish, Scape compressed green, Stamens enclosed

17086 Lvs. oblong-cord Umbel 6-flwd. Segms. of perianth obl -lanceol. Lateral teeth of filament very much elongat. and sometimes 2-lbd.

[into cylind.-campan limb

17087 Scape terete bearing umbel of about 7 flws. Spathe of 2 membranac. lvs. Perian. cylindric gradually widening

17088 Stem erect clthd with short thick crimson persistent velvety down, Flws. in short termin. spiked raceme, Stigma capit project beyond tube
17089 Deep green, Flws. panicled, Perianth swelling towards the summit hairy, Segms a little reflexed

17090 Lvs. linear keeled with spiny serratures, Ovarium elongated tuberculated

[straight 1-sided long. th. stam

17091 Lvs lanceol very ent. acumin. glauc. and woolly ben. Pedic. shorter th. brac quite smooth as is cal Petals
17092 Lvs lin -lanceol very entire smooth acumin. ¼ in broad, Stem simple, Segms of cor revol white, Stigma 3-fid white

[and rachis pubes Brac much long th pedic

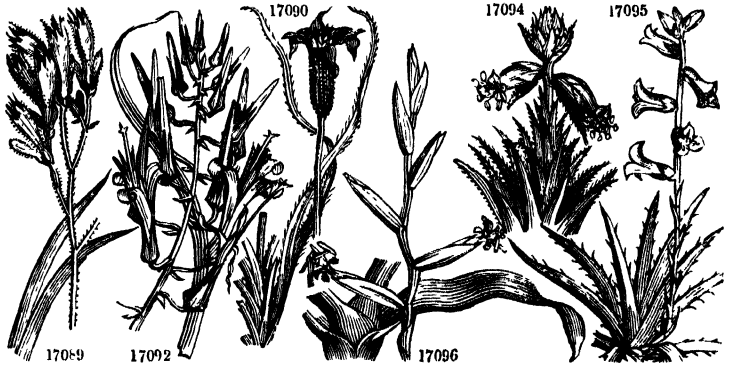
17093 Raceme many-flwd. elongat Petals oblong-lanceol. obtuse twisted to one side concave with galeat spur, Cal

17094 Lvs lanceol -linear elongated ciliato-spinulose furfuraceous beneath, Racemes panicled villous

17096 The only species

[remote, Brac ab eq to flws.

17096 Lvs lin -ligul ent invol at base, towards extrem plane recurved acute, Spike simple, Rachis zigzag, Flws
17097 Lvs oblongo-lanceol accuminated undulated recurved, Flowers aggregate sessile
17098 Lvs. ligulate acumin furfuraceous, Spike ovate solitary scarcely higher th. lvs Brac ovate concave bright pink



and Miscellaneous Particulars.

2564 *Dyckia.* "The dry stove seems to suit it, for there it produces its rich orange flowers in great perfection, and retains them in all their freshness and beauty for several weeks." (*Bot. Reg.*)

2565. *729a BILLBE'RGIA Thun. (*J G Billberg*, a Swedish Botanist) *Bromeliděæ*. Sp 3—10.
17099 - - iridifolia *B R* Iris-leaved ☌ ⧄ or 1 mr S B Y R Janeiro 1825. Sk s p Bot reg. 1065
17100 - - zebrina *Lindl* zebra-streaked ☌ ⧄ or 1½ jn S Amer 1820 Sk r m Bot. mag 2686
17101 - - fasciàta *B R* banded ☌ ⧄ or 1½ au B R R Janeiro 1825. Sk r.m Bot. reg 1130
Nos 4115 4123 and 4136. in p. 246-8. are now referred to this genus.

730 PONTEDE'RIA Sp 7
17102 4145*z* cærùlea *Maund* blue-*fluid* ≋ △ or 2 au B N Amer 1830 D h Bot. gar. 551
2 azùrea *Swz* *fine*-blue ≋ ⧄ or ¾ jl au B Jamaica 1824 O l Bot. mag
17104 4145*y* cràssipes *Mart* thick-petioled ≋ ⧄ or ¼ s.o B Guiana 1825 O l Mart br. 4

2566 *733a A'CIS Sal. Acis (*Acis*, a shepherd, son of Faunus) *Amaryllidæ* Sp 2—3.
17105 - - rùbeus *Swt* rose-*cld* ☿ △ pr ¼ au s R Corsica 1821. O s l Sw fl gar 297
17106 - - grandiflòrus *Red* great-flowered ☿ △ pr ½ au s W Numidia 1820 O s l Bot. reg. 544
Nos 4168 and 4169. in p 248 are also referred to this genus

735. CRI'NUM Sp 27—66
17107 4187*a* èlegans *Carey* elegant ☿ ⧄ or 4 s W E Indies 1823 O s.l Bot. mag. 2592

2567 *736a CLI'VEA Lindl (Named in compliment to the Duchess of Northumberland) *Amaryllidæ* Sp 1
17108 - - nòbilis *Lindl.* noble ☿ ⧋ spl 1½ my au R Y C. G H 1823. O r m Bot. reg. 1182
Imatophyllum Aitoni Hook. Bot. mag 2856

2568 *738a PYROLI'RION *Herb.* (*Pyr*, fire, *lirion*, lily, colour of perianth) *Amaryllidæ*. Sp 1
17109 - - aùreum *Herb.* golden-*perianthed* ☿ ⧋ or 1 ap Go Peru 1833 ? O p.l Bot reg 1724

2569 *738*b* HIPPEA'STRUM *Hook* Knight's Star (*Hippeus*, a knight, *astron*, a star) *Amaryllidæ* Sp 2
ambiguum
β longifiòrum *Hook* long-flowered ☿ ⧄ or . W R Lima 1836 O r m Bot mag 3542
17110 - - breviflòrum *Herb* short-flowered ☿ ⧄ or 3 ap W.R B Ayres 1836 O r.m Bot mag 3549
aùlicum, *syn* Amarýllis aùlica, No 4235 in p 252

739 AMARY'LLIS Sp. 34—113
4236 psittacina
β hybrida *Hook* hybrid ☿ ⧄ spl 1½ ap R G Eng. hyb 1820 O r m Bot mag 3528
psittacina Johnsoni Gowan in Hort. tr & p. 361; A Griffini Swt hort brit p 509
17111 4240*a* kermesina *Booth* carmine-*perianth* ☿ ⧄ or 1 ... Car Brazil 1833. O l p s Bot reg 1638
4242 pulverulénta
β longipedunculàta *Lindl* long-ped ☿ ⧋ or 2 mr.ap O Mexico 1826. O r m Bot reg 1188

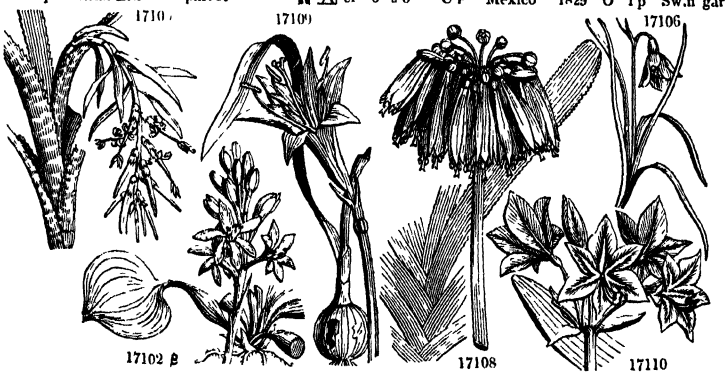
743 ZEPHYRA'NTHES Sp 7—11
17112 4272*a* Spofforthiàna *Herb* Spofforth ☿ ⧋ or ½ my Ro hybrid 1833 ? O r m Bot. reg 1746
17113 4273*a* carinàta *B M.* keeled ☿ ⧋ pr ½ my jn Pk Mexico 1824. O s l Bot mag 2591
17114 4273*b* verecúnda *Herb* blushing ☿ ⧋ pr ¾ ap my Pa R Mexico 1824 O s l Bot mag 2583
17115 4273*c* striàta *Herb.* channelled ☿ ⧋ pr ¾ ap my W Mexico 1824 O s l Bot mag 2593

2570. *743a SCEPTRA'NTHES *Grah* (*Skeptron*, a sceptre, *anthos*, a flower) *Amaryllidæ* Sp 1
17116 - - Drummóndi D Don Drummond's ☿ △ or 1½ jl W Pk Texas 1835 O r.m Sw fl gar 2.s 328
Zephyránthes Drummondi D Don

2571. *743*b* HAYLO'CKIA Herb (*Matthew Haylock*, gard to Mr Herbert.) *Amaryllidæ* Sp 1
17117 - - pusilla *Herb* dwarf ☿ △ or ½ s Str B Ayres 1829 O s l Bot reg. 1371

744 HABRA'NTHUS Sp 7—14
4276 gracilifòlius
β Boothiànus Herb Booth's ☿ △ pr ½ o Pk B Ayres 1836 O s l Bot reg 1967
17118 4276*a* angústus *Herb* narrow ☿ ⧋ pr ½ s R Brazil 1822 O p l Bot mag 2639
17119 4276*b* bifidus *Herb* two-cleft ☿ △ or ¾ jn Pk B Ayres 1823 O s l Bot. mag 2597
17120 - - Bagnóldi Herb Bagnold's ☿ △ or 1 n Y Chile 1829. O s l Bot reg 1396
17121 - - Andersoni Herb Anderson's ☿ ⧋ or 1 ap my Y R Mt Video 1829 O s l Bot. reg 1345
β texànus *Herb* Texian ☿ ⧋ or 1 ... Y Texas 1834 O s l Bot mag 3596
17122 - - minùtus D Don red-*flowered* ☿ △ or 1 jl R Chile 1832 O lt s Sw.fl gar 2 s 213

748 ALSTRŒME'RIA Sp 12—21
7123 4286*a* ovàta *Cav* ovate ⚸ △ or 4 jn jl R G Y Chile 1824 R l s p Cav ic. 1 76
17124 4286*b* acutifòlia *Lk & O* acute-leaved ⚸ ⧋ or 6 au o R Y.G Mexico 1829 O l p Sw fl gar 2 s 77
17125 4286*c* hirtélla *Kth* rather hairy ⚸ △ or 4 jl R Y G Mexico 1824 S p l Sw fl gar 228
17126 4286*d* psittacina *Lch* parrot ⚹ ⧋ el 6 s o C P Mexico 1829 O l p Sw.fl gar 2 s 15



History, Use, Propagation, Culture,

2567. *Clivea.* A splendid green-house plant of easy culture, and may be propagated either by seeds or suckers
748. *Alstrœmèria.* All the species of this genus have showy and beautiful flowers, and they may all be cultivated in

17099 Lvs lanceol.-ensiform undulat acumin rather spinous, Spike pend many flwd Flws. solit. Brac. very entire
17100 Leaves most singularly barred at uncertain intervals with white
17101 Rad lvs glauc erect recurved channelled ligul obt with a little point spinous serratures and cross. with white downy bands, Spike capit prolifer

17102 Erect lvs. cordate lanceol Flws in crowded spikes

17104 Floating lvs. reniform cordate acuminated, Petioles inflated, Flws. in spikes

17105 Spathe 1-flwd Leaflets of the perianth obl bluntish entire, Lvs narrow linear obtuse glaucous spreading
17106 Petals entire

17107 Limb longer than the tube much shorter than the style

17108 Lvs distichous coriac strap-sh sheathg. at base retuse and oblique at apex margin rough Flws 48—50 in pendulous umbel

17109 The only species

17110 Scape ab. 3 ft high rounded glauc Spathe 2 lanceol membran lilts Umbel 6-flwd scentless Germ obovate 3-gonous, Style short. than perianth

17111 Lvs linear obtuse shorter than scape, Umbel 3-flwd Flws. nearly erect funnel-sh sedile. round slender 2-3 inches long, Spathe 2-valved acumin.

[much declined long than filam
17112 Hybrid, Scape 5½ in high, Spathe brownish-green, Pedun 1 in long, Lvs not ¼ in wide acute keeled, Style
17113 Lvs ligulate channeled keeled acute red near the base, Spathe 1-lvd cells of ovarium many seeded, Style robust
17114 Lvs linear bluntish channeled purplish at the base, Spathe bifid, Style thick [declinate
17115 Lvs linear blunt channeled, Spathe reddish bifid

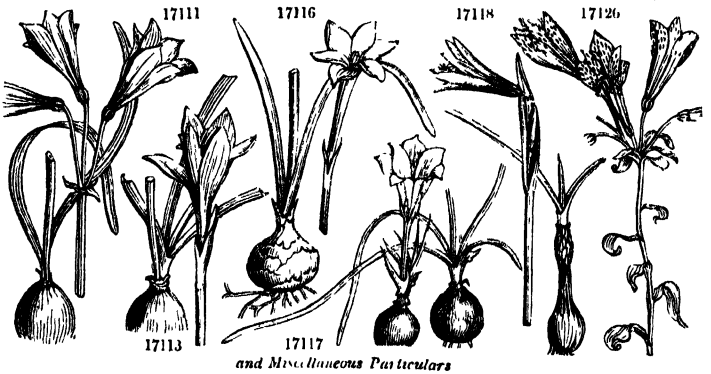
[somewhat 3-lobed Lvs glaucous shorter than scape
17116 Limb of the perianth coarctate 3 times shorter than tube, Segms ovate mucron. with involute margins, Capsules

17117 Lvs. narrow lying on the ground rising in autumn after the flowers

17118 Lvs narrow obtuse, Scape 2-flwd
17119 Lvs narrow, Scape 4-flwd Spathe bifid
17120 Lvs obtuse glaucous umbel 6-flwd
17121 Lvs narrow, Scape 1-flwd Spathe divided at apex

[rather long than lvs
17122 Umbel 2-5-flwd Perianth campanul Limb 6-parted thrice longer th. tube, Throat beard Scape very smooth

17123 Lvs obl acumin petiol villose above, Pedun umbellate, Bract loose, Segms. of cor connivent
17124 Stem twining, Leaves obl. lanceol acumin. many-nerved twisted at the base, Nerves pilose above, Umbel many-flwd peduncles hispid [shorter
17125 Stem smooth, Lvs. obl acumin striated petiolate pubesc ben Umbel many flwd Outer segments of cor
17126 Stem erect spotted, Lvs. obl lanceol acute twisted at the base, Umbel many-flwd Peduncles angular



and Miscellaneous Particulars

deep dry sandy soil in a warm situation in the open air, provided they receive the protection of a frame, or of dry litter or leaves, during winter.

4288 pulchélla *Sims*, syn Hookèri Swt
β pilòsa I mdl. hairy-*leaved* ✱ ▽ spl 1 aut S Chile ... S l.s.p. Bot. reg 1410
17127 4288*a* Neillii Gill Neill's ✱ △ el 2 jn Pa Ro Mendoza 1827. O l p Bot mag. 3105
17128 4288*b* hæmántha *R & P.* blood-cld-*flwd* ✱ ▽ or 1½ jl Dp O.R Chile 1830. O l.s.p Sw fl.gar 2 s 159
17129 - - aurantíaca *R & P.* orange-cld-*sep* ✱ △ spl 2 jn O spot Chile 1831. D l s p Sw.fl gar.2.s.205

2572 *749*a* CUMMI'NGIA D Don (*Lady Gordon Cumming*, of Altyre, Forres, N.B.) *Asphodèleæ* Sp 1—3
17130 - - trimaculàta *D Don* three-spotted ♂ △ el ¼ d B Chile 1829 O p l Sw.fl. gar.2. s.88

765 TRADESCA'NTIA Sp 14—26
17131 436*1a* carcifólia *Hook.* Sedge-leaved ✱ △ or 1 au s B Texas 1835 D r m Bot. mag 3546
17132 436*4a* pilòsa *Lch* hairy ✱ △ cu 2½ aut B.P Louisiana 1832 D co Bot. mag 3294

2573 *769*a* FU'NKIA Spr. FUNKIA. (*Henry Funk*, a German cryptogamist.) *Hemerocallideæ*. Sp 3—7.
17133 - - Sieboldtiana Dens. Sieboldt's ✱ △ or 1 jn Li Japan 1830. D r l Bot cab 1869
17134 - - lanceæfòlia *Dens* lance-leaved ✱ △ or 2 jl au Li Japan 182 . D s l Bot. cab 1658
17135 - - álbo-marginàta *Hook* white-margd ✱ △ or 1½ jl L Japan 1837.? D s.l Bot. mag 3657
Nos. 4383. and 4384 in p. 260 are referable to this genus

771 LI'LIUM Sp 23—35.
17137 4486*b* speciòsum *Thun* showy ♂ △ spl 2 au C Japan 1833. O p l Bot reg 2000
supérbum *Thun Fl. Jap* 134.; *Kasbiago* vulgò *Konokho Juri* Kæmpf Amœn 871; lancifòlium *Hort.*
β. Tametomo Sieb. Tametoma ♂ spl 4 jl au W Japan 1834. O r m
eximium *Hort.*
17138 4503*a* tenuifòlium *Fis* slender-leaved ♂ △ or 1 jn jl S Siberia 1820. O p.l Sw fl gar.2. s 275

772 TU'LIPA. Sp 15—24
4506 óculis sòlis
β pérsica I mdl. Persian *sun's eye* ♂ △ spl 1 mr S.bk Persia 1826 O co Bot reg 1143
17139 4507*a* montàna *B R.* mountain ♂ △ or 1 jl S Persia 1826. O r m Bot reg 1106
17140 4508*a* præ'cox *Ten.* early-*flowering* ♂ △ or 1 ap.my S Italy 1825 O r m Sw. fl gar 157
17141 4508*b* pubéscens *W* pubescent ♂ △ or 1 ap my R . ... 1824 O r m Sw fl gar 78
17142 4508*c* Bonarotiana Reboul Bonarota's ♂ △ or 1½ ap my R Va Italy 1827? O co Sw.fl g 2 s 116
17143 4509*a* stellàta *B M* starred ♂ △ or 2½ mr ap W Kumana 1827. O r m Bot. mag. 2702
17144 - - scabriscàpa *Sts.* rough-stemmed ♂ △ or 2 ap my R v Italy 1837. O r m Bot reg. 1990

2574 *773a CYCLOBO'THRA *Swt* (*Kyklos*, a circle, *bothros*, a pit; each sepal.) *Tulipaceæ* Sp 4
17145 - - purpùrea *Swt.* purple ♂ △ or 3 au s P G Mexico 1827 O p l Sw fl g 2 s 20
17146 - - élegans *Ph.* elegant ♂ △ pr ½ jn jl W Columbia 1826 O s p Hort tr. 7. 9
Calochórtus élegans *Ph*
17147 - - pulchélla *Benth* pretty-*flwd* ♂ △ or 1 au s Y Californ 1832? O p l. Bot reg. 1662
17148 - - álba *Benth* white-*petaled* ♂ △ or 1 au s W Californ 1832? O p Bot reg 1661

2575 *773b RHINOPE'TALUM *Fis* (*Rhin*, nose, *petalon*, petal, base of upper sepal.) *Liliàceæ* Sp 1
17149 - - Karelìni Fis Kareline's ♂ △ pr ½ ja Pa Pk Spt Ural 1834? O p.l Sw fl. g 2 s 283

2576 *773c. CHARLWOO'DIA Swt (*G Charlwood*, F L S, an enthusiastic Eng bot.) *Asphodèleæ* Sp 1—4
17150 - - stricta *Swt* upright ♀ ▭ or 10 mr B N Zeal 1820 C p l Bot reg 956
Dracæ'na stricta *B M*

774 DRACÆ'NA Sp 8—21
17151 4529*a* terminàlis *Jac* terminal ♀ ▭ or 10 jn jl W E Indies 1820 C p l Bot reg 1749

782. ERYTHRO'NIUM Sp 4—5
17152 457*3a* grandiflòrum *Ph* large-*pyramanthed* ♂ △ or ½ my Y N.W A 1826? O p Bot reg 1786
17153 - - gigantèum *Lindl* gigantic ♂ △ spl ... N W A. .. . O p

2577 *795*a* ? CALLIPRO'RA *Lindl* (*Kale*, pretty, *prora*, front, its beauty.) *Asphodèleæ*. Sp 1—
17154 - - lùtea *Lindl.* yellow-*flwd* ♂ △ or ½ jl Y N Califor 1831? O p Bot reg 1590

2578 *798*a* LAXMA'NNIA R Br (*E Laxmann*, a Siberian traveller.) *Asphodèleæ*. Sp 1—
17155 - - grácilis *R Br* slender ♀ △ or ½ jn jl P.w N Holl. 1824. D s p

803 SCI'LLA. Sp 25—33.
17156 4754*a* præbracteàta *Haw* long-bracted ♂ △ or 1 my jn B S Europe ..... O s l Bot. mag 749
peruviana *Hort* not of L
17157 4755*a* Cupanidna Guss. Cupani's ♂ △ or 1 jn Dl P Sicily 1834? O s l Bot. reg 1878
17158 4758*a* amœ'nula *W* pretty ♂ △ pr ½ mr.ap B Russia 1822 O s l Bot. mag 2408
17159 4759*a* villòsa *Desf* villous-*lvd* ♂ △ or ½ . ... Li Tripoli 1831. O p l Bot mag 3211



History, Use, Propagation, Culture,

772. Tùlipa. It appears to us highly probable that the greater number, and indeed perhaps the whole, of the above names, are only varieties.

[prunnose ent. Pedun 2-flwd.
17127 Lvs spathul. about 7-nerved central rib hardly promin behind in upper half reflect at point and sides glauco
17128 Erect, Lvs lin -lanceol twisted margins ciliated, Pedunc branc umbellate, Perianth 6-lvd 3 outer ones ovato-
17129 Stem erect, Lvs. lanceol obtuse obsoletely denticulated, Umbels many-flwd. Pedunc. angular [lanceol. serrated

17130 Limb of the perian longer than tube with 3 blk spots in the centre

[Sheaths ciliat on margins
17131 Stem erect simple or bran rounded glabr jointed, Lvs lin -acuminated glabr striated sheathing at base,
17132 Stem dichotom bran and jointed lower part glabr upper densely hairy, Lvs scarcely sheath lanceol wavy striat lower downy, upper densely hairy
[wider in proportion
17133 Lvs all radic ov. acumin striat Bracteas lanceol lower ones longer th flws upper one gradually smaller and
17134 Lvs. lanceol nerved, Corolla campanulate [flwd Brac ov twice as long as pedic.
17135 Lvs all radic. petiol. ov -lanceol very acute elegantly margined with white, Petiol longer th. lvs. Rac 12-14

17136 Stem glabrous, Leaves scattered lanceolate 3 nerved attenuated at both ends, Corolla tubularly campanulate
[volute papillosely bearded
17137 Stem erect smooth, Lvs. scattered ovato-obl nerved petiol Bran 1-flwd Flws. drooping reflexed, Cor. re-

17138 Lvs very narrow linear scattered, Perianth smooth revolute, Capsule turbinate

[Lflts. ov flat acute
17139 Stem leafy 1-flwd Lower lvs. obl -lanceol channeled acumin undul. glauc Upper ones lin flat, Perian oval
17140 Stem 1-flwd glabrous, Flws erect, Petals ovate lanceol acuminated bearded at the apex, Lvs. ovate lanceol. ciliate, Bulbs woolly
17141 Stem pubescent 1-flwd 3 outer petals acute 3 inner ones obtuse and mucronate, Lvs obl. lanceolate pubescent
17142 Stem pubescent longer than that on lvs Perianth campanulately spread Segms ellipt -lanceol acute bearded at apex margin involute
[Filam. subulate
17143 Lvs lin -lanceol subconvolute glauc Petals lanceol obtuse very spreading 3 outer ones longest, Stam. equal
17144 Scape pubescent scabrous, Lvs flaccid, Segms of perian. acumin Stem 1-flwd

[acute glab inner ones blunt ciliated
17145 Glaucous, Stem few-flwd Lvs channeled acuminated upper ones dilated at the base, Outer segms of perianth
17146 Stem 3 flowered one-leaved, Inner petals woolly

[ovate-lanceol acumin
17147 Umbel 2-3-flwd. Pedun shorter than bract Petals ovate obtuse serrulato-fimbriate, Flws globose, Sepals
17148 Umbel 2-3-flwd Pedun shorter than bract Petals ovate very obtuse margin naked, Sepals ovate-lanceol. half length of petals

17149 Lvs lanceol subconvolute, Flws terminal solitary

17150 Stem upright simple densely leafy, Lvs lin -lanceol cuspid recurv. patent ent. Rac. terminal many-flwd.

17151 Stem arborescent, Lvs. attenuated at both ends, Branches of panicle divaricate, Flws nearly sessile

[3-parted
17152 Lvs obl -lanceol subcomplic obtuse, Segms. of perian ovate-lanceol. acumin reflex nearly from base, Stigma
17153 Lvs obl or lanceol. Scape irregularly bran. 5-flwd. Segms. of perian. acumin. reflex from middle, Stigma 3-lobed

17154 Habit of *Allium*

17155 The only species

17156 Lvs broad linear longer than the scape, Bracteas equal in length to pedicels, Flowers disposed in a large sub-conical corymb Perian spreading persistent
[few-flwd Caps rotate
17157 Lvs lanceol. flat very smooth and densely ciliated (edged with broken cartilaginous margin *Lindl.*), Corymbs
17158 Scape 5-angled, Racemes 3-flwd Pedunc drooping, Cor campanulate patent, Bracteas very short
17159 Lvs. lanceolate sparingly villous, Racemes corymbose 5-7-flwd. Bracteas lanceol equal to peduncles



and Miscellaneous Particulars.

2577 *Calliprora.* A handsome hardy bulbous plant, growing freely in a shaded peat border.

2579. *803*a*. BARNA'RD*IA* Lindl (*E Barnard*, F L S, Vice-Sec. Hort. Soc London.) *Asphodèlcæ*. Sp 1
17160 - - *scilloides B R.* Scilla-like ♂ △ or ½ jl au P China 1826. O p l Bot. reg. 1029

2580. *805*a* DAUBE'NY*A* Lindl (*Dr Charles Daubeny*, Prof. of Chem. & Bot at Oxford.) *Asphodèlcæ*. Sp 1.
17161 - - *aúrea Lind* golden-*cld-flwd* ♂ △ or ½ jn Y C.G.H. 1832? O s.l Bot reg. 1813
Massònia lùtea *Hort*

2581 *809*a CAMA'SSIA* Lindl. (*Quamash*, or *Cumas*, native name in N W. Amer.) *Asphodelcæ* Sp. 1—.
17162 - - esculénta *Lindl.* esculent ♂ △ or 1½ jl D P Columbia 1827. O p Bot. reg 1486

2582 *809*b* TRICHOPE'TALUM *L* (*Thrix*, hair, *petalon*, a petal, inner perianth fringed) *Asphodèlcæ* Sp 2—2.
17163 - - grácile *Lindl.* slender ♃ △ cu 3 jn au W GshChile 1828 D r m Bot reg 1535
17164 - - stellàtum *Lindl.* starry-*flowered* ♃ △ cu 1 ap W Chile 1829 D co Bot mag 3084
Anthéricum plumòsum *Bot mag* 3084, *Loud Hort Brit*, *R. & P.*?

2583 *810*a* STYPA'NDRA *R Br.* Stypandra (*Stype*, tow, *aner*, an anther.) *Asphodèlcæ*. Sp 1—5.
17165 - - propínqua *Cun.* near akin ♃ △ or 1 sp azure N S W. 1823. C s p l Bot. mag 3417

2584 *810*b*. TRICO'RYNE *R Br* Tricoryne (*Treis*, three, *koryne*, a club, capsules) *Asphodèlcæ*. Sp 1—3.
17166 - - elàtior *R. Br.* taller ♃ △ or 2 jn jl W. N Holl. 1824 D r m

2585 *816*a HERRE'RI*A* R. & P (*C. A de Herrera*, a Spanish agriculturist.) *Asphodèlcæ* Sp 1—2.
17167 - - parvifòlia *B R* small-flwd ♃ △ or 8 jn jl G Y Brazil 1824 C r m Bot reg 1042

2586 *816*b*. GEITONOPLE'SIUM *Cun* (*Geiton*, neighbour, *plesion*, near, affinity & habitat) *Aspho*. Sp 3—1.
17168 - - cymòsa *R Br.* cymose ♃ ⌴ pr 3 my jn G N Holl 1825 C p l Bot. mag 3131
Luzuriàga cymòsa *Brown* in Prod.

822 LACHENA'LI*A*. Sp 31—36.

17169	4888*a* anguínea *Swt.*	serpent	♂ △	pr	1 jn jl	W	C G H	1825.	O s.l	Sw. fl gar 179
17170	4888*b* liliflòra *Jac*	Lily-flowered	♂ △	pr	1 ap jl	W	C G H	1825	O s.l	Jac ic 2 387
17171	4883*a* mutábilis	changeable	♂ △	el	½ n	B	C G H.	1825.	O s.l	Bot cab 1076
17172	4889*a* purpùrea *Jac*	purple	♂ △	or	½ mr my	P	C G H	1826	O s l	Jac ic 2 393
17173	4889*b* glaúca *B R.*	glaucous	♂ △	or	½ my	P G	Persia	1825	O s.l	Bot. reg 1085

829 *BE'RBERIS*. Sp 14—24

	4922 vulgàris	♂ lùtea *Dec*, yellow-*fruited*					♀ purpùrea *Dec.*, purple-*fruited*			
17174	4922*a* iberica *Fis*	Iberian	❀	or	5 ap my	Y	Iberia	1818	L r.m	
17175	4924*a* floribunda *Wal.*	many-flowered	❀	or	10		Nepal	. ...	L r m	
17176	4924*b* asiática *Rox*	Asiatic	❀	or	4	Y	Nepal	1823	L r m	
17177	4930*a* decalbàta *Lindl*	whitened-*lvd*	❀	or	10 d	Y	Mexico	1830?	L r m	Bot. reg 1750

2587 *829*a* MAHO'NI*A* Nut (*Bernard M'Mahon*, of N Amer., a lover of botany.) *Berberideæ*. Sp 5

17178	- fasciculàris *Dec* No 4929 in p 286	bundled-*flwd*	❀	⌴	or 10 ap my	Y	Californ	1819	L co	Bot mag 2396
17179	- *Aquifòlium Nut*	Holly-*leaved*	❀	⌴	or 6 ap my	Y	N Amer	1824	G r m	Bot reg 1425
17180	- nervòsa *Nut* glumàcea *Dec.*	nerved-*leaved*	❀	⌴	or 10 o	Y	N Amer.	1826	G r m	Bot reg 1426
17181	- répens *G Don*	creeping	❀		or 2 ap	Y	N Amer	1824	R r m	Bot. reg. 1176
17182	- tenuifòlia *Lindl*	slender-lvd	❀	⌴	or . .		V Cruz	1838?	L r m	

2588 *833*a*. SCHRA'DER*A* Vahl Schradera (*Henr A D Schrader*, a German bot.) *Rubiàceæ*. Sp. 1—
17183 - - cephalòtes *W* round-headed ❀ ▭ or 4 jl au R Jamaica 1820. C l p
Fúchsia involucràta *Swz*

2589. *836*a* STEPHA'NI*A* Dec. Stephania (*F Stephan*, a professor at Moscow.) *Capparideæ*. Sp 1
17184 - - cleomoides *Dec* Cleome-like ❀ ⌴ or Caraccas 1823. C l p Jac sc 111
Capparis paradoxa *Jac*



History, Use, Propagation, Culture,

2581. **Camássia** 17162 *esculénta* "This plant is known by the natives under the name of *Quamash*; and the bulbs are carefully collected by them, and baked between hot stones, when they assume the appearance of baked pears, and are of an agreeable sweet taste. They form a great part of their winter stores. Though an agreeable food to Governor Lewis's party, they occasioned bowel complaints if eaten in any quantity. It is perfectly hardy, requiring to be planted in a peat border, and may be propagated either by seeds or bulbs. (*Pursh*.)

2585. *Herrèria*. A singular, but desirable, hot-house climber, growing freely in any good soil

2587. *Mahònia*. "The species are elegant evergreen shrubs, with yellow flowers and pinnate leaves. The latter

[Segms obl.-concave narrowed at base
17160 Lvs. weak lin. channel. cuspid. rather angul. extern. Scape erect 6-angled, Rac. simple conic. Perian. 6-leaved,

17161 Habit of Massònia, Umbel sessile

17162 Bulb ov about size of hazel nut, Lvs lin acumin. channel short than scape broken back from weakness, Pedic filif ¾ in long, Perian 6-lvd 2 in in diam

17163 Stem paniculate, Petals and sepals revolute, Flowers nodding
17164 Scape 2-4-flowered rather leafy, Petals bearded capsules elongated

17165 Glaucescent, Lvs. distinct twisted

17166 Stem terete leafy, Leaves flat, Umbels 5-7-flowered

17167 Lvs lanceolate, Segments of perianth ovate obtuse

17168 Cymes terminal bipartite, Branches terete, Branchlets striated glabrous

17169 Flws campanulate stalked drooping, Stamens exserted descending, Leaf long solitary fascicle underneath
17170 Lvs twin lanceol pustulate, Scape erect, Corolla spreading reflexed, Petals nearly linear [broader at base
17171 Lvs obl-lanceol acute channeled smooth margins undul. Flws subsess horizont Brac very small acumin
17172 Lvs twin lanceolate crenulated, Flowers pedunculate spreading, Corolla subcylindrical
17173 Flws turbinate, Rac loose pyramidal many-flwd Lvs broadly acuminated glaucous

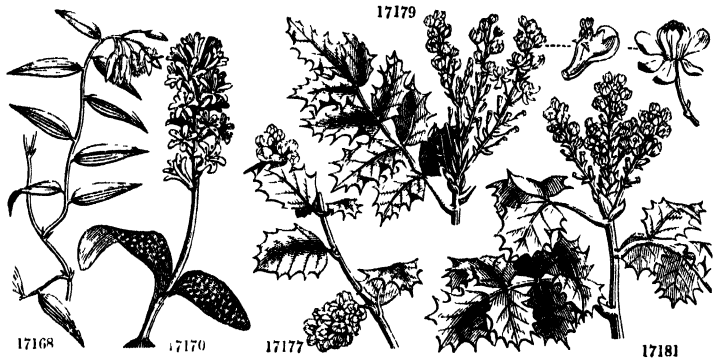
ζ nigra *Dec*, black-*fruited* η asperma *Dec*, seedless ϑ dúlcis *A B*, sweet-*fruited*
17174 Spines simple and 3-parted, Lvs. obovate oblong quite entire, Racemes many-flwd Petals entire
17175 Spines 3-parted and very stiff, Lvs oblong or obl-lanceol nearly ent toothed in various degrees somewt deeply and coarsely veined, Rac slend long loose [Rac short many-flwd. corymbose
17176 Spines trifid or simple, Lvs oval cuneat or ellipt mucron smooth under surf glauc ent or spinulosely thd
17177 Spines scarcely any, Lvs roundish coarsely toothed rather glauc white beh. Rac very short compact pendulous

17178 Lvs 3-6 pairs with odd one lowest pair near base of pet Leafl ov-lan rath distant 1-nrvd 4 or 5 spiny teeth on each side, Rac nearly erect
17179 Lvs 4 pairs with odd one lowest pair distant from base of pet Leafl ov approxim cordate at base 1 nrvd 9 or 6 spiny teeth on each side, Rac erect [somewhat 3 5-nrvd Rac. elongated
17180 Lvs 5-6 pairs with odd one lower pair dist from base of pet Leafl ov. acumin 12 or 14 teeth on each side

17181 Lvs 2-3 pairs with odd one roundish-ov opaque spiny toothed, Rac diffuse, Root creeping
17182 Lvs pinnate and ternate, Leaflets ovate oblong acute thin flat and quite entire

17183 Lvs. obl.-acuminated, Pedunc termin. solit short, Heads of flws surrounded by ent involucr. Cor 7-8-lobed

17184 Lvs obl.-lanceol acuminated scarcely longer than pedicels



and Miscellaneous Particulars

resemble pretty much those of the ash, and hence doubtless, the name of Ash-berberry. Natives of the N W. coast of Amer, and also of Nepal, and perhaps Japan. Though some botanists think that the characters ascribed to this genus, and those ascribed to *Bérberis*, are not sufficient to keep them separate as genera; yet the habits of the species of one, as to the mode of growth, foliage, and inflorescence, are so distinct from those of the other, as to induce us to adopt Mahónia. The species in British gardens are all of comparatively slow growth, and admit of but slow multiplication by layers, and scarcely at all by cuttings. Some of them, however, seed freely, and are readily propagated in that way" (*Arb Brit* vol. ii. p 309)

TRIGYNIA.

2590. *845*a* **CALOCHO'RTUS** *Ph* CALOCHORTUS. (*Kalos*, handsome, *chortos*, grass.) *Liliàceæ*. Sp. 4—6

17185 . - macrocárpus *Dou.* long-fruited ♀ △ spl 2 au P Californ 1826 O s.p Bot. reg. 1152
17186 - - spléndens *Dou.* splendid-*cor.* ♀ △ spl 1½ au s Li Californ. 1832? O s p Bot reg. 1676
17187 - - venústus *Dou.* handsome-*cor.* ♀ △ spl 1½ au s W spt Californ. 1832? O s.p Bot. reg. 1669
17188 - - lúteus *Dou.* yellow-*petaled* ♀ △ or 1 s o Y.G spt Californ. 1834 O s.p Bot. reg. 1567

2591 *851*a* *MERENDE'RA* Bieb. (A name given to Colchicum by the Spaniards.) *Melanthàceæ*. Sp. 1.
17189 - - caucásica *Bieb* Caucasian ♀ △ or ½ au P Caucasus 1823. O s.p Bot mag 3690
Bulbocòdium trígynum *Adams*, *Cólchicum caucásicum Spr.*

855 *SA'BAL.* Sp. 2—5.
17190 4996*a* Blackburniàna Lo C Blackburn's ♇ □ or ... ... G tropics 1825. S s.l G m v f. 10.

2592 *855*a*. LIVISTO'NIA *R. Br.* (*Patrick Murray*, of *Levistone*, near Edinburgh.) *Palmæ*. Sp. 1—2.
17191 - inérmis *R. Br* unarmed ♇ □ or 40 ... ... N. Holl. 1824. S r m Mart. Palm. t.

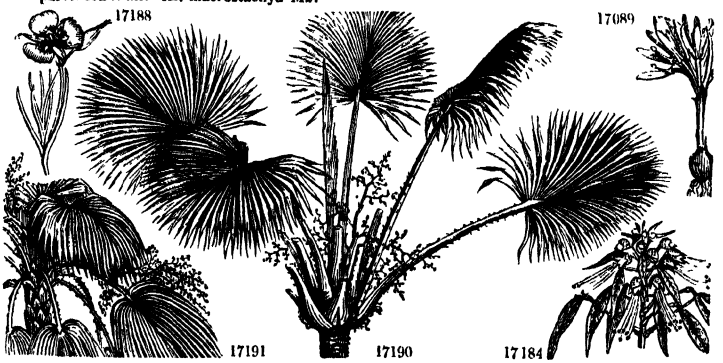
Page 296. CLASS VII. — HEPTANDRIA. 7 STAMENS.

Order 1. MONOGYNIA. 7 Stamens. 1 Style.

2593. *Pàvia* Capsule smooth. That of *Æ'sculus* is echinated.

MONOGYNIA.

2593 *866*a* PA'VIA Boer PAVIA (*Pierre Paw*, professor of botany at Leyden.) *Æsculàceæ* Sp 6—8
†5058 rùbra *Lam* red-*flowered* ♓ or 6 my.jn S N. Amer. 1711. G s l Den. br 120
Æ'sculus Pàvia L. No 5058 in p 296.
β argùta *Bot reg* 993, γ sublacinìata *Den br* 120,
† 5060 flàva *Dec* yellow ♌ or 20 my.jn Y N Amer. 1764 G s l Den br 163
Æ'sculus flàva H K No 5060 in p 296
† 5059 discolor *Swt.* two-cld-*flwd* ♓ or 5 my R Y N. Amer. 1812. G s l Bot reg 310
Æ'sculus discolor Ph No 5059. in p. 296.
17192 - - neglécta *G Don* neglected ♌ or 20 my jn Pa Y ..... 1823? G co Bot reg 1000
17193 - - macrocárpa *Host* long-fruited ♌ or 20 .. R Y ... .. 1826 G co A b. vol 5 pl 52
17194 - - macrostàchya *Dec.* long-spiked ♓ or 6 jn,jl W N. Amer. 1820. G co A b. f 137
parvifìora *Walt.* *Æ.* macrostàchya *Mx.*



History, Use, Propagation, Culture.

2590 *Calochórtus*. A genus of very handsome bulbous plants, which may be planted in a warm border in the open air during the summer, but should be taken up as soon as the leaves are withered, and kept dry till they begin to shoot, when they may be potted and kept in the green-house till the spring frosts are over.

Page 300. CLASS VIII. — OCTANDRIA. 8 STAMENS.

Order 1. MONOGYNIA. 8 Stamens. 1 Style.

2594. *Chymocárpus*. Calyx persistent, valved in æstivation Petals 2. Fruit baccate, composed of 2 1-seeded carpels.

2595. *Arthrostémma* Cal turbinate or campanulate, usually beset with bristles or scales on outside, 4-lobed Petals 4. Stigmas 8, glabrous Anthers oblong, having their connectives rather long, and bluntly biauriculate at base. Ovarium bristly at apex. Capsule 4-celled

TRIGYNIA.

17185 Stem 3-5-lvd. 2-flwd. Petals beautifully bearded at base, Capsule erect linear-oblong
17186 Stem 3-5-flwd. Sepals revol Petals with wart-like tuft of very short firm hairs
17187 Stem few-lvd sub-2-flwd. Sepals erect, Petals with oblong tuft of rather loose hairs a short distance above base
17188 Stem sub-3-flwd. Lvs. convolute shorter th pedun. Petals cuneate rounded at apex transv. bearded about middle

17189 Anthers versatile, Lvs lanceol.-linear spreading, Flowers rising at the leaves

17190 Leaves fan-shaped, Spathe divided, Flowers panicled

17191 Segments of fronds connected by threads, Stipes unarmed

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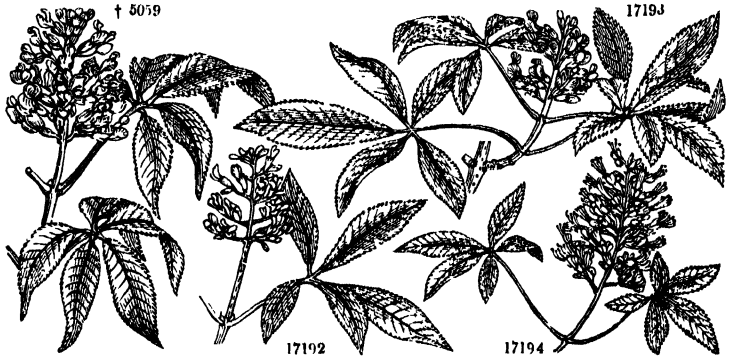
CLASS VII. — HEPTANDRIA.

MONOGYNIA

†5058 Leafl 5 ellipt.-obl tapering at both ends smooth as is pet axils of nvs hairy on under surf. of lvs. Petals 4 longer than stams
ß hùmilis *Bot. reg* 1318, ε hùmilis péndula *A B.*
†5060 Leafl. 5-7 pubesc beneath and above upon nerves, Petioles pubescent flattish towards the tip

†5059 Whole plant including young wood covered with pubescence, Flwrs large and snowy

17192 Lvs with rufous down on veins on upper side smooth beneath rather plicate [petals less spreading
17193 Lvs. large smooth on upper surface and shining, Flwrs nearly as large as those of *Æsculus Hippocástanum* but
17194 Stamens much longer than corolla, Racemes very long, Root stoloniferous



and Miscellaneous Particulars

2593 *Pàvia.* Middle-sized deciduous trees or shrubs, distinguishable from the horsechestnuts by the smoothness of their fruit, and the comparative smallness of their flowers, which have their petals erect and narrower The leaves, also, are generally smaller and smoother. (*Arb Brit* p. 469) Budding and grafting are the most usual modes of propagation, though they are frequently increased from seed.

2596. *Godètia.* Limb of calyx reflexed. Capsule opening at angles Placenta persistent. Stamens all alike. Chalaza of the seed crowned round the margin by a fringe
2597 *Clàrkia.* Limb of calyx 4-parted. Petals 4, tripartite Caps. 4-celled Seeds not pappous.
2598 *Eucharidium.* Tube of calyx above the ovarium, elongated, filiform, with a 4-parted deciduous limb Petals 4, clawed, trifid. Capsule 4-celled, 4-valved, dehiscent. Seeds numerous.
2599 *Francòa.* Calyx 4-parted. Petals 4. Stamens distinct, 16, 8 of which are fertile. Anthers 2-celled. Capsule 4-gonal, 4-celled.

MONOGYNIA.

875. TROPÆ'OLUM Sp. 10—11.

5083 *május*

γ atrosanguíneum *D Don* dark red ⊼ ○ or 3 jn au D.R gardens ... . S co Sw.fl g 2 s.204

17195 5086*a* polyphýllum *Cav.* many-leaved ⅄ ⩚ or 3 jn,jl O Y Chile 1827 C s.l Cav. ic 4 365

17196 5086*b* Jarrattii Youell Jarratt's ⅄ ⩚ el 12 S Y Santiago 1836 C p l Pax. mag 5. 29

17197 5086*c* tricolórum *Swt.* three-coloured ⅄ ⩚ el 12 jn,s O P Valpara 1828 C p l Sw. fl gar 270

17198 5086*d* brachyceras *Hook.* short-spurred ⅄ ⩚ pr 12 au Y R Chile ... C l.p Bot. reg 1926

17199 5086*e* tuberósum *Maund* tuberous-*rooted* ⅄ ⩚ esc 3 s Y Peru, 1837 R C r Bot. gar. 633

2594 *875*a* CHYMOCA'RPUS *D. Don* (*Chymos*, juicy, *karpos*, fruit, berry) *Tropæòleæ* Sp 1

17200 - - pentaphyllus *D.Don* five-leaved Tropæ'olum pentaphýllum *Lam* ⅄ ⩚ or 4 au.o R G.P B. Ayres 1830 C s p l Sw fl g 2. s 245

892 *ERI'CA.* Sp 320—562

17201 5114*a* penicillàta *Sal* pencilled ⩚ or 2 va sea Ro C G H. 1792 C s p Bot cab. 1918

17202 5127*a* carinàta *Lod* keeled ⩚ or 1½ s P C G H 1820 C s p Bot cab. 1071

17203 5127*b* carnìula *Lod* flesh-coloured ⩚ or 1 jl s F C G H 1818 C s p Bot cab. 926

17204 5127*c* chlorolòma *Lindl* green-fringed ⩚ or 2 n C G C G H . C s p Bot reg n s 17

17205 5128*a* rigida *Lod* stiff ⩚ or 2 jl.au Pk C G H. 1820 C s p Bot cab. 1286

17206 5134*a* epistòmia *Nois* spout-*flowered* ⩚ or 2 my jn Y G C.G H 1810. C s p Bot cab 1186

17207 5184*a* pseùdo-vestìta *Bot* hybrid-clothed ⩚ pr 2 my Pk hybrid . . C s p Botanist, 104

17208 5205*a* calóstoma *Lod* pretty-mouthed ⩚ or 1 my jn F Eng hyb 1810 C s p Bot cab 1759

17209 5212*a* Russelliàna Lod Russell's ⩚ el 1½ my jn Pk C G H 1820 C s p Bot cab. 1013

17210 5247*a* cónica *Lo C* conical ⩚ or 2 my au P C G H 1820 C s p Bot cab 1179

17211 5284*a* codonòdes *Lindl* bell-formed ⩚ or 12 f m Pa Ro ... . . . C s p Bot reg. 1698

5352 *Tétralix*

γ cárnea flesh-*coloured* ⩚ or 1 jn au F Britain mo he L co

δ Mackaiàna A B Mackay's ⩚ or 1 jn au F Ireland L s p

17212 5358*a* lactiflòra *Lod* milk-flowered ⩚ ⩚ or 2 jn s W C.G H 1820 C s p Bot cab. 901

17213 5359*a* villosiúscula *B. C.* slightly villous ⩚ ⩚ or 1½ my Li C G H. 1829? C s p Bot cab 1844

17214 5372*a* recurvàta *Bedf* recurved ⩚ ⩚ or 2 my B.w.R C G H 1810. C s p Bot cab 1446 Bot mag 3427

17215 - - rùbida *Lod* red ⩚ ⩚ or 2 jl au Pk C G H 1826 C s p Bot cab 1166

17216 - - crinìta *Lod.* hairy ⩚ ⩚ or 2 . R C G H. 1826. C p l Bot cab 143

17217 - - Beaumontiàna Roll Beaumont's ⩚ ⩚ or 1 jn W C G H 1820 C s p Bot cab 1686

17218 - - vernàlis *B C* vernal ⩚ ⩚ or 3 mr ap Pk C G H 1827. C s p Bot cab. 1608

17219 - - undulàta *B C* waved-*tubed* ⩚ ⩚ or 1? su Ro C G H 1727. C s p Bot cab 1792

17220 - - quadràta *B C.* square-*mouthed* ⩚ ⩚ or 1½ my W C.G H 1829. C s p Bot cab 1943

17221 - - hispida *B C* hairy-*leaved* ⩚ ⩚ or 1½ jn jl Pk C G H. 1792 C s.p Bot. cab. 1982

17222 - - cantharifórmis *B C* cantharis-*fluid* ⩚ ⩚ or my.jn W C G H 1829? C s p Bot cab 1961

17223 - - dichrómata *B. C* two-coloured ⩚ ⩚ or 3 aut w Y Pk C G H 1800 C s p Bot cab 1813

17224 - - verecúnda *B C* ruddy *flowered* ⩚ ⩚ or 3 su aut Ro C G H 1820 C s p Bot cab. 1827

17225 - - Willmòrei K & W Willmore's ⩚ ⩚ or 3 jl Pk hybrid 1817 C s p Fl cab 2 115

2595 *900*a*. ARTHROSTE'MMA *Pav* (*Arthron*, joint, *stemma*, crown, anth jointed on fil) *Melastom* Sp 2

17226 - - nítidum *Grah.* glossy-*leaved* ⩚ ⩚ or 2 jl Pa Li B Ayres 1830 S p l Bot. mag 3412

17227 - - versicolor *Dec.* various-cld ⩚ ⩚ or ⅔ s Pk Brazil 1825. C s p Bot. mag 3678

901. *ŒNOTHE'RA* Sp 41—70 (including 8 sp. of Godètia)

17228 5437*a* salicifòlia *Desf.* Willow-leaved ⅇ ○ or 2 jn au Y ... 1824. S co

17229 5446*a* serrulàta *Nut.* serrulated ⅄ △ pr 1 jn Y N. Amer 1824. S p l Sw. fl gar 133

17230 5446*b* cheiranthifòlia *Hort* Cheir -leaved ⩚ ⩚ or 1½ jn au Y Chile 1823 S s l Bot reg. 1040

17231 5446*c* Drummóndii Hook Drummond's ♃ △ or ½ au s Y Texas 1833. C s l Bot mag 3361

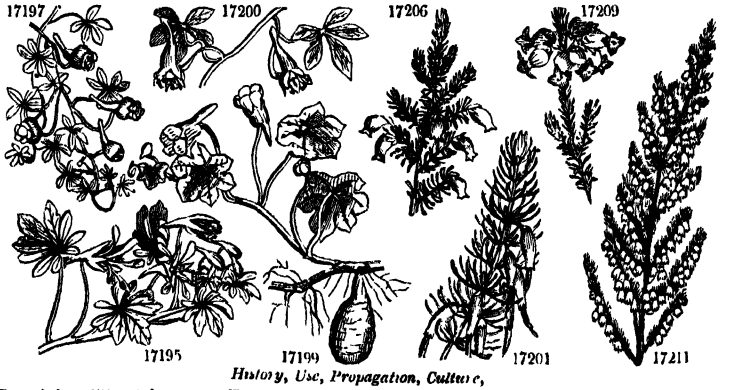
17232 5446*d* serótina *Hort* late-*flowering* ⅄ △ or 1½ au s Y .... 1829 D co Sw fl. gar 184

5447 fruticòsa

β ambigua *Hook* ambiguous ⅇ △ or 1 jl Y N Amer 1813 D co Bot mag 3345

Œ. ambigua Spr, *Dec*, *Œ* canadénsis *Gold* in *Edin Phil Journ*

17233 5448 missouriénsis *B M* Missouri ⅄ △ or 1 jn au Y N Amer. 1818 R s l Bot mag 1[illegible]



History, Use, Propagation, Culture,

875. *Tropæ'olum* 17199 *tuberósum* This species may be considered about as hardy as the potato, and, like it produces eatable and agreeably flavoured tubers. Mr Lambert was the first, we believe, who grew these tubers in England, and presented them at table When boiled, the tubers are of a soft pulpy substance, and, Mr. Cameron says, in flavour resemble sea-kale, mixed with the hot taste of garden cress. The council of the Caledon. Hort. Soc considers the tubers to be of a very delicate flavour, resembling the richest asparagus Mr. Young of Epsom found the

MONOGYNIA.

[quite entire
17195 Leaflets 5-10 obl or obovate little-toothed cuneated at base, Petals unguicul rather longer than cal obtuse
17196 Leaflets 7 obovate lanceolate, Segments of calyx blunt
17197 Tuberous, Stem slender climbing branched, Lvs peltately divided, Segms 6-7 obov ent cuspid Petioles cirrhose
17198 Lvs peltate, Segms 6-7 oblong-obov. ent sess Petals cuneif Cal. segms obtuse, Spur very short and very blunt
17199 Lvs peltate nerved 5-lobed transversely truncate at base smooth, Petals almost length of calyx

17200 Leaflets 5 ovate or ov.-lanceol ent stalked, Petals 2 sessile acute quite ent. shorter than calyx

17201 Lvs. linear, Peduncles axillary 1 flwd Stamens much exserted, Ectasis [Crests of anths plumose
17202 Lvs 5 in whorl reflexed woolly, Flws termin Bract remote from cal Tube of cor cylind. inflated ribbed,
17203 Lvs 3-4 in whorl linear glabr Flws termin racemose, Cal bracteate, Cor with inflated tube and short limb
17204 Lvs linear 5 in a whorl pubescent, Branchlets pilose, Corolla cylindrical glabrous constricted at apex, Syringòdea
17205 Glabr Lvs 4 in whorl linear spread Flws termin pedicellate, Cor ventricosely tubular, Border blunt, Bract remote from cal. [Stam and pist enclosed ainstate
17206 Lvs glabrous, Flws termin Bract remote from and close to cal Cal large inflated, Tube of cor obl inflated,
17207 Lvs acerose, Corolla cylindrical, Limb short spreading [white limb
17208 Glabrous, Lvs lin 4 in whorl, Flws termin. crowded, Cor with elongate ventricose tube dark neck and
17209 Lvs 4 in whorl lin glabr Flws termin Bract remote from cal Cor ov.-globose with large open segments
17210 Lvs 4 in whorl linear glabrous, Flws. axillary racemose, Stam and pist enclosed
17211 Branchl villose, Lvs. in threes very narrow, Cor. campanulate, Style exserted, Stigma simple

17212 Lvs 4 in whorl as well as bran scabr Flws termin erectish, Cor. ovate, Bract remote from cal Anth crested
17213 Hairy, Lvs acicular ciliated with long hairs, Flws. in racemose terminal fascicles, Cor campanulate
17214 Lvs 6 in whorl lin flexuous recurved, Flws. termin nearly sess drooping capit Bract sess Cor curved ov.-obl. Anth mutic
17215 Lvs 4 in whorl lin. glabr Flws termin and axill Bract distant from cal Cor tubular drooping
17216 Lvs 6 in whorl crowded lanceol. each termin by a hair, Flws nrly termin drooping, Cor cylindric contract. at neck [little exserted
17217 Glabrous, Lvs lin. 5-6 in whorl, Flws axill and termin drooping, Pedic many-bracted, Cor. campanul. Style
17218 Glabrous, Lvs 3 in whorl, Flws terminal, Cor campanulate, Style exserted
17219 Lvs linear obtuse Corymbs 4-flwd Cor tubularly ventricose, Limb spreading, Stamens enclosed, Callista
17220 Lvs short blunt, Branchlets 3-4-flwd Cor ovate, Stamens enclosed, Erica [urceol globose
17221 Lvs 4 in whorl hispidly ciliated lin spread obt Flws termin racemose pendul Bract remote from cal Cor.
17222 Lvs obtuse, Flws terminal, Pedicels about 3 together, Cal reflexed, Cor ovate ventricose
17223 Lvs short obtuse, Branchlets 3-4-flwd Cor tubular inflated towards the top Stamens enclosed, Syringòdea
17224 Lvs 4? in a whorl lin obt Flws lateral verticillate, Cor. with ventricose tube and spreading limb
17225 Lvs. linear 3 in a whorl, Flws early, Cor tubular ventricose constricted at the mouth, Anthers enclosed

[axill 3-flwd longer than pet
17226 Shrubby erect 4-gonally winged as are bran Lvs ov acute serrul. glabr. on both surfs shining above, Pedun.
17227 Suffrutic pilose, Lvs petiol ov serrul. 5-nrvd. discoloured beneath, Flws termin solit. Lobes of cal 4 serrated at apex

17228 Lvs oblong-lanceol. acute nrly ent rath pilose thickish, Stem tall simple angul Caps oblong tetragonal
17229 Stem branched pubesc Lvs obl linear serrulated mucronate pubesc beneath, Flws sessile, Calyx angular, Petals entire [somet. obl somet ov rath cord all obt
17230 Lvs glauc pubesc of several shapes, lower spatulate on long pet distant upper close togeth. somewh sess
17231 Lvs. obl ellipt somewh obtuse slightly sinuately toothed atten at base, Stem bran succulent soft with down as is fol. [of stigma blunt spread
17232 Stems ascend bran pubesc Lvs lanceol acute dentic glabr atten at base, Petals wrinkled or plaited, Segms.

[Caps 4-winged
17233 Stem simple downy decumb Lvs lanceol tapering at both ends margin. and slightly ciliat. Petals broad obcord



and Miscellaneous Particulars.

tubers, when boiled, superior in flavour to any potato, though disposed to be watery and not boiling firm. (*Gard. Mag* xiv. p 254.)

2594. *Chymocárpus.* For culture, &c., see Tropæ'olum.

2-96. *Arthrostémma.* Propagation, &c., the same as recommended for Melástoma

17234	5457*a* taraxacifolia *Hort*	Dandelion-lvd	♇	△	or	½	my.au	W	Peru	1825.	S	co	Sw. fl. gar. 294
17235	5467*a* densifŏra *Lindl*	close-flowered		○	or	3	aut	.. ..	N.Califor.	1831.	S	s l	Bot reg 1593
17236	5468*a* pállida *Lindl*	pale-*flowered*	♇	△	or	1½	jn s	W.R	America	1826	D	p.l	Bot reg. 1142

2596. *901*a* GODE'TIA Spach (Unexplained, but, doubtless, a Latinised proper name) *Onagràceæ* Sp.11—3.

†5450	purpùrea *Cur*	purple-*flowered*		○	or	1	my au	P	N Amer.	1794	S	co	Bot mag. 352
	(Œnothèra purpùrea, No 5450 in p 318, Godètia Willdenowiana Spach												
17237 -	- Romanzòvii Led	Romanzow's		○	or	1	jn au	P	N Amer	1817.	S	co	Bot reg. 562
17238 -	- decúmbens *Dou*	decumbent		○	pr	1	jn n	P	Californ	1827	S	co	Bot. mag 2880
17239 -	- rŏseo álna *Bernh.*	red & white		○	or	1	my au	R w	Nepal	1827	S	co	Loud fl.g pl 8 f 8
17240 -	- quadrivúlnera *Dou*	4-spotted-*petaled*		○	or	1½	s	Pk	N Amer	1826	S	co	Bot reg 1119
17241 -	- Lindleyàna Dou	Lindley's		○	or	1½	jn n	P	N Amer	1826	S	co	Bot mag 2832
†5463	tenélla *Fl per.*	delicate		○	pr	½	ap.au	P	Chile	1822	S	co	Bot mag 2424
	(Œnothèra tenélla, No 5463. in p. 318.												
17242 -	- viminea *Dou*	twiggy		○	pr	3	jn s	P	Californ.	1826	S	co	Bot. mag 2873
17243 -	- rubicúnda *Lindl.*	ruddy		○	or	2	jl au	P Fla	Californ	1834?	S	co	Bot. reg 1856
17244 -	- lépida *Lindl*	pretty		○	pr	1½	au s	Pk	Californ	1835	S	co	Bot. reg 1859
17245 -	- vínòsa *Lindl.*	wine-*cld-flwd*		○	pr	2	jl au	Bh	Californ.	1835.	S	co	Bot reg 1880

2597. *902*a* CLA'RKIA Ph (*Capt Clark*, accomp. Capt Lewis to Rocky Mountains) *Onagràceæ*. Sp. 3

17246 -	- pulchélla *Ph.*	pretty		○	pr	1½	jn o	P	N Amer	1826.	S	co	Bot reg 1100
	β fl álbo *Swt*	white-flowered		○	pr	1½	jn o	W	N Amer	1826.	S	co	Loud fl g pl.9 f 2
17247 -	élegans *Dou.*	elegant		○	pr	2	jl s	Ro P	Californ.	1832	S	co	Bot. reg 1575
	Phæóstoma Douglàsii Spach												
	β rŏsea *Hort*	rose-*cld-flwd*		○	pr	2	jl s	Pa R	gardens	..	Ro	co	Loud fl g pl 9 f 4
	γ fl plèno *Hort.*	double-flwd		○	pr	2	jl s	Pa.R	gardens		S	co	
17248 -	- rhomboidea *Dou.*	rhomboid		○	pr	1	au	P	Californ	1834	S	co	Bot. reg. 1981
	gauroides *Dou ms.* Sw fl g 379												

2598. *902b. EUCHARI'DIUM *F & M* (*Eucharis*, agreeable; appearance of the plant) *Onagràceæ*. Sp 1

17249 -	- concinnum *F. & M.* neat			○	pr	1	ap.s	P	N. Amer	1836	S	p l	Bot. reg 1962

904 FU'CHSIA. Sp 14—18

17250	5490*c* macrostèmon *Fl per*	long-stamened	♚	⊔	el	3	jl o	S.P	Chile	1823	C	p l	Bot cab 1062
	α discolor *Lindl.*	two-*coloured*	♚	⊔	or	3	au	R Y	P Famine	1830?	C	p l	Bot reg 1805
	β cónica *D Don*	conic	♚	⊔	or	4	jn o	S P	Chile	1825	C	p.l	Bot reg 1062
	F cónica *Lindl.*												
	γ globòsa *D Don*	globose-*flwd*	♚	⊔	or	5	jn s	C P	Eng hyb	1830?	C	p.l	Bot. reg
	F globòsa *Hort*												
	subv élegans *Pax.*	elegant-*flwd*	♚	⊔	spl	6	jn	S	Eng hyb	?1836?	C	p l	Pax. mag 75
	δ grácilis *D. Don*	slender	♚	⊔	or	8	my o	S P	Chile	1823.	C	p l	Bot. reg 847
	F grácilis *Lindl*, F decussàta *Graah*												
	ε recurvàta *Hook.*	recurved-*scp.*	♚	⊔	spl	7	..	R.P	Ir. hyb.	1835	C	p l	Bot. mag 3521
17251	5490*d* microphýlla *Kth*	small-leaved	♚	⊔	pr	6	jn s	S.P	Mexico	1828.	C	p.l	Sw fl.g 2 s 10
17252	5490*e* baccillàris *Lindl.*	rod *branched*	♚	⊔	or	5	su	Ro	Mexico	1829	C	p l	Bot reg 1480
17253	5492*a* parviflòra *B R.*	small-flowered	♚	⊔	or	4	my o	R	Mexico	1824.	C	p l	Bot reg 1048
17254	5492*b* thymifólia *Kth*	Thyme-leaved	♚	⊔	or	6	my o	R	Mexico	1827	C	p l	Bot. reg 1284
17255	5492*c* arborèscens *Moc.*	arborescent	♀	⊔	or	16	o	Pk	Mexico	1824	C	p l	Bot. reg 943
17256 -	- cylindrácea *Lindl.*	cylindrical-*flwd*	♚	⊔	el	2	au	S	Mexico	1837	C	p l	Bot. reg. n s 66
17257 -	- fúlgens *Dec*	glowing	♚	⊔	spl	4	my o	R	Mexico	1837.	C	p l	Bot. reg n s 1

916. COMBRE'TUM Sp 5—13.

17258	5563*a* grandifŏrum *G Don*	large-flowered	♚	⊔	or	5	f jl	S	S Leone	1824.	C	r.m	
17259	5563*b* paniculàtum *G Don*	paniculate	♞	□	or	50	ja jn	S	Guinea	1824	C	r m	
17260	5563*c* élegans *Kth.*	elegant	♞	□	or	15	ap jl	S	Brazil	1820.	C	r m	

TETRAGYNIA.

2599. *932*a* FRANCO'A Cav. (*M Franco*, of Valentia, a promoter of botany in the 16th cent.) *Galacineæ* Sp 3

17261 -	- appendiculàta *Cav*	appendicled	♀	△	or	3	my.jn	Ro C	Chile	1831.	S	p l	Bot reg 1831
17262 -	- sonchifolia *Pers*	Sowthistle-lvd	♀	△	or	2½	jl au	Ro P	Chile	1830.	S	r l	Bot. cab 1861
17263 -	- ramòsa *D Don*	branch *-inflor*	♀	△	or	2½	jl au	W	Chile	1831.	S	p l	Sw fl gar 2 s 2-3



History, Use, Propagation, Culture,

2596. *Godètia*. A genus of highly ornamental plants, separated by Spach from the genus Œnothèra. It contains all the species with purple flowers, which Dr Lindley informs us will not mix with the yellow-flowered kinds, so as to form hybrids; neither do they close their petals in the sunshine, and thus forfeit all title to the name of Evening Primrose. Culture, &c., same as recommended for Œnothèra.

2597 *Clárkia*. A genus of very ornamental annuals, requiring the same treatment as that of the annual Œnothèra

17234 Procumb Lvs pubes altern interruptedly pinnatif sinuately toothed ent. at apex, Tube of cor. very long Petals large obov. ent 5-nrvd
17235 Tomentose, Lvs linear lanceol toothed, Ovarium cylindrical, Petals 2-lobed, Stamens 4 fertile 4 sterile
17236 Glabrous, Stems decum Lvs linear lanceol toothed, Capsules linear twisted, Root creeping

†5450 Lvs lanceol atten. at both ends bluntish, Tube of cal. short, Caps ovate triquetrous sess. angul pilose

17237 Lvs. lanceol -obl mucron tapering into petioles, Caps obl -cylindric somewh tetragonal pilose
17238 Lvs glauc quite ent pubesc lower ones broadly ov . upper ov.-lanceol Caps bluntly 4-gonal tapering from base villous
17239 Lvs lanceol bluntish slightly toothed glauc Stem round, Caps cylindrically tetragonal [villous
17240 Lvs linear-lanceol somewh denticul puberulous, Stem bran weak puberulous, Caps 4-gonal atten at apex
17241 Lvs linear-lanceol quite entire glabr Stem ascending diffuse bran Caps round elongat acute larger th. lvs
†5463 Lvs linear spatulate, Stem bran erect, Caps. furrowed cylindric. curved down; longer than bracteas

17242 Lvs lanceol glauc ent Caps cylindric atten furrowed pubescent, Bran long slender rod-like
17243 Lvs linear-lanceol slightly toothed, Anthers fiery red yellow at apex, Caps linear sess truncated
17244 Lvs ovate-lanceol ent Caps sess ovate-oblong hairy
17245 Lvs. linear-oblong subdentated glabrous, Anthers crimson yellowish at summit

17246 Leaves linear, Petals deeply 3-lobed

17247 Leaves ovate dentated & entire, Petals rhomboid undivided

β Has the flowers of a pale brick-red rather than rose colour
γ Has the flowers semidouble
17248 Leaves lanceolate, Petals rhombold entire

17249 Pubescent, Lvs petiolate ovate entire, Flws axillary solitary

[spreading petals, Stigma 4 lobed
17250 Bran glabr Lvs 3 in whorl ov acute denticul on short petioles, Lobes of cal oblong acute exceeding obov
α
β Lvs 3-4 in whorl, Flws pendul solit Petals equal to cal Tube of cor conical, Stigma ovate

γ Lvs. in threes ovate toothed smooth as are bran. Calyx glob. half length of pendul smooth filif red pedun

δ Lvs oppos glabr on long petioles remotely denticul Pedic axill nodding puberul length of cal Cal lobes obl acute exceeding pets Stigm. ent
ε
17251 Lvs oppos small ellipt -obl acutish dent. glabr little Pedic axill shorter th flws Cal funnel-sh lbs ov acumin Stigm 4-lbd
17252 Bran erect slender rod-like, Lvs pale green thin, Cal segms very narrow & subulate
17253 Bran smoothish, Lvs scatter & oppos petiol ov -cord or oval quite ent. glauc & glabr Pedic sub-aggreg Cal lbs reflexed, Stig thick 4-lbd [short th flws Stig undiv
17254 Bran puberul Lvs about oppos small ov or roundish ov obt almost ent hairy above glabr. ben Pedic. axil
17255 Glabr Lvs 3 in a whorl ov -obl acumin at both ends petiol. quite ent Panic trichotom urly naked, Cal lbs
17256 Dicœious, Lvs. obovate, Calyx cylindrical, Petals roundish apiculated, Anthers enclosed [ov. acute reflexed
17257 Lvs oppos petiol ov -cord acute denticul glabr. Pedic axill. short th. flws upper ones racemose, Cal lbs ov -lanceol acute exceeds petals

17258 Lvs oblong, Spikes short axillary & terminal, Cal pubescent, Petals obovate obtuse, Stamens long
17259 Lvs obl obtuse, Panic terminal branched hairy, Cal pubescent, Bract very short, Flws pedicellate
17260 Lvs. ellipt acute acumin puberul. above . clothed with yellowish tomentum ben Spks. simple, Pedun short, Petals lanceol acute hairy

TETRAGYNIA.

17261 Stemless, Lvs petiolate, Racemes loose secund, Calycine segments lanceolate acute
17262 Caulescent, Lvs sess Rac loose nodding, Cal segms dilated, Petals with involute margins
17263 Caulescent, Lvs petiolate, Rac spirate erect Cal segms lanceol obtuse nerveless



and Miscellaneous Particulars

2598. *Eucharidium.* A pretty and very neat little plant, seeds of which may be sown at any period of the spring or summer, as they will generally flower in about six weeks after sowing.

2599. *Francoa.* A genus of ornamental perennials, which are, however, found to be most useful if treated as half-hardy annuals, because, as perennials, they are too tender to endure the winter in the open air without protection. Besides this, they can only be propagated by seeds.

Page 332. Class IX. — ENNEANDRIA. 9 Stamens

Order 1 MONOGYNIA 9 Stamens. 1 Style.

2600. *Tetranthèra* Involucrum of umbel 4-5-lvd, deciduous Limb of perianth 4-6-parted. Stamens 6-15 Anthers 4-celled. Stigma dilated, sub-lobate very naked.

MONOGYNIA.

2600 *934a TETRANTHE'RA *Jac* Tetranthera (*Tetra*, four, *anêr*, an anther) *Laurinæ* Sp. 1—8.
17264 - - laurifòlia *Jac* Laurel-leaved ♠ □ or 6 my jn G China 1822. C p l Bot reg 893
Litsæa chinènsis *Lam.*

937. ERIO'GONUM Sp 3—5
17265 - - compósitum *Dou.* compound ♃ △ pr 1½ my.jn Ysh W New Alb. ... C m s Bot. reg. 1774

Page 338. Class X. — DECANDRIA 10 Stamens

Order 1. MONOGYNIA 10 Stamens 1 Style

2601 *Castanospérmum* Calyx somewhat bilabiate, with short tube; upper lip bifid, lower one 3-fid. Petals 5, papilionaceous, with wings and keel nearly equal in length. Legume stipitate, large, oblong-cylindrical, 2-valved, usually 4-seeded. Valves coriaceous, spongy inside

2602 *Richárdia* Sepals 5, joined into campanulate crenulated calyx Petals 6-10, somewhat papilionaceous Stam declinate, distinct, cohering together beneath middle by beard. Style filiform Stigma dilated. Legume samaroid, ending in oblong wing

2603 *Erwstemon* Calyx 5-parted Petals 5, marcescent Stamens unequal, free, fringed, tapering into a thread which bears the anthers. Fruit of 5, rarely 1-2, carpels

2604 *Phebâlium* Calyx 5-cleft Petals 5 Stamens unequal, smooth. Style and stigma 5-furrowed. Fruit of 5 capsular, 2-valved, 1-seeded carpels, girded by calyx

2605 *Pieris* Calyx 5 parted Corolla tubular or ovate, with a contracted, 5-toothed, revolute mouth. Filaments dilated, furnished with two bristles at the tip Anthers with short incumbent cells that open lengthwise. Style 5-cornered Stigma truncate Leaves coriaceous Flowers drooping, terminal, racemose

2606 *Pernettya* Corolla globose, with a revolute limb Anthers with the 2-cells 2-lobed at the tip; the lobes bifid Hypogynous scales 10, 3-lobed, surrounding the ovary. Berry with 5 cells, the dehiscence loculicidal

2607 *Lamánthes.* Calyx 5-parted. Petals 5 Stamens 10 Nuculæ 5

2608 *Chætogástra* Calyx turbinate, pilose or scaly, 5-lobed Petals 5 Filam 10, glabrous. Anthers oblong, having connectives drawn out into simple or bifid spur, and sometimes only into 2 blunt tubercles. Ovarium bristly at apex Capsules 5-celled.

2609. *Ceratopétalum* Limb of calyx 5-parted, permanent Petals 5, linearly multifid, permanent or wanting Anthers beaked Capsule 1-seeded from abortion, dehiscing at apex Leaves simple or ternate.

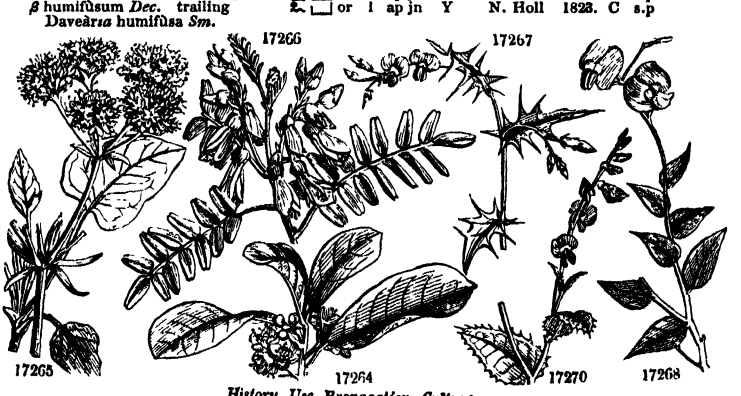
2610. *Darwinia* Tube of calyx drawn out into membranous deciduous limb, throat dilated. Lobes roundish, cordate Stamens free. Ovarium 1-celled, 1-ovulate.

MONOGYNIA.

940 EDWA'RDSIA Sp 4—6
17266 5670*a* chilénsis *Miers* Chilian ♀ □ or ... ap my Y Chile 1822 L l Bot reg 1628

949 CHORO'ZEMA Sp 7—9
17267 5703*a* triangulàre *Lindl* three-angled ♠ □ or ¾ ap S N Holl. 1830 C s.p Bot. reg. 1513
17268 5704*a* ovâtum *Lindl.* ovate-*leaved* ♠ □ el 1 my S N Holl 1830. C s p Bot. reg 1528
17269 5704*b* Henchmánnii R Br. Henchmann's ♠ □ spl 2 ap jn S N. Holl. 1824. C s.p Bot. reg 986
17270 - - cordâtum *Lindl* cordate-*leaved* ♠ □ pr 2 ap R N S. W. ... C s.p Bot reg n. s 10

950. PODOLO'BIUM. Sp 3—5
17271 5705*a* staurophýllum *Dec.* cross-leaved ♠ □ pr 2 mr Y N. Holl. 1822. C p l Bot. reg. 959
17272 5705*b* scándens *Dec.* climbing ♠ □ or 3 ap jn Y N Holl 1824. C s.p
β humifûsum *Dec.* trailing ♠ □ or 1 ap jn Y N. Holl. 1823. C s.p
Daveàr*ia* humifûsa *Sm.*



History, Use, Propagation, Culture,

1737 *Ertógonum* A hardy herbaceous plant, which thrives in any common soil kept damp, and somewhat shaded It is readily increased by cuttings of the well ripened shoots, planted in sand and peat, and covered with a bell-glass

CLASS IX. — ENNEANDRIA.

MONOGYNIA.

17264 Lvs obovate obl glabrous above pilose beneath as well as petioles & branches, Involucre 4-lvd. tomentose

[Peduncle scapiform, Involucre many-flwd
17265 Lvs. approximate at the base of the stem ovate rounded or cordate at the base clthd. with white wool beneath,

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Order 2 DIGYNIA 10 Stamens 2 Styles

2611. *Pachynèma* Stamens 7 or 10, free Filaments broad and thick at base Ovaries 2 Styles awl-shaped Sepals and petals 5, but the petals soon fall off
2612 *Iddàmia* Limb of calyx with 5 short teeth Petals 5 Styles ending in rather club-sh 2-lobed stigmas. Berry crowned by teeth of calyx, somewat 5-celled, many seeded
2613 *Tillima* Free part of calyx inflated, 5-toothed, the adhering part conical Petals 5, jagged Styles 2-3, distinct Capsule 1-celled, 2-valved at apex.

Order 3 TRIGYNIA. 10 Stamens 3 Styles

2614 *Stigmaphýllum* Calyx 5-parted, 4 of the segments biglandular at the base Petals unequal. Stamens unequal Styles flortaceous at apex Samar usually 3, one-seeded, winged at end
2615 *Thyàllis* Petals roundish, unguiculate Stamens awl-shaped Caps. triquetrous, separable into 3 parts, cells opening by outer angles
2616 *Galphimia* Calyx glandless Petals unguiculate Stamens nearly free Drupe containing 3 1-seeded nuts, which open on the back
2617 *Dcidæia* Calyx 5-cleft. Petals 5 Filaments flattened, tridentate at apex, middle tooth bearing the anther. Capsule 3-4-celled

Order 5 PENTAGYNIA 10 Stamens 5 Styles.

2618 *Echevèria* Cal 5-parted Sepals erect, reterable to leaves, united at very base, erect, thick stiffish, thickest at middle nerve, and nearly 3-gonal at base, acute Stamens shorter than petals, adnate to them at base. Carpels 5, ending each in subulate style
2619 *Balbísia* Calyx 5-leaved, involucrated by 10 lineal bracteas Petals spreading, obtuse Stigma 5-lobed, sessile Capsule 5-lobed, many-seeded Seeds compressed
2620 *Viscaria.* Calyx cylindrical, 5-toothed, naked. Petals 5, unguiculate, scales in the throat Capsule 5-celled.

MONOGYNIA.

17266 Lvs. 13-19 elliptic obl obtuse silky beneath, Upper petal length of the lateral ones, Legume 2-jointed wingless

17267 Lvs subhastate pinnatifidly spinous, Pedicels with bracteæ at base
17268 Stems weak ascending, Lvs ovate acute, Peduncles long terminal naked 3-flwd
17269 Plant hoary, Lvs acicular, Flowers axillary
17270 Lvs sessile cordate obtuse spiny-toothed, Flowers racemose drooping, Calyx pubescent

17271 Leaves opposite trifid, Lobes about equal entire spiny at apex, Ovary smooth
17272 Leaves opposite oblong-elliptic quite entire mucronate, Ovary villous



and Miscellaneous Particulars.

949 *Chorózema* All the species are small shrubs, profusely covered with beautiful flowers, one of the handsomest is C. Henchmánnii, which grows freely in sandy peat

965. BURTO'NIA — Sp. 2—4

17273 5720*a* conferta *Dec* clustered-*flwd* or 2 jl s V S.W Aus. 1830. C s.p Bot. reg. 1600

965 PULTENÆ'A — Sp. 16—47

17274 - - rosmarinifòlia *Lindl* Rosemary-lvd or 2 ap jn Y N Holl. 1824. C s l p Bot. reg. 1584
17275 - - cordàta *Grah* cordate-*leaved* or 2 ap O V D L 1832. C s p l Bot mag 344
17276 - - subumbellàta *Hook* subumbellate or 1 ap O Y V. D L. 1831. C s.p l Bot. mag. 3254

967 MIRBE'LIA — Sp. 4—6

17277 - - speciòsa *Sieb* showy or 2 my jl P N. Holl 1824. C s l p
17278 - - grandiflòra *B M.* large-flowered or 2 my jl P.o N. Holl 1825. C s l p Bot. mag. 2771

2601. *972*a*. CASTANOSPE'RMUM *Cun.* (*Castanea*, chestnut, *sperma*, seed.) *Legumindsæ.* Sp. 1.

17279 - - austràle *Cun.* southern tr 40 ... Saf N Holl 1828 L 1 Bot mis. 51, 52

977 POINCIA'NA — Sp 4—5

17280 - - rêgia *Boj.* royal spl 40 . C Madagas 1828 C r.m Bot mag 2884
17281 - - Gillièsii Hook Gillies's spl 10 jl Y S Amer. 1829 C r.m Sw fl gar 2 s 311

2602 *978*a* REICHA'RDIA Roth (*J J Reichard*, a celeb. French botanist.) *Leg. Cæs 'Cass* Sp 1

17282 - - hexapĕtala *Roth* six-petaled or 10 .. Y E Indies 1824. S p.l

2603. *999*a* ERIOSTE'MON *Sm* (*Erion*, wool, *stemon*, stamen, fringed filaments.) *Rutàceæ* Sp 2.

17283 - - salicifòlius *Sm* Willow-leaved or 3 ap jl Pk N Holl 1824 C s p l Lin tr 1126
17284 - - cuspidàtus *Cun* cuspidate or 3 ap jl Pk N Holl 1824. C s p l Bot cab 1247

2604 *999*b* PHEBA'LIUM *Ven* PHEBALIUM. (*Phibalee*, a myrtle, appearance.) *Rutàceæ.* Sp 1—6

17285 - - squamulòsum *Ven* squamulose or 2½ ap jl Y N. Holl 1824 C s l p Ven mal 102

†1014 *RHODODE'NDRON L.* (*Rhodon*, a rose, *dendron*, a tree.) *Ericàceæ Rhodoreæ* Sp 32

I PONTICUM. — *Limb of calyx short, 5-lobed. Corolla campanulate Stamens* 10. *Ovarium* 5-*celled Leaves coriaceous, evergreen.* (*Don's Mill* iii p 843.)

5923 pónticum *L.* Pontic spl 12 my jn P Gibraltar 1763 L s p Bot mag 650
β obtùsum obtuse spl 4 my jn P Armenia 1763 L s p Den br 162
γ *myrtifòlium* Myrtle-leaved or 4? my jn P Gibraltar 1763 L s p Bot cab 908
δ Smithii Smith's spl 12? my jn P spot hybrid ... L s p Sw fl gar 2 s 80
ε Lòwii Low's spl 6? my jn W spot hybrid ... L s p
ζ azaleoides Azalea-like spl 3 jn au Pk hybrid L s p Bot. rep 379
subv. odoràtum *Lo C.* sweet-sctd spl 3 jn au Pk hybrid 1820. L s p

Nursery Varieties.

1 álbum — 6 bullàtum — 11 fibre plèno
2 angustifòlium — 7 *cassinæfòlium* — 12 fòlius argénteis
3 angustissimum — 8 cærulèscens — 13 fòlius aureis
4 *arbutifòlium* — 9 contórtum — 14 fòlius marginàtis
5 bromeliæfòlium — 10 crispum — 15 frondòsum

5924 máximum *L.* largest spl 20 jn au Pk N. Amer 1736 L s p Bot mag 951
β álbum *Hort* has pure white flowers γ hybridum *Bot mag*, 3454 has fragrant flowers
5925 purpùreum *G Don* purple-*flwd* spl 25 jn au P N Amer. . L s p
máximum γ purpùreum *Ph* in p 358
5926 Pùrshii *G Don* Pursh's or 20 jn au W N Amer 1811 L s p
máximum β album *Ph* in p 358



History, Use, Propagation, Culture,

2601 *Castanospérmum* The seeds are eaten by the natives about Moreton Bay on all occasions, and, when roasted, have somewhat the flavour of Spanish chestnuts; and even Europeans, who have subsisted on them for two or three days together, have found no bad effects from them when roasted. For culture and propagation, see *Cerà tònia*

977. *Poincià*na 17282 *règia* is a magnificent tree, no less remarkable for its extreme beauty than for its rarity, having been found only in Madagascar, near Foul Point, where it is known by the name of *Tanahou.*

17281 *Gillièsii* The flowers of this species have a disagreeable smell, and are considered by the common people of Chile to be injurious to the sight, hence the vernacular name *mal de ozos* The shrub will not grow unless in irrigated places. (*Don's Mill* v 2 p 433.)

2602 *Reichárdia.* Culture and propagation the same as for Poincià*na*

2603 *Eriostèmon.* A genus of beautiful shrubs with pink flowers, which deserve a place in every collection of green-house shrubs They require the same treatment as Phebàlium

2604. *Phebàlium* An equal mixture of loam and peat suits this genus of plants, but care must be taken not to overwater them, or crowd them amongst other plants Cuttings root freely in sand under a bell-glass, without heat

1014. *Rhododéndron* ' Under this genus, Professor D Don has included the Azalea, which, however technically correct, appears to us injudicious in a practical point of view; and though we have followed his arrangement in this article, yet we have indicated two sections, containing the Indian or tender, and the Asiatic and American, or hardy, azaleas, which those who cultivate extensive collections of these shrubs may, if they choose, consider as constituting the genus Azàlea as heretofore Such persons, therefore, may view the genus Azàlea as remaining exactly as it is in

17273 Leaves simple very crowded linear subulate with revolute margins smooth as are branches

17274 Heads many-flwd. Bract shorter th. cal Lvs. linear mucron with revolute margins pubescent beneath
17275 Lvs cordate ovate acute mucronate glabrous, Stipules scarious, Heads terminal
17276 Bran ciner pilose, Lvs linear obtuse smooth both sides, Heads termin. subumbell. many-flwd. Brac. very short setaceous feathered

17277 Leaves linear acutish with revolute quite entire margins, Spikes interrupted terminal leafy
17278 Pubescent, Lvs. alternate ovate lanceolate, Flws axillary twin

17279 The only species

[crenate at marg involute at base

17280 Unarmed, Lvs. abruptly bipinnate 11-18 pairs of pinnæ which are 4 in. long horizontally patent, Petals orbicul
17281 Unarmed, Lvs bipinnate, Leaflets oblong, Petals glandular denticul. ciliat at apex, Legume acinacif. glandul 1-seeded dry

17282 Cor 6-petaled, Lvs. abruptly bipinnate prickly as are stems

[Filam hispid

17283 Lvs linear lanceol ent smth Bran triquetrous, Flws axill almost sess solit Cal & pets hoary on outside,
17284 Lvs. obl -lanceol. acute glauc. ending in hooked mucro, Racemes umbellate 4-5-flwd axillary or terminal

17285 Lvs linear lanceol acute scaly beneath, Flws terminal umbellate, Stamens exserted

5923 Lvs oblong-lanceol glabr both surfs wide lanceol streak on upper side, Segms of cor ovate, acute, or lanc
β Leaves subcordate coriaceous obtuse
γ Leaves small
δ Leaves lanceol clothed with white tomentum beneath, Corymbs many-flwd Ovarium tomentose 10-celled
ε Corolla white marked by a few dull scarlet spots

Nursery Varieties

16 grandiflòrum
17 incarnàtum
18 intermèdium
19 kalmæfòlium
20 macrophýllum
21 nivàticum
22 obtûsum
23 ovâtum
24 pygmæ'um
25 rôseum
26 salicifòlium
27 spectâbile
28 violàceum

5924 Arborescent, Lvs ellipt -oblong acute convex bluntish at base whitish or rusty beneath glabr. Cal segms oval

[obtuse

5925 Arboreous, Lvs large obl -elliptic flattish acute bluntish at base glabr. both surfs Segms. of cor oblong &

5926 Arborescent, Lvs cuneate-lanceol flat glabr gradually tapering to base paler ben Segms of cor roundish-oblong



and Miscellaneous Particulars

our *Hortus Britannicus.*" (*Arb Brit.* vol ii p 1130.) "Of all the genera in existence," G. Don observes, "*Rhododéndron*" (under which he includes the Azàlea) "comprises the most handsome, elegant, and showy shrubs for adorning shrubberies or planting singly on lawns." Though in Britain these plants are solely cultivated as ornamental, yet, in their native countries, they are not without their other uses "The *Rhodòreæ*," Mr. Royle observes, abound in stimulant, and even deleterious, properties Thus *Rhododéndron pónticum*, *R máximum*, *R. ferrugineum*, and *R. chrysánthum*, are poisonous to cattle which feed on them; and yet, in moderate doses, are used in medicine, for the cure of rheumatism, &c. Azàlea procúmbens *L.* and *Lèdum palústre* are accounted diuretic, and *L. latifòlium*, being more stimulant, is used as a tea, under the name of Labrador tea, but determines to the head. *Kálmia latifòlia* is accounted poisonous, and honey collected by bees from its flowers is of a deleterious nature, as is that of Azàlea pôntica, which was so injurious to the soldiers in the retreat of the Ten Thousand. In the Himalayan species, *R arbòreum* is more remarkable for its use as a timber tree than the other species. The flowers are eaten by the hill people, and formed into a jelly by European visiters. The leaves of *R. campanulàtum*, being used as a snuff by the natives of India, are imported from Cashmere, under the names of *koolas-kasmeeree* (Cashmere snuff) and *burg-i-tibbut* (Thibet leaf), though easily procurable within the British territories. It is remarkable that De Candolle mentions the employment in the United States, for a similar purpose, of the brown dust which adheres to the petioles of kalmias and rhododendrons The leaves of *R* lepidòtum (a species not yet introduced into Europe) are highly fragrant, and of a stimulant nature." (*Royle Ill.* 219.) Culture, propagation, and other particulars, see p 144 and p 398, 350

5927 catawbiénse *Mx* Catawba or 4 jn au P N. Amer 1809 L s p Bot mag 1671
β Russellianum has flws of a bt rosy red, approaching to crimson. A splendid var but somewhat tender
5928 chrysánthum *Pall* officinale *Sal.* yellow-flwd. or ½ jn jl Y Siberia 1796 L s p Par lon. 80
5929 caucásicum *Pall* Caucasian or 1 au P Caucasus 1803. L s p Bot mag. 1145
β stramíneum *Bot mag* 3422, straw-cld flws γ pulchérrimum *Bot. reg* 1820 f. 2. "most beautiful"
5930 punctátum *Andr* dotted-*leaved* or 4 jn au Pk N Amer. 1786. L s p Bot reg. 36
β május larger or 4 jn au Pk N Amer 1786. L s p Bot reg 37
5931 ferrugíneum *L.* rusty-*leaved* or 1½ my jl S Switzerl. 1752. L s p Bot. cab 65
β álbum white-*flwd* or 1½ my jl W Switzerl. 1752. L s p
5932 hirsútum *L.* hairy-*leaved* or 1½ my jl S Switzerl. 1656 L s p Bot. mag 1853
β variegátum variegated-*lvd* or 1½ my jl S . 1800 L s.p
17286 5932*a* setósum *D. Don* bristly or 1 .. P Nepal 1825 L s p

II. LEPI'PHERUM *D Don* (*Lepis*, a scale, *phero*, to bear, lvs. covered with small scales.)—*Limb of calyx dilated, 5-lobed Corolla campanulate or rotate Stamens* 10 *Ovarium 5-celled. Leaves membranous; sometimes deciduous, but generally persistent*

17287 5932*b* lappónicum *Wahl* Lapland or ½ mr my R Lapland 1810. L s p
5933 dahúricum *L.* Dahurian or 2 mr d P Siberia 1780. L s p Bot. mag. 636
β atrovírens deep-green or 2 mr d P Siberia .. L s.p

III CHAMÆCI'STUS *D Don* (*Chamai*, on the ground, and *cistus*, the rock rose; plants with the habit of Helánthemum)—*Limb of calyx foliaceous, 5-cleft. Corolla rotate Stamens* 10. *Ovarium 5-celled.*

5934 camtscháticum *Pall* Kamtschatka or 2 jl P Kamtsch 1802 L s.l A b fig 940
5935 Chamæcístus *L* Ground Cistus or ½ my jn Pa P Austria 1786 C s p Bot. mag 488

IV. PENTANTHE'RA *D Don* (*Pente*, five, *anthera*, an anther, flowers pentandrous)—*Limb of calyx short, 5-lobed. Corolla funnel-shaped Stamens* 5 *Ovarium 5-celled Leaves deciduous.*

5936 flávum *G Don* Azálea póntica *L* yellow-*flowered* or 6 my jn Y Turkey 1793. L s.p Bot mag. 433

2 álbum *Lo C.* 4 crocátum *Lo C* 6 flamíneum *Lo C.*
3 aurántium *Lo C* 5 cúpreum *Lo C.* 7 fúlgens *Lo C.*

5936*a* nudiflórum *Torr.* naked-*flowered* or 3 my jn S pk N Amer. 1734 L s p A b fig 943

1 álbum *D Don* 9 colorátum *Lo C.* 17 flóridum *Lo C*
2 álbum et rúbrum *Lo C* 10 conspícuum *Lo. C.* 18 globósum *Lo. C* [f 964
3 amœ'num *Lo C* 11 crispum *Lo C* 19 Govenianum D. Don. A b
4 blándum *Lo C* 12 cúmulum *Lo C.* 20 grandiflórum *Lo. C.*
5 cárneum *D Don* 13 discolor *Lo C* 21 incánum *Lo. C*
6 carolinianum *Lo C.* 14 exímium *D Don* 22 incarnátum *Lo C.*
7 Cobúrgi Lo C 15 fastigiátum *Lo C.* 23 mirábile *Lo. C.*
8 coccineum *D. Don* 16 flóre plèno *Lo C.* 24 montánum *Lo. C.*

5936*b* bicolor *G. Don* two-coloured *flwd* or 4 my jn St N Amer 1734. L s p
5936*c* calendulàceum *Torr* Marigold-*flwd* or 4 my jn O N Amer 1806 L s.p
β Mortera Swt fl g 2 s 10. subvar. 1 cárneum, with flesh-cld cor. with upper segment orange coloured edged with flesh-colour
5936*d* canéscens *G Don* canescent or 3 my jn R N Amer 1812. L s p
5936*e* viscósum *Torr.* clammy or 2 jl.au W N. Amer. 1734. L s.p A. b f 947

A. *Varieties*

2 álbum 4 dealbátum 6 præ'cox
3 crispum 5 penicillátum 7 pubéscens

B. *Hybridæ altaclerénses*

11 amœ'num 16 calorýphe 21 eúprepes
12 actinátum 17 Cartónium 22 Govénium
13 Auróræ 18 chariéssa 23 Herbertianum
14 basilissum 19 coccineum nóbile 24 imperátrix
15 calodendron 20 eudæ'mon 25 inclytum

C *Hybridæ belgicæ*

35 Agate 40 árdens 45 cárdon
36 álbo plèno 41 àtro-rúbens 46 coccineum máximum speciósum
37 amábile 42 aurántium máximum
38 amarántinum 43 blandínum 47 concínnum
39 amœnissimum 44 calendulàceum globósum 48 corúscans



5927 Lvs. short-oval rounded and obtuse at both ends glabr different colour ben. Cal segms. elongated oblong
γ tigrinum, much resembles var. β, but with obvious spots on the inside of the corolla
5928 Lvs. acutish attenuated at base obl. glabr. reticulately veined & rusty ben. Flws. & buds clthd. with rusty toment. Cal. hardly any
5929 Lvs ovate-obl clthd with rusty toment. ben. rugged & green above, Bracteas elongated toment. Cor rotate.
δ Nobledánum Bot. reg. 1820 f. 1. differs from var. γ in having deep and brilliant rose-coloured flowers
5930 Leaves oval-lanceol acute at both ends glabr. beset with rusty resinous dots ben. Segms of cor ovate little
β Leaves and flowers larger [undul Cal teeth short
5931 Leaves oblong atten at both ends glabr thickly beset with rusty dots beneath, Cal. segms. dentately ciliated,
Filam hairy at bottom [Cal. segms. fringed and bearded
5932 Leaves ovate-lanceol or ellipt. acutish ciliat. with rusty hairs on margins, Glabr. ab. dotted and hairy ben.
β Leaves edged with yellow
17286 Branchl beset with bristles, Lvs ov bristly on margins and under surfs. ¼ in. long, Cal. segms. rounded coloured naked crenulated

[undulat Stams. 5-8 equal to cor
17287 Procumbent, Lvs obl obt stiff beset with honeycomb-like dots yellowish & scaly ben Segms. of cor uneq.
5933 Lvs obl atten at both ends glabr but sprinkled with rusty scales especially ben. ferrugin. ben. Limb of cal. 5-toothed, Cor rotate

5934 Lvs obov acutish 5-nrvd naked ciliat Peduncles hairy usually twin, Cal segms ciliated foliaceous
5935 Lvs obl lanceol. atten at both ends stiffish glandularly ciliat. Pedun usually twin beset with glandul. hairs as are cals.

5936 Flws leafy clammy, Lvs ovate obl pilose ciliated, Corolla funnel-sh. Stamens very long

8 glaúcum *Lo C*
9 ignéscens *Lo C*
10 ochroleúcum *Lo C.*
11 pállidum *Lo. C*
12 tricolor *Lo C.*

5936*a* Lvs lanc -obl nrly smth ciliat. on margins, Midrib bristly ben. woolly above, Tube of cor long th segms

25 ochroleúcum *Lo. C.*
26 pállidum *Lo C*
27 pallidúsum *Lo C.*
28 papilionáceum *D Don*
29 partítum *D Don*
30 *periclymenóides Lo C.*
31 polyándrum *D. Don*
32 purpuráscens *Lo C*
33 purpúreum *Lo C*
34 róseum *Lo C* A b. f 945.
35 ruberrimum
36 rubicundum
37 rúbrum *Lo C.*
38 rúfum *Lo C*
39 rútilans *Lo C.*
40 serótinum *Lo. C.*
41 stamíneum *Lo C.*
42 stellátum *Lo C*
43 tricolor *Lo. C.*
44 várium *Lo. C*
45 variábile *Lo. C.*
46 versícolor *Lo C.*
47 violáceum *Lo. C.*

5936*b* Lvs. oblong clothed with fine hoary pubescence on both surfs Tube of cor hardly longer than segments
5936*c* Lvs oblong pubescent on both surfs but afterwards hairy, Cal teeth obl Tube of cor. hairy short. th segms
subvar 2 præ'stans has pale copper-cld flws tinged with blush
γ fúlgida *Hook* has orange-red-cld flws [rounded obtuse
5936*d* Lvs obov -obl. downy above tomentose ben Tube of cor hardly shorter th segms. Cal. teeth very short
5936*e* Lvs obl -obov acute smooth and green on both surfs. ciliat Midrib bristly, Flws clammy leafy hairy, Tube of cor. as long as segms.

A. *Varieties*

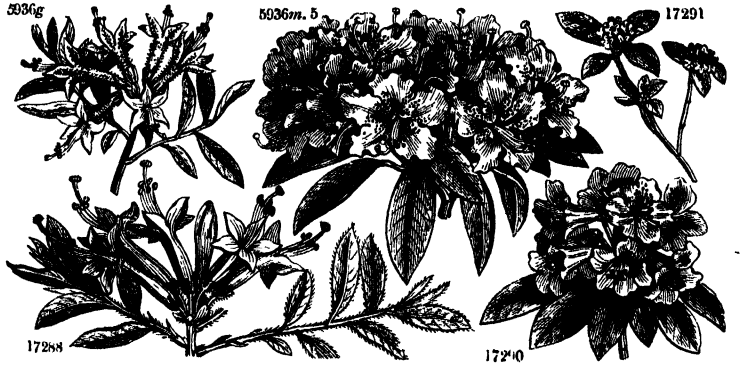
8 variegátum
9 vittátum
10 *Viola* odórae

B *Hybrids raised at High Clere*

26 *jasminodórum*
27 lépidum
28 ochroleúcum
29 poikilum
30 pónticum *Howard*
hexaplum
31 pulchéllum
32 regále
33 rúgens
34 thyrsiflórum

C *Hybrids raised in Belgium*

49 crócum
globósum
50 cruéntum
51 cúpreum
rúbrum
cúp spléndens
52 decorátum
53 décus hortórum
54 dulcédo
55 electum
elée máximum
rúbrum
56 elegantísimum
57 exquisítum
58 Ferróckii



59 flamboyante
60 fúlgidum
insígne
nòvum
supérbum
álbum
legans
eximium
globòsum
61 fúlvum
62 glòria múndi
glor mún. máxima
minor
63 Guliélmus primus
64 hýbridum cocciferum
coccíneum
níveum
65 incarnàtum máximum
rùbrum
66 lépidum
67 lùteum rubicúndum
68 magnificum
69 maritimum incarnàtum
70 miniàtum
71 mirábile
72 mixtum triúmphans
73 Mortèri
74 nè plús últra
75 nóbile
76 nóritas antillénsens
77 noritàtum
78 óptimum
79 ornàtum pállidum

5936*f* glaúcum *G Don* glaucous-*leaved* ♣ or 2 jn W N. Amer 1734 L s p Den br 15

5936*g* hispidum *Torr.* hispid ♣ or 15 jn W N Amer 1734 L s p Den br 6
5936*h* nítidum *Torr.* shining-*lvd* ♣ or 4 jl W N Amer. 1812. C l p Bot reg 414

17288 5936*i* speciósum *G Don* showy ♣ or 4 my jn S N Amer. . L p l Den br 116
17289 5936*k* arboréscens *Torr.* arborescent ♣ or 10 jl R N. Amer. 1818. L s p

V. Rhodo'ra *D Don.* (*Rhodon*, a rose, colour of flws.) — *Limb of calyx* 5-*toothed Corolla bilabiate, upper lip broadest, and* 2-3-*cleft, lower one bidentate. Stamens* 10. *Capsule* 5-*celled*, 5-*valved. Leaves deciduous.*

5936*l* Rhodòra *G Don* Rhodora ♣ or 2 ap my P N Amer. 1767. L p l Bot mag 474
Rhodòra canadénsis *L.*

VI. Boo'ram (Name of *R* arbòreum in Nepal) — *Limb of calyx* 5-*lobed. Corolla campanulate. Evergreen trees*

5936*m* arbòreum *Sm* tree ♀ ⌐ spl 20 ap my S Nepal 1820 L s p Bot reg 896
1 sanguíneum *Bot reg* 890 2 róseum *Swt fl. g* 2 s 382, *Bot reg* 1240. *δ* níveum *Swt*
17290 5936*n* campanulàtum *D. Don* campanulate ♣ ⌐ or 4 ap my Pa Pk Nepal 1825 L s.p A b f 954

VII. Pogona'nthum (*Pogon*, a beard, and *anthos*, a flower; throat woolly inside) — *Limb of calyx short*, 5-*lobed Corolla salver-sh with cylindrical tube, and a spreading limb Stamens* 5, *enclosed Ovarium* 5 *celled. Evergreen Leaves coriaceous*

17291 5936*o* anthopógon *D Don* bearded-*flwd* ♣ ⌐ or 1 ap my P Nepal 1820 L s p A b f. 954

VIII Tsutsu'tsi *D Don* (Chinese name of Azàlea indica) — *Limb of calyx foliaceous*, 5-*cleft Corolla campanulate. Stamens* 5-10 *Ovarium* 5-*celled. Evergreen. Leaves membranous, hispid from hairs. Indian azaleas of British gardens.*

5936*p* índicum *Swt.* Indian ♣ ⌐ or 4 mr.my S China 1808 C p l Bot mag 1480
2 phœniceum *Swt fl g* 2 s 128 5 púlchrum *Swt fl. g* 2 s. 117 8 lùteum *Swt*
3 flóre plèno *Bot. mag* 2509 6 ignéscens *Swt* 9 spathulàtum *Blum*
4 *le*difólium *Bot mag* 2901 7 aurantiacum *G Don* 10 grandiflórum *Blum*

17292 5936*q* sinénse *Swt.* Chinese ♣ ⌐ or 3 my Y China 1823 L s p Bot cab 885
β flavéscens *Swt fl g* 290 γ macránthum *Don's Mill.* 3. p 816

2605. *1016*a*. PI'ERIS *D Don* Pieris. (*Pieris*, a general appellation of the Muses) *Ericàceæ* Sp 1
17293 - - ovalifólia *D. Don* oval-leaved ♀ ⌐ or 20 my W Nepal 1825. C s p A b f 913

1018. GAULTHE'RIA Sp 2—4.
17294 5963*a* *Shállon* Ph Shallon ♣ or 4 my W N Amer. 1826. L s p A b f 926

1019. *A*'RBUTUS. Sp 10—16
17295 5965*a* procèra *Don* tall ♣ ⌐ or 15? my Gsh W N W Am 1827 L s p Bot reg 1751
17296 5965*b* tomentòsa *Ph.* woolly *bran & pet.* ♣ ⌐ or 4? mr W California 1826 L p l Bot mag 3829

2606. *1019*a* PERNE'TTY*A* Gaud (*Dom Pernetty*, author of a Voy to Falkland Isles) *Ericàceæ* Sp 2
17297 - - mucronàta *Gaud* mucronate ♣ ⌐ or 6? my jl W Magellan 1828. L p Bot reg 1671
A'rbutus mucronàta *L. fil* Bot. mag 3093
17298 - - pilòsa *G Don* pilose ♣ cu ½ my W Mexico 1829.? L l p Bot mag 3177
A'rbutus pilòsa *Grah.*

2607 *1026*a* LIMNA'NTHES *R Br* (*Limne*, lake, *anthos*, flower, habitat) *Limnánthæ.* Sp 1 –
7299 - - Douglàsii R Br Douglas's ☽ O fra l aut Y w California 1833. S m s Bot reg 1671



History, Use, Propagation, Culture.

2605. *Pieris.* Plants with the habit of, and requiring the same treatment as, those of Andrómeda.
2606 *Pernéttya* Propagation, culture, &c., as for *A*'rbutus.

80 picturàtum
81 pónticum globòsum
kânink
tricolor var.
82 præstantissimum
83 pulchéllum
84 puniceum
85 récqui
86 regina bélgica
87 restantissimum
88 rigidum incarnàtum
89 robustum
90 rùbrum aurántium
fúlvum
91 rubricàtum
92 sanguíneum
93 Saturnı
94 sevèrum
95 speciòsum
96 speciosissimum
97 spléndens
98 splèndidum
99 sulphureum
100 supérbum
101 tricolor Jacòbi
Wolff
102 triúmphans
103 variegàtum
104 venústum
105 venustissimum
106 versicolor

5936f Branchl hispid, Lvs. obl lanceol. acute glabr on both surfs. glauc. ben ciliated, Midrib bristly, Tube of cor. twice long th segms [cor. wide scarcely long. th. segms
5936g Branches straight very hispid, Lvs long-lanceol hispid ab smooth ben ciliated, Nerves bristly ben. Tube of
5936h Bran smoothish, Lvs obl lanceol. rather mucron coriac. smooth on both surfs. shining ab. Margins revolute ciliat Tube of cor. little long th. segms
17288 Bran hairy, Lvs lanceol. ciliated acute both ends, Cor silky with obtuse ciliated lanceol. undulated segms.
17289 Lvs. obovate rather obtuse smooth on both surfs. glauc. ben. ciliated, Midrib almost smooth, Tube of cor longer th. segms.

5936l Lvs oval quite entire pubesc. & glauc. ben. Flws in termin. clusters or racemose umbels protruded before lvs.

[curled margins
5936m Lvs. lanceol acute silvery ben tapering to base, Pedunc & cals woolly, Segms. of cor 2-lobed with crenul.
4 cinnamòmeum 5 venústum *Sw fl g* 2. s 285
17290 Lvs ellipt.-obl. mucron. rusty ben. rather cordate at base, Segms. of cor. flat emarginate, Ovarium 6-celled glabr

17291 Branchl downy, Lvs. oval rusty ben. from lepidoted toment ending in reflexed mucro, Cor with woolly throat

[obtuse ciliated spreading
5936p Bran strigose, Lvs cuneate-lanceol. finely crenulat strigose atten. at both ends, Cal. teeth long-lanceol.
11 angustifòlium *Blum.* 13 Danielsdnum Pax mag 15 variegàtum *Blum.*
12 floribúndum *Blum.* 14 lateritium *Bot. reg.* 1700 16 speciòsum *D Don*

17292 Lvs. ellipt. acutish pilosely pubesc. feather-nrvd ciliated canesc beneath subevergreen, Cor. downy, Stams eq. to limb of cor.

[segms. ovate & acute
17293 Lvs. oval. acumin. 2-4 in. long 1-2 in. broad rounded at base entire, Racemes lengthened leafy many-flwd. Cal

[secund bracteate clthd. with rusty down
17294 Procumbent. Stems hairy, Leaves ovate subcordate serrated glabr. on both surfs. abruptly acumin. Racemes

17295 Lvs obl serrated or entire glabrous, Racemes terminal panicled secund
17296 Whole plant except flws downy while young, Bran. hispid, Lvs. ov. acute subcord. at base clthd. with white toment. ben. Midrib hispid

[to leaves
17297 Lvs ovate cuspid. denticul. serrulate stiff shining on both surfs. Pedicels axill. bracteate about eq. in length

17298 Stem pilose procumb Lvs. ov -elliptic ciliately serrulated coriac. without mucro & callous at point, Cor. ovate with blunt revolute teeth

[lflts with odd one, Pedun. axill. 1-flwd.
17299 Glabr much bran. especially nr. base decumb. Lvs. altern. on long pet pinnated 1-3 pairs of obl. or lanceol.



and Miscellaneous Particulars.

2607. *Limnánthes.* A sweet-scented ornamental annual, requiring to be sown or planted in a damp border.

2608. *1029*a*. CHÆTOGA'STRA *Dec.* Chætogastra. (*Chaite*, hair, *gaster*, belly; ovary) *Melastom.* Sp 2—2
17300 - - lanceolàta *Dec.* lanceolate-*lvd* ◫ pr 1 ja W Trinidad 1820. S p l Bot mag. 2835
17301 - - grácilis *Hook.* slender ◫ pr 1 jn R Ll Brazil 1834 S p l Bot mag 3481

2609. *1034*a* CERATOPE'TALUM *Sm.* Ceratopetalum. (*Keras*, a horn, *petalon*, a petal) *Cunoniàceæ.* Sp 1.
17302 - - gummíferum *Sm.* gum-bearing ♀ ⌴ or 50 . Y N. Holl. 1820 C p.l Sm. n. h. 1 3

2610. *1034*b* DARWI'NIA Rud (*Dr Darwin*, author of the Botanic Garden, a poem) *Rhámneæ* Sp. 1—2
17303 - - fasciculàta *Rud.* fascicled ⌴ or 29 my.jl ... N. Holl. 1820. C s.p l Lin. tr 11. 22

DIGYNIA.

2611 *1037*a* PACHYNE'MA *R Br.* (*Pachys*, thick *nema*, a filament, stamens) *Dilleniàceæ* Sp 1
17304 - - complanàtum *R. Br* flat-*branched* ⌴ or 1½ ... ... N. Holl 1825. C s l Deless 1 73

2612. *1039*a* ADA'MIA Wal (*Dr J Adam*, of Calcutta) *Caprifoliàceæ* \ *Hydrangeàceæ.* Sp 1
17305 - - cyànea *Wal* blue-*berried* ⌴ or 4 Pk . Nepal 1829 C l p s Bot mag 3046

2613. *1043*a*. TE'LLIMA *R. Br.* Tellima (Anagram of Mitella, separated from it) *Saxifràgæ.* Sp 1
17306 - - grandiflòra *Dou.* great-flowered △ cu 1 ap.my Pk N. Amer 1826. D s p Bot. reg. 1178

1045 SAPONA'RIA. Sp 8—13
17307 6132*a* cerastioides *Fis* Cerastium-like ○ pr ½ jn s Pk Russia? 1833 S co
17308 6132*b* calábrica *Guss* Calabrian ○ or ½ au s R Calabria 1830. S co Sw. fl. g 2 s 79

1046 DIA'NTHUS. Sp. 63—103.
17309 6140*a* aggregàtus *Pour.* aggregate ◯ or 1 jn jl P 1817 S s l
β flòre plèno double-flowered △ or 1 jn au C gardens ?1832 C r l
17310 6145*a* gigantèus *Urv* gigantic △ or 3 jl au P Greece 1821. S co Sw. fl. gar 288
17311 6194*a* Líbanòtis *Lab.* Rosemary △ or 4 au W spt Mt Leb 1830 C l p Bot reg 1584

TRIGYNIA.

2614 *1055*a*. STIGMAPHY'LLUM *Hil* (*Stigma*, stigma, *phyllon*, leaf, stigma foliaceous) *Malpigh* Sp 1—2
17312 - - aristàtum *Lindl* awned-*leafed* ⌴ or 20 jn au Y Brazil 1832? C p s l Bot reg 1699

2615 *1055*b* THRYA'LLIS *L* Thryallis (Greek name for a plant of the Mullein kind) *Malpighiàceæ* Sp 1
17313 - - brachystachys *Lindl* short-spiked ⌴ el 10 s o Y Rio Jan 1823. C p s Bot reg 1162

2616 *1055*c* GALPHI'MIA Cav Galphimia (An anagram of Malpighia) *Malpighiàceæ.* Sp 1—2
17314 - - glauca *Cav.* glaucous ⌴ or 8 . Y Mexico 1829 C l p Cav ic 5. 480

2617 * . DEU'TZIA Thun Deutzia (*John Deutz*, sheriff of Amsterdam, a bot patron) *Philadélphæ* Sp 1
17315 - - scàbra *Thun.* rough-*leaved* or 6 my W Japan 1833. C co Bot reg. 1718

PENTAGYNIA.

2618 *1060*a* ECHEVE'RIA Dec Echeveria. (*Echeveria*, a botanical draughtsman) *Crassulàceæ.* Sp. 2—6
17316 - - grandifòlia *Haw* great-leaved ⌴ or 2 o O Mexico 1828. C s l Sw fl gar 272
17317 - - gibbifòlra *Dec* gibbous-fl.wd ⌴ or 2 jl o Y Pk Mexico 1826. C s l Bot reg 1247
Nos 6410. & 6414. are also referable to this genus.

1061. *SE'DUM.* Sp 44—76.
17318 - - Ewérsii Led. Ewer's ▲ or ½ jl au Ro Siberia 1829 C D s l.ruBot gard. 513
17319 - - Siebóldii Siebold's ▲ or ½ jn au B Japan 1836 C l ru
17320 - - cærùleum blue-*flowered* △ or ½ . . B Tunis 1822. C s.l.ru Bot. reg.

1065. *OXALIS.* Sp 87—121.
17321 6464*a* crenàta *Jac.* notched-*petld* ⁂ △ esc 3 s Y Lima 1829. C s l Sw fl g 2 s 125
17322 6469*a* Simsii Swt Sims's ▲ △ or ¼ ap jn C Chili 1822. O s p Bot. mag. 2415
rósea *of Bot mag*, not of others.



History, Use, Propagation, Culture,

2608. ***Chætogastra.*** The species require a mixture of loam, peat, and sand, and young cuttings root readily in heat, under a hand-glass.

2609. ***Ceratopétalum.*** A mixture of peat and loam suits this plant, and ripened cuttings root readily in sand, under a hand-glass.

2610. ***Darwínia.*** Singular plants, requiring to be grown in a mixture of loam, peat, and sand; and young cuttings root readily in sand, under a hand-glass.

2611. ***Pachynèma.*** This shrub thrives well in a mixture of loam and peat, and cuttings root freely in sand, under a hand-glass

2612. ***Adámia.*** This shrub requires a mixture of loam, peat, and sand, and cuttings root readily in the same kind of soil, under a hand-glass It is called *Bansook* by the natives.

[nrvd villous both surfs Pedur trichot.
17300 Stem somewh 4-gonal clothed with adpressed villi, Lvs. petiol broad lanceol. acumin serrulately ciliated 5-
17301 Erect nearly simple, Stem 4-gonally terete villous, Lvs. almost sess lanceol.-lin. acute quite ent. 3-5-nrvd villous, Pedic axill. 1-flwd

17302 Leaves ternate, Flowers with petals

17303 Leaves acerose, Receptacle chaffy, Style 3 times length of flowers, Calyx red

DIGYNIA.

17304 A little leafless shrub with the habit of *Ephedra*. The only species

17305 The only species

17306 Lvs cordate lobed dentately serrated, Racemes elongated, Petals oblong-linear pinnatifidly jagged

17307 Lvs ovate acute serrat pilose, Racemes termin tomentose rather compound at the base, Flws usually trigynous
17308 Stem erect dichotom branched, Lvs obovate spatulate nrly sessile ciliat on margins, Flws. axill. solitary

17309 Flws aggreg sess Cal scales broad mucronate with membranaceous margins longer than tube, Lvs lanceol many-nerved [lin very long connate at base
17310 Flws numerous sess in hemispherical heads leafy bracts at base, Cal scales ov acumin pressed to cal Lvs
17311 Stem erect, Flws rather aggregate, Calycine scales ovate acuminated divaricating shorter than tube, Petals multifid bearded, Lvs lanceol

TRIGYNIA.

17312 Lvs glabr sagittately hastate angular acute, Hind lobes truncate margined horned, Petiole biglandular at apex

17313 Lvs ovate lanceol glauc green above white ben Racemes short panicled, Petioles biglandul at apex

17314 Lvs ovate obtuse smooth glaucous beneath 1 tooth on each side at base, Petioles without glands

17315 Lvs ovate acute sharply serrated pilose, Rac terminal tomentose, Flowers usually trigynous

PENTAGYNIA.

17316 Lvs orbicularly cuneated, Petiole thick, Flws in spicate panicles
17317 Lvs flat cuneiform acutely mucron crowded at tops of branches, Pedic. spreadg Flws. on short pedic along bran of panicle

[compound, Petals lanceol acute little long th. stams
17318 Lvs oppos. obsoletely denticul. adnate inferior ones broadly ellipt superior sess cord. Corymbs termin
17319 Lvs opposite orbiculate denticulate [obtuse
17320 Stem flat on ground at base ascending, Lvs obl altern obt loosened at base, Cymes bifid glabrous, Petals 7

17321 Stem erect leafy, Pedun umbelliferous 5-6-flwd longer than lvs. Leaflets obovate, Petals crenated
17322 Stem erect branched, Pedun long, Flws subumbellate drooping before expansion, Leaflets 3 obcordate sessile



and Miscellaneous Particulars.

2614 *Stigmaphýllum* A handsome climber, propagated by cuttings
2615 *Thryallis* A mixture of loam and peat will suit this plant, and ripened cuttings will root in sand under a hand-glass, in heat
2616 *Galphimia*. A genus of rather handsome shrubs, requiring the same treatment as *Thryállis*.
2617 *Deutzia*. A very showy free-flowering shrub, which deserves a place in every collection It is readily propagated by cuttings or layers According to Kæmpfer, the wood is used by the cabinetmakers in Japan for making their very finest pegs, for which its hardness and toughness render it well adapted.
2618 *Echeveria* Culture, propagation, &c., see Crássula, in p 230.
1065. *Oxalis* 17321 *crenata*. "The tubers of this plant are produced in considerable plenty, and are often 2 in long, and 1 in in diameter. When raw, they are slightly subacid, but on being boiled they lose it entirely, and taste

17323	6469*b*	*rósea Jac.* floribúnda *Bot reg.*	rosy	♂ △ pr	½	mr jn	Ro	Chile	1826.	O s p	Bot. mag. 2830 ; not of Lehman or of Sweet.
17324	6478*a*	fúlgida *B. R.*	fulgid	☿ △ pr	½	s n	C	C G.H.	1820.	O s p	Bot. reg. 1073
17325	6480*a*	cùprea *B C.*	copper-cld	☿ △ pr	½	ap jn	Cop	C G H.	1822.	O s.p	Bot. cab. 824
17326	6482*a*	tortúsa *Lindl.*	twisted	♃ ⌴ or	½	jn.au	Y	Chile	1825.	C s.l	Bot. reg. 1249
17327	6482*b*	mauritiàna *B. C.*	Mauritian	☿ △ or	½	s o	Pa.Ro	Maurit.	1810.	O s p	Bot cab. 1780
17328	6482*c*	punctàta *B M.*	dotted	☿ △ or	½	ap jn	P	C.G H.	.	O s.p	Bot reg 2781
17329	6492*d*	bipunctàta *Grah.*	2-spotted	☿ △ pr	½	ap.jn	Li	Brazil	1825	O s l	Bot mag. 2781
17330	6482*e*	Déppei B C	Deppe's	☿ △ el	½	mr n	Cop R	Mexico	1827.	O s p	Sw fl.gar 2 s 96
17331	6482*f*	floribúnda *Lehm.*	many-flowered	☿ △ or	½	ap.s	Ro	Brazil	1829.	O s l	Sw.fl.gar.2 s.54
17332	6488*a*	Commersòni Pers.	Commerson's	☿ △ pr	½	o n	Y	Brazil	..	O s p	
17333	6524*a*	Dasywallìana Westc	Darwall's	☿ △ pr	½	.	Pa.C	...	...	O s p	
17334	-	- Cuminga Herb.	Cuming's	☤ △ pr	½	au.s	Go	Chile	1831.	S s l	Bot. reg. 1545
17335	-	- divérgens *Benth.*	diverging	☿ △ or	½	jn.s	W	Mexico	1829.	O p l	Bot. reg 1620

2619. *1065*a*. BALBI'SIA Cav (*John Baptist Balbis*, a botanical author.) *Fícoidæ* D Don, *Oxalídeæ* Dec. Sp 1

17336	-	- pedunculàris *D.Don*	long-pedunc.	♃ ⌴ or	1	au	Y	Chile	1825.	C s l	Bot reg 1392

Ledocárpon pedunculáre *Lindl.*, Bot. reg 1392, Cruickshánksia cistifòlra *Hook*, Bot mis. 90.

1066. AGROSTE'MMA. Sp 7— .

17337	6537*z*	Bungeàna D Don	Bunge's	☽ △ or	1½	jl	S	As. Rus.	1834	C.D r.lt	Sw.fl.gar 2 s 317

Lýchnis Bungeàna Hort.

17338	-	- pyrenàica *G Don*	Pyrenean	☽ △ pr	½	jn jl	Pa.Ro	Pyrenees	1819.	D p l	Sw fl gar 2 s 202
17339	-	- suécica *Mœnch*	Swedish	☾ △ pr	½	jn s	Pk	Sweden	1824	D co	Bot. gar. 576

2620. *1066*a*. VISCA'RIA *Roehler* Rock Lychnis. (*Viscus*, birdlime, stems glutinous.) *Caryophýllcæ*. Sp 3

17340	-	- neglécta *G. Don*	neglected	☾ △ or	½	my jl	W	.. .	1807	D co	Bot. gard 523

Lýchnis Viscária albiflòra *Hort*

Page 392. Class XI. — DODECANDRIA. 12 Stamens

Order 1 MONOGYNIA. 12 Stamens. 1 Style.

2621. *Calandrínia*. Calyx 2-parted. Petals 3-5, free or rather connate at base Stamens, 4-15. Style very short, tripartite at the apex. Lobes clavate. Capsule oblong-elliptic, 3-valved Seeds wingless.

MONOGYNIA.

1091 PORTULA'CA Sp 10—14.

17341	6618*a*	grandiflòra *Hook.*	great-flowered	⁂ ⌭ or	½	jn jl	Y P	Chile	1827	S s l	Bot mag 2885
17342	-	- Gilliésii Hook	Gillies's	♃ ⌭ or	½	jn jl	R P	Mendoza	1827.	C s l	Bot. mag 3064

2621 *1092*a* CALANDRI'NIA H & B. (*J L. Calandrini*, a Genoese botanist.) *Portulácæ* Sp. 6—10

17343	-	- grandiflòra *Lindl*	great-flowered	☾ ⌴ or	1	jn jl	P	Chile	1826	C S p l	Bot. reg 1194
17344	-	- speciòsa *Lindl*	showy	☽ ○ spl	½	my o	D P	N Califor.	1831	S s l	Bot. reg 1598
17345	-	- discolor *Schr.*	two-cld-*flwd*	♃ ⌴ or	1½	jl au	Bt.Ro	Chile	1834.	C S s.l	Bot. mag 3317
17346	-	- arenària *Lindl.*	sand-*mhabiting*	☽ △ cu	½	jl	O ro	Valpar.	1831.	S s l	Bot reg. 1605

No. 6624 in p 396. is also referable to this genus.



History, Use, Propagation, Culture

very much like the potato, for which they might form occasionally an agreeable substitute at table. It is a native of Peru, and is cultivated abundantly in the gardens about Lima, as a salad, for which purpose its succulent stems and acid flavour, seem strongly to recommend it. It grows freely in the open border, and is readily increased by cuttings, as well as by the tubers, which require to be taken up and treated as potatoes." (*Sw. Fl. Gar.*, 2. s. 125.)

2619. *Balbísia*. A showy conservatory plant, which may be increased by cuttings, but is apt to damp off; if kept in health, it is very handsome.

17323 Stem erect fleshy leafy, Pedun bifid corymbosely racem. at apex 4 times longer th. lvs. Lflts obcord Petals crenated at apex [very long
17324 Stem decumb bran Leaflts lin sess acute, Pedun much higher than lvs Bract approaching cal. Styles
17325 Hairy nearly stemless, Scape 1-flwd. drooping before expansion, Leaflets 3 obcordate
17326 Stem fleshy scaly, Leaflts lin obt pilose beneath, Flws umbellate, Pedicels and petioles twisted fleshy
17327 Stemless, Scapes 2-3-flwd Leaflts. 3 obcordate [lvs with 2 bracts ab middle
17328 Stemless, Lflts roundish obcord bright purple and dotted with shining golden dots beneath, Scapes longer th
17329 Stemless, Lflts 3 sess. broadly obcord. pubesc ben smth ab Scape compress paniculately many-flwd Petals truncate uneq cren
17330 Bulb large scaly stemless, Lflts. 4 large obcord pilose glauc ben on short pilose petioles, Umbels many-flwd.
17331 Tuberous, Lflts 3 roundish-obov deeply emarginate hairy leprous ben on margins, Scape many-flwd Filam and styles bearded [middle
17332 Stem very short leafy, Lflts 6 ovate clothed with close-pressed villi, Scapes longer than lvs. with 2 bracts in
17333 Stem very short leafy, Flowers pale crimson
17334 Stipe fleshy, Leaflets 3 obcordate ciliated pubesc Scape 3 5-flwd bituate, Calyx ciliated
17335 Stemless smooth, Lflts. 3 cuneate 2-lobed, Lobes divorging, Scape many flwd Sepals ovate

17336 Lvs. usually alternate with linear pilose segms Peduncles much longer than lvs.

17337 Lvs ovate and lanceolate pubescent, Flowers solitary, Petals cit [lvs spatul on long footst Stem lvs cord sess.
17338 Stems tufted diffuse, Flws in dichotom bundles 1-flwr in each fork on long peduncles, Lvs leathery, Radic.
17339 Lvs linear channelled, Stem ones opposite subulate, Petals jagged

17340 Stems not clammy, Petals entire, Lvs. lanceol linear ciliated at base

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Order 3 TRIGYNIA 12 Stamens 3 Styles.

2622 *Poinsettia* Involucrum 1-lvd, androgynous, 5-celled at base, appendiculate outside, nectariferous Flowers pedicellate, naked. male ones monandrous, in two rows, female ones solitary Germen 3-lobed Lobes 1-seeded

Order 6 DODECAGYNIA. 12 Stamens 12 Styles

2623 *Cephalotus* Calyx coloured, 6-cleft Stamens 12 Anthers didymous, glandular on the back Ovaries 6, distinct Styles terminal Chenia 1-seeded

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MONOGYNIA.

[by whorl of lvs and crowded hairs
17341 Stem diffuse bran, Lvs scattered cylindr acute with pilose axils, Flws 3-4 together termin. crowd surround
17342 Stem erectish bran at base, Lvs obt-cylindr rather compressed obtuse dotted axillary fascic. of hairs erect adpressed, Flws termin usually solit

17343 Glaucous, Lvs fleshy rhomboid acute petiolate, Raceme simple loose, Calyx spotted Petals obcordate
17344 Glabrous diffuse, Lvs spatul acute elongat at base, Flws racemose, Pedicels and bracteas very short
17345 Lvs fleshy obovate-obtuse elongat into petiole somew d scoloured ben, Rac bending, the pedicel drooping after the falling of the petals [bose, Pedic little long th brac.
17346 Glauc, Stems numer prostrate leafy, Lvs linear, Common pedunc termin naked simple or bran, Rac corym.



and Miscellaneous Particulars.

2620. *Viscaria.* Culture as in the common catchfly.

2621. *Calandrinia* A genus of ornamental succulent plants, generally treated as annuals, although properly they are not so, as they may be preserved in the green-house through the winter, and in time, so treated, *C. grandiflora* will become shrubby. They require to be planted in hot dry exposed places.

TRIGYNIA.

1103. *EUPHO'RBIA.* Sp 139—223.

17347 6703*a* spléndens *Boj.* shining — spl 4 jn s Ap I France 1826. C p.l Bot. mag. 2902
17348 6703*b* Bójeri Hook. Bojer's — spl 4 n f Ap Madagas. ..... C p.l Bot. mag. 3527
17349 - fúlgens *Karw* Jacquiniæflòra Hort. fulgent — spl 4 jl.s Ap Mexico 1836 C s.p Pax. mag. 4 31
17350 - rigida *Bieb.* biglandulòsa *Desf.* rigid — rk ½ my.jn Ap S Europe 1829. D ru Bot. reg. n s. 43

2622 *1103*a* POINSE'TTIA Gra Poinsettia (*M Poinsette*, a Mexican traveller) *Euphorbiàceæ.* Sp 1—1
17351 - pulchérrima *Gra.* fairest — spl 4 ja.mr Ap Mexico 1834 C s l Bot mag 3493
β álbida *Hensl.* white-*bracted* — or 4 d Ap Mexico 1834. C s l Botanist, 70

HEXAGYNIA.

2623. *1109*a* CEPHALO'TUS *Lab* (*Kephale*, head, *ous*, ear, glandular-headed stam.) *Rosàceæ.* Sp 1—1
17352 - folliculàris *Lab.* follicled — cu 1 ..... W N. Holl. 1822. S bog Lab. n. h 2. 145

P. 408. Class XII.—ICOSANDRIA. Stamens many, perigynous, or inserted into the Calyx

Order 1. MONOGYNIA. Many perigynous Stamens 1 Style.

2624 *Melocàctus.* Tube of calyx adhering to ovarium Lobes 5-6, petaloid, crowning the young fruit Petals 5-6, united into a long tube along with the sepals Stamens disposed in many series Stigma 5-rayed Fruit smooth
2625 *Echinocàctus.* Sepals numerous, imbricate, adhering to the ovarium, outer ones in the form of an involucrum, inner ones petaloid Style multifid at the apex, very scaly from the remains of the sepals
2626 *Mammillària* Tube of calyx adhering to the ovarium Lobes 5-6, coloured, crowning the young fruit Petals 5-6, hardly distinguishable from the sepals Stamens disposed in many series Stigmas 5-7-cleft, very smooth
2627. *Cèreus.* Sepals numerous, imbricate, adhering to the base of the ovarium, united into an elevated tube Outer sepals like a calyx, middle ones longer and coloured, innermost ones petaloid. Style multifid at the apex Berry areolate, tubercular, or scaly
2628. *Epiphýllum.* Tube of calyx long, furnished with remote scale. Limb of cor. multifid, rosaceous, or ringent
2629 *Opúntia.* Sepals numerous, foliaceous, adnate to the ovarium, upper ones flat and short, inner ones petaloid. Stigmas numerous, erect. Berry oval, umbilicate, tubercled, or spiny

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MONOGYNIA.

2624. *1111*a* MELOCA'CTUS *C. Bauh.* Melon Thistle. (*Melo*, melon, *cactus*, shape.) *Cactàceæ.* Sp 2—6
†6848 commùnis *L & O* common — gr ½ jl au R W Indies 1688 O s.p Plant. grass 112
Cáctus Melocáctus, No 6848 in p 410, No 6853 is also referable to this genus.

2625 *1111*b* ECHINOCA'CTUS *L & O.* (*Echinos*, the sea urchin, *cactus*, spiny) *Cactàceæ* Sp. 9—32
17353 - Eyriès*ii* Otto Eyries's — fra 1 va sea W Y Mexico 1829 O s.p Bot.reg 1707
17354 - mammillarioides *Hook.* Mammil.-lk — gr ½ ..... Y R Chile 1836 O s p Bot mag 3558
17355 - Mackie*ana* Hook Mackie's — gr ½ ..... Y w Chile 1836 O s.p Bot. mag 3561
17356 - oxygòna *Lk & O.* sharp-angled — gr 1 ..... Pa Ro Brazil 1831. C s.l Bot reg 1717
17357 - tubiflòra *Hort* tube-flowered — gr ½ ..... W Mexico 1836. O s p Bot. mag 3637
Nos 6841. 6844 6150. & 6852. in p. 410 are also referable to this genus.

2626 *1111*c* MAMMILLA'RIA *Haw.* Mammillaria (*Mamma*, the nipple, tubercles.) *Cactàceæ.* Sp 9—34
17358 - púlchra *Haw.* pretty — gr ½ jn Ro Mexico 1826. O ru Bot reg 1329
17359 - ténuis *Dec* slender — gr ½ my Pa Y ..... 1830. O ru Bot reg 1521
17360 - atràta *Hort* dark *green* — gr ½ ..... Pk .... O s.p Bot. mag 3612



History, Use, Propagation, Culture,

2622. *Poinsèttia.* "Nothing can be more ornamental in the stove. The rose-like whorls of bracteæ which terminate the branches have been seen on the large plants cultivated at Philadelphia as much as 20 in. across, and equal in colour to the finest tints of *Hibiscus Rósa sinénsis*" (*Bot. Mag*) A mixture of sand and loam suits this plant, and cuttings root readily in sand under a bell-glass in heat.

TRIGYNIA.

[scarlet roundish united and concave at base

17347 Much bran clthd with numer. long and strong straight spines, Lvs oblongo-spathul. mucron, Brac. large
17348 Stem obtusely and irregul angul smth pale gray-cld, Lvs coriac. on short petioles obov.-obl retuse with mucro each lf situat betw 2 strong spines, Brac brick scarlet
17349 Glaucous, Lvs lanceol acum. entire uppermost ones reddish, Peduncles axillary racemose few flowered

17350 Stems diffuse, Lvs. stiff obov. acute glaucous, Umbel multifid, Bracteas roundish cordate, Segms of involucre biglandular

17351 The only species

HEXAGYNIA.

17352 The only species

2630 *Peréskia.* Sepals numerous, foliaceous, adnate to the ovarium Cor rotate Stigmas aggregate, spiral Berry globose or ovate
2631 *Pirshia.* Lobes of calyx obovate, obtuse Petals and stamens arising from the calyx Stamens about 20 Carpels 1-2, ovate-oblong, tapered into a short style, pubescent, each includes 1 ovule inserted into its base, and opens by a longitudinal cleft
2632 *Cowania.* Cal 5-cleft Petals 5 Ovaries 5-14 Ovule erect. Styles terminal, continuous Achenia awned with the plumose persistent styles Embryo erect

Order 2. DI-PENTAGYNIA Many perigynous Stamens. 2 to 5 Styles.

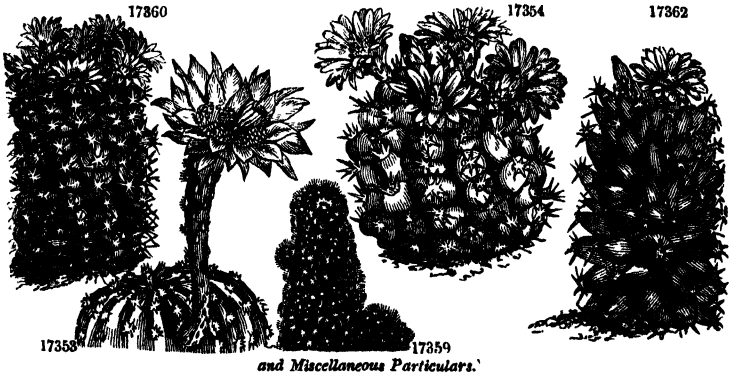
2633 *Stranvæsia.* Cal 5-toothed Petals 5, concave, sessile, spreading, villous at base. Stamens 20, spreading Ovary villous, superior, 5-celled Cells containing 2 ovules Fruit spherical, enclosed by the calyx, containing the superior, 5-valved, hard, brittle, dehiscent capsule. Seeds oblong, compressed Testa cartilaginous. Radicle exserted Leaves simple Flowers corymbose
2634 *Kageneckia* Cal saucer-shaped, furnished with a ring a little elevated on the inside, girding the ovaries Petals wanting? Stamens 15, 5 of which alternate with the lobes of the calyx, the rest by pairs opposite the lobes

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MONOGYNIA.

17353 Subglobose umbilicate, Ribs 13 continuous somewhat undulated, Tubercles woolly bearing many short stiff straight spines, Petals acute [spreading
17354 Roundish cylindrical, Mammillæ lrge. conical rather angular disposed along 16 rather spiral ribs, Spines slender
17355 Obovate, Mammillæ lrge conical depressed disposed along 16—17 ribs, Spikes 8—10 long slender spreading
17356 Nearly globose glaucescent, Ribs 14 acute, Spines unequal spreading, Flowers very long
17357 Nearly globose umbilicate, Ribs 9—10 undulated, Spines 5—6 straight black, Petals acuminated

17358 Oblong cylindrical, Spines 6—7 upper ones largest brown
17359 Cylindrical proliferous, Axils naked, Spines 20 equal spreading [Petals nearly equal
17360 Simple oval cylindrical, Mammillæ large conical obtuse, Spines 8—10 stiffish straight nearly equal spreading,



and Miscellaneous Particulars.

2623 *Cephalòtus.* This plant grows best in turfy peat soil, and should be kept rather damp If moss is allowed to grow on the surface of the soil it helps the growth and health of the plant. It is increased by seed
1111. *Cactus* to 2630. *Peréskia.* For propagation, culture, and other particulars relating to Cacteæ, see p 410-415.; also, for some excellent remarks on the general treatment of Cacteæ, see *Gard Mag.*, vol xv p 83

17361 - - floribúnda *Hook* copious flwg ▭ gr ½ ..... Pk Chile .. O s l Bot mag. 3647

17362 - - Lehmánni *Hook* Lehmann's ▭ cu ½ . Y Mexico ..... O ru Bot. mag 3634
Also Nos 6839, 6840 & 6842 are referable to this genus.

2627 *1111*d* CE'REUS *Haw* CEREUS (*Cereus*, a torch or taper; resemblance) *Cactàceæ* Sp 25—68
17363 6870*a* Napoleónis Grah Napoleon's ▭ spl 6 s W .. ?1825. C s l Bot mag 3458
Cáctus Napoleónis Hort. Cèreus triangularis var. major *Salm-Dyck*
6857 speciosissimus
β lateritius *Lindl.* brick-red ▭ or 2 my s Brl.R Eng hyb 1831 C lt Bot reg 1596
17364 6875*a* Mallisóni Hort. Mallison's ▭ or 6 . C Eng hyb 1830 C p l s Bot reg 1565
17365 - - setósus *B. C* bristled ▭ or ½ au Pk Brazil 1829 C lt.l Bot cab 1887
pentálophus *Dec*
β subarticulátus *Pf* subarticulate ▭ or 1 .. L Mexico C s p Bot. mag 3651
Nos 6868, 6869, 6854, 6855, 6856, 6857, 6858, 6878 6876 6872 6871 6857. 6859 6861, 6162, 6863 6807 6865 6860 6874 6873 and 6875. are also referable to this genus

2628 *1111*e* EPIPHY'LLUM *Haw* EPIPHYLLUM (*Epi*, upon, *phyllon*, a leaf, flowers) *Cactàceæ* Sp 7—8
17366 6901*a* Hoóker Haw Hooker's ▭ or 2 jn jl W S Amer .. C s p Bot mag 2692
Cáctus Phyllánthus *Hook*, not of Haw
17367 6901*b* speciósum *Haw* showy ▭ or 3 jn jl R Brazil 1810 C s p Bot reg 304
β Jenkinsóni Hort Jenkinson's ▭ spl 3 ap my C Eng hyb .. C s p
γ latéritia *Hens* brick-red ▭ spl 3 jn R Eng hyb 1828 C s p Bot.mist, 12
17368 6901*c* Ackermánni Haw Ackermann's ▭ or 2 jn S Mexico 1829 C s p Bot mag 3598
17369 6903*a* crispátum *Haw.* curled ▭ gr 1 aut Y Brazil 1829 C s l
Nos 6901, 6902, and 6903 are also referred to this genus

2629 *1111*f* OPU'NTIA *Haw.* INDIAN FIG (Plentiful near *Opus*, a city of Locris) *Cactàceæ* Sp. 25—43
†6884 vulgáris *Haw* common ▭ fr 2 jl au Y S Europe 1596 C s l Bot mag 2393
Cáctus Opúntia *L* No 6884 in p. 417
17370 6887*a* Ficus índica *Haw* Indian Fig ▭ gr 2 jn jl Y S Amer 1731. C s p
To this genus Nos 6877 to 6901 inclusive, are referred

2630 *1112*a* PERE'SKIA Haw BARBADOES GOOSEBERRY (*N F Peireskius*, a lover of bot.) *Cactaceæ* Sp 2—2
†6904 aculeàta *Haw* prickly ▭ fr 5 o n W W Indies 1696 C s p Dr el 227 291
Cáctus Peréskia L. No 6904 in p 414
17371 - - *Bleo* H & K Bleo ▭ fr 5 o ja Ro Mexico 1827 C p l Bot reg. 1473

1113 BARTO'NIA Sp 4—4.
17372 - - albéscens *Gill.* whitish ○ cu 2 jl n Pa Y Chile 1831. S s l Sw fl gar 2 s 182
17373 - - aúrea *Lindl.* golden-*flowered* ○ or 2 jl n Go Californ. 1833 S m s.l Bot reg 1831

1114 PHILADE'LPHUS Sp 9—15
17374 6915*a* Zeyheri Schrad Zeyher's ▭ or 4 jn W N Amer ... L co Sc phil ic
17375 6915*b* latifólius *Schrad* broad-leaved ▭ or 6 jn W N Amer ... . L co A b fig 676
17376 6915*c* floribúndus *Schrad* bundle-flwd ▭ or 6 jn W N Amer. .. L co Sc phil ic
17377 6915*d* láxus *Schrad.* loose *growing* ▭ or 4 jn W N Amer 1830 L co Sc phil ic
hùmilis *Hort*, pubéscens *Lo C.*
17378 6917*a* tomentósus *Wall* woolly-*leaved* ▭ or 6 jn jl W Nepal 1822 L co Royle ill 46 1
nepalénsis *Lo C*, ? trifidus *Royle* The *P* verrucósus *Schrad* is syn with *P* grandiflórus *Bot reg* 570
and *P* grandiflórus *W.* is the *P.* inodórus *Hort* and *P* láxus *Lo C*

1121 MY'RTUS Sp 11—15.
6974 communis
β flóre pleno double-flwd ▭ or 6 jl au W S Europe 1597 C r m
ε variegáta variegated-*lvd* ▭ or 6 jl au W S Europe 1597 C r m
κ maculáta blotched *lvd* ▭ or 6 jl au W S Europe 1597 C r m
17379 6980*a* obscura *B R* doubtful ▭ or 6 jn au W Maranh 1823. C s.p Bot. reg 1014

2631 *1130*a* PU'RSHIA Dec PURSHIA (*T Pursh*, author of Fl. Amer Sept.) *Rosàceæ*. Sp 1—1
17380 - - tridentàta *Dec* 3-toothed-*lvd* ▭ or 2 my jn Y N Amer 1826 C l p Bot reg 1116
Tigárea tridentàta *Ph*

2632. *1135*a* COWA'NIA D Don COWANIA (*James Cowan*, an English merchant) *Rosaceæ* Sp 1—1
7381 - - plicàta D Don plaited-*leaved* ▭ or 2 jn R Mexico . .. L s p Sw. fl gu 4 0



History, Use, Propagation, Culture,

2631. *Purshia*. A dry light soil suits this plant, and cuttings of the young wood will root in sand under a hand glass.

17361 Globose subcylindrical, Mammillæ lrge conical obtuse, Spines 14—16 strong straight nearly equal, Petals very unequal [acuminate

17362 Oblong subcylindrical, Mammillæ lrge. subtetragonal, Spines 7—8 straight slender one longer than rest, Petals

17363 Branches diffuse creeping triangular, Spines 4—5 stiff spreading.

17364 Hybrid between C. speciosissimus and C flabelliformis [linear obtuse

17365 Stems creeping triangular, Spines numerous bristle-shaped, Flowers solitary from the centre of the bristles, Petals

17366 Branches deeply serrated naked, Tube of flower very long slender, Segms. of cor. lin. lanceol

17367 Stem serrated repand, Tube of cor short scaly unarmed

[Petals keeled

17368 Branches seldom with any spines except when young, Cor large ringent nearly four times longer than tube,

17369 Branches cuneate oblong undulated, Margins appearing curled from large crenatures

6884 Proliferous loose, Joints ovate, Spines setaceous

17370 Joints ovate oblong blunt at both ends, Spines setaceous length of the wool

6904 Lvs ellipt Prickles solitary in axils of lvs fascicled on stems, Flowers panicled, Fruit globose

17371 Lvs ellipt acute tapering into short footstalks, Spines fascicled, Upper axils bearing thick rounded fleshy 3-5-flwd. peduncs, Petals obov retuse soon reflected

17372 Stem with white shining epidermis, Lvs sinuately toothed, Capsule naked 3-valved, Seed broadly marginate, Flws in leafy panic

17373 Stem branched hispid, Lvs ovate lanceol pinnatifid, Bract pinnatifid, Petals 5 obovate cuspidate

17374 Lvs ov acumin serrately denticul rounded at the base 3-nerved, Flws fewer and larger than in *P.* vulgàris and scentless [minate

17375 Bark whitish, Lvs broad-ovate acumin toothed about 5-nrvd hairy ben Inflor racemose, Lobes of cal acu-

17376 Lvs ovate-oval with long acuminate tip serrat toothed 3-nrvd hairy ben Inflor subracemose, Flws 5-7 showy slightly scented [level with stamens

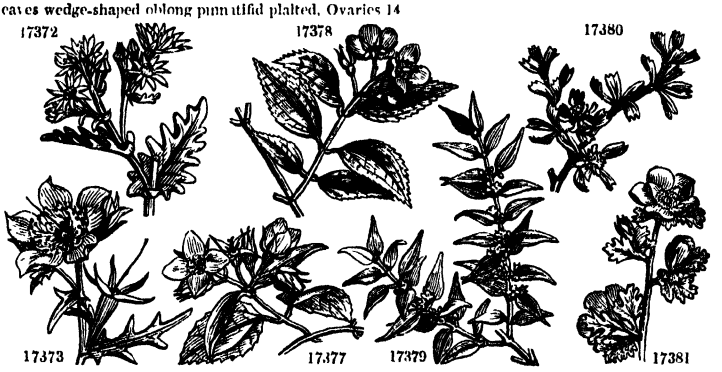
17377 Lvs oval-ovate with long acuminate tip toothed pubes ben Flws solitary or 2-3 together, Stigmas about

17378 Lvs ovate acuminated denticulated toment ben Racemes termin, Pedicels oppos Lobes of cal ovate acute

17379 Peduncles angular short usually solitary, Lvs ovate lanceol acum Calyx hairy 4-cleft, Petals hairy outside

17380 Subdecumbent, Lvs. grouped wedge-sh ending in 2-3 teeth villose ab toment ben Buds scaly, Stipules none or minute

1738 Leaves wedge-shaped oblong pinnatifid plaited, Ovaries 14



and Miscellaneous Particulars.

2632 *Cowánia.* A handsome evergreen hardy shrub, with large showy blossoms resembling a small rose.

DI-PENTAGYNIA.

†1132. CRATÆ'GUS *L.* (*Kratos*, strength, hardness and strength of wood.) *Rosàceæ* § *Pòmeæ.* Sp. 27—27

I COCCI'NEÆ —*Leaves cordate, lobed, acutely serrated. Flowers and Fruit large. Plants large and of free and vigorous growth.*

†7063 coccìnea *L.* scarlet-*fruited* ♆ or 20 my jn W N Amer. 1683 B co Den. br. 62
æstivàlis *Booth*, *Mé*spilus æstivàlis *Walt*, *M* coccìnea *Mill.*
β corállina A.b f 565, syn *C* corállina *Lod*, *C* pyriformis of some.
γ indentàta A b f 566., syn *C* indentàta *Lo C*

†7067 glandulòsa *W* glandular ♆ or 15 my jn W N Amer. 1750 B co Den. br. 58
*Mé*spilus rotundifòlia *Ehrh*, *Pỳ*rus glandulòsa *Mœnch*, *C* rotundifòlia *Booth*
β succulénta *Fis.* γ subvillòsa A. b f. 568, syn. *C.* subvillòsa *Fis.*

II. PUNCTA'TÆ.—*Leaves not lobed, large, with many nerves. Bark white or ash-coloured. Fruit large or small*

†7070 punctàta *Ait* dotted-*fruited* ♆ or 15 my jn W N Amer 1746. B co Den. br 57
Crûs-gálli *Duroi*, *Mé*spilus cuneifòlia *Ehrh*, *M* punctàta *Link*, *M* cornifòlia *Lam*
α rùbra A b f 569, syn *C.* edùlis *Ronalds.*
β rùbra stricta *Hort*, syn *C* p stricta *Ronalds*

†7065 pyrifòlia *Ait.* Pear-tree-lvd ♆ or 20 jn W N. Amer 1765. B co Bot reg 1877
leucophlœ'os *Mœnch*, radiàta *Lod*, tomentòsa *Duroi*, *Mé*spilus latifòlia *Lam.*, *M* Calpodéndron *Ehr*, *M* pyrifòlia *Link*, *M* cornifòlia *Poir*, *Booth*, *C.* latifòlia *Ronalds.*

III. CRU'S-GA'LLI —*Leaves without lobes. Fruit small or middle-sized, round, dark green till nearly ripe, when ripe scarlet Spines very long, and bent like the spur of a cock.*

†7071 Crûs-gálli *L.* Cock's spur ♆ or 20 my jn W N Amer. 1691 S co Den br 56
lùcida *Wang*, cuneifòlia *Lod*, *Mé*spilus lùcida *Ehrh*, *M.* Crûs-gálli *Poir.*, *M.* hyemàlis *Walt*, *M* cuneifòlia *Mœnch*
β spléndens *Dec*, syn *C* arbutifòlia and *C* spléndens *Ait*
γ pyracanthifòlia *Dec* A b f 580, syn *C* pyracanthifòlia *Lod*, *M* lùcida *Dum*

17382 - ovalifòlia *Horn* oval-leaved ♆ or 30 my jn W N. Amer. 1810 B co Bot. reg 1866
Crûs-gálli ovalifòlia *Lindl*, elliptica *Lod*

17383 - pruniifòlia *Bosc* Plum-tree-lvd ♆ or 20 my jn W N Amer 1818. B co Bot reg 1868
Crûs-gálli pruniifòlia *Lindl*, carolinìana *Lod*, *Mé*spilus pruniifòlia *Poir*
β ingéstria *A B.* Ingestrie ♆ or 20 my jn .. Eng hyb. ..... B co

IV. NI'GRÆ —*Leaves middle-sized, deeply lobed. Lobes pointed Fruit round, black or purple. Tree rather fastigiate, with few or no spines. Bark smooth*

†7083 nìgra *W & K.* black-*fruited* ♆ or 20 ap my W Hungary 1819. B co Den br 64
*Mé*spilus nìgra *W.*, carpática *Lod.*

17384 - purpùrea *Bosc* purple-*bran* ♆ or 15 my jn W Altaic M ? 1822. B co Den br 60
β altàica *A B*, Altaic ♆ or 15 my jn W Altaic M ... B co A b f 583

V. DOUGLA'SII —*Leaves small, and not lobed as in the preceding section Spines rather numerous and rigid Fruit small, and dark purple Pulp soft and watery*

17385 - Douglàsii Lindl. Douglas's ♆ or 15 my W N W Am. 1830. S B co Bot reg 1810

VI FLA'VÆ —*Leaves small, obovate, slightly lobed, and serrated Flowers frequently solitary Spines numerous, straight, and more slender than in division Fruit top, or pear, shaped, yellow, or greenish-yellow*

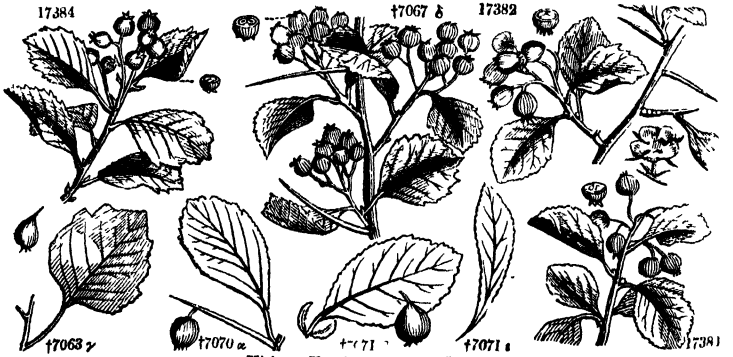
17386 - flàva *Ait* yellow-*fruited* ♆ or 20 my W N Amer 1724 B co Den br 59
glandulòsa *Mx.* not of Walt, *Mé*spilus Michaúxii Pers, *C* carolinìana *Poir*, *C* flavíssima *Hor*

17387 - lobàta *Bosc* lobed-*leaved* ♆ or 15 my jn W ..... B co A.b f 554 & 586
*Mé*spilus lobàta *Poir.*, *C* lùtea *Hort*

17388 - trilobàta *Lod.* three-lobed-*lvd* ♆ spinosissima *Lee*

VII. APIIFO'LIÆ —*Leaves deltoid, or somewhat resembling those of the common thorn. Fruit also of the same colour But the tree has a totally different habit, having the shoots loose and spreading, weak, and almost without thorns*

†7074 apiifòlia *Mx* Parsley-leaved ♆ or 15 my jn W N. Amer. 1812. B co A. b f 589
Oxyacántha *Walt*, apiifòlia màjor *Lod.*
β minor *A B* less ♆ or ... my jn W . ... . B co A b f 588



History, Use, Propagation, Culture,

1132. *Cratæ'gus.* "Of all the genera of hardy deciduous ligneous plants in cultivation in British gardens, there is not one which, taking it altogether, can be compared with the genus *Cratæ'gus*. . . . They are not only highly beautiful when in flower (a period which extends from the beginning of April to the end of July, commencing with C *pùrea*, and ending with C *cordàta*), but also when they are covered with ripe fruit, which includes a period commencing with C. *pusillà* and C. *nìgra*, in the beginning of July, and continuing till the following spring or summer

DI-PENTAGYNIA.

7063 Lvs cord -ovate angled with lobes acutely serrated glabr. Petiol. & cal pubes. glanded, Petals orbicul. Styles 5, Fruit eatable
- δ máxima *Lod* ; syn. *C.* c spindsa *Godefroy.*
- ε neapolitàna *Hort* , syn. *Mespilus constantinopolitàna Godefroy.*

7067 Lvs obov -wedge-sh. angled glabr glossy, Petioles stipules & sepals glanded, Fruit oval scarlet, Nuts 4-5, Flesh hard and dry
- δ macracántha A b f 572 , syn. *C* macracántha *Lod.*, *C* spina longissima *Lec.*
- subvar minor A b f 573

7070 Lvs. obov -wedge-sh glabr. serrat Cal rather villose, Sepals awl.-sh. entire, Fruit usually dotted
- γ aúrea, syn No 7068 in p 424 , *C.* dúlcis *Ronalds*, *C.* edùlis *Lod* , *C* pentágyna flàva *Godefroy.*
- δ brevispina *Don*, A b. f 2462 [Sep lin-lanceol.

7065 Spiny or spineless, Lvs ovate-ellipt incisely serrat obscurely plaited rather hairy, Styles 3, Cal. slightly villose, [somewh. serrat. Styles 2

7071 Spines long, Lvs. obov -wedge-sh nrly sess. glossy glabr falling off late, Stipules linear, Cal. lobes lanceol
- δ salicifòlia *Dec* A b f 578
- ε lineàris *Dec* A b f 577 ; syn *M* lineàris *Desf*
- ζ nàna *Dec* A b f 552 , syn *M* nàna *Dum*

17382 Lvs oval serrat rather pilose on both surfs. shining on upper one, Stipules sub-cord. incisely serrat. with glanded serratures

17383 Lvs broadly ovate uneq serrated & glabr. Petioles bearing few glands, Sepals with glanded serratures, Pedun and cal. little villose.

7083 Lvs sinuately lobed serrat somew wedge-sh. truncately so at base villose ben Stip obl. serrately cut, Cal. villose Styles 5, Fruit black [serratures

17381 Lvs. ovate cuneate at base lobed serrat glabr. or pubes. ben Stip. somewhat circular serrated with glanded

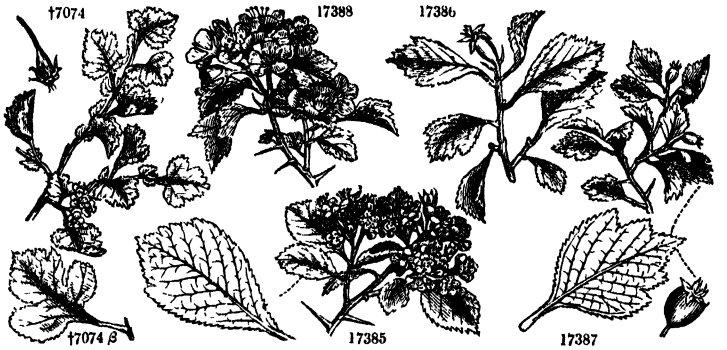
17385 Spines straightish short and long, Lvs. obovate and oval gashedly serrated acute cuneate at base glabr in autumn leathery purplish and shining

17386 Lvs obov -cuneat slightly lobed crenately serrate on short petioles, Stip glanded, Nuts 4 in a fruit [bose

17387 Bran. rather villose Lvs ovate uneq. serrat or lobed slightly downy bent on short petioles, Stip. cut, Inflor. corymb-

17388 Lvs. ovate-cuneate notched and serrat Petioles slender, Branches small thickly beset with slender thorns

7074 Lvs. cut into acute and incisely toothed lobes, Pedic. in corymb villose, mostly simple, Cal. tube villose Sepals obscurely serrated



and Miscellaneous Particulars.

C mexicana, C *virginica*, and some other species, retaining their fruit all the winter . All the species may be trained either as small, handsome, exceedingly picturesque trees, or as beautiful and picturesque shrubs, at the pleasure of the cultivator " (*Arb Brit* , p. 811) " Most of the species would make excellent hedges . . All the species will grow on any soil that is tolerably dry, but they will not grow vigorously in a soil that is not deep and free, and rich rather than poor." (*Ib*)

VIII MICROCA'RPÆ.—*Fruit small, round, red Flowers small, produced in corymbs, later in the season than in most of the other species Spines few, but sometimes very large*

†7064 cordàta *Mill* heart-*leaved* ♆ or 20 jn jl W N Amer 1738. B co Bot reg 1151
populifòlia Walt. Méspilus acerifòlia Poir. dict.
†7073 spathulàta *Ell* spathula-*shaped* ♆ or 15 my jn W N Amer 1806. B co Bot reg 1846
microcárpa *Lindl. Bot. reg.*

IX AZARO'LI.—*Fruit large, round or pear-shaped, yellow or red, eatable. Leaves wedge-shaped, 3 cleft, or more shining, pubescent, or hairy. Spines few or none.*

†7078 *Azaròlus* L Azarole ♆ or 15 my jn W S Europe 1640 B co Bot. reg. 579
17389 - - maroccàna *Pers.* Morocco ♆ or 15 my jn W Morocco 1822 B co A. b f. 594

17390 - - Aròna *Bosc* Aronia ♆ or 15 my jn W S Europe 1810 B co Poc or 85
Méspilus Aròna *W, N Duh.*; *C Azaròlus* β Willd sp, *C* fissa *Lod*; *M* orient apiifol. súbtus hirsùta *Poc*
†7080 orientàlis *Bosc* Eastern ♆ or 15 my jn W S Europe 1810. B co Bot. rep 590
odoratissima *Bot rep* and No 7080 in p. 424, *Méspilus* orientàlis *Poir.*
β sanguínea *A B* blood-eld-*fld* ♆ or 15 my jn W Crimea 1810 B co Bot. reg 1852
C orientàlis *Lindl Bot reg, C* sanguínea *Schrad, C* tanacetifòlia β taúrica *Dec*
†7079 tanacetifòlia *Pers* Tansy-lvd ♆ or 15 my jn W Greece 1789 B co Bot rep. 591
M tanacetifòlia *Poir dict, N Duh*; *M* pinnàta *Dum*, *M* Celsiàna Dum ?
β glàbra *Lod* A b f 598 γ Leeàna A b. f 599., syn *C.* incisa *Lee.*

X HETEROPHY'LLÆ.—*Leaves cuneate and subpersistent Fruit long, middle-sized, and crimson.*

17391 - - heterophýlla *Flug.* various-leaved ♆ or 20 my jn W N. Amer 1816 B co Bot reg 1847

XI OXYACA'NTHÆ.—*Leaves obovate, trifid, or variously cut Flowers numerous, in corymbs. Fruit generally red*

†7075 *Oxyacántha L.* Sharp-thorn ♆ or 15 my jn W Britain hed S co Eng bot 2054

2 obtusàta *Dec.*, B. r 1128.; syn *C* oxyacantholdes *Thuill.*
3 sibírica *A B*, syn *C* monógyna *L.*
4 transylvánica *Hort*, syn *C O* 3 sibírica ?
5 quercifòlia *Booth*, A b f 608
6 laciniàta A. b f 603, syn *C* laciniàta *Lo C*
7 pterifòlia A b f 604, syn *C* pectinàta *Hort*
8 eriocárpa *Lindl.*, A. b f 607, syn No 7076 in p 424
9 purpùrea (purple-*shoots*) A b f 611
10 Oliveriàna A B, Bot reg 1933, syn *C* Oliveràna and orientàlis *Lo C*
11 melanocárpa *A B*, Bot reg 1874., syn. *C* fissa *Lee*, platyphýlla *B R*
12 aúrea *Hort.*, A b f. 610., syn No. 7075 ξ in p 424
13 aurantíaca *Booth*
14 leucocárpa *A B.*
15 múltiplex *Hort*, A b. f 609., syn. No 7075 δ in p 424

XII PARVIFO'LIÆ.—*Leaves small, ovate, serrated or notched, but scarcely lobed Fruit green or greenish yellow, rather large and hard*

†7069 parvifòlia *Ait* small-leaved ♆ or 6 my jn W N Amer 1704 B co Den br 65
Méspilus axillàris *Pers*, *M* tomentòsa *Poir*, *M* xanthocárpus *L fil*, *M* parvifòlia *Wats*, *C.* tomentósa *L sp*, *C* umbílora *Duroi*, *C* víridis, axillàris, betulifòlia, flórida, and linearis *Lo C*
β flórida *Lod* Florida ♆ or 6 my jn W N Amer ... B co A b f 613
γ grossulariæfòlia *A B* Gooseb.-lvd ♆ or 6 my jn W . ... .. B co A. b. f 616
C lineàris *Lo C*
17392 - - virgínica *Lod* Virginian ♆ or 5 my jn W Virginia 1812 B co A b f 615

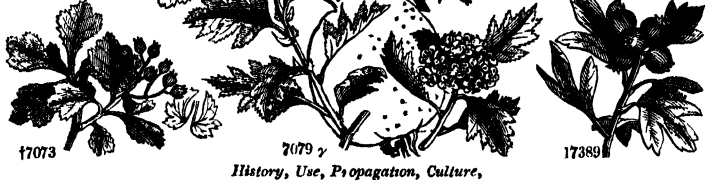
XIII MEXICA'NA.—*Leaves large, oval lanceolate, notched and serrated Fruit large, green or greenish yellow*

17393 - - mexicàna *M & S* Mexican ♆ or 15 my jn W Mexico 1823 B co Sw.fl.gar.2 s 360
stipulácea *Lo C*, Lambertiàna Hort

XIV PYRACA'NTHA.—*Leaves oval, lanceolate, glabrous, entire, small, evergreen Fruit numerous, of a bright coral colour.*

†7072 *Pyracántha Pers* Pyracantha ♆ or 10 my W S Europe 1629 S s l A b f 561
β crenulàta *A B* crenulated ♆ or 10 my jn W Nepal 1830 B s l
C. crenulàta *Roxb ms., Lindl* in *Lin trans, Don's Mill*, *Méspilus* crenulata *D Don.*

2633 *1132a. STRANVÆ'SIA Lindl (*Hon W. Fox Strangways*, a learned botanist) *Rosàceæ* Sp 1—1
17394 - - glaucéscens *Lindl* grey-*leaved* ♆ or 20 jn W Nepal 1828 B co Bot reg 1956
Cratæ'gus glaúca Walt. Arb brit p 844 figs 562, 563.



History, Use, Propagation, Culture,

Stranvæ'sia. This plant succeeds perfectly when grafted on the common hawthorn.

7064 Lvs. cord -ovate angled by lobes glabr Petioles and calyxes glandless, Styles 5

7073 Lvs fascicled obl cuneat 3-cleft lobed and cuneat smth shining, Corymbs many-fld. Cal. smth Segms. ovate ent. Fruit 5-celled

[Styles 1-3

7078 Lvs pubes trifid, Lobes blunt and with few large teeth, Branchlets corymbs and calyxes pubes Sep obtuse,
17389 Lvs 3-lobed and pinnatif glabr glandless, Stip cut rather palmately, Pedunc long, Corymbs termin Sepals obtuse, Styles 2 [yellow
17390 Branchlets pubes. Lvs pubes. on under surf. Lobes obtuse entire each ending in 3 obtuse mucron teeth, Fruit

7080 Branches toment. Lvs 3-lobed downy ben 2 side lbs ovate with tooth-lk. incisions at tip middle 1-3-fid, Stip
β Fruit of a very dark purplish red or port wine colour [broad and cut

7079 Lvs pinnatifidly cut hairy, Lbs. obl acute having few teeth, Sepals acutish reflexed hairy, Styles 5, Fruit globose yellowish green

17391 Lvs. lanceol -cuneat. toothed at apex 3-cleft, Segms serrate, Cal tube fusiform, Cymes many-flwd. Style 1, Stips large and pinnatifid

7075 Lvs. obov.-cuneate almost ent or 3-fid or cut glabr. rather glossy, Corymbs of several flws. Sepals glandless acute, Styles 1-3

16†rósea *Hort*, A b f 612
17 punícea *Bot cab.* 1363 ; syn. *C. O* rósea supérba *Hort.*
18 punícea fl pl *Hort.*
19 fól aúreis *Lod*
20 fólis argénteis *Hort*
21 stricta *Lod*, A. b. pl. 152., syn *C. O.* rígida *Ronalds*
22 Celsiána Hort.
23 péndula *Lod*
24 reginæ *Hort.* (Queen *Mary's* Thorn) A b p 153
25†præ'cox *Hort* (*Glastonbury* Thorn)
26 monógyna *A B.*, syn No 7077 in p 424
27 apétala *Lod*
28 lucida *A B*
29 capitáta *Sm of Ayr*
30 flexuósa *Sm of Ayr*

7066 Lvs oval-lanceol incisely serrat pubes Flws mostly solit Branlts. and cal. vill Stip pristle-lk Sep serrat. Fruit almost top-sh., Nuts 5

β Has the leaves and fruit somewhat smaller and rounder than those of the species
γ Has the leaves lobed, and somewhat like those of the gooseberry

17392 Lvs obov cuneat glabr shining notched not lobed small, Fruit round rather larger than a common haw dark green

17393 Lvs oval-lanceol notched and serrat acumin somewhat ciliated at base, Petiol short channeled, Margin winged, Stams. 10-15, Styles 2 rarely 4

7072 Lobes of cal. obtuse, Styles 5, Fruit globose

17394 Lvs lanceol. coriac serrat. pointed at base midrib and nrvs on under side and young twigs hairy Corymbs somew woolly, Pedic 3-4 times as long as bud



and Miscellaneous Particulars.

†7080. *Cratæ'gus orientális β sanguínea* has large fruit of a port wine colour, and is one of the handsomest species of the genus *C Oxyacántha* eriocárpa forms a handsome tree of the middle size.

1133. PY'RUS — Sp 32—47

7086 communis
α *A'chras Wallr* (*entire-leaved*) — γ foliis variegàtis
β Pyráster *Wallr* (*serrated-leaved*) — δ fructu variegàto (fruit variegated *with yellow and white*)

17395	7087*a* crenâta *D Don*	crenated		or	15	my jn	W	Nepal	1820	G co	Bot. reg 1655
17396	7087*b* variolôsa *Wall*	variable-*lvd*		or	...	ap my	Pksh.	Nepal	1825	G co	A. b pl. 170
	P Pâshia Ham. mss										
	7096 *A'ria*										
	α obtusifôlia *Dec*	blunt-lvd		tm	40	my jn	W	Europe	...	G co	Fl dan 302
	β acutifôlia *Dec*	sharp-lvd		tm	40	my jn	W	Europe	..	G co	• Duh. no. 34
	γ undulâta *Lindl.*	undulated-*lvd*		tm	30	my jn	W	S Europe	.	G co	A b pl. 139*a*
	δ angustifôlia *Lindl*	narrow-leaved		tm	30	my jn	W	S Europe	...	G co	
	ε rugôsa *Lindl.*	wrinkled		tm	30	my jn	W	S Europe	..	G co	
	ζ cretica *Lindl.*	Cretan		tm	30	my jn	W	Crete ?	...	G co	
	η bullâta *Lindl*	blistered		tm	30	my jn	W	S Europe	...	G co	
17397	7097*a* vestita *Wall.*	clothed		or	30	my jn	W	Nepal	1820	G co	A. b. pl. 391
	7101 aucupâria										
	β fructu lûteo	γ foliis variegàtis						δ fastigiàta			
17398	7000*a* lanuginôsa *Dec*	woolly-*leaved*		or	25	my jn	W	Hungary	.	S co	A b pl 146
17399	7085*a* floribúnda *Lindl*	bundle-flwd		or	4	my jn	W	China	1818	G co	Bot reg 1006
17400	7085*b* deprêssa *Lindl*	depressed		or	1½	my jn	W	N Amer.	...	L co	
17401	7085*c* pûbens *Lindl.*	downy-*bran*		or	5	my jn	W	N Amer	1810.	B co	
17402	7085*b* grandifôlia *Lindl*	great-leaved		or	5	my jn	W	N. Amer.	1810.	B co	Bot. reg 1154

2634. *1137*a* KAGENE'CKIA R & P. (*M. De Kageneck*, a German statesman.) *Rosàceæ* § *Quillàjeæ.*

17403	- cratægifôlia *Lindl* cratægoides *D Don.*	Hawthorn-lvd		or	10	jn	W	Chile	1830.	L l	Bot. reg. 1836

1138 *AMELA'NCHIER.* — Sp 5—6.

17404	7120*a* sanguínea *Dec*	bloody		or	4	ap.my	W	N. Amer.	1824	L co	Bot. reg. 1171
	Pyrus sanguínea *Ph*, Aronia sanguínea *Nutt*, *Méspilus* canadénsis γ rotundifôlia *Mx.*										
17405	7121*a* flôrida *Lindl.*	flowery		or	12	my jn	W	N Amer.	1826	L co	Bot. reg. 1589

1139 COTONEA'STER — Sp 10—10

17406	7123*a* laxiflôra *Jac.*	loose-flowered		or	...	ap	Pk	.	1826	L co	Bot reg 1305
17407	7123*b* frigida *Wall.*	frigid		or	10	ap.my	W	Nepal	1824.	G l	Bot. reg. 1229
17408	7125*a* nummulâria *Lindl*	money-lk -*lvd*		or	15	ap my	W	Nepal	1824.	G l	A. b. pl 122*b*
	ellíptica *Hort*, Eriobótrya elliptica *Lindl.*, *Méspilus Cúsle* Hort										
17409	7125*b* rotundifôlia *Wall*	round-leaved		or	3	ap my	W	Nepal	1825.	L co	Bot. reg. 1187
	microphýlla β Uva-úrsi *Lindl Bot Reg*, Uva-úrsi *Hort*										
17410	7125*c* microphýlla *Wall*	small-leaved		or	6	my jn	W	Nepal	1824	L co	Bot. reg. 1114
17411	7125*d* buxifôlia *Wall*	Box-leaved		or	6	my jn	W	Neelgher	1824.	L co	

1141 SPIRÆ'A. — Sp. 28—46

17412	7127*a* ariæfôlia *Sm.*	White-Beam-lvd		or	5	jn jl	Ysh W	N. Am.	1827.	C co	Bot reg 1365
	7128 salicifôlia										
	α cárnea *Ait*	flesh-cld-*flwd*		or	5	jn au	F	Britain ?	m n	Sk co	Eng bot 1408
	β alpéstris *Pall*	alpine		or	2?	jn au	W	Russia	1820.	Sk co	Pall ros 1 22
	γ paniculâta *W*	panicled		or	5	jn au	W	N Amer	.	Sk co	Mil ic 257 2
	δ latifôlia *W.*	broad-leaved		or	5	jn au	W	Europe	.•	Sk co	A b f 441
	S carpinifôlia Willd enum, No 7129 in p 428, *S* obovâta *Rafi*, not of W & K.										
	ε grandiflôra *A B*	large-flowered		or	5	jn au	Pk	Kamtsch	1826	Sk co	A. b f 442
	7132 hypericifôlia										
	α uralénsis *Ser*, syn No 7136 p 428	β Plukenetiâna Ser, syn No 7132. p 428								γ acûta *Ser*, A b f 434	
17413	7144*a* vaccinifôlia *D Don*	Strawberry-lvd		or	2	jl au	W	Nepal	1820	C p l	A b f 439
17414	7149*a* palmâta *Thun*	palmate	△	or	2	jl au	R	China	1823	D p.l	
17415	7149*b* digitata *W.*	digitate	△	or	2	jl au	R	Siberia	1823.	D p.l	Pal. ros. 1 27

POLYGYNIA.

1148. *RO'SA.* — Sp 77—121.

.7416	7478*a* Dícksoni Lindl.	Dickson's		or	5	my jn	D.R	Ireland	...	L co	Eng bot 2707
17417	7478*b* dahúrica *Pall.*	Dahurian		or	6	my jl	Pk	Siberia	1824.	L r m	
	7480 alpina										

δ pimpinellifôlia *Imdl*, syn *R* glandulôsa *Bel.* ε lagenária *Ser.*, flask-*sh-fld* ζ sorbinélla *Ser.*
η hispidélla *Ser*, syn *R* a. coronâta *Desv.* θ lævis *Ser*, A.b. t. 483. ι pyrifórmis (pear-shaped-*fruited*)



History, Use, Propagation, Culture,

2634. *Kageneckia* 17403 *cratægifôlia.* The leaves of this plant are intensely bitter, and they are used by the

ε sanguinolènta (*flesh of fruit red or reddish*) η jáspida (*bark striped with yellow*)
ζ flòre plèno θ sativa *Dec.* [woolly, Sepals ovate subacute

17395 Branlts whitely toment Lvs oval acute crenat glabr. ab. toment ben. when young, Corymbs simple and
17396 Lvs ovate acumin crenat. glabr. in adult state when young clthd. with yellowish toment ben. Umbels termin. Pedic and cal woolly

α Leaves broadly ovate and obtuse
β Leaves ovate-oblong acute
γ Leaves flat oval-lanceol broad undulat. unequally and deeply serrated, acumin. and cobwebbed above
δ Leaves oval obtuse concave somewhat simply serrated woolly above
ε Leaves large ovate-elliptic doubly serrated shining above and wrinkled, white beneath [webbed
ζ Lvs flat orbicularly ellipt crenately serrat retuse cuneated at base, smooth ab hoary ben Bran cob-
η Lvs concave elliptic acumin blistered, closely serrated at apex, but entire at base
17397 Lvs cymes, and young bran clthd with white toment. Lvs. ellipt or obov -ellip acumin serrat towards apex, Corymbs branched and termin

17398 Buds woolly, Lflts serrat woolly ben Petiole woolly, Pome globose [flwd and long th leaves
17399 Bran cinereous, Lvs. obl -lanceol acute on long pets toment be as well as cal Fruit spheric Corymbs many-
17400 Stem humble reclin Lvs obl obt toment ben. as well as cal Fruit pear-sh Corymbs length of leaves
17401 Erect, Bran pubes Lvs obl or obov abruptly acumin smth Fruit spherical as well as cal quite glabr Corymbs lax many-flwd [with vill dist
17402 Lvs obl or obov acute glabr. Fruit spherical and as well as cal glabr Corymbs few-flwd. coarctate, Fruit

17403 Lvs. oval-lanceol. smooth glaucous, Male and female flowers produced separately on the same plant

17404 Lvs oval obt. at both ends mucronate finely serrat sub-cord at base, Rac few-flwd. Cal. glabr. Fruit eatable

17405 Lvs obl obt at both ends coarsely serrate in terminal portion glabr. Bract and stipules feathery at tip soon falling off, Rac upright many-flwd

17406 Lvs obl obt at both ends smooth ab woolly ben Cymes panicled pilose, Cal quite smooth
17407 Branlts woolly, Lvs ellipt mucron. coriac crenulat. glabr. woolly ben when young, Corymbs panicul termin white and woolly
17408 Lvs orbicul or ellipt ending in mucro sometimes emargin. Stips lin.-lanceol. membran. soon falling off, Cymes axill few-flwd
17409 Lvs roundish pilose ben. evergreen, Peduncles 1-flowered

17410 Lvs. oblong obtuse pubescent beneath evergreen, Peduncles usually 1-flowered
17411 Lvs ovate woolly beneath evergreen, Peduncles 2-3-flowered woolly

17412 Lvs. elliptical oblong more or less lobed toothed pale villose beneath, Panicle villose, Flws very numerous

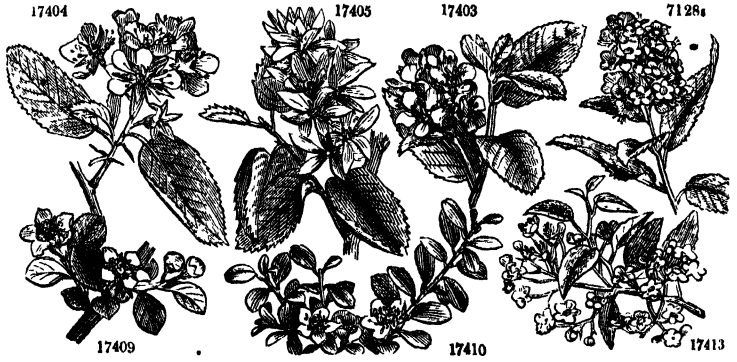
α Lvs lanceol. Panicles consisting of racemes more or less spicated, Bark of branches yellowish
β Leaves shorter than those of var α, Branches very short
γ Leaves ovate-oblong, Petals white, Bark of branches red
δ Leaves ovate-oblong, Petals white, Bark of branches reddish

ε Flowers nearly twice as large as those of the species
7132
δ crenàta *Ser.* syn S obovàta *W & K.* ε savránica *Ser.* A. b f 436 ζ Besseriàna Ser syn *S* crenàta *Bess*
17413 Branlts hairy, Lvs ellipt acute serrated at tip glabr. glauc. ben Cymes termin tomentose few-flowered
17414 Lvs 5-7 lobed, Lobes oblong acumin acutely & doubly serrated, Panic. cymose decompound
17415 Lvs pinnate toment. ben. Termin. lflt largest 7-lobed lateral ones 5-lbd Corym bran contract Carpels parallel villous

POLYGYNIA.

17416 Bran. flexuous setiger. Prickles few slender scattered, Lflts folded togeth uneq with coarse dbl serrat Stips. pets and sepals compound [ben dply serrat Fruit ovate red
17417 Bran slender coloured, Prickles stipular spreading little recurved, Stips. linear, Lflts obl wrinkled toment.

κ setòsa *Ser* (bristly-*calyxed*) λ globòsa *Desv.* (globular-*fruited*) μ hellebórina *Ser* ν pilósula *Ser* (pilose-*peduncled*) ξ turbinàta *Desv* (top-sh -*fld*), syn *R* inérmis *Del* ο speciòsa *Hort* (*Drummond's thornless*)



and Miscellaneous Particulars.

inhabitants of Chile to cure intermittent fevers. It strikes readily by cuttings, and may probably be grafted on the common hawthorn. The plant thrives in loam, peat, and sand.

17418 7480*a* suàvis *W.* sweet or 4 jn jl Pk ..... 1818 L r m A b f 484

17419 7492*a* Wilsoni Bor Wilson's or 3 jn.jl D Pk Britain ... L co Eng bot 2723
7495 gállica
γ arvìna *Lindl*, syn *R* arvìna *Kr. sil.* δ inapérta *Ser.* (*Vilmorin Rose*) ε A'gatha Red (Agatha *Rose*)
17420 7495*a* pulchélla *Spr* neat or 2 jn jl R France 1824. L r m

17421 7494*a* grácilis *Woods* slender or 8 jn jl R Britain Highl.v L r.m Eng. bot. 583
17422 7499*a* Sherárdi Dav. Sherard's or 6 jn.jl Pk Britain hed. L co

17423 7499*b* sylvéstris *Lindl* wood or 7 jn jl ..... Britain hed. L co
7503 rubiginòsa
β Vaillantiàna Red δ aculeatissima *Dup.* ζ † umbellàta *Lindl ros.* 87
γ rotundifòlia *Lindl. ros* 88 ε nemoràlis *Red.* η pùbera *Ser*
17424 7503*a* suavèolens *Rafi.* sweet-smelling or 6 my.jl Pk N Amer. 1800 L r m

17425 7503*b* Ibérica *Stev.* Iberian or 6 my.jl Pk Iberia 1820. L r m
17426 7505*a* Klùki Bes Kluk's or 6 my jl W Tauria 1819 L r.m
rubiginòsa *Bieb*, floribúnda *Stev.*, balsàmea *Bes*
17427 7505*b* Montezùmæ H. & B Montezuma's or 3 jn jl Pk Mexico 1825. C r.m Red. ros. 1. 16
7507 canina
β surculòsa *Woods* ε ægyptiaca *Lindl.* ϑ obtusifòlia *Desv.*
γ nùda *Woods* ζ burboniàna *Desv* ι glaucéscens *Desv.*
δ aciphýlla *Lin*, A b f 501, 502 η nitens *Desv.* κ Schotti*àna* Ser
17428 7507*a* Fórsteri Sm Forster's or 6 jn jl Pk Britain hed L co Eng bot 2611

17429 7507*b* dumetòrum *Thuil* thicket or 6 jn jl Britain hed L co Eng bot. 2610
17430 7507*c* bractéscens *Woods* bractescent or 6 jn jl Pk Britain hed L co
17431 7507*d* sarmentàcea *Sm* twiggy or 8 jn jl Pk w Britain hed L co Cur. lon. 5 34

17432 7507*e* cæ'sia *Sm* grey or 8 jn jl Pk w Scotland hed L co Eng bot. 2367
17433 7507*f* Bórreri Woods Borrer's or 6 mr jl Pk Britain hed L co Eng bot. 2579
7509 indica
ε Noisettiàna Noisette's or 10 my s W hybrid .. C p l A b f 505
ζ caryophýllea *Red* clove-*scented* or . . .. C p l
η pannòsa *Red* pannose or . . . . P RO ... . C p l
ϑ cruénta *Red* bloody or . . .. C p l
ι Fraseriàna H. B Fraser's or 4 my s P . ... C p l
κ rùga wrinkled or 12 Bh w Italy hyb. C p l Bot reg 1389
λ ochroleùca yellowish-white or 2 my s Crea China 1824 C p l
μ Blàiri D Don Blair's or 5 jn R hybrid 1830 C p l Sw fl gar 405
ν Smithii Swt Smith's *yel.-N* or 5 sp su Y Eng hyb 1829 C r l Sw fl gar 2 s 189
ξ nívea *D Don* snowy-*dbl. fld* or 3 jl W R gardens 1831. C l Sw fl gar 2 s 229
7515 sempervìrens
β Russelliàna A B. Russell's or 20 jn jl Bh Eng hyb ... L p l
γ Clàrei Lindl Rose Clare or jn jl Dp R Eng hyb . L p l Bot. reg 1438
δ Leschenaultiana Red Lesch 's or 60 jn jl V Neelgher ... L p.l
7516 multifìdra
β Grevillei Hort Grev *7-Sisters* or 20 ap jl Psh China . C p l A. b. f. 513
R Grevillei Hort, *R* Roxbúrghii Hort, *R* platyphýlla *Red*
γ Russelliana Hort Russell's or .. .. C p l
δ Boursáltii G Don Boursalt's or 13 my s Pk hybrid 1821 C p l
R Boursoúlti Hort

1153 POTENTÝLLA Sp 48—126
17434 7580*a* atrosanguínea-pedata *Maund* (hyb.) △ or 1 jn s Dp O Eng hyb 1831 D co Bot gard 385
17435 7580*b* ferruginea *Pax* rusty-*cld* △ or 1 jl au O B hybrid 1835 D co Pax mag 5 223
17436 7581*a* nemorali-formòsa (*hybrid*) △ or ½ my n O R Irish hyb 1829 D r
17437 7581*b* Mackayana Swt Mackay's △ or 1½ su au Y pk Eng hyb D l Sw fl gar 2 s 43

17438 7581*c* Russelliàna Swt Russell's △ spl 1½ jn au S hybrid D co Sw fl. gar 279
17439 7581*d* Hopwoodiàna Swt Hopwood's △ or 1½ jn jl B RO Eng hyb 1829 D co Sw fl gar 2 s 61

17440 7584*a* glandulòsa *Lindl* glandulose △ cu 1 au Y Californ. 1830 D co Bot. reg 1583
β inclsa *Lindl* cut-*leaved* △ cu 1 jn Y Californ. 1835. D co Bot. reg 1973
7609 réptans
β flòre plèno γ variegàta
17441 - - grácilis *Don* slender △ or 1 jn au Y N Amer 1827. S co Bot. mag 2984

†1156 KE'RRIA Dec Kerria. (*W. Ker*, a collector of plants for Kew Gardens.) *Rosàceæ* Sp 1—1
†7629 japónica *Dec.* Japan or 6 year Y Japan ?1834. L co A. b f 2446
flòre plèno double-flowered or 6 year Y Japan 1700. L co Bot. mag 1296
Córchorus japónicus L, No. 7629. in p. 454.



17418 Stem hispid, Lvs glabr glaucescent ben. Pedunc and petioles clothed with glandular bristles, Petals dply 2-lobed, Fruit obl glabr [Fruit ovato-urceol.
17419 Prickles crowde duneq. straight intermixed with setæ, Lflts. simply serrat hairy, Disk eglandulose, Cal. simple,

ζ mérmis *Ser* η parvifòlia *Ser* (small-lvd *Burgundy*), syn *R* parvifòlia *Ehrh*, Bot reg 452
17420 Ovaries roundish-obov Pedunc & cal beset with glandul. bristles, Petioles clothed with glandul pubes unarmed, Caul prickles scattered [Lflts dbly serrat hairy, Fruit globular
17421 Pedunc. usually in pairs bristly often bracteate, Bran. fruit, & cal bristly, Larger prickles curved usually twin,
17422 Prickles conic hooked compressed, Lflts ellipt. acute downy both surfs Sepals pinnate, Fruit globul abrupt rather bristly [ellipt bristly
17423 Prickles hooked, Lflts. oblong acute hoary both surfs Sepals diverging deciduous before fruit is ripe, Fruit

ϑ grandifòra *Lindl* κ spinulifòlia *Ser.* μ parvifòlia *Lindl. ros.* 145
ι mājor *Ser* λ flexuòsa *Lindl* ν Lyburn.
17424 Prickles scattered straight, Pets beset with glandul bristles, Lflts. ovate serrat sparingly glandul ben Flws. usually solit Fruit ovate [glandul on both surfs.
17425 Cauline prickles scat. hooked dilat at base, Pets. glandul and prickly, Lflts broad ovate glandularly serrat.
17426 Caul prickles strong compressed dilat. at base recurved, Pets vill & prickly, Lflts small ellipt acute biserr vill ab rusty & glandul ben [Cal. tube ellipt glabr.
17427 Pets armed with little hooked prickles, Bran. unarmed, Lflts ovate sharply serrat. glabr Flws. solit. termin.

λ pilosiúscula *Desv* ξ microcárpa *Desv.* ρ squarròsa *Rau.*
μ fastigiàta *Desv.* ο Meratiàna *Ser.* σ rubifòra *Ser.*
ν hispida *Desv* π ambigua *Desv*
17428 Prickles scatter conic hooked, Lflts simply serrat smth ab hairy on ribs ben Sepals dbly pinnate, Fruit elliptic smooth as are flowr stalks [slightly hairy, Fruit ellipt smth
17429 Prickles numer scat hooked, Lflts simply serrat hairy on both surfs Sepals pinnate decid Pedun aggreg
17430 Calyx tube globose, Prickles hooked, Lflts simply serrat downy beneath, Bracteas overtopping the fruit
17431 Prickles hooked, Lflts ovate dbly. serrat smooth glandul Pedun aggreg smth. or minutely bristly, Sepals pinnate decid Fruit broad-ellipt [nate decid Fruit ellipt
17432 Prickles hooked uniform, Lflts ellipt somewh dbly serrat glauc hairy ben glandless, Sepals distantly pin-
17433 Prickles hooked, Lflts ovate dbly. serrat. hairy glandless, Sepals pinnate often dbly pinnate decid. Flw stalks aggregate hairy

ι Stem firm as well as bran. prickly, Stips nrly. ent Flws panicled very numer. semidouble, Styles exserted
ζ Has the flowers in a kind of panicle, and the leaflets large and thin [ther droopin
η Stem & bran prickly, Lflts ovate red ben Stips so finely denticul as to appear fringed or pannose, Flws ra-
ϑ Differs from var η principally in having the stems & branches almost unarmed & the stipules almost entire
ι Has double pink flowers
κ Has double blush, changing to white, sweet-scented flowers and is of rapid growth
λ Has large cream-coloured flowers, deepening almost into yellow in the centre
μ Has fine double crimson flowers with a yellowish tinge
ν Has very double pale yellow flowers
ξ Very beautiful white-flowered variety

7515
β Is a very strong-growing variety, quite deciduous, with blush flowers
γ Is an elegant variety with deep red flowers
δ Germens ovate, Pedunc. hispid with glanded hairs, Stems & pet prickly violaceous, Lflts ovate-lanceol

7516
β Is a beautiful variety, with much larger & more double flowers than those of the species, Stipules fringed

γ A vigorous-growing climber
δ A remarkable variety from its petals having a reticulated appearance

[ent. or bifid
17434 Decumb clthd with silky villi, Lvs tern petiol Lflts obov dply serrated toment. ben. Stip ov lanceol.
17435 Hybrid between P pedàta and P atrosanguínea
17436 Hybrid between P nemorālis and P formòsa
17437 Villous, Stems ascend bran Lvs flaccid radic ones quinate, Lflts obl.-cuneat coarsely and bluntly toothed, Stem lvs ternate few toothed [rather silky ben, Stip adnate ov lanceol acumin
17438 Villous, Stems bran diffuse, Radic lvs petiol 3-4-5-nate, Lflts ov or obov. obt dply. serrat feather-nrvd
17439 Villous, Stems ascend Lower lvs. 5-6 lflts upper ones ternate, Lflts. obl.-cuneif coarsely thd hairy on both surfs Cal. segms ov.-acumin. [Panicles dichotomous few flow.
17440 Stems erect covered with glandular hairs, Radic. lvs pinnate upper ones sessile ternate, Stip round membran.

[dply serrat toment ben
17441 Stem erect hairy corymbosely panic at apex, Lvs quinate lower ones petiolate upper alm. sess. Lflts lanceol.

7629 The only species
β The only form known in British gardens previously to about 1831



Page 456. Class XIII. — POLYANDRIA. Stamens many, hypogynous, or inserted under the Ovary.

Order 1. MONOGYNIA. Stamens many, hypogynous Style 1.

2635. *Rydnea.* Flowers hermaphrodite, apetalous, with petaloid urceolus between the stamens and pistil. Fruit baccate, indehiscent

2636 *Achlys.* Sepals 0. Petals 0. Flowers naked, disposed in a dense spike Stamens numerous. Stigma dilated, hence concave Ovary ovate, smooth, 1-celled, 1 ovule fixed to bottom of cell

2637 *Hunnemánia* Petals 4. Stamens indefinite. Stigma peltate, 4-furrowed, slightly 4-lobed Capsule silique-formed, rather compressed, 10-ribbed, 1-celled, 2-valved.

2638 *Lídia* Calyx permanent, 5-7-parted, lobes oval. Petals 0. Stamens numerous, inserted in the disk. Anthers roundish. Ovary 1, ovate. Style filiform Stigma 3-fid, rarely 4-fid. Berry dry, globose, pointed by the style, 6-8-seeded.

2639 *Azára* Calyx 4-5-parted. Petals 0 Style awl-shaped. Stigma obtuse Berry many-seeded.

2640. *Læ'tia.* Calyx 5-parted, marcescent. Petals 5, or wanting Stamens indefinite, hypogynous. Anthers roundish. Capsule fleshy, 3-5-valved, small, globose, acuminated with the style

2641. *Godoya* Calyx of many deciduous sepals Petals 5 Stamens numerous, disposed in many rows, or collected into five bundles. Anthers long, biporose Style simple. Capsule 3-5-valved, 3-5-celled, with the edges of the valves bent inwards, forming the dissepiments, many-seeded Seeds winged

2642. *Dendromècon.* Sepals 2, caducous. Petals 4. Stamens numerous, filif. Anthers linear. Stigmas 2, sessile, short. Capsule silique-formed, 1-celled, 2-valved. Placentæ marginal, filif. Seeds many, pear-shaped, smooth.

MONOGYNIA.

2635 *1162a RYA'NEA Vahl (*John Ryan*, M D, F R S, a corresp of Vahl's) *Flacourtidneæ* Sp 1—1
17442 - speciòsa *Vahl* showy ● □ or 10 .. W Trinidad 1823. C s l Vahl ec 1. 9
Patrinia pyrifera *Roth*

2636 *1166a. A'CHLYS Dec. (*Achlys*, the goddess of obscurity; genus obscure) *Podophyllàceæ* Sp 1—1
17443 - triphýlla *Dec.* three-leaved ⁂ △ or 2½. ap jn W N Amer. 1827. D s l p Hook. am 12

1170 PAPA'VER Sp 16—24
17444 7659a pérsicum *Lindl* Persian ○ or 1½ jn jl Bri Persia 1830? S co Bot reg 1570

17445 7662a rùbro-aurantiacum *Fis* red-orange ⅄ △ or ½ jl au R o Dahuria 1822. S s l Bot mag 2344
17446 7667a hórridum *Dec* horrid ○ or 2 jl au R N. Holl 1826 S co Sw. fl. gar 173

17447 7667b setigerum *Dec* bristle-bearing ○ or 2 jl.au W S Europe 1825 S co Sw fl gar 172
17448 - garicplnum *Burch* South African pr 4 jn R S. Africa 1835 S co Bot mag 3628

1172 ARGEMO'NE. Sp 3—5.
17449 7672a ochroleùca *Swt.* yellowish white ○ or 2 jl au S w Mexico 1827 S co Sw. fl. gar 242

17450 7672b grandiflòra *Swt* great-flowered ⅄ △ or 3 jl au W Mexico 1827 S co Sw. fl gar 226

1175 LIMNO'CHARIS. Sp 2—2.
17451 7687a Humbóldtii Rich Humboldt's ≛ △ or 1½ ap Pa Y B Ayres 1831 D m s Bot. mag 3248

2637. *1176a. HUNNEMA'NIA Swt (*John Hunneman*, a zealous botanist) *Papaveràceæ.* Sp 1—1
17452 - fumariæfòlia *Swt.* Fumaria-lvd ⅄ △ or 2 .. Y Mexico 1827. S r m Sw fl gar 276

2638 *1179a LU'DIA *Lam* (*Ludo*, to sport, in shape of lvs in young and old plant) *Bixàceæ.* Sp. 1—2
17453 - heterophýlla *Lam* various-lvd ● □ or 4 jl au Y Mauritius 1823. C s l.p Lam il 466 1, 2

2639 *1179b AZA'RA R & P. (*Jos Nich. Azara*, a Spanish promoter of science) *Homalinàceæ.* Sp 2—2.
17454 - dentàta *R. & P.* toothed-*leafed* ● ⌋ fra 10 . Y Valpar. 1830 L C s p.l Bot reg 1788
17455 - integrifòlia *R. & P* entire-leafed ● ⌋ fra 18 .. . Conception 1832. C l p Fl. per. 5 466

2640. *1179c LÆ'TIA L (*J de Lact*, of Antwerp, author of a history of America) *Bixàceæ.* Sp. 1—1
7456 - Thámnia *Swz* Thamnia ● □ or 4 jn.au W W Indies 1824. C s p l Br jam 25 2



History, Use, Propagation, Culture,

2635. *Rydnea* 17442 *speciòsa* is a beautiful and singular plant, deserving a place in every stove Ripened cuttings root freely in sand, under a bell-glass, in heat. The plant thrives in vegetable mould with a little sand

2636. *Achlys* 17443 *triphýlla.* This plant succeeds well in common garden soil, and is increased by division of the root

2637. *Hunnemánia.* For culture, &c, see Eschschóltzia, p. 1218.

2643 *Platystèmon* Sepals 3, caducous Petals 6. Stamens numerous. Filaments dilat Membrane cordate. Anthers linear Ovaria numerous, linear, each terminated by a linear sessile stigma. Capsules distinct, torulose, articulated, indehiscent, transversely many-celled, hispid. Seeds pendulous, solitary in the cells

2644. *Platystigma* Sepals 3, ovate, deciduous, hairy. Petals 4-5 Stamens numerous Filaments thread-like. Anthers linear, 2-celled, opening sideways Stig 3, ovate, acute, erect, divergent Caps oblong, attenuated at base, 1-celled 3-furrowed, 3-valved, opening from top to base. Seeds numerous, minute, egg-shaped, black, smooth, shining

2645 *Cálythrix* Calyx drawn out into a cylindrical tube; lobes ending in a long bristle each. Stamens 10-30, free Fruit dry, indehiscent, 1-celled.

Order 2. DI-TRIGYNIA. Stamens many, hypogynous. Styles 2-3.

2646 *Pleurándra.* Stamens 5-20, all leaning to one side, and fertile. Ovaries 2. Styles filiform. Sepals and petals 5

Order 3. TETRAGYNIA. Stamens many, hypogynous Styles four

2647 *Eschschóltzia.* Stamens indefinite Stigmas 4, 2 short and 2 long. Caps. elongated, silique-formed, 2-valved, 1-celled. Cal calyptrate. Recept expanded.

Order 5 POLYGYNIA. Stamens many, hypogynous Styles many.

2648 Talaúma Carpels disposed in spikes, 1-2-seeded, joined together into a strobile-like fruit opening valvately and irregularly on the outside Calyx of 3 sepals

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MONOGYNIA.

17412 Under surface of the leaves stellately hairy on the ribs, Peduncles 1-flwd.

17413 Lflts with very unequal sides upper side or front coarsely sinuate-toothed or lobed, Lobes blunt finely rayed with nerves

17444 Caps hispid oval, Sepals hairy, Lvs pinnatif. hairy laciniated part often terminating in bristles, Stems bran and leafy [Lbs cut, Lobules termin by a bristle

17445 Caps. hispid obov. obl Sepals bristly, Pedun. radic very long covered with adpressed hairs, Lvs pinnately lbd

17446 Caps smooth ellipt. Sepals hairy, Stem few-flwd. covered with stiff bristles, Lvs somew stem-claspg. glauc sinuately pinnatif. [terminated by a bristle

17447 Caps smooth obov. Sepals rather setose, Stem smooth few-flwd. Lvs stem-claspg glauc toothed each tooth

17448 Caps smooth obov -obl. Sepals hairy, Stem covered with numer bristly hairs, Lvs sess. hispid sinuately pinnatif Lbs ov and distant

17449 Lvs profoundly sinuat or pinnatif glaucescent, Nrvs. with prickly bristles, Flws solit. Caps. oblong dply. 5-6-furrowed covered with smoothish reflex prickles

17450 Lvs. sinuated smooth spiny-toothed, Nrvs. unarmed, Flws panic polyandr. Caps. bluntly quadrangul almost unarmed

17451 Lvs petiol roundish-ov. obtuse 7-nrvd central one remarkably swollen below, Petioles terete, Pedunc. elongat. 1-flwd Petals twice length of cal. Pistils 6

17452 Leaves decompound triternate glaucous, Lflts. linear bluntish

17453 Lvs obov. shining veiny those of the young plants small and spinosely-toothed those of adult ones larger and quite entire

17454 Leaves in pairs toothed larger one elliptical smaller one roundish, Flws umbellate

17455 Lvs in pairs quite entire larger one obovate smaller one roundish, Flws. in drooping spikes

17456 Flws apetalous, Pedun. axill many-flwd sub-divided, Lvs oblong acute somewhat crenated shining



and Miscellaneous Particulars

2638. *Lùdia.* Shrubs with lateral, almost sessile, flowers, which thrive in a mixture of loam, sand, and peat, and ripened cuttings root freely in sand, under a hand-glass, in heat. The native name of L. heterophýlla is *Bois sans écorce*

2639 *Axàra.* For propagation and culture see Lùdia.

2640. *Læ'tia.* Propagation and culture as recommended for Lùdia.

2641. *1190*a*. GODOY'*A* R & P. Godoya (*Em de Godoy*, Prince of the Peace.) *Guttiferæ*. Sp. 1—1.
17457 - -gemmiflôr*a Mart* bud-*like*-flowered ♣ □ or 8 ..... Y Brazil 1820. C s.l.p Mart. br. 74

2642 *1190*b*. DENDROME'CON *Benth* (*Dendron*, tree, *mekon*, poppy, hab and affin.) *Papaveràceæ*. Sp 1—.
17458 - - rigida *Benth*. stiff-*habited* ♣ ⌐ or 2 ... . Y Californ. 1833. S s.l Hook. ic. 1. 37.

2643 *1190*c* PLATYSTE'MON *Benth*. (*Platys*, broad, *stemon*, stamen.) *Papaveràceæ*. Sp. 2—2
17459 - - californ*icus Benth*. Californian ○ or 1 au Y Californ. 1833. S s.l Bot. reg. 1679
Boóthi*a* californ*ica Douglas ms*
17460 - - leiocárpus *F & M*. smooth-fruited ○ or 1 jn.au W Y Siberia 1837. S s.l Fl. cab 2 p 129

2644 *1190*d* PLATYSTI'GMA *Benth*. Platystigma. (*Platys*, broad, *stigma*.) *Papaveràceæ*. Sp 1—1
17461 - - lineàre *Benth*. linear-*leafed* ♣ ⌐ pr ½ ... Y Californ. 1833 S s l Hort tr 2 s 406-7

2645 *1193*a* CA'LYTHRIX *Lab*. (*Kalyx*, calyx, *thrix*, hair ; terminations of calyx.) *Myrtàceæ* Sp. 1—3
17462 - - virgàta *Cun* twiggy-*bran* ♣ ⌐ or 2 ap au W N. S W. 1823. C. s p Bot. mag 3323
ericoides *Cun*. in Field's New South Wales, p. 350.

1194 MENTZE'LI*A* Sp 4—5
17463 7736*a* hispida *W* hispid ♣ △ or 1½ jn jl Y Mexico 1820. S s l Bot mag 3205
17464 - - stipitàta *Dec* stalked ♣ △ or 2 o Y Mexico 1835. C s l Botanist, 34

1197. *CI'STUS* Sp 27—40.
17465 7740*a* Clùsii Dun. Clusius's ♣ or 3 jn jl W Spain 1810. C s p Sw cist 32
17466 7742*a* oblongifôlius *Swt* oblong-leaved ♣ or 3 jn jl W S Europe .. C co Sw. cist. 67

17467 7742*b* asperifôlius *Swt* rough-leaved ♣ or 2 jn jl W S Europe ... C s l Sw cist. 87
17468 7732*c* psilosépalus *Swt* smooth-sepaled ♣ or 3 jn jl W ... ... C s l Sw cist. 33

17469 7745*a* lætifôlius *Swt*. broad-leaved ♣ ⌐ or 4 jn W Barbary 1656 C p l Sw. cist. 16
17470 7746*a* florentinus *Lam*. Florentine ♣ or 3 jn jl W Italy 1825 C s l Sw cist 59
17471 7748*a* cymôsus *Dun*. cymose ♣ or 3 jn jl P . ... C s l Sw. cist. 90

17472 7750*a* obtusifôlius *Swt* obtuse-leaved ♣ or 3 jn jl W .... C s l Sw cist. 42
17473 7750*b* Cupani*ànus* Presl Cupani's ♣ ⌐ or 2 jn jl W Sicily ... C s l Sw cist 70]

β acutifôlius *Swt*. acute-leaved ♣ or 1 my s W S. Europe ... C s l Sw. cist. 78
C. acutifôlius *Swt*., *C* salvifôlius β humifûsus *Dec*.

1198 HELIA'NTHEMUM Sp 72—130
17474 7759*a* rugôsum *Dun* wrinkled-*lvd* ♣ ⌐ or 3 jn jl Y spt. Portugal 1800 C s p Sw cist. 65
17475 7763*a* cheiranthoides *Pers*. Stock-*leaved* ♣ ⌐ or 3 jn jl Y Portugal 1818. C s p Sw cist. 107
17476 7763*b* cándidum *Swt* white-*leaved* ♣ or 3 jn jl Y Spain ... C s l Sw cist 25
or 1 jn jl Y Mexico 1823. C s p Sw. cist 113
17477 7764*a* glomerâtum *Lag*. glomerate ♣ ⌐ or 1 jn jl Y Mexico 1823. C s p Sw cist 110
17478 7764*b* brasiliénse *Pers*. Brazilian ♣ △ or ½ jn jl Y Brazil 1323. C s.p Sw. cist 43

17479 7764*c* lignôsum *Swt* woody ♣ or 1 jn jl Y ... 1806 C s.p Sw cist 46
17480 7773*a* arábicum *Pers* Arabian ♣ ⌐ or 1 jn jl Y S Europe 1826 C s p Sw. cist 97

17481 7777*a* dichótomum *Dun* dichotomous ♣ ⌐ or 1 jn au Y Spain 1826 C s p Cav ic 3 262 2
17482 7778*a* pulchéllum *Swt*. neat ♣ or ½ my jl Y S Europe 1820 C co Sw. cist 74

17483 7778*b* alpéstre *Dun* alpine ♣ or ½ jn jl Y Germany 1818 C s.l Cr au 6 1
17484 7779*a* vineàle *Pers*. vine ♣ or ½ jn jl Y Germany 1817 C s.l Sw. cist 77

17485 7784*a* barbàtum *Pers* bearded-*stipul* ♣ or 1 jn jl Y S Europe .. C co Sw cist 71
17486 7793*a* macránthum *Swt*. long-flowered ♣ or 1 my jl Crea W ..... . C co Sw. cist 103
β múltiplex *Swt* manifold ♣ or 1 my jl Crea W ... . . C co Sw cist 104
17487 7793*b* rhodánthum *Dun*. red-flowered ♣ or ½ my jl R Spain 1800. C s.p Sw. cist 7
17488 7793*c* canéscens *Swt*. canescent ♣ or ½ my jl R S.Europe 1800 C s.p Sw. cist. 51

17489 7793*d* lanceolàtum *Swt*. lanceolate-*lvd* ♣ or ½ my.au W Y hybrid 1818 C s.p Sw. cist 100
17490 7798*a* variegàtum *Swt* variegated ♣ or ½ my jl R.w S Europe .. C s p Sw cist 38

17491 7798*b* versicolor *Swt* party-colored ♣ or 1 jn jl R w S Europe 1800 C s p Sw cist 26
17492 7803*a* hyssopifôlium *Tsn* Hyssop-leaved ♣ pr ½ my jn Y Italy ... C s l



History, Use, Propagation, Culture,

2641 *Godoya* is a genus of elegant trees worth cultivating A mixture of sandy loam and peat suits them, and ripened cuttings root freely in sand, under a hand-glass, in heat
2642. *Dendromècon* Requires some care to keep it through the winter,
2643. *Platystèmon*. Remarkable for the peculiar pale yellowish white colour of its flowers

17457 Lvs oblong bluntish obsoletely serrul Racemes axill or termin. compound elongated, Cal of 10 sepals Stamens about 40

17458 The only species

17459 Whole plant hairy spreading, Lvs lanceolate in threes, Scape solit Carpels hairy

17460 Carpels smooth

17461 Stems very short and densely covered with leaves, Lvs linear ent amplexic 1-nrvd. Pedunc. 1-flwd slightly hairy erect

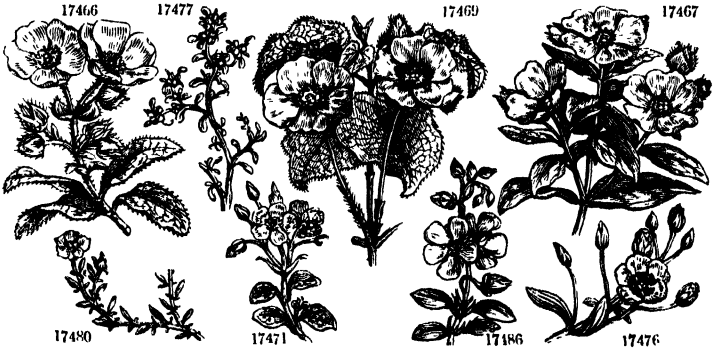
17462 Lvs on short petioles scattered lax patent (less so and more crowd in young bran) tereti-filif acute dotted, Tube of cal. elongat very narrow upwards

17463 Petals obov mucronately acumin longer th cal Stam 30-35, Lvs and flws nearly sessile
17464 Petals oval mucronately cuspidate much longer than cal Stamens 30-40, Flowers and leaves stipitate

[5-celled
17465 Lvs somew 3-nrvd linear margins revolute canes ben Cal 3- -epaled pilose, Sepals ovate acute, Capsules
17466 Erect, Bran hispid vill. Lvs on short footstalks obt -lanceol obl pubes and waved at margins veiny ben Pedunc cymose [rough, Flowers cymose
17467 Lvs alm sess ovate-lanceol acute 3-nrvd wrinkled smthish ciliat netted with veins ben Nrvs and veins
17468 Lvs on short footstalks obl -lanceol 3-nrvd acute undulat somewhat denticul and ciliat rather hairy, Petals broad cuneat imbric [broad cord villose
17469 Lvs broadly cord acute, Margins waved denticul ciliat Pedun bracteate somewhat cymose pilose, Sepals
17470 Lvs narrow-lanceol wrinkled reticul ben almost sess Peduncles villose generally 3-flwd
17471 Lvs broad-ovate twisted at top acutish wrinkled and hoary ben Footst dilat at base somewhat sheathing, Cymes 5 or 10-flowered [acute
17472 Lvs alm ses tapering to base ov-obl obt wrinkled clthd with starry pubes Outer sepals broadly cordate
17473 Lvs stalked cord -ov 3-nrved. reticul veined scabr ab clthd with fascicled hairs ben Margin fringed, Pedun pilose 2 3-flowered

β Lvs pubescent on both surfaces, Branches twiggy diffuse and rather prostrate

[oblique hoary ben
17474 Bran rath hairy clthd with leprous toment scabr brownish grey, Lvs sess tapering to base obov obl rath.
17475 Young bran vill toment hoary, Lvs toment hoary obl -lanc tapering to base, Ped very short 2-flwd Cal 5-sep
17476 Bran leprously white, Lvs obov -lanceol white on both surfs tapering to base pilose ab scabr from papillæ ben Sepals 3 or 5 acute [Racemes axill. or termin many-flowered
17477 Somewhat dichotom bran Bran rather tomentosely cinereous, Lvs lanceol -obl tapering to base hoary ben
17478 Branlts simple hairy, Lvs ovate-obl acute sess hairy, Pedun and cal hairy canescent, Pedun solit 1-flwd inner sepals ovate acumin [canescent nrvd ben furrowed ben
17479 Stem 4-gonal, Bark rough scaly, Bran hispidly hairy, Lvs ov -obl ending in petiole 3-nrvd hispidly hairy
17480 Bran twiggy, Lvs altern lin -obl hairy alm sess Pedun. solit 1 flwd almost oppos the lvs rameal or termin Cal hairy [slender few flowered
17481 Bran dichotom smthish Lvs. minute ovate acute glabr margins revolute on short footstalks, Racemes
17482 Bran clthd with hoary toment Lvs roundish or ovate obt green and beset with hisp hairs ab and hoary toment ben Rac simple, Cal pilose [Hairs cinereous
17483 Procumb Bran pilosely hairy, Lvs green on both surfs obl ellipt rather glabrous or with hairs in fascicles,
17484 Procumb Bran ascend pilosely toment canesc Lvs ov -obl green and strigosely pilose ab hoary toment ben, Rac simple few-flowered [Rac long hairy bearded many-flwd
17485 Bran clothed with fascicled hairs, Lvs hairy green both surfs lower ones roundish-ovate upper ones ellipt.
17486 Bran procumb rather toment Lvs flat ov -obl acutish smth ab densely toment ben pale cinereous Stips rath pilose about eq to petioles [Stips awl-sh pilose and bristly at tip
17487 Procumb Bran rath toment and hoary, Lvs obl revolute margins hoary toment ben greenish glauc ab
17488 Bran rath toment Lvs flat or hardly revolute at margins toment. hoary ben greenish glauc ab lower lvs ov -obl obt upper lanceol acute [Stips awl-sh lin longer than pets
17489 Bran hoary toment at apex, Lvs lanceol acute margins revolute green and smthish ab hoary toment ben
17490 Bran toment rath hoary, Lvs lanceol acute flattish hoary toment ben green and rath scabr ab Stips lin ciliat longer than pets Cal clthd with violac toment [at top somewh longer than lvs.
17491 Lvs oblong flat or concave above hoary-toment beneath green and glabr above, Stips obl -lin ciliat bristly
17492 Bran hairy-tomentose, Lower lvs oval upper ones oblong-lanceol green on both surfs flat hairy Cal hairy, Petals imbricate



and Miscellaneous Particulars

2644 *Platystigma.* A pretty little hardy annual, and requiring the usual treatment of such
2645 *Calythrix.* A genus of singular plants, requiring the same treatment as that recommended for Lùdia.
p 1213

		α crocàtum *Swt*	saffron-cld	♀	or ½	my jl	Saf.	Europe	...	C co	Sw cist 92	
		β cùpreum *Swt*	copper-cld	♀	or ½	my jl	Cop.	Naples	...	C s l	Sw cist. 58	
		γ multiplex *Swt.*	double-*flwd*	♀	or ½	my jl	Cop.	Italy	..	C s p	Sw cist. 72	
17493	7803*b* cùpreum *Swt*		copper-*cld*	♀	or ½	jn jl	Cop.	hybrid	1825?	C co	Sw cist. 66	
17494	7803*c* venùstum *Swt.*		beautiful	♀	or ½	jn jl	R	S.Europe	1800	C s p	Sw cist. 10	
17495	7803*d* Millèri Swt		Miller's	♀	or ½	my jl	Cop	S Europe	? ...	C co	Sw. cist. 10	
17496	7805*a* diversifòlium *Swt*		divers-leaved	♀	or ½	my.jn	R	Europe	...	C co	Sw. cist 95	
17497	7805*b* eriosépalon *Swt*		woolly-sepaled	♀	or ½	my jl	Y	S Europe	.	C s p	Sw. cist. 76	

DIGYNIA.

2646 *1201*a* PLEURA'NDRA *Lab* (*Pleura*, rib, *aner*, anther, stamens) *Dilleniàceæ* Sp 1—6.

17498 - - bracteàta *R Br.* bracteate ♣ ⊔ or 2 my jn Y N Holl 1823. C s p Deless i 78

1202 *PÆO'NIA* Sp 19—22

7812 *Moùtan*

δ Annesleæ (*pink-flowered*) Hort tr. 6 7 η ròsea-plèno (double-rose) And rep 373

ε Hùmeæ (*purple-flowered*) Bot reg 379 ☽ Rawèsii (*pale pink-flowered*)

ζ ròsea-semiplèna (semidouble-rose) ι cárnea-plèna (double-flesh-*coloured*)

7813 albiflòra

α vestàlis (*white-flowered*) Bot. rep. 64 α* cándida (*flesh-coloured-flowered*)

7816 officinàlis

☽ anemoniflòra (*red-flowered*) Bot mag 3175 ι Sablæi (*dark-crimson*) B. cab. 1075.

7821 arietina

β oxoniénsis (*pale-blush-flowered*) subvar flòre-álbo (white-flowered)

17499	7823*a* Rússi Biv.	Russ's	✱ △	or 2	my jn	C	Sicily	.	R s l	Sw fl gar 122	
17500	7823*b* pùbens *B M.*	downy	✱ △	or 2	my jn	R	..	.	R s l	Bot mag 2464	
17501	7823*c* villòsa *Swt*	villous	✱ △	or 2	my.jn	R	S Europe	1816	R s l	Sw. fl gar 113	
17502	7823*d* Brówni Dou	Brown's	✱ △	or 2	my jn	R	N. Amer	1826	R s l		

7826 tenuifòlia

β flòre-plèno (double-flowered) γ latifòlia (broad-leaved)

TRIGYNIA.

1204 *DELPHI'NIUM* Sp 47—53

17503	7830*a* Menzièsii Dec.	Menzies's	✱ △	spl 2	jn jl	B	N Amer.	1826	D p l	Bot. reg 1192
17504	7831*a* virgàtum *Poir*	twiggy	○	or 1½	jn jl	B	Syria	1823	S co	Deless 1 55
17505	7834*a* Oliveriànum Dec	Oliver's	○	or 1½	jn jl	B	S Europe	1826	S co	Deless 1 51

7837 grandiflòrum

γ álbum δ álbum plèno ι pállidum ☽ rubrum

7838 cheilánthum

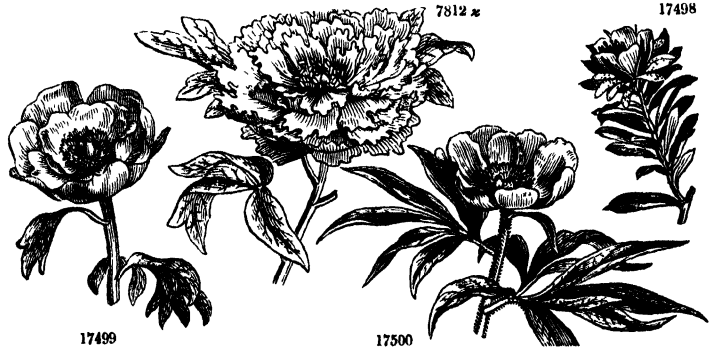
	β múltiplex *D Don* double-flwd	✱ △	spl 5	jn	Dp	B	England	hyb	D co	Bot reg 1944
	D Barlòwii Hort .									

7839 intermèdium

α pilosissimum β leptostàchyum γ pállidum *Bot reg* 1969

17506	7840*a* alpinum *W & K*	alpine *Bec*	✱ △	or 5	jl au	B	Hungary	1816	D co	W & K 3 246
17507	7842*a* fissum *W & K*	cleft	✱ △	or 4	jl au	B	Hungary	1816	D co	W. & K. 1 81
17508	7842*b* velutìnum *Bert*	velvety	✱ △	or 4	jl au	B	Italy	1819	D co	
17509	7842*c* pentágynum *Lam*	five-styled	✱ △	or 2	jl au	B	S Europe	1819	D co	Desf at. 1 111
17510	7842*d* élegans *Dec.*	elegant	✱ △	or 1½	jl au	B	N Amer		D co	
	β flòre plèno	double-flwd	✱ △	or 1½	jn jl	B	N Amer	1741	D co	Fl con 43
17511	7842*e* amœ'num *Stev*	pleasing-*blue*	✱ △	or 2	jl au	Pa B	Siberia	1818.	D co	Gm si 4 77
17512	7843*a* palmatifidum *Dec*	palmate-cleft	✱ △	or 3	jl au	B	Siberia	1824	D co	Gm si 4 79
	β glabéllum *Dec*	smoothish	✱ △	or 3	jl au	B	Siberia	1817	D co	Gm si 4 75
17513	7851*a* montànum *Dec*	mountain	✱ △	or 4	jl au	B	Switzerl.	1819	D co	
	β bracteòsum *Dec*	bracteose	✱ △	or 8	jl au	B	S Europe	1816	D co	
17514	7851*b* dasyárpum *Stev*	thick-fruited	✱ △	or 4	jl au	B	Caucasus	1819	D co	

7812 ✱ 17498



17499 17500

History, Use, Propagation, Culture,

2646 *Pleurándra.* A genus of pretty small green-house shrubs A mixture of loam, peat, and sand suits them Cuttings root readily under a hand-glass

α Has flowers saffron-cld., with more or less of a ferruginous tint, and may represent the species
β Has flowers of a reddish copper colour
γ Has double flowers of a reddish copper colour [Stips lanceol acute ciliat. bristly at apex

17493 Bran. rath toment adult ones glabr Lvs. obl.-lanceol channeled green and hairy ab. hoary toment ben.
17494 Bran. glabr. warted somewh toment at apex, Lvs obl.-lanceol. acute flat or hardly revolute marg hoary toment ben green and shining ab [Cal hairy
17495 Bran hoary-toment Leaves oblong bluntish flat green on both surfs hairy, Stips falcate longer than petioles,
17496 Bran rath toment Lvs stalked green hairy ab hoary tomentose ben lower ones oval or obl obt flat upper lin lanceol ciliat 3-4 times longer than pet [hairs, Cal. clthd with woolly hairs
17497 Stems hoary at apex, Lvs lanceol acute margins somewh revolute green on both surfs and beset with starry

DIGYNIA.

17498 Lvs obl. smthish mucronulate, Bracteas crowded about the sess flws which are villous on the outside Ovaries very hairy

7812
α álbida-plèna (double-white)
λ variegàta (*white and purple*) Sw fl gar 2 s 238
μ lácera (*bright rose-red-cld-flwd*) Bot reg 1771
ρ punícea (*carmine-coloured*) Sw fl gar 2 s 207
ξ peciòsa (showy *pink-flowered*)

7813
ι Póttsii (*crimson-flowered*) Bot reg 1436
κ Reevesii (*pink-flowered*)

7816
κ Báxteri (*crimson*)
λ variegàta (variegated-*leaved*)

7821

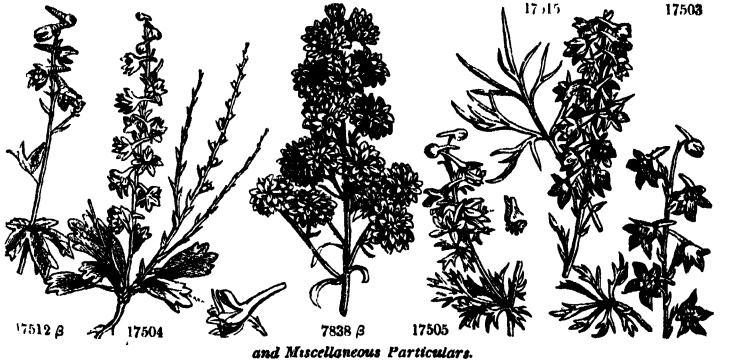
17499 Carpels hairy, Segments of leaves elliptical entire hardly puberulous beneath
17500 Lvs bitern Lflts lanceol acumin densely clthd with soft pubescence ben Ovaries toment each crowned with somewh orbic stigma [somew bitern upper ternate, Lflts pinn
17501 Carpels densely toment erect but somewh incurv at apex, Lvs villous pubes and whitish glauc ben lower
17502 Carpels 5 quite smooth erect, Lvs smooth on both surfs Lflts ternately divid. or pinnatif jagged, Segments obl those of upper lvs very blunt

TRIGYNIA

17503 Petioles hardly dilated at base, Lvs 5 parted with entire linear lobes, Brac trifid, Root grumose
17504 Stem erect bran from base, Lvs. smooth lower ones 3-fid with toothed lbs those of bran and flws ent. and acute, Rac loose [Caps smooth
17505 Stem smooth a little bran Bran hardly diverging, Flws few loosely racemose, Pedicels length of bracteas,

δ cæruléscens *Bot reg* 1984. ε ranunculifolium ϛ láxum

17506 Petioles not dilat Lvs cordate 5-7-cleft upper ones 3-lobed, Racemes branched
17507 Petioles dilat at base, Lvs many-parted linear lobes, Racemes elevated, Spur straight longer than flower
17508 Petioles dilat and sheathing at base, Lvs 5-parted multifid with lin lbs Rac lax clthd with soft down as are the stems, Spur curved, lower brac long th flws [Pet shorter than cal
17509 Pet ditto, Lower leaves 5-lobed lobes cut and bluntish at apex upper ones 5-parted many cleft into linear lbs
17510 Pet hardly dilat at base, Lvs smth 5-parted with 3-5-cleft lobes and linear lanceol ac lobules, Rac lax few-flwd Spur curved short th sepals [th cal Spur straight
17511 Pet ditto, Lvs pubes ben 5-part with lanceol pinnatif lbs and linear acute lobules, Rac bran. Petals shorter
17512 Petioles not dilated at base, Lvs ciliat 5-cleft somew truncate at base lbs cut at apex upper lvs of 3 ent 3-fid lbs Brac caps and cal smooth
17513 Petioles not dilat at base, Lvs pubes 5-lbd Lbs wedge-sh at base but 3-fid and cut at apex, Rac simple, Brac cal and caps pubesc. Spur bent inwards [as long as brac Spur straight
17514 Pet ditto, Lvs pubes 5-lbd Lbs lanceol somewh trifid dply toothed at apex, Rac simple pubes Pedic thrice



and Miscellaneous Particulars.

Pæònia Moûtan. **The varieties of this species have lately been greatly increased, in consequence of plants having ripened seeds in various parts of France, and also as the result of cross-fecundation with the herbaceous peony, both on the Continent and in England.**

17515	7851*c* **speciôsum** *Bieb*	showy	♃	△	or	4	jl au	B	Caucasus	1816	D co	Deless 1 62
17516	7851*d* **triste** *Fis*	sad	♃	△	or	2	jl au	Br	Dahuria	1819	D co	
17517	7852*a* **albiflôrum** *Dec*	white-flowered	♃	△	or	4	jl au	W	Armenia	1823	D co	Deless 1 58
17518	- **tenuissimum** *Sibth.*	slenderest-*bran*		○	or	1	au	P	Greece	1835	S r m	
17519	- **viminèum** *D Don*	wand-like	♃	△	pr	4	au	B	N Amer	1835.	D p l	Sw fl gar 371

TETRAGYNIA.

2647	*1205*a* **ESCHSCHO'LTZIA** Cham	(*Dr Eschscholtz*, a botanist)							*Papaveràceæ*		Sp 3—3	
17520	- **californica** *Cham*	Californian	⁂	△	or	1	jl o	Y	Californ	1826	S co	Sw fl gar 265
17521	- **crôcea** *Benth*	Saffron-*old*	⁂	△	or	1	jl o	Saf	Californ	1833	S co	Bot mag 3496
	β flôre-pleno	double-flwd	⁂	△	or	1	jl o	Saf	gardens	1837	D co	
17522	- **compácta** *Lindl.*	compact	⁂	△	or	1	jl o	Y	California	.	S co	Bot mag 1948

PENTAGYNIA.

1208 **AQUILE'GIA** Sp 14—18

7882 **vulgàris**

β **corniculâta** (small-horn *double blue & white flwd*) γ **invérsa** (inverted *double blue & white flwd*)

17523	7882*a* **sibirica** *Lam*	Siberian	♃	△	or	1½	my jl	B w	Siberia	1806	D co	Deless 1 17
17524	7882*b* **Garneriàna** Swt	*Miss* Garner's	♃	△	or	1½	my jl	P Str	Eng hyb	1829	D co	Sw fl g 2 s 103
17525	7884*a* **davùrica** *Patr*	Dahurian	♃	△	or	1½	my jl	P	Dahuria	1827	D co	Deless 1 49
17526	7885*a* **anemonoides** *W*	Anemone-like	♃	△	or	1	my jl	P	Altai	1827	D co	
17527	7886*a* **grandiflôra** *Patr*	great-flowered	♃	△	or	1½	my jl	B	Siberia	1818	D s p	
17528	7887*a* **formôsa** *Fis*	beautiful	♃	△	or	1½	my jl	R o	Kamsch	1822	D s p	

POLYGYNIA.

1217 **MAGNO'LIA** Sp 14—18.

7904	**grandiflôra**										
	δ **ferruginea** *B M*	rusty	●	or	20	jn o	W	N Amer		L l p	
	ε **exoniénsis**	Exeter	●	or	20	jn o	W	N Amer	.	L l p	Bot cab 1814
	ζ **rotundifôlia**	round-leaved	●	spl	20	jn o	W	N Amer	.	L l p	
	η **præ'cox**	early-*flowering*	●	or	20	jn o	W	N Amer		L l p	
	θ **crispa**	curled	●	spl	20	jn o	W	N Amer		L l p	
	ι **angustifôlia**	narrow-leaved	↕	or	20	jn o	W	Paris	1825	L l p	
7905	**glaûca**										
	β **Thompsoniàna**	Thompson's	⁂	or	26	jn	W	hybrid	1817.	L l p	Bot. mag 2164
	γ **longifôlia**	long-leaved	↕	or	20	jn o	W	N Amer	...	L p l	
7907	**conspícua**										
	β **Soulangeàna**	Soulange's	⁂	⎵	or	3	ap my	P w	hybrid	1826	C p l	Sw fl. gar 260
	γ **Alexandrina**	*Empress* Alex	⁂	⎵	or	3	mr my	P w	Fr hyb	1831	C p l	
	δ **speciôsa**	showy	⁂	⎵	or	3	ap my	P w	Fr hyb		C p l	
	ε **citriodora**	lemon-scented	⁂	⎵	or	3	ap my	P w	Fr hyb	..	C p l	
7915	**acuminâta**										
	β **Candóllii Savi**	De Candolle's	⁂		or	60	my jl	Gsh		...	L s l	Bib. it 224
	γ **máxima**	largest	↕		or	60	my jl	Ysh G	...		L s l	

2648 *1217*a* ***TALAU'MA*** J (The vernacular name of the South Amer species) *Magnoliàceæ*. Sp 2—3

17529	- **Plumièri** Dec	Plumier's	⁂	▭	fra	.	W	Antilles	1829	L p l	
17530	- **Candóllii** Blume	De Candolle's	⁂	▭	fra 15	f mr	Cr taw.	Java	1827	L p l	Bot reg. 1709

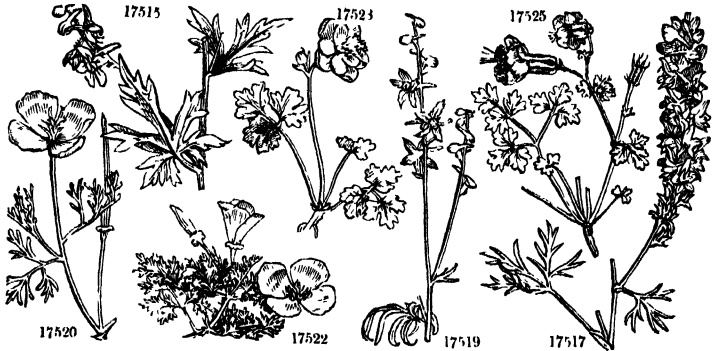
Magnòlia odoratissima *Roxburgh*, No 7910 is also referable to this genus

1223 ***ASI'MINA*** Sp 4—4

17531	7932*a* **grandiflôra** *Dun*	large-flowering	⁂		or	3	ap jl	W	Georgia	1820.	L p l	Dun mon 11

1226 **ANEMO'NE** Sp 31—45

7932	7944*a* **vitifôlia** *Buc*	Vine-leaved	♃	△/	or	3	s	W	Nepal	1829.	S l	Bot reg 1185
7933	7948*a* **Fischeriàna** Dec	Fischer's	⁂	△	or	½	ap my	W	Siberia	1827	D co	



History, Use, Propagation, Culture,

2647. ***Eschscholtzia.*** The generic name Chrysèis has been applied to this genus by Dr Lindley, under the supposition that the name *Eschscholtz* was the same as that of *Elsholtz*, after whom another genus had been named. It has, however, since been proved that the names are quite distinct, therefore we retain that of Eschscholtzia. Showy flowers, which, though they will occasionally last several years as perennials, are grown as annuals, and are desirable for the flower-garden

17515 Pet ditto, Lvs pubes 5-lbd lbs dply. serrat Brac lanceol villous clammy, Spur curved, Capsule smooth
17516 Pet ditto, Lvs 3-5-parted, Lbs narrow somew pinnatif. acute upper lvs. 3-parted with entire lobes, Rac. lax, Caps pubes [long th pedicel
17517 Pet dilat. and sheathing at base, Lvs many-parted, Lbs. linear, Rac elongat. crowded, Spur straight blunt rather
17518 Stem erect slender a little bran. and rather pubes at apex, Pedic much longer than the awl-sh. bracteas
17519 Lvs petiolate tripartite segms lin.-cuneate ent or dply. and uneq bifid, upper ones narrowest, Rac. lax elongat Rachis and pedicels downy

TETRAGYNIA.

17520 Stigmas 4 two longer than the others, Seeds globose almost black
17521 Stem branching and leafy, Segms of lvs linear, Peduncle with funnel-shpd. appendage, Limb much dilated, Cal long and acumin. [large nearly flat
17522 Stem dwarf densely bran Segms. of lvs linear wedge-sh tridentate at apex, Cup of pedunc. funnel-sh Limb

PENTAGYNIA.

δ stellàta (starred *double blue & white flwd*) ε dégener (degenerate *double blue & white flwd*)
17523 Spur incurved, Caps very smooth, Stem 1-2-flwd almost naked smooth, Sepals very blunt
17524 Hybrid between A sibirica and A vulgàris
17525 Spur straight equal in length to petals, Stamens equal in length to petals, Styles protruding
17526 Spur straight very short equal in length to pet Petals thrice as long as cal Pedun radic 1-flwd almost naked
17527 Spur straight length of limb, Sepals oval, Stem few-flowered, Lvs deeply divided [longer than petals
17528 Spur straight much longer than petals and very short stamens, Styles not protruding, Sepals lanceol. much

POLYGYNIA.

δ Differs from var ε in having rather broader leaves and larger flws, and forms a broader and more compact
ε Lvs oblong-elliptical generally rusty beneath, Flws somewhat contracted [tree or bush
ζ Has roundish leaves
η Lvs oval-oblong, Flws. fully expanded
θ
Lvs lanceol pointed at both extremities wavy

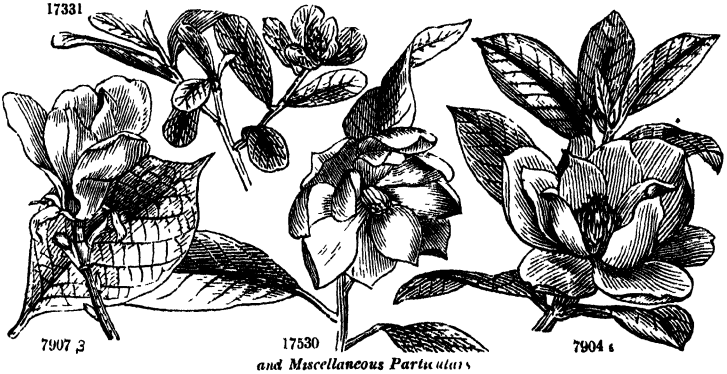
β Is a supposed hybrid between M glaúca and M tripétala
γ Lvs ellipt acute at both ends resembling those of M tripetala but thicker smaller and glaucous beneath

β Hardly distinguishable from M conspicua except by the flws which resemble in form those of M purpùrea
γ Closely resembling var β from which it differs in flowering somewhat earlier [var. grácilis
δ A hybrid scarcely differing from var γ
ε

β Leaves ovate oblong acute, Flws greenish
γ Leaves much larger than those of the species

17529 Lvs ovate roundish somewh cuneated at base, Petals 12 thick oblong obtuse
17530 Lvs oblong acumin at both ends, Flws 9-12 petaled outer ones short, Pedun 1-flwd rather droopg clthd as are petioles of young lvs with ruf vill

7531 Lvs cuneate-obov obt under surf as well as bran clthd with brown pubes Flws sess Outer petals obov much larger than cal [ab bluntly cord 5-lbd 3-lvd
7532 Lvs large cord 5-lbd woolly beh Lbs broad ov cut and cren those of involucr stalked woolly beh smth
7533 Lvs bitern those of involucr on very short stalks, Lbs elongat acumin Pedic 2 pubescent Sepals 5 elliptical



and Miscellaneous Particulars

2648 Talaúma is a genus of magnificent trees and shrubs, resembling magnolias A mixture of loam, peat, and nd suits them They may be increased by layers or inarching on Magnòlia obovata, and ripened cuttings will root sand, under a hand-glass, in heat

7949 nemorōsa
β flōre-plēno (double-flowered) γ cærùlea (blue-*flowered*)

17534	7950*a* cærùlea *Dec*	blue	⅄ △	or	½	my jn	B	Siberia	1826.	R s p	Deless. 1. 14
17535	7952*a* umbellàta *W*	umbelled	⅄ △	or	1	my	W	Levant	1824	S s l	Deless. 18

1227 CLE'MATIS. Sp. 33—45

7970 flórida
γ Siebóldtii D Don Siebold's ♃ or 10 jn Gsh &P Japan 1836 L s.l Sw.fl.gar 396
C flórida bicolor *Lindl*, Bot reg n s 25.

17536	7974*a* campaniflòra *Brot.*	bell-flowered	♃	or	6	jn s	W	Spain	1810	L s l	Bot cab 987
17537	7981*a* grandiflòra *Dec*	large-flowered	♃ □	or	12	f my	Y G	S Leone	1823	L p l	Bot. reg 1234
17538	7981*b* dahùrica *Pers.*	Dahurian	♃	or	12	s	Y G	Dahuria	1820	L p.l	
17539 -	- grāta *Wal*	grateful-*scented*	♃	or	12	o n	W	E Indies	1831	S l	Wal aslat.1.98
17540 -	- cærùlea *Lindl*	blue-*flowered*	♃	or	10	ap	V	Japan	1836	L s l	Bot. reg. 1955
17541 -	- montàna *Ham* nepalénsis *Dec*	mountain	♃	or	20	my	W	Nepal	1831.	L l	Sw fl gar 2 s 253

Page 490. CLASS XIV — DIDYNAMIA 4 STAMENS, of which two are shorter than the others.

Order 1. GYMNOSPERMIA Pericarpium divided into four lobes resembling naked seeds.

2649 *Lophánthus* Calyx equal, or oblique, or sublabiate, usually 15-nerved, superior teeth the largest Corolla bilabiate Stamens ascending, or diverging
2650 *Aphanochìlus* Corolla tubular Limb short, bilabiate. Anthers versatile Cells divaricate. Lobes of gynophore shorter than ovarium
2651 *Dysophýlla* Anthers terminal, also the younger ones confluently 1-celled Stamens somewhat declinate Corolla almost regular
2652 *Pycnóstachys* Lower segment of corolla elongated, concave Teeth of fructiferous calyx subulately spinose Whorls of flowers spicate
2653 *Sphacele* Calyx reticulately veined, 5-toothed, limb not dilated, teeth nearly equal Tube of corolla ample Cells of anthers linear, diverging
2654 *Perìlòmia* Achenia membranously winged Segments of corolla flattish Gynophore elongated, incurved, oblique at apex Lips of calyx entire
2655 *Roýlea* Calyx tubular at base, 10-nerved Segment 5, equal, oblong, membranous
2656 *Microméria* Tube of corolla rarely exserted Calyx nearly equal Superior stamens antheriferous
2657 *Gardoquia* Calyx tubular, somewhat incurved, with an equal or sub-bilabiate mouth Tube of corolla much exserted Stamens 1-3, now and then sterile
2658 *Physostègia* Calyx obscurely veined, inflated after inflorescence Corolla much exserted, with an ample throat
2659 *Coleus* Fructiferous calyx toothed, not spiny, with an open mouth Filaments monadelphous Lower segment of corolla elongated, concave
2660 *Chilòdia* Upper lip of calyx entire, tube short, 13-nerved, lower one bifid. Anthers mutic, 2-celled

Order 2. ANGIOSPERMIA Seeds several, enclosed in an undivided pericarpium

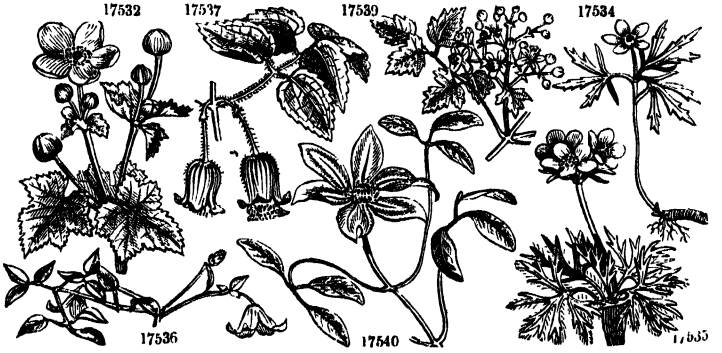
2661 *Pentarāphia* Calyx adnate to the ovarium. Corolla superior Ring of glands hardly present. Anthers connected by pairs
2662 *Rytidophýllum* Calyx adnate to the ovarium Corolla superior. Epigynous ring thick and sinuated Leaves stipulate
2663 *Sinningia* Corolla oblique, ringent, with only one gibbosity at base. Calyx adnate to the ovarium, angularly winged
2664 *Amphicome* Calyx tubular, 5-toothed Corolla tubular, ventricose near base Limb 5-lobed, ciliated Stamens 4, didynamous, with rudiment of a fifth Stigma bilamellate Capsule silique-formed Seeds winged at both ends, and bearded

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GYMNOSPERMIA.

1242 A'JUGA Sp 12—11

17542	8093*a* bracteòsa *Wall*	long-bracted	⅄ △	or	½	jl au	B	Nepal	1821.	D s.l	
17543	8096*a* austrālis *R Br*	southern	⅄ △	or	½	my jl	B	N Holl.	1822	D s.l	



17534 **Leaves** of involucrum 3-5 cleft on short stalks with deeply toothed segments, Sepals 4-5 oval [umbellate
17535 **Radic. lvs.** 3-5-parted segms trifid very entire densely villous at margins those of involucr undivided, Flws

γ Is a very beautiful var. The sepals are cream-coloured, suffused with violet spots, Lvs and bran. more hairy than those of the sp [spreading at apex wavy
17536 Peduncles 1-flwd somewh long than lvs Lvs biternately decompound, Lflts ent or 3-lobed, Sepals half-
17537 Peduncles 1-flwd. Flws campanulate tomentose, Sepals oblong, Lvs pinnate, Leaflets ovate serrated pilose
17538 Peduncles 3 1-flwd Lvs ternate smooth leaflets ovate entire flws drooping
17539 Flowers axillary panicled, Leaves subbiternate villous, Leaflets cordate acuminated serrated 3-lobed, Sepals obtuse [naceous margin distend
17540 Lvs spreading hairy ternate, Segms ovate acute ent Peduncles 1-flwd Sepals 6-8 obl lanceol acute membra-
17541 Peduncles 1-flwd not bractd several togeth Lvs ternately parted, Segms ovate-obl acumin. incisely toothed, Sep ellipt-obl mucronul. spreading

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2665 *Tuldia* Calyx 5-parted, enclosed in spathe-formed bractea, which is cleft on one side Corolla tubularly ventricose Limb equal, 5-lobed, sub-bilabiate Stamens 5, 4 fertile exserted, sterile one enclosed Stigma bilamellate Berry spongy, longer than calyx
2666 *Tecoma* Calyx 5-toothed Corolla with short tube and campanulate throat Limb 5-lobed, sub-bilabiate. Lobes of anthers divaricate Capsule silique-formed, dissepiment contrary Seeds disposed in 2 rows, imbricate, winged, transverse
2667 *Salpiglóssis* Calyx 5-angled, 5-cleft Corolla funnel-shaped, 5-lobed Lobes 2-lobed Stamens didynamous, with rudiment of a fifth between the 2 longer ones Style tongue-shaped at apex Stigma truncate, transverse
2668 *Calámpolis* Calyx semi-5-cleft Corolla with tubular base, ventricose throat, and a contracted 5-lobed limb Stamens 4, didynamous, without any rudiment of a fifth Lobes of anthers obtuse, divaricate, distinct at apex Wings of seeds repandly sinuated, emarginate at base
2669 *Eucnemocárpus* Calyx membranous, 5-cleft, coloured Corolla tubular, with an equal throat, and a 5-lobed equal limb Stamens 4, didynamous, with the rudiment of a fifth. Anthers versatile Cells parallel, combined Wings of seeds repandly sinuated, nerved
2670 *Strobilánthes.* Calyx 5-parted Corolla funnel-shaped. Anthers erect, with parallel cells Capsule 4-seeded in the middle Seeds small
2671 *Goldfússia* Calyx 5-parted Corolla funnel-shaped Limb nearly equal Anthers erect, 2-celled Stigma subulate, crenulate on one side Capsule 6-angled, 2-valved Cells 2-seeded at bottom Seeds discoid
2672 *Calóphanes* Calyx 5-parted, equal Corolla funnel-shaped Throat ventricose Limb bilobed nearly equal Stamens enclosed Cells of anthers parallel, spurred at the base Stigmas simple Cells of ovarium 2-seeded Capsules sessile, almost cylindrical
2673 *Amasónia* Calyx 5-cleft, bracteate Bracteas coloured Corolla tubular, 5-cleft, equal Style bifid Drupe 2 4-seeded
2674 *Geissoméria* Calyx 5-parted Sepals glumaceous, equal Corolla tubular, clavate Limb nearly equal, lower segment bearded. Cells of anthers parallel, hairy at apex Ovarium 2-celled Cells 2-seeded. Stigma funnel-shaped
2675 *Chloánthes* Calyx 5-cleft. Corolla tubular, upper lip bifid, lower one tripartite Stamens exserted Stigma bifid Drupe containing 3 nuts
2676 *Lophospérmum* Corolla bilabiate Tube wide, gibbous at base Capsule dehiscing irregularly under the apex
2677 *Scymèria* Calyx deeply 5-cleft. Corolla with a short tube, and a subrotate spreading limb Stamens a little longer than the corolla Cells of anthers nearly equal
678 *Diplacus.* Calyx prismatic, 5-cleft Corolla ringent, 5-cleft Lobes emarginate Stigma bilamellate Capsule 2-celled Placenta broad Seeds subulated at both ends
2679 *Torénia.* Calyx plicate, obliquely 5-toothed Two lower filaments appendiculate, or gibbous at base
2680 *Collinsia* Corolla gibbous above the base Limb very irregular. Capsule 2-valved Valves bipartite
2681 *Franciscea* Calyx 5-toothed. Corolla salver-shaped. Stigma 2-lobed Capsule 2 celled, dissepiment parallel with the valves, separating from the parietes at the base

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GYMNOSPERMIA.

[spike
7742 Diffuse without stolones, Branches pilose, Lvs ovate sinuately-toothed or entire villous, Upper whorls of flowers
7743 Lvs narrow-obl narrowed at base quite ent or sinuat rather vill Lower whorls of flws remote upper subspic Teeth of cal short



2649 *12′8*a*. LOPHA′NTHUS *Benth* (*Lophos*, crest, *anthos*, flower; appearance of flowers) *Labiàceæ*. Sp 5—5
17544 - - *anisâtus* *Benth* Anise-*scented* ♃ △ or 3 jl s B N Amer. 1825 S co Bot. reg 1282
Nos 8162, 8163, 8164 and 8188. are also referable to this genus.

2650. *1254*a* APHANOCHI′LUS *Benth.* (*Aphanos*, obscure, *cheilos*, a lip; lip of flower.) *Labiàceæ*. Sp 1—2.
17545 - - *inclsus* *Benth* cut ♃ △ or 2 s W Nepal 1824 D co Pl. rar. gen. 23 t 8.
Méntha blánda *Lindl*, but not of Wal

2651 *1254*b* DYSOPHY′LLA *Blume.* (*Dysodes*, fetid, *phyllon*, leaf, smell ?) *Labiàceæ*. Sp 1—2
17546 - - *pùmila* *Benth* dwarf ♃ △ cu ½ jl.s P Nepal 1826. D co Bot. mag 2907
Méntha pùmila *Grah*, verticillâta *D Don.*

2652 *1256*a* PYCNO′STACHYS *Pour.* PYCNOSTACHYS (*Pyknos*, dense, *stachys*, a spike) *Labiàceæ* Sp 1—1.
17547 - - *cærùlea* *Hook.* blue ♃ [O] or 3 au B Madagas 1825. S co Hook ex. fl 202

1259 *LA′MIUM.* Sp 12—17
17548 8272*a* longiflòrum *Ten* long-flowered ♐ △ or 1 mr Pk S Europe ..... D co Eng. bot. 2550
maculâtum *Eng bot*, but not of *Flora Græca*
β álbum white ♐ △ or 1 mr W gardens ..... D co

1263 *STA′CHYS.* Sp. 38—57
8299 germánica
β pubéscens *Lindl.* pubescent ♐ △ spl 2 au o P Germany 1826. D p l Bot. reg 1289
17549 - - inflàta *Benth* inflated-*calyx* ♃ △ or 2 jl au Pk N. Africa 1832. C s.l Bot. reg 1697

2653 *1263*a* *Sphà′cele* *Benth* SPHACELE. (*Sphakele*, Greek name for Sage) *Labiàceæ* Sp 1—2.
17550 - - Lindlèyi Benth. Lindley's ♃ ⌊ un 2 au Pk Chile 1825. C lt r Bot reg. 1226
Stáchys Sálviæ *Lindl*

2654. *1264*a* PERILO′MIA *H &K* (*Peri*, around, *loma*, margin, fruits with membran border) *Labiàceæ* Sp 1—1.
17551 - - ocymoides *Kth* Basil-like ♃ ⌊ or 3 au s P Peru 1829 C s l Bot reg 1394

2655 *1265*a* ROY′LE*A* Wal (*Dr Royle*, superintend of Bot Gard. Saharumpoor) *Labiàceæ*. Sp 1—1.
17552 - - élegans *Wal* elegant ♐ △ or 2 jl.au P Nepal 1824. C s l Wal. pl. as. 1.
Ballòta cinérea *D Don*

1268 *PHLO′MIS* Sp 16—25
17553 8356*a* floccòsa *D Don* flocrose ♃ ⌊ or 2 jl o Y Egypt 1828 D s l.p Bot. rep 1300
17554 8361*a* Russelli*ana* Lag Russell's ♃ △ or 3 jn.jl Br Levant 1821. D r.m Bot. mag 2542

2656 *1275*a* MICROME′RIA *Benth* MICROMERIA (*Mikros*, small, *meros*, a part) *Labiàceæ* Sp. 1—1
17555 - - Teneriffæ *Benth* Teneriffe ♃ ⌊ or 1 jn jl P Teneriffe 1829 C co
Thymus Teneriffæ *Pers*

2657 *1277*a* GARDOQUI*A* R & P GARDOQUIA (*D Diego Gardoqui*, a noble Spaniard) *Labiàceæ* Sp 2—3
17556 - - Gillièsi Grah Gillies's ♐ △ pr ¾ jn s Li Y Chile 1828 C p s Bot reg. 1812
17557 - - multiflòra *R & P.* many-flowered ♐ ⌊ pr 1 jn s S Chile .. C s l p Botanist, 6

2658 *1279*a* PHYSOSTE′GIA *Benth* (*Physa*, a bladder, *stege*, a covering, calyx) *Labiàceæ* Sp 6—7
17558 - - imbricàta *Hook* imbricated-*flwd* ♐ △ or 6 su aut Pa P Texas 1833 D co Bot. mag 3386
17559 - - truncàta *Benth*; truncate-*calyx* ♃ ○ or 1 .. Pa Pk S Felipe 1834 D lt l Bot mag 3491
To this genus Nos 8435, 8436, 8437 and 8450 may be referred

2659 *1282*a* CO′LEUS *Lou* COLEUS (*Koleos*, a sheath; united stamens) *Labiàceæ* Sp 3—3
17560 - - aromàticus *Benth* aromatic ♃ □ ha 1½ mr my Pa V India 1826 C p l Bot reg 1520
Nos 8476 and 8477 also belong to this genus

2660 *1283*a* CHILO′DEA *R Br* (*Cheilos*, lip, *odous*, tooth, tip of lower lip of cal bifid) *Labiàceæ* Sp 1—1
17561 - - scutellarioides *R Br* Scutellaria-lk ♃ ⌊ pr 2½ va sea V N S W 1829 S p l Bot mag 3105

ANGIOSPERMIA.

1290 *GE′SNERA* Sp 21—28
17562 - - Douglàsi Lindl Douglas's ♃ [X] or 1½ s R Y Rio Jan 1826 R p l Bot. cab 1029



History, Use, Propagation, Culture,

2649 ***Lophánthus*** Plants which prefer a light dry soil, and may be increased by division of the root, or by seed
2650. ***Aphanochìlus*** Plants of easy culture, and will grow in any light rich soil.
2651. ***Dysophýlla*** The species grow well in the open air in summer, if planted in a cistern or pond, but require the protection of a green-house or stove during winter Readily increased by division.
2652 ***Pycnóstachys*** Plants of easy culture and propagation, thriving in a light rich soil.
2653. ***Sphácele.*** Free growers and flowerers. Any light rich soil will suit them, and cuttings root freely under hand-glass.
2654. ***Perilòmia.*** Any light rich soil suits this genus, and cuttings of the young wood root readily under a hand glass.
2655. ***Roylea.*** For propagation and culture see *Sphácele*, above.

17544 Glabrous, Lvs ov. or ov.-lanceol. acute crenate, Spikes cylindric. interrupt. at base, Cal. segms. lanceol.-acute, Stamens exserted

17545 Nearly glabrous, Lvs petiol rhomboid-ov. dply. serrat. Whorls equal loose, Spikes panicled, Cor. hardly exceeding the calyx

17546 Glabr Lvs 4 in whorl lower ones usually 6 ellipt.-lin. narrowed at both ends remotely serrat. Flor. lvs. ov. Cal. villous

17547 Stem and bran 4-gonal Lvs sess obl.-lin. or lanceol. acute remotely serrat. narrowed at base, Spikes dense termin 1-2 in. long

17548 Leaves heart-shaped pointed deeply serrated, Whorls 10-flwd.

17549 Lvs. nrly sess obl obt. quite ent. little wrinkled toment. ben Whorls 6-flwd. Flws sess Cal inflately campanul with ov. bluntish mutic teeth

17550 Bran floccose, Lvs ov. cordate at base bullately wrinkled woolly ben Rac. dense, Whorls many-flwd Cor. twice as long as cal.

17551 Glabr or hardly pubes. Lvs petiol ov crenat roundedly truncate at base Rac elongat. Cor. 4-5 times longer than calyx

17552 Cal. tubular at base 10-nrvd Limb 5-cleft, Segms. erect oblong membranaceous reticulately veined equal

17553 Bran floccose, Lvs ov.-obl cord at base much wrinkled and floccose ben Whorls densely many-flwd. Cal. [teeth subul stiff glabr hooked
17554 Bran alm simple, Rad lvs. ov dply cord. at base as well as stem-lvs wrinkled canes ben. Whorls 40-50-flwd Cal teeth spread

17555 Lvs sess ovate acute rigid glabr flat lower ones broader and somewh plicate upper alm. lanceol Cal teeth setaceous about equal to cor.

17556 Lvs obl.-linear or cuneated obtuse quite ent 3-6 in long, Whorls few many-flwd rather loose and irreg Cal [teeth lanceol.-subul nrly equal
17557 Lvs petiol ov. bluntish crenat little rounded at base, Whorls loose subsecund, Cymes pedunc. Cal teeth acute

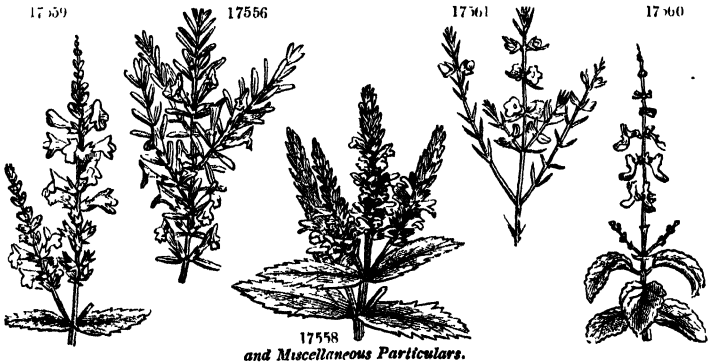
17558 Lvs ellipt.-lanceol coarsely serrated, Spikes panicled 4-gonal, Flws erect densely imbricat. Upper lip of cor [concave
17559 Calyx truncate obscurely 3-5-lobed, Lobes very broad denticulated

17560 Lvs petiol broad-ov crenat rounded at base or cuneat very thick hispid or clothed with white villi, Whorls remote 20-30-flwd

17561 Bran pubes Lvs sess. lin. lanceol acute quite ent with subrevolute edges, Flor lvs exceeding flws Cal ciliated

ANGIOSPERMIA.

17562 Pubesc Lvs falsely verticill 4-5-6 rarely oppos ov acute crenately toothed, Cyme termin Hypogynous glands twin behind



and Miscellaneous Particulars.

2656 *Micromeria* is a genus of plants which thrive, during the summer, on rockwork, but require the protection of a frame in winter.

2657 *Gardoquia*. The species are well deserving of cultivation; they thrive in a mixture of sand, loam, and peat, and cuttings root readily in sand, under a hand-glass.

2658 *Physostegia*. Elegant plants of easy culture, well adapted to the flower border. They may be readily increased by division of the root, and will thrive in common garden soil.

2659 *Cóleus* A mixture of peat and loam suits this plant, and cuttings root readily in sand, in a gentle heat.

2660 *Chilódia*. For propagation and culture see Cóleus, above

1290. *Gésnera*. Very showy plants while in flower. A light rich soil, or a mixture of loam, peat, and sand, suits them Most of the species increase readily by cuttings, and by tubers of the root. While dormant, they require to be kept dry

	β verticillàta *Hook*	verticillate	⁂ ⧄	or	2	ap	R B	Rio Jan	1826	R p l	Bot mag 3612
17563 -	- Sellòwii Mart	Sellow's	⁂ ⧄	or	2	jl	S	Brazil	1835	O p l	Pax. mag 4 27
17564 -	- faucàlis *Lindl*	wide-mouthed	⁂ ⧄	or	2	jl	S	Brazil	1833?	O p l	Bot reg 1785
17565 -	- macrostàchya *Lindl*	long-spiked	⁂ ⧄	spl	2	year	S	Rio Jan	1825	C p l	Bot reg 1202
17566 -	- elongàta *Hum.*	elongated	⁂ ▭	or	2	s	S	S Amer.	1835.	C p.l	Botanist. 27
17567 -	- corymbòsa *Swz*	corymbose	⁂ ▭	or	2	jn au	S	Jamaica	1822	C p l	
	sc ptrum										
	β igneum *Hook*	fiery-*flowered*	⁂ ▭	or	3	s	Rsh Y	Brazil	1835	C p.l	Bot mag 3576
17568 -	- spicàta *L. & O*	spiked-*rnflor*	⁂ ⧄	or					1831	O p l	
17569 -	- allagophýlla *Mart*	changing-lvd	⁂ ▭	or	1½	jl	O	Brazil	1834.	C p.l	Bot reg. 1767
17570 -	- rùtila *Lindl.*	brilliant red	⁂ ⧄	spl	2	au s	S Y	Brazil	1825	C p l	Bot reg 1158
17571 -	- Lindlèyi Hook	Lindley's	⁂ ⧄	spl	2	jn jl	S Y	Brazil	1825	C p l	Bot mag 3602
17572 -	- ulmifòlia *Hum.*	Elm-leaved	⁂ ⧄	or	2	jn au	S	S Amer	1820	C p l	Bot reg 1032
17573 -	- hirsùta *H & B.*	hairy	⁂ ▭	or	1	jn au	S	Cumana	1826	C p l	
17574 -	- Sùttoni Booth	*Capt.* Sutton's	⁂ ⧄	or	2	jl	S	Rio Jan	1833	C r l	Bot reg. 1637
17575 -	- Coóperi Pax	Cooper's	⁂ ⧄	or	2	my jn	S	Brazil	1829?	C s l p	Bot mag 3041
17576 -	- lateritia *Lindl*	brick-red	⁂ ⧄	or	2	jn	R	Brazil	1834	O p l	Bot reg 1950

2661 *1290*a* PENTARA'PHIA *Lindl* Pentaraphia (*Pente*, five, *raphis*, a spike) *Gesneràceæ* Sp 1—1

17577 -	- longiflòra *Lindl*	long-flowered	▭	or	1½	jn jl		Jamaica	1823	C p.l	
	Gesnèria ventricòsa *Swz*										

2662. *1290*b* RYTIDOPHY'LLUM *Mart.* (*Rytis*, wrinkle, *phyllon*, leaf, surface) *Gesneràceæ* Sp 2—2

17578 -	- auriculàtum *Hook*	auricled	▭	or	5	n	Y G R	Brazil	1836	C p l	Bot mag 3562
	No 8521 in p 512 is also referable to this genus										

2663 *1290*c* SINNI'NGIA Nees (*W Sinning*, gardener to the University of Bonn) *Gesneràceæ* Sp 5—5

17579 -	- Hélleri Nees	Heller's	▭	or	1	jn jl	W G	Rio Jan	1820	C p l	Bot reg 997
	Schóttii Mikan										
17580 -	- guttàta *Lindl*	spotted	▭	or	1½	my jl	Y R w	Brazil	1827	C p l	Bot reg 1112
17581 -	- velutina *Lindl*	velvety	▭	or	1½	my jl	Y	Brazil	1827	C p l	Bot cab 1398
17582 -	- villòsa *Lindl*	villous	▭	or	1½	my jl	Y G	Brazil	1827	C p l	Bot cab 1629

1291 GLOXI'NIA Sp. 4—5

15343	speciòsa										
	β álba		γ máxima						δ álba máxima		
17583	8527*a* caulésc ens *B R.*	caulescent	⚜ ⧄	or	¾	jl au	P	Pernamb	1826	D p l	Bot. reg. 1127
17584	8527*b* hirsùta *B M*	hairy	⚜ ⧄	or	¼	jn au	B	S Amer	1824	D s p	Bot mag. 2690

2664 *1294*a* AMPHI'COME *Royle* (*Amphi*, around, *kome*, hair, seeds) *Bignoniàceæ* Sp 1—1

17585 -	- arguta *Royle*	finely cut	⚜ △	pr	1	au	L	Himalayas		C l p	Bot reg n s 19

2665 *1294*b* FIE'LDIA *Cun* (*Baron Field*, some time chief judge in N S W) *Bignoniàceæ* Sp 1—1.

17586 -	- australis *Cun*	southern	⚜ ▭	or	1	jl au	W	N Holl	1826	C s l	Ex fl 232

2666 *1294*c* *TE'COMA* J Tecoma (*Tecomaxochitl*, the Mexican name) *Bignoniàceæ* Sp 6—14

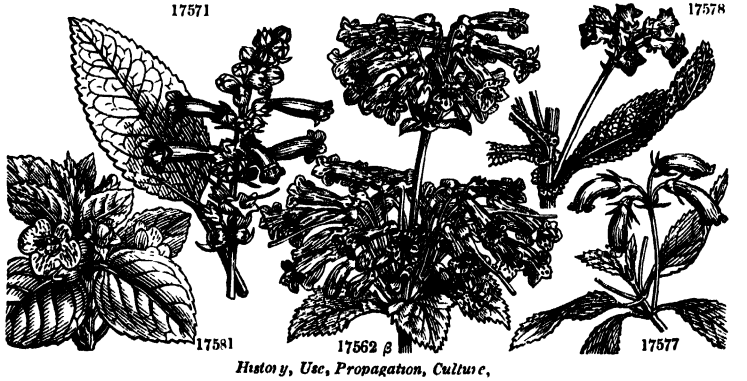
17587 -	- capénsis *B R*	Cape	⚜ ▭	or	8	jl s	O	C G H	1823	C p l	Bot reg 1117
	Nos 8547 8559 8550, 8551 and 8554, in p 514, are referable to this genus										

2667 *1294*d* SALPIGLO'SSIS *R & P* Salpiglossis (*Salpigx*, a tube, *glossa*, a tongue) *Solanàceæ* Sp 1—9

17588	- sinuàta *R & P*	sinuated-*leaved*	○	or	1½	au s	P o str	Chile	1824	S lt	Bot mag 2811
	atropurpurea *Grah*										
	β picta *Swt*	painted	○	spl	2	my jn	Va	Chile	1820	S co	Sw fl gar 258
	γ stramínea *Hook*	straw-*coloured*	○	or	1½	jn au	Crea m	Chile	1824.	S p l	Hook. ex fl 229
	δ Barclayàna Penny	Barclay's	○	or	3	jn s	Br v	kng hyb		S lt	Sw.fl.gar 2 s 112
	S intermèdia *Swt*										

2668 *1294*e* CALA'MPELIS *D Don* Calampelis (*Kalos*, pretty, *ampelis*, a vine) *Bignoniàceæ* Sp 1—1

17589 -	- scàbra *D Don*	scabrous	⚜ △	pr	10	jl s	O	Chile	1824	C l s	Sw fl g. 2 s 30
	Eccremocárpus scàber *R & P*										



History, Use, Propagation, Culture,

2661. *Pentaràphia.* For propagation and culture see Rytidophýllum

2662. *Rytidophýllum* A light rich earth, vegetable mould, or a mixture of loam, sand, and peat, suits the species, and cuttings root readily in heat.

2663. *Sinningia* For culture, &c., see Rytidophýllum, above.

2664. *Amphicome* For culture, &c, see Rytidophýllum, above.

2665. *Fieldia.* Culture, &c., as recommended for Rytidophýllum

2666. Técoma. For propagation and culture see Bignònia, in p. 514.

[later many-flwd Hypogynous glands 4

17563 Stem pilose, Lvs oppos. on short petioles cord.-ov acute serrat. hairy ab hoary toment. ben Cymes thyrsoid
17564 Lvs nearly sessile cord obl. cren. tomentose, Rac terminal, Bract. reflex Cor tomentose upper lip obl 2-lobed throat wide
[glands twin behind
17565 Downy, Stem simple, Lvs oppos petiol cord -ov crenated wrinkled Cymes axill. many-flwd. racemose, Hypog
17566 Bran 4-gonal clthd with woolly hairs, Lvs oppos. obl acumin. acute at base somew. crenat. rufes ben. Pedun axill 4-flwd. elongat
17567 Lvs petiol oppos ov. acute serrat scarious rough toment ben. Pedunc. termin and axill many-flwd corymb
β Villous, Lvs on short pets. oppos or 3 in whorl 1½-2 in long obtuse rarely crenat pubes ben and canes Hyp. glands 4-5
[Hyp glands 5
17568 Stem simple pilose, Lvs 3 in whorl petiol lanceol.-obl acumin crenat pilose ab toment ben Whorls 10-flwd
17569 Stem usually 3-gonal, Lvs. villous nrly sess 3 in whorl or oppos or scattered lin oblong or spatul obtuse crenat Limb equal, Hyp gl 2 behind
[out, Hyp. gl 2 behind
17570 Villous, Lvs oppos. obl.-lanceol acutish at both ends coarsely crenat Pedunc axill Upper lip of cor drawn
17571 Pubesc rather scabrous, Lvs pet ovate obl cren ltac terminal compound, Limb of cor oblique upper lip largest
17572 Bran subtetragonal and pilose, Lvs oppos ov.-acute obliquely cord at base crenat blistered ab pubes ben. Ovarium girded by yellow ring
[twin, Hypog gl hairy
17573 Bran very hairy, Lvs oppos obl -ov acumin rounded at base pilose ab toment ben. Pedun axill 1-flwd
17574 Stem terete toment Lvs. ov cord crenat toment Pedun axill solit 1-flwd Upper lip of cor oblong undulated lower small revolute
[bifid erect lower one small and reflexed
17575 Pubescently tomentose, Lvs oppos cord.-ovate crenate-serrate, Panicle termin. Upper lip of cor very long
17576 Lvs petiolate roundish ovate cord crenate hairy axillary, Flws. solitary termin d ones twin stem-clasping, Upper lip of corolla obl concave

17577 Lvs ellipt acuminat glabr. Pedun usually 4-flwd Cal segms. subul elongat. Cor cylindric incurved

17578 Lvs broadly lanceol somewhat obliquely falcate crenate-serrate sessile auricul at base very wrinkled and bullate ab beautifully reticul ben

17579 Lvs. glabrous cordate-ovate serrated ciliated, Cal turbinate twice as long as ovarium
[as ovarium
17580 Lvs obl.-lanceol atten at base pubes lucid serrat. Cor spotted, Cal cylindrically campanul. 3 times as long
17581 Leaves oblong subcordate velvety, Cal cylindrically campanul 3 times as long as ovarium
17582 Stem and leaves villous, Cal. 5-parted length of ovarium, 1 flowers aggregate

ε pálida máxima ζ Menziésii z violácea

17583 Lvs ov. crenat obt toment edges revolute, Pedun axill elongat Cor downy, Segms nrly equal middle one cord -ov all undul
17584 Stemless very hairy, Lvs ov.-roundish wrinkled hispid rath cord at base, Scapes and pedunc aggreg 1-flwd. Cor. funnel-sh

17585 Lflts oppos on short pets. 3-4 pairs lanceol acumin unequal at base dentately serrated

17586 The only species

17587 Glabr Bran terete, Lflts 9 ovate serrat bearded in axils of veins ben. Rac termin. on long pedunc. Limb of cor 4-parted

17588 Clthd with glandul hairs, Lower lvs petiol ellipt obl sinuat upper sess lanceol.-lin. ent Bran dichotom. Filam glandul pilose
β Corolla elegantly variegated with yellow and bluish purple
γ Corolla cream-coloured veined with blue
δ Corolla striped with brown and yellow

17589 Lvs 2 pairs of pinnæ, Lflts altern obliquely cord ovate serrat or ent Stems angul clthd with short stiff pellucid hairs when young, Cor hairy



and Miscellaneous Particulars.

667 *Salpiglóssis.* A genus of very showy handsome plants, which succeed well if sown in the open border early spring, or they may be sown in autumn, if preserved in the green-house or frame during winter, where they will have a free admission of air and light.

668 *Calámpelis* 17589 *scábra* is a beautiful climber, generally raised from seeds in spring, on a hot-bed. The plants succeed well if trained in a conservatory, or in the open ground against a wall or house with a south exposure.

2669. *1294*f.* ECCREMOCA'RPUS *R & P.* (*Ekkremes*, pendent, *karpos*, fruit) *Bignoniàceæ.* Sp 1—1.
17590 - - longifiòrus *Hum* long-flowered ♣ △ pr 6 jl au O Peru 1825. C s l p H. & B 65

1297 PENTSTE'MON. Sp 32—40
17591 - - atropurpùreum *G Don* dark purple ♀ △ or 1½ jl o D.P Mexico 1827. D p l Sw fl gar. 285
17592 - - pulchéllum *Lindl* pretty ♀ △ pr 1½ jn au Li Mexico 1827 D p l Bot reg 1138
élegans *G Don* Chelòne élegans *Kth.*
17593 - - ròscum *G. Don* roseate ♀ △ or 1½ ... .. R Mexico 1825. D p.l Sw fl gar. 230

17594 - - Kúnthii G Don Kunth's ♀ △ or 1½ P Mexico 1825 D p l H & B. 2173
17595 - - glandulòsum *Dou.* glandular ♀ △ or 2 jn au Pa P N Amer. 1827. D co Bot. reg 1262

17596 - - venústum *Dou* graceful ♀ △ or 2 jl s P N Amer 1827 D co Bot. reg. 1309
17597 - - Richardsònii Dou Richardson's ♀ △ or 1½ jn s D P Columbia 1825 D p l Bot. reg 1121

17598 - - Scoúleri Dou. Scouler's ♀ △ or 3 my jn P B N Amer 1827 D co Bot. reg 1277
17599 - - speciòsum *Dou.* showy ♀ △ or 3 jl s B N. Amer 1827. D co Bot reg 1270

17600 - - acuminàtum *Dou.* acuminate ♀ △ or 1 jn au P N Amer. 1827 D co Bot. reg. 1285
17601 - - Cobœ'*a* Nutt Cobœa-*fltwd* ♀ △ or 2½ aut W P.Y.R Texas 1835. S s.l Bot mag 3465

17602 - - digitàlis *Nutt.* finger ♀ △ or 1½ jl s W Arkansa 1824 D p l Sw fl gar 120
17603 - - ovàtum *Dou.* ovate-*leaved* ♀ △ spl 4 jn au B N Amer 1826. D p.l Bot mag 2903

17604 - - procèrum *Dou* tall ♀ △ or 1 jn au P N Amer 1827 D p l Bot mag 2954
17605 - - confértum *Dou.* crowded-*flwd* ♀ △ or 2 jl au Pa Y N Amer 1827 D p l Bot reg 1260

17606 - - glaúcum *Grah* glaucous ♀ △ or 1 jn au Pa Li N Amer 1827 D p l Bot reg 1286
17607 - - deústum *Dou.* blasted ♀ △ or 1 . P N Amer 1827. D co

17608 - - attenuàtum *Dou* tapering ♀ △ or 1½ jl au Pa Y N Amer 1827 D co Bot. reg 1295
17609 - - diffùsum *Dou.* diffuse ♀ △ or 1½ jn n P N Amer. 1826 D p l Bot. reg 1132

17610 - - triphýllum *Dou.* three-leaved ♀ △ or 1½ jl au Pk California 1827. D p l Bot reg 1245
17611 - - grácile *Nutt* slender ♀ △ or 1 jl s B N Amer 1824 D co Bot. mag 2945

17612 - - Murray*anum* Hook Murray's ♀ △ or 3 aut S S Felipe 1835 D p l Bot mag 3472
17613 - - crassifólium *Lindl* thick-leaved ♀ △ or 1 jn B N. Amer D co Bot reg n s 16

1298 CHELO'NE. Sp 6—8
17614 8573*a* nemoròsa *Dou.* grove ♆ △ or 1 jl s P N Amer 1827 S r m Bot reg 1211

17615 8574*a* centranthifòlia *Benth* Cent.-leaved ♀ △ or 7 jl n S California 1834? D co Bot reg 1737

1300 MARTY'NIA Sp 5—4
17616 8579*a* lùtea *Lindl.* yellow ▣ or 1½ au Y Brazils 1825 S co Bot reg 934

1302 BARLE'RIA Sp 9—13
17617 - - lupúlina *Lindl* Hop-*headed* ■ □ or 2 au Y Mauritius 1824. C p l Bot reg 1483

1304 RUE'LLIA Sp 20—31
17618 - - picta *B C* painted ■ □ or 1 ap au B Domingo 1826. C p l Bot cab 1448
17619 - - ciliatifòra *Hook* fringed-flwd ♀ □ or 1½ s Pa P B Ayres 1838 C co Bot mag 3718

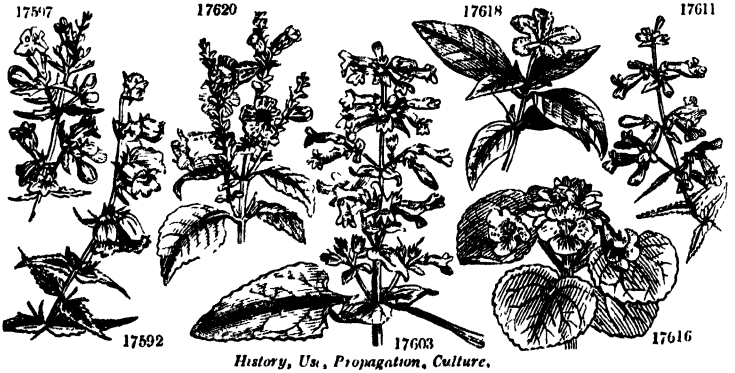
2670 * 1304*a* STROBILA'NTHES *Nees* (*Strobilos*, pine cone, *anthos*, flower, in bud state) *Acanth* Sp 1—1
17620 - - Sabiniana Nees Sabine's ■ □ or 4 w B P Nepal 1826 C p l Bot mag 3517
Ruéllia Sabiniana Wall, Hort Brit

2671. *1304*b* GOLDFU'SSIA Nees (*Dr Goldfuss*, professor of nat hist, at Bonn) *Acanthaceæ* Sp 1 - 1
17621 - - anisophýlla *Nees* unequal-leaved ■ □ or 3 jn au B Silhet 1823 C l p Bot mag 3101
Ruéllia anisophýlla *Wall*, R persicifòlia *B R*, R amygdalæfolia *Hort*

2672 * 1304*c* CALO'PHANES *D Don.* (*Kalos*, beautiful, *phaino*, to appear, flowers) *Acanthaceæ* Sp 1—1
17622 - - oblongifòlia *D Don* oblong-leaved ♀ △ or 1 au B Carolina 1832 D l p Sw fl g 2 s 181
Ruéllia oblongifòlia *Michaux.*

2673 *1305*a* AMASO'NIA L Amasonia (*Thomas Amason*, an American traveller) *Verbenàceæ* Sp 1—?
17623 - - punícea *Vahl* scarlet ♀ △ pr 1½ au s Y Trinidad 1825 Sk s.l Aub gui 2??

2674 *1306*a* GEISSOME'RIA *B R* (*Geisson*, penthouse, *meris*, part, calyx imbric) *Acanthaceæ* Sp 1 1
17624 - - longifòra *B R* long flowered ■ □ el 3 jl.au S Brazil 1826. C l p Bot reg 1015



History, Use, Propagation, Culture.

2669. *Eccremocárpus.* See Calámpelis for propagation and culture
2670. *Strobilánthes Sabiniàna* is a very handsome plant, easily propagated by cuttings.
2671. *Goldfússia.* A pretty stove plant, easily propagated by cuttings in any rich moist soil.

17590 Lvs. abruptly tripinnate, Lflts. oval entire rarely bifid or trifid sess. Stem furrowed, Pedun pendulous 3-4-flwd
[both ends upper ov acumin stem-clasp
17591 Stem rath flexuous shining glandul pili at top, Lvs sess. sharply serrul glabr lower ones lanceol. atten.
17592 Stem pubes. Lvs sess. ovate-lanceol. serrul glabr. Pedun. 1-2-flwd Corolla rather pilose glandless

17593 Lvs sess glabr. ov.-lanceol sharply serrulat. acumin upper lvs. broader, Peduncusually 3-flwd. Cor rath. hairy, Lower lip bearded [lip densely bearded at base
17594 Stem and lvs glabr Lvs. linear sharply serrul spreadingly recurv Pedun 1-2-flwd hairy, Cor downy, Lower
17595 Plant clthd with glandul pubes Rad lvs ovate coarsely toothed, Stem lvs. stem clasp acute nrly ent Cal. segs ov. Cor ventricose
17596 Lvs sess ov.-lanceol acumin denticul glabr Pedun many-flwd Cal glabr Cor ventricose ciliated
17597 Lvs sess pinnatif Pedun few-flwd Cal. clthd with glandul pubes segms ovate-acute, Cor ventric Ster filam with few hairs at apex [woolly
17598 Lvs obov.-lanceol serrul upper lvs quite ent Pedun 1-flwd racemose, Cal downy segms acumin Anthers
17599 Glauc glabr Lvs quite ent rad ones spatul caul ones lanceol sub-undulat sess Flws verticillately panicled, Ster fil quite glabr. [stem-clasp Cor with funnel-sh tube
17600 Glabr and very glauc. Rad lvs ov.-obl on long pets ent rath cordac Caul lvs and brac cord. acumin sess
17601 Clthd with glandul pubes Lvs sharply serrul. shining, Rad lvs lanceol. petiol. Stem lvs ov ultim ones sub-amplex. Throat of cor inflat naked [campanul.
17602 Glabr Caul lvs lanceol acumin repandly denticul Cal clammy segms acumin reflexed, Cor large sub-
17603 Flws stems and pedun. glandul hairy, Lvs ov.-cord. amplex glabr coarsely toothed, Upper lvs on long pets. Pedun axill subcorymb Cor tubular [lately spicate, Whorls dist
17604 Stem erect nrly simple, Lvs lanceol quite ent. lower ones petiol upper sess subconnate, Flws verticil-
17605 Lvs quite ent glabr rad ones spatul acumin on long pets upper sess. ov acumin Upper flor. lvs reduced to jagged serrat bracteas [sess amplex Panic thyrsoid
17606 Stem smthish Lvs. all glabr. rad ones lanceol petiol quite ent or denticul Stem lvs and brac ov.-lanceol.
17607 Stem alm simple glabr Lvs dply toothed rad. ones ov.-obl those near them spatul Stem lvs obl. acute segs upper ones alm quite ent [cal. and cor. downy
17608 Stem erect pilose at top, Rad lvs ellipt acute petiol upper ovate-obl amplex all quite glabr and ent Panic
17609 Stem bran Lvs. ov.-obl glabr. unequ serrat. Pedun axill many-flwd forming termin panic. Cal turbinate with jagged segms. [Pedun 2-3-flwd cobwebbed
17610 Humble, Lvs 3-4 in whorl glabr. bluntly cut lower ones obl Flor. lvs ent lin.-lanceol usually ternate,
17611 Stem smth and slend Lvs smth lin. acute sub-amplex sharply serrul Panic simple few-flwd Cor. smth. inside, Cal segs lin.-obl [very glabrous, Tube sub-cylindr
17612 Lvs very glauc quite ent obl lower lvs spathul upper lvs or brac connato-perfoliate, Flws racemose, Cor.
17613 Glabrous, Lvs. obovate lanceol entire rac terminal few-flwd secund, Anthers very villous

17614 Bran glabr Lvs. ov acumin serrat upper ones amplexic cord Pedun. 3-flwd downy, Cal segms and brac. subul. downy as is cor [subul pendul glabr.
17615 Glabr glauc Lvs ov.-lanceol quite ent cordately stem-clasp at base, Pedun axill many-flwd panicul. Cor.

17616 Stem bran clthd with glandul down, Lvs oppos. cord.-orbicul toothed clthd with gland. down, Beaks much long th pericarp

17617 Lvs lanceol quite entire, Spines simple spreading, Spikes ovate, Bracteas ovate concave imbricated

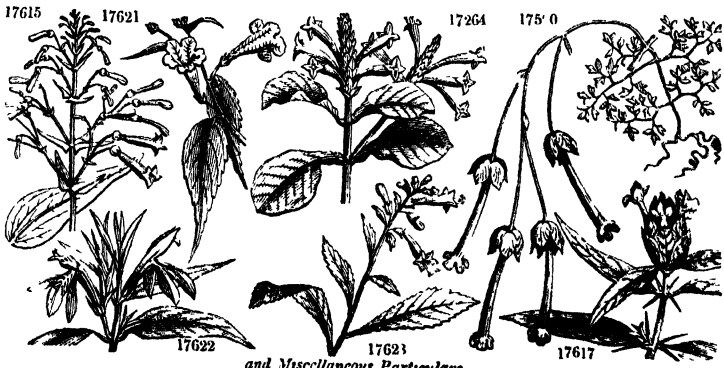
17618 Lvs ovate ellipt Flws sessile solitary axil Segms of cor undulated
17619 Lvs petiol ovate unequ serrated more or less hairy, Panic termin leafless Cal long and narr pubescent glandul Segms subul unequ Limb spreading [ben Spikes axill and termin
17620 Bran. erect glabr younger one quadrangul Lvs oppos unequ oval acumin obliq obscurely crenate-serrat purple

17621 Lvs obl cordato-acuminate dark green with prominent nerves above pater ben. with sunken nerves oppos or abortive leaf very small

17622 Lvs spatulate, Tube of cor ¼ longer than calyx

17623 Stem erect, Flowers yellow

17624 The only species



and Miscellaneous Particulars.

2672. *Calliphanes* A very beautiful plant, increased by cuttings or division of the root
673 *Ahausonia* See Ruellia for propagation and culture
674 *Gerssemēria* A splendid free-flowering stove plant easily propagated by cuttings Requires a rich moist

1308 THUNBE'RGIA Sp 6—8.

17625 - alàta *Lod* winged ☿ □ or 4 my s Y E Indies 1823 C p l Bot cab. 1045
17626 - angulàta *Boj* angular ☿ □ or 4 my s B Madagas 1823 C p l Bot cab 1044
17627 - coccínea *Wal* scarlet ☿ □ or 4 my.s S Nepal 1823. C p l Hook. ex fl 195
17628 - Hawtayneàna Wal Hawtayne's ♃ □ spl 10 ... P Nepal 1826. C p.l

1312 LANTA'NA Sp. 18—30.

8649 nivea
β mutábilis *Hook.* changeable-*hued* ♒ □ or 5 my jn Y.ro .... C l.p Bot. mag. 3110

17629 - Sellovi*àna* L. & O Sellow's ♒ □ or 1 d.ja Psh R Montevid. 1822. C p.l Bot. mag. 2981

1314 I'PPIA Sp 2—2

17630 - dúlcis *Trev.* sweet ♒ □ pr ½ jn s W Trinidad 1827. D p.l Bot. cab. 1573

2675 *1317*a* CHLOA'NTHES *R Br.* (*Chloos*, greenish yellow, *anthos*, flower) *Verbenàceæ* Sp. 1—3
17631 - *Stœ'chadis R. Br.* Stœchas-*like* ♒ ⌊ or 2 jn au G y N. Holl 1822. C s p Bau. n. h.

1322 VERBE'NA. Sp. 31—41

17632 8678*a* alàta *l.k & O* winged-*stem* ♀ △ or 5 au o Ro R Mon Vid. 1828 S lt Sw fl.gar.2.s.41.
17633 8679*a* scàbra *Vahl* scabrous ♆ △ or 4 jl au R Mexico 1825 D r m
17634 8683*a* polystàchya *Kth.* many-spiked ♆ △ or 4 jl au R Mexico 1820. D p l
17635 8683*b* diffùsa *Desf.* diffuse ♀ △ or 3 jl au B N Amer. 1818. D p l
17636 8683*c* *veronicæfòlia H & B* Veronica-lvd ○ or ½ jl au B Mexico 1825. S co
17637 8684*a* lasi stachys *Lk.* hairy-spiked ♆ ○ or 2 jl au P Californ 1826 S co
17638 8684*c* trifida *Hum.* trifid ○ or 1 jl au P Mexico 1818. S s
8685 Aublètia
β Drummóndi Lindl Drummond's ♀ △ or 1½ jl L Texas . D co Bot reg 1925
17639 8685*a* pulchélla *Swt.* neat ♒ ⌊ el 1 jn s P B Ayres 1827 S co Sw fl gar 295
β cor álbida whitish corol ♒ ⌊ el 1 jn s Wsh ..... 1834 C co
17640 8686*a* chamædrifòlia *Sm.* Melindres Gill. Germander-lvd ♒ ⌊ el 1 jn s S B Ayres 1827 C co Sw. fl gar. 2 s 9
17641 8686*b* Tweedie*àna* Hook Tweedie's ♒ ⌊ el 1½ jn.s S Brazil 1834 ? C p l Bot mag. 3541
17642 8686*c* incisa *Hook.* cut-*lvd* ♒ ⌊ el 2 jn s R Panama 1836 C p l Bot mag. 3628
17643 8686*d* rugòsa *D Don* wrinkled-*lvd* ♆ △ or 2 jl V B Ayres 1833 ? D lt l Sw fl gar 2 s 318
17644 - teucrioides G & H Germander-like ♀ △ or 2 au W pk S Amer 1837 D co Bot mag. 3694
8687 Lambértia
β rósea *D. Don* rosy-*flwd* ♆ △ or 1½ jl Pk Carolina ... D co Sw fl gar 2 s 347
17645 8689*a* sorória *D Don* sister ♆ △ or 2 jl au P Nepal 1824 S r m Sw fl. gar 202
17646 8691*a* *erinoides W.* Erinus-lk ♇ △ or ½ jl au B Peru 1818. S co
multifida *R & P.*
β Sabini D. Don Sabine's ♇ △ or ½ jn o Chile 1834. C L co Sw fl gar 2.s 363
17647 - venòsa *G. & H* *strong*-veined ♀ △ or 2½ my s Ro B Ayres 1830. S s l Bot mag 3127

1325 CLERODE'NDRUM. Sp 17—39.

8698 squamàtum *Vahl*, syn C speciosissimum *Paxt mag* 3 p. 217
17648 8699*a* emirnense *Boj.* Emire ♒ □ or 3 f mr W Madagas 1822 C p l Bot mag 2925
17649 8702*a* pubéscens *Lindl.* pubescent ♒ □ or 4 jl au W W Indies 1824 C l p Bot reg 1035

1343. ANTIRRHI'NUM. Sp 6—13.

8756 màjus
ε álbum ζ fl álb plèno η caryophylloides ϑ variegàtum
17650 - rytidocárpum *Fis.* wrinkled-fruited ○ or 2 au s R P Y California 1834 ? L co Bot reg 1093
glandulòsum *Lindl*, Bot Reg, 1893

1346 NEME'SIA Sp 4—4

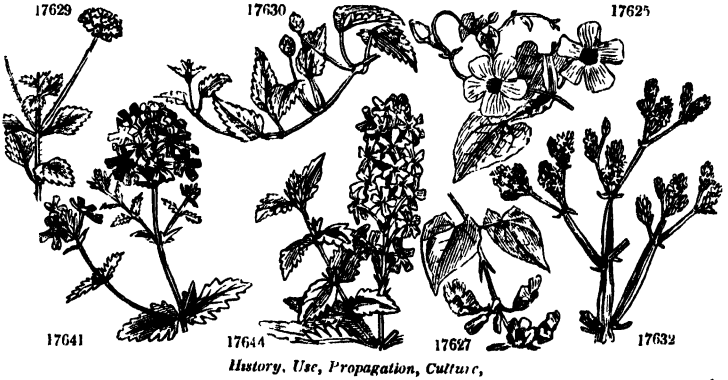
17651 - floribúnda *Benth* many-flowered ○ or 1 jn au W Y C G H S s l Bot. reg n s 20

2676 *1346*a* LOPHOSPE'RMUM *D Don* (*Lophos*, crest, *sperma*, seed, crested seeds.) *Scroph* Sp 3—3
17652 - erubéscens *D Don* blushing ♀ ⌊ or 10 jn o Ro Jalapa 1830 C s l Bot reg 1381
17653 - scándens *D Don* climbing ♀ ⌊ or 10 jn o P Mexico 1835. C s l Sw fl gar 2 s 401
17654 - atrosanguíneum *Zuc* dark-bloody ♀ ⌊ or 10 jn o D P Mexico 1833 C p l Sw fl gar 2 s 250
Rhodochíton volúbile *Zuccarini*, Lophospérmum Rhodochíton *D Don*

1347 MAURA'NDYA. Sp 3—3

17655 8803*a* Barclay*àna* Lindl Barclay's ♀ ⌊ or 10 year B w Mexico 1825 C l.p Bot reg 1107

2677 *1348*a* SEYME'RIA Ph SEYMERIA (*Henry Seymer*, an English naturalist) *Scrophularineæ* Sp. 1—1
17656 - pectinàta *Ph.* pectinated ○ pr 1 jl au Y N Amer 1820 S s p



History, Use, Propagation, Culture,

2675. *Chloánthes* For propagation, culture, &c, see *Verbèna*
2676 *Lophospérmum.* For propagation, culture, &c, see Calámpelis

17625 Lvs cord. triangular sinuately toothed five-nerved, Petioles winged
17626 Lvs cord. triangular entire five-nerved, Petioles wingless
17627 Lvs. cord. entire, Flowers scarlet
17628 Lvs. cord. entire coriaceous, Flowers purple

β Has beautiful heads of changeable-coloured flowers which open yellow, outer ones gradually becoming pink, the whole dying off of a delicate rose colour [Involucr. cord smaller th heads
17629 Lvs. subsess. or petiol. oppos. ovate somewh. acute crenate-serrat. pubes. on both sides, Heads subglobose,

17630 Lvs. oblong acute serrate rough, Flowers white

17631 Stem erect, Flowers greenish yellow

[strigose, Spikes crowded panicled
17632 Stem erect branched glabrous, Branches tetragonal winged when young hispid, Lvs lanceol sessile 3-nerved
17633 Stem erect, Whole plant scabrous
17634 Stem erect, Spike branched
17635 Stem erect, branched, Flowers blue
17636 Stem trailing
17637 Stem erect hairy
17638 Lvs. trifid, Flowers purple

17639 Ascend. branched, Branches hairy, Lvs 3-partite pinnatifid, Corymbs terminal, Calyx elongated

17640 Ascend hispid, Lvs obl. acute serrated upper ones almost entire, Corymbs terminal, Calyx elongated, Segms of cor cun emarg [cun emarg.
17641 Erect pubesc. Lvs ovate lanceol acumin coarsely serrated, Corymbs spiked, Calyx elongated, Segms. of cor.
17642 Erect pubesc. Lvs cord obl pinnatifid upper ones lanceol Corymbs terminal, Calyx elongated, Segms of cor. cun bifid
17643 Erect hairy, Lvs cord obl serrated, Spikes dense short, Cor hairy, Segms cun emarginate
17644 Erect branched, Lvs. pinnatifid scabrous, Spikes thif panicled, Pedunc. and calyx covered with glandul. hairs

17645 Prostrate hairy, Lvs multifid, Segms narrow ciliated, Spikes capitate, Flws tetrand Cor pubesc Segms emar.
17646 Erect hispid, Stem acutely tetragonal, Lvs obl lanceol sessile subcordate coarsely serrated, Spikes panicled

17647 Erect branched pilose, Lvs. obl or lanceol sessile deeply cut, Spikes elevated, Calyx elevated

17648 Lvs opposite alternate ovate acute entire or serrated, Corymbs terminal. Tube of cor. slender, Calyx 5-toothed
17649 Pubesc. Lvs. obl lanceol acumin. entire, Pedun axil 3-fid, Tube of cor short, Calyx 5-toothed

17650 Covered with glandular pili, Lvs ovate lanceol Raceme dense leafy, Lobes of calyx lin lanceol. unequal

17651 Erect nearly glabrous, Lvs ovate serrated lower ones petiolate upper ones nearly sessile, Spur bluntish equal in length to lower lip of cor [or deeply serrat Pedic vill bractless
17652 Bran clthd with articul short viscid hairs, Lvs cord more or less distinctly 5-lbd downy, Lbs mucron crenat.
17653 Lvs cordate acuminated dply serrated hairy 5-nrvd. Pedunc bractless, Stem herbaceous, Flws pendulous
17654 Lvs cordate acuminated coarsely and dentately serrated, Cal. semiquinquefid spreading, Cor. tubular, Filam simple

17655 Lvs cordate acuminated young ones somewhat hastate, Cal segms lin-lanceol very acute clthd. with glandular hairs

17656 Downy, Lvs pinnatifid with linear obtuse rather cut segments, Capsule downy obtuse



and Miscellaneous Particulars.

2677 *Seymèria.* For culture and propagation see Gerárdia, in p. 528.

1361. *Mi'mulus* ... 13—18

17657 8829*a* Lewisii Ph — Lewis's — ♃ △ pr ¾ au — Pa.P Missouri 1824. D p l — Ph. am. 2. 20

17658 8829*b* cardinàlis *Dou.* — scarlet — ○ spl 2 jl s — S — N.W.Am 1835. S co — Bot mag. 3560

17659 8829*c* róseus *Lindl.* — rosy-*flwd* — ♃ ⩓ or 1 jl.au — Ro — N Calif. 1831 — C p l — Bot reg. 1591

8833 lùteus
β rivulàris — rivulet — ♃ △ pr ¾ jn.s — Y — Chile — 1826 — D p l
γ Wilsoni — *Miss* Wilson's — ♃ △ pr ½ jl — Y spt.P hybrid — 1836 ? D p l — Sw fl gar 406
δ Youngànus — Young's — ♀ △ or ¾ jl au — Y.spt Chile — 1833 ? D p.lt — Bot. mag 3363
ε variegàtus *Don* — variegated-*flwd* — △ or 1 au — Pa.Y P Chile — 1831. S lt l — Bot cab 1872

17660 8833*b* propínquus *Lindl.* — related — ♃ △ or ¾ ap o — Y — N. Amer. — 1827 — D p l — Bot. reg. 1330
17661 8833*c* Smithii Lindl — Smith's — ♀ ⩓ or ¾ f n — Y.spot Eng hyb — 1832 — D p l — Bot reg. 1674
17662 8833*d* róseo-cardinàlis *Hiens* rosy-scarlet — ○ pr 2 jl s — R — hybrid — 1837. S co — Botanist, 51
17663 8833*e* moschàtus *Don.* — musk-*scented* — ♃ △ pr ¾ jl.s — Y — Colombia 1826 — D p.l — Bot. reg. 1118

17664 8833*f* floribúndus *B. R.* — bundle-flwd — ○ or ¾ au. — Y — N. Amer 1826 — S cg — Bot. reg 1125

2678 *1351*a* DI'PLACUS *Nut* (*Dis*, two, *plax*, *plakos*, a placenta, capsule) *Scrophulariàceæ* Sp 1—1
17665 - - puniceus *Nut* — scarlet-*flwd.* — ▭ ⌴ or 4 year — S — Californ 1837 — C r m — Bot. mag 3655

2679. *1353*a* TORE'NIA L. Torenia. (*Rev Olaf Toren*, a Swedish botanist.) *Scrophulariàceæ* Sp 2—4
17666 - - scàbra *Grah.* — rough-*leaved* — ▭ ⌴ or 3 jn au — Pa B Moretn Bay 1830 — C r l — Bot mag 3101
17667 - - cordifòlia *Rox.* — heart-leaved — ⌧ or ½ o — Pa Li Samulcot 1838. S r l — Bot. mag 3715

1364 RUSSE'LIA. Sp 2—4
17668 - - júncea *Zuc.* — rushy-*bran.* — ▭ ⌴ or 3 jl au — S — Mexico — 1833 ? C s l — Bot reg 1773

2680 *1368*a* COLLI'NSIA Nut (*Zaccheus Collins*, a vice pres. of Ac Nat Sc Philadel) *Scrophul* Sp 6—5
17669 - - vérna *Nut* — spring — ○ el 1 my jn — B P — N Amer 1826. S lt — Sw fl gar 220
17670 - - parviflòra *B R.* — small-flowered — ○ or ¼ my jl — P B — Colombia 1826 — S lt. — Bot reg 1082
17671 - - sparsiflòra *F & M.* — scattered-flwd — ○ or ½ jn jl — V P — Californ 1836 — S lt
17672 - - grandiflòra *B R.* — large-flowered — ○ or 1 my jl — Pk B — Colombia 1826 — S lt. — Bot reg 1107

17673 - - bicolor *Benth* — two-cld-*flwd* — ○ or 1¼ my.s — W P — Cahforn 1833 — S lt — Bot reg 1734
17674 - - heterophýlla *Nut* — various-lvd — ○ or 1½ jl au — P.w — Colombia 1833 — S lt. — Bot mag 3695

2681 *1375*a*. FRANCI'SCEA Pohl. Franciscea. (*Francis*, emperor of Austria) *Solandceæ* Sp 1—1
17675 - - unifiora *Pohl* — one-flowered Hopeàna Hook Bot. mag 2828. — ▭ ⌴ or 3 jn au — W P — Brazil — 1826. C l.p — Bot cab 1332

P 536 Class XV.—TETRADYNAMIA. Stamens 6, of which four are longer than the rest

2682 *Streptanthus* Silique very long, angular, compressed Seeds flat, marginate, disposed in 1 row Cotyledons accumbent

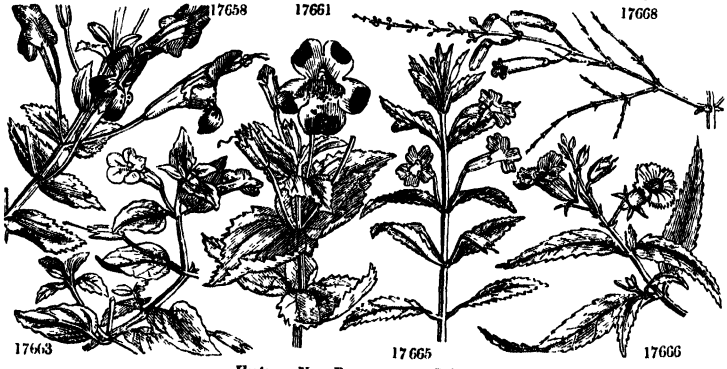
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2682 *1390*a* STREPTA'NTHUS *Nut* (*Streptos*, twisted, *anthos*, flower, claws of petals) *Cruciferæ* Sp 2—3
17676 - - obtusifòlius *Hook.* — blunt-leaved — ○ or 1½ au s — Ro — Arkansa — 1833. S s l — Bot mag 3017

17677 - - *hyacinthoides* Hook. Hyacinth-*flwd* — ○ or 3 au — Bsh P Texas — 1834 — S s l — Bot mag 3016

1391 AUBRIE'TIA Sp 2—3
17678 9051*a* purpùrea *Dec* — purple — ♀ △ pr ½ mr.jn — P — Greece — 1820 — D co — Fl gr 643

2683 *1400*a* SCHIVERE'CKIA Andrz (*Andr Schivereck*, a Russian botanist) *Cruciferæ* Sp 1—1
17679 - - podólica *Andrz* — Podolian — ♀ △ or ¼ my jl — W — Podolia — 1821 — D sp. — Sw fl gar 77



History, Use, Propagation, Culture,

2678 *Diplacus.* See *Mimulus* for propagation and culture.
2679. *Torènia* The species require a moist soil. They are readily increased by division.
2680. *Collinsia* All the species are very desirable showy annual plants, and have a good appearance if sown in large patches

17667 Plant downy, Lvs. sess obl-lanceol acute nrvd. mucron. denticul Flws. few termin. on very long pedics Cal. acuminated
17668 Villous, Lvs. amplexic ovate with crosely toothed margins, Peduncs. long th lvs Cal. large inflately tubul hardly plicate with ov.-acute teeth
17650 Pubescent, Lvs amplexic obl little-toothed 5-nerved, Peduncs. shorter th. lvs. Cal. large subinflat. tubul. with ov-acute nrly. eq teeth
β Caulescent many-flowered
γ Flowers yellow spotted with purple
δ Decumbent, deep yellow, Segms of limb with a large blood-coloured spot on each
ε Stem erect, Corolla pale yellow, each segment stained with a large purple spot
17660 Clothed with glandular pubesc Stems decumb. round, Lvs. ovate toothed upper ones sessile, Peduncles axil-
17661 Hybrid, *M* variegātus and *M* lūteus rivulāris [lary 1-flwd. shorter than lvs
17662 Hybrid between *M.* rōseus and *M* cardinālis
17663 Diffuse clthd with woolly villi, Lvs petiol ovate or ov-lanceol little-toothed rounded at base rath pilose and clammy, Cal teeth uneq lanceol [very short acute
17664 Diffuse loosely pilose clammy, Lvs petiol broad-ovate little-toothed truncate at base or rounded, Cal. teeth

17665 Clammy glabrous, Lvs lanceol serrul rather connate at base, Segms. of cal unequal

17666 Lvs lanceol.-ovate serrated scabrous, Stem erect pubescent, Calyx 5-toothed equal
17667 Lvs ovate-cord Peduncs axill. subfascicled or solitary, Cor about twice length of cal which is ovate and rounded at base

17668 Branches tetragonal erect rushy, Lvs. small ovate, Peduncles filif. generally 2-flwd

17669 Lvs lanceol Pedicels axill solit. much long th flws Cal downy about equal in length to corolla
17670 Lvs ov.-obl. nrly ent downy, Pedic axill. solit much long th flws Segms of cor acutish entire, Cal downy
17671 Diffuse, Lvs all oppos Flws solitary, Pedicels little longer than calyx, Capsule globose [about eq to cor
17672 Lower lvs spatulate, upper ones oblong-linear, Pedic verticill shorter than flws Cor. segms. dilated retuse, Cal glabr ½ length of cor.
17673 Erect downy, Lvs glabr ov-lanceol subcordate at base, Pedicels verticillate racemose
17674 Lower lvs 3-lobed upper ones ov Cal clth. with glandular pubesc Segms of cor crenated at apex

17675 Bran diffuse spreading, Lvs ellipt. acute, Bract lanceol glabrous as are calyxes, Flws. solitary

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2683 *Schiverēckia* Silicle ovate, valves convex, somewhat depressed lengthwise in the middle Seeds numerous Calyx equal at base Petals entire Larger stamens toothed.

17676 Lvs elliptic very obtuse dply 2-lobed at base amplexicaul, Petals obov on long and at length twisted claws, Filam short subul [abortive lineal anther
17677 Lvs oblong-linear acumin Petals linear with reflex limb, Filam combined forked at apex bearing each an

17678 Pedicels shorter than the calyx, Lvs oblong entire or toothed hispid with stellate down

17679 The only species



and Miscellaneous Particulars

2681. *Francisceæ.* For cultivation, &c., see Brunsfélsia, in p 534.
2682. *Streptānthus.* This genus requires the usual treatment of other hardy annuals.
2683. *Schiverēckia* 17679 *podólica* is a very pretty little rock plant, and thrives well if grown in a small pot in light sandy soil

1412. *IBE'RIS.*

17680 9120*a* coronária *D Don* crown-*flowering* ○ or 1 jn W ... . 1836. S co Sw fl gar. 2.s.359

1424 *ERY'SIMUM.*

17681 - Perowskiánum F & M Perowski's ○ or 1½ jn O s Palestine 1838 S co Fl cab. 19

1448 CLEO'ME Sp 17—21.

17682 - dendroides *Schult.* tree-like ♣ ⌴ or 5 . P Brazil 1828. S s.l Bot. mag. 3296

17683 - speciosíssima *Deppe* most showy ○ or .. jn s P Mexico 1827 S co Bot. reg 1512

Page 560. Class XVI. — MONADELPHIA.

Order 1. TRIANDRIA. Stamens 3.

2684 *Orthosánthes* Spathe many-flowered, 2-valved Perianth 6-parted, equal, with a short triangular tube Stamens 3, combined at the base Stigmas 3, fringed at top Capsule oblong, trigonal, many-seeded

2685 *Cypélla* Spathe 2-leaved Perianth 6-parted, concave at the base, outer segments large, spreading; inner ones small, convolute, reflexed at apex Stamens 3, monadelphous Style slender. Stigma 3-lobed, the lobes 3-fid and appendiculate Capsule oblong, 3-celled, 3-valved, many-seeded Seeds angular

2686. *Herbértia* Perianth 6-parted, tube very short, 3 outer segments much smaller than the inner ones Stamens 3, monadelphous. Anthers linear Stigmas 3, bifid Capsule oblong, 3-celled, many-seeded Seeds angular

2687 *Spatalánthus* Spathe rigid, 2-valved, 1-flowered Perianth spreading, with a very short tube, and a 6-parted regular limb Stamens 3, short, monadelphous Anthers oblong, sagittate. Ovarium warted at apex Stigmas 3, bifurcate

2688 *Homéria* Perianth 6-parted, alternate segments smaller, tube very short Stamens 3, monadelphous Stigmas 3-fid, the segments bifid and fringed

Order 2 PENTANDRIA. Stamens 5.

2689 *Mahérnia* Cal naked, campanulate, 5-cleft Petals 5, with an obcordate limb, spirally twisted, and straightish claws Filaments monadelphous at base, dilated into a cordate tubercle, or a cup-formed process in the middle Styles 5, sometimes joined into 1. Capsule 5-celled, 5-valved, many-seeded

2690 *Malvavíscus* Cal tubular, membranous, inflated, 5-lobed Filaments filiform, distinct, or connected with the stipe of the ovarium. Anthers versatile Ovarium superior, stipitate, 1-celled, with the placentas at the base, from which the ovules arise by the intervention of umbilical cords Styles 3, filiform Stigmas clavate Fruit capsular, 1-celled, 3-valved Testa crustaceous, brittle, with a fleshy crest and no arillus Embryo round, in the centre of fleshy albumen, with the radicle next the hilum

2691 *Clintónia* Limb of cal 5-cleft Cor bilabiate, with hardly any tube Anthers cohering, 2 superior one bearded Capsule silique-formed, triangular, dehiscing by 3 loriform valves, many-seeded Seeds attached to two parietal placentas

Order 6 DODECANDRIA Stamens 12

2692 *Philothèca* Cal 5-parted Petals 5, unguiculate Stamens 10, unequal, connate at base, with tube smooth and free, part of the filaments hairy Fruit of 5 1 seeded carpels Leaves alternate, linear

TRIANDRIA.

2684 *1450*a* ORTHROSA'NTHES *Swt* Orthosanthus (*Orthros*, morning, *anthos*, flower) *Iridæ* Sp 7 -

7684 - multiflóra *Swt* many-flowered △ or 1 jn jl B N Holl. 1820 D s.p Bot reg 1060

1451 FERRA'RIA Sp 5—8

7685 9342*a* obtusifólia *Swt* obtuse-leaved ☿ △ pr ½ my jl Br C G H 1825 O s p Sw fl gar 148

17686 9342*b* uncinàta *Swt* hooked ☿ △ pr ½ my jl Br C G H 1825 O s.p Sw fl gar 161

17687 9342*c* divaricàta *Swt* divaricate ☿ △ pr ½ my jl Br C G H 1825 O s.p Sw. fl gar 162

1452 TIGRI'DIA Sp 2—2

17688 9343*a* conchiflóra *Swt.* shell-flowered ☿ △ spl 1 my s D Y Mexico 1823. O s p Sw. fl gar 129

17684 17680



17681 17682

History, Use, Propagation, Culture,

1424. *Erýsimum* 17081 *Perowskiánum*. A very splendid annual, of the easiest culture.

17680 Pubescent, Lvs. wedge-sh obtusely dent Pods corymbose acutely 2-lbd ma gins gnawed crenat. Seeds winged, Stem strictly branched

17681 Lvs lanceol toothed, Petals obov Stigmas globose, Fruit silique 4-sided

17682 Velvety-pubescent somewhat clammy, Lflts. 7 with 20 veins on each side of each leaflet
17683 Unarmed, Lflts 5-7 lanceol acuminated pilose, Brac ovate, Petals length of pedicels, Pedicel of fruit long

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2693 *Omphalòbium.* Cal 5-parted Petals 5, imbricate in æstivation Stamens monadelphous, or somewhat polyadelphous at base Carpels 5, each bearing a style Capsules 1 ', legume-formed, 2-valved, dehiscent Seed twin, or solitary, exalbuminous Leaves trifoliate, or impari-pinnate

2694 *Parkia* Flowers hermaphrodite Calyx tubular, bilabiate, imbricate in æstivation Legume compressed, many-seeded Seeds covered with farinaceous substance

2695 *Sarcocaulon.* Sepals 5, equal Petals 4, equal Stamens 15, monadelphous at base

2696 *Montezùma* Calyx hemispherical, truncate, sinuately toothed Stamens numerous, twisted around the style, monadelphous, with 5 distinct furrows Capsules globose, 4-5-celled Cells many-seeded Leaves entire

2697 *Assonia* Calyx girded by a 3-crenate 1-leaved involucel Antheriferous filaments 15, 3 fertile between each sterile one Styles 5, very short Carpels 5, 2-seeded, closely connected into a single capsule. Seeds rather triquetrous, not winged

2698 *Plagianthus* Calyx 5-cleft Petals 5, 2 of which are approximate, remote from the rest Stigma clavate.

2699 *Nuttallia* Cal naked, 5-cleft Anth numerous. Stig numerous, filiform Carp numerous, disposed into a ring, or whorl, 1-seeded, not opening spontaneously

2700 *Labiconia* Cal. 5-parted, girded by a shorter 5-parted involucel Petals 5, exserted in part, twisted in æstivation, with a spreading limb. Styles 10 Carp 5, or only 4 from abortion, 1-seeded, indehiscent

2701 Abùtilon Cal naked, 5-cleft, usually angular Styles multifid at apex. Carp capsular, 5-30, many-seeded, usually bladdery, disposed into a whorl around the axis, so closely connected with each other as to form a many-celled capsule

2702 *Eriolæ'na* Cal. tomentose, girded by a 5-leaved involucel Calyx-lobes jagged, 3 inner ones largest, all shorter than the calyx Petals unguiculate Stam disposed in many series, monadelphous, outer ones shortest, all fertile. Style solitary, villous, crowned by numerous aggregate small stigmas.

2703 *Recvesia* Flowers hermaphrodite Stams monadelphous Anth 15, sessile on the top of the tube Calyx stipitate, 5-celled, 5-valved. Cells 2-seeded Seeds winged at base.

2704 Stravàdium Limb of calyx 4-parted Ovarium semilocular Cells 2-ovulate Otherwise agreeing with Barringtònia, in p 561

2705 *Morisonia* Cal obovate, bifid Petals 4 Stams 20, somewhat monadelphous at base ? Berry stipitate, globose

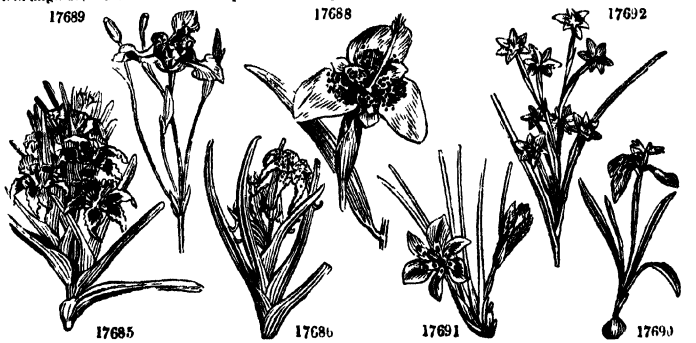
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TRIANDRIA.

17684 The only species

17685 Stem erect-branched many-flwd Lvs distich ensiform obtuse keeled on both sides
17686 Stem short-branched shorter than the lvs Lvs linear striated hooked at top, Spathe 2-flwd Segms of perianth
17687 Stem branched at top, Lvs. linear acute glaucescent, Spathes many-flwd [acuminated involuted at apex

17688 Stem angular, Outer leaflets of the perianth oblong-ovate acutish mutic inner ones short acute concave beneath



and Miscellaneous Particulars.

2684 *Orthosánthes.* Equal proportions of loam and peat suit this genus, and the species are increased by offsets

2685 *1453a. CYPE'LLA *Herb* Cypella (*Kupellon*, a kind of cup; shape of flower.) *Irideæ*. Sp 1—2
17689 - - Herbértii B M Herbert's ♂ △ or 1 jn au Ve B Ayres 1823. O s p Bot. mag. 2599
Tigridia Herbértii B M, Moræ'a Herbértii B M

2686. *1453b HERBE'RTIA Swt (*Hon & Rev W Herbert*, an assiduous botanist) *Irideæ* Sp 1—1.
17690 - - pulchella *Swt.* neat ♂ △ or ½ jl B P Chile 1827. O s.p Sw. fl. gar 222

2687. *1453c SPATALA'NTHUS *Swt* Spatalanthus. (*Spatalos*, delicate, *anthos*, flower) *Irideæ* Sp. 1—1.
17691 - - speciósus *Swt* showy ♂ △ spl ½ jn au R C. G. H. 1825. O s l Sw fl gar 300

2688. *1453d HOME'RIA Ven Homeria (*Homer*, the father of epic poetry) *Irideæ*. Sp 4—10
17692 - -miniàta *Swt* red *spot-flwd* ♂ △ or 1 my jn Ve C. G H 1825. O s p Sw. fl gar 152
Nos 806, 807. and 816, in p 46, are referable to this genus.

PENTANDRIA.

2689 *1455a MAHE'RNIA L Mahernia (An anagram of *Hermannia*; affinity) *Byttneriàceæ*. Sp. 2—14
17693 - - verticillàta *L.* whorled ☘ ☐ or 2 jn au Y C G H 1820 C l p Cav dis 6 176 t
heterophýlla is synon with No 9379. in p 564.

2690 *1459z MALESHE'RBIA R & P. (*De Malesherbes*, a French patron of botany) *Malesherbiàceæ* Sp 1—2
17694 - - linearifòlia *Posr.* linear-leafed ○ or 1½ aut P B Chile 1831 S l t Bot mag 3362
paniculàta *Don*, in Ed ph journ. 1827, coronàta *Dou* in Swt fl. gar 2. s 167, Gynopleùra linearifòlia *Cav.*

1459. PASSIFLO'RA. Sp 58—80

17695 9392a Cavanillèsii Dec Cavanilles's ☘ ☐ or .. jl.o Cop Caribees 1822 C l p Cav dis 273
17696 9396a phœnicea *Lindl* crimson-*flwd* ☘ ☐ spl 20 s C . 1831 C l p Bot reg 1603

17697 9397a ligulàris *J* ligular ☘ ☐ or 20 s Gy.P N Gran 1819 C p l Bot mag 2967
17698 9398a coccinea *Aub* scarlet ☘ ☐ or 20 jl n S Guiana 1820 C p l Aub gui. 3 324
17699 9404a Andersònii Dec Anderson's ☘ ☐ or . jl o Str St Lucia 1823 C l p

17700 9405a discolor *Lk* sundry old ☘ ☐ or 8 my jn ... S Amer. 1800 C p l Bot. reg 597
vespertilio *Bot reg.* Maximiliàna Bory.
17701 9423a nigelliflòra *Hook.* Nigella-flwd ☘ ☐ or 10 s W G B Ayres 1835. C p l Bot mag 3635

17702 9424a vitifòlia *H & B* Vine-leaved ☘ ☐ or 10 ... ... S Amer. 1823 C p l
17703 9425a gossypiifòlia *Desv* Cotton-tree-lvd ☘ ☐ cu 8 au W W Indies 1831 C r l Bot reg. 1634
17704 - - tucumanénsis *Hook* Tucuman ☘ ☐ or 10 jl W Chile 1836 C p l Bot mag 3636

17705 9431a onychina *Lindl.* *Lieut Sulivan's* ☘ ☐ or 10 n B B Ayres 1827. C l p Bot reg n s 21
17706 9431b kermesina *L. & O.* crimson ☘ ☐ spl 20 all sea C ... 1831 L r l Bot. reg 1633
17707 9431c Loúdons Loudon's ☘ ☐ spl 20 ... P .. ... L C r l
17708 9431d bicoloràta two-coloured ☘ ☐ or 20 jl au W B .. .. .. C r l

2691 *1460a CLINTO'NIA Dou (*De Witt Clinton*, late governor of the State of N York) *Lobeliàceæ* Sp 2—2
17709 - - élegans *Dou* elegant ○ pr ½ jl au B Colombia 1827 S co Bot. reg 1241
17710 - - pulchella *Lindl* pretty ◑ el ½ jl au B w.v Colombia 1831 ? S co Bot. reg 1909

DECANDRIA.

1463 *GERA'NIUM* Sp 48—63

17711 9662a Lambértii Swt Lambert's ☘ △ or 1½ jl s R Nepal 1824 D s l Sw ger 338
17712 9665a eriánthum *Dec.* woolly-flowered ☘ △ or 1½ su Wsh N Amer 1827 D co
albiflòrum *Grah*
17713 9673a cristàtum *Stev* crested ☘ △ or 1½ jn jl R Iberia 1820 D s l Bot mag 3732
albànum *Bieb*

2692 *1463a PHILOTHE'CA *Rud* (*Psilos* (err *philos*), smooth, *theke*, sheath, tube of stam) *Rutàceæ* Sp 1—1
17714 - - australis *Rud* southern ☗ ☐ or 2 ap W N Holl 1824 C p l Lin tr 11 21



History, Use, Propagation, Culture,

2685. *Cypélla.* Soil and propagation as recommended for Orthrosánthes above
2686. *Herbértia.* Soil and propagation, see Tigridia.
2687. *Spatalánthus.* Thrives in a mixture of turfy loam, peat, and sand, in pots kept in a frame.
2688. *Homéria.* For soil and propagation, see Gladiolus.
2689. *Mahérnia* is a genus of pretty little shrubs, which thrive in loam and peat, and cuttings of the young wood root readily under a hand-glass.

17689 Lvs. plicate obl-lanceol. acute, Stem flexuose bifurcate branched, Branches 1-flwd. Outer segms perian dilat. at top

17690 Lvs. linear ensif. acute at both ends plicate, Segms of perianth bearded at the base

17691 The only species

17692 Lvs linear striated glaucous, Scape kneed branched, Segms of perianth bearded acutish at base

PENTANDRIA.

17693 Lvs disposed in whorls entire or trifid linear ciliated, Stem decumbent, Pedunc. 1-2 flwd involucrated

17694 Glandularly pubes Lvs lin obt toothed recurved with pair of 3-partite stips. at base, Mouth of cal dilat Ovary subglobose

17695 Leaves glabrous ovate glandless ciliated, Petioles glandless, Pedicels solitary
17696 Lvs smooth oblong cuspid. ent Petiol with 2 glands at the upper end, Stips lin -lanceol Brac cord.-ovate serrated at base [ab with about 6 filiform clav glands, Stip. ov acumin
17697 Involuc of 3 large ovato-acumin serrat lflts little distant from fl Lvs glabr cord very ent Petiol grooved
17698 Leaves glabrous ovate toothed and acutish, Petioles bearing 4-6 glands, Bracteas ovate subserrated velvety
17699 Leaves glabrous glandular beneath rounded at the base 3-nerved truncate at the apex sublunate, Pedicels twin, Petioles glandless
17700 Lvs cuneif 2-lob acum divaricate 2-glandular at base, Petioles glandless, Involucr wanting

17701 Clthd with silky pili, Lvs cordate 5-lbd hairy or almost silky on both surfs. sharply serrat Involucre ben Cal of 3-pinnatif lvs Segms tapped with gland [toothed
17702 Lvs cord downy beneath deeply 3-lbd toothed, Lobes bigland in the sinuses, Petioles bigland Bracteas gland
17703 Velvety, Lvs cordate 3-lobed, Lobes ovate obtuse or acumin a little toothed, Ovarium villous
17704 Glabr Lvs broadly cord dply 3-lbd Lbs spreading obl or nrly ov or lanceol. glandulose-serrate at base, Pedun solit 1-flwd Brac 3 ov -cord waved
17705 Glabr Lvs cord 3 lbd Segms obl obtuse obscurely serrulated, Petioles bearing 4-6 glands, Ovarium tomentose
17706 Glabr Lvs cord 3-lbd denticulated wine-cld beneath, Petioles 2-glandular
17707 Lvs cord. 3-lbd wine-coloured beneath, Flowers purple
17708 Lvs. cord 3-lbd Flowers white and blue

[long acumin
17709 Glabrous, Stem procumb branched rather angular, Lvs sess ovate 3-nrvd Flws solit axill sess Ovary sess
17710 Lvs and sepals obtuse, Upper segms of cor ovate acute divaricate mid segm of lower lip longest

DECANDRIA

[toothed, Pedun 3-flwd
17711 Stem diffuse geniculately bran elongat Lvs oppos cord 5-lbd pilose both surfs Lbs cuneif. cut bluntly
17712 Stem erect almost simple naked below, Lvs 5-7-lbd deeply serrated, Peduncles short, Calyx villous, Petals entire, Filaments villose
17713 Stem flaccid simple, Lvs renif 7-lbd Lbs trifid, Lobules 3-toothed, Pedun elongat hispid as are cals Carpels crested

17714 Leaves very numerous linear somewhat imbricate convex beneath, Pedicels axillary



and Miscellaneous Particulars.

2690 *Malesherbia* is a genus of singular and ornamental plants, at present somewhat rare in collections, but nevertheless well deserving cultivation.

2691 *Clintonia* is a genus of tender annuals, and requires the treatment of such. The flowers are elegant, but the plants are very thinly clothed with foliage

2692 *Philotheca* The soil most suitable to this genus is a mixture of sandy loam and peat, and the plants require to be placed in an airy situation, and not crowded amongst other plants. Cuttings root freely in sand, under a bell-glass.

2693. *1463*b* OMPHALO'BIUM *Gae* Omphalobium (*Omphalos*, a navel, *lobos*, a pod) *Connaràceæ* Sp 1—2.
17715 - - africànum *Dec* African ● □ or 8 ... Pa.R Guinea 1822. C p l Cav. dis 7 221

2694 *1464*a* PA'RKIA R Br (*Mungo Park*, the celebrated African traveller.) *Legumin Mimòseæ*. Sp. 1—2
17716 - - biglobòsa *R Br* biglobular ♀ □ esc 30 mr ap Ve Guinea 1822 S r m Beau ow 2. 90

DODECANDRIA.

2695 *1465*a* SARCOCAU'LON *Dec* Sarcocaulon (*Sarx*, flesh, *kaulos*, stem) *Geraniàceæ* Sp 2—3
17717 - - Pattersònii Dec Patterson's ● □ or 2½ my jn .. C. G H 1827 R s l Patters. 14
S L'Heritièri Dec is syn with No 9693 in p 580.

2696 *1467*a.* MONTEZU'MA M. & S Montezuma (*Montezuma*, a Mexican sovereign) *Bombàceæ*. Sp 1—1
17718 - - speciosissima *M & S* showiest ♀ □ or 30 R Mexico 1827 C s l

2697 *1467*b* ASSO'NIA Cav. Assonia (*Ignatius de Asso*, a Spanish botanist) *Byttneriaceæ* Sp. 1—2
17719 - - popúlnea *Cav* Poplar-*leaved* ♀ □ or 10 W Bourbon 1820 C s l Cav dis 3 42 3

2698 *1470*a.* PLAGIA'NTHUS *Forst.* Plagianthus (*Plagios*, oblique, *anthos*, flower) *Bombàceæ* Sp 1—1
17720 - - divaricàtus *Forst* divaricated ● □ or 8 jn jl R N. Zeal 1822 C s l Forst 43

POLYANDRIA.

1472 *MA'LVA* Sp 59—78.
17721 9730*a* purpurâta *Lindl* empurpled ☿ △ or 1½ jn o P R And Chile 1825 S co Bot reg 1362
17722 9753*a* Creedna Hook. Cree's ☿ △ or 2 jl o R Hybrid 1835 C co Bot mag 3698
minìata β Creedna Penny
17723 9753*b* Munroana Dou. Munro's ☿ △ or 2 jl au S Columbia 1828 S co Bot reg 1306

2699 *1472*a* NUTTA'LLIA Dick (*Thomas Nuttall*, prof min Cambridge, N Eng) *Malvàceæ* Sp 2—5
17724 - - Papàver *Grah* Poppy-*flowered* ☿ △ or 3 au R P Louisiana 1833 S p l Bot mag 3287
17725 - - cordâta *Lindl* heart-*leaved* ☿ pr 2 au Pk N Amer 1835 R p l Bot reg 1938

1474 *ALTHÆ'A* Sp 11—17
17769 hirsùta *W* hairy ○ or 2 jn jl W Britain ch pl S co Eng bot 2674

1477 *URE'NA* Sp 5—13.
17726 - - speciòsa *Wal.* showy ● □ or 8 n Pk Ava 1828 S s l Wal pl as ra 26

2700 *1479*a* LEBRETO'NIA *Schrank* (*Manuel le Breton*, a French botanist) *Malvàceæ* Sp 1—1
17727 - - coccínea *Schk* scarlet ● □ or 10 jn jl S Brazil 1823 C s l Sch mo 90

1480 *HIBI'SCUS* Sp 53—90
17728 9836*a* crinitus *Wal* long haired ☾ △ spl 3 s o Y R Prome 1828 S p l Wal pl as ra 11
17729 9837*a* Lindlei Wal Lindley's ● □ spl 3 d P India 1828 C l p Bot reg 1395
17730 9840*a* hilifilorus *Cav* Lily flowered ● □ or 6 jn jl S Bourbon 1822 C s p Cav dis 3 57 1
β hybridus hybrid ● □ spl 10 jl S Mauritius 1828 C s p Bot mag 2891
17731 9840*b* Genèvii Boj Geneve's ● □ spl 15 jn jl Ro Mauritius ... C l p Bot mag 3141

17732 9840*c* rhoseus *Thore* Rose-*coloured* ☿ △ or 4 jl s Pk Italy 1827 D p Sw fl. gar 277
17733 9840*d* splèndens *Fra* splendid ● □ spl 10 my Ro N Holl 1828 C r m Bot. mag 3025

17734 9849*a* africànus *Roth* African ○ or 2 jn o W P Africa 1826 S co

2701 *1487*a ABU'TILON* Kth (Arabic name of a plant analogous to the marsh-mallow) *Malvàceæ* Sp 25—36
17735 - - pulchéllum *Swt* pretty ☾ □ fra 8 sp W N S W. 1821 C p.l Sw.fl.gar 2 s.287
Sida pulchélla Bonp Nos 9897 to 9921 inclusive are referable to this genus



History, Use, Propagation, Culture,

2693 *Omphalòbium* For soil and propagation, see Philothèca, above

2694 *Pàrkia* The species of this genus may be increased by cuttings of the young wood, planted in sand under a bell-glass, in heat "In Soudan the seeds of *P. africàna* are roasted as we roast coffee, then bruised, and allowed to ferment in water, when they begin to become putrid they are well washed and pounded, the powder made into cakes somewhat in the manner of our chocolate They form an excellent sauce for all kinds of food The farinaceous matter surrounding the seeds is made into a kind of sweetmeat" (*Don's Mill*, 2 396)

2695 *Sarcocaùlon* is a genus of curious spiny shrubs, which bear beautiful large flowers. They may be increased by cuttings and slips of the roots, in good soil, under a bell-glass

2696 *Montezùma* 17718 *speciosissima* is a very showy tree, thriving in a mixture of loam and peat. Full-grown cuttings (not too old) will root freely in sand, under a bell-glass, in a moist heat

2697. *Assònia* A light rich soil, or a mixture of loam and peat, suits this genus; and young cuttings root freely under a hand-glass, in heat.

17715 Lflts 3 oval acuminated smooth on both surfs somewh membran and feather-nrvd Flws. panicled, Carpels solit. stipitate

17716 Lvs with about 20 pairs of pinnæ, Each pinna ab 30 pairs of obt pubes. lflts Flower heads biglobular

DODECANDRIA

17717 Lvs. oblong cuneate blunt entire some of them almost sessile others on short petioles

17718 Lvs. smooth cord acute entire stalked, Pedic 1-flwd. rising from the brans beneath the lvs. The only species

17719 Lvs cordate acuminated smooth a little serrated, Peduncle scarcely longer than the petioles

17720 Leaves small in bundles linear, Flws. solitary The only species

POLYANDRIA

17721 Pubes Lower lvs 5-cleft upper ones 3-fid, Segms usually 3-fid, Lbs forked obt Pedun axill solit.
17722 Brans clthd with harsh stell hairs, Petiol somewh flatten ab hairy like stem, Upper lvs trilob central lb elongat lower less dply. lbd Involucel of 3 filif lvs
17723 Foment Lvs roundish cord somewhat 5-lbd crenate, Involucel setaceous, Pedun axill and termin. Panic 3 5-flwd.
[Involuc 5-lvd Lflts lanceol
17724 Root lvs lobed or pedate, Lower stem lvs palmato-pedate upper digit or simple, Cal segms ov -acute ciliat
17725 Rad lvs cord obtuse deeply lobed, Stem lvs tripartite and simple, Bracteas and calyx pilose at apex

17769 Lvs cord rough with hairs lower ones obtusely upper ones acutely lbd and toothed, Stem hispid, Pedunc 1-flwd

17796 Lvs 3-nrvd denticul hoary-toment beh with gland on each nrv beh Lower lvs roundish acutely somewh. 3-lbd. upperm ones lanceol nrly. sess.

17727 Lvs ovate acuminated serrated, Pedic axill 1-flwd longer than petioles, Cor twice as long as involucel

17728 Setosely hispid, Lvs roundish cord acumin toothed obtusely 5-angled, upper ones sagitt Rac few-flwd Involuc 12-parted ciliat Stips lin filiform [Flws axill solit Involucel 8 10 lin hisp ciliat 2-lbd lflts
17729 Petiol and pedun scabr and prickly, Lvs roundish cord palmately 3-7 parted, Lbs lanceol acumin serrat
1,730 Lvs lanceol -obl ent or rarely trifid, Involucel 5-lvd shorter than 5-toothed cal Petals rather velvety on outside
β A splendid hybrid from *H. Rhiliborus* impregnated with the pollen of *H. mutabilis*
17731 Lvs roundish-ovate ent at base unequally toothed at apex, Petals obovato-cuneate spreadg Seeds subtrigon convex on back clthd appressed hairs [the middle
17732 Lvs cord toothed somewh 3-lbd hoary from down beh Pedic axill free from petioles 1-flwd jointed above
17733 Bark clthd with stell pubes intersp with short spreadg nrly straight tubul acules, Lvs palmat 3-5-lbd with harsh stell pubes on both surfs [full of nerves
17734 Lvs toothed lower ones undivided upper ones 5-cleft with oblong blunt lobes, Cal inflat membranaceous

17735 Lvs cord ov -lanceol coarsely and unequ crenat somewh downy beh from stell pubes scabr ab Rac axill few-flwd Carpels 5 2-awned



and Miscellaneous Particulars

2698 *Plagiánthus* A shrub which, if planted in a warm sheltered situation, will stand our winters; and cuttings of young wood root freely in sand under a hand-glass

2699 *Nuttállia* is a genus of very elegant plants when in blossom, well deserving a place in every collection Peat with a little sand suits them best They may be increased by division or by seed

1477 Urèna 17726 *speciòsa* "This is a very elegant plant, with large pink flowers, which are disposed in a kind of terminal racemose panicle It differs so much in habit from all the other species of this genus, that we doubt its being a genuine species of *Urèna*" (*Don's Mill.* 1. 47)

5700 *Lebretonia* The species of this genus deserve to be cultivated in every collection, on account of their showy scarlet blossoms A mixture of loam and peat suits them best Cuttings taken off close to the stem of the plant root readily in sand under a hand-glass None of the leaves should be taken off, or shortened above the sand

5701 Abutilon Some of the species of this genus are rather ornamental when in flower. They thrive in any light rich soil, and are readily increased by cuttings, which should be placed in a gentle heat.

2702. *1489*a*. ERIOLÆ'NA *Dec* Eriolæna. (*Erion*, wool, *læna*, cloak; calyx woolly) *Byttneriàceæ*. Sp 1—5
17736 - - Wallichi*a* Dec Wallich's ♣ ⊔ or 6 ... R E. Indies 1823. C s.p Mém m. 10. 5.

2703. *1489*b*. REEVE'SIA Lindl Reevesia (*John Reeves* of Canton) *Byttneriàceæ*. Sp. 1—1.
17737 - thyrsóidea *Lindl* thyrse-lk -*flwd* ♣ ⊔ or 4 ja W China 1826 C p.l Bot. reg. 1236.

1596 CAME'LLIA Sp. 9—8
17738 9953*y* euryoïdes *B. R.* Eurya-like ♣ ⊔ or 4 my jn W China 1824. I p l Bot. reg. 983
17739 9953*z* *Kissi* Wal Kissi ♣ ⊔ or 10 my jl W Nepal 1823. I p l Ab. f. 99
9953 *Sasánqua*
γ plèna álba double white ♣ ⊔ pr 4 f n W China 1824. I p.l Bot reg. 1091
δ semiplèna álba semidouble white ♣ ⊔ pr 4 f n W China 1811. I p.l Bot. reg 12
17740 9953*a* reticulàta *Lindl.* reticulated ♣ ⊔ spl 6 ap jl R China 1824. I p l Bot. reg. 1078
9954 japónica

19 Carnation-flwd Warratah
20 Pale yellow
21 Fringed white
22 Thick-nerved
23 Expanded red
24 Shell-flwd
25 Lady Campbell's red-stmd
26 Long-leaved
27 Aucuba-leaved
28 Scarlet
29 Great-flwd red
30 Dwarf
31 Incarnate
32 Blush Warratah
33 Ross's
34 Spatulate
35 Straw-coloured
36 Aiton's large single red
37 Hollyhock-flwd
38 Coral-flowered
39 Splendid
40 Flowery
41 White Anemone-flwd.
42 Chandler's striped Warratah
43 Grey's spotted
44 Rose of the World
45 Press's single red

2704. *1497*a* *STRAVA'DIUM* J. Stravadium. (*Tyleria Samstravadi*, its Malabar name) *Myrtàceæ*. Sp 1 -2
17741 - - acutángulum *J* sharp-angled ♀ ▭ or 20 P E Indies 1822. L s p R mal 4. 7
Barringtòn*ia* acutángula *Rox*, Eugèn*ia* acutángula *L.*, *S.* rùbrum *Dec*

2705 *1499*b* MORISO'NIA Plu (*R Morison*, professor of botany at Oxford, d 1683) *Capparideæ* Sp 1—1
17742 - - americàna *L.* American ♀ ▭ or ... ... W W Indies 1824 C p.l Jac. am. 97
Cápparis Morisòn*i* Swz

Page 598. Class XVII.—DIADELPHIA. Stamens united in two separate parcels.

Order 3 OCTANDRIA. Stamens 8.

2706. *Monnìna*. Flws resupinate Sepals 5, deciduous, 2 inner ones wing-formed, 3 outer ovate, 2 of these usually united Petals 3-5, connate at base, middle one concave, 3-toothed. Stams 8, rather pilose, united into a tube at base, which is cleft on one side Drupe or capsule 2-celled, 2-seeded, or 1-celled, 1-seeded, girded by a membranous wing, or without Seed hanging from the top of the cell Albumen sparing

Order 4. DECANDRIA. Stamens 10

2707 *Amhérstia* Cal tubular, 5-toothed, with the stamens inserted in it near the apex, bibracteate at base, valvate in æstivation Petals unequal, upper one large, unguiculate, obcordate; lateral ones wedge-shaped, 2 lower ones awl-shaped Stams 10, 9 joined and 1 free, adhering to the pedicel of the ovary Anth versatile Legume stalked, flat, oblong, few-seeded
2708 *Rudólphia* Cal. tubular, bilabiate, upper segment obtuse, lower one acute, 2 lateral ones very short Vexillum oblong-linear, very long Wings shorter than calyx, very narrow. Legume compressed, many-seeded
2709 *Lálage* Calyx bracteate, bilabiate, upper lip bifid, lower one tripartite Vexillum flat, round, emarginate. Keel obtuse. Stamens all connected

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OCTANDRIA.

1508 POLY'GALA Sp. 29—44.
17743 9986*a* thesiöides *W* Thesium-like ♣ ⊔ or ½ jl B Valpar 1882 C p s.l Sw.fl g 2.s 21
17744 9991*a* attenuàta *Lod* attenuated ♣ ⊔ or 3 my v P C G. H 1820. C s p Bot. cab 1006



History, Use, Propagation, Culture,

2702 *Eriolæ'na* Any light rich soil, or a mixture of loam, peat, and sand, suits this genus; and cuttings of the young wood, not deprived of their leaves, root readily in the same soil, if placed under a hand-glass, in heat
2703. *Reevèsia*. Ripened cuttings, not deprived of their leaves, root readily in sand, under a hand-glass, in a moist heat. Soil as for Eriolæ'na, above

(5-lvd.
17736 Lvs stalked cord acumin. toothed pubes. ab villous ben Pedic. villous 1-flwd. 3 times as long as petioles, involucre

17737 The only species

17738 Lvs. ovate-lanceol acumin serrated sulcate ben Branches hairy, Pedunc. lateral 1-flwd scaly
17739 Lvs ellipt serrulat bluntly acumin Flws sess axill generally solit and somewh termin. usually 4-pet. and with 3 distinct furrowed woolly styles

17740 Lvs obl acumin serrat flat reticulated, Flws axill solit. Calyx 5-sepaled coloured, Ovary silky

46 Press's Eclipse
47 Single red-spotted
48 Chinese Rose
49 Rawes's showy
50 Elegant
51 Imbricated
52 White semidouble
53 Neat
54 Colvill's
55 Sweet's
56 Reeves's
57 Compact-flowered
58 Donkelaer's
59 Rose-like-flwd
60 Parks's
61 Salmon's
62 Choice
63 Lady Wilton's
64 Woods's
65 Rosy-coloured
66 Epsom
67 Knight's
68 Elphinstone's
69 Susanna
70 Martha
71 Wadie's

17741 Lvs. cuneate-obl. acuminat obsoletely serrulated, Rac very long pendulous, Drupe acutely 4-angled

17742 The only species

2710 *Velmoreia* Cal cylindrical, 4-toothed, somewhat bilabiate Wings shorter than the keel Style acute. Legume stalked, lanceolate, compressed, tapering
2711 *Barbieria* Cal tubular, 5-cleft, bibracteate at base, Wings shorter than keel, and keel shorter than vexillum Style bearded at apex Stigma obtuse Legume linear, villous, many-seeded
2712 *Dumasia* Cal obliquely truncate, toothless, bibracteate at base Claws of petals length of calyx Keel obtuse Legume tapering to the base, compressed, few-seeded
2713 *Neurocarpum* Cal tubular, with 5 acuminated nearly equal teeth, and furnished with 2 bracteas at base. Vexillum large, roundish Keel obtuse Legume stipitate, compressed, sub-tetragonal from the middle nerve of the valves being rather prominent, 4-8-seeded
2714 *Cologania* Cal tubular, 5-cleft, bibracteate at base, somewhat bilabiate Vexillum roundish Ovary stipitate, linear, very hispid, girded by the disk Style smooth, obtuse
2715. *Clianthus* Calyx campanulate, 5-toothed, 5-cleft Vexillum ovate-lanceolate, acuminate, rather short, the keel reflexed Wings lanceolate, spreading Keel cymbiform Anthers incumbent. Style filiform Stigma truncate. Legume oblong, swollen, coriaceous
2716 *Adesmia.* Cal 5-cleft, lobes acute Vexillum complicated above the wings when young. Keel curved and truncate at base Stams distinct, but approximate Legume compressed, many-jointed
2717. *Hosackia* Cal campanulate, 5-cleft Wings equal in length to vexillum Keel beaked. Stigma capitate Legume cylindrical, or rather compressed, straight

OCTANDRIA.

17743 Stems many erect, Lvs obl.-lin crowded, Rac 8-12-flwd Capsule somewhat 2-horned at apex
17744 Lvs narrow tapering to both ends acute and as well as twigs smooth, Rac elongat Brac decid Pedunc longer than flws Wings obtuse



and Miscellaneous Particulars.

2704. Stravadium For culture, &c, see Barringtonia, in p 597.
2705 *Mortonia* 17742 *americana* A mixture of loam, peat, and sand suits this plant; and cuttings of the young wood should be planted in sand, and placed under a hand-glass in heat. It is called in Martinique *Bois Mabonia.*

9995 *myrtifòlia*
β grandiflòra *Hook* large-flowered ▣ ⌴ or 4 my o P C G. H. 1818. C s p Bot mag 3816
9996 oppositifòlia
β major *Lindl* larger ▣ ⌴ or 3 my au P C G. H. . C p.l Bot reg 1146

2706 *1510a* MONNI'NA R & P Monnina (*Monnino*, Count de Flora Blanca) *Polygalæ.* Sp. 1—1
17745 - obtusifolia *H & A* obtuse-leaved ▣ ⌴ or 2 jn Rsh P Peru 1830 S p.l Bot mag 3122

DECANDRIA.

2707 *1520* AMHE'RST*IA* Wall (*Countess Amherst* and her daughter *Lady Sarah*) *Legumin* Sp 1—1.
17746 - nóbilis *Wall* noble ☿ □ spl 40 mr Ve w v Martaban 1837 S lt r m Wal pl as.ra.1

1521 ERYTHRI'NA. Sp 11—35
17747 *1001a* laurifòlia *Jac* Laurel-leaved ♀ ⌴ spl 4 jl s S S Amer 1800 S r m Sw fl gar. 142

2708 *1521a* RUDO'LPHI*A* W Rudolphia (*W J H Rudolph*, a bot of Jena) *Leg Pap Phaseol* Sp 1—2
17748 - rósea *Tus.* roseate ♣ □ or 6 R W. Indies 1826 C s.l Pl. am 102 1?

1525 PLATYLO'BIUM Sp 5—6
17749 *1005oa* obtusángulum *Hook* obtuse-angled ▣ ⌴ or 1 my Y R V D L 1832? S s p Bot. mag 3258
17750 *1005ob* Murrayánum Hook Murray's ▣ ⌴ or 1 my Y R V D L. 1832 S s p Bot mag 3259

2709 *1525a* LA'LAGE Lindl Lalage (*Lalage*, a lively dame in Horace, appearance) *Legumin* Sp 1—1
17751 - ornàta *Lindl* gay-*flowering* ▣ □ or 2 ap Y bd P N Holl 1830 C p Bot reg 1722

1540 CROTALA'RIA Sp 41—85.
17752 - striata *Hook* striated-*fwd* ▣ □ or 3 . Y R Maur ? 1831 S l p Bot mag 3200

1532 SCO'TTI*A* Sp 3—3.
17753 *1012Sa* angustifòlia *Lindl* narrow-leaved ▣ ⌴ or 6 jn n Pk v N Holl 1826 C p.l Bot reg 1266
17754 *1012Sb* lævis *Lindl* smooth-*bran.* ▣ ⌴ or 3 jn s Y s N Holl 1833 C s p Bot reg 1652

1536 HO'VEA Sp 7—15
17755 *1013?a* villòsa *Lindl* shaggy ▣ ⌴ el 3 ap Li N Holl 1829 C s p Bot reg 1512
17756 - Manglèsii Lindl *Capt* Mangles's ▣ ⌴ pr 1 ja P SwanRiv 1836 C co Bot reg n s 62

1537 SPA'RTIUM. Sp 22—2
17757 *1013?a* acutifòlium *Lindl* sharp-leaved ♛ or 6 jl s Y Turkey 1836 S co Bot reg n s 1971
júnceum var odoratissimum ? *Sw fl gar* 390

1540 U'LEX 10185 europæ'a Sp 2—4
β fl plèno double-flowered ♣ or 6 ap jn Y Britain gard C co

1541 LU'PINUS Sp 51—58
17758 - bracteolàris *Desv* bracted ○ or 1½ jl au B Mon Vid 1820 S co
17759 - pusillus *Ph* little ○ or ½ jl au Pa B N Amer 1817 S co
17760 - bicolor *B R* two-coloured ○ or ½ jl au Pa B N Amer 1826 S co Bot reg 1139
17761 - micránthus *Dou* small-flowered ○ or ½ my jl P B N Amer 1826 S co Bot. reg 1251
17762 - polyphyllus *B R* many-leaved ♑ △ spl 4 jn jl B Colombia 1826 S co Bot reg 1096
β albiflòrus white flowered ♑ △ spl 4 jn jl W Colombia 1826 S co Bot reg 1377
17763 - rivulàris *Lindl* rivel-*ond.* ♑ △ or 3 my s W.B P Californ 1831 S co Bot reg 1560
17764 - macrophyllus *Benth* large-leaved ♑ △ spl 4 jn jl B S s l Sw fl g 2 s 51

17765 - laxiflòrus *Dou* loose-flowered ♑ △ or 1 au B pk Columbia 1826 R co Bot reg 1110
17766 - lépidus *Dou* pretty ♑ △ or ½ au s B pk Columbia 1826 S co Bot reg 1114
17767 - ornatus *Dou* ornamental ♑ △ or 2 my jn B pk Columbia 1826 S co Bot reg 1.1
17768 - álbifrons *Benth* hoary-*headed* ▣ ⌴ or 3½ s n Dp B Californ 1833 C s l Bot reg 1614
17769 - littoràlis *Dou* shore ♑ △ or 1 jn o B pk Columbia 1826 S co Bot reg 1198
17770 - áridus *Dou* arid ♑ △ or 1 au s P B N Amer 1827 S co Bot reg 1212
17771 - plumòsus *Dou* feathery ♑ △ or 3 jn jl B Californ S co Bot reg 1?1?



History, Use, Propagation, Culture,

2706 *Monnina* A genus of plants not worth cultivation for ornament A mixture of loam and peat suits them, and cuttings of the young wood root readily in sand, under a hand-glass, in heat.

2707 *Amhérstia* 17746 *nóbilis* is a native of the Burman empire, in the garden of a decayed kioun, a sort of monastery, 2 miles from the right bank of the Salven river, and 27 miles from the town of Martabau, but its native place of growth is still unknown, as the trees found in the garden have undoubtedly been planted there The flowers are large, of a fine vermilion colour, diversified with yellow spots This tree, when in foliage and blossom, is the most superb object that can possibly be imagined, and not surpassed by any plant in the world. The Burmese name of the tree is *Thoka*

17745 Lvs oblong obtuse cuneate at base obsoletely veined rather leathery glabrous as are branchlets, Rac. solitary

DECANDRIA.

17746 The only species

17747 Stem suffrutic bran Bran glabr rather prickly, Lflts petiol obl acumin Petioles rath prickly glandul. Cal truncate unident

17748 Bran smooth glabrous, Lvs. ovato-oblong glabrous acuminated, Racemes pedunculate

[3 or 4 brown concave bracteas

17749 Lvs oppos rather remote deltoid subcoriac angles rath obt and mucronate, Pedunc very short concealed by
17750 Much branched, Bran erect flexuous somewh wiry, Lvs deltoid angles acute and mucron. Pedun. filif. longer th lf with about 6 small distich bract at base

17751 The only species

17752 Stipules wanting, Lflts ellipt obt. mucron nrly glabr Rac termin. and nrly. oppos. lvs Bract setaceous deciduous

17753 Leaves opposite lin -oblong truncate at base, Flws solitary on very short pedicels
17754 Lvs ovate truncate at base unequally denticulated, Branches smooth

17755 Lvs linear obl obtuse mucronulate glabr. reticulated above very villous beneath as well as branches, Pedicels twice shorter than petioles villous
17756 Lvs linear mucron with revolute margins glabr above pilose beneath, Flowers twin sess

17757 Lvs acumin. Racemes loose

17758 Flws altern pedicell bracteol Upper lip of cal. bipartite lower trifid, Stip ov lanceol. Lflts 5-6 obov -obl vill on both surfs

[as are stems and pets Leg very hairy

17759 Flws altern without bracteoles, Upper lip of cal bipart lower ent Lflts 5-7 lin -ellipt glabr ab hairy ben
17760 Clthd with silky plli, Lflts 5-7 lin spatulate, Flws few verticill Upper lip of cal bifid lower elongat and ent Wings longer than vexillum

[6-seeded transversely furrowed

17761 Flws somewh verticill bracteol sess Upper lip of cal bifid lower ent Lflts 5-7 lin spatulate ciliat Leg
17762 Flws rath verticill without bracteoles pedicill Lflts 11-15 lanceol hairy ben Both lips of cal quite entire, Stems pilose

[Vexillum sessile

17763 Silky, Leaflets 7 pubes beneath, Racemes verticillate, Cal bractless, Lips entire upper one gibbous at the base,
17764 Hairy leaflets 12-15 lanceol. acute, Whorls many-flwd. contiguous, Cal bractless, Lips entire, lower one lanceol. acute
17765 Pilose, Flws altern without bracteol Upper lip of cal. ent saccate at base lower longer ov. and acumin Keel beardless, Lflts 7-9 lin -lanceol

[lanceol. silky on both surfs

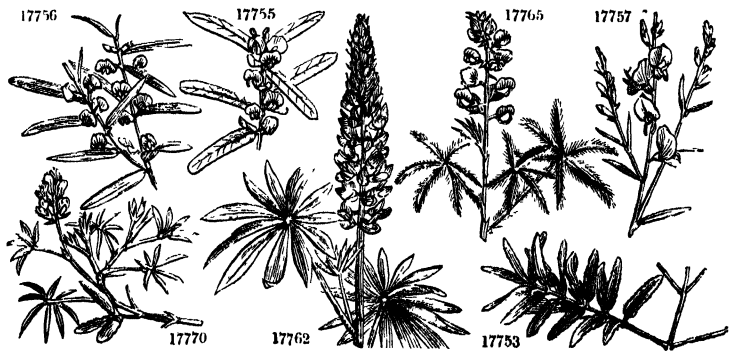
17766 Flws altern pedicell. without bracteol Cal villous upper lip bipart lower acumin and elongat. Lflts 5-7
17767 Flws verticill appendicul Upper lip of cal bifid, lower ent. elongat Lflts 7-12 lin -lanceol clthd with silvery silky down, Leg 4-5-seeded

[slender racemes

17768 Stem and lvs clthd with silvery silky down, Lflts obovato-oblong narrowed at base, Flws verticill in long
17769 Flws verticill pedic without brac Lips of cal. ent Lflts 5-7 lin. spatulate silky both surfs. Leg 10-12-seeded transversely furrowed

[Stipules subulate

17770 Very hairy, Flws verticill pedicell bracteol Upper lip of cal bifid lower ent Lflts. 5-9 lin -lanceol villous,
17771 Very villous, Flws altern on short pedic bracteol Upper lip of cal bifid lower ent Lflts 5-7 lanceol silky. Leg. glabr 3-5-seeded

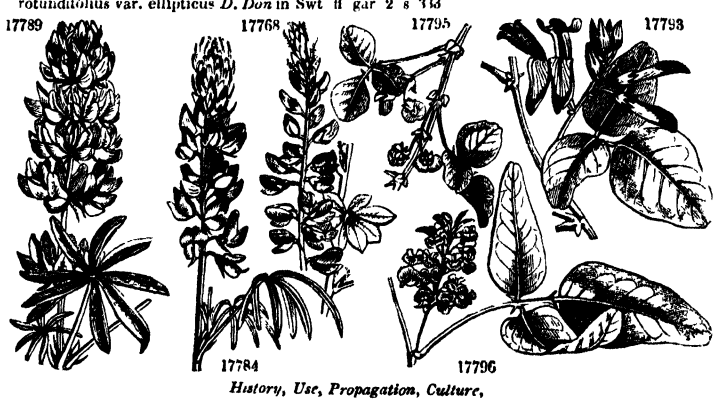


and Miscellaneous Particulars.

Handfuls of flowers were presented as offerings in the cave before the images of Buddha. Along with this tree were found some trees of Mesùa *ferrea* and *Jonésia* Asòca It is not a little remarkable, that the priests of these parts should have manifested so good a taste as to select three sorts of trees, as ornaments to their objects of worship, which can hardly be surpassed in beauty. A light loamy soil suits this tree, and large cuttings root in sand, under a hand-glass, in heat

2709 *Lálage* 17751 *ornàta* is a very gay flowering shrub, which requires to be kept in a well-aired green-house, in peat soil, and may be multiplied by cuttings

17772 -	- leucophýllus *Dou*	white-leaved	♃ △	or	2	s o	Pk	Columbia	1826	S	co	Bot reg 1124		
17773 -	- Sabinæ̀nus Dou	Sabine's	♃ △	or	3	my	Y	Columbia	1827	S	s.l	Bot. reg 1436		
17774 -	- sericeus *Ph*	silky	♃ △	or	1	my jn	P	N Amer.	1826.	D	s p			
17775 -	- argenteus *Ph*	silvery	♃ △	or	1	my jn	W	N Amer	1826.	S	s.l			
17776 -	- élegans *H & K*	elegant	○	or	2	jn	V Ro	Mexico	1831.	S	s l	Bot. reg. 1581		
17777 -	- arbústus *Dou.*	shrub	♃ ⌐	or	1½	jl au	Pa P	Californ	1826.	S	co	Bot. reg. 1230		
17778 -	- multiflòrus *Desv*	many-flowered	♃ ⌐	or	4	jl s	B	Mte Vid	1810	C	s l			
17779 -	- incànus *Grah.*	hoary-*herbaged*	♃ ⌐	or	3	jn o	Pa.Li	B. Ayres	1832.	S	s l	Bot. mag. 3283		
17780 -	- mutàbilis *Swt.*	changeable	♃ ⌐	or	5	jl s	B Y	Bogota	1819	C	s l	Sw fl gar 130		
17781 -	- canaliculàtus *Swt.*	channeled	♃ ⌐	or	4	jn au	B	B Ayres	1828.	C	p.l	Sw. fl. gar. 283		
17782 -	- versicolor *Swt.*	party-coloured	♃ ⌐	or	5	jl s	Pk B	Mexico	1825.	C	s l	Sw. fl. gar. 2. s 1		
17783 -	- pulchéllus *Swt.*	pretty	♃ ⌐	or	3	jn o	B P	Mexico	1828.	C	s l	Sw. fl. gar. 2 s 67		
17784 -	- leptophýllus *Benth.*	narrow-leafleted	○	or	1	jl s	B.li	Californ.	1833	S	s.l	Bot reg 1670		
17785 -	- bimaculàtus *Hook.*	twin-spotted	♃ △	or	.	s	B	Texas	1835	S	lt s.l	Sw fl gar 2.s 314		
17786 -	- tomentòsus *Dec.*	tomentose	♃ ⌐	or	6	jn jl	Pk w	Peru	1825.	C	co	Sw fl gar 261		
17787 -	- Marshall*ànus* Swt.	Marshall's	♃ ⌐	or	5	jl o	B	Eng hyb	1830.	C	s l	Sw fl g. 2 s.139		
17788 -	- Hartwèg*ii* Lindl	Hartweg's	○	or	3	jn.o	D B pk	Mexico	1838.	S	co	Bot.reg.n s 1839 31		
17789 -	- densiflòrus *Benth*	dense-inflor.	○	or	¾	jl s	W pk	Californ	1833.	S	s l	Bot. reg 1689		
17790 -	- latiflòlius *Lindl*	broad-leaved	♃ △	or	1½	jl	B	Californ	1834	S	l p	Bot. reg. 1891		
17791 -	- subcarnòsus *Hook*	subcarnose-*lvd*	○	or	1	jl	Dp B w	Texas	1835.	S	s l	Bot. mag. 3467		
17792 -	- texénsis *Hook*	Texas	○	or	1½	jl	Dp B	Texas	...	S	s.l	Bot mag 3492		
	1553 KENNE'DY*A*						Sp 10—16							
17793	10315*a* nígricans *Lindl*	dark-*corollaed*	♄ ⌐	or	3°	f jn	D P G	N Holl	1832°	C	s p	Bot reg. 1715		
17794	10317*a* Marryáttæ Lindl.	*Mrs.*Marryatt's	♄ ⌐	or	4	jn jl	S	Australia	1834	S	s p	Bot. reg 1790		
17795	10317*b* Stirlingi Lindl	Stirling's	♄ ⌐	or	3°	ap	S	Swan R.	1834	C	s p	Bot reg 1845		
17796	10318*a* macrophýlla *Lindl*	long-leaved	♄ ⌐	or	15	...	P	Swan R	1835	C	s p	Bot reg. 1862		
	10319 monophýlla													
	β longeracemòsa *Lindl*	lg-racemed	♄ ⌐	or	3	mr au	Pk	N S W	1828	S	l p	Bot. reg. 1336		
2710	*1555*a* VILMORI'N*IA* Dec	(*M Vilmorin*, memb of Agricul Soc., Paris.)								*Leg*	*Pap*	*Lot*	*Clt.*	Sp. 1—1
17797 -	- multiflòra *Dec*	many-flowered	♃ ▭	or	6		P	W Indies	1820	C	s p			
2711.	*1555*b* BARBIE'R*IA* Dec	(*J B G Barbier*, M D a French botanist.)								*Leg*	*Pap*	*Lot*	*Clt*	Sp 1—1
17798 -	- polyphýlla *Dec*	many-leaved	♃ ▭	or	.		P	S Amer.	1818	C	s p	Dec leg 5 30		
2712	*1555*c* DUMA'S*IA* Dec.	(*M Dumas*, one of the edit of Annals of Nat His.)								*Leg*	*Pap*	*Lot*	*Clt*	Sp 1—2
17799 -	- pubéscens *Dec*	pubescent	♄ ▭	or	6	au d	Y	Nepal	1824	C	s l	Bot. reg 962		
2713	*1556*a* NEUROCA'RPUM *Desv*	(*Neuron*, nerve, *karpos*, fruit.)								*Leg*	*Pap*	*Lot*	*Clt*	Sp 1—2
17800 -	- guianénse *Desv*	Guiana	♃ ▭	or	2	...	P	Guiana	1826	C	p l	Aub. gui 2 305		
	Crotalària guianénsis *Aub* lon glfòlia *Lam*													
2714.	*1556*b* COLOGA'N*IA* Kth	Cologania (The family of *Cologan*, in Teneriffe.)								*Leg*	*Pap*	*Lot*	*Clt*	Sp 1—2
17801 -	- angustifòlia *Kth*	narrow-leaved	♄ ⍁	or	3		V	Mexico	1827	C	p l	Kth mim 58		
	1557 *O'*ROBUS						Sp 21—36							
17802	10333*a* Fischer*i* Swt.	Fischer's	♣ △	or	1	my jl	P	Siberia		S	co	Sw. fl gar 289		
17803	10343*a* formòsus *Stev.*	beautiful	♃ △	or	¾	my jl	P	Caucasus	1818	R	p.l	Lin. tr 11 36		
17804	10344*a* atropurpùreus *Desf*	dark-purple	♃ △	or	1	my	P	Algiers	1826	S	sl	Bot. reg 1763		
17805	10344*b* stipulàceus *Hook*	stipulaceous	♃ △	or	6	my	P	N Amer	?	D	co	Bot mag 2947		
17806 -	- pistiformis *Maund*	pea-formed	♃ △	el	1	my	P	S Europe	1822	R	s l	Bot. gar 634		
	1558 *LA'*THYRUS						Sp 34—53							
178 7	10368*a* magellánicus	Magellan	♃	or	10	jn au	P B	Brazil	1829	S	C lt sl	Bot gard 520		
†10371	rotundifòlius *W*	round-leaved	△	or	3	ap my	Pk	Tauria	1822	R	co	Sw fl g. 2 s 333		
	rotundifòlius var. ellipticus *D. Don* in Swt fl gar 2 s 333													



History, Use, Propagation, Culture,

2710. ***Vilmorinia.*** A mixture of peat, loam, and sand suits this genus; and cuttings will root in sand, under a bell-glass, in heat; but the most ready mode of increasing it is by seed

2711. ***Barbièria*** For soil and propagation see Vilmorin*ia*, above

17772 Very villous, Flws altern. pedicell. bracteol. Upper lip of cal bifid lower ent. Lflts. 7-9 obl.-lanceol Stipules subul woolly
17773 Flws. somewh. verticill without bracteoles, Rac. many-flwd. Cal villous, Upper lip ov and acute lower boatsh. Lflts 7-12 lan.-acumin. [surfs Stems clthd. silky toment.
17774 Flws rath verticill. without bracteoles, Upper lip of cal cut lower ent Lflts 7-8 lanceol acute silky both
17775 Flws altern without brac Upper lip of cal obtuse lower ent. Lflts. 5-7 lin. lanceol. acuto glabr. ab clthd. silky silvery down ben [lanceol.-acute, Stipules setaceous
17776 Clthd with soft plli, Rac elongat. peduncul Flws somewh. verticill. Lower lip of cal. acute and ent Lflts.
17777 Flws altern. pedicell bracteol. Upper lip of cal. bifid lower one ent. acute, Lflts. 7-13 obov.-obl. silky on both surfs Leg 3-4-seeded [villi
17778 Flws. altern. almost sess bracteol Upper lip of cal bifid lower tridentate, Lflts. lanceol covered with silky
17779 Silky, Lvs digit Lflts about 9 lin.-lanceol carin. below ent. very acute, Pedic. scatt over rachis or within a little way of base, Brac small subul. adpress inconspic [Upper lip of cal bifid lower keeled acute ent
17780 Bran spreadg glauc glabr Lflts 7-9 glauces. rath. pubes ben. lanceol bluntish, Flws somewh verticill
17781 Clthd with silky toment. Flws. altern pedicell bracteol Cal. appendicul Upper lip bifid lower ent and acumin Lflts 8-9 lin. canaliicul. obt [caducous sprdg silky chat long th silky cal.
17782 Bran. and lvs pubes Lflts 7-9 lanceol.-spatul. bluntish somewh mucron smthish. ab pubes ben Bract
17783 *Bran. erect* clthd with silky pubes Lflts. 5-7 *obl.-lanceol acute mucron. pubes ben. Stip setaceous,* Rac. peduncul. Flws. verticill Brac caducous and setaceous
17784 Bran angul clthd adpress pubes. Lflts 9 lin acute few silky hairs on both surfs. Stip foliac. lin. Flws. in lax peduncul racemes somewh verticill Lips of cal ent
17785 Sarmentose and hoary, Flws. somewh verticill tern pedicel bracteolate Vexillum bicallous at base
17786 Clthd with silky toment Flws verticill. pedicell bracteol Both lips of cal. ent Lflts 8-10 obl. bluntish mucronul. tapering to base, Ovary very hairy [lanceol acute, Brac long and slend extending beyond flws
17787 Clthd with soft woolly and silky hairs, Lower lvs of 9-14 lflts upper ones 8-5 lflts Lflts. varying from ellipt to
17788 Pilose, Stipules setaceous, Lflts. 7-9 obl obtuse, Raceme elong many-flwd Bracteas setaceous plumose, Keel
17789 Lvs of 7-9 oblongo-spathul. lflts Whorls 6-10-flowered, Legume villous 2-seeded [beardless
17790 Glabr Lflts 5-7 obov narrowed at base, Whorls few-flwd Cal bractless silky, Lips nearly entire
17791 Stem downy, Lvs on long pets of five obov.-lanceol singularly thick and alm fleshy retuse lflts. Lflts of lower lvs shortest and broadest glabr ab somewh. silky ben
17792 Lvs of 5 lanceol acute lflts very smooth ab silky ben Stip subulate, Lower lip of cal always entire [straight, Vexill remarkably retrofracted
17793 Lvs broadly ov almost cord at base retuse at apex sometimes tern Flws erect second racemose, Keel nearly
17794 Villous, Leaflets 3 obl obtuse undulated, Stipules and bracteas cord Pedunc 4-flwd
17795 Leaflets 3 roundish ov. mucron almost glabr Petioles and stems pilose, Stipules ovate acute, Bracteas in
17796 Leaflets 3 ovate obl retuse mucron Stip setaceous, Racemes many-flwd. [fascicles or whorled, Pedun. 2-flwd.

17797 Stem erect glabr. Lvs. pinnate with 5 or 6 pairs of ovate lflts. which are pubes beneath, Racemes shorter than leaves

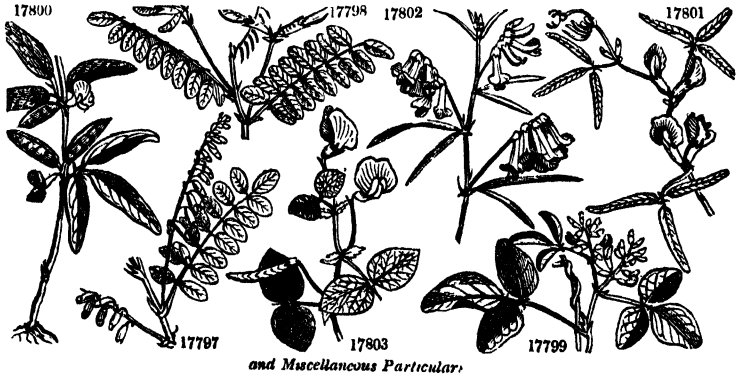
17798 The only species

17799 Branches petioles peduncles and leaves pubescent, Lflts ovate, Legume 4 times longer than calyx

17800 Stem erect shrubby, Lvs sess. trifoliate, Lflts. obl obt. and somewh. mucron pubes as are brans. Flws. 2-3 on very short peduncles

17801 Twining, Lflts linear obtuse rather strigose on both surfaces, Calyx covered with hispid pili

17802 Stem tetragonal alm. simple, Lflts lin bluntish mucronul. rather silky ben Stip lin acute little-toothed auricle at base, Flws. secund, Leg 6-7-seeded [axill about 2-flwd Leg lanceol. glabr
17803 Quite smooth, Lflts. ovate mucronul Stip small semisagitt acute denticul with diverging nrvs Pedunc.
17804 Stem striat or angul Lvs with 3 pairs of lin acute lflts Stip semisagitt very narrow awned, Pedun many-flwd Leg compressed somewh ellipt [axill and termin. few-flwd.
17805 Stem erect angul bran ab Lvs with 2-3 pairs of lin. attenuat. very long lflts Stip. large semisagitt. Pedun.
17806 Leaflets 6 linear, Stipules broad sagitt. Pedun. 2-4-flwd [tate, Tendrils 3-fid, Peduncs 3-7-flwd.
17807 Glabrous glaucous, Stems branch. 4-gonal, Lvs with one pair of ovate obl leaflets, Stipules broad cordate sagit-
†10371 Pedunc. many-fl. Tendrils 2-lvd. Leaflets roundish, Joints membranous



and Miscellaneous Particulars

2712. *Dumasia.* Soil and propagation as recommended for Vilmorinia, above
2713. *Neuracánthum* Propagation, &c, the same as that of Vilmorinia.
2714 *Cologania* requires the same treatment as that recommended for Vilmorinia

17808	10377*a* decaphy'llus *Ph*	ten-leaved		or	4	jn	R.li	N. Amer	1829.	S	co	Bot. mag. 3123
17809	10378*a* mutábilis *Swt.*	changeable		or	4	jn au	P R	Siberia	1825	S	co	Sw. fl gar 192
17810	10378*b* californícus *B. R.*	Californian		or	4	jn jl	P	California	1826.	S	co	Bot. reg 1144
	1566 CY'TISUS						Sp 26—38					
17811	10453*a* æólicus *Guss*	Strombolo		or	7	my	Y	Stromb	1836	S	s l	Bot. reg 1902
	2715. *1571*a* CLIA'NTHUS *Sol* (*Kleios*, glory, *anthos*, flower, noble aspect) *Legumindceæ.*											Sp 1—1.
17812	- puniceus *Sol* Dónia punicea *G Don, Parrot's bill.*	crimson-*coy.*		spl	4	my jn	C	N. Zeal.	1832	C	p	Bot. reg 1775
	1573 COLU'TEA						Sp 5—12					
17813	10485*a* nepalénsis *B M*	Nepal		or	5	au.s	Y	Nepal	1822	S	co	Bot. mag. 2622
	2716 *1583*a* ADE'SMIA *Dec* (*A*, without, *desmos*, a bond, stam free) *Leg Pap. Hed Euhed*											Sp 5—8.
17814	- microphýlla *Hook.*	small-leaved		or	2	va.sea	Y	Valparaí	1830	S	s.l	Bot cab 1692
17815	- pêndula *Dec*	pendulous		or	1	jn jl	O Y	B Ayres	1825	S	s l	Sw fl.gar 2 s 322
17816	- Loudónia H & A. Loudónia anthyllóides *Bertero Mss*	Loudon's		or	2	my jn	Y	Chile	1832.	S	p l	Bot reg 1720
17817	- viscósa *G & H*	clammy-*herb*		or	12	my o	Y taw	Chile	1832	C	lt l	Sw fl gar 2 s 230
17818	- uspallatánsis *Gill*	Uspallatan		pr	1	jl	Y	Chile	1832	C	s l	Sw fl gar 2 s 222
	1589 INDIGO'FERA.						Sp 26—49					
17819	- atropurpùrea *Ham*	dark purple		or	5	au	D P C	Nepal	1816	C	s p	Bot reg 1744
17820	- violácea *Rox.*	violet-*cor.*		or	5	..	P.R	E Indies	1819	C	s l	Bot. mag 3348
	1597 PSORA'LEA.						Sp 31—39					
17821	10756*a* brachiàta *Dou*	brachiate		esc	1½	jn.jl	W B Pl	RockyM	1828	D	p.l	Hook am 53
17822	10763*a* macrostàchya *Dec*	long-spiked		or	3	jl	P	Californ.	1834	S	s l	Bot reg 1769
17823	- orbiculàris *Lindl*	round-*leaved*		or	½	jn.jl	P	Californ.	1835.	R	p l	Bot reg 1971
	2717 *1601*a* HOSA'CK*IA* Dou Hosackia (*D Hosack*, M D, F.R S, of New York) *Leg Pap Lot*											Sp 1—2
17824	- bícolor *Dou* Lòtus pinnàtus *Hook* Bot mag 2913	two-coloured		or	½	jl s	Y w	N. Amer	1826	D	co	Bot reg 1257

Page 650. CLASS XVIII. — POLYADELPHIA. STAMENS united into several parcels.

Order 2 POLYANDRIA Stamens indefinite

2718 *Eudésmia* Limb of calyx 4-toothed Petals joined into a deciduous operculum Bundles of stamens 4, alternating with teeth of calyx Caps 4-celled, 4-valved Flws pedunculate

2719 *Candóllea* Cal of 5 oval, mucronate, permanent sepals Petals 5, obovate or obcordate, deciduous Stams indefinite Style filiform Carpels 2-5, ovate, opening on the inside

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POLYANDRIA

	1610. MELALEU'CA					Sp 26—50						
17825	- Fráseri Hook.	Fraser's		or	1½	Pa Ro N S W		1829	C	p l	Bot mag 3210
	1613 BEAUFO'RT*IA*					Sp 3—5.						
17826	10970*a* Dampiéri Cun. carinàta *Cun* ?	Dampier's		or	2	my	Pk	Hartog's I....		C	s p	Bot mag 3270
	2718 *1613*a*. EUDE'SMIA *R. Br* Eudesmia (*Eu*, well, *desme*, bundle, stamens) *Myrtàceæ*											Sp. 1—1
17827	- tetragòna *R. Br*	four-angled		or	16	jl	W	N Holl.	1824.	C	s.p	Sw au 21



History, Use, Propagation, Culture.

2715. *Clianthus* 17812 *puniceus* is a splendid half-hardy shrub, which well deserves a place in every collection It is very readily increased by cuttings and by seed, and thrives in peat or any light rich soil. In New Zeal nd it is called *kowaru-gutukaka*, or the parrot's bill, and it is said to grow there to the size of a large tree.

2716. *Adésmia* is a genus of South American plants, some of which are shrubby; the appearance of several of them resembles that of Genísta, and may be increased in the same manner

17808 Glabr. or pubes. Lvs with 4-6 pairs of ellipt. rarely ov or obl. lflts Stip. small semisagitt. lanceol. with lobe deflexed and about eq in length to stips [acute angularly toothed at base, Leg convex narrow
17809 Stem flexuous winged, Wings ciliately pubes. Lvs with 3 4 pairs of ov obt glauces lflts Stip semisagitt ov
17810 Stem 4-gonal glabr Lvs glauc with 4-5 pairs of ov.-obl. glabr mucronul. lflts. Stip. semisagitt. about size of lflts Leg obl rather falcate inflated

17811 Bran round hoary as are lvs. Lvs. trifoliate, Lflts. oval toment. on margin, Flws tern alm. bractless, Cal membran pubes Leg. glabr

17812 Minutely pubes Lflts. altern. obl retuse coriaceous, Flws. racemose, Calyx 5-toothed smooth

17813 Lflts. roundish ellipt retuse, Rac. droopg few-flwd Callosities of vexillum papilliform, Leg. rather coriaceous pubescent [3-jointed covered with long plumose bristles
17814 Much bran Bran striat pubes divaric spinose, Lvs 6-pairs of small orbicul lflts on short pets pubes Leg.
17815 Stem diffuse hardly pubes Lvs 7-9 pairs of oval-obl ent pubes lflts Rac elongat Leg pendul with 7-8 rather hispid joints
17816 Silky erect much branched very leafy, Lflts 3-pairs lin lanceol Pedunc axillary solit Cal 5-cleft, Legumes 3-jointed [lflts Pod of 4 to 6 1-seeded joints
17817 Unarmed clammy with numer tubercul shining glands, Lvs of 9-14 pairs of cuneat -obl cren coriac nrly sess
17818 Spiny, Leaflets 5 pairs oval obtuse glabrous, Teeth of calyx semiovate acute reflexed, Legumes bristly 2 or 3 joints [Leg. straight compressed mucron pendul 8-10-seeded
17819 Lvs pinnate with 5 7 or 10 pairs of oval retuse mucronul lflts rather undul on margins, Rac axill slender,
17820 Lvs pinnate with 5 pairs of obovato-ellipt flat slightly pubes lflts Rac axill longer th lvs. Leg. subcylind glabr 6-10-seeded

17821 Stem erect flexuose a little branch villous, Lvs of 5 ellip hairy lflts Pedunc axill elong Racemes obl spicate. Flowers erect [lvs Spikes cylindric hairy as are rachis and bract
17822 Lvs pinnately trifol pubes Lflts ovate mucron. Petioles scabr from glands, Pedun axill 4 times longer than
17823 Covered with down intermixed with glands, Leaflets round oval heads con Pedunc. very long axill. Bracteas obl concave, very hairy, Stem creeping

17824 Glabrous, Flws umbel. 6-10 in each umbel bractless, Leaves with 7-9 leaflets

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2720 *Blumenbachia* Tube of cal spirally twisted Limb 5-parted Petals 10, 5 outer ones cucullate, and the 5 inner ones scale-formed, each scale enclosing 2 sterile filaments Fertile stams disposed in 5 bundles Fruit dividing into 10 parts at base

2721 *Scyphanthus* Cal deeply 5-parted, permanent, equal Petals 5 Stams numerous, perigynous, 10 outer ones destitute of anthers, and placed by twos opposite the scales, and longer than the rest, which are disposed in 5 fascicles opposite the petals. Caps prismatic, silique-formed, crowned by tube of calyx, 3-valved at apex. Seeds oval wrinkled

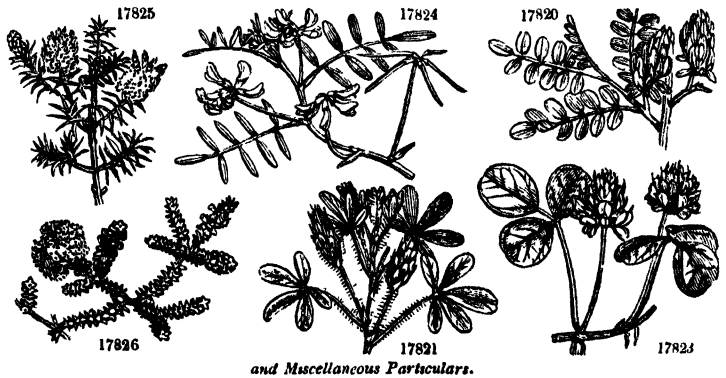
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POLYANDRIA

17825 Lvs altern lin.-subul compress reflexo-patent slightly atten. at base acumin with mucro at point, Flws. in subglob spike terminated by 2 or 3 annotinous shoots

17826 Leaves oppos decussate many-nerved keeled on the back ovate or oval glaucous

17827 The only species



and Miscellaneous Particulars.

2717 *Hosáckia.* The species of Hosáckia are rather showy, and well adapted for ornamenting flower-borders and rockwork They will grow in any common garden soil, and are easily increased by seeds, or by division of the root

2718. *Euddsonia* For culture and propagation see Melaleùca, in p. 652.

2719. *16135. CANDO'LLEA Lab. (*Aug. Py. DeCandolle*, F.R.S., F.M.L.S. &c, Geneva) *Dilleniàceæ*. Sp 1—1
17828 - - cuneiformis *Lab* wedge-shaped ♠ ⌴ or ? ... Y N. Holl. 1824. C s.p Bot. mag. 2711

1619 *LOA'SA*. Sp. 8—9.
17829 11054*a* hispida *L* hispid ⚹ ◯ or 2 jl au Y Lima 1830. S s.l Bot. mag. 3057
ambrosiæfolia Juss., and *Lindl.* in Bot. reg 1390.
17830 11054*b* incana *Grah.* hoary ♃ △ cu 2½ o.n W Peru 1830 S co Bot mag. 3048
17831 11054*c* alba *D Don* white-*flowered* ○ or 1 jl o W Chile 1831. S co Sw fl gar 2.s.19
17832 11054*d* latèritia *Hook.* brick-*cld-flwd* ♗ ○ or 20 jl o R Tucum 1835. S s.l Bot mag 3632
aurantiaca *Hort.*, punicea *R & P.*? coccínea *Hort*, Caiophora latèritia *Benth.*, C punicea *Presl*?

2720. *1619*a* BLUMENBA'CHIA Schr (*J F. Blumenbach*, F.R.S, prof med, Gottingen) *Loasàceæ*. Sp 2—2
17833 - - mignis *Schr.* remarkable ⚹ ○ or ½ jl.n W Monte Vid 1826. S r m Sw fl. gar. 170
17834 - - multifida *Hook.* multifid-*leaved* ○ or 1 jl n Gsh R.Y B Ayres 1826 S r.m Bot mag 3599

2721 *1619*b* SCYPHA'NTHUS *Swt* SCYPHANTHUS (*Skyphos*, a cup, *anthos*, a flower) *Loasàceæ* Sp 1—1
17835 - - grandiflòrus *Swt.* great-flowered ⚸ ○ or 2 au s Y Chile 1827. S s l Sw. fl gar 238



History, Use, Propagation, Culture,

2719 *Candollea* Requires the same treatment as that recommended for Melaleùca, in p 652
2720. *Blumenbàchia* is a genus of ornamental annuals, and requires the usual treatment of such

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Page 660. CLASS XIX. — SYNGENESIA STAMENS 5. ANTHERS united by their edges

Order 1. ÆQUALIS Florets of the disk and ray all hermaphrodite

2722 *Craspèdia*. Heads 5-flwd. homogamous, girded by bracteas seated on a cylindrical woolly rachis, receptacle narrow. Paleæ entire Scales of involucrum membranous Corollas tubular, 5-toothed Anthers setiferous at the base. Achænia oblong, villous Pappus in one series, composed of filiform plumose bristles.
2723. *Erythrolæ'na* Involuc conical, inner lvs imbricated, outer ones reflexed, spiny-toothed Receptacle convex, pilose. Flowers hermaphrodite, tubular, with a 5-parted limb and a 5-angled tube Filaments glandular. Anthers bisetose at the base. Stigma bifid Pappus sessile, plumose
2724 *Alòmia*. Heads many-flwd Involucrum campanulate, imbricate Scales narrow, acute. Receptacle naked, convex. Tube of corolla slender, glabrous Anthers terminated by obtuse appendages. Lobes of style elongated Achænia 5-angled, naked at top
2725 *Ozothámnus*. Head 3-20-flowered, homogamous Receptacle alveolate, usually naked. Involucrum imbricate. Scale scarious, obtuse. Corolla 3-toothed. Anthers bisetose at the base Achænia obovate. Pappus in one series, composed of filiform scabrous bristles.

Order 2. SUPERFLUA. Florets of the disk hermaphrodite, of the ray female.

2726 *Leptostèlma* Involuc equal, hemispherical Receptacle paleaceous Flowers of the ray ligulate, female, those of the disk hermaphrodite, tubular, 5-toothed Pappus capillary.
2727. *Adenotrichia* Involucrum double, many-lvd, outer lvs. squarrose, subulate, glandular. Flowers of the ray ligulate, almost entire, female, those of the disk tubular, filiform, hermaphrodite Receptacle naked Pappus pilose
2728 *Diplopáppus* Ray flowers in 1 series, female, those of the disk hemaphrodite, tubular. Pappus in 2 series Corollas of the disk regular Achænia beakless.
2729 *Brachyglottis* Heads 9-10-flowered, heterogamous Ray flowers in 1 series, female, ligulate, shorter than the disk, disk flowers tubular, 5-toothed, hermaphrodite. Receptacle naked. Involucrum oblong, surrounded by 1 row of linear scales. Achænia oblong. Pappus in 1 series, composed of dense scabrous bristles, which are combined at the base
2730. *Rhodánthe*. Heads many-flwd. Flowers hermaphrodite. Pappus in 1 series, hair formed, plumose Achænia beakless, woolly. Receptacle naked
2731. *Diplácoma* Involucrum many-lvd. imbricated. Flowers of the ray female, ligulate, those of the disk hermaphrodite, tubular Achænia of the rays bald at the top, those of the disk pappose Pappus double, unequal
2732 *Nèja*. Involucrum many-lvd imbricated Receptacle pitted. Flowers of the ray female, ligulate, those of the disk hermaphrodite, tubular, 5-toothed. Achænia uniform. Pappus double; outer paleaceous, inner pilose
2733. *Mutisia*. Involucrum many-lvd imbricated. Receptacle naked Flowers of the ray ligulate, female, those of the disk hermaphrodite, bilabiate Filaments papillose. Anthers bisetose at the base. Achænia a little beaked. Pappus in many series, plumose
2734. *Chætachlæ'na*. Heads many-flwd heterogamous, ray-formed Involucrum hemispherical, imbricate, with linear flat scales. Receptacle pilose or fringed Ray flowers bilabiate, outer lip large, 3-toothed; inner one small, bipartite. Corollas of the disk tubular, 5-cleft, glabrous Anthers bisetose at the base. Achænia beakless, somewhat compressed. Pappus in two series, setaceous, scabrous
2735. *Lasthènia*. Head many-flowered, homogamous. Flowers of the ray female, tubular, obliquely truncate Receptacle conical, papillose Scales of involuc. in one series, combined into a toothed ciliated cup. Corolla short, with an inflated throat and a 5-toothed limb Achænia compressed, pubescent. Pappus composed of 5-10-toothed paleæ.

17828 Leaves smooth obovately cuneated blunt at the top entire, Branches cinereous rough

17829 Lvs. altern. bipinnatifid, Lobes bluntish, Pedic extra-axill Lbs. of cal lanceol -linear acute shorter than petals
17830 Clthd with harsh barbed white hairs and a few stinging ones intersp Lvs. scatter petiol. spread ov acute [hispid inciso-serrate, Pedun spread. ab half length of lvs.
17831 Canescent, Lvs. oppos. palmate toothed, Cal segms long and linear, Outer appendages hatchet-formed awned
17832 Climbing, Lvs. cord. palmate lobed, Petals sessile keeled, Append. 3-lbd. truncate each furnished inside with 2 bristles, Caps. spiral ribbed

17833 Lower lvs generally 7- but sometimes 5-lobed; upper ones deeply bipinnatifid
17834 Leaves palmate with bipinnatifid lobes, Flowers bibracteated, Petals hispid

17835 Stem dichotomous, Segments of leaves obtuse ciliated



and Miscellaneous Particulars

2721. *Scyphánthus* is a twining annual, with somewhat curious inflorescence. It is said to have been lost soon after its introduction in 1827

2736 *Baèria* Head many-flowered, heterogamous, radiate Scales of involuc about 10, flat, in 2 rows Receptacle conical, naked Flowers of the disk hermaphrodite, 5-toothed, those of the ray female, ligulate, fertile, in 1 series Achænia fusiform, somewhat tetragonal, glabrous

2737 *Erióphyllum* Head many-flowered, radiate Flowers of the ray female, ligulate Flowers of the disk hermaphrodite, 5-toothed, glandular. Involuc. ovate, with 1-2 series of adpressed scales Receptacle naked, or a little fringed Achænia turbinate or linear, tetragonal, glabrous. Paleæ of pappus 4-8, oval or oblong, membranous.

2738 *Lagenóphora* Head many-flowered, heterogamous Flowers of the ray ligulate, female, in 1 series, those of disk tubular, 5-toothed, hermaphrodite, male Receptacle flat, naked Scales of involuc in 2 series, acute, adpressed Achænia of the rays compressed, oblong, beakless, those of the disk abortive

2739 *Oxyùra.* Head many-flowered, radiate. Flowers of the ray 10-12, in 1 series, ligulate, female, those of the disk tubular, 5-toothed, hermaphrodite. Scales of involuc. in 1 series, convolute, each drawn out into lin leafy appendage at top Receptacle paleaceous. Branches of the styles of the disk flowers drawn out each into a hispid appendage Achænia compressed, glabrous.

2740. *Cladánthus.* Heads many-flowered, heterogamous. Flowers of the ray ligulate, neuter, those of the disk tubular, hermaphrodite, 5-toothed. Receptacle conical, paleaceous, intermixed with threads. Scales of involucrum in 1 series, scarious at top. Achænia compressed, glabrous.

2741. *Ericócoma.* Involucrum few-lvd. Receptacle paleaceous Paleæ cucul mucronate Flowers of the ray 4-10-ligulate, neuter; those of the disk hermaphrodite, 5-toothed. Achænia cuneated, glabrous at top, enclosed by the persistent paleæ.

2742 *Viguièra.* Heads many-flowered, heterogamous Flowers of the ray neuter, ligulate, those of the disk hermaphrodite, 5-toothed. Involucrum semiglobose, scales nearly equal, each drawn out into leafy appendage at top Receptacle paleaceous. Achænia compressed, obovate, pubescent, crowned by four lamellæ and two awns from the angles

2743 *Callíopsis.* Heads many-flowered, heterogamous. Flowers of the ray neuter, in 1 series, ligulate, 3-5-toothed, those of the disk hermaphrodite, tubular, 5-toothed Involucrum in 2-series, outer scales short, squarrose, inner ones large, erect, combined. Receptacle flat, paleaceous. Achænia compressed, glabrous, incurved, truncate, with a minute epigynous disk.

2744 *Plectocéphalus* Involucrum globose, imbricate Appendages to scales cartilaginous, pectinated. Receptacle clothed with setaceous paleæ. Flowers of the ray neuter, funnel-shaped, radiate; those of the disk hermaphrodite, tubular, quinquefid. Pappus uniform, pilose, scabrous, caducous.

Order 4. NECESSARIA. Florets of the ray female, of the disk male.

2745 *Moscària.* Involucrum 5-lvd. Receptacle paleaceous. Paleæ of two forms; outer paleæ cucul gibbous at the base, and truncated at apex. Flowers all hermaphrodite, bilabiate, equal. Pappus paleaceous, very short

2746 *Centroclinium.* Involucrum subglobose or cylindrical, imbricated Flowers of the disk tubular, 5-toothed, deeply-cleft on one side; those of the ray 7-12 in number, bilabiate, inner lip very minute, bipartite, outer lip very long, 3-fid Anthers biaristate, stigma entire Pappus unequal, scabrous Receptacle hispid

ÆQUALIS.

2722. *1624*a* CRASPE'DIA *Lessing.* Craspedia (*Kraspedon*, a fringe; pappus.) *Compósitæ.* Sp 1—2
17836 - - macrocéphala *Hook.* large-headed ♀ △ or 1½ ... Ysh W V. D. L. 1834. S s l Bot. mag 3415

2723. * - * ERYTHROLÆ'NA *Swt.* (*Erythros*, red, *læna*, cloak; scales of calyx.) *Comp Card.* Sp 1—1
17837 - - conspícua *Swt.* conspicuous ☿ ○ or 8 s.o Pa.Y Mexico 1825. S r.m Sw. fl. gar. 134

1689. STE'VIA. Sp. 11—30.
17838 - - fasciculàris *Dec.* close-headed ☿ ⌊⌋ pr 1 ... W Mexico 1837. C co Bot. reg n s. 59

2724. *1692*a* ALO'MIA *Kth.* Alomia. (*A*, privative, *loma*, a fringe.) *Comp. Eup.* Sp. 1—1.
17839 - - ageratoides *Kth.* Ageratum-like ♀ ⌊△⌋ or 1½ jl au W N Spain 1824. C s l H. & B. 4. 354

1705. CHRYSO'COMA. Sp 10—14
17840 - - squamàta *Lab.* scaly-*stalked* ♍ △ or 2 my Y N. S. W. 1837. C co Bot. mag 3625
Leptorhýnchos squamàtus *Less.*

2725 *1705*a.* OZOTHA'MNUS *R. Br.* (*Ozos*, branch, *thamnos*, shrub.) *Comp. Cas d Vern.* Sp 2—3
17841 - - cinèreus *R. Br.* grey ♍ or 1 ap s Y V. D. L. 1820. C p.l Lab n h 2. 182
Chrysócoma cinèrea *Lab*
17842 - - rosmarinifòlius *R Br.* Rosemary-lvd ♍ ⌊⌋ or 1 ap.s Y V. D L 1822. C s.p Lab. n h. 2 181
Eupatòrium rosmarinifòlium *Lab.*

SUPERFLUA.

1725. ANTENNA'RIA Sp. 9—8
17843 11782*a* hyperbòrea *D. Don* northern ♂ △ pr ½ jl Wsh I of Skye mou D p l Eng bot 2610
dioica *β* hyperbòrea *Dec.*

1730. *HELICHRY'SUM.* Sp 23—47.
11815 bracteàtum
β involùcro-álbido whitish-involucr ○ or 3 jl o Y Cambr 1833 ? S co
17844 11815*a* bicolor *Lindl.* two-coloured ○ or 3? au Y V. D L 1835. S co Bot. reg 1814

1735. *MA'DIA.* Sp 3—3
17845 11859*a* élegans *D. Don* elegant ○ or 1½ aut Y N.W Am 1831. S co Bot reg 1458
Madaria élegans *Dec.*

1736. *ERI'GERON*
17846 - speciòsum *Dec* showy-*flowered* ☿ △ or 2 jl o P California 1831. D co Bot reg 1577
Stenáctis speciòsa *Lindl*

2726. *1736*a* LEPTOSTE'LMA *D Don.* (*Leptos*, slender, *stelma*, crown, slender rays form.) *Comp Ast* Sp 1—1
17847 - - máximum *D. Don* largest ☿ △ or 6 s.n Wsh Mexico 1827. D co Sw. fl gar 2 s 18

1738. *SENE'CIO.* Sp 64—105
17848 - - ampullàceus *Hook* flask-*headed* ? ○ or 2 ... Y Texas 1834 ? S co Bot mag 3487
17849 - - Tussilágmis *Lindl* Coltsfoot-*lvd* ♀ ⌊△⌋ or 1 w sp Li Teneriffe 1829 L s l Bot reg 1540
Pericállis Tussilágmis *D Don*, Sw fl gar 2 s 228, Cinerària tussilaginoides *Webb*
β Waterhousiana Pax Waterhouse's ♍ ⌊△⌋ or 2 mr jn R hybrid 1835. C l p Pax mag 4229

2727. *1738*a* ADENOTRI'CHIA *Lindl* Adenotrichia (*Aden*, a gland, *thrix*, hair.) *Comp Jacobææ* Sp 1—1
17850 - - amplexicaúlis *Lindl* stem-clasping ♀ ⌊△⌋ pr 2 my Y Chile 1826 S co Bot reg 1190

1739 *A'STER* Sp 110—157.
17851 12012*a* cassiarábica *F & M.* Arabian Cassia ☿ △ or 2 s P Russia 1834. D co Bot gard 679

2728. *1739*a.* DIPLOPA'PPUS *Cass* (*Diploos*, double, *pappos*, pappus, fruit.) *Compós Astèr* Sp 1—1
17852 - - incànus *Lindl.* hoary-*herbaged* ♍ ⌊△⌋ or 2 aut Li v California 1832 C s l Bot reg 1693

2729 *1740*a* BRACHYGLO'TTIS *Forst* (*Brachys*, short, *glottis*, tongue.) *Compós Jacòbææ.* Sp 1—1.
17853 - - repánda *Forst.* spreading ♍ ⌊⌋ or 8 .. .. N Zeal 1834 C l p

1741. CINERA'RIA. Sp 36—62
17854 12121*a* pulchélla *Swt* neat ♍ ⌊⌋ or 1½ f my P Canaries 1818 C l.p
Brachyrhýnchos cymbalariæfòlius *Dec*
17855 12137*a* aurantiaca *Hoppe* orange ☿ ○ el ¾ my jl O Switzerl. 1819 D p l Sw fl gar 2 26
Senècio aurantiacus *Dec*
17856 - - macrophýlla *Led* long-leafed ☿ △ or 8 jl au Y Altai Mts 1831 S lt Bot gard 524
Ligulària macrophýlla *Dec*



History, Use, Propagation, Culture,

2722. *Craspèdia* is a genus of ornamental herbaceous plants, increased by division of the root and by seed, and thrives in good light loam.

2723. *Erythrolæ'na* **17837** *conspícua* is an ornamental biennial, and delights in a warm sheltered situation, planted in rich garden soil.

2724 *Alòmia.* A mixture of sand and loam suits this genus, and cuttings root readily in sand under a bell-glass

ÆQUALIS.

17836 Lvs. oblong altern gradually smaller upwards lower and root lvs. longest and broader upw. so as to be spathul. clthd. with appress. rather silky hairs

17837 The only species

17838 Lvs. opposite rhomb. lanceol. deeply serrat. upper ones sessile, Infloresc. fastigiate

17839 The only species

17840 Bran downy erect slender virgate leafy, Lvs. lin.-lanceol lowerm. 1½ to 2 in. long acute passing into smal scales clthd. with white toment. ben. Scales of involucre numer.

17841 Lvs linear obtuse revolute on the margins clth with cinereous cobwebbed tomentum, Corymb. panicled Involucr hemispher. woolly

17842 Lvs. linear mucron with revolute margins cobwebbed and muricate above and tomentose beneath, Corymb terminal, Involucr. cobwebbed and rusty

SUPERFLUA.

17843 Stolones procumbent, Flower stems simple, Lvs. spatulate, Upper ones lin. tomentose on both surfaces but almost glabrous in an adult state, Corymbs terminal simple

17844 Lvs. lin. lanceol. acumin. obtuse at the base roughly ciliated upper ones subulate, Stem glabrous branch. Bract of involucrum acute

17845 Receptacle conical pilose, Flowers of the disk bearded in the limb, Stems diffuse

17846 Stem erect corymbose many-flwd glabrous Lvs. ciliat. acute quite entire rad. ones spatulate, Stem ones ovate lanceol. somewhat stem-clasping

17847 The only species

[of many closely placed linear scales

17848 Lvs obl obt semiamplexic at base thick and fleshy entire rad lvs spathul Panic corymbose, Involucr. cylindr.

17849 Lvs cord stalked angular sharply toothed white and woolly ben upper ones amplexic. Capitula numerous in corymbose panicle

17850 The only species

17851 Erect pilose, Lvs. ovate acute serrated tapering at the petioles, Infloresc. paniculate corymbose

17852 Lvs lin obt. hoary half stem-clasp. Stem corymbose, Bran 1-flwd. Lflts. of involucrum squarrose glandular

17853 Lvs. ovate repandly sinuate, Panicle compound divaricate

17854 Glabrous erect, Lower lvs petiol lyrate downy beneath, Terminal lobe reniform toothed, Upper lvs sessile amplexic lanceol and little toothed uppermost ones quite entire, Pedunc 1-headed

17855 Stem simple rather woolly, Rad. lvs. ellip repandly toothed, Stem lvs. lanceol entire, Inflores: corymbose

[leafless, Achænia glabrous

17856 Smoothish, Stem simple furrowed, Radical lvs ellip toothed cauline one amplexic. Panicle elong crowded



and Miscellaneous Particulars

2725 *Oxothámnus.* A mixture of peat and loam suits this genus, and the species may be increased by cuttings

2726 *Leptostélma* This genus may be increased by division of the root, and will thrive in good garden soil

2727 *Adenotrichia* Culture, &c., see Leptostélma, above.

2728 *Diplopáppus* This genus may be increased by cuttings, and the plants thrive in a sandy loam

2729 *Brachyglóttis.* For soil and propagation see Diplopáppus, above.

17857 - - renifolia *Mcy.* kidney-leaved ♃ △ or ½ jn Y Russia 1833 D r.m Bot. gard. 619
Ligulária renifòlia *Dec*

1746. GRINDE'LIA. Sp. 7—9.
17858 12178*a* coronopifòlia *Leh.* Coronopus-lvd ♂ ⊔ or 1½ jl s Y Mexico 1826 C l.p

2730 *1747*a* RHODA'NTHE *Lindl* (*Rhodon*, rose, *anthos*, flower; inner scales rose-clr) *Compósitæ* Sp 1—1
17859 - - Mangièsii Lindl. *Capt* Mangles's ⊔ or 1½ my n Ro Y Swan Riv. 1832. S lt Bot. reg. 1702

1747 PODO'LEPIS *Grah.*
17860 - - grácilis *Leh.* slender ♃ △ pr 3 jl.s Pk N. S. W. 1826. S co Sw. fl. gar. 285

2731. *1751*a* DIPLO'COMA *D.Don.* (*Diploos*, double, *kome*, hair, pappus two forms) *Comp Card.Vern.* Sp 1—1
17861 - - villòsa *D. Don* villous ♃ △ or 1 my.jl Y Mexico 1826. D co Sw fl. gar. 246
Dorónicum villòsum *Sessé*

2732. *1751*b* *NE'JA* D. Don. Neja. (Without meaning) *Comp. Aster.* Sp. 1—1.
17862 - - grácilis *D Don* slender ♂ △ or 1 au Y Mexico 1828. C l.t Bo'. cab. 1814

2733, *1752*a*. MUTI'SIA Cav. (*Celestine Mutis*, the discoverer, a S Amer bot.) *Compós. Labiat.* Sp. 3—3
17863 - - arachnoidea *Mart.* cobweb-like ♂ ⊔ or 6 jl au R Brazil 1823. C p.l Bot. mag. 2705
speciòsa *Bot mag.*
17864 - - latifòlia *D. Don* broad-leaved ♂ ⊔ or 10 ?o Pa Pk.Y Valpar. 1832. C p.l Sw.fl gar 2 s 288
17865 - - ilicifòlia *Hook.* Holly-leaved ♂ ⊔ or 10 ... ... S Amer. 1832. C l.p Bot. mis 1. 7

2734 *1752*b* CHÆTACHLÆ'NA *D.Don* (*Chaite*, hair, *chlaina*, covering; points of invol scales) *C.Lab.* Sp 1—1
17866 - - odoràta *D. Don* sweet-scented ♀ ⊔ or 1 au.s R Chile 1830. S s.l
Onóseris odoràta *Dec*, Leysera odoràta *R. & P.*

2735 *1754*a* LASTHE'NIA *Dec* Lasthenia (Meaning of the name not given.) *Comp* Sp. 2—2
17867 - - glabràta *Lindl.* smooth-*surfaced* ○ or 1 my.jl Y Californ 1834 S co Bot. reg. 1780
Hologýmue glabràta *Bartl* Bot mag 3730.
17868 - - glaberrima *Dec* smoothest ○ or 1 my jl Y Californ 1834. S co Bot. reg 1823

2736 *1754*b* BAE'RIA F. & M. Baeria. (*Professor Baer*, of the University of Dorpat) *Comp* Sp. 1—1
17869 - - chrysóstoma *F.& M* golden-mouthed ○ el 1 ap jn Y Californ 1835. S co Sw. fl gar. 395

2737 *1755*a* ERIOPHY'LLUM *Lag.* (*Erion*, wool, *phyllon*, a leaf, woolly foliage) *Comp Helian.* Sp 1—2
17870 - - cæspitòsum *Lag* turfy ♃ △ or 1 my jn Y N. Amer 1826 D co Bot. reg 1167
Trichophýllum lanàtum *Nut*, Actinélla lanàta *Ph*, *Bâhia* lanàta *Dec.*, *Helènium* lanàtum *Spr.*

2738 *1756*a* LAGENO'PHORA *Endl.* (*Lagenos*, flask, *phoros*, bearing) *Comp Ast* Sp 1—1
17871 - - Fórsteri Endl. Forster's ♀ ⊔ or .. ... Y P N. Zeal 1837. D lt.l

1758 DA'HLIA Sp 3—3.
17872 12207*a* Cervantèsii Lag Cervantes's ♃ △ or 7 n S Mexico ... R p.l Sw fl.gar 2 s 22
Georgina Cervantèsii W

1759. BŒ'BERA. Sp 2—3
17873 12209*a* incàna *Lindl.* hoary-*herb.* ⊔ or 1½ n Go Mexico 1828. S lt.l Bot reg 1602
β Dysòdia incàna *Dec.*

1760. TAGE'TES Sp 10—15
17874 12210*a* flórida *Swt.* florid ♃ △ or 1 jl n Y Mexico 1827. D co Sw fl gar 2 s 35
17875 12212*a* corymbòsa *Swt.* corymbose ○ or 1½ au s P Mexico 1825. S co Sw fl gar 151
β lùtea yellow ○ or 1½ au s Y Mexico 1825. S co

2739. *1769*a* OXYU'RA *Dec* Oxyura (*Oxus*, sharp, *oura*, a tail, involucre.) *Comp Senec* Sp. 1—1
17876 - - chrysanthemoides *Dec.* Chrysanth.-lk ○ or 1½ jn s Y Californ 1834 S lt.l Bot reg 1850

2740. *1777*a* CLADANTHUS *Cas* (*Klados*, branch, *anthos*, flower, on branches.) *Comp Anth* Sp 1—2
17877 - - canéscens *Swt.* whitish ⊔ or 1 mr.au Y Canaries 1829. S s l Sw.fl.g 2 s 1c 10



History, Use, Propagation, Culture,

2730. *Rhodánthe* is a very elegant little tender annual, and highly deserving a place in every greenhouse, and it requires to be grown in a good light soil

1747. *Podolepis* 17860 *grácilis* is a very pretty annual, deserving a place in every flower border.

2731. *Diplócoma* A handsome but rather tender herbaceous plant, requiring a light soil, with slight protection in severe weather.

2732. *Nèja* may be readily increased by cuttings, and will thrive in a good light soil.

2733. *Mutísia* is an exceedingly interesting genus of shrubby climbers, with leaves terminating in tendrils, by the prehension of which the stems are supported M latifòlia represents a family of climbers so very different from every other hitherto propagated in British gardens, that we cannot but strongly recommend it for trial against every conservative wall. (*Arb. Brit.*)

2734. *Chætachlæ'na.* A very pretty herbaceous plant, of easy culture.

17857 Glabrous, Stem 1-4-headed, Lvs spatulate toothed, Lower ones renif. Upper ones somewhat rhomb. Petioles naked woolly at base, Achænia glabrous

17858 Lvs. sessile thickish lin. pinnatifidly toothed wrinkled glabrous, Heads solitary, Involucr. clammy, Outer scales spreading

17859 The only species

17860 Glabrous branch. Scales of involucr. glandular along the spike obtuse, Cauline lvs. adnate by the auricles to the stem.

17861 The only species

17862 The only species

17863 Scandent, Lvs. pinnate, Lflts. 6-7 ov.-lanceol. very acute sess. cobwebbed ben. terminat. by large branching tendril, Stip. ellipt. Flws. solit. Lower scales acute and reflexed

17864 Stem winged, Lvs. cord. obl. dentately spinose woolly beneath, Scales of involucr. appendiculate, Rays of pappus [equal truncate
17865 Glabrous, Stem terete, Lvs. amplexicaul. cord. oval spinosely toothed reticulated

17866 Lvs. sessile obl. lanceol. attenuated at the base, Outer scales of involucr. ending each in a long flexuose bristle

17867 Quite glabr. Involucr. 15-toothed, Pappus wanting, Achæna mucron. at apex

17868 Branch. and pedicels pubesc. Involucr. 15-toothed, Pappus of 5 paleæ

17869 The only species

17870 Decumbent, Stem and under side of lvs. tomentose, Lvs. altern. pinnatif. upper ones lin. entire, Pedunc. clong 1-headed tomentose

17871 Lvs. glabr. obovate orbicular acutely toothed petiolate, Petioles ciliated

17872 Stem solid not prunose, Ligulate flowers of the ray without any style

17873 Stem hairy, Lvs. pinnate rather hairy, Lflts. lin. acute channeled some entire and some 3-fid. Peduncles 1-headed

17874 Stem erect branch. Lvs. lanceol. sharply serrated the lower serratures awned, Ligulæ usually 3
17875 Stem and branches erect angular, Lvs. opposite and altern. pinnate, Lflts. 6-8 pairs nar. serrat. dotted, the serrats. of the upper lvs. awned, Peduncles corymbose 1-headed

17876 The only species

17877 The whole plant canescent



and Miscellaneous Particulars.

2735. *Lasthènia* is a genus of ornamental annuals, which may be sown in the open border; and as the plants, under ordinary circumstances, flower in about 6 weeks after the seeds are sown, it will be found necessary to have several sowings to keep up a good appearance.

2736. *Baëria*. An elegant annual, requiring the same management as Lasthènia.

2737. *Eriophyllum* is a desirable and showy herbaceous perennial, is readily increased by division, and thrives in any good garden soil.

2738. *Lagenóphora* is a showy perennial, easily increased by division.

2739. *Ozyùra* 17876 *chrysanthemoides* is an ornamental annual. It may be sown in the open border, where it is intended to remain.

2740. *Cladánthus*. A genus of very ornamental annuals, may be sown the open border.

FRUSTRANEA.

1798. HELIA'NTHUS Sp. 27—33

17878 12436*a* lenticulàris *Dou.* lenticular ○ or 6 au Y N. Amer. 1827. S co Bot reg 1265

17879 12456*a* Hoóker: G Don Hooker's ⅄ △ or 3 jl o Y .... D co Bot. mag 2778
pubéscens *Hook.*
17880 - - speciòsus *Hook* showy ○ or 5 s.n R Jorullo. 1833. S co Bot. mag. 3295
Leighto speciòsa *Dec.*

2741 *1800*a*. ERIO'COMA *Kth.* Eriocoma. (*Erion*, wool, *komc*, hair; paleæ) *Comp Helianth.* Sp 1—1.
17881 - - fràgrans *D. Don* fragrant ▬ ▁ or 3 s W Mexico 1828 C co Sw. fl. g 2s 44

1801. GAILLA'RDIA. Sp 3—4.

17882 12471*a* Drummóndii Dec Drummond's ⅄ △ or 2 au Car y Louisiana 1833. D lt Bot. mag. 3551
bicolor β Drummóndii integérrima *Hook*, picta *D Don*, Sw fl gar 2 s. 267
17883 12471*b* aristàta *Ph.* awned ⅄ △ or 1 jl.o Y N. Amer. 1812. D c

1804. COREO'PSIS. Sp 24—24.

17884 12477*a* grandiflòra *Hogg* large-flowering ⅄ △ or 3 au s Y N Amer. 1826. S r.m Sw. fl. gar 175

17885 12479*a* filifòlia *Hook* thread-leaved ○ or 2 au.s Y Texas 1835. S p l Bot. mag. 3505
17886 12489*a* diversifòlia *Hook.* various-leaved ○ or 2 jl B o.br. Texas 1825. L co Bot. mag. 3474

17887 12492*a* lóngipes *Hook.* long-stalked ○ el 2 mr au Y Texas 1835. S co Bot. mag. 3586

17888 - - coronàta *Hook.* crowned ○ or 2 su aut Y br sp Texas 1835 S co Bot mag. 3460

2742 *1804*a*. VIGUIE'RA Kth Viguiera. (*L G A. Viguier* of Montpelier, botanist) *Comp. Hel.* Sp 1—13.
17889 - - heliantholdes *Kth* Sunflower-like ⅄ ⍁ or 3 jl au Y Cuba 1825 C p.l H. & B 4. 379

2743. *1804*b* CALLIO'PSIS *Rchb* (*Kallistos*, most beautiful, *opsis*, eye; of fl.) *Comp. Helian.* Sp. 3—5
†12488 tinctòria *Dec.*, Diplosástera tinctòria *Tausch*
β atrosanguínea *M* dark-blood-*cld-flđ* ○ or 3 jl o D Bld N Amer 1823 S co Bot. gard 518
17890 - - Atkinsonidna Dou Atkinson's ○ or 2 su Y br Columbia 1826 S co Bot reg 1376
17891 - - Drummóndii D Don Drummond's ○ or 2 s Y rsh br ..... 1835 S co Sw.fl gar 2.s.315

1816 SPHENO'GYNE Sp 8—10.

17891*a* 12530*a* speciòsa *Maund* showy ○ or 1 jl au Del Y S Amer. 1836. S co Bot. gard. 625

2744. *1819*a* PLECTOCE'PHALUS *D Don* (*Plektos*, plaited, *kephalc*, head, involucre) *Comp Cargl* Sp 1—1
17892 - - americànus *D Don* American ○ or 3 au s Li Arkansa 1824 S s.l Sw fl gar 2. s. 51
Centaurèa americàna *Nut.*

NECESSARIA.

2745. *1824*a*. MOSCA'RIA *Dec.* Moscaria. (*Moschos*, musk, scent) *Comp Lab.* Sp 1—1
17893 - - pinnatífida *R & P* pinnatifid-*lvd* ⅄ △ or 3 au s W Chile 1827. S co Sw. fl. gar 229
Gastrocárpha runcinàta *D Don*

2746. *1829*a*. CENTROCLI'NIUM *D Don* (*Kentron*, sharp point, *kline*, bed.) *Compós Labiat.* Sp 1—2
17894 - - appréssum *Hook* appressed-*scaled* ▬ ▭ or 2 jn Ro Peru 1830. S lt Bot. mag. 3115
Onóseris appréssa *Dec.*

SEGREGATA.

1854 EUXE'NIA.

17895 - - *Mitiqui* Lindl. Mitiqui ▬ or 3 au n Y Chile 1824. C p.l



History, Use, Propagation, Culture,

2741. *Eriócoma.* A handsome fragrant annual.
2742. *Viguièra* An ornamental stove plant.
2743. *Calliópsis.* A very showy genus of annuals, of very easy culture, and deserving a place in every garden

FRUSTRANEA.

17878 Stem hispid, Lvs altern petiol. ov 3-nerved serrate, Heads large drooping, Scale of invol. expanded scabr on the back, Paleæ 3-fid, Achænia bistriate [subul. or lin -lanceol slightly downy ciliat
17879 Lvs oppos sess. subamplexic. ov -lanceol crenato-serrate very hairy ab scabr. to touch, Scale of invol. imbric.

17880 Leaves cordate entire and 3-lbd. Pedun swollen upwards, Involucrum foliaceous, Paleæ very acute

17881 Lvs. cord. obl. toothed tomentose acute, Corymbs compound, Throat of corolla campanulate about equal to the length of the tube

17882 Annual rather downy, Lvs. narrow undivided rather ent Scales of invol ciliated at the base with a very short glabrous subulate appendage
17883 Perennial, Invol. very hairy at the base with lin -lanceol. scales, Cors. of the disk very hairy

17884 Stem erect branch furrow glabr Lvs oppos sess. ciliated at base, lower ones biternate, upper ones ternate or 3-partite, Ligulæ acutely 5-toothed [bipin Segms alm filiform rath fleshy furrowed above
17885 Stem erect slender bran especially upwards striat and glabr as is every part of plant, Lvs oppos. pinnatif and
17886 Lvs generally glabr. petiolat obovato-spathul and undivided ternate pinnate and even bipinnate, Lfts. obov. or oval and very obt those of lowermost lvs most orbicular
17887 Stem erect but weak and flex Lvs oppos and connate, lower ones ent rest more or less pinnatif. or bipinnatif Segms lin -lanceol flaccid glabr Pedun elongated
17888 Stem ditto, Lvs oppos in remote pairs spathul tapering at base undivided or cut in pinnated manner, Pedun. elongat. Achæn obl ov. bearing 2-3 white chaffy scales

17889 Stem glabr Lvs. altern ov acumin. quite entire 3-nerved scabrous above and pilose beneath, Petioles ciliated, Receptacle conical hollow [obl minutely tubercled on both sides
+12488 Glabr Radical lvs pinnate or bipinnatifid, Outer scales of involucrum very short acute, Ligulæ trifid, Achænia

17890 Radical lvs bipinnatifid cauline ones pinnate, Outer scales of invol lin obl. Ligulæ 3-toothed, Achænia smooth
17891 Pilose, Upper lvs. ternate, Segms ovate, Achænia ventricose tuberculated [margined with a short wing

17892 Lvs obl membran. undiv Pedunc ventric at top, Outer scales of involuc 3 times as short as their appendages

NECESSARIA

17893 The only species

17894 Lvs lanceol waved nrly ent white and cottony beh Pedunc naked, Invol cylindr imbricat. with many close-pressed subulate scales

SEGREGATA.

17895 Lvs. oval lanceol. cuneate at the base and acumin at apex coarsely serrated in the middle



and Miscellaneous Particulars.

2744 *Plectocéphalus.* A very curious and striking annual
2745 *Gastrocárpha* A handsome strong-growing annual.
2746. *Centroclinium.* A showy plant, requiring rather a moist high temperature

Page 748. CLASS XX. — GYNANDRIA.

ORCHIDA'CEÆ. — "The uses to which the plants of this family are applied are few, but in several instances highly romantic. In Demerara, that most deadly of all poisons, the 'Wourali,' is thickened by the juice of the Catasetums, and in Amboyna the *true* 'Elixir of Love' is prepared from the minute farina-like seeds of Grammatophyllum speciôsum In Mexico, where the 'language of flowers' is understood by all, the Orchidaceæ seem to compose nearly the entire alphabet Not an infant is baptised, not a marriage is celebrated, not a funeral obsequy is performed, at which the aid of these flowers is not called in by the sentimental natives, to assist the expression of their feelings; they are offered by the devotee at the shrine of his favourite saint, by the lover at the feet of his mistress, and by the sorrowing survivor at the grave of his friend. whether, in short, on fast days or feast days, on occasion of rejoicing or in moments of distress, these flowers are sought for with an avidity which would seem to say that there was 'no sympathy like theirs,'—thus, 'Flor de los Santos,' 'Flor de Corpus,' 'Flor de los Muertos,' 'Flor de Maio,' 'No me olvides' (or 'Forget me not'), are but a few names out of the many that might be cited, to prove the high consideration in which our favourites are held in the New World. Nor are these the only honours that are paid to them: for Hernandez assures us that in Mexico the Indian chiefs set the very highest value on their blossoms, for the sake of their great beauty, strange figure, and delightful perfume, while in the East Indies, if Rumphius is to be credited, the flowers themselves positively refuse to be worn, except by princesses or ladies of high degree. In Honduras, again, the large hollow cylindrical stalks of a fine species of Epidendrum [E. tibicinum] are made into trumpets by the little boys and girls of the country, and the pseudo-bulbs of several of the more succulent species are used instead of resin for the strings of their guitars The following are, however, almost the only known instances in which the tribe do any direct service to mankind. The bulbs of Maxillaria bicolor contain a large quantity of an insipid watery fluid, which is greedily sucked by the poor natives of Peru in the dry season, a fluid of a similar nature is obtained from what is probably a Lælia, in Mexico, and is administered as a cooling draught in fevers; from the roots of some of the orchises, the nutritive substance called 'Salep' is obtained, in New Zealand certain species are of considerable importance as esculents, and in Guiana, the soles of the shoemaker are as much indebted to the viscid matter obtained from the Catasetums and Cyrtopodiums, as are the poisoned arrows of the Indians" (*Bate Orch*, p 2.)

Mr Bateman, speaking of the fragrance of many of this order, says. "We question whether 'Araby the blest' can boast of any pertumes that can at all compete in sweetness with those exhaled by such plants as Angræcum odoratissimum *Lmdl. MSS*, Tetrapeltis fragrans, Aerides odoratum, and Epidendrum aromaticum. Other species emit odours which remind the recipient of the smell of a druggist's shop, of the milk of the cocoa-nut, of fresh hay, of wallflowers, violets, pomatum, aniseed, and angelica, of noyau, cinnamon, allspice, citron, musk, and honey. Some of these yield no fragrance, except in the daytime, but there are others which, like Epidendrum nocturnum and Brassavola nodosa, are aromatic only by night, and there are none, we believe, which are positively offensive at any hour, either of the night or day" (*Ib*, p 4)

The attention and curiosity are excited no more by the beauty and delicacy of the blossoms of many of this tribe, than by the very close resemblances they bear to objects of the animal kingdom In our native species we find the bee, fly, spider, lizard, man, &c, surprisingly imitated, and in those of warmer climates, swans, eagles, doves, pelicans, &c &c.

The cultivation of Orchidàceæ may be mentioned under two heads, namely, that of terrestrial and that of epiphytal Orchidàceæ.

Terrestrial Orchidàceæ should never have a great volume of external air admitted at once, however fine the weather may be To prevent the house (which should have a southern aspect) from becoming too hot, a thick canvass shading should be drawn over it during summer sunshine During the growing season, Orchidàceæ require a moderately moist heat, varying from 65° to 85°, in the dormant season, from 60° to 75° is quite sufficient, in the season of rest the house should be kept dry. Orchidàceæ in pots should be sparingly watered in the growing season, in the dormant state, little or no water should be given The secret of growing these plants is to take care never to kill the old roots when too much water is given, while the plants are in a growing state, almost all the old roots invariably perish (*Paxton* in part)

Epiphytal Orchidàceæ may be grown in the same house with, and receive nearly the same treatment as, terrestrial Orchidàceæ, except that they require to be grown on, instead of in, the soil, attached to blocks of wood, or in baskets, or any rustic construction in the basket way, and suspended from the roof, or by any other suitable means In the outset, before the plants are established on the soil, or wood, where they are intended to be grown, it is very necessary to secure firmly the plant, and such roots as may be already formed, to the wood or soil, by means of bast or pegs, as judgment shall direct The best kind of soil for growing epiphytal Orchidàceæ on is found to be good surface peat, cut into pieces of 1 in to 2 in square, this should be placed over a considerable quantity of drainage, in order to carry off superfluous water, and at the same time, if they are plunged in a tan-bed, will allow the heat to rise more freely than if the pots were entirely filled with soil

"It is of the greatest importance to preserve and encourage the roots, and, as they are generally protruded near the surface of the soil, it should be raised several inches above the level of the pot, in a pyramidal form, in order that they may have full room to push out" (*Bot Reg*)

Syringing the plants moderately, when in a growing state, till the flowers are nearly expanded, helps their growth much

For some other particulars respecting this order, see p. 748. to 767.

Order 1. MONANDRIA. Stamen 1.

1. MALAXI'DEÆ — Pollen cohering in masses of a fine waxy texture, without any of the cellular substance by which the grains are connected, remaining under the form of a distinct gland lying upon the stigma, or of a transparent caudicula between the pollen masses and the gland.

§ 1. *Pleurothállieæ*. Column erect, drawn out a little at the base.

†1894 *Pleurothállis*, page 749.

†1913 *Octomèria*, page 749

2747 *Lepanthes*. Sepals spreading, connate at the base. Petals 2, free and short Labellum 2-lobed at apex, and combined with the column Column elongated, cylindrical, 2-winged. Pollen masses 2.

2748 *Specklinia*. Sepals conniving, equal, distinct; lateral ones saccate at the base, gibbous outside Petals conforming to the sepals, but much smaller Labellum free, saccate at base. Column short, free, membranaceously winged. Anther 1-celled. Pollen masses 2. (No species given.)

†1924 *Stélis*, page 750

2749. *Obcrònia* Sepals spreading or reflexed, usually equal, free. Petals smaller than the sepals Labellum ascending, of various forms, usually elongated, always more or less 4-lobed Column small, free. Stigma elevated Anther 2-celled Pollen masses 2, pear-shaped, solid. (No species given)

†1927. *Micróstylis*, page 750

†1925. *Malàxis*, page 750

†1882. *Corallorhiza*, page 749.

2750. *Aplectrum*. Petals equal, connivent Labellum unguiculate, not drawn out at the base. Column free. Anther seated below the summit of the column Pollen masses 4, oblique, lenticular.

2751. *Acánthus* Sepals subringent, acumin, free Petals smaller, acum. Labellum free, entire, bicallous at base, with a naked disk. Column semiterete, clavate Anther term, recumbent, 2-celled. Stigma ovate, transverse Pollen masses 8.

†1928 *Liparis*, page 751

2752. *Calìia*. Sepals distinct, equal, spreading Petals nearly equal, but a little smaller than sepals. Labellum

quite entire, ungiculate, continuous with the base of the column. Column short, continuous with ovarium, drawn out a little at base Anther 2-celled. Pollen masses 4, by pairs.
†1904 *Pholidòta*, page 749
†1897. *Cœlógyne*, page 749.

§ 2. *Dendrobièæ*. Column recumbent, drawn out much at the base.

2753 *Megaclinium*. Sepals erect, unequal, lateral ones the smallest, combined with the column. Petals short. Labellum short, quite entire, articulate with the base of the column. Column short, marginate, disk-formed. Anther obsoletely 2-celled. Pollen masses 4, cohering by pairs.
2754. *Bolbophýllum* Sepals erect, acumin, nearly equal, lateral ones combined, or connate with the base of the column, and oblique at the base. Petals short Labellum articulated with the foot of the column, unguiculate, usually entire. Column short, bidentate or 2-horned in front Anther 2-celled. Pollen masses 4, free, very unequal sometimes combined in one, and sometimes cohering by pairs
2755. *Cirrhopétalum*. Sepals ringent; lateral ones acumin., drawn out at the base, adnate to the column, much longer than upper one. Petals short, apiculated Labellum entire, articulated with base of column. Column small, drawn out at base, and furnished with 2 petaloid horns at top Anther 2-celled. Pollen masses 4, 2 inner ones smaller
2756 *Trias*. Sepals equal, ovate, spreading, connate at the base Petals small, erect. Labellum small, undivided. Column short, semiterete, emarginate, free. Anther 2-celled, drawn out into a petaloid, cuneated, emarginated membrane at the apex. Pollen masses 4, 2 inner ones smaller
2757. *Bryóbium*. Flowers villous Sepals conniving, lateral ones equal at the base. Petals narrower and shorter than the sepals, reflexed between them. Labellum undivided, unappendiculated, constricted at the base. Column short Pollen as in Eria
†1912. *Eria*, page 749.
2758 *Aporum* Sepals fleshy, erect, lateral ones larger, oblique, connate with the column Petals smaller than upper sepal. Labellum articulated with foot of the column, undivided, or 3-lobed. Limb crested, callous, or naked. Column semiterete, drawn out at base. Anther sess., 2-celled, sometimes membran. at apex. Pollen masses 4, collateral by pairs.
†1908 *Polystachya*, page 749
†1900 *Dendróbium*, page 749.
2759. *Paxtònia* Sepals 6, spreading, equal Labellum conforming to the petals. Column erect, terete, subclavate a little shorter than the petals. Anther termin., opercular, deciduous. Pollen masses 8, narrow, clavate, cohering at tops.

II. EPIDE'NDREÆ — Pollen cohering in masses of a fine waxy texture, with cellular substance. Caudiculæ not transparent, and connected with the stigma by means of a gland, as in *Vánda*, but powdery, and very often turned back on the face of the pollen masses Anther terminal, opercular.

†1907 *Epidéndrum*, page 749
2760 *Dinèna* Sepals and petals nearly equal, spreading Labellum large, membranous, undivided, unguiculate, combined with the base of the column. Column short, bicornute. Anther 2-celled. Pollen masses 4, adnate by pairs to 2 replicate caudiculæ
2761 *Encýclia* Sepals and petals nearly equal, connivent. Labellum cuculate, involving the columns, 3-lobed at apex, callous at base. Column free, semiterete, clavate, parallel with the labellum. Anther 4-celled, with marginate dissepiments. Pollen masses 4. Collateral caudiculæ 4, revolute
2762 *Chýsis*. Sepals a little connate, spreading Petals conforming to the sepals Labellum 3-lobed, spreading; Column marginate, channeled, rustic. Anthers roundish, glabrous Pollen masses 8, the four outer ones thin, and the four inner ones thicker, beak convex.
2763 *Physinga* Sepals membranous, equal, connate at the base Petals small, obliquely adnate to the base of the sepals Labellum fleshy, tubercular, undivided, connate with the base of the column, and furnished with a bladder-formed sac at the base. Column fleshy, short, 2-lobed, antheriferous at the base. Pollen masses 4, adnate to 2 twin powdery threads.
†1903 *Isochilus*, page 749
2764. *Hartwegia* Perianth spreading, coloured. Lateral sepals drawn out at the base, adnate to the labellum Labellum connate with the column, gibbous at base, ovate. Anther 4-celled. Pollen masses 4. Caudiculæ replicate.
†1914 *Brassavóla*, page 749
2765. *Læ'lia* Sepals flat, lanceol, equal Petals larger than sepals, fleshy, flat Labellum 3-parted, lamellate, twisted round the column Column wingless, fleshy, channeled in front Pollen masses 8, with 4 elastic caudiculæ
2766 *Schombúrgkia* Sepals and petals similar, spreading, all free and equal at the base. Labellum difformed, membranous, 2-3-lobed, cucullate, connate at the base, with the margin of the column tumid above the base with lamellate veins Column marginate. Pollen masses 8.
†1906 *Cattléya*, page 749
†1905. *Broughtònia*, page 749
2767 *Leptóles* Sepals and petals linear, nearly equal, spreading. Labellum 3-lobed, parallel with the column Lateral segms. short, convolute around the column, middle segm. obl with reflexed margins Column short, thick, semiterete. Pollen masses 6, incumbent, 2 upper ones pear-shaped, oblique, compressed; 4 lower ones unequal and thinner.
†1911. *Blétia*, page 749
2768 *Cýbe* Sepals and petals similar, lanceol conniving, lateral ones oblique at the base. Labellum large, membran., cucullate, never expanded, half-connate with the clavate marginate column
2769. *Pescomèdia* Sepals nearly equal, free, deciduous. Petals conform adnate to the base of the column, persistent. Labellum connate with the base of the column, gibbous at the base, with an undivided convolute limb. Column clavate, semiterete. Pollen masses 4, cuneate
2770. *Phàtus*. Sepals and petals nearly equal, spreading, free. Labellum usually cucul., adnate with the base of the column, spurred, entire, or 3-lobed, usually keeled, lamellose or crested above. Column erect, continuous with the ovarium, semiterete, marginate, elongated. Anther 8-celled. Pollen masses 8, nearly equal.

III. VA'NDEÆ — Pollen cohering in masses of a fine waxy texture Caudiculæ separating along with the gland of the stigma, and forming a strict adhesion with the pollen masses. Anther terminal, rarely dorsal, opercular.

2771. *Nanódes* Perianth ringent Upper sepal arched, lateral ones connate to the labellum at the base. Petals conforming to the lateral sepals, free Labellum fleshy, undivided, connate with the column. Column winged. Anther 2-celled, beaked Pollen masses 4, collateral, sessile
2772 *Aspásia*. Perianth spreading, equal, lateral sepals free, the upper one connate with the petals at the base. Labellum oblong, concave, spurless, obsolctely 4-lobed, half-connate with column Column parallel with the labellum, semiterete, marginate. Pollen masses 2, pear shaped, furrowed behind. Caudiculæ flat, cuneated.
†1902 *Ornithidium*, page 749.
2773 *Sophronítis* Perianth spreading. Sepals nearly equal, imbricated, free Labellum entire, cucul., connate with the base of the column, with a simple transverse crest in the middle. Column free, winged on both sides at the apex. Anther 8-celled Pollen masses 8.
†1890. *Trizeùxis*, page 749.
†1910. *Ornithocéphalus*, page 749.
2774. *Cirrhæ'a* Perianth spreading Sepals free, equal. Petals linear, flexuose Labellum unguiculate, continuous with the column, tripartite. Column erect, clavate, terete, with a nearly square horizontal stigma, and a

tendril beak. Anther dorsal, membranous, subunilocular. Pollen masses 2, parallel, oblong, compressed, with a short-horned caudicula, and an incurved gland.

2775. *Sarcochilus* Perianth spreading. Lateral sepals connate with the claw of the labellum beneath Petals conform to the sepals. Labellum spurless, continuous with the claw of the labellum, slipper-shaped; middle lobe fleshy, solid Pollen masses 2, sessile on a deltoid gland.

†1892. *Maxillaria*, page 749

†1891. *Xylóbium*, page 749.

2776 *Bifrenaria* Sepals spreading, free, nearly equal. Lateral one adnate to the produced base at the column. Petals about half the size of the sepals. Labellum articulated to the mucronate base of the column, cucullate, 3-lobed, callous in the middle. Column short, semiterete, mutic. Anther mutic, somewhat crested. Pollen masses 4, incumbent, with two distinct caudiculæ

2777. *Trigonidium* Sepals equal, cohering into the form of a trigonal cup, spreading at the top Petals about half the size of the sepals, veiny. Labellum short, 3-lobed, articulated with the column, fleshy in the middle Column short, free, semiterete Anther 1-celled Pollen masses 4, cohering. (No species given)

2778. *Trichoplilia* Sepals and petals equal, spreading, narrow. Labellum large, petaloid, convolute, parallel with the column, 3-lobed Column terete, clavate Anther 1-celled, compressed, convex in front. Pollen masses 2, adhering to a slender cuneate caudicula. Gland small

2779 *Dicrypta* Sepals free, erect, equal Petals conform to the sepals, but smaller. Labellum 3-lobed, fleshy, articulated with the column Column continuous with the ovarium, semiterete, clavate in front at the base Anther obsoletely bilocular Pollen masses 4, flattened, incumbent, with a short linear caudicula, and a binate gland

2780. *Govénia* Perianth bilabiate Lateral sepals falcate Petals conniving under the upper sepal Labellum quite entire, spurless, concave, articulated with the column, sessile Column terete, margined on both sides at the apex, drawn out a little at the base. Anther hood-formed, 1-celled. Pollen masses 4, solid, incumbent, with a short caudicula, and a small triangular gland

2781 *Batemannia* Flower ringent Sepals spreading, lateral ones unguiculate Petals broader than sepals, oblique at base, adnate to the produced base of the column Labellum articulate to the column, 3-lobed, cucullate Column semiterete. Anthers small, 2-celled, membranous. Pollen masses 2, 2-lobed behind, with a triangular gland and no caudicula.

2782 *Cycnóches* Perianth spreading. Lateral sepals lanceolate, upper one narrow. Petals broader than sepals, falcate Labellum free, spurless, lanceolate, quite entire, continuous with the column, with an abrupt callous claw Column elongated, arched, clavate at apex, furnished with two falcate auricles Anther 2-celled. Pollen masses 2, furrowed, with a linear caudicula and a thick gland

2783 *Myánthus*. Perianth flattened. Sepals free, equal, similar to the petals, but narrower. Labellum flat, obovate, tridentate, shorter than the sepals. Column erect, terete, bicirrhose at the base. Anther and pollen masses as in Catasétum.

†1889. *Catasétum*, page 749.

2784. *Monachánthus* Perianth flattened. Sepals and petals equal, turned backwards Labellum fleshy, undivided, ventricose, much larger than the sepals. Column short, thick, mutic. Anther and pollen masses as in Catasétum.

2785 *Mormòdes*. Upper sepal a little arched, narrow, lateral ones reflexed Petals broader than the sepals, erect Labellum ascending, 3-lobed, cuneated, apiculated, articulated with the column. Column semiterete, mutic. Pollen masses 4, connate by pairs, fixed to thick caudicula, and adhering to thick fleshy gland.

2786 *Stanhópea* Perianth membranous, spreading, or reflexed Sepals free, subundulated. Petals narrower than sepals Labellum free, spurless, fleshy, and horned on both sides Column very long, marginate. Anther 2-celled Pollen masses 2, elongated, cleft, caudicula shorter than the 2-lobed gland

2787. *Gongòra* Perianth flattened. Lateral sepals free, upper one connate to the back of the column Petals smaller, adnate to the middle of the column. Labellum continuous with the base of the column, free, unguiculate Column very long, arched, clavate, marginate. Anthers subbilocular. Pollen masses 2, linear, sessile on a cuneated caudicula.

2788 *Coryánthes*. Perianth spreading. Sepals dilated, flexuose, conduplicate. Petals erect, much smaller than the sepals Labellum large, unguiculate, galeate, continuous with the base of the column, 3-dentate Column terete 2-horned at the base, elongated, recurved at apex, 2-winged Anther 2-celled. Pollen masses 2, compressed, sulcate behind, with a linear arched caudicula and a lunate gland

2789. *Anguloa* Perianth globose Sepals and petals free, concave, nearly equal. Labellum unguiculate, cucullate, 2-lobed, with an intermediate reflexed segment Column semiterete, clavate, 2-horned at apex. Anther beaked Pollen masses 2, with a lanceolate caudicula and small ovate gland (*No species given*)

2790 *Peristèria* Perianth globose Sepals somewhat connate with the base of the labellum. Petals smaller than the sepals Labellum erect, articulated in the middle. Column erect, semiterete, dilated at the base. Anther crestless 2-celled. Pollen masses 2, cleft behind. Gland sessile, naked, involving the beak.

†1885. *Cymbidium*, page 749

†1901. *Camaridium*, page 749.

2791 *Gróbya* Perianth flattened, bilabiate Lateral sepals connate at the base. Upper sepal erect, shorter Petals dilated, erect, connivent, much larger than the sepals Labellum 3-lobed, naked, articulated with the base of the column, smaller than the sepals. Column erect, semiterete, arched, thickened at the base. Pollen masses 2-lobed behind, adnate to two short caudiculæ Gland oval

2792 *Acropera*. Sepals spreading, upper one galeate, lateral ones divaricated. Petals short, oblique, truncate at apex Labellum unguiculate, articulate at the base of the column, 3-lobed, the middle lobe smaller and saccate Column erect, marginate, saccate at the base. Pollen masses 2, linear, convolute, with a linear subulate caudicula and a minute gland Beak subulate

2793 *Grammatophýllum* Perianth flattened, spreading Sepals and petals nearly equal Labellum articulate with the column, short, 3-lobed, cucullate Column arched, erect, semiterete, callous at the base Anthers subbilocular Pollen masses 2, globose, sulcate at the base, sessile upon the extremity of an arched gland.

†1888 *Geodórum*, page 749.

2794 *Sobralia* Perianth large, rather fleshy, flattened, spreading Sepals and petals nearly equal. Labellum cucullate, involving the column, narrowed at the base, 2-lobed. Column erect, elongated, marginate, clavate, winged on both sides at the apex Anther 2-celled Pollen masses 2, with a linear caudicula

2795 *Acanthophippium* Perianth ventricose Sepals agglutinate. Lateral sepals adnate to the claw of the column Labellum unguiculate, articulate with the base of the column, 3-lobed, complicate, with a lamellate disk Anther fleshy, 2-celled Pollen masses 8, unequal, sessile

†1929. *Calýpso*, page 750

†1920. *Eulophia*, page 759

2796 *Dipódium* Perianth spreading Petals and sepals equal. Labellum auricled on both sides beneath the middle, bearded in the disk, saccate at the base, and connate with the column. Column erect, marginate, semiterete Anther membranous, 2-celled. Pollen masses 2, obliquely 2-lobed, fixed to two caudiculæ.

2797. *Galeándra*. Perianth spreading or connivent. Sepals and petals ascending, free Labellum funnel-shaped, spurred, undivided, sessile, sometimes fringed on the margin. Column erect, winged. Anther helmet-shaped, with a recurved crest Pollen masses 2, excavated behind, with a short caudicula and elongated gland.

2798. *Zygopétalum*. Perianth flattened Sepals and petals ascending, nearly equal, connate with the claw of column Labellum mutic, undivided, spreading, with an ascending claw and large transverse fleshy crest. Column short, arched, semiterete Anther subbilocular Pollen masses 2, almost sessile on a transverse gland.

2799. *Huntleya*. Perianth flattened, nearly equal Lateral sepals involute at the base in front. Labellum flat, unguiculate, spreading, rhomboid, fringed at the base, articulated with the base of the column. Column clavate, cucullate at apex, winged in the margin Anther 2-celled, mutic Pollen masses 4.

2800. *Stenia*. Perianth flattened, nearly equal Lateral sepals oblique at the base. Labellum continuous with

the base of the column, concave, appendiculated in the disk. Column semiterete, drawn out at the base, rounded at the apex, mutic. Anther 2-celled. Pollen masses 4, linear, twin, dorsal one small. Caudicula nearly square, acute

†1896 *Cyrtopódium*, page 749

2801. *Cyrtopèra*. Perianth flattened. Sepals and petals ascending, nearly equal, connate with the claw of the column. Labellum spurless, concave, 3-lobed, with callous crested or tubercled veins. Column semiterete, marginate Anther 1-2-celled. Pollen masses 2, 2-lobed behind, with a short subtriangular caudicula.

†1887. *Lissochilus*, page 749

†1893 *Notília*, page 749

2802 *Masdevállia*. Perianth closed. Sepals acuminate, or awned, connate into a campanulate tube. Petals short. Labellum short, oblong, concave, entire, articulated with the column. Column erect, linear, channelled. Pollen masses 2, with a short caudicula

2803 *Cryptochilus* Perianth tubular, contracted at the throat, gibbous in front at the base. Sepals connate, except at the apex. Petals free, rather smaller than the sepal Labellum undivided, free, continuous to the base of the column. Column semiterete. Anther 2-celled. Pollen masses 8, adhering by pairs to common glands.

†1919. *Ionópsis*, page 751.

2804 *Quekéttia*. Perianth cylindrical Sepals linear, equal, gibbous at the base, lateral ones connate. Petals linear, of equal length. Labellum oblong, entire, mutic, parallel with the column, excavated at the base, bicallose. Column semiterete, erect, auricled on both sides at the apex Anther 1-celled. Pollen masses 2, excavated behind, with a linear caudicula and a minute gland.

†1883 *Rodriguezia*, page 749.

†1884. *Gomiza*, page 749

2805 *Burlingtònia* Perianth membranous, convolute, oblique. Sepals unguiculate, shorter than the labellum; lateral ones concave at the base, connate. Petals unguiculate, parallel with the labellum Labellum 2-lobed, parallel with the column, with a channelled lamellate claw Column terete, clavate Stigma horned on both sides. Anther 1-celled Pollen masses 2, excavated behind, adnate to a subulate elastic caudicula

2806 *Comparéttia* Perianth ringent Middle sepal and petal short, free, somewhat galeate; lateral ones connate, one-spurred Labellum free, flattened, obcordate, unguiculate, furnished with 2 spurs, which are hidden within the spur of the sepals Column free, erect, mutic. Pollen masses 2, adnate to beaked cuneated caudicula.

†1898 *Macradènia*, page 749

†1909 *Cyptarrhena*, page 749.

†1895 *Oncidium*, page 749

2807 *Fernandèzia* Perianth spreading Sepals free. Petals conniving under the upper sepal. Labellum spurless, free, 3-lobed, tubercled on the disk Column short, eared on both sides Anther 2-celled. Pollen masses 2, obovate.

2808 *Scaphyglóttis* Sepals connivent Lateral ones drawn out at the base, a little connate with the foot of the column, upper one linear, convex Petals a little shorter than the sepals Labellum oblong, channelled, continuous with the column, with a repand margin Column marginate Pollen masses 4, sessile on a cuneated gland.

2809 *Pachyphýllum*. Perianth connivent Sepals and petals free, equally acute. Labellum free, undivided, sessile, furnished with one tubercle at the base, and two at the apex Column petaloid. Pollen masses 2. (No species given)

2810 *Dichæ'a* Perianth connivent Sepals and petals free, acute, equal Labellum unguiculate, naked, spurless, deltoid, articulated with the column. Column erect, terete, wingless. Anther 2-celled. Pollen masses 4, by pairs, collateral, with a cuneate caudicula and a minute gland

2811 *Miltònia*. Perianth flattened. Petals revolute, and lateral sepals connate at the base, sessile. Labellum large, dilated, undivided, sessile, connate with the column, lamellate at the base. Column short, semiterete, eared at the apex Pollen masses 2, adnate to an oblong caudicula.

2812 *Cyrtochilum* Perianth flattened Sepals free, lateral ones unguiculate Petals a little smaller than sepals. Labellum free, undivided, continuous to the base of the column, with a tuberculated claw. Column short winged. Anther 2-celled Pollen masses 2, with a filiform caudicula and a minute gland

†1886 *Brássia*, page 749.

2813 *Tetrapéltis* Perianth somewhat spreading Sepals free, equal Petals very narrow, of equal length Labellum free, sessile, saccate, geniculate, 3-lobed. Column erect, length of petals semiterete, clavate. Rostellum straight. Pollen masses 4, globose, pitted behind, adhering by pairs to two narrow caudiculæ connected by a common gland

2814 *Phalænópsis* Perianth flattened, spreading Sepals free Petals larger than the sepals, dilated. Halalellum connate with the column, free, 3-lobed, callous at the base, middle lobe narrower, bicirrhose. Column lying upon the ovarium, semiterete Rostellum gladiate. Anther 2-celled. Pollen masses 2, nearly globose, with a flat spatulate caudicula and a large caudate gland.

†1916 Vánda, page 750

2815 *Camarótis* Perianth flattened. Lateral sepals connate with the back of the labellum, free at apex. Petals a little smaller than the sepals, free Labellum obovate, channelled, appendiculate at apex. Column erect, terete, free, beaked Anther dorsal, apiculate, subbilocular. Pollen masses 2, with a very long subulate caudicula and a forked rostellum.

†1918. *Renanthèra*, page 750.

2816 *Micropèra*. Perianth equal, spreading Lateral sepals adnate to the base of the labellum. Labellum continuous with the base of the column, slipper-shaped, 3-lobed, middle lobe very small. Column short, with a large inflexed rostellum. Pollen masses 2, with a subulate caudicula

2817 *Succolàbium*. Perianth flattened, spreading Sepals equal to the petals, lateral ones usually largest. Labellum undivided, spurred, connate with the base of the column Column erect, semiterete, with subulate rostellum. Anther semibilocular. Pollen masses 2, nearly globose, with an elongated caudicula and a minute gland.

2818 *Cleisóstoma*. Sepals and petals spreading, linear, nearly equal Labellum spurred, connate with the base of the column, 3-dentate. Column semiterete. Anther semibilocular. Pollen masses 2, 2-lobed, nearly globose, with a filiform caudicula and a hooked minute gland (No species given)

†1915 *Sarcánthus*, page 750

2819 *Œccóclades*. Perianth spreading, ringent, or connivent, nearly equal, free Labellum free, sessile, articulate with the column, spurred, naked, or bilamellate at the base. Column elongated, semiterete. Anther 2-celled. Pollen masses 2, furrowed behind, with a narrow caudicula and a minute gland.

†1917 *Aérides*, page 750

†1922. *Aeránthes*, page 750.

†1921. Angræ'cum, page 750

2820 *Trichocentrum*. Perianth spreading, free, equal Labellum sessile, spurred, flat, 2-lobed, lamellose at the base, connate with the base of the column. Column short, semiterete, thick, winged on both sides. Anther 2-celled, mutic Pollen masses 2, complicate, with a cuneated caudicula and a minute gland

†1923 *Calánthe*, page 750.

IV OPHRY'DEÆ. — Pollen cohering in innumerable waxy masses, collected on a cobwebbed elastic axis, fixed to the glands of the stigma. Anther terminal, erect, or resupinate, persistent, with complete cells.

†1859 *Orchis*, page 748.

†1864. *Anacámptis*, page 748.

†1858 *Gymnadènia*, page 748.

†1860. *Nigritélla*, page 748.

†1865 *Aceras*, page 748

†1857 *Platanthèra*, page 748.

†1868. Herminium, page 748.

†1867. *Chamóorchis*, page 748.

†1861. *Habenaria*, page 748

2821. *Bonátea.* Perianth and anther of Habenària. Upper lip of stigma free, cucullated, or complicated; process of the stigma sometimes long and sometimes short

2822. *Cynórchis* Sepals equal, connivent Petals fixed under the upper sepal. Labellum connate with the column, spurred, usually 4-parted Sepals larger than the petals, and of a different texture. Column short. Anther horizontal or resupinate, with distinct elongated cells. Rostellum flat, 3-partite. Pollen glands naked. Lobes of stigma 2, fleshy.

†1862 *Bartholina*, page 748.
†1856. *Satyrium*, page 748.
†1855. Disa, page 748.
†1862 *Serapias*, page 748

2823 *Pterygódium* Perianth subringent Lateral sepals exterior, horizontal, concave. Labellum inserted in the middle of the column, between the remote cells of the anther.

2824. *Corycium.* Perianth ringent. Petals equal at the base, erect; lateral ones connate. Petals free, concave. Labellum unguiculate, connate with the face of the column, appendiculate in front. Anther dorsal, resupinate. Glands naked.

†1806. *Ophrys*, page 748.

2825 *Disperis.* Perianth ringent, of 4-5 sepals. Lateral sepals exterior, horizontal, somewhat spurred Labellum erect from the base of the column, and connected with it. Anther revolute, drawn out in two segments, which are bent in front.

V. GASTRODIE'Æ. — Anther terminal, opercular. Pollen masses cohering in granules, which finally become waxy, and are indefinite in number.

2826. *Gastrodia.* Perianth tubular, 5-lobed. Lobes secund. Labellum closed, free, unguiculate, lying on the column Column long, hollow at top. Anther deciduous, with approximate cells. Pollen masses large, composed of numerous angular particles.

VI. ARETHU'SEÆ. — Anther terminal, opercular. Pollen masses as in tribe Neottieæ.

†1881. *Calcana*, page 749

2827. *Corysanthes* Perianth ringent. Helmet large. Lower lip 4-parted, short, hidden by the labellum. Labellum large, cucullate, or tubular Anther 1-celled, 2-valved, persistent Pollen masses 4, powdery.

2828. *Pterostylis* Perianth ringent, 4-leaved, inner leaflet bifid Labellum unguiculate, almost enclosed, appendiculate, or gibbous at the base Column connate with the base of the galea, winged at apex. Anther persistent, with approximate cells. Pollen masses 2 in each, all compressed, powdery

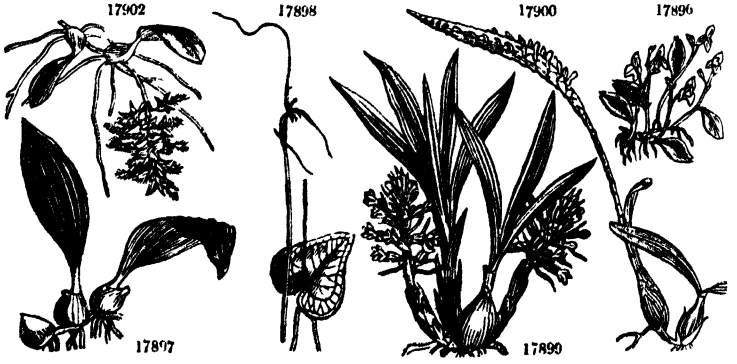
†1877 *Arthrasa*, page 749
†1879 *Pogonia*, page 749.
†1878 *Calopogon*, page 749

2829 *Glossodia* Perianth of 5 equal spreading sepals Labellum dissimilar, short, undivided, glandless. Appendage between the column and the labellum. Anther terminating the membranous dilated column, with approximate cells Pollen masses 2 in each cell, compressed, powdery

2830 *Chloræa.* Perianth membranous Outer sepals nearly equal, lateral ones deflexed, upper one, along with the inner ones, conniving into a galea. Labellum sessile, cucullate, entire or 3-lobed, with a crested disk Column elongated, semiterete, marginate. Anther 2-celled Stigma lying on the top of the column. Pollen masses 2, bipartite, cohering behind.

MONANDRIA.

*2747.	-	- LEPA'NTHES *Swz*	(*Lepos*, bark *anthos*, flower, habit)	*Orchid Malax Pleur.*										Sp	1—1
17896	-	- tridentàta *Swz*	3-toothed-*lvd*	⚷ ⧄ cu	♮	ja	P.v	Jamaica	1834	D	mo	Bot. reg	1762		
*2750.	-	- APLE'CTRUM *Swt*	(*A*, without, *plektron*, a spur; flower)	*Orchid Malax Pleur*										Sp	1—1
17897	-	hiemale *Swt.* wintry		⚷ ⧄ cu	1		Br	N Amer	1827.	O	s p				
		Corallorhiza hiemàlis *Nut*													
*2751	-	- ACIA'NTHUS *R. Br*	(*Akis*, point, *anthos*, flower; bristly tips)	*Orchid Malax Pleur.*										Sp	1—3
17898	-	- caudàtus *R. Br.* tailed		⚷ ⧄ or	1	my.jn	Br	N. Holl	1824.	R	l p				
*2752.	-	- CŒ'LIA *Lindl.* CELIA	(*Koilos*, hollow; pollen masses)	*Orch Malax. Pleur.*										Sp	1—0
17899	-	- Baueràna Bauer's		⚷ ⧄ cu	1	.. .		Jamaica	..	R	l p	Sm.ic pict	14		
*2753.	-	- MEGACLI'NIUM *Lindl.*	(*Megas* large, *klino*, to bend, spike)	*Orch Malax. Dendrob*										Sp	1—3
17900	-	- máximum *Lindl* largest		⚷ ⧄ cu	1	au	G	S. Leone	1836	D	p r w	Bot reg	1959		
*2754	-	- BOLBOPHY'LLUM *Thou*	(*Bolbos*, bulb, *phyllon*, leaf, mode of leafing)	*Orch. Mal Den.*										Sp	2—0
17901	-	- leopardinum *Lindl.* leopard-spotted		⚷ ⧄ spl	.	...	Ysh G	E. Indies	..	D	p r w				
17902	-	- saltatórium *Lindl* dancing		⚷ ⧄ pr	♮	d	R	S Leone	1835.	D	p r w	Bot. reg	1970		



†1880 *Epipdctis*, page 749.

2831 *Caladènia*. Perianth bilabiate, glandular outside. Upper lip flattish. Labellum unguiculate, cucullate, somewhat 3-lobed, or narrowed at the apex, ornamented with rows of glands in the disk Column membranaceously dilated. Anther persistent, with approximate cells. Pollen masses 2 in each cell, compressed, half 2-lobed, powdery.

2832. *Eriochilus*. Perianth bilabiate Outer lateral sepals unguiculate; inner ones erect, smaller. Labellum unguiculate, inappendiculate, with a pubescent glandless disk. Column semiterete, simple at top. Anther persistent, mutic, with approximate cells. Pollen masses 4 in each cell.

2833. *Chiloglóttis*. Perianth bilabiate Outer lateral sepals channelled, and terete at the apex. Labellum unguiculate, glandular in the disk, and furnished with a tongue-shaped appendage at the base. Column bifid at apex. Anther persistent, with proximate cells. Pollen masses 2 in each cell, compressed, powdery.

2834. *Cyrtóstylis* Perianth bilabiate. Sepals mutic, 4 lateral ones nearly equal, spreading. Labellum dissimilar, stretched out, flat, obtuse, undivided, bicallose at the base. Column semiterete, dilated at apex. Anther persistent, with approximate cells Pollen masses as in Chiloglóttis

2835 *Micrdtis*. Perianth ringent. Outer lateral sepals sessile; inner ones almost similar, ascending. Labellum dissimilar, oblong, obtuse, callous at the base Column funnel-shaped. Anther furnished with a membranous auricle on both sides. Pollen masses 2 in each cell, powdery, fixed by the base.

VII. NEOTTIE'Æ. — Anther parallel with the stigma, and erect. Pollen masses simple, or consisting of granules in a loose state of cohesion.

†1874. *Spirdnthes*, page 749.
†1875. *Stenorhýnchos*, page 749.
†1873. *Neóttia*, page 749.
†1876 *Listera*, page 749.

2836 *Pelézia*. Sepals conniving into a cylinder. Outer lateral ones dependent, connate with the base of the column. Labellum entire, stretched out, spurred at the base, connate with the ovarium.

2837 *Sauroglóssum* Perianth connivent Lateral sepals linear, arcuately spreading, running into the ovarium at the base. Labellum linear, channelled, callous at the base Column elongated, semiterete, drawn out at the base, and somewhat spatulate at the apex. Rostellum ovate. Pollen masses 2, 2-lobed, with a very short caudicula.

†1870. *Goódyera*, page 748

2838. *Anœctochilus* Perianth ringent. Upper sepal, along with the petals, forming a galea; lateral sepals spreading. Labellum connate with the column at the base spurred, with a channelled inflexed claw, and a 2-lobed spreading limb Column short, with membranous, dilated, involute margins.. Stigma bicallous at the base. Pollen masses 2, powdery, 2-lobed, with very short caudicula, and an oblong gland.

†1872. *Ponthièva*, page 748..

2839 *Cránichis*. Perianth resupinate, subringent Labellum arched. Anther as in Neóttia.

†1926. *Prescóttia*, page 750

2840 *Calochilus* Perianth ringent. Inner sepals sessile, smaller than the outer ones, erect. Labellum longer than the sepals, sessile, acuminated, with the margins and disk bearded. Anther parallel with stigma, persistent.

2841 *Prasophýllum*. Perianth ringent, galea in front, 2 outer sepals usually cohering, inner ones unequal-sided. Labellum ascending, undivided, spurless, unguiculate. Column bipartite Anther parallel with the stigma, persistent. with approximate cells. Pollen masses 2 in each cell, powdery, fixed to the top of the stigma.

†1871 *Diúris*, page 748
†1930. Vanilla, page 751.

MONANDRIA.

17896 Leaf ovate acute marginate triden at apex, Flws. triquetrous at base, Sepals acuminated

17897 The only species

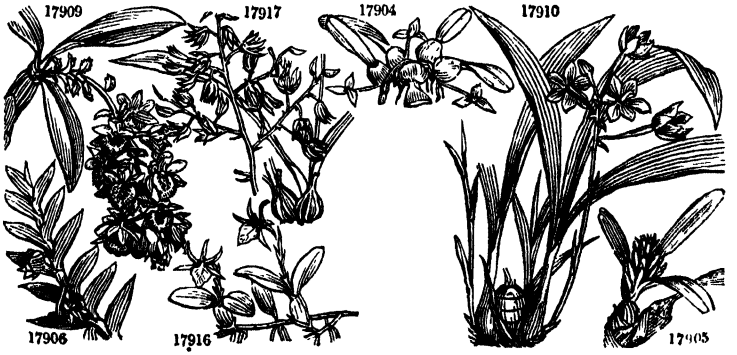
17898 Scape 1-2-flwd. Horns very long, Margins of lvs. undulated

17899 The only species

17900 Upper sepal acute lateral ones acum. reflex. with involute margins, Labellum linear revolut

[fleshy quite entire

17901 Pseudo-bulbs tufted ovate obl. Lvs. coriaceous stiff ovate obl. solitary petiolate, Flws rad. fascicled, Labellum
17902 Pseudo-bulbs ov. comp. wedged, Lvs. sol. acute shorter than rac. Bracteas ov. membran. Sepals pubesc. Labellum ovate feathered at top



*2755. - - CIRRHOPE'TALUM *Lindl.* (*Kirrhos*, tawny, *petalon*, petal; flowers.) *Orch. Mal. Dend.* Sp. 1—3.
17903 - - Thouársii Lindl Thouars's ⚷ △ cu 1 jl Y.B Soc. Isles ... D p r.w Bot.reg.n. s.11
Bolbophýllum longiflòrum *Thou*, Zygoglóssum umbellàtum *Reinw.*

*2756. - - TRI'AS *Lindl* Trias. (*Trias*, three, open flower forming a triangle.) *Orch. Malax Dendròb.* Sp. 1—1.
17904 - - oblónga *Lindl* oblong ⚷ △ el n Din G.P E Indies ... D p r.w Wal. pl. as

*2757. - - BRYO'BIUM *Lindl.* (*Bruo*, to sprout, *bio*, to live, bulbs.) *Orch. Malax. Dendròb.* Sp. 1—1.
17905 - - pubéscens *Lindl.* pubescent ⚷ △ cu 1 n G E Indies 1836. D p.r.w

*2758 - - A'PORUM *Blume.* (*Aporus*, a running shoot, appearance) *Orch. Malax Dendrôb* Sp. 1—1
17906 - anceps *Lindl* two-edged-*stmd* ⚷ △ cu ½ year Y.G Bengal 1826. D p.r.w Bot. reg 1239

1900 DENDRO'BIUM Sp 13—32.
17907 12922*a* nóbile *Lindl.* noble ⚷ △ pr 2 f Gsh Y P China 1836 D p r w Sert orch. 3

17908 12922*b* cæruléscens *Wal.* bluish ⚷ △ or 2 ap B P India 1837 D trunks Sert orch 18
17909 12925*a* densiflòrum *Wal.* dense-flowered ⚷ △ or 1½ my Y Nepal 1830 D p r w Bot. reg 1828

*2759. - - PAXTO'NIA Lindl (*J Paxton, F L.S* cond of *Mag of Bot*, a successful cultiv) *O. M D* Sp 1—1.
17910 - - rósea Lindl. rose-*coloured* pr ½ s o Ro Philippines 1837. D p.l Bot reg n s 60

1907. EPIDE'NDRUM *Orch Epidéndreæ* Sp 20—71
17911 12939*a* odoratíssimum *Lindl* sweetest-sctd ⚷ △ fra 1 su G Y Rio Jan 1827 D p r w Bot reg 1415
Encýclia pàtens *Hook* in Bot mag 3013, Macradènia lutéscens *Bot Cab* 1556, but not of Bot reg
17912 12939*b* oncidioides *Lindl* Oncidium-like ⚷ △ fra 3 jn Y br S Amer ?1823 D p r.w Bot reg 1623
17913 12939*c* aromáticum *Bate* aromatic ⚷ △ el 3 my Pa Y Guatem 1835 D p r w Bate orch 10
17914 12947*a* bicornùtum *Hook.* two-horned ⚷ △ fra 1½ ap W sp Trinidad ?1831 D p r w Bot mag.3352

17915 12942*a* floribúndum *Hook* many-flowered ⚷ △ el 1 n G B Mexico ... D p.r w Bot mag 3637

*2760. - - DINE'MA *Lindl* (*Dis*, double, *nema*, a filament, filaments.) *Orch. Epidénd.* Sp 1—
17916 - - polybúlbon many-bulbed ⚷ △ cu 1 au W Jamaica 1832 D p r w Bot cab 1230
? Epidéndrum polybúlbon.

*2761 - - ENCY'CLIA *Hook* Encyclia. (*Egkykleo*, to wrap round; column by lip) *Orch Epid* Sp 1—1
17917 - - viridiflòra *Hook.* green-flowered ⚷ △ cu 1 f G Rio Jan. 1827. D p r.w Bot. mag 2831

*2762 - - CHY'SIS *Lindl* (*Chysis*, a melting, pollen masses, as it were, fused together) *Orch Ep* Sp 1—1
17918 - - aúrea *Lindl* golden-*flwd* ⚷ △ or 1 s Go Venezuela 1834 D p.r w Bot. reg 1937

*2763. - - PHYSI'NGA *Lindl.* (*Phusa*, a bladder, shape of labellum.) *Orch Epidénd* Sp 1—1
17919 - - prostràta *Lindl.* prostrate ⚷ △ cu 1 au G P Demerara 1837. D p.r w

*2764 - - HARTWE'GIA Lindl (*M Theodore Hartweg*, bot. collect to Lond. Hort Soc) *Or Ep.* Sp 1—1
17920 - - purpùrea *Lindl* purple ⚷ △ or .. . P Vera Cruz ?1837 D p r w

*2765. - - LÆ'LIA Lindl Lælia (*Lælia*, a vestal virgin) *Orch Epidénd* Sp 6—20
17921 - - anceps *Lindl* two-edged-*scpd* ⚷ △ el 1½ d Pa P Mexico 1843 O p r w Bot reg 1751
β Barkeriàna Lindl Barker's ⚷ △ el 1½ d P Mexico 1833. O p r w Bot reg 1917
17922 - - autumnàlis *Lex.* autumnal ⚷ △ spl 3 au o Li P Mexico 1836 D p r w Bate orch 9

*2766 - - SCHOMBU'RGKIA Lindl (*R. J H Schomburgk*, a traveller in Guiana) *Orch Epid* Sp 1—1
17923 - - marginàta *Lindl.* bordered ⚷ △ or 4 au s R Y Surinam 1834 D trees Sert orch 13

1906 CATTLE'YA *Orchidàceæ Epidéndreæ* Sp 20—50
17924 12936*z* Móssiæ Hook *Mrs* Moss's ⚷ △ or 1 jn au P S Amer. 1836. D p r w Bot mag 3669
17925 12935*y* Perrinæ Lindl Perrin's ⚷ △ or 1 [illegible] P Brazil ... D p r w Bot reg n s 2

17926 12937*b* guttàta *Lindl* . spotted-*flwd* ⚷ △ or 1 G Bd W.P Brazil 1827. D p r w Bot reg 1466

17927 12937*c* pùmila *Hook* dwarf ⚷ △ el ½ jl au P S Amer 1837. D p.r w Bot mag 3656

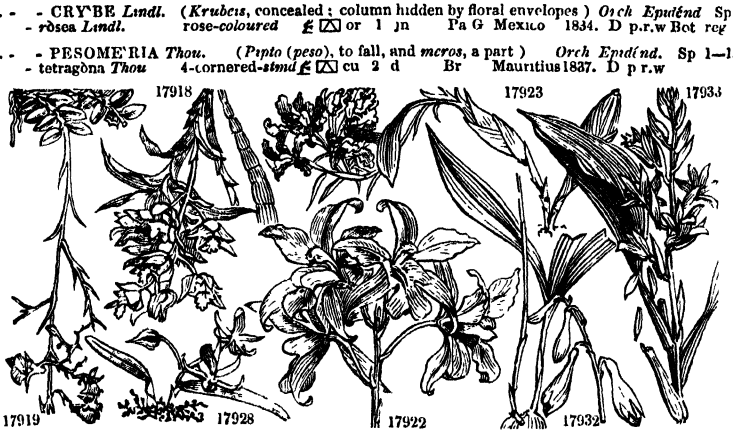
*2767. - - LEPTO'TES *Lindl* Leptotes (*Leptos*, slender, leaves) *Orchidàceæ Epidéndreæ.* Sp 1—1
17928 - - bicolor *Lindl* two-cld-*flwd* ⚷ △ or ½ ap W B Brazil 1831 D p r w Bot. reg 1625

1911. BLE'TIA *Orch Epidénd.* Sp 9—15.
12957 verecunda
β Shepherdii Lindl Shepherd's ⚷ △ or 2 ja m Dp P Jamaica 1825? D p l Bot mag 3819
17929 12957*a* pátula *Hook* spreading-*flwd* ⚷ △ el 2 mr P Hayti 1830 O p l Bot mag 3518
17930 12957*b* gráclis *B. C* slender-*scaped* ⚷ △ pr 1½ jl au Y.B Mexico 1830 D p l Bot reg 1681

17931 12957*c* reflexa *Lindl* reflexed-*sepaled* ⚷ △ or 2 n P G w Mexico 1833? O p l Bot reg 1760

*2768. - - CRY'BE *Lindl.* (*Krubeis*, concealed; column hidden by floral envelopes) *Orch Epidénd* Sp 1—1
17932 - - rósea *Lindl.* rose-*coloured* ⚷ △ or 1 jn Pa G Mexico 1834. D p.r.w Bot reg 1872

*2769. - - PESOME'RIA *Thou.* (*Pipto* (*peso*), to fall, and *meros*, a part) *Orch Epidénd.* Sp 1—1.
17933 - - tetragòna *Thou* 4-cornered-*stmd* ⚷ △ cu 2 d Br Mauritius 1837. D p r.w



17903 Petals ciliated and are as well as the upper sepal awned, Lvs. obl. obtuse emarginate shorter than the scape

17904 Lvs. oblong

17905 The only species

17906 Lvs fleshy acute, Flws. sol. or twin, Sepals fleshy, Stems pendulous, Labellum emarginate crenulated

17907 Stems terete pendulous, Lvs obl obliquely emarginate obtuse, Flws. twin, Sepals oval, Petals conforming to the sepals but larger, Labellum roundish cucullate cordate [emarginate
17908 Stem erect fleshy, Lvs obl obtuse emarginate, Racemes horizont 2-3-flwd Sepals linear obtuse
17909 Stems articulated clav pendulous leafy at top, Lvs obl. acute Racemes later many-flwd Labellum rhomb unguiculate serrul. retuse

17910 The only species

[Labellum almost free 3-lobed with a callous depressed disk
17911 Lvs oval corrugated twin ensif Rac almost simple, Sepals obl and are as well as the cuneated petals spreading, [3-lobed, Lateral lobe short oblong
17912 Lvs oval 2-edged ensif. Panicle term branched, Sepal and petals obovate unguiculate spreading, Labellum
17913 Pseudo-bulb large 1-2-leaved, Scape panicled, Sepals lanceol Labellum 3-lobed, Middle lobe orbicular
17914 Lvs few lin obl obtuse coriaceous, Racemc term pedunc few-flwd Sepals and petals equal, Labellum 3 lobed, Middle lobe lanceol acute horned inside at base
17915 Lvs lanceol obl acum submembran Panicle term. Sepals reflex lanceol. Petals filiform, Labellum 4-lobed bituberculate at base, Middle lobe lin.

17916 The only species

17917 The only species

17918 The only species

17919 The only species

17920 The only species

17921 Lvs twin or sol lanceol Scape 2 edged 2-flwd clothed with keeled scales, Ovarium clammy, Disk of labellum lin elong 3-lobed at apex, Pseudo-bulbs ovate distant 4-angled
17922 Lvs. obl lanceol. keeled arched, Scape elong. many-flwd Pseudo-bulbs turbin furrowed

17923 Petals and Sepals undulated obtuse, Mid lobe of labellum round acute

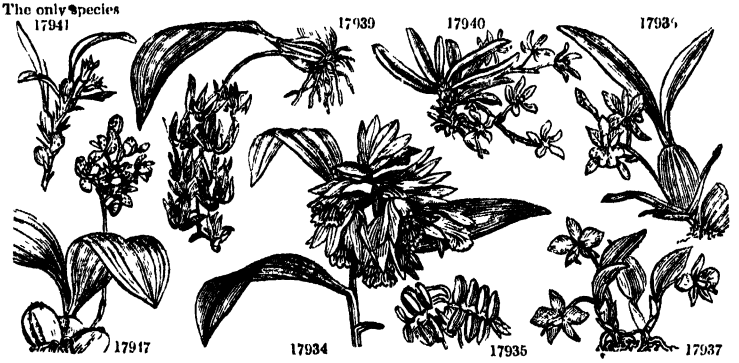
17924 Flws large, Sepals lanceol Petals ellip. ovate ungu with curled margins, Labellum obov 2-lobed crenul.
17925 Sepals obl lin obtuse, Lateral ones falcate narrower than obtuse petals, Labellum obl lanceol 3-lobed, Mid lobe obl obtuse undulated, Lvs obl. coriaceous
17926 Flowers fleshy, Sepals lin obl obtuse, Petals conform to sepals but a little broader undul Labellum 3-lobed, Middle lobe obcord with tuberculated disk, Lvs concave
17927 Sepals obl acute upper one recur narrower than petals, Petals oval obl obtuse undul Mid lobe of labellum short obtuse undulately laciniated, Lvs. obl lanceol.

17928 The only species

[emarginate transversely plicate 6 unequal lamellæ on the disk
17929 Lvs lanceol Scape tall branched, Flws spreading, Sepal lanceol ellip spreading, Labellum cucul Mid lobe
17930 Lvs obl lanceol plicate, Scape simple, Sepals and Petals nearly equal lanceol acumin Labellum 3-lobed mid. lobe emarginate undulated with a solitary lamellæ in the disk
17931 Lvs narrow ensif plicate, Scape simple 2-4-flwd Sepals lin lanceol lateral ones reflex Petals cun lanceol. Labellum 3-lobed, Mid lobe narrow undulated furnished with 5 lamellæ on the disk

17932 The only species

17933 The only species



*2770. - - PHA'IUS *Lour.* Phaius (*Phaio*, to shine, splendour of flowers.) *Orch. Epidend* Sp. 1—2.
17934 - - álbus *Lindl.* white ⚘ ⧄ spl 2 jl W.F.G Nepal 1837? D p l Bot reg.n. s. 23

*2771. - - NANO'DES *Lindl* Nanodes (*Nanodes*, pygmy; size of plant) *Orch Vándeæ*. Sp. 1—1.
17935 - - discolor two-colored ⚘ ⧄ cu ½ au G P Rio Jan 1827 D p r w Bot reg 1541

*2772. - - ASPA'SIA *Lindl* (*Aspazomai*, I embrace; column by labellum) *Orch Vándeæ*. Sp 1—2.
17936 - - variegàta *Lindl* variegated-*flwd* ⚘ ⧄ fra ½ f G sp Y R S.Amer. 1836 O p r w Bot. reg 1907

*2773 - - SOPHRONI'TIS *Lindl* Sophronitis. (*Sophron*, modest, appearance) *Orch. Vándeæ*. Sp 1—6.
17937 - - grandiflòra *Lindl.* large-flowered ⚘ ⧄ or ½ .. S Organ Mts 1837. D p.r w Bot. mag 3709
Cattlèya coccínea *Lindl.* in text of Bot reg. t. 1919.

*2774. - - CIRRHÆ'A *Lindl* Cirrhæa (*Cirrhus*, a tendril, form of rostellum) *Orch Vándeæ* Sp 2—5
17938 - - viridi-purpùrea *Lod* green & purple ⚘ ⧄ or ½ my G P spt. Brazil 1827. D lt mos.ptsh Bot cab 1967
Gongòra viridi-purpùrea *Hook* Bot mag 2978., C Loddigèsii Lindl, C. dependens *B. R*, Cymbidium dependens *Bot Cab* 936
17939 - - tristis *Lindl* dull-*cld-flwd* ⚘ ⧄ cu ½ jn D P.G.R Mexico 1834. O p.r w Bot. reg. 1889

*2775 - - SARCOCHI'LUS *R Br* Sarcochilus. (*Sarx*, flesh, *cheilos*, a lip) *Orchid Vándeæ* Sp. 1—1.
17940 - - falcàtus *R. Br* falcate-*lwd* ⚘ ⧄ or ½ ap W.pk N Holl. 1821. D p r w Bot reg. 1832

1892 MAXILLA'RIA. *Orchid. Vándeæ* Sp. 10—40
17941 - - Henchmánni Hook Henchmann's ⚘ ⧄ cu 1 ap.my P Mexico 1835. D p.r w Bot. mag 3611

17942 - - Warreàna Lod. Warre's ⚘ ⧄ or 2 au W P Y Brazil 1829. D p r w Bot. cab 1884
17943 - - cristàta *Lindl.* crested-*labell.* ⚘ ⧄ or ½ jl W P Trinidad 1834. O p.r.w Bot. reg 1811

17944 - - Rollissòni Lindl. Rollisson's ⚘ ⧄ or ½ au Y Brazil 1836 D p r w Bot reg n s 40
17945 - - aúreo-fúlva *Hook* golden-brown ⚘ ⧄ pr 1 my jn Go Br S Amer 1836. D p r w Bot mag 2789

17946 - - vitellina *Lindl.* yolk of egg-*cld* ⚘ ⧄ or ½ jn Y B Brazil 1838. D p r.w Bot.reg 1839.12

*2776 - - BIFRENA'RIA *Lindl* Bifrenaria (*Bis*, twice, *frænum*, a bridle) *Orchid Vándeæ* Sp 1—2.
17947 - - aurantiaca *Lindl.* orange cld ⚘ ⧄ or ½ o O Demer. 1834. D p.r.w Bot. reg 1875

*2778 - - TRICHOPI'LIA *Lindl.* Trichopilia (*Thrix*, hair, *pilion*, cap, cap of anther) *Orch. Vándeæ*.
17948 - - tórtilis *Lindl* twisted *petal d* ⚘ ⧄ cu ½ ja W C Mexico 1835 D p.r.w Bot reg 1863

*2779 - - DICRY'PTA *Lindl* (*Dis*, two, *krypto*, to conceal; pollen masses.) *Orchid Vándeæ*. Sp 3—10
17949 - - crassifòlia *Lindl.* thick-lvd. ⚘ ⧄ cu 1 year Y Brazil 1830. D p.r w Bot. reg 1028
Heterotáxis crassifòlia *Lindl* Bot. reg

*2780. - - GOVE'NIA Lindl (*James Robt Gowen, Esq*, an English botanist) *Orchid Vándeæ* Sp 2—2
17950 - - superba *Lindl.* superb-*aspected* ⚘ ⧄ spl 5 f mr O Mexico 1828 D s lt Bot. reg. 1795
17951 - - liliàcea *Lindl* Lily-*flwd* ⚘ ⧄ el 1 jl Psh.W Mexico 1837 D p l Bot.reg n s 13

*2781 - - BATEMA'NNIA Lindl (*Jas Bateman, Esq*, Knypersley Hall) *Orchid Vándeæ* Sp 1—1
17952 - - Colleyi Lindl Colley's ⚘ ⧄ or ½ au P.W.G Demer 1834 D p r w Bot reg 1714

*2782 - - CYCNO'CHES *Lindl* (*Kyknos*, swan, *auchen*, neck; column of flower) *Orchid. Vándeæ* Sp 2—2
17953 - - Loddigèsii Lindl Loddiges's ⚘ ⧄ fra 1 jn jl G spt Surinam 1830. D p r w Bot. reg 1742
17954 - - ventricòsus *Bate.* ventricose-*lip* ⚘ ⧄ or 2 ... G w Guatem. 1835. D p r.w Bate orch 5

*2783 - - MYA'NTHUS *Lindl* (*Myia*, fly, *anthos*, flower; appearance dried) *Orch Ván.* Sp 2—3, and 2 vars
17955 - - cérnuus *Lindl* drooping-*inflor* ⚘ ⧄ or 1½ my Lu G P Rio Jan 1832 D p r w Bot reg 1721
Catasètum trifidum *Hook.* Bot mag 3262
17956 - - barbàtus *Lindl* bearded-*labell* ⚘ ⧄ cu ½ f mr G P Demer. 1834 D p r w Bot reg. 1778

1889 CATASE'TUM *Orchid Vándeæ* Sp 8—11
17957 12892*a* maculàtum *Kth* spotted-*flwd* ⚘ ⧄ or 3 ... G spt.P N Gren 1836 D p r w Bate orch. 2
17958 12892*b* pùrum *Nees* spotless ⚘ ⧄ or 1 w Y G Brazil 1824. D p r w Bot mag 3388
inapértum *Hook ex Jl* s. maiapértum *Hook*
17959 12892*c* lùridum *Lindl* lurid-*flwd* ⚘ ⧄ or 1 s n G Y br Brazil 1832. D p r w Bot. reg. 1667
Nos 12893 & 12894 in p 756 are only varieties of C tridentàtum.

*2784 - - MONACHA'NTHUS *Lindl* (*Monachos*, monk, *anthos*, flower, labellum.) *Orchid Vándeæ*. Sp. 1—2.
17960 - - discolor *Lindl* *dingy*-cld ⚘ ⧄ or 1 n P.Y Demer 1834 D p r w Bot reg. 1735

*2785 - - MORMO DES *Lindl* (*Mormo*, a goblin, appearance of flowers) *Orchid Vándeæ* Sp 1—1.
17961 - - atropurpùrea *Lindl* dark-purple ⚘ ⧄ cu ½ d D.P Sp Main 1834. D p r w Bot reg 1861

*2786 - - STANHO'PEA Hook (*Earl Stanhope*, Pres of the Medico-Bot. Soc) *Orchid Vándeæ*. Sp 7—8
17962 - - insignis *Hook* remarkable ⚘ ⧄ or 1 jl o P Trinidad 1826 D p r w Bot mag. 2948
Ceratochilus insignis *Lindl*
17963 - - tigrina *Bate* tiger-*spotted* ⚘ ⧄ spl 2 mr jn Y P Mexico 1836 D p r w Bot reg. 1839
17964 - - grandiflòra *Lindl* large-flowered ⚘ ⧄ or 2 jl o P Trinidad 1824 D p r w Bot cab 1414
17965 - - ebúrnea *Lindl* ivory-*lipped* ⚘ ⧄ or ½ jl W P Rio Jan 1828 D p r w Bot. reg 1529



[obl. cucul denticu with 5 crests in the disk, Spur emarginate
17934 Caulescent, Lvs obl lanceol. acute glauc beneath, Sepals and petals obl. lanceol acute nearly equal, Labellum

17935 The only species

17936 Pseudo-bulbs obl 2-edged, Sepals lin. obl. Petals somewhat rhomb acute, Lateral lobes of labellum recur Mid. one fleshy serrated

17937 Pseudo-bulbs obl cylind. 1-lvd. Petals ellip. round. Sepals obl lanceol. smaller, Labellum small 3-lobed, Mid. lobe flattish acumin.

17938 Lvs. obl. lanceol. Petals lin arched, Mid lobe of labellum cuneated equal to lateral ones

17939 Lvs. obl. lanceol. Petal lin. spatulate, Labellum sagit. Mid lobe lin. abruptly acute, Lateral ones acumin.

17940 The only species

17941 Pseudo-bulbs oval obl. compressed smooth bearing a sol lin ligul leaf, Pedunc. 1 flwd Petals and sepals erect obl acute, Labellum obscurely 3-lobed
[obovate obl undivided
17942 Lvs obl lanceol acumin plicate, Scape radical many-flwd Sepals ovate concave, Petals smaller, Labellum
17943 Pseudo-bulbs ovate bearing a sol obl lanceol plicate leaf, Scape pendu 2-flwd Sepals and petals lanceol acute equal, Labellum 3-part. Mid lobe fringed
17944 Pseudo-bulbs roundish compressed bearing 2-obl lanceolate Lvs Scape 1-2-flowered, Sepals keeled, Labellum 3-lobed
17945 Pseudo-bulb compressed tetragonal bearing a sol 3-nerv leaf, Flws. racem Petals oval 2 lower ones drawn out into a horn at base, Labellum obovate subtrilobed crested
17946 Pseudo-bulb ovate bluntly angular bearing a lanceol chan leaf, Raceme droop Labellum cuneate 3-lobed, Mid lobe 2-lobed crenulated

17947 Pseudo-bulb roundish compressed 2-lvd Lvs obl plicate, Raceme erect, Lateral lobes of labellum semicord Mid. one transverse subundulated callous at the base

17948 The only species

17949 The only species

17950 Labellum ovate cord Spike cylind Bracteas acumin Lvs. obl acum narrowed at the base
17951 Labellum ovate cucul at base, Spike obl Bracteas obl cucul Lvs obovate lanceol Root tuberous

17952 The only species

[short winged claw, Column slender arched clavate on both sides
17953 Sepals lin obl Lateral ones ovate obl pendulous, Petals obl lanceol Labellum spreading obl entire with a
17954 Sepals and petals lanceol acumin reflexed, Labellum entire ventricose acumin. callous at the base with a short claw, Column arched much shorter than upper sepals

17955 Labellum not bearded

17956 Labellum bearded with succulent hairs

17957 Two innner calycine segments spotted, Labellum ciliated
17958 Leaves linear-lanceolate, Perianth spreading obsoletely dotted, Labellum ventricose incurved at apex ciliated

17959 Leaves oblong 5-plicate, Perianth globose scarcely spotted, Labellum ventricose straight at apex

17960 Raceme loose many-flwd Labellum hemispherical with flat margins and fringed in the middle

17961 The only species

17962 Labellum constricted in the middle, Flws pendulous

17963 Lateral sepals large roundish oblong much broader than the petals
17964 Labellum oblong constricted in the middle, Scape erect 2-flwd shorter than the petals
17965 Labellum obl constricted in the middle, Scape pendulous 2-flowered twice as long as the petals



17966 - - quadricórnis *Lindl.* four-horned £ △ pr 2 jn Y.sp.R Sp Main 1836. D p r w Bot. reg n. s. 5
17967 - - oculàta *Lindl* eyed £ △ el 2 jn.jl Pa.Y Mexico 1829. O p r w Bot. reg 1800

*2787 - - GONGO'RA R & P (*Anton Caballero y Gongora*, a friend of Mutis) *Orchid Vándeæ.* Sp 1—6
17968 - - maculàta *Lindl* spotted-*fiwd* £ △ or 2½ my Y spt Demer 1832 D p r.w Bot. reg 1616

*2788 - - CORYA'NTHES *Hook* (*Korys*, helmet, *anthos*, flower, shape of lip) *Orchid Vándeæ* Sp 1—3.
17969 - - maculàta *Hook* spotted-*lipped* £ △ spl 1 jn Y.P Demer. 1829. D p r.w Bot. mag 3102

*2790 - - PERISTE'RIA *Hook.* (*Peristera*, a dove, its column resembles) *Orchid. Vándeæ.* Sp. 1—4
17970 - - cérina *Lindl.* waxen £ △ or 1 jn Y Sp Main 1835 D p r.w Bot. reg 1953

*2791. - - GRO'BYA Lindl (*Lord Grey of Groby*, a patron of horticulture) *Orchid Vándeæ* Sp 1—1
17971 - - Amhérstiæ Lindl. *Lady* Amherst's £ △ or ¼ s Och s Brazil 1829. D p r w Bot reg 1740

*2792 - - ACROPE'RA *Lindl* (*Akros*, the extremity, *pera*, a bag, append. to labell) *Orchid Vándeæ.* Sp.—
17972 - - Loddigèsii Lindl Loddiges's £ △ or ½ au s Pa Y P Mexico 1828 D p r w Bot. mag 3563

*2793 - - GRAMMATOPHY'LLUM *Blume* (*Grammata*, letters, *phyllon*, leaf) *Orchid Vándeæ.* Sp. 1—4.
17973 - - speciòsum *Blume.* showy £ △ spl 6 ... Y br E. Indies 1837. D p r w Ru Am.

*2794 - - SOBRA'LIA R. & P Sobralia (*F M Sobral*, a Spanish botanist) *Orch Vándeæ.* Sp. 1—4.
17974 - - *Caravàta* Lindl Caravata £ △ or 2 ... . Guiana ... D p r.w Aub. gui.

*2795 - ACANTHOPHI'PPIUM *Bl.* Acanthophippium. (Application unknown) *Orchid Vándeæ.* Sp 1—3
17975 - - bicolor *Lindl.* 2-clr.d.-*persanth* £ △ or ½ jn Y R Ceylon 1833. O p pots Bot. reg. 1780

*2796. - - DIPO'DIUM *R Br* (*Dis*, two, *pous*, foot; threads of pollen masses) *Orchid. Vándeæ* Sp. 1—1
17976 - - punctàtum *R Br* spotted £ △ or 1½ jn au R N Holl 1822 D p l Sm.ex bot.1.12

*2797 - - GALEA'NDRA *Lindl.* (*Gale*, a weasel, *aner*, a male, flowers) *Orch Vándeæ* Sp 1—3.
17977 - - gràcilis *Lindl.* slender £ △ or 1½ au o G S. Leone 1832 D p l Bot. reg 742.

*2798 - - ZYGOPE'TALUM *Hook* (*Zygos*, yoke, *petalon*, petal; joined at base) *Orchid Vándeæ* Sp 3—6.
17978 - - Mackàii Hook Mackay's £ △ or 1 jn jl B G Y Brazil 1825 D p r w Bot mag 2748
β crinitum *Lindl.* hairy *lipped* £ △ or 1 o W spot G Brazil 1829 D p r.w Bot mag 3402
17979 - - maxillàre *Pax* *tooth-like-flwd* £ △ or 1 jn jl B G S Amer 1829 D p r w Pax. mag 271
17980 - - Murrayànum Gard ms Murray's £ △ cu ½ . G w Brazil 1837 D p r w Bot. mag 367

*2799 - - HUNTLE'YA Bate (*Rev John Thomas Huntley*, of Kimbolton) *Orchid Vándeæ* Sp 1—2
17981 - - meleagris *Lindl* Guinea-hen £ △ spl 1 jn Y.R.w Brazil 1838 D p r.w Bot reg. 1839

*2800. - - STE'NIA *Lindl* Stenia (*Stenos*, narrow; pollen masses) *Orchid. Vándeæ.* Sp 1—1.
17982 - pállida *Lindl.* pale-*flowered* £ △ pr ½ au Y Demer ... D p r w Bot. reg n s 20

*2801. - - CYRTOPE'RA *Lindl.* (*Kurtos*, convex, *pera*, a pouch, labellum) *Orch Vándeæ* Sp 1—1.
17983 - - Woodfórdii Woodford's £ △ or 1 o P Trinidad 1814. D p r w Bot mag. 1814

*2802 - - MASDEVA'LLIA R & P. (*Joseph Masdevall*, a Spanish botanist) *Orch Vándeæ.* Sp. 1—1.
17984 - - infrácta *Lindl* broken £ △ cu . Wsh Y Org Mnts. D p r w

*2803. - - CRYPTOCHI'LUS *Wall* (*Kruptos*, hidden, *cheilos*, lip, by calyx) *Orchid Vándeæ* Sp 1—1
17985 - - sanguínea *Wall* blood-coloured £ △ pr 1 jn S Nepal D p r w Bot reg n.s 23

*2804. - - QUEKE'TTIA Lindl (*E J Quekett, F L.S*, a skilful veget anatomist) *Orch Vándeæ.* Sp 1—1.
17986 - - microscópica *Lindl* minute £ △ cu ½ . Brazil ... D p r w

*2805. - - BURLINGTO'NIA Lindl Burlingtonia (*Countess of Burlington*) *Orchid Vándeæ* Sp 1—1
17987 - - cándida *Lindl.* *snow* white £ △ de 1 ap W Demer 1834 D p r w Bot reg. 1927

*2806 - - COMPARE'TTIA Pop (*A Comparetti*, an Italian botanist) *Orchid Vándeæ* Sp. 1—2
17988 - - coccínea *Lindl* scarlet £ △ or ½ au S Brazil 1837 D p r w Bot reg n s 68

1895 ONCI'DIUM *Orchid Vándeæ* Sp 18—41
17989 - - leucochílum *Bate* white-lipped £ △ or 1 au s W G Guatem 1835 D p r w Bate orch 1
17990 - - Lemoniànum Lindl *Sir C* Lemon's £ △ or ¾ my Y spt Havann 1835 D p r w Bot reg 1789
17991 - - Cavendishiànum Bate. Cavendish's £ △ or 4 jn Y G Guatem 1836 D p r w Bate. orch 3

17992 - - Lanceànum Lindl Lance's £ △ or 1½ jn jl V y G Surinam 1834 D p r w Bot. reg. 1887
17993 - - Russellianum Lindl. Russell's £ △ or 1 . Li P Rio Jan 1835 D p r w Bot reg. 1830

17994 - - Forbèsii Hook Forbes's £ △ or 1 o S Y Org Mnts. 1837. D p.r w Bot mag 3705

17995 - - raniferum *Lindl* frog-bearing £ △ pr 1 au s Y spt Brazil 1838 D p r w Bot.reg n s 43

*2807 - - FERNANDE'ZIA R & P (*George Garcias Fernandez*, a Spanish bot) *Orch Vándeæ* Sp 1—2
17996 - - élegans *B R* elegant £ △ cu ½ jn.jl Y Trinidad 1817 D p r w Bot. mag 2715
Lockhártia élegans *Hook*

*2808 - SCAPHYGLO'TTIS *Pop* (*Skaphe*, boat, *glotta*, a tongue; labellum.) *Orchid Vándeæ* Sp 1—1
17997 - - violàcea *Lindl.* violet-*cld-flwd* £ △ cu ½ f R v Demer .. D p r w Bot reg 1901



17966 Labellum constricted in the middle, Lvs. obl acute at both ends on short petioles
17967 Labellum constricted in the middle ovate acuminated

17968 Leaves obovate obl 5-plicate lateral, Sepals truncate at top with acute angles which are drawn out into two tendrils.

17969 Lvs broad lanceol Scapes nodding many-flwd, Labellum spotted with purple inside

17970 Scape short pendulous, Raceme dense, Middle lobe of labellum curled on the mar in Column wingless

17971 The only species

17972 The only species

17973 Stem fleshy, Lvs ensif plicate, Scape radical

17974 Lvs. lanceol. pubesc. Heads imbricate termin

17975 Petals obl. lanceol. acutish, Lateral lobes of labellum rounded, Perianth ovate

17976 Scales radical distant, Labellum straight with a pubescent disk

17977 Lvs lin lanceol. acumin. shorter than scape, Perianth spreading, Labellum fringed in the margin

17978 Lvs lorately lanceol striat. recurved at apex shorter than raceme, Sepals and petals obl lanceol acute, Label- [lum obcord. pubesc. [obovate

17979 Lvs lanceol. undul acumin longer than flexuose raceme, Sepals and petals ovate obl acute Labellum
17980 Lvs lanceol striat longer than racem Racemes many-flwd Sepals and petals ovate lanceol acute, Lobes of labellum obl Lateral ones erect, Middle one large reflexed

17981 Sepals and petals ovate acumin tessellated, Labellum unguiculate concave, Hood of column crenated

17982 The only species

17983 Stems fusiform fleshy, Lvs. lanceol plic. Scape radical many-flwd Sepals lanceol Petals obl connivng

17984 Lvs obov obl on short petioles length of scape, Flws ventricose, Sepals awned

17985 The only species

17986 The only species

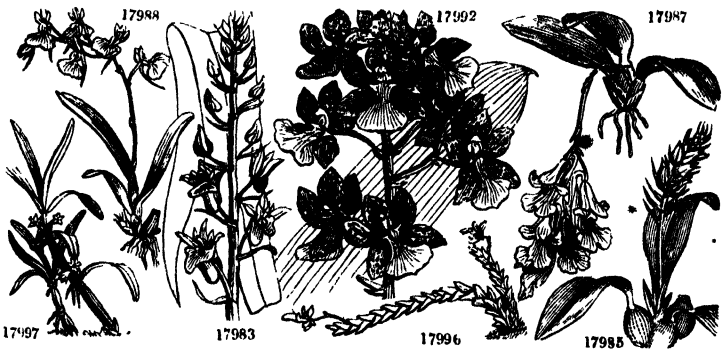
17987 Racemes pendulous, Anterior sepal 2-lobed at apex, Upper sepal as well as the petal obtuse, Labellum furnished with two rows of fleshy lamellæ

17988 The only species

17989 Scape tall panicled, Sepals and petals obl obtuse spreading [free, Petals obl undul.
17990 Pseudo-bulbs very small 2-lvd Lvs compressed acum sulc above, Scape few-flwd Sepals small spatul apicul.
17991 Leaf erect fleshy, Scape tall panicled, Sepals ovate obtuse upper one arched, Petals obl obtuse undulated, Labellum large 3-lobed [undulated margins
17992 Bulbless, Lvs obl acute striat fleshy, Scape compound racemose, Sepals and petals obl obtuse concave with
17993 Pseudo-bulbs ovate ribbed 2-lvd Lvs ligul lanceol Raceme few-flwd. radical, Sepals and petals ovate obl. subundul Lamellæ on the disk of labellum truncate
17994 Pseudo-bulbs obl furrowed compressed, Leaf lanceol coria Scape panicled many-flwd. Petals and sepals obovate undulated, Disk of labellum tuberculatly crested at the base [acute spreading
17995 Pseudo-bulbs ovate furrowed 2-lvd Lvs broad linear shorter than the panicled scape, Sepals and petals oblong

17996 Lvs. ovate obtuse keeled, Flws panicled, Labellum hastate, Lateral lobes acute, Middle lobe oblong obtuse

17997 Lvs. lin. emarginate at the apex, Flws usually twin, Labellum lin apicul. repand



*2810. - - DICHÆ'A *Lindl.* DICHÆA. (*Dichæ*, in two rows; disposition of leaves.) *Orch. Vándeæ.* Sp. 1—3.
17998 - - *graminoïdes* Grass-like ℰ ⧄ cu 1 au St Guiana 1823. D p.r w Hook ex fl

*2811. - - MILTO'NIA Lindl (*Kamara*, a chamber, *ous*, an ear, top of labellum.) *Orch. Vánd* Sp 1—1
17999 - - *spectábilis Lindl* showy ℰ ⧄ or 1 .. R G Brazil 1835. D p.r w Bot. reg. 1992
Macrochilus Frydnus K & W Fl. cab 45

*2812. - - CYRTOCHI'LUM *H. & K.* (*Kyrtos*, convex, *cheilos*, lip, labellum.) *Orchid. Vándeæ* Sp. 1—4.
18000 - - *bictoniénse Bate* Bicton ℰ ⧄ or 2 n R Guatem 1836 D p r w Bate orch. 6

*2813. - - TETRAPE'LTIS *Wall* (*Tetra*, four, *pelte*, buckler; pollen masses.) *Orchid. Vandeæ.* Sp. 1—1.
18001 - - *frágrans Wall* sweet-scented ℰ ⧄ or .. . W Nepal .. D p r w

*2814 - - PHALÆNO'PSIS *Blume.* (*Phalæna*, a moth, *opsis*, resemblance.) *Orchid Vándeæ* Sp. 1—1.
18002 - - *amábilis Blume* lovely ℰ ⧄ or 1½ ju W n.w Manilla 1836 D p r w Bot.reg n s.34

*2815. - - CAMARQ'TIS *Lindl* (*Kamara*, a chamber, *ous*, an ear, top of labellum.) *Orch. Vánd.* Sp 1—0
18003 - - *purpúrea Lindl.* purple ℰ ⧄ or 1 ... P India 1838 D p.r.w

*2816. - - MICROPE'RA *Lindl* MICROPERA. (*Mikros*, small, *pera*, pouch.) *Orchid Vándeæ.* Sp. 1—3.
18004 - - *pállida* pale-coloured ℰ ⧄ or 2 . Y Silhet O m s

*2817 - - SACCOLA'BIUM *Blume.* (*Saccus* a sack, *labium*, a lip, labellum.) *Orchid Vándeæ* Sp 1—4
18005 - - *papillósum Lindl* pimpled ℰ ⧄ or 1 au s W.spot India 1828 D p potsh Bot. reg 1552

*2819 - - ŒCEO'CLADES *Lindl* (Probably from *oikeo*, to inhabit, *klados*, a branch.) *Orch Vánd* Sp. 2—2
†12979 falcàta *Lindl* falcate ℰ ⧄ pr ½ n d W China 1815. D p r w Bot. mag 2697
Angræ'cum falcàtum in p. 764, No. 12978 is also referable to this genus.

1921. *ANGRÆ'CUM.* *Orchid Vándeæ* Sp 3—5
18006 - ebúrneum *Thou* ivory-lipped ℰ ⧄ or 1½ n.ja G w Madagas 1826 D p r w Bot reg 1522
18007 - - caudátum *Lindl* tailed-*labellumed* ℰ ⧄ cu 1½ au W r G S Leone 1834 D r w Bot reg. 1844

*2820 - - TRICHOCE'NTRUM *Pop* (*Thrix*, hair, *kentron*, spur or centre.) *Orchid Vandeæ.* Sp 1—1
18008 - - *fúscum Lindl* brown-*flwd* ℰ ⧄ cu ½ jl G w P Mexico 1835 D p r w Bot reg 1951

*2821. - - BONA'TEA W. BONATEA (*Bonato*, prof of botany at Padua.) *Orchid Ophrydeæ.* Sp 1—1.
18009 - - *speciósa W* showy ℰ ⧄ el 2 au W C G. H 1820 D s p Bot cab 284

*2822 - - CYNO'RCHIS *Thou* DOG ORCHIS (*Kyon*, a dog, *orchis*.) *Orchid Ophrydeæ.* Sp 1—1
18010 - - fastigiàta *Lindl.* fastigiate ⁂ ⧄ cu ½ ap G R 1 France 1835 R s l Bot reg 1998

*2823. - - PTERYGO'DIUM *Swz* (*Pterygodes*, wing-like, sepals.) *Orchid Ophrydeæ* Sp 1—2.
18011 - - alàtum *Swz* winged ⁂ ⧄ or 1 jn au . C G H 1821. R l p

*2824 - - CORY'CIUM *Swz* CORYCIUM (*Korys*, a helmet, form of flower.) *Orchid. Ophrydeæ* Sp 1—2.
18012 - - orobanchoides *Swz.* Orobanche-like ⁂ ⧄ or ½ jn au Y P C. G H. 1825 R l.p Bot reg. n. s. 45

*2825 - - DISPE'R S *Swz.* (*Dis* two, *pera*, pouch, outer lateral segms of perian.) *Orchid Op* Sp.1—3.
18013 - - cucullàta *Swz* hooded ⁂ ⧄ or ¾ jn jl P C G. H 1822. R l p

*2826 - - GASTRO'DIA *R Br* (*Gaster*, a belly, *odous*, a tooth, top of column.) *Orchid Gastrodieæ.* Sp.1—1.
18014 - - sesamoides *R Br* Sesamum-like ℰ ⧄ cu ½ ap my W N Holl 1826. D p.r.w

*2827 - - CORYSA'NTHES *R Br.* (*Korys*, helmet, *anthos*, fl., helmet large.) *Orch Arethuseæ* Sp 1—3
18015 - - fimbriàta *R Br* fringed ⁂ ⧄ or jl au D Br N. Holl. 1824. R p.l Par lon 83?

*2828. - - PTERO'STYLIS *R Br* (*Pteron*, wing, *stylos*, style, col at top winged.) *Orch Areth* Sp 1—2.
18016 - - Bánksii R Br. Banks's ⁂ ⧄ cu 1½ d Y.w N. Zeal 1826 D p l Bot mag 3172

*2829 - - GLOSSO'DIA *R. Br* (*Glossa*, tongue, *eidos*, like, append within fl.) *Orchid Areth.* Sp. 1—2
18017 - - minor *R Br* smaller ⁂ ⧄ pr jn au B N. Holl 1824 R p l

*2830. - - CHLORÆ'A *Lindl* CHLORÆA (*Chloros*, green, hue of the flower.) *Orchid Arethuseæ.* Sp 1—1.
18018 - - longibracteàta *Benth* long-bracted ⁂ ⧄ cu 1 s o W Y Chile 1837 D l p Botanist, 94

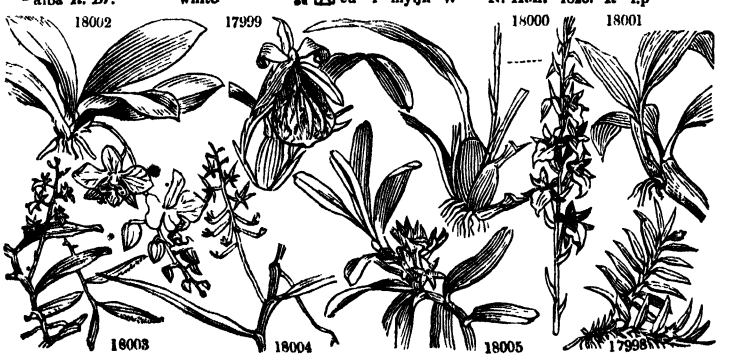
*2831 - - CALADE'NIA *R Br* (*Kalos*, beautiful, *aden*, gland, disk of labellum.) *Orch Areth.* Sp 1—9
18019 - - cárnea *R Br.* flesh-*coloured* ⁂ ⧄ or . . . F N. Holl 1826 R p.l

*2832 - - ERIOCHI'LUS *R Br* (*Erion*, wool, *cheilos*, lip, disk of labell pubesc.) *Orch Areth.* Sp 1—1.
18020 - - autumnàlis *R Br* autumnal ⁂ ⧄ or 1 n d R N Holl. 1823. R p l Lab n h 2 211 2
Epipáctis cucullàta Lab

*2833 - - CHILOGLO'TTIS *R Br* (*Cheilos*, lip, *glotta*, tongue, app to lip.) *Orch Arethuseæ* Sp 1—1.
18021 - diphýlla *R Br* two-leaved ⁂ ⧄ or ½ . R N. Holl. ... R p l Bauer n h 8

*2834 - - CYRTO'STYLIS *R Br* CYRTOSTYLIS (*Kyrtos*, convex, *stylos*, style.) *Orch Areth.* Sp 1—1
18022 - - reniformis *R Br* reniform-*leaved* ⁂ ⧄ cu ¾ my.jn . N. Holl. 1823. D p.l

*2835 - - MICRO TIS *R. Br* (*Mikros*, small, *ous*, ear, auricle on each side of column.) *Orch. Areth* Sp. 1—4.
18023 - - álba *R. Br.* white ⁂ ⧄ cu 1 my.jn W N. Holl. 1826. R l.p



17998 Stems erect, Lvs lin acute, Petals and sepals acute, Labellum cuneately sagittate, Capsule glabrous

17999 The only species

18000 Pseudo-bulbs oblong compressed, Lvs linear ensif. Raceme secund terminal many-flwd

18001 The only species

18002 The only species

18003 The only species

18004 The only species

18005 Lvs. ligulate oblique at the apex cuspidate, Racemes very short capitate, Sepals fleshy lin. ovate obtuse

18006 Stem simple. Lvs coriac shining, Spikes many flwd secund, Labellum cord [upper sepal, Ovarium scabrous
18007 Lvs lorate channelled emarginate, Spike radical pend flex 4-flwd cusp. Spur parallel with the Labellum obovate beaked serrulated, Spur very long

18008 Lvs obl. acute obliquely twisted longer than the racemes, Labellum glabrous bilamellate at the base, Wings of column serrated

18009 Stem leafy, Lvs obl. subundul. Raceme many-flwd. compact, Bracteas cucul. acumin Flws. gateate, Petals biparlite

18010 Lvs twin radical obl. lanceol acumin. Stem furnished with one scale, Raceme corymbose, Labellum 4-parted, Spur very long filiform

18011 Stem many-lvd Lvs broad lanceol. Labellum 3-lobed, Middle lobe very narrow

18012 The only species

18013 Stem 2-lvd 1-flwd. Lvs obl pubesc beneath as well as the bracteas, Ovarium glabrous

18014 The only species

18015 Labellum spurless cucullate at the bottom and dilated at top with inflexed fringed margins

18016 Stem leafy 1-flwd Lvs broad lanceol keeled below and sheathing at the base, Labellum obl bluntish somewhat unguiate equal in length to the column

18017 Appendage 2-partite, Lobes parallel and blunt

18018 The only species

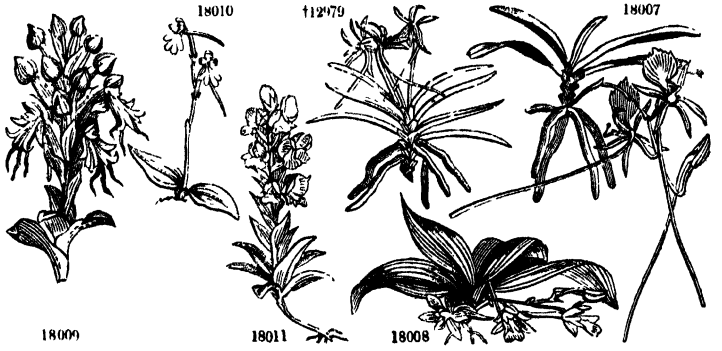
18019 Sepals acute Column and labellum striped, Glands in 2 rows, Middle lobe fringed, Disk naked

18020 The only species

18021 The only species

18022 The only species

18023 Lower sepals revolute inner ones linear, Lower half of labellum linear upper half dilated and bifid with a thickened disk and undulated margins



*2836. - - PELE'XIA *Poit* PELEXIA. (*Pelex*, a helmet, large) *Orchidàceæ Neottièæ*. Sp. 1—1.
18024 - - spiranthòides *R Br* Spiranthes-like ⚣ ⍁ or ⅜ ap W W. Indies 1823. D 1 p Bot. reg. 985.
Neóttia adnàta *Swz*

*2837 - - SAUROGLO'SSUM *Lindl.* (*Saura*, a lizard, *glossa*, a tongue) *Orchid Neottièæ* Sp 1—1.
18025 - - elàtum *Lindl.* tall ⚣ ⍁ pr 1½ mr W ysh Brazil 1832. D s.p Bot reg 1618

*2838 - - ANŒCTOCHI'LUS *Blume* (*Anoiktos*, open, *cheilos*, lip, apex spreading) *Orch. Neottièæ*. Sp 1—1.
18026 - - setàceus *Blume* fringe-*flowered* ⚣ ⍁ cu ½ jn R.w G Java 1836. D p r.w Bot. reg. 2010

*2839 - - CRA'NICHIS *Swz* CRANICHIS. (*Kranos*, a helmet, form of flower.) *Orchid. Neottièæ*. Sp. 1—8.
18027 - - muscòsa *Swz* Moss ⚣ ⍁ cu ½ . ... Jamaica ... D s.p

*2840 - - CALOCHI'LUS *R Br* (*Kalos*, beautiful, *cheilos*, lip) *Orchid Neottièæ*. Sp. 1—2.
18028 - - campéstris *R Br* field ⚹ ⍁ or ½ .. Br N Holl 1824 D 1 p

*2841. - - PRASOPHY'LLUM *R Br.* (*Prason*, leek, *phyllon*, leaf, similarity) *Orchid. Neottièæ*. Sp. 1—7
18029 - - fúscum *R. Br* brown ⚹ ⍁ or 1 . Br N Holl 1824 R 1 p

HEXANDRIA.

1914 *ARISTOLO'CHIA* Sp 27—38

18030 13011*a* caudàta *Lindl* tailed-*lipped* ⅜ ⍁ cu 5 jn Ld Brazil 1828 Sk lt l.r Bot reg. 1453
18031 13019*a* chilénsis *Lindl* Chilian ⅜ ⍁ cu 6 s P G Chile 1832. D s.l Bot. reg. 1680

18032 13030*a* cymbífera *Mart.* boat-*flowered* ⅜ ▭ or 20 jl au Y P St Paul 1829. C p l Bot. reg 1543
18033 - - trifida *Lam* trifid-*leaved* ⅜ ▭ cu 15 ..Gsh Y B R Caraccas ... C p l Botanist, 3

18034 - - saccàta *Wall* pouch-*flowered* ⅜ ▭ cu 20 s Y psh R Silhet 1829 C 1 p Bot. mag. 3640
18035 - - ciliòsa *Benth* fringed ⅜ ▭ cu 6 s P G N Patag 1836. C s.l p Botanist, 96

Page 768. CLASS XXI. — MONŒCIA.

Order 2 DIANDRIA Stamens 2.

2842. *Ceratiola* Cal 2-lvd. membranaceous, with 4 scales at base. Petals 2, converging into a tube. Stamens 2. Stigma 6-cleft Berry globose, 2-stoned.

Order 4. TETRANDRIA Stamens 4

2843. *Sarcocócca*. Flowers monœcious Calyx of male flowers 4, equal sepals. Stamens 3-4 exserted. Calyx of female flower of many imbricated sepals Ovarium 2-celled. Cells 2-seeded. Stigmas 2, sessile. Drupe 1-celled, 1-seeded

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DIANDRIA.

2842 *1940*a* CERATI'OLA *L* CERATIOLA. (*Keration*, a little horn, stigma) *Empétreæ*. Sp. 1—1.
18036 - - ericòides *L* Heath-like ⚥ ⍁ pr 1½ jn jl Br N Amer. 1826 C s.p Bot. mag. 2758

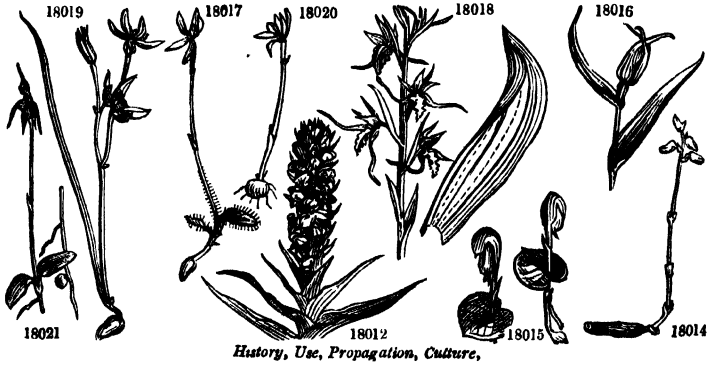
TETRANDRIA.

2843 *1957*a* SARCOCO'CCA *B R.* (*Sarx*, flesh, *kokkos*, a berry; substance of.) *Euphorbiàceæ* Sp 1—1
18037 - - pruniformis *B. R* plum-shaped ⚥ ⍁ or 4 jn jl Pa Y Nepal 1820 C p l Bot. reg 1012

POLYANDRIA.

1989 BEGO'NIA Sp 32—54

18038 13349*a* sanguínea *Rad* bloody-*lvd* ⚥ ▭ or 1½ ap au W Brazil 1832. D co Bot mag 3520



History, Use, Propagation, Culture,

2842. *Ceratiola* 18036 *ericoides* is a small heath-like evergreen shrub, grown in British gardens in peat soil, and may be propagated by cuttings.

18024 The only species

18025 The only species

18026 Lvs ovate or oval acute discoloured, Spike generally 4-flwd Outer sepals pubescent, Label.um multifid towards the base, Sack of labellum subdidymous

18027 Root fascicled filiform tomentose, Radical lvs spatulate ovate, Cauline ones sheathing, Flowers spreading, Labellum dotted inside

18028 Labellum a litte longer than the perianth furnished with a semilanceol acum point, Column 2-gland. at the base, Spike 4-8-flwd

18029 Ovaria obovate 3 times longer than bractea, Sepals acumin. hlud ones cohering at the base

HEXANDRIA.

[Lip cord cuspid the cusp twisted filiform

18030 Lower lvs remf 6-angular 3-lobed, Upper lvs 3-partite, Cal cylind ventricose and 6-spurred at the base,
18031 Lvs remf emarg undul pubesc beneath, Limb of cal ventric at base obl oblique emarg on both sides
peduncl 1-flwd bractless pubesc [one longer inflated with a broad emarg. undul lamina
18032 Glabrous, Lvs cord. remf Flws solit Tube obov Limb cylind bilabiate, Upper lip lanceol acute, Lower
18033 Glabrous, Stems furrow Lvs 3-lobed, Cal cylind inauv Lip cord cusp Appendage 6-parted reflexed
[more silky beneath above, Flws forming large pouch, Throat circular vertical
18034 Lvs 12 to 15 in long and 4 in broad scarf ovato-cord atten at apex slightly waved and sinuat ent edges
18035 Glabrous, Lvs cord remif Peduncl 1-flwd, Tube of perianth obliquely ventric at base stretched out from the mid to the apex cylindrical, Limb orbicul cihated

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Order 7. POLYANDRIA Stamens more than 6.

2844 *Pterocárya* Male flws in spikes Stams in a flower many Female flws in long pendulous spikes, and distant, sessile, and without bracteas Cal connate with the ovary, except in a terminal portion, which is cleft into 2 3-5 unequal lobes. Ovary, and the part of the cal that is connate with it, taken together, flaggon-sh , bearing 2 wings above the base Cell 1 Ovule 1, erect Fruit subdrupaceous, angled, not opening, containing a bony nut. Embryo without albumen

Order 8. MONADELPHIA Stamens united into a single body

2845 *Picea* Differs from *Pinus* and *Abies* in having the cones erect The strobile is cylindrical, and has its carpels not thickened at the tip Both carpels and bracteas separate from the axis of the strobile , and the leaves are obviously 2-ranked in direction

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DIANDRIA.

18036 Flws in axils of upper lvs solitary except a small abortive one by the side of the principal flower

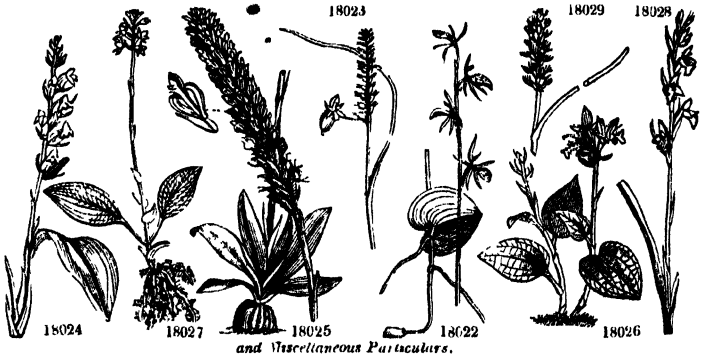
TETRANDRIA.

18037 The only species

POLYANDRIA.

[both surfs green ab blood-red ben.

18038 Stems several from crown of root, Lvs subpelt. uneq.-cordate acumin leathery succulent glabr. and shining on



and Miscellaneous Particulars.

2843. *Sarcocócca* The stigmas of this plant are so like those of the common box, that, in the absence of fruit, there would be little apparent reason to suspect a difference from *Búxus*, to which genus the narrow-leaved variety bears a great resemblance

18039 13350*a* **semperflòrens** *Lk.* ever-flowering ♎ ▭ or 2 ap.s Pk Brazil 1829. C l.p Bot. mag. 2920

18040 - - **diversifòlia** *Grah.* various-leaved ♐ ▭ or 1 o Pk Mexico 1829. C l.p Bot mag 2966

18041 13351*a* **papillòsa** *Grah* papillose ♎ ▭ or 3 ap.s ♠ Pk Brazil 1826. C l p Bot. mag 2846

18042 - - **insignis** *Grah.* remarkable ♎ ▭ or 2 d Pk S Amer. 1826. C l p Bot mag 2900

18043 13343*a* **villòsa** *B R* villous ♎ ▯ or ½ jl W S Amer. ... S l p Bot reg 1252
18044 - - **dipétala** *Grah* two-petaled ♎ ▭ or 3 ap s Pk Bombay 1827 C l p Bot mag 2849

18045 - - **lóngipes** *Hook.* long-pediceled ♎ ▭ or 3 mr au W Mexico 1828 C p l Bot mag 3001

18046 - - *heracleifòlia* S. & C. Heracleum-lfd ⁂ ◭ or 2 year Ro Mexico 1831. D r m Bot. reg. 1668

18047 - - **Fischeri Otto** Fischer's ♎ ▭ or 1½ f mr W ... 1835. C l p Bot. mag 3532
18048 - - **geraniifòlia** *Hook.* Geranium-lfd ⁂ ◭ or 1½ s W R Lima 1833 D lt Bot. mag 3387

18049 - - **monóptera** *Otto* one-winged ⁂ ◭ or au W Brazil 1829. D l p Bot mag. 3564

18050 - - **octopétala** *Hertt* grandiflòra *Fl. Cab* 25 eight-petaled ⁂ ◭ or 2 o.n Gsh W Peru 1835. l.p Bot. mag. 3559

18051 - - **parvifòlia** *Otto* small-leaved ♎ ▭ pr 3 year W C G H 1835 C l p Bot. mag. 3720

18052 - - **petalòdes** *Lindl* petaled ♎ ▭ or 1 ap Ro w Brazil 1832 C lt l Bot reg 1757

18053 - - **platanifòlia** *Pax.* Plane-tree-lvd ♎ ▭ or 10 s Pksh Brazil 1829. C lt.l Bot. mag. 3591

2844. **1999b* **PTEROCA'RYA** *Kth.* (*Pteron*, a wing, *karya*, common walnut) *Juglandàceæ* Sp 1—1.
18054 - - **caucásica** *Kth* Caucasian ♆ tm 40 ap my Ap N. Amer S co A. b pl 199
Jùglans fraxinifòlia Lam, *J* pterocárpa *Mx*, *Rhus* obscùra *Bieb.*, *Fráxinus* lævigàta *Hort Par*

MONADELPHIA.

†2012. **PI'NUS** *L.* Pine. (*Pinos*, Gr, used by Theophrastus to designate the pine tree *Pinos* has for its root *pion*, which signifies fat, because the trees of this genus furnish pitch and tar. Others derive the word from *pim*, or *pyn*, a mountain or rock, *Celt*, habitat) *Coniferæ* Sp. 40—40

1. Bi'næ. — *Leaves generally two in a sheath*

i Sylve'stres.

13502 **sylvéstris** *L.* wood, *Scotch* ♀ m 80 my Ap Scotland sc alp S s l Lamb. pin. 1. 1
1 vulgàris A b. f. 2046 3 uncinàta A. b f. 2047 5 rigénsis
2 horizontàlis (Highland Pine, Speyside Pine) 4 haguenénsis 6 genevénsis

13503 **pumilio** *Hæ.* dwarf ♀ or 12 ap my Ap Carniola 1779. S s l Lamb pin 5
2 rubræflòra 3 Fischeri

13506 **Banksiàna** Lamb. Banks's Scrub ♀ or 12 my jn Ap Huds.Bay 1785 S s l Lamb pin 7 3

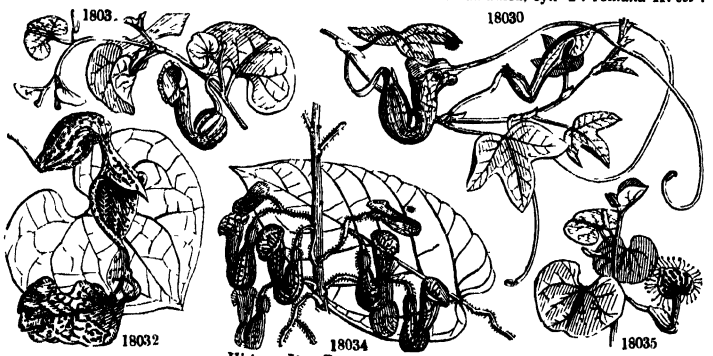
13512 **inops** *Ait* pool, Jersey ♀ tm 50 my Ap N Amer 1739 S s l Lamb pin 18 13

13514 **mitis** *Mx* soft-*leaved* ♀ tm 50 my jn Ap N Amer 1739 S s l A b f 2072-5
P variàbilis *Pursh*, Lamb. pin ed. 2. l. 14., A b f 2131 and No 13514 in p 802.

13505 **púngens** *Mx.* prickly *coned* ♀ tm 50 Ap N Amer 1804 S s l Mic ar 1 61 5

ii. Laricio'nes

13504 **Laricio** *Pors.* *Corsican* Larch ♀ tm 80 .. Ap Corsica 1814. S s l Lamb pin 2 28 9
1 corsicàna 2 subviridis 3 caramánica, syn *P.* romàna *H. cel* ♀



History, Use, Propagation, Culture

2844. *Pterocàrya* 18054 *caucásica*. This tree is "sufficiently hardy to be classed among ornamental trees of the third rank. It is readily propagated by layers. For small gardens and diminutive arboretums this tree may serve very well to exemplify the Juglandàceæ. Care should be taken to train it to a single stem, and not to plant it in soil so rich and moist as to prevent it from ripening its wood Perhaps something might be gained, in point of hardiness by grafting it upon the common walnut." (*Arb. Brit.*, vol iii p. 1452.)

18039 Very smooth, Lvs ov.-rotund obt at base rarely little cord. uneq. apicul. Marg minutely serrat subciliat. Largest wing of cap trian projecting

18040 Smth and shining herbac. Stem obscurely angled transparent Root lvs. renif. nrly eq at base broadly cren. on long pets. Stem lvs sublob. sharply and uneq serrat Upper ones uneq. cord.

18041 Stem erect terete, Lvs very uneq cord acumin somewh undul and bullate crisped, Upper surf. bright green shining occasionally spot with white having distant papillæ red ben.

18042 Lvs altern. on smooth shining pets ¼ length of lvs uneq cord. acumin slightly concave pale green and sparingly strig ab paler or red ben obscurely lbd dbly serrat.-ciliat. crispod

18043 Lvs. semicord obsoletely toothed obtuse, Petioles and branches villous larger, Wing of capsule roundish

18044 Lvs. semicord acute somewh lbd uneq and doubly serrato-dent. above green with white spots below blood-cld when old blanched, Wings of cap rounded subequal

18045 Stem thick rough with thick short hairs or glands, Lvs altern large a span or more long sheathed when young with ov -obl decid bractea very uneq rotund-cord

18046 Lvs all radic bright green ab paler ben subpelt cord-palm hairy with 7 strong radiating nrvs. very promin bel Lbs lanceol obl undulat sinuate unequal [bright red ben. M. flws 4 pet F. flws. 6-pet.

18047 Stem erect swollen at joints red, Lvs uneq cord acute indistinctly sinuat. glabr. on both surfs when young

18048 Very smooth, Lvs equally cord plaited cut into many uneq very acute inciso-serrate lbs Margin red, M. flws 4-pet Outer and larger alm orbic and red, 2 inner obov waved white

18049 Stem erect genicul and swollen at joints dull red minutely papill and downy, Rad lvs somewh renif trunc at base, Stem lvs rndsh oblq -cuneat papill and red ben Germ 1-winged

18050 Stemless, Lvs on long succul downy pets cord dply lbd and serrat slightly downy, M flws. 2 in. in diam. of 8-9 obov spreading uneq pets F flws smaller generally 6 pets

18051 Suffrutic glabr Lvs unequally cord at base pale and crystalline ben with promin reddish veins, Lbs. subacute distantly serrat with minute bristle on base of each fissure

18052 Lvs equal-sided orbicular 5-9-lobed serrated crenulated, Male flowers of 2 sepals and 2 petals, Female flowers of 4 sepals and 4 petals, Wings of fruit nearly equal

18053 Shrubby, Lvs altern pet renif nrly eq at base hispid on both surfs Lobes acute contort. serrulato-dentic. Stips oppos ov acute invol herbac

18054 Lvs with about 19 lflts ovate-oblong acuminate argutely serrat glabr. each with lower side of its base attached the petiole

MONADELPHIA.

* *Cones having the scales without prickles*

[twisted, Edges finely serrulated

13502 Lvs rigid in pairs, Young cones stalked recurved, Crest of the anthers very small, Lvs somewhat waved and

7 monophýlla 9 intermèdia 11 tortuòsa
8 scariòsa 10 altàica

13503 Bran generally recumb Lvs short stiff somewhat twist thickly distrib over bran with long lacerat. woolly white sheaths, Cones 1½-2 in long and ¾-1 in broad

4 *Mughus*; syn No 13507, *P montàna Baum Cat*, 5 nàna A b f 2062
echinàta *Hort.*, uncinàta *Dec* (*Knee Pine*)

13506 Lvs in pairs, divaric oblique 1-1½ in long, Cones recurved twisted 1½-2 in long, Crest of anthers dilated

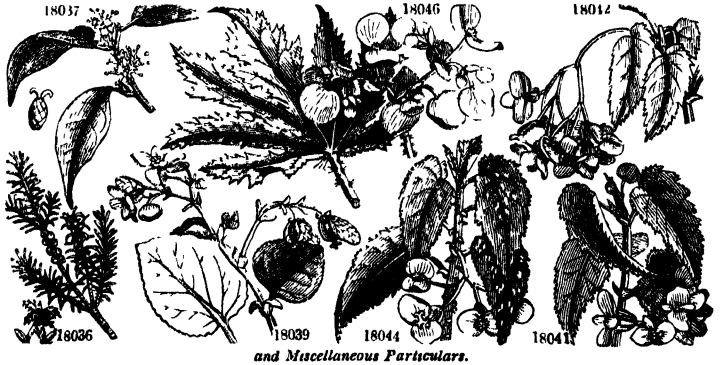
* * *Cones large, having the scales furnished with prickles*

13512 Lvs in pairs 1¾-2¾ in long, Cones drooping oblong-conic 2⅔-3½ in long and 1-1⅓ in broad, Scales awl-sh with promin prickles, Crest of anth short broad jagged [small slender mucro pointing outwards

13514 Lvs. long slend 2½-4 in long, Cones small ovate-conic 2 in long and 1 in broad, Scales termin in a very

13505 Lvs short and thickly set 2½ in long including sheath, Cones top-sh very large yellow 3½ in long and 2½ in broad, Scales with hard incurv prickl. thick broad at base

13504 Lvs lax twice length of cones 4-6 in. long, Cones conical often in pairs rarely in threes or fours varying from 2-4 in and more in length, Scales very slightly pointed



and Miscellaneous Particulars.

2012. *Pinus* For information relative to this genus, see p 802. 804.; and also for extensive and valuable information relative to Coniferæ generally, too extensive for the limits of this work, see *Arboretum et Fruticetum Britannicum*, vol iv p. 2103 2152; and relative to the Scotch Fir, p. 2153 2186.

18055 13504*a* austriaca *Hoss* — Austrian, *Black* — tm ... .. — Ap — Austria — 1835. S s l — A b f 2005

18056 13504*b* Pallasiàna Lamb — Pallas's — tm 60 my — Ap — Siberia — 1820 S s l — Lamb pin.2 1 1
18057 13504*c* pyrenàica *Lap* — Pyrenean — tm 50 — Ap — Pyren. — 1834. S s l — A. b. f 2090-93

13513 resinòsa *Ait.* rùbra *Mx.* — resinous, *Red* — tm 50 my — Ap — N Amer. — 1756. S s.l — Lamb pin 20.14

III PINA'STRI.

13508 *Pinàster Ait* — Pinaster, *Cluster* — tm 60 ap my — Ap — S. Eur. — 1596. S s.l — Lamb pin 94,5
2 Escarènus, syn. *P. P.* Aberdònæ — 4 minor, syn *P* maritima minor *N' Duh.* — 5 fòliis variegàtis
3 Lemoniànus — 6 maritimus

13509 *Pinea L.* — *Stone* Pine — tm 60 my — Ap — S. Eur. — 1584. S s.l — Lamb pin 11.6,7,8
2 frágilis — 3 crética — 4 americàna

IV HALEPE'NSES.

13511 halepénsis *Ait* — Aleppo — tm 40 my — Ap — Levant — 1683. S s.l — Lamb pin.2 30.10
2 minor — 3 maritima — 4 genuénsis, syn. *P.* genuénsis *Cook*

8058 13511*a* brùtia *Ten* conglomeràta *Græf.* — Calabrian — tm .. ... — Ap — Calabria ... — S s l — Lamb. pin. 3. 82

II. TERNA'TÆ — *Leaves 3 in a sheath.*

V. TÆ'DÆ.

13515 *Tæda L.* — Frankinc *Loblolly* — tm 30 my jn — Ap — N. Amer. — 1713. S s l — Lamb pin.23 16,17
β alopecuròidea *Ait* — Foxtail-lk — tm 30 my jn — Ap — S s l
13518 rigida *Mil* — rigid — tm 50 my jn — Ap — N Amer — 1759 S s l — Lamb.pin 25 18,19
13517 serótina *Mx.* — late, *Pond* — or 40 my jn — Ap — N. Amer. — 1713. S s.l — Mic. ar 1. 86,7

VI. PONDERO'SA.

18059 13517*a* ponderòsa *Dou.* — heavy-*wooded* — tm 50 ... — Ap — N. Amer — 1828. S co — A. b. f 2132-7

VII SABINIA'NÆ.

18060 13517*b* Sabiniàna Dou — Sabine's — or 110 f mr — Ap — Californ — 1832 S s.l — Lamb pin 2 80
18061 13517*c* Coúlteri D Don macrocárpa *Lindl ms.* — Coulter's — or 100 .. — Ap — Californ — 1832 S s.l — Lamb.pin 3 83

13521 longifòlia *Rox* — long-leaved — or 40 ... — Ap — Nepal — 1801 S p l — Lamb pin 29 21

VIII GERARDIA'NÆ.

18062 13521*d* Gerardiana Wall *Nedsa* Govan — Gerard's — or .. — Ap — E Indies ... — S p.l — Lamb pin 2 2 79

IX AUSTRA'LES.

13519 austràlis *Mx* — southern — tm 60 .. — Ap — N. Amer 1730 S s l — Lamb pin 27 20
β excélsa — lofty — tm .. .. — Ap — N. Amer. 1830. S s l

X CANARIE'NSES.

13520 canariénsis *C Sm* adúnca *Bosc ?* — Canary — or 60 ... — Ap — Canaries — 1815. S s l — Lamb pin 2 1 28
18063 13520*a* sinénsis *Lamb* — Chinese — or 40 ... — Ap — China — 1825 S s l — Lamb pin 2 1 29
18064 13520*a* insignis *Dou* — remarkable — or . . — Ap — Californ — 1833 S s l — A b f 2170-72

18065 13520*b* *Teocòte* S & D — Teocote, *twisted* — or ... .. — Ap — Mexico — 1826. S p l — Lamb pin 2 1 20
18066 13520*c* pátula *S & D.* — spreading.*lvd* — or .. ... — Ap — Mexico . — S p.l — Lamb.pin.2 1 19

XI. LLAVEA'NÆ.

18067 13520*d* Llaveàna Otto — La Llave's — or .. . — Ap — Mexico — 1830. S s.l — A. b f. 2177-79

III. QUI'NÆ. — *Leaves 5 in a sheath*

XII OCCIDENTA'LES.

18068 13520*e* occidentàlis *Swz.* Làrix americàna *Ton* — western — tm 80 mv.jn — Ap — W. Indies — 1826. S co — Lamb p n 2 1 23
18069 13520*f* Montezùmæ Lamb occidentàlis — Montezuma's — or ... ... — Ap — Mexico .. — S p l — Lamb pin 2 1 22
18070 13520*g* *Ocòte* Loud — Ocote — or 40 ... — Ap — Mexico — 1838. S p.l — G.m xv. p 257
" Ocote Pine of the Mexicans," ocócarpa *Schecde.*



18055 Lvs 2-5 in long seldom and but little twisted when young erect when older standing out and curved towards twig, Points prickly [slightly tuberculate ending in very small prickles

18056 Lvs in pairs very long erect rigid channeled, Sheaths very short, Cone ovate-oblong often recurved, Scales

18057 Lvs long in tufts at extremities of shoots, Brans dispersed naked scaly when young, Conical smooth little recurved, Seeds hard [of lvs Scales dilated in middle unarmed

13513 Bark red, Lvs in pairs 4 in to 5 in long, Cones reddish brown ovate-conical rounded at base and half length

[short than lvs 4 in to 6 in long and 1¼ in to 2½ in wide

13508 Lvs in pairs rigid very long, Cones conical in whorls of 3 4 or even as many as 8 together rarely solit. much

7 chinénsis 9 nòvus hollándicus, syn. *P.* 10 st helénicus
8 nepalénsis nòva-zælánica *Ait* 11 Massonsánus

13502 Lvs in pairs, Cones ov. obt nrly as long as lvs Scales with recurv. deciduous points, Seeds bony with very short wings

[pairs stalked

13511 Lvs. in pairs very slender, Cones pyramidal rounded at base turned downwards smooth solitary or in

18058 Lvs in pairs very long slender wavy, Cones sess crowded ovate smooth, Scales truncate at apex flattish umbilicate

* *Cones hardly so long as the leaves, the scales with prickles.*

13515 Lvs in threes elongated Cones often in pairs short th lvs obl pyramidal rather truncate at apex, Scales with sharp prickles turned inwards [Male cats elongat Crest of anth dilat and roundish

13518 Lvs in threes, Cones ov -obl in threes or fours much short th lvs Scales terminat by rough thorny point,

13517 Lvs in threes very long Male cats. erect incumbent, Cones ovate, Scales having very small mucros, Seed very small, Wing ¼ in to ½ in in length

[termin. in conic minute recurv spine

18059 Lvs. in threes much long than cones flexible tortuous with short sheaths, Cones ov reflex Apices of scales

** *Cones having the scales hooked.*

18060 Lvs in threes very long, Cones ovate echinate very large, Scales long awl-shaped incurved and spiny at apex

18061 Lvs ditto and compressed, Sheaths ragged, Cones obl solit. very large, Scales wedge-sh apex elongat thickened lanceol mucron compress hooked [thick recurved

13521 Lvs in threes very long and slender pendul Sheaths long, Cones ovate-oblong, Scales elevated at apex very

18062 Lvs in threes short, Sheaths deciduous, Cones ovate-obl 8 in long and about 5 in. broad, Scales thick blunt recurved at apex

13512 Lvs in threes very long, Male cats long cylindric of a tawny blue divergent, Cones very long tessellated with tumid tubercles ending in very small mucros

13520 Lvs in threes and spreading rough, Crest of anthers round entire, Cones oblong tuberculate

[point

18063 Lvs in threes sometimes twos very slender, Male cats short, Cones ovate, Scales truncate at apex without any

18064 Lvs 3 sometimes 4 in a sheath much twisted varying greatly in length longer than cones grass green, Cones ovate pointed Scales tuberculate. [dilat at apex somewh trapezoid

18065 Lvs in threes compressed flexuous scabrous, Sheaths about ½ in long, Cones ovate smoothish dropping, Scales

18066 Lvs in threes very slender 2-channeled spreading, Sheaths about 1 in long, Cones ovate-oblong polished

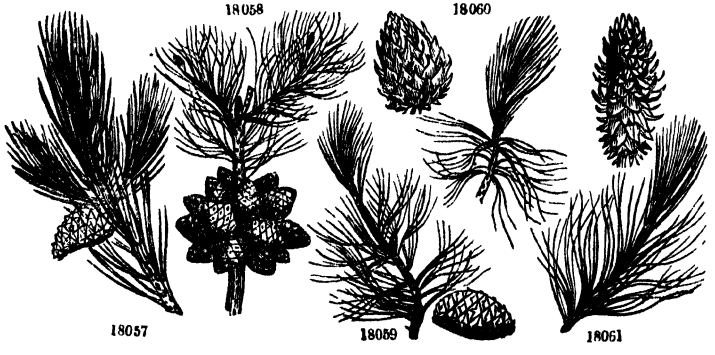
18067 Lvs short narrow triquetrous slightly twisted glauc generally in threes often in twos somethnes in fours, Cones conic pointed, Scales slightly tubercled without prickles

[small mucros

18068 Lvs in fives slender, Sheaths persistent, Cones conical half length of lvs Scales thickened at apex with very

18069 Lvs in fives erect triquetrous, Sheaths about 1 in long persistent, Cones oblong about 9 in. long tuberculate

18070 Lvs in fives long erect triquetrous, Sheaths short persistent, Cones ovate 4-5 in. long, Scales tubercled 4-angular



xiii. Leiophy'llæ.

18071 13520*b* leiophy'lla *S & D* smooth-leaved ♀ ___ or ... .. Ap Mexico ... S p.l Lamb.pin.2.1.21

xiv. Ce'mbræ.

13523 *Cémbra* L. *a* sibírica . Cémbran ♀ tm 60 my Ap Siberia 1746. S s.l Lam.pi.34.23.34
β pygmæ'a, syn. *P. C.* pùmila *γ* helvètica

xv. Strо'bi.

13522 *Stròbus L* Strobus, *Weymouth* ♀ tm 100 ap Ap N. Amer. 1705. S s l Lamb. pin 31.22
β álba *γ* brevifólia *δ* compréssa
13516 excélsa *Wall.* lofty ♀ tm 100 my jn Ap Nepal 1823 S co Lamb pin.2 1 33
18072 13516*a* Lambert*iàna* Dou Lamb ,*Gigantic* ♀ tm 150 ... Ap N Amer 1827. S p l Lamb pin 2 1 34

18073 13516*b* monticola *Dou* mountain ♀ tm ... ... Ap Californ. 1831. S p.l Lamb pin 2 3.87

IV. Du'biæ. — *Doubtful to which section it belongs.*

18074 13516*c* californiàna *Lo* California ♀ tm 50 my Ap Californ. 1829. S s.l

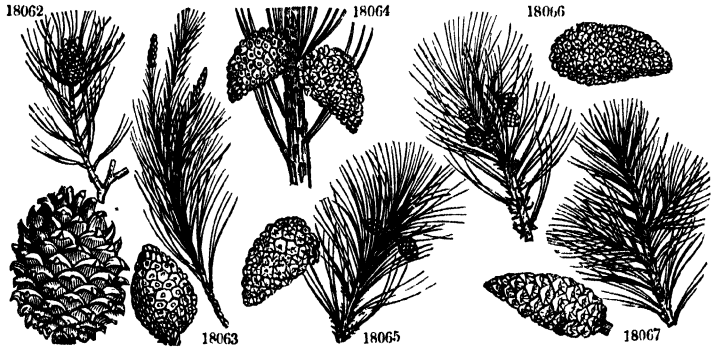
†2013. *A*'BIES *Sal.* (*Abeo*, to rise ; aspiring habit · or, *apios*, pear tree ; form of fruit) *Coniferæ.* Sp 10—10
13530 excélsa *Dec* lofty, *Norway* ♀ tm 120 ap Ap N Europe 1548 S s l Lamb pin.2.1 35
commùnis *Hort* , *Picea Mill.*, *Pinus A*'bies *L* , *P.* excélsa *Lam.*, *P Picea Duroi*, Prussian Fir.

1 commùnis A b f 2212 3 carpática 5 fòliis variegàtis
2 nigra A b pl 338*a* 4 péndula 6 Clanbrasiliàna No. 13529. in p. 804.

13531 álba *Mx* white ♀ tm 50 my jn Ap N Amer. 1700 S s l Lamb pin.2.1.36
Pinus álba *Ait* , *P* canadénsis *Duroi*, *A.* curvifòlia *Hort* , Single Spruce, *American.*
β nána *Dickson* dwarf ❀ or Ap ... L s l
13533 nigra *Ait* black ♀ tm 70 my jn Ap N Amer 1700 S s l Lamb pin 2 1 37
Pinus nigra *Ait* , *P* mariàna *Ehr.*, *A* mariàna *Wangh* , Double Spruce, *American*
13532 rùbra *Poir* *Newfoundland*, red ♀ tm 50 my Ap N Amer. 1755 S s l Lamb pin 2 1 38
18075 13532*a* Smith*iàna* Wall Smith s ♀ tm 50 Ap Kamaon 1818 S s l Lamb pin 3 88
Pinus Smith*iàna* Wall , *P. Khùtrow* Royle, *A Morinda* Hort , Himalayan Spruce.
13528 orientàlis *Tourn* Oriental ♀ or 30 my Ap Levant 1825. S co Lamb pin 2 1 39
Pinus orientàlis *Lamb* , *A* excélsa var *t A B*

18076 13528*a* Dougiàsii Lindl. Douglas's ♀ tm 100 my Ap N Amer 1826 S s l Lamb pin 3 90
P taxifòlia *Lamb pi* 2 2 47 *Ph* , *A* californica *Hort* , Trident-bracted and Nootka Fir
18077 13528*b* Menzièsii Dou Menzies's ♀ tm . Ap California 1831. C s l Lamb pin. 3 89
P Menzièsii Lamb , Warted-branched Spruce Fir
13527 canadénsis *L* Canadian ♀ or 60 my Ap N. Amer 1736 S s.l Lamb. pin 1.45
P. canadénsis *L* , *P* americàna *Duroi*, *P A* americàna *Marsh.*, Hemlock Spruce.
18078 13527*a* cephalónica *A B* Cephalonian ♀ or 60 . Ap Cephalonia 1824. C s l A. b. f 2235-46
A taxifòlia *Hort* , *A* luscombeàna *Hort.*, Mount Enos Fir.

2845 *2013*a* *PI'CEA *D Don* (*Pix*, pitch , the tree producing abundance of resin) *Coniferæ* Sp 9—9
†13525 pectinàta *D Don* pectinate ♀ tm 100 my Ap Germany 1603 S s l Lamb pin 2 1 40
A'bies *Picea* No 135[05], *A* pectinàta *Dec* , *Pinus Picea L* , *Pinus A*'bies *Duroi*, *A.* álba *Mill*
A. vulgàris *Poir* , *A* taxifòlia *Hort* , *A* excélsa *Lk*
β tortuòsa (twisted-*branched*) *γ* fòlis variegàtis (variegated-leaved)



History Use, Propagation, Culture,

2845. Picea "Some confusion exists in the works of modern authors respecting the silver fir and the spruce, partly, as it would appear, from the circumstance of Linnæus having made an erroneous application of the names given to these trees by Pliny The tree which Theophrastus calls Elate, Pliny calls Abies, and Linnæus Pinus Picea, while the tree that Pliny calls Picea, and which is our spruce fir, is named by Linnæus Pinus A'bies The silver fir was esteemed by the Romans for its use in carpentry, and for the construction of vessels . . . The wood of the silver fir is elastic, and the colour is whitish The grain is irregular, as the fibres which compose it are partly white and tender, and partly yellow or fawn-coloured, and hard The narrower the white lines are, the more beautiful and solid is the grain of the wood In the Vosges, it is said that the external layers are more compact than the internal ones, which may arise from the practice of barking the trees there before they are cut down The weight of this wood varies exceedingly, according to the age of the tree, the place where it grew, and even the part of the trunk from which it was taken According to Hartig, the wood of a tree 80 years old weighs 66 lbs 14 oz per cubic foot green, and 41 lbs. 5 oz when dry , while that of a tree 40 years old weighs only 37 lbs 9 oz. when dry. It shrinks considerably in drying, like all white woods It is used for planks, and carpentry of all kinds, for the masts of small vessels, for joists and rafters, and for building the boats for navigating rivers It is said to endure a long time when used as piles, and to be much employed in Holland for that purpose In the Vosges it is used in every department of agriculture, carpentry, joinery and even cabinet-making and sculpture In England, the wood of the silver fir has been chiefly used for flooring , and, according to Arthur Young, and also to Mitchell, boards sawn out of full-grown trees

18071 Lvs in fives very slender, Sheaths deciduous, Cones ovate stalked, Scales depressed truncate brown scarious white and torn on the margin

13523 Lvs in fives, Sheaths deciduous, Cones ov erect ab. length of lvs. Scales with young pubes. Wings of seed obliterated, Crest of anth kidney-sh

13522 Lvs slender without sheaths, Male cats small, Cones cylindrical long and pendulous, Cotyledons 6 to 10 [smooth pendulous long than lvs.

13516 Lvs in fives very long and slender loose, Crest of anthers roundish truncate simple lacerated, Cones cylindric.

18072 Lvs in fives rigid roughish, Sheaths very short, Cones thick very (14 in to 16 in) long cylindric, Scales loose roundish

18073 Lvs in fives short smoothish obtuse, Cones cylindrical and smooth about 7 in long, Scales loose and pointed

18074 Leaves in twos and threes, Cones much longer than the leaves, Sheaths short black

I *Leaves tetragonal, awl-shaped, scattered in insertion.*

13530 Lvs scattered quadrangular, Cones cylindric 5 in to 7 in long and from 1½ in to 2 in. broad termin pendent, Scales naked truncate at summit flat

7 Clanbrasiliana stricta 9 tenuifolia 11 monstrosa, syn. *A monstrosa Sm of Ayt*
8 pygmæa, syn nana *Hort*, elegans *Sm* 10 gigantea

13531 Lvs somewhat glauc scattered round the branches erect quadrangular, Cones obl-cylind pendul lax Scales with entire margins

13533 Lvs solit regularly disposed all round the branches erect very short somewh. quadrang Cones ov pendul Scales somewh undulat crenulat or divided at apex

13532 Lvs solit awl-sh acuminate, Cones obl blunt, Scales round somewhat 2-lobed entire [on margin

18075 Lvs compress 4-gonal straight awl-sh sharp-pointed, Cones ov-obl Scales obov-roundish coriac rigid smooth

13528 Leaves solitary tetragonal, Cones ovate-cylindrical, Scales rhomboid

II *Leaves flat, generally glaucous beneath, imperfectly 2-rowed.*

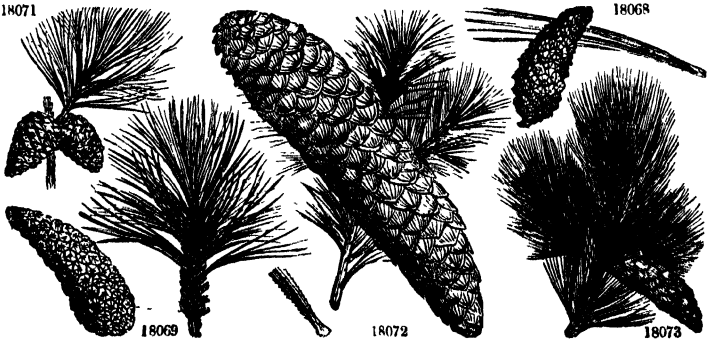
18076 Lvs flat blunt entire pectinate silvery ben Cones ovate-obl Bracteas elongated linear 3-pointed, Cones about 4 in long

18077 Lvs acute flat silvery ben turned in every direction, Cones cylindric, Scales scarious gnawed on the margin

13527 Lvs solit flat slightly denticulate obtuse 2-ranked, Cones oval termin pendent naked scarcely longer than the leaves

18078 Lvs subulate flat dark green above silvery ben terminat in sharp spine, Petioles very short dilated lengthwise at point of attachment to branches.

†13525 Lvs solit flat obtuse 2-ranked points turned up, Cones axill. cylindric erect, Scales with long dorsal bracteas Anth with short crest with 2 teeth



and Miscellaneous Particulars

may be laid down at once, without any risk of their shrinking As fuel, the wood of the silver fir is to that of the beech as 1079 is to 1540, and that of the spruce as 1079 is to 1211. The charcoal is to that of the beech as 1127 is to 1600. Though the charcoal is much inferior to that of the beech, yet it is preferred for heating iron that is to be forged, as producing the heat more slowly, in consequence of which the iron is more pliant to work The bark may be employed for tanning leather, and is used generally in some parts of Switzerland. A resinous sap flows from the trunk and branches, called *larmes de sapin* This sap is bitter, acrid, and viscous, and its smell approaches to that of the citron, it is healing, balsamic and antiseptic The resinous fluid is found in small tumours or blisters, under the epidermis of the bark, and in the green cones, from the latter of which it is collected about midsummer From the resin of this tree are manufactured Strasburg turpentine (so called from a large forest of silver firs, the Hockwald, near Strasburg), colophony, and white pitch The quantity of potash furnished by the bark and wood is in proportion of 2 lbs of potash to 1000 lbs of wood and bark, which places the silver fir in the rank of 21 in a series of 73 ligneous plants. In some parts of Europe, the young cones, reduced by boiling to a pulp, and preserved with sugar, are eaten as a sweetmeat This conserve is put into tea, to which it is said to communicate an agreeable odour The leaves serve for litter; and, in Switzerland, according to Kasthoffer, are given to sheep and goats: but they are said to give the milk a peculiar taste "

" The silver fir, like all the other Abiétinæ, will attain a large size on soils of a very opposite description; but a loam, rather rich and deep than otherwise, appears to suit it best." (*Arb. Brit.*, vol iv.)

18079 13 25*a* *Pichta* A. B. Pitch ♀ tm 50 my Ap Siberia 1820. S s.l Led. ic. p.f r 499
Pinus Pichta Lo. C , *P. sibirica Led.*, *A. Pichta* Fis
†13526 balsâmea *L* balm *of Gilead* ♀ or 20 my Ap N Amer 1696 S s.l Lamb pin.2 1 41
Pinus balsâmea *L* , *Pinus Abies* balsâmea *Marsh* , *Abies Táxi* fólio, &c *Hort. Angl.*, *A* balsaminea *N Duh.*, *A* balsamífera *Mx*
β longifólia *Booth* long-leaved ♀ or 20 my Ap . ... C s.l
†13524 Frâseri Ph Fraser's ♀ or 30 my Ap Pennsyl. 1811. S s.l Lamb.pin 2.1 42
Pinus Frâseri Ph , *Abies* Frâseri Lindl
18080 13521*a* grándis *Dou* great ♀ tm 170 my Ap N Calif 1831. S s.l Lamb pin 3 94
Pinus grándis *Dou. mss* , *Abies* grándis *Lindl*
18081 13524*b* amábilis *Dou.* lovely ♀ tm .. ... Ap N Calif. 1831. S s l A. b. f 2247-48
P grándis ?
18082 13524*c* nóbilis *Dou.* noble ♀ tm ... ... Ap N Amer 1831 S s.l A. b. f. 2249-50
Pinus nóbilis *Dou. mss* , *Abies* nóbilis *Lindl*
18083 13524*d* Webbiâna Wall. Webb's ♀ tm 90 ... Ap Nepal 1822. C s.l Lamb. pin. 2. 44
Pinus Webbiâna Wall , P spectábilis *Lam monog.*, *Abies* Webbiâna Lindl
18084 13524*e* *Pindrow* Royle Pindrow ♀ tm 100 my Ap Kamaon 1837. C s.l Lamb. pin. 392
Pinus Pindrow Royle ill. t. 86 , Taxus Lambertiâna Wall., *P.* Webbiana var. ?

Page 816. Class XXII. — DICŒCIA.

Order 4. TETRANDRIA Stamens 4

2846. *Garrya*. M. flws in pendulous catkin-like racemes within connate bracteas Cal 4-leaved. Stam 4 — Female flws. in pendulous catkin-like racemes, within connate bracteas Cal connate, with a 2-toothed 1-celled ovary Styles 2, setaceous. Ovules 2, pendulous, with funiculi as long as themselves Fruit a berried pericarp, not opening, 2-seeded. Embryo very minute, on the base of a great mass of fleshy albumen.

TETRANDRIA.

2057. SHEPHE'RDIA. Sp. 2—2.
18085 13878*a* argéntea *Nut.* silvery ♀ or 10 ap my Ap Missouri 1818. L p.l A. b f 1208

2058. HIPPO'PHAE. Sp 2—2.
18086 13879*a* salicifólia *D Don* Willow-leaved ♀ or 8 , Ap Nepal. 1822 L 1 p A. b f. 1207
conférta *Wall.*

*2846 - - GA'RRYA Lindl. (*Nicholas Garry*, secretary of Hudson's Bay Co) *Garryàceæ*. Sp. 1—1
18087 - - elliptica *Lmdl* elliptic-*leaved* ♀ cu o G N Calif 1828 L 1 Bot. reg. 1686

OCTANDRIA.

*2847. 2087*a* RHODI'OLA *L.* Rose Root. (*Rhodon*, a rose , roots smelling like roses.) *Crassulàceæ* Sp. 1—2
18088 - - rósea *L.* Rose-*smelling* ♃ △ or 1 my jl Y Britain moun D co Eng. bot 508

MONADELPHIA

2112. ARAUCA'RIA. Sp 4—4
18089 14047*a* brasiliàna *Lamb.* Brazilian ♀ ⌴ tm 100 .. Ap Brazil 1819. S p l Lamb pin 2 12 5



History, Use, Propagation, Culture.

2846. *Gárrya* 18088 *elliptica* is an evergreen hardy shrub, with thick coriaceous leaves, like some species of evergreen viburnum. "This is probably the greatest botanical curiosity sent home by Douglas; for it appears to represent a natural order altogether distinct from any previously known, and connecting certain well-known natural orders in an unexpected and satisfactory manner. In its amentaceous inflorescence, imperfect flowers, superior calyx, and mode of germination, Gárrya is very similar to Cupuliferæ, from which it differs most essentially in its wood without concentric circles or dotted vessels, its opposite exstipulate leaves, simple fruit, and minute embryo lying in a great mass of albumen The latter characters bring it near *Piperàceæ* and their allies, especially Chlorànthæ, with which its woodless wood (for Chloránthus has no annual zones), simple fruit, and opposite leaves, also agree, but the stipules

18079 Lvs solit. tetragon. dark green, Cones cylindric. erect, Scales cuneate-obov. rounded at apex quite entire convex externally

†13526 Lvs solit. silvery ben. apex emarginate or entire somewh recurv. and spreading, Cones cylindric violet-coloured and pointing upwards

†13524 Lvs. linear emarginate silvery ben. Cones oblong squarrose, Bracteoles somewh. leafy obcordate mucron. half-exserted reflexed

18080 Lvs. flat obtuse emargin pectinate silvery ben Cones cylindric Bracteoles ovate acumin irregularly dentate very short

18081 Lvs flat obtuse entire, Cones cylindrical, Bracteoles very short pointed, Scales triangular upper margin rounded entire

18082 Lvs mostly on one side the brans. falcate short acute silvery ben Cones cylindric Bracteoles elongat. spathul. gnawed imbricated backwards

18083 Lvs 2-rowed lin flat obtusely emargin silvery ben. Cones cylindric Scales kidney-sh roundish, Bracteoles oblong apiculate

18084 Lvs 2-rowed lin flat same colour on both sides sharply 2-toothed at apex, Cones oval, Scales trapezoideo-cordate, Brac roundish emarg irreg crenulat

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Order 7 OCTANDRIA Stamens 8

2847 *Rhodiola* Barren flowers Cal 4-partite Petals 4 Glands 4, emarginate — Fertile flowers Cal. 4-partite. Petals 4 Glands 4, emarginate Germens 4 Caps 4, many-seeded

Order 13 MONADELPHIA Stamens united into one body

2848 *Ampelosicyos* Male flowers with a turbinate 5-cleft calyx, and a fringed 5-petaled corolla, and 5 stamens, which are disposed in 3 bundles — Female flowers having the limb of the calyx 5-toothed, corolla as in the male, and a 3-5 lobed stigma. Fruit fleshy, long, furrowed, divided into 3 twin cells Seeds compressed, reticulated.

TETRANDRIA.

18085 Lvs obl.-ov obtuse on both surfaces glabrous and covered with silvery peltate scales

18086 Thornless upright-branched, Lvs lanceol obt whitely tomentose as are the branchlets

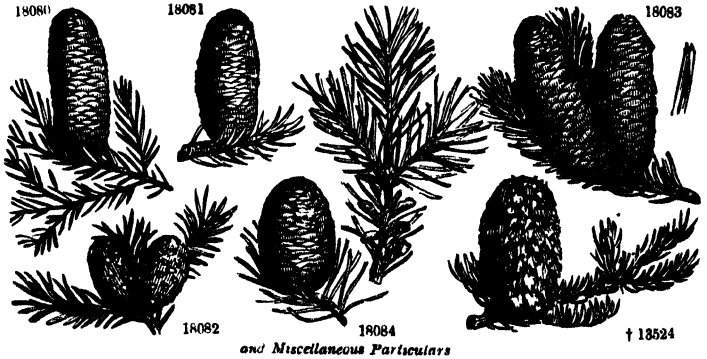
18087 Young brans pubes and purplish when older smooth and greyish, Lvs oppos. exstipul wavy on short footst obl.-acute leathery dark green and shining ab hoary ben

OCTANDRIA.

18088 The only species

MONADELPHIA

18089 Lvs. loosely imbricat lanceol mucron glauc green keeled ben Fem cats roundish-oval, Scales [at apex recurved



and Miscellaneous Particulars

of Chloranthæ, together with its achlamydeous bisexual flowers and articulated stems, distinctly separate that order." (*Bot Reg.*) "Only the male plant of G. elliptica is in the country. When in flower (which it is from December till April), the plant has a most striking graceful appearance, from its slender pendulous catkins, many of which are 8 in. to 1 ft in length. It was at first grown in peat, but appears to prefer a loamy soil. It is readily increased by layers and by cuttings in sand under a hand-glass" (*Arb. Brit*, iv. 2031.)

2847 *Rhodiola* 18088 *rosea* is a plant with the habit of Sedum *Telephium* It is found on wet rocks, on the mountains of the north of England and Ireland, and in the north-west of Scotland, abundant, likewise on cliffs by the sea-shore. It is the badge of the Highland clan *Gunn*.

18090 14047*b* Cunninghàmi G Don Cunningham's ♀ ⊔ or 30 ... Ap N. Holl. 1824. S p.l
Altingi*a* Cunninghàmi Nor.

2114. *TA'XUS.* Sp 2—3.
18091 14063*a* canadénsis *W* Canadian ♀ or 20 f ap Ap Canada 1800. S co

2848 *2122*a* AMPELOSI'CYOS. (*Ampelos*, a vine, *sicyos*, a cucumber) *Cucurbitàceæ* Sp 1—1.
18092 - - scándens *Thou.* climbing ♀ ⊠ cu 20 jl P Zanzibar 1825 C p l Bot.m.2691 2751, 2
Jollìfia africàna *Boj.*

Page 852. Class XXIII. — POLYGAMIA.

Order 2 DICŒCIA Flowers dicœcious.

2849 *Galactodéndron* Fruit globose, rather fleshy, having the appearance of a walnut, containing a one-seeded nut.

MONŒCIA.

2127 *ACA'CIA.* Sp 95—273.
14145 decípiens
β prærnórsa *Grah.* bitten-*leaved* ♣ ⊔ or 3 mr jn Y N Holl. 1830 C s l p Bot. mag. 3244
18093 - - tristis *Grah* dull-*green* ♣ ⊔ or 18 mr ap Y N Holl 1828. C s l p Bot. mag 3420
18094 - - vernicifluа *Cun.* varnish-flowing ♣ ⊔ or 6 mr my Y N Holl 1823 C s l p Bot. mag 3266

18095 - - gravèolens *Cun.* strong-scented ♣ ⊔ or 15 ap jn Y V. D L . C s l p Bot mag 3276
18096 - - brévipes *Cun* short-pediceled ♣ ⊔ or 6 ap Y N. S W 1810 C s l.p Bot mag 3358

18097 - - undulæfòlia *Cun* waved-leaved ♣ ⊔ or 4 ap jn Y N. S W 1824 C s l p Bot mag 3394

18098 - - elongàta *Sieb* long-*branched* ♣ ⊔ or 6 ap jn Y N S W. 1823 C s l p Bot mag 3337

18099 - - Cunninghàmi Ait. Cunningham's ♣ ⊔ or 4 ap jn Y N Holl 1823 C s l.p Hook ic 1225
18100 - - umbròsa *Cun.* shade-*inhabg* ♣ ⊔ fra 25 ap Pa Y N S W. 1823 C s.l p Bot mag 3338

18101 - - intermèdia *Cun.* intermediate ♣ ⊔ or 8 ... Y N Holl. 1818.? C s l.p Bot mag 3203
18102 - - plumòsa *Lowe* feathery-*leaved* ⅋ ▭ or 20 ? ... Y .... .. C s.l p Bot. mag 3366

18103 - - prénsans *Lowe* holding, *prickles* ⅋ ⊔ or 40 .. Y . . . C s p.l Bot mag 3108

18104 - - pentadènia *Lindl.* 5-glanded ♣ ⊔ or 5 ap Y . 1830 C s p.l Bot. reg 1521

2143 *A'CER.* Sp 19—19
18105 14278*z* oblóngum *Wall* oblong-*leaved* ⅋ ⊔ or 20 f G w Nepal 1824. S co A b. f. 112
18106 14284*a* macrophýllum *Ph.* long-leaved ⅋ or 25 my jn G N. Amer 1812. L co Hook. am I 38

DIŒCIA.

2849. *2158*a* GALACTODE'NDRON *Hum* Cow Tree (*Gala*, milk, *dendron*, a tree) *Urticeæ* Sp 1—1
18107 - - útile *Hum* useful ♀ ▭ ... 50 .. ... Caracas 1829. S l.p Bot. mag 3734



History, Use, Propagation, Culture,

2848. *Ampelosicyos* 18092 *scándens.* "The fruit" of this plant "is 3 ft. long, and 8 or 10 inches in diameter, full of seeds as large as chestnuts (264 in one fruit), which are as excellent as almonds, and have a very agreeable flavour, and, when pressed, they yield an abundance of oil, equal to that of the finest olives It is a perennial plant, and grows at the margins of the forest, enveloping the trees with it branches, while its trunk is frequently seen with a circumference of 18 in" (*Bot. Mag.*) The name of this plant among the Indians of Zanzibar is *Koumé*

2849 *Galactodéndron* 18107 *útile.* "M de Humboldt was the first to bring the Cow Tree of Caraccas into notice 'We returned,' he says, in his valuable *Rélation Historique*, vol ii. p. 106., 'from Porto Cabello to the Valley of Araguas, stopping at the plantation of Barbula, through which the new road to Valencia is to pass For many weeks, we had heard a great deal of a tree whose juice is a nourishing milk. The tree itself is called the Cow Tree, and we were

18090 Decandrous, Lvs of young tree vertically compressed spinuloso-mucron. straight, of full-grown tree lanceol acute imbric. Cones ovate, Scales with membranac wings on margin

18091 Lvs. linear 2-ranked crowded revolute, Male flowers globose always solitary

18092 Lvs. altern pedate of five obl.-ov lfts. with waved and distinctly toothed margins pointed at both ends. Seeds orbic. compress. reticul veined

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2850 *Semecárpus.* Flowers polygamo-deciduous. Cal. 5-cleft. Petals 5, oblong. Ovary 1, sessile, 1-celled. Stams. 5, all fertile. Styles 3. Nut compressed, heart-shaped, seated on a thick depressed torus. Leaves simple

2851 *Melanorrhœ'a* Flowers hermaphrodite Sepals 5, caducous, cohering valvately Petals 5, rarely 6, imbricate in æstivation Stam numerous, inserted in the torus. Style 1. Fruit indehiscent, depressedly kidney-shaped, stalked. Leaves simple.

MONŒCIA.

[2 uneq nrvs. Pedunc subsolit. ½ length of lvs.

18093 Stips like strong rigid straight and spreading setæ at first soon becoming brown decid Phyllod. falcate with

18094 Phyllodia lin.-lanceol. 2-nrvd. falcate attenuated at base, Heads of flws. globose axillary twin, Young branches viscid [young brans. Heads of flws usually twin axill.

18095 Phyllodia lanceol tapering at both ends shining 2-nrvd. with a gland on upper margin at base clammy as are

18096 Phyllod lancool obl and frequently narrow lanceol 4 to 6 in long falcate striate usually 3-nrvd. Pedun very short axill solit Younger phyllod clthd with grey scale-like process

18097 Phyllodia obliquely ov. undulat and marginat. 1 nrvd glabr ending in hooked twisted point, Heads of flws axill solit. Pedun beset with adpress pili

18098 Phyllod altern lin acute with callous point falcate wlh 3 elevated longitud. lines on each side and an oblong gland on upper edge nr base, Cor 5-lbd Pedun solit or 2 or 3 together [narrow elongated

18099 Lvs lin. falcate mucron 2-3-nrvd scattered twice as long as pedunc Heads of flws axill solit Leg very

18100 Phyllodia obliquely ov -lanceol. tapering at both ends ending in hooked mucrone with a gland on upper margin, Heads of flws racemose [rather obt. reflex at apex

18101 Phyll. lin -lanceol. acute atten at base obscurely 3-nrvd Spikes cylindric. Cor. quadrifid, Segms. oblongo-ovate

18102 Prickly Lvs 2-pinn Lflts very small lin. rather obt straight or nrly so 40 or 50 pairs of thereab. Spikes obl abbreviat ½ in long Leg 5 to 6 in long 1 in broad flat 1-celled dry

18103 Clthd. with hooked prickles, Lflts 16-20 with generally an odd one at base almost lin. acute very uneq. at base, Brac. ov or lanceol decid ferrugineo-pubes. Heads globose very dense

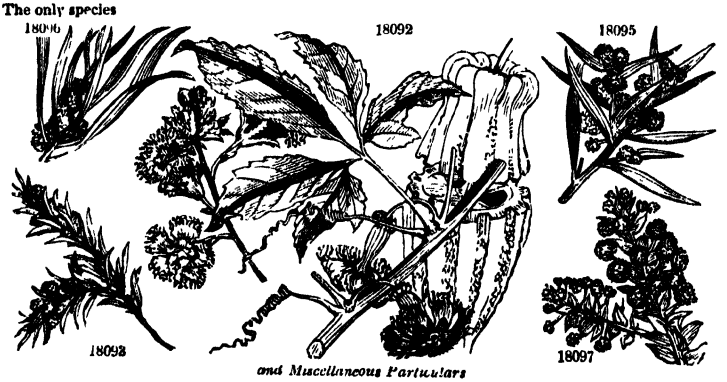
18104 Unarmed glabrous branched angular, Lvs with 4 or 5 pairs of pinnæ and each pinna with about 24 pairs of obl obtuse lflts. a depressed gland on the petiole between each of the pinnæ, Heads pedicellate solitary [smooth separated

18105 Lvs. obl.-lanceol acumin. quite entire coriac smooth rounded at base, Rac. compound, Wings of fruit parallel

18106 Lvs digit 5-lobed with roundish recesses, Lbs somewh. 3-lbd. repandly toothed pubes. ben. Rac. compound erect, Stam 9 with hairy filam. Ovary very hairy

DIŒCIA.

18107 The only species

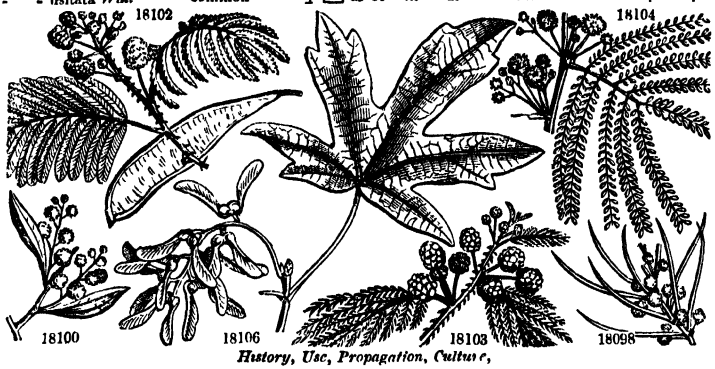


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assured that the negroes on the farm, who are in the habit of drinking large quantities of this vegetable milk, consider it as highly nutritive, an assertion which startled us the more, as almost all lactescent vegetable fluids are acrid, bitter, and more or less poisonous Experience, however, proved to us, during our residence at Barbula, that the virtues of the Cow Tree, or *Palo de Vaca*, have not been exaggerated. This fine tree bears the general aspect of the Star-apple Tree (Chrysophyllum *Cainito*), its oblong, pointed, coriaceous, and alternate leaves are about 10 in long, and marked with lateral nerves, that are parallel, and project beneath The flower we had no opportunity of seeing, the fruit is somewhat fleshy, and contains one or two kernels Incisions made in the trunk of the tree are followed by a profuse flow of gluey and thickish milk, destitute of acridity, and exhaling a very agreeable balsamic odour It was offered to us in calabashes; and, though we drank large quantities of it, both at night before going to bed, and again early in

2850. *2164*a* SEMECA'RPUS *L.* (*Semeio*, to mark, *karpos*, fruit; use of juice) *Terebinthàceæ.* Sp. —1
18108 - Anacárdium *I.* Anacardium ♀ ▭ fr 20 ... G.r E. Indies 1820. C r.m Ru. am. 1 70
Anacárdium longifòlium *Lam*, *Cassùvium* Spr.

2851 *2164*b* MELANORRHŒ'A *Wall.* (*Melas*, black, *rheo*, to flow; juice.) *Terebinthàceæ* Sp 1—1
18109 - - usitàta *Wall* common ♀ ▭ us 50 ... R E. Indies 1829. C l.pWal pl as ra il 1



History, Use, Propagation, Culture,

the morning, we experienced no uncomfortable effects The viscidity of this milk alone renders it rather unpleasant to those who are unaccustomed to it. The negroes and free people, who work in the plantations, use it by soaking bread in it made from Maize, Manioc, Aropa, and Cassava Slaves become visibly fatter during the season when the *Palo de Vaca* yields most milk. When exposed to the air this fluid displays on its surface, probably by the absorption of the atmospheric oxygen, membranes of highly animal nature, yellowish and thready, like those of cheese, which, when separated from the more watery liquid, are nearly as elastic as those of caoutchouc, but in process of time exhibit the same tendency to putrefaction as gelatine The people give the name of cheese to the curd which thus separates when brought into contact with the air, and say that a space of 5 or 6 days suffices to turn it sour, as I found to be the case in some small quantities that I brought to New Valencia The milk itself, kept in a corked bottle, had deposited a small portion of coagulum, and, far from becoming fetid, continued to exhale a balsamic scent. When mingled with cold water, the fresh fluid is coagulated with difficulty; but contact with nitric acid produced the separation of the viscous membranes.

"This wonderful tree appears peculiar to the cordillera of the shore, especially from Barbula to the Lake of Maracaybo. Some individual Cow Trees are also said to exist near the village of San Mateo, and likewise in the Valley of Caucaguea, three days' journey to the east of Caraccas

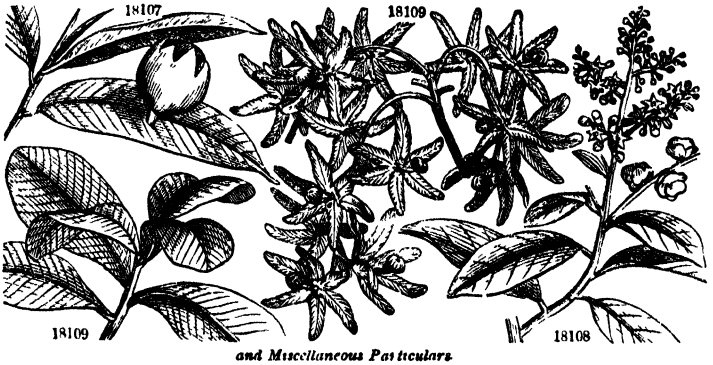
"At Caucaguea, the natives call the tree which yields this nutritive fluid, Milk Tree (*Arbol de leche*)."

"The wood forming the body of the trunk is white, very close-grained, and hard, resembling the boxwood of Europe The soil which these trees inhabit is dark and rich, and must be damp or very wet all the year round" (*Bot Mag*)

2851 *Semecárpus* 18108 *Anacárdium* is a lofty tree with spreading branches. Leaves about 18 in. long, and about 4 or 5 broad Flowers small, of a greenish yellow colour Receptacle of the fruit when ripe yellow, about the size of the nut, which is black; the cover or shell is composed of 2 laminæ, the inner hard, the outer less so and leathery, between them are cells which contain the black, corrosive, resinous juice, for which this nut has been long known, the juice is of a pale milk-colour till perfectly ripe, when it becomes black The wood of this tree is reckoned of no use, not only on account of its softness, but also because it contains much acrid juice, which renders it dangerous to cut down and work upon. The fleshy receptacles on which the seeds rest are roasted in the ashes; and eaten by the natives, their taste is very like that of roasted apples · unroasted, they taste astringent and acrid, leaving a painful sensation on the tongue for some time. The kernels are rarely eaten The green fruit, well pounded into a pulp, makes good birdlime The pure, black, acrid juice of the shell is employed by the natives externally to remove rheumatic pains, aches, and sprains in tender constitutions it often produces inflammation and swelling, but where it has not these effects it is an efficacious remedy It is employed by the Telinga physicians in the cure of almost every kind of venereal complaint It is in general use for marking cotton cloths, the colour is improved and prevented from running by a little mixture of quicklime and water. This juice is not soluble in water, and is only

18108 Lvs. oblong bluntish glauc. ben. more or less covered on the nerves beneath with scabr. down, Panicle terminal tomentose

18109 Leaves obovate very blunt villous



and Miscellaneous Particulars

diffusible in spirits of wine, for it soon falls to the bottom, unless the menstruum be previously alkalised. The solution is then pretty complete, and of a deep black colour It sinks in expressed oils, but unites perfectly with them: alkaline lixivium acts upon it with no better success than plain water (*Don's Mill*, ii 63) Culture, &c, see Melanorrhœa below

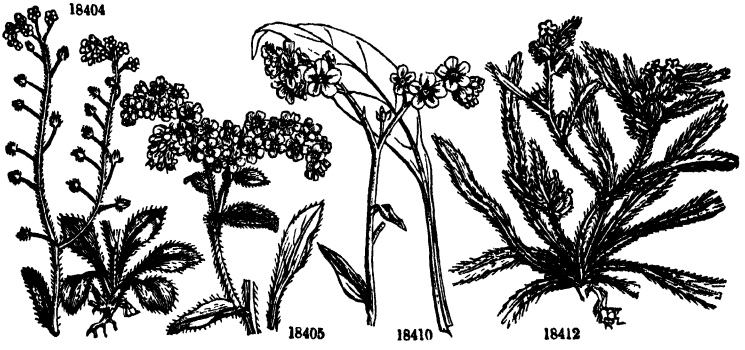
2851 *Melanorrhœa* 18109 *usitàta*. This tree is a native of Hindostan, in a large valley called Kadbbu, in the kingdom of Munipur, Silhet, and Tipperah, as well as in the Burmese empire, on the banks of the Irrawadi, where it is called *Thcet-tsee* or *Zit-si* This is identical with the majestic *Kheu* or varnish tree of Munipur, on the north-east frontier districts of Silhet and Tipperah Mr M R Smith, who has resided a long time in Silhet, considers this the same as the varnish tree of the Chinese, in the eastern and north-eastern provinces. It is procurable in great quantities from Munipur, where it is used for painting river craft, and for varnishing vessels destined to contain liquid The drug is conveyed to Silhet for sale by the merchants On being handled it occasions extensive erysipelatous swellings, attended with pain and fever, but never of long duration In the neighbourhood of Prome a considerable quantity of varnish is extracted from the tree, but very little at Martaban, owing, it is supposed, to the poorness of the soil, and partly also to there being none of the people in that part whose business is to perform the process, although it is very simple Short joints of a thin sort of bamboo, sharpened at one end, and shut up at the other, are inserted in a slanting direction into holes made in the trunk and principal branches, and left there for 24 or 48 hours, after which they are removed, and their contents emptied into a basket previously varnished over. Sometimes a hundred bamboos may be seen sticking into the tree at once during the collecting season, which last as long as the tree is destitute of leaves, namely, from January until April, and they are renewed as long as the juice will flow In its pure state it is sold at Prome at the rate of 1 tical, or 2*s*. 6*d*, the viss, and at Martaban, 2 Madras rupees the viss, although of an inferior quality to that sold at Prome, being usually mixed with oil of sesamum. A tree is reckoned to produce 2 to 3 or 4 viss annually, a viss being equal to 3¼ lb Every article of household furniture destined to contain solid or liquid food is lacquered over with it. The article to be varnished with it must be prepared with calcined bones, after which the varnish is laid on thinly, either in its pure state, or variously coloured. The process of drying is the most difficult part, being effected in a very slow and gradual manner, by the articles thus varnished being placed in subterraneous vaults for many months. The drug is also used as a size glue in the process of gilding, nothing more being required than to besmear the surface of the article to be gilded with it, and immediately to apply the gold leaf If it is considered how very extensively that art is practised by the Burman nation, it being among their most frequent acts of devotion and piety to contribute to the gilding of their numerous religious edifices and idols, it will be evident that a great quantity of the drug must be consumed for that purpose alone Finally, the beautiful Pali writing of the religious order of the Burmas, on ivory, palm leaves, or metal, is entirely done with this varnish in its native and pure state (*Don's Mill*, ii 67) A mixture of loam and peat will suit this tree, and ripened cuttings will root in sand, under a hand-glass, in heat.

The following additional Figures are illustrative of Plants described in Pages 1300. 1304. and 1332.

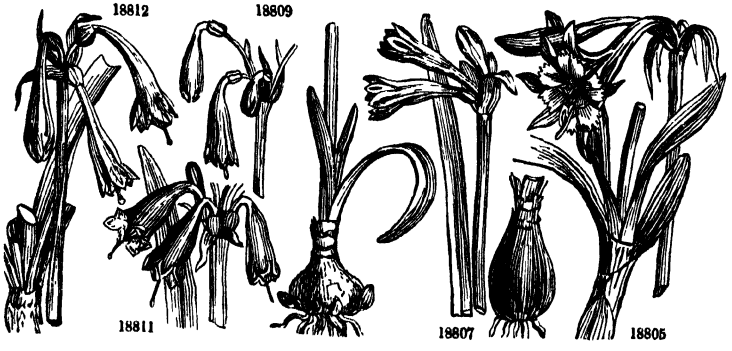
Page 1300.



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Page 1332.



SECOND

ADDITIONAL SUPPLEMENT

TO

LOUDON'S ENCYCLOPÆDIA OF PLANTS;

COMPRISING

THE SPECIFIC CHARACTER, DESCRIPTION,

CULTURE, HISTORY, APPLICATION IN THE ARTS,

AND EVERY OTHER DESIRABLE PARTICULAR RESPECTING

ALL THE PLANTS

ORIGINATED IN, OR INTRODUCED INTO,

BRITAIN,

BETWEEN THE PUBLICATION OF THE FIRST ADDITIONAL SUPPLEMENT IN 1840,

AND

MARCH, 1855:

WITH

A NEW GENERAL INDEX TO THE WHOLE WORK.

PREPARED BY GEORGE DON, F.L.S., UNDER THE DIRECTION OF MRS J. C. LOUDON,
ASSISTED BY MR DAVID WOOSTER.

4N3

Page 1. CLASS I.—MONANDRIA. 1 STAMEN.

Order I. MONOGYNIA. 1 Stamen. 1 Style.

2852. 10*a*. *Gastrochílus*. Calyx tubular, cleft on one side. Tube of corolla elongated, filiform; outer segments of limb equal, spreading, inner ones lateral, broader, joined with the filament; lip large, saccate. Filament linear lengthened beyond the anther. Ovary 3-celled. Ovula numerous.

MONOGYNIA.

	Systematic Name and Authority.	English Name	Habit.	Habitation in the Garden Popular Character	Height in Feet.	Time of Flowering	Colour of the Flower.	Native Country.	Year of Introduction of Exotics and Localities of British Species.	Propagation.	Soil	Reference to Figures
	1. CA'NNA											
18110	5*a* Warczewiczii *Dict*	Warczewicz's	℔	▱ or	3	au s	R	C Amer	1852.	R	r.m	
	2. MARA'NTA.											
18111	24*a* ornàta *Linden*	adorned	℔	▱ or	2	...	...	Columb	1849.	R	s.l	Hout. fl. 413, 414
	3. CALA'THEA.											
18112	25*c* villòsa *B R.*	villous	℔	▱ or	2	jn jl	Y	Demera.	1840.	R	s l	Bot. reg. 1845 14
	5 PHRY'NIUM.											
18113	28*a* sanguíneum *Hook.* *Maránta sanguínea* Hort.	red-bracted	℔	▱ or	3	jn. jl	S	E Ind	1845?	R	s l	Bot mag. 4646
18114 -	- setòsum *Rosc*	bristly	℔	▱ or	2	my jl	S	Rio Jan.	1824	R	s l	Rosc. scit. icon
	6. HEDY'CHIUM											
18115	37*a* chrysoleùcum *Hook*	cream-col	℔	▱ or	4	au	W.o	E Ind.	1849.	D	s l	Bot. mag 4516
18116 -	- stenopétalum *Wall.*	narrow-petaled	℔	▱ or	7	mr	W	E. Ind.	1830	D	s l	Bot cab 1902
18117 -	- urophýllum *Wall.*	tail-leaved	℔	▱ or	5	s	Y	E. Ind.	1828.	D	s.l	Bot cab. 1785
	7. ROSCO'EA.											
18118	38*a* lùtea *Royle*	yellow-flwd	℔	▱ or	1	my jl	Y	Nepaul	1839.	D	s l p	Royle ill. 89 ?
	10. ZI'NGIBER.											
18119	60*a* Américans *Bi*	Americans	℔	▱ or	4	jn.au	R	Penang	1851	D	s l	
2852.	10*a* GASTROCHI'LUS *Wall.*		(*Gaster*, belly, *cheilos*, lip, lip of cor. inflated.)									*Scitam* Sp 2—3.
18120 -	- pulchérrima *Wall*	prettiest	℔	▱ or	1	au	G R	E Ind.	1841.	D	s.p	Bot. mag. 3930
18121 -	- longiflòra *Wall*	long-flowered	℔	▱ or	2	jl.au	Pk Y	Rangoon	1840	D	s.p	Bot. mag. 4010
	13 AMO'MUM.											
18122	79*a* vitellínum *Lindl.*	yellow-flwd	℔	▱ or	2	ap.my	Y	E. Ind.	1846.	D	s p.l	Bot. reg. 1847, 52
	14 CURCU'MA.											
18123	95*a* cordàta *Wall*	cordate	℔	▱ or	1	jl	R Y	E Ind.	1846	D	s.l	Bot mag 4435
18124 -	- Roscoeàna *Wall.*	Roscoe's	℔	▱ spl	1	au.d	S Y	E. Ind.	1837	D	s l	Paxt mag 7 1
18125 -	- parvifòra *Wall.*	small-flowered	℔	▱ or	½	o f	W.Y	Prome	1828	D	s.l	Wal.pl.as ra 1,57
	20. CENTRA'NTHUS											
18126	112*a* macrosíphon *Bois*	long-tubed	☽	○ or	2	jn jl	R	Grenada	1849.	S	co	Paxt. fl. gard 67
	18 LOPE'ZIA											
18127	102*a* lineàta *Zucc.*	lined-leaved	⚥	⌴ pr	3	ja.f	R	Mexico	1839.	S	co	Bot. reg. 1840, 40

DIGYNIA.

	27 CALLI'TRICHE											
18128	128*a* platycárpa *Kit*	broad-fruited	⚘	○ w	fit	my.s	W	Britain	sh.wa	S	aq	Eng bot 28 2864



History, Use, Propagation, Culture,

2. *Maránta* Until the *M. ornàta* has flowered, the genus cannot be ascertained. In the meanwhile, the foliage of these plants forms a most beautiful object among other vegetation; the green is of the rich deep hue of *Calàthea zebrina*, while the stems and under side of leaves have the same rich stain of purple; in addition, the leaves are brilliantly banded by well defined oblique streaks of a delicate pink in one variety, and of a yellowish white in the other. They require a well-worked, rich, mixed soil frequent watering while growing, and a shady place in a

CLASS I. — MONANDRIA.

MONOGYNIA.

Essential Specific Character

18110 Leaves ovate-oblong acuminated glabrous coloured on the margins, Ovarium subglobose papillose, Segments of Calyx obtuse, Lip revolute obtuse emarginate

18111 Leaves rich deep green, striped in one variety with white and in another with pink

18112 Leaves glaucous beneath pilose, Scape elongated, Bracts cuspidate villous, Petals obovate 2-lobed

18113 Caulescent or Scape radical leafless, Leaves oblong acuminate purple beneath, Raceme compound, Bracts ovate lanceolate complicate scarlet

18114 Spike imbricated concave below and convex above hairy, Leaves lanceolate unequal-sided, Petioles and Spikes bristly, Outer Bract cordate with an elongated setose apex, Inner Bract winged

18115 Leaves oblong acuminated, Outer Spathes obtuse, Inner ones cylin , Mid seg of Cor. rounded unguic bifid

18116 Lvs broad ovate-oblong, Spathes cucullate as long as tube, Mid seg of Cor. broad 2-lobed unguic rest linear

18117 Leaves oblong taper-pointed, the point long twisted at top, Middle segment of Corolla broad entire unguiculate, the rest lanceolate

18118 Raceme spike-formed strict, Flowers scattered, Calyx obliquely truncate bluntly tridentate, Capsule baccate roundish

18119 Ligula very short and rounded, Bracts roundish cordate, Spikes obovate 6 inches above ground and 4 inches below, Leaves narrow

18120 Leaves lanceolate nearly sessile, Spike terminal secund, Tube of Corolla enclosed

18121 Leaves oblong-cordate on long petioles, Spikes radical, Tube of Corolla very long exserted

18122 Caulescent glabrous, Leaves oval, Spike oblong sessile rather loose, Lip oblong obtuse toothed, Appendage of anthers petaloid tripartite, Segments undulated torn

[at top of spike violaceous

18123 Tubers numer. glob , Lvs ovate-cord acumin clothed with silky hairs, Spikes centr , Bracts ovate obtuse, Tuft

18124 Spikes terminal, Leaves on long stalks broad-ovate, Bracts scarlet

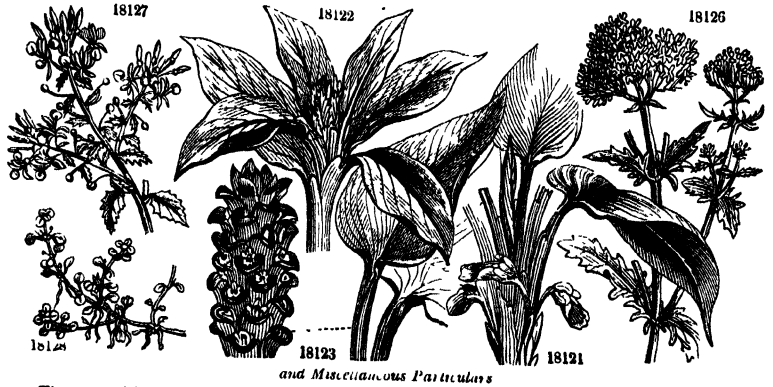
18125 Tubers almost wanting, Leaves oblong ovate on long stalks, Spike central pedunculate imbricated in four rows, Coma white, Lip obovate, Anthers mutic at the base

18126 Stem fistular glaucous, Leaves ovate entire or toothed, upper ones sessile more or less deeply cut at base, Panicle corymbose, Tube of Corolla very long

18127 Stem and petioles hairy, Lvs ovate crenately serrul. downy lined above, Gland solitary on the base of up. ptls

DIGYNIA.

18128 Fruit nearly sessile, Lobes parallel in pairs slightly winged at the back, Styles erect in the flower reflexed closely over the fruit, Bracts falcate



and Miscellaneous Particulars

stove in 1849 These exquisite plants were exhibited before the Horticultural Society at one of their meetings at Chiswick

2852 *Gastrochilus.* The blossoms are very handsome and graceful, and at first sight give the plants the appearance of *Orchideæ*. The genus is nearly allied to *Kæmpferia*. They thrive well with the same treatment as terrestrial tropical *Orchideæ*.

Page 8. CLASS II.—DIANDRIA. 2 STAMENS.

Order I. MONOGYNIA. 2 Stamens. 1 Style.

2853. 37*a* *Forsýthia.* Ca'vx 4-parted. Corolla subcampanulate, 4-cleft. Stamens equal in length to the calyx, with short filaments and oblong anthers. Stigma 2-lobed

2854 40*a* *Leptándra* Corolla tubular, subringent, 4-lobed ; lower segment the smallest

2855 49*a* *Porphyrócoma.* Calyx 5-parted, tribracteate at base Corolla tubular, bilabiate. Cells of Anthers diverging. Stigma obtuse. Capsule oblong, stipitate, 2-celled. Seeds 2 in each cell, orbicular.

2856 49*b* *Phlogacánthus.* Calyx 5-parted, equal. Corolla obliquely bilabiate , upper lip broader and longer, bifid . lower lip trifid ; tube trigonal. Stamens 2, with rudiments of 2 abortive ones Stigma acute. Capsule compressed, 2-celled ; upper cells 4-seeded.

2857 49*c.* *Cyrtanthèra.* Calyx 5-cleft. Corolla ringent ; lobes deeply divided, equal , upper lip complicate ; lower one elongated, trifid. Anthers drooping. Stigma unilabiate.

2858. 49*d.* *Thyrsacánthus.* Calyx 5-cleft, equal. Corolla tubular, incurved, 5-lobed, bilabiate. Cells of anthers

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MONOGYNIA.

36. LIGU'STRUM.

18129	159*a* japónicum *Thunb.*	Japan		or	6	jn	W	Japan	1846.	L	co	Thunb. jap. 1
18130 -	- vestítum *Wall.*	clothed		or	4	ap.jl	W	Nepaul	1840.	L	co	

37 SYRI'NGA.

18131	160*a* Emòdi *Wall.*	Himalayan		or	4	ap	W	Himala.	...	C	co	Bot. reg. 1845, 6

2853. 37*a* FORSY'THIA *Vahl.* (*W. Forsyth*, His Majesty's gardener at Kensington) *Oleàceæ* Sp. 1—2

18132 -	- viridíssima *Lindl.*	greenest		or	10	mr	Y	N China	1845.	C	l.t	Bot. mag. 4587

39 JASMI'NUM

18133	181*a* lanceolárium *Roxb*	lanceolar-lvd		or	10	...	W	Sylhet	1826	C	s p	
18134 -	- caudátum *Wall.*	tailed-lvd		or	10	su	W	Sylhet	1838.	C	r m	Bot. reg 1842, 26
18135 -	- affine *Royle*	allied		or	10	jn o	W	Himala.	1843	C	co	Bot. reg 1845, 26
18136 -	- nudiflórum *Lindl*	naked-flowered		or	3	f mr	Y	China	1844.	C	s l p	Bot. reg. 1846, 48
18137 -	- ligustrifólium *Wall*	Privet-leaved		or	10	my o	W	Nepaul	1839.	C	s l p	
18138 -	- syringæfólium *Wal.*	Lilac-leaved		or	10	...	W	E Indies	1830	C	s.l p	
18139 -	- subulátum *Lindl.*	awl-leaved		or	4	my jl	Y	China	1839.	C	s l p	
18140 -	- lineàre *R Br*	linear.leaved		or	6	my jl	W	N. Holl	1850.	C	s.l.p	Hook icon. 831

40 VERO'NICA

18141	191*a* grandis *Fisch.*	grand		or	1½	jn.jl	W	Siberia	1820	D	co	
18142	252*a* formòsa *Benth*	beautiful		or	3	ap	B	V.Di L	1835.	C	s.l	Bot. mag. 4512
	diosmæfólia Fl cab t 106. not of Cunn											
18143 -	- speciósa *R Cunn.*	showy		or	3	jn my	P	N Zea	1841.	C	s.l	Bot mag. 4057
18144 -	- nívea *R Br*	snowy white		or	1	my jl	W	V Di L	1840.	C	s.l	
18145 -	- salicifólia *Forst*	Willow-leaved		or	3	jl my	W	N. Zea	1843.	C	s.l	Bot. reg 1846, 5
	Lindlyàna Paxt Mag											
18146 -	- Andersónii *Lindl.*	Anderson's		or	3	jl.my	B	Hybrid		C	s l	Px fl g. 2. 34
18147	265*a* polita *Fries*	polished		or	½	mr jl	B	Britain	clt.gr	S	co	Eng bot 783

2854 40*a* LEPTA'NDRA *Nutt* (*Leptos*, slender, *aner*, a male , narrow anther.) *Scrophulaíneæ.* Sp 3.—

18148 -	- Meyéri *G Don*	Meyer's		or	1½	jn jl	B	Dahuria	1837	D	co	
	Verónica tubiflóra *F. M* , as well as Verónica sibírica No. 182. and V. virgínica No. 183. of the body of the work, belongs to this genus											

44 SCHIZA'NTHUS.

18149	472*e* cándidus *Lindl.*	white		or	2	my.au	W	Coquim.	1840	S	l.t	Bot. reg. 1843, 48
18150 -	- pinnatífidus *Lindl*	pinnatifid-lvd		or	2	my au	Va	Coquim.	1841.	S	l t	

49 ERA'NTHEMUM

18151	313*a* albiflórum *Hook.*	white-flwd		or	2	o n	W	Bahia	1843.	C	s l.p	Bot. mag. 4225
18152 -	- strictum *Lindl.*	upright		or	2	ap jl	B	India	1826	C	s.l p	Bot. reg 867
18153 -	- variábile *R Br*	variable		or	1½	ap my	W	N Holl	1820	C	s l p.	Pax m 13 761c
18154 -	- hispidum *Nees*	hispid		or	1	s n.	Y	S Leone	1826	C	s l p	Bot.r 19 1846,12
	Justicia hispida Vahl *Lankestèria parviflóra* Lindl. Bot reg. 19 12. *Lank longiflóra* Bot. reg 19.											



History, Use, Propagation, Culture.

2853 *Forsýthia.* This forms a compact deep green bush, with opposite oblong leaves, which emit a slight balsamic odour. It sheds its leaves in autumn and remains dormant like any other deciduous shrub, but is remarkable for the number of large prominent buds scattered along the young stems produced the preceding summer. Early in

parallel. Sterile filaments subulate, or wanting Stigma bidentate. Capsule depressed from the base to the middle, 2-celled, 2—4-seeded. Seeds discoid, furnished with retinacula.

2859 65*a*. *Rhynchoglóssum*. Calyx tubular, 5-cleft. Corolla tubular, personate. Stamens 5, the two lower bearing reniform anthers, the three upper ones small and sterile. Stigma capitate. Capsule enclosed, ovate, 2-valved. Seeds small.

2860. 65*b* *Pterostigma*. Calyx 5-parted or 5-toothed. Corolla bilabiate; upper lip emarginate; lower one divided into 3 lobes Anthers 2-lobed Style simple. Stigma undivided Sterile filaments subulate.

2861 65*c*. *Læbigia* Calyx tubular, 4—5 cleft. Corolla funnel-shaped, widened upwards; limb unequal, 5 lobed, subbilabiate Stamens 4, 2 only bearing anthers. Anthers 2-celled, cohering Stigma bilamellate. Capsule siliqueformed, falsely 4 celled, 2-valved. Seeds pendulous, expanded into a wing at the base

2862 67*a* *Chondrospérmum*. Calyx urceolate, 4-toothed Corolla funnel-shaped, 4-parted, rather fleshy; segments linear, clavate Stamens inserted above the base of the tube, enclosed. Ovarium 2-celled; cells 1-seeded. Stigmas 2, sessile, acute.

2863 75*a*. *Labichea*. Calyx 5-cleft, regular. Petals 5, roundish. Stamens 2. Style subulate. Stigma simple. Ovarium biovulate, on a short stipe.

MONOGYNIA.

18129 Leaves oblong-ovate acuminated glabrous, Racemes compound, Peduncles and pedicels spreading
18130 Leaves ovate acuminate rather coriaceous hairy beneath, Thyrse hairy tomentose as well as young branches

18131 Branches warted, Lvs broad-obl. tapering to both ends glabrous whitish beneath, Segms of Cor hooked at tip

18132 Bran tetragonal, Lvs obl.-lanceol. serrated at top, Flws rising before the lvs twin on short pedicels drooping Sepals roundish

18133 Erect, Lvs ternate Leaflets lanceolate, Corymbs terminal [Corolla 5-parted bluntish
18134 Glabrous, Lvs opposite ternate, Lflts ovate-lanceol. taper-pointed, Panic cyme-formed, Cal acutely 5-toothed,
18135 Lvs op pin 2-3 pairs term largest, Flws 3 term on long ped, Cal seg subul, Lobes of Cor obl. obt or ac
18136 Bran angular, Lvs trifol., Lflts ovate-acum glabr, Flws sol scaly at base, Cor 6-lobed obtuse, Cal. seg. lanc
18137 Lvs small ovate-acuminate glabrous, Peduncles terminal many-flwd, Calyx segments setaceous
18138 Glabrous, Lvs ov-lan acum, Ped trichot axillary term corym, Cal teeth 6 subul, Cor seg 6-7 lan. lin. acute
18139 Lvs altern ternate glabrous, Lflts oval-acute, Flws panicled, Sepals subulate, Cor. 5-parted, Segments ovate
18140 Lvs ternate nearly opposite downy, Lflts linear acute, Branches terete, Panicles axillary trichotomous [nearly globose glabrous
18141 Lvs cordate-oblong obtuse deeply toothed somewhat pinnatifid at base naked, Racemes elong terminal, Capsule
18142 Bran. with two rows of hairs, Lvs ob-lanceol acute quite entire glabr., Racemes few-flwd subcorymb Segm. [of Cor lanceol acute
18143 Glabr, Lvs on short petioles fleshy obovate entire retuse and mucro. at top, Peduncles axil. solitary race-
18144 Rac lateral erect, Lvs pinnatifid glabr, Cor bearded at the base [mose, Flws dense, Cor. subrotate
18145 Racemes lateral nutant, Lvs lanceol. sessile quite entire or serrated one-nerved

18146 A beautiful hybrid between *V. speciósa* and *V salicifólia*
18147 Procumbent hairy, Lvs cordate-ovate serrated, Cal. seg ovate acute, Capsule obcor. lobes turgid not keeled

18148 Glabrous, Lvs scattered nearly linear acute sharply serrulated, Raceme terminal dense

18149 Lvs pinnatif with entire linear segs, Lower lip of Cor 3 lobed, lateral segs setaceous middle segm 2-lobed acute
18150 Lvs pinnatif with rounded entire segms, Lower lip of Cor 3-lobed middle lobe cucul 2-lobed lateral lobes [falcate spatulate obtuse
18151 Glabrous, Lvs sessile obov-obl rather fiddle-shaped, Racemes terminal erect elong. many-flwd
18152 Erect downy Bran simp decus, Lvs lanc obscurely cren, Spikes term elon, Bracts op by fours, remote, 1-fl
18153 Slndr dwny, Rac term lo se, Ped axil. few-fl, Lvs ov. ent or slightly toothd blthd with white, Cal. lob subul.
18154 Branches villous, Leaves obovate acuminated undulated hairy, Spikes short axillary and term, Calyx hairy



and Miscellaneous Particulars.

spring these buds gradually unfold themselves, and present a profusion of bright yellow flowers all over the shrub which is highly ornamental.

2855. 49*a*. PORPHYRO'COMA *Hook.* (*Porphyra*, purple, *kome*, hair; spikes.) *Acanthàceæ* Sp. 1.
18155 - lanceolata *Hook* lanceolate-lvd ▭ or 1 ap jn. P S. Amer 1845. C lt s. Bot. mag. 4176.

2856. 49*b* PHLOGACA'NTHUS *Nees.* (*Phlox*, flame, *acanthus*, colour of flowers.) *Acanthàceæ* Sp 2
18156 - curviflòrus *Nees* curve-flowered ▭ or 6 n. Ysh Silhet 1839 C s.p l. Bot mag 3788.
Justicia curviflòra Wall. Pl. rar. as. 2 t 112
18157 - guttàtus *Nees* spotted flwd ▭ or 2 ap.au. Y.sp E. Indies 1828 C s p l Bot. reg. 1334.

2857. 49*c* CYRTANTHE'RA *Nees.* (*Kyrtos*, curved, *anthera*, anther) *Acanthàceæ.* Sp 3.
18158 - catalpæfòlia *Nees* Catalpa-leaved ▭ or 6 jl.au Y Hondur. 1848 C s.l p Bot mag 4444.
18159 - aurantiaca *Nees* orange-flwd ▭ or 6 au.s. Or S. Amer. 1848. C l.p. Bot. mag 4468
18160 - magnifica *Nees* magnificent ▭ or 6 au.s. F Rio Jan. 1847. C l.p Bot.reg. 1397.
Justicia cárnea Lindl

2858 49*d*. THYRSACA'NTHUS (*Thyrsos*, a thyrse, and *acanthus*.) *Acanthàceæ.*
18161 - strictus *Nees* upright ▭ or 3 f mr S S Amer 1840? C p.l Bot. mag. 4378
Lemaniànus Nees *Eranthemum coccineum* Lem *Apheländra longiscàpa* Hort.
18162 - lilacinus *Lindl* Lilac-flowered ▭ or 2 jy au Li S Amer ... C p l
18163 - bracteolàtus *Nees* bracteate ▭ or 2 jy au S W Ind 1823. C p.l Bot. mag 4411
18164 - rùtilans *Planch.* glittering ▭ or 2 ... S C Amer 1851 C p l Px.fl g 3 73 266

50 WULFE'NIA
18165 314*a* Amherstiàna *Benth* Amherst's ◭ △ or ½ jy Li Ch. Tar. 1816 D co

51 CALCEOLA'RIA.
18166 318*a* flexuòsa *R & P.* flexuous ▭ or 1½ jn o Y Peru 1846. C lt Moor m 1 33.tc.
18167 - Pavònii *Benth.* Pavon's ◭ △ or 2 jn o Y Peru 1848 C lt Bot mag 4525
18168 - cuneiformis *R & P* wedge-shaped ▭ or 1½ jy o Pa.Y Bolivia 1846 C lt Px fl g 1 172 199
18169 - stricta *H B K* straight ▭ or 1½ jn o Y N Gren. 1846 C lt Px fl g 3 9 235
18170 - álba *R & P* white-flowered ▭ or 1½ s W Chili 1843 C s l.p Bot mag 1157
18171 - amplexicaúlis *H B K* stem-clasp. ▭ or 1½ my jy Y Peru 1843 C lt p Bot. mag 4300
18172 - tetragòna *Benth* tetragonal ▭ or 1½ jn.s Pa.Y Peru 1848. C lt p Px fl g 2 70 170

52. PINGUI'CULA.
3173 327*a* orchidioides, *Dec* Orchis-like ◭ △ el ½ d.ja P Mexico 1845 D bog Bot. mag. 4231

54 STACHYTA'RPHETA.
18174 337*a* aristàta *Vahl* awned ▭ or 2 s.n Dk.P S Amer 1840. C p l Bot. mag. 4211

60. MONA'RDA.
18175 355*a* amplexicaúlis *Fee* stem-clasping ◭ △ or 3 jn au R w N Amer 1844 D co Moor mag 2 229
18176 - contórta *Mor.* twisted ◭ △ or 3 jl au R P N. Amer 1850. D co Morr. hort 1 6
18177 - albiflòra *Mor* white-flowered ◭ △ or 4 jn au W N. Amer. 1844. D co

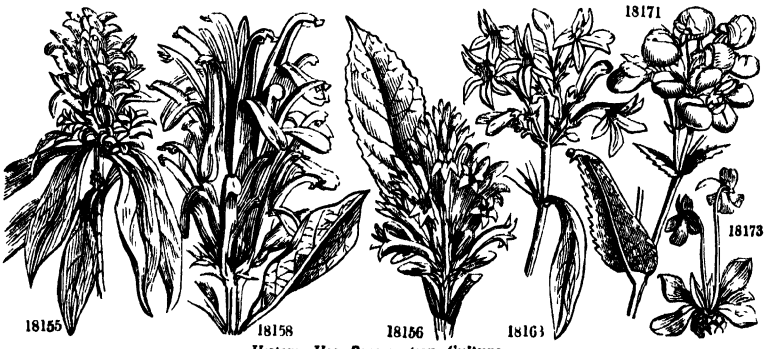
62 SA'LVIA.
18178 381*a* Règla *Cav* Regla ▭ or 5 jn S Mexico 1828 C co B reg. 1841, 14
18179 - gesneraefòlia *Hort* Gesnera-flwd. ▭ or 3 mr ap S Columb 1840 C lt
18180 - prunelloides *H B* Prunella-like ◭ △ or ½ jl ap B Mexico 1839. D s p l Pax m 11 145.tc
18181 - candelàbrum *Boiss.* chandelier ◭ △ or 12 jl.au Cr N Spain 1845 D co Px fl.g 2 161 217
18182 - hians *Benth.* gaping ◭ △ pr 1 my jn B W Cashm 1839 D co Bot reg 1841, 49
18183 - oppositiflòra *Benth* opposite-flwd ▭ or 3 n W R Peru 1847. C l p Pax m 15 53 tc
18184 - pàtens *Cav* spreading-flwd ▭ spl 3 year B Mexico 1838 C r lt.l Botanist, 109
18185 - tubiflòra *Cav. longiflòra* W tube-flowered ▭ or 3 o n R Mexico 1840. C co Bot. reg. 1841, 41

64 CATA'LPA.
18186 470*a* Pöttsii *Seem* Potts's ▭ or .. ... Chihuah. 1851. C co

2859. 65*a* RHYNCHOGLO'SSUM *Dec* (*Rhynchos*, beak, *glossa*, tongue, lip of flower) *Cyrtandraceæ*
18187 - zeylánicum *Hook* Ceylon ◭ ⬡ pr 1 jl au B Ceylon 1844 S sp.l Bot mag 4198

2860 65*b* PTEROSTI'GMA *Benth* PTEROSTIGMA (*Pteron*, a wing, and *stigma*, winged) *Scrophulariaceæ*
18188 - grandiflòrum *Benth* great-flwd ◭ △ or 2 jl au B Hong K. 1843. D sp l H et A in B v 45
Gerárdia glutinòsa Lin *Dugtàlis chinénsis* Lour.

2861. 65*c*. LIEBI'GIA *Dec* LIEBIGIA. (*Prof J Liebig*, the distinguished German chemist) *Cyrtandraceæ*
18189 - speciòsa *Dec* showy ◭ ⬡ or 1½ jn au Y.w.P Java 1846 C p Bot. mag. 4315
Tromsdórffia speciòsa Blume.



History, Use, Propagation, Culture,

2855 *Porphyrócoma* is a beautiful plant, with dense heads or spikes of purple bracts, and purplish-blue flowers Culture and propagation are the same as those recommended for *Justicia*, p 18.

2856 *Phlogacánthus* Pretty shrubs cultivated in the same manner as *Justicia*, p. 18.

2857. *Cyrtanthèra.* The species are all splendid plants, when well grown. They succeed best in a warm part of a stove. A mixture of good loam, leaf mould, and turfy peat is the best soil for them. In order to insure large heads of flowers, the plants should be shifted into larger pots when necessary. They are readily propagated from cuttings.

18155 Leaves lanceol. nearly sessile entire, Spikes terminal and subterminal aggregate, Bracts large 1-flowered

18156 Stems quadrangular downy, Leaves large elliptic acute at both ends toothed glabrous, Corolla elongated

18157 Leaves oblong attenuated at both ends subcrenulated, Racemes terminal, Flowers fascicled

18158 Leaves on longish petioles broad cordate acuminate entire, Thyrse large compact, Bracts and sepals lin subul
18159 Leaves broad elliptic-lanceol. tapering into the thick short petioles, Thyrse compact, Bracteoles and sepals lanc
18160 Leaves on longish petioles ovate-acuminate, Bracts and sepals ovate-lanceolate, Thyrse compact

18161 Glabrous, Lvs obl. acuminated, Racemes terminal elong. simple, Ped short 1-flwd fascicled, Cor nearly regular

18162 Downy, Lvs obl -lanc. rug , Thyrse interrupted naked many-flwd, Cor inflated funnel-shpd with glandular limb
18163 Glabrous, Lvs lanceol acum sessile, Pan terminal short thyrsoid bracteate, Cor elongated nearly regular
18164 Glabr., Lvs nearly sess. obl lanc. erosely denticulated, Rac axil many-flwd nodding, Cor. tubularly ventricose

18165 Plant pale yellow, stemless, with slender graceful one-sided drooping spikes

[than the leafy calyx

18166 Stem hairy flexuous, Lvs cordate-ovate wrinkled crenate whitish beneath, Pan. terminal, Cor. hardly longer
18167 Clam vil , Pet. wing dent petiol , Lvs ov cord at base doubly set canes beneath, Pan. lar , Lower lip lar ob
18168 Branches glabr., Lvs approximate cuneiform ovate deeply ser hoary and tomentose beneath, Corymbs terminal
18169 Branches clammy, Lvs lanceolate acuminate denticulated glabrous, Corymbs terminal, Pedicels clammy
18170 Viscid, Lvs linear remotely serrated, Panicles terminal leafy, Ped opposite corymbose, Lower lip large inflated
18171 Pilose, Lvs ovate-lanceolate crenately serrated, Panicle corymbose, Lower lip large obovate-orbicular
18172 Lvs oblong obtuse entire clammy, Corymbs terminal, Outline of Corolla square

18173 Leaves of two forms, outside ones small imbricate, inner or upper ones fewer obovate spatulate obtuse concave, Spur curved, Ovarium villous

18174 Downy, Leaves ovate-acuminate coarsely serrated, Spike elongated dense, Bracts orbicular awned, Tube of Corolla curved

[white hairs, the nerves purple, Whorls larg

18175 Stem quadrangular, internodes long, Leaves lanceolate subcordate subamplexicaul serrated fringed with
18176 Stem fist. tetrag., Lvs ov -lanc cord at base wavy ser bullate downy, Floral lvs smaller redish-vi Cor twist.
18177 Stem tetragonal, Leaves lanceolate acuminate serrated oblique at base, Floral leaves long acuminate white in the middle, Whorls globose approximate

18178 Leaves roundish-cordate sinuately crenated wrinkled above downy beneath, Whorls terminal few-flowered
18179 Hab of *S fulg* , but the upper lip of cor is flatter, the tube longer, the flws far more abundant and conspicuous
18180 Stem sim. pil , Lvs ov -obl obt cren nly glabr , Whorls abt 4-flwd lower remote, Cal hairy, Up. lip triden.
18181 Stem villous, Lvs obl. toment., Scapes naked glabrous, Pan elong. bran viscid, Cal 5-toothed, Cor glandular
18182 Erect villous, Leaves stalked cordate-sagittate, Floral ones ovate, Rac branched, Whorls 6-flwd, Calyx clammy
18183 Procumb at base, Bran erect downy, Leaves ov -ob , Whorls 2-flwd one-sided, Cor downy, Lips nearly equal
18184 Stm pil , Lvs ov -deltd hastate cren , upper lvs lanc lin , Whrls few remote, Stam much exserted, Cor large
18185 Leaves ovate serrate-crenate rounded at base downy beneath, Whorls 6-flowered one-sided, Style bearded

18186 Branches smooth, Leaves coriaceous linear-lanceolate entire glaucous, Flowers 2½ inches long

18187 Lower lip of Corolla trifid twice as long as the tube, Racemes terminal one-sided simple, Pedicels solitary 4-bracted, Leaves unequal-sided

18188 Leaves opposite wrinkled ovate, Flowers racemose large tubular

18189 Scabrous, Leaves opposite unequal ovate elliptic serrated, Peduncles axillary aggregate bifid or dichotomous, Flowers diandrous



and Miscellaneous Particulars.

2858. *Thyrsacánthus* These are splendid stove plants, and should be treated in the manner recommended for *Cyrtanthèra*

2859 *Rhynchoglóssum zeylánicum* is a curious plant of easy culture It requires heat and moisture. Being an annual, the seeds may be raised in a frame

2860 *Pterostegma.* A pretty greenhouse plant, with large purple flowers. It should not be too much exposed to the sunshine It is propagated by cuttings

2861. *Læbigia* is a lovely plant, and requires the same treatment as others of the order *Cyrtandràceæ*

2862. 67*a*. CHONDROSPE'RMUM *Wall* (*Chondros*, a lump; *sperma*, a seed.) *Olèmæ*.
18190 - - smilacifòlium *Wall.* Smilax-lvd ♃ ▭ or 10 jl.au Gsh.Y E. Ind. 1850. C s.l
Chionánthus smilacifòlia Wall. *Ligústrum laurifòlium* Roxb.

70. MORINA
18191 486*a* longifòlia *Wall.* long-leaved ♀ △ or 3 jl. n R India 1839. S s.l.p Bot. reg. 1840, 36
Wallichiàna Royle lil t. 55., Bot. Mag. 4092.

73 PIMELE'A.
18192 494*a* Hendersònii *Grah.* Henderson's ♣ ⌊ or 2 jl Pk K.Geo.S. 1837. C s.p Bot. mag. 3721
18193 - spectábilis *B R.* showy ♣ ⌊ or 3 ap my W.Pk Swan R. 1840. C s.p Bot. reg. 1841, 33
18194 - diosmæfòlia *B.C.* Diosma-leaved ♣ ⌊ or 2 jn Ro N. Holl. 1826 C s.p Bot cab. 1708
18195 - clavàta *Lab* clavate ♣ ⌊ or 3 ap my W N Holl. 1824 C s.p
18196 - cérnua *R. Br.* drooping ♣ ⌊ or 3 jl Y N. Holl 1835 C s p Fl. cab. 2. 113
18197 - crinita *B. R.* hairy ♣ ⌊ or 1 jl W Swan R. 1837 C s.p
18198 - nàna *Grah* dwarf ♣ ⌊ or ½ ap jl W Swan R. 1839. C s.p Bot. mag. 3833
18199 - prostràta *Vahl* prostrate ♣ ⌊ or 1 ap jl W N. Zeal. 1839. C s.p
18200 - decussàta *R Br.* decussate-lvd ♣ ⌊ or 4 ap jl Ro N Holl. 1824 C s p Sweet fl au 8
18201 - Nieppergiàna *Mor.* Niepperg's ♣ ⌊ or 2 ap.jl W Swan R 1846 C s p
18202 - macrocéphala *Hook* large-headed ♣ ⌊ or 3 ap jl Ro Swan R 1848 C s p Bot. mag. 4543
18203 - paludòsa *R. Br* marsh ♣ ⌊ or 2 f ap W N. S. W. 1826 C s p
18204 - Verschaffèltii *Mor.* Verschaffelt's ♣ ⌊ or 2 f ap W N. Holl. 1851 C s p Mor.a.g 3 451 166

2863. 75*a*. LABI'CHEA LABICHEA. (*M Labiche*, a French naval officer.) *Leguminòsæ*.
18205 - diversifòlia *Mets.* diverse-leaved ♣ ⌊ or 6 mr jl Y Swan R. 1842. C s p
18206 - bipunctàta *Paxt.* two-dotted ♣ ⌊ or 3 mr jl Y.Br Swan R. 1840. C s p Px. m. 10 149. ic
18207 - punctàta *Lindl.* dotted ♣ ⌊ or 3 mr.jl Y Swan R. 1848. C s.p

Page 30. CLASS III.—TRIANDRIA. 3 STAMENS.

Order I MONOGYNIA. 3 Stamens. 1 Style.

2864 118*a* *Sonerila*. Calyx trigonal, tridentate, deciduous. Petals 3. Stamens 3. Anthers dehiscing by 2 pores. Ovary 3-celled. Capsule many-seeded.

MONOGYNIA.

78. VALERIA'NA.
18208 555*a* Mikàniæ *Lindl.* Mikan's ♣ ⌊ or 3 jn jl W Guatem. 1847. C lt
18209 - - Nàpus *Lindl* turnip-rooted ⁂ △ or 1 jn.jl W Mexico 1839. R co

88 COMMELI'NA
18210 592*a* grácilis *R & P.* slender ♀ △ or 1 jl B Peru 1830. C l p Bot. mag. 3047
18211 - - cucullàta *L.* hooded ♀ ◯ or ½ jn s B Brazil 1825. S l.p
benghalénsis L ?

96. TRICHONE'MA
18212 645*a* subpalústre *Herb* rather boggy ♂ △ or ½ my.jn Li w Salonica 1840 ? O s.p.l Bot r. 1847, 40 1
18213 - - Pylium *Herb* Pylium ♂ △ or ½ my jn W Y Navarino 1840 ? O s p.l Bot. r. 1847, 40 2
18214 - - edùle *Herb* edible ♂ △ or ½ my.jn P B Socotra 1836. O s p.l

100 TRITO'NIA.
18215 676*a* odoràta *B C* sweet-scented ♂ △ or ½ jn Y C. G. H. 1829. O s p.l Bot. cab. 1820
18216 - - fucàta *Lindl* painted ♂ △ or 1 my R Y C G H 1836. O s p l Bot. r. 1838, 35
18217 - - aúrea *Pappe.* golden-flwd ♂ △ or 2 jl.au O.R Caffraria 1846. O s.p l Bot. mag. 4335

105 GLADI'OLUS
18218 731*a* æquinoxiàlis *Herb.* equinoxial ♂ △ or 1 ap my W R S. Leone 1842. O s.l p Paxt. mag. 11. 27
18219 - - oppositifòlius *Herb* opposite-flwd ♂ △ or 2 ap my P R Madagas 1824. O s.l.p
18220 - - festìvus *Herb* festive ♂ △ or 1½ jl s P R C.G. H. 1844. O s l p



History, Use, Propagation, Culture,

2862. *Chondrospérmum.* This is a rambling evergreen shrub, with ash-coloured separating bark, and large coriaceous 3-nerved leaves, and terminal panicles of small greenish-yellow flowers. The erect position of the ovula seems to indicate its belonging to *Jasmineæ*, but the æstivation of the corolla is valvate. It does very well if trained to a trellis, or for covering a pillar in a stove. It is readily increased by cuttings in the ordinary way.

18190 Scandent, Branches tetragonal, Leaves opposite petiolate oval acuminated 3-nerved glaucous, Panicles terminal and axillary

18191 Leaves sinuated spiny-toothed, Floral leaves Corollas and Rachi villous, Lobes of Calyx cuneate oblong emarginate

[lanceolate linear, Lower part of Tube hispid upper part silky

18192 Involucrum 4-lvd, Lvs ovate glabrous ciliated equal in height to the crowded heads of flowers, Lvs opposite
18193 Lvs linear-obl. glaucous glabrous, Heads round many-flwd, Calyx vill., Lvs of Involuc. ovate-acum. coloured
18194 Involucrum 4-leaved, Leaves oblong decussate glabrous, Tube of Perianth hairy
18195 Lvs lanc. downy beneath, Flws dicecious, Male heads peduncled naked rather pilose, Lvs spatulate linear
18196 Invol. 4-lvd, Lvs ov glabr. about eq. in length to the head, Peri artic above [length of flws, Hds dense
18197 Lvs lin. glabr. above cithd. with white villi beneath as well as stem, upper ones narrower. subverticil imbr.
18198 Lvs alter. rarely opp. lin. spat pilose, Hds terminal many-flwd, Style and Stam. equal in length to the perianth
18199 Lvs oval or oblong obtuse glabrous, Invol 4-lvd, Flowers villous in heads, Segments of Corolla oblong obtuse
18200 Invol. 4-leaved, Leaves broad ovate glabrous, Tube of Perianth hispid, leaves decussate oval coriaceous
18201 Invol. 4-lvd, Lvs roundish obl. shorter than the flws, Perianth villous, lvs obl. glabr tapering to both ends
18202 Glabr. glauc., Lvs opp. subsecund broad lanc., Lvs of Invol. 4-5, Heads many-flwd, segms. of Limb ciliated
18203 Invol 4-lvd, Lvs ov. silky inside half shorter than hds, Tube of Peri silky, lvs lin. longer than internodes
18204 Lvs decus ov. obl. or lanc., tapering to ends hoary powdery, Floral lvs shorter than hds, Flws. very numerous

[branches, Racemes axillary few-flowered, Calyx and Corolla tetramerous

18205 Leaves pinnate, Leaflets lanceolate spiny-mucronate marginate smooth above downy beneath as well as the
18206 Leaves simple narrow oblong some having 2 stiff sharp points others with only one, Racemes short axillary
18207 Lvs simple obl. elliptic mucron. dotted downy beneath, Racemes short axil., Anthers obtuse and b porose

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2865. 156*a*. *Apèra*. Spikelets laterally compressed 1-flowered with a superior rudiment Glumes 2, the upper larger, 3-nerved, about as long as the outer palea. Paleæ unequal, scarious, outer ones dorsally awned. Stigmas nearly sessile. Seed free

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MONOGYNIA.

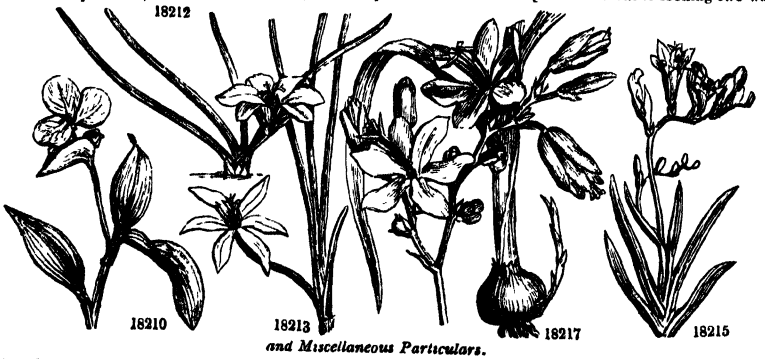
18208 Scandent glabrous, Stem terete, Lvs cordate-triangular acuminated toothed at base, Flws panicled minute
18209 Root large tuberous, Leaves pinnate, Segments linear acute toothed or entire, Flowers capitate or corymbosely panicled, Stamens exserted, Fruit downy

18210 Lvs ovate petiolate glabrous, Involucrum cordate ciliated, Stems creeping, Sheaths ciliated
18211 Lvs petiolate ovate-elliptic downy, Sheaths pilose ciliated, Cilia long brown, Spathes on short peduncles cucullate turbinate, Peduncles twin in the spathes one bearing two hermaphrodite flowers and the other one male flower

18212 Leaves linear sulcate much longer than the scape, Segments of Perianth ovate blue with white bases
18213 Lvs linear sulcate much longer than scapes, Segments of Perianth oval white with yel. bases purplish outside
18214 Corms edible, Leaves slender 8 inches long, Stems 4 inches, Bracts of involucrum equal

18215 Scapes much longer than leaves, Leaves ensiform, Flowers secund [recurved with eq lin segments
18216 Stem simple, Spikes secund, Flws erect, Perianth clav arched bilab., Upper Lip oblong tridental lower 5-parted
18217 Stem branched, Spikes panicled flexuous many-flowered, Segments of Perianth oval, Stamens white length of perianth

18218 Corm middle-sized, Leaves erect glabrous ½ inch broad, Stem about 10-flowered, Bracts 3 inches
18219 Corm large, Lvs broad rather glauc., Stem strong erect many-flwd, Bran 2-3-flwd, Limb of Perianth undul.,
18220 Stem early 10-flwd, Flws crowded secund, Bracts eq to tube [Flws bifarious or looking two ways



and Miscellaneous Particulars.

2863. *Labichea*. The species of this genus are beautiful shrubs when in blossom. A mixture of peat, loam, and sand suits them, and cuttings will root under a hand-glass. It is rather a remarkable Leguminous genus with diandrous flowers.

18221 - - crispifidrus *Herb.* curled-flowd ☿ △ or 2 ap jl B Russia 1842. O s l p
18222 - - caucásicus *Herb.* Caucasian ☿ △ or 3 jl s P w Fefflis 1842. O s l p
18223 - - ramósus *Paxt* branchy ☿ △ or 5 jl Pk C. G. H. 1837. O s l p Paxt mag 6 99

108. XIPHI'DIUM.

18224 735*a* gigantèum *Lindl.* giant ♐ ⍓ or 4 o W Caraccas 1845. O l.p

.14 BRODIÆ'A

18225 752*a* californica *Lindl.* Californian ☿ △ or 2½ jn o Pa B Califor 1848 O s.l p J H S 4. 84
18226 - - grandiflòra *Paxt* great-flowered ☿ △ or 1 jn.o B N W Am 1848. O s l p Px. m. 12. 221. ic

2506. 114*b*. LEUCOCO'RYNE.

18227 - - alliácea *Miers* Garlic-scented ☿ △ or 1 ap my B Chili 1825. O s.p Px. m. 11. 101 ic
Brodiæ'a alliácea Miers

115. IRIS

18228 805*a* styl5sa *Desf* long-styled ☿ △ or 1½ my B Corfu 1844 D co Desf atl 1 40 5
18229 - - setòsa *Pall* bristle-pointed ☿ △ or 1½ my Pa B Siberia 1845 D co Bot reg 1847, 10
18230 - - deflexa *K & W.* deflexed ☿ △ or 1½ jn jl Li Nepal 1833. D co Jl cab 51
18231 - - imbricâta *Lindl.* imbricate-brct ☿ △ or 2 my Lem ... . D co Bot reg. 1845, 3)
18232 - - frâgrans *Lindl.* fragrant ☿ △ or 2 jn jl B.w N. India 1839 D co Bot reg. 1840, 1
18233 - - aúrea *Lindl* golden yellow ☿ △ or 2½ my jl Y N India 1840 D co Bot reg 1847, 59

117 MA'RICA

18234 842*a* grácilis *Herb.* slender ☿ ⍓ or 2 au. P y w Brazil 1830 O l p Bot. mag 3894
18235 - - cœlèstis *Lemaire* blue ☿ ⍓ or 3 au. Li.w b Mexico 1829. O l.p Ann gand 258
Cipùra Northiàna var. *cœléstis* Ann Gand

2508 117*a* SISYRI'NCHIUM.

18236 - - majále *Lk & Otto* showy ♐ ⍓ or 1 f mr Y Chili 1832 O s p Lk & O. ic 10
18237 - - júnceum *K. & W.* rushy ♐ ⍓ or ¾ jn jl Li Chili 1832 O s p Fl cab 95

2864. 118*a*. SONFRI'LA *Benn* SONERILA. (*Scottì-Sonerì-la*, the Khassee name of one species) *Melastomàceæ*
18238 - - stricta *Hook.* upright ♐ ⍓ pr ¾ my Ro Java 1848. S p Bot. mag 4394

DIGYNIA.

139 PA'SPALUM.

18239 928*a* exile *Kipp.* Hungry Rice ⩩ ⍓ ag 1½ jn jl Ap S Leone 1843. S s p l

2865 156*a* APE'RA *Beauv* APERA (*A*, without, *pera*, a sack, glumes) *Graminæ.*
18240 - - interrúpta *Beauv* interrupted ⩩ ○ w 2 jn jl Ap England san fi S co Eng bot 2951
18241 - - aplca vénti *Beauv.* silky ⩩ ○ w 2 jn jl Ap England hea S co Eng bot 951
Agróstis spica vénti L No 990.

180 DA'CTYLIS.

18242 1089*a* cæspitòsa *Forst* Tussock-grass ⩩ △ ap 6 jl s Ap Falk Is. 1844 D co Hk. fl. arct 2 186
Festùca antarctica Spreng. *F. cæspitòsa* R. & P *F flabellàta* Lam.

196 POA.

18243 1179*a* Balfoúrii *Parn* Balfour's ⩩ △ w ½ jl Ap Scotland moun D co Eng bot 2918
18244 - - Parnéllii *Bab* Parnell's ⩩ △ w 1 jl Ap England crev roD co Eng bot 2916

207 LO'LIUM

18245 1249*a* limícola *Sonder* Flax ⩩ ○ w 1 my jl Ap England clt fi D co Eng bot. 2955



History, Use, Propagation, Culture,

2864 *Sonerìla* This is a pretty annual having little of the habit of a Melastomaceous plant, it is more like a *Tremándra* It grows best in peat earth or vegetable mould, with plenty of heat and moisture, not too much exposed to the sun's rays It ripens seed, by which it is propagated.

18239 *Páspalum exile* is a Lilliputian grain which is described by Mr Clarke as being about the size of Mignonette seed, and is stated to be cultivated about some of the villages of Sierra Leone by industrious individuals of the Soosoo, Foulah, Bassa, and Joloff nations, by whom it is called "Hungry Rice." The ground is cleared for its reception by burning down the copse-wood, and hoeing between the roots and stumps. It is sown in the months of May and June, the ground being slightly opened, and again lightly drawn together over the seed with a hoe. In August, when it shoots up, it is carefully weeded, it ripens in September, growing to the height of 1½ foot; and its stems, which are very slender, are then bent to the earth by the mere weight of the grain They are reaped with hooked knives Manure is said to be unnecessary or injurious, the plant delighting in light soils and being raised even on rocky situations When cut down it is tied up in small sheaves and placed in a dry situation within the hut; for, if allowed to remain on the ground or to become wet, the grains become agglutinated to their coverings The grain is trodden out with the feet, and is then parched or dried in the sun, to allow of the more easy removal of the chaff in the process of pounding, which is performed in wooden mortars It is afterwards winnowed with a kind of cane fanner on mats In preparing this delicious grain for food, Mr Clarke states that it is first thrown into boiling water in which it is assiduously stirred for a few minutes. The water is then poured off, and the natives add to it palm oil, butter, or milk; but the Europeans and negroes connected with the colony stew it with fowl, fish, or mutton, adding a small

18221 Corm mid. size, Stem 2 feet slender upds. Fl. about 9 secund bracteate Margin of limb of Per. plic, Caps
18222 Corm large, Stem strong, Flowers above 12 bracteate secund, Capsule wrinkled [turbinate trisulcate
18223 Corm large, Stem strong branched, Flowers bracteate looking one way, Bracts ovate striated, Upper 3 segments of Perianth broad oblong obtuse, lower 3 narrow emarginate

18224 Leaves broad quite entire acute shorter than the many-flowered contracted panicle, Rachis deeply furrowed downy, Branches all simple, Flowers secund white glabrous

18225 Limb of Perianth longer than the subventricose tube, Leaves fleshy channeled
18226 Segments of Perianth oblong-linear, Scales ligulate, Flowers umbellate, Scape slender, Leaves linear channeled, Bulb small

18227 Leaves long linear smooth smelling like garlic when bruised, Peduncles unequal

18228 Beardless, Lvs ensif., Segments of Cor. nearly eq., Tube very long beardless [short trunc cuspid.
18229 Beardless, Lvs ensif shorter than terete-branched stem, Spathes with scar. marg., Outer segs rndsh inner very
18230 Brdless, Lvs longer than scape lin. ac., Out segments of Per rndsh-spat., on lg clws inner shorter than clws of
18231 Bearded, Lvs stiff brd shrtr than scape, Brcts distich foliac imb., Pet obov emarg [outer tru c., Seta term.
18232 Brdl., Lvs nar. ens glauces lngth of my-flwd stem, Ovar fusif linger than brcts, Sep rhom. ent., Pet spat ent
18233 Beardless Leaves ensiform about equal to the many-flowered scaly scape, Scales leafy imbricate, Sepals ovate undulated, Petals lanceolate undulated acute

18234 Spathe leafy, Valves of spathe elongated, Peduncles slender, Flowers middle-sized.
18235 Leaves broad ensiform distich, Scape winged, Outer 3 segments of Perianth larger obovate deflexed white marked with brown transverse veins at base

[back, Spathe many-flwd, Filaments monadelphous, Ovaries glandularly pilose
18236 Scape compressed much shorter than the lvs, Lvs conduplicate linear sheathing striated scabrous on the edges and
18237 Stem simple sulcate l-lvd, Lf hollow, Spathe very long Flws numerous stipitate, Peduncle very long, Filam. connate, Ovaries hairy [beneath, Spikes terminal few-flwd, Rachis and Ovaries beset by glandular hairs
18238 Stem erect tetragonal, Lvs opposite, upper ones 4 in a whorl linear-lanceol. downy 1-nerved serrated purple

DIGYNIA.

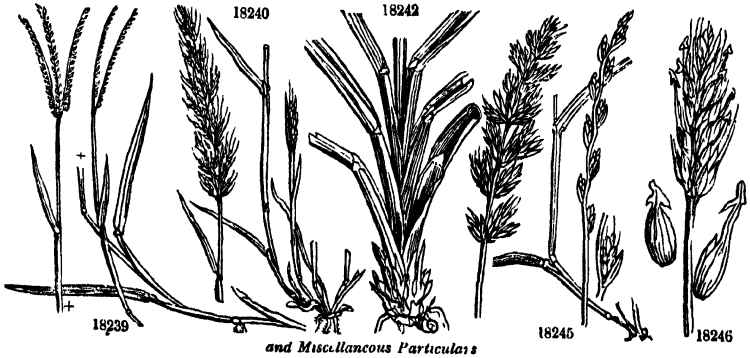
18239 Glabrous filiform, Racemes in threes digitate, Spicules small in two rows pedicellate, Glumes ovate acute equal to the paleæ, Leaves linear with serrulated edges

18240 Panicle elongated close, Anthers oval
18241 Panicle whorled spreading, Beard long

18242 Panicle coarctate imbricated on all sides by spikelets

18243 Panicle erect rather spreading, Spikelets ovate of 3 or 4 ribbed florets, Outer Paleæ with 5 nerves
18244 Panicle erect large rather close, Spikelets ovate of 2 or 3 acute florets, Outer Paleæ with 5 nerves

18245 Spikelets longer than the glume, Flowers elliptic, Roots annual destitute of sterile shoots



and Miscellaneous Particulars

piece of salt pork for the sake of flavour, and the dish thus prepared is stated to resemble kous-kous. The grain is also made into pudding with the usual condiments, and eaten either hot or cold with milk The Scotch residents sometimes dress it as milk porridge Mr Clarke is of opinion that if the Fundi or Fundungi grain were raised for exportation to Europe it might prove a valuable addition to the list of light farinaceous articles of food in use among the delicate and convalescent The plant much resembles *Digitaria*, and is called Fundi, Fundungi, or Hungry Rice

2865 *Apèra* is a genus of rather pretty grasses Being annual the seeds only require to be sown in the open ground

18242 *Dactylis cæspitosa* is the famous Tussock grass of the Falkland Islands. It is also abundant in Terra del Fuego, Straits of Magellan, Cape Horn, &c. Commerson discovered it first in the Straits of Magellan in 1767 It will thrive in pure sand near the sea, where it has the benefit of an atmosphere loaded with moisture, of soil enriched by decaying seaweed, and of manure which is in the Falkland Islands composed of guano. It is a gregarious grass, extending in patches sometimes for nearly a mile, but is seldom seen beyond the influence of the sea air in the places of its natural growth It will, however, thrive far from the sea. When cultivated, Governor Moody of the Falkland Islands says, he knows of no grass likely to yield so great an amount of nourishment as the Tussock grass when thoroughly established. He recommends it not to be grazed, but cut and reaped in bundles, for if cut it quickly shoots again, but it is much injured by grazing, for all animals, especially pigs, tear it up to get at the sweet nutty flavoured roots. The Tussock has been used abundantly when made into hay, being preferred by cattle even to its green state. Plants of the Tussock grass six feet high were exhibited in the Crystal Palace in 1851, by Peter Lawson and Sons, raised from seed by them in the Orkney Islands.

210. HO'RDEUM.

18246	1271*a* cœléste *Bw.*	naked	♣	O	ap	4	jn jl	Ap	.....	...	S	co		
	var. trifurcàtum *Ser* Nepal		♣	O	ap	4	jn.jl	Ap	Himala.	1835.	S	co	Ser. in ann. soc. agr. Lyon 4 5	
	H. humalayénse Kth. *H. ægiceras* Royle.													

Page 76. CLASS IV.—TETRANDRIA. 4 STAMENS.

Order 1. MONOGYNIA. 4 Stamens. 1 Style.

2866 237*a*. *Adenánthos* Perianth quadrifid Hypogynous scales adnate to the base of the persistent perianth Style longer than the perianth. Stigma vertical Nut ventricose. Involucrum 1-flowered, imbricate, 4—8-leaved
2867 248*a* *Hemiclidia* Perianth quadrifid Anthers enclosed by concave laminæ. Scales 4 Ovary 1-celled, biovulate. Pericarp crustaceous, bearded on all sides, opening at top. Seed only one coming to maturity, ventricose, wingless. Common receptacle flat. Involucrum imbricated.

MONOGYNIA.

229. PETRO'PHILA

18247	1307*a* acicularis *R Br*	acicular-leaved	♣	or	4	jy au	Pk w	N. Holl.	1830	S	s l	Bot. mag. 3469
18248 -	- heterophýlla *B. R.*	various-leaved	♣	or	3	my y	...	Swan R.	1840	S	s l	
18249 -	- brevifòlia *B. R.*	short-leaved	♣	or	3	my au	...	Swan R.	1840	S	s l	
18250 -	- canéscens *Cun*	canescent	♣	or	1	.	W	N. Holl.	1830	S	s.l	
18251 -	- biloba *R. Br*	two-lobed-lvd	♣	or	1	...	...	Swan R.	...	S	s.l	

230 ISOPO'GON

18252	1312*a* sphærocéphalus *Lindl*	round-hd	♣	or	4	mr.my	Y	Swan R.	1845	C	s.l.p	Bot. mag 4332
18253 -	- scàber *Lindl*	rough-leaved	♣	or	3	ap	Pk	Swan R.	1842	C	s l p	Bot mag 3450
18254 -	- róseus *Lindl.*	rose-cld-flwd	♣	or	3	ap	R	Swan R	1840	C	s l p	Bot mag. 4037

231. PRO'TEA

18255	1344*a* longifòra *Lk.*	long-flowered	♣	or	6	...	W	C G.H.	1849	C	s.l p	Lk. & Otto, t 22

2510 237*a* CONOSPE'RMUM

18256	1682*a* tenuifòlium *R Br*	fine-leaved	♣	or	3	jy.au	W	N Holl.	1824	S	s p l	
18257 -	- cærùleum *R Br*	blue-flowered	♣	or	3	jy au	Bl	N Holl	1830	S	s p l	
18258 -	- triplinervium *R Br*	triple-nerved	♣	or	3	jy au	Bl	N. Holl	1830	S	s p l	

2866. 237*a*. ADENA'NTHOS *R Br* ADENANTHOS. (*Aden*, a gland, *anthos*, a flower) *Protèaceæ*

18259 -	- obovàta *R Br.*	obovate-leaved	♣	or	...	...	...	N Holl	1824	S	s l p	Lab n hol 1 37
18260 -	- cuneàta *R. Br.*	cuneate-leaved	♣	or	...	...	...	N Holl	1824	S	s.l p	Lab n hol 1 36
18261 -	- terminàlis *R Br*	terminal-flwd	♣	or	..	...	...	N Holl.	1824	S	s l p	
18262 -	- barbigera *R Br*	beard-bearing	♣	or	...	...	...	Swan R	1845	S	s l p	

238. PERSOO'NIA

18263	1407*a* mòllis *R Br*	soft	♣	or	3	my au	Y	N.S W	1848	C	s l p	
18264 -	- spatulàta *R Br.*	spatulate	♣	or	3	my au	Y	N S W	1824	C	s l p	
18265 -	- myrtilloides *Sieb.*	Myrtillus-like	♣	or	3	my au	Y	N S W	1837	C	s l p	
18266 -	- ellíptica *R Br* *Laurèola* Lindl	elliptic-leaved	♣	or	3	my.au	Y	Swan R	1840	C	s l p	
18267 -	- Fràseri *R Br*	Fraser's	♣	or	3	my au	Y	Swan R	1840	C	s l p	
18268 -	- macrostàchya *R Br*	large-spiked	♣	or	3	my.au	Y	Swan R.	1840	C	s l p	
18269 -	- longifòlia *R Br* *Drummóndi* Lindl	long-leaved	♣	or	3	my.au	Y	Swan R	1840	C	s l p	

2512. 238*a*. ANADE'NIA

18270 -	- Manglèsii *Grah* *Grevillea glabràta* Meisn	Mangles's	♣	or	3	ap jy	Y	Swan R	1836	C	s p	Hook icon 347
		Manglèsia glabràta B. R										
18271 -	- Aquifolium *B R*	Holly-leaved	♣	or	3	...	Y	Swan R	1836	C	s p	
18272 -	- flexuòsa *B R*	flexuous	♣	or	2	...	...	Swan R.	...	C	s.p	



History, Use, Propagation, Culture

18246 *Hórdeum cæléste* var. *trifurcàtum*, the Nepal Barley. The paleæ are occasionally different 3-lobed, the lateral lobes descending, the awns often present the rudiment of a second flower Mr Janson, F L S, grew the plant at Stoke Newington in 1837 and following years. It ripened earlier than our common grains, and produced, from the ripened seeds of the first crop, a second crop which also ripened within the same summer. Mr. Janson was the first who made the discovery that the plant belonged to *Hórdeum* instead of *Triticum*, to which till then it was always supposed to belong. The *Hórdeum cæléste* is the naked or wheat barley.

18246 Florets hermaphrodite, Seeds decorticate
Spike straight cylind , Outer Palea trifurcate white and petaloid during florescence, sometimes the 2 lateral points are short and incomplete

2868 252*a*. *Anthúrium* Spathe short, deflexed. Spadix nearly sessile, cylindrical, densely beset with flowers Sepals 4. Stamens 4, opposite the sepals Filaments flattened. Anthers 2-celled. Berry 2-celled, 2—4-seeded. Stigma sessile, oblong.

2869 280*a* *Ophíthe* Corolla rotate, 4—5-parted, each segment furnished with 2 distinct or combined nectariferous naked pores, or glands, at base. Seeds angular, scabrous Stamens 4—5. Capsule 1-celled, 2-valved, margins of valves placentiferous.

2870 296*a* *Campylobóthrys*. Calyx 5-cleft, segments with 2—3 glands Corolla 4-parted, segments unequal. Stamens inserted in the throat of corolla, exserted. Ovary tetragonal, fleshy, 2-celled, with an epigynous, fleshy, lid-formed disk, many-seeded.

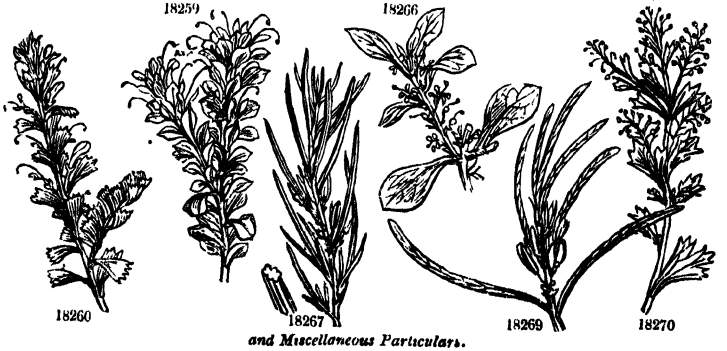
MONOGYNIA.

18247 Lvs filiform obsoletely sulcate, Scales of Strobile nerved ovate [Perianth silky tomen., Stigma glabr.
18248 Bran glabr , Lvs long lin obt. apic striated on both sides simp. or 2—3-parted , Strob ov. axil., Scales ov. shin ,
18249 Bran glabr , Lvs terete not sulc. spiny at top, Strobile term. ov sess , Scales glabr , Perianth tomen., Upper
18250 Lvs bitripinnatifid filif. silky sulcate above, Strobile ov sess , Scales ovate silky [joint of Stigma bearded
18251 Lvs flat ternate, Leaflets bifid, Lobes ovate mucronate, Strobiles axillary, Scales silky
[glabr., Lobes villous, Stigma articulated glabr.
18252 Bran tomentose, Lvs nar -lanc downy mucronate, Strob nearly globose, Scales ovate-acuminate villous, Calyx
18253 Dwny, Lvs lin chan. scabr subbiter , Seg ent or trif muc , Strob. spher , Scls ov. imb , Stig elon., Up jnt hairy
18254 Bran toment , Lvs glabr on long petioles 3-parted, Leaflets cuneated, lateral ones 3—4-cleft, middle one broader 5-cleft, Strobiles ovate sessile tomentose, Calyx glabr. elongated villous at top

18255 Bran elongated reddish villous while young, I vs oblong sessile subcordate at base ciliated with wool, upper ones silky, Involucrum turbinate, Style glabrous
[Perianth downy exceeding the tube
18256 Lvs linear-filiform a little channeled veinless, Ped elongated scape-formed, Corymb nearly simple, Limb of
18257 Lvs oblong flat veiny, Ped elongated scape-formed, Corymbs compound, Limb of Per glabr. exceeding tube
18258 Lvs lingulate-oblong tapering to the base flat 3-nerved veiny glabrous, Pan. pedunculate formed of alternate spikes, Rachis and bracteas woolly

18259 Lvs obovate entire glabrous
18260 Lvs cuneate silky dentately crenate
18261 Lvs filiform trifid, lateral segments bifid, middle one undivided, Flowers terminal
18262 Pilose, Lvs oblong-lanceolate obtuse triple-nerved, Flws axillary solitary pedunculate, Involucre spreading villous, Perianth pilose bearded at top

18263 Lvs lanceolate villous soft beneath, Perianth bearded, Ovarium 2-seeded glabrous
18264 Lvs lanceolate-spatulate mucronate concave scabrous on both sides with crystalline dots
18265 Lvs elliptic-lanceolate mucronate flat nearly veinless, Branchlets silky, Perianths awned downy
18266 Glabrous, Lvs broad-ovate obtuse veiny narrowed at base, Perianths mutic downy, Style of Ovary not articulated, Stigma dilated [down as well as branches
18267 Lvs filiform bisulcate beneath, adult ones glabrous, Peduncles axillary solitary cinereous from short spreading
18268 Bran. tom , Lvs filiform furrowed beneath, floral ones short, Flws solitary axil., Per. tom , Ped pilose, Ov glabr.
18269 Bran downy, Lvs falcate linear-lanc. elongated, Ovaries narrow at base glandular, Flws solitary, Ped and Per. tomentose, Anth linear, Stipe of Ovary articulated
[gent, Rac. stalked simple
18270 Quite smooth, Lvs cuneate tapering into the short pet flat 3-nerved semi-trifid, Lobes undivided or 2—3-cleft pun-
[the lvs Rach and Per glabrous
18271 Bran ang silky, Lvs obl spin. tthd cuneate at base quite ent. silky and reticulated flat above, Rac shorter than
18272 Lvs bipinnatif. glab , Ract flex. wngd, Lbs decur trian elon., Per. glab., Rac. dense-stalked my-flwd, Per. glab.



and Miscellaneous Particulars.

231. *Proteàceæ* In the Botanical Magazine there are some valuable remarks on the culture of *Proteàceæ*, by Mr John Smith, practised for many years at the Royal Botanic Gardens at Kew, which we here extract. "Within the last twenty or thirty years the cultivation of *Proteàceæ* has declined, the species have gradually disappeared from most of the private collections around London, and but few nurserymen now take an interest in them. This change may be partly owing to the supposed difficulties of preserving them , for, under certain circumstances, the plants suddenly die, even when in a vigorous state of health. In the Royal Botanic Gardens at Kew, *Proteàceæ* have maintained their

18273 -	- grácilis *B R*	slender		or	2	...	...	Swan R	...	C	s.p			
18274 -	- tenuiflòra *B R.*	thin-flowered		or	2	..	...	Swan R	..	C	s.p			
	239 GREVI'LLEA.													
18275	1412*a*. agrifòlia *Cun.*	Holly-leaved		or	2	...	...	N Holl.	1820.	C	s l p			
18276 -	- gibbòsa *R Br*	gouty-capsuled		or	2	...	.	N Holl.	1821.	C	s l p			
18277 -	- bipinnatifida *R. Br.*	bipinnatifid-lvd		or	3	...	...	Swan R.	1837.	C	s.l p			
18278 -	- ferruginea *Sieb*	rusty		or	3	...	...	N S W.	1837.	C	s.l.p	Botanist, 153		
18279 -	- Thelemanniàna *Hug*	Thelemann's		or	2	..	C	Swan R.	1838.	C	s.l p			
18280 -	- ceratophýlla *R Br*	horn-leaved		or	2	...	...	N Holl	1839.	C	s l p			
18281 -	- longifòlia *B R*	long-leaved		or	3	...	R Y	N.S W.	1836	C	s.l p			
18282 -	- brachyántha *B R.*	short-flowered		or	3	...	P	Swan R.	1845.	C	s l p			
18283 -	- eriostáchya *B. R.*	woolly-spiked		or	3	...	O	Swan R.	1845	C	s l p			
18284 -	- acanthifòlia *Cun.*	acanthus-lvd		or	4	jn au	W	N S W	1823.	C	s l p	Hook. ex fl 216		
18285 -	- Baùeri *R. Br.*	Bauer's		or	3	my.au	Bh	N.S W	1823.	C	s l p			
18286 -	- rosmarinifòlia *Cun.* *ripària* Sieb.	Rosemary-lvd		or	3	my.au	Li	N S.W	1824.	C	s.l p	Sweet fl au 30		
18287 -	- trinérvis *R. Br.*	three-nerved		or	3	jn au	...	N. Holl	1845.	C	s l p			
18288 -	- éxul *Lindl*	exile		or	4	jn.au	R	N. Caled.	1850.	C	s l p			
18289 -	- lavandulàcea *Schl.*	Lavender-like		or	3	jn jl	R	Swan R.	1850.	C	s l p	Moore m. 3 257 ic		
18290 -	- ròsea *Lindl.*	rosy-flowered		or	3	my jl	R	S. Austr.	1850.	C	s l p	Pax fl gar 2 6		
	240 HA'KEA.													
18291	1440*a* ferruginea *Cun*	rusty-barked		or	6	my jl	Pa Y	N Holl	1825	C	s l.p	Bot mag 3421		
18292 -	arborèscens	arborescent		or	...	...	.	N Holl.	1820	C	s l p			
18293 -	- cristàta *R Br*	crested		or	...	...	...	Swan R	1837.	C	s l p			
18294 -	- denticulàta *R Br.*	denticulated		or	...	...	...	N Holl.	1830	C	s l p.			
18295 -	- laùrina *R Br.*	Laurel-like		or	...	...	W	N Holl.	1830	C	s l p			
18296 -	- Bàxteri *R Br*	Baxter's		or	...	my o	W	N Holl	1830	C	s l p			
18297 -	- undulàta *B R.*	waved-leaved		or	..	...	W	Swan R	1837	C	s l p			
18298 -	- triförmis *B R.*	three-formed		or	...	...	...	Swan R	1840	C	s l p			
18299 -	- tuberculàta *R. Br*	tubercled		or	...	...	W	N Holl	1830	C	s l p			
18300 -	- glabélla *B R*	smoothish		or	...	...	R Y	Swan R.	1830	C	s l p			
18 01 -	- cucullàta *R Br.*	cucullate-lvd		or	...	...	R Y	Swan R.	1824.	C	s l p	Bot mag. 4528		
18302 -	- Drummóndi *Don* *Victòriæ* Hort not of Drum	Drummond's		or	10	...	Y w	Swan R.	1846.	C	s.l.p			
18303 -	- Victòriæ *Drum*	Q Victoria's		or		...	W	Swan R	1846.	C	s l.p			
18304 -	- conchifòlia *Hook.*	shell-leaved*		or	10	...	W	Swan R	1845	C	s l p	Hook ic 432		
18305 -	- pilulifera *B R*	pill-bearing		or	...	...	W	Swan R	1848.	C	s l p			
18306 -	- cyclocárpa *B. R*	round-fruited		or	...	...	W	Swan R.	1848.	C	s.l p			
18307 -	- míxta *B R*	mixed		or	...	...	W	Swan R	1840.	C	s l.p			
18308 -	- myrtoides *Meisn.*	Myrtle-like		or	...		Pu.W	Swan R.	1849	C	s l p	Bot mag 4643		
18309 -	- scopària *Meisn*	Broom		or	...	...	Y	Swan R	1849.	C	s.l p	Bot mag 4641		
18310 -	- ruscifòlia *Lab*	Ruscus leaved		or	...	...	W	N. Holl	1824.	C	s.l p	Lab n hol 1. 30		
	241 STENOCA'RPUS													
18311	1441*a* Fórsteri *R Br.* *Embóthrium umbellàtum* Forst	Forster's		or	4	...	W	N Caled.	1850.	C	s.l.p	Forst gen. 16 8		
18312 -	- Cunninghàmii *R Br* *Agnóstus sinuàta* Cun	Cunningh 's		or	20	..	O s	Moret. B.	1830.	C	s l.p	Bot. mag 4263		
	242 LAMBE'RTIA.													
18313	1442*a* echinàta *R Br*	echinated		or	..	...	W	N. Holl.	1824.	C	s l.p			
18314 -	- propínqua *R Br.*	allied		or	.	...	W	N. Holl.	1830.	C	s.l p			
18315 -	- multiflòra *B. R*	many-flowered		or	...	..	W	Swan R.	...	C	s.l p			
	245. LOMA'LIA.													
18316	1446*a* tinctòria *R. Br.* *Embóthrium tinctòrium* Lab 1 42-43	dyer's		or	.	jn.au	St	V Di. L.	1822.	C	s l p	Bot mag 4110		
18317 -	- ferruginea *R Br.*	rusty		or	...	jn au	Go O	Chloe	1850	C	s l.p	Cav icon 1 35		
18318 -	- ilicifòlia *R. Br.*	Holly-leaved		or	.	jn.au	Str	N Holl.	1824.	C	s l p	Bot mag 4023		
18319 -	- dentàta *R. Br.*	toothed-leaved		or	...	jn.au	Str	Chili	1824.	C	s.l p	Fl. per. 1 94*a*		
	247 BA'NKSIA.													
18320	1474*a* ilicifòlia *R. Br.*	Holly-leaved		or	...	...	S	N. Holl.	1824	C	l.p			
18321 -	- Menzièsii *R. Br.*	Menzies's		or	...	...	Y	Swan R.	1837.	C	l.p			



History, Use, Propagation, Culture,

place, more especially those that are natives of Australia; and as there are some at this time between forty and fifty years of age, and others of a large size half that age, it may be inferred that *Proteàceæ* are not so short-lived in a state of cultivation as they are generally supposed. Within our recollection it was the common practice to grow them in some kind of light soil, usually peat The hygrometrical condition of such soil is easily affected by changes of the surrounding atmosphere, becoming quickly dry during hot weather, and apt to become sodden with moisture in winter, and the spongioles or rootlets of *Proteàceæ* are very sensitive to either extremes, the use of light soil, therefore,

18273 Brn. slen ang., Lvs marg tripar. or pin decur rather pil ben Seg nar pin. trid., Rac pub. length of lvs, Per. glab.
18274 Villous, Lvs pinnate, Seg cuneate tripartite, Lobes triangular pung. Rac. axil. shorter than lvs, Per pubescent, Style pubescent
[late nutant, Peri glabr. outside bearded inside, Pist glabr.
18275 Lvs cuneate obovate angular beyond the middle and spiny-toothed, adult ones smoothish, Rac axil. peduncu-
18276 Lvs long linear quite entire downy 1-nerved veiny, Rac. elongated, Stig conical, Follicles gibbously thickened
18277 Lvs bipinnatifid flat reticulated marginate, adult ones nearly glab., Seg mucronate, Stem diffuse, Spikes elong.
18278 Lvs obl. obt muc adult ones scab above clthd with gysh tom. beneath, Rac few-flwd, Per. beaked beak exceed-
18279 Lvs trifidly bipin, Seg. lin bisulc beneath submucro when young pubes, Rac dense [ing lamina
18280 Lvs 2—3-cleft or undivided nerved beneath silky, Segments long linear, Follicles oval quite glabrous
18281 Lvs lanc lin elon coarsely ser in mid glabr above veiny, Rac. erect, Per and Ovar silky, Stig. dilated convex
18282 Glauc, Bran silky, Lvs coria. retic stiff marg obl sin ang or pinnatif. spin., Rac term. cylin, Bracts cucul. cil.
18283 Bran. tom., Lvs lin. very long stri downy bisulc beneath. Spks term elon. secund woolly, Style glabr., Stig dilat.
18284 Lvs pinnatifid glabrous with refracted edges, Seg mostly 2-3-cleft, Lbs spinescent, Rac. dense erect, Ov. vil.
18285 Leaves oblong obtuse mucronulate glabrous, Racemes short, Pistils hairy, Perianths and Peduncles glabrous
18286 Leaves linear subulate mucronate with revolute margins convex above silky beneath, Racemes recurved pedun-
culate, Perianths glabrous [Perianth silky
18287 Leaves subulate-lanceolate mucronate pungent divaricate glab 3-nerved with refracted margins silky beneath,
18288 Leaves obl ret. glauc tom ben 3-nrvd, Rac 1-sided silky tom. panicl, Pist glauc, Stipe long, Stig comc
18289 Hoary all over, Lvs lin obl acutish mucr revolute edges finally scabr from dots above hoary ben. Rac. term.
18290 Leaves linear lanceolate with revolute edges pungent silky beneath, Fascicles terminal few-flowered, Calyx silky shorter than the smooth style, Ovaria stipitate villous

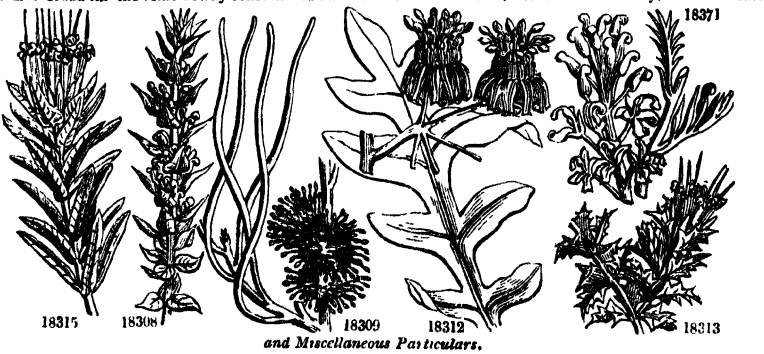
18291 Branches covered with brown tomentum slender drooping, Lvs ov.-obl mucr. downy, Fasc. axillary sessile
18292 Leaves quite ent. ling or lin. mut, Umb naked, Ped Pedic and Per tomen, Caps spurless, Scales brown cil.
18293 Lvs cuneate obovate spinosely toothed glabrous as well as branches, Capsule bicristate, Crests deeply toothed
18294 Leaves obovate oblong obtuse denticulated cordate and stem-clasping at the base, Branches angular
18295 Leaves quite entire elliptic-lanceolate mutic marginate, Capsule spurless smooth
18296 Leaves flabellate cuneate rounded and many-toothed, adult ones glabrous, Capsule spurless gibbous
18297 Leaves obovate 3-nerved undulate spinosely toothed, Capsule ventricose spurless
18298 Quite glabrous, Leaves cord stem-clasp spiny-tthd sometimes roundish somet obl or obov Caps cucu depr.
18299 Lower Lvs cun tthd beyd mid up. pinnatif Seg subul Corym term. Per smooth, Caps bicalc. Valves tuberc.
18300 Lvs cun quite ent. or trident teeth spinesc. cord stem-clasp at base quite smooth, Per smooth, Caps. spurl.
18301 Leaves quite entire cucullate reniformly cordate acuti h, Capsule spurless sessile mucronate glaucous
18302 Lvs obl. glauc ses spiny-tooth 6-8 in long, Bract. of diff colours or variег, Stems and buds velvety
[celed fascicled rising from a woolly axis, Style smooth, Fruit spurless
18303 Bran. and Involucre tom, Lvs roundish cord. emarginately 2-lobed spiny repandly-tthd marg, Flws axil pedi-
18304 Bran vill, Lvs sess reniform cord cucul. ac glabr glauc with repandly-tthd spy marg., Flws axil fascic
18305 Bran silky, Lvs tom. ben with revol. marg lower obl upper ter Heads many axil Per and Styles hairy
18306 Branches glabrous, Leaves oblong-lanceolate obtuse quite entire or lobed, Calyx silky, Follicles compressed
18307 Bran. filif stiff glabr, Lvs glabr. some obl obt petiol conc others terete, Calyx villous, Foll. ov compressed
18308 Lvs ses ov or suborb pung marg sm, Fasc axil ses, Cal glab, Style long, Stig term., Caps. spurless sm.
18309 Bran puberul, Lvs long filif some terete 5-fur, Fur vil, Heads ses involucre, Per glabr, Stigma cylindrical
18310 Leaves elliptic or obovate petiolate entire spiny mucronate scabrous from dots above tomentose beneath, Branches hairy, Capsule spurless dotted scabrous

18311 Leaves oblong obtuse nerveless

18312 Leaves ample obovate lanceolate entire sinuated or pinnatifid, Umbels compound, Flowers silky orange

18313 Involucre 7-flwd, Styles glabr, Fol. 2-horned echin, Lvs cuneate-lin below dilated and lobed at top, Lbs. mucr.
18314 Involucre 7-flwd in lvs equal in length to per, Style glab, Fol 2-hd ech, Lvs lin obl obt ent tom trid glab flat
18315 Involucre many-flowered about half the length of the flowers, Leaves linear mucronate, glabrous with flat margin

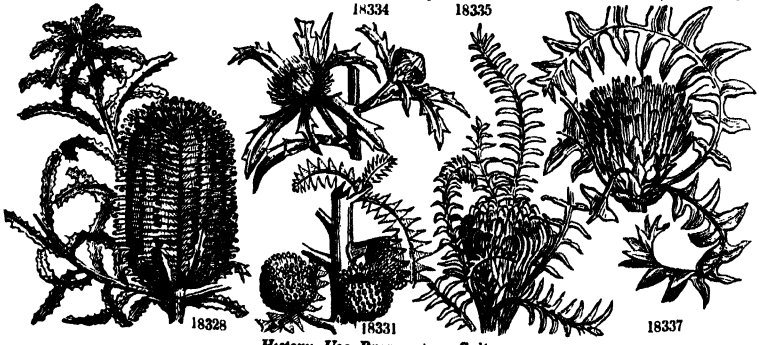
18316 Lvs pinnatifid or bipinnatifid rarely undivided, Segments linear bluntish mucronate, Racemes elongated glabrous undivided
18317 Lvs beautifully ferruginous bipinnatifid, Segments ovate or lanc, Racemes terminal shorter than the leaves
18318 Lvs oblong-ovate acute spinosely toothed quite glabrous, Racemes terminal elongated
18319 Lvs oval toothed glabrous, Racemes lateral short, Calyx pilose, Ovarium tomentose
[tomentose
18320 Lvs cun deeply serrated, on young plants deeply pinnatifid elongated, Veins glabrous and between the veins
18321 Lvs broad lin the veins downy beneath and toment between the veins, Perianth decid. silky, Follicles toment.



and Miscellaneous Particulars.

In our opinion, accounts for the frequent sudden death of plants of this kind. We use good yellow loam, to which, for small plants, we add a little sharp sand In shifting or repotting a plant we make it a rule to keep the ball of roots a little elevated above the surface of the new mould, to prevent any superabundance of water from lodging round the base of the stem. In the winter, care must be taken to give no more water than is absolutely required to keep the soil moderately moist; but, in summer, water may be freely given in the evening or morning It is important that the plants should be so placed that the sun's rays do not strike the sides of the pot. The *Proteaceæ* do not readily propa-

18322 -	- brównii *Bart.*	Brown's		or	...	my	jn	...	N. Holl.	1830.	C	l.p		
18323 -	- Goódii *R. Br.*	Good's		or	...	...		...	N. Holl.	1830.	C	l.p		
18324 -	- Báxteri *R. Br.*	Baxter's		or	...	...		...	N. Holl.	1830.	C	l.p		
18325 -	- Solándri *R Br.*	Solander's		or	...	...		S	N. Holl.	1830.	C	l.p		
18326 -	- Baúeri *R Br.*	Bauer's		or	...	...		...	N. Holl.	1830.	C	l.p		
18327 -	- Caléyi *R. Br.*	Caley's		or	...	...		...	N. Holl.	1830.	C	l p		
18328 -	- Cunninghámii *Sieb.* *littoràlis* var	Cunningham's		or		my	au	Str	N. Holl.	1822.	C	l p		Bot. mag 3060
	Lindl. Bot. Reg. 1363.		*ledifòlia* Cun											
18329 -	- cómpar *R. Br*	related		or	20	ap	jn	Str	N. Holl.	1824.	C	l.p		
18330 -	- prostráta *R. Br.*	prostrate		or	...	...		O	N. Holl.	1824.	C	l.p		
18331 -	- dryandroides *Bart.*	Dryandra-like		or	...	...		Str	N. Holl.	1824.	C	l.p		Swt. fl austr 56
18332 -	- média *R. Br.*	middle		or	...	...		St	N. Holl.	1824.	C	l p		Bot. mag 3120
	248. DRYA'NDRA.													
18333	1483*a* nóbilis *Lindl* *runcinàta* Meisn.	noble		or	...	...		Y	Swan R.	1840	C	s.p.l		
18334 -	- carduácea *R Br.*	Thistle-like		or	2	ap	my	Y	Swan R.	1840.	C	s p l		Bot. mag 4317
18335 -	- arctotides *R. Br.*	Arctotis-like		or	2	...		Y	N. Holl	1830.	C	s.p l		Bot. mag 4083
18336 -	- Fráseri *R. Br*	Fraser's		or	...	...		Y	Swan R.	1840.	C	s p l		
18337 -	- nervósa *R. Br.*	nerve-leaved		or	1½	ap	jn	Y	Swan R	1823.	C	s p l		Swt. fl au 22
18338 -	- senecifòlia *Cun*	Senecio-leaved		or	...	...		Y	N. Holl	1840.	C	s.p l		
18339 -	- folioláta *R. Br.*	leafleted		or	...	...		Y	N Holl.	1830.	C	s p l		
18340 -	- calophýlla *R Br*	beautiful-lvd		or	...	...		Y	N Holl	1830	C	s p.l		
18341 -	- bipinnatífida *R. Br*	bipinnatifid		or	..	...		Y	Swan R	1840	C	s p l		
18342 -	- stupósa *B R*	heavy		or	.	...		Y	Swan R.	1840	C	s p l		
18343 -	- proteoides *B R.*	Protea-like		or	...	...		Y	Swan R.	1840	C	s p l		
18344 -	- favósa *B. R.*	favose		or	...	...		Y	Swan R	1840.	C	s p l		
18345 -	- prærnórsa *Meisn.*	bitten-leaved		or	...	...		Y	Swan R	1848.	C	s p l		
18346 -	- pteridifòlia *R. Br.*,	Pteris-leaved		or	1	mr	d	Y	N. Holl	1824.	C	s p.l		
	β *blechnifòlia* Hook. *blechnifòlia* R. Br.	*Blechnum-lvd*		or	1	mr	d	Y	N Holl.	1824.	C	s.p l		Bot. mag 3500
2867	248*a* HEMICLI'DIA *R Br.*	HEMICLIDIA	(*Hemisus*, half, *klino*, to shut up)							*Proteàceæ*				
18347 -	- Báxteri *R. Br* *Dryándra falcàta* R Br	Baxter's		or	3		jn	Y	Lucky B. ...		C	l.p		Bot reg 1455
2868	252*a* ANTHU'RIUM	(*Anthos*, flower, *oura*, tail; floriferous spadix)								*Orchidàceæ.*				
18348 -	- Harrísii *Endl*	Harris's		cu	3	my	jl	G Br	Brazil	1824.	Sk	p l		Bot cab 1301
18349 -	- grácile *G. Don* *Pòthos grácilis* Rudge Guian 33	slender		cu	¾	my	jl	G	Trinidad	1825.	Sk	p l		Bot. reg 1635
18350 -	- microphýllum	small-leaved		cu	½	s	o	P	Brazil	1829	Sk	p l		Bot. mag 293
18351 -	- amœnum *Kth*	beautiful		cu	¾	s	o	Br	Caraccas	1828	Sk	p l		
18352 -	- glaucéscens *Kth.* *Pòthos glauca* Schott	glaucous	*Pòthos reflexa* Hoffman	cu	1	s	o	Br	Mexico	1829	Sk	p l		
18353 -	- longifòlium *Lk. & Ott*	long-leaved		cu	1	s	o	Br	Mexico	1829.	Sk	p l		
	259 ELÆA'GNUS.													
18354	1534*a* parvifòlia *Wall.*	small-leaved		or	15		jn	W	Kamaon	1842.	C	p.l		Bot.reg 1844, 51
	261. HOUSTO'NIA.													
18355	1542*a* longifòlia *Gært* *angustifòlia* Mx	long-leaved		or	½		au	S	N. Amer.	1828.	S	s.p		Bot mag 3099
	266 GA'LIUM.													
18356	1620*a* Vaillántii *Dec* *G Aparine* var *Vaillántii* Lois	Vaillant's		w	2	my	au	W	England	cor.fl	S	co		Eng. bot. 2911
	272 CALLICA'RPA													
18357	1671*a* longifòlia *Jam* *japónica* Thunb	long-leaved		or	6	jl	au	Pk	Japan	1850.	C	p l		Px. g 2. 165
	274 ÆGI'PHILA													
18358	1676*a* grandiflòra *Hook.*	large-flowered		or	3	n	d	Y	Havana	1843.	C	l p		Bot. mag 4250
	279. BU'DDLEA													
18359	1722*a* connàta *R & P*	connate-leaved		or	6	my		Or	Peru	1826	C	l p		Bot mag 2873
18360	1724*a* heterophýlla *B R*	variable-leaved		or	6	my		Y	S Amer	1826.	C	l p		Bot reg 1259



History, Use, Propagation, Culture,

gate from cuttings, but may be more readily increased by grafting on any of the more free-growing species. Imported seeds germinate freely" (*Bot Mag* for 1850, no 4528.)

Before the introduction and high state of cultivation of the splendid flowering plants now annually exhibited in the vicinity of London, it was customary to estimate the value of public and private collections by the number and rarity of the species, without regard to the circumstances of their producing fine flowers. Perhaps no tribe of plants were in higher repute than those belonging to *Proteàceæ*, as is amply shown by the early volumes of the Bot. Mag.

18322 Lvs lin. pinnatif., Segs lin approx. falcate hoary beneath veinless, Aments cylind., Per. silky, Style uncin.
18323 Lvs ob. sinuately tooth. tom. beneath, Stem short, Ament hidden by lvs, Bracts subul. vill., Lam. of Per. vill.
18324 Lvs pinnatifidly trun., Lbs triang. acute toment beneath, Bran. vil., Aments glob., Per. and Styles vil.
18325 Lvs cuneate pinnatifid hoary beneath, Perianth with silky claws and glabrous acute laminæ, Stigma capitate
18326 Lvs linear cuneated elong serrate toothed, Veins smooth and between toment, Perianths silky marcescent
18327 Lvs lin trun. serr. tthd, Veins glabr lacun. toment, Perian. mutic sunthsh, Stig. ang, Fol. immersed
18328 Leaves linear spinosely toothed or entire hoary and veinless beneath, Bracts of Ament tomentose, Branches and Involucrum pilose
18329 Lvs scattered ligul. oblong obtuse white and veinless beneath, Branches and Bracts toment., Perianth silky
18330 Lvs elong pinnat., Lobes quite ent, Stems prostr. toment., Ament leafless, Lam of Per. smooth
18331 Lvs lin pinnat., Lobes triang toment. beneath nerveless, Aments ov., Per. silky, Style glabr., Stig. cap.
18332 Lvs cun lin trunc. ser. tapering to base retic ben., Veins glabr., Lacunæ tomen, Per. mutic, Claws silky, Lamina glabr., Coll smoothish [Stig sulc., Per bearded at apex
18333 Lvs long lin clothed with cin toment ben., Lobes triang. mucr 3-5 nerved, Involucre woolly with lin. ser. leaflets, [bricate, leaflets the inner ones ciliated at top, Perian silky, Stigma small obtuse
18334 Lvs lanc. remotely and spinosely tthd or pinnatif white from toment beneath, Involucre glabr with closely im-
18335 Lvs lin pinnatif clothed with white toment ben., Lobes lin, Scales of Involucre scar nearly glabr, Per. vill.
18336 Lvs lin pinnatif. toment ben, Lobes lin. subul. fak, Scales of Involucre lin subul downy, Lam of Per. smooth
18337 Lvs pinnat, Lobes semilanc, Stem erect humble, Lam of Perian. short awned loosely pencilled at top, Scales
18338 Lvs white ben lin quite ent below middle pinnatif above, Lobes distant lin, Scales of Involucre lin. subul. vill.
18339 Lvs long lin pinnatif trunc mucron, Lobes triang white ben, Involucre often appendiculated, Per. villous
18340 Lvs pinnatif, Lobes semiov lanc nerved, Stem short prostr shorter than lvs scaly below leafy at top
18341 Lvs longer than scaly stem bipinnatif beyond mid., Segs lin mucr with revol. edges, pil. above toment. ben.
18342 Bran. vill Lvs long lin semip white ben veiny, Lobes triang mucr with revol edges, Involucre toment.
18343 Lvs pinnatif nitid, adult glabr floral vill, Lobes triang flat pung. toment ben., Bran toment., Calyx glabr.
18344 Lvs long lin semipinnatif white ben, Veins naked, Lobes triang mucr with revol edges, Involucre downy
18345 Lvs cun obov sinuately toothed trunc white and toment. ben, Teeth triang pung., Bracts toment
18346 Lvs pinnatifid longer than the toment stem, Lobes lin acute mucron with revol marg. dil at base, Scales of Lobes manifestly 3-nerved, Stem humble simple, Florifcrous Bran prostrate [Involucre ov. toment

18347 Erect-bran, Lvs pinnatif, Lbs mucr pung veined ben., Lacunæ filled with curled wool terminal solitary

18348 Caulescent, Leaves radical on long petioles lanceolate-acute, Peduncles long, Spathe reflexed
18349 Almost steml, Lvs cun-lan acumi nar at base marg., Veins obsol, Petioles slender, Peduncles filif, Spadix slender few-flowered [cylindrical length of spathe
18350 Stemless, Leaves ovate acute costate, Petioles about the length of the leaves, Thickened at top, Spadix short
18351 Leaves oblong acuminated rounded at base on long petioles, Spathe ovate-oblong acuminate
18352 Stemless, Leaves on long petioles lanceolate-acute mucronate glaucescent above green beneath, Spadix on a long peduncle erect cylindrical, Spathe lanceolate-oblong acuminate, Spadix slender
18353 Nearly steml, Lvs pet. lin. lanc mucr. rounded at base glab., Pedunc. elong, Spathe lin-lan acum reflexed

18354 Lvs obl. pet. green above dotted beneath, Flowers rising from the short branchlets longer than the petioles

18355 Stem erect, Branches tetragonal downy at joints, Leaves linear-oblong radical ones tapering at base and ciliated, Stipules broad-ovate entire or bi-tridentate, Stamens enclosed

18356 Leaves 6-8 in whorl linear-lanceolate with reflexed marginal prickles, Stems rough from reflexed prickles, Peduncles axillary many-flowered cymose, Fruit bristly

18357 Covered with glandular dots and stellate down, Leaves lanceolate oblong membranous acuminated serrate, Cymes many-flowered, Stamens exserted

18358 Glabrous, Leaves verticillate oblong entire subcordate at base, Flowers terminal corymbose, Calyx 5-toothed, Corolla 5-lobed downy, Berry compressed blue [term. pedunc. globose
18359 Clothed with white tom, Branches tetragonal, Leaves lanc connate crenate acute scabrous green above, Heads
18360 Bran woolly, Lvs woolly ben lower cord obl upper ov-lanc nearly entire, Rac term. Panic. thyrsoid



and Miscellaneous Particulars.

2867. *Hemiclidia* This genus is nearly allied to *Dryándra* and is cultivated like other Australian Proteaceous plants

2868. *Anthùrrum* is separated from the old genus *Pòthos* by Schotte and Endlicher, and perhaps rightly so The American species of *Pòthos* mostly belong to this genus. The type of the genus *Pòthos*, according to these botanists, is the *Pòthos scándens* of Linnæus (Bot. reg. 1837). The species require the same treatment as that recommended for the stove species of *Pòthos* or *Arum*.

18361 -	- Lindleyàna *For.*	Lindley's	▣ ▭	or	6	jn jl	V1	China	1844.	C	l.p	Bot. reg. 1846 4	
18362 -	- madagascariénsis *Lam.*	Madagasc.	▣ ▭	or	1	jn jl	Cr	Madagas	1824.	C	l.p	Bot. mag. 2824	

280. E'XACUM.

18363	1728*a* tetragònum *Roxb.*	tetragonal	◯	or	1	jn jl	P	E Indies	1846.	S	p.l	
	β bicolor B.M	*two-coloured*	◯	or	1	jn jl	Pa. Pu	Concan	1846.	S	p l	Bot. mag. 4202
18364 -	- zeylánicum *Roxb*	Ceylon	◯	or	1	jn jl	B	Ceylon	1847.	S	p.l	Bot mag. 4423
	Chirònia trinérvis Lin.											

2869 280*a*. OPHE'LIA *D Don.* OPHELIA (*Ophèlia*, service, medicinal) *Gentiàncæ.*

18365 -	- corymbòsa *Griseb*	corymbose	◯	pr	1	my au	B	E. Indies	1836.	S	p l	Bot. mag 4489
18366 -	- purpurascens *D Don*	purplish	◯	pr	1	my au	W P	Nepal	1846.	S	p.l	

287 BOUVA'RDIA.

	1740*a* triphýlla											
	β splèndens Grah.	*splendid*	▣ ▭	or	3	au.s	S	Mexico	1838	C	s.l p	Bot. mag 3781
	γ angustifòlia Paxt.	*narrow-leaved*	▣ ▭	or	3	ap.n	S	Mexico	1835.	C	s l p	Px m 7 100 ic
18367 -	- longiflòra *H. & B.*	long-flowered	▣ ▭	or	2	ap n	S	Mexico	1845.	C	s l p	Bot mag. 4223
18368 -	- flàva *Don*	yellow-flwd	▣ ▭	or	1½	mr	Y	Mexico	1845.	C	s.l p	Bot.reg. 1846, 32
18369 -	- strigòsa *Benth*	strigose	▣ ▭	or	3	ja.au	Y R	Mexico	1845.	C	s l p	
18370 -	- Cavanillèsii *Dec.*	Cavanilles's	▣ ▭	or	1½	my o	S Y	Mexico	1845.	C	s.l p	J H S 3 245 fig
18371 -	- leiántha *Benth*	smooth-flwd	▣ ▭	or	2	jl n	S	Mexico	1850.	C	s.l.p	Moor.m 3 97 ic

288 IXO'RA.

18372	1752*a* javánica *Dec.*	Java	▣ ▭	or	4	jl	Or.ve	Java	1845.	C	p l	Bot mag 4586
18373 -	- salicifòlia *Dec.*	Willow-leaved	▣ ▭	or	4	jl	Or	Borneo	1847.	C	p l	Bot mag 4523
18374 -	- Griffíthii *Hook*	Griffith's	▣ ▭	or	4	jl	Or Y	Singapr.	1845	C	p l	Bot mag. 4335
18375 -	- lanceolària *Colebr*	lance-leaved	▣ ▭	or	6	ap my	Gsh W	E. Indies	1847.	C	p l	Bot mag 4399
18376 -	- laxiflòra *Smith*	loose-flowered	▣ ▭	or	4	ap jl	W.pk	S Leone	1845.	C	p l	Bot. mag 4482
18377 -	- subséssilis *Wall.*	sessile-flwd	▣ ▭	or	4	jn jl	W	E Indies	1828	C	p l	
18378 -	- odoràta *Hook.*	sweet-scented	▣ ▭	or	3	jl au	W R	Madagas	1844.	C	p.l	Bot mag 4191
	Pavétta grácilis Dec											

290. PAVE'TTA

18379	1755*a* cáffra *Thunb*	Caffrarian	▣	or	4	au	W	C G H	1823.	C	p l	Bot. mag 3580

296. MANE'TTIA.

18380	1762*a* bicolor *Pœpp.*	two-coloured	⚥ ▭	or	4	f mr	C Y	Brazil	1842	C	s p l	Px.m. 10. 27 ic
18381 -	- uniflòra *H B & K*	one-flowered	⚥ ▭	or	4	s d	Ro	S Marth	1844	C	s p l	

2870. 296*a* CAMPYLOBO'THRYS *Hook.* (*Campyle*, a curve, *bothrys*, a raceme; curved racemes) *Rubiàceæ*

18382 -	- discolor *Hook*	two-colour-lvd	▣ ▭	or	1½	jn jl	R	Brazil	1850	C	p lf m	Bot. mag 4530

297 EPIME'DIUM.

18383	1763*a* pinnàtum *Fisch.*	pinnate-leaved	⚸ △	or	½	mr	Y	Persia	1848	D	lt l	Bot mag 4476
18384 -	- Musschiànum *M. & D.*	Mussch's	⚸ △	cu	1	my jl	W	Japan	1838	D	co	Bot mag 3745

304 ZIE'RIA.

18385	1777*a* lævigàta *Paxt*	smooth	▣ ▭	or	1	my jl	Pk w	N Holl.	1840.	C	s l p	Px m 9. 77 ic
18386 -	- macrophýlla *Bonpl.*	long-leaved	▣ ▭	or	16	my jl	W	V D L	1845	C	s l p	Bot. mag 4451
18387 -	- octándra *Swt.*	octandrous	▣ ▭	or	10	ap jl	G	N. Holl.	1818.	C	s l.p	

DIGYNIA.

305 CI'SSUS

18388	1782*a* marmòrea *Hort.*	marbled-leaved	▣ ▭	or	...	...	G	Java	1852.	C	s.p l	

2515. 306*a*. BENTHA'MIA.

18389	16840*a* japónica *Siebold*	Japan	▣	or	...	...	...	Japan	1847.	C	l p	Sieb &Z. 1 38 11
	Córnus gràndis Schlech.											

TETRAGYNIA.

315. I'LEX.

18390	1832*a* paraguénsis *Lamb*	Paraguay Tea	⚸ ▭	ec	30	...	W	Paraguay	...	C	p.l	Bot. mag. 3994
18391 -	- Gongónha *S Hil*	Gongonha	⚸ ▭	ec	30	...	W	Brazil	...	C	p.l	



History, Use, Propagation, Culture,

2869. *Ophèlia.* The species are pretty plants with the habit of *Chirònia*. The seed should be sown in pots filled with peat soil The seeds should not be covered by earth, but pressed by the finger. Moisture is requisite, being naturally bog plants.

2870. *Campylobòthrys.* This is a very pretty plant, thrives well in a mixture of peat and leaf-mould, and is readily increased by cuttings in the same kind of soil under a hand glass.

18390. The leaves of *I'lex paraguénsis* (the Paraguay Tea) are used in Paraguay, La Plata, Chili, Peru, and Quito, at all hours of the day, by putting a handful in a kind of teapot called *mate*, and from the spout of this the hot liquor

18361 Glabrous, Branches tetragonal, Leaves ovate subserrate, Racemes terminal tomentose verticillately spicate
18362 Branches subtetragonal downy, Leaves ovate lanceolate petiolate glabrous above wrinkled covered with rusty or white tomentum beneath, Racemes terminal, Peduncles few-flowered [4 ovate acuminate
18363 Stem tetragonal, Lvs stem-clasping ovate-oblong acuminate 5-nerved, Calyx 4-parted 4-winged, Cor. segments
β Leaves nearly ovate, Segments of Corolla white purple at top.
18364 Stem tetragonal, Leaves sessile elliptic-oblong 3-nerved, Calyx 5-parted with semicordate oval wings, Segments of Corolla 5 obovate, Stamens exserted

[flowered, Corolla 4-parted
18365 Stem tetragonal, Branches fastigiate, Leaves spatulate elliptic 3-nerved, lower ones large, Cymes fastigiate few-
18366 Stem terete, Leaves lanceolate-acuminate 3-nerved scabrous ciliated, Cor. 5-cleft, Filaments monadelphous

β All parts of plant more pilose than the species, Corollas larger and deeper scarlet
γ Leaves very narrow [Calycine segm. foliaceous
18367 Glabrous, Bran. subtetragonal, Lvs ovate-acuminate entire, Stipules broad ciliated, Flws corymbose, Ped. leafy,
18368 Lvs ovate lanc ciliated, Stipules setac, Racms 3-5-flwd, Pedicels downy studr, Flws drpg, Segs of Cal acum.
18369 Lvs 3 in a whorl or rameal ones opp ov-acute scabr, Segs of Cal lanc-lin. falac, Cor strig with obov. segs
18370 Lvs ovate, Stipules tridentate, Segments of Corolla acute spreading, Flower terminal corymbose
18371 Lvs ternate ovate-acuminate slightly hairy above downy-villous beneath, Corymbs subtrichot., Cor. glabrous

18372 Lvs ovate-oblong glabrous, Stipules cuspidate connate at base, Corymb trichotomous, Peduncles long
18373 Lvs long lanceolate glabrous, Corymbs ample dense, Tube of Corolla long slender, Stamens short
18374 Lvs ovate oblong reticulated glabrous, Stipules short broad acuminated, Cymes large dense compound
18375 Lvs lanceolate acuminate glabrous, Corymbs trichotomous, Segments of Corolla and Calyx linear
18376 Lvs oblong lanc tapering at base, Stipules ovate, Panicle corymb ample loose-flwd, Tube of Cor. very slender
18377 Lvs oblong tapering to both ends glab, Corymbs almost sessile, Stipules subulate at top, Lobes of Cor acute
18378 Lvs large elliptic coriaceous shining, Stipules broad-ovate, Panicle terminal ample trichotomous, Tube of Corolla long

18379 Lvs obovate nearly sessile glabrous, Stipules connate, Flowers corymbose

[base with a spreading rather reflexed limb
18380 Lvs nearly sessile lanceolate slightly glaucous, Calycine segments 4-8 reflexed, Corolla hairy, tube swollen at
18381 Branches terete, Lvs ovate, Peduncles 2-leaved 1-flowered, Corolla 4-cleft, Filaments villous, Style smooth

[red, Racemes circinate secund
18382 Humble, Branches terete downy, Leaves opposite a little hairy shining above, Petioles branches and peduncles

[Racemes radical many-flwd, Nectaries cuculiate
18383 Hairy, Lvs ternate or biternate, Lflts on long petioles, adult ones glabrous cordate-ovate ciliately serrated,
18384 Lvs ternate, Petals exceeding the calyx, Style filiform subcentral, Stigma a little lobed

18385 Smooth, Leaflets 3 linear-lanceolate revolute acute, Peduncles bi-trichotomous, Corolla reflexed
18386 Branchlets downy, Leaflets 3 lanceolate, Panicles trichotomous, Petals obovate dotted downy
18387 Smooth, Leaflets 3 obovate thickish, Peduncles axillary corymbose

DIGYNIA.

18388 Lvs serrated purple beneath and beautifully marbled with green and white above silky

18389 Lvs ovate-elliptic acuminated quite entire covered by hairs which are fixed by their centres, Limb of Calyx truncate entire

TETRAGYNIA.

[8-furrowed 4-seeded
18390 Lvs obov-oblong bluntish remotely serrated, Pedun axillary cymose, Flws tetrandrous, Stigma 4-lobed, Fruit
18391 Lvs ellip. mucron spinj-tthd rounded at base, Spks usually twin-bran. downy, Flws pentand, Stigma entire



and Miscellaneous Particulars.

is imbibed Some mix sugar with it, others add a few drops of lemon juice; and by pouring fresh boiling water the infusion may be renewed The Creoles are very fond of it, and never travel without a supply. They drink the infusion at every meal, and never eat until they have taken some of it. It must be drunk directly, for if suffered to remain long the liquor would become as black as ink The pipe of the mate or teapot, called bombilla, is perforated with holes at the top to prevent swallowing the pulverised herb The whole party is supplied by handing the mate and pipe from one to another, filling up the vessel with hot water as fast as it is drunk out. The repugnance of Europeans to drink after all sorts of people, in a country where diseases are so common, has occasioned the intro-

18392 -	- latifòlia *Thunb.*	broad-leaved	♀	or	20	...	W	Japan	1840.	G	co	
18393 -	- cornùta *Lindl.*	horned-leaved	♀	or	20	...	W	China	1848	G	co	Px. fl. g. 1. 43. 27
18394 -	- microcárpa *Lindl.*	small-fruited	♀	or	20	...	W	China	1848.	G	co	Px fl g. 1. 43. 28
18395 -	- leptacántha *Lindl*	slender-spined	♂	or	10	...	W	China	1848.	G	co	Px.fl g 3. 75.268
18396 -	- dipyrèna *Wall.* *Cunninghàmi* and *Dentòni* Hort	two seeded	♂	or	12	...	W	N. India	1840.	G	co	
18397 -	- serràta *Thunb.*	serrate-leaved	♂	or	...	...	W	Japan	1840.	G	co	
18398 -	- Macoucoúa *Pers.* *acuminàta* W. *Macoucoúa guianénsis* Aubl	Macoucoua	♀ □	or	40	...	W	Trinidad	1840.	C	p.l	Aubl. gui. 1. 34

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duction of small glass tubes with which each person is sometimes provided. The leaves when green taste something like mallow leaves, they are roasted and dried, and almost pulverised, before they are packed. There are three kinds of it in its prepared state, although produced by the same plant, which go under the names of *Caa-cuys*, *Caa-mini*, and *Caa-quaxu*, the first is the buds of the leaves when hardly expanded, the second is the leaves stripped of the ribs before roasting, and the third is roasted without any preparation. The people boast of the innumerable qualities that this herb possesses It is certainly aperient and diuretic, but the other qualities attributed to it are rather doubtful. Like opium it produces some singular effects; it gives sleep to the restless and spirit to the torpid. The

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Page 108. CLASS V.—PENTANDRIA. 5 STAMENS.

Order 1. MONOGYNIA. 5 Stamens. 1 Style.

2871. 324*a*. *Plumbaginélla* Calyx 5-parted, 5-ribbed, 5 crested, beset with stipitate glands, small, but large in the fruit-bearing state Segments 1—2-toothed. Corolla tubular, 5-lobed, shorter than the calyx, cuspidate. Style filiform Stigmas 5, filiform. Utriculus oblong, calyptriform at top

2872. 325*a*. *Valoràda* Calyx glumaceous, of 5-linear 3-nerved segments Corolla salver-shaped, 5-parted Stamens 5, hypogynous, free. Anthers linear, bifid at base. Style filiform. Stigmas 5. Utriculus subcoriaceous, 5-valved below and calyptriform at top. Seeds fusiform, somewhat 5-ribbed.

2873 330*a* *Amsinckia*. Calyx 5-parted. Segments linear gibbous. Corolla funnel-shaped Segments of limb roundish Throat naked. Stamens enclosed. Nuts 4, gibbous outside, conniving at top, wrinkled outside.

2874 340*a* *Macromèria* Calyx 5-parted Corolla 5-cleft, funnel-shaped Lobes acute Throat naked Anthers linear-oblong, incumbent Style a small prunose dot Ovaria 4, combined

2875 345*a* *Arnèbia* Calyx 5-parted. Corolla funnel-shaped. Tube long. Throat naked Lobes rounded Anthers enclosed Style bifid. Stigmas 2 round Nuts 4, truncate

2876. 368*a* *Gemóstoma* Calyx small, 5-lobed Corolla funnel-shaped, 5-parted· Throat bearded. Stigma didymous Capsule oblong. Valves 2, woody, with inflexed margins Seeds many, angular, wingless

2877 370*a*. *Cyanánthus* Calyx campanulate, 5-cleft Corolla funnel-shaped, with an ample tube and a 5-cleft limb Stamens enclosed Anthers connivent Style simple. Stigma 5-cleft. Capsule oblong-conical, 5-celled, 5-valved Valves carinately horned Seeds many, oblong-linear

2878. 371*a* *Cánlua*. Calyx tubular, 5-toothed, often cleft on both sides Corolla funnel-shaped· Tube long Lobes of limb obcordate, convolute in æstivation Stamens inserted near the base of the tube. Cells of Capsule many-seeded. Seeds compressed, girded with a membranous wing

2879 377*a* *Desfontainea* Calyx 4—5-parted, nearly equal Corolla tubular, 4—5-lobed Lobes roundish, retuse Stamens 4—5. Anthers erect, 2-celled Berry 1-celled, many seeded, with 4—5 parietal placentas. Seeds angular

2880 377*b* *Juanulloa* Calyx large, inflated, 5-parted Corolla tubular gibbous under the throat. Limb small, 5-lobed Stamens villous at base. Berry ovate, 2-celled, many-seeded, girded by the large calyx Seeds reniform

2881 378*a*. *Lvánthus*. Calyx pentagonal, 5-winged, 5-parted Corolla 5-parted, funnel-shaped. Stamens unequal Stigma capitate or umbrella-shaped, glandular disk none Capsule 2-celled.

2882 380*a* *Whitleya* Calyx campanulate, unequally 5-lobed Corolla campanulate. Stamens straight. Berry 2-celled, enclosed in an inflated calyx, operculate.

2883 381*a*. *Physochlaina* Calyx ventricose. Corolla campanulate, regular Stamens inclinate. Capsule hidden by the inflated calyx, operculate.

2884. 384*a*. *Jacquemóntia*. Sepals 5 Corolla campanulate. Stigmas 2, ovate, flattened. Ovarium 2-celled Cells biovulate

2885. 384*b*. *Exogònium*. Sepals 5. Corolla tubular. Stamens exserted Stigma capitate, 2-lobed Ovarium 2-celled Cells biovulate.

2886. 384*c* *Batàtas*. Sepals 5. Corolla campanulate Stamens enclosed. Stigma capitate, 2-lobed. Ovarium 4-celled Cells 1-seeded. Capsule 4-celled, seldom 3-celled

2887 385*a*. *Rivea*. Sepals 5 Corolla funnel-shaped. Stigma capitate, 2-lobed Ovarium 4-celled, 4-ovulate Capsule baccate

2888. 385*b*. *Mina*. Calyx short, naked. Corolla salver-shaped. Tube short, contracted at the base. Limb ventricose Stigma capitate. Stamens unequal, exserted. Ovarium 4-celled. Cells 1-seeded.

2889. 385*c* *Calbòa*. Sepals 5, furnished with a subulate process on the back of each Corolla with a curved cylindrical tube and a campanulate 5-lobed limb. Stamens declinate.

2890 395*d* *Cyathòdes*. Calyx with many bracts. Corolla funnel-shaped, without any hairs or glands· Limb spreading. Stamens enclosed. Ovarium 5—10-celled. Drupe baccate.

2891. 401*a*. *Cystánthe*. Calyx foliaceous. Corolla closed, hood-formed, dehiscing transversely, with a truncate persistent base. Stamens hypogynous, persistent. Hypogynous scales 5.

2892. 411*a* *Alýxia*. Corolla salver-shaped. Throat naked. Stamens enclosed. Stigma obtuse, usually pencilled Drupes 2, solitary by abortion.

2893. 413*a* *Aganósma* Corolla funnel-shaped. Hypogynous scales long, combined Stigma conical, mucronate

2894. 413*b* *Mandevilla* Calyx 5-leaved, furnished with a pectinated ring inside. Corolla funnel-shaped Throat naked Filaments enclosed. Anthers conniving into a cone around the stigma Stigma conical, having 5 pits or hollows at the side, with a 5-lobed campanulate base, and a bicuspidate apex. Hypogynous ring 5-lobed, fleshy Lobes truncate.

2895. 413*c*. *Roupéllia*. Calyx 5-parted, with a circle of about 12 glands at the base. Corolla funnel-shaped Throat crowned by 10 combined ligulæ. Stamens enclosed. Style dilated at top into a 5-furrowed mass, to which the anthers adhere Nectary wanting.

2896. 413*d* *Dipladènia* Calyx 5-parted: Lobes with 1-2 glands at the base of each. Corolla funnel-shaped, hispid about the origin of the stamens. Anthers sessile. Glands 2, alternating with the ovaria. Stigma globular, with a reflexed membrane at bottom

2897. 413*e*. *Rhynchospérmum*. Calyx 5-cleft, or 5-parted, with many glands inside the tube; glands truncate Corolla 5-cleft; Tube cylindrical. Lobes oblique-obovate Anthers hastate, adhering to the middle of the stigma Nectary cup-shaped, 5-cleft. Stigma oblong. Follicles elongated, many-seeded.

2898. 414*a*. *Parsónsia*. Calyx 5-parted Corolla funnel-shaped, 5-parted. Throat naked. Stamens exserted Anthers sagittate, cohering by their middle to the dilated stigma. Hypogynous scales 5. Follicles 2, distinct or combined

18392 Lvs ovate bluntish serr. shining above, Pedicels aggreg longer than petioles rising above axils of leaves
18393 Lvs obl. coriac. marginate trun spinose on adult plants 3-horned entire, Umbels axil. sessile, Berries 4-seeded
18394 Lvs oval quite entire acute at both ends glabr, Umbels pedunculate shorter than the petioles, Fruit 4-seeded
18395 Lvs oval-oblong acuminated spiny-toothed
18396 Lvs elliptic-oblong mucronate remotely spiny-serrated, Flws sessile in axillary fascicles, Fruit 2-seeded

18397 Lvs ovate acute ciliately serrated, Pedicels axillary solitary 1-flowered drooping
18398 Lvs oval or ovate coriaceous smooth quite entire, Peduncles numerous cymose axillary

and Miscellaneous Particulars.

leaves are called in Paraguay *Yerva-mate*, and by the French *Herbe du Paraguai* The *Ilex Gongônha*, the leaves of which afford a kind of tea called Gongonha in Brazil, and which by some is considered identical with that of Paraguay, grows in the provinces of Minas Geraes and St. Paul, and when the export of tea from Paraguay was prohibited by Dr Francia the dictator, the inhabitants of the other states, who were formerly supplied from Paraguay, were obliged to use that from Brazil, which was found to be much inferior Persons ignorant of the specific distinctions between the two trees have attributed the inferiority of the Brazil kind merely to the different mode of preparing the leaves.

2899 414*b*. *Lyónsia* Calyx 5-cleft Corolla funnel-shaped Limb 5-parted Segments equal-sided: Throat naked Stamens exserted. Anthers sagittate, cohering by their middle to the stigma Style dilated at apex. Stigma concave Hypogynous scales connate Capsule cylindrical, 2-celled, dissepiment free

2900 418*a*. *Adènium* Calyx 5-parted Lobes lanceolate, glandular Corolla downy with a cylindrical tube, widened upwards, and a 5-parted limb Stamens short. Anthers linear-sagittate, cohering to the stigma, terminated by a hair-like seta Hypogynous glands none Ovaria 2, globose Stigma capitate, bidentate

2901 431*a* *Lacepèdia* Calyx 5-parted. Petals short, unguiculate Ovarium 3-celled Cells 8-ovulate. Style triquetrate, at length tripartite Berry tricuspidate, 6—9-seeded

2902 434*b* *Ulùcus* Flowers membranous Exterior Calyx open, joined, 2-parted Inner one of 5-segments or sepals, equal, awned. Stamens enclosed, joined at base into a fleshy urceolus. Ovarium ovate. Style short, thickened towards the apex. Fruit ovoid, hid by the unchanged calyx

2903 435*a*. *Labìsia* Calyx small, 5-toothed Corolla coriaceous, 5-parted Segments induplicately valvate in æstivation, reflexed and apiculated at apex Style subulate Drupe pea-formed, 1-seeded

2904 435*b* *Coryneràtipus* Calyx of 5 concave sepals Corolla of 5 rounded petals, alternating with as many petal-like scales, which are furnished with a gland inside at base Stamens rising from the claws of the petals. Stigma obtuse. Drupe club-shaped, containing a single 1-seeded nut

2905. 437*a* *Fagræ'a*. Calyx 5-parted Corolla funnel-shaped Limb 5—6-parted Stamens 5—6, inserted in the mouth of the tube Style filiform Stigma orbicular Berry 2—6-celled, many-seeded Seeds angular

2906 445*a* *Habrothámnus* Calyx campanulate, 5-toothed Corolla clavately tubular Limb 5-toothed. Stamens enclosed Stigma capitate, obsoletely 2-lobed Berry girded by the calyx, 2-celled Seeds few, angular.

2907 445*b*. *Isochìlma* Calyx tubular, a little inflated, 5-toothed Corolla tubular, 5-toothed Stamens enclosed. Style clavately capitate, bifid Ovarium 2-celled Berry enclosed in the calyx. Seeds numerous, compressed, orbicular or reniform

2908 446*a*. *Hebeclàdus* Calyx 5-parted Corolla funnel-shaped, 5-lobed, usually with teeth between the lobes. Stigma clavately capitate, a little 2-lobed Berry globose, small Seeds compressed, reniform

2909 450*a* *Chænéstes* Calyx tubular, unequally 5-toothed, at length cleft laterally. Corolla tubular, 5-lobed, with floccose edges and with small teeth between the lobes Stamens nearly enclosed Stigma clavate, 2-lobed Berry 2-celled, obovate, enclosed in the cleft calyx Seeds many, wrinkled, reniform

2910 460*a* *Rogiera*. This genus differs principally from *Rondeletia* by the absence of the prominent ring in the throat of the corolla

2911 460*b*. *Péntas* Calyx 5-cleft, sometimes with 1 or 2 teeth in the sinuses Corolla with an elongated tube, and a campanulate throat, which is bearded inside Limb spreading, 5-cleft. Stamens short Epigynous disk thick. Style filiform, 2-lobed Capsule nearly globose, many-seeded.

2912 460*c* *Hindsia*. Calyx turbinate Limb 4—5-cleft. Segments unequal, foliaceous at top Corolla funnel-shaped, with an elongated tube, and a 5-cleft-limb Anthers sessile at top of tube Ovarium 2-celled. Branches of Style linear, papillose Capsule corticate, 2-valved

2913 460*d* *Hugginsia* Limb of calyx 4—5-toothed Corolla salver-shaped, 4—5-parted Throat naked. Stamens inserted in the middle of the tube, enclosed Stigmas 2. Berry oblong, subtetragonal, many-seeded

2914 460*e* *Imènia*. Calyx turbinate, 5-ribbed Limb 5-cleft Corolla salver-shaped, with a very long slender tube, and a 5-parted spreading limb. Anthers sessile, linear. Style bifid at top Capsule 2-celled. Seeds numerous, angular

2915 463*a* *Adenóphora* Calyx 5-cleft. Corolla campanulate, 5-lobed Stamens free. Nectary girding the base of the style Style pilose Stigmas 3 Capsule 3-celled.

2916. 463*b*. *Platycòdon* Calyx and Corolla 5-lobed. Stamens and Stigmas 5 Capsule 5-celled.

2917. 463*c*. *Glossocòma* Calyx 5-lobed, foliaceous, reflexed. Corolla campanulate, 5-lobed. Stigmas 3, ovate. Capsule 3-celled.

2918. 464*a* *Isolòma* Calyx 5-parted, nearly equal. Corolla salver-shaped or funnel-shaped, nearly equal. Segments nearly equal. Stamens combined into a tube. Anthers cohering, beardless, two lower ones mucronate. Stigma capitate Capsule 2-celled, many-seeded

2919 464*b* *Centropògon*. Calyx 5-parted, with a globose tube Corolla with an incurved tube, and a 5-cleft limb upper Segments larger, falcate; lower ones spreading. Two lower Anthers generally ending in an ovate, triangular, cartilaginous, solitary gland. Annulus fleshy, between the limb and the calyx. Berry globose, 2-celled

2920 477*a*. *Weigèla*. Calyx pentagonal, adnate to the ovarium, 5-lobed. Lobes lanceolate. Corolla funnel-shaped. Throat wide Lobes ovate, roundish. Stamens adnate to the corolla. Style a little exserted. Stigma peltately capitate Ovarium 2-celled, many-seeded

2921 485*a* *Rhodóstoma* Calyx tribracteate, 5-cleft. Segments recurved. Corolla funnel-shaped. Tube long Limb 5-lobed; Segments lanceolate, mucronate by reflexed plicæ Stamens short, inserted at top of tube. Ovarium 2-celled Ovula solitary in the cells Style simple. Stigmas 2, linear.

2922 486*a* *Sherbournia*. Lobes of calyx foliaceous, cuneate Corolla fleshy, funnel-shaped: Tube narrow at base, hairy inside at base. Stamens short, inserted above the middle of the tube. Ovarium crowned by a large disk or hemispherical gland. Stigma clavate.

2923 486*b* *Hinsia*. Lobes of calyx foliaceous, oblong Corolla salver-shaped, hairy, with 5 undulated lobes. Throat hairy. Anthers sessile Style filiform Stigmas 2, linear. Fruit globose, 2-celled, many-seeded. Seeds wingless, nestling on the superficies of the placentas

2924 507*a*. *Cùltha*. Calyx flat, 5-lobed. Petals 5. Capsule 3—4-sided, 3—4-celled. Cells 1-seeded. Stigma 3-parted.

2925 515*a* *Sóllya* Calyx small, 5-parted, the hind segment the largest. Petals 5, ovate, nearly equal, campanulately spreading Stamens erect. Anthers cohering at top Ovarium terete, 2-celled, many-ovulate. Style short, erect, continuous with the ovarium Stigma obsoletely 2-lobed. Berry fusiform, dry, many-seeded.

2926. 515*b*. *Prondya.* Calyx 5-leaved: Leaves acuminate, equal. Petals 5, obovate, equal, campanulately conniving, subrevolute at apex. Stamens erect. Ovarium terete, 2-celled, many-ovulate. Style short, terete, articulated with the ovarium. Stigma acute. Berry cylindrical, many-seeded.

2927. 515*c*. *Maranthus.* Calyx small, 5-parted, equal Petals 5, equal, spatulate, with conniving claws. Stamens ascending. Ovarium declinate, oblong, compressed, 2-celled. Style filiform, subfalcate, continuous with the ovarium Stigma capitate

2928 520*a*. *Lemònia.* Sepals 5 Corolla 5-cleft, unequal: Tube straight. Stamens 5, inserted in the tube, 2 fertile ones sessile; three sterile ones horned, longer than the tube, covered with glands. Disk cup-shaped, notched. Carpels 5, 1-seeded

2929. 520*b*. *Pentarhàphia.* Calyx of 5 narrow stiff lobes, not unlike 5 brown needles. Corolla tubular, 5-cleft. Style projecting

2930 520*c*. *Metrodòrea.* Calyx 5-cleft Petals 5 Ovarium buried in the disk and confused with its substance. Fruit tubercled 5-lobed, 5-celled. Cells 1—2-seeded.

2931. 520*d*. *Almèda.* Calyx 5-toothed Petals 5. Ovaries 5, connected at base. Fruit only of 1 or 2 1-seeded carpels.

2932. 520*e*. *Erythrochìton.* Calyx tubular, 5-cleft, connected into two nearly equal lips. Corolla 5-cleft. Fruit of 5 1-seeded carpels.

2933. 524*a*. *Corethróstylis* Calyx petaloid, 5-parted. Corolla none. Style long, hispid from fascicles of bent-back hairs, broom-formed. Capsule 3-celled, 3-valved. Cells 1-seeded

2934. 524*b*. *Guichenòtia.* Calyx 5-parted. Petals 5, gland-formed. Ovary 5-celled. Cells containing 5 ovula

2935. 541*a*. *Schweiggèria* Sepals 5, unequal, exterior ones hastately, biauricular at base Lower petal large, cordate, drawn out into a spur at base Stamens free. Appendages of anterior anthers subulate.

2936. 542*a*. *Cryptándra.* Calyx campanulate, 5-cleft Petals small, cucullate, sessile. Stamens enclosed Anthers 2-celled. Disk wanting. Fruit containing 3 seeds.

Order 2. DIGYNIA. 5 Stamens. 2 Styles.

2937. 579*a* *Schubèrtia* Calyx 5-parted. Corolla funnel-shaped. Corona simple, of 5 retuse lobes. Stigma turbinate. Gynostegium short.

2938. 590*a* *Trichosáchme.* Calyx 5-cleft. Corolla with long feathery tails, which are perhaps analogous to the tails of *Strophánthus.*

MONOGYNIA.

324. PLUMBA'GO.

18399 1861*a* rhomboidea *Hook.* rhomb-leaved ▭ or ½ s B S Amer. 1826 S pl Bot. mag. 2917

2871. 324*a* PLUMBAGINE'LLA *Spach.* PLUMBAGINELLA. (Diminutive of *Plumbàgo.*) *Plumbaginea*

8400 - - micrántha *Boiss* small-flowered ○ pr 3 jl W Persia 1829 S co Led ic. ros 1 21
Plumbàgo micrántha Led. icon. fl. ros 1. t 21.

2872. 325*a*. VALORA'DIA *Hochs.* VALORADIA (Perhaps the name of a botanist called *Valorado*) *Plumbaginea*

18401 - - plumbaginoides *Boiss* Plumbago-lk ⚳ △| pr ½ jl n Dp.V China 1845. D pl Bot mag. 4487
Plumbàgo Larpéntæ Lindl. *Ceratostigma plumbaginoides* Bunge, enum. pl. chin. p. 55 1831.

325 HELIOTRO'PIUM.

18402 1867 peruvianum
β Voltaireànum Hort *Voltaire's* ⚹ ⌴ fra 1½ my.s Dp.P Hybrid 1847. C r m

326. MYOSO'TIS.

18403 1877*a* rèpens *G. Don* creeping ♒ △ pr ½ ap au B.V Britain ditches D co Eng bot 2703
18404 1878*a* collina *Hoffm* hill ○ pr ½ ap my B V Britain dr.sa pl S co Eng. bot. 2620
18405 1888*a* azórica *H. Wats.* Azorean ♑ △| pr 1 au.n Dk.B Azores 1840. D co Bot mag 4122

2873 330*a* AMSI'NCKIA *Lehm.* AMSINCKIA (From *M Amsinck*) *Boraginæ.*

18406 - - angustifòlia *Lehm.* narrow-leaved ○ pr ½ jn jl Y N Amer. 1836. S co
18407 - - lycopsoides *Lehm.* Lycopsis-like ○ pr ½ jn jl Y Chili 1836. S co
18408 - - intermèdia *F. & M.* intermediate ○ pr ½ jn jl Y Californ. 1836. S co
18409 - - spectábilis *F & M.* showy ○ pr ½ jn jl Y Californ. 1836. S co

333. ANCHU'SA

18410 1923*a* petiolàta *Hook.* petiolate ♐ △ or 1 o P Nepal 1840. D co Bot. mag 3858
18411 - - parviflòra *Willd.* small-flowered ○ or ½ jn o B Levant 1827. S co
18412 - - aggregàta *Lehm.* cluster-flwd ○ or ½ jn.o B Levant 1827. S co Fl. græc. 167

18398 18393



18394 1839*5*

History, Use, Propagation, Culture,

2871. *Plumbaginélla* being an annual, the seeds only require to be sown in the open ground, in a warm sheltered situation, in a mellow soil.

2872. *Valorádia* is a creeping-rooted pretty plant, and answers well to be planted out into beds in summer. It grows on the ruined ramparts of Shanghai in China, also out of the stone-work on the city wall.

2939. 592*a*. *Dictyánthus.* Calyx of 5 broad-lanceolate lobes Corolla urceolate below: Limb reflexed, with 5 long horn-like segments, having the margins recurved. Corona simple, of 5 large spreading lobes.
2940 592*b* *Cyrtóceras.* Calyx 5-parted. Corolla rotate, tomentose at base inside · Segments linear, acuminate. Corona smooth Leaflets acuminated at both ends. Anthers oblong, obtuse, terminated by a bidentate membrane.
2941. 592*c*. *Raphistémma.* Calyx 5-cleft. Corolla campanulate. Leaflets of simple Corona elongated, compressed. Follicles ventricose Anthers each terminated by a membrane
2942. 592*d*. *Stephanótis* Calyx of 5 sepals. Corona simple, 5-leaved. Anthers terminated by a membrane. Follicles horizontal. Seeds pulpy
2943. 592*e*. *Oxypétalum.* Calyx campanulate: Tube ventricose. Gynostegium exserted. Leaflets of simple corona fleshy, obtuse. Anthers each terminated by a membrane.
2944 601*a* *Wigándia.* Calyx of 5 sepals. Corolla funnel-shaped. Stamens exserted. Stigmas capitate. Capsule 2-celled. Placentas 4, at first joined by twos, afterwards free.
2945 623*a*. *Xanthósia.* Margin of calyx 5-lobed. Petals stipitate, oval, cuspidate, replicate at apex. Style filiform, rising from the base of the stylopodium. Fruit compressed. Mericarps contracted at the commissure, with 7—9 filiform ribs, the 2 lateral ribs marginating.
2946 623*b*. *Astrótricha* Calyx 5-toothed Petals 5, oval, clothed with stellate down outside. Styles thickened at base. Mericarps contracted at the commissure, with 3 primary dorsal ribs, and 2 acute nearly obsolete marginal ones, and 4 secondary ones with vittæ in the commisure, which are covered by a spongy pellicle, but none in the furrows.
2947 668*a* *Nárthex.* Margin of calyx obsolete. Stylopodium urceolate Styles filiform, at length reflexed. Fruit compressed from the back, and girded by a dilated margin. Mericarps with 5 primary ribs, the 3 intermediate ones filiform, the 2 lateral ones close to the margin, and nearly obsolete. Vittæ in the dorsal furrow usually solitary.

Order 5. PENTAGYNIA. 5 Stamens. 5 Syles.

2948 669*a*. *Grammánthes.* Calyx 5-cleft. Corolla 6-lobed. Stamens 5—6, enclosed. Scales none. Styles and carpels 5
2949 706*a*. *Acantholimon.* Calyx funnel-shaped: Limb scarious, multiplicate, 5-nerved, shortly 5-lobed Corolla gamopetalous only at base, forming a ring, the rest free with long claws, the edges of the claws so close as to form a kind of tube. Ovarium linear, tapering into the 5 styles. Stigmas capitate Utricle membranous, acutely 5-sided, opening by a conical lid, and also splitting irregularly into 5 valves at base.

MONOGYNIA.

18399 Annual, Stem terete, Leaves rhomboid, Petiole winged stem-clasping and auricled at the base, Spikes few-flowered, Bracts and calyx glandular

18400 Stem furrowed erect branched, Lower Leaves oblong a little denticulated with stem-clasping petiole, the rest [sessile cordately auricled, Spikes axillary and terminal

18401 Branches flexuous angular rather bristly, Leaves obovate obtuse ciliated, Flowers in dense bracteate 3—7-flowered clusters, Lobes of Corolla obcordate

18402 Flowers beautiful dark purple, Plant more diffuse

18403 Leaves obovate rather strigose, Calyx covered with adpressed bristles, Corolla flat, Lobes somewhat emarginate
18404 Calyx beset with uncinate bristles, Limb of Corolla concave shorter than the tube
18405 Stem decumbent at base bristly, Segments of Calyx linear, Limb of Corolla with emarginate lobes

18406 Throat of Corolla glabrous naked, Limb twice shorter than the tube
18407 Throat of Corolla bearded, Limb 3 times shorter than the tube
18408 Throat of Corolla glabrous naked, Limb rather shorter than the tube
18409 Throat of Corolla glabrous half-closed by plicæ, Limb length of tube

[Flowers racemose panicled

18410 Stems branched, Leaves lanceolate, radical ones on long petioles, cauline ones sessile, upper ones bract-formed,
18411 Stems much branched hispid, Leaves linear bluntish hispid, Racemes few-flowered crowded
18412 Stems diffuse, Lvs linear-oblong obtuse hispid, Flws sess. aggregate 4 times shorter than bracts, Nuts spherical



and Miscellaneous Particulars.

2873 *Amsinckia* is a genus of pretty annuals The seed only requires to be sown in the open ground in April, in a dry, warm, sheltered situation.

18413 -	- cæspitòsa *Lam*	tufted	☿ △	or	½	jn.o	B	Levant	1828.	D	co	Fl. græc 169
18414 -	- crispa *Viv*	curled	☿ △	or	1	jn.o	B	Corsica	1835	D	co	

336. CYNOGLO'SSUM.

18415	1935*a* glochidiàtum *Benth*	burred	☽ ○	or	2	jn	Pa.Bl	Nepal	1840.	S	co	Bot reg. 1841, 15
18416 -	- longiflòrum *Royle*	long-flowered	☽ △	or	3	jn jl	Pa.Bl	Cashm	1839	D	co	Bot. reg. 1840, 50
18417 -	- anchusoides *B. R.*	Anchusa-like	☽ △	or	1	my au	Pa Bl	Cashm	1840.	D	co	Bot. reg 1842, 14
18418 -	- cœlestinum *Lindl.*	celestial-blue	☽ ○	or	2	jn	B w	N India	1837	S	co	Bot. reg. 1839, 36

2874. *340a* MACROME'RIA *D Don* MACROMERIA (*Makros*, long, *meris*, part; flower) *Boragineæ*

18419 -	- exserta *D Don*	protruding-st.	☿ ⊔△	or	3	my o	Y	Mexico	1846.	S	s.l p	Bot. reg. 1847, 26

345 E'CHIUM

18420	1996*a* petræ'um *Tratt*	rock	♃	pr	1	my	Pk.Li	Dalmatia	1842.	C	s l	Bot reg. 1843, 26

2875. 345*a*. ARNE'BIA *Alph Dec.* ARNEBIA. (A name of Arabic origin) *Boragineæ*

18421 -	- echioides *A Dec*	Bugloss-like	☿ △	or	2	my jl	Y.pu	Caucasus ...		C	s p	Bot mag 4409

Lycopsis echioides Lin. *Anchusa echioides* Bieb. *Lithospermum erectum* P & M.

347 NOLA'NA.

18422	2006*a* cœlestis	celestial blue	♃ ⎵	or	2	jl.au	Pa B	Chili	1843.	C	s l.p	Bot. reg 1844, 4
	Alòna cœlestis Lindl											
18423 -	- tenella *Lindl*	slender	☽ ○	or	½	jl.s	B	Chili	1824.	S	p.l	Bot. mag. 2604

349 ANDRO'SACE.

18424	2015*a* lanuginòsa *Wall.*	woolly-leaved	♃ △	or	½	au	Ro Li	Himalay.	1841.	D	s p	Bot.'mag. 4005

350 PRI'MULA

18425	2023*a* altàica *Lehm*	Altaian	☿ △	pr	1	ap.my	R.or	Altaia	1819.	D	p l.s	Px.m.16. 194 ic
18426 -	- Munròi *Lindl*	Capt Munro's	☿ △	pr	¾	mr.my	W	Himal	1845	D	s.l p	Bot.reg 1847, 15
18427 -	- sikkimènsis *Hook.*	Sikkim	☿ △	pr	½	mr my	Y	Sk N In.	1850.	D	s.l.p	Bot. mag 4597
18428 -	- Stuàrtii *Wall*	Stuart's	☿ △	pr	1	jn	Y	Nepal	1845.	D	s l.p	Bot. mag 4856
18429	2031*a* denticulàta *Sm*	denticulated	☿ △	pr	½	my.jn	Li	Nepal	1838	D	s l p	Bot reg 1842 47
18430 -	- capitàta *Hook*	capitate-flwd	☿ △	pr	½	o	R	Himalay	1850	D	s l p	Bot mag 4550
18431	2037*a* involucràta *Wall*	involucrated	☿ △	pr	½	mr.my	W	N. India	1845	D	s.l p	Bot reg 1846, 31

352. SOLDANE'LLA.

18432	2045*a* minima *Hoppe*	least	☿ △	or	¼	ap my	Pa Li	Switzerl	1827.	D	p l	Swt fl. g. s 2 53
	β alba	*white-flowered*	☿ △	or		ap my	Bh	Switzerl.	..	D	p.l	

354. CY'CLAMEN

18433	2051*a* littorale *Sadl.*	sea-shore	♃ △	pr	½	mr.ap	Dp Ro	Como l.	1845	S	p l	Bot reg 1846, 56
18434 -	- macropus *Zucc*	long-scaped	♃ △	pr	½	mr jn	R w	Levant	1848.	S	p.l	
18435 -	- ibéricum *Goldie*	Iberian	♃ △	pr	½	mr jn	Ro.P	Iberia	1831.	S	p l	Moor g 1 89 1

356 LYSIMA'CHIA.

18436	2054*a* candida *Lindl*	white-flowered	☽ △	or	1	jl au	W R	China	1846.	D	co	
18437 -	- lobelioides *Lindl*	Lobelia-like	☿ △	or	1	jl au	W	N India	1840.	D	co	Bot reg 1842, 6
18438	2068*a* azórica *Hort n*	Azorean	♃ △	or	½	jn	Y	Azores	1835	D	co	Bot. mag 3273
18439 -	- nùtans *Nees*	nutant	☽ △	or	2	jl.au	Dk P	C G. H.	1823.	D	co	Swt. fl g s 2 31

Lubinia atropurpùrea Lk & Ott hort. berl. 1. t 27

357 ANAGA'LLIS.

18440	2075*a* alternifòlia *Cav*	alternate-lvd	♃ △	or	½	ap jl	Y.pk	Brazil	1839.	D	s.p.l	Cav. icon. 506 1

364 CHIRO'NIA

18441	2093*a* pedunculàris *Lindl*	long-peduncled	♃ ⎵	or	3	jl o	P	C G. H.	1820.	C	s.p.l	Bot. reg. 1803
	trinérvis Hort but not of Lin											
18442 -	- floribùnda *Paxt*	bundle-flwd	♃ ⎵	or	2	jn.my	Pk	C. G. H.	1843.	C	s.p.l	Px. m. 12. 123 ic
	Fischeri Hort											
18443 -	- glutinosa *Pax t.*	clammy	♃ ⎵	or	2	jn.my	R	C G H.	1843.	C	s.p.l	Px.m.15 245 ic

2876. 368*a* GENIO'STOMA *Forst* GENIOSTOMA (*Geneion*, a beard, *stoma*, a mouth) *Loganiàceæ*

18444	2105*a* ligustrifòlia *Cun.*	Privet-like	♃ ⎵	or	4		W	N. Zeal.	1837.	C	s.p.l	
	Logania ligustrifolia Cun	*Geniostoma rupestris* Rich.										

369 PHLO'X.

18445	2110*a* pendulifòra *Swt*	pendulous-flwd	☽ △	or	3½	aut	Ro.Li	N Amer	1824.	D	p.l	Swt fl. g. 2 s 46
18446	2119*a* crassifòlia *B C*	thick-leaved	♃ △	or	1	ap	P p	N. Amer	1825	D	co	Bot cab 1596

ripens β crassifolia D Don in Sweet's fl gard n s t 293



History, Use, Propagation, Culture,

2874. *Macromèria* is a fine half-hardy perennial, and grows best in an equal mixture of sandy loam and fibry peat. It ripens seed if kept in a greenhouse, by which it is propagated Its foliage is too coarse to make it a valuable ornamental plant; and its flowers, which always droop, fall off soon after opening, so that it never looks so well as its showy appearance on paper or in the herbarium would lead us to expect.

18413 Stems decumbent, Leaves linear obtuse hispid undulated longer than the stems, Racemes terminal few-flowered
18414 Strigose, Leaves linear-oblong coarsely toothed, cauline ones undulately curled, Spikes loose, Calyx inflated pendulous, Nuts triquetrous [short in 1 series

18415 Pilose branched, Lvs oblong sessile, Racemes elongated, Flws nearly sessile, Nuts small marginate, Prickles
18416 Pil., Lvs obl upper ones cordately stem-clasping, Racs bractless, Nuts marg., Prickles in 1 ser , Tube of Cor long
18417 Clothed with whitish down, Rad Lvs lanc. on long pets, caul ones lin lanc. sess , Pan loose, Nuts mur in disk
18418 Downy, Cauline Leaves ovate cuneated at base, radical ones cordate-ovate on long petioles, Racemes bractless, Nuts marginate glochidate

18419 Stems hispid, Leaves lanceolate mucronate scabrous, Style and Stamens much exserted

18420 Stems erect much branched, Leaves linear-lanceolate obtuse downy revolute and white beneath

18421 Erect pilose, Leaves sessile tomentose bluntish, radical ones oblong-obovate, cauline ones spatulate, Spikes terminal, Bracts foliaceous

18422 Shrubby, nearly glab., Lvs terete fascicled, Pedun elong , Cal hairy, Plicæ of Cor. pilose, Nuts many-celled
18423 Clothed with viscid down, Stems filiform, Petioles ciliate, [lobe emarginate, the other tridentate, Ovary 5 lobed Leaves ovate-obtuse, Calyx campanulate 2-lobed, one

18424 Caulescent procumbent hairy, Lvs scattered obovate-lanceolate, Pedun. terminal elon., Umbel many-flowered

18425 Robust, Leaves erect, Scape few-flowered, Flowers large, Corolla spreading with bidentate segments [mibifid
18426 Lvs on long pet. subcord obt. repand glabr., Scp 5—7-flwd, Peds longer than invol , Lbs of Cor rounded se-
18427 Lvs obovate oblong obtuse doubly-tthd, Scape elong , Flws umbellate, Lflts of Invol lanc., Segs of Cor emarg.
18428 Lvs broad-lanc mealy ben serr., Scape mealy, Invol. many-lvd many-flwd, Calyx mealy, Cor. lbs subcrenated
18429 Lvs obov -lanc downy wrinkled uneq dentic , Flws densely umb , Cor Limb flat, Segs 2-lbd, Cal teeth gland cil
18430 Lvs obl -lanc dentic mealy, Scape elon , Flws densely capit., Lflts of invol. lanc., Cal scurfy, Seg. of Cor emar
18431 Lvs on long petioles ovate-oblong obtuse nearly entire glabrous, Scape tall 2-3-flowered Leaflets of Invol oval, Lobes of Corolla obcordate, Root bulbous

18432 Lvs orbicular, Scape 1-flowered, Pedicels clothed with short glandular down, Corolla cleft to the third of its length, Flowers whitish

[subulate
18433 Root small round, Lvs deeply cordate roundish entire spotted, Segments cordate oblong, Calycine segments
18434 Root vry lrge with sevrl crwns, Lvs cord -ovl broad subang uneq. cren white-veind and zoned, Cor. tube glob.
18435 Lvs heart-shaped with an open sinus very slightly sinuate-toothed zoned greyish-green purple beneath, Tube of Cor ventricose, Mouth pentagonal, Segments of Cor. obovate

18436 Glabr , Lvs a little tthd entire dotted, radical ones oval, rameal ones lin.-spatul , Flws racem , Bracts subulate
18437 Ascending, Lvs ovate a little serrated, Racs naked many-flwd, Flws nutant, Cor. campanul., Stamens exserted
18438 Erect, Lvs ovate-lanceolate, Peduncles axillary solitary 1-flowered, Segments of Calyx subulate
18439 Erect, Lvs opposite or twin lanceolate a little serrated glabrous, Racemes terminal, Lobes of Corolla spatulate erosely denticulated

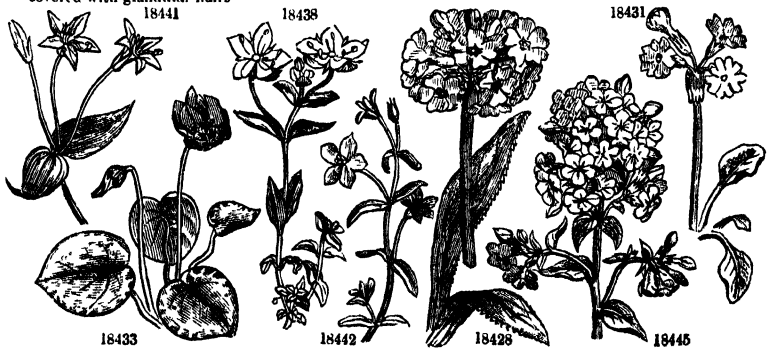
18440 Trailing, Lvs alternate ovate. Near to *Anagállis tenélla*

18441 Glabrous, Lvs ovate-lanceolate acuminate sessile 3—5-nerved, Peduncles 1-flowered longer than the leaves

18442 Glabrous much branched, Leaves linear or oblong-ovate acute, Peduncles solitary 1-flowered, Segments of Calyx oblong acute, Segments of Corolla obovate
18443 Dark green smooth, Lvs 3—5-nerved ovate-lanceolate, Calyx 5-parted, Corolla large with an expanded 5-parted limb, Stamens exserted

18444 Lvs elliptic-lanceolate, Racemes axillary, Pedicels bibracteate, Lobes of Calyx subulate, Lobes of Corolla hairy at top

[panicled drooping before expansion
18445 Stem rather flexuous downy spotted, Leaves oblong-lanceolate glabrous above scabrous beneath, Corymbs
18446 Lvs and petioles fringed with white hairs on the midrib and margins lanceolate acuminate, Tube of Corolla covered with glandular hairs



and Miscellaneous Particulars.

2875. *Arnèbia echioides* has much the habit of *Lithospérmum canéscens*, and, like it, is an evergreen herb, well fitted for decorating rockwork It can only be increased by seed.

2876. *Gensóstoma.* This genus is nearly related to *Logánia.* It consists of greenhouse shrubs, and they should be treated in the same manner as recommended for the species of *Logánia*, p 130.

370. POLEMONIUM.

18447 2126*a* moschàtum *Wormsk.* musky ☽ △ or 1 my.jl B N. Amer. 1827. S co
18448 - villòsum *Ried* villous ☽ △ or ½ jn o B Siberia 1826. S co Swt fl. gar 266
hùmile R & S. Bot. reg. 1304.

2877. 370*a* CYANA'NTHUS *Wall.* CYANANTHUS. (*Kyanos*, blue, *anthos*, a flower.) *Polemoniàceæ*
18449 - lobàtus *Wall.* lobed ♐ △ or ½ my s B Himala. 1845. C s.p.l Bot reg. 1847, 6

2878. 371*a* CA'NTUA *Juss.* CANTUA. (*Cantu* is the Peruvian name of the first species.) *Polemoniàceæ*
18450 - buxifòlia *Juss.* Box-leaved ♉ ⌴ or 5 ap Ro Peru 1846. C s.p.l Bot. mag. 4582
Periphràgmos dependens R & P fl per. 2 t 133.
18451 - pyrifòlia *Juss.* Pear-leaved ♉ ⌴ or 4 mr Crea Peru 1846. C s.p.l Bot mag. 4386
Periphràgmos flexuòsus R. & P fl per. 2 t 131.
18452 - bicolor *Paxt.* two-coloured ♉ ⌴ or 4 my R v Peru 1846. C s p.l Px. m. 15 220 ic.

373. PHACE'LIA.
18453 2125*a* fimbriàta *Mx* fringed ○ or 1 jn jl Li w N Amer. 1840. S co Mx fl. amer. 1 16
Cosmànthus fimbriàtus Hort.

377 BRUGMA'NSIA.
18454 2171*a* cornigera *B M* horn-bearing ♉ ⌴ or 10 jl o W Brazil 1846. C r.m Bot. mag. 4252
Datùra cornigera B M
18455 - Gárdneri *B M.* Gardner's ♉ ⌴ or 10 jl.o W Brazil 18[illegible]0. C r.m
Datùra arbòrea Hort not Lin.

2879 377*a*. DESFONTAI'NEA *Ruiz & Pav* (*M Desfontaines*, a French bot see *Fontanèsia*) *Gentiàneæ*
18456 - spinòsa *Ruiz & Pav* spiny-leaved ♉ ⌴ or 10 . S.v Peru 1850 C s l p H B pl. æq 1 45

2880 377*b* JUANULLO'A *R & P.* (*Giov Juan* and *Antonio Ulloa*, two disting Spaniards) *Solanàceæ*
18457 - parasìtica *R & P* parasitic ♐ ▭ or 3 my.o Or Peru 1840 ? C p l Bot. mag. 4118
Ulòa parasìtica Pers *Brugmànsia floribùnda* Paxt vol 9 p 3 icon *B parviflòra* Hort.

378 LISIA'NTHUS.
18458 2176*a* princeps *Lindl.* Prince ♉ ▭ or 4 jl o S v N. Gran. 1848. C p.l.s Px fl g.1 90.61
18459 - pùlcher *Hook.* fair ♉ ▭ or 5 aut S N Gran. 1847. C p.s l Bot. mag 4424
18460 - acutángulus *R & P* acute-angled ☽ ▣ or 3 jn my G v S.Marth. 1845. S s p Bot. mag. 4324
trifidus B K *tetragònus* Benth.

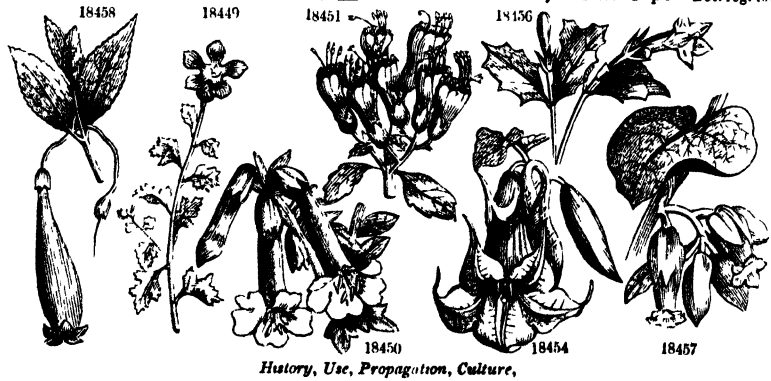
2881. 378*a* LEIA'NTHUS *Cham* LEIANTHUS (*Leios*, smooth, *anthos*, a flower.) *Gentiàneæ*
18461 - nigréscens *Cham* blackish ☽ ◯ or 1½ jl au P Bk Mexico 1842 S s l p Bot mag 4043
Lisiànthus nigréscens Cham
18462 - longifòlius *Griseb* long-leaved ♊ ▭ or 2 jn jl Y Jamaica 1793. C s l p Bot. mag 4169
Lisiànthus longifòlius No 2173 *Tàchia longifòlia* Mart
18463 - umbellàtus *Griseb* umbellate ♉ ▭ or 10 my jl G Jamaica 1843. C s l p Bot mag. 4213
Lisiànthus umbellàtus Swz

2882 380*a*. WHI'TLEYA *Swt* WHITLEYA. (The late *Mr. Whitley*, of Fulham) *Solanàceæ*
18464 - stramonifòlia *Swt* Stramonium-lvd ☽ △ or 4 au s Y G Himalay 1823. S co Swt. fl. gar 125
Anisodus stramonifòlia G Don *Iùrida* Lk & Ott

2883 381*a* PHYSOCHLAI'NA *G Don* (*Physa*, a bladder, *chlaina*, a cloak, calyx inflated) *Solanàceæ*
18465 - grandiflòra *Miers* large-flowered ☽ △ or 1 mr ap PaY p Thibet 1850 D p l Bot mag 4610
18466 - physaloides *G Don* Physalis-like ☽ △ or 1 mr ap P v Siberia 1777. D p l Swt. fl gar 13
Hyoscyàmus physaloides No 2187., as well as *Hyoscyàmus orientàlis* No. 2192, belong to this genus

382 NICOTIA'NA
18467 2196*a* noctiflòra *Hook.* night-flowering ☽ ○ or 2 au W Chili 1826 S co Bot. mag 2785

383. IPOMŒ'A.
18468 2212*a* palmàta *Forsk* palmate ☘ ⧍ or 6 jn au P Kaffraria 1849. C s l p Moor co 1 2 ic
18469 - batatoides *Benth* Batatas-like ☘ ⧍ or 6 au P c Mexico 1840 C s.p l
18470 - muricàta *Cav* muricated ☘ ⧍ or 1 jn jl R S Amer 1840 C s p l Bot. mag 4401
18471 - ficifòlia *B R.* Fig-leaved ☘ ⧍ or 3 n P B Ayres 1840. C p l Bot. reg. 1841, 13



History, Use, Propagation, Culture,

2877. *Cyanànthus* is a native of the higher ranges of the Himalayas It proves to be a delicate little herbaceous plant, with the habit of some species of *Campànula* It requires plenty of moisture during the flowering season, but afterwards should be kept rather dry and allowed to rest

2878 *Cántua* is a genus of beautiful shrubs. The Peruvian Indians, according to Ruiz and Pavon, adorn their chambers on feast days with the *C buxifolia* The ancient Indians called it the magic tree. The species have proved hardy greenhouse plants, and thrive if potted in a mixture of light loam and peat containing a portion of sand They possibly will grow freely in the open air during summer, if planted in a warm sheltered situation; some of them have succeeded in the open air in Devonshire They may be treated in the same way as *Fuchsias*. Cuttings root freely.

2879. *Desfontainea*. This is one of the plants in whose external features there is nothing to lead to a knowledge of their affinities. It has been placed in *Gentiàneæ*, *Solanàceæ*, and *Theophrástaceæ* by turns. It is an evergreen and a native of America, with a very bitter taste. The leaves are opposite petiolate spiny-toothed, very similar to those of

18447 Stems diffuse, Lvs downy, Leaflets cordate, Calyx hairy with blunt segments, Segments of Corolla obtuse
18448 Stem pilose erect with many pairs of ovate blunt pilose leaflets, Flowers a little panicled drooping, Segments of Corolla round crenulated

18449 Pilose, Lvs rhomboid cinereous beneath lobed at top, Segments of Corolla bearded at top

18450 Lvs subfascicled obovate entire or toothed, Calyx tubular downy, Limb spreading, Lobes obcordate, Stamens slightly exserted
18451 Lvs elliptic or obovate downy entire or toothed, Corymbs branched, Flowers erect, Calyx bilabiate, Stamens much exserted
18452 Branches downy, Leaves fringed with soft hairs tomentose beneath cuneate-oblong mucronate, Flower large showy

18453 Pilose, Lvs pinnate or pinnatifid, Leaflets entire, Racemes loose, Corolla fringed

18454 Downy, Lvs entire or angular, Calyx cylindrical 5-ribbed cleft lengthwise, Limb of Corolla spreading, the Segments ending in long points
18455 Smoothish, Leaves quite entire, Calyx cylindrical inflated entire or unequally 4—5-lobed, Limb of Corolla spreading acuminated

18456 Calycine segments lingulate and are as well as the leaves glabrous, Leaves opposite spiny-toothed like those of holly, Flower terminal solitary

18457 Parasitical pendent, Leaves oblong acuminated thickish alternate, Racemes dichotomous pendulous

[5-inches, Stamens enclosed
18458 Leaves petiolate oval-lanceolate glabrous, Flowers solitary pendulous, Calyx pentagonal, Corolla very long
18459 Lvs petiolate ellip -lanc , Pan. term trichot , Flws pendulous, Stamens exserted, Branches bluntly tetragonal
18460 Lvs connivent at the base, lower ones cordate, upper ones ovate, Peduncles dichotomous panicled, Flowers pendulous, Stem fistular acutely tetragonal

18461 Branches terete, Lvs decussate lanceolate acuminate 3-5-nerved, Panicle much branched loose, Flws pendulous

18462 Downy, branches tetragonal, Leaves lanceolate or oblong-lanceolate, Flowers axillary and terminal pedicellate

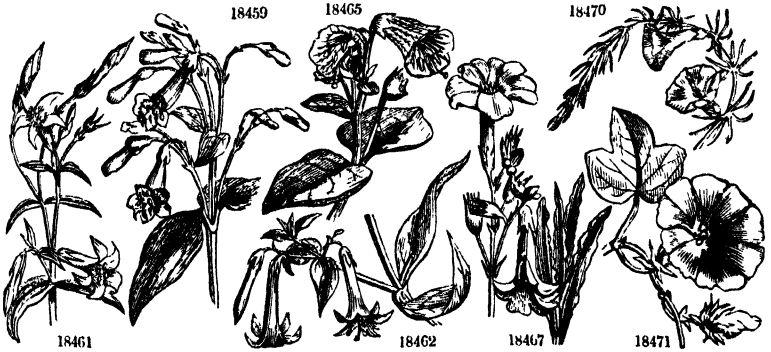
18463 Strong, Leaves obovate-lanceolate acuminate, Petioles connate, Umbels many-flowered involucrate axillary, Calyx wingless, Stamens exserted

18464 Strong robust downy canescent, Stem dichotomous, Leaves twin ovate-elliptic repandly lobed villous beneath, Flowers solitary drooping

[to corolla
18465 Glandularly pubescent, Lvs ovate, Panicle terminal leafy, Flws nutant, Corolla funnel-shaped, Stamens equal
18466 Leaves ovate repand or quite entire, Flowers pedicellate terminal capitate, Stamens enclosed, Fruit-bearing Calyx inflated angular glabrous

[Limb obcordate
18467 Glandular and clammy hairy, Leaves oblong-lanceolate undulated, Tube of Corolla cylindrical, Segments of

18468 Leaves palmately 5-lobed, middle lobe the longest, 2 lower lobes bipartite Peduncles axillary 1-flowered
18469 Downy, Lvs 3-5-lobed middle lobe acum lateral ones ang hairy on the veins beneath, Ped. 1-2-flwd, Sep. uneq.
18470 Stems filif. branched, Lvs glabr sess many-parted, Seg filif , Ped. 1-flwd axillary, Sep. muricated on the back
18471 Scabr , Lvs 3-lobed, lateral lobes rounded middle narrower and longer, Ped 3 flwd. Cal covered with blk hairs



and Miscellaneous Particulars.

holly. The flowers are large, terminal, and solitary; they are scarlet with a yellow limb The berries are white. It is worth cultivating for the elegance of its foliage and the brilliancy of its flowers. It should be grown in a mixture of peat, loam, and sand. Cuttings will probably root in the ordinary way

2880 *Juanulloa* is an epiphytal plant, and flourishes freely if planted in vegetable earth and kept in a moist warm stove It recommends itself both by its handsome foliage and its large richly coloured calyx.

2881 *Lisiánthus* is a genus founded on the *Lisiánthus longifolius*. The species are interesting plants, and will grow in a shady part of a greenhouse or stove, where they will flower very profusely.

2882 *Whitleya* is a strong coarse-growing plant, with something of the habit of *Belladónna*, and smelling like tobacco when bruised. It is of the most easy culture, and will grow in any soil, but requires a dry situation. It is increased either by division or seed.

2883. *Physochlaina* is a genus of desirable hardy plants, being early flowerers, and elegant when in blossom. They

18472 -	- pulchélla *Roth*	neat	☆	△	or	10	d ja	P	Ceylon	1845?	C	p.l	Bot. mag. 4305
18473	2235*a* Tweèdiel *Hook.*	Tweedie's	☆	△	or	6	jn.jl	P	Parana	1838.	C	p.l	Bot. mag. 3978
18474 -	- Melæ'na *Lindl.*	Melæna	☆	△	or	10	ap.my	Bh Bk	.....	1845?	C	s.p.l	
18475 -	- Hardingh *Paxt*	Harding's	☆	△	or	10	my.jn	P	hybrid	1845?	C	s.l p	Px.m. 11. 217 ic
18476	2256*a* simplex *Thunb.*	simple	☆	△	or	½	jl	Pa P	C G H	1844.	C	s l.p	Bot. mag 4206
18477 -	- crássipes *Hook*	thick-peduncled	☆	△	or	4	au	P	S Africa	1842.	C	s.l	Bot. mag 4068
18478 -	- oblongàta *E Mey.*	oblong-leaved	☆	△	or	4	jl au	R	Kaffraria	1848.	C	s l	Moor.m 3.297 ic
18479 -	- longifólia *Lindl.*	long-leaved	☆	△	or	1	jl s	W R	Mexico	1839.	C	s.l	Bot. reg. 1840, 21

384. CONVO'LVULUS.

18480	2266*a* albivènus *Lindl.*	white-veined	♃	□	or	6	s	Pa Pk	Algoa B.	1823.	C	p l	Bot. reg. 1116
18481	2267*a* italicus *R. & S.*	Italian	☽	△	or	6	jl s	R	N Africa	1846.	D	co	Bot. reg. 1847, 12
18482	2274*a* verrùcipes *Tenore*	warted-stalked	☆	△	or	6	jl.au	W	...	1841.	D	co	
18483	2290*a* ocellàtus *Hook.*	purple-eyed	♃	⌴	or	1½	au	W.bsh.p	S. Afr.	1846	C	s l.p	Bot. mag. 4065

2521. 384*a* PHARBI'TIS.

18484	16915*a* Learii *Lindl.*	Lear's	☆	△	or	20	s	D P	Ceylon	1839.	C	co	Bot mag. 3928
18485 -	- tyrianthina *Lindl*	Tyrian-purple	☆	△	or	10	au n	D P	Californ	1838.	C	r.m	Bot. mag. 4021
18486 -	- cathártica *Choisy*	cathartic	☆	△	or	10	au s	P	W. Ind.	1839	C	r m	Bot. mag 4289
	β *rósea* Hook.	*rose-coloured*	☆	△	or	10	au s	Ro	St Dom.	1836.	C	r.m	Bot. reg. 999
	Convólvulus purpurándus Lindl.												
18487 -	- limbàta *Lindl*	bordered		○	or	2	s o	V w	Java	1849	S	lt.s	
18488 -	- ostrina *Lindl.*	purple	☆	△	or	20	su	D P	Cuba	1839.	C	lt s	Bot. reg. 1842, 51

2884. 384*b*. JACQUEMO'NTIA *Choisy*. (*M Jacquemont*, a traveller in N India) *Convolvulàceæ*

18489 -	- canéscens *Benth.*	canescent	♃	⌴	or	6	jn jl	B	Bogo'a	1846	C	s p l	Bot reg. 1847, 27
	Convólvulus canéscens H. B. & Kth							*Convólvulus polyánthus* Schlecht. & Cham					

2885. 384*c* EXOGO'NIUM *Choisy* EXOGONIUM. (*Exo*, outside, *gonia*, an angle, stems) *Convolvulàceæ*

18490 -	- púrga *Benth*	true jalap	☆	△	m	10	s	Ro	Jalapa	1838	C	s p l	Bot mag. 4280
	Ipomœ'a Schiedeàna Zucc.	*I. Púrga* Wend.	*Convólvulus Jalàpa* Schiede										

2886. 384*d*. BATA'TAS *Choisy* BATATAS (Malay name of sweet potato) *Convolvulàceæ*

18491 -	- betàcea *Lindl.*	Beet-rooted	☆	△	or	6	au	P.w	Dem	1839.	C	p l	Bot.reg 1840, 56

385. ARGYREI'A.

18492	2293*a* festiva *Wall*	festive	♃	□	or	10	jl.s	W	E Indies	1840.	C	s l.p	Wal. pl ra 1 76
18493 -	- pomàcea *Choisy*	apple-fruited	♃	□	or	10	n	Pa.Ro	Mysore	1828.	C	s l p	
18494 -	- spléndens *Swt.*	splendid	♃	□	or	10	n	Pa R	E. Indies	1820.	C	s.l p	Bot mag 2938
18495 -	- speciòsa *Swt*	showy	♃	□	or	10	jl au	Ro	E Indies	1818.	C	s l p	Bot. mag 2446
18496 -	- setòsa *Choisy*	bushy	♃	□	or	10	jl.au	Pk	Nepal	1818.	C	s l.p	

2887 385*a* RI'VEA *Choisy*. RIVEA. (*Aug de la Rive*, a physician of Geneva) *Convolvulàceæ*.

18497 -	- tiliæfòlia *Choisy*	Lime-tree-lvd	♃	□	or	10	my.au	W	E. Indies	1812.	C	s l p	
18498 -	- ornàta *Choisy*	adorned	♃	□	or	10	jn au	P	E. Indies	1824.	C	s.l p	

2888 385*b*. MI'NA *Llav. & Lex.* MINA (*Don Francesco Xavier Mina.*) *Convolvulàceæ*

18499 -	- lobàta *Llav. & Lex.*	lobed-leaved		○	or	6	su	R.Y	Mexico	1841.	C	co	Bot. reg 1842, 24

2889 385*c* CALBO'A *Cav.* CALBOA. (*Don L. Calbo*, a Spanish botanist.) *Convolvulàceæ*.

18500 -	- globòsa *Lindl*	globose-flwd	♃	⌴	or	6	jn au	R	Mexico	1848.	C	co	J H S. 5. 83 ic

386. NEMO'PHILA.

18501	2294*a* maculàta *Benth*	spotted-flwd		○	or	½	jn.s	W v	Californ.	1848	S	co	J.H.S. 3. 320 fig

387. CALYSTE'GIA

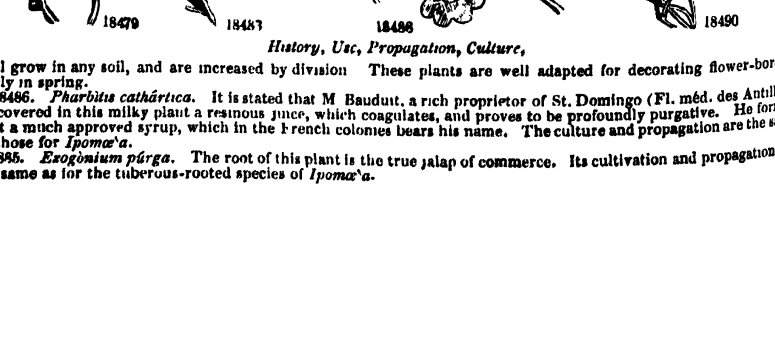
18502	2298*a* pubéscens *Lindl.*	double-flwd	☽	△	or	6	jn s	Pa Ro	China	1844.	R	co	Bot reg 1846, 42

388 COBŒ'A

18503	2299*a* stipulàris *Benth.*	large-stipuled	♃	⌴	or	20	my o	P v.	Mexico	1839.	S	p l	Bot.reg 1841 2
18504 -	- macrostémma *Pav*	long-stamened	♃	⌴	or	20	n	Y	Guayaq.	1839.	S	p l	Bot. mag 3789
	acuminàta Dec. *Rùtea* D Don.												

2523 388*c* NAVARE'TTIA.

18505 -	- squarrósa *Hk & Ar*	squarrose		○	or	1	jl s	B	Ve Cruz	1847	S	lt r	Bot. mag 2977
	Gilia púngens Hook												



History, Use, Propagation, Culture,

will grow in any soil, and are increased by division These plants are well adapted for decorating flower-borders early in spring.

18486. *Pharbitis cathártica.* It is stated that M Bauduit, a rich proprietor of St. Domingo (Fl. méd. des Antilles), discovered in this milky plant a resinous juice, which coagulates, and proves to be profoundly purgative. He formed of it a much approved syrup, which in the French colonies bears his name. The culture and propagation are the same as those for *Ipomœ'a.*

2885. *Exogònium púrga.* The root of this plant is the true jalap of commerce. Its cultivation and propagation are the same as for the tuberous-rooted species of *Ipomœ'a.*

18472 Glabr., Lvs quinate, Lflts petiol. ellip acum, Pedun twisted 1-3-flwd, Pedic. clavate, Lbs of Cor. emarg. plicate
18473 Glabr, Lvs cordate acute entire, Peduncles 1-2-flwd. Sepals ovate acute unequal, Cor with elongated tube
18474 Glabrous, Leaves cordate acum entire and 3-lobed, Peduncles stiff 3-4-flowered, Sepals roundish concave
18475 Downy, Leaves cordate 3-5-lobed, middle lobe ovate, Peduncles long hairy [lower part of the stem
18476 Glabro s, Stems suffruticose weak, Leaves linear-lanceolate a little wavy, Peduncles solitary 1-flowered from the
18477 Pilose, Lvs oblong-lanceolate entire acute, Peduncles 1-flwd bibracteate thickened above, Sepals very unequal
18478 Stems elon. climb. or trail, Lvs ovate-obl. ent ciliated, Petioles villous, Pedun. axil 1-flwd, Sep narrow ciliated
18479 Glabrous, Leaves oblong-lanceolate obtuse mucronate thickish, Peduncles 1-flowered bibracteate in the middle, Sepals elliptic

18480 Lvs roundish cordate subrepand, the veins elevated and woolly beneath, Flws solitary, Stem usually tuberculate
18481 Stem and Lvs hairy. Radical Lvs cordate repand toothed, Cauline Lvs palmately pedate cut, Peduncles 2-flwd
18482 Lvs cord acum, low. ones ent, up ones 3-lobed, Ped. 1-flwd warted, Cap hry 3-celled 3-seeded, Seg of Cal obl.
18483 Procumbent, Branches erect downy, Lvs lin. entire clothed with silky white down, Pedun. solit 1-flwd bibract.

18484 Climbing, Lvs cordate acum. entire or 3-lobed pilose, Cymes many-flwrd capitate, Sepals and Bracts lin. pilose
18485 Stem fruticose warted, Leaves roundish cordate acuminate villous, Peduncles many flowered, Calyx villous
18486 Climbing glabrous, Leaves cordate or cordately 3-lobed, Peduncles 1-3-flowered, Bracts lanceolate
β Flower rose-coloured

18487 Stem hairy, Lvs cordate entire angular or 3-lobed acuminate pilose, Pedun solitary 1-flowered, Sep hispid linear
18488 Climbing, Lvs hastate tripartite glabrous glaucescent beneath, Peduncles 3-4-flowered, Sepals obtuse glabrous, Limb of Corolla obsoletely 10-lobed

18489 Downy scabrous, Lvs oblong cordate on long petioles, Cymes pedunculate dense-flowered, Sepals oblong obtuse

18490 Lvs cordate acum entire glabr, Pedun 2-3-flowered, Tube of Cor. long, Limb spreading, Lobes emarginate

18491 Lvs ovate cordate angular or somewhat 5-lobed, Rac compound contracted, Sepals acum, Root fusiform red

18492 Lvs ovate clothed with fine brown silky hairs underneath, Flowers cymosely panicled
18493 Tomentose cinereous, Lvs ovate-elliptic obtuse clothed with velvety down especially beneath, Cyme many-flwd
18494 Lvs ovate oblong smooth above and clothed with silky down beneath, Peduncles corymbosely many-flowered
18495 Tomentose, Lvs large cord glab above clothed with silky down and nerved beneath Flws umbellately capitate
18496 Hairy, Lvs cord. acum. glabr above and clothed with adpressed strigæ beneath, Ped corymbosely many-flwd

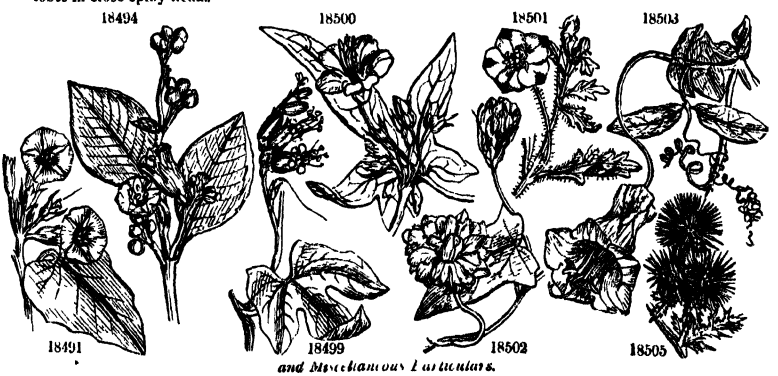
18497 Lvs cordate roundish, Peduncles 1-flowered rarely 2-4 flowered, Sepals roundish, Corolla inflato-cylindrical
18498 Lvs orbicularly cordate, Peduncles elongated spicately panicled, Sepals ovate-lanceolate obtuse, Corolla narrow tubular

18499 Lvs 3-lobed, Racemes forked, Flowers secund erect

[Flowers umbellate
18500 Lvs on long petioles very variable in form some cord some sagittate others hastate, lower ones deeply angular,

[Calyx reflexed, Appendages crenulated convolute
18501 Lvs pinnatifid lyrate, Segs short obtuse 2-3-lobed and entire, upper ones 3-lobed, Peduncles 1-flwd, Sinuses of [margins
18502 Pubescent, Lvs oblong hastate, Lobes angular, Peduncles angular 1-flwd, Bracts ovate ciliated with reflexed [wards, Stamens not exserted
18503 Lflts 3 pair, Upper pair narrow ovate acum oblique at base, Lower pair stipule-formed reniform acum down-
18504 Lflts obovate ciliated at base, Segments of Calyx lanceolate ciliated, Stamens much exserted

18505 Plant hairy and viscid all over, Lvs spiny dark green cut into sharp segments, Flws among bracts and calyx lobes in close spiny heads



and Miscellaneous Particulars.

2886 *Batàtas* Most of the tuberous-rooted species under the genus *Ipomœ'a* belong to this genus as, *I. paniculàta, tuberòsa, Jalàpa, bonariénsis*, &c.

2887. *Ruvea* To this genus belongs the *Ipomœ'a bòna-nóx*, No 2227. The species are showy. They may be trained upon rafters or trellis-work in a stove. A light soil suits them best, and cuttings root freely in the ordinary way

2888 *Mina*. This plant is cultivated by the Mexicans for purposes of decoration. The flowers are racemose, erect, and arranged in the scorpioid manner of Borage; at first they are crimson, but change through orange to pale yellow. It is a half-hardy annual, and only requires the treatment of purple convolvulus.

2889 *Calbòa* comes very close to *Mina*, and requires the treatment of the half-hardy woody species of *Ipomœ'a*

18506 - pubéscens *Hk & Ar.* downy ○ or 1 jl.s B Californ. 1848. S lt.r
18507 - cotulæfòlia *Hk.& A.* Cotula-leaved ○ or 1 jl.s W Californ. 1848. S lt.r

2525. 388*d* HUGE'LIA.
18508 16937*a* lanàta *Lindl.* woolly ○ pr ½ jl au L.B Californ. 1847. S co

393. E'PACRIS.
18509 2309*a* dùbia *Lindl.* doubtful ▲ ⌴ or 3 mr.ap W N Holl. ... C s.p Bot reg 1846, 38
18510 2308*a* miniàta *Lindl* vermilion-flwd ▲ ⌴ or 3 my S W N.S W. ... C s.p Px. m. 12. 25 ic.

395 LISSA'NTHE.
18511 2316*a* sápida *R. Br.* sapid ▲ ⌴ or 4 ap.my W N. Holl. 1823. C s.p Bot. mag. 3147
18512 - stellàta *K. & W.* stellate ▲ ⌴ or 3 mr.ap W N. Holl. 1836. C s p

2890. 395*a* CYATHO'DES *R. Br.* (*Cyathos*, a cup, *odous*, a tooth; disk cup-shaped and toothed.) *Epacrideæ*
18513 - Oxýcedrus *R. Br.* Red-Cedar-like ▲ ⌴ or 6 ap.jn W V.D.L. 1822. C s.l.p Lab.n.h.1.69

401. LEUCOPO'GON.
18514 2325*a* polystàchyus *R. Br.* many-spiked ▲ ⌴ or 2 my.jl W N Holl. 1826. C l p Bot. cab. 1436
18515 - interrúptus *R. Br.* interrupted ▲ ⌴ or 3 my jl W N. Holl. 1826. C l.p Bot. cab 1451
18516 - Richei *R. Br.* Riche's ▲ ⌴ or 2 my jl W N Holl. 1826. C l.p Bot. reg. 1560
18517 - verticillàtus *R. Br.* whorled ▲ ⌴ or 2 my.jl W N. Holl. 1837. C l p

2891. 401*a* CYSTA'NTHE *R Br.* (*Kyste*, a box, *anthos*, a flower; closed hooded flower.) *Epacrideæ.*
18518 - sprengelioides *R.B* Sprengelia-like ▲ ⌴ or 2 ap jn R N. Holl. 1840. C l p

403. AZA'LEA.
2329 índica.
ζ *rùbra plèna* *double-red* ▲ ⌴ or 4 mr.my R China 1844. C p.l Bot. reg. 1842, 56
η *calycìna* *large-calyxed* ▲ ⌴ or 4 mr.my R China 1849 C p.l Px. fl. g. 2. 70
18519 - Fárreri *D Don* Farrer's ▲ ⌴ or 2 mr my R China 1830. C s.p Swt. fl g n s 95
18520 2329*a* squamàta *Lindl* scaly ▲ ⌴ or 2 mr.my Spot China 1844 C s p Bot. reg 1847, 3
18521 - obtùsa *Lindl.* obtuse-leaved ▲ or 1½ ap Dp.R Shanghai 1844 C s p Bot reg 1846, 37
18522 - ovàta *Lindl* ovate-leaved ▲ or 8 my Pk Chusan 1844 C s p J H. S. 2. 2
β *álba* Fort *white-flowered* ▲ or 8 my W Chusan 1844 C s p
18523 - ramentàcea *Lindl* ramentaceous ▲ or 2 ap my W China 1846. C s p J H.S.4. 291 fig

407. ALLAMA'NDA.
18524 2342*a* Schóttii *Pohl* Schott's ▲ ▭ or 10 ... Y Brazil 1846 C p.l Bot mag 4351
18525 - Aublétii *Pohl* Aublet's ▲ ▭ or 10 ... Y Guiana 1847 C p l Bot mag 4411
18526 - neriifòlia *Hort* Oleander-lvd ▲ ▭ or 3 ... Y S Amer. 1847. C p.l Bot. mag. 4594

2892 411*a*. ALY'XIA *R Br.* (*Alyxis*, grief, gloomy appearance) *Apocýneæ.*
18527 - gynopógon *R & S.* bearded-stigm ▲ ⌴ or 4 jl s W Norf Is. 1831 C p l
18528 - daphnoides *Cun.* Daphne-like ▲ ⌴ or 4 jl.s W N S W 1831 C p.l Bot mag. 3313
18529 - ruscifòlia *R Br.* Butcher's-br -lv ▲ ⌴ or 4 au n W N S W 1820 C p l Bot mag 3312
β *pugioniformis* C *dagger-leaved* ▲ ⌴ or 4 au.n W Moret B. 1820 C p l

409 CLAVI'JA.
18530 2344*a* ornàta *D. Don* ornamental ▲ ▭ or 10 ... Or Caraccas 1828 C l.p Jacq schb I 116

412. WRI'GHTIA.
18531 2354*a* pubéscens *R. Br.* downy ▲ ▭ or 4 mr Gsh Y N. Holl. ... C l p Bot. cab. 1929

413. ECHI'TES
18532 2359 hirsùta *R & P.* hairy ⚘ ▭ or 10 s Y ro Brazil 1841. C s p.l Bot. mag. 3997
18533 - francíscea *A Dec.* river Francisco ⚘ ▭ or 10 au s Dp R Brazil 1845 C s p.l Bot. reg 1847 24
β *pallidiflòra* Hook. *sulphur-cld* ⚘ ▭ or 10 au s Su Brazil 1845 C s.p l Bot. mag 4547
18534 - stellàris *Lindl.* starry ⚘ ▭ or 6 s Ro y Brazil 1831. C p l Bot. reg. 1661
18535 - peltàta *Velloso* peltate ⚘ ▭ or 6 jl.s Y Brazil 1850 C p.l Houtt fl. 390

2893. 413*a*. AGANO'SMA *G Don.* AGANOSMA. (*Aganos*, mild, *osme*, smell, flowers.) *Apocýneæ.*
18536 - cymòsa *G Don* cymose-flwd ⚘ ▭ or 10 jl au W Silhet 1828 C s.p l
Echites cymòsa Roxb, *E confèrta* Wall, as well as *Echites caryophyllata*, No. 2361, belong to this genus

2894. 413*b*. MANDEVI'LLA *B R* (*H J. Mandeville*, H B M minister at Buenos Ayres) *Apocýneæ*
18537 - suavèolens *B R.* sweet-scented ⚘ ⌴ or 20 jn au W Buen Ay 1837 C co Bot reg 1840 7



History, Use, Propagation, Culture,

2890. *Cyathòdes Oxýcedrus* is a small shrub with somewhat of the appearance of Red Cedar, and thrives with the same treatment as *E'pacris*.

2891. *Cystánthe* is a pretty little shrub with habit of *Sprengèlia*, and its culture is the same.

2892. *Alýxia* They are shrubs of easy culture, and are rather pretty when in blossom. They strike root readily in sand under a hand-glass.

2893. *Aganósma.* The species of this genus are very pretty, and the flowers are very fragrant and in large cymes. The treatment recommended for *Echites* will suit them.

18506 Hairy, Lvs bipinnatifid with linear acute lobes, Flowers in close heads greyish blue
18507 Lvs soft pinnatifid with terete linear acute lobes, Flowers in close heads white

[cylindrical, Stamens exserted
18508 White from dense wool, Lvs pinnatifid linear pungent, Heads on short peduncles, Bracts short pungent, Calyx

[leafy spike, Calyx ciliated
18509 Erect, Branches downy, Lvs linear-lanceolate 3-nerved denticulated, Flws axillary nearly sessile disposed in a
18510 Erect, Branches tomentose, Lvs cordate smooth, Flws solitary pedicellate, Lobes of Calyx and Bracts awned, Corolla cylindrical

18511 Racemes 2-3-flowered recurved, Lvs oblong-linear mucronate whitened and striated beneath
18512 Flws axillary solitary unibracteate, Lvs oblong mucronate glaucous, Stem downy

18513 Lvs linear spreading with naked edges 3-5-nerved beneath, Nerves all simple

[oval depressed at top
18514 Spikes axillary and terminal 7-10-flwd aggregate, Lvs linear-lanceolate mutic, Branchlets glabrous, Drupes dry
18515 Spikes nearly terminal, Lvs elliptic spreading many-nerved crowded in whorls [convex above
18516 Spikes erect many-flowered a little shorter than lvs, Drupes ovate 5-celled, Lvs glabrous oblong-lanc. 3-5-nerved,
18517 Spikes nearly terminal aggregate nodding, Drupes 5-celled, Lvs oblong-lanceolate attenuated at apex disposed in interrupted whorls

18518 Branches annulated when naked

ζ Flowers double red
η Flowers large deep rose-coloured spotted, Segments of calyx leafy as long as the tube of corolla
18519 Lvs stiff coriaceous ovate-obt mucronate hairy ciliated, Petioles ciliated, Flws terminal solitary decandrous
18520 Young Lvs covered with rusty hairs old ones naked ovate, Flws 8-10-androus rising before lvs from rusty scales
18521 Lvs pilose oblong-obt mucronate, Flws solitary pentandrous, Sep. triangular villous, Segm. of Corolla acute
18522 Lvs ovate subcord. emarg mucr nitid, Ped. hispid glandular 1-flwd, Flws pentand, Sepals ovate glab, Seg. of
β Flws white spotted and very beautiful. The species has pink flowers also spotted [Cor subcordate
18523 Lvs roundish and oblong-obtuse, Umbels few-flwd bracteless, Pedicels and Ovaria ramentaceous, Flws subcampanulate pentandrous, Sepals linear-oblong fringed at apex

18524 Branches rather pilose, Lvs 3-4 in a whorl oblong-acum sess. glabr., Constricted part of Cor longer than tube
18525 Subscandent glab, Lvs obl.-ov. acum. on short petioles, Pan many-flwd, Cor large, tube slender, limb ample
18526 Erect glab, Lvs obl. on short petioles acum., Panicle many-flwd, Tube of Cor. partly constricted dilated at base angular, upper part elongated funnel-shaped

[less, Branches smooth
18527 Flws axillary and terminal solitary or twin, Lvs 4-5 in a whorl obovate veinless beneath shining, Stigma beard-
18528 Flws axill. and term, Lvs 4 in a whorl obov-oblong shining veiny beneath, Stigma bearded, Branches tomentose
18529 Flowers terminal, Lvs 3-4 in a whorl elliptic acute spiny-mucronate veiny, Stigma penciled
β Leaves narrow lanceolate mucronate

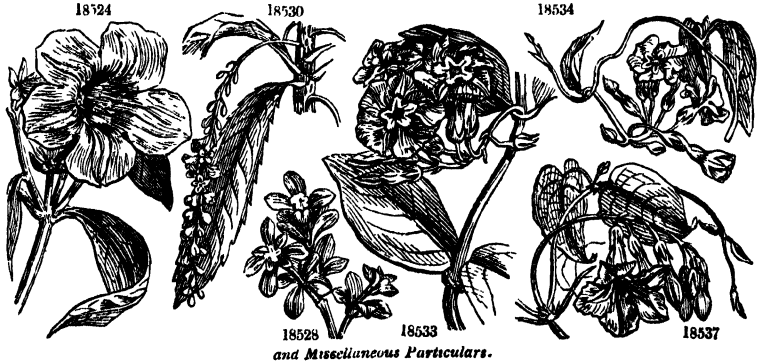
18530 Lvs long lanceolate acute spiny-toothed on short petioles, Racemes drooping, Berry usually 2-seeded

18531 Lvs elliptic-oblong acuminate downy, Corymbs erect, Tube of Cor a little longer than calyx, Follicles cohering

[obovate, Follicles hairy
18532 Lvs ovate or oblong auriculately cordate, Racemes lateral elongated many-flwd, Cor villous, Segments of limb
18533 Clothed with velvety down, Lvs ovate mucronate, Rac simple axill, Lbs of Calyx triang. hairy, Cor. glabrous
β Flowers smaller sulphur-coloured, with a red tube and rose-coloured eye
18534 Bran downy, Lvs ovate-obl. glab. above downy ben, Racemes axill a little hispid 10-12-flwd, Pedun downy
18535 Lvs roundish pointed covered with rusty down, Racemes 6-8-flowered, Segments of Corolla curled

18536 Hairy, Lvs elliptic acuminate, Cymes terminal, Segments of Corolla oblique ensiform, Nectary cup-shaped 5-toothed

18537 Lvs membranous cordate-oblong glabrous beneath, Stipules pectinate, Racemes secund axillary many-flwd



and Miscellaneous Particulars.

2894 *Mandevilla* This plant was first sent to this country under the name Chili jasmine; a name which has been given to it from its snowy white sweet-scented flowers, which from their large size and colour are beautiful to look upon The plant is well fitted for training up trellis-work or rafters in a conservatory or on a wall The young shoots should be trained to the utmost length, as it is always near the ends of the shoots where it blooms. The shoots should be cut back in the same manner as vines in winter, or other plants which bear their fruit or flowers upon the wood of the same year. It is readily increased by cuttings.

2895. 413c. ROUPE'LLIA *Wall* CREAM FRUIT. (*Charles Roupell* of S Carolina, and his nephews.) *Apocýneæ*
18538 - grâta *Wall.* grateful ☗ ▭ or 10 jn jl W.R S. Leone 1847. C l p Bot. mag. 4466

2896 413d DIPLADE'NIA *Decaisne.* DIPLADENIA. (*Diploos*, double, *aden*, a gland.) *Apocýneæ*
18539 - illústris *Mart* illustrious ⁂ △ or 1½ su Ro P Brazil 1848. C s.l.p
18540 - urophýlla *Hook* tail leaved ☗ ▭ or 4 jl o Dp Sa Brazil 1847. C s.l p Bot. mag. 4414
18541 - nóbilis *Linden* noble ⚘ ▭ or 10 jl.o W pk Brazil 1848. C s.l.p Px m. 16 4. fig
18542 - spléndens *Hook.* splendid ⚘ ▭ or 10 jl.o Ro Brazil 1841. C s l.p Bot. mag 3976
Echites spléndens Hook.
18543 - crassinóda *A Dec* thick jointed ⚘ ▭ or 10 jl.o Ro Brazil 1840. C s.l.p Bot reg 1844, 64
Echites crassinóda Gardn. in Hook Journ 1. p 544
18544 - atropurpùrea *B R* dark-purple ⚘ ▭ or 10 jl o Dk PuBrazil 1842. C s l p Bot reg. 1843, 27
Echites atropurpùrea Lindl

2897 413e RHYNCHOSPE'RMUM *A. Dec.* (*Rhygchos*, a snout, *sperma*, a seed.) *Apocýneæ*
18545 - jasminoides *Lindl* Jasmine-like ⚘ ▭ or 10 jl au W Shanghai 1846. C s.l p J. H. S. 1 74 fig

2898. 414a. PARSO'NSIA *R Br* PARSONSIA. (*James Parsons, M D.*, a botanical author) *Apocýneæ*
18546 - heterophýlla *Cun.* various-leaved ⚘ ▭ or 6 jl au Crea N. Zeal. 1847. C s l.p J.H S 5 195 fig
18547 - variábilis *Lindl.* variable ⚘ ▭ or 6 jl o W N Zeal 1847. C s.l p J.H S 5. 196

2899. 414b. LYO'NSIA *R. Br.* (*Israel Lyons*, Sir J. Banks's earliest botanical instructor) *Apocýneæ*
18548 - straminea *R B* straw-coloured ⚘ ▭ or 6 jn.jl Str V. D L 1840. C s.l.p

418 TABERNÆMONTA'NA
18549 2384a longifolia *Benth* long-flowered ☗ ▭ fra 10 s.o W S Leone 1846. C r m Bot. mag 4484
18550 - dichótoma *Roxb* forked ☗ ▭ fra 14 s o W Y Ceylon 1840. C r.m Bot reg 1841, 53

2900. 418a. ADE'NIUM *R & S.* ADENIUM (*Aden*, its native place.) *Apocýneæ.*
18551 - Hónghel *A. Dec.* Honghel-bush ☗ ▭ or 2 jn Ro G Aden 1845 C s.p l Bot reg 1846, 54

420 CE'RBERA
18552 2386a Tánghin *Hook.* Tanghin ♀ ▭ or 30 my Pk Madagas. 1826. C s.l.p Bot. mag 2968
Tanghinia venenífiua Poir *Ordeal tree of Madagascar.*

2901. 434a. LACEPE'DIA *H. B & K* (*Count Lacépède*, the distinguished naturalist.) *Hippocrateacea*
18553 - insignis *H B. & K* showy ♀ ▭ or 20 my W Mexico 1847. C lt.m Bot mag 4459
Triceratia trifolia W. *Triceros salapénus* Spreng

2902 434b ULLU'CUS *Lozano* ULLUCUS (*Ulluco*, its name in Peru) *Basellàceæ*
18554 - tuberósa *Lozano* tuberous-rooted ⁂ △ or 1 jn jl Gy Peru 1846 R lt.m Bot mag 4617
Mellòca tuberòsa Gard. Chron 1847, p. 684 1848, p 828 *M peruviàna* Moq *Basélla tuberòsa* H B & k

435 ARDI'SIA. [2 17)
18555 2444a hymenándra *Wall* membrane-an. ☗ ▭ or 8 my jl Pk Silhet 1828. C s.p l Wall. pl as rar

2903. 435a. LABI'SIA *B R* LABISIA (*Labis*, a spoon, form of division of corolla) *Myrsinàceæ*
18556 - Pothóina *B R* Pothoina ⚘ △ or 1 jn jl W Penang 1843 C s l.p Bot. reg 1845, 18



History, Use, Propagation, Culture,

2895 *Roupéllia* This is a handsome fragrant plant noticed by Atzelius (*Report*, 1794, p 113 No 7) as the Cream fruit, so called from the use formerly made of the cream-like juice of the fruit The flowers are large, white tinged with rose colour, the corona is red It is a pretty stove plant well suited to train on a trellis, pillar, or rafters, or to be grown in a pot and the plant supported by a wire trellis. Good fresh loam mixed with a little leaf mould suits it well It is a fast grower and requires water freely during summer, but care must be taken that the soil does not become stagnant It is readily increased by cuttings

2896 *Dipladénia* The species are either scandent or erect shrubs, with opposite entire leaves, and many bristles or glands in place of stipules. The genus differs principally from *Echites* in the number of nectareous glands The flowers are very showy, usually rose-coloured, pink, or purple. They thrive best in equal parts of light rich loam, heath mould, and very coarse sand They may be trained to rafters or wire trellis in a stove. They are readily increased by cuttings.

2897. *Rhynchospérmum* This is a pretty climbing shrub, with the habit of a simple-leaved species of Jasmine It is well fitted for training on rafters or trellis-work. It is of easy culture, and is readily propagated by cuttings

2898. *Parsónsia* The species are cultivated like other green-house climbers. A mixture of loam, sand, and peat suits them best

2899 *Lyónsia.* This is a pretty greenhouse climber, with sweet-scented flowers. It is well adapted for training on rafters. The same soil recommended for *Parsónsia* will suit it

2900. *Adènium Hónghel* is a curious plant It forms one or two fleshy stems like those of *Plumèria*, on the top of a club-shaped protuberant root or base of stem, and these stems divide again into dumpy branches, each bearing two or three leaves only It appears to be of very slow growth. Its flowers are very handsome and rose-coloured According to Alph. Decandolle this shrub is found in dry places in Wallo and Senegambia, where it is commonly called Honghel It requires a dry stove where it can be fully exposed to the sun. Being a plant of slow growth, it does not require much water at any time, and it should be kept almost dry after the leaves have fallen

420. *Cérbera Tánghin* is the Ordeal tree of Madagascar. When the late queen of Madagascar, in the beginning of 1830, came to the resolution of clearing her land from sorcerers, an ordeal was commanded in every town and village,

18538 Lvs smooth oblong-elliptic acuminate, Cymes terminal sessile 6 8-flowered, Bracts keeled

18539 Root tuberous, Stems annual, Leaves obovate rounded downy, Flowers 3 4 together terminal
18540 Glabrous erect, Leaves oblong-ovate taper-pointed, Racemes loose drooping 4-6-flowered
18541 Glabrous, Root round, Leaves ovate-oblong acute, Racemes terminal one-sided, Sepals very narrow
18542 Leaves elliptic acuminated undulated cordate downy beneath, Racemes axillary

18543 Glabrous, Stem and Branches swollen at the joints, Lvs lanceolate acuminate, Racemes axillary usually 6-flwd

18544 Glabrous, Leaves ovate acute, Peduncles axillary 2-flowered, Sepals narrow, Lobes of Corolla triangular curled

18545 Rooting like ivy, Young Branches downy, Leaves oval deep green glabrous with minute scale-like glands in place of stipules, Flowers corymbose [Corolla urceolate
18546 Stem downy, Lvs downy wavy variable in form from linear to obovate, Flws in close one-sided naked panicles,
18547 Stem downy, Leaves shining from linear to obovate, Panicles short one-sided, Corolla campanulate

18548 Leaves opposite, Cymes terminal trichotomous, Limbs of Corolla bearded differs from *Passónsia* in the fruit being a capsule

18549 Leaves oblong-elliptic abruptly acuminated Peduncles loosely 3-flowered, Corolla with a very long tube
18550 Leaves oblong obtuse coriaceous, Cymes elongated dichotomous, Calycine Segments obtuse, Segments of Corolla oblong falcate

18551 Leaves obovate-oblong glabrous obtuse mucronate, Bracts narrow, Pedicels villous, Calyx downy, Lobes of Corolla obovate

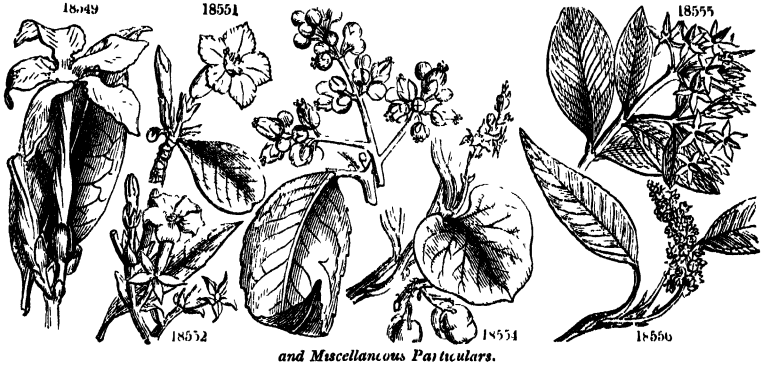
18552 Leaves elliptic lanceolate approximate coriaceous shining, Corymbs terminal panicled

18553 Leaves serrulated, Panicle terminal, Flowers sweet-scented

18554 Fleshy, Lvs alternate entire, Flws pedicellate in single or branched spikes, Spikes few-flowered, Bracts remote

18555 Glabrous, Leaves obovate acuminate coarsely crenated, Corymbs lateral leafy from large bracts, Segments of Corolla linear, Anthers combined winged and tailed

18556 Leaves membranaceous, Petioles tumid at base and articulated with the stem, Flowers spicate



and Miscellaneous Particulars.

and at Tannanarivoo scarcely any class of inhabitants escaped. On the 9th of May, 1830, in compliance with the sovereign's mandate, a notable administration of the Tanghin took place The accused persons amounted to about thirty, including some of the highest All the nobility recovered, while the unknown plebeians, who, according to the common jugglery had been compelled with them, died The former made the usual triumphant entry into town, on the 17th, borne in open palanquins, amongst the shouting, dancing, and grimaces of the many thousands of people In the following month, April, about an equal number of Malagassy ladies submitted to the same ordeal, but all survived, and, in due course, made a grand entry into town The Tanghin is administered in private as well as in public. A subject so deeply rooted in the minds of all the Malagassy people, from the sovereign down to the slave, is the belief in witchcraft; and so blindly are they led by this belief that the whole nation may be considered as under a spell as powerful as the fascination which they attribute to the unfortunate sorcerers themselves The fruit of the Tanghin is the part used, and is administered by means of some liquid, as broth.

2901 *Tacepidia insignis* is a fine tree with very fragrant blossoms. It grows in any light soil, and is readily propagated by cuttings in the usual way.

2902 *Ulucus*. The tubers of this plant are eaten in Peru. In the time of the potato panic the roots were introduced as a substitute for it, but it proved an entire failure, as the roots are worthless, and not suited to the English palate It is called Ulluco and Melloco in Peru The plant is cultivated for its roots throughout the elevated regions of the Andes of Peru and Bolivia under the name of *Oca-quina*. The tubers are chiefly used by the Indians in the preparation of *Chuna*, by alternately freezing and steeping them, by which they are changed into an amylaceous substance It is a succulent herbaceous plant, growing luxuriantly in the open air during the summer and autumn Being easily affected by frost, it is necessary to take up the tubers about the end of October, and keep in store till April, when they should be planted in the open air. The plant throws out thread-like branches, which run over the stems, or on the ground, and enter the soil, and there develope new tubers. The largest tubers grown are about the size of a hazel nut, of a rich yellowish colour, and firm waxy texture.

2903 *Labisia*. This curious stove plant requires to be grown in a humid atmosphere, where it may have a gentle bottom heat. In winter little water is required for weeks, if the soil is kept moist it will be all that is required.

2904 435*b*. CORYNE'CA'RPUS *Forst.* (*Koryne*, a club, *karpos*, a fruit; shape of fruit.) *Myrsinedcæ.*
18557 - - lævigàtus *Forst* smooth-leaved ♀ ▭ or 20 my jn W N. Zeal. 1823. C s.l p Bot. mag. 4379

2905. 437*a*. FAGRÆ'A *Thunb* (So called by Thunberg after *Jonas Theodore Fagræus, M.D.*) *Potaliàcæ.*
18558 - - obovàta *Wall.* obovate-leaved ♀ ▭ or 20 my W E Indies 1816. C s.p.l Bot. mag. 4205

444 SOLA'NDRA.
18559 2459*a* læ'vis *Hort* smooth ● ▭ or 4 o n W S Amer. ... C lt.m Bot. mag 4345.

445. CE'STRUM.
18560 2478*a* viridiflòrum green-flowered ● ▭ fra 2 au G Brazil 1836 C p.l Bot. mag. 4022
calycinum Willd Paxt. l. p 153 fig 97.
18561 - - aurantiacum orange-flwd ● ▭ fra 4 au Or Guatem. 1843. C p.l Bot. reg. 1845, 22
18562 - - Warczewiczii *Klotsch* Warczewicz's ● ▭ fra 4 jl au G C. Amer. 1852 C p l
18563 - - bracteàtum *Lk & O* bracteate ● ▭ fra 4 jl.au ... Brazil 1850 C p l L et O ab. l.11.6
18564 - - alaternoides Alaternus-like ● ▭ fra 3 jl au W Trinid. 1840 C p.l Bot. mag. 2929

2906. 445*a* HABROTHA'MNUS *Endl* (*Habros*, gay, *thamnos*, a shrub, beauty.) *Solanàceæ.*
18565 - - fasciculàtus *Endl* fascicled-flwd ● ▭ or 5 ap my S Mexico 1813 C lt.l Bot. mag 4183
Céstrum fasciculàtum Miers.
18566 - - corymbòsus *Endl* corymbose-flwd ● ▭ or 5 my.jn R Mexico 1843. C lt.l Bot. mag 4201
Meyènia corymbòsa Schlecht. *Céstrum Endlicheri* Miers
18567 - - élegans *Schcidw* elegant ● ▭ or 5 jn jl P Mexico 1847. C lt.l Bot. reg. 1844,43
purpùreus Lindl *Meyènia élegans* Scheidw *Céstrum élegans* Miers.
18568 - - tomentòsus *Benth* tomentose ● ▭ or 4 jl au Pk Mexico 1846. C lt.m
18569 - - ròseus *G. Don* rose-flowered ● ▭ or 4 jl au Ro Mexico 1850. C lt.m H B et K 3. 197
Céstrum ròseum H B. & Kth.

2907. 445*b* ISOCHRO'MA *Benth* (*Isos*, equal, *chrome*, colour, same coloured flwr to all species.) *Solanàceæ*
18570 - - tubulòsa *Benth.* tubular-flwd ● ▭ or 5 jl au G.v Loxa 1843 C s l p Bot. reg. 1845, 20
Habrothámnus cyàneus Lindl

2908 446*a* HEBE'CLADUS *Miers.* HEBECLADUS. (*Hebe*, down, *klados*, a branch, branches.) *Solanàceæ.*
18571 - - biflòrus *Miers* two-flowered ● ▭ pr 2 jl au G.P Peru 1844 C lt.l Bot. mag. 4192
A'tropa biflòra R. & P. fl. per 2. t 181 f 6.

2909. 450*a*. CHÆNE'STES *Miers* CHÆNESTES. (*Chaino*, to gape; calyx.) *Solanàceæ*
18572 - - lanceolàta *Miers* lanceolate-lvd ● ▭ or 5 jl.s Pa B Quindiu 1846 C l p.s Bot mag 4330
18573 - - fuchsioides *Miers* Fuchsia-like ● ▭ or 5 jl s S Azoques 1843. C p l Bot. mag. 4149
Lycium fuchsioides H B. & Kth.

451 SOLA'NUM
18574 2521*a* demissum *Lindl* low ✱ △ cnl 1 jn.jl V Mexico 1846 R lt m J.H S 3 69 fig
18575 - - cardiophyllum *Lindl* heart-leaved ✱ △ cul 1 jn.jl Crea Mexico 1846 R lt.m J.H S 3. 71 fig
18576 2525*a* runcinàtum *R & P* runcinate lvd ✱ △ or 3 o V Chili 1831 S co Swt. fl g 2 s 177
18577 2551*a* macranthèrum *Dun* large-anthered ♿ ▭ or 14 s P Mexico 1838 C s.l p Bot. reg. 1841, 7
dulcamaroides Poir
18578 - - concàvum *B R* concave-leaved ♿ ▭ or 14 jl au V Chili 1839 C s l p
18579 2544*a* ligustrinum *Lodd* Privet like ● ▭ or 5 my Dp.V Chili 1831 C s l p Bot. cab 1963
18580 - - myrtifòlium *Lodd* Myrtle-leaved ● ▭ or 4 jn jl B S Amer 1820 C s l p Bot. cab. 1431
18581 - - angustifòlium *Lam* narrow-leaved ♿ ▭ or 3 jn P B Ayres 1838 C s.l.p Botanist, 191
18582 - - cándidum *B.M.* white ● ▭ or 5 o W Mexico 1836 C s.l p
18583 - - jasminoides *Paxt.* Jasmine-like ♿ ▭ or 8 au d Pa B S. Amer 1838 C s.l p Bot. reg. 1847, 33
18584 - - vernicàtum *Lindl* varnished ○ or 1 jl au Gy v B. Ayres 1837. S c o
18585 - - uncinéllum *Lindl.* hooked ✱ ○ or 3 jl Pk ..... 1836. S co Bot. reg. 1840, 15
18586 - - campanulàtum *R & S* campanulate ✱ ○ or 1 jn B N. S W 1825 S s.l.p Bot mag 3672
18587 2563*a* Hóskii *Lindl* Ross's ● ▭ or 2 jn jl B Mexico 1839. C s.l p
18588 - - macrànthum *Dun.* large-flowered ● ▭ or 12 jl au Pa Li Brazil 1840 C s.l.p Bot mag 4138

453 CA'PSICUM
18589 2605*a* cerèolum *Bertol* waxy ✱ ▭ cul 2 ap jl W Brazil 1846 S s.l.p Px fl g.2 131 202

458. EXOSTE'MMA
18590 2616 longiflòrum *R & S* long-flowered ● ▭ fra 3 jn jl W.R Caraccas 1820. C p l Bot. mag. 4186
Cinchòna longiflòra Lamb cinch t 12.



History, Use, Propagation, Culture,

2904. *Corynecárpus* is a fine tree, with laurel-like leaves. It only requires the culture of an ordinary greenhouse plant, and readily increases by cuttings.

2905. *Fagræ'a* The species of this genus are beautiful trees. They flourish in a moist stove, and succeed best with bottom heat.

2906. *Habrothámnus.* The species of this genus are said by Hartweg to be the gayest productions of the Mexican flora. The genus is hardly distinct from *Céstrum*, but, as the plants are common in the gardens under the name of *Habrothámnus*, we have retained the name. The species do well with the treatment of *Pelargónium*

2907. *Isochròma tubulòsa* is a handsome half-hardy deciduous shrub. It grows freely in rich soil in the open air during summer, but it should have an abundant supply of water; and it should be taken up about the end of

18557 Leaves alternate obovate-wedge-shaped subemarginate quite entire glabrous, Panicle large terminal sessile

18558 Arboreous, Branches bluntly tetragonal, Leaves elliptic or obovate, Panicle cymose 3—6 flowered, Tube of Corolla obovate

18559 Leaves obovate-elliptic glabrous, Calyx bilabiate, Tube with 5 angular wings, Corolla with a 5-ribbed tube widening upwards and contracted at the mouth, Lobes curled

18560 Clothed with stellate down, Filaments toothless, Leaves ovate-lanceolate nearly naked above, Spikes simple axillary pedunculate, Bracts narrow [ciduous, Limb of Corolla reflexed, Berries white

18561 Glabrous, Filaments furnished with a tooth, Leaves oval undulated, Flws sessile spicate panicled, Bracts de-

18562 Glabr, Lvs oval pale beneath, Flws disposed in thyrsd tastig term. corymbs, Bracts persistent [Brcts foliac.

18563 Lvs oval obl.-lanc scabr. above rather tom beneath, Lvs of buds emulating seps, Flws sess. in crowded spks,

18564 Filaments denticulate, Lvs alternate ovate undulated coriaceous shining, Racemes nearly sessile

18565 Downy, Lvs ovate entire, Flws terminal cymosely capitate involucrated, Corolla urceolate with ciliated segs

18566 Glabrous, Lvs ovate-lanceolate entire, Corymbs terminal forming as it were a dense leafy panicle, Segments of Corolla lanceolate

18567 Branches and under side of lvs downy, Lvs ovate-lanceolate, Cymes terminal, Segments of Corolla ciliated [sessile fascicled, Bracts involucrate

18568 Branches flexuous downy, Lvs ovate lanceolate downy above and tomentose beneath, Flws terminal axillary

18569 Young branches villous, Leaves oblong bluntish downy, Peduncles terminal and axillary 3—6-flowered, Flowers sessile capitate involucrate, Calyx tubular

18570 Leaves ovate 3 or 4 times shorter than the corolla, Corolla tubular with 5 short teeth

18571 Leaves ovate-acute undulated generally sinuated, upper ones twin, Peduncles 2-flowered, Flowers drooping

[Flws drooping

18572 Branches tomentose, Lvs lanceolate acum downy above and tomentose beneath, Umbels short many-flowered,

18573 Glabrous, Leaves oblong acum. obovate obtuse, Pedicels aggregate axillary and terminal 1-flowered, Flowers drooping

[Corolla circular 10-toothed

18574 Prostrate stoloniferous downy greyish, Lvs subinterruptedly pinnate, Leaflets roundish obovate, Calyx 5-cleft,

18575 Erect stolonif dk grn glabr, Lvs auricul pin 2—3 pairs, Lflts rnd cord fleshy, Cal cup-shpd 5-tthd, Cor 5-

18576 Stems procumbent angular fleshy fragile, Lvs downy pinnatifid 5—7 lobed, Lobes and sinuses obtuse [parted

18577 Scandent, Lvs petiolate ovate-acute downy beneath, Racemes panicled loose

[equal

18578 Lvs oblong-linear obtuse concave glabrous repand, Panicle cymose many-flowered, Calyx 5-toothed, Anthers

18579 Branches terete glabrous, Lvs subcordate ovate or ovate-lanceolate bluntish glabrous, Corymbs few-flwd glabr.

18580 Branches terete green, Lvs lanceolate glabrous tapering to both ends, Racemes short lateral

18581 Stem climbing, Lvs narrow oblong-lanceolate glabrous bluntish, Racemes corymbose loose [lvs, Cal unarm

18582 Very vil. prickly, Lvs obl cord sinuatly-anglr hoary bnth, prickly on veins, Racs sess woolly distich borne under

18583 Mny-stmd, Stms twiggy smth sarment, Lvs mostly cord ov smtms 2-3-4-5-cleft or prtd glabr. Racs pan dichot

18584 Glabr varnished, Stms very prickly, Lvs pinnatif. cil., Pets and ribs prickly, Umbels infra-ax. nutant, Anth equal

18585 Unarm, Lvs ent ov-lanc. subcord dwny, Pan term, Calyx 5-cren, Segs of Cor. uncin. at top, Anths unequal

18586 Stm wlly prkly, prick crwdd subul acic, Lvs ov.ang.-lbd hry prkly, Cal prkly, Racs simp few-fl., Cor. campan

18587 Prostr slndr prickly, Lvs twin or tern uneql dwny obl sin, upr cord, Flws quadrif tetrandrous, Anth equal

18588 Arboreous, Stem prickly, Brns woolly, Lvs large broadly-ovate angularly lobed nearly sessile woolly prickly beneath, Racemes much shorter than the leaves, Pedicels and Calyxes prickly

18589 Fruit conical acute bright yellow waxy hence the name, Leaves ovate-acuminate, Peduncles recurved

18590 Leaves lanceolate glabrous, Petioles short, Pedicels terminal and axillary, Teeth of Calyx subulate



and Miscellaneous Particulars.

September, and placed where it will be secure from the frost during winter. About the middle of the following March it should be cut back rather freely. It is readily increased by cuttings.

2908, *Heudelotia* is a pretty little shrub of easy culture

2909 *Chænostes*. Beautiful half hardy shrubs, which will grow and flower freely if planted against a wall in summer, but require protection from frost in winter They are readily increased by cuttings The flowers are very showy

451 *Solanum demissum* and *S cardiophyllum* are Mexican kinds of potatoes. The first grows at an elevation of 10,000 or 11,000 feet above the sea level, the other at 8,000 to 9,000 feet. The tubers of the first are kidney-shaped, white, with transparent flesh, the second has roundish waxy tubers.

460. RONDELE'TIA.

18591 2620*a* speciòsa *Lodd.* showy ● □ or 3 ap.my S Havana 1830. C l.p Px.m.16.354.ic

2910. 460*a*. ROGIE'RA *Planch* (*M. Charles Rogier*, minister of the interior in the Belgian cabinet.) *Rubiàceæ*

18592 - - Menéchmea *Planch* Menechmes ● □ or 4 ap my R S. Amer. 1851. C s l p Px fl g.2.41.15
Rondelètia amœ'na Hort.

18593 - - versicolor *Planch* party-coloured ● □ or 4 jn.jl R.wy C Amer 1838. C s l.p Bot. mag. 4579
Rondelètia versicolor Hook.

18594 - - cordàta *Planch* cordate-leaved ● □ or 3 jn jl Pk S. Amer. 1848. C s.l p Moor. mag.3 89
Rondeletia cordàta Benth. *R. thyrsiflòra* Hort

18595 - - amœ'na *Planch* pleasing ● □ or 4 jn au Ro Guatema.1851. C s.l p Planch fl. 442

2911 460*b*. PE'NTAS *Benth.* PENTAS (*Pente*, five, number of parts of flower) *Rubiàceæ*

18596 - - cárnea *Benth.* flesh-coloured ● ⊠ or 1½ ap.o F S. Leone 1842. C p.l Bot mag. 4086

2912 460*c*. HI'NDSIA *Benth.* HINDSIA. (*R B. Hinds, R N*, a lover of Botany.) *Rubiaceæ*

18597 - - violàcea *Benth* violet-flowered ● □ or 3 my V Brazil 1842. C s p Bot mag 4115

18598 - - longiflòra *Hook* long-flowered ● □ or 2 au B Brazil 1841 C s p B t. mag 3977
Rondelètia longiflòra Cham

2913. 460*d* HIGGI'NSIA *Pers* HIGGINSIA. (*General O'Higgins*, some time governor of Chili) *Rubiàceæ*

18599 - - mexicàna *Klotzsch* Mexican ● □ or 4 my o Y Mexico 1838 C l s p

2914 460*e*. LINDE'NIA *Benth* LINDENIA. (*J Linden*, a traveller in Colombia and Cuba) *Rubiàceæ.*

18600 - - rivàlis *Benth.* river-side ● □ or 3 jl au C Mexico 1838. C l s p

462 PORTLA'NDIA.

18601 - - platántha *Hook.* broad-flowered ● □ or 2 su W T Amer 1848. C l s.p Bot. mag 4534

463 CAMPA'NULA.

2629*a* carpática

β álba *white-flowered* △ or ½ jn s W Gardens ... D co

18602 2629 grándis *Fisch & M* great △ or 3 au B Natolia 1842 D co Px. m 10 31 ic

18603 2653 macrántha *Fisch* large-flowered △ or 2 jl B Dahuria 1820. D co Bot. mag 2553

18604 2671 coloràta *Wall* coloured △ or 1 jn jl B Sik Him 1849. S co Bot. mag 4555

β Mooreroftiàna Dec *Moorcroft's* △ or 1 jn jl B Nepal 1849 S co

18605 2674*a* Vidálii *Wats* Capt Vidall's △ or 1½ jl au W Azores 1845 S co Moor. c l 33 ic

18606 - - nóbilis *Lindl.* noble △ or 1½ jn au Spot China 1844 D co

18607 2679 frágilis *Cyr* fragile △ or ½ jn au Pa.B Italy 1826 D co Cyril p. l 11 2

β hirsùta Alph Dec. *hairy* △ or ½ jn.au Pa.B Italy 1840 D co Px.m 11 25 ic

18608 2685*a* sylvática *Wall* wood ○ or 1 jn au B Nepal 1844 S co Px m 12 215 ic
stricta Wall. *integérrima* D Don

18609 2691 Lœflingii *Brot* Lœfling's ○ or 1 au B Portugal 1818. S co Bot reg. 1843, 19

2915. 463*a*. ADENO'PHORA *Fisch.* (*Aden*, a gland, *phoreo*, to bear, nectary at base of style) *Campanulàceæ*

18610 - - tricuspidàta *Fisch* tricuspidate △ or 1½ jl au B Dahuria 1817. D s.l.p Swt fl g 116
Campánula denticulàta Led

18611 - - coronopifolia *Fisch.* Buckhorn-lvd △ or 1½ jn jl B Altaia 1822. D s l p Swt fl g 104
C. coronopifòlia R. & S., as well as Nos 2645, 2646. 2649 and 2650, belongs to this genus.

2916. 463*b*. PLATYCO'DON *Alph Dec* (*Platys*, broad, *kodon*, a bell, shape of flower) *Campanulàceæ*

18612 - - grandiflòrum *A. D.* great-flowered △ or 1 jl.au B Dahuria 1782 S s l p Bot. mag. 252
C grandiflòra Jacq No 2647

β álbum *white-flowered* △ or 1 jl au W China 1845. S s.l p

18613 - - chinénse *Lindl* Chinese △ or 3 jl au B China 1845. S s l p
homalánthinum Alph Dec

2535 463*c* WAHLENBE'RGIA

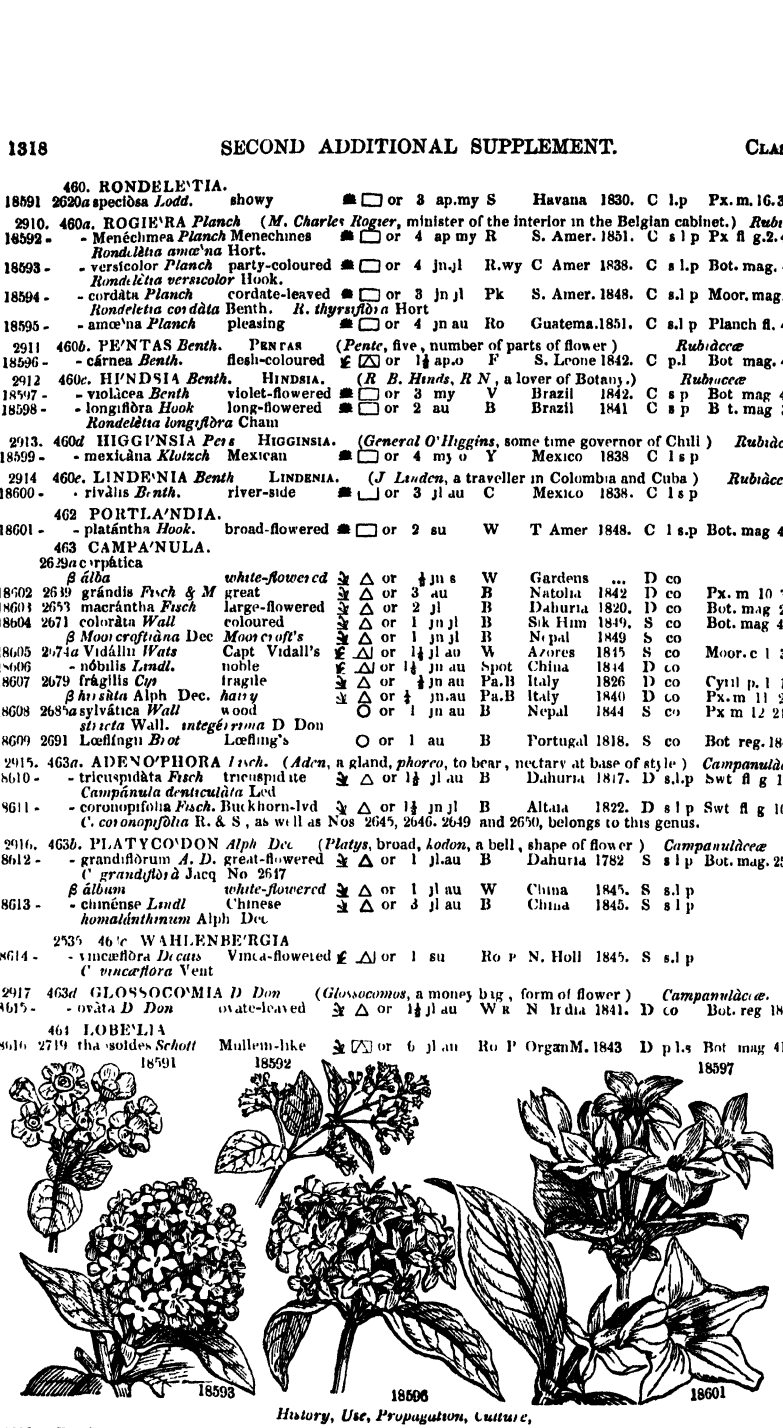
18614 - - vincæflòra *Decais* Vinca-flowered ◐ △ or 1 su Ro P N. Holl 1845. S s.l p
C vincæflora Vent

2917 463*d* GLOSSOCO'MIA *D Don* (*Glossocomos*, a money bag, form of flower) *Campanulàceæ.*

18615 - - ovàta *D Don* ovate-leaved △ or 1½ jl au W R N India 1841. D co Bot. reg 1842, 3

464 LOBE'LIA

18616 2719 thalsoides *Schott* Mullein-like △ or 6 jl au Ro P OrganM. 1843 D p l.s Bot mag 4150



History, Use, Propagation, Culture,

2910 *Rogiè'ra* is a genus of pretty shrubs nearly allied to *Rondelètia*, they grow freely in a mixture of loam and leaf mould, and are readily increased by cuttings

2911. *Péntas P cárnea* is a very handsome and showy plant; it grows freely in a moist heat in a mixture of leaf mould, sand, and loam, and is readily increased by division and cuttings in the ordinary way.

2912. *Hindsia* The species are among the finest things obtained from Brazil. They only require the treatment of other stove plants.

2913. *Higginsia mexicàna.* This plant was raised in the Berlin Garden from seeds that sprang up in the earth in which Mexican plants had been imported For the summer it does very well in the open air, but it must be placed in a green-house in winter. The flowers are in axillary cymes.

[fastigiate, Branches 3-flowered
18591 Lvs ovate-lanceolate tapering strigose beneath and bearded in the axils of the veins, Panicle terminal leafy

18592 Lvs ovate covered with scurfy down, Stamens inserted near the orifice of the tube, Style short
[Corolla roundish with silky disks
18593 Branches and younger leaves silky villous, Lvs ovate subcordate smooth above and downy beneath, Lobes of
[flexed, Cymes terminal corymbose many-flowered
18594 Hairy, Lvs nearly sessile ovate-lanceolate acuminate cordate at base coriaceous, Stipules ovate-lanceolate re-

18595 Hairy, Lvs oblong nearly sessile, Stipules large ovate, Cymes short compact terminal, Lobes of Calyx obtuse

[elongated
18596 Lvs ovate or oval-oblong acute rather pilose, Tube of Corolla much longer than the Calyx, Branches of style
[middle
18597 Downy, Stipules ovate, Lvs broad-ovate, Calycine Segments very unequal, larger ones foliaceous above the
18598 Lvs ovate-lanceolate strigose beneath bearded in the axils of the veins, Panicle leafy, Branches 3-flowered

[recurved, Berries scarlet
18599 Branches tereto purple, Lvs obovate-acute nearly glabrous, Peduncles axillary 3-8-flowered, Limb of Corolla

[nearly sessile
18600 Lvs approximate at tops of the branches oblong-lanceolate entire, Corymbs terminal few-flowered, Flowers

[bipartite
18601 Lvs broad-obovate-elliptic nearly sessile, Flowers axillary, Lobes of Calyx lanceolate, Stamens enclosed, Stigma

β Flowers white. A pretty plant well adapted for bedding out in masses
18602 Lvs long-lanceolate serrated, Flowers numerous flatly campanulate, Segments ovate acuto
18603 Stem and lvs rather pilose, Lvs doubly serrated, lower ones cord upper ones sessile, Flws racemose, Cal. glabr
18604 Stem branched downy, Lvs scattered ovate-lanc toothed, Pedunc elongated terminal and axill., Lobes of Cal.
β Lvs less toothed [large foliaceous repandly toothed, Flower subnutant
18605 Suffruticose leafy at top, Lvs long-lanc toothed, Flowers racemosely panicled drooping on peduncles
18606 Pil , Stem brnchd, Lvs coarsely biser , rad petı cord -ov , caul sess lanc , Rac pend , Segs of Cal cil append ov
18607 Stems ascending diffuse, Radical Lvs petiolate roundish cord crenately lobed, cauline leaves smaller ovate, Flws
β Plant hispid, and as if it was covered with wool [panicled, Lobes of Cal linear-lanceolate
18608 Plant beset with short stiff hairs, Stem erect few-flowered, Radical Lvs obl -obov , cauline ones linear, Flowers terminal erect, Corolla downy
18609 Stem branched many-flowered scabrous on the angles, Lvs crenulated, lower ones ovate reniform, upper ones ovate stem-clasping

18610 Lvs serrated, radical ones petiolate rounded, cauline ones sessile ovate-lanceol , Flws racemose, Segments of Calyx triangular toothed, Style length of corolla
18611 Radical leaves petiolate ovate-cordate toothed, cauline ones sessile linear-lanceol., Flws few racemose, Segments of Calyx lanceolate entire, Style length of corolla

18612 Glabrous glaucescent, Lvs ovate-lanceolate serrated, Stigmas 5, Capsule 5-celled

β Flowers white semidouble
18613 Glabrous glaucescent erect, Lvs ovate finely serrated, Flowers racemose, Stigmas 5, Capsule hemispherical

18614 Plant slender branched, Lvs narrow toothed

18615 Downy, Stems ascending, Lvs cordate-ovate, Calycine Segments oblong obtuse reflexed quite entire

18616 Leaves sessile lanceolate denticulated ciliated rather pilose, Flowers racemose, Bracts ciliated



and Miscellaneous Particulars.

2914 *Lindènia rivàlis* is a plant nearly related to *Augùsta* or *Portlàndia* in the nature of the fruit, and *Tocoyena* in the form of the flower It forms a beautiful shrub, with flowers like those of *Oxyánthus*.

2915. *Adenóphora*. All the species are elegant border flowers, and are therefore worth cultivating in every garden They will grow in ordinary soil, and are increased by seeds or dividing at the root.

2916 *Platycòdon* These plants are neat when in blossom. They thrive best in pots in a mixture of sand, loam, and peat, and placed among alpine plants They will also thrive in a peat border.

2917. *Glossocòmia ovàta* is a hardy perennial with spindle-shaped roots, and is inclined to twine It grows well in common garden earth. It is readily increased from seeds treated like those of *Campánula carpática*.

18617	2704*a*	gigantèa *Cav*	giant			or	14	au.n	Or	S. Amer.	1828.	C	p l		Cav. icon. 6. 513
18618	-	- multifl5ra *K. & W*	many-flowered			or	2	jn.o	B	Swan R.	1838.	D	lt.p		
18619	2724	glandulòsa *Walt.*	glandular			or	2½	s.o	Pa.B	N Carol.	1845.	D	p.l		Bot. reg. 1846, 6
18620	-	- pyramidàlis *Wall.*	pyramidal			or	2	jl.au	G n	Himalay	1840.	D	p s.l		Bot. mag. 2387
18621	-	- discolor *Lk Kl.*	discoloured			or	1	jl.au	B	Mexico	1840.	D	p l.s		Lk. K. et O. ic 1
18622	27	*b* texensis *Alph Dec*	Texian			or	2	jl.s	S	Texas	1845.	D	p l.s		Lk. K.et O. ic.33
18623	2743	mollis *Graham*	soft			or	1	my.au	P	Dominic	1828.	D	p.l		
18624	-	- rugulòsa *Grah*	wrinkled			or	½	my au	W	N. Zeal.	1828.	D	p.l		
		maculàta Penny.													
18625	-	- heterophýlla *Lab*	variable-leaved			or	2	s	B	V. D L.	1837.	D	p.l		
18626	2719	cœlestis *Nutt.*	heavenly blue			or	½	jl o	B	N. Amer	1831.	D	p.l		Px. m. 15. 103 ic
		crispa Grah.													

2918 464*a* ISOTOMA *G Don* ISOTOMA. (*Isos*, equal, *tome*, a section, flowers equal) *Lobeliàceæ.*

18627	-	- axillàris *B.R*	axillary-flwd			or	1	jn.s	B	N. Holl.	1824	D	s l p		Bot reg 964
		Lobèlia scævoides Cun.													
18628	-	- Brównii *G Don*	Brown's			or	1	s	R	N. Holl.	1829.	S	s.l.p		Bot mag 3075
		Lobèlia hypocrateriformis R. Br.													

2919 464*b* CENTROPO'GON *Alph Dec.* (*Kentron*, a spur, *pogon*, a beard, anthers) *Lobeliàceæ.*

18629	-	- cordifolius *Benth.*	heart-leaved			or	2	n	Ro	W Indies	1840	C	s p		
18630	-	- surinamènsis *A Dec*	Surinam			or	2	ja jl	Or.R	W Indies	1786.	C	s.p		Bot mag 225
		Lobelia surinamènsis Lin no 2720													

2537 464*c*. TU'PA

18631	16986*a*	crassicaùlis *Hook*	thick-stemmed			or	6	jl.s	Y.or	Brazil	1850.	C	s.l.p		Bot. mag. 4505
		Siphocámpylos cànus Hort Belg													

2538. 464*z* SIPHOCA'MPYLOS.

18632	16987	longipedunculàtus	long-peduncled			or	3	ja	R.Y	Brazil	1840.	C	s.l p		Bot. mag. 4015
18633	-	- lantanæfòlius *Hook.*	Lantana-lvd			or	3	ap my	Pa R	Caracccas	1843	C	s.l p		Bot. mag 4105
18634	-	- coccíneus *Hook*	scarlet-flwd			or	3	my.jl	Bsh S	Org.Mts	1844	C	s.l.p		Bot mag. 4178
18635	-	- microstomus *Hook*	small-mouthed			or	3	year	S	N. Gran.	1845	C	s.l.p		Bot. mag. 4286
18636	-	- glandulòsus *Hook.*	glandular-cal.			or	3	ju au	S	Bojola	1845	C	s.l p		Bot. mag. 4341
18637	-	- manettiæflòrus *Hook*	Manettia-flwd			or	1	ap o	R Y	N Gran.	1848.	C	s l.p		Bot mag. 4403
18638	-	- betulæfòlius *Cham.*	Birch-leaved			or	3	jl	R.Y	Brazil	1840	C	l.s.p		Bot mag 3973
18639	-	- hamâtus *Wendl.*	hooked			or	6	jn.my	V	Brazil	1849.	C	l s.p		Px. fl g. 2. 28
18640	-	- scándens *G Don*	scandent			or	4	jl	S	Peru	1817.	C	l s p		
		Lobelia scándens H B.													
18641	-	- amœ'nus *Planch*	pleasing			or	3	jn au	Or R	Brazil	1852.	C	l s.p		Px.fl.g 2 135 206

2539. 467*a*. LESCHENAU'LTIA

18642	16994*a*	spléndens *Hook*	splendid			or	1	jn au	S	N Holl	1844.	C	s.p		Bot mag. 4256
18643	-	- arcuàta *Le Vaest*	arched			or	1	jn au	Y.s	Swan R	1841.	C	s p		Bot mag. 4265
18644	-	- biloba *Lindl*	two lobed			or	1	jn.au	B	N. Holl.	1840.	C	s p		Bot. reg 1842 2
		grandiflòra Dec													

469. EUTHALES

18645	-	- macrophýlla *B.R*	long-leaved			or	3	su	Y Br	N Holl	1839.	D	s.p.l		Bot. reg. 1841, 3

470 DAMPIERA.

18646	2771	cuneàta *R Br*	cuneate-leaved			or	1	my jl	B	N. Holl	...	C	s p l		
18647	-	- linearis *R Br.*	linear-leaved			or	1	my jl	B	N Holl	1840	C	s p l		
18648	-	- fasciculàta *R Br*	fascicled			or	1	my jl	B	N Holl	1841	C	s p l		
18649	-	- alàta *B R*	winged-stmd			or	1	my jl	B	Swan R	1842.	C	s p l		
18650	-	- lavandulàcea *B R*	Lavender-like			or	1	my jl	B	Swan R.	1843	C	s pl		

472 VELLE'IA

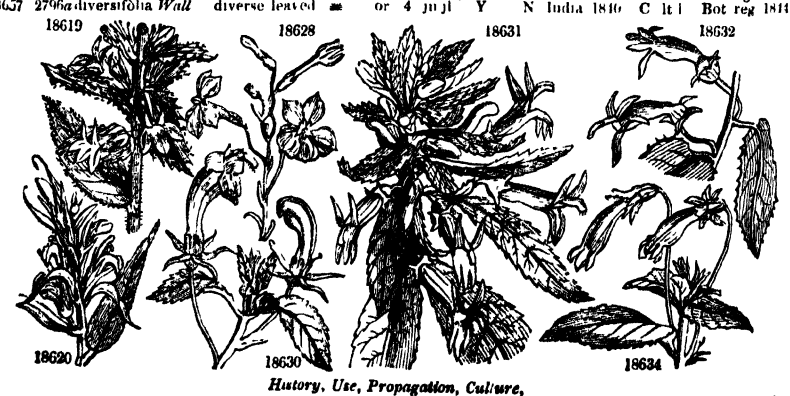
18651	2774*a*	lanceolata *B R*	lanceolate			or	1		Y	Swan R	1841	D	s p l		

473 SCÆ'VOLA

18652	2778*a*	attenuàta *R Br*	attenuated-lvd			or	2	jn jl	B	Swan R	1844	D	s l.p		Bot mag. 4196
18653	-	- multiflòra *B R*	many-flowered			or	2	jn s	B	Swan R	1840	D	s l.p		
18654	-	- squarrosa *B R*	squarro e			or	2	jn s	B	Swan R	1842	D	s.l p		
18655	-	- platyphýlla *B R.*	broad-leaved			or	2	my au	W	Swan R.	1841	D	s l p		

475 LONI'CERA

	2795	tatárica													
		β *punicea* H J S	*crimson-flwd*			or	10	ap my	C	Siberia	1848	C	co		
18656	-	- fragrantíssima *Lindl*	very fragrant			fla	6	ap my	W	China	1848	C	co		Px fl g 3 75 268
18657	2796*a*	diversifòlia *Wall*	diverse leaved			or	4	jn jl	Y	N India	1846	C	lt l		Bot reg 1844 53



History, Use, Propagation, Culture,

2918. *Isótoma.* **The species are very pretty while in blossom, and are of easy culture. A light soil suits them best, and they answer if planted out during summer in the open border.**

18617 Lvs obl -lanc acum. wrinkled glabr above clothed with hoary toment. beneath, Flws axillary on long pedunc.
18618 Stem erect brnchd at base, Lvs ov.-obl. rather hisp. obsoltly and glandly tthd cil. sess., Spk elong. term. leafy
18619 Lvs lanc glandly serrul. rather fleshy glabr., Fl. on short peds racem , Cal. Segs tthd. Stem erect bran. downy
18620 Lvs narrow lanc. finely serrated, Flws axillary almost hid by the green bracts, lateral and dorsal petals smooth
18621 Lvs deeply lobed cordate lying flat on the ground and erect, Flowers panicled small
18622 Downy, Stem simple flexuous, Leaves sessile oblong lanc denticulated pale green, Flws racem , Peds twisted
18623 Branched dwny, Lvs cordtly ov dwny abve and alng veins beneath doubly serr , upper lvs lanc , Racem. elon
18624 Lvs rndsh repd wrnkld glabr., Peduncs lngr than lvs, Cal Segs ent. gland at base, Stems spotted prostr rootg
[eolate entire, Middle Segment of lower lip of Corolla obcordate
18625 Glabrous, Stems ang. simple, Racemes secund Lvs thickish, lower ones dentately pinnatifid, upper ones lan-
18626 Lvs sessile scabrous decurrent, Peduncles long hairy, Flowers axillary solitary disposed in a long leafy raceme

18627 Rather downy, Lvs sessile pinnatifid toothed, Peduncles axillary naked elongated 1-flowered, Corolla salver-shaped, tube entire
18628 Stems almost simple, Lvs linear quite entire, Peduncles scape-formed 1-flowered, Cor lla funnel-shaped, tube cleft

18629 Lvs broad heart-shaped acuminate pale green shining glabrous repand toothed, Flowers axillary
18630 Lvs oblong-lanceolate remotely denticulated glabrous, Flowers axillary, Corolla glabrous

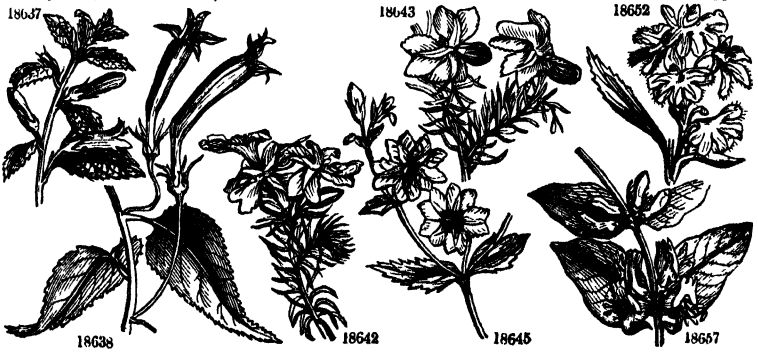
18631 Suffruticose, Stem erect simple thick hoary, Leaves dense only at top of stem reflexed lanceolate hoary beneath serrated, Pedicels axillary, Corolla bilabiate
[acuminated, 2 lower Anthers bearded, Pedicels axillary
18632 Subscandent smoothish, Leaves acuminated membraneous sharply too hed a little cordate, Lobes of Corolla
18633 Lvs ov dentic glabr above fusc. toment beneath, Peds corymb , Calyx and Cor. leafy, 2 lower Anths bearded
18634 Shrubby glabr., Lvs ov. ac. doubly serrd, Peds axill , Cal Segm lanc serr., Cor contracted a little at mouth
18635 Lvs ov ac gland serr glabr., Flws umb term leafy , Cor downy much contrcd at mth, 2 lower Anth bearded
18636 Pubesc , Stem ang , Lvs on long stalks co d. dbly serr , teeth termd by black gland, Peds ax , Lbs of Cal gland. ser.
18637 Erect suffrut , Lvs on short stalks obl ov serr nitid above, Peds axill., Cal Segs subul serr , Lmb of Cor yel
18638 Shrubby glabr., Lvs cordtly triang dbly serr., Peds axill. solit , Cal Segs narrow serrul , Anths bearded in frnt
18639 Downy, Lvs obl. ov little heart-shpd with callous teeth, Lobes of Calyx hooked backwds, Tube of Cor slendr
18640 Scandent, Lvs oblong obtuse entire glabrous with revolute edges, Racemes terminal, Flowers reflexed, Calycine Segments slightly denticulated
18641 Lvs obl. lanc bright green with glandular serratures downy and silky above, Racemes 1-sided, Branches downy
[bottom, Segment cuneate spreading 2 lobed
18642 Branched, Lvs filiform compressed apiculate, Corymbs 3—5-flowered, Corolla having the tube hairy inside at
18643 Brnchd, Lvs scattered filif , Flws terminal, Cor large with 3 broad sprdng bifid segs and 2 smaller entire ones
18644 Branched, Leaves linear obtuse, Corymbs few-flowered, Segments of Corolla cuneated deeply 2-lobed with a mucrone between them

18645 Stem erect thick branched, Lvs opposite petiolate oblong toothed, Flowers loosely and dichotomously panicled
[dunculate, Corolla hairy outside
18646 Erect downy, Lvs toothed obovate cuneated, upper ones elliptic lanceolate ad lt ones smoothish, Spikes pe-
18647 Erect downy, Lvs lin few-toothed, lower ones cuneated, adult ones smoothish, Spikes pedun , Cor hairy outside
18648 Erect, Brans compr tetrag., Lvs cun tthd a lit , up lvs crowded, adult ones glab , Ped in fasc few-flwd, Cor hairy
18649 Erect, Stm simp wngd, Lvs obov ent nar. at base, Ped filif glab few-flwd, Cor with black beard, villi plumose
18650 Branches terete, Lvs linear or oblong-lanceolate a little toothed hoary beneath with revolute edges, Peduncles terminal and axillary woolly, Corolla with a greyish beard villi plumose

18651 Stem procumbent, Leaves lanceolate a little denticulated rather pilose villous at the axils, upper ones linear, Calyx 5-leaved pilose, Corolla gibbous at base

18652 Erect pilose, Lvs lanceolate toothed, Bracts entire, Cor hairy inside, margins naked above, Styles very villous
18653 Glab , Stem panicled, Lvs ovate acute sharply serrated, Spikes elong many flwd, Bracts narrow ent , Styles vill.
18654 Stem erect pan ang glab., Lvs lin. dentic coriac , upper lvs and bracts squarrose, Spikes capitate. Styles pilose
18655 Pilose, Lvs oblong apiculate a little serrulated half stem-clasping, Flowers axillary solitary, Corolla unilabiate, tube woolly inside, Style glabrous

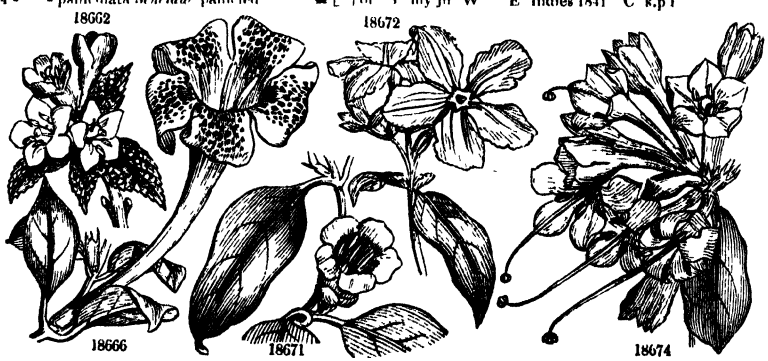
β Flowers crimson
18656 Quite glabrous, Leaves evergreen oblong acute pale beneath, Peduncles nutant, Bracts linear-lanceolate
18657 Downy erect, Lvs ovate acute, Flws twin sess. axil., Lower Lobe of Cor. linear recurved trident., upper cord



and Miscellaneous Particulars.

2919. *Centropogon.* The species of this genus are very similar to those of *Siphocampylos*, and their culture is similar.

18658	2790*a*	discolor *Lindl*	2-coloured-flwd		or	4	jn jl	Y R	N India	1840.	C	co	Bot reg 1847, 44		
18659	2797*a*	angustifòlia *Wall.*	narrow leaved		or	4	ap my	Y.	N. India	1840.	C	co	H J S 3.238. fig		
18660 -		- Ledebourn *Esch*	Ledebour's		or	3	jn jl	Y.R	Californ	1824.	C	co	E T. S. 1000		
		Pallasn Led.													
18661 -		- involucràta *Banks*	involucrated		or	3	my	Y	Hudsn B	1838	C	co	Bot reg. 1179		
2920	477*a*	WEIGE'LA	(*C E Weigel*, author of Observ Botanicæ, 1772.)											*Caprifoliàceæ.*	
18662 -		- ròsea *Lindl*	rose-cld-flwd		or	8	ap my	Ro	China	1844	C	lt m	Bot. mag. 4396		
	485	POSOQUE'RIA													
18663 -		- formòsa *Planch*	beautiful		fra	6	jl.au	R w	Caracas	1850.	C	p.l	Px fl.g J 185.114		
		Stánnia formòsa Karst													
18664 -		- versicolor *Lindl*	par 3-coloured		or	2	jl au	W	Cuba	1839	C	p.l	Bot reg 1841, 26		
		Oxyánthus versicolor Bot reg. 1840.													
2921	485*a*	RHODO'STOMA *Schaltw.*	RHODOSTOMA.						(*Rhodos*, red, *stoma*, a mouth.)					*Rubiàceæ*	
18665 -		- gardenioides *Schaltw.*	Gardenia-like		or	2	jl.au	W	S. Amer	1840	C	p.l			
	487.	GARDE'NIA.													
	2826*a*	florida													
		β Fortùni Lindl.	*Fortune's*		or	5	jl au	W	China	1844	C	s p.l	Bot reg 1846 43		
18666	2829*a*	Stanleyàna *Hook*	Earl Derby's		or	6	jn jl	W spot R	S Leone	1840.	C	s.p.l	Bot mag. 4185		
18667 -		- Whitfieldii *Hook*	Whitfield's		or	6	jn jl	W	S Leone	1844	C	s p l			
18668		- Devoniàna *Lindl*	D of Devon 's		or	6	s	Crea	S Leone	1845	C	s p l	Bot. reg 1846, 63		
18669 -		- longifòlia *G Don*	long-leaved		or	5	jl au	Crea	S Leone	1844.	C	s.p l	Bot mag 4307		
		malleifera Hook.													
18670 -		- nítida *Hook.*	shining		or	3	o n	W	S Leone	1844.	C	s l p	Bot mag 4343		
2922	486*a*	SHERBOU'RNIA *G Don*	(*Mrs Sherbourn*, who first flowered the plant in England.)											*Rubiaceæ*	
18671 -		- folìosa *G Don*	leafy		or	6	jn.jl	W R	S Leone	1844	C	s l p	Bot. mag. 4044		
		Gardenia Sherbóurniæ Hook.													
2923.	486*b*	HEI'NSIA *Dec*	(The famous philologist, *Heinsius*, translator of Theophrastus.)											*Rubiàceæ*	
18672 -		- jasminifòra *Dec*	Jasmine-flwd		or	6	s	W	S. Leone	1830.	C	s.l p	Bot. mag. 4207		
	489	OXYA'NTHUS.													
18673	2839*a*	tubiflorus *Dec*	tube-flowered		or	4	jl	W	S. Leone	1789.	C	s l.p	Bot. mag 4636		
18674 -		- villòsus *G Don*	villous		fra	4	jn	Crea	S Leone	1844.	C	s.p.l	Bot. mag. 4322		
		Gardenia longistyla Hook.													
	490	RA'NDIA													
18675	2841*a*	oxypétala *Lindl*	sharp-petaled		or	6	jn au	Y	Saharump	1842.	C	s p.l			
18676 -		- Bowieàna (*un.*	Bowie's		or	6	jn.au	Pa Y	Brazil	1816.	C	s p l	Bot. mag. 3409		
	2542	491*a*	LUCUMA'LIA.												
18677	1700	3*a* Pinceàna *Hook*	Pince's		fra	5	my.s	W	Nepal	1843.	C	p.l	Bot. m g 4132		
	491	MUSSÆ'NDA													
18678	2812*a*	macrophýlla *Wall*	long-leaved		or	6	jl au	Or	Nepal	1845	C	p.l	Bot. reg 1846, 21		
	497	CEPHAE'LIS													
18679	2855*a*	Ipecacuánha *Rich*	Ipecacuanha	£	m	½	jn.jl.	R w	Brazil	1830.	D	s p.l	Bot. mag 4063		
		Callicócca Ipecacuánha Brot Lin		trans	6	t	11								
	503	RHA'MNUS.													
18680	2874*a*	hirsutus *Wight*	hairy		or	4	my jn	G w	W. Ind	1850.	C	co	Px fl g 2 86 179		
18681 -		- cròceus *Nutt.*	coppery-wood		or	4	my jn	G w	Monterey	1848.	C	co	H. S. J. 6. 217		
	507	CELA'STRUS.													
18682	2907*a*	lycioides *Dec*	Boxthorn-like		or	4	my jn	W	Canaries	1821.	C	s p l			
18683 -		- macrocárpa *Dec*	long-fruited		or	4	my jn	W	Peru	1826.	C	s.p l	R. et P 3 230 b		
2924	507*a*	CA'THA *Forsk*	CATHA.						(A name of Arabian origin.)					*Celastrinea*	
18684 -		- paniculàta *Schaltw*	panicled		or	8	my jn	W	E Indies	1841	C	s.p l			



History, Use, Propagation, Culture,

2920. ***Weigèla*** is one of the most beautiful shrubs which have been introduced into this country for years It is hardy and an early flowerer, it does well against a wall. It appears to be nothing but the *Calyphỳrum flòridum* of Bunge It also forms a pretty plant when grown in pots

2921. ***Rhodóstoma*** is a small bush with cymes of white flowers, which as they decay change to red The culture and propagation are the same as those recommended for *Posoqueria* or *Gardenia.*

2922. ***Sherbóurnia*** is a beautiful shrub when it flowers. It requires much heat and a moist atmosphere. In its natural habitat it grows in the low lands by the sides of rivulets, where it forms a close compact leafy bush, along with *Smeathmánnia pubéscens* Its culture is the same as for *Gardenia.*

2923 ***Heinsia jasminiflòra*** is a most graceful shrub in its native place. The flowers are numerous, about the size of those of *Vinca rósea.* Its culture is the same as for *Gardenia.* In its native place it grows on the mountains in great quantities along with *Smeathmánnia lævigàta*, and these two flowers form profuse sheets of white

497. ***Cephaëlis Ipecacuánha.*** Although the root of Ipecacuanha has been long employed as a valuable article of

18658 Glab , Lvs obl. ac. glauc. ben., Pedun 2-flwd axil., Cal 5-tthd cil. with glands, Tube of Cor. convex 2-coloured,
18659 Lvs narrow lanceolate ciliated, Peduncles pendulous 2 flwd shorter than lvs [Berries 2 connate black
18660 Branches tetragonal, Lvs ovate or oblong downy, Pedun 2-3-flwd, Bracts 4, 2 inner ones broad obcord , Cor gibbous at base
18661 Branches tetragonal. Leaves oval hairy, Peduncles 2-3-flowered, Bracts 4, 2 inner ones broad obcordate, Corollas gibbous at base
18662 Downy, Leaves oblong-acuminate sharply serrated glabrous above, Flowers sessile axillary and terminal, Corolla pubescent with roundish segments
18663 Leaves broad oblong-lanceolate coriaceous, Flowers 3-4 inches long pure white
13664 Leaves oval-lanceolate, Corolla party-coloured with linear segments
18665 Glabrous, Lvs ovate oblong undulated, Stipules small joined at base, Flowers terminal cymose, Bracts fleshy

β Flowers double white changing to buff colour , as large as a double camellia [wd throat and ov obt segm
18666 Glab , Lvs obl gland in axils of veins, Flws erect so it axill. mostly from forks of stems, Cor with long tube
18667 Lvs glab tern obov cusp , Flws term solit downy, Cor with cylnd tube, funnel-shpd limb and roundish segs
18668 Lvs wavy obl downy ben , Flws solit erect term , Cor with long tube campan limb and revolute emarg segm
18669 Lvs obovate oblong glabrous, Flws solitary terminal or in forks, Cor with elongated tube campanulate throat and roundish segments, Stigma large clapper-shaped
18670 Glab , Lvs opposite or tern oblong-lanceolate undulated, Flws terminal solitary, Calyx 6-parted, Cor. with a narrow tube and a 7-parted reflexed limb
18671 Lvs elliptic acuminate glabrous, Pedicels bracteate axillary solitary 1-flowered, Calyx and Cor. campanulate, Stigma capitate
18672 Lvs oval oblong, Flws 3—4 together pedicellate, Tube of Cor. clothed with yellow hairs and the limb hispid
18673 Glabrous, Teeth of Calyx bluntish, Racemes very short 3-flowered, Tube of Corolla longer than leaves
18674 Villous, Lvs obovate or oval villous, Flws subcapitate terminal, Tube of Corolla very long, Stigma clavate

[acuminate reflexed lobes
18675 Spinescent glabrous, Lvs oval sessile approximate, Flws terminal sessile solitary, Cor funnel-shaped with
18676 Unarmed glabrous, Lvs obovate oblong at tops of branches acuminate on short petioles a little downy beneath, Flowers terminal sessile, Tube very long, Segments of Calyx foliaceous spatulate, Stigma clavate
18677 Limb of Corolla with 5 didymous tubercles in the throat, Flowers larger and more fragrant than *I. gratissima*
18678 Branches pilose, Leaves ovate downy, Stipules bifid, Corymbs terminal trichotomous, Large Segment of Calyx white
18679 Stem ascending simple, Leaves obovate acute entire smoothish, Head of Flowers terminal solitary, Involucrum 4-leaved

[together from the base of the young shoots, Calyx 4-cleft
18680 Spinescent downy, Leaves ovate or oblong serrulated nearly glabrous above hairy beneath, Pedicels 2—3
18681 Thorny branched, Leaves shining when dry of a bright yellowish-brown beneath, Fascicles 2—6-flowered, Wood yellow
18682 Erect glabrous, Leaves roundish-ovate crenate coriaceous, Pedicels axillary short
18683 Erect glabrous, Leaves oblong-lanceolate with an emarginate point, Pedicels short axillary aggregate

[tops of branches
18684 Thorny, Leaves ovate-lanceolate serrated, Scales of Buds ciliated, Stipules small ciliated, Flowers punctid at



and Miscellaneous Particulars.

the Materia Medica, yet the botanical character of the plant which produced it remained unknown until Professor Brotero of Coimbra determined the genus to which it ought to be referred, with the assistance of observations made in Brazil on living plants by Bernardo Gomez, a resident medical botanist. The plant is a native of moist woods near Pernambuco, Bahia, Rio Janeiro, and other provinces of Brazil. It is called Ipecacuanha by the natives of some parts of Brazil, and *Poaia de Matto* by those of the southern provinces. The root is simple, or a little branched, irregularly bent, externally brown, wrinkled by rings It appears that a native of Brazil, whose name was Michel Tristan, was the first who brought Ipecacuanha into use He speaks of it as a remedy in dysentery. Piso afterwards describes it, and speaks of two sorts, the white and brown. Besides these, the name Ipecacuanha, which, in the language of South America, means Vomit-root, is given to various species of *Cynánchum*, *Asclèpias*, *Dorstenia*, *Euphórbia*, *Viola*, &c. The black, or striated, Ipecacuanha is *Psychótria emética*, the white Ipecacuanha is *Richardsònia scàbra*, and the common brown Ipecacuanha is *Cephaëlis Ipecacuánha*.

2924 *Càtha* is a plant of easy culture, only requiring the treatment of other hothouse shrubs

2544. 508*a*. COLLE'TIA.

18685 1700*8a* serratifòlia *Vent.* serrate-leaved ▲ ⊔ or 4 my jl Y Peru 1823. C s.p.l Vent. choix, 15

509 EUO'NYMUS.

18686 2917*a* fimbriàtus *Wall.* fringed ▲ or 10 my jl G Himala 1850 C co Px.fl.g.2.55.16*d*

18687 - - echinàtus *Wall.* echinate-frtd ▲ or 10 my jl G Japan 1844. C co

2911 japónicus *W.*

β maculàtus *spotted-leaved* ▲ or 6 jn au Pk Japan 1836. C l.p

γ variegàtus *variegated-lvd* ▲ or 6 jn au Pk Japan 1836. C l.p

510 CEANO'THUS

18688 2925*a* pállidus *Lindl* pale-flowered ▲ ⊔ or 10 su Pa B N. Amer. 1838 C p.l Bot. reg 1840, 20

18689 - - divaricàtus *Nutt.* divaricate ▲ ⊔ or 5 su B Californ 1842 C p.l

18690 - - thyrsiflòrus *Eschsch.* thyrse-flwd ▲ ⊔ or 6 my jl B Californ 1840 C p l Bot. reg 1844, 38

18691 - - papillòsus *Torrey* papillose ▲ ⊔ or 6 su B Californ. 1849. C p l Hook. icon 272

18692 - - rigidus *Nutt* stiff ▲ ⊔ or 4 su Pa V Californ. 1848. C p.l Bot. mag 4664

18693 - - verrucòsus *Nutt.* warted ▲ ⊔ or 4 su P.B Californ. 1848 C p l Bot mag. 4660

18694 - - dentàtus *Torrey* tooth-leaved ▲ ⊔ or 4 su B Californ. 1848. C p.l Px. fl. g 1 4

18695 - - cuneàtus *Nutt.* cuneate-leaved ▲ ⊔ or 6 su W Californ. 1848 C p l H. S. J 5. 220. ic.

18696 - - integérrimus *Nutt.* entire-leaved ▲ ⊔ or 4 su B Californ. 1848. C p.l

512 POMADE'RRIS.

18697 2929*a* ledifòlia *Cun.* Ledum-leaved ▲ ⊔ or 5 ap jn Y N. Holl 1824. C s p l

18698 2929*b* betùlina *Cun.* Birch-like ▲ ⊔ or 5 ap jl Y N. S W. 1823. C s p.l

18699 - - andromedæfòlia *Cun.* Androm.-lvd ▲ ⊔ or 5 ap jl Y N S W. 1824. C s p l

18700 2928*a* ligústrina *Sieb.* Privet-like ▲ ⊔ or 5 ap jn G w N. S W. 1826. C s.p.l

18701 - - áspera *Sieb.* rough ▲ ⊔ or 5 ap jn G Y N. S.W. 1825. C s p.l

515 BILLARDIE'RA

18702 2936*a* daphnoides *K & W.* Daphne-like ▲ ⊔ or 6 my.jn Pa.Y N. Holl. 1839. C s p.l

2925. 515*a* SO'LLYA *Lindl* (*Richard Horsman Solly*, F R S, F L.S., a promoter of science) *Pittospòreæ*

18703 - - heterophýlla *Lindl* various-leaved ▲ ⊔ or 6 jn au B N. Holl. 1830. C s.l.p Bot. reg. 1466
Billardiera heterophýlla Lindl No 17103

18704 - - angustifòlia *Lindl* narrow-leaved ▲ ⊔ or 8 jn.jl B V.D Ld 1823. C s.p Lab. nov hol 90
Billardièra fusiformis Lab

18705 - - lineàris *Lindl.* linear-leaved ▲ ⊔ or 4 jl. B Swan R. 1838. C s l p Bot. reg 1840, 3

2926. 515*b* PRONA'YA *Hug* PRONAYA (*Baron Pronay*, a Hungarian nobleman) *Pittospòreæ*

18706 - - élegans *Hug* elegant ▲ ⊔ or 4 jn jl B L N Holl. 1837. C s.p l Px. m. 12 99 ic.
Spiranthèra frèsert Hook. *Billardièra rosmarinifòlia* Hort.

2927 515*c* MARIA'NTHUS *Puterl.* (*Maria*, Mary, *anthos*, a flower; Virgin Mary) *Pittospòreæ*

18707 - - cærùleo-punctàtus *Puterl* blue-sptd ▲ ⊔ or 6 mr W.B Swan R. 1840. C s l p Bot mag 3893

516. ELÆODE'NDRUM

18708 2940*a* capénse *Eckl.on* Cape ▲ ⊔ cu 20 jn. G C. G. H. 1828. C co Bot mag 3835

2928 520*a* LEMO'NIA *Lindl* (*Sir Charles Lemon*, Bart, a patron of Horticulture) *Rutàceæ*

18709 - - spectábilis *Lindl* showy ▲ ▭ or 2 au C Cuba 1839 C co Bot reg 1840, 9

2929 520*b* PENTARHA'PHIA *Decaisne* (*Pente*, five, *rhaphis*, a needle, lobes of calyx) *Rutàceæ*

18710 - - cubénsis *Decaisne* Cuba ▲ ▭ or 4 jl au S Cuba 1848 C s l.p H J S 5 86 fig

2930. 520*c* METRODO'REA *St Hil* (*Metrodoro Sabino*, the first to illustrate plants by figures) *Rutàceæ*

18711 - - nigra *St Hil* black ▲ ▭ or 6 ... P Brazil 1848 C s l p St. Hil fl b 1 16

2931 520*d* ALMEI'DA *St. Hil* (*John Rodriguez Pereira de Almeida*, a friend to St. Hilaire.) *Rutàceæ*

18712 - - rùbra *St. Hil.* red-flowered ▲ ▭ or 4 s Ro Brazil 1840 C s.l.p Bot. mag 4518

2932. 521. ERYTHROCHI'TON *Nees.* (*Erythros*, red, *chiton*, an outer coat, calyx red.) *Rutàceæ*

18713 - - brasiliénse *Nees* Brazil ▲ ▭ or 10 jn au R w Brazil 1830. C s l p Bot reg. 1843, 47

522. PITTO'SPORUM

18714 2975*a* ligustrifòlium *Cun* Privet-leaved ▲ ⊔ or 6 s W Y N Holl 1823. C l p

18715 - - cornifòlium *Cun.* Dogwood-lvd ▲ ⊔ or 3 my jn Rh Br N Zeal. 1827. C l.p Bot. mag. 3161

18716 - - angustifòlium *B C* narrow-leaved ▲ ⊔ or 2 mr Y N. S W 1830. C l.p Bot. cab 1859

18717 - - bracteolàtum *Endl.* large-bracted ▲ ⊔ or 4 my jn ... Norfolk I. 1837. C l.p



History, Use, Propagation, Culture,

2925. *Sóllya* All the species are beautiful and delicate shrubs, of easy culture, with delicate blue flowers

2926. *Prondya élegans* is an evergreen twining shrub from Swan River, with terminal clusters of pale lilac flowers It has the habit of *Sóllya*, to which it is nearly allied, but is inferior in beauty.

2927. *Marianthus.* A curious and interesting twining-plant, allied to *Sóllya*, of great beauty when in blossom.

2928. *Lemònia* is allied to the American monopetalous Rutaceous genera, of which the Angostura-bark tree may be taken as the type. It is a pretty shrub, and will grow well in a rich mixed soil, and cuttings will root readily in the ordinary way.

18685 Leaves elliptic sharply serrated, Branches leafy, Flowers usually solitary

18686 Leaves ovate fringed with long toothed serratures, Flowers tetrandrous subumbellate, Capsule 2—5 winged
18687 Climbing radicant, Leaves ovate-lanceolate serrated, Peduncles filiform several times dichotomous, Petals orbicular crenulate, Capsule prickly
β Leaves spotted with white or yellow
γ Leaves variegated with white or yellow

18688 Lvs oval serrated glabrous above and downy beneath, Flowers in thyrsoid panicles, Pedicels pilose in capitate
18689 Rather spiny, Leaves glossy deep green, Flowers clustered [corymbs
18690 Leaves ovate-oblong glandularly serrated shining downy beneath Panicles terminal raceme-formed
18691 Leaves narrow oblong obtuse downy beneath, Flowers in small roundish stalked heads [ends of small spurs
18692 Young brnchs dwny, Lvs small trunc. spiny-tooth shining pale and pitted ben., pits hairy, Flws clustered at
18693 Brnchs warted at the nodes, Lvs rndsh-cun glab entire or tooth vil beneath, Corymbs axil rather tubercled
18694 Brnchs covered with rusty hairs, Lvs obl rounded coarsely-toothed revolute edges with distinct stalk glands,
18695 Rather thorny, Leaves cuneate, Umbels small axillary [Flws in term. stalked roundish clusters or umbels
18696 Leaves quite entire.

[petals
18697 Leaves oval or elliptic smooth silky white beneath, Corymbs few-flowered terminal, Stems twiggy, Flower with
18698 Leaves small oval-oblong shining above downy beneath, Flowers corymbose, Flower with petals
18699 Leaves oval-lanceolate white from down beneath, Corymbs terminal crowded, Flower with petals
18700 Leaves ovate-lanceolate downy beneath, Panicle few-flowered, Flowers apetalous
18701 Leaves ovate-lanceolate serrated scabrous from starry down above and velvety beneath, Panicles few-flowered, Flowers apetalous

18702 Leaves lanceolate glabrous above but silky villous beneath, Flowers axillary solitary, Berries silky

18703 Glabrous, Leaves ovate-lanceolate, lower ones serrated, upper ones quite entire, Cymes many-flowered nutant

18704 Young branches villous, Leaves lanceolate entire, Panicle few-flowered, Berry spindle-shaped villous

18705 Glabrous, Leaves linear entire bluntish, Cymes many-flowered nutant, Stigma nearly simple, Fruit oblong

18706 Leaves narrow oblong-lanceolate pilose beneath, Corymbs terminal, Flower pale blue, Stem erect

18707 Downy, Lower Leaves spatulate dentate or pinnate, upper ones oblong, Peduncles solitary corymbose, 3 lower Petals paler and spotted with blue

18708 Leaves nearly opposite unequal-sided coriaceous ovate-oblong bicrenate, Panicles axillary simple dichotom., Calyx enclosed in a 2-leaved involucrum

18709 Leaves petiolate trifoliate smooth, Leaflets obovate, Peduncles axillary 2–3-flowered

18710 Leaves obovate crenated netted with green veins on a pale ground beneath, Peduncles axillary solitary 1-flowered, Corolla one inch long, Shrub of compact habit

18711 Leaves simple rarely bifoliate repand with appendages at the base of the petioles, Panicles terminal and lateral

18712 Leaves broad-lanceolate, Racemes compound, Peduncles glabrous, Petals obtuse

[duncles, Flowers in axils of two bract-formed leaves, Calyx red, Corolla white
18713 Leaves lanceolate entire glabrous, Branchlets axillary nearly leaflets bearing one or more long floriferous pe-

[many-seeded, Valves thick woody
18714 Leaves linear-lanceolate mucronate coriaceous glabrous, Peduncles solitary, Capsule ovoid compressed 2-valved
18715 Leaves oval or oblong obtuse cordate coriac glabrous 3—5 in a terminal whorl, Pedunc. solitary twin or ter-
18716 Leaves very narrow linear [minal downy, Capsule downy, Petals linear
18717 Lvs obl obov. glab., Peds thick nutant, Caps large bluntly triquet. 3-valved, Valves woody, Seeds brown shiny



and Miscellaneous Particulars.

2929 *Metrodòrea* A pretty shrub A good mixture of sandy loam and peat will answer it well, and it will be readily increased by cuttings in peat

2930 *Pentarhàphia* is a pretty little bush with scarlet flowers. It requires the treatment of ordinary stove shrubs.

2931. *Almeida rùbra* is a very handsome shrub with delicate rose-coloured flowers. A mixture of light loam and leaf mould suits it well. It is increased by cuttings in bottom heat.

2932 *Erythrochiton.* This genus is nearly allied to *Galipèa* that furnishes the Angostura bark. A mixture of light loam and leaf mould will suit it.

18718 -	- glabrátum *Lindl.*	smooth		or	2	my jn	Bt.Y	Hong K	1845	C	l.p		
18719 -	- oleifólium *Cun.*	Olive-leaved		or	3	my.jn	Y	N. Holl.	1846.	C	l.p		

523. LASIOPE'TALUM.

18720	2978*a* macrophýllum *Grah.*	long-leaved		or	5	my	Pa G	N. Holl.	1835.	C	s.l p	Bot. mag	3908

524 THOMA'SIA.

18721	2980*a* canéscens *Lindl.*	canescent		or	1	my jl	P	Swan R.	1838.	C	s.l p		
18722 -	- stipulácea *Lindl* *macrocárpa* Hug.	large-stipuled *triphýlla* Gay.		or	1	...	G	Swan R	1842.	C	s.l.p	Bot	mag. 4111
18723 -	- grandiflóra *B. R.*	great-flowered		or	2	my.jn	R	Swan R.	1842.	C	s.l p		
18724 -	- glutinósa *B. R*	clammy		or	2	my jn	R	Swan R.	1840	C	s.p		
18725 -	- paniculáta *B. R.*	panicled		or	2	jn.jl	R	Swan R.	1842	C	s.p		

2933 524*a* CORETHRO'STYLIS *Endl.* (*Korethron*, a broom, *stylos*, a style; hairs on style) *Lasiopetàleæ*

18726 -	- bracteáta *Endl.*	bracteate		or	3	ap.my	Ro	Swan R.	1843	C	s l.p	Bot	r. 1844, 47

2934. 524*a* GUICHENO'TIA. (*Anthony Guichenot*, who went round the world.) *Lasiopetàleæ*

18727 -	- macrántha *Turcz.*	large-flowered		or	3	mr	Pa P	Swan R.	1847.	C	s p.l	Bot. mag	4651

2548 529*a* ESCALLO'NIA

18728	1701*8a* macrántha *H & A*	long-flowered		or	3	jl au	R	Chiloe	1847.	C	l p	Bot. mag	4473
18729 -	- organénsis *Gaud.*	Organ mountain		or	3	jl.au	Ro	Brazil	1840.	C	l p	Bot. mag.	4274

538 IMPA'TIENS.

18730	3017*a* cándida *Lindl*	white-flowered		or	6	au	W	Himala	1839.	S	r.m	Bot. reg	1841 20
18731	- macrochila *Lindl*	large-lipped		or	8	jl au	Ro	N. India	1838	S	lt m	Bot reg	1840 8
18732 -	- glandulifera *Royle*	gland-bearing		or	6	au	Ro	Nepal	1839.	S	r m	Bot. mag	40.0
18733 -	- rósea *Lindl*	rose-coloured		or	6	au	Ro	Himala.	1839	S	r.m	Bot reg	1841 27
18734 -	- platypétala *Lindl.*	broad-petaled		or	3	jl au	Ro	Java	1845	C	r m	Bot reg	1846 60
18735 -	- macrophýlla *Gard*	large-leaved		or	3	jl au	Y R	N India	1838	S	r m	Bot mag	4662
18736 -	- cornígera *Hook*	horn-bearing		or	4	au	Ro	Ceylon	1840	S	r m	Bot mag	46..3
18737 -	- tricórnis *Lindl.*	three horned		or	6	jl au	Bsh P	India	1839.	S	r m	Bot. mag	4051
18738 -	- fasciculáta *Lam.* *setácea* Colbr in Hook. exot. fl 2. t. 127	fascicled		or	2	jl.au	R *heterophýlla* Wall.	India	1840.	S	r m	Bot. mag	2641
18739 -	- pulchérrima *Dalz*	fairest		or	6	jl au	R	Bombay	1848.	S	r m	Bot mag.	4615
18740	3019*a* rèpens *Moon*	creeping		or	½	jn s	Y	Java	1848.	C	r m	Bot mag.	4104
18741 -	- parviflóra *Dec.*	small-flowered		or	1	jn s	Pa.Y	Siberia	1828.	S	co		
18742 -	- scapiflóra *Heyn.* *bulbósa* Modn. *acaulis* Arn.	scape-flowered		or	½	au	Li	India	1835.	C	lt.m	Bot. mag	3586

540. VI'OLA.

18743 -	- pyrolæfólia *Poir.*	Pyrola-leaved		or	½	ap.jn	Y	Pat. Chil.	1850	D	p s l	Moor co.	1 37 1c

2935. 541*a* SCHWEIGGE'RIA *Spreng* (*Auguste Fred Schweigger*, Prof. at Regiomonti, in Sicily.) *Violàrieæ*

18744 -	- pauciflóra *G. Don*	few-flowered		or	6	jl au	W	Brazil	1839.	C	s p.l	Bot reg.	1841, 40

2936 542*a* CRYPTA'NDRA *Smith.* (*Kryptos*, hidden, *aner*, a male, anthers concealed) *Rhámneæ*

18745 -	- suávis *Lindl*	sweet-scented		or	1	ja	W	Swan R	1843	C	s l p	Bot	reg 1841, 56
18746 -	- ericæfólia *Smith*	Heath-leaved		or	2	my jl	W	N. Holl.	1821.	C	s.l.p		

550. RI'BES.

18747	3130*a* Menziésii *Pursh* *férox* Smith.	Menzies s		or	4	ap my	P	Californ.	1830.	C	co	Bot	reg. 1847, 56

562 RHAGO DIA.

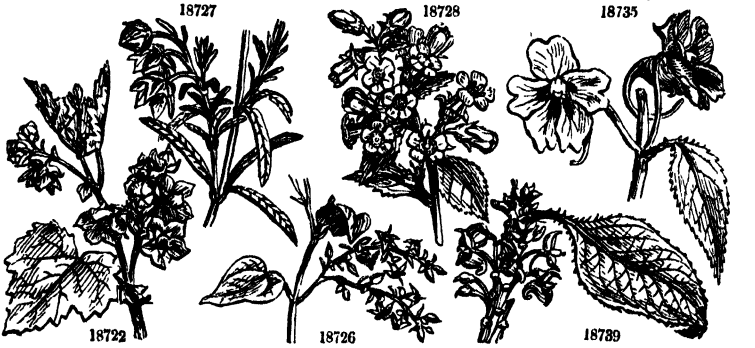
18748	3166*a* crassifólia *R. Br.*	thick-leaved		or	1	jn jl	Y	N. Holl.	1830.	C	s.l p		

566 GOMPHRE'NA.

18749	3177*a* pulchélla *Mart*	neat		or	1½	jl	Ro	Brazil	1843.	S	r.m	Bot. mag.	4064

570 HELICO'NIA *Hook.*

18750	3191*a* angustifólia *Hook.*	narrow-leaved		or	3	d ja	R	Brazil	1845.	D	s p.l	Bot	mag 4475



History, Use, Propagation, Culture,

2933. *Corethróstylis* is one of the most striking Swan River plants; but, owing to the difficulty of cultivating it, the specimens that have been produced in Europe are very inferior to the wild ones. The foliage is sweet-scented. Rough peat and silver sand is the best soil known for it. It requires a liberal supply of water in summer, and as much air as possible. In winter it should be treated the same as Cape heaths. It is propagated by cuttings in the usual way.

2934 *Guichenótia* is a very pretty shrub, and requires the same treatment as *Corethróstylis*.

18718 Leaves subverticillate obovate shining entire glaucous beneath, Umbels term. sessile few-flwd, Sepals ciliated
18719 Leaves lanceolate mucronate coriaceous glabrous, Peduncles solitary, Capsule glabrous 2-valved 2-seeded. Seed purple

18720 Leaves ovate-deltoid 3-nerved, Bracts 3 lanceol.-elliptic, Calycine segments glabrous inside, Ovarium 5-celled

[glabrous, Pets none
18721 Leaves small cordate 3-lobed with whitish hairs beneath, Stipules none, Racemes erect many-flowered, Style
18722 Hispid from stellate hairs, Leaves cordate subhastate sinuate obtuse, Stipules large petiolate cordate, a little 3-lobed, Racemes secund, Petals none [tose margins glabrous Flws very large
18723 Lvs cordate ovate obtuse entire or 3-lobed at length glabrous, Peds tomentose usually 2-flwd, Calyx tomet-
18724 Lvs cord hast. 3-lbd pil. above stel tom ben, Stips none, Racs erect mny-fld glut, Pets none, Style pil at base
18725 Leaves cordate lanceolate subhastate pilose stellately hispid beneath, Stipules foliaceous semicordate, Racemes flexuose many-flowered hispid, Petals none, Style glabrous

18726 Beset with stellate hairs, Leaves cordate entire, Flowers cymosely racemose opposite the leaves, Bracts leafy coloured

18727 Peduncles elongated 2—3-flowered, Bracts 2—3 linear alternate remote from the flower, Capsule glabrous

18728 Branches and Calyx glandularly downy, Leaves obovate elliptic serrate, Panicles terminal
18729 Glabr. erect, Lvs oblong obtuse serrulated above mid full of resinous dots, Pan. terminal Pet spatulate

[Spur short incurved, Dorsal Sepal emarginate
18730 Erect, Leaves verticillate lanceolate acuminate serrate glandular at base, Peduncles terminal many-flowered,
18731 Erect, Lvs alternate ovate-lanc serrate with glandular petioles, Flws terminal umbellate, Spur clavate inflexed
18732 Erect branched, Lvs whorled lanc glandularly serrate, Stip. glandular, Ped axil 3-flwd, Spur short reflexed
18733 Erect, Lvs lin-lanc. serrate, Ped 1-flwd aggregate axil, Dorsal Sep. mucronate, Spur short ventricose incurved
18734 Glabrous, Root tuberous, Lvs whorled oblong-lanceolate serrate, Ped 1-flwd, Spur filiform falcate, Fruit smooth
18735 Er simp, Lvs large alt ov-acum mucr. ser. pil gland fring, Ped 1-flwd aggr., Spur short incurv. infl. didym
18736 Erect radicant at base, Lvs altern ovate scabr fimbriolate at base, Ped axil aggregate, Spur short obt. curved
18737 Pilose erect, Lvs alternate lanc, Rac axillary, Dorsal Sepals subbilobed cuspidate, Spur acuminate incurved
18738 Erect, Lvs opposite sessile lanceolate setaceously serrated, Ped axillary solitary or twin, Spur long filiform

18739 Erect, Lvs alternate ovate setaceously serrated glaucous beneath, Peduncles 2-3 axillary 1-flwd, Spur filiform
18740 Succulent bran creeping, Lvs altern renniformly cord slightly ser, Ped axil solit. 1-flwd, Spur short incurved
18741 Leaves ovate serrate wrinkled, Spur straight, Peduncles 3-6-flowered, Flower small
18742 Lvs roundish cordate entire, Spur longer than the pedicel, Scapes radical bearing a raceme of long-stalked flws

18743 Pilose, Leaves radical numerous cordate-ovate, Stipules linear lanceolate fringed, Peduncles radical pilose, Spur short blunt, Petals bearded with clavate hairs inside

18744 Leaves tapering to the base obovate spatulate obtuse crenately serrate, Peduncles axillary, Lip hairy with two elevated glandular lines

18745 Pilose, Leaves obovate, Flowers glabrous axillary on the lateral branches, Tube of Calyx cylindrical
18746 Leaves linear remote smooth, Heads of Flowers terminal, Bracts silky toothed, Style pilose

18747 Hispid, Spines by threes straight, Leaves cordate 5-lobed deeply serrate downy beneath, Peduncles nutant 1—3-flowered, Sepals reflexed, Fruit hispid

18748 Erect, Branches unarmed, Leaves quite entire oval or oblong-linear fleshy convex beneath powdery, Spikes branched

18749 Strigose, Stem branched, Lvs lanceolate, Peduncles elongated, Heads globose smooth, Involucrum many-lvd, Segments of stamineous tube bicuspidate

[Sepals white
18750 Lvs lingulate oblong clothed with powdery down beneath, Rachis flexuous, Spathes 6-7 many-flowered lanceolate,



and Miscellaneous Particulars.

2935 *Schweiggèria* is a pretty shrubby violet with white flowers. It will grow well in a compost of sand, loam, and peat, and cuttings of young wood will strike root in sand The plant requires plenty of water while growing, and should be placed in an airy situation in the hothouse

2936 *Cryptandra* is a genus of neat little greenhouse shrubs, requiring about the same treatment as Cape heaths. They should be potted in a soil composed of sandy peat and a small portion of loam, with plenty of drainage They are increased by cuttings of the young shoots, like Cape heaths.

DIGYNIA.

579 SARCOSTE'MMA

18751 3213*a* campanulàta *Lindl* campanul -fld ♃ ⊔ or 10 s.o G.Y.P Peru 1845. C s.l Bot. reg. 1846, 36

2937. 579*b* SCHUBE'RTIA *Mart.* (*H B Schubert*, Professor of Botany, Erlangen.) *Asclepiàdeæ.*

18752 - - gravèolens *Lindl* strong-scented ♃ ▭ or 10 au W Brazil 1835. C s.l.p Bot. reg. 1846, 21
Physiánthus auriconus Graham, Bot. mag. 3891.

588. ASCLE'PIAS

18753 3238*a* Douglàsii *Hook.* Douglas's ♃ △ or 1 aut R.G N W Am 1846. D p.l Bot. mag 4413
18754 - - vestita *Hook.* clothed ♃ △ or 3 o Y G N Amer. 1843. D p.l Bot. mag. 4106

2938. 590*a*. TRICHOSA'CHME *Zucc* (*Thrix*, a hair, *achme*, a point, petals.) *Asclepiàdeæ.*

18755 - - lanàta *Zucc.* woolly ♃ ▭ or 6 jl.au P S Amer 1850 C r.m.p Px. fl. g. l. 105 71

591. MARSDE'NIA.

18756 3260*a* flavéscens *Cun* yellowish ♃ ▭ or 20 jn au Ysh N Holl. 1830 C s l Bot mag. 3289
18757 - - maculàta *Hook.* spotted ♃ ▭ or 20 jn au Psh.B Trinidad 1834. C s.l Bot mag. 4299

592. HOY'A.

18758 3265*a* ovalifòlia *Wight.* oval-leaved ♃ ▭ or 6 jn.jl Y R E. Indies 1850 C r m p Px. fl g. l. 23
18759 - - cinnamomifòlia *H.* Cinnamon-lvd ♃ ▭ or 6 jl.au Pa Y Java 1847 C r.m p Bot mag 4347
18760 - - purpùreo-fúsca *H.* purplish brown ♃ ▭ or 6 s Pu Br Java 1848. C r.m p Bot mag 4520
18761 - - bélla *Hook.* pretty ♃ ▭ or 1 jl s P TaungK. 1847 C r m p Bot mag 4402
18762 - - imperiàlis *Lindl* imperial ♃ ▭ or 10 jn jl Br P Borneo 1847 C r m p Bot mag 4397
18763 - - Cummingiàna *Dcn.* Cumming's ♃ ▭ or 10 my.jn G.Y Philippi 1845 C r m p Px fl.g 2 114 192
18764 - - pállida *Lindl* pale ♃ ▭ or 6 jl.au W R E. Indies 1819. C r.m p Bot reg 951
18765 - - campanulàta *Bl* campanulate-fl. ♃ ▭ or 10 ap Pa B Java 1845. C r.m p Bot. mag 4545
Physostélma Decaisne. *Cystidiánthus campanulàtus* Harsk.

2939. 592*b*. DICTYA'NTHUS *Jord.* (*Diktyon*, a net, *anthos*, a flower, purple stripes on white.) *Asclepiàdeæ*
18766 - - campanulàtus *Jord* campanulate-fl ♃ ▭ or 10 jn au W.P Brazil 1851. C s p Moor c l 21 ic
Tympanánthe suberòsa Harsk *Stapélia campanulàta* Pavon

2940 592*a*. CYRTO'CERAS *Benn* CYRTOCERAS (*Kyrtos*, a curve, *keras*, a horn.) *Asclepiàdeæ*
18767 - - reflèxa *Benn.* reflexed ♃ ▭ or 6 au W. ta Java 1838. C r.m p Bot mag. 4518
Hoya coriàcea Blume.

2941. 592*c* RAPHISTE'MMA *Wall.* (*Raphis*, a needle, *stemma*, a corona, segs of corona.) *Asclepiàdeæ*
18768 - - pulchélla *G. Don* neat ♃ ▭ or 10 jl s W E. Indies 1845. C s.l Px m. 14 27 ic
Asclépias pulchélla Roxb.

589 GONO'LOBUS.

18769 3250*a* hispidus *Hook* hispid ♃ ⊔ or 4 jl Br Brazil 1837 C p l Bot. mag 3786
18770 - - Martiànus *Decaisne* Martius's ♃ ⊔ or 30 my.jn W G Brazil 1845 C l p Bot. mag 4472

2942. 592*d* STEPHANO'TIS *Brong.* (*Stephane*, a crown, *ous*, an ear, corona eared.) *Asclepiàdeæ*
18771 - - floribúnda *Brong.* bundle-flwd ♃ ▭ or 10 jn o W Madagas. 1842. C s l p Bot. mag 4058

2943. 592*e*. OXYPE'TALUM OXYPETALUM. (*Oxys* sharp, *petalon*, a petal.) *Asclepiàdeæ*
18772 - - solanoides *Hk. & A.* Solanum-like ♃ ▭ or 6 jn au P Brazil 1847. C s.l p Bot mag 4367
Schizóstoma longifòlium Decaisne, also *Tweedia cærùlea*, No. 17054, belongs to this genus.

593 CEROPE'GIA

18773 3268*a* Wightii *Grah.* Dr. Wight's ♃ ⊠ or 1 jn s G P E. Indies 1830. C s.l p Bot mag 3267
18774 - - Lúshii *Grah* Dr Lush's ♃ ⊠ or 2 jn s Y.P E. Indies 1838. C s.l.p Bot mag 3509
18775 - - vincæflòra *Hook* Vinca-flowered ♃ ▭ or 20 s P Bombay 1837. C s.l.p Bot mag 3740
18776 - - élegans *Wall.* elegant ♃ ▭ or 4 au o P Neelgher. 1828. C s.l p Bot. mag 3015
18777 - - oculàta *Hook* eyed ♃ ▭ or 6 s Y.G Bombay 1842. C s.l.p Bot. mag. 4093
18778 - - Cummingiàna *Dcn* Cumming's ♃ ▭ or 4 jl au C P Manilla 1845. C s.l p Bot. mag 4349
18779 - - stapeliæformis *Haw* Stapelia-like ♃ ▭ or 1½ jl Y.R C.G.H. 1824. C s l p



History, Use, Propagation, Culture,

18751 *Sarcostémma campanulàta* is a pretty little greenhouse climber, well adapted for training over ornamental wirework, like most of the Asclepiadeous plants. It requires a rich loamy soil, and plenty of moisture during the growing season When it has done flowering, water should be gradually withheld. The plants should then be cut back and repotted.

2937. *Schubértia gravèolens* When *Stephanòtis floribúnda* made its appearance it was generally considered, and justly, the finest twining plant in cultivation. The present plant is not inferior to it under good culture. The flowers are rather larger and quite as fragrant It is of easy culture.

2938. *Trichosachme* is a curious woolly climbing shrub, with small flowers having long purple tails, which are analogous to those in *Strophánthus*. Its culture is the same as that of other hothouse climbers.

2939. *Cyrtóceras* is very close to *Hoya* in habit. It is a beautiful hothouse climber. It requires the treatment of *Hoya*.

DIGYNIA.

18751 Downy, Lvs ovate-oblong acuminate cordate tomentose beneath, Peduncles many-flwd, Corollas campanulate

18752 Villous, Lvs cordate obovate downy shining above, Umbels 6-7-flowered pilose, Segments of limb ovate

[Lflt of corona ovate pointed

18753 Stem simple, Lvs oblong tomentose beneath, Peduncles short tomentose, Umbels many-flwd, Fl. tomentose,
18754 Stem branched, Lvs broad elliptic subcord. coriaceous glabr., Pedunc thick, Pedicels and Flws hairy, Umbels dense many-flwd, Cucull fleshy truncate

18755 Woolly all over, Lvs ovate, Flowers small dark purple, with long fleshy purple tails

[Corolla subrotate, Throat naked

18756 Lvs oblong-lanceolate acum. smooth above and hoary beneath, Peduncles twice as long as lvs,, Cymes crowded,
18757 Glabrous, Lvs broad elliptic spotted cordate, Umbels dense nearly sessile, Calyx and Corolla ciliated, Lflts of stam corona ovate confluent with the anthers

18758 Glabrous, Lvs fleshy narrow oval 3-nerved, Lvs of corona acute, Peduncles thick, Flowers umbellate
18759 Glab, Lvs coriaceous ovate 5-nerved, Umbels compact many-flwd on short peduncs, Lflt of corona ovate acute
18760 Glab radicant, Lvs fleshy ovate 5-nerved, Umbels round compact on short peduncs, Lflt of corona ovate acute
18761 Suffruticose diffuse, Lvs small ovate 1-nrvd pale beneath, Umbels lat on short ped, Lflt of corona concave ac.
18762 Downy, Lvs obovate-lanceolate coriaceous, Peduncles pendulous, Umbels many-flwd, Flws large, Lflt of co-
18763 Glabrous, Lvs oblong ovate acuminated, Umbel dense [rona white 2-lobed
18764 Glabrous, Lvs ovate-lanceolate acuminate fleshy veiny, Umbel hemispheric compact
18765 Glabr, Lvs obl. coriaceous, Umbels many-flwd on longish peduncles, Cor. broad campanulate 5-lobed, Lobes short obtuse

18766 Downy, Lvs opposite cordate acuminate, Petioles long red, Peduncles axillary 1-flowered large stellate

18767 Glab., Lvs coriaceous ellip. rounded at the base, Umbels on long peduncs many-flwd, Lflts of corona concave

18768 Glabrous, Lvs large cordate, Flws corymbose, Corona exserted

[inside at base

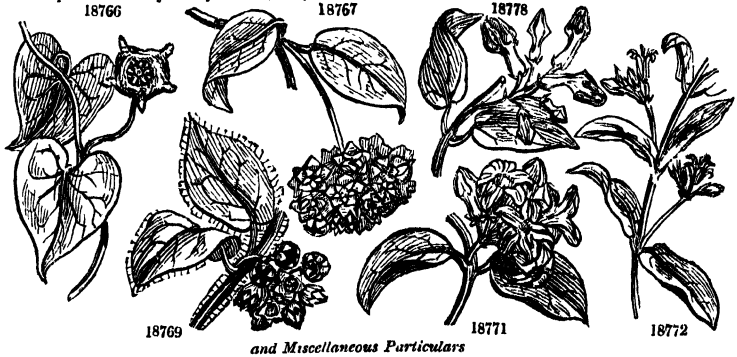
18769 Lvs cordate-ovate acute, Stem petioles and nerves of lvs hispid, Flws umbellate, Corolla coriaceous tubercled
18770 Hairy, Lvs oblong cordate, Umbels many-flowered on long peduncles, Lobes of corona fleshy and rounded

18771 Lvs elliptic retuse, Flws numerous umbellate, Corona shorter than the membranes of anthers, Sepals ovate shorter than the tube of corolla

18772 Stem simple downy, Lvs oblong cordate tomentose, Peduncles corymbosely panicled many-flowered, Lflts of corona bifid

[apex glabrous

18773 Glabrous, Root tuberous, Lvs ovate-lanceolate fleshy, Segments of limb downy, Lobes of corona united to
18774 Glabr, Root tuberous, Lvs lin fleshy, Seg of limb lin, Exterior lobes of corona emarginate, Pedun. umbel axil
18775 Downy, Lvs ovate, Peduncles 4—6-flowered, Segments of limb conniving hairy inside, Lobes of corona emarg.
18776 Glabrous, Lvs oblong-lanceolate, Peduncles 1—6-flwd, Segments of limb ligulate ciliated, Lobes of corona ligulate
18777 Lvs cord-ov rather hry cili gland at base, Ped 4-6-flwd, Seg of Cor. cili, Out lbs of corona emar, in ones ent.
18778 Glab, Lvs ov subcord, Pedun axil my-flwd, Cor clav segs coher, Out lvs of corona short bifd, in lig clav
18779 Brnchs prostrate fleshy nearly leafless, rough from tubercles, Lvs very minute ternate cord, Flws axil. sessile



and Miscellaneous Particulars

2940. *Dictyanthus* A woody climber of great beauty when in blossom The corolla is large, urceolate be ow, and green, its limb turned back and prolonged into five long horns with recurved margins. this part is whitish marked with numerous small lines or striæ of purple. The plant will grow in the open air in summer, and in a warm house in winter. It requires the same treatment as other woody tender climbing Asclepiadeous plants.

2941. *Raphistémma pulchéllum*, as a climber, is nearly equal to *Stephanótis floribúnda*.

2942. *Stephanótis floribúnda* is a graceful climbing shrub; and when trained upon a wire globe trellis, with the mass of dark foliage and the countless clusters of large white flowers, is most attractive. It is a plant of easy culture, and is easily propagated by cuttings in the usual way.

2943. *Oxypétalum* is a genus of pretty hothouse climbers with showy blue or purple flowers. *O. solanoides* may be treated in the same manner as recommended for *Stephanótis*.

594. STAPE'LIA.

18780 3314*a* cactiíórmis *Hook* Cactus-formed ♃ □ or ½ jn.jl Y R C G H 1842. C s l.p Bot mag. 4127

2944 601*a* WIGA'NDIA *R & P.* WIGA'NDIA. (*John Wigand*, bishop of Lithuania.) *Hydroleàceæ*

18781 - - caraccasàna *H B & K* Caraccas ♃ □ or 12 f P v Caraccas 1836. C s.l p Bot. mag. 4575

18782 - - ùrens *Ruiz & Pav.* stinging ♀ ⍁ or 3 my.jl Pa.V Peru 1827. C s l p Fl per 3. 243

2945. 623*a*. XANTHO'SIA *Rudge.* XANTHOSIA. (*Xanthos*, yellow, down on plants) *Umbelliferæ*

18783 - - rotundifòlia *Rudge* round-leaved ♃ ⌴ or 1½ my.s W N.S.W. 1836. D s.l p Bot mag. 3582

2946 623*b* ASTRO'TRICHE. ASTROTRICHE. (*Astron*, a star, *thrix*, a hair; calyx.) *Umbelliferæ.*

18784 - - floccòsa *Dec* floccose ♃ ⌴ or 1 my.jl W N. Holl. 1825. C s.l p Dec. umb 5
Bòlax floccoides Sieb

18785 - - ledifòlia *Dec* Ledum-leaved ♃ ⌴ or 1 my jl W N. Holl. 1830. C s l p Dec. umb 7

632. ŒNA'NTHE.

18786 3544*a* fluviátilis *Colem.* river ♒ △ or 2 my.au W Eng. run. wat. D co Eng bot 2944

2947. 668*a*. NA'RTHEX *Falc.* NARTHEX. (*Narthex*, the name of *Asafœ'tida* in Dioscorides.) *Umbelliferæ*

18787 - - asafœ'tida *Falc.* asafœtida ♃ △ m 4 Y Astore 1835. S co Kæmpfr. 536
Férula asafœ'tida Lindl. *Asafœ'tida disgunénsis* Kæmpf.

TRIGYNIA.

679 VIBU'RNUM.

18788 3758*a* plicàtum *Thunb.* plicate-leaved ♃ or 4 my W N China 1846 G co Bot. reg. 1847, 51

18789 - - dilatàtum *Thunb* dilated-leaved ♃ or 4 ap my W China 1846 G co

18790 - - macrocéphalum *Fort* large-headed ♆ or 20 my W China 1844. G co Bot. reg 1847, 43

PENTAGYNIA.

695 EVO'LVULUS

18791 3857*a* purpùreo-cærùleus *Hook.* purp.-bl. ♃ □ or 1 jl.au Pa B Jamaica 1840. C s p l Bot. mag 4202

696 ARA'LIA.

18792 3860*a* japónica *Thunb.* Japan ♃ ⌴ or 10 jl au G Japan 1838. R p l

18793 - - trifoliàta *Hort* trifoliate ♃ ⌴ or 6 G N Zeal. 1842. C p l

18794 - - crassifòlia *Sol* thick-leaved ♀ ⌴ or 20 ... G N Zeal 1846. O p l Hook. ic. 583 4
heterophýlla Sol, Hook icon 583-4

18795 3861*a* macrophýlla *Lindl* long-leaved ♃ △ or 1 ... G.v N. India 1840. D co

2948. 699*a* GRAMMA'NTHES *Dec* (*Gramma*, writing, *anthos*, flower, cor marked with lines) *Crassulàceæ*

18796 - - chloræflòrus *Harv* Chlora-flwd ⊼ ⍁ or ½ jl au Y or C G H 1774 S s l p Bot. mag. 4607
Crássula retroflexa Thunb No *Vauánthes chloræflòra* Haw

701. LI'NUM

18797 3935*a* grandiflòrum *Desf.* large-flowered ○ or ½ jn jl C Algiers 1820 S s.p.l Pax. fl.g 1 27 13

706. STA'TICE.

18798 3960 rariflòra *Dreger* few-flowered ♇ △ or 1 jn au P Britain mud s D co Eng bot. 2917

18799 - - exímia *Fisch & Mey* beautiful ♇ △ or 2 jl s Pk Songaria 1844 D co Bot reg 1847, 2

18800 3974 macrophýlla *Spreng* long-leaved ♃ ⌴ or 3 my jl P w Canaries 1842 S s p l Bot reg 1845 7

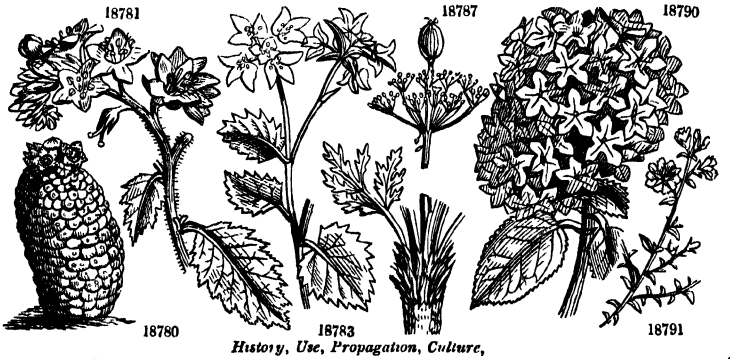
18801 - - Fortùnii *Lindl* Fortune's ♇ △ or 2 my jl Y China 1844 S s l p Bot reg 1845, 61

18802 - - rytidophýlla *Hook* rough-leaved ♃ ⌴ or 2 jl au Ro P. Natal 1846 S s l p Bot. mag 4055

18803 - - arbòrea *Brouss.* arboreous ♃ ⌴ or 4 au n Pa.Vi Teneriffe 1829 C p l Bot mag 3776

2949 706*a* ACANTHOLI'MON *Boiss* (*Acanthos*, spine, *limon*, sea lavender, lvs. and bracts) *Plumbaginæ*

18804 - - glumàceum *Boiss* glumaceous ♇ ⍁ or ½ my.s Ro Armenia 1845. D s p l Moor m 2 161 u
Statice Aucheri Hort



History, Use, Propagation, Culture,

2944. *Wigándia.* The species are straggling plants, with blue flowers, beset with stinging hairs; they are of easy culture, and cuttings will root readily The genus comes near to *Hydrólea*

2945. *Xanthósia rotundifólia* is one of the prettiest greenhouse plants It grows best in rough peat, sand, and a little loam. It will grow from cuttings or best from seed.

2946 *Astrótriche.* Grows well with the same treatment as *Xanthósia.*

2947. *Nárthex asafœ'tida* Dr. Falconer says that he has compared his materials with Kæmpfer's description and figures, and with the original specimens of that author in the collection in the British Museum, and found them to agree, as far as comparison could be instituted, in every essential particular Jubbar Khan, the Dardoh rajah of the country in which Dr. Falconer gathered his specimens, at once recognised it as that which furnishes the *Heeng* or Asafœtida of commerce, and referred to the medicinal accounts given of it by the Persian and Arabian authors, but the Dardohs are a wild race, and do not collect the gum resin for exportation. Some young shoots were carefully removed and introduced to the Botanic Garden at Saharumpoor, but afterwards transferred to the subsidiary hill garden at Mussooree. Of these some have succeeded well, but had not flowered up to the time of Dr Falconer leaving India; and one of these furnished the leaves which are represented in the figure in the Linnean Transactions, together with a small quantity of asafœtida, differing in no respect from the ordinary condition of that substance as

18780 Stem cylindric simple areolate, Flowers nearly sessile small aggregate, Outer series of corona 5-cleft, Lobe-bifid with teeth between

18781 Hairy, Leaves elliptic cordate doubly crenate, Spikes secund revolute, Sepals lanceolate, Stamens ciliated
18782 Hispid, Leaves ovate cordate doubly serrate pilose, Spikes unilateral scorpioid, Sepals linear-lanceolate

18783 Leaves reniformly orbicular coarsely toothed, Umbels 3—4-rayed, Umbellules many-flowered, Involucra and Involucels 3-leaved

18784 Clothed with lanuginous down, Leaves ovate-lanceolate

18785 Clothed with short adpressed down, Leaves oblong-linear coriaceous

18786 Stems floating creeping at base, Lvs bipinnate, Segments simple or pinnatifid, Leaflets wedge-shaped, Umbels opposite the leaves

18787 Downy, Stem simple furnished with leafless dilated petioles, Radical Leaves glaucous with trisected petioles and bipinnate divisions, Segments linear-lanceolate unequal-sided entire

TRIGYNIA.

18788 Habit of *V dentàtum.* The flowers are white in round heads, size of those of the Guelder Rose or Snowball
18789 Habit of *V dentàtum* Leaves plicate with a few rough hairs on both sides, Flowers small white
18790 Covered with stellate scurfy down, Leaves ovate obtuse denticulated, Cymes compound somewhat pyramidal

PENTAGYNIA.

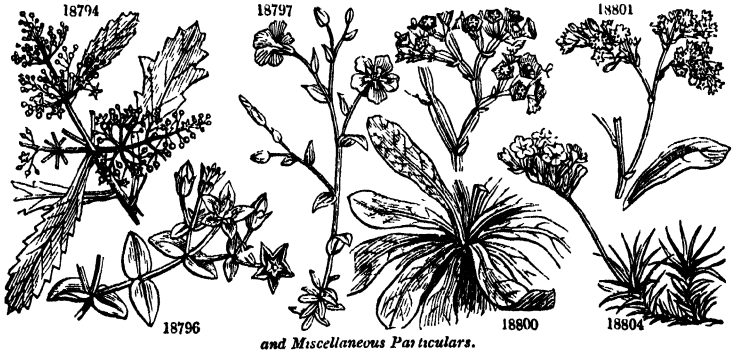
18791 Clothed with adpressed hairs, Branches slender, Leaves small lanceolate, Pedicels 1-flwd terminal and lateral, Corolla silky with crenulated edges [terminal, Pedicels umbelliferous
18792 Unarmed, Lvs petiolate 7-nerved 7-lobed, adult ones glabr, young ones woolly, Lobes ovate serrated, Panicles
18793 Leaves trifoliate
18794 Leaves thick smooth, in the young plant elongated reflexed simple toothed lanceolate, in the old tree ternate, Flowers racemosely umbellate
18795 Smooth, Leaves tripinnate, Leaflets petiolate cordate oblong serrated, sometimes 3-lobed, Umbels compound racemose

18796 Leaves oblong, Flowers disposed in cymose corymbs

[on the edges, Flower large crimson
18797 Glaucous branching upwards, Lower Leaves narrow obtuse closely packed, Cauline ones ovate acute fringed

18798 Lvs oblong-lanceolate faintly nerved, Scape branched, Branches panicled, Flowers unilateral distant, Bracts large
18799 Radical lvs obl. or obov, Scape leafless branched at top, Branches downy terete, Fascicles 4-flwd crwdd secund
18800 Stem shrubby leafy at top, Lvs sessile large obovate-spatulate, Panicles compound, Branches of Panicle winged
18801 Lvs glaucescent oblong 3-nerved at base, Scape stiff panicled, Branches angular, Bracts 4-flwd, Flwrs secund
18802 Erect branchd, Stem compressed, Lvs spatulate glaucous dotted, Pan lateral elon, Spikes many-flwd, Cal hispid
18803 Arborescent, Lvs ovate obtuse narrow at the base, Panicle compound terminal, Branches of Panicle 2-edged

18804 Branches naked at base beset with old deflexed lvs, Lvs acerose the lowest flat the rest subulate trigonal, Scapes downy Spike of 7—9 dense spikelets, Bracts crowded longer than the tube of calyx mucronate



and Miscellaneous Particulars.

it occurs in commerce. The species is found, as it would appear, in the greatest abundance in the Persian provinces of Khorassan and Laar, and thence extends on the one hand into the plains of Turkistan upon the Oxus, where it seems to have been met by Sir Alexander Burnes, and on the other stretches across from Beloochistan, through Candahar and other provinces of Affghanistan, to the eastern side of the valley of the Indus in Astore. Dr Falconer has not met with it in Cashmere. Besides the gum resin, the fruits of *Nárthex Asafœ'tida* are also imported into India for medicinal use, and along with them the fruits of another umbelliferous plant, which Dr. Falconer found to belong to a true *Férula*, and which are sold under the name of *Doogoo*, a word evidently connected with the Greek δαῦκος Dr. Falconer also mentions another umbelliferous fruit in the collection of Dr. Royle, labelled as the seed of the wild asafœtida plant, collected and brought to England by Sir John MacNeill from Persia, which differs widely from the fruit both of *Nárthex* and *Férula*, and belongs to another tribe of *Umbelliferæ*.

2948 *Grammánthes* is a pretty little annual plant. It requires to be grown in a pot placed in a greenhouse It will, perhaps, succeed on rockwork. A light sandy soil suits it best.

2949. *Acantholimon glumàceum* is a pretty little Alpine plant of easy culture It should be grown in a pot filled with a light loamy soil well drained. It is propagated by dividing the plant at the root, or by seed.

Page 236. CLASS VI.—HEXANDRIA. 6 STAMENS.

Order I. MONOGYNIA. 6 Stamens. 1 Style

2950. 712*d* *Elisèna* Tube of Perianth short, subcylindrical, decurved · Limb reflexedly spreading. Corona cylindrical, deflexed. Stamens declinate, recurved. Anthers short, incumbent, fixed by the middle Bulb covered by thick persistent fibres

2951 712*f* *Hymenocállis* All as in *Pancrátium*; but the tube is straight, angularly cylindrical Filaments flaccid, distant on the cup. Anthers long, pendulous Stigma roundish. Ovarium trigonal, 3-celled. Seeds fleshy, oblong, green.

2952 713*a*. *Callipsỳche* Flowers declinate. Sepals and Petals combined into a short tube, regular Sepals boat-formed. Stamens and Style very long, deflexed. Filaments furnished each with a tubercle at base Anthers versatile Ovarium 3-celled, many-ovulate Stigma capitate.

2953 715*a* *Calliphèa* Tube of Perianth narrow, funnel-shaped, nearly straight · Limb regular, stellate Stamens furnished with a bristle on each side. Anthers subsagittate, a little curved Style straight. Stigma subrecurved, 3-lobed, lower lobe a little longer. Cells of Ovarium 2—3-seeded. Seeds a little quadrate.

2954. 717*a*. *Sphærótele*. Perianth tubular. Throat naked. Limb 6-cleft, equal, erect Segments ovate, obtuse, flat. Stamens inserted in the throat. Filaments erect Stigma hemispheric. Ovarium trigonal, 3-celled, many-seeded

2955. 722*a*. *Phenakospérmum* This genus differs from *Ravenàla*, 722., in the seeds in the cells being disposed in many series, obovate, subglobose, on long stiff funicles, and covered with a comose stupose aril Stamens 6, all perfect.

2956 725*a* *Dasylirion* Flowers dicœcious. Male Perianth 6-parted to the base. Stamens free. Filaments a little thickened in the middle Anthers fixed by the back. Glands six, at the base of the stamens, similar to the rudiments of ovaria. Female flower unknown.

2957. 725*b* *Beschornèria*. Perianth 6-parted, the bottom nectariferous. Segments conniving into a tube, but spread a little at top Stamens inserted in the bottom of the perianth, subulate Ovarium subclavate, bluntly hexagonal, 3-celled, the top free, conical, 3-furrowed. Seeds few, 2-rows in each cell. Style trisulcate, triangular Stigma same thickness as the style, obtuse, papillose

2958 726*a*. *Acanthóstachys* Perianth 6-parted, inner 3 petaloid. Stamens 6, exterior 3 epigynous, and interior 3 epipetalous Ovarium 3-celled, flatly trigonal Cells biovulate. Style filiform. Stigma funnel-shaped, 3-lobed, minutely fringed. Berry triquetrous, 3-celled Cells 2-seeded.

2959 728*a*. *Pùya* Perianth 6-parted Segments convolute Stamens subulate Style filiform Stigmas 3, linear, spirally twisted. Capsule cartilaginous, trigonal, 3-celled, 3-valved. Seeds numerous, compressed, margined.

2960. 729*a* *Vrièsia* Perianth 6-parted outer 3 convolute, equal, inner 3 petaloid, revolute at apex. Scales 2 to each petal Stamens 6, 3 of which are free, the other 3 connate at the base. Ovarium half-inferior. Stigma 3-lobed: Lobes convolute and situated, villous.

2961 729*b* *Æchmèa*. Bractea cup-shaped Perianth 6-parted, spirally convolute · outer 3 like a calyx; inner 3 petaloid Stamens filiform, adnate to the petals. Berry ovate, globose, 3-celled, many-seeded. Style filiform Stigmas 2—3, linear, petaloid.

2962. 731*a* *Phædranássa* Perianth tubular, pendulous: Tube 6-furrowed Segments spatulate, convolute Stamens exserted. Filaments flattened, upper 3 the shortest Anthers versatile. Style straight. Stigma clavate, simple. Ovarium trigonal, oblong, constricted at top, 3-celled, many-seeded

2963. 736*a* *Gastronèma* Filaments inserted in the tube, 3 of which are declinate and twisted, and the 3 lower ones straight, conniving at top. Tube of Corolla curved, cylindrical below, and ventricose above Ovarium oval

2964. 739*a*. *Phycélla*. Spathe 2-valved Corolla tubular, 6-parted, convolutely closed, campanulately subringent Filaments inserted in the base of the segments, declinate exterior ones stretched out into two subulate processes Anthers ovate, versatile Ovarium trigonal, 3-celled, biseriately many-seeded. Style filiform, declinate Stigma simple. Seeds membranous.

2965 739*b* *Callithaùma* Perianth 6-parted Tube slender, cylindrical, nearly horizontal Corona 12-lobed funnel-shaped. limb spreading a little. Filaments short, conniving, inserted into the side of the corona. Stigma obtuse

2966. 739*c*. *Sprekèlia* Perianth declinate, annular at base, with a very short or scarcely with any tube. Stamens fascicled, declinate, clasped by lower lip

2967 739*d* *Ixiolirion* Perianth 6-parted, narrowly funnel-shaped · Segments reflexedly spreading Stamens straight. Anthers fixed by the base, erect. Style straight. Capsule oblong, chartaceous, scarcely operculate. Seeds black.

2968 739*e*. *Lycòris*. All as in *Amaryllis*, but having the tube declinate, widened towards the throat, and the filaments combined into a tube with the segments of the perianth, 3 of which are declinate and twisted, and the 3 lower ones straight, conniving at top.

MONOGYNIA.

2558. 712*a*. ISMENE

18805	7083*a* virèscens	greenish-flwd	☿ △	or	1	jn.au	Gsh	Cusco	1840.	O	l p.s	Bot. reg	1841, 12

2560. 712*c* COBU'RGHIA.

18806	17085*a* minìata *Lindl*	vermilion-cld	☿ △	or	3	ap.my	Ve w	Peru	1843.	O	r m		
18807	- trichròma *Herb.*	three-coloured	☿ △	or	1	jn	S G w	Andes	1837.	O	r m	Bot. mag	3867
18808	- stylòsa *Lindl.*	long-styled	☿ △	or	2	mr	O.R	Quito	1847.	O	r m		
18809	- coccínea *Herb.*	scarlet	☿ △	or	1	mr	S	Cordill.	1839	O	r m	Bot mag	3865
18810	- hùmilis *Herb*	dwarf	☿ △	or	¼	mr.ap	S	Andes	1841.	O	r m	Bot. reg.	1842, 46
	Clitánthus hùmilis Herb												
18811	- vérsicolor *Herb.*	party-coloured	☿ △	or	2	d ja	G w	Andes	1841.	O	r.m	Bot. reg	1842, 66
18812	- incarnàta *Sut*	flesh-coloured	☿ △	or	2	au.s	S	Quito	1826.	O	r.m	Sw fl.g	2 s 17

Pancrátium incarnàtum Kth. *Chrysophiala incarnàta* Schultes.

History, Use, Propagation, Culture,

2560. *Cobúrghia*. The species will grow in a rich alluvial soil with a little rotten manure, and they appear to dislike sunshine and fine weather. They stand out of doors all the summer and autumn, and on the approach of

2969 739*f* *Collàmia.* Perianth subcylindrical, 6-parted. Sepals and Petals unlike, forming themselves into a tube Stamens and Style straight Ovarium turbinate, operculate, glandular at top. Pericarp opercular, pulpy. Pulps edible.

2970 748*a.* *Bomàrea.* Perianth 6-parted Sepals and Petals of a different form. Petaline filaments earliest. Capsule obtusely trigonal dehiscing at top

2971 758*a.* *Atáccia* Perigone 6-parted inner segments large, reflexed. Stamens inserted in base of segments. Filaments broad, concave above. Anthers 2-celled. Cells free. Stigma capitate, 3-lobed. Berry 3-celled, many-seeded. Seeds lunate.

2972 765*a.* *Cyanótis* Flowers nearly regular Sepals 6, exterior ones nearly equal, navicular, connate at base, persistent, interior 3 longer, petaloid, connate by the claws, caducous Stamens nearly equal, adhering to the tube, very long Capsule trigonal, 3-celled, membranous, 3-valved. Valves septiferous in the middle. Ovula twin in the cells

2973 765*b* *Thercèsia* *Perianth bell-shaped, 6-parted* Sepals oblong, coloured, furnished with a nectariferous cavity inside Stamens hypogynous, enclosed Style slender Stigma hardly distinguishable. Ovarium 5-celled, many-seeded, 5-angled, columnar

2974. 774*b* *Cordylìne* Perianth 6-cleft, equal, deciduous Filaments glabrous, inserted in the throat of perianth. Stigma small, 3-lobed. Berry globose, 3-celled. Seeds many, strophiolate

2975 771*c* *Spironema* Perianth 6 cleft, the 3 petaloid segments enclosed Stamens hypogynous. Filaments spiral Anthers cordate, petaloid, bearing a cell at the base of each lobe. Stigma papillose Ovarium 3-celled, few-seeded Ovula horizontal

2976 788*a* *Luzuriàga* Corolla 6-petaled Petals distinct, equal 3 outer ones narrow. Stamens inserted in the receptacle Anthers erect, sagittate. Style triquetrous Stigma triangular Berry triangular, with a membranous dissepiment Seeds 2 in each cell from abortion.

2977 788*b* *Callixene* Corolla deeply 6-parted, equal, alternate segments glandular at base Stamens dilated at base Anthers versatile Stigma trigonal Berry small, 3-celled Cells pulpy inside, usually 3-seeded.

2978 788*c* *Philesia* Perianth campanulate, 6-parted, regular 3 outer segments acuminate, 3 inner ones twice as long, obtuse Stamens connate at the base. Anthers long, versatile Stigma 3-lobed Berry subtrigonal, 3-celled, many-seeded

2979 789*a* *Lapagèria.* Perianth 6-leaved, campanulately connivng outer leaves carinated, inner ones broader, subunguiculate. Stamens subulate. Anthers fixed by their base Ovarium 1-celled, with 3 parietal placentas Ovula numerous, mucous. Stigma clavate, oval-oblong Berry 1-celled, many-seeded Seeds obovate, truncate, nestling in pulp

2980 789*b* *Ripógonum* Perianth 6-parted, equal, spreading, bibracteate, deciduous Stamens subulate, glabrous Anthers longer, emarginate, inserted by their base. Ovarium 3-celled. cells 1-seeded Style short. Stigma 3-lobed, obtuse Berry 1—2-seeded Seeds subglabrous

2981 808*a* *Bidwillia.* This genus differs from *Asphódelus* in the filaments being clavate above

2982 809*a* *Simethis* Perianth of 6 spreading 5—7-nerved segments. Filaments woolly at apex. Capsule globose, 3-lobed, 3-celled, 6-seeded

2983 809*b* *Echcándia* Perianth 6-parted Sepals all more or less twisted and rolled back Filaments enlarging outwards Style filiform Capsule triangular, roundish, oblong, 3-celled Cells many-seeded

2984 813*a* *Chrysobáctron* Flowers racemose, sometimes dioecious Perianth 6-leaved Anthers versatile Ovarium 3-furrowed. Female flowers as in the male, but the anthers are incomplete Capsule ovate, 3-celled, 3-valved Cells usually 2-seeded. Style strong Stigma capitate, 3—6-lobed. Anthers closely connected together.

2985 817*a* *Dimmiópsis* Perianth green, campanulate, nearly equal. Stamens equal, epipetalous. Ovarium tapering into the style Ovula twin, collateral

2986 821*a* *Bellevallia* Perianth campanulate, 6-parted. Stamens exserted or enclosed. Capsule membranous, triangular, 3-celled, 3-valved Cells 2-seeded Stigma obtuse entire.

2987 2590*a* *Isómeris.* Sepals united at base Petals 4, oblong, sessile, nearly regular. Torus fleshy, dilated above. Stamens equal, much exserted. Capsule large, obovate-elliptic, inflated, coriaceous, indehiscent, stipitate Seeds numerous, large

2988 836*a* *Anópteris* Calyx 6-lobed. Petals 6. Stigma bifid. Capsule 1-celled, 2-valved Seeds compressed, furnished with a wing at top.

2989 836*b* *Eleutherìne* Stamens free. Style trifid at apex. Capsule 3-celled, dehiscent at top, chartaceous. Seeds wrinkled, roundish Perianth fugacious, regular.

2990 836*c* *Prepùsa* Calyx large, 6-winged, 6-cleft, coloured Corolla campanulate, 6-cleft, with a swollen tube and a naked throat. Stamens as if they were emerging from the duplicatures of the corolla. Stigma bilamellate Capsule 1-celled, 2-valved, many-seeded. Margins of valves inflexed, placentiferous. Seeds nearly globose, many-seeded.

2991. 836*d* *Trimèzia.* Perianth very unequal: Claws of sepaline segments broad, the lamina spreading, of the petaline segments narrower, incurved, the lamina recurved Stamens filiform, spiral, inserted in the papillæ of the disk Anthers and Lobes of Style cohering firmly. Style linear, 3-lobed at apex Lobes lamina-formed cucullate Stigma soft, 2-lobed. Lobes bifarious. Seeds glabrous, bay-coloured, roundish, with a hard testa.

MONOGYNIA.

18805 Leaves green erectish acute sheathing at base, Scape 2-edged, Tube of perianth about equal to the segments, Sepals and petals ovate [hardly joined into a corona

18806 Leaves green, Scape compressed, Tube of Perianth clavate 3 times longer than limb, Filaments membranous

18807 Bulb ov., Lvs glauc obt., thick, Spathe green exceeding short pedun., Tube a little curved, Tth of Cor. 2 lobd

18808 Lvs stiff ac glauc, Umbs 3—5-flwd, Flws sess., Tube clav archd, Tth of Coron twin, Style defl, Stams straight

18809 Bulb bulbif about 4-flwd, Lvs glauc, Peduncs uneq, Flws pendulous, Lamb short, Anthers equal to the limb

18810 Bulb small stoloniferous, Leaves green a foot long channelled acute, Sepals so close as to form a narrow tube [limb

18811 Leaves glaucous bluntish, Scape compressed 2-edged, Teeth of Corona 2-lobed green, Stamens shorter than

18812 Scape twice the length of the leaves compressed, Spathe about 4-flowered, Segment ovate elliptic, Sinuses of Corona bidentate

and Miscellaneous Particulars

winter the leaves perish, and the pots in which they grow may then be put in a dry part of a greenhouse till next spring.

2950. 712*d*. ELISE'NA *Herb.* ELISENA. (Not explained by author.) *Amaryllidæ*
113 - - longipétala *Herb.* long-petaled ☿ △| or 3 mr W Lima 1837. O s.l.p Bot. mag 3873

2951. 712*e*. HYMENOCA'LLIS (*Hymen*, a membrane, *kalos*, beautiful; cup of flowers.) *Amaryllidæ*.
314 - - Borkiàna *De Vriese* Bork's ☿ △| or 1 ap W La Guay. 1850. O s.l.p
315 - - Skinneriàna *Herb.* Skinner's ☿ △| or 1½ mr W Guatem. 1841. O s p l
316 - - bistubàta *Herb* double-tubed ☿ △| or 1½ ap W Mexico 1840. O s p.l
317 - - Harrisiàna *Herb.* Harris's ☿ △| or 1½ ap W Mexico 1837 O s.p.l
318 - - rotàta *Herb* rotate ☿ △| or 1½ my W Florida 1803. O s l.p Flor. cab. 2 51
Pancràtium rotàtum Bot mag. 827. *Ismène Knightii* Flor. cab 2. 51.
319 - - panamènsis *Herb.* Panama ☿ △| or 1½ my W Panama 1850. O s l p

2952. 713*a*. CALLIPSY'CHE *Herb* CALLIPSYCHE. (*Kalos*, beautiful, *psyche*, a butterfly.) *Amaryllidæ*.
3820 - - eucrosiòdes *Herb.* Eucrosia-like ☿ ▽ or 2 mr S.G Mexico 1843. O s.l.p Bot. reg 1845, 45

715 CALOSTE'MMA.
3821 4080*a* cárneum *Lindl.* flesh-coloured ☿ △| or 1 ap F Australia 1836. O s.p.l Bot. reg 1840, 26

2953. 715*a* CALIPHU'RREA *Herb.* CALIPHURREA. (Derivation not given by author.) *Amaryllidæ*.
3822 - - Hartwegiàna *Herb* Hartweg's ☿ ▽ or 1 my G.w N Gren. 1843. O s.l p

2961 717*a* STENOME'SSON.
18823 17087*a* latifòlium *Herb.* broad-leaved ☿ △| or 1 mr C Lima 1837. O s p.l Bot mag. 3803
18824 - - vitellinum *Lindl.* yolk of egg ☿ △| or 1 f Y Lima 1841. O s p.l Bot. reg 1843, 2
18825 - - Hartwègii *Lindl.* Hartweg's ☿ △| or 1 mr O Quito 1843. O s l.p Bot. reg 1844, 42
18826 - - aurantiacum *Herb* orange-flwd ☿ △| or 1 my O Quito 1843. O s.p l
Pancràtium aurantiacum Kth.
18827 - - eustephioides *Herb* Eustephium-lk ☿ △| or 1 ap Pa.O Quito 1848 O s.p.l

2954. 717*a* SPHÆRO'TELE *Presl.* SPHÆROTELE. (*Sphaira*, a sphere; round stigma) *Amaryllidæ*.
18828 - - coccínea *Presl* scarlet ☿ △| or 1 my jn S Peru 1850 O s p.l Lk. Ot Kl ic. 38
Stenoménsson coccíneum Lk. & Ott. *Amarýllis cyrtanthoides* No. 2443. and *Amarýllis ignea* No 4244 be- [long to this genus.

720. ANIGOZA'NTHOS.
18829 4086*a* pulchérrimus *Hook* fairest ☿ △| or 3 my jn Y Swan R 1844. D s l p Bot. mag. 4180
18830 - - tyrianthus *Hook.* Tyrian purp.-fld ☿ △| or 3 my jn Lem Swan R. 1850 D s.l.p Bot. mag. 4507
18831 - - fuliginòsus *Hook.* sooty ☿ △| or 3 my jn Lem Australia 1844. D s l.p Bot. mag. 4291
18832 - - humilis *Lindl.* humble ☿ △| or 3 my jn C Swan R. ... D s l.p

2962 720*a*. BARBACE'NIA
18833 17090*a* squamàta *Paxt* scaly-stalked ☿ ▽ or ½ jn S Organ M. 1841. D s l p Bot. mag. 4136
Vestchia squamàta Herb.
18834 - - Rogièri *Hort. Belg.* Rogier's ☿ ▽ or 1½ jl P Brazil 1850. D s.l.p Moor. m. 2. 209

2955 722*a* PHENAKOSPE'RMUM. (*Phenax*, a cheat, *sperma*, a seed, seeds differ from order) *Musàceæ*
18835 - - guianénsis *Endl* Guiana ☿ ▽ or 15 ... R.w Guiana 1824. D s.l p Rich. mus. 6—7
Helicònia Bállia Rich. *Urània guianénsis* Rich.

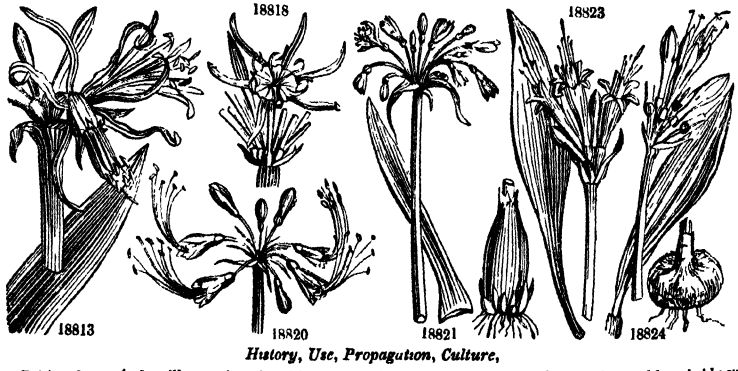
725 FOURCRŒ'A
18836 4107*a* longæ'va *Karw.* long-lived ♆ ⌴ or 50 ... G Mexico 1833 Sk r.m

2956. 725*a* DASYLI'RION *Zucc* DASYLIRION (*Dasys*, thick, *leirion*, a lily; succulent.) *Bromeliàceæ*.
18837 - - graminifòlium *Zucc.* Grass-leaved ☿ △| or 5 ... ... Mexico 1835. Sk r.m
18838 - - acrótrichum *Zucc.* bearded-leaved ☿ △| or 5 ... ... Mexico 1830 Sk r m
Roulinia acrótricha Brong. *Yucca acrótricha* Schiede.

2957 725*b*. BESCHORNE'RIA *Kth.* BESCHORNERIA. (*H. Beschorner*, a German botanist) *Bromeliàceæ*.
18839 - - tubiflora *Kth* tube-flowered ☿ △| or 6 my G P Mexico 1845. Sk r.m Bot. mag. 4642
Fourcroya tubiflora Kth Hort. ber
18840 - - yuccoides *Kth* Yucca-like ☿ △| or 7 ... G.R Mexico 1845. Sk r.m Px. fl. g. 3 71.

726 BROME'LIA
18841 4118*a* longifòlia *Rudge* long leaved ☿ ▽ or 4 ... Ro Guiana 1846 Sk r.m Rudge gui. 1 49

2958 726*a*. ACANTHO'STACHYS *Klotzsch* (*Acantha*, a spine, *stachys*, a spike) *Bromeliàceæ*
18842 - - strobilàcea *Klotz* strobilaceous ☿ ▽ or 4 jn jl R.G Brazil 1840. Sk lt.m Lk. Ot Kl ic 7



History, Use, Propagation, Culture,

2950 *Elisèna longipétala* will grow best in white sand with a small admixture of loam. It would probably succeed in a bed of white sand out of doors, if it can be kept from shooting too early in spring.
2951. *Hymenocállis*. The flowers of *H Borkiàna* smell like Vanilla.
2952. *Callipsỳche*. This bulb should be potted in sandy loam and leaf mould. In summer, while growing, it requires to be kept in a temperature of 75° or 80° by day and shaded in sunny weather. In autumn, when the leaves die, it should be kept in a warm greenhouse quite dry for a few weeks. As soon as the bulb begins to shoot it should again be watered and placed in more heat. It is a beautiful plant when in blossom.
2953. *Caliphùrea*. This genus is very nearly allied to *Eùrycles* and requires the same treatment.
2954. *Sphærótele* The species are rather hardy. They require the same treatment as the greenhouse kinds of *Amarýllis*, that is, to be kept dry when in a dormant state, and plenty of water given to them while growing.

18813 Scape 2-edged about 6-flowered, Limb of Perianth revolute, Teeth of Corona irregularly trifid

18814 Leaves dull green 2½ feet long, Flowers 7 in an umbel, white with a very thin entire transparent corona
18815 Leaves petiolate costate 1 foot, Scape 5 inches, Spathe 6-flowered, Corona narrow toothed, Tube slender
18816 Scape 2-edgd, Spathe 8-flwd, Lvs green, Corona long cylind. which gives it a hose in hose appearance
18817 Scape compressed glaucous, Corona with small teeth, Leaves 3 subpetiolate an inch broad linear
18818 Scape 2-edged 10—12-flowered longer than leaves, Leaves linear-oblong streaked, Segments of Perianth linear-lanceolate, Corona spreading closely toothed
18819 Leaves erect acuminated lorate, Scape 2-edged, Umbel many-flowered, Flowers sessile, Tube 6 inches long, Corona obconical free bluntly toothed between the stamens

18820 Leaves few green 4 inches wide, Scape 10-flowered glaucous, Stamens very long incurved

18821 Leaves stiff ensiform shorter than scape, Tube of Perianth equal to limb, Corona truncate toothless emarginate, Umbels dense, Pedicels articulated, outer ones the longest

18822 Bulb ovate, Leaves petiolate depressed ovate subplicate green, Scape nearly terete glaucous, Umbels 7-flowered

18823 Scape glaucescent 5-flowered, Peduncles short umbellate, Style and Stamens exserted
18824 Lvs obov.-obl. 3-nerved, Umbel 6-flwd, Seg of Per. obl erect, Stam exserted, Teeth of Corona obt. undivided
18825 Lvs ligul. with revol edges, Umbel 2-flwd, Flws pendul . Seg. of Per. ovate, Stams enclosed, Corona toothless,
18826 Leaves with rolled-back edges, Flowers pendulous, Corona toothless [Fils 2—3-toothed, Style exserted

18827 Corona acutely cut, Filaments wiry setose, Anthers exceeding the limb

18828 Leaves oblong, Umbel few-flowered, Lateral teeth of Filaments divided

[bristles, Anthers mutic
18829 Leaves equitant linear falcate covered with stellate tomentum, Panicles much branched clothed with rufous
18830 Stem tall ter. pan clthd with hoary tom. below, Lvs lin stiff strght glabr , Pan. clthd with purp tom., Anth. mut.
18831 Stem angul , Lvs equit lin. subfalc glabr , Spks sec , Pan clthd with plum. brwnsh hairs, Per. tom., Anths apic.
18832 Rhizoma scaly cormoid, Leaves falcate smoothish much shorter than simple woolly scape, Racemes secund elongated, Limb of Perianth erect, Anthers mutic

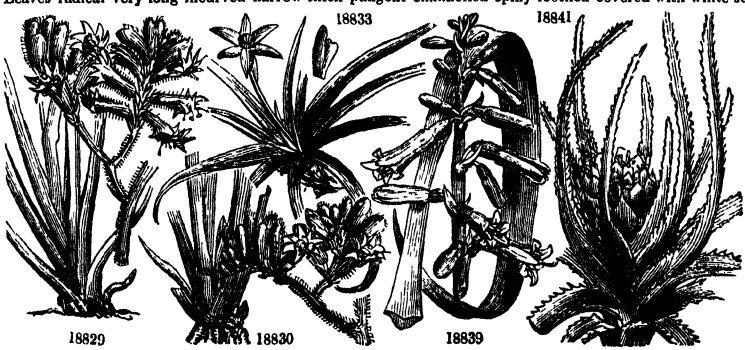
18833 Caudex short divided covered by the vestiges of the old leaves, Leaves narrow keeled glaucous spiny serrated, Scape shorter than leaves, Perianth glabrous, Filaments broad truncate
18834 Caudex short, Leaves linear acuminated imbricate with broad stem-clasping bases finely spiny-serrated on margin and keel recurved, Scape and Ovaria tubercled, Filaments broad bifid

18835 Leaves large resembling those of *Ur̀ana* or *Mùsa*, Stems tall, Spathes or Bracts many-flowered

18836 Leaves linear-oblong acuminate unarmed glaucescent with the margins callously ciliated scabrous beneath

18837 Leaves long narrow spiny-serrate green
18838 Leaves narrow glaucous spiny-serrated ending in a tuft of hairs or fibres

18839 Leaves radical linear channelled recurved spinosely denticulate, Scapes erect long simple, Flowers nutant fascicled bracteate, Fascicles remote secund
18840 Leaves radical thick broad-lanceolate smooth but scabrous to the touch beneath cartilaginously annulated, Scapes tall racemosely subpanicled, Bracts large red, Flowers nutant fascicled pedunculate
18841 Leaves long scurfy curved spiny-toothed with a long bristle-shaped point, Spike globose nearly sessile, Bracts oblong serrulate mucronate mealy, Sepals narrow [Scape simple long scurfy, Bracts coloured
18842 Leaves radical very long incurved narrow thick pungent channelled spiny-toothed covered with white scurf,



and Miscellaneous Particulars.

2955 *Phenakospèrmum.* This is a noble plant growing in moist shady places in Guiana, and north of Brazil, as in Maranham and Para It is of as easy culture as *Mùsa* or *Helicònia*. It is propagated by division. It will require plenty of moisture and heat.

2956. *Dasylirion.* The species of *Dasylirion* require the same treatment as the more tender species of *Yùcca*.

2957. *Beschornèria.* The cultivation of the species of this genus is the same as that for *Fourcræ'a* or *Agàve* They are tall handsome plants, with green drooping flowers and coloured bracts.

2958. *Acanthòstachys* requires the same treatment as *Agàve* or *Littæ'a*. The plant is from the southern part of Brazil, and is covered with a white scurf The bracts are large and bright red. The flowers are sulphur colour. It requires a heat of from 58° to 60°. A soil composed of equal parts of sand and decayed leaves seems most agreeable to it. The leaves are all radical and keeled

728 PITCAI'RNIA

18843	4138*a*	cinnabárina *Dietr.*	cinnabar-cld		or	1½ jn.jl	Ve	Brazil	1850.	Sk r.m	
18844	-	fúlgens *Dne*	fulgent		or	2 my jl	S	Guadal.	1850.	Sk r m	
18845	-	montalbénsis *Lmdl*	Montalba		or	2 jn.jl	S	Mexico	1850.	Sk r m	
18846	-	Funckiàna *Paxt*	Funck's		or	2 my jl	S	S Amer	1850.	Sk r m	
18847	-	ríngens *Lk*	gaping		or	3 my.jn	S	Demera.	...	Sk s p l	Lk. Ot Kl. ic 25
18848	-	exscàpa *Hook.*	scapeless		or	1½ my jn	S	N Gren.	1848.	Sk r.m	Bot. mag 4591
18849	-	Jacksónii *Hook*	Jackson's		or	2 jn jl	S	Guatem	1848.	Sk r.m	Bot. mag 4540
18850	-	undulata *Scheidw.*	undulated		or	2½ jn.jl	S	Brazil	1840.	Sk r m	
18851	-	micrántha *Lmdl.*	small-flowered		or	⅔ mr jl	W	Rio Jan	1841.	Sk block	

2959. 728*a* PU'YA *M & D.* PUYA. (A name of American origin.) *Bromeliàceæ.*

18852	-	Altensteinii *Lk*	Altenstein's		or	2½ my.jl	W	Brazil	...	Sk s.p.l	Bot. mag 4241
		Pitcairnia undulatifólia Hook.									
		β gigantèa B M.	*giant*		or	6 jn jl	W	Brazil	1840	Sk r.m	Bot. mag. 4309
18853	-	maidifólia *Dcn*	Maize-leaved		or	2 my	Crea	Caraccas	1848.	Sk r.m	Dcn. ann g 289
18854	-	heterophýlla *Lmdl*	various-leaved		or	1½ my	Pk	Mexico	1838.	Sk p l	Bot. reg 1840, 71
18855	-	longifólia *Morren*	long-leaved		or	½ my jn	Pk	S Amer.	1850.	Sk p l	Px. fl. g 3. 86
18856	-	recurvàta *Scheidw.*	recurved		or	5 ap jn	W	Brazil	1843	Sk p.l	
18857	-	cærùlea *B R.*	blue		or	4 ap.au	B	Chili	1827.	Sk p l	Bot. reg. 1840, 11
		Pourrètia cærùlea Miers									

2564. 728*b* DY'CKIA.

18858	-	altissima *Lmdl.*	tallish		or	6 o	O	B. Ayres	1838.	O s p	

729. TILLA'NDSIA.

18859	4142*a*	bulbòsa *Hook.*	bulbous		or	⅝ d	P	Jamaica	1845.	Sk s.p	Hook. ex fl 173
18860	-	inànis *Lmdl*	low		or	1 ...	P.Li	B. Ayres	1850.	Sk s p	Px fl g. 1.159 103
18861	-	éminens *Lmdl.*	eminent		or	1 d	S	St Dom.	1845.	Sk s.p	
18862	-	erythræa *Lmdl*	red		or	1 d	P	Jamaica	1845	Sk s p	Bot. mag. 4288
		bulbòsa β picta B M.									
18863	-	pùmila *Lmdl.*	dwarf		or	½ ...	...	Para	1845.	Sk s p	
18864	-	vitellina *Lk & Ott*	yolk of egg		or	2 ...	Y	Venezu.	1844.	Sk s.p	Lk Kl. Ot ic. 40
18865	-	rùbida *Lmdl.*	reddish		or	¼ f	Pk	Brazil	1841.	Sk s.p	Bot. reg. 1842, 63

2565. 729*a* BILLBE'RGIA.

18866	7099*a*	cruénta *Hook*	bloody		or	1 f.mr	B R	Rio Jan.	1824.	Sk s p	Bot. mag 2892
		Bromelia cruénta Graham.									
18867	-	bicolor *B C.*	two-coloured		or	⅔ mr.m	Ro.B	Rio Jan.	1829.	Sk s p	Bot. cab 1819
18868	-	purpùrea-rósea *Hook*	purple & rosy		or	2 n	P B	Brazil	1831.	Sk s p	Bot mag 3304
18869	-	polystàchya *Lmdl*	many-spiked		or	2 ...	P	Brazil	1848.	Sk s p	Px fl g 3. 80
		Bromèlia polystàchya Hort									
18870	17100*a*	Morelliàna *Brong.*	Morell's		or	1 ...	S	S. Amer.	1850.	Sk s p	Px fl g 3 77
18871	-	thyrsoidea *Mart*	thyrsoid		or	1 jn jl	S	Brazil	1850.	Sk s p	Px fl g. 3 74
18872	-	pyramidàlis *B M*	pyramidal		or	1 f.mr	Ro R	Peru	1822.	Sk s.p	Bot mag 1732
		Bromelia pyramidàta B.M		*Pourrètia pyramidàta* Ruiz & Pav. fl. per. 3. 257.							

2960. 729*b* VRIE'SIA *Lmdl* VRIESIA (*M de Vriese*, professor of bot Amsterdam.) *Bromeliàceæ*

18873	-	speciòsa *Hook*	showy		or	1½ mr ap	W	S Amer	1847.	Sk p.l	Bot mag 4382
18874	-	glaucophýlla *Hook*	glaucous-lvd		or	1½ au	P	S Martha	1847.	Sk p.l	Bot mag 4415
18875	-	psittacina *Lmdl*	parrot-lk-flwd		or	2 jl	S	Rio Jan	1826	Sk s p	Bot. reg 1843, 10
		Tillándsia psittacina B.M 2841 No. 17096, and *T. setàcea* B M 3275 belong to this genus									

2961 729*c*. ÆCHME'A *Schultes* ÆCHMEA. (*Aichme*, a point; stiff points of calyxes) *Bromeliàceæ*

18876	-	Mertènsii *Schultes*	Mertens's		or	1½ mr.ap	G R	Demer	1832	Sk s p l	Bot mag 3186
18877	-	fúlgens *Paxt*	brilliant		or	1 mr.ap	S B	Cayenne	1842.	Sk s p l	Px mg 10 173.ic
18878	-	suavèolens *K & W*	sweet-scented		or	2½ f.ap	Pk	Brazil	1838.	Sk s p.l	Fl. cab. 134
		Pitcairnia suavèolens Bot reg 1061									
18879	-	discolor *Hook*	two-cld-lvd		or	2 d f	S	Brazil	...	Sk s.p.l	Bot mag. 4293

731 HÆMA'NTHUS.

18880	4152*a*	tenuiflórus *Herb*	slender-flwd		or	1 ap	B	Mozamb.	1839.	O s l.p	Bot. mag. 3870
18881	-	magnificus *Herb*	magnificent		or	1½ my.s	S	S Africa	1838.	O r m	



History, Use, Propagation, Culture,

2959. *Pùya* is a genus of pretty plants They have much of the habit of the pineapple. They are half-epiphytal, and will grow in the poorest situations, as on stones or wood. They succeed well with the same kind of treatment as epiphytal orchideous plants.

2960 *Vriésia*. This genus is nearly allied to *Tillándsia*. The species will grow suspended by a piece of wire from a beam in an orchidaceous house, or they may be suspended in a wire basket. The bracts of all are of a beautiful red colour. In fact they require the same kind of culture as the tropical epiphytal *Orchideæ* When p...

18843 Lvs entire smooth reddish underneath, Rac. 6 inches long one-sided, Fl. 2 inches long of a deep vermilion
18844 Lvs spiny at base mealy beneath, Rac. dense, Bracts large smth, Pets 2 round. conc with cren. scale at base
18845 Lvs lanc. smth spiny-tthd at base, Scape cvd with fine wool as well as bracts, Spike 3 in. long, Flws 2 in. long
18846 Stm lfy finely tom., Lvs long lanc quite ent. glab naked shing, Shths tom , Rac term. pyr , Pets naked at base
18847 Lvs lin long entire dil. at base spiny cil glab , Scape bracteate simple vill., Bracts villous, Pets naked
18848 Lvs all rad. long acum. ent, with inflated sheaths cll above, Spike rad. capit bract , Brcts hairy, Pets with scale
18849 Lvs ensif keel. scurfy ben. spiny-ser. above, Scape simple, Ped and Cal mealy, Sep. obt , Pet. lin with ser, scale
18850 Lvs lanc ent. cusp glab ab powd. ben , Scape simp. scaly powd., Scales lanc ent., Rac elong. simp , Pet. nak.
18851 Lvs ensiform acuminated downy outside at base, Raceme slender panicled, Flowers minute, Petals lanceolate naked at base acute

18852 Lvs ensiform membranous unarmed glabrous undulated distich, Peduncle short sheathed by bracts, Bracts convolute purple, Spike simple
β Stem 5—6 feet, Leaves 3 times longer than the spike
18853 Lvs broad thin ribbed rather glauc , Spike long cone-shaped, Bracts crimson tipped with green, Cor 2 in long
18854 Ps -bulb., First Lvs dil at base nar. upw. spiny ser , secondary lanc. unarmed prum , Sp sess. imb , Br wool.
18855 Pseudo-bulb. stemless, Lvs of two forms like those of *P. heterophýlla*, longer than the spks, Sep lin. lanc. keeled
18856 Stem simp tall scaly powd , Lvs quite ent dentic. at top powd ben., Sp. term., Br imbr. rose-cld, Fl. ses. rec
18857 Lvs linear taper-pointed spiny-toothed smoothish, Scape panicled, Bracts oblong concave, Petals obtuse blue

18858 Lvs acum. distantly spinose glab., Scales of tomen. scape acum. ent , Spike elong dense-flowered, Bracts acute

[distich usually coloured
18859 Leaves few broad at base and sheathing around the bulb terete convolute, Spikes branched bracteate, Bracts
18860 Scape shorter than the leaves, Spike simple leafy at base, Bracts greenish purple lepidated
18861 Scape higher than the leaves, Spike leafless branched, Bracts naked scarlet distich keeled uncinate at top
18862 Scape shorter than the leaves, Spike branched, Bracts foliaceous scarlet naked, lower ones longer than spike

18863 Scape sessile among the lvs, Spike nearly simple leafless, Bracts green coriaceous ventricose loosely lepidated
18864 Leaves oblong-lanceolate quite entire, Spike many-flwd a little branched pendulous, Flws sessile, Bracts small
18865 Lepidoted, Leaves ovate-lanceolate channelled, outer ones recurved sheathing the scape, Bracts lanceolate acuminated at base and green at top

18866 Leaves strap-shaped obtuse mucronate spinosely dentate tipped with blood-red, Bracts broad-oval imbricate obtuse concave, Spike capitate subsessile
18867 Closely allied to *B nudicaúlis*, but the Petals are obt , the Spines green not black and the Lvs narrower green
18868 Lvs ligul dp grn acum spiny-tthd, Pan many-flwd, Flor Brcts ov -mucr rose-cld, as well as calyx, Cor exsert.
18869 Leaves channelled spiny-toothed recurved ventricose at base, Spike conical many-ranked mealy, Bracts roundish acuminate imbricate [red scales, Bracts coloured, Racs secund, Flws fascicled, Petals revolute
18870 Leaves ligulate channelled banded with white with a few spiny teeth near base, Stem smooth with large loose
18871 Lvs erect brd lig obt. conc. spiny serr , Spathe ov -lanc , Spkethyrs almst without brcts, Flws dense, Pets obt.
18872 Leaves lanceolate acuminate spiny-toothed, Scape branched naked below the flowers, Bracts lanceolate quite entire red

[gated scarlet, Bracts coloured
18873 Leaves broad-oblong mucronate channelled entire glabrous crossed by black bands, Scape scaly, Spike elon-
18874 Leaves long subul. glauc. or mealy, Scape brnchd at top with distich branches and bracts forming spikes, lower
18875 Leaves oblong acute dilated at the base, Sepals a little shorter than corolla, Stamens exserted [bracts cld

[coloured, Partial Bracts and Calyxes ending in a spine
18876 Leaves ligulate spiny ciliated convolute at base, Racemes spicate, Flowers sessile glomerate, Bracts leafy
18877 Lvs clasping each other at base swrd-shpd spiny-serrul , Spks short stout a little brnchd with rich scarlet stlk,
18878 Lvs ligulate convolute at base spiny-serrate, Racemes spicate, Flowers pale pink [Flws scarlet, blue at top

18879 Leaves ligulate striated obscurely banded serrulated of a different colour beneath, Bracts lanceolate, Flowers sessile in the panicle

[filiform, Segments of Perianth linear, Stamens exserted
18880 Lvs broad undul. sheath red at base obscurely spotted, Umbel many-flowered, Spathe of 3—6 acute valves, Bracts
18881 Lvs broad undul. glabr., Scape compr. dot. at base as well as peti , Umb many-flwd hemisph., Segs of Per. lin



and Miscellaneous Particulars.

it should be in leaf mould, and the pots should be well drained with potsherds. Water should be given plentifully in the summer months, but sparingly in winter.

2961. *Æchmèa.* A genus composed of epiphytal pineapple-like plants with long racemes or spikes of scarlet or red flowers, and large scarlet or red bracts which last give splendour to the plants They succeed well with the same treatment as tropical epiphytal *Orchideæ*. They will grow on blocks of wood, in baskets, or in pots well drained with potsherds, in leaf mould. They require plenty of heat and moisture when in a growing state.

2962. 731*a*. PHÆDRANA'SSA *Herb* (*Phaidros*, gay, *anassa*, a queen; beauty.) *Amaryllideæ*.
18882 - chlorâcea *Herb.* crimsn & green ♂ ⧋ or 2 ja.mr C.G Peru 1842. O s.l.p Bot. reg. 1845, 17
Phycélla chlorâcea Kth
18883 - obtûsa *Herb* obtuse ♂ ⧋ or 1 ja.mr R.G Peru 1840. O r.m
Phycélla obtûsa Lindl

732 GALA'NTHUS.
18884 4163*a* reflexus *Herb* reflexed-petal ♂ △ cu ... W G M Garga. 1844: O co

2963. 736*a*. GASTRONE'MA *Herb.* (*Gaster*, belly, *nema*, filament; filaments swollen in middle.) *Amaryllideæ*
18885 - sanguíneum *Lindl.* blood-red flwd ♂ ⧋ or ½ jn jl Dp.Ro Caffraria 1845. O s.l J.H.S. 3.315. fig.

735. CRINUM.
4138 amábile
β *rôseum* *rosy-flowered* ♂ ⧊ or 4 jn.au Ro E.Indies. ... O r.m Bot. reg 1844, 9

2569 736 HIPPEA'STRUM.
18886 - organénse *B. R.* Organ Mount. ♂ ⧊ or 2 ... R w OrganM. 1841. O r.m
β *compréssum* *compressed* ♂ ⧊ or 2 ... Bri *Brazil*
18887 - robústum *Dietr.* robust ♂ ⧊ or 3 ... Car Brazil 1848. O r.m

739 AMARY'LLIS
18888 4235 Slateriâna *Herb.* Slater's ♂ ⧊ or 2 ap my Ro C G. H. ... O r m Bot. reg 1842, 11
Banksiâna Herb.
18889 - laterítia *Dietr.* brick-colour ♂ ⧊ or 2 ... R Guiana 1850. O r.m

2964. 739*a*. PHYCE'LLA *Herb.* PHYCELLA. (Dim. of *phykos*, red alkanet, colour of flowers) *Amaryllideæ*
18890 - brevitubâta *Herb.* short-tubed ♀ ⧋ or 1½ jl S Peru 1836 O r m Bot. reg. 1943
18891 - Herbertiana *Lindl.* Herbert's ♀ ⧋ or 1½ my.jn R.Y Valparai. 1825. O r m Bot. reg. 1341

2965 739*b* CALLITHAU'MA *Herb.* CALLITHAUMA. (*Kallos*, pretty, *thauma*, admiration) *Amaryllideæ*.
18892 - viridiflôra *Herb* green-flowered ♂ ⧋ or 1 jn.jl G Peru 1837. O r.m Bot. mag 3866.a.
Pancrâtium viridiflôrum R & P
18893 - angustifôlia *Herb.* narrow-leaved ♂ ⧋ or 1 jn.jl G Peru 1837. O r m Bot. mag 3866.b.

2966 739*c* SPREKE'LIA *Heist* SPREKELIA. (Not explained by its author) *Amaryllideæ*
18894 - cybister *Herb.* tumbler ♂ ⧊ or 2 ap W.R Bolivia 1839. O s.p.l Bot mag 3872
18895 - glaúca *Herb.* glaucous ♂ △ or 1 my Pa.R Mexico 1839 O s.l p Bot. reg. 1841, 16
18896 - formosíssima *Herb* Jacobea lily ♂ △ or 1 my au S N. Amer. 1658. O s.l.p Bot mag 47
Amarýllis formosíssima L No 4234.

2967. 739*d* IXIOLI'RION *Herb* IXIOLIRION (*Ixia*, and *leirion*, a lily) *Amaryllideæ*
18897 - montânum *Herb.* mountain ♂ △ or 1½ my.jn Dk L Persia 1843. O s l p Bot reg 1844, 66
Amarýllis montâna Red lil *A tatarica* Pall
18898 - tatárica *Herb.* Tartarian ♂ △ or 1½ my.jn P Altaia 1850. O s.l.p Herb am. 19-20
Ledebourî Fisch. *Amarýllis tatárica* Led

2968 739*e*. LYCO'RIS *Herb.* LYCORIS (A mythological name.) *Amaryllideæ*.
18899 - stramínea *Lindl* straw-cld-flwd ♂ △ or 1 jl au Pa.Str China 1845. O co
18900 - aúrea *Herb* golden ♂ △ or 1 jn jl China 1777. O co Bot mag. 409
Amarýllis aúrea Lin. *Nerîne aúrea* W No 4227. as well as No. 4228. belongs to this genus

2969 739*f* COLLA'NIA *Herb.* COLLANIA (Not explained by author) *Amaryllideæ*.
18901 - andinamarcâna *H.* Andinamarca ♃ ⧋ or 6 ap S G Peru 1844 O s.l p Bot mag 4247
18902 - dúlcis *Hook.* sweet ♃ ⧋ or 3 au R G Peru 1845. O s l.p Bot. reg. 1847, 34

741. GRIFFI'NIA
18903 4267*a* Lebomiâna *De Jong.* Lebon's ♂ ⧋ or ½ my B Brazil 1848. O s.l.p

744. HABRA'NTHUS
18904 4276*a* praténsis *Herb* meadow ♂ ⧊ or 1 my S S Chili 1840. O s l p Bot. reg. 1842, 35
Amarýllis praténsis Poep
18905 - concolor *Herb.* one-coloured ♂ △ or 1 ap my Str Mexico 1842 O s l.p Bot. reg 1845, 54
18906 - nóbilis *Herb* noble ♂ △ or 1 o R Brazil 1842 O s.l.p



History, Use, Propagation, Culture,

2962. *Phædranássa.* This is a splendid bulb with cylindrical, fleshy, rather fistular scapes, and broad green petiolate leaves. The flowers are about 6 in an umbel, and are pendulous, long and tubular, green at base and apex, the stamens protrude, and the stigma is clavate. *P chlorâcea* grows on rocks at the village of Saragura near Loxa in Peru, at the height of 9000 feet above the level of the sea; and *P. obtûsa* in the valley of San Antonia in the province of Quito They are both greenhouse bulbs They require to be potted in light, rich, sandy loam, kept quite dry during the season of rest, and fully supplied with moisture when in a growing state. The flowers rise before the leaves.

2963. *Gastronêma* requires the same culture and treatment as *Amarýllis.*

2964. *Phycélla.* Pretty bulbs and require the same treatment as *Amarýllis*, to be kept dry when in a dormant state and given plenty of water while growing

2965. *Callithaúma.* These are bulbs with green flowers which are stated to grow in their native country as tall

18882 Umbel about 6-flowered, Flowers drooping tubular, Leaves green acutish petiolate rising with the flower, Stamens longer than style
18883 Umbel 6-flowered, Flowers drooping, Leaves oblong petiolate, Scape terete glaucous subspiral, Stamens shorter than style

18884 Leaves flat subglaucous one fourth to three fifths of an inch broad, Spathe exceeding the peduncle, Flowers small, Sepals concave, Petals short deeply cut green with two spots reflexed at top

18885 Leaves solitary linear spatulate obtuse green longer than the 1-flowered stem, Spathe 2-leaved, Flower sessile erect, Tube terete widened at throat, Segments oblong equal

β Leaves pale green thick, Flowers nearly sessile red marked with white afterwards deep red, Corolla campanulately funnel-shaped revolute at top

18886 Leaves obtuse, Perianth funnel-shaped, Scape 3—4-flowered
β Lvs an inch broad blntsh, Scape glauc usually 2-flwd, Per compressed laterally brick-col. with deeper veins
18887 Lvs strap-shaped green, Scape glaucous, Flowers in pairs erect bell-shaped the divisions separate to the base, Corona short green

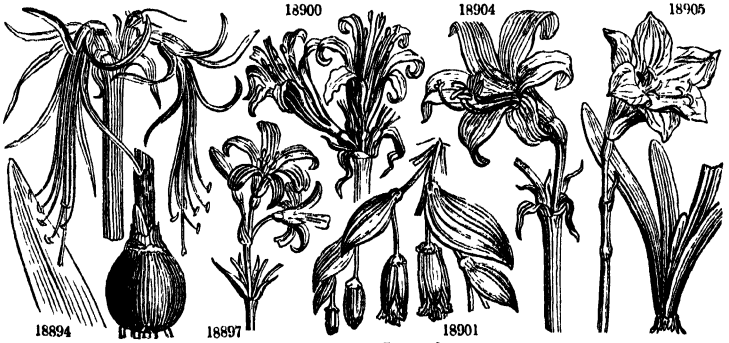
18888 Lvs erect obtuse glaucescent shorter than the many-flowered scape, Umbel divaricate, Peduncles slender
[tube which is destitute of appendages in the throat
18889 Lvs lorate-lanceolate, Scape glaucous 2-flowered, Segments of perianth combined into a curved funnel-shaped
[lorate sheathed, Corolla ringent campanulate drooping
18890 Spathe 2-flowered, Upper segments of Perianth broader and recurved, lower ones narrow, Tube very short, Lvs
18891 Spathe 3-flowered, Segms of Perianth arched, Stamens unappendiculate at the base inserted between the fringed ring of the throat, Lvs linear recurved
[than corolla, Stigma obtuse
18892 Bulb cylindrical, Lvs flat green, Scape green 2-edged, Limb of Perianth green equal to corona, Style shorter

18893 Lvs narrower, Limb of Perianth exceeding the corona, Style exceeding the Perianth, Stigma dilated somewhat 3-lobed
[lower lip clasping the stamens, Stigma 3-lobed
18894 Scape 4-flowered, Peduncles 1 inch, Spathe reddish 2 inches, Segments of Perianth striated narrow at base, the
18895 Lvs linear glaucous, Flws solitary drooping, Segms of Perianth marked with white in the middle, Petals
18896 Tube fringed, Corolla nodding with a very ringent limb, Stamens enclosed
[lanceol recurved

18897 Lvs glaucous channelled stem furnished with leaf-formed bracts, Flowers racemosely paniculed, Peduncles 1 3-flwd, Corolla tubularly closed in the lower part
18898 Distinguished from *Ix. montànum* by the expanded rotate flowers

18899 Ovary subspherical, Perianth with a short tube, and linear-oblong undulated segments shorter than the stamens
18900 Flowers stalked erect funnel-shaped clavate, Segments linear-lanceolate, Stamens straight

[lucrate at base, Perianth subcylindrical, Sepals oblong, Petals spatulate
18901 Glaucous, Stem glabrous leafy, Leaves lanceolate downy beneath, Racemes umbellate terminal pendulous involucrate
18902 Glaucous, Stem erect filiform flexuous, Lvs oblong obtuse, Flowers 1-4 pendulous cylindrical
[narrow whitish in the lower part, Stamens short declinate
18903 Lvs narrow flaccid mottled with pale blotches upon a dark green ground, Flws small pale ultramarine, Segms
[at base, appendages of throat linear acuminate, Stigma nearly simple
18904 Lvs linear green convex on back, Umbel 2-3-flwd, Perianth campanulate revolute at apex, filaments glandular
[lar erect, Sepals apiculate, Petals oblong acum., Stigma 3-parted
18905 Lvs erect glaucescent, Scape 1-flowered, Spathe tubular coloured shorter than peduncle, Perianth nearly regular
18906 Lvs bluntish green, Scape a little compressed Spathe 2-valved, Umbels 6 fld, App of throat minutely bearded



and Miscellaneous Particulars.

as a man, but they are actually hardly 3 feet high In this country they scarcely attain 1 foot. This genus is closely akin to *Cobúrghia*, of which, according to Herbert, it may perhaps ultimately be found to form only a section.

2966 *Sprekélia.* Comprehends the *Jacobea Lilies* well known for their splendid ringent declinate large showy blossoms, with the stamens closely embraced by the lower lip. The species grow very well out of doors, planted close against a south wall.

2967 *Ixiolírion* The plants are perfectly hardy and flower freely. Whether it will be better to take up the bulbs to be dried in summer and reset in the autumn is not yet ascertained, but it will probably not be necessary.

2968. *Lycóris.* Cultivated like other hardy bulbs. They require to be grown in a sheltered place

2969. *Collània.* These splendid plants should be reared in a hot-bed and then removed to a cool greenhouse. The open border would in all probability suit them. The genus is nearly allied to *Alstrœmèria.* The roots are edible.

748 ALSTRŒME'RIA.

18907 4288*a* lineatifl5ra *R & P* line-flowered ⁂ ⧋ or 1 jn jl Pk.Y Peru ... R s.l p Bot. reg. 1843, 58
18908 - - Errembaültii *H. Bel* Errembault's ⁂ ⧋ or 2 au s W Sp Hybrid 1835. R l s.p Botanist, 237
18909 - - nemorôsa *Gard.* grove ⁂ ⧋ or 2 n R.Y Brazil 1840 O s p l Bot. mag. 3958
18910 - - magnífica *Herb* magnificent ⁂ ⧋ or 2 . Pa P Coquim 1843 O s.p l
18911 - - chorillénsis *Herb.* Chorillos ⁂ ⧋ or 1 ... Ro.Y Peru 1843 O s p.l
18912 - - pállida *Grah* pale-flowered ⁂ ⧋ or 2 s.o Pk.R Chili 1827. O s.p.l

2970. 748*a* BOMA'RIA *Herb.* BOMARIA. (A name not explained by its author.) *Amaryllídeæ.*
18913 - - símplex *Herb.* simple-stemmd ⚷ △ pr 3 jn R.G.Y Cusco 1838. O l s p Bot. mag. 3863
18914 - - Salsílla *L* Salsilla ⚷ ⧋ or 5 my.jl R.P Chili 1831. D l.s.p Swt. fl g. 2 s 269
Alstrœmèria oculàta Bot cab. 1851, Bot mag 3344.
18915 - - edúlis *Herb.* edible-rooted ⚷ ⧋ or 6 jn jl G.C S. Amer 1806. D l.s p Bot. mag 1613
Alstrœmèria oculàta Juss *A. Salsílla* Bot mag. 1613. No 4286 and No. 17124. belong to this genus
18916 - - acutifólia *Herb* acute-leaved ⚷ ⧋ or 6 au.o R Y.G Mexico 1829. O s l p Swt fl g. 2. s 77
Alstrœmèria acutifólia Lk. & Otto
β aúrea *golden flwd* ⚷ ⧋ or 6 au o R Y G Sudley ... O s.l p Botanist, 137
γ maculàta *spotted-flwd* ⚷ ⧋ or 6 au o G R Caraccas 1839. O s l.p Bot. mag. 3871

2971. 758*a* ATA'CCIA *Kth.* ATACCIA. (Malay name.) *Taccàceæ*
18917 - - cristàta *Kth.* crested ⚘ ⧈ cu 1½ my jl Dk P E Indies 1840. D l p Bot. mag. 4589
Tácca cristàta Jack mal misc. *Raffleviàna* Jack Wall cat.
18918 - - áspera *Kth* rough ⚘ ⧈ cu 1½ my.jl Dk P E. Indies 1810. D l.p Bot. mag. 1488
Tácca integrifólia Roxb. No. 4322.

763 LICUA'LA
18919 4359*a* peltàta *Roxb.* peltate-leaved ⚵ ▭ or 10 ... ... E. Indies ... S r.m Mart. palm 134

2972 765*a* CYANO'TIS. CYANOTIS. (*Kyanos*, blue, *ous*, an ear) *Commelíneæ.*
18920 - - vittàta *Lindl* vittate ⚘ ⧈ or 1 au o R P Mexico 1846. D p.l
Tradescántia zebrìna Hort , as well as *T. vittàta* Lm No. 4371., belongs to this genus, and a few others.

765. TRADESCA'NTIA.
18921 4372*a* velutìna *Kth* velvety ⚘ ⧈ or ½ my au Vi Guatem. 1850. D r m
18922 - - iridéscens *Lindl.* Iridescent ⚘ ⧋ or ½ jn au Li Mexico 1838 D r m Bot reg. 1840, 34
18923 - - túmida *Lindl.* tumid ⚘ ⧋ or 1 s R Mexico 1839. D r m Bot reg. 1840, 42
18924 - - crássula *Lk.* thick leaved ⚘ ⧈ or 1 my au W Brazil 1825. D r m Bot. mag 2935

766. DICHORIZA'NDRA.
18925 4373*a* ovàta *Mart* ovate-leaved ⚘ ⧈ or 1 my jn B Brazil 1846 D r.m Px m 1849. 5 ic

767. AGAPA'NTHUS.
4374 umbellátus
β albiflórus Bot. white-flowered ⚧ ⧋ or 3 jn s W Gardens ... D r.m Botanist, 81
γ máximus B. M largest ⚧ ⧋ or 3 jn s B Gardens ... D r m Bot. reg 1843, 7

768 BLANDFO'RDIA
18926 4376*a* margináta *Herb* marginate-lvd ⚧ ⧋ or 2 jl s O.R V D L. 1842. S s.l.p Bot. reg. 1845, 18
Aletris punicea Lab nov holl 1 t 111
18927 4377*a* intermédia *Herb* intermediate ⚧ ⧋ or 1½ s Bt Y N Holl ... D s.l.p
18928 - - flámmea *Lindl* flame-coloured ⚧ ⧋ or 2 jn.s O.s Australia 1849. D s.l.p

2973. 768*a* THERE'SIA *Koch.* THERESIA (Meaning not explained by the author) *Liliàceæ.*
18929 - - pérsica *Koch* Persian ⚧ △ or 2 jn jl M Ararat ... O s.l p

771 LI'LIUM.
18930 4486*a* Wallichiànum *Sch fil* Wallich's ⚧ △ or 5 jn s W Nepal 1819. O r.m Bot. mag 4561
longiflórum Wall not Thunb
17137 speciósum
β álbum Hort. white-flowered ⚧ △ spl 3 jl au W Japan 1833. O r m Bot. mag 3785
18931 - - Thomsoniànum *Lindl* Thomson's ⚧ △ or 3 ap jn Ro Mussoor. 1843 O r m Bot. reg. 1845, 1
Fritillária Thomsoniàna Royl ill. 92
18932 4486*b* testàceum *Lindl* testaceous ⚧ △ or 3 jn O R Japan 1841 O r.m Bot. reg. 1843, 11
18933 4488*a* sanguíneum bloody ⚧ △ or 1½ my jn O Japan 1845 O r m Bot. reg 1846, 50
18934 4490*a* sínicum *Lindl.* Chinese ⚧ △ spl 1 s S China 1844. O r.m Px fl g 2 115 193
18935 4501*a* Loddigesiànum *Sch,fil* Loddiges's ⚧ △ or 3 jn jl Y Pk Crimea 1842. O r.m Px fl g. 2 58
18936 - - Thunbergiànum *Sch fil* Thunberg's ⚧ △ or 1½ jl au Dp O Japan 1835. O r.m Bot reg 1839, 38
aurantiacum Siebold *bulbíferum* Thunb. *philadelphicum* Thunb



History, Use, Propagation, Culture,

2970. *Bomária.* All the species will do very well out of doors in a warm sheltered situation in summer, but require protection during winter. A light dry soil suits them best. They may be propagated either by dividing the plant at the root or by seed. Being climbers they require to have something to support the stems.
2971 *Atáccia.* A moist warm part of a stove suits these plants. A mixture of loam and peat with plenty of water is the best soil for them. They are readily increased by offsets They are very remarkable plants.

[cuspidate, Petals lanceolate
18907 Lvs oblong obtuse narrow at base, upper ones verticillate, Peduncles of Corymbs 3-flowered, Sepals obovate
18908 A beautiful hybrid. The flws are white spotted with red or purple [ated undulated, Pet. narrow acute
18909 Glab , Lvs of involucre and bracts of peduncs similar to the lvs, Peduncs 2—3-flwd, Sep. broad rounded crenated cili-
18910 Sep obov. apic pale purp , Lower Pet. same col lat pets narrower suff. with deep purp fulv. mid. purp. br. top
18911 Peduncs 2-3-flwd, Lvs resup. 2-3-nerved dot. with white, Seps spat , Pets narrower pale rose yel. middle
18912 Stem flaccid erect, Lvs linear-lanc. denticulated half stem-clasping, Outer Segms of Perianth obovate, inner ones longer lanceolate
[red, Petals greenish-yellow dotted
18913 Lvs acutely subcord toment. beneath, Peduncs about 5-flwd bracteate, Lvs of Invol small, Ovaries downy Seps
18914 Stem terete glabr , Lvs ovate-oblong obtuse glabr., Petioles twisted, Umbels many-flwd composed of 2-flwd peduncs, Bracts obov. spatulate coloured, Petals of 2 forms with a black mark in centre of each inner petal
18915 Flowers in branched umbels, Perianth cylindrical

18916 Lvs oblong-lanceolate many-nerved twisted at base, Nerves pilose above, Umbel many-flwd, Peduncles hispid

β Umbels many-flowered, Flowers golden yellow
γ Umbel 10- (or more) flowered, Peduncles 1—2-flwd bracteate downy, Sepals ovate apiculate green, Petals spatulate dotted inside

18917 Lflts of involucrum 4 in two series, Threads or sterile peduncles many long, Lvs oblong, Scapes and petioles erect elongated smooth
18918 Lflts of involucrum 4 in two series, Threads or sterile peduncles many long, Leaves ovate entire, Scapes and petioles rough

[broadest sharply bifid and toothed, Floriferous branches simple, Fruit obovate
18919 Frond digitately fan-shaped peltate, Petioles prickly on margins, Lflts long cuneated many-nerved, middle one

18920 Procumbent branched pilose, Lvs oblong discoloured greenish grey vittate fringed on the top of the sheaths, Flowers aggregate within a double spathe

[axillary and terminal
18921 Downy, Root fascicled fleshy, Stem branched, Lvs sessile ovate-lanc. cord stem-clasping, Umbels many-flwd
18922 Stemless, Roots fleshy, Lvs oblong acute conc glab. ciliated pilose beneath, Umb loose term sess., Pet. obov.
18923 Internodes of stem tumid, Lvs hardly sheathing obl revol. convex pilose ben , Umb sess axil , Pet concave
18924 Stem ascending, Branches glabrous, Lvs oblong-lanceolate entire glabrous, Nerves and sheaths ciliated, Umb. terminal, Filaments vill , Calyx hairy

18925 Lvs ovate-lanceolate smooth entire acute shining purple beneath stem-clasping, Racemes terminal erect, Sepals and petals obtuse

β Flowers pure white or with a tinge of blue
γ Leaves broader than in the species and the flowers much larger

18926 Leaves stiff erectish with scabrous margins, Flowers conical in long racemes pendulous, Bracts narrow foliaceous equal to or longer than pedicels [pendulous funnel-shaped
18927 Leaves channelled acutely keeled scabrous on the margins, Bracts leaf-formed, Racemes 20-flowered, Flowers
18928 Leaves linear bluntly keeled, Racemes short 6-flowered, Bracts ovate-lanceolate stiff, Perianth inversely conical with 6 gibbosities

18929 Root like that of Crown-imperial

18930 Stem slender leafy few-flowered at top sometimes 1-flowered, Leaves scattered numerous linear acuminated sessile approximate, Corolla salver-shaped nutant with a long tube

β Flowers white
18931 Leaves alternate linear acuminate soft, Flowers racemose horizontal campanulate, Sepals and petals obovate-lanceolate with a darker mark at base, Stamens declinate, Stigma 3-lobed, Capsule turbinate
18932 Lvs scat. lanc , Flws nodding, Lvs of Perianth smooth or a little papillose inside much longer than the stamens
18933 Glabrous, Leaves dense subverticillate ovate-lanc. acute, Flower erect solitary, Sepals and Petals unguiculate
18934 Stem 2—3-flwd, Lvs scatt obl.-lin. scarcely downy up ones subverticil , Peduncs 1-lvd, Segs of Per revol sess.
18935 Lvs crowded scattered sprig puberulous beneath, Racs erect few-flwd, Flws drooping on short peds, Per revol
18936 Stem villous above, Leaves ovate-lanceolate, lower ones alternate, upper ones verticillate, Flowers terminal erect, Segments of Perianth spreading glabrous inside



and Miscellaneous Particulars.

2972. *Cyanòtis.* *Cyanòtis vittàta* is a pretty blotched and banded-leaved procumbent plant. It requires plenty of moisture and heat. A compost of sand, loam, and peat answers it well, and it is readily increased by division or cuttings.

2973. *Therèsia.* This plant requires the same culture and treatment as ***Fritillària.***

772. TU'LIPA.

18937 4512*a* tricolor *Led* three-coloured ♂ △ or 1 ap R Altaia 1840. O r.m Hist, t. 3887 mag.
18938 - hùmilis *Herb.* humble ♂ △ or ½ ap Pa P M.Elburz 1843. O r.m mag. 21, 2

773 FRITILLA'RIA.

18939 4524*a* lusitánica *Wicks.* Portugal ♂ △ or ½ ap R Y Portugal 1845. O r.m A h. 16
18940 - Kotschiàna *Herb* Kotschy's ♂ △ or ½ ap G P M.Elburz 1845. O r.m

2974. 773*a* CYCLOBO'THRA.

18941 17148*a* monophýlla one-leaved ♂ △ cu ½ au s Bt.Y Californ 1848 O s.p.l J. H S. 4 81

2974. 774*a*. CORDYLI'NE *R. Br.* CORDYLINE. (*Cordyle*, a club; shape of stem.) *Asphodèleæ*

18942 - indivisa *Kth.* undivided ♀ ⊔ or 20 ... W N. Zeal. 1850. Sk s p l Paxt. fl g. 3. 90.
Dracæ'na indivisa Forster.
18943 - Rúmphii *B M.* Rumphius's ♣ □ or 6 ... W N Zeal 1840 Sk p l Bot mag 4279
australàlis Endl *Charlwoódia australis* Swt Bot. mag. 2. 2835. *Sanseviera fruticósa* Blume.
18944 - Sieböldtii *Planch* Sieboldt's ♣ □ or 6 ... W Java 1848. Sk p.l Flor des ser. 569
Dracæ'na javánica Kth. *Sanseviera javánica* Bl.
β maculàta Planch. *spotted-lvd* ♣ □ or 7 ... G.W Java 1848. Sk p.l

2975. 774*b* SPIRONE'MA. (*Speira*, a spire, *nema*, a filament, filament spiral.) *Commelinæ*

18945 - fràgrans *Lindl.* fragrant ♣ ⧍ fr 2 my W Mexico 1839. Sk p l Bot reg. 1840, 47

780. TULBA'GHIA.

18946 4553*a* violàcea *Harv.* violet-flowered ♂ ⧍ or 1 o P C.G H. .. O r.m Bot. mag. 3555

788. SMILACI'NA.

18947 4589*a* amœ'na *Wendl.* pleasing ♣ ⧍ or 4 my.jn W Guatem. 1850. Sk p.l

2976. 788*a* LUZURIA'GA *R & P* (*Ign M R. de Luzuriago*, a Spanish botanist) *Smilàceæ.*

18948 - radicans *R & P* rooting ♣ ⧍ or 6 ... R Chili 1847 Sk s.l p Fl. p. 3 66. 298

2977. 788*b* CALLI'XENE *Comm* (*Kalos*, pretty, *xenos*, a stranger; in reference to beauty of plants) *Smilàceæ.*

18949 - polyphýlla *Hook.* many-leaved ♣ ⧍ or 10 ... R Chili 1847 Sk s l p

2978. 789*a*. LAPAGE'RIA *R & P* LAPAGERIA (*Josephine Lapagerie*, wife of Bonaparte) *Smilàceæ*

18950 - rósea *R. & P.* rose-cld-flwd ♣ ⧍ or 6 ... Ro Chiloe 1847. Sk s p.l Bot. mag 4117

2979 789*b*. PHILE'SIA *Comm.* PHILESIA. (*Phileo*, to love, beauty of flowers) *Smilàceæ.*

18951 - buxifòlia *Comm.* Box-leaved ♣ ⊔ or 4 ... R Chili 1850. Sk s p l Lam ill 248

2980. 789*c*. RIPO'GONUM *R Br.* RIPIGONUM (*Rips*, a twig, *gonos*, a shoot) *Smilàceæ.*

18952 - álbum *R Br* white-flowered ♣ ⊔ or 6 my jl W N S W 1820. Sk p.s.l

790. OPHIOPO'GON

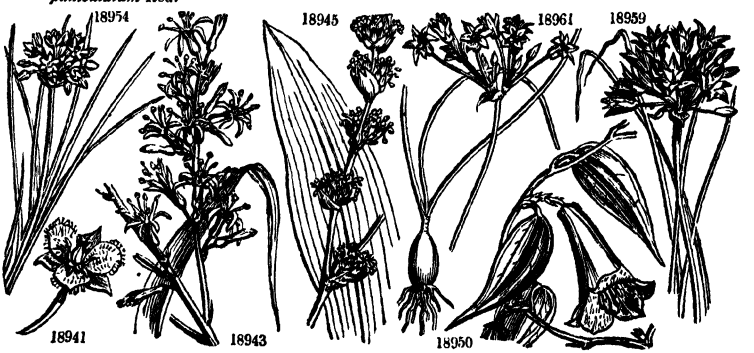
18953 4601*a* prólifer *Lindl* proliferous ♣ ⧍ or 1 jn jl W Penang 1844. D s p l

795 SOWERBÆ'A

18954 4615*a* laxifòra *Lindl.* loose-flowered ♣ ⧍ or 1 my.jl R Swan R. 1839 R s.p l Bot reg. 1841, 10

796. A'LLIUM

18955 4628*a* scorzoneræfòlium *Red* Scorzon -lvd ♂ △ or ½ jn jl Y S Europe 1823. O co Red. lil 2. 99
18956 - ambíguum *Smith* ambiguous ♂ △ or 1 jn jl R Jersey Fields O co Eng. bot 2803
incarnàtum Spreng *rósеum β.* Bot mag. 978.
18957 - eudsmum *Lk & Ott* sweet-scented ♂ △ or 1 jn jl W S Brazil 1829. O co Lk & Ott. ic 1. 8
nudicaùle Lehm
18958 - glandulòsum *L & O* glandular ♂ △ or 1 jn jl Dk.P Mexico 1829. O co Bot. reg. 1034
longifòlium Lindl Bot reg. but not of Kth
18959 - acuminàtum *Hook.* pointed-petaled ♂ △ or 1 jn jl W R Californ. 1840. O co Paxt. fl. g. 1. 25
18960 - majàle *Cyr.* large Moly ♂ △ or 2 jn jl W Sardinia 1825 O co Ten neap 1. 29
18961 - nerinefòrum *G Don* Nerine-flwd ♂ △ or ½ jn jl Ro Chusan 1843. O co Bot. reg 1847, 5
Calosc6rdon nerinefòrum Herb
18962 - exsértum *G Don* exserted ♂ △ or ½ jn.jl R Chusan 1846. O co
Calovc6rdon exsértum Herb
18963 4633*a* pulchéllum *G Don* neat ♂ △ or 1 jl au V Russia 1819. O co Red. lil. 5. 252
paniculàtum Red.



History, Use, Propagation, Culture,

2974. *Cordyline* comes very near to *Dracæ'na*, and requires nearly the same treatment: they are fine plants.
2975. *Spironèma* will be despised by the searcher after show plants, but by the lover of fragrant plants it will be cherished, for its smell is delicious To be treated as any common greenhouse plant, increased by division
2976. *Luzuriàga* is a splendid plant when in blossom It grows best in leaf mould and sand, and requires plenty of water while growing Being a creeping radicant plant it is readily increased by cuttings.
2977 *Callixene*, *Lapagèria*, and *Luzuriàga* are all climbing plants from the south of Chili, *Lapagèria* from Chiloe. All three are much alike, and are probably only species of the same genus. Their culture is the same.
2978. *Lapagèria rósea* is a twining plant, with a fascicled fleshy root, 6 ft or more in height The flowers are large, rose-coloured, and spotted with white. Requires leaf mould and sand, and should be trained to a support.

[and ciliated at base, Leaves oblong linear green

18937 Bulb solitary, Stem 1-flowered 2-leaved, Petals acute, inner ones broader, Filaments bearded above the base
18938 Stem 3—4-leaved, Leaves boat-shaped glaucous lying on the ground, Scape 1½ inch purplish smooth, Petals pale purple pale yellow at base green outside

18939 Flowers between those of *F lutea* and *F Meleagris*, Leaves lanceolate green, upper ones glaucous
18940 Stem 1-flowered, 4—6-leaved green glaucous, Flowers pendulous greenish purple tesselated inside

18941 Leaf solitary linear-lanceolate acuminated glaucescent beneath, Scape 3 flowered, Peduncles longer than the linear acuminated bracts, Sepals acute naked, Petals bearded recurved at top

18942 Stem arborescent, Leaves ensiform acute quite entire 2 feet long stem-clasping terminal, Racemes lateral compound

943 Leaves linear channelled acuminated marginate reflexed, Fruit usually 3-seeded but from abortion 1—2-seeded, Panicle simple terminal erect
944 Stem slender branched, Leaves oblong deflexed 4—6 inches long dark green, Flowers terminal and axillary panicled
β Leaves deep green prettily marked with yellowish green blotches

[of 3—5 toothed bracts

945 Habit of *Sanseviera*, glabrous stemless, Lvs oblong-lanceolate, Panicle branched, Flws agglomerate in the axils

946 Lvs linear obtuse, Corona 3-leaved, Leaflets of corona linear-oblong obtuse emarginate or sinuately 2-lobed, 3 or 4 times shorter than limb of calyx, Segments of calyx linear-oblong obtuse

947 Root thick knobby, Stem bearing long narrow dull green ribbed leaves, shining above and glaucous beneath, Panicle compound, Flowers small

948 Stem radicant, Branches tetragonal, Leaves lanceolate oblique, Peduncles 2—4 flowered, Flowers variegated drooping

949 Branches nodose, Leaves numerous small scale-formed entire, Flowers terminal solitary

950 Stem round twining radicant, Leaves alternate ovate-lanceolate cuspidate nerved, Peduncles axillary solitary 1-flowered, Corolla large rose-coloured spotted with white internally

951 Branches flexuous, Leaves alternate petiolate ovate-elliptic entire acute, Flowers solitary axillary and terminal, Peduncles imbricated by scales, Corollas large

952 Stem prickly, Branches unarmed, Leaves alternate opposite or terminal, Racemes undivided, Perianth a little longer than anthers

953 Rhizoma radicant scandent, Lvs recurved quite glabrous ensiform longer than the interrupted spicate racemes, Bracts ovate with membranous edges longer than the flowers

954 Lvs triquetrous about equal in length to the scape, Pedicels twice as long as flowers, Sepals and Petals ovate, Cells of Anthers elongated

[oblong obtuse, Ovarium 6-winged

955 Lvs linear-lanceolate nerved beneath, Spathe 1-valved, Umbel bulbiferous few-flwd, Segments of Perianth ovate-
956 Leaves lorate-linear acute twisted a little, Spathe 3—4-lobed, Umbel bulbiferous fastigiate, Segments of Perianth crenulated
957 Leaves linear shorter than the scape, Umbel many-flowered, Segments of Perianth bluntish, Ovarium elliptic, Cells 6—8-ovulate
958 Scape leafy at base, Leaves linear channelled scabrous on margins, Umbels many-flowered, Sepals narrow oblong obtuse

[ments of Perianth erect acuminate recurved at top

959 Stem leafy at base, Lvs subulate equal to the scapes, Umbels lax, Pedicels much longer than the spathe, Seg-
960 Leaves lorate-linear keeled, Spathe 3—4-lobed, Umbel many flwd compact, Segments of Perianth elliptic obt
961 Leaves narrow semi-terete channelled above, Spathe 1-valved, Umbels about 12-flowered, Stamens enclosed

962 Leaves narrow flat one-half shorter than the scape, Umbels few-flowered contracted, Stamens exserted

963 Leaves semi-cylindrical sulcate beneath with the margins and ribs ciliated, Umbel effuse, Flowers pendulous, Segments of Perianth oblong truncate concave



and Miscellaneous Particulars.

2979 *Phlèsia buxifolia* is enumerated by Dr Joseph Hooker as amongst the handsomest of the antarctic American flora, occurring along the coast of Magellan to Valdivia. According to Mr. Lobb, who first sent it to this country in a living state, it is a plant of slow growth. In its native country it forms large masses on trunks of trees and on rocks, throwing out long slender stems which creep under the decayed bark, and over rocks that are partially covered with soil. The flowers are produced near the extremities of the branches, have a campanulate form of a deep rose-colour, and are sometimes not less in size than a common tulip. Mr. Lobb says he traced the plant from the level of the sea to the snow line of the mountains, and it flourishes more freely at this great elevation.
2980 *Ripógonum.* Only requires the common culture and treatment of ordinary greenhouse climbing shrubs.

18964 4648*a* **Babingtònii** *Bor.* Babington's ☿ △ or 6 jn,jl R Britain Steeps O co Eng bot. 2906
18965 4655*a* **azùreum** *Led* blue-flowered ☿ △ or 1 my,jl B Altai ... O co Bot. reg 1840, 51
cærulèscens G Don. *cæruleum* Pall.

799. THYSANO'TUS.

18966 4713*a* **proliferus** *Lindl.* proliferous ☾ ⧚ or 1 au P N.S W. 1838. D s.l p Bot. reg 1838, 8
18967 - - **intricàtus** *Hort* intricate ☾ ⧚ or ¾ jl P Swan R 1838 D s l p Bot reg 1840 4
18968 - - **ténuis** *Lindl.* slender ☾ ⧚ or 1 my P Swan R. 1836. D s l p Bot reg 1838, 50

802. ORNITHO'GALUM.

18969 - - **chloroleùcum** *Lindl* greenish white ☿ ⧚ or 1 jl G.w Valparai 1834. O s l.p Bot reg 1843
18970 - - **divaricàtum** *Lindl.* spreading ☿ △ or 2 jl.au W G Californ 1841. O s.l p Bot reg 1842 2s
18971 - - **marginàtum** *Lindl.* margmate ☿ ⧚ or ¾ mr G w ..... 1843 O s l p Bot reg 1845, 21
18972 - - **nànum** *Sibth.* dwarf ☿ △ or ½ mr G w Arcadia 1843. O s l p Bot reg 184 , 30

803 SCI'LLA.

18973 - - **bifìdra** *R. & P* two-flowered ☿ ⧚ el 1 ap W Peru 1832 O p l s Swt. fl g 2.s 246
Ornithógalum bifìdrum D Don.
18974 - - **pùbens** *Welwitsch* downy ☿ △ or 1 my jn B Portugal 1846 O s l.p
4755 peruviàna
β discolor B R *two-coloured* ☿ △ or 1 my jn PaG BAlgiers 1844 O s.l p Bot reg 1843, 48
18975 - - Bertolòni *Duby* Bertoloni's ☿ △ or . . . Pa Li ..... 1844 O s.l p
18976 4764*a* **pratènsis** *W. & K* meadow ☿ △ or ... jn B Croatia 1827 O s l p Bot reg 1840 43
18977 - - **plúmbea** *Lindl.* lead-coloured ☿ ⧚ or 1 ap jn Lead C G.H. 1812 O s l p Bot. reg 1845
18978 - - **pùmila** *Brot* dwarf ☿ △ or ... ap my B Portugal 1819. O s l p

2981. 808*a* BIDWI'LLIA. BIDWILLIA. (*Mr. Bidwill* of Sydney, a zealous botanist.) *Asphodeleæ*
18979 - - **glaucéscens** *Herb* glaucescent ☿ △ or 1 my W Australia 1843. O s l p
18980 - - **glaúcus** *Herb* glaucous ☿ △ or 2 au s W Peru ... O s l p Bot. mag 3610
Anthéricum glaúcum R et P

2982 809*b*. SIMETHIS *Kth.* SIMETHIS (Not explained) *Asphodeleæ*
18981 - - planifòlia *Kth* flat-leaved ☾ △ or 1 jn jl P Britain Heaths O co Eng. bot 2952
Anthéricum planifólium Lin

2983. 809*a* ECHEA'NDIA *Ort* ECHEANDIA (*Greg Echeandia*, Prof Bot at Saragossa) *Asphodeleæ*
18982 - - **terniflòra** *Ort.* three-flowered ☿ ⧚ or 3 jn Y Mexico 1847 O s l Px fl g.1 120 81
Conanthèra Echeándus Pers. *Anthéricum reflèxum* Cav icon 3. t. 241.

2984 813*a* CHRYSOBA'CTRON *Colenso.* (*Chrysos*, gold *baktron*, a staff, golden flowers) *Asphodeleæ*
18983 - - **Hookeri** *Colenso* Hooker's ☾ ⧚ cu 1 ... Y N. Zeal 1848. D s p l Bot mag 4604

816 ASPA'RAGUS.

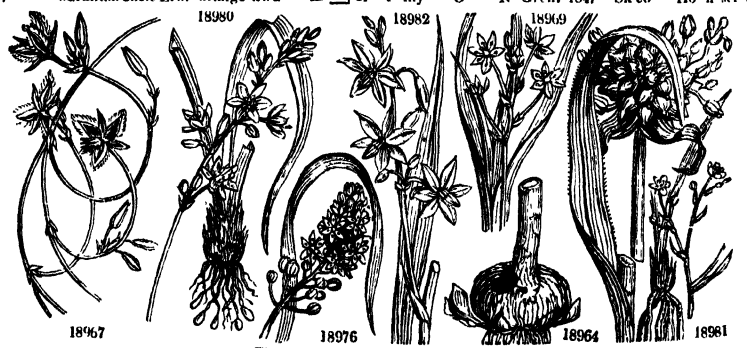
18984 4862*a* **lùcidus** *Lindl.* shining ♣ ▭ cu 10 my jl G Macao 1842 D p l

2985 817*a* DRIMMIO'PSIS *Lindl* DRIMMIOPSIS. (*Drimmia* and *opsis*, resemblance) *Asphodeleæ*
18985 - - **maculàta** *Lindl* spotted ☿ ⧚ or ½ jn jl G C. G H 1850 O s.p.l Px fl g 4 73 142

2986 821*a* BELLEVA'LIA Lap BELLEVALIA (*P R Bellevat*, a French botanist.) *Asphodeleæ*
18986 - - **syriaca** *Lindl.* Syrian ☿ △ or 1 my W Syria 1840 O co
18987 - - **romàna** *Lindl.* Roman ☿ △ or ½ my W Italy 1596. O co Bot mag 939
operculàta Lap. *Scilla romàna* B M *Hyacinthus romànus* L.

829 BE'RBERIS.

18988 4931*a* **empetrifòlia** *Lam.* Empetrum-lvd ♣ or 2 mr Y Magel Valp 1830 Sk co Bot reg 1840, 37
18989 - - **actinacántha** *Mart* ray-spined ♣ or 3 my jn Y Chili 1830 Sk co Bot reg 1841
18990 - - **buxifòlia** *Lam* Box-leaved ♣ or 3 d mr Y Mag Fuego 1830 Sk co Hk fl an 2 25 87
dúlcis Swt fl g 2 s vol 2 t 87 *microphýlla* Forst Com Gœt *mérmis* Pers
18991 - - **lútea** *R. & P* yellow ♣ ▭ or 4 my Y Peru 1847 Sk co R et P 3 51 290
18992 - - **Wallichiàna** *Dec* Wallich's ♣ ▭ or 10 jn jl Y Nepal 1820. Sk co Wal as 3 23 241
atrovirens G Don.
18993 4930*a* **Darwinii** *Hook* Darwin's ♣ or 5 mr Dk O Chiloe 1847 Sk co Bot m g 4700
18994 - - **parvifòra** *Lindl.* small-flowered ♣ or 3 my Y S Amer 1846 Sk co J H S 9 244
18995 - - **loxénsis** *Benth* Loxa ♣ or 4 my Y Peru 1848 Sk co Paxt fl g 1 173
18996 - - **undulàta** *Lindl.* wavy-leaved ♣ or 6 my Y Peru 1847 Sk co
18997 - - **aurahuacénsis** *Lem* orange-flwd ♣ ▭ or 4 my O N Gren. 1847 Sk co Ho fl ser 3 30



History, Use, Propagation, Culture,

2981 *Bidwillia* This plant was introduced by Mr Bidwill of Sydney. It is a native of an elevated tract of table land, called New England, on the south mountains of the Australian continent. It is quite hardy and of easy culture
2982. *Simethis.* Heath mould is the best soil for this plant, and it is increased by division.
2983. *Echeándia* is a tall plant. The flowers are greenish yellow, in clusters of 3—6, and issuing singly from small bracts. They open for 8 or 10 hours and then close and fade. The culture is easy.
2984. *Chrysobáctron.* This pretty little plant grows in boggy places The pot in which it is grown should be placed in water to about the middle.

18964 Umbels bulbif., Lvs broad lin. keeled with carinate sheath rough edg and keel, Seg. of Per. rough, Stam. exsert.
18965 Leaves linear triquetrous, Scape terete, Umbels globose much longer than the spathe, Segments of Perianth acute equal in length to the stamens

18966 Leaves linear subglaucous smooth longer than the scape channelled, Umbels 2—3-flowered [about 2-flwd
18967 Stems terete glabrous sulcate, Branches divaricate ultimate ones forked, Lvs scale-formed, Pedun stiff 2-edged
18968 Leaves rushy erect glabrous length of humble branched scape, Umbels terminal about 4-flowered, Bracts mucronate, Stigma papillose [obtuse longer than stamens
18969 Leaves acuminate channelled length of corymbose raceme, Filaments lanceolate, Sepals and Petals oblong-
18970 Lvs glauc very long chnld, Pan. divaric, Seg of Per lin undul coherg at length spreading, Cells of Ov 2-sd
18971 Lvs ascend broadish channelled with white margins longer than corymbose scape, Sepals and Petals obl obt.
18972 Leaves linear channelled glabrous longer than corymb, Corymbs on short peduncles spreading, Pedicels retracted after florescence, Bracts oval, Ovarium 3-lobed

18973 Raceme loose many-flowered, Flowers twin, Leaves ensiform acute

18974 Very close to *S. peruviana* but much smaller in all its parts, Flowers of the same greyish hue and corymbose arrangement, Bracts curved inwards at top
β Sepals and Petals yellowish brown, Ovarium and Filaments blue [linear almost sterile
18975 Close to *S. stellata*, Racemes loose 3—5-flowered, Bracts as long as pedicels at first but become shorter, Filaments
18976 Lvs numerous ensif longer than scape, Race elong, Bracts small scarious, Seg of Per lin longer than stamens
18977 Lvs strap-shaped flat recurved, Scape terete few-flwd, Peds longer than bracts, Seg of Perianth ovate at length
18978 Bulb 1-leaved very like a small Lily of the valley, Racemes 3—5-flowered, Anthers yellow [reflexed

18979 Leaves linear narrow glaucous, Stem simple 2—3-forked, Peduncles bracteate
18980 Leaves linear elongated keeled, Sheathing glaucous beneath, Flowers racemose, Pedicels 3 together, Stamens thickened

18981 Leaves flat, Racemes loose panicled

18982 Leaves sheathing erect glaucous linear-lanceolate acute, Stem terete branched with a long lanceolate sheathing pale green bract, Flowers issuing singly from small bracts

18983 Leaves linear ligulate acuminated, Racemes loose-flowered, Ovarium obovate, Capsule on a short stipe

18984 Branches very long climbing with straight prickles, Leaves linear-falcate lucid, Peduncles 1-flowered

18985 Leaves succulent, Scape racemose destitute of a coma

18986 Leaves glaucous a foot long channelled rather scabrous on the margins, Peduncles spreading racemose
18987 Corolla campanulate, Flowers racemose, Pedicels longer than the flowers, Filaments membranous, Anthers blue, Capsule roundish at top

[or in pairs
18988 Trailing, Spines tripartite, Leaves linear pungent bright green fascicled, Peduncles axillary 1-flowered solitary
18989 Spines large palmate, Leaves small dark green spiny in fascicles, Peduncles 1-flowered clustered
18990 Straggling, Leaves small ovate or oblong dark green above rather glaucous beneath toothless spiny-pointed, Spines large tripart, Flws single or in clusters [old plants, Spines small slightly tripart, Flws in clusters
18991 Branches downy, Leaves small oblong having 3 or more spiny teeth while young, narrow and mucronate in the
18992 Leaves in clusters 3—4 inches long serrulated ending in a straight point on each side with a spiny point bright green above pale beneath, Spines tripart slender, Flws in fasc [on each side near middle, Racs erect
18993 Brans ferrug, Lvs small close together deep green with three large spiny teeth at apex and one or two more
18994 Lvs narrow obov 3—5-lobed spinose glauces. above green beneath. Racemes few-flowered, Flowers small
18995 Lvs obov obt bright green with a spiny point and several teeth on each sid, Spines small palm, Racs pan erect
18996 Rigid, Spines 3-5-parted, Lvs fascicled cortic wavy opaque mucr sometimes obl-lanc, Rac erect nearly sessile
18997 Brn bearing lvs of two forms, low cord ang, up obov-ellip cori wavy with a few marg spiny tth, Racs droop



and Miscellaneous Particulars.

2955 *Drimmiópsis* A greenhouse bulb requiring the same treatment as *Drimmia* and *Lachenàlia*
2956 *Bellevàlia.* Hardy bulbs of easy culture.
849 *Bérberis* The fruit of *B buxifolia* were used by the officers of Sir James Ross's expedition for tarts and found excellent. *B tinctòria* furnishes a yellow dye *B. Lýcium* has been discovered by Dr Royle to be the real *Lycium indicum* of the Greek physicians, and to this day its extract is used against Ophthalmia with as great success as in the days of Dioscorides. It is an erect subevergreen. In winter the leaves are nearly green on both sides, and at length become dull purple. The berries of *B trifoliàta* are eaten by children in Mexico

18998 -	- Jamiesònii *Veitch*	Jamieson's		or	4	my	Dp	Y	Quito	1847	Sk co			
	glaùca Benth													
18999 -	- hypoleùca *Lindl*	white-backed		or	5	my	Pa.	Y	Nepal	1846	Sk co	J HS 2 246		
19000 -	- umbellàta *Wall.*	umbel-flowered		or	4	my	jn	Pa	Y Kamaon	1843	Sk co	Bot reg 1844, 41		
	angulòsa Wall													
19001 -	- tinctòria *Lesch.*	dyer's		or	6	my	jn	Y	Neelghe.	1843	Sk co	Wight ill 8		
19002 -	- Lyèium *Royle*	ophthalmic		or	5	...		Y	Himalay.	1850.	Sk co	Royle ill 45		
19003 -	- trifoliàta *Hartw*	trifoliate		or	5	ap.	my	Y	Mexico	1839	Sk co	Bo.. reg. 1845, 10		
	Mahònia trifoliàta Lindl.													
19004 -	- trifùrca *Lindl.*	trifurcate		or	6	my		Y	China	1850.	Sk co	Px. fl. g. 3 57 258		
	Mahònia trifùrca Hort													
19005 -	- Ehrembérgii *Kunz.*	Ehremberg's		or	6	...		Y w	Mexico	1849.	Sk co			
19006 -	- pállida *Benth.*	pale-leaved		or	6	my		Pa Y	Mexico	1842.	Sk co	Bot. reg. 1844, 16		
	Mahònia pállida Hort.													
19007 -	- nepalénsis *Wall*	Nepal		or	10	my		Y	Nepal	1830	Sk co	Px. fl. gard 3 79		
	Mahònia nepalénsis Dec *B. pinnàta* Roxb													
19008 -	- Leschenaùltii *Wal*	Leschenault's		or	6	ap.	my	Y	Neelghe	1845.	Sk co	Wight neilg. 7 8		
	acanthifòlia Wall.													
19009 -	- japónica *Lindl*	Japan		or	6	mr.	ap	Y	Japan	1845.	Sk co	Px. fl. g 1 11 2		
	Mahònia japónica Dec *B Beàttii* Fortune. *Ilex japónica* Thunb													
19010	1717*ba* coriàcea *Royle*	hide		or	5	ap	my	Y	Nepal	1845.	Sk co	Bot. reg. 1841, 46		
19011 -	- Fortùnii *Lindl.*	Fortune's		or	4	...		Y	Shanghai	1845.	Sk co	J. H S 1 300 ic		

2987. 2590*a*. ISO'MERIS *Nutt.* (*Isos*, equal, *meris*, a part; parts of flower equal) *Capparideæ.*

19012 -	- arbòrea *Nutt.*	arboreous		or		...		...	N Amer.	...	C	s.l	Bot. mag 3842	

854 APONOGE'TON.

19013	4955*a* junceum *Lehm.*	rushy		or	½	ap.	s	W	C. G. H.	1845	O	p.l		

2988. 836*a* ANO'PTERIS *Labill.* ANOPTERIS (*Ano*, upwards, *pteron*, a wing, seeds.) *Escalloniæ*

19014 -	- glandulòsa *Labill.*	glandular		or	20	d.	ja	W	N. Holl	1823.	C	p.l.s	Bot. mag 4377	

2989. 836*b* ELEUTHERI'NE *Herb.* ELEUTHERINE. (Not explained by its author) *Irideæ.*

19015 -	- anómala *Herb.*	anomalous		or	½	ap		W	W Indies	1840	O	s.l p	Bot reg. 1843, 57	
	Marica plicàta B.M., the *Sisyrinchium latifolium* Swz, is a species of *Eleutherine.*													

2990. 836*c* PREPU'SA *Mart* PREPUSA. (*Prepousa*, conspicuous, beauty of plants) *Gentiàneæ*

19016 -	- Hookeriàna *Gard.*	Hooker's		or	1	mr.	ap	W.o	Ceylon	1841	D	m s	Bot mag 3909	

2991. 836*d*. TRIME'ZIA *Salisb.* TRIMEZIA. (Meaning not given by author) *Irideæ*

19017 -	- meridénsis *Herb.*	Mount Merida		or	1	ap		Y	Maracaib	1848	O	s l.p		
	Iris martinicénsis Sw. *Sisyrinchium martinicénsis* Swartz is another species of *Trimèzia*													

Page 296. CLASS VII. — HEPTANDRIA. 7 STAMENS.

Order I. MONOGYNIA 7 Stamens 1 Style

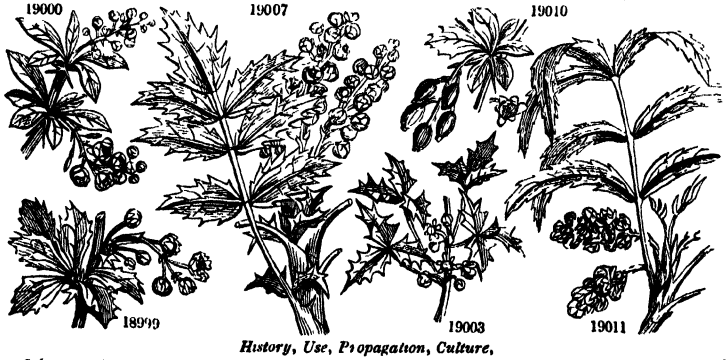
2992 *Ungnàdia.* Calyx 5-parted. Petals 5, hypogynous, unequal, unguiculate Claws crested at top, erect

MONOGYNIA.

2992.	866*a* UNGNA'DIA *Endl.* UNGNADIA. (*David ab Ungnad*, Austrian minister in Turkey) *Hippocastanea*													
19018 -	- speciòsa *Endl*	showy		or	20	...		Ro	Texas	1850	C	s l p		

867. JONE'SIA.

19019	5065*a* Asòca *Roxb.*	Asoca		or	20	...		Y o s	E. Indies	...	C	p.l	Px. fl gar 1 1	



History, Use, Propagation, Culture,

2987. *Isòmeris* A curious shrub, the blossoms at first sight resemble those of small-flowered species of *Edwardsia* The whole plant has the odour of *Polanisia.* For culture see *Cápparis*, p. 458

2988. *Anópteris.* This is a fine-looking greenhouse tree or large shrub. The leaves are large and handsome It is of easy culture A compost of sand loam and peat suits it best, and cuttings are easily rooted.

2989. *Eleutherine.* To be kept moist when growing A peat soil is best for it; readily increased by division

2990. *Prepùsa.* All the species are beautiful when in blossom. They grow freely in a mixture of peat-earth and sand with the addition of a little turfy loam They require moisture when in a growing state, but should be kept rather dry in winter as they are apt to damp off at that season They may be propagated by cuttings or division.

19998 Lvs deep green in fascicles 3 inches long oblong with a spiny point and usually with a few spiny teeth on each side pale beneath, Racemes panicled erect

19999 Lvs coriaceous broad obov. distantly spinose and entire reticulated white beneath, Rac. shorter than the lvs

19000 Brnchs angular, Spines tripartite slender, Lvs narrow bluish green glaucous beneath entire or with 1-2-teeth on each side, Racemes drooping slender, Berries purple [erect loose, Berries purple

19001 Spines slender tripart., Lvs dull green glauc beneath oblong obtuse with a spiny point hardly spiny-toothed, Rac

19002 Brn angul., Spin tripart., Lvs glauc ben obl-lanc spiny-pntd usually with several lat teeth, Rac. erect pan.

19003 Lflts 3 sessile at the ends of the petioles deeply scolloped bluish green variegated glaucous beneath, Racemes small axillary sessile 3-5-flowered

19004 Lvs pinnate, Leaflets broad trifurcate, Racemes compound erect [longer than lvs, Petals small

19005 Lvs pinnate, Leaflets 7-15 nearly sessile ovate obtuse mucronate entire, Racemes compound loose drooping

19006 Lvs pinnate slightly prickly, Rac panicled, Berries round dark purple particularly acid

19007 Lvs pinnate a foot long with 5-6 pair of sessile ovate-oblong spiny-toothed leaflets the largest 3 inches long and 1 broad, Racemes simple erect, Berries oblong dark purple

19008 Lvs 18 inches long with 11-12 pairs of closely set leaflets [long and deeply cordate with 5 coarse spiny teeth on each side

19009 Lvs 15 inches long, Lflts 5 slightly cordate, sessile with 3-4 spiny teeth on each side the terminal one 5 inches [lous many-flowered, Berries red oblong

19010 Spines strong tripartite, Lvs lanceolate or obovate entire or awnedly serrated green on both sides, Rac. pendu-

19011 Glabrous dark green, Lvs of 7-9 linear lanceolate spiny serrated very acute leaflets, Rac panicled the lateral branches spreading dense-flowered

19012 A dwarf shrub with fusiform roots, approximate trifoliate leaves, and large yellow flowers disposed in terminal racemes

19013 Lvs narrow grass-like, Spike bifid

19014 Glabrous, Lvs alternate plicate ovate-oblong tapering to both ends nearly sessile coriaceous callously toothed, Rac simple terminal, Flwrs sometimes 7-cleft white tinged with purple

19015 Lvs oblong narrowed at base upper ones petiolate longer than the lax pedunculate flowers

19016 Herbaceous tufted, Radical lvs linear-spatulate rather fleshy 1-nerved, cauline lvs subconnate, Calyx campanu- [late large inflated 6-angled coloured

19017 Perianth yellow with a brown transverse mark and spotted at base downy

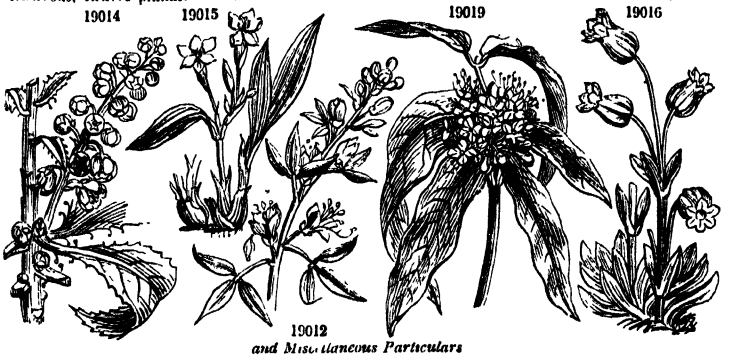
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Lamina obovate, spreading Stamens 9, combined with the lamina, torus, and stipe of ovarium. Filaments filiform, exserted, ascending Ovarium stipitate, 3-celled Ovula twin in the cells Styles very short. Stigma simple.

MONOGYNIA.

19018 Leaves alternate imparipinnate, Leaflets 3 pair, Racemes lateral corymbose [fascicled, Flowers hexandrous

19019 Arboreous, Leaves pinnate 3—5 pair of lanceolate smooth undulated acuminated leaflets, Corymbs terminal



and Miscellaneous Particulars

2991 *Trimèzia.* This genus is nearly allied to *Eleutherine*, and requires the same kind of treatment.

862 *Ungnàdia speciòsa* is a fine hardy tree, lately introduced, nearly allied to the *Æsculus* It may prove to be a handsome tree. It requires the common treatment of the horsechestnuts, and may be propagated by grafting on a common horsechestnut

19020 *Jonèsia Asòca.* The flowers of this tree are orange, scarlet, pale yellow, and bright orange. The Brahmins, who adore beautiful objects, have consecrated the lovely *Asòca*, which they plant near their temples, and frequently mention a grove of it in which Ravan confined the unfortunate Sita The eighth day from the new moon of Chaitra is called Asocastami.

Page 300. CLASS VIII.—OCTANDRIA. 8 STAMENS.

Order 1. MONOGYNIA. 8 Stamens. 1 Style.

2993 878*a*. *Acronýchia.* Calyx short, 4-parted. Petals 4. Stamens inserted under the disk. Style short. Stigma capitate, 4-lobed. Fruit berry-formed, nearly globose, 4-celled. Cells 1-seeded by abortion.

2994. 899*a* *Oxýspora* Calyx oblong, 4-lobed. Petals 4. Stamens equal. Anthers elongated, drawn out into 2 blunt spurs at base, with their connectives hardly perspicuous. Capsule 4-valved, 4-celled. Seeds awned at both ends.

2995. 899*b*. *Marcètia.* Calyx cylindrical, 4-lobed Petals 4, acute Stamens equal. Anthers with 2 tubercles at base, and opening by a pore at apex. Ovarium free, glabrous. Style filiform. Stigma dot-formed. Capsule 4-celled, 4-valved Seeds cochleate.

2996 899*c*. *Centradènia.* Calyx with a subtetragonal tube and a 4-parted limb. Petals 4. Anthers uniporose, the larger 2 having the connectives drawn out into an elongated clavate spur, and those of the smaller ones into a gland-formed appendage. Ovarium 4-celled, many-ovulate, with a single whorl of hairs at top Style short. Stigma capitate. Seeds echinated

2997 903*a*. *Zauschnèria* Calyx with a tetragonal tube and a 4-parted limb Petals 4, inserted in the throat of the calyx, regular Stamens exserted Ovarium 4-celled, many-seeded Style filiform Stigma 4-lobed.

2998 909*a* *Lagétta* Flowers hermaphrodite or dioecious Perianth coloured, tubular Limb 4-cleft Throat hispid. Stamens inserted in two series in the upper part of the tube, enclosed. Stigma capitate, emarginately 2-lobed Drupe covered by the baccate villous perigone, 1—3-seeded. Putamen crustaceous

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MONOGYNIA.

875 TROPÆOLUM

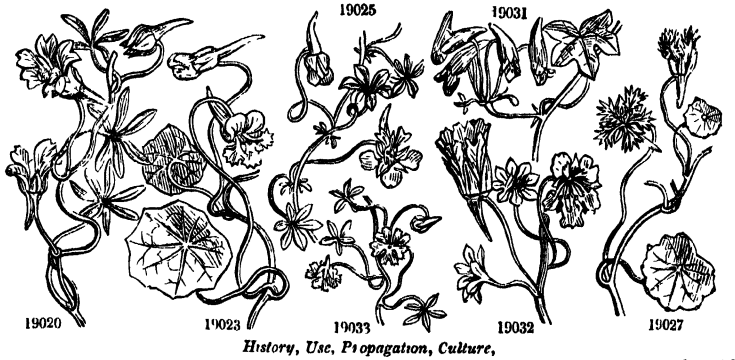
19020	5086*a*	edùle *Lindl*	edible-rooted	⁂ △	or	6	jn jl	O Gr	Chil	1841	R	s l p	Px m. 9 127
		polyphýllum Hort	not R & P										
19021	-	Smíthii *Dec*	Smith's	⅄ ○	or	10	jn au	O	Peru	1775.	S	s l p	Bot mag 438
		peregrinum Lindl	not B M										
19022	-	digitàtum *Karsten*	digitate leaved	⅄ ○	or	4	jl au	S	Venezu.	1850.	S	s.l.p	Px. fl g 3 71
19023	-	Lobbiànum *Veitch*	Lobb's	⅄ △	or	6	jl s	O R	Columb.	1843.	C	l p	Bot. mag 4097
19024	-	péndulum *Klotzsch*	drooping	⅄ ○	or	4	jn.au	Y	C Amer	1851	S	s.l.p	
19025	-	speciòsum *Lindl*	showy	⅄ △	or	4	jn jl	R Y	Chiloe	1845	C	l p	Bot. mag 4323
19026	-	Benthamii *Klotzsch*	Bentham's	⁂ △	or	4	jn au	Y	Bolivia	1851	C	l s.p	
19027	-	Moritziànum *Klotz*	Moritz's	⁂ △	or	6	jl	Y R	Cumana	1839.	C	l.p	Bot. mag 3841
19028	-	crenatiflòrum *Hook*	crenate-fld	⅄ △	or	4	jl au	Y	Peru	1845	C	l p	Bot. mag 424
19029	-	Deckeriànum *Karsten*	Decker's	⁂ △	or	4	jl au	Dp B	Venezu.	1849	C	l p	Moor.m I 216
19030	-	Wagneriànum *Karsten*	Wagner's	⅄ △	or	4	jl.au	Dk Vi	Venezu.	1850.	C	l p	
19031	-	umbellàtum *Hook*	umbellate	⁂ △	or	4	jn jl	R o	Pitzhum	1846.	C	l.p	Bot mag 4337
19032	-	polyphýllum *Cav*	many-leaved	⁂ △	or	3	jn au	Y	Bolivia	1848.	C	l s p	Px mag 10 175
19033	-	azùreum *Miers*	azure-blue	⁂ △	or	4	au s	B	Chili	1842.	C	s.l p	Bot. mag 3985

878. BORONIA

19034	5090*a*	anemonæfòlia *Cun*	Anemone-lvd	❀ ⌴	or	2	my jl	R	N Holl	1830	C	s p l	Bot mag 4052
		Fraseri B M											
19035	-	triphýlla *Sieb*	three-leaved	❀ ⌴	or	2	my.jl	Pk	N. Holl.	1840.	C	s p l	Bot reg 1841, 47
		β *ledifolia* Paxt	*Ledum-leaved*	❀ ⌴	or	2	my jl	R	N Holl.	1840.	C	s l.p	
19036	-	microphýlla *Sieb*	small-leaved	❀ ⌴	or	2	su	Pk	N. Holl.	1846.	C	s p	
19037	-	tetrándra *Labill*	tetrandrous	❀ ⌴	or	2	mr.ap	Pk	Swan R.	1850.	C	s.p	Paxt fl g 1 8
19038	5091*a*	crenulàta *Smith*	crenulated-lvd	❀ ⌴	or	2	my au	R	K G S	1840.	C	s p	Px mag 4 267
19039	-	viminea *Lindl*	twiggy	❀ ⌴	or	2	my au	Pk	Swan R	1848	C	s.p	
19040	-	denticulàta *Smith*	denticulate-lvd	❀ ⌴	or	2	my au	Pk	K G S.	1823	C	s.p	Bot reg 1100
19041	-	spatulàta *Lindl*	spatulate-lvd	❀ ⌴	or	2	mr ap	Pk	Swan R.	1849	C	s p	
19042	-	teretifòlia *Lindl.*	terete-leaved	❀ ⌴	or	2	mr.my	Pk	Swan R.	1849	C	s p	

2993. 878*a*. ACRONY'CHIA *Forst.* (*Akros*, the summit, *onyx* a claw, incurved ends of petals) *Rutaceæ*

19043	-	Cunninghàmii *B M*	Cunningham's	❀ ⌴	or	7	my jn	W	Mortn.B	1838	C	co	Bot mag 4001



History, Use, Propagation, Culture,

2993. *Acronýchia Cunninghàmii* is a tall handsome evergreen shrub, a native of Moreton Bay. The flowers at first sight have a good deal the appearance of those of the orange, as well as in the odour; but it is combined with the aromatic warmth of ginger. The foliage emits a turpentine smell when bruised from the numerous pellucid glands

2999 910*a*. *Edgwórthia*. Perianth 4-parted Hypogynous scale 1 emarginate. Stamens inserted in 2 series. Ovule solitary Stigma elongated, subulate. Nut fibrous

3000 916*c*. *Bugmvillæ'a*. Involucrum 3-leaved, with a flower springing from near the base of the midrib of each leaf Perianth tubular, 5-toothed. Stamens enclosed Stigma undivided. Achenia angular, hard. Fruit 1-celled.

Order 2. DIGYNIA. 8 Stamens. 2 Styles.

3001 919*a* *Geissois*. Calyx 4-parted, deciduous Petals wanting Style 1. Stigmas 2. Capsule compressed, 2-celled, 2-valved. Cells many-seeded Seeds compressed, winged

Order 3 TRIGYNIA 8 Stamens. 3 Styles.

3002 921*a* *Sarcogònum*. Flowers polygamous Styles 3, or Style 3-parted Stamens 8. Perianth baccate Berry white, juicy Nuts angular.

3003 921*b* *Fagopỳrum* Perianth 5-cleft, equal, shorter than the achenia when mature. Hypogynous glands 8, hemispherical, alternating with the stamens Anthers versatile Styles 3, long. Stigmas capitate Achenia large, triquetrous Seed free.

Order 4 TETRAGYNIA. 8 Stamens. 4 Styles

3004 932*a* *Loudònia*. Calyx 4-toothed, superior. Tube tetragonous, verrucose Petals cucullate, imbricate in æstivation Stamens 8 Anthers linear. Disk none Ovarium 1-celled, biovulate Ovules pendulous Styles 4 Stigmas roundish, discoloured.

MONOGYNIA.

9020 Root tuberous, Lvs of 5—6 glaucous linear-lanceolate leaflets Petioles long twisted, Peduncles 1-flwd, Upper 2 Petals obcordate, lower 3 smaller spatulate emarginate Spur large

19021 Lvs peltate 5-lobed, Segments acute, Stipules jagged, Peduncles long twisted, Petals cuneate, 2 upper smaller sessile, 3 lower unguiculate, all jagged and ciliated, Spur subulate straight

19022 Lvs peltate 5—7-lbd, Lbs rndish quite ent ,Pet denticulately ciliated length of cal , Sep appendiculate at base

19023 Pd , Lvs orb. obsc lbd pelt glauc. ben , Lbs muc , Pet. obov 2up ent 3 low smllr tthd fringd at base on lng clws

19024 Lvs pelt. glab ben. slght 5-lbd, mid. lobe muc., Fl axil sol pend Pet spat serr , 3low. on lng clws 2up ses

19025 Pd , Lvs subpelt , Lflts 6 obl. obov. obt on short pet Ped long, Pet obcord 2-lobed, upper smaller, Spur long

19026 Root tuberous, Lvs deeply cut peltate roundish, Leaflets 5—6 obovate, Petals obcordate twice as long as calyx

19027 Leaves peltate suborbiculate 7—9-lobed, Lobes callous at tips, Petals nearly equal, 2 lower ones cuneate fringed at top, 3 upper ones spatulate fringed at base, Spur long [subbuccinate, upper two lined with red

19028 Leaves peltate suborbiculate 5-lobed, Lobes obtuse or retuse mucronate, Petals obovate nearly equal truncate

19029 Rad. downy, Lvs pelt. triang ovate sin., Petı hairy, Peduncle axil twisted, Spur straight Pet. wedge-shpd tthd

19030 Glab , Lvs pelt. obl. triang deep green, Ped axil at top of branchs, Spur long orange tip by green, Pet cun tthd

19031 Root tuber , Lvs subpel cord 5-lbd, Flws umbel , Cal cylin d , Pet spat ac , 2 up scale frnd, Spur curv obt

19032 Root tuber., Stems ascending not climbing, Lvs numerous, 5—10-lbd, Lbs obl or obov glauc , Pet obt entire

19033 Root tuberous, Leaves peltate deeply 5-parted, Lobes linear-lanceolate obtuse, Petals cuneated nearly equal spreading 2-lobed, Spur short conical

19034 Branches angular glabrous, Leaves pinnate, Leaflets 5 oblong-lanceolate obtuse, Peduncles umbellate hoary, Petals hoary, Anthers mucronate

19035 Leaves ternate with revolute edges hoary-tomentose from stellate hairs beneath

β Leaflets oval

19036 Leaves ternate, Leaflets linear revolute downy beneath, Peduncles axillary 1-flowered

19037 Lvs pinnate 4—5 pairs, Leaflets linear obtuse smooth, Branches pilose Ped short 1-flowered, Flws tetrandrous

19038 Lvs obovate mucronate crenulated, Pedicels axillary and terminal 1-flowered, Filaments blunt glandular at tips

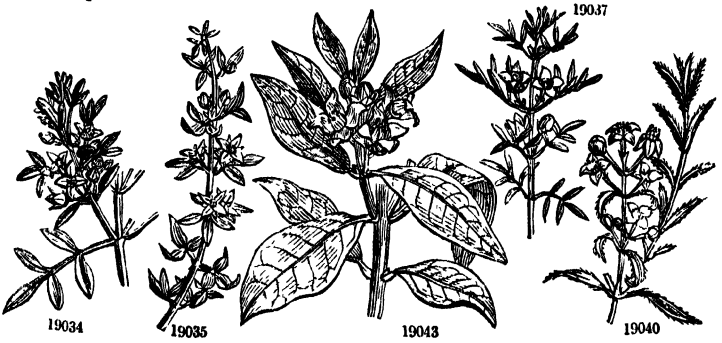
19039 Brnchs dichot slend flex., Lvs. lin obt. flat nar. at base, longer than internds, Fls axil on short peds, Fil vill

19040 Leaves linear retuse denticulated mucronate, Peduncles corymbose, Filaments blunt and glandular at tips

19041 Brnchs comp. rough when young, Lvs short rndish obo , but nar. and spat on later brnchs, Fls small term cym

19042 Glabrous, Lvs simple terete obtuse dilated at base sulcate, Cymes many flowered on long peduncles, Filaments hispid [at base

19043 Leaves oblong smooth acute at both ends, Cymes axillary, Filaments fringed all nearly combined into a tube



and Miscellaneous Particulars

with which they abound. The genus is nearly allied to *Cymnósma*. It grows freely in any common soil, and is readily increased by cuttings in the ordinary way.

879. TETRATHE'CA

19044 5092*a* hirsùta *Lindl* hairy ♃ ▭ or 2 mr.ap P Swan R 1843 C s l p Bot reg 1844, 67
Tremándra Hugèlii Hort
19045 - verticillàta *Hort* whorled-leaved ♃ ▭ or 2 f mr V R Swan R. 1845. C s.l p Px.m. 13. 171.
Tremándra verticillàta Hort
19046 - rubrisèta *B R.* red-bristled ♃ ▭ or 2 ap my Ro Swan R 1840 C s.l p
19047 - viminea *B R* twiggy ♃ ▭ or 2 ap my P Swan R 1840 C s.l.p
19048 - nùda *B R.* naked ♃ ▭ or 2 ap my C Swan R 1840. C s.l p

880 CORRÆ'A

19049 5095*a* pulchélla *R Br* neat ♚ ▭ or 5 ap jl C K G.S 1824. C s l p Bot. mag. 4029
19050 - rùfa *Hook* rusty ♚ ▭ or 4 ap jn Y G Australia 1836 C s.l p Botanist 124

881. MIMU'SOPS.

19051 - revolùta *Hochst.* revolute ♚ ▭ or 20 . W Natal 1830 C s l p
cáffra E Meyer.

889. AMY'RIS

19052 5107*a* toxifera *Willd.* poison-bearing ♀ ▭ or 50 .. W Carolina 1820. C p l.s Cat. carol. 1 40
balsamífera Lin

891 BÆ'CKIA.

19053 5113 saxícola *Cun* rock ♚ ▭ or 2 jl au W N S W. 1824. C s p.l Bot mag 3160

897. DODONÆ'A.

19054 - salsolæfòlia *Cun.* Salsola-leaved ♚ ▭ or 2 jn jl G V D.L 1830. C s.l.p

899 OSBE'CKIA.

19055 5428*a* canéscens *Mayer* canescent ♃ ▭ or 2 su W Mexico 1838 C l.p Bot mag 3790
19056 - glomeràta *Dec.* glomerate ♃ ▭ or 1½ jl au Ro Trinidad 1818 C l p Bot mag 2837
β albiflòra *white-flowered* ♃ ▭ or 1½ jl.au W W Indies 1818 C l p Bot. cab 334

2994 899*a* OXY'SPORA *Dec.* (*Oxys*, sharp, *spora*, a seed, seeds awned at both ends) *Melastomàceæ*
19057 - vàgans *Wall.* common ♃ ▭ or 2 jn jl Ro E. Indies ... C s l.p Bot mag 4553
Melastoma rugòsa Roxb

2995 899*b* MARCE'TIA *Dec* (*Francis Marcet*, who wrote on the effects of poisons on vegetables) *Melastom*
19058 - excoriàta *Dec* loose-bark ♃ ▭ or 1 au W Pk Mexico 1842 C s l.p Bot reg 1843, 31
19059 - decussàta *Dec.* decussate-lvd ♃ ▭ or ½ s o Pk Brazil 1840. C s p.l Botanist 223

2996 899*c*. CENTRADE'NIA *G Don.* (*Kentron*, spur, *aden*, a gland; smtms endg in gland-fmd append) *Melas*
19060 - ròsea *Lindl* rose-coloured ♃ ▭ or 1 ja Pk Mexico 1840. C s.l.p Bot reg 1843, 20
Douglàsii Hort
19061 - floribúnda *Klotzsch* bundle-flwd ♀ △ or 1 jl.au Pa.R C Amer 1851. D s p l
19062 - divaricata *Klotzsch* divaricate ♀ △ or 1 W C Amer. 1851. D s p l

2595. 900*a* ARTHROSTE'MMA.

19063 17227*a* fragile *Lindl* brittle ♚ ▭ or 3 jl s Ro Mexico 1846 C s p l J H S 3. 75 fig

901 ŒNOTHE'RA

19064 5441*a* bifrons *D Don* two-fronted ☽ ○ or 2 s Y Texas 1835 S co Bot mag 3760
19065 5456*a* anisóloba *Swt.* unequal-lobed ♀ △ or 2 jn W Chiloe 1828. S co Bot. reg 1479
[Sw fl g 2 10

2596. 901*a* GODE'TIA.

19066 17245*a* grandiflòra *Lindl* great-flowered ○ or 2 jl.au Pk Californ 1838 S co Bot. reg 1842, 61
19067 - albéscens *Lindl* whitish ○ or 1½ jl au Pk Colum R 1841. S co Bot. reg. 1842, 5

903 EPILO'BIUM

19068 5480*a* lanceolàtum *Schast* lanceolate-lvd ☽ △ or 1 jn jl Pk Britain sandste. S co Eng bot 2935

2997 903*a* ZAUSCHNE'RIA *Presl* ZAUSCHNERIA. (*H Zauschner*, a German botanist.) *Onagrariæ*
19069 - californica *Presl* Californian ♀ △ or 1 jn.o S Californ. 1847. D lt m Bot mag 4193
β mexicàna Presl *Mexican* ♀ △ or 1 jn o S Mexico 1847 D lt m
γ latifolia Hook *broad-leaved* ♀ △ or 1 jn o S Californ 1847 D lt m Bot mag 4492



History, Use, Propagation, Culture,

879. *Tetrathèca* is a genus of delicate greenhouse shrubs, gay with pretty blossoms. They will grow freely in a compost of peat, loam, and sand in equal proportions, and if a few potsherds are mixed with it so much the better. In summer plenty of air should be given, and shade in sunny weather. In winter they should be placed in some airy part of the greenhouse where they will be secure from damp. Fire heat should not be applied except to keep off frost. They are propagated by cuttings in the usual way.

19052. *Amyris toxifera* is a large tree with pinnate leaves. The fruit hangs in bunches; they are pear-shaped, and of a purple colour. The juice distilled from the trunk of the tree is as black as ink, and the inhabitants of Carolina believe it to be poisonous. It is called Janca tree and White Candlewood; and the wood is said to be valuable as timber, it bears a fine polish and has a pleasant smell. The fruit has much the taste of balsam of Copaiba.

19044 Branches tomentose sometimes setose, Leaves oblong scattered or opposite tomentose beneath hispid above, Peduncles setose or scabrous, Flowers pentamerous

19045 Branches slender downy, Leaves linear in whorls acute hairy, Peduncles axillary hairy, Petals cordate-ovate [axillary corymbose, Anthers scabrous beaked, Flowers pentamerous

19046 Branches hispid from red bristles, Leaves oblong linear revolute scabrous above tomentose beneath, Peduncles
19047 Glab or a little pil at base, Lvs ov.-obl or roundish verticil or scat shorter than internodes, Flwrs pentamerous
19048 Glabrous, Branches rush-like, Leaves linear deciduous many deficient, Peduncles scattered length of corolla, Petals obovate, Flowers pentamerous [Cal. truncate

19049 Clothed with stellate down, Lvs cordate-ovate obtuse undulated at length glabrous, Flwrs solitary pendulous,
19050 Leaves spreading elliptic or oblong glabrous above clothed with rusty tomentum beneath as are the branches, Flowers 1—3 terminal cylindrical, Stamens much exserted

19051 Leaves glabrous obovate spatulate obtuse coriaceous entire with revolute edges glaucous beneath, Peduncles axillary by threes or fours, Calyx 8-parted, Corolla biseriate, outer series 10- inner 8-parted all entire

19052 Leaves pinnate, Leaflets 5—7 stalked ovate subcordate acuminate, Racemes simple about the length of the petioles

19053 Glabrous, Leaves imbricate in 4 ranks obovate acute dotted immarginate on short petioles, Stamens 10, Flowers solitary or twin in the axils of the upper leaves on short pedicels

19054 Leaves in fascicles fleshy glabrous channelled above, Flowers dioecious glomerate, female ones solitary much shorter than leaves, Fruit 3-winged [Flowers erect, Petals obovate, Stamens 10 fertile

19055 Erect, Lvs cordate-ovate obtuse tubercled hoary beneath, Panicles terminal and axillary, Bracts ovate caducous,
19056 Erect hispid, Lvs ovate-lanceolate 3-nerved, Flwr terminal pedunculate, Segs of Calyx ovate-lanceolate ciliated,
β Flowers white [Hairs of Tube branched, Petals obtuse ciliated, Stamens 8

19057 Subscandent, Branches pendent, Leaves subcordate-ovate acuminate crenulated ciliated tomentose beneath as well as branches and petioles, Panicle elongated nutant [pedicellate disposed in a leafy raceme

19058 Suffruticose much branched, Lvs nearly sessile oblong obtuse mucronate downy 3-nerved, Flowers axillary
19059 Suffruticose branched, Leaves sessile ovate rather cordate entire 3-nerved downy as are the branches and calyxes, Flowers axillary pedicellate, Lobes of Calyx lanceolate subulate

19060 Leaves ovate-lanceolate unequal-sided, Racemes subcorymbose terminal [bristles at edges downy on veins beneath, Cymes trichotomous, Petals obovate

19061 Stem and branches tetragonal covered with bristly hairs, Leaves triple-nerved petiolate ovate acute with stiff
19062 Branches straggling hoary, Leaves unequal-sided petiolate acuminate bristly at edges pale beneath and downy on the veins, Flowers few terminal, Petals obovate

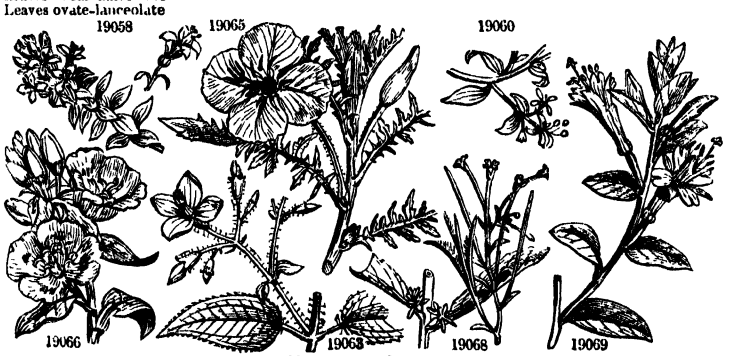
19063 Branches tetragonal beset with glandular hairs, Lvs ovate-cordate acute 5-nerved serrated, Cymes loose terminal few-flwd, Calyx glandular, Spurs of Anthers bifid [or bracts cordate, Capsule cylind sulcate hairy

19064 Erectish branched a little hairy, Lvs semi-amplexicaul toothed a little, lower ones ovate-acuminate, upper ones
19065 Branched downy, Lower Leaves elliptic entire or few-toothed, upper ones sharply toothed and divided at base, uppermost ones pinnatifid, Tube of Flwr long, Petals large crenul. [yellowish, Fruit lin 4-fur. terete downy

19066 Erect, Lvs lanc. a little toothed green smoothish, Tube of Calyx obconical shorter than segs, Lobes of Stigma
19067 Branches short crowded, Leaves glaucous lanceolate entire glabrous, Flowers sessile, Petals obcordate, Fruit oblong 8-furrowed terete villous

19068 Lvs lanc stalked irregularly toothed, Stem obsoletely angular, Stigma slightly lobed, Barren shoots none [part, Flowers axillary solitary drooping, Petals obcordate

19069 Glaucous, Lvs linear sessile slightly toothed opposite on the lower part of the stem and alternate in the upper
β Leaves linear-lanceolate
γ Leaves ovate-lanceolate



and Miscellaneous Particulars

2994 *Oxyspora* The species of this genus are small shrubs of considerable beauty when in blossom. A compost of loam, peat, and sand will suit them, and they may be propagated by cuttings in the usual way. They require a moist atmosphere.

2995 *Marcetia* is nearly allied to *Oxyspora*, and may be treated in the same manner with regard to both cultivation and propagation.

2996 *Centradenia*. Pretty soft-wooded plants, which thrive best in sandy peat with a little loam, and cuttings strike freely

2997 *Zauschneria* These are pretty glaucous plants with bright scarlet flowers. They may be grown in pots as ornamental plants for the greenhouse or conservatory. They also answer well for flower-beds or borders: the root creeps like French willow in a light dry soil.

904. FU'CHSIA

19070 5490*a* integrifòlia *Cambess* entire-leaved radicans Miers, Bot. reg. 1041. 66. — pyrifòlia Presl. — or 10 s o — S — Brazil — 1837. C p.l — Bot. mag. 3948

19071 - - alpéstris *Gard.* — mountain — or 10 su — S — Brazil — 1841. C l p — Bot. mag 3969

19072 - - splendens *Zucc.* — splendid — or 6 su — S c — Mexico — 1841 C l.p — Bot. mag 4082
cordifolia Hook t. 656. not B.R.

19073 - - serratifòlia *R & P.* — serrate-leaved — or 5 jl s — R.Pk Y Peru — 1844. C l p — Bot mag 4174

19074 - - macrántha *Hook.* — long-flowered — or 3 ap jn — Ro G — Columb — 1844. C l p — Bot. mag 4243

19075 - - spectábilis *Hook.* — showy — or 5 jl.o — S — Andes — 1847. C l p — Bot mag 4375

19076 - - cordifòlia *Benth* — heart-leaved — or 5 au s — S.G — Mexico — 1840 C l p — Bot reg 1841 57

19077 - - nígricans *Linden* — blackish — or 4 jl s — Ro P — C Amer. — 1851 C l p — Px fl.g 1 41 25

19078 - - venústa *Humb.* — beautiful — or 5 jl.s — S — N Grena. — 1850 C l.p — Px. fl. g 1 78 57

19079 - - tetradáctyla *Lindl* — 4-fingered stig — or 2 jn.s — Ro — Guatem. — 1846. C l p

19080 17257*a* corymbifòra *R &P.* — corymb-flwd — or 6 jn.au — C — Peru — 1840 C l p — Bot. mag 4000

907 VACCI'NIUM

19081 5516*a* Rollissòni *Hook* — Rollisson's — or 2 my jl — S — Java — 1850 C p l s — B t mag 4612

19082 - - erythrinum *Hook.* — coral-red-flwd — or 3 o — S — India — 1851 C p l s — Bot mag 4688

2998. 909*a* LAGE'TTA *Lam.* — LACE-BARK TREE. — (*Lagetto*, its name in Jamaica.) — *Thymelæ*

19083 5525 lintearia *Lam.* — common — ec 20 ja d — W — Jamaica — 1793 C l p — Bot mag 1402
Daphne Lagétto Swartz

910 DA'PHNE

19084 5526*a* Fortùni *Lindl* — Fortune's — or 3 ap my — Pa Li — Chusan — 1844. C l p — J H S 2 1

19085 - - japónica *Siebold* — Japan — or 2 f mr — Pk P — Japan — 1840. C l.p — Px m 8 17 10

19086 - - Houtteàna *Planch.* — Van Houtte's — or 4 mr my — Vi Li — China — 1850. C p l — Fl. serres 592
Mezèreum fòlus atropurpùreis Hort — papyràcea Wall

19087 5538*a* austrális *Cyr* — southern — or 3 ap my — P — Naples — 1838 C p l — Bot reg 1838, 40

2999. 910*a* EDGWO'RTHIA *Meyer.* — (*M. P Edgeworth*, E India Comp 's civil service.) — *Thymelæ*

19088 - - chrysántha *Meyer* — yellow-flwd — or 1 f mr — Y — Chusan — 1845. C s.l p — Bot. reg 1847, 48
Daphne papyrífera Siebold. — *Edgwórthia papyrífera* Zucc.

916 COMBRE'TUM

19089 5563*a* latifòlium *G Don* — broad-leaved — or 10 my — Bt R — India — 1843. C s.p.l — Px mag 5.145 10
macrophýllum Roxb

3000 916*c*. BUGINVILLÆ'A *Comm.* — (*M Bougainville*, a French navigator.) — *Nyctagineæ*

19090 - - spectábilis *Juss.* — showy — or 15 jn jl — P Y — S.Mexico — 1829. C s.l p — Px mag 12 71 10

DIGYNIA.

3001. 919 GEI'SSOIS *Labill* (*Geisson*, the house eaves, seeds imbricated like the tiles of a house.) — *Cunoniaceæ*

19091 - - racemòsa *Labill* — racemose — or ... ... — C — N Caled — 1850. C s l p — Lab sert cal 50

TRIGYNIA.

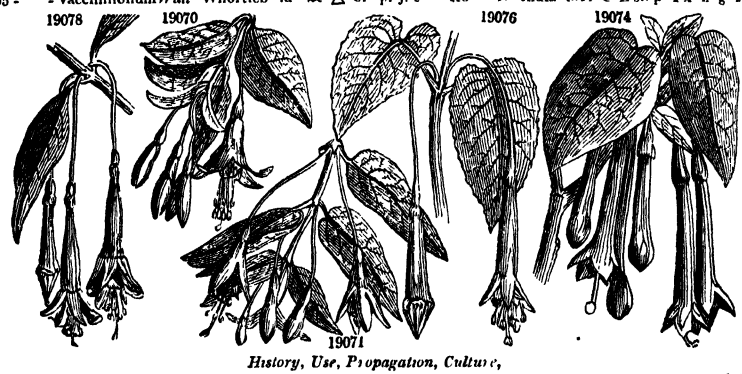
921 POLY'GONUM

19092 5589*a* injucúndum *B R.* — disagreeable — or 2 my — G w — Valparai — 1825. C S co — Bot. reg 1240

19093 5589*a* complèxum *Cun.* — complex — or 10 jl o — G Y — N Zeal — 1843. C — s.l.p

19094 5593*a* Brunònis *Wall* — Brown's — or pr au s — Ro — N India — 1845 C L s l.p — Royle ill 86 1

19095 - - vaccinifòlium *Wall* — Whortleb -ld — or pr jl s — Ro — N India — 1845 C L s.l p — Px fl g 2 ..



History, Use, Propagation, Culture,

2998. *Lagétta lintearia* is the famous Jamaica lace-bark tree Many persons have seen this beautiful substance but few have seen the living tree, for it was not until 1844 that it was introduced permanently to our hothouses, and then only through Mr Wilson, curator of the Botanic Garden at Bath in Jamaica, to Kew Gardens, where it flowered and fruited in the autumn of 1849 It is well known that the liber or inner bark of this tree consists of layers of reticulated fibre, exactly resembling well prepared lace, and its nature is best exhibited by taking a truncheon from a branch and tearing down the bark and separating it by hand into as many layers as that portion of the tree is years old. The ladies of Jamaica, Lunan observes, "are extremely dexterous in making caps, ruffles, and complete suits of lace with it" In order to bleach it after being drawn out as much as it will bear, they expose it stretched to the sun shine and sprinkle it frequently with water It bears washing well with common soap, and acquires a degree of whiteness equal to the best artificial lace The wild negroes have made apparel from it of a very durable nature, but the common use to which it is applied is rope-making The Spaniards are said to have worked it into cables It was also made into negro whips in the days of slavery The tree grows in marly limestone hills where there is not a particle of earth to be seen. In this country, according to Mr John Smith of Kew Gardens, it is best grown in good yellow loam mixed with a little leaf mould and sand It is difficult to propagate, and is most likely to succeed according to the same authority by layering. The tree is deciduous in its native country, but in our hothouses it becomes evergreen.

19070 Stem prostr. radicant, Lvs opp. ternate a little toothed purplish beneath, Stip. fleshy, Ped. solitary axil. 1-flwd, Seg. of Cal. acum. twice the length of petals, Pet obcord. [lanc.-acum. twice as long as cuneate pets
19071 Subscand. pubes., Lvs opp. obl or ov.-lanc scarcely toothed, Stip memb , Ped. axill. sol. 1-flwd, Seg. of Cal
19072 Downy, Lvs opposite or ternate on long petioles ovate-cordate denticulated acuminate, Peduncles filiform axillary solitary 1-flwd, Segm. of Calyx triangular longer than petals [obov petals
19073 Glabr , Lvs 3-4 in a whorl obl.-lanc. serr , Ped. sol axill. 1-flwd, Tube of Calyx elong., Segments longer than
19074 Downy, Lvs ov.-ac. entire, Peds axill solitary, Fl apet., Tube of Cal long, Stam. enclosed, Stig cap exserted
19075 Brn purp suc., Lvs large tern. ov. ellip. gland denti. cil purp. ben , Peds axil. sol 1-fld, Pets round, Stig 4-lbd
19076 Lvs opp or tern cord acum. denticu nearly glab , Peds axill sol 1-flwd, Cal downy Tube longer than ov. pets
19077 Downy, Lvs opp. or tern , Flws in leafy bunches at ends of branches, Petals flat lanc acute as long as calyx
19078 Lvs opp or tern ellip. ent. glabr , Peds axill upper ones racem , Pet. obl -lanc. ac , Segs of Calyx ob -lanc. ac.
19079 Tuberous slender nearly herbaceous downy, Lvs opposite obovate oblong blistered on long petioles, Ped axillary solitary 1-flwd, Segm. of Calyx triang , Pet oblong obtuse, Stamens short, Stigma large 4-fingered
19080 Downy, Lvs opp nate and ternate ovate-oblong veined, Corymb long term. pend., Ped leafy, Tube of Cal long Segm. reflexed, Pets acuminate [nutant decandrous, Cor. urceolate with 5 recurved lobes
19081 Erect glab branches angular, Lvs obov. cuneate coriaceous shining entire, Racs term few-flwd bracteate, Flws
19082 Glabrous branched, Lvs ovate obtuse coriaceous quite entire, Racemes terminal aggregate leafy many-flwd, Flws decandrous secund nutant, Corolla urceolate, Anthers mutic

19083 Arboreous, Lvs cordate-ovate acute feather-nerved reticulated shining, Spikes terminal pedunculate, Perianth urceolate glabrous, Ovarium hairy

19084 Lvs oblong or ovate-oblong silky, Flws 4, exinvolucrated silky villous outside, Segms of Calyx oblong obtuse
19085 Lvs oblong lanceolate acute wavy margined with yellow, Flws terminal corymbose
19086 Flws rising with the leaves, Lvs lanceolate acuminate purple glabrous, Flws growing in little branched cymes

19087 Hairy green, Lvs obovate obtuse shining above glabrous, Flws terminal sessile silky tomentose

19088 Leaves oblong-lanceolate pilose on the ribs beneath, Flowers capitate, Tube of Perianth clavate clothed with silky villi

19089 Glabrous, Leaves large coriaceous oblong acuminate, Spikes short dense-flowered, Flowers small decandrous, Calyx downy, Petals obovate obtuse, Stamens twice the length of calyx

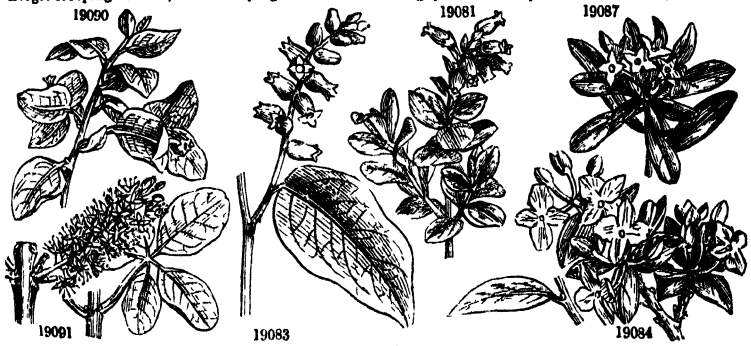
19090 Spiny, Leaves ovate obtuse hairy, Pedicels united to midrib of bracts, Bracts oval purple, Perianth yellow

DIGYNIA.

19091 Leaves opposite petiolate quinate, Leaflets elliptic obtuse quite entire downy beneath, Stipules undivided ribbed caducous, Racemes axillary many-flwd

TRIGYNIA.

[Flowers octandrous digynous
19092 Leaves triangular tapering acute, Ochrea cylindrical truncate glabrous, Racemes axillary shorter than leaves,
19093 Glabr , Stem shrubby flex. slndr, Lvs small rndsh petiol. subcord ent., Racs short axill term , Fl polyg dicc
19094 Evergreen creeping glabr., Lvs oblong-lanc. narrowed at base serrulated, Spikes terminal solitary interrupted
19095 Evrgr. creeping ascend , Lvs ov taperg to both ends shining quite entire, Spikes elong slender, Lwr Fl remote



and Miscellaneous Particulars.

2969 *Edgworthia* is a half-hardy shrub, and grows freely in a compost of sandy loam and one of turfy peat with sufficient drainage, for although it requires an ample supply of water while growing during summer it is liable to damp off in winter, and for a few weeks at this time it requires little water The flowers being sweet-scented and the plant of free growth, it may be expected to prove a useful addition to our greenhouses.

9000 *Bugmvilla'a* is a fine stove climber, suited for training upon trellis-work or pillars The purple bracts are the principal feature of the plant A compost of sand, loam, and turfy peat answers it well, and cuttings strike root freely in the ordinary way.

000 *Geissois* This plant being so recently introduced, very little is known of the manner in which it should be cultivated The flowers are a bright crimson and grow in long dense racemes

19096 *Polygonum cuspidatum* is said by De Vriese to be the handsomest of all the species *P. Brunonis* and *P. vaccinifolium* are well fitted for ornamenting rockwork *P. complexum* is a small round-leaved climbing species, well fitted for covering pillars in a conservatory or greenhouse and is probably a species of *Sarcogonum*. From *P. chinense*, but more particularly *P. tinctorium*, indigo is prepared in China Which last is cultivated extensively in Belgium as a substitute for the true indigo, and is said to produce the dye in great abundance and of the finest quality

19096 5596*a* cuspidàtum *Siebold* cuspidate ♐ △ or 4 jl au G Japan 1845. D co Px fl. g 1 137 (6)
19097 - - mólle *Wall* soft ♐ ⌋ or 2 jn au W N India 1840. C co
19098 5597*a* amplexicaúle *D. Don* stem-clasping ♐ △ or 1½ jn jl Ro Nepal 1826. D co Bot. reg. 1839, 46
petiolàtum D. Don
19099 5603*a* chinénse *Meisn* Chinese ♐ △ ec 3 jn.jl Y w China 1830. D co
Amplógonum chinénse Lindl
19100 - - tinctórium *Lour.* dyers' ♐ △ ec 2 jn.jl Pa.R China 1830. D co

3002. 921*a* SARCOGO'NUM *G. Don.* (*Sarx*, flesh, *gonia*, an angle, berries white and fleshy) *Polygòneæ*
19101 - - deprèssum *G. Don* depressed ♐ ⌋ cu 4 my au W N. Holl. 1822. C.S l.p Bot. mag 3145
Polýgonum depréssum R Br *Coccóloba austrális* Forst.

3003 921*b*. FAGOPY'RUM *Gærtn.* BUCKWHEAT. (*Phagos*, beech, *pyros*, wheat, beech corn) *Polyg*
19102 - - cymòsum *Meisn* cymose-flwd ♐ △ or 4 jl.s W C Tartar. 1827 S.D co Bot reg 1846.46
Polýgonum cymòsum Trev *P. acutàtum* Lehm, *P. emarginàtum* Will., as well as *Polýgonum emarginàtum* No 5601. and *P. Fagopýrum* No 5602 and *P. tatáricum* No. 5600., belong to this genus

922. COCCO'LOBA
19103 5606*a* macrophýlla *Hook.* large-leaved ♀ □ or 30 jl.au Ro S Amer 1830. C lt l Bot mag 4536
macrántha Desf.
19104 5611*a* vírens *Lindl.* green ♚ □ or 10 au Y G W Indies 1825. C lt.l Bot. reg. 1816

TETRAGYNIA.

3004 932*a*. LOUDO'NIA *Lindl* LOUDONIA (*J. C. Loudon*, a great promoter of Gard and Bot.) *Halorágeæ*
19105 - - aúrea *Lindl.* golden-flwd ♚ ⌋ or 1½ ... Y Swan R. ... C s.p Lindl.swan r pl ic

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Page 332. CLASS IX.—ENNEANDRIA 9 STAMENS.

Order 1. MONOGYNIA 9 Stamens. 1 Style.

3005. 934*a* *Agathophýllum*. Perianth funnel-shaped, constricted at the throat Limb-6 cleft Stamens 12 in

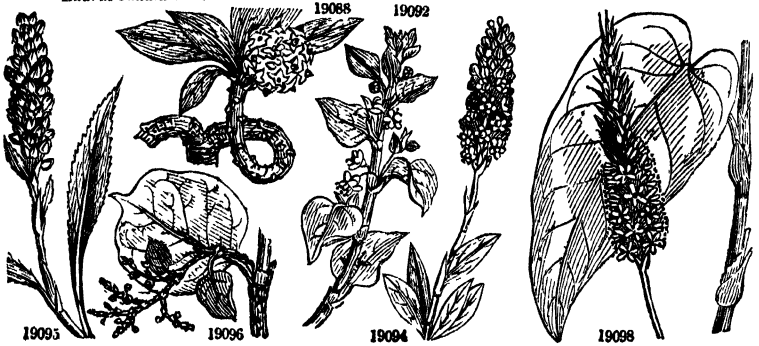
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MONOGYNIA.

3005 933*a*. AGATHOPHY'LLUM *W.* (*Agathos*, good, *phyllon*, a leaf, sweet-scented) *Laurineæ*.
19106 - - aromáticum *W.* aromatic ♚ □ or 30 ... W Madagas 1843. C s.l.p

934. LAU'RUS.
19107 5657*a* regàlis *Doug* royal ☿ or 30 .. ... Californ. 1847. C l.p
californica Nutt.

3006. 934*a* OREODA'PHNE *Nees.* OREODAPHNE. (*Oreos*, a mountain, and *Daphne*.) *Laurineæ*
19108 - - bullàta *Nees.* bullate-leaved ☿ ⌋ or 50 ... ... C G H. ... C s.l.p Bot mag 3931
Laúrus bullàta Burch



History, Use, Propagation, Culture,

3002. *Sarcogònum.* A climbing plant of the most easy culture. It will grow in any light soil, and is readily increased by cuttings or berries.
3003. *Fagopýrum cymosum* is a pretty plant of the most easy culture. It will grow in any common garden soil, and may be increased by dividing the roots or by seeds.
3004. *Loudònia.* This is a pretty shrub, with corymbs of golden yellow flowers. A compost of sand, loam, and peat will probably suit it well, and cuttings will strike root in the ordinary way.

19096 Lvs broad-ov. hardly cord., Stem rnd hollow spotted with purple, Stipules obliq trun. purple, Pan. axill. divar.
19097 Half-shrubby forming a bush, Lvs lanceolate pale green acuminated hairy, Panicles d nse terminal
19098 Erect, Lvs radical on long petioles cordate-ovate acuminate crenulate and entire, upper leaves stem-clasping, Spikes elongated many-flowered, Bracts ovate-acuminate imbricate, Stamens exserted
19099 Lvs ovate-lanceolate stalked bearded along the midrib, Heads of Flowers small, Flowers small fle hy succeeded by black succulent berries
19100 Stems numerous, Stipules membr., Lvs ovate entire glabr. thick fleshy, Spikes long branched, Style semibifid

19101 Glabrous, Stems twining or prostrate terete, Lvs cord.-acuminate crenulated with scabrous edges, Racemes axillary or terminal, Bracts and achenia naked

19102 Root stoloniferous, Lower Lvs triangular cordate or hastate with bluntish lobes, upper lvs oblong or lanceolate-sagittate, Panicles on long peduncles nearly leafless dichotomous or trifid

19103 Glabr , Stem simple, Lvs cordate-ovate acute sessile stem-clasping bullate veined, Ochrea large inflated, Racemes dense spicate elongate simple terminal, Flws copious, Perianth 4—6-lobed, Stamens 8—12
19104 Lvs ovate-lanceolate obtuse tapering into the petioles, Racemes nutant, Flowers decandrous

TETRAGYNIA.

[Panicles terminal corymbose, Upper bracts petaloid obovate
19105 Glab , Stem erect terete simple leafy at base sometimes leafless at top, Lvs alternate coriaceous quite entire,

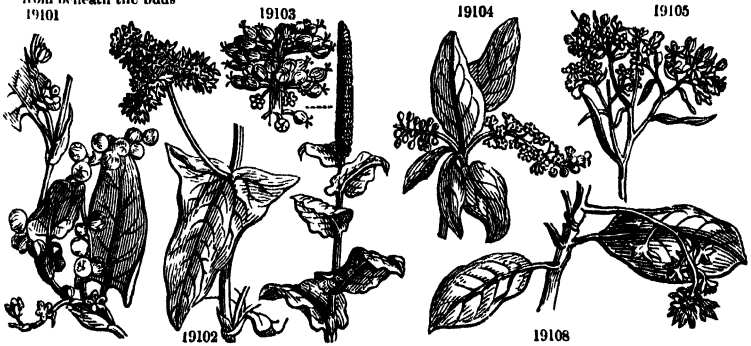
4 series the 9 outer ones fertile, 3 inner ones sterile , these last are furnished with twin sessile subglobose glands at both sides Anthers ovate, membranous at tips Style thick. Stigma capitate Ovarium 1-celled, 1-seeded
.006 9 4*a* *Oreodáphne* Hermaphrodite dicecious or polygamous Perianth 6-parted Stamens 9. Anthers oblong narrowed into the filaments, 4-celled , cells placed by pairs one above another three of the inner anthers reversed Berry more or less immersed in the tube of the perianth, which becomes a thick cup.

MONOGYNIA.

19106 Lvs alternate crowded, Buds stipitate 2-valved, Panicles terminal contracted

19107 A large tree growing about Santa Cruz

19108 Lvs elliptic or oblong-elliptic reticulated blistered above, Racemes few-flowered axillary and terminal rising from beneath the buds



and Miscellaneous Particulars.

3 05 *Agathophýllum.* This is a tree not much known. It will require to be grown like other stove plants. It will propagate by cuttings. It is called Madagascar Nutmeg
1906 *Oreoddphne* This tree will only require the treatment usually given to greenhouse plants. *Oreodáphne bullàta* is called *stink hout* or stink-wood ; and the greatest part of the timber used in building, and indeed for every other purpose, in South Africa, consists of the *giel hout* (yellow wood, a species of *Podocárpus*) and the *stink hout*. Our plant is said to produce a handsome wood resembling mahogany both in colour and quality.

Page 338. CLASS X.—DECANDRIA. 10 STAMENS.

Order 1. MONOGYNIA. 10 Stamens 1 Style.

3007 948*a* *Ammodēndron* Calyx 5-cleft, subbilabiate, at length reflexed Wings and dipetalous keel equal and connate Legume flat, membranous, 1 seeded by abortion, samaroid, margmate by a wing. Seed reniform, compressed.

3008 949*a* *Dichovēma* Calyx campanulate, bilabiate. upper lip bifid, lower lip tripartite. Corolla with a broad bilobed standard, much exceeding the small wings keel straight, obtuse, a little shorter than wings Stamens uniform Ovarium sessile, many-ovulate, somewhat 2-celled from the suture being inflexed Style uncinate, bearded on the under side. Stigma capitate

3009 953*a* *Jansònia* Calyx bilabiate · upper lip bifid nearly to the base, lower lip much longer, tripartite Corolla with an ovate-lanceolate reflexed standard, which is shorter than the elliptic wings keel compressed longer than wings Stamens unequal Ovarium villous, substipitate, 4—5-ovulate, the stipe surrounded by a little sheath Style elongated, incurved at top Stigma small.

3010 978*a* *Coultèria.* Calyx turbinate, 5-cleft, the lower lobe the largest, and pectinately toothed with glands Petals 5, upper one the largest Stamens bearded at base, and with a nectariferous gland on the upper side of the ovarium Style short Stigma glandularly ciliated Legume flat, spongy, hardly dehiscent, but usually divided transversely into cells, 4—6-seeded

3011 987*a* *Cupània* Calyx 5-cleft, or 5-parted. Petals 5, each furnished with a small scale above the base inside Disk regular, occupying the bottom of the calyx, entire or crenulate Stamens sometimes 9—5, inserted between the edge of the disk and ovarium Style bifid or undivided Capsule pear-shaped, 2—3-seeded, 2—3-valved, 2—3-celled Seeds erect, arillate

3012. 989*a*. *Turræ'a.* Calyx 5-cleft. Petals 5, long, strap-shaped Stamens combined into a very long tube, which is 10-cleft at apex, with an anther seated at the base of each lobe or between them Stigma thickish Capsule 5-celled Cells 2-seeded: Valves with a dissepiment in the middle of each

3013. 989*b* *Munrònia.* Calyx 5-cleft Segments linear Petals 5, bound together by the claws. Stamens combined into a tube, ending in 10 subulate segments, and bearing an equal number of anthers inside. Ovarium downy, 6-celled. Cells 1—2-seeded. Stigma obscurely 5-lobed

3014 999*c* *Acradenia* Calyx 5-parted. Petals 5, velvety. Stamens glabrous, about equal to corolla. Anthers glabrous, mappendiculate Carpels 5, cohering, seated on a fleshy lobed gynobase, villous, each bearing a smooth sessile fleshy gland at its upper angle. Ovula 2 in each cell, collateral, pendulous Style long, length of stamens Stigma slightly capitate.

3015 999*d* *Diplolæ'na* Involucrum double, outer one 5 parted, inner one 10—15-parted many-flowered Flowers sessile, furnished with a 5-leaved chaffy calyx and a 5-petalled corolla Stamens exserted Filaments fringed. Style 5-furrowed Stigma 5-lobed Fruit of 5 distinct, 2 valved, 1-seeded carpels. Seeds oblong

3016 999*e* *Bieberstæ'nia* Calyx 5-parted, irregular Petals 5, twisted in the bud Stamens subulate, the 5 shortest opposite the petals, the alternat 5 furnished each with a scale on the outside at the base Anthers axillary Ovaria 5, distinct at the apex, but connected at base Styles 5 Carpels 1-seeded, arillate inside

3017 1012*a* *Ammyrsìne.* Calyx deeply 5-parted Petals 5. Stamens exserted Anthers opening by two terminal pores Capsule 5-celled, 5-valved, dehiscing at apex

3018. 1014*a* *Bryánthus* Calyx 5 leaved Corolla 5-parted. Filaments flattened, glabrous Cells of Anthers short, mutic, or awned behind, each dehiscing by a terminal pore. Stigma obtuse Capsule 5-celled, with a septicidal dehiscence

3019 1016*b* *Thibaúdia* Calyx urceolate, 5-lobed Corolla tubular, coarctate at apex, 5-lobed. Stamens inclosed Filaments short, dilated Anthers 2-celled, shortly spurred at base, and drawn out into 2 tubes at apex cells or tubes parallel, dehiscing lengthwise by a linear fissure Style pentagonal Stigma large, peltate. Berry 5-celled Cells many-seeded Seeds minute, angular, dotted

3020 1016*c* *Leucóthoë* Calyx 5-leaved Corolla tubular, 5-toothed Stamens inclosed Filaments flattened, downy. Cells of Anthers short, truncate, mutic Stigma capitate. Capsule with a loculicidal dehiscence

3021 1016*d* *Lydònia* Calyx 5-parted Corolla ovate or tubular, with a 5-toothed contracted mouth Stamens inclosed. Filaments dilated, short, downy Cells of Anthers membranous, dehiscing lengthwise, mutic Style strong, pentagonal, fusiform Stigma simple truncate. Capsule pentagonal, 5 celled, with a loculicidal dehiscence Margins of valves closed by other external valves. Seeds acicular, imbricate.

3022 1016*e*. *Agarista* Calyx fleshy, 5-lobed Corolla ovate, with a contracted 5-toothed mouth Stamens inclosed. Filaments dilated, and villous at base. Anthers bipartite, with short membranous cells, which are mutic at base, and diverging at apex, each opening by a terminal pore Style strong. Stigma capitate. Capsule globose, pentagonal, 5-celled, with a loculicidal dehiscence. Placentas thick, oblong Seeds angular, curved.

3023. 1016*f*. *Gaylussàcia.* Calyx 5-cleft Corolla tubular, ventricose, 5-lobed Stamens inserted in the limb of the corolla, inclosed Anthers mutic, drawn out at top into two little tubes Stigma capitate. Drupe nearly globose, 10-celled, covered by the calyx Cells 1-seeded Seeds smooth, lenticular.

3024 1016*g* *Macleània* Calyx truncate, obsoletely 5-toothed, 5-winged Corolla cylindrical: Limb 5-cleft Stamens combined, their whole length into an urceolus. Anthers mutic behind, and tapering into a single tube at apex, which opens inwardly by a single chink Ovarium 5-celled, many-ovulate. Fruit a berry

3025 1019*b* *Arctostáphylos* Calyx 5-parted. Corolla globularly campanulate Limb 5-cleft, reflexed Stamens inclosed Filaments dilated, pilose Anthers compressed, dehiscing by two pores at apex, and furnished with 2

MONOGYNIA.

940 EDWA'RDSIA.

19109 5670*a* M.cnabiàna Macnab's ♃ or 6 jl au Y N Zeal 1820 C co Bot mag 3735
19110 5672*a* macrocurpa *Sm* long-fruited ♃ ⊔ or 10 ap my Y Chili 1822 C p.l Bot. cab 1125

941 SOPHORA

19111 5676*a* velutina *B R* velvety ♃ ⊔ or 6 jn Pk Nepal ... C p l Bot. reg 1185

944 THERMO'PSIS.

19112 5681*a* fabàcea *Dec.* bean-like ♃ △ or 1½ jn.jl Y Kamts 1818 D lt.l Pall. astr 90. 2
rhombifòlia Rich. *Sophòra fabàcea* Pall. *Cytisus rhombifolius* Ph

History, Use, Propagation, Culture,

19111. *Sophòra velutina* The flowers of this species are pale purple or red, disposed in long racemose spikes; and being very showy it would perhaps become more hardy by grafting it on *Sophòra japónica*, which would make it a

reflexed awns. Ovarium seated on a hypogynous disk, or half-immersed in it, usually 5-celled, rarely 6—9-celled. Cells 1-seeded. Stigma obtuse Drupe nearly globose

3026. 1019c. *Conarostáphylos* Calyx 5-parted. Corolla globularly campanulate Limb 5-cleft, reflexed. Anthers 2-awned at base, and biporose at apex Ovarium surrounded by a hypogynous disk. Stigma obtuse. Drupe papillose, globose, containing a 5-celled or 6—9 celled putamen. Cells 1-seeded.

3027 1029a. *Charianthus.* Calyx with an ovate tube, and a rather urceolate 4—5-lobed limb. Petals 4—5. Stamens 8—10. Anthers 2-celled, bursting by 2 longitudinal chinks. Berry fleshy, 4—8-celled, globose, umbilicate.

3028 1029b. *Meriania.* Calyx campanulate, 5—6-lobed Lobes broad at base and subulate at apex. Petals 5—6 Stamens 10—12. Anthers blunt at apex, bursting by 2 pores, and furnished with 2 short processes at base. Capsule free, 5—6-celled, with lunate placentas. Seeds small, cuneate, angular

3029 1029c *Medinilla* Calyx with an obovate tube, and a cylindrical truncate limb. Petals 4—5. Stamens 8—10 Anthers elongated, bluntly biauriculate at base Capsule baccate, 4—5-celled

3030 1029d *Heterótrichum.* Calyx ovate, globose, 4—5-cleft Lobes broad at base and subulate at apex Petals 4—8, oval. Stamens 10—12—16, equal, glabrous Anthers oblong, hardly gibbous at base, and opening by a single pore at apex Capsule baccate 5—6 celled, crowned by the calyx

3031 1029e *Lasiándra.* Calyx 5 cleft Petals 5, spreading Stamens nearly equal, the connectives of anthers biauriculate Anthers uniporose Filaments usually pilose Ovarium crowned by bristles Capsule covered by the calyx but free from it, 5-celled, many-seeded

3032 1029f *Pleróma* Calyx ovate, often involved by two deciduous bracts Petals 5, obovate Stamens glabrous Anthers nearly equal, elongated, arched at base, each furnished with a stipe-formed connective, which is biauriculate at base Ovarium bristly Capsule baccate, 5-celled, adnate to the calyx. Seeds cochleate

3033 1029g. *Bertoldnia.* Calyx campanulate, 5 lobed Petals 5, obovate Stamens rather unequal. Anthers ovate, obtuse, opening by a single pore, scarcely auriculate at the base Capsule trigonal, 3-valved, cut transversely, and therefore exhibiting the appearance of a lid. Seeds cuneate, triquetrous, scabrous

3034 1029h. *Tetraxýgia* Calyx with a globose tube and a 4 toothed limb. Petals 4, obovate Stamens 4—8—10 equal Anthers linear, obtuse at base, opening by a single pore at apex Capsule baccate, 4 celled Seeds cuneate, angular, with a linear hilum.

3035 1029i. *Olinia* Calyx bibracteate, adhering to the ovarium at base 5- rarely 4-toothed Petals 5 rarely 4, spatulate, obtuse. Stamens 5—10, inserted in the throat of the calyx under scales Anthers globose, didymous, dehiscing lengthwise Ovarium truncate, 4—5-celled Cells 3-ovulate Style subulate Stigma elongated, thickened. Berry drupaceous, containing a 3—4-celled putamen Cells 1-seeded.

3036 1029k *Eriocnêma* Calyx 5-parted, with campanulate tube and narrow simple or duplicate segments Petals 5, oblong-obovate, glabrous Stamens equal, or nearly so, uniform Anthers linear, subulate, opening by a single pore at apex, the connective not drawn out Ovarium free or adhering to calyx at base, roundish or ovate, crowned by bristles. Stigma small Valves of Capsule septiferous in the middle Flowers umbellate.

3037 1034b *Verticórdia.* Flowers girded by two free or concrete bracts before expansion. Calyx 5-lobed: Lobes palmately parted into 4—9 divisions. Stamens 20, of which ten are sterile and ligulate, and the other 10 fertile and equal. Style filiform, exserted. Stigma bearded. Fruit 1-seeded, but the ovarium contains 5—6 ovules. Seed globose

Order 2 DIGYNIA 10 Stamens. 2 Styles.

3038 1038a *Acrophyllum* Calyx 5-parted. Petals 5 Hypogynous disk small Styles setaceous. Berry globose, 2-celled Cells many-seeded Seeds minute, smooth

3039 1038b *Codia* Calyx 4—5 parted Petals 4—5 Stamens 8—10 Ovarium 2-celled, adhering to the calyx. Styles downy Capsule closed at apex, usually 1-seeded by abortion Seeds roundish, smooth, with a bony testa.

3040 1038c *Rhodolæa* Calyx minute, truncate, adnate to the ovarium at base, increasing and persistent Corolla none Ovarium with many glands at base Styles long Stigma obtuse Capsule 2-celled, many-seeded. Seeds compressed, obliquely subtriangular

3041 1043a *Hoteia* Calyx 5-parted Petals 5, spatulate. Stigma obtuse Ovarium 2-celled, many-ovulate. Carpels 2, adnate to the calyx Seeds scrobiculate, 1—2 in each cell

3042 1044a *Tunica.* Calyx turbinate Corolla salver-shaped or funnel-shaped Petals unguiculate. Flowers solitary or in fascicles Fascicles girded by a 4 leaved scarious involucrum, the central fascicle pedunculate; the lateral fascicles sessile, and girded by 2 scarious bracts at base

Order 3. TRIGYNIA. 10 Stamens. 3 Styles.

3043 1050a *Vivianía* Calyx campanulate, 5 toothed Petals 5, unguiculate, twisted in æstivation. Stamens inserted on the top of the torus. Style short, crowned by 3 linear stigmas, with reflexed edges Capsule 3-celled, 3-valved Valves separating from the axis, even to the placentas, as in *Linum*

3044 1055a *Heteropteris* All as in *Banisteria*, except the styles, which are less dilated at apex, and the wings of the carpels are thickened on the lower side, as in *Acer*, not on the upper side.

Order 4. PENTAGYNIA. 10 Stamens 5 Styles

3045 *Quillaja* Calyx 5-cleft Segments ovate, tomentose, with truncate margins Disk combined with the calyx 5-lobed, stellate, fleshy, smooth, nectariferous Lobes emarginate. Petals 5, spatulate Stamens disposed in two series Carpels 5, combined Styles free Stigmas unilateral.

MONOGYNIA.

[at base shorter than wings, Petals of keel separate longer than wings

15109 Leaflets 20 pairs elliptic-obovate smooth above and rather villous beneath, Vexillum large roundish subcordate

15110 Leaves with 13—19 pairs of elliptic-oblong obtuse coriaceous leaflets silky beneath, Racemes short axillary

15111 Leaves with 23 alternate elliptic velvety leaflets, Racemes cylindrical terminal, Petals imbricate, Vexillum bifid

3112 Leaves stalked, Leaflets rhomb-ovate cuneate rather silky pubescent beneath, Stipules obliquely ovate, Lower flowers of raceme twin

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very desirable addition to our hardy shrubs. There was, in Kensington Gardens, some years ago, a large *Sophora*, probably the *S chinensis* Hort, very nearly related to *S. japonica*, and was possibly introduced at the same time.

946 CYCLO'PIA.

19113 5686*a* tenuifòlia *Lehm.* fine-leaved ▣ ▭ or 4 jl au Y C.G.H 1820. C s.p.l

3007. 948*a*. AMMODE'NDRON *Fisch.* (*Ammos* sand, *dendron*, a tree; habitat.) *Leguminòsæ.*

19114 - Sievérsii *Fisch.* Sievers's ▣ or 3 my jn Y P Siberia ... . Pall. astr. 71

Sophòra argéntea Pall act petrop 1792, p 373. t. 8 *Sophòra bifòlia* Pall. astrag. t. 91. *Podalýria argentea* Willd. *Robinia argéntea* Sievers.

949 CHOROZE'MA.

19115 5704*a* sparmoides *Lodd.* Broom-like ▣ ▭ or ½ ap Y.R N. Holl. 1832 C s l p Px m. 10. 127 ic

19116 - vàrium *Benth.* various-leaved ▣ ▭ or 4 jn jl Y.R Swan R. 1837. C s.l.p Bot. reg 1839, 49

latifòlium and *élegans* Hort.

β *grandifòrum* K & W great-flwd ▣ ▭ or 3 ap my O s N. Holl. 1844. C s l p

19117 - Dicksoni *Benth.* Dickson's ▣ ▭ or 3 my s S.Y Swan R 1836. C s.l p Botanist, 106

19118 - spectábile *B R.* showy ½ ▭ or 2 my jl O.R Swan R. 1840. C s.l p Bot. mag 3903

19119 - nervòsum *Moor.* nerved-leaved ▣ ▭ or 2 sp O c Swan R. 1851. C p.l Moor c l 121 ic

19120 - Báxteri *Grah* Baxter's ▣ ▭ or 2 ap jn Y N. Holl. 1824 C p l.s Bot reg 1434

Mirbelia Báxteri Hort.

19121 - angustifòlium *Benth* narrow-lvd ▣ ▭ or 1½ ap O.R N. Holl. 1830 C s.l.p Bot. reg 1514

Dillwýnia glycinefòlia Smith.

3008 949*a*. DICHOSE'MA *Benth.* (*Dichos*, double, *sema*, a standard, standard two-lobed.) *Leguminòsæ*

19122 - subinérme *Meisn.* unarmed ▣ ▭ or 2 my jl Y R Swan R. 1851 C s l p Moor. com l ic

950. PODOLO'BIUM.

19123 5705 berberifòlium *Cun.* Berberry-lvd ▣ ▭ or 3 ap jn O.R N. Holl. 1839. C p.l.s

951 OXYLO'BIUM.

19124 5707*a* Pultenæ'a *Paxt.* Pultenæa-like ▣ ▭ or 1½ my jl Y.o N. Holl. 1840. C s p l Px. m. 9 149 ic

19125 - Osbórni *G. Don* Osborn's ▣ ▭ or 1½ jn au Y Darl D 1851. C s p l

19126 - retùsum *R. Br.* retuse-leaved ▣ ▭ or 2 my jn Y Swan R. 1850. C s p l Bot reg 913

ovalifòlium Meisn. *Chorozèma cordàceum* Smith.

19127 - obovàtum *Benth.* obovate leaved ▣ ▭ or 2 ap.my R Y Swan R. 1841. C s p l Bot reg 1843, 36

cuneàtum Benth.

19128 - capitàtum *Benth.* capitate-flwd ▣ ▭ or 1½ su Y Swan R 1837 C s.p.l Bot reg 1843, 16

19129 - parvifòrum *Benth.* small-flowered ▣ ▭ or 1 my jl Y R Swan R. 1845. C s p l

19130 - obtusifòlium *Sut* blunt-leaved ▣ ▭ or 2 ap my C o Y K.G.S 1825. C s l p Swt. fl austr 5

952 CALLI'STACHYS

19131 5710*a* longifòlia *Paxt* long-leaved ▣ ▭ or 5 jn jl Y.P Swan R. 1840. C s l.p Px m 8 31 ic

19132 - linearis *Benth sórdida* Graham linear-leaved ▣ ▭ or 4 o Y Swan R 1838 C s l p Bot mag 3882

19133 - retùsa *B C.* retuse-leaved ▣ ▭ or 2 jn au R N Holl. 1840. C p l.s Bot cab 1983

953 BRACHYSE'MA.

19134 5712*a* lanceolàta *platýptera* Hort lanceolate-lvd ▣ ▭ or 3 jn S Swan R. 1848 C s p.l Bot mag 4602

3009. 953*a* JANSO'NIA *Kipp* (*Joseph Janson*, F L.S., patron of botany.) *Leguminòsæ.*

19135 - formòsa *Kipp* beautiful ▣ ▭ or 4 ... S Swan R. ... C s.p.l Lin tr. 20 384 ib

954 GOMPHOLO'BIUM

19136 5719*a* barbigerum *fimbriàtum* Sieb. bearded-bearing but not of Sm ▣ ▭ or 2 su Y N Holl. 1824. C s p Bot mag 4171

19137 - versicolor *B M.* party-coloured ▣ ▭ or 1½ mr ap O R Y Swan R. 1839 C s.p Bot mag 4179

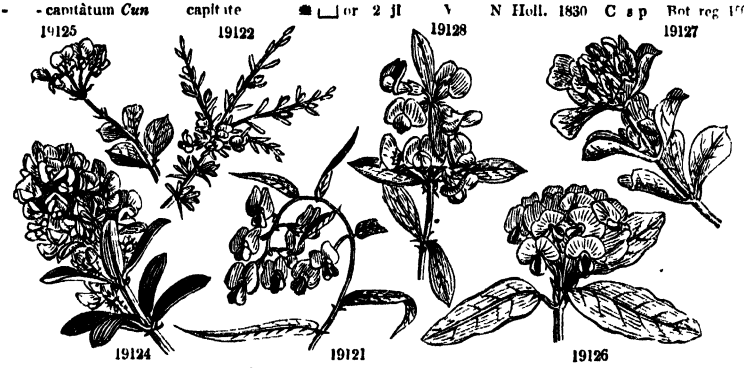
19138 - lanàtum *Cun.* woolly ▣ ▭ or ¾ mr jl C p Y N Holl. 1824 C s p

19139 - hirsùtum *Paxt* hairy ▣ ▭ or 2 my jn Y N Holl. 1840. C s p Px m 16 [illegible] ic

19140 - Hendersòni *Paxt.* Henderson's ▣ ▭ or 1 my S Y Swan R. 1841. C s.p Px m 11 103 ic

19141 - ténue *B. R.* slender ▣ ▭ or 1 au Y N Holl 1830 C s p Bot. reg 1615

19142 - capitàtum *Cun* capitate ▣ ▭ or 2 jl Y N Holl. 1830 C s p Bot reg 1663



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3007 *Ammodéndron* A native of the salt steppes in Siberia, comes near to *Halimodéndron*, of which the habital and culture are the same. Sand, loam, and peat would be a good soil for it, watering occasionally with salted water

3008 *Dichosèma* is a genus nearly related to the narrow-leaved *Chorozèmas*. The species are very pretty and require the same treatment as *Chorozema*.

3009. *Jansònia formòsa*. The nearest affinity of *Jansònia* is with *Brachysèma*, with which genus Mr. Kippist states that it agrees in its unguiculate petals, in the form and unusual length of the keel, in the extreme shortness of the standard, in its elongated filiform style, and in its shortly stalked villous germs, surrounded at the base by a minute fleshy ring, but it is abundantly distinguished by its capitate inflorescence, by the remarkable inequality of the calycine

19113 Smooth, Leaflets setaceous acute, Segments of Calyx obtuse, Bracts roundish keeled

19114 Silky, Petioles hardening into spines, Leaves bifoliate, Leaflets lanceolate silky white, Flowers purple disposed in racemes

[1-flowered, Corollas large

19115 Branches irregular slightly drooping, Leaves few sessile spatulate retuse, Peduncles very long axillary solitary
19116 Leaves nearly sessile roundish cordate undulated spiny-toothed and entire downy, Racemes erect many-flowered a little longer than leaves

β Flowers larger, orange and scarlet instead of yellow and red

19117 Leaves sessile ovate-lanc mucronulate, Flowers axillary solitary or in pairs on long peduncles, Vexillum large
19118 Lvs scattered elliptic-lanc obov. or cune. entire mucro , Rac many-flwd axil and term , Upper lip of Cal. bifid obtuse, Stigma truncate [conspicuous veins, Racemes few-flwd, Pedic. bibracteate above middle

19119 Branches downy, Lvs broadly cordate with a stiff mucrone glab undul with entire thickened marg and rather
19120 Leaves a little crenate oblong-lanceolate mealy above beset with adpressed hairs beneath, Flowers terminal disposed in verticillate heads

19121 Leaves lanceolate-linear entire with revolute edges, Racemes axillary and terminal many-flowered, Calyx attenuated a long way at base, Teeth hardly shorter than tube

19122 Branches hairy, Stipules roundish, Leaves linear bluntish with a thickened midrib and revolute edges, Flowers axillary pedunculate, Ovarium 6-seeded, Corolla red with a zone of crimson at base of standard

19123 This is probably only a variety of *P. trilobàtum*. It has much darker smaller and more prickly leaves, Flowers axillary orange-yellow, Keel dull red [capitate, Pedun bracteate, Bracts decid.

19124 Lvs 3—4 in a whorl or alternate bluntish with revolute edges, smooth except the middle nerve, Flws pedicellate
19125 Leaves opposite roundish-oblong coriaceous pilose beneath mucronate subcrenulate, Racemes umbellate terminal, Bracts subulate at base of pedicel, Segments of calyx reflexed, Legume villous pedicellate

19126 Leaves oblong retuse coriaceous reticulated glabrous, Corymbs axillary stalked crowded shorter than the leaves

19127 Leaves obovate cuneated mucronulate coriaceous, Racemes axillary short dense many-flowered, Calyx silky villous ferruginous, Ovarium 4-ovulate

19128 Lower leaves obovate, upper ones oblong or linear with a recurved mucrone, Racemes dense capitate few-flwd shorter than the leaves, Pods twice as long as calyx [silky, Ovarium 4-ovulate

19129 Leaves obl.-linear or cuncate retuse or emarg mutic, Racemes axillary and terminal elongate loose, Cal rather
19130 Lvs obl. linear obtuse smooth above clothed with silky tomentum beneath revolute, Corymb loose verticillately racemose, Pedicel bracteate, Calyx silky downy, Wings of Corolla reflexed. [lanc. covered with brown hairs

19131 Downy, Stipules small, Leaves lanc mucronate 6 inches long smooth above, Spikes term , Calyx seg ovate-
19132 Leaves linear elongated mucronate reticulated with revolute edges, Racemes loose terminal

19133 Leaves obovate retuse, Flowers racemose

19134 Leaves opp. rarely alternate ovate or ovate-lanc. muc entire silky white beneath, Stips minute subulate, Racs sub-compound, axillary shorter than leaves, Calyx silky, Wings and vexillum one-half shorter than the keel

19135 Erect or ascend , Lvs opp obl.-ov emarg. mucr retic. with subundulated minutely dentic margs, Stips lanc subul , Flws sessile crwdd into 4-flwd drpng heads propped by 4 decus. ov.-coriac. brown bracts silky outside

19136 Branches angular, Leaves trifoliate, Leaflets broad linear acute, Keel bearded on the edges, Vexillum ample

19137 Leaves trifoliate, Leaflets linear glabrous with revolute edges, Racemes few-flowered, Calyx segments oblong-linear cuspidate [axillary at tops of branches, Keel bearded

19138 Branches and leaves villous, Lvs pinnate, Lflts linear subulate with revolute edges, Peds solitary terminal and
19139 Hairy upright, Lvs pin. glauc , Lflts 6-8 pairs lin obt with rev edges, Flws corymb., Keel brdd, Leg smooth
19140 Stem warted, Leaves trifoliate, Leaflets linear wedge-shaped mucronate, Calyx downy inside, Keel smooth
19141 Glabrous, Stems filiform smooth, Leaflets 3 linear-muc. with revolute edges, Flowers solit. pedunculate, Vexil emarginate twice the length of beardless keel [smooth above, Calyx hairy, Keel ciliated

19142 Pilose, Flowers capitate, Leaves impari-pinnate 3—4 pairs sometimes subpalmate, Leaflets linear subulate muc.



and Miscellaneous Particulars

segments, by the much greater length of the claws of the petals, and by the paucity of its ovules, which do not appear to exceed six in number. Mr. Kippist also compares it with *Leptosèma* Benth , which is clearly distinguished by its bibracteate calyx, composed of two nearly equal lips, the uppermost of which is slightly bifid, its scarcely unguiculate vexillum ; its wings about equal in length to the keel ; the distinct inflexion of the carinal suture, as well as by its inflorescence : that of *Leptosèma* being a densely crowded raceme, while in *Jansònia* the flowers are perfectly sessile, and arranged in a verticillate manner round a common axis, which is slightly prolonged beyond the point from whence the flowers spring in the form of a short mucrone The culture recommended for *Brachysèma* (p 342) will answer for *Jansònia* also.

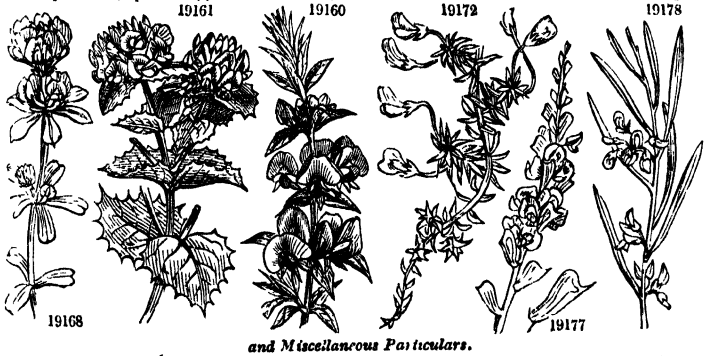
19143 -	- aristâtum *Benth.*	awned	♣ ⌴	or	2	su	Y	Swan R.	1837.	C	s p	
19144 -	- parvifŏrum *Benth.*	small-flowered	♣ ⌴	or	2	su	Y	K.G.S.	1837.	C	s.p	
19145 -	- venulŏsum *B.M.*	veiny-leaved	♣ ⌴	or	1½	jl.au	Y	N. Holl.	1830.	C	s p	Bot. reg 1574
	955 BURTO'NIA.											
19146	5720*a* pulchélla *Meisn.*	neat	♣ ⌴	or	2	ap my	P	Swan R.	1846.	C	s l p	Bot. mag 4390
19147 -	- villŏsa *Meisn*	villous	♣ ⌴	or	2.	my jn	P.Y	Swan R.	1846.	C	s.l p	Bot. mag. 4410
	956. JACKSO'NIA.											
19148	5722*a* Sternbergiàna *Hug*	Sternberg's	♣ ⌴	or	...	aut	Y	Swan R.	1837.	C	s.l.p	Hug. b. a. 3
19149 -	- floribúnda *Endl.*	bundle-flwd	♣ ⌴	or	...	my.jl	Y	Swan R.	1828.	C	s.l.p	
	958 SPHÆROLO'BIUM.											
19150	5726*a* acuminâtum *Benth.*	acuminate	♣ ⌴	or	3	jn.au	Y	K G S.	1842.	C	s.p.l	
	959. AO'TUS.											
19151	5727*a* gracíllima *Meisn.*	very slender	♣ ⌴	or	3	my	Y R	Swan R	1844.	C	s.p.l	Bot. mag 4146
19152 -	- lanígera *Cun.*	wool-bearing	♣ ⌴	or	2	my	Y	Moret B	1826.	C	s.l p	
19153 -	- cordifŏlia *Benth.*	heart-leaved	♣ ⌴	or	3	my.jn	Y	Swan R.	1848.	C	s.l.p	Moor. m.l 161 ic
	Gastrolŏbium Hugèlii Henfr	in Moor mag l 41. ic. 161 ic										
19154 -	- Drummŏndi *Moor.*	Drummond's	♣ ⌴	or	3	my jn	Y.R	Swan R.	1850.	C	s.l p	Moor. c l 97ic
	960 DILLWY'NIA.											
19155	5733*a* clavâta *Paxt*	clavate	♣ ⌴	or	3	ap my	Y R	Swan R.	1841.	C	s.l.p	Px. m. 11 5 ic
19156 -	- speciŏsa *Paxt.*	showy	♣ ⌴	or	2	my.jn	O.c	N S W.	1838.	C	s.l p	Px.m. 7 27 ic
19157 -	- scábra *Schlecht.*	scabrous	♣ ⌴	or	2	ap jn	R	Adelaide	1850.	C	s.l p	Moor. c. 41 1
	961. EUTA'XIA.											
19158	5734*a* púngens *Swt*	pungent-lvd	♣ ⌴	or	4	ap jn	Y.o	N. Holl.	1825.	C	p.l s	Swt fl. aust
	Dillwŷnia pŭngens	Cun										
19159 -	- Bâxteri *Benth*	Baxter's	♣ ⌴	or	6	mr.jl	Y	N. Holl	1830.	C	p.l s	Flor cab 41
	963 GASTROLO'BIUM.											
19160	5736*a* acùtum *Hook.*	acute	♣ ⌴	or	1½	mr	Y R	Swan R.	1842.	C	s l p	Bot. mag 40
19161 -	- spinŏsum *Benth.*	spiny	♣ ⌴	or	3	ap.my	O R	Swan R.	1838	C	s.l p	Px.m 11 171
	Choræzèma oppositifŏlium Hort.											
19162 -	- velutínum *Lindl.*	velvety	♣ ⌴	or	2	ap my	O	Swan R.	1850.	C	s l p	Px fl g 3 76
19163 -	- calycínum *Benth.*	large-calyxed	♣ ⌴	or	2	ap jn	Y	Swan R	1851.	C	s l p	Moor. c l 10
19164 -	- ovalifŏlium *Henfr.*	oval-leaved	♣ ⌴	or	2	ap jn	Y o	Swan R.	1850.	C	s.l p	Moor c. l 41
16165 -	- cuneâtum *Benth.*	cuneate-leaved	♣ ⌴	or	2	ap.jn	Y	Swan R.	1850.	C	s l.p	Moor c l 49
19166 -	- villŏsum *Benth*	villous	♣ ⌴	or	3	my jn	R c	Swan R.	1845	C	s l p	Bot. reg 1847
19167 -	- pyramidâle *Moor*	pyramidal	♣ ⌴	or	4	ap.jn	Y R	Swan R	1850.	C	s p l	Moor c l 81
	Oxylŏbium ovalifŏlium Lindl	Paxt fl g 3. 85., not Meisn										
19168 -	- retusum *Lindl*	retuse leaved	♣ ⌴	or	1½	my	O.s	N Holl.	1830.	C	s l p	Bot mag 332
19169 -	- obovâtum *Benth.*	obovate-leaved	♣ ⌴	or	1, ½	...	Y	Swan R.	...	C	s.l p	
19170 -	- Drummŏndi *Meisn.*	Drummond's	♣ ⌴	or	2	au.o	Y	Swan R.	1839.	C	s l p	
	965 PULTENÆ'A.											
19171	5750*a* ericæfŏlia *B M.*	Heath-leaved	♣ ⌴	or	1½	ap	Y	Swan R.	1848.	C	s l p	
19172 -	- pedunculata *Hook*	pedunculate	♣ ⌴	or	2	my	Y	N Holl.	1820	C	s l p	Bot mag 986
19173 -	- ericoides *Henfr*	Heath-like	♣ ⌴	or	1	ap	Y R	Swan R.	1848.	C	s l p	Moor m 114
19174 -	- brachýtropis *Benth*	short keeled	♣ ⌴	or	1½	ap jn	P o	Australia	1838.	C	s l p	
19175 -	- euchila *Dec.*	well-lipped	♣ ⌴	or	1	my jn	Y	N. Holl	1820	C	l p	
	Mycóstylis Sièberi Benth	*Dillwŷnia cuneàta* Sieb										
19176 -	- staphyleoides *Cun.*	Staphylea-like	♣ ⌴	or	2	ap.jl	Y	N. Holl	1824.	C	s l p	
	966. DAVIE'SIA.											
19177	5756*a* physŏdes *Cun.*	bladdery	♣ ⌴	or	3	ap jl	Y	N. Holl.	1823.	C	s.l p	Bot mag 4241
19178 -	- virgàta *Cun*	twiggy	♣ ⌴	or	2	jn	Br	N Holl.	1827	C	s.l.p	Bot. mag 3196
19179 -	- genistæfŏlia *Cun.*	Genista-like	♣ ⌴	or	2	ap.jn	Y	N. Holl	1830	C	s l p	Bot cab 1052
	genistoides B C											
19180 -	- polyphýlla *Benth*	many-leaved	♣ ⌴	or	2	ap my	Y	Swan R.	1842	C	s l.p	
19181 -	- ramulŏsa *Benth*	branchy	♣ ⌴	or	2	ap.my	Y	Swan R	1842.	C	s l p	
	Choræzèma diversifŏlia Meisn											
19182 -	- quadrilátera *Benth*	four-sided	♣ ⌴	or	2	ap my	Y	Swan R.	1840.	C	s l p	



History, Use, Propagation, Culture,

19177. *Daviesia physodes.* In Bot mag it is said that Mr. A. Cunningham has not mentioned the fruit in the character given. The truth is, that Mr. A Cunningham had nothing to do with the description given of the species

19143 Lvs sess. or on short petioles linear-subul. stiff mucron with revol. edges, Flws in the axils of upper lvs, Calyxes
19144 Lvs oblong-linear muc. retic. tapering a long way at base flat, Racs loose term. [long-awned, Keel ciliated
19145 Leaflts 3 linear-lanceol. veiny mucronate with revolute edges, Stipules longer than petioles, Peduncles subterminal solitary bibracteolate, Corolla longer than calyx
[lose inside
19146 Branches puberulous, Leaflets glabrous linear mucronate, Peduncles axillary bibracteate, Margins of calyx pi-
19147 Villous, Leaflets linear-subulate bluntish mutic scabrous from dots, Pedunc axillary bibracteate, Flowers large
[teral loosely racemose, Legume stipitate ventricose
19148 Branches loosely divaricate alternately branched, Branches angular spinescent at top smoothish, Flowers la-
19149 Phyllodineous branches oblong cuneated at base sinuately toothed quite glabrous veiny, Flowers racemose, Calyx silky longer than Corolla, Legume stipitate
19150 Branches terete, Tube of Calyx much shorter than lips, Keel oblong longer than vexillum subulately mucronate at apex, Style strght at base incurv. at apex
[1—3 together pil like calyx, Upper lip of cal. trunc. emarg
19151 Brnchs slend. nearly glab., Lvs scat. or nearly op. lin obt or mucron. convex abve with revol edges, Peds ax.
19152 Leaves narrow deep green pointed, Racemes dense-flowered, Flowers yellow with a few streaks of crimson
19153 Leaves ternately verticillate cordate-lanceolate mucronate with revolute wavy edges, Flowers verticillate
19154 Branches pilose stiff spreading, Lvs scattered or somewhat whorled stalked linear acute slightly scabrous little hairy, Veins prominent, Peds in twos or threes axil, Calyx pilose, Teeth of lower lip reflexed
19155 Lvs numerous sessile linear mucronate, Flws in clusters near ends of branches, Vexillum broad rather reniform
19156 Lvs linear twisted acute scabrous numerous, Branches scabrous, Corymbs terminal sessile
19157 Leaves terete obtuse hispid scab from the tubercles after the hairs have fallen, Corymbs terminal pedunculate few- or dense- flowered, Calyx downy
19158 Leaves scattered or verticillate acicular pungent with revolute edges, Peds few-flwd axillary crowded, Branches canescent, Ovarium villous
19159 Loosely branched, Leaves opposite or tern coriaceous mucronate veiny, Flowers axillary tern, Bracts minute
[illary few-flowered, Calyx villous, Ovarium sessile villous
19160 Branches villous, Leaves tern ovate acute mucronately pungent entire adult ones glabrous, Racemes short ax-
19161 Leaves nearly sessile opposite smooth heart-shaped, with equidistant spiny teeth, Flowers in clusters at end of shoots
[gins, Racs elongated terminal villous as are the calyx and ovary
19162 Velvety, Leaves tern nearly sessile cuneate-oblong or subbilobed mucronate with revolute subcrenulate mar-
19163 Branches glab, Leavs opposite or tern lanc. or oblong muc entire glauc., Racemes axillary and terminal loose few-flwd, Calyx large, Upper lip broad bifid, Ovary stipitate villous
[minal scaly, Ovary stip. vil
19164 Villous while young, Lvs opposite elliptic mucronate at length glab above, Stips large triangular, Racs ter-
19165 Lvs 4 in a whrl, rthr silky ben. cun subemrg muc., Racs term lfless, Flws whrld, Two upper tth of cal coher
19166 Villous, Lvs opp ov.-lanc. cord obt. mucr. undul., Bracts brown lanc, Ovarium stipit vil, Racs term axil
19167 Tomentose while young, Leaves 3 in a whorl oval or roundish mucronate glabrous above, Racemes axillary capitate, Bracts dark brown, Ovaries nearly sessile villous
19168 Leaves cuneate-oblong retuse rather silky beneath reticulated with a deciduous mucrone, Heads few-flowered
19169 Lvs op or scat. obov cun. acute muc. entire, younger ones and branches silky, adult ones glabrous, Racs axil-
lary dense few-flowered, Calyx silky, Upper lip bifid
[ther loose, Calyx downy
19170 Branches slender, Stips setaceous, Leaves tern lanceolate mucronate retic glaucous, Racs axil. and term. ra-
[many-flwd, Floral stips imbric connate by pairs into trifid bracts ciliated, Calyx bilab ciliated
19171 Brnchs downy, Stips persistent erect, Lvs scattered subterete with involedges mut glab., Heads term dense
19172 Peduncs axil twin elongated, Stips set, Leaves lin lanceol flat clothed with adpressed hairs as are branches, Heads at first terminal and then lateral, Bracts 2 longer than calyx
[ers crowded in heads
19173 Branches tomentose, Lvs scattered linear involute minutely tubercled ben hairy mucr, Stips subulate, Flow-
19174 Brnchs beset with loose silky hairs, Stips persist, Lvs on short petioles obl.-lin with rev pilose edges, Heads term leafy, Floral stips con by pairs forming brown membr trifid. brcts, Cal. bilab, Keel shorter than wings
19175 Flowers axillary and racemose, Leaves cuneated linear obtuse glauc glab, Stipules and bracts small, Calyx like that of *Euchilus*
[in the adult state reflexed, Stips lin, Branches villous
19176 Flowers sessile solitary axillary, Leaves ovate-acute pungent villous beneath when young, but only on the edges
[mucronate, Keel subrostrate shorter than wings
19177 Glaucous erect, Leaves linear terete upper ones verticillate dilated towards the points hatchet-shaped 2-nerved
[ered shorter than leaves bracteate at base, Branches incurved twiggy
19178 Leaves spatulate lin nerved apic. by a soft mucrone with a thickened edge, Racs axillary solitary about 4-flow-
19179 Glab. Branches erectish, Lvs terete striated linear-subulate stiff spinescent at top, Brnchs 4—5 times shorter than leaves, Keel obtuse
[flowered equal to the leaves
19180 Glabrous, Branches angular, Leaves linear oblong subfalcate spinescent short thick substriated, Racemes many-
19181 Glab, Branches terete striated or angular leafless, Florif. brnchs mutic min. bracteate, Sterile ones bi-trichot. spinescent at top, Racs term, Calyx bilabiate, Upper lip broad truncate, Lower one acutely tripartite
19182 Glab glauc, Brnchs terete, Lvs obl. 4-sided flat vertical fixed by the lower angle, inner angle rounded, outer angle spinescent, Spine of upper one tending upwds of lower one downwds, Racs many-flwd longer than lvs



and Miscellaneous Particulars.

The species are all pretty when in blossom. Like all leguminous shrubs, they make better plants when raised from seed than by cuttings.

19183 - - leptophýlla *Cun* narrow-leaved ♣ ⌴ or 2 ap jn Y N. Holl. 1824. C s l p
19184 - - cordàta *Smith* cordate-leaved ♣ ⌴ or 2 ap.jl Y K.G.S. 1824 C s l.p Bot. reg 1005

967. MIRBE'LIA.

19185 5758*a* floribúnda bundle-flwd ♣ ⌴ or 2 mr.ap P Y Swan R. 1838. C s.l p Px. m 8. 103 ic
19186 - - Meisneri *Hook.* Meisner's ♣ ⌴ or 2 ap.my R.P Swan R. 1847 C s l p Bot. mag 4419
dilatàta Meisn , not R. Br
19187 - - Báxteri *Mackay* Baxter's ♣ ⌴ or 2 my ... Swan R. 1838 C s l p Botanist, 114
Oxylóbium scándens Botanist, 114.

3010. 978*a*. COULTE'RIA *H B & Kth.* (*Thomas Coulter, M D*, author of a monograph on *Dipsàceæ*) *Legum*
19188 - - móllis *H. B & K.* soft ♣ ▭ or 8 ... Y St. Mrtha 1840. S p l
Cæsalpínia móllis Spreng.
19189 - - tinctòria *H B & K* dyer's ♣ ▭ or 8 O Popayan 1822. S p.l H B.& K 6 565
Cæsalpínia Tárra Ruiz & Pav. Fl per 4 t. 376. *C. tinctòria* Domb

3011. 987*c*. CUPA'NIA *Plum* (*Father Francis Cupani*, an Italian monk, author of Hort. Cath.) *Sapindàceæ*
19190 - - Cunninghàmi *Hook* Cunningham's ♀ ⌴ tm 60 ... Wsh N. Holl 1820 C l s p
Stadmánnia austrális Cun.

3012 989*a*. TURRÆ'A. (*George Turra*, an Italian botanist, professor of botany, Padua.) *Meliàceæ*
19191 - - pinnàta *Wall.* pinnate-leaved ♀ ▭ or .. ... Pk E. Indies 1828 C l p Bot reg 1413
19192 - - quercifólia *G. Don* Oak-leaved ♀ ▭ or ... ... W S. Leone 1842. C l p Bot. reg 1844, 4
lobàta Lindl.
19193 - - rigida *Vent* rigid ♀ ▭ or 50 ... Y Maurit. 1816. C s.p Vent choix 48

3013. 989*b* MUNRO'NIA *Lindl* (*Capt Munro*, E India Co 's service, a celebrated botanist.) *Meliaceæ*
19194 - - javánica *Lindl.* Java ♃ ▭ or 1 jn.jl W Java 1848. C s p Moor.m 3 32 1

999 CROWEA.

19195 - - latifólia *Paxt* broad-leaved ♣ ⌴ or 3 jn d Ro N. Holl. 1830. C s l p Px m 14 122 ic

2603. 999*a*. ERIOSTE'MON.

19196 17285 buxifólium *Smith* Box-leaved ♣ ⌴ or 2 ap jn Ro N S W. 1822. C s l p Bot. mag 4101
19197 - - scábrum *Paxt.* scabrous ♣ ⌴ or 1½ ap.jn W Pk N S W 1840 C s.l p Px m 13 127 ic
19198 - - intermédium *Hort* intermediate ♣ ⌴ or 3 su W N.S W 1845 C s l p Bot mag 4139
19199 - - myoporoides *Dec.* Myoporum-like ♣ ⌴ or 2 sp W N Holl 1824 C s l p Bot mag 3180

19200 - - nerilfólium *Swt.* Nerium-leaved ♣ ⌴ or 3 ap.my Ro N Holl. 1847. C s.l.p

2604 999*b*. PHEBA'LIUM.

19201 17286 Billardièri *Juss* Labillardière's ♣ ⌴ or 10 ap.my Ysh N. Holl. 1822. C s l.p Lab n h 1 141
Eriostemon squámeum Lab.

3014. 999*c*. ACRADE'NIA *Kipp* (*Akros*, the summit, *aden*, a gland, top of ovarium.) *Rutàceæ*
19202 - - Franklíniæ *Kipp.* Mrs. Franklin's ♣ ⌴ or 4 ap jn W V D.L. 1850. C s.l.p Bot.mag ic med
Zièria Franklíniæ Milligan MSS.

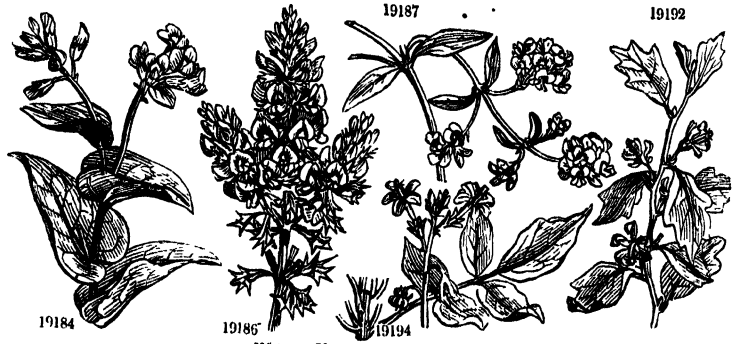
3015. 999*d*. DIPLOLÆ'NA *Desf.* (*Diploos*, double, *chlaina*, a cloak; double involucrum.) *Rutàceæ*
19203 - - Dampièri *Desf.* Dampier's ♣ ⌴ or 4 su G.c Swan R 1837. C s.l.p Bot mag 1667

3016 999*e* BIEBERSTEI'NIA *Steph.* (*Fred. Marshall Bieberstein*, author of the Flora Caucasica.) *Rutàceæ*
19204 - - odòra *Steph* sweet-scented ☿ △ or 1 my.jl G Altaia 1837. S p.l s

3017. 1012*a* AMMY'RSINE (*Ammos*, sand, *myrsine*, a myrtle; habitat.) *Rhodordceæ*
19205 - - prostràta *Swt* prostrate ♃ or ½ my.jn W N. Amer. ... L p l Swt fl g ic med
Lèdum buxifólium L No 5921 also belongs to this genus.

1014 RHODODE'NDRON

19206 5932*a* albiflórum *Hook* white-flowered ♣ or 2 jn W N Amer 1835. L p.l.s Bot. mag 3670
19207 - - californicum *Lindl* Californian ♣ ⌴ or 5 ... Monterey 1834 L p l s



History, Use, Propagation, Culture,

3010. *Coultèria.* The species are very showy when in flower. Their culture is the same as recommended for *Cæsalpínia*, p. 350. No 979 The wood of *Coultèria tinctòria* is used in dyeing.
3011. *Turræ'a* A mixture of loam, peat, and sand will suit the species, and ripened cuttings will grow in the usual way Their culture is the same as for any ordinary hothouse plant.
3012 *Munrònia japónica* is a small bush with pinnate leaves. It thrives with the culture and treatment of any ordinary stove shrub All of the plants belonging to the same natural order are trees of considerable size
3013. *Cupánia Cunninghámi* is a large timber tree, with ample pinnate leaves. A light loamy soil suits it best, and ripened cuttings will strike root, planted in the usual way
3014. *Acradènia* is a genus nearly allied to *Zièria*, both in habit and character. It is a pretty shrub, with snowy white conspicuous flowers and trifoliate leaves. A compost of sand, loam, and peat will suit it, and cuttings will strike root if treated in the ordinary way. In fact, the culture of *Zièria* will answer for *Acradènia*
3015. *Diplolæ'na.* A pretty, as well as singular, greenhouse plant, with drooping heads of flowers. A compost of loam, peat, and sand suits it well, and it is propagated by cuttings.

19183 Lvs linear-lanc. strongly nerved obtuse and mucronate coriaceous smooth, Peduncles few-flowered axillary
19184 Leaves cordate stem-clasping reticulated, Peduncles axillary aggregate corymbose many-flowered

[verticillate
19185 Branches villous, Leaves linear mucronate with revolute edges, Flowers numerous and appearing as if they were
19186 Leaves small fan-shaped narrowed on the short petioles deeply multifid at top, the segments spiny

19187 Leaves opposite spatulate oblong obtuse subcrenate mucronate sessile silky beneath, Racemes capitate 4—5-flwd terminal, Calyx reflexed

19188 Leaves calyxes and fruit downy, Leaflets oblong retuse, Petioles unarmed, Legume stipitate obtuse

19189 Leaflets glabrous oval emarginate, Petioles armed a little puberulous, Calyxes smoothish, Legume glabrous curved obtuse

19190 Leaves alternate with 2—3 pairs of large oblong retuse rather coriaceous opposite leaflets and an odd one, Young leaves and branches covered with rusty down, Panicles terminal

[with ligulate segments, Claws of petals connate
19191 Leaves impari-pinnate with 2—3 pairs of stalked cordate-lanceolate acute entire downy leaflets, Calyx downy
19192 Leaves cuneate at base triangularly 3-lobed at top somewhat 5-lobed, Pedicels solitary axillary 1-flowered

19193 Leaves elliptic acuminated stiff shining with revolute edges, Calyxes and petals smoothish

19194 Leaves impari-pinnate with two pairs of nearly opposite leaflets, lowest pair nearly cordate, upper pair oblong ovate, term. one much larger on a long petiole and occasionally lobed, Racs axil. few-flwd, Pedicels bibracteate

19195 Branches trigonal, Leaves ovate-lanceolate entire full of pellucid dots, Peduncles axillary 1-flowered

[Peduncles bibracteate, Filaments hispid, Petals oblong
19196 Leaves spreading ovate obtuse mucronate sessile, Branches round pilose, Flowers axillary on short peduncles,
19197 Leaves linear acute many-veined dotted, Peduncles 1—2-flowered, Petals oblong
19198 Branches downy, Leaves oblong obov glauc. mucron dotted beneath, Pedunes solitary 1-flwd, Filaments ciliated
19199 Leaves linear-lanceolate entire smooth dotted with glands mucronate, Branches round, Peduncles axillary bifid 3-flowered, Filaments a little fringed on the margin
19200 Leaves lanceolate marginate mucronate dotted, Peduncles axillary 3-flowered, Filaments bearded

19201 Leaves lanceolate entire covered with yellow rufous or silvery scales beneath, Branches angular, Peduncles axillary trifid 3-flowered, Stamens exserted

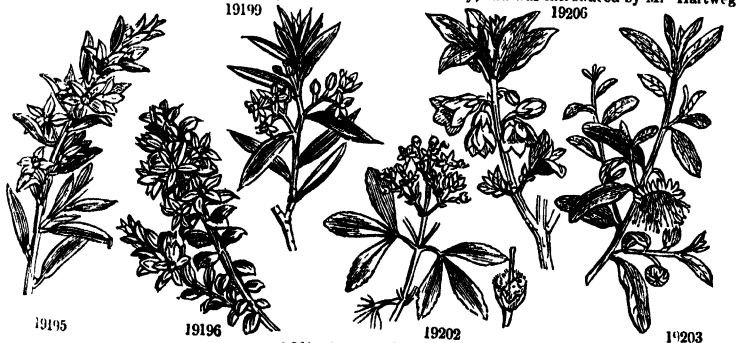
19202 Much-branched, Leaves opposite trifoliate smooth, Leaflets lanceolate serrated slightly warted paler beneath, Peduncles terminal trichotomous many-flowered, Bracts subulate

19203 Leaves oblong-ovate obtuse a little scabrous covered with stellate tomentum beneath, younger ones rather rusty

19204 Leaves pinnate, Leaflets roundish deeply toothed, Petals entire

19205 Prostrate, Leaves ovate-oblong flat smooth

19206 Lvs lanc.-acute clothed with rusty toment beneath, Limb of Cal short callous 5-lobed, Ovar toment 5-celled
19207 Not yet described that we know of, it grows in woods at Monterey, and was introduced by Mr Hartweg



and Miscellaneous Particulars.

3016 *Bucherstcinia.* This singular plant is beset with glandular hairs. It requires to be grown in pots among other alpines. It can only be increased by seed

3017 *Ammyrsine.* The species grow best in a peat border, and they may be propagated by layers or cuttings from young wood.

1014 *Rhododéndron* This genus is the most prominent in the Sikkim Himalayas and Nepal Seedlings have been reared in quantities from seed sent home by Dr. Hooker, but the plants will all probably require protection in severe weather in winter. Many of the species resemble each other in the foliage, particularly in the young state, but, nevertheless, they are distinct in the flowers and fruit, according to Dr. Hooker. They grow at elevations varying from 8000 to 16,000 feet; but it is especially between 10,000 and 14,000 feet the genus prevails, several species, comprising three quarters of the bulk of the vegetation The wood supplies the natives with fuel, and from its tough nature and property is easily worked into many domestic utensils, as spoons, bowls, &c. The bark is used like that of the birch in the arctic regions; and the leaves serve as plates and wrappers for butter, cream, cheese, &c At the elevation of 13,000 feet, the snowy mountains glow with the blood-red blossoms of the *R. fulgens*, whilst the beauty of

19208	5923*a*	myrtifòlium *Schott*	Myrtle-lvd			or	2	my	jn	R	Europe	1850.	L	s.l.p		
19209	5934*a*	cinnamòmeum *Wall.*	cinnamon			or	20	jn		W	Nepal	1820.	L	p l s	Bot mag.	4524
		β Cunninghàmii	*Cunningham's*			or	20	jn		W	hybrid	1840.	L	p l.s	Paxt mag	1. 16
19210	5934*b*	javánicum *Benn*	Javanese			or	4	year		O R	Java	1847.	L	s.l.p	Px. m	15 217
		Virrya javánica Blume.														ic
		β flávum Hook.	*yellow-flwd*			or	4	year		Y spot	Java	1847.	L	s.l p	Bot. mag	4336
19211	-	formòsum *Wall.*	beautiful			or	5	my jn		W	Khoseah	1837.	L	s.l p	Bot. mag	4457
		Gibsoni Paxt mag	8 217. icon.													
19212	-	Champiòni *Hook*	Champion's			or	...	...	...		Hong-Kng .		L	s l p	Bot mag	4669
19213	-	ciliàtum *J Hook*	ciliated			or	2	mr ap		Pa Lt	Sik Him	1850.	L	s l p	Hook rhod	26
		β roseo-álbum Hook.	*rosy white*			or	2	mr ap		Pa R	Sik Him.	1850	L	s l p	Bot mag	4648
19214	5934*c*	barbàtum *Wall*	bearded			or	30	mr my		Dk R	Nepal	1829	L	s.l p	Hook rhod	3
		camtschaticum Lodd Bot cab 1944						*lanceolàtum* Hook rhod			t 4					
19215	17290*a*	Rollissònii *Lindl*	Rollisson's			or	20	my.jn		Dk.R	dot Ceyl	1843.	L	s l p	Paxt. fl	g. 1 7
		xeylánicum Hort														
19216	-	Máddeni *J Hook.*	Madden's			or	6	jl au		W	Sik Him	1850.	L	s.l p	Hook. rhod	18
19217	-	Aucklándi *J Hook*	Ld Auckland's			or	8	my jl		W	Sik Him	1850.	L	s.l p	Hook rhod	11
		Griffithii Wight														
12218	-	argénteum *J Hook.*	silvery			or	30	my.jl		W	Sik. Him	1850	L	s l.p	Hook rhod	9
19219	-	lepidòtum *Wall*	scaly			or	3	my.jn		R	Nepal	1829.	L	s l p	Bot mag	4657
19220	-	campylocárpum *J Hook*	curve-frtd			or	3	...		Pa Str	Sik Him	1850.	L	s l p	Hook. rhod	30
19221	-	Dalhoúsii *J Hook*	Ld Dalhousie's			or	8	.		W	Sik Him	1850.	L	s.l p	Hook. rhod	2
19222	-	Thomsònii *J Hook.*	Dr Thomson's			or	10	jn		Dk R	Sik Him	1850.	L	s l p	Hook. rhod	12
19223	-	Hodgsònii *J. Hook.*	Hodgson's			or	12	my jn		Ro	Sik Him	1850	L	s l p	Hook rhod	15
19224	-	Edgwórthii *J Hook.*	Edgworth's			or	ep	...		W	Sik Him	1850	L	s l.p	Hook. rhod	21
19225	-	Falconèri *J. Hook.*	Dr Falconer's			or	30	...		W	Sik Him	1850.	L	s.l.p	Hook rhod.	10
19226	-	lanàtum *J. Hook.*	woolly			or	6	...		Crea	Sik Him	1850.	L	s l.p	Hook. rhod	16
19227	-	Wightii *J Hook*	Dr. Wight's			or	10	jn		Pa Y	Sik Him	1850	L	s l p	Hook rhod	27
19228	-	cinnabárinum *J. Hook*	cinnabar-cld			or	3	ap jn		R	Sik Him.	1850.	L	s l p	Hook. rhod	8
		Roylei Hook rhod t 7.														
19229	-	nilgáricum *Zenker.*	Nilgherries			or	20	my.jn		Ro W	Kamaon	1840	L	s.p l	Bot mag	4381
19230	-	glaúcum *J Hook*	glaucous			or	2	...		Ro	Sik Him	1850	L	s p.l	Hook rhod	17
19231	17291*a*	jasminiflòrum *Hook*	Jasmine-flwd			or	...	s		W	Malacca	1849	L	s l p	Bot reg	1982
3018	1014*b*	BRYA'NTHUS *D Don*	(*Bryo*, to sprout, *anthos*, a flower, fine low shrub)												*Ericàcea*	
19232	-	erectus *Lindl*	erect			or	1	ap		R	Hybrid	...	L	s l p	Paxt fl	g 1 17
		2665. 1016*a* PIERIS														
19233	-	phillyreæfòlia *Dec*	Phillyrea-lvd			or	1	ja		W	W Flor	1842	L	s p	Bot reg	1814 46
		Andrómeda phillyreæfòlia Hook icon t. 2 122														
3019	1016*b*	THIBAU'DIA *Wall*	THIBAUDIA	(*M Thibaud*, a French travelling botanist)											*Ericaceæ*	
19234	-	macrántha *Hook*	large-flowered			or	3	my		W R Y	Moulmein	1850	C	s.p.l	Bot mag	4506
19235	-	scabriúscula *H B & K*	roughish			or	4	ap		C	Quindiu	1850.	C	s.p.l	Px. fl. g	1 75 38
19236	-	pulchérrima *Wall*	most beautiful			or	10	ap my		R Y	N India	1849	C	s.p.l	Bot. mag	4303
19237	-	pichinchénsis *Benth*	Pichincha			or	6	s		Dp.R	Pichinch	1849.	C	s.l p		
		β glábra Hook	*glabrous*			or	6	s		D Ro	Columb.	1849.	C	s.p.l	Bot mag	4 14
3020	1016*c*	LEUCO'THOE *D Don*	LEUCOTHOË	(A mythological name.)											*Ericàceæ.*	
19238	-	púlchra *Dec.*	fair			or	3	my		W	Caraccas	...	C	s p.l	Bot. mag	4314
		Andrómeda púlchra Cham	*Agarista púlchra* G Don													



History, Use, Propagation, Culture,

the *R. campanulàtum*, and the great elegance and delicacy of the *R campylocárpum*, excite the more admiration from their being found in the region of fog and rain It has been insisted that many of the so-called species are of hybrid origin, but this is by no means clear, nor can it be ascertained. Some species are parasitical on trees, but these have been found growing even in clayey soil. They will readily grow in vegetable mould.

Rhododéndron ciliàtum has passed the winter in the open air, surrounded by a bank of earth 1½ foot high, but it flowered in the cool part of a greenhouse

R. javánicum is one of the most beautiful plants yet introduced; but it requires the protection of a greenhouse

19206 Leaves small ovate or obovate-elliptic pointed crenate dark green above and clothed with short shaggy woo beneath, Racemes about 5-flwd terminal, Peduncles shaggy

19209 Leaves lanceolate acute rusty beneath, Calyx woolly, Segments of Corolla 2-lobed with curled margins

β A hardy evergreen hybrid, Flowers white, two upper petals spotted

19210 Glabrous, Leaves oblong-obovate coriaceous acute lepidoted beneath, Flowers umbellate, Calyx obsolete, Corolla funnel-shaped, Segments of Limb obovate

β Flowers yellow, but in the species they are reddish orange colour

19211 Lvs like those of *Azálea* ovate-lanceolate mucronate ciliated dotted like the petioles whitish beneath and beset with scaly dots above, Flowers large white tinted with pink [Limb spreading, Bracts clammy

19212 Glandular hispid, Leaves lanceolate acuminate reticulate pilose beneath and glabrous above, Corolla reticulated,

19213 Hispid, Leaves elliptic-oblong coriac acute beset with rusty hairs ciliated lepidoted beneath, Peduncles ter-

β Flowers larger white tinged with rose colour [minal umbel. 3—6, Cor camp , Tube narrow, Limb large

19214 Leaves oblong-lanceolate acute yellowish beneath, Segments of Calyx dilated membranous, Ovarium 1-celled glandular hispid, Petioles midribs of leaves and branches bristly, Filaments glabrous, Bracts and buds viscid

19215 Lvs obl wavy rugged convex revolute covered with pale brown wool ben , Flws in heads, Peduncs woolly, Cal. obsolete, Cor cam [Cal 5-cleft, I bs unequal, Cor ample, Lbs entire, Stam 18—20 glab , Cap. 10-cld

19216 Twiggy Branches ped and under sides of lvs covered with rusty scales, Lvs ellip.-lanc acum., Peds 2—3 term ,

19217 Lvs ample obl -oval acute cordate at base pale ben , Flws large 3—5 term , Cal obscurely lbd, Cor with a campanulate tube, Limb spreading, Lbs bifid, Stam 12—18, Ov 12-cld gland , Stig disk-formed Caps cylind.

19218 Lvs amp obov -obl. ac glab silv ben , Bracts decid silky, Peds downy Cal short obsc lbd, Cor. large camp , Seg 2-lbd, Sta glab , Stig dilated [Fllms woolly at base, Cap scaly archd cylind gland 6-vlvd, Sta glab.

19219 Covd with rusty scale-like dots, Lvs spat -lanc rusty ben , Seg Cal rnd , Cor short camp lepido , Seg rndsh,

19220 Slend twig gland pil , Lvs ovate or oblong cord obt glab glaucescent ben , Heads term loose 6—8-fld, Calyx 5-lbd gland , Cor camp [Lb of Cal lobac obt , Cor camp 5-pitted at bot , Fllms pil at base

19221 Parasit slender, Bnchs remote verti , Lvs obov -ellip obt covd with rufous dots ben , Fls lge umbel 7 together,

19222 Bnchd, Lvs rndsh-ov blunt cord at base glab glauces ben, with recurv edges Corymb many-fld, Cal lge cup-shpd uneq -lbd, Cor camp , Limb spreding, Lobes emarg upper spotted, Ovar 6—10-celled cylind

19223 Lvs ampl obov -ellip obt rather cord at base glab above clthd with white tomen. ben , Heads lge 15—20-fld, Cal. obs , Cor camp , Limb short, Lbs emarg , Sta about 18 glab , Ovar downy vise 10-cld, Cap cyl tomen

19224 Epiph covered with rusty villous tomentum, Lvs on longish petioles elliptic ovate with revolute edges, Peds 2—3 terminal and lateral, Flws large, Lobes of Cal obovate unequal ciliated, Ovar. 5 celled, Cap oblong

19225 Lvs ample obov ellip cord at base glab above rusty ben , Hds glob dense, Peduncls downy and clammy, Cal. minute slightly lobed, Lobes of Cor deeply 2-lobed, tam 16, Ovar 18-celled hairy clammy Stig dilated

19226 Clthd with white or fulvous wool, Bnchs twisted, Lvs ellip obov or obl obt mucro glab above, Cory term. cap many-fld, Cal minute 5-lbd, Cor camp , Lbs of Limb entire, Stam woolly Cap cylind

19227 I vs large elliptic-lanceolate glabrous above but with rufous wool beneath, Heads many flwd, Bracts viscid, Cor campanulate straw-coloured large dotted with red, Limb reflexed, Stamens glabrous, Capsule cylindrical

19228 Bnchs slend twisted, Lvs ov -lanc acute with revo edges, and ruf scaly dots ben , I bs small capt., Lbs of Cal lin uneq beset with gland scale-like dots, Cor funnel-shpd I bs rndsh ac , Sta pil at base, Ovar 5-cld scurfy

19229 Leaves oblong-lanceolate acute with revolute edges and rusty tomentum beneath, Racemes terminal capitate, Calyx small 5-lobed, Corolla campanulate, Segments undulated 2-lobed, Ovarium hairy 10-celled

19230 Cvd with scales, Lvs ellip -lanc mucro naked above glaucous ben , Corymbs terminal 6—8-flwd, Cal 5-parted, Cor glandularly dotted camp , Lbs emarg , Stam downy at base, Cap sub-globose 5-celled glaucous scaly

19231 Glabrous, Leaves oblong-obovate acute, Umbel many-flowered, Corolla salver-shaped, Tube long straight, Lobe of Limb obovate undulate

19232 Erect-branched, Lvs linear obtuse slightly serrated, Peduncles pilose, Flowers corymbose, Sepals acute glabrous, Corolla campanulate 5 lobed, with scarcely any tube, Style exserted

19233 Leaves oblong convex serrated near the top, Racemes pilose axillary nutant, Sepals ovate, Anthers bisetose on the back

[red yellow at base and apex, Tube bellied with a contracted mouth, Style and Sta exserted rather long

19234 Glab , Bnchs rather pend , Lvs lanc acum entire, Peds extra-axil twin or tern pend , Cor white lined with

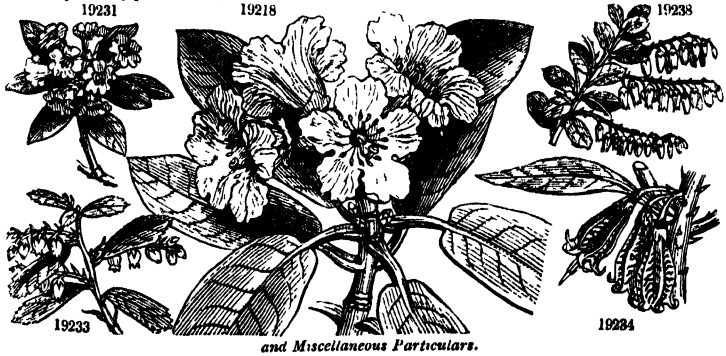
19235 Downy, Bnchs ter rough, Bnchlets ang downy fuscous, Lvs obl acum sub-cord rough from dots above downy on the nerves beneath, Cor downy [lateral umbels, Cor cylind pentagonal

19236 Glab , Old Bnchs florif , young ones foliif , Lvs broad-lanc subserrated, Flws numerous in sessile pendent umbels

19237 Branches angular furfuraceous hairy as also calyx, Lvs on short petioles oval-obl. rather scabrous on both sides,

β Glab or furnished with a few brown hairs on the under side of the leaves [Rac. axillary, Cor glabrous

19238 Glabrous, Branches angular, Leaves elliptic cordate obtuse or retuse mucronate coriaceous marginate, Racemes axillary solitary pedunculate, Flowers secund, Corolla ovate, Teeth of Limb small erect



and Miscellaneous Particulars.

3018 *Bryánthus erèctus* is said to be a hybrid between *Phyllódoce taxifólia* and *Rhododéndron Chamæcístus* It grows best where the sun does not shine It thrives well in damp, cold, shady pits

3019 *Thibaúdia pulchérrima* will grow well in a conservatory border, or in a Camellia-house or greenhouse, trained against a wall The flowers appear on the year-old wood, developing at Christmas, and expanding in April, and are beautifully variegated, like those of *Fritillária Meleágris* The other species will thrive with the same treatment

3020 *Leucóthoë*. This is a splendid genus of hardy greenhouse shrubs, with racemes of scarlet flowers. They thrive best in light peat soil, well drained, and they prefer a cool shady place in summer. Propagated by layers

19239 - - nerifôlia *Dec.* Nerium-leaved ▲ ⌐ or 3 my S Brazil 1849. L s.l.p Bot. mag. 4593
Andrómeda nerifôlia Schlecht. *Andrómeda crassifôlia* Pohl. bras 2. 121. *Agarista nerifolia* G Don
Andrómeda floribúnda Ph. No. 5958. and *Andrómeda spinulósa* Ph. No. 5954. belong to this genus.

3021. 1016*d*. LYO'NIA *Nutt.* (*John Lyon*, an indefatigable collector of North American plants.) *Ericàceæ*
19240 - - jamaicénsis *G. Don* Jamaica ▲ ⌐ or 10 jn jl W Jamaica 1793 L l.p s Bot. mag 4273
Andrómeda jamaicénsis Swartz. No. 5942. *fasciculáta* Swartz, as well as *Andrómeda* 5939, 5940, 5941 5946. 5949 5951, 5952, 5953., belong to this genus.

3022. 1016*e*. AGARI'STA *D. Don.* AGARISTA. (A mythological name.) *Ericàceæ.*
19241 - - buxifôlia *G Don* Box-leaved ▲ ⌐ or 4 jn jl S I. Bourb. 1822. C s.l.p Bot. mag. 2660
Andrómeda buxifolia Lam.
19242 - - salicifôlia *G. Don* Willow-leaved ▲ ⌐ or 3 my G.P Maurit. 1 33. C s.l p Bot. mag. 3286
Andrómeda salicifôlia Comm.

3023. 1016*f* GAYLUSSA'CIA *H B. & K* (*M. Gay Lussac*, the celebrated French chemist.) *Ericàceæ.*
19243 - - Pseùdo-Vaccínium *Dec.* False Bilb. ▲ ⌐ or 1½ my Ro Brazil 1843. L s.l.p Bot. reg. 1844 62
Andrómeda coccínea Schrad. *Vaccínium brasiliénse* Spreng.

3024. 1016*g*. MACLEA'NIA *Hook.* (*John Maclean*, of Lima, who introduced some of this species.) *Ericàceæ*
19244 - - punctàta *Hook.* dotted ▲ □ or 3 n Ro w.y Andes 1846. C s.l p Bot. mag. 4426
19245 - - angulàta *Hook* angular-brnchd ▲ □ or 3 jn S y Peru 1842 C s.l.p Bot mag 3979
19246 - - longiflòra *Lindl* long-flowered ▲ □ or 5 ... R And.Per. 1843. C s.l.p Bot. reg. 1844, 23

1018. GAULTHE'RIA.

19247 5962*a* bracteàta *G Don* bracteate ▲ ⌐ or 3 my jn Ro Andes ... L s l p Bot. mag. 4461
odoràta H B. & K. *erécta* Vent *cordifôlia* H. B & K *rígida* H. B. & K. *Andrómeda bracteàta* Cav.
Icon 6 t 528. f. 1
19248 - - ferruginea *Cham* rusty ▲ ⌐ or 2 my jn ... Brazil 1850. C s l.p Bot. mag 4607
19249 - - nummularioides *G. Don* Num.-lk ▲ ⌐ or . . jn jl W Nepal 1846? L s.l p Px fl g 2 164 226

1019 A'RBUTUS.

19250 5970*a* vàrians *Benth.* varying ▲ ⌐ or 2 my jn R.w Mexico 1846. L s.l.p Bot mag. 4595
móllis Bot. mag. *xalapénsis* Lindl.
19251 - - Lindeniàna *Planch.* Linden's ▲ ⌐ or 3 my.jn W Caraccas 1850 L s.p.l Px fl g.1. 112 79
19252 - - laurifôlia *L* Laurel-leaved ▲ ⌐ or ... ... N W Am. 1837 L s.l p Bot.reg. 1839, 67
19253 - - Menzièsii *Ph.* Menzies's ▲ or 10 ... W N.W Am 1827. L s.l p

2606. 1019*a* PERNE'TTYA.

19254 - - angustifôlia *Lindl.* narrow-leaved ▲ ⌐ or 2 jn.jl W Valdivia 1834. L s l.p Bot mag. 3889
19255 - - ciliàris *D Don* ciliated ▲ ⌐ or 1½ jn jl W Brazil 1849, L s l.p J. H. S 6 268 ic

3025. 1019*b*. ARCTOSTA'PHYLOS. BEAR'S GRAPE. (*Arktos*, a bear, *staphylos*, a bunch of grapes.) *Ericàceæ*
19256 - - nítida *Hook.* shining-leaved ▲ ⌐ or 4 my W Mexico 1836. L s.l.p Bot. mag 3904
discolor Dec. *Arbutus discolor* Hook *Arbutus nítida* Hort
19257 - - púngens *Kth* pungent-lvd ▲ ⌐ or 1 f W Mexico 1839. L s.l.p Bot mag. 3927
tomentòsus β Lindl. in Bot. reg. 1791

3026. 1019*c*. COMAROSTA'PHYLOS *Endl* (*Komaros*, the arbutus, *staphylos*, a bunch of grapes.) *Ericàceæ*
19258 - - arbutoides *Lindl.* Arbutus-like ▲ ⌐ or 6 my.o W Guatem 1840. L s l.p Bot. reg 1843, 30
19259 - - polifôlia *Endl.* Polium-leaved ▲ ⌐ or 2 my.o C Mexico 1840 L s.l.p

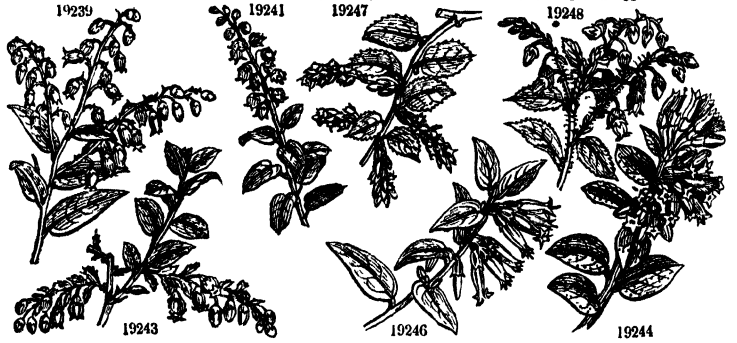
1020 CLE'THRA.

19260 5076*a* mexicàna *Dec* Mexican ▲ ⌐ or 10 su W Mexico 1840 L s p
19261 - - quercifôlia *Lindl* Oak-leaved ▲ ⌐ or 10 su W Mexico 1840. L s p Bot.reg 1842, 23
tinifôlia Schlecht.
19262 - - ferruginea *G Don* rusty ▲ ⌐ or 5 su W Peru 1838. L s.p Fl. per 4. 380 b
Cuellària ferruginea R et P syst.

2607. 1026*a*. LIMNA'NTHES

19263 17299*a* rósea *Benth* rosy-flowered ○ or ½ su Ro Californ. 1848. S co J. H. S 4 78 ic

19264 - - álba *Hartw* white-flowered ○ or ½ su W Californ. 1848. S co



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3021. *Lydnia.* The hardy kinds of this genus are best grown in a peat border, along with other American plants They are increased by layers put down in spring. The tenderer kinds, as the *jamaicénsis*, require to be protected from frost in winter. They are all ornamental, and therefore desirable evergreen shrubs.

3022. *Agarista* is a splendid genus of tender shrubs. They grow best in a warm part of a greenhouse, in a mixture of loam, peat, and sand, and cuttings of ripened wood will strike root under a hand-glass in the same kind of mould

3023. *Gaylussàcia Pseùdo-Vaccínium* is a very handsome, hardy, greenhouse shrub, with racemes of scarlet flowers It should be grown in a compost of sand, loam, and leaf mould, and treated in the same way as Cape Heaths. It is propagated by layers as well as by ripened cuttings.

3024. *Macleània* The species require a warm greenhouse, and are splendid shrubs while in blossom. A mixture of sand, loam, and peat will suit them Owing to their producing large fleshy roots, a large pot or tub will be required

19239 Glabrous, Branches terete, Leaves cordate oblong mucronate pungent coriaceous, Racemes axillary and terminal erect, Flowers secund, Corolla urceolate 5-parted

19240 Covered with scale-like dots, Branches angular, Lvs oval-lanceolate slightly serrate coriaceous, Flowers axillary numerous fasciculately subracemose, Corolla ovate, Ovarium hairy, Anthers bifid at top

19241 Leaves cordate-ovate mucronate downy rusty beneath, Panicle terminal downy composed of racemes, Flowers secund

19242 Lvs lanceolate attenuated white beneath, Racemes simple glabrous, Flowers secund, Corolla pale green inclining to purple

19243 Glabrous or downy, Lvs elliptic lanceolate, Racemes secund erect bracteate, Corollas ovate cylindrical, Ovarium glabrous or nearly so

[late, Limb spreading

19244 Leaves sessile cordate obtuse dotted coriaceous, Peduncles glomerate axillary and terminal, Corolla urceo-
19245 Leaves ovate obtuse, Axils 3-flowered, Corolla urceolate pentagonal
19246 Leaves sessile oval-oblong obtuse reticulated obsoletely triple-nerved, Axils 3-flowered, Corolla cylindrical angular

19247 Prostrate hispid, Leaves cordate-ovate acute ciliately serrated rather hispid beneath, Racemes terminal and axillary beset with glandular hairs, Bracts ovate coloured, Cal coloured pilose, Cor. ovate, Limb spreading

[ate, Bracts coloured

19248 Clothed with rusty hairs and glandular pili, Leaves ovate acute mucronate serrated, Racemes terminal bracte-
19249 Procumbent filiform bristly, Leaves cordate mucronate nearly sessile naked above hispid beneath, Pedicels axillary short solitary, Flowers drooping

19250 Downy, Leaves oblong entire or slightly serrated with a hard firm reddish edge, Flws disposed in short pyramidal panicles, Peduncles glandular and woolly, Calyx smooth, Corolla ovate
19251 Leaves resembling the *Camélita* in form but *A'rbutus* in texture, Flowers small pure white
19252 Leaves oblong acuminate at both ends acutely serrated glabrous, Racemes axillary secund sessile solitary
19253 Arborescent, Leaves broad-oval quite entire glabrous on long petioles, Racemes axillary and terminal panicled dense-flowered

[1-nerved, Pedicels axillary solitary 1-flowered naked

19254 Erect-branched, Branches pubescent angular, Leaves linear-lanceolate acuminate remotely serrated glabrous
19255 Dark green, Branches setose, Leaves ovate-lanceolate acute denticulated and ciliated with bristles, Peduncles glandular, Berries red

19256 Erect, Bark deciduous, Lvs lanceolate acute sharply serrated glabrous glaucescent beneath, Racs paniculately branched pilose
19257 Erect downy while young, Leaves oval or oblong coriaceous mucronately pungent entire, Racemes short terminal, Bracts acuminated

[minate shorter than the pedicels

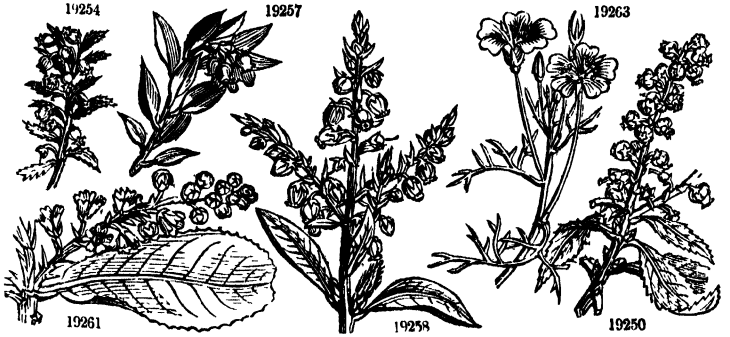
19258 Erect tomentose, Leaves linear-oblong entire mucronate green rusty beneath, Racemes panicled, Bracts acu.
19259 Erect tomentose, Leaves linear-lanceolate, Flowers racemose

19260 Leaves obovate obtuse 4 inches long clothed with white down beneath, Racemes panicled
19261 Leaves obovate-lanc acute denticulated wrinkled above tom. ben , as are the petioles, younger ones rusty, adult ones hoary, Racs loose so crowded as to appear panicled tomentose, Lobes of Corolla toothed ciliated
19262 Clothed with rusty hairs, Leaves oblong quite entire acuminated excavated at base, Racemes simple fascicled at tops of branches

19263 Leaves linear pinnate bipinnate or entire, Segment filiform undivided, Peduncles long, Petals bearded at base, Fruit corrugated

[Petals bearded at base

19264 Leaves elongated pinnate, Segments sessile ovate acute entire or 3-lobed, Peduncles very long, Calyx pilose,



and Miscellaneous Particulars.

it probably, they will succeed well planted out in a conservatory border. Water should be freely given in summer. To have the plant furnished well with young shoots, it will be necessary to cut it back early in autumn, in order to have the plant clothed with leaves before winter. They are difficult to multiply, but may be managed by cuttings under a hand-glass

19247 *Gaulthèria bracteàta* should be grown in a light peat soil, and placed in a cool airy pit or frame, and in summer it should not be exposed too much to the sun

3025 *Arctostáphylos* The hardy kinds are trailing evergreens, which grow best in peat soil, and are propagated by layering The rest may be cultivated and treated like the species of *Comarostáphylos*.

3026 *Comarostáphylos*, like the common kinds of *A'rbutus*, thrives best in a light sandy loam with a portion of leaf-mould The species may be budded on the common *A'rbutus* in July or August.

1028 QUISQUA'LIS.

19265 5998*a* sinénsis *B M.* Chinese ♣ ▭ or 10 jl Ro China 1842. C l.p Bot. reg. 1844, 15
indica Lour., not of Lin.

2608 1029*a*. CHÆTOGA'STRA

19266 17301*a* strigòsa *Dec.* strigose ♣ ▭ or 1 au Ro P W. Ind. 1848. C p.l Px m.15. 265 ic

3027. 1029*b* CHARIA'NTHUS *D Don* (*Charieis* beautiful, *anthos*, a flower.) *Melastomàceæ.*

19267 - coccínea *D Don* scarlet ♣ ▭ or 4 aut S Cayenne 1848. C s.l.p
Melástoma coccínea Rich *alpìna* Swz

3028. 1029*c* MERIA'NIA JAMAICA ROSE (*Mad Merian*, authoress of Met Ins. Surin.) *Melastomàceæ*

19268 - leucántha *Swz.* white-flowered ♣ ▭ or 10 ... W Jamaica 1825 C s.l.p
19269 - purpùrea *Swz* purple-flwd ♣ ▭ or 10 P Jamaica 1825. C s.l.p

3029 1029*d*. MEDINI'LLA *Gaud* MEDINILLA (Not explained by author) *Melastomàceæ*

19270 - magnífica magnificent ♣ ▭ or 5 su Pk Philipp 1848. C s l p Bot mag 4543
bracteàta Veitch
19271 - speciòsa *Blume* showy ♣ ▭ or 4 jl Pa.Ro Java 1845. C p l Bot mag. 4321
Melástoma speciòsa Reinw.
19272 - Sieboldiàna *Planch.* Siebold's ♣ ▭ or 4 ap.jl Ro Molucca 1850. C p l Bot mag 4600
19273 - erythrophýlla *Blume* red-leaved ♣ ▭ or 3 su Pk E Indies 1837. C p.l Pax. m. 9 79 ic

19274 - javánica *Blume* Java ♣ ▭ or 4 s d Pa Ro Java 1849. C p.l Bot mag 4769
Melástoma javánica Blume

3030. 1029*e* HETERO'TRICHUM (*Heteros*, variable, *thrix*, a hair, of different forms.) *Melastomàceæ*

19275 - mácrodon *Planch* long-toothed ♣ ▭ or 7 aut W Caraccas 1848. C p.l Bot. mag. 4421

3031. 1029*f* LASIA'NDRA *Mart* LASIANDRA. (*Lasios*, wool, *aner*, an anther.) *Melastomàceæ*

19276 - petiolàta *Grah* petiolate-lvd ♣ ▭ or 5 jn jl Pa P Brazil 1836 C s.l.p Bot. mag 3766
Pleròma petiolàta Benth, Paxt. mag 11 p 287. icon.

3032. 1029*g* PLEROMA *D Don* PLEROMA. (*Pleroma*, fulness, cells of capsule.) *Melastomàceæ*

19277 - Benthamiàna *Gard* Bentham's ♣ ▭ or 6 au.o P Brazil 1841. C p.l Bot. mag 4007
Kunthiàna Dec. *Lasiándra Kunthiàna* Paxt. mag 12 p. 125 icon
19278 - élegans *Gard.* elegant ♣ ▭ or 4 jn Psh R Brazil 1844. C p l Bot. mag 4264

19279 - Kunthiàna *Hook* Kunth's ♣ ▭ or 5 jl P Brazil 1847. C p l Bot mag 4412
Lasiándra Kunthiàna Dec

3033 1029*h* BERTOLO'NIA *Radd* (*Ant Bertoloni*, an Italian botanical author) *Melastomàceæ*

19280 - maculàta *Dec.* spotted-leaved ♣ ▭ or ½ su Ro Brazil 1848 C p.s Bot mag 4551

3034 1029*i* TETRAZY'GIA *Rich.* (*Tetra*, four, *zugos*, yoke, quaternary number of parts of flower) *Melast*

19281 - elæagnoides *Dec* Elæagnus-like ♣ ▭ or 10 jn au W W. Ind. 1848. C l.s p Bot. mag 4383
Melástoma elæagnoides Swz

3035 1029*k* OLI'NIA *Thunb* OLINIA (The name of a town in Spain) *Melastomàceæ.*

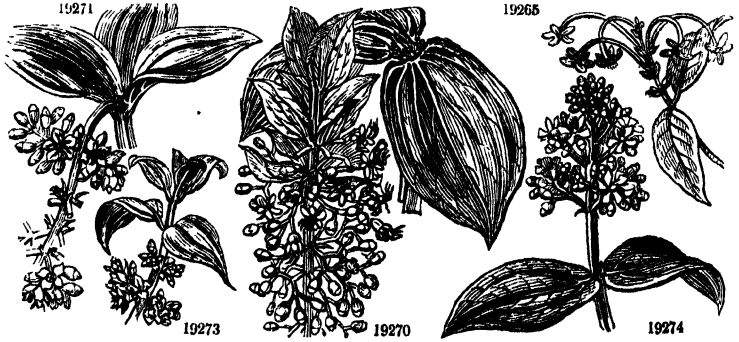
19282 - acuminàta *Lk & Ott* acuminate-lvd ♣ ▭ or 3 my.au G C G H 1841 C l p s
19283 - cymòsa *Lk & Ott.* cymose-flwd ♣ ▭ or 3 my au ... C G H. 1841 C l p s

3036 1029*l* ERIOCNE'MA *Naudin* ERIOCNEMA. (*Erion*, wool, *kneme*, a knee, joints) *Melastomàceæ*

19284 - æneum *Naudin* bronze ♣ △ or ½ my jl Ro Brazil 1850 D p s
19285 - marmoràtum *Naud* marble-leaved ♣ △ or ½ my jn Ro Brazil 1850. D p.s Px. fl g 1 271

2610 1034*b* DARWI'NIA

19286 17303*c* taxifòlia *Cun.* Yew-leaved ♣ ▭ or 3 my.jl W N.S.W. 1827. C s. l. p



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3027 *Chariánthus coccíneus* is a splendid shrub when in blossom. It requires only the treatment of other hothouse Melastomaceous shrubs

3028. *Meriània* These two species are the white and red roses of the mountains of Jamaica. They are splendid when in blossom in their native mountains. In this country they will thrive in a compost of loam, sand, and peat and half-ripened cuttings will strike root in the common way in the same kind of soil

3029. *Medinílla magnífica* is a most splendid plant, with broad leaves, large coloured bracts, and panicles of pink flowers. It grows and flowers freely in a mixture of loam and peat. The pots should be well-drained, so as to allow water to be liberally given during the season of growth without the risk of the soil becoming soddened It should also be frequently syringed over head A climate that suits the pitcher-plant will answer this The species are all remarkable for the beauty of their foliage, and the delicacy of their blossoms. They all require the same kind of culture.

3030. *Heterótrichum mácrodon* requires the treatment of other hothouse Melastomaceous shrubs.

3031. *Lasiándra.* The species are worth cultivating for the sake of their large panicles of showy purplish-blue

19265 Leaves oblong on short petioles glabrous as are the petioles and branchlets, Branches deciduous

19266 Branches tetragonal bristly, Leaves ovate acute entire scarcely 3-nerved bristly, Cymes terminal pedunculate few-flowered, Calyx hispid

19267 Downy while young but becoming glabrous, Branches nearly terete, Leaves oval acuminated entire 5-nerved clothed with flocky down beneath or small dots

[solitary 1-flowered, Bracts 2 ovate-lanceolate entire, Lobes of calyx subulate at apex

19268 Glabrous, Branches subtetragonal, Leaves ovate-oblong acuminated 3-nerved denticulated, Peduncles axillary,
19269 Glabrous, Branches terete, Leaves ovate-lanceolate 3-nerved denticulated, Peduncles axillary solitary 1-flwd Bracts 4 lanceolate denticulate, Lobes of calyx subulate at apex

19270 Branches compressed tetrapt bristly at nodes, Lvs opp coriac glab. sess obovate-obl. cordately stem-clasping cusp at apex 3-nerved, Panics term elong with the brnchs vertic , Bracts large col ured decid , Flws decid.
19271 Branches tetrapterous, Lvs nearly sessile 3—4 in a whorl rarely opposite oval-oblong 7—9-nerved, Pedunes terminal axil nutant, Flws 6—10-androus [minate 5-nrvd green above, Panes thyrsoid term pedunc nutant
19272 Brnchs terete stuposely boarded at the nodes, Lvs opposite on short thick petioles elliptic-ovate coriaceous acu-
19273 Leaves opposite on short petioles oblong-lanceolate acuminate 3-nerved, Cymes axil or on the naked branches below the leaves, Flowers tetramerous, Anthers dark purple
19274 Branches acutely tetragonal smooth, Leaves sessile elliptic-ovate 5-nerved subcordate at base, Panicles terminal axillary erect, Bracts obsolete, Anthers dark purple

19275 Branches petioles and cymes covered with long fulvous hairs, Leaves opposite unequal cordate-ovate acuminate serrated 7-nerved, Cymes many-flowered, Stamens 16, Petals obovate-cuneated

19276 Branches compressed pilose, Leaves opposite oblong-lanceolate subcordate at base, Flowers panicled at top of branches, Calyx setose

19277 Branches tetragonal villous, Leaves oblong-lanceolate rounded at base 9-nerved silky beneath, Panicles terminal glandularly pilose as are the calyxes, Style villous
19278 Hispid, Leaves ovate-oblong glabrous wrinkled above pilose beneath 3-nerved ciliated, Flowers about 3 together terminal, Pedicels short hispid, Bracts lanceolate ciliate, Calyx bristly
19279 Villous, Branches tetragonal, Leaves petiolate ovate-elliptic acute 5-nerved entire setose above and clothed with silky villi beneath, Pedicels hispid axillary terminal, Calyx hispid, Bracts large coloured

19280 Stem creeping-branched hairy as are the petioles and peduncles, Leaves broad-ovate cordate 5-nerved spotted hairy nearly entire purple beneath, Peduncles axillary, Flowers in unilateral cymes, Calyx hispid

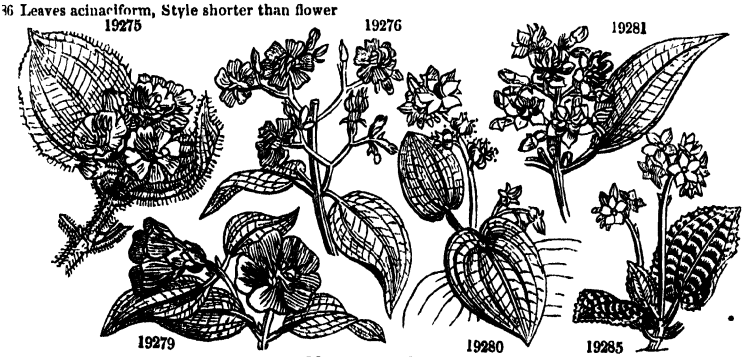
19281 Clothed with adpressed rufescent lepidoted powdery down, Leaves oblong 3-nerved glabrous above, Cymes panicled corymbose trichotomous, Calyx globose, Limb slightly 4-toothed

[dense cymes, Filaments red, Berries red

19282 Brnchs slender bluntly tetragonal, Leaves subcoriaceous oblong acuminate shining above, Flowers terminal in
19283 Branches bluntly tetragonal, Leaves obovate emarginately apiculated green above, Cymes axillary at ends of branches, Bracts rhomboid, Filaments white, Berries reddish

19284 Flower spikes scorpioid, Scape almost black, Leaves greenish almost black shining
19285 Stem short fleshy, Leaves hairy oval 5-ribbed oblong cordate green above and beautifully marbled with brown and white purple beneath, Scapes terminated by a spike, Flowers size of *Cyclamen*

19286 Leaves acinaciform, Style shorter than flower



and Miscellaneous Particulars.

flowers A compost of loam, sand, and turfy peat will suit them, and they require plenty of water while growing The pots should be well drained by sherds.

3032 *Plerôma.* The plants of this genus are similar to the *Lasiándra*, and their culture is the same

3033 *Bastolônia maculàta* is a pretty little creeping plant. It grows best in light soil, and is readily increased by cuttings. Abundance of water should be given during summer, or while the plant is growing

3034 *Tetrazygia* The culture recommended for *Lasiándra* will suit this shrub equally well.

3035 *Olíma.* These are greenhouse shrubs. They grow best in light rich soil, and cuttings root planted in the ordinary way under a bell or hand glass.

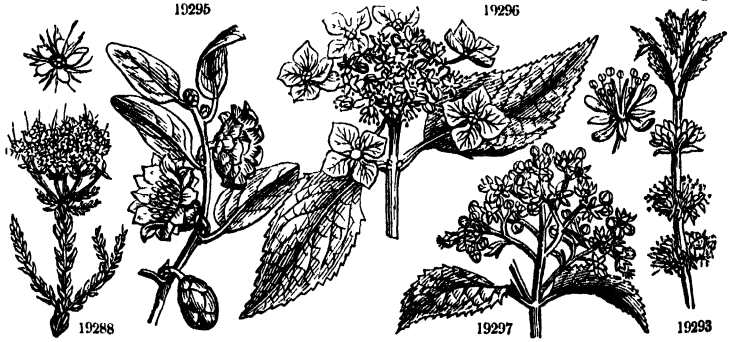
3036 *Eriocnêma.* These pretty plants are probably only annual The leaves of *E. marmoràtum* are green above, and beautifully marked with brown stains and broken streaks of white, and on the under side rich purple The blossoms are of a rich rose colour. The leaves of *E. æneum* are greenish brown, almost black, and shining with quite a metallic lustre These two plants are very delicate They are grown in peat, but require to be kept continually shaded and damp. The treatment of the tropical *Orchidea*, such as *Anæctochilus*, would suit them

3037.	1034*c.* VERTICO'RDIA *Dec*		VERTICORDIA.					(Meaning not given by author)								*Myrtàceæ*
19287 -	- Fontainèsii *Dec.*	Desfontaine's		or	4	my jl	W	N. Holl.	1826.	C	s.l p	Desf mem. 5 4				
	Chamælaúcium plumósum Desf															
19288 -	- Brównii *Dec.*	Brown's		or	...	ap my	W	N. Holl.	1836.	C	s p l	Desf. mem. 15 19				
	Chamælaúcium Brównii Desf.															
19289 -	- insígnis *B. R.*	showy		or	..	ap jl	Pk	Swan R.	1839.	C	s.p.l					
19290 -	- acerbsa *B. R.*	chaffy-leaved		or	...	ap jn	Y	Swan R.	1842.	C	s.p.l					
19291 -	- pennígera *Benth.*	feather-bearing		or	...	mr.my	L	Swan R.	1811.	C	s p l					
19292 -	- densiflòra *B. R.*	dense-flowered		or	...	ap.my	W	Swan R.	1841.	C	s.l.p					

DIGYNIA.

3038.	1038*a* ACROPHY'LLUM *Benth.*		(*Akros*, summit, *phyllon*, leaf, leaves at top of stem.)													*Cunoniàceæ*
19293 -	- verticillàtum *D Don*	whorl-flowered		or	3	my jn	W.R	N Holl.	1835	C	s l p	Bot. mag 4050				
	venòsum Benth.	*Weinmánnia venòsa* K. & W	Fl. cab t.					*Calycòmus verticillàta* D Don.								
3039	1038*b.* CO'DIA *Forst*		(*Kodeia*, a little ball, flowers in small round heads)													*Cunoniàceæ.*
19294 -	- montàna *Forst*	mountain		or	8	...	W	N. Caled.	1850	C	s.p.l	Lab. a. cal 46				
3040	1038*c* RHODOLEI'A *Hook*		RHODOLEIA			(*Rhodon*, a rose, red flowers)										*Hamamelideæ*
19295 -	- Championi *Hook.*	Champion's		or	10	...	Ro	H Kong	...	C	s.l.p	Bot. mag. 4509				
	1039 HYDRA'NGEA.															
19296	6048*a* japónica *Sieboldt*	Japan		or	3	my jl	Pa.Ro	Japan	1840.	C	p l	Bot. reg 1844, 61				
	β cærùlea Hook.	*blue-flowered*		or	3	my.o	B	Japan	1840.	C	p.l	Bot. mag 4253				
	Azùsa Sieboldt															
	2612 1039*a* ADA'MIA															
19297	17305*a* versícolor *Fortune*	party-coloured		or	3	jl.s	B w	H Kong	1844.	C	p l	Pax. fl. g 1 5				
19298 -	- sylvática *Meisn*	wood		or	3	jn s	Pa.B	India	1846.	C	p.l					
	Cyanùtis sylvática Reinw.															
	1041 SAXI'FRAGA															
19299	6051*a* ciliàta *Royle*	ciliated		or	½	my	W	N. India	1842.	D	s p l	Bot. reg. 1843, 65				
19300 -	- thysanòdes *Lindl.*	coarse-fringed		or	⅛	ap	W	N India	1844.	D	s p l	Bot. reg 1846, 33				
	6063 umbròsa															
	β serratifòlia Mak.	*serrated-lvd*		or	½	my	W spt	Ireland	hills	D	co	Eng bot 2891				
19301 -	- élegans *Mak*	elegant		or	½	my	W.spt	Ireland	hills	D	co	Eng bot 2892				
	Geum Hook.															
19302	6079*a* flagellàris *Wild.*	running		or	¼	my	Y	N Eur.	1820	D	s p	Bot. mag 4621				
	áspera Bieb *setigera* Ph.															
19303	6101*a* affinis *D Don*	allied		or	½	my.jn	W	Ireland	hills	D	co	Eng bot 2893				
	lævis Mack.															
3041.	1043*a* HOTEI'A *M & D*		(*Ho-tei*, a Japanese botanist mentioned by Sieboldt)													*Rosàceæ.*
19304 -	- japónica *M. & D*	Japan		or	3	jn	W	Jap.Nep.	1835	D	p.l	Bot. mag. 3821				
	Spiræ'a Aruncus Thunb.	*barbàta* Wall. Bot. reg 2011														
3042	1044*a* TU'NICA *F. & M*		TUNICA			(*Tunica*, a coat, bracts to flowers)										*Caryophýlleæ*
19305 -	- dianthoides *F & M*	Pink-like		or	1	jl.au	R.w	Candia	1838.	S	p l s	Fl. græc 383				
	Gypsóphila dianthoides Smith															
19306 -	- illýrica *F & M*	Illyrian		or	1	jl.au	R	Sicily	1838	S	co	Fl. græc 386				
	Saponària illyrica Lin. *Gypsóphila illyrica* Spr.															
	1046 DIA'NTHUS															
19307	6140*a* cruéntus *Fisch.*	bloody		or	1½	jn jl	R	Russia	1850	S	co	Px fl g 1 119 8				

19295 19296



19288 19297 19293

History, Use, Propagation, Culture,

3037. *Verticórdia* is a genus of pretty little plants rather difficult to cultivate. A mixture of sand, loam, and peat or vegetable earth, will suit them best. Cuttings will probably root if planted in silver sand with a bell glass over them.

3038 *Acrophýllum* only requires the treatment of an ordinary greenhouse shrub. A compost of sand, loam, and peat suits it best. It is a pretty plant when in blossom.

3039. *Codia* is a remarkable plant, lately introduced, in a living state, to this country. It requires the same culture as *Acrophýllum* or *Callicoma*.

19287 Calycine lobes linear ciliated, Bracts concrete on one side and separating lengthwise on the other, Leaves acicular

19288 Calycine lobes linear subulate bearded each ending in an awn, Bracts distinct, Leaves obtuse adpressed

19289 Calyc. lobes trif, Lobules multif, Segs wool-fmd beardl., Pets and sterile Fil. cil., Style beardl shorter than pets, Stigma subcap, Bracts distinct mutic, Lvs obov. triquet submucr. serrul on back, Peds elong. corym.

19290 Branches comp scab., Leaves acerose acum. glab, Upper or floral ones ovate, Corymbs dense, Bracts mutic decid, Seps multifid plumose, Pets many-parted glab, Sterile Filaments lanc pectinate, Anthers mutic

19291 Lobes of calyx multifid, Lobules linear pennately plumose, Petals deeply toothed, Style plumose, Leaves concave ovate imbricate mucronate hispidly ciliated, Pedicels short racemose subsecund

19292 Lvs lin. triq. obtuse, Corymbs capit many-flwd, Bracts deciduous cucullate under the apex, Tube of Calyx vill., Sepals unguiculate many-parted, Petals roundish downy fringed, Style bearded with forked hairs

DIGYNIA.

19293 Erect-branched, Leaves 3 in a whorl nearly sessile oblong cordate acute coarsely serrated glabrous coriaceous glaucous beneath, Stipules paleaceous persistent, Flws small numerous pedicll verticil, Capsule membranous

19294 Leaves elliptic obtuse entire glabrous coriaceous on jointless petioles, Stipules caducous, Flowers small white capitate, Heads of flowers globose pedunculate axillary

19295 Lvs alternate ellip -ov obtuse petiol, Flws capit 5 in each head coadunate at base, Involl double emulating a *Camellia* flwr, outer one of 5 silky brown lvs, inner one of numer rose-cld lvs, Fruit comp. of 5 radiat caps

19296 Leaves opposite on short petioles ovate-oblong glabrous sharply serrulated, Branches of flat dense cyme downy radiating, Flowers 4—6 on horizontal peduncles, Sepals usually 4 obovate serrated

β Flowers blue

19297 Leaves oblong-lanceolate acutely-toothed entire at base downy on ribs beneath, Panicle pyramidal, Branches cymose, Flowers heptamerous icosandrous

19298 Leaves oblong-lanceolate smoothish serrated from the middle upwards, Cymes nearly undivided on short peduncles, disposed in a crowded panicle

[Cymes panicled, Calyx ventricose 5-parted hairy, Segments foliaceous, Petals spatulate unguiculate

19299 Leaves obovate coriaceous ciliated subauricled at base, Petioles large sheathing, Peduncles stiff rather scabrous,

19300 Leaves obovate coarsely crenate toothed hairy fringed, Scape glabrous, Racemes crowded, Calyx smooth, Segments obtuse, Petals roundish

β Leaves oblong acutely and deeply serrated

19301 Lvs roundish smooth acutely serrate shining, Petioles broad flat above, Panicle racemose, Calyx reflexed, Filaments enlarged upwards

19302 Runners filiform proliferous at top, Stem erect simple 1—3-flowered beset with glandular hairs as are the calyxes, Leaves obovate glandularly ciliated, Petals persistent

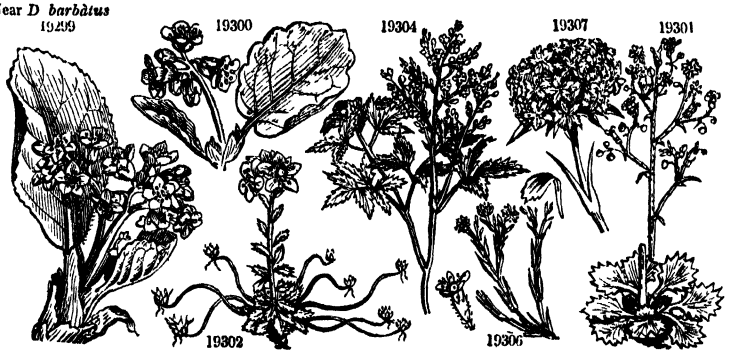
19303 Shoots trailing, Leaves 3—5-parted fringed with jointed hairs, Lobes linear acute, Cauline leaves few, Flowers few 2—4, Calyx segments subulate acute, Petals oblong inflexed at sides 3-nerved

19304 Leaves tripinnately cut, Petioles pilose coloured at the nodes, Terminal Leaflet ovate tapering to both ends hispid on the nerves

19305 Leaves obtuse, Flowers capitate, Bracts crowded pointed membranous, Petals obtuse quite entire

19306 Downy tufted at base fastigiate at top, Leaves linear 3-nerved, Calyx bractless, Petals obovate entire

19307 Near *D barbàtus*



and Miscellaneous Particulars.

3040 *Rhodoleia* is a very pretty small tree or large shrub, resembling *Camèllia japónica* both in leaves and heads of flowers. The culture and propagation recommended for *Camèllia* will also suit this plant.

3041 *Hotcia* is nearly allied to *Astilbe*, differing principally in the presence of petals. It is an elegant plant, of easy culture.

3042 *Tùnica* is a genus of pretty little plants, well suited for decorating rockwork. They may be increased by division, but better by seed. The genus is separated from the old genus *Gypsóphila*.

TRIGYNIA.

1048. SILE'NE.

19308 6198*a* lacinìàta *Cav.* cut-petaled ✻ △ or 1½ jn.au S Mexico 1822. D tfy.p Bot. reg. 1444
19309 - - speciòsa *Paxt* showy ✻ △ or 1 jn.au S Mexico ? 1842 D tfy p Px m 10 221 ic
19310 6240*a* Schâfta *S. G Gmel.* Schafta ✻ △ or ½ jn.o R P Russia 1844. D lt.m Bot. reg. 1846, 26

19311 6282*a* virginica *L.* Virginian ✻ △ or 2 my au S Virginia 1783. D p.l Bot. mag. 3342

1050 ARENA'RIA.

19312 6351*a* rubélla *Smith* reddish-flwd ✻ △ or ½ my au Rsh.W Scot. B.Lawers D s.l.p Eng. bot. 2638
cherlerwòides G. Don *hirta* Fl. dan 1646 *Alsine rubélla* Wahl.
19313 - - uliginòsa *Schlecht.* bog ✻ △ or ½ my.au W England bog.pl. D s.l.p Eng bot. 2890
Spérgula stricta Swz. *Alsine stricta* Wahl
19314 - - norvégica *Gunn.* Norway ✻ △ or ½ jl au W Scotland mntns D s l.p Eng. bot 2852

19315 - - bifìdra *L* two-flowered ✻ △ or ½ my au W Switzer 1818 D s.l p Jacq icon 83

3043. 1050*a* VIVIA'NIA *Cav.* (*D. Vivìani, M D*, an Italian botanist) *Caryophýllcæ.*
19316 - - grandifòlia *G Don* large-leaved ✻ ⌴ or 2 jl o R Chili 1832. C s p l
Macræ'a grandifòlia Lindl
19317 - - marifòlia *Cav* Cat-thyme-lvd ✻ ⌴ or 2 jl.o Ro Chili 1832. C s.p.l Bot. misc. 50
Macræ'a ròsea Lindl

1055 BANISTE'RIA.

19318 - - adenópoda *A Jus* gland-petioled ✻ ▭ or 10 ... ... Brazil 1840 C s.l p

2614. 1055*a* STIGMAPHY'LLUM.

19319 - - ciliàtum *Lindl* ciliated ✻ ▭ or 5 o Y Brazil 1840 C s l p Pax.m. 15 77 ic
Banistèria ciliàta Cav.
19320 - - jatrophæfòlium *Jus* Jatropha-lvd ✻ ▭ or 5 jl Y Uruguay 1840. C s.l p Bot r. 1844, 7
19321 - - heterophýllum *Hook* variable-lvd ✻ ▭ or 10 d Y Tucum. 1841. C s l p Bot mag 4014

3044. 1055*b*. HETERO'PTERIS *Dec* (*Hèteros*, variable, *pteron*, a wing; wings of fruit) *Malpighiàcæ*
19322 - - undulàta *Tenore* undulated ✻ ⌴ or 10 jl Y B. Ayres 1838. C s.l p

2617 DEU'TZIA

19323 1731*5a* staminea *R Br.* long-stamened ✻ or 4 my jn W Kamaon 1841 L lt m Bot. reg 1847 13

19324 - - grácilis *Sieb* slender ✻ or 4 ap my W Japan 1843. L lt.m Px. fl g 1 7 121

19325 - - corymbòsa *R. Br.* corymbose-flwd ✻ or 5 jn W Nepal 1838 L co Bot. reg 1840, 5

PENTAGYNIA.

2618 1060*a*. ECHEVE'RIA.

19326 1731*7a* láxa *Lindl* loose ✻ ⌴ or 1½ jl au Y Californ. 1847 C s l p
19327 - - farinòsa *Lindl.* mealy ✻ ⌴ or 2 jl au Lem Californ. 1847 C s l.p

19328 - - retûsa *Lindl* retuse-leaved ✻ △ or 1½ n ap C Y Mexico 1846 C s l.p Bot. reg 1847
19329 - - bractèosa *Lindl* bracteate ✻ ⌴ or 1½ jl au S Y Mexico 1846 C s.l p Px fl g 3 60 3
Pachýphyton bracteòsum Lk Ott & Kl
19330 - - ròsea *Lindl.* rosy-calyxed ✻ ⌴ or 1 ap P Y Mexico 1840 C s l p Bot.reg 1842 2
19331 - - lùrida *Lindl* lurid-leaved ✻ △ or ½ jn S Mexico 1840 C s l p Bot reg 1841,
19332 - - acutifòlia *Lindl* acute-leaved ✻ ⌴ or 1 ap S Mexico 1841. C s l p Bot reg 1842 90
19333 - - Scheèrii *Lindl* Scheer's ✻ ⌴ or 1½ o n C Y Mexico 1841. C s.l p Bot reg 1840
19334 - - bracteolàta *Lk & Kl* bracteolate ✻ ⌴ or 1 jn au S Y Caraccas 1846 C s.l p Lk Kl & Ott 4

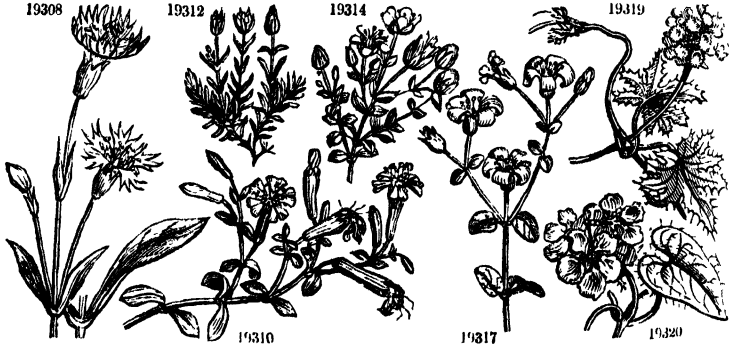
19335 - - secúnda *Booth* secund-flwd ✻ △ or 1 jn au R Y Mexico 1837. C s l p Bot reg 1840 57

1061 SE'DUM

19336 6427*a* kamtschàticum *F & M* Kamtschatka ✻ △ or ½ jl au B Kamtsch. 1829 C ru
19337 6428*c* Ewèrsii *Led.* Ewers's ✻ △ or ½ jl au Bd Altaia 1829. C ru Bot gard 513
19338 6433*a* multicaúle *Wall.* many-stemmed ✻ △ or ½ my jn Y Himalay 1838. C s l

1065 O'XALIS.

19339 6403*a* fruticòsa *Raddi* shrubby ✻ ▭ or 1 my jl Y Brazil 1840. C s l p Bot reg 1841 11
19340 6488*a* élegans *H B & Kth* elegant ✻ △ or ¾ jn s Vi Loxa 1846 O s l.p Bot. mag 4490



History, Use, Propagation, Culture,

1048. ***Silène speciòsa*** and ***S. lacinìàta*** being rather tender, will require protection in winter. They are fine plants with scarlet flowers. Turfy peat is the best soil for them. ***S. Schâfta*** is a fine plant for ornamenting rockwork.
3043. ***Vivìania*** is composed of pretty dry sub-shrubs with opposite exstipulate downy leaves, and rosy flowers

TRIGYNIA.

[duncles 1-flowered, Calyx cylindrical, Petals cut
19308 Downy, Stem erect branched, Leaves large lanceolate-acute, Flowers large terminal rather drooping, Pe-
19309 Hairy, Leaves sessile lanceolate bluntish, Flowers axillary and terminal, Calyx hairy, Petals deeply cut
19310 Root woody many-stemmed, Stems ascending simple, Peduncles 1—2-flowered, Leaves obovate acute, Flowers erect, Calyx long clavate, Petals cuneate denticulate
19311 Downy and clammy procumbent, Leaves lanceolate, lower ones on long petioles ciliated at base, Flowers large panicled, Calyx clavate, Petals broad bifid

19312 Tufted, Leaves awl-shaped smooth 3-nerved, Peduncles 1-flowered elongated downy, Sepals acute 3-nerved, Petals elliptic, Capsule 3—4-valved longer than calyx

19313 Ascending-branched, Leaves subulate semi-terete obtuse glabrous, Branches naked, Peduncles 1—3-flowered, Lateral pedics bibracteate, Sepals ovate-lanc 3-nerved about as long as petals, Caps 3-valved equal to sepals
19314 Glabrous, Stems terete procumbent 1—2-flowered, Leaves spatulate, Flowers terminal rather globose, Sepals ovate-obtuse hardly nerved equal to petals, Capsule ovate globose
19315 Procumbent-branched, Leaves ovate-roundish rather imbricate, Peduncles lateral few-flowered, Sepals ovate-obtuse shorter than petals, Capsule 3-valved length of calyx

19316 Leaves grey and glandular beneath with prominent veins, Branches pubescent, Peduncles shorter than leaves

19317 Leaves distant white and glandless beneath, Branches pubescent, Peduncles elongated

19318 Leaves ovate shortly acuminate glabrous above downy reticulated and glandular beneath, Glands pedicellate, Flowers smelling like Lily of the valley

19319 Leaves palmately 5—6-lobed or parted acute serrately ciliated cordate glabrous, Petioles biglandular at apex, Petals fringed [late, Lobes of calyx nearly orbicular with small glands, Petals fringed
19320 Glaucous, Leaves cordate oblique at base smooth ciliated, Petioles furnished with 2 glands, Flowers umbel-
19321 Rather pilose, Leaves ovate-obtuse mucronate or subcordate 3-lobed, Lobes oblong obtuse, Petioles biglandular, Umbels axillary many-flowered, Styles leafy at top

19322 Glabrous, Leaves narrow lanceolate entire undulated, Petioles short glandless, Corymbs few-flowered terminal, Calyx glandular, Petals undulated, Styles simple, Carpels villous

19323 Young branches covered with stellate down older ones glabrous, Leaves ovate-lanceolate serrulated clothed with white tom ben., Cymes trichot., Cal tom, Pet obl obt, Fils glab broad trifid, Anthers pilose, Style glab
19324 Branches long flexile and drooping, Leaves small wedge-shaped lanceolate or ovate-lanceolate serrulated covered with starry hairs, Racemes terminal on the lateral branches, Flowers small
19325 Leaves ovate acuminated serrulated downy as are the branches, Panicles corymbose, Calyx segments triangular acuminate, Filaments tridentate, Anthers glabrous, Styles 4—5

PENTAGYNIA.

[secund pedunculate
19326 Tufted, Leaves rosulate ovate pointed concave glaucous when young, Flowers loosely and racemosely panicled
19327 Caulescent dwarf, Leaves tongue-shaped flat acute white, adult ones green, Stems decumbent, Racemes secund corymbose panicled, Flws pedunculate [subcorymb, Branches few-flwd, Petals keeled gib at base
19328 Leaves obovate spatulate, old ones retuse glauc crenul, cauline ones linear-oblong quite entire, Panicle dense
19329 Leaves spatulate excavated glaucous crowded at top of branches, Racemes axillary simple or forked, Bracts drawn out into an acute gibbosity at base [Bracts coloured triquetrous, Cal. rose-coloured, Cor. yellow
19330 Caulescent, Lvs oval-acute terminal sometimes rosulate sometms imbricated, Spike cylindrical dense, Lower
19331 Lvs rosulate crowded oblong concave glaucous discoloured, Racemes nodding at tops, Flowers pedunculate
19332 Caulesc, Lvs subrhomboid acute concave rosulate at tops of branches, Pan dense cylin with 3—4-flwd branches
19333 Caulescent, Leaves ovate-acute lengthened into the flat petioles, Racemes nutant
19334 Lvs spatulate excavated glaucous crowded at tops of branches, Racs axillary simple or forked, Bracts drawn out into an acute gibbosity at base, Flowers secund, Pedicels bibracteate
19335 Leaves rosulate crowded cuneate mucronate glaucous, Racemes secund recurved, Flowers on long peduncles

[sessile compound, Petals acute
19336 Leaves opposite obsoletely denticulated adnate, lower ones broad elliptic, upper ones sessile cordate, Corymbs
19337 Glab, Lvs obov. lanc ser. altern. or subop., Stms ascend. creep. at base, Cym term. crowd shorter than floral lvs
19338 Stems many erect glabrous-branched tripartite at top, Flowers sessile unilateral along the branches, Leaves linear adnate, Sepals foliaceous
[Stamens all longer than styles, Cells of Ovar 1-seeded
19339 Shrubby branched, Pet. dilated foliaceous lanc. lin. acute at both ends, Pedun axil short bifid, Pedic. fascicled,
19340 Glabrous, Leaves trifoliate purple beneath, Leaflets deltoid, Scapes long 6—9-flowered, Sepals acuminate tipped by 1 linear orange glands, Stamens glabrous, Styles downy



and Miscellaneous Particulars.

posed in corymbose terminal panicles, and they may be either increased by cuttings or by seed.
3014. *Heteropterys.* This genus is nearly related to *Banisteria*, and its culture and treatment are the same as f r
at genus It is well suited for training up rafters in a conservatory.

19341 -	- lasiopétala *Zuc.*	woolly-petaled	▲ △	or	½	jl	Pk	B. Ayres	1841.	O	s.p	l	Bot. mag. 3932
19342	6534*a* lasiándra *Grah*	woolly-stamnd	▲ △	or	1½	my	Y	Mexico	1840	D	r.m		Bot. mag. 3896
19343 -	- díscolor *Lindl.*	two-colrd-lvd	▲ △	or	½,	su	Cre.C	Mexico	1844.	D	lt.m		Lk Kl & Ott 40
	2620. 1066*a* VISCA'RIA												
19344	6538*a* oculàta *Backh.*	dark-eyed	○	or	2	su	Pk R	Algiers	1843.	S	co		Bot. reg. 1843, 33
	3045 QUILLÁ'JA *Mol.*	QUILLAJA.					(*Quillai*, its name in Chili.)						*Quillàjeæ.*
19345 -	- Saponària *Mol.*	soap	▲	or	10	ap.jl	W	Chili	1832.	C	s.l	p	
	Q. Molinæ Dec.	*Q. Smegmadérmos* R & P.					*Smegmària emarginàta* Willd.						

Page 392. CLASS XI. — DODECANDRIA. 12 STAMENS.

Order 1. MONOGYNIA. 12 Stamens. 1 Style.

3046 1076*a*. *Ceratostèma.* Calyx 5-parted, foliaceous. Corolla tubular, coarctate at apex, 5-lobed. Stamens 12 Filaments very short. Anthers bluntly spurred at base Cells elongated at apex, filiform, almost totally free, each

MONOGYNIA.

	1076. BEJA'RIA.												
19346	6587*a* glaúca *H & B.*	glaucous	▲ □	or	6	...	R	Caracas	1826.	C	s.p.l		H B pl æq 2 177
19347 -	- coarctàta *H & B.*	coarctate	▲ □	or	5	...	...	Peru	1847	C	s p l		H B pl æq 2 121
19348 -	- cinnamòmea *Lindl.*	cinnamon	▲ □	or	4	...	...	Peru	1847.	C	s p l		
19349 -	- ledifòlia *H. & B.*	Ledum-leaved	▲ □	or	4	sp	P	Caraccas	1847.	C	s p l		H.B pl. æq 2 120
19350 -	- æ'stuans *Mutis*	glowing	▲ □	or	12	...	Ro	Peru	1846	C	s p.l		
19351 -	- Lindeniàna *Henrincq.*	Linden's	▲ □	or	4	...	C	Caxamar	1851.	C	s p l		Bot. mag 4132
	coarctàta B. M.												
	1091 PORTULA'CA.												
19352	6618*b* Thellusònii *Lindl*	Thelluson's	○	or	1	su	S	S. Eur.	1839.	S	p.s l		Bot. reg 1840,31
	grandiflòra rùtila B R	1839, Misc No. 114											
	2621 1092*a*. CALANDRI'NIA.												
19353 -	- umbellàta *Pax*	umbellate	▲ △	or	½	jn jl	R.P	Chili	1843.	C	s l.p		Px.m 12 271 ic
	Talinum umbellàtum R & P.												
19354 -	- paniculàta *Dec*	panicled	▲ △	or	1½	jl.au	P	S Amer.	1816.	S	s l		
	1096 HEI'MIA.												
19355	6641*a* myrtifòlia *H. Ber.*	Myrtle-leaved	▲ □	or	4	au s	Y	Brazil	1826.	C	s.l	p	
	Lythrum apétalum Spreng.												
	3046. 1076*a* CERATOSTE'MA *Juss.*	(*Keras*, a horn, *stema*, a stamen ; anthers spurred)											*Fricàceæ*
19356 -	- longiflòrum *Lindl.*	long-flowered	▲ □	or		...	C	Peru	1846.	C	s.l	p	Gar c 1848,87 ic
	1097. CU'PHEA.												
19357	6648*a* cordàta *R & P*	cordate-leaved	▲ □	or	1½	jn.au	S	Peru	1842.	C	lt p		Bot mag 4208
19358 -	- cinnabárina *Planch*	cinnab .eld	▲ □	or	1½	jn jl	C	Mexico	1850.	C	s.l.p		Px. fl g 1 89 60
19359 -	- silenoides *Nees*	Silene-like	○	or	1½	jn au	Bd.P	Mexico	1836.	S	lt m		Bot. mag 4962
19360 -	- ignea *A Dec.*	fiery	▲ □	or	1½	jl o	S.w P	Mexico	1845.	C	lt.p		Px m 13 267 ic
	platycéntra Benth.												
19361 -	- Llàvea *Lexar.*	La Llave's	▲ □	or	1½	d	Dp P	Mexico	1830.	C	s.l	p	Bot reg 1786
19362 -	- pubiflòra *B R.*	downy-flwd	▲ □	or	1½	jl.o	R.Y	Mexico	1844.	C	s.l	p	Bot. reg 1846, 14
	strigillòsa Hort.												
15363 -	- miniàta *D Don*	vermilion-flwd	▲ △	or	2	jn s	P Ve S	Amer.	1843.	C	s l	p	Px. m 14 101 ic
	β purpùrea Hort.	*purple*	▲ □	or	1½	jn jl	Psh	.....	1847.	C	s l	p	



History, Use, Propagation, Culture,

3045. *Quillàja Saponària.* This tree is quite hardy enough to stand our milder winters, and ripened cuttings will probably root if planted in autumn. The bark of the tree is used in Chili for soap.

1076. *Befària.* The treatment given to Indian *Azaleas* will suit the strongest kinds, and that of *Rhododéndrum*

19341 Root tuberous, Leaflets 3 obcordate bilobed downy beneath, Scape many-flwd, Petals and Sepals pilose the latter bipinnulate at top, Style erect shorter than stamens [toothed, Styles short diverging
19342 Lvs all radiating, Lflts 7—8-oblong spatulate entire, Scape umbellate many-flwd, Stamens unequal longer ones
19343 Bulb simple, Leaves ternate, Leaflets fleshy obcordate violet beneath, Petioles downy, Scape 2—3-flwd, Sepals biglandular at apex, Styles short glabrous

19344 Lobes of Calyx constricted, Appendages of Petals short emarginate, Capsule ovate granular

19345 Leaves oval usually toothed

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dehiscing by a terminal pore Stigma simple, obtuse. Berry 5-celled, many-seeded. Seeds small, angular.

Order 6. DODECAGYNIA. 12 Stamens 12 Styles.

3047 1110*a*. *Ædonum*. Calyx campanulate or turbinate, 6—12-cleft Petals as many. Stamens same number as petals. Ovaria equal in number to the petals, immersed in the receptacle at base Styles triquetrous. Stigmas acute, at length papillosely capitate Fruit follicular, dehiscing at base. Seeds obliquely subpyriform.

MONOGYNIA.

19346 Glabrous, Leaves oblong obtuse glaucous beneath, Racemes terminal and axillary, Pedicels somewhat fastigiate
19347 Branches villous, Lvs oval-acute densely imbricate with revolute margins glaucous beneath villous on midrib, Corymbs dense short, Peduncles covered with rusty tomentum, Calyx smoothish, Style exserted
19348 Brnchs downy hispid, Lvs slightly downy above, rusty tomentose beneath, Pans close term , Pedun woolly hispid
19349 Leaves oblong mucronate glaucous beset with glandular hairs along the middle nerve on both surfaces, Racemes terminal beset with clammy glandular hairs [Corymbs terminal simple beset with rusty glandular hairs
19350 Lvs elliptic nearly glabrous above, downy glaucous beneath, clothed with rusty toment while young, ciliated,
19351 Branches downy tomentose, Leaves oblong glabrous glaucous beneath, Corymbs large terminal, clothed with rusty tomentum

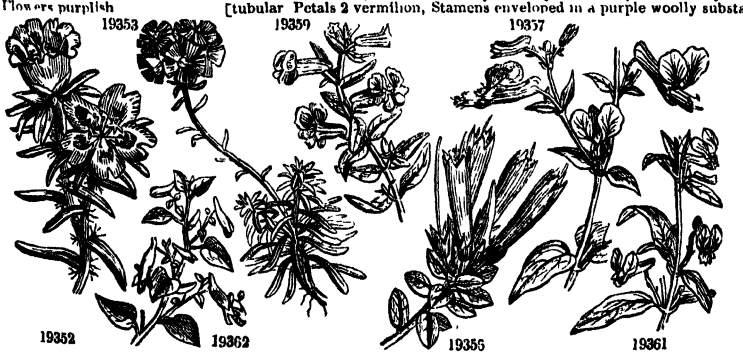
19352 Stem erect thready in the axils, Lvs subcylindrical obtuse, floral ones subverticillate, Flowers large terminal sessile, Petals 2-lobed

19353 Suffruticose procumbent, Leaves crowded linear acutish pilose, Peduncles elongated bearing a few distant small leaves, Corymbs terminal many-flowered, Bracts ciliated, Stamens 18—20
19354 Caulescent branched, Leaves obovate-oblong acuminated, Flowers panicled, Pedicels 5 times longer than bracts, Stamens 10—15

19355 Leaves nearly opposite or alternate lanceolate-acute smaller than those of *H. salicifolia*, Flowers nearly sessile, Capsules globose

19356 This plant is mentioned in the Gard. Chron as having been lately introduced

[spurred obliquely 6-toothed, Stamens 11, Two upper Petals large roundish, and 4 lower minute
19357 Downy suffruticose, Leaves oval opposite sessile entire, Racemes panicled bracteate, Calyx coloured bluntly
19358 Flowers crimson or deep purple. Distinguished from *Cuphea Llavea* by its panicled flowers
19359 Ascending clammy hispid from brown hairs, Leaves opposite oblong-lanceolate obtuse hairy, Flowers subspicate secund, Calyx tubular, Petals roundish stipitate, 2 larger than the rest
19360 Suffruticose, Branches compressed, Leaves petiolate oblong-acuminate rather scabrous, Pedicels winged, Calyx scarlet elongated 6-toothed, Spur dilated, Anthers black, Filaments smooth [obovate large, Stamens 11
19361 Stems numerous hispid, Brnchs ascending, Lvs nearly sess. ov-lanc strigose, Pedunc inter-foliac , Pets few
19362 Decumbent or erectish downy, Leaves ovate lanceolate, Ped uncles generally 2-flowered subracemose, Calyx clammy, Spur blunt, Petals 2, Stamens 11
19363 Leaves ovate-acuminate covered with white bristles, Flowers solitary axillary on short pedicels Calyx long 3 Flowers purplish [tubular Petals 2 vermilion, Stamens enveloped in a purple woolly substance



and Miscellaneous Particulars

cidsum the weaker. A damp atmosphere, and a free circulation of air, are necessary, but they are of difficult
ulture. They are splendid plants in blossom when well grown.
3046 *Ceratostema* Pretty shrubs, nearly allied to *Befaria*, and requires the same culture.

DODECAGYNIA.

3047. 1110*a*. *ÆO'NIUM Webb.* (A name of Dioscorides's for *Sempervivum arbóreum.*) *Crassulàcea*

19364 - - cruéntum *Webb* bloody ♃ ⊔ or 2 my Y Canaries 1834 C s l.p Bot reg 1841 6
19365 - - Youngeànum *Webb* Young's ♃ ⊔ or 3 jn Y Canaries 1842. C s.l p Bot reg 1844 35
Sempervivum Youngeànum Hort., and all the species natives of the Canary Islands and Madeira, belong to this genus.

P. 408. CLASS XII. — ICOSANDRIA. STAMENS many, perigynous, or inserted into the Calyx.

Order 1 MONOGYNIA. Many perigynous Stamens 1 Style

3048 1111*b*. *Echmópsis* Tube of Perianth much prolonged beyond the ovarium Sepals numerous, lower ones scale-formed, upper ones elongated, spirally imbricate, setigerous in the axils, petaloid, longer, more or less spreading, emulating a funnel-shaped or campanulate corolla Stamens in two series, one of the series inserted in the bottom of the tube, the other series connate with the tube Style filiform Stigma many-rayed. Rays linear Berry scaly, setose in the axils

3049. 1111*c*. *Leuchtenbérgia* Sepals numerous, adnate to the ovarium at the base, and combined into an elongated tube; outer ones calycine, inner ones petaline Stamens numerous, concrete with the tube Style thick, columnar Rays of Stigma about 10, recurved Ovarium 1-celled Ovula numerous, parietal

3050. 1112*a*. *Lepismium.* Sepals adnate to a pear-shaped ovarium, and combined into a short tube, outer ones 4—5, subimbricate; inner ones 5—7 petal-formed. Stamens filiform, in many series Anthers minute, reniform Style columnar. Stigma 4—5-rayed. Ovarium subglobose, smooth, crowned by the dry calyx.

3051. 1115*a* *Bellòtia* Tube of Calyx rather turbinate Limb 5-cleft Lobes valvate Petals 5 Stamens 10—30, free, shorter than petals Style filiform Stigma capitate Capsule 3-celled, many-seeded.

3052 1115*b*. *Babingtònia.* Calyx turbinate. Limb 5-cleft, persistent Petals 5, sessile, orbicular Stamens 15 3 opposite each petal. Anthers roundish, didymous, opening by a pore at apex. Ovarium 3-celled, many-seeded Capsule perforated at apex.

3053 1115*c*. *Lhótskya* Bracts twin, paleaceous, persistent, connate at base. Calyx with a 10-ribbed tube, and a 5-parted limb · Lobes short, scarious, obtuse. Petals 5, obovate Stamens numerous, unequal, exserted, inserted with the petals. Style filiform. Stigma dot-formed Capsule oblong, 10-ribbed, 1-celled, indehiscent, 1-seeded by abortion, the ovula being twin.

3054 1115*d* *Buckhoùsia* Calyx turbinate, villous, covered with imbricate caducous bracts outside Limb 5-parted, petaloid Petals 5, small, concave. Stamens numerous Fruit dry, coriaceous Ovarium adnate to the tube of the calyx at base, hairy, 2-celled

3055 1115*e* *Hypocalýmma* Limb of Calyx 5-parted. Petals 5, unguiculate, orbicular Stamens 20—30 Ovarium 2-celled, many-seeded Style filiform Stigma capitate.

MONOGYNIA.

2ᶜ25 1111*b* ECHINOCA'CTUS

19366 17357*a* conémus *Hort.* neat ♃ ⊐ gr ½ mr ap Y M Video 1828 O s p Bot. mag 411
orthacánthus Lk & Ott.
19367 - - Pentlándii *Hort.* Pentland's ♃ ⊐ gr ½ jl Ro Mexico ... O s p Bot mag 4124
19368 - - myriostigma *Salm* many-spotted ♃ ⊐ gr 1 jl Pa Str Mexico 1843 O s p Bot mag 4177
Astróphytu n myriostigma Lemaire.
19369 - - multiflòra *Hook* many-flowered ♃ ⊐ gr ½ jn W ..... . O s p Bot mag 4181
19370 - - Leeàna *Hook.* Lee's ♃ ⊐ gr ½ my jn Pa Y B Ayres 1840 O s p Bot. mag 4181

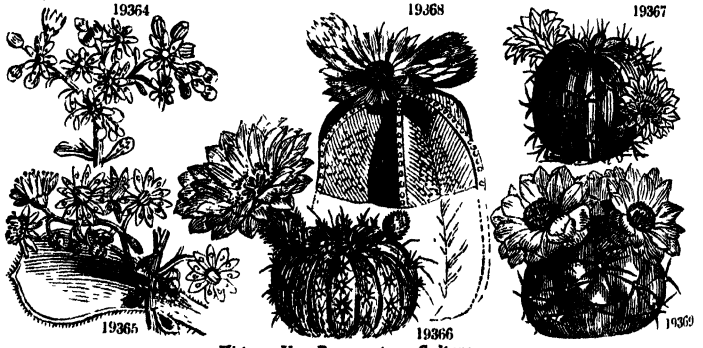
19371 - - pectinífera *Lemaire* comb-bearing ♃ ⊐ gr ½ ap my Pa.G Ro Mex. 1844. O s p Bot mag 4196
19372 - - Williámsii *Lemaire* Williams's ♃ ⊐ gr ½ jn jl W Ro Mexico 1845. O s p Bot mag 4296

19373 - - cinnabárina cinnabar-clrd ♃ ⊐ gr ½ jn jl R Mexico 1846. O s.p Bot mag 4576
19374 - - chlorophthálma *Hook* green-eyed ♃ ⊐ gr ½ jn jl P w R. del Monte O s p Bot mag 4373

19375 - - rhodophthálma *Hook.* red-eyed ♃ ⊐ gr ½ au Ro R Mexico ... O s p Bot mag 44[illegible]

β elliptica Hook. *elliptic* ♃ ⊐ gr ½ au Ro R Mexico ... O s p Bot mag 4661

19364 19368 19367



19365 19366 19369

History, Use, Propagation, Culture,

3047. *Æónium* Most of the shrubby species of *Sempervivum*, natives of Madeira and the Canaries, belong to this genus; as *Sempervivum tabulaeforme, Smithii, arbóreum,* &c. The species are both singular and ornamental.

DODECAGYNIA.

[lines beneath papillose on margins, Panicle cymose, Flowers 6—8-parted
19364 Branches covered with glandular down, Leaves cuneate-spatulate glabrous thick convex and marked with red
19365 Leaves thick dark green oboordate spatulate subtetragonal at the base obsoletely mucronate ciliated on the margin

3056 1117*a*. *Angóphora.* Tube of Calyx turbinate, marked with 5 prominent ribs: Limb of 5 persistent teeth Petals 5 Stamens indefinite. Style filiform Capsule covered by the corticate calyx, obovate, truncate, 3-celled, 3-valved. Seeds solitary or few.

3057 1117*b* *Callistémon.* Tube of Calyx half-spherical: Limb 5-parted Lobes obtuse Petals 5 Stamens numerous Style filiform. Stigma capitate. Capsule 3-celled, many-seeded, covered by and adnate to the thickened tube of the calyx, which is adnate to the branches

3058 1129*a*. *Cérasus.* Drupe globose or umbilicate at the base, fleshy, glabrous, containing a smooth, compressed stone Leaves conduplicate when young.

Order 2. DI-PENTAGYNIA. Many perigynous Stamens. 2 to 5 Styles.

3059 1136*a*. *Lindleya* Calyx with turbinate tube and a 5-parted limb. Petals 5 Stamens 15—20. Styles 5 Stigmas subclavate Capsule covered by the calyx, ovate, pentagonal, 5-furrowed, 5-celled, 5-valved, woody Cells 2- or only 1-seeded by abortion Seeds girded by a membranous edge.

3060 1136*b*. *Neillia* Calyx campanulate, free, 5-cleft Petals 5, roundish, sessile, inserted in the throat of calyx Stamens numerous, disposed in a double series, inserted with the petals Filaments smooth Anthers roundish, 2-celled Style smooth. Stigma obtuse Capsule follicular, 1-celled, opening on the inner side, many-seeded. Seeds spherical, shining, in two rows

3061 1136*c* *Adenóstoma.* Calyx funnel-shaped. Tube 5 angled Limb 5-parted Segments short Throat furnished with 5 fleshy, transverse, oblong glands inside Stamens 15, in the throat of the calyx Petals 5, ovate, roundish, shortly unguiculate. Ovarium solitary, sessile, ovate, compressed obliquely, truncate at apex, 1-celled, 1-ovulate Style sublateral Stigma obtuse

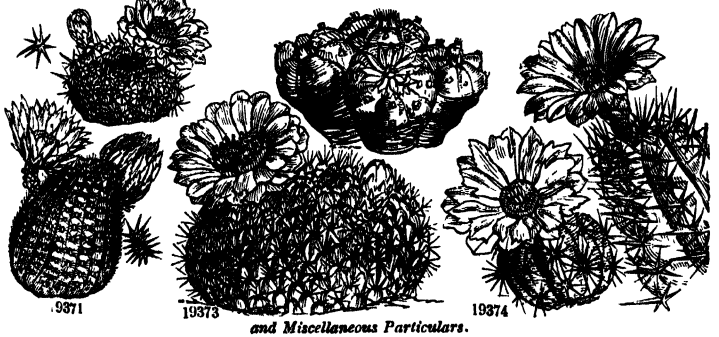
3062 1139*a* *Nagèlia* Petals small, spreading Stamens 10—15. Carpels 2 adnate to the back of the calyx one round, crowned by the calyx, fleshy, brittle Seeds 2 in each cell, compressed

3063 1141*a* *Schizonótus* All as in *Spiræ'a*, except the disk, which fills the bottom of the calyx. Ovula many, pendulous Carpels cohering into a 5-celled capsule, each splitting on the back to release the seeds Leaves pinnate

MONOGYNIA.

[Spines setaceous 8—10 one of which is longer and stronger
9366 Globose depressed glaucescent with about 10 ribs, Ribs obtuse sinuately crenated, Areolæ remotish woolly,
[Spines strong equal a little arched brownish, Flowers lateral scattered solitary, Calyx scales ciliated
9367 Globose umbilicate glaucous about 12-ribbed, Ribs elevated remotely crenated, Areolæ remote white woolly,
9368 Roundish-oblong 5—6-ribbed, Ribs prominent, Areolæ approximate woolly unarmed, Flowers rising from the umbilicate top of plant [tical series, Areolæ tomentose, Prickles 5 strong recurved nearly equal, Flws large
9369 Globose rather glaucous tuberculate hardly ribbed, Tubercles large mammæform disposed in an irregular ver-
9370 Glob depressed rather glauc, Tuber round large 6-sided mammæform confluent, Areolæ oval tomentose, Prickles about 10 slen. spreading, the cent. one long, Flws large [ones spreading subpect, in ones smaller, Pets ser.
19371 Rndsh-ov depressed about 20-ribbed, Ribs elev. obt, Areolæ approx white woolly, Prckls num of two forms, out.
19372 Tufted turb depressed glauc. 6—8-ribbed, Ribs broad convex tuberc unarmed, Pulv formed of dense fascicles of hairs, Flws small nearly solitary [tral one erect long, Flws solitary scattered, Tube of Calyx woolly
19373 Glob depressed green umbilicate, Tubercles conical, Areolæ small tomentose, Outer Prickles radiating, cen-
19374 Glom nearly glob. with about 10 deep furrows, Tubercles conical, Areolæ prom. woolly, Prickles 10—12 acicular radiant straight, central one stronger, Calyx scaly, Scales imbricate woolly at top, Stigmas radiant green
19375 Solitary tall conico-columnar deeply 8—10-furrowed, Ribs obt. tuberculate, Tubercles compressed round, Areolæ scarcely woolly, Prickles 9 strong straight purple, cent. one twice the size of the rest, Calyx scaly
β Plant elliptic

19370 19372 19375



19371 19373 19374

and Miscellaneous Particulars.

nd require the protection of a greenhouse. They look well on rockwork during summer, but the slightest frost lestroys them in this country, although in their native islands some kinds bear several degrees of it

19376 -	- streptocaúlon *Hook* twisted-stmd		▭	gr	1½	au	Y	Bolivia	1844.	O	s.p	Bot. mag. 4562
19377 -	- longihamàta *Galeotti* long-hooked *hamatacántha* Muhl.		▭	gr	½	jl	Y	Mexico	1846.	O	s.p	Bot. mag. 4632
19378 -	- centetèrea *Lehm.* many-spined		▭	gr	½	jl	Y.n	Mexico	1840.	O	s.p	Bot mag. 3974
19379 -	- tenuispina *Lk & Ott.* fine-spined		▭	gr	½	jl	Y	Brazil	1825.	O	s.p	Bot. mag 3963
19380 -	- corynòdes *Pfeiff.* club-shaped		▭	gr	½	o	Y.o	S. Amer.	1837.	O	s.p	Bot. mag. 3906
19381 -	- Visnàga *Hook.* Visnaga *ingens* Zucc.		▭	gr	7	...	Y	Mexico	1847.	O	s.p	Bot mag 4559
19382 -	- hexaedróphora *Lemaire* hexaedron		▭	gr	½	jn	W Pa.R	Tampico	...	O	s.p	Bot. mag 4311
19383 -	- Scòpa *H Berl.* Broom *Cáctus Scòpa* Lk. *Cèreus Scòpa* Dec		▭	gr	½	ap	Y	Brazil	1838	O	s p	Bot. reg 1839 21
19384 -	- Stainèsii *Hook.* Staines's		▭	gr	6	...	Y	Mexico	1847.	O	s p	

3048 1111b. ECHINO'PSIS Echinopsis. (*Echinos*, a hedgehog, *opsis*, resemblance, plants) *Cácteæ*

19385 -	- campylacántha *Pfeiff* curve-spined *Echinocáctus leucacántha* Gill Bot. reg 1840, 13		▭	gr	1	...	P Ro	Chili *Cèreus leucacánthus* Pfeiff.	...	O	s.p	Bot. mag 4567
19386 -	- cristàta *Salm* crested *Echinocáctus obrepándus* Salm		▭	gr	1	jn jl	W	Chili	1844.	O	s.l	Bot. mag. 4687
	β *purpùrea* Lk. & Ott *purple* *Echinocáctus obrepánda* β *purpùrea* Salm		▭	gr	1	jn.jl	P	Chili	1844	O	s l	Bot. mag 4521

2626. 1111c MAMMILLA'RIA

19387 17362*a*	pycnacántha *Mart.* dense-spined		▭	gr	½	jl	Y	Mexico	1841.	O	s.p	Bot mag. 3972
19388 -	- turbinàta *Hook.* top-shaped		▭	gr	½	jl	Str	Mexico	1838.	O	s p	Bot mag 3984
19389 -	- tetracántha *Salm* four-spined		▭	gr	½	jl	Ro	Mexico	...	O	s p	Bot. mag 4060
19390 -	- clàva *Pfeiff.* club-shaped		▭	gr	1	jn	Str	.....	...	O	s p l	Bot. mag 4398

3049. 1111c. LEUCHTENBE'RGIA *Hook.* Leuchtenbergia. (*Prince Leuchtenberg*) *Cácteæ*

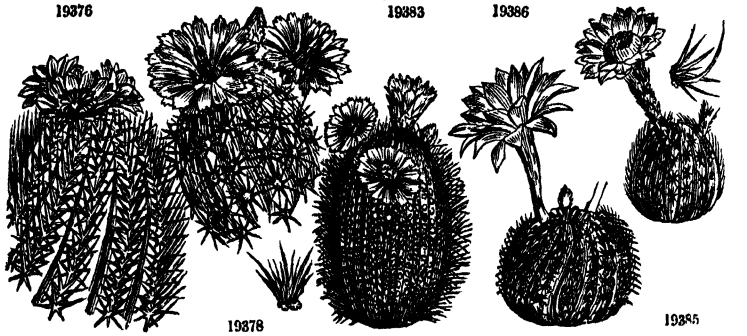
19391 -	- principis *Hook.* prince		▭	spl	1	jn jl	Y	Mexico	1847.	O	s l	Bot. mag. 4393

2627 1111*d*. CE'REUS

19392 17365*a*	Pitajàya *Dec* *undulòsus* Dec.	Pitajaya *variábilis* Pfeiff	▭	gr	6	jl	W	Carthagena	1836.	O	s l.p	Bot. mag. 4084
19393 -	- Leeànus *Hook.*	Lee's *Cáctus Pitajàya* Jacq	▭	gr	1	jn jl	R	Mexico	1845?	C	s.l p	Bot. mag 4417
19394 -	- Tweedièi *Hook.*	Tweedie's	▭	gr	3	jn jl	O	B. Ayres	1845.	C	s.l p	Bot. mag 4418
19395 -	- exténsus *Salm* *squamatus* Pfeiff	long-stemmed	▭	gr	6	au	Pa R	Trinidad		C	s.l.p	Bot mag 4066
19396 -	- cæruléscens *Pfeiff* *Æthiops* Haw	bluish	▭	or	3	jn.jl	W	Brazil	1829.	C	s p l	Bot mag 392
19397 -	- múltiplex *Pfeiff* *Echinocáctus múltiplex* Hort	many-flowered	▭	or	½	jn.jl	R	S Brazil	...	C	s l p	Bot mag 378
19398 -	- Martiànus *Zucc*	Martius s	▭	or	3	jn.jl	Ro	Brazil	...	C	s l p	Bot mag 373
19399 -	- reductus *Lk.* *Cáctus nóbilis* Haw No 6850.	restored *Hawórthii* Spreng.	▭	or	3	jn jl	W Pk	Mexico	1796	C	s l.p	Bot mag 441

2628. 1111*e*. EPIPHY'LLUM

19400 17369*a*	truncàtum	truncate	▭	or	...	...	...	.....	...	...	...	
	β *Russellianum* B M. *Cèreus Russellianus* Gardn	D of Bedfd's	▭	or	1	my	Pk	Brazil	1839.	C	s.p l	Bot. mag 371
19401 -	- crenàtum *G Don* *Cèreus crenàtus* B R.	crenated	▭	or	2	my	W	Hondur.	1839	C	s p l	Bot reg 1844
19402 -	- látifrons *Zucc* *Cèreus oxypétalus* Dec. Pfeiff.	broad stemmed	▭	or	10	au	Pa.Cre	S.Amer	1830	C	s l p	Bot mag 381
19403 -	- bifórmis *G Don* *Disocáctus bifórmis* Bot reg 1845, 9.	two-formed	▭	or	3	jn	Ro	Hondur	1839	C	s l p	Bot reg 1845



History, Use, Propagation, Culture,

19381. *Echinocáctus Visnàga.* This wonderful plant was found in Mexico, at San Louis Potosi, and is one of the largest and most remarkable of the *Cáctus* family In its native country it bears the name of *Visnàga*, which signifies a toothpick among the Mexican settlers, who use the spines for that purpose. The original plant, sent to the Royal Botanic Garden at Kew, was nine feet high, and nine and a half in circumference, and it weighed a ton After a year of apparent health it exhibited symptoms of internal decay, the inside became a putrid mass, and the crust, or shell fell in by its own weight. Other lesser ones are, however, in the collection at Kew. All the plants were procured with great trouble, by Fred Staines, Esq. The ovarium is elongated and densely woolly, and furnished with soft prickles or scales at top, and the petals are serrated

19376 Erect, columnar 12—14-furrowed spiral, Ribs and Furrows acute, Areolæ approximate naked, Prickles 8 fuscous straight, 7 radiating, central one 3 times larger and vertical, Flowers 3—4 terminal, Stigmas 9—12 linear
19377 Subglob. green 13 angld, Ribs strong acutish, Areolæ large obl. short-woolled, Out. 9 Prckls straight radiat., inner 4 strong, up 3 straight, cent one long flattened hooked [ment., Out. 10 Prickles slend., cent 4 stronger
19378 Subglobose tuberc. hardly umbilicate, Tuberc in 15 nearly vertical series confluent obl., Areolæ oval white to-
19379 Globose depressed 12—14-ribbed rather glaucous, Ribs obtuse, Areolæ white tomentose numerous, Prickles slender 12—18, of these 4—5 are twice the length of the rest, Flowers crowded, Petals serrulated
19380 Globose depressed obscure green 16-angled, Ribs arched crenate, Areolæ immersed, when young white and very villous, Outer Prickles 9 spreading reddish, central one erect brown all straight
19381 Lrge ellip many-ang. with nar. sinuses and deep sinuat. tuberc angles, top very woolly, Areolæ approx. rhomb immersed glab pale brown, Prickles 4 strong, cent. one 2 in long, the other 3 deflexed shorter, Flws copious
19382 Globose glaucous flat at top tuberculate Tubercles hexaedrous disposed in two series vertical and spiral, Areolæ immersed tomentose, Prickles 7 radiating unequal, central one longer stronger
19383 Oblong many-ribbed, fascicles of spines approximate woolly at base, Outer Spines 20—40 weak white, central 3—4 purple stiff, Petals in 2 series serrated at top
19384 This is nearly the size of *E. Visnàgo*, and was sent to Kew Gardens along with it, but has not been described

19385 Ovate glob. 14—16-ribbed, Ribs vert. obt., Areolæ large approx ellip woolly, Prickles acicular yellowish brown at top, outer ones 8—10 radiate 1 inch straight, central one very long 3 inches curved Cal rather scaly hairy
19386 Globose depressed green 17-ribbed, Ribs compressed, the Pulvinæ crestedly subrepand immersed rather crowded grayish tomentose, Prickles stiff, outer ones spreading, the central one longer, Flowers white
β Flowers purple

[strongest, Wool floccose in the axils of areolæ and about the flowers
19387 Roundish cylindrical, Mammæ broadish obscurely 2-lobed at top, Prickles 12 spreading recurved, inner series
19388 Glaucous roundish depressed contracted at base, Mammæ obtuse conical tetragonal umbilicate at apex, upper ones furnished with 3—4 erect acicular spines, the rest naked [olæ stiff, lower one longest
19389 Simple nearly globose, Axils woolly, Mammæ crowded slender angular, Prickles 4 from the nearly naked are-
19390 Simple clavately columnar glauc green, Axils tomen, Mammæ large elongated angular, Areolæ tomen term., Prickles straight elongated 8—10—12, central one longer and stronger, Flws 2—3 term large, Pets ser. at apex

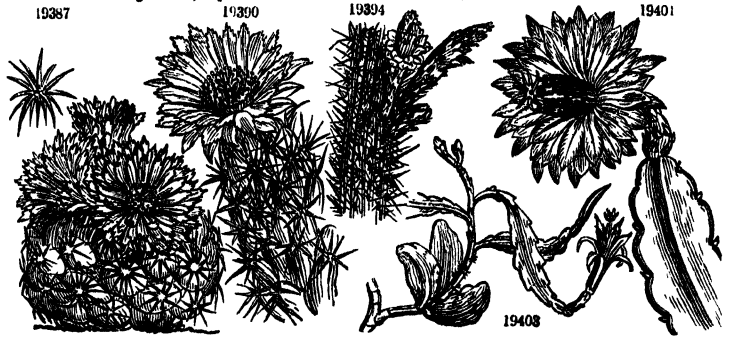
19391 Shrub fleshy cylindrical, Mammillæ elongated leaf-formed triquetrous truncate, lower ones deciduous, Spines glumaceous, outer ones shorter about 10, central one very long triquetrous at base

19392 Erect with long joints glaucescent, Ribs deep 4 sometimes 3—5 compressed obtuse undulately repand, Arcolæ remote white tomentose, Prickles stiff straight 4—6—8 unequal, outer ones stellately spreading brown
19393 Erect conico-cylindrical acutely 12—14-ribbed, Areolæ approximate tomentose usually 12-spined, Spines and Prickles acic. short, cent one 1 in long, Flws brick-red Scales of Cal green at top bristly, Pets obov -acute
19394 Erect cylin. many-angled glauc, Ribs obtuse equal, Areolæ copious brown woolly, Spines numer unequal 4—5 are stronger white all deflxd, Flws numer orange clrd, Scales of Cal remote, low ones cil, Stamens unequal
19395 Jointed radic green triang, Angles repand obt, Areolæ remote nearly nak, Prickls very short straightish 2—3, Bristles short decid, Fls large with cylin scaly tubes, Scales large clrd gradually changing to sepals and petals
19396 Erect bluish 8 angled, Ribs blunt crenated, Areolæ approx., Prickles acicular of two colours rising from black tomentum, about 12 radiating, 3—4 central, the upper ones usually the strongest, Petals undulately toothed
19397 Subclavate green attenuated umbilic at top, Ribs 13 vertical acute, Spines acicular, cent. 4 black at top and bottom, out 9—10 shorter yellowish radiat irregularly [white radiat, cent ones 2—4 brown hardly larger
19398 Fresh-brnchd 8-ang. with broadsh sinuses and scarcely prom ribs, Areo approx, Out. Prckls 6—8 bristle-lmd
19399 Erect large 5-angled with deep furrows, Spines numerous usually an inch long brown

19400 Erectish, Joints obovate truncate at both ends very blunt one-toothed having a cluster of hairs in the teeth
β Corolla with equal spreading sepals, Ovaries 4—5 winged, Stamens monadelphous at base

19401 Branches straight compressed biconvex having the margin exactly crenated green, Flowers large white, Stigma 9-rayed
19402 Branches large flat foliaceous green obtuse having the margins repandly toothed and the teeth truncate

19403 Prostrate weak, Adult Branches terete younger flat articulated crenate, flowering ones lanceolate terete at base, sterile ones oblong sessile, Sepals 4 narrow, Petals 4 broader, Stigmas 5



and Miscellaneous Articulata

3018 *Echinópsis* comes very near to *Echinocáctus*, and the treatment and cultivation of the species are similar to that required by those plants

3019 *Leuchtenbérgia* is a singular Cactean plant. Few persons, viewing it destitute of flowers, would imagine it to belong to *Cáctaceæ*: the mammillæ have rather the appearance of leaves of some aloid plant, while the stem, appearing as if formed of the persistent bases of old leaves, resembles that of some *Cycadeous* plant. The blossoms differ in no particular from those of *Cèreus*. The propagation and cultivation are the same as those for *Cèreus*, but it requires more moisture, being a less succulent plant.

19404 - - angùlifer *G Don* angle-bearing ☘ ▭ or 2 ja W.Br Mexico 1846 C s.l.p Px. fl. g 1. 34
Phyllocáctus angùlifer Lemaire
19405 - - cerulorhizus *G Don* rooting-stmd ☘ ▭ or 3 au.s Y.w Hondur. 1848. C s p l Mr m. 2 230 ic
Phyllocáctus caulorhizus Lemaire.

2629 1111*f* OPUNTIA

19406 17370*a* Salmiànus *Parm.* Salm-Dyck's ☘ ▭ or 2 s.o Su R Brazil 1846. C s l p Bot. mag 4542

19407 - - decúmbens *Salm* decumbent ☘ ▭ or ½ ju Pa Y Mexico 1838. C s.l p Bot. mag 3914
répens Karw. *trroràta* Mart

1112. RHIPSALIS.

19408 2911*a* bracteàta *Hook* bracteate ☘ ▭ cu 1 mr ... B. Ayres 1843 C s.l.p Bot. mag 4039
19409 - - pachyptera *Pfeiff* thick-winged ☘ ▭ cu 1 ap Y.Pk Rio Jan 1839. C s.l p
Cèreus alatus Lk & Ott
19410 - Hookerìana *G. Don* Hooker's ☘ ▭ cu 1 jl.o ... W. Ind. ... C s.l p Hook. ex fl 21
Cassytha Hook.

3050. 1112*a* LEPISMIUM *Pfeiff* Lepismium (*Lepis*, a scale, scales at crenatures.) *Cácteæ*
19411 - Myosùrus *Pfeiff* Mouse-tail ☘ ▭ gr 4 aut ... Brazil 1837 C s.l p Bot. mag 3765
Cèreus tenuispinus Haw *C. Myosùrus* Salm. *C. tènuis* Schæff
19412 - commùne *Pfeiff* common ☘ ▭ gr 2 su ... Brazil 1836. C s.l p Bot. mag 3763
Cèreus squamulòsus Salm *C élegans* Hort

1114. PHILADELPHUS.

19413 6917*a* verrucòsus *Schrad* warted ❀ or 8 jn W N Amer. 1800. L co Bot reg 570
grandiflòrus Ph Bot reg
19414 - speciòsus *Schrad* showy ❀ or 10 jn W N Amer 1815 L co Bot. reg 2603
19415 - Gordoniànus *Lindl.* Gordon's ❀ or 10 jn jl W Oregon 1823 L co Bot. reg 1849, 42
19416 - mexicànus *Schlecht* Mexican ❀ or 4 jn W Mexico 1840. L co Bot reg 1842 38
19417 - Satsùmi *Steb.* Satsumi ❀ or 5 jn W Japan 1850 L co P. fl.g 2 103 184

1115 LEPTOSPERMUM.

19418 6932*a* grandiflòrum *Smith* great-flowered ❀ ▭ or 5 ap jl W Ro N S W. 1803 C p l Bot mag 3119

3051 1115*a* BILLOTIA *R Br* (*Mdme Tecophila Billoti*, a famous botanical artist.) *Myrtàceæ*
19419 - - marginàta *G. Don* marginate-lvd ❀ ▭ or 5 jn jl W N Holl. 1820 C s l p Lab n h 2 148
Leptospérmum marginàtum Labill. *L flexuòsum* Spreng *Metrosidèros flexuòsa* Willd en
19420 - - flexuòsa *G. Don* flexuous ❀ ▭ or 5 my jl W N Holl 1824. C s l p Coll h ap 1.111
19421 - - theæfórmis *G Don* Tea-formed ❀ ▭ og 4 my jl W K G S 1828. C s l.p
Leptospérmum theæfólium Cun *hypericifolium* Ott *Agònis theæfórmis* Schaur

3052 1115*b*. BABINGTONIA. *Endl.* (*C C. Babington*, M A St John's Col, Cambridge.) *Myrtàceæ*
19422 - - Camphorósmæ *Endl* camphor-scntd ❀ ▭ or 7 su Pk w N. Holl 1841 C s l p Bot reg. 1842, 10
Bæckia Camphorósmæ Endl.

3053 1115*c*. LHOTSKYA *Schaur.* (*John Lhotsky* Ph D., a German botanist.) *Myrtàceæ*
19423 - violàcea *Lindl* violet coloured ❀ ▭ or ... V Swan R 1843. C s l p

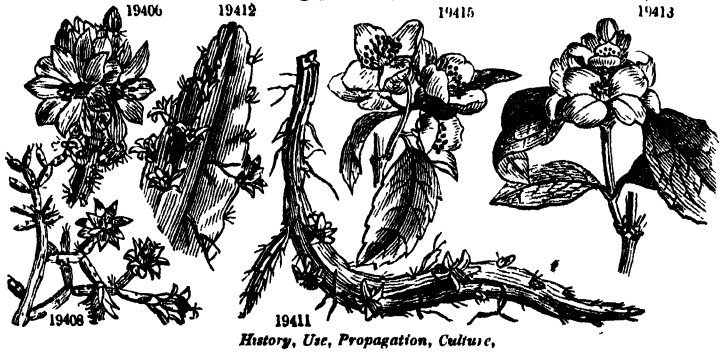
3054 1115*d* BACKHOUSIA *Hook & Harv* (*James Backhouse*, trav in Australia and S Africa.) *Myrtàceæ*
19424 - myrtifòlia *H & H* Myrtle-leaved ❀ ▭ or 10 su Pa Y N S.W ... C s p.l Bot mag 4110

3055 1116*a* HYPOCALYMMA *Endl.* (*Hypo*, under, *kalymma*, a veil, bracts hide calyx.) *Myrtàceæ*
19425 - - robústum *Endl* robust ❀ ▭ or 2 my Pk Swan R 1842 C s.p l Bot. reg. 1843 8
19426 - - angustifòlium *Endl* narrow-leaved ❀ ▭ or 2 jn au W Swan R 1842. C s p.l

19427 - - suàve *Lindl* sweet-scented ❀ ▭ or 2 jn au W Swan R 1844. C s.p l

1117 METROSIDEROS

19428 6936*a* buxifòlia *Cun.* Box-leaved ▲ ▭ or 10 jn W Y N Zeal 1845? C s.l.p Bot. mag 4616
scándens Forst
19429 - - robùsta *Cun* robust ▼ ▭ fra 80 jn S N Zeal 1845 C s.l p J. H. S 3 116



History, Use, Propagation, Culture,

3050. *Lepismium* is a genus composed of very singular plants in habit They require the same treatment as th species of *Cereus*.

3051. *Billòtia* The species are pretty shrubs when in blossom, and are well suited for conservatory plants compost of loam, peat, and sand is the best soil for them. Cuttings taken from young wood root readily if planted i sand with a bell glass over them

3052. *Babingtònia Camphorósmæ* is a greenhouse shrub, graceful in its habit, and not difficult to cultivate grows best in a rich brown peat and leaf-mould, and flowers freely during the summer months from the ends o pendent branches. Cuttings of young wood will strike root if treated in the usual way.

3053. *Lhótskya* is a genus of pretty heath-like plants They are rather difficult to cultivate A compost of ligh loam, sand, and peat suits them best; and young cuttings will strike root if planted in sand, placing a bell-glass ove them.

19404 Branches foliaceous stiff flat thick pinnatifid, Lobes almost rectangular triangles, Flowers brown outside and white inside, Sepals longer than petals, Stigmas 9—10

19405 Glaucescent articulated oblong compressed crenate, Scales in the crenatures larger than in the allied kinds, Rootlets numerous issuing from the joints, Flowers yellow outside but white inside

19406 Erect-branched pale green, Branches cylin , Areolæ crowded white tomen , older ones globose furnished below with 3—5 brownish prickles, Flowers glomerate Petals obovate-lanceolate sulphur-coloured tinted with red

19407 Decumbent obovate green, Areolæ crowded laniferous, Prickles of two forms, upper ones setaceous yellow, lower 1 or 2 strong white

[bearded, Flowers on the lower branches terminal solitary, Style exserted

19408 Erect much-branched, Branches scattered terete articulated dotted, Joints of branches short, ultimate ones

19409 Trailing, Stem flat, Joints leafy roundish-ov flat hanging down 3 in long 2 in broad with a thick prom woody midrib, Fls sol sess issuing from each crenat pale brownish yel their buds tinged with pnk, Pets ov. obl. obt

19410 Pendulous branches verticillate naked glabrous, Calyx 4-parted, Petals 4

19411 Plant diffusely suberect subarticulated, Joints elongated slender 3—4-sided, Margins acute crenulated purple, Crenæ remote furnished with white hairs and propped by foliaceous bracts

19412 Articulated erect subradicant pale green triangular, Ribs much compressed repandly crenated furnished with an ovate acute scale and numerous white hairs at the crenæ

19413 Leaves oval-elliptic acuminate denticulate downy beneath, Flowers racemose, Lobes of Calyx acuminated Style 4-cleft at apex [minate, Style deeply 5-cleft, exceeding the stamens

19414 Leaves ovate acuminate sharply serrate downy beneath, Flws solitary or by threes, Lobes of Calyx long acu-

19415 Branches pendulous, Branchlets downy, Leaves ovate acute coarsely toothed pilose beneath, Racemes compact term 5—9-flwd, Style 4-parted, Calyx spread [brous above Flws solit or by threes term , Petals roundish

19416 Branchs loose downy, Lvs ovate acuminate remotely denticulated or entire 3 nerved hairy beneath at length gla-

19417 Leaves ovate-lanceolate acuminate slightly serrated, upper ones long narrow rather hairy beneath, Flowers solitary or in pairs terminal, Calyx smooth, Styles divided almost to the base

19418 Leaves lanceolate mucronate tapering to both ends, Calyx villous with coloured teeth, Bracts glumaceous permanent

19419 Flowers capitate, Leaves obovate edged with white 3-nerved, lateral nerves obsolete at apex

19420 Flowers capitate, Leaves linear-lanceolate 3-nerved glabrous, Branches flexuous glabrous

19421 Branches crowded stiffish angular glabrous like the leaves, Heads axillary many-flowered silky villous, Leaves sub-distich ovate-elliptic or rndsh 1-nerved veiny inflexed undul complicate at apex mucr glabr on edges

19422 Leaves linear opposite nerved, Flowers in little cymes disposed in long terminal racemes

19423 Leaves linear triquetrous obtuse villous, Bracts obovate downy on the back with membranous margins equal to villous tube of calyx, Flowers capitate

19424 Leaves ovate acuminated with prominent nerves

19425 Leaves linear-lanceolate mucronate, Flowers axillary on short pedicels Heads many-flowered

19426 Branches twiggy tetragonal, Leaves remote spreading decussate sessile linear-subulate channelled convex on the back mucronate, Flowers axillary twin sessile interruptedly spicate

19427 Leaves filiform plano-convex glandular mucronate, Flowers twin axillary sessile, Stamens exserted

19428 Scandent, Branches hoary, Lvs quadrifarious ovate-roundish obtuse coria shining with rev edges beset with white scattered hairs on both sides dotted beneath, Flws in upper axils terminal, Pedunes short 3-flowered

19429 Lvs oval flat emarg , Flws crims in clusts with long crims stams surrounded by a green cup-shaped wavy disk



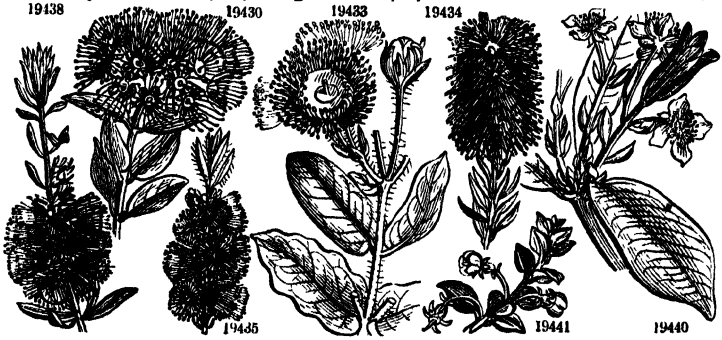
and Miscellaneous Particulars.

3054 *Backhousia myrtifolia* is a large shrub of an elegant habit well fitted for a conservatory plant. Cuttings of young wood will strike root in sand by the ordinary method

3055 *Hypocalymma* is composed of pretty greenhouse shrubs The leaves smell of lemon when bruised. The plants should be potted in a compost of loam and heath-mould, with a small portion of silver sand. The pots must invariably be well drained, and water should be freely given during summer They may be propagated by young cuttings

1117 *Metrosideros robusta* is said by Mr Allan Cunningham to be the *Hatu* of the New Zealanders, and is a noble tree usually attaining the height of 80 or 100 feet The wood is hard, close-grained, and very durable , and hence admirably adapted for ship timbers, and in the construction of agricultural implements. The leaves have a rich aromatic odour The plant flowers in our greenhouses at the height of 3 or 4 feet. *Metrosideros tomentosa* grows best in a rich vegetable soil, but is not hardy enough to stand our winters in the open air. *Metrosideros buxifolia* climbs like ivy in its native country.

19430 -	- flórida *Smith*	florid	●	▭	or	6	my	S	N. Zeal.	1840?	C	s.l.p	Bot. mag. 4471
	Leptospérmum scándens Forst cat												
19431 -	- tomentósa *A. Rich.*	tomentose	●	▭	or	6	d	W	N. Zeal.	1840?	C	s.l.p	Bot. mag. 4488
19432 -	- ciliàta *Lindl*	ciliated-leaved	●	▭	or	4	...	C	N. Caled.	1851.	C	s.l.p	
3056	1117*a* ANGO'PHORA *Cav.*		(*Aggos*, a vessel, *phoreo*, to bear; form of fruit.)										*Myrtàceæ*
19433 -	- cordifòlia *Cav.*	heart-leaved	●	▭	or	10	my.au	Y	N S.W.	1789.	C	s.l	Bot. mag. 1960
	Metrosideros hispida Smith. No. 6935, as well as No 6937, belongs to this genus.												
3057.	1117*b*. CALLISTE'MON *R. Br*		(*Kallistos*, beautiful, *stemon*, stamen, scarlet in most)										*Myrtàceæ*
19434 -	- viridiflòrum *Dec.*	green-flowered	●	▭	or	6	jn.au	G.Y	N Holl.	1818.	C	s l.p	Bot. mag. 2602
	Metrosidèros viridiflòra B.M.												
19435 -	- lophánthum *Swt*	crest-flowered	●	▭	or	6	jn.au	Straw	N. Holl.	1820.	C	s l.p	Swt. fl aust. 29
	Metrosid. lophánthum Vent. cels 69. *M saligna* B M 1821 and Nos 6939—6950 belong to this genus.												
19436 -	- leptostáchyon *Swt*	slender-stalked	●	▭	or	6	jn au	G.Y	N. Holl.	1820.	C	s.l p	
19437 -	- brachyándrum *Lindl.*	short-stam.	●	▭	or	4	o	C.Y	S. Austr.	1840	C	s.l.p	J. H S 4 113.10
19438 -	- microstáchyum *Swt.*	small-spiked	●	▭	or	4	mr	S	N. Holl.	1837.	C	s l.p	Bot. reg. 1838, 7
	1119. EUGE'NIA.												
19439	6958 ternifòlia *Roxb.*	tern-leaved	♀	▭	or	40	..	W	Chittag.	1840.	C	s.l.p	
	Jambòsa ternifòlia G. Don												
	β *rósea*	*rose-colrd-flwd*	♀	▭	or	40	....	Ro	Chittag.	1840.	C	s.l p	
19440	6962*a* brasiliénsis *Dec.*	Brazilian	●	▭	or	4	jn jl	W	Brazil	1820.	C	s.l.p	Bot. mag. 4526
	Mýrtus Dombèyi Spreng.												
19441 -	- U'gni *Hook. & Arn.*	Ugni	●	▭	or	4	jl	W	Valdivia	1848.	C	s.l.p	Bot. mag 4626
	Myrtus U'gni Mol. Chil.												
19442	6965*a* trinérvia *Dec.*	3-nerved	●	▭	or	4	ap my	W	N.S.W.	1823.	C	s.l p	Bot. mag. 3223
	1121 MY'RTUS												
19443	6980*a* tenuifòlia *Smith*	fine-leaved	●	▭	or	4	my au	W	N S.W.	1824.	C	s p l	
19444 -	- orbiculàta *Spreng.*	orbicular-lvd	●	▭	or	7	jl au	W	Bourbon	1824.	C	s.l p	Bot. mag. 4558
	Jossinia orbiculàta Dec. *Eugènia orbiculàta* Lam.												
19445 -	- melastomoides *Cun*	Melastoma-lk.	♀	▭	or	15	...	W	Moret B.	1824.	C	s.p l	
	Jossinia melastomoides Cun.												
	1125. STRAVA'DIUM.												
19446	6987*a* álbum *R. Br*	white-flowered	♀	▭	or	20	...	W	N.Caled.	1850	C	s p.l	
	1126. EUCALY'PTUS.												
19447	7017*a* calophýlla *Hort.*	beautiful-lvd	♀	▭	or	20	my jl	W	N Holl.	1835.	L	s l p	
19448 -	- Preissiàna *Schauer*	Preiss's	♀	▭	or	30	jn jl	...	Swan R	1842.	L	s l.p	Bot. mag. 4266
19449 -	- splachnicárpon *Hook*	Splachn.-frtd	♀	▭	or	30	ap jl	Y	K G S.	1840.	L	s l p	Bot. mag 4096
19450 -	- coccifera *Hook.*	berry-bearing	♀	▭	or	30	jn jl	Y	V.D.L.	1842.	L	s l p	Bot mag 4657
19451 -	- glóbulus *Lab.*	globe-fruited	♀	▭	or	200	my jl	W	V.D L	...	L	s.l p	Paxt fl. g 2 153
19452 -	- macrocárpa *Hook.*	large-fruited	♀	▭	or	30	jn jl	...	Swan R	1842.	L	s.l p	Bot. mag 4332
19453 -	- amygdálina *Lab.*	almond-like	♀	▭	or	30	jl	W	V.D.L.	1810.	L	s.l p	Bot mag 3260
	Metrosidèros salicifòlia Gærtn.												
	1128. AMY'GDALUS.												
7020	Pérsica												
	δ *sanguínea plèna* Gord.	*dbl-red-pch*	✲		or	15	ap my	R	China	1845	B	co	Moor. c. 1 129 b
	ε *álba* Lindl	*sngl wht peach*	✲		or	14	ap.my	W	Persia	...	B	co	
	ζ *álba plèna*	*dble wht peach*	✲		or	15	ap my	W	China	1845	B	co	
	η *frúctu plèno*	*dble frtd peach*	✲		or	15	ap my	R	China	1845.	B	co	J. H S. 3, 314



History, Use, Propagation, Culture,

3056. *Angóphora* is a genus of beautiful broad-leaved shrubs or trees with large terminal flowers. They answer well as conservatory plants. A mixture of sand, loam, and peat is the best soil for them. Cuttings of them are difficult to strike These should be taken from ripened wood, and planted in sand, placing a bell-glass over them

3057. *Callistémon.* All the species are worth cultivating in every collection of greenhouse plants, for the neatness of their foliage and the beauty of their blossoms. They are well adapted for conservatory plants Ripened cuttings strike root in the ordinary way, under a hand-glass They may also be raised from seed, which is frequently produced in this country. Plants reared from cuttings taken from flowering plants come into flower when of a small size, but those raised from seed do not flower till they become large plants.

19439. *Eugénia ternifòlia* is a fine stately species. It grows to a large tree. There are two varieties; one with white flowers, and the other with beautiful rose-coloured flowers. The fruit is edible. The leaves are very large, in fact, the largest of all the species.

19440. *Eugénia brasiliénsis*, the fruit of which is brought to the markets in Brazil under the name of *Grumichama*, has the young leaves above the flowers purplish-brown. *Eugènia U'gni* is the *Murtilla* of Feuillée, Obs. 3.

19430 Leaves oblong-ovate glabrous rather coriaceous, Corymb compound terminal, Calyx turbinate, Petals and Stamens scarlet, Fruit urceolate 5-ribbed
19431 Leaves elliptic coriaceous bluntish, glabrous above but clothed with cinereous tomentum beneath, as are the branches and cals, Corymb comp. term , Pedics 3-flwd, Cal turbinately cylind., Petals minute, Caps. smooth
19432 A charming crimson-flowered bush

19433 Leaves sessile ovate cordate at base glabrous like the branches, Peduncles and Branchlets covered with bristly hairs

19434 Leaves linear-lanceolate stiff pungent beset with scabrous dots rather villous when young as well as branches, Calyx glabrous
19435 Leaves lanceolate tapering to both ends mucronate glabrous in the adult state but villous while young, Flowers distinct spicate nearly terminal, Calyx pilose, Petals downy ciliated
19436 Leaves lanceolate acute mucronate tapering to both ends glabrous in adult state downy when young, Spikes
19437 Branches downy, Leaves linear pungent channelled, Calyx tom , Petals unequal [long slender, Calyx pilose
19438 Leaves linear-spatulate obtuse spreading with white ciliated edges, Calyx downy

19439 Leaves large 3 in a whorl 6—15 inches long and 3—6 broad, Flowers lateral

β Flowers rose-coloured
19440 Leaves oblong-obovate acuminate glabrous shining above full of dots, Peduncles from the axils of the upper scales opposite solitary 1-flowered, Calyx bractless, Lobes ciliated, Petals 4 obovate
19441 Leaves ovate acute coriaceous dotless green above and pale beneath, Young Branches upper Leaves and Petioles downy, Peduncles axillary solitary 1-flowered, Bracts and Calycine segments reflexed
19442 Leaves oval-oblong acuminated 3-nerved, glabrous above downy beneath, Lateral nerves almost marginal, Peduncles trifid or twice trifid 3—7-flowered rather hairy as are bracts and calyxes [fld, Cal. glab., Pets dwny
9443 Leaves linear mucronate with scarlet edges downy beneath 1 inch long and 1 line broad, Pedics axil solit. 1-
9444 Leaves nearly sessile elliptic-orbicular coriaceous stiff glabrous with subreflexed edges, Pedicels short 1-flowered axillary fascicled, Calyx bibracteate, Teeth of Calyx short, Petals orbicular concave
9445 Leaves 3—5-nerved very like those of a species of *Melástoma*

9446 A beautiful tree with pendent spikes of large white flowers

[axillary 4—5-flowered pedunculate, Operculum small hemispherical umbonate
9447 Leaves alternate ovate-lanceolate petiolate marginate acuminate or obtuse mucronate, Umbels terminal and
9448 Brnchs tetrag., Lvs vertical elliptic green, Peduncs axil. solit. 3-flwd compressed very broad, Cupula turb. on very short pedicel [culum hemispherical subglobose broader than the calycine cup, Fruit splachniform
19449 Leaves alternate obliquely ovate-lanc marginate feather-nerved coriaceous, Umbels terminal compound, Oper-
19450 Glaucous, Young Branches angular, Leaves alternate coriaceous dotted marginate uncinately acuminated, Corymbs terminal many-flowered, Pedicels compressed 2-edged, Operculum hemispherical umbonate
19451 Leaves alternate lanceolate almost falcate, Peduncles axillary short 1-flowered, Operculum conical length of cup which is tetragonal, but in the adult state it is depressed and mucronate in the centre
19452 Glaucous, Leaves opposite elliptic-cordate coriaceous acum. sess , Peduncs axil solit short 1-flwd, Calyx large thick, Operc. conico-hemispher acuminated, Capsule large depressed hemisph marginate woody 4—5-valved
19453 Leaves narrow-lanceolate tapering to both ends acuminate-mucronate, Peduncles axillary and lateral nearly terete, Umbels 6—8 flowered, Lid hemispherical almost mutic shorter than cup

δ Flowers dark crimson semidouble
ε Flowers single pure white
ζ Flowers pure white and full semidouble
η Two or three fruits are often produced by one flower



and Miscellaneous Particulars.

p 44 t 31 It has the habit of our common myrtle, and grows in the Bay of Valdivia. The natives call it *Ugni*, and the Spaniards *Murtilla* or *Myrtilla*. The petals are orbicular, very concave and forming, as it were, a globose corolla white tinged with red.

19444 *Myrtus orbiculàta* is called Medlar-wood in Madagascar. It requires considerable heat and a moist atmosphere. A compost of sand, peat, and loam suits it well. The pot in which it is grown should be well drained Cuttings from ripened wood strike root under a hand-glass in a moist heat.

19447 *Eucalýptus calophýlla* has the leaves 4—6 inches long, pale green with a rich red marginal line, within which runs a faint intra-marginal vein The veins are simple and pinnate ; and the whole appearance of the foliage is that of a *Calophýllum* The flowers are large and white.

19450. *Eucalýptus coccífera* has been cultivated in the gardens for many years, so that it is now more than 20 feet high , and might perhaps be hardy in sheltered situations. The leaves have the smell of myrtle when bruised

19451 *Eucalýptus glóbulus* grows in its native place from 100 to 200 feet, and has been seen as tall as 330 feet, which must be an enormous tree, and is called Blue Gum Tree.

7022. nana												
	β geórgica Dec.	*Georgian*		or	2	mr.ap	R	Georgia	1818.	Sk co		
	γ campéstris Ser. *Besseriàna*	*field*		or	2	mr.ap	W	Podolia	1818.	Sk co		
	δ sibírica	*Siberian*		or	2	mr ap	R	Siberia	1818.	Sk co		

3058. 1129*a*. CE'RASUS *Juss.* CHERRY. (First brought from *Cerasus*, a town of Pontus in Asia.) *Amygdalàceæ.*

19454 -	- japónica *Lois* *Prùnus japónica* Thunb. bot. reg. 1801.	Japan		or	4	ap my	Bk	China	1810.	B co	Bot reg 1801	
	β flòre pleno álbo	*dble white-flwd*		or	4	ap.my	W	N. China	1846.	B co		
19455 -	- serrulàta *G. Don* *Prùnus serrulàta* Lindl	serrulated-lvd		or	4	ap.my	W	China	1822	G co		
19456 -	- salicina *G Don* *Prùnus salicina* Lindl	Willow-leaved		or	4	ap.my	W	China	1822	G co		
19457 -	- cornùta *Wall.*	horned		or	10	ap my	W	Himalay.	1846	G co	Royle Ill 38 2	
19458 -	- nepalénsis *Ser.*	Nepal		or	6	ap.my	W	Nepal	1840	G co	Moor.m 3. 285 ic	
19459 -	- ilicifòlia *Nutt.*	Holly-leaved		or	3	ap my	W	Californ.	1845.	G co	Px.fl.g 3.44 254	

DI-PENTAGYNIA.

1132. CRATÆ'GUS.

19460	7072*a* crenulàta *Roxb.* *Mespilus crenulàta* D. Don	crenulated-lvd		or	6	Jn	W	N. India	1840	B co	Bot. reg. 1844 52	
19461	7080*a* Celsiàna *Dum.* *Lecuna* Hort.	Celsi's		or	20	jn jl	W	Persia	...	? B co	Loud. tr. 373, 660	

tanacetifòlia β Celsiana Loud. Encyc of Trees, p. 372, 373.

3059	1136*a*. LINDLE'YA *Kth* (*John Lindley*, Ph D., Prof of Bot. University College.) *Pomàceæ*											
19462 -	- mespiloides *Kth*	medlar-like		or	12	jl	W	Mexico	1839	G lt.l	Bot reg 1844, 27	
3060.	1136*b*. NEI'LLIA *D. Don.* (*Patrick Neill*, LL.D., Secretary Caledonian Hort Soc.) *Homalineæ*											
19463 -	- thyrsiflòra *D. Don*	thyrse-flwd		or	6	...	W	Nepal	1850	C co		
19464 -	- rubiflòra *D Don*	Rubus-flwd		or	6	...	W	Nepal	1850.	C co	G. Don g s 102	
3061	1136*c* ADENO'STOMA *Hook & Arn* ADENOSTOMA (*Aden*, a gland, *stoma*, a mouth.) *Rosàceæ*											
19465 -	- fasciculàtum *Hook*	fascicled-lvd		or	2	...	W	Californ	1848.	C l.p		

1138 AMELA'NCHIER

19466	7121*a* racemòsa *B. R*	racemose		or	4	my jn	W	China	...	G lt l		

1139 COTONEA'STER.

19467	17411*a* thymifòlia *Hort*	Thyme-leaved		or	1	my jn	W	Nepal	1845	L lt.l	Px fl g 2 132 203	
3062.	1139*a* NAGE'LIA *Morren* NAGELIA (*M Nageli*, the fellow-worker with Schleiden.) *Rosàceæ*											
19468 -	- denticulàta *Morren* *Cotoneaster denticulàta* Benth.	denticulated		or	6	my jn	S w	Mexico	1839	G co	H B & K 6 556	

1141. SPIRÆ'A.

19469	7143 pubéscens *Turcz*	downy		or	3	mr.ap	W	Chusan	1844	C lt	Bot reg 1847, 6	
19470 -	- rotundifòlia *Lindl.*	round-leaved		or	4	...	W	Cashm.	1839.	C lt		
19471 -	- decúmbens *Koch*	decumbent		or	1	my jl	W.R	Friouli M		C lt	Px fl g. 1 15 6	
19472 -	- fissa *Lindl* *argéntea* Benth.	cleft-leaved		or	4	jn jl	W G	Mexico	1840	C co		
19473 -	- prunifòlia *Lindl.* *β flòre plèno*	Plum-leaved *double flowered*		or	6	mr ap	W	China	1844.	C co		
				or	6	mr ap	W	China	1845	C co	S & Z fl g 1 70	
19474 -	- callòsa *Thunb.*	callous		or	4	jl au	W	China	1845	C co	Px fl g 2 115	
19475 -	- expánsa *Wall*	expanded		or	4	jn jl	Pk	Kamaon	1846	C co		
19476 -	- laxiflòra *Lindl.*	loose-flowered		or	3	jl au	W	Nepal	1838.	C p.l	E of T & S 208	
19477 -	- Douglàsii *Hook.*	Douglas's		or	5	au s	Pk	N Amer	...	C co	Px. mag 12 195	
19478 -	- lanceolàta *Poir*	lanceolate-lvd		or	3	ap.my	W	China	1840	C co		
19479 -	- cuneifòlia *Wall* *canéscens* D Don	wedge-leaved *argéntea* Hort		or	4	...	W	Nepal	1837	G co	E of T. & S 510	
			cuneàta Wall									
19480 -	- Reevesiàna *Hort.* *corymbòsa* Roxb.	Reeves's		or	4	my jn	W	China	.	C co	Bot. reg 1844, 10	



History, Use, Propagation, Culture,

3058. *Cérasus ilicifòlia* is a small evergreen bush, first found by Nuttall, then by Coulter, and lastly by Hartweg, who reports the fruit to resemble a small cherry. The leaves are like those of the holly, and the flowers like those of the bird-cherry. The species of *Prùnus* from 7026 to 7043 belong to the genus *Cérasus*

19461. *Cratæ'gus Celsiàna.* This species is perfectly distinct from *C. tanacetifòlia* and *C. orientàlis* The tree is more robust; the leaves are larger and more deeply cut; the habit is also more fastigiate The fruit is larger, and the tree flowers much later in the season. It was first noticed by Dumont de Courset.

3059. *Lindlèya mespiloides* is a small tree with the habit of *Mespilus grandiflòra*, and with flowers as sweet-scented as the hawthorn, and it may be propagated by grafting on it. It requires protection in severe weather.

β Lobes of Calyx lanceolate length of tube, Style enclosed hardly tomentose at base
γ Lobes of Calyx length of tube, Petals narrower longer and white, Style scarcely tomentose at base, Leaves broader
δ Leaves narrower than in the other varieties

19454 Leaves ovate acuminate glabrous shining, Peduncles solitary, Lobes of Calyx shorter than the tube

β Flowers semidouble white
19455 Leaves obovate acuminate setaceously serrulated glabrous, Petioles glandular, Flowers in fascicles
[dular length of petioles, Petioles glandless
19456 Flowers usually solit- shorter than leaves, Leaves obov acuminate glandularly serrate glabrous, Stipules glan-
[Racemes leafy elongated many-flowered, Fruit ovate roundish
19457 Leaves oblong-elliptic cordate at base acuminated reticulately veined serrated glabrous, Petioles often glandular,
19458 Lvs lanc. acuminated bluntly serrated glab ous pilose in axils of veins beneath, Peduncles short rather villous
19459 Leaves coriaceous shining cordate-ovate on short petioles spiny-toothed, Racemes axillary and terminal dense-flowered, Bracts shorter than pedicels

DI-PENTAGYNIA.

19460 Spinescent evergreen, Young Branches tomentose, Leaves narrow oblong shining crenately serrated, Corymbs terminal, Calyx glabrous with rounded segments, Styles 5 glabrous, Pome depressed globose red
19461 Leaves hairy pinnatifidly cut, Sepals reflexed, Styles 5, Fruit large yellow

19462 Glabrous, Leaves scattered simple crenulate, Stipulas petiolar twin, Flowers axillary solitary pedunculate at the tops of the branches
[Bracteoles toothed, Calyx silky
19463 Leaves cordate-ovate and 3-lobed doubly serrated, Stipules leafy serrated, Racemes spicate terminal thyrsoid,
19464 Leaves cordate 3-lobed acuminated doubly serrated, Stipules entire membranous, Racemes terminal solitary, Bracts entire, Calyx tomentose

19465 Leaves linear pointed sometimes 2—3-lobed rising in fascicles, Flowers small in terminal panicles

19466 Leaves glabrous oblong mucronate narrowed at the base, Racemes many-flowered glabrous, Segments ovate acute petaloid serrated, Carpels naked

19467 Evergreen shining, Branches prostrate intertwined, Leaves linear-obovate obtuse with recurved edges downy beneath, Fruit sessile solitary recurved, Petals minute

19468 Leaves an inch long rounded at top and slightly toothed dark green above and grey from down beneath, Corymbs small terminal
[pels 5 pilose
19469 Downy, Leaves ovate-oblong acute coarsely serrated somewhat 3-lobed, Corymbs small hemispherical, Car-
19470 Branches angular, Leaves roundish oblong obtuse crenated above the middle [term. Fls white with red eye
19471 Brnchs many shining brown tufted, Lvs obov petiol serrate above middle, green above glauc ben , Cory. small
19472 Pilose, Branches angular, Leaves cuneate-obovate deeply serrated glabrous above downy beneath as are the petals, Panicles loose tomentose terminal, Calyx bibracteate
19473 Leaves glabrous oblong serrate, Panicle corymbose terminal
β Flowers white double like those of the double-flowered hawthorn [Calyx covered with silky hairs
19474 Lvs lanc. tapering to both ends ser upper sers with little brown callosities glauc. ben., Cymes branched term.
19475 Hairy, Lvs petiol ellip -lanc serr above mid. wrinkled, above dull yelsh green whitsh ben., Cory term pan.
19476 Brnchs weak terete velvety, Lvs glab ov. cren. on long stalks glauc ben , Panicles loose vill., Petals reflexed
19477 Brnchs and pedunes downy, Lvs ellip. coarsely uneq ser towards apex clothed with hoary tom. ben., Spikes
19478 Leaves lanceol lobed and serrated glabr paler beneath, Corymbs term. [crowded panicled, Carpels 5 glab.
19479 Leaves oval or obovate-obtuse quite entire villous, Corymbs crowded tomentose as well as branches
[late, Sepals villous inside
19480 Leaves lanceolate 3-lobed and pinnatifid glabrous glaucescent beneath, Racemes corymbose terminal peduncu-



and Miscellaneous Particulars.

3060 *Neillia* will, perhaps, prove quite hardy shrubs. They will grow in ordinary soil, and will strike root from cuttings planted in autumn. They will prove a good addition to our shrubberies.

3061 *Adenóstoma* is a hardy small evergreen heath-like bush, with small white flowers. The leaves are in fascicles in the axils of the primordial ones, which fall off early, and leave a pair of spine-pointed stipules behind. Their culture is the same as that for *Spiræ'a*.

Adenóstoma fasciculàtum is a pretty little shrub with the habit of *Spiræ'a*, will grow well in common soil, and is increased by cuttings.

3062 *Nagelia* is nearly related to *Cotonéaster*, and requires the same culture.

19481 7149*a* **kamtschática** *Dec* Kamtchatca ♃ △ or 2 jn.jl W Kamtch. 1836. D co

β himaléнsis Lindl. *Himalayan* ♃ △ or 2 jn.jl W Himalay 1838. D co Bot. reg 1841, 1

3063. 1141*a* SCHIZONO'TUS *Lindl.* (*Schizo*, to cut, *notos*, the back, cell of capsule open at back.) *Rosàcæ*
19482 - tomentòsus *Lindl.* woolly ♃ or 8 jl au W Nepal 1848. Sk co Bot. reg. 1845, 33
Spiræ'a Lindleyàna Wall., as well as *Spiræ'a sorbifòlia* L. No 7142, belongs to this genus.

POLYGYNIA.

1148. RO'SA

19483 7518*a* anemonæflòra *Fort.* Anemone-flwd ♃ or 8 jn.au Pa.Bh Shang. 1845. C lt.l
19484 - rugòsa *Thunb* wrinkled ♃ or 4 jn.s R Japan 1845. L co Lindl. ros 5 19
β Fortùnis Lindl. *Fortune's* ♃ or 4 jn.s Rch P China 1845. L co
19485 - Fortuneàna Fort.'s dbl-yel. ♃ or 4 jn.s Buff China 1845. L co Bot. mag. 4679

1153. POTENTI'LLA

19486 7577*a* ochreàta *Lindl* ochreate ♃ or ½ s Y N India 1849. C co Px. fl g. l. 144 ic
19487 7578*a* ambígua *Cambess.* ambiguous ♃ or 2 jn.jl Y Himala. 1840 C co Bot. mag 4613
19488 7593 missoúrica *Horn* Missouri ♃ △ or 1 jn au Y N. Amer. 1827. D co Bot. reg 1412
argùta Spreng. not Ph.
19489 - argùta *Ph.* sharp-toothed ♃ △ or 2 jl Ysh.W N. Amer 1818. D co Bot. reg 1379

19490 7596*a* bícolor *Lindl.* two-coloured ♃ △ or 1 jl au Y.R Cashm. 1843. D co Bot reg 1845 62
19491 7614*a* insígnis *Royle* showy ♃ △ or 4 jn au Y Nepal 1840. D co Bot reg. 1841, 37

1157 CALYCA'NTHUS

19492 7632*a* macrophýllus *Hartw.* long-leaved ♨ fra 6 my.au Br P Californ 1848. L l p
19493 - occidentàlis *Hook* occidental ♨ fra 6 my.au Br P Californ. 1850 L l p Px fl g. 2 98 184
19494 - oblongifòlius *Nutt.* oblong-leaved ♨ fra 4 my au Br P N Amer. 1820 L l.p

1161. SIEVE'RSIA

19495 7637 elàta *Royle* tall ♃ △ or ½ jn jl Y Nepal 1840 D s.p l Royle Ill 39 1
19496 - trifìdra *Ph* three-flowered ♃ △ or ½ my Ro· R Moun. 1826. D s.p.l Bot. mag 2858
rósea Grah.

Page 456. CLASS XIII.—POLYANDRIA. STAMENS many, hypogynous, or inserted under the Ovary.

Order 1. MONOGYNIA Stamens many, hypogynous. Style 1

3064 1177*a* *Victòria*. Sepals 4, deciduous Petals numerous in several series, passing gradually into stamens as in *Nymphæ'a*, and united with them Stamens numerous, united at the base, bearing the elongated anthers cells the innermost stamens united into a monadelphous body and sterile Ovarium 27—30-celled, and 10—12 ovules in each Fruit a turbinate truncate berry, with a deep hollow disk, and a persistent central column

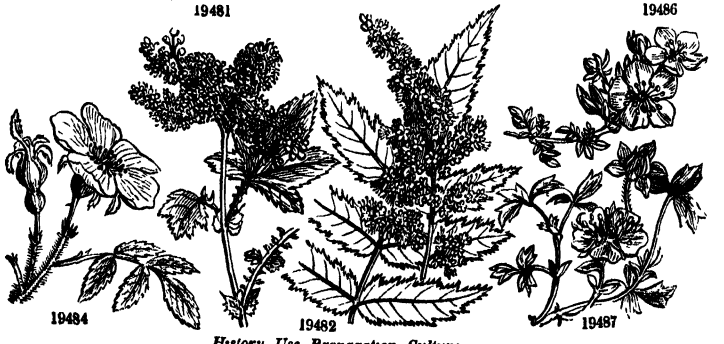
3065 1192*a* *Frezièra* Calyx of 5 sepals Petals 5, broadest at the base Stamens free Anthers smooth sometimes cordate. Style 3—5-cleft at apex Berry dry, 3—5-celled Cells many-seeded

3066 1192*b*. *Fréna*. Calyx 4-parted Petals 4 3-lobed at apex. Anthers 12, cordate-oblong, acuminate, dehiscing at apex. Berry dry, somewhat stipitate, indehiscent, 2—4-furrowed, 2—4-celled Cells 2-seeded

3067. 1192*c*. *Saurauja* Calyx 5-parted Petals 5, connected together to their middle Stamens many, monadelphous at the base. Styles 3—5, sometimes connected at the base. Berry furrowed, filled with shining pulp, with as many cells as there are styles. Seeds minute, angular

3068 1196*a*. *Pachystigma*. Calyx subtriphyllous Sepals unequal, concave Petals 4, conform, free, concave Stamens numerous, inserted by two series on a fleshy gynophore Ovarium globose, 7—8-furrowed, 7—8-celled Cells biovulate. Stigma large, 7—8-lobed Capsule at length dividing into 7—8 parts, stellately disposed Parts 1-seeded by abortion.

3069. 1198*a*. *Luxembúrgia*. Calyx of 5 unequal sepals Petals 5, unequal. Anthers nearly sessile, definite or indefinite, inserted on a short gynophore along with the pistil, bursting by two pores at apex, agglutinated into a



History, Use, Propagation, Culture,

3063. *Schizondtus* is a genus separated from *Spiræ'a*. They are well suited for ornamenting shrubberies The well known *Spiræ'a sorbifòlia* is the type of the genus. *S. tomentòsus*, in severe frost, is usually killed to the ground.

19481 Leaves simply palmate upper ones subhastate or lanceolate, Petioles appendiculate, Flowers corymbose, Sepals reflexed pilose, Carpels hairy parallel, Styles subcapitate
β Leaves tomentose beneath, Segments usually acuminated

19482 Leaves pinnate 5—8 pairs, Leaflets sessile ovate-lanceolate acuminate coarsely and doubly serrated, Stipules linear, Racemes forming a pyramidal panicle

POLYGYNIA.

[tioles prickly, Stipules narrow ent with gland edges free and subulate at top. Sepals entire. Flwrs clustered
19483 Glab scand, Brnchs setig. gland., Lvs tern rarely pinnate, Lflts ov.-lanc acum. sharply ser. glauc. ben., Pe-
19484 Prickles crowded nearly equal, Peduncles beset with curved prickles [purple flowers
β Habit of *R kamtschática* The variety was sent by Mr Fortune It has semidouble sweet-scented rich
19485 Habit of *R arvensis.* Leaflets 3 pair bright shining green above, Flowers as large as those of the common China rose solitary semidouble dull buff tinged with purple

19486 Shrubby dwarf hairy, Branches weak spreading, Leaves nearly sessile palmate or digitate with oblong revolute leaflets varying in number from 5 to 9, Flowers terminal with 5 lanceolate bracts, Petals roundish
19487 Hairy, Stems ascending few-flowered fruticose at base, Leaves ternate, Leaflets obovate tridentate, Stipules ovate acute entire or tridentate, Segments of calyx obovate, Petals obovate scarcely exceeding the calyx
19488 Erect, Leaves pinnate with usually 3 pairs of leaflets hoary above and clothed with white down beneath, Leaflets oblong pinnatifid, Stipules foliaceous cut, Flowers corymbose, Calyx woolly, Petals emarginate
19489 Erect downy clammy, Leaves pinnate, Leaflets roundish-ovate doubly and deeply toothed, Stipules entire, Petals obov entire [nate oblong-lanc bifid or entire, Stipulas ser., Petals veined with red
19490 Hairy, Leaves silky white beneath, radical and lower cauline lvs digitate, Lflts obov. coarsely ser., upper ter-
19491 Stems ascending many-flowered, Leaves ternate often quinate, radical ones on long petioles, Lobes crenately serrated green above hoary beneath, Stipulas ovate obtuse entire or multifid, Petals roundish emarginate

19492 Leaves ovate-lanceolate acuminated glaucous and downy beneath
19493 Lvs obl acum smooth obt. slightly cord at the base rather scabrous above on short petioles, Flwrs solit., Bracts
19494 Lvs ovate-lanc glaucous and downy beneath [numer subul revol., Seps and pets lin lanc obt.
[rupted by small entire lobes, Flowers large handsome, Panicles 3—4-flowered
19495 Leaves deep green pinnate with roundish crenated lobes gradually diminishing to the base occasionally inter-
19496 Pilose, Stems simple 3-flowered, Radical leaves interruptedly pinnate, Leaflets cuneate and deeply toothed, Petals oblong length of calyx, Awns of carpels long and villous

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mass on one side, usually clasping the ovarium Style declinate Stigma simple or tripartite. Ovarium sessile, oblong, triangular. Capsule 1-celled, 3-valved, many-seeded Valves bent inwards, and bearing the seeds on the edges Seeds oblong, girded by a membrane, which is broadest at top.

Order 3. TRIGYNIA. Stamens many, hypogynous Styles 3.

3070 1198*b* ***Consólida*** Sepals 5, coloured, upper one infracted, unguiculate, spurred Petals 2, joined; inner spurred, lobed, thrust in between the sepals Stamens declinate Carpel solitary.

Order 4 POLYGYNIA. Stamens many, hypogynous. Styles many.

3071 1212*a*. ***Smeathmánnia*** Calyx 5-leaved. Petals 5 Nectarium 1-leaved, urceolate, surrounding the stamens at base Stamens numerous, distinct, seated on a short column. Anthers incumbent Stigmas 5, peltate. Capsule inflated, 4—5-valved, sessile, many-seeded. Seeds dotted.

3072 1224*a* ***Lapláceæ*** Calyx 5-leaved, Corolla 5- or many-petalled. Petals generally unequal Stamens indefinite Styles 5, or more. Stigmas simple. Capsule woody, 5—10-celled. Seeds biseriate, and many in each cell, winged at top.

3073 1233*a* ***Cathártia*** Calyx 2-leaved, caducous. Petals 4, roundish, deciduous. Stamens 25—30, Filaments filiform Anthers 2-celled, terminal. Stigma fleshy, 5—6-rayed Capsule erect, silique-formed, 1-celled, 5—6-valved. Seeds numerous, compressed, scrobiculate.

3074 1233*b* ***Eucrýphia*** Calyx 5-parted. Styles usually 12. Petals 5. Anthers didymous. Capsules ovate, with boat-shaped cells hanging by funicles



and Miscellaneous Particulars.

19487. ***Potentilla ambígua*** is a small shrubby species, increasing by the rooting stolons or runners.
19493 ***Calycánthus occidentális*** is a fine species, but rather tender. The flowers are of a brownish red, with a subacid unpleasant odour.

MONOGYNIA.

1171 MECONO'PSIS.

19497 7671a heterophýlla *Benth.* variable-leaved ⅄ △ or 1 ... O R Californ 1833. S co H trans. 1 468

19498 - crassifòlia *Benth* thick leaved ⅄ △ or 1 O Y Californ. 1833. S co H. trans. 1 468
19499 - Wallichii *J Hook* Wallich's ⅄ △ or 3 jn jl B Sik. Him 1852 S co Bot. mag 4664

1173 SARRACE'NIA

19500 7676a Drummóndi *Croom* Drummond's ⅇ △ or 2 jn jl P Florida 1829 D bog Px fl g 1 1

1174. NYMPHÆ'A.

19501 7682a élegans *Hook* elegant ⅏ △ or flt jl s W B N Mex 1848 R l Bot. mag 4604

19502 - micrántha *Guillm.* small-flowered ⅏ △ or flt au W Gambia 1848 R l Bot mag 4535

19503 - dentàta *Schum.* toothed-leaved ⅏ △ or flt au W Guinea 1845 R l Bot mag 4297
19504 7683 Devoniénsis *Paxt.* D. of Devon 's ⅏ △ or flt jn o R hybrid 1850. R l Bot. mag 4665

19505 7680a scutifòlia *Dec* saucer-leaved ⅏ △ or flt jn s B C G H. 1792 R l Px fl g 2 182 2(
capénsis Thunb *cærulea* Andr b t rep 197 Bot. mag 552 *Castàlia scutifòlia* Sal. *Lòtus Lìnnan* Jus
19506 - ámpla *Dec.* ample-leaved ⅏ △ or flt jn s W Jamaica ... R l Bot mag 4469
Castàlia ámpla Sal *N Rudgeàna* Meyer
19507 - gigantèa *Hook* giant ⅏ △ or flt jn.s B Australia 1848. R l Bot mag 4647
Victòria Fitzroyàna Hort.

3064. 1177a. VICTO'RIA *Gray* VICTORIA. (Her Majesty *Queen Victoria*) *Nymphæàceæ*
19508 - règia *Lindl* royal ⅏ △ spl flt su Ro w Guiana 1846 S r l Bot mag 4275
regìna Gray *Cruziàna* D'Orbign *Nymphæ'a Victòria* Schomb. *Euryale amazónica* Poepp

3064* 1192 TERNSTRŒ'MIA

19509 - sylvática *Cham* wood ❀ ⌴ or 6 f my G P Mexico 1840. C s l p

3065. 1192a FREZIE'RA *Swz* (*A F Frezier*, a French engineer, a traveller in Chili) *Ternstræmiàcea*
19510 - theoides *Swz* Tea-like ❀ □ or 6 my jn W Jamaica 1849 C s l p Bot mag 4 46
Eùbrum theoìdes Swz

3066 1192b FRIE'SIA *Dec* (*Elias Fries*, M D, Prof of Bot. in the Upsal university) *Elaocárpeæ*
19511 - pedunculàta *Dec* pedunculate ❀ ⌴ or 4 jn jl W V D.L 1840 C s l p Lab. n h 2 1

3067. 1192c SAURAU'JA *W* (*Sauraujo*, the name of a Portuguese bot known to Willdenow) *Ternstræmiàceæ*
19512 - spectábilis *Hook* showy ❀ □ or 10 su W Bolivia 1838 C s l p Bot mag 3984

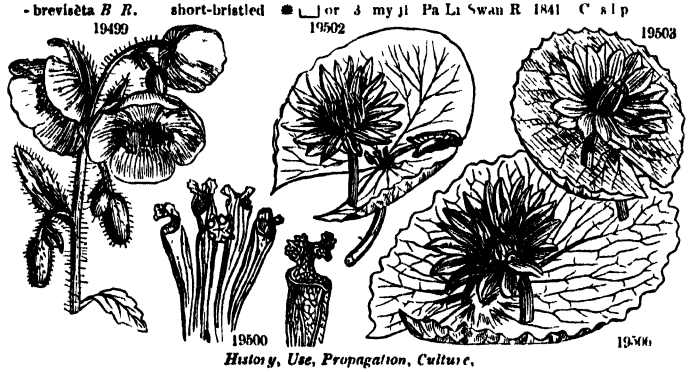
2645. 1193a CA'LYTHRIX

19513 17462a glàbra *R Br.* glabrous ❀ ⌴ or 4 ap au Rsh N S W 1818 C s l p Bot reg 409
19514 - pubéscens *Cun* downy ❀ ⌴ or 4 ap au Rsh N Holl 1824 C s l p
19515 - scábra *Dec* scabrous ❀ ⌴ or 4 ap jn W Australia 1824 C s l p
glàbra Sieb
19516 - sapphirina *B R* violet flowered ❀ ⌴ or 3 ap jn B Swan R. 1843. C s l p

19517 - aúrea *B R* golden flwd ❀ ⌴ or 2 ap jn Y Swan R 1843 C s l p Lind Swan el

19518 - variábilis *B R.* variable ❀ ⌴ or 3 ap jn Li Swan R 1842 C s l p

19519 - brevisèta *B R.* short-bristled ❀ ⌴ or 3 my jl Pa Li Swan R 1841 C s l p



History, Use, Propagation, Culture,

19499. *Meconópsis Wallichii* is a pretty blue-flowered poppy from the Sikkim Himalayas The flowers are large and droop, they are disposed in long leafy racemes. The plant was grown in pots in a frame, but will, perhaps succeed well in the open border.

19500 *Sarracènia Drummóndi* The stove is said to be the most suitable place for this plant at a temperature of 80° to 100°, among *Orchideæ* and *Epiphytes*, at least at that time when they are making and maturing their growth at which time they require much warmth and moisture. The other species would require the same treatment They are all inhabitants of the swamps of a region which during the summer experiences a tropical heat.

19501. *Nymphæ'a elegans* will probably grow and flower in the open air. The flowers are very sweet-scented. It comes near to *Nymphæ'a ámpla*.

19503. *N dentàta* is very common in ponds in every part of Guinea, along with *Pistia Stratiótes*. The root of *N ámpla* is composed of round tubers The leaves of *N gigantèa* are 2 feet across, and the root is composed of tubers *N Devoniénsis* appears to be only a strong seedling plant of *N. rùbra*, and is not a hybrid

3061. *Victòria règia* This splendid waterlily has been found in the rivers Amazon, De la Plata, Berbice and in the river Yacuma, a tributary of the river Marmora, in Bolivia, and probably in many other lakes and rivers in South America. The plant flowered first at Chatsworth, the seat of the Duke of Devonshire, under the care of Sir Joseph Paxton; at Sion House, under the care of Mr. Iveson, and at the Botanical Gardens, Regent's Park, and at Kew, and in the open air at Mr Weeks's Nursery, King's Road, Chelsea. The whole plant is prickly, except the

MONOGYNIA.

19497 Leaves few remote pinnate, Lower segments ovate cut subpetiolate, Upper ones linear entire subconfluent, Capsules smooth [ments ovate cuneate, Upper linear cuneate, Capsules smooth

19498 Stem leafy at base, Leaves thickish glaucous pinnate, Segments deeply lobed with revolute edges, Lower seg-

19499 Tall glaucescent bristly from long rufescent hairs, Radical leaves petiolate pinnate but pinnatifid towards the apex, Lobes sinuate, Caul. lvs obl sinuate pinnate sess , Flws nodding large in long leafy race, Ovar. bristly

19500 Pitchers long straight dilated upwards ang. tapering much to base furnished with a sharp projecting rib in front with an undulated inflexed roundish blade which is covered with long hairs inside, Flowers purple

19501 Leaves nearly orbicular repandly toothed spotted with black and purple beneath with a narrow recess, Sepals 4, Petals white with a bluish tint, Stamens in 15 bundles, Outer Anthers appendiculate, Stigma 15-rayed

19502 Leaves small roundish-cordate entire, Petioles long slender, Lobes divaricate acuminate reddish beneath and dotted with violet generally bearing bulbs between the lobes, Stigmas 15 nearly sessile [pressed at base

19503 Leaves peltate sharply toothed glabrous the nerves very prominent beneath, Calyx 4-lvd vittate truncate de-

19504 said to be a hybrid between *N rubra* and *N Lōtus* The leaves and flowers are larger than those of the parents, Leaves strongly dentate, Flowers crimson

19505 Leaves peltate bluntly and sinuately toothed not dotted glabrous, Lobes incumbent, Anthers appendiculate at top, Stigma 20-rayed

19506 Leaves cordate roundish peltate toothed glabrous tubercled above and coloured beneath with a narrow sinus, Sepals dotted, Stigma 20-rayed, Anthers appendiculate, Outer ones long

19507 Lvs cordate peltate roundish thick remotely toothed, Flws large, Calyx 4-lvd, Petals numerous obtuse, Outer ones obovate, Inner ones linear-lanceolate, Stamens hiding the stigma, Anthers curved, Outer ones apiculated

19508 Plant prickly, Leaves large 5 to 7 feet in diameter and 20 or more in circumference, Flowers large more than a foot in diameter

19509 Leaves narrow oblong bluntly acuminate green above and pale beneath smooth, Peduncles solitary 1-flowered hid among the leaves, Flowers dull greenish-purple

19510 Leaves elliptic-lanceolate acute serrately toothed tapering into the short petiole, Flowers nutant, Pedicels axillary nearly solitary 1-flowered, Anthers apiculated pencilled on the back, Style hispid at apex

19511 Leaves ovate-lanceolate serrated sometimes opposite and sometimes alternate, Flowers drooping on slender pedicels composed of 4—6 sepals and petals, the latter 3-cleft with 3 deep crimson stripes in the middle

19512 Branches peduncles and nerves of leaves clothed with adpressed rusty bristles, Lvs obovate-lanceolate petiolate doubly serrated, Panicle ample much branched, Petals obcordate

19513 Icosandrous, Leaves terete glabrous petiolate stipulate

19514 Icosandrous, Leaves terete petiolate downy stipulate [villous

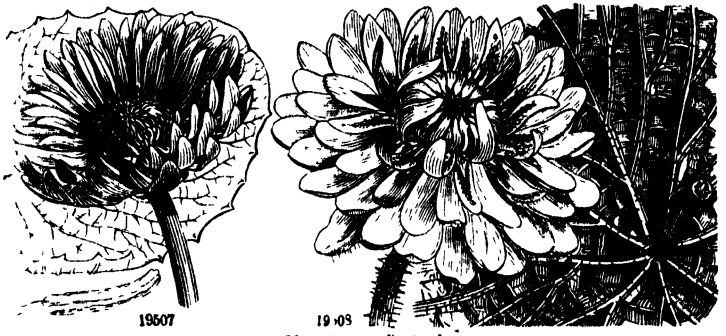
19515 Icosandrous, Leaves petiolate with two very short stipules scabrous in the adult state as well as brcts, Branches

19516 Icosandrous hispid, Leaves linear petiolate keeled, Heads spherical, Floral Leaves villous, Bracts linear-lanceolate acuminate shorter than slender tube, Tails very slender twice as long as petals

19517 Icosandrous downy, Leaves imbricate oblong-obtuse ciliated, Brcts with membranous edges mucronate shorter than the tube of calyx, Awns twice as long as petals

19518 Icos glabr , Leaves linear-tetragonal obtuse imbricate papillose, Bracts obovate apiculate length of tube of Calyx, Tails a little longer than petals, Flowers axillary [shorter than petals, Flowers axillary

19519 Icosandrous glabrous, Leaves linear semiterete obtuse mucronate, Bracts obovate equal to calyx, Tails a little



19507 19508

and Miscellaneous Particulars.

19508 The leaves are sometimes of a prodigious size, 5 to 7 feet in diameter, and 20 feet or more in circumference, turned up at the rim all round , the under side is purple, with very strong ribs and veins radiating from the petiole which disappear at the edge. The flowers are of the same gigantic dimensions, and measure more than 1 foot in diameter, they are very fragrant, and expand in the evening about 6 o'clock , they are at first white, but as they decay towards morning they become red or pink. The plant produces seed in this country, and therefore is likely to become plentiful It requires a strong heat to make it grow freely, and is generally grown by itself in a house called a Victoria house, or aquarium.

19506 *Freziera theoides* much resembles *Thèa Bohea* both in leaves and flowers. Dr. Macfadyen states that the leaves are astringent, like those of green tea. The shrub is cultivated and propagated like an ordinary stove plant

19506 *Friesia pedunculata* is an evergreen half-hardy shrub with deep green leathery leaves. It will probably become a pretty conservatory plant. The flowers are something like those of *Andrómeda speciōsa*. The culture is the same as that for the species of *Elæocárpus*. Plenty of water will be required when the plant is in a growing state

19507 *Saurauja* is a genus of fine plants with laurel-like leaves and rather large white flowers The species will thrive in a mixture of loam, peat, and sand, and ripened cuttings will strike root under a hand glass in the usual way

19520 -	- angulàta *B. R.*	angular		or	3	ap.jn	Y		Swan R.	1842.	C	s.l.p			
19521 -	- glutinòsa *B. R.*	clammy		or	3	ap.jn	Y		Swan R.	...	C	s.l.p			

1195. LAGERSTRŒ'MIA

19522	7758*a* élegans *Paxt.*	elegant		or	10	au.s	Ro.Y		E. Indies	1841.	C	s.l.p	Px. m 14 269		

3068 1196*a*. PACHYSTI'GMA *Hook.* PACHYSTIGMA (*Pachys*, thick, *stigma*, a stigma) *Rutàceæ*

19523 -	- pteleoides *Hook.*	Ptelea-like		fra	10	f.mr	W		Jamaica	1844.	C	s.l.p	Bot. mag 4436		

1198. HELIA'NTHEMUM

19524	7805*a* scopàrium *Nutt.*	Broom		or	½	my.jn	Y		Californ.	1848.	S	s.p.l			

3069. 1198*a* LUXEMBU'RGIA (*Duke of Luxembourg*, a promoter of botany.) *Frankeniàceæ*

19525 -	- ciliòsa *Gard.* *Plectanthera ciliòsa* Mart.	ciliated		or	2	su	Y		Brazil	1848.	S	s.p.l	Bot. mag. 4048		
19526 -	- corymbòsa *St. Hil.*	corymbose-flwd		or	4	su	Y		Brazil	1840.	C	s.l.p	Hil. mem m.124		

DIGYNIA.

1202. PÆO'NIA.

7812. Moûtan

	β *salmònea* Gord.	*salmon-cld-fld*		or	3	ap.jn	Pa.Sal		China	1846.	L	p.l	Paxt. fl g 1. 20		
	γ *atrosanguínea* Gord.	*dark-purple-fld*		or	3	ap.jn	Dk P		China	1846.	L	p.l	Paxt. fl. g 1 31		
	δ *pícta* Gord	*painted*		or	3	ap.jn	Pa.Ro		Canton	1844.	L	p.l			
	ε *versícolor* Gord.	*party-coloured*		or	3	ap.jn	W R		China	1846.	L	p.l			
	ζ *parvyflòra* Gord.	*small-flowered*		or	3	ap.jn	Pa.Ro		Shnghae	1845	L	p.l			
	η *globòsa* Gord.	*globose-flwd*		or	3	ap.jn	W.P		Shnghae	1845.	L	p.l			
	θ *lilácina* Gord.	*lilac-flowered*		or	3	ap.jn	Li		China	1845.	L	p.l			
	ι *Reevesiàna* Paxt.	*Reeves's*		or	3	ap.jn	Dp C		China	1846.	L	p.l	Px m. 1 197		
19527	7820*a* Wittmanniàna *Hart.*	Wittmann's	△	or	2	my	GshY		Abcharia	1842.	R	s.l	Bot reg 1846, 9		
19528	7823*a* californica *Lindl*	Californian	△	or	2	my.jn	R		Californ	1850	R	s l			

TRIGYNIA.

1203. HIBBE'RTIA

19529	7829*a* perfoliàta *Hug.*	perfoliate-lvd		or	2	my au	Y		Swan R.	1846.	C	s.l p	Bot reg 1843, 64		
19530 -	- pedunculàta *R. Br.* *corifolia* Bot mag. 2672.	pedunculate		or	1	my.au	Y		N. Holl.	1823.	C	s.l p	Bot reg 1001		
19531 -	- Cunninghàmi *Ait* *Candóllea Cunninghàmi* Bot. No 85.	Cunningham's		or	3	jn	Y		K.G.S	1823.	C	s.l p	Bot. mag. 3183		

1204. DELPHI'NIUM.

19532	7851*a* decòrum *F & M.*	decorous	△	or	1½	my	P		New Cal.	1838.	D	co	Bot. reg 1840, 64		

3070. 1204*a*. CONSO'LIDA *Bauh* (A name used by Bauhin and other old authors.) *Ranunculàceæ*

19533 -	- Acontti *Lindl.* *Delphinium Aconiti* L. No 7835 *Delph. Consólida* No. 7832 belongs also to this genus.	Aconite like	○	or	1	jn jl	P		Levant	1801	S	p.l	Vahl symb 1 13 *Aconitum monógynum* Forsk.		

1205. ACONI'TUM.

19534	7858*a* ochránthum *Led.*	pale-flowered	△	or	4	jl au	Crea		Russia	1834.	D	co	Led fl ross 406		
19535 -	- Lamárckii *Rchb.* *pyrenáicum* Lam	Lamarck's	△	or	2	jn.au	Pa Y		Pyrenees	1817.	D	co	Rchb. ill. 40		
19536 -	- Nuttállii *Swt* *pállidum* Nutt.	Nuttall's	△	or	5	jn o	Pa B		N Amer.	1829.	D	co			
19537 -	- moldávicum *Bes.*	Moldavian	△	or	3	jn o	P		Moldavia	1820.	D	co			
19538	7859*a* autumnàle *Lindl.*	autumnal-flwng	△	or	3	s.d	Li.w		China	1846.	D	co			
19539 -	- ovàtum *Lindl.*	ovate-leaved	△	or	2½	s.d	G R P		Cashm.	1839.	D	co	Bot gard 870		
19540 -	- chinénse *Sieb.* *sinénse* Paxt.	Chinese	△	or	2	s	Dp V		Japan	1833	D	co	Bot. mag 3852		
19541	7866*a* Stoerckiànum *Rchb.*	Stoerck's	△	or	4	au s	B		Austria	1824	D	co	Bot. cab 1991		



History, Use, Propagation, Culture,

3068. *Pachystigma* only requires the treatment of an ordinary stove-plant, and ripened cuttings will strike root in the usual way.

3069. *Luxembúrgia.* The species are very pretty plants resembling some species of *Rhododéndron*, with showy yellow flowers and shining serrated stiff leaves. *L. ciliòsa* and *corymbòsa*, the only species ever cultivated in this

19520 Icosandrous glabrous, Branches angular, Lvs linear-obtuse carinate spreading, Bracts obovate-obtuse connate beyond middle shorter than tube of Calyx, Tails rather longer than petals, Flws axillary

19521 Icosandrous glabrous, Leaves linear semiterete obtuse imbricate, Bracts lanceolate-acuminate clammy rather shorter than tube of calyx, Tails twice as long as petals, Flowers corymbose

19522 Deciduous, Branches tetragonal, Angles winged, Lvs roundish-ovate acute glabrous glaucous green, Peduncles axillary constituting a terminal panicle

19523 Much-branched, Leaves alternate on long petioles trifoliate, Leaflets ovate-entire or obsoletely serrated full of pellucid dots, Peduncles subtrichotomously branched, Flowers fragrant

19524 Leaves alternate linear without stipules, Flowers small by twos or threes at ends of branches on naked pedicels, Sepals 5, 3 of which are oval and pointed and 2 subulate, Corolla twice as long as calyx

19525 Leaves crowded on long petioles oblong-lanceolate glandularly setose setosely mucronate, Stipules deciduous, Corymbs many-flowered, Flowers polyandrous

19526 Leaves on short petioles narrow-oblong acutish cuneated at base, Flowers large few disposed in corymbs polyandrous

DIGYNIA.

β Flowers double of a salmon colour
γ Flowers of a dark blood colour
δ Flowers semi-double rose-coloured stained and veined with deeper rose colour towards the apex
ε Flowers party-coloured
ζ Flowers small pale rose colour
η Flowers globular white and purple
θ Flowers lilac
ι Flowers deep crimson

19527 Leaves triternate, Leaflets entire ovate rugose grey and downy beneath, Petals ovate yellow, Carpels erect [tomentose recurved at apex

19528 This species is mentioned in the Hort. Soc Journ., vol 5., but without any description

TRIGYNIA.

19529 Glabrous glaucescent, Branches nearly terete, Leaves obovate-oblong and oblong stem-clasping and perfoliate denticulated opaque and smooth beh., Peduncs solitary 1-flwd scaly at base, Petals 2-lobed, Ovaries 4—5 glab.

19530 Leaves linear bluntish with revolute edges, Flowers on long peduncles digynous, Ovaries hairy

19531 Twining a little glabrous, Leaves alternate linear cordate at base and stem-clasping with revolute edges, Outer Stamens sterile, Carpels 5 glabrous 4—5-seeded

19532 Rather downy, Leaves tripartite, Lateral segments bifid or undivided, Lobes oblong tridentate or entire, Floral Leaves and Bracts nearly oblong, Spur curved length of sepals, Carpels 3 divaricate

19533 Stem branched downy, Leaves pedate multifid, Pedicels long, Spur incurved at end horizontal divided upwards

[Ovaries 3 downy

19534 Stem clothed with short deflexed hairs, Leaves glabrous above palmate-parted, Segments 3—5 pinnatifid,

19535 Stem glabrous, Leaves 7—9-parted, Segments unequally cleft, Spur spiral, Helmet constricted clavate, Ovaries 4 villous

19536 This is a pretty plant with cream-coloured flowers nearly related to *Lycóctonum*

[pressed, Ovaries silky villous

19537 Stems purple downy, Leaves 3—5-lobed ciliated, Racemes crowded, Brnchs panicled, Helmet cylindrical com-

19538 Downy, Leaves palmatifid, Segments pinnatifid, Spikes simple strict, Helmet compressed roundish acuminated, Cuculli circinate, Filaments winged, Ovaries villous [teral sepals obt., Petals renif. at top, Ovs 5 glab.

19539 Erect pyram dwny, Lvs stem-clspng cord.-ov. obt. deeply cren, Bracts 2 foliac concave, Helmet rounded, La-

19540 Stem robust glabrous, Lower Leaves petiolate ample deeply tripartite, side segments bifid all cut, upper leaves sessile 3—4-cleft segments nearly entire, Racs sub-comp., Pedicels hairy at top, Nectaries with short spurs

19541 Calyx deciduous, Petals supine hooked, Stamens pilose, Helmet arched, Ovaries 3—5—7 smooth, Panicle loose



and Miscellaneous Particulars.

country, require a moderate stove-heat, and flower during the summer months. A compost of vegetable mould, sand, and loam will answer them. They may be propagated by seeds and cuttings.

19570 *Consólida* is a genus separated from *Delphinium*, and requires the same culture and treatment as *Delphinium* pictum. It is a biennial plant.

PENTAGYNIA.

1208 AQUILE'GIA.

19542 7883*a* jucúnda *Fisch.* joyous ♃ △ or 1½ jn.au B.w Siberia ... D s l p Bot. reg 1847, 59
glandulòsa Swt. fl g. *alpina* Delesse not L.
19543 7886*a* Skinneri *Hook.* Skinner's ♃ △ or ½ ap my S G Guatem. 1841. D s l p Bot mag 3909
19544 - - pubiflòra *Wall* downy-flwd ♃ △ or 1 my.au Pa P N India 1839 D s l p
19545 - - leptóceras *Nutt.* slender-spurred ♃ △ or 1 jn au V Y w Siberia 1846 D s l p Bot. mag 4407
cærùlea James *macrántha* Hook & Arn
19546 - - frágrans *Benth* fragrant ♃ △ or ½ my Pa Y Himalay 1839. D s.l p Botanist 181
19547 - - glaúca *Lindl.* glaucous ♃ △ or 2 my jn Pa.Y Himalay 1839. D s l.p Bot reg 1840 46
19548 - - kanaoriénsis *Jacq* Kanaor ♃ △ or 1 my jn B w India 1851. D s p Bot mag 467

3071. 1212*a*. SMEATHMA'NNIA *Sol* (*After Smeathmann*, a traveller in Western Africa.) *Passiflòrea*
19549 - - lævigàta *Sol* smooth ● □ or 8 ... W S Leone 1823. C s l p Bot. mag 4194
19550 - - pubéscens *Sol.* downy ● □ or 6 W S Leone 1845 C s l.p Bot. mag 4364

POLYGYNIA.

1213 NELU'MBIUM.

7898 speciòsum
γ álbum *white-flowered* ⛵ △ or flt su W ..... 1787. R l
19551 - - jamaicénse *P Br.* Jamaica ⛵ △ or flt ... W Jamaica .. R l

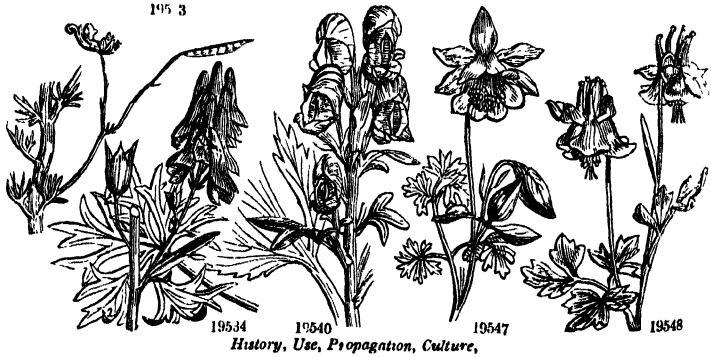
1215. ILLI'CIUM

19552 7902*a* religiòsum *L* holy ● ⌴ or 6 mr Y.G Japan 1842. C s l p Bot mag 3963
anisàtum Thunb

3072 1224*a* LAPLA'CEA *St. Hil* (*Marquis de La Place*, celebrated French mathemat.) *Ternstræmiaceæ*
19553 - - semiserràta *St Hil* semi-serrated ♀ □ or 30 my.s W Brazil* 1842 C s l.p Bot. mag 4129
Hæmócharis semiserràta Mart.

1226. ANEMO'NE.

7938 palmàta
β flòre plèno Swt *double-flwd* ♃ △ or ⅝ my jn Y S Eur ... D co Chab sc 461
19554 7944*a* Hudsoniàna *Rich.* Hudson's ♃ △ or ½ ju jl W N Amer. 1827 D co Del lt sc 1 17
multífida β Hudsoniàna Dec. *multífida* Hook
19555 - - rivulàris *Buch* river ♃ △ or 1½ my jn W N. India 1840 D co Bot reg 184
19556 7949*a* deltoidea *Doug.* deltoid ♃ △ or ⅜ ap jn W Oregon 1827. R co Hk.b am 1 3
19557 7951*a* Richardsònn *Hook* Richardson's ♃ △ or ½ jn jl Y Rocky m. 1827. R co Hk b am 1 14
ranunculoides var Rich
19558 7952*a* longistàpa *Wall.* long-peduncled ♃ △ or 1 jn jl W N India 1839. R co
19559 - - japónica *Sieb* Japan ♃ △ or 2 my o Ro Japan 1844. R lt.m Bot mag 436
Clématis japónica Dec *Atragene japónica* Thunb
β hýbrida *hybrid* ♃ △ or 4 jl o Ro hybrid ... R co
19560 - - obtusíloba *D Don* blunt-lobed ♃ △ or ½ jn jl W N. India 1842. R co Bot. r 1841 60
Govaniàna Wall
19561 7961*a* Nuttalliàna *Rich.* Nuttall's ♃ △ or 1 jn jl P N. Amer. 1826 R co Nutt ac phil
Ludovicìana Nutt *Clématis hirsutíssima* Ph
19562 - - montàna *Hoppe* mountain ♃ △ or 1 jn P Switzerl. 1830 R co Bot. gard 796
pratènsis β intermèdia Schultz. *Pulsatilla rùbra* Gaud.



History, Use, Propagation, Culture,

3071. *Smeathmánnia* The species are pretty shrubs with tea-like leaves and pretty white flowers. *S lævigàta* grows on the hills at Sierra Leone, and is one of the most showy plants there, it flowers so profusely. *S pubéscens* grows in the lowlands by the sides of rivulets in thickets, and is not so showy a plant as *S. lævigàta*. A mixture of loam, peat, and sand will suit them, and cuttings will strike root in the usual way They require plenty of heat and moisture when growing

19552 *Illicium religiòsum* is the celebrated Anise tree There seem to be two kinds of Anise tree the *I anisàtum* of Loureiro, the Chinese kind, and *I religiòsum* Sieboldt, the *I anisàtum* of Thunberg, the Japanese kind. By the Japanese this plant is held sacred They strew wreaths of it and branches over the tombs of their friends and their priests burn the bark as a perfume upon the altars of their deities. A singular use is made of the pulverised

PENTAGYNIA.

19542 Spurs thick curved much shorter than the lip, Pistils exceeding the stamens a little, Fruit ovoid umbilicate at base

19543 Glabrous, Spurs straight and very long at least 5 times longer than the limb, Stamens much exserted exceeding the 3—5 styles

19544 Stem many-flowered downy tomentose under the calyx, Lvs pil. beneath, Leaflets cuneated 3-lobed, Segments truncate cut, Flowers pilose, Sepals acuminated twisted round the spurs, Ovaries glabrous

19545 Radical Leaves biternate glaucous beneath, Leaflets cuneate lobed, Spurs very long straight slender twice as long as limb, Sepals rhomboid-lanceolate

9546 Downy subglandular many-flowered, Segments of lower Leaves divided beyond the middle, Flowers large, Sepals ovate-lanceolate acute, Spurs hooked much shorter than the truncate lamina

9547 Glaucous downy many-flowered, Leaves trifid cuneated, Segments 2—3-lobed, upper ones ovate entire, Flowers large pilose, Sepals ovate-lanc, Spurs reddish straight shorter than truncate lamina, Ovaries glandul villous

9548 Stem Petioles and Peduncles beset with glandular down, Spurs deep blue straight equal in length to calyx, Limb of Petals obovate, Stamens and Style shorter than petals, Fruit pilose

9549 Branches rather silky, Leaves oblong coarsely serrated acuminate t tapering into the petioles glabrous shining, Urceolus cut pilose inside [Leaves oblong serrately toothed obtuse at base, Urceolus bearded

9550 Younger branches and Petioles glandular, Ribs beneath calyxes and peduncles covered with rusty hairs,

POLYGYNIA.

γ Flowers white

9551 Leaves orbicular-rayed, Fruit obversely conical, Seeds large embedded

9552 Arborescent evergreen glabrous, Leaves elliptic quite entire tapering to both ends, Stamens 18—20, Capsule fleshy

9553 Leaves oblong-obovate acute oblique at base, serrated at top, coriaceous glabrous, Flowers in the axils of the upper leaves, Petals 5—8

γ Flowers double yellow [decomposed on short stalks, Peduncs 2 bearing involucels, Seps 5—8 ov acutish

19554 Villous, Radical Leaves ternate with many-parted segments and linear lobes, Leaves of Involucrum ternately [partite, Lobes lanceolate serrated pinnatifid, Ovaries glabrous, Fruit linear acuminate mucronate

9555 Leaves rather villous tripartite, Leaflets ovate trifid, Lobes cut acutely toothed, Leaves of Involucrum sessile tri-

9556 Leaves of Involucrum 3 sessile ovate acuminate deeply serrated, Stem pilose, Sepals 5—6 obovate

9557 Pilose, Leaves kidney-shaped 3—5-parted, Lobes trifid and toothed, Leaves of Involucrum roundish cuneate sessile trifid and toothed, Sepals 6 spreading, Carpels compressed smooth ending each in a hooked beak

9558 Young Leaves villous, adult ones glabrous, Radical Leaves on long petioles reniform 5-lobed, Segments 3-lobed, Lobes serrate, Petioles villous, Leaves of Involucrum like the rest but larger and cut, Flowers umbellate

9559 Caulis, Radical and Cauline Lvs ternately cut, Segs cord. 3 lobed uneq. serr, Lower involu Lvs petiolate cun. at base, upper ones sess, Peduncs elong. 1-flwd or dichot -brnchd, Seps about 20 silky outside, Cariopsis vil.

β A tall branchy plant

9560 Villous, Leaves roundish cordate 3-lobed coarsely and deeply crenate, Umbel few-flowered, Sepals obtuse pilose on the back, Leaflets of Involucrum foliaceous, upper ones cuneated 3-lobed, Carpels pilose

9561 Leaves ternate, Segments cuneate trifid, Lobes long linear, Leaves of Involucrum parted into linear lobes, Flowers erect, Sepals 5—6 erect connate

19562 Radical Leaves triplicately pinnate, Segments linear acute, Involucral Leaves sessile many-parted, Lobules linear 2—3-cleft, Flowers drooping, Sepals at first campanulate but at length stellate



and Miscellaneous Particulars.

bark by the public watchmen. Hollow tubes graduated on the outside are filled with the substance, which is lighted at one extremity and burns gradually and uniformly, so that when the fire has reached a certain mark, the watchman strikes the hour upon a bell, and thus announces it to the public.

9572 *Aplàcca semiserràta* recommends itself by its handsome tea-like evergreen foliage and large white flowers. It will thrive in a mixture of loam, peat, and sand; and ripened cuttings will root under a hand-glass in the ordinary way

19560 *Anemòne japónica* is hardy, and cultivated in our gardens for the beauty of its flowers A moist soil seems most favourable to its success The hybrid variety of it is a much stronger and taller plant, and at first sight looks like a small red-flowered *Dahlia*

1227. CLE'MATIS.

19563	7971*a* lanuginòsa *Lindl.*	woolly		or	10	jl	B	China	1851.	L	s.p.l	Px. fig 3	107	94
19564	7976*a* pedicellàta *G. Don*	pedicellate		or	15	mr.ap	W	Majorca	1596	S	co	Bot mag	1070	
	cirrhòsa β pedicellàta Dec.													
19565	7985*a* lathyrifòlia *Bess*	Lathyrus-lvd	△	or	4	jn.au	W	Podolia	1836.	D	co	Bot. r	1849,	61
19566	- hexapétala *Lindl.*	six-petalled		or	4	ap	Pa.G	N. Zeal.	1844.	S	co	Bot. r	1846,	44
	Fórsteri Gmel.													
19567	- Grahàmii *Benth*	Graham's		or	15	au.s	Pa.G	Mexico	1846.	S	co	J.H.S.	2	315
19568	- gravèolens *Lindl.*	strong-scented		or	15	jl.au	Pa.Y	Tartary	1845.	S	co	J.H.S.	1	307
19569	- glycinoides *Dec.*	Glycine-like		or	15	ap.jn	W	N S.W.	1826.	S	co			
19570	7985*b* tubulòsa *Turcz*	tubular-flwd		or	2	au.s	B	China	1845.	S	co	Bot. mag	4269	
19571	7988*a* smilacifòlia *Wall.*	Smilax-leaved		or	20	jn.jl	Br Bk	E.Ind.	1823.	C	s l p	Bot. mag	4249	
	glandulòsa Blume.	*subpeltàta* Wall. pl rar. asiat. 11. t. 20												
19572	- indivisa *W.*	undivided-lvd		or	20	ap.my	W Cre	N.Zeal.	...	L	s.l.p			
	integrifòlia Forst. not L.													
	β lobàta Hook.	*lobed-leaved*		or	20	ap my	W.Cre	N Zeal	1847.	L	s.l.p	Bot. mag	4366	

1229 THALI'CTRUM.

19573	8012*a* cultrātum *Wall.*	cultrate-leaved	△	or	3	jn jl	Gr.Y	Himalay.	1838.	D	co			

1233. RANU'NCULUS.

19574	8048*a* cardiophyllus *Hook*	heart-leaved	△	or	1	my.jn	Y	Rocky M.	1829.	D	co	Bot mag	2969	
19575	- spicātus *Desf*	spiked	△	or	1½	ap my	Y	Algiers	1840.	D	co	Bot mag	4[illegible]	
	ollyssiponénsis Pers													
19576	- cortusæfòlius *Willd*	Cortusa-leaved	△	or	4	ap.my	Y	Canary I	1845.	D	co	Bot. mag	4621	
	Tenerìffæ Pers. *grandiflòrus* Lowe.													
19577	8066*a* Leormándi *Schultz*	Leormand's	△	or	fit	my au	W	Britain	ditch.	D	co	Eng. bot	2930	
	hederàceus β grandiflorus Babingt.													
19578	- tripartitus *Dec.*	tripartite-lvd	△	or	fit	my au	W	Britain	ditch.	D	co	Eng bot	2946	
19579	- circinātus *Sibth.*	rounded-leaved	△	or	fit	jn jl	W	Britain	pon. dit.	D	co	Eng bot	2869	
	divaricātus Koch													
19580	- fluitans *Lam.*	floating	△	or	fit	jn.jl	W	Britain	bro riv	D	co	Eng bot	2870	
3073	1233*a* CATHCA'RTIA *Hook.*	CATHCARTIA.	(*J F Cathcart*, late Judge at Tirrhoot.)									*Papaver aceæ*		
19581	- villòsa *Hook*	villous	○	or	1½	jn jl	Y	N. India	1851.	S	co	Bot mag	4496	
3074	1233*b* EUCRY'PHIA *Cav*	(*Eu*, well, *kryphia*, a cover, flower covered by a calyptra.)										*Hypericaceæ*		
19582	- cordàta *Cav*	cordate-leaved		or	40	..	W	Chiloe	1848.	C	s.p l	Cav. icon	4	37

1234. TRO'LLIUS

19583	8074*a* acaúlis *Lindl.*	stemless	△	or	½	jl	Y	Cashmer	1842.	D	s.l.p	Bot reg	1843	41

1237 HELLE'BORUS

19584	8082*a* atrórubens *W & K*	dark red	△	or	1	f.mr	Psh	Hungary	1820.	D	s p	Bot mag	1581	
19585	- orientālis *Dec*	Eastern	△	or	1	f mr	W Psh	Greece	1841	D	s p	Bot. reg	1842,	8
	officinālis Smith fl. græc. 583.													
19586	- olýmpicus *Lindl*	Olympic	△	or	2	my.jn	W	Bithynia	1842.	D	s.p	Bot. reg	1842,	56

1239 CA'LTHA

19587	8089*a* sagittàta *Cav.*	sagittate-lvd	△	or	½	au s	Ysh	Falk Isl.	1841.	D	bog	Bot. mag	4046	
19588	- Goveniàna *Wall.*	Gowen's	△	or	½	...	...	N. Ind.	1848.	D	bog			

Page 490. CLASS XIV.—DIDYNAMIA. 4 STAMENS, of which two are shorter than the others

Order I GYMNOSPERMIA. Pericarpium divided into four lobes resembling naked seeds.

3075 1263*a*. *Audsbértia*. Calyx bilabiate Upper lip concave, entire, or tridentate; lower lip bifid Throat naked Corolla bilabiate; Upper lip bifid, lower trifid middle lobe broad emarginate Two lower Stamens fertile, two



History, Use, Propagation, Culture,

19572. *Clématis indivisa* and its variety *lobàta* quite festoon the trees in New Zealand with their dense foliage and large panicles of white flowers

19576. *Ranúnculus cortusæfòlius* is the handsomest of all the buttercups. The roots are grumose. The flowers are large and yellow. The plant requires protection in winter.

3073. *Cathcártia*. This is a pretty biennial plant, and will grow in any light rich soil; but in a sheltered situation

[and alabastra, Peduncles and younger stems woolly, Sepals 6 ovate acuminated spreading
19563 Lvs simple and ternate, Leaflets coriaceous cordate acuminate villous beneath and on the branches petioles
19564 Peduncles 1-flowered stalked within the involucrum, Leaves ovate somewhat cordate toothed in fascicles
[obovate tomentose, Tails of Carpels villous
19565 Herbaceous erect, Leaves pinnate, Leaflets ovate-lanceolate entire 2—3-lobed, Corymbs panicled, Sepals 4—5
19566 Leaves ternate, Leaflets ovate-cordate broadly crenate reticulated smooth coriaceous, Flowers panicled dicecious of 6 sepals [coarse serratures, Flws small downy, Corymbs axillary and terminal downy panicled
19567 A rambling shrub with habit of *C. virginiana*, Leaves pinnate, Leaflets ovate slightly cordate acum with a few
19568 Glabrous slender, Stems angular, Leaves pinnately bi-triternate, Leaflets small tripartite, Segments ovate ent. or deeply ser., Peduncs 1-flwd solit., Seps 4 obl -obt recvd at top dwny inside Carps dwny with feathery tails
19569 Lvs tern. glab., Lflts ov.-lanc. acum ent 3-nerved at base, Peduncs shorter than lvs, Flws panic. dicecious
[minal and axillary, Sepals linear oblong at first tubular but at length revolute downy outside
19570 Erect rather downy, Leaves trifoliate on long petioles, Leaflets ovate a little lobed muer toothed, Corymbs ter-
19571 Lvs ovate cordate slightly peltate entire or slightly crenulate glabrous, Panicles axillary Sepals 4 clothed with rusty tomentum
19572 Dicecious, Flowers panicled, Sepals 5—7 elliptic silky, Leaves ternate, Leaflets petiolate ovate entire, adult ones glabrous
β Leaflets lobed

19573 Glaucous slender, Leaflets ovate reticulated, Flowers scattered in somewhat horizontal racemes
[ones palmately multifid with linear segments, Calyx spreading, Fruit oblong
19574 Downy hairy, Lvs subcoriaceous glaucous green, radical ones roundish cordate coarsely serrate crenate, cauline
19575 Root grumose, Leaves rather hairy, radical ones petiolate orbicular, lower ones 5-lobed toothed, upper ones tripartite with linear entire lobes, Stem erect few-flowered, Calyx spreading Spike of Carpels elongated
19576 Tall pil, Rad. Lvs cordately reniform, lobes lobed and toothed, caul ones nearly sess 3—5-parted. floral ones lanc, Stem corymbosely brnchd at top, Sepals villous, Head of Carp obl glob, Carp ending in a hooked style
19577 Floating and creeping, Lvs all cordate roundish subpeltate 3—5-lobed, Lobes with 2—3 notches, Carpels transversely wrinkled semi-obovate with a terminal acute point, Receptacle not setose
19578 Floating, Submersed Leaves divided into capillary segments, Floating Leaves subpeltate tripartite, Segments triangularly obovate 2—4-cleft, Carpels subobovate blunt with a subterminal point, Receptacle setose
19579 Submersed, Stems ascending, Leaves all submersed divided into numerous capillary 2—4-times forked segments, Carpels ovate compressed tipped by the long acute curved style
19580 Stems floating, Leaves all submersed 2—3-times forked, Segments elongated setaceous parallel, Carpels obovate inflated with a short straight lateral point

19581 Covered with brown villi, Stem simple Lower Lvs on long petioles cordate palmately or pedately 5-lobed, lobes lobuled, upper lvs sessile the uppermost ones pinnatifid, Peduncles terminal and axillary, Flowers drooping

19582 Leaves opposite cordate crenated downy beneath, Flowers white pedunculate

19583 Lvs digitately palmate, Segments tripartite, Peduncles very short 1-flwd, Flowers stellate or spreading, Sepals 9 lanceolate a little cut, Petals linear-cuneate rounded at apex [coloured dark purple changing to green
19584 Radical Lvs glabrous pedate, cauline nearly sessile pinnate, Stem subangular bifidly branched, Sepals roundish
19585 Lvs pedate, floral ones sessile palmate, Segments lanceolate serrated separable to the base and entire, Peduncles bifid or trifid, Sepals roundish-ovate acute petaloid white suffused with purple
19586 Radical Leaves palmate, Segments oblong-linear serrated entire at base, Stem 2-flowered, Floral Leaves nearly sessile, Sepals ovate obtuse greenish white [toothed, Sepals 8—10, Stamens and Pistils numerous
19587 Creeping radicant, Leaves broadly sheathing the stem at the base on long petioles ovate-sagittate sinuately
[Flowers subumbellate, Sepals 5 oblong-ovate, Stigmas elongated and a little hooked
19588 Stem erect leafy, Leaves large roundish toothed, Auricles large approximate, Floral Leaves deeply serrated,

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exserted, the rudiments of the two upper ones small, club-shaped, or wanting. Anthers dimidiate Style bifid· lobes subulate.

3076 12636 *Pogógyne.* Calyx campanulate, 13-nerved Teeth lanceolate; the lower one longest. Corolla bilabiate Tube straight, exserted, naked inside Upper lip entire, lower lip trifid Stamens ascending, approximate at top Cells of Anthers distinct parallel, mutic Style villous, bifid at apex

3077 12638 *Eremóstachys* Calyx tubular or funnel-shaped with 5 spinose teeth, or the limb is large membra-



and Miscellaneous Particulars.

It would perhaps be safer to grow them in pots the first year, placing them under shelter in winter like ordinary alpine plants, and in the month of May, in the second year of their growth, planting them out in the open border

3074 *Eucrýphia* is a very pretty tree lately introduced. It will grow in a compost of sand, peat, and loam, and young cuttings will strike root if planted in sand and covered with a bell-glass.

19585 *Helleborus orientalis* is said to be the true black Hellebore of the ancients.

neous and mucroniform, Corolla with an enclosed tube, and a bilabiate gaping limb: Upper lip elongated, galeate pilose outside, bearded inside and on the margins, lower lip spreading, trifid. Two upper Filaments thickened into a blunt or fringed appendage at base. Anthers approximate by pairs Style bifid Achenia dry, hairy.

3078. 1268*b* *Colquhounia*. Calyx turbinately campanulate, 10-nerved, 5-toothed, with a naked throat. Corolla with a curved tube, naked inside, a dilated throat, and a bilabiate limb. Upper lip erect, entire; lower lip of three short entire lobes. Stamens ascending under the helmet Style bifid. Achenia oblong, smooth, drawn out into a membrane at top

3079. 1271*a*. *Bècrum* Calyx bilabiate· Upper lip decurrent, dilated, lower lip truncate, ciliated. Corolla bilabiate Upper lip 3-lobed, the middle segment cleft, lower lip oblong, concave Stamens very long Ovarium immersed in a 4-toothed disk. Stigma 2-lobed

3080 1279*a*. *Cedronélla* Calyx tubular or campanulate, 15-nerved, with a nearly equal or obliquely 5-toothed limb Corolla with an exserted tube, naked inside, a dilated throat, and a bilabiate limb. Upper lip straight, flattish, emarginately bifid; lower one trifid, with a large middle lobe Stamens ascending Style bifid. Achenia dry, smooth

3081 1284*a* *Hemándra*. Calyx campanulate striated Lips flat, closed over the fruit, upper lip entire; lower lip bifid. Corolla with a short wide tube, a campanulate throat, and a bilabiate limb. Upper lip bifid, the lower one 3-lobed, the middle lobe emarginate. Stamens glabrous Anthers dimidiate Fertile cell ascending; sterile cell descending. Style bifid at apex

3082. 1284*b*. *Monardélla* Calyx ovate, tubular, 10–13-nerved, 5-toothed Throat naked Corolla subbilabiate Upper lip bifid, lower trifid Stamens nearly equal, diverging, exserted Cells of Anthers parallel, at length divaricate. Style bifid at apex. Stigmas minute Achenia dry

Order II. ANGIOSPERMIA Seeds several, enclosed in an undivided pericarpium.

3083. 1291*a* *Chrysóthemis* Calyx campanulate, 5-toothed, with 5 projecting sides Corolla almost regular, with 2 projecting folds on the lower lip Stamens enclosed Stigmas 2-lobed Perigynous disk a notched fleshy gland

3084 1291*b*. *Collándra* Calyx free, 5-parted Corolla tubular, compressed, angular, rather ventricose, inflated at base, curved. Segments 5, equal, erectly incurved Flowers sessile, aggregate, bracteate, turned downwards Bracts and Sepals lanceolate, acuminate, jagged

3085. 1291*c* *Alloplectus* Calyx 5-cleft, coloured: Segments imbricate Corolla tubular or club-shaped Limb 5-lobed or 5-toothed Stamens with small rudiment of a fifth at base of tube Hypogynous ring swollen into a gland behind. Capsule baccate, ovate, coriaceous, 1-celled, 2-valved, many-seeded Seeds oblong.

3086. 1291*d* *Macróchlamys* Calyx regular, surrounded by petaloid bracts; the rest as in *Alloplectus*.

3087 1291*e*. *Hypocyrta*. Calyx 5-parted. Corolla tubular, gibbous behind at base. Tube ventricose in front Limb 5-lobed or 5-toothed, nearly equal. Stamens with the rudiment of a fifth behind. Anthers cohering by pairs Ovarium with a hypogynous cup-shaped disk Berry globose, coloured, juicy, 1-celled. Seeds many, fixed to two 2-lobed parietal placentas

3088 1291*f* *Episcia* Calyx 5-parted or 5-cleft Corolla funnel-shaped, gibbous behind at base, 5-lobed Stamens with the rudiment of a fifth behind Hypogynous disk swelling into a gland behind. Capsule nearly globose, membranous, 2-valved, with two bilamellate parietal placentas Seeds numerous oblong.

3089 1291*g* *Drymónia* Calyx obliquely 5-leaved, 2 interior Corolla obliquely campanulate, subringent, gibbous at base Upper lip 2-lobed, lower lip 3-lobed. Hypogynous disk bearing an ovate gland behind Capsule baccate, ovate, coriaceous, 1-celled, 2 valved, with two parietal bilamellate placentas Seeds numerous fusiform.

3090 1291*h* *Nematánthus*. Calyx 5-parted, oblique Corolla campanulately funnel-shaped, oblique, gibbous base behind, with an open throat and equal 5-lobed limb Hypogynous ring swollen into an oblong gland behind Capsule pyramidal, coriaceous, 1-celled, 2-valved Placentas 2, parietal, bilamellate. Seeds numerous, oblong

3091 1291*i* *Campánea* Calyx of 5 oval, acuminated, 3-nerved divisions. Corolla large, campanulate, hairy Limb of 5 rounded lobes Stamens enclosed, glabrous Anthers heart-shaped, firmly joined together. Disk formed of 5 yellow, fleshy, obtuse glands, surrounding the hairy ovarium

3092 1291*j* *Comádia* Calyx adnate to the ovarium, 5-cleft or 5-toothed Corolla tubular or campanulate, 5-cleft Stamens with the rudiment of a fifth behind Anthers usually cohering Glands on disk wanting Capsule dry, covered by the 5—10-ribbed calyx, flat at top, 2-valved Placentas 2, parietal Seed scobiform

3093 1291*k* *Mitária* Calyx 5 parted, equal, calyculated by a 2-lobed mitre-shaped bract Corolla tubularly ventricose Upper lip 2-lobed, lower 3-lobed Stamens exserted, with the rudiment of a fifth behind. Berry 1 celled, many-seeded

3094 1291*l* *Arctócalyx* Calyx tubularly campanulate, shaggy, smooth in its upper part. Corolla with a lacerated or fringed, 5-lobed, nearly equal limb, and a curved tube, broadest upwards.

3095. 1291*m*. *Centrosolènia* Calyx 5-parted Segments serrated Corolla tubular, spurred behind at base, the throat widened, and the limb short, 5 lobed, and spreading Stamens enclosed, with a minute rudiment of a fifth abortive filament. Hypogynous ring obscure, the hind gland large Ovarium hairy. Style dilated at apex subcapitate Fruit capsular

3096 1291*n* *Heintzia*. Calyx large, 5-parted Corolla funnel-shaped. Tube curved: Limb of 5 spreading hairy segments

3097 1291*o* *Moussònia* Calyx 5-parted Corolla ½ an inch long, curved, swollen about the middle of tube Limb of 5 spreading, nearly equal, crosely crenated segments

3098 1292*a* *Abelia* Calyx oblong. Limb 2—5-parted Segments oblong, foliaceous. Corolla tubular, funnel shaped, 5-lobed, nearly equal Stigma capitate Ovarium 3-celled, 2 of the cells contain many ovula, but they all become abortive, but the third cell contains only 1 ovulum, which comes to perfection Fruit 1-seeded, indehiscent, crowned by the foliaceous limb of the calyx.

3099 1294*g* *Spathódia* Calyx spathaceous, cleft on one side, and toothed or entire on the other Corolla funnel shaped, with a 5 lobed, rather unequal, subbilabiate limb. Stamens with the addition of a fifth or sterile filament Cells of Anthers divaricate Stigma bilamellate Capsule silique-formed, falcate, falsely 4-celled. Seeds transverse, with membranous wings

3100. 1294*h* *Adenocalýmma* Calyx campanulate, 3-toothed, rarely truncate, and rarely spathaceously cleft bearing 10 large, flattish, brown glands near the top Corolla tubular, with a nearly equal 4-lobed limb Stamens 4 fertile, and 1 sterile Lobes of Anthers divaricate, glabrous Stigma bilamellate

3101. 1294*i*. *Colea*. Calyx campanulate, 5-toothed. Corolla funnel-shaped, with a long tube a little widened at top, and a 5-parted spreading limb, having the lobes equal Style filiform Stigma bilamellate Fruit fleshy, oblong 2-celled, tipped by the style.

3102 1295*a* *Phyllárthron* Calyx campanulate, 5-toothed Corolla funnel-shaped, 5-lobed· Lobes roundish Stamens enclosed Cells of Anthers spreading Ovarium inserted in a fleshy disk. Fruit silique-formed, indehiscent Seeds not winged

3103 1297*a* *Tetranèma*. Calyx 5-parted Corolla bilabiate. Upper lip flat, emarginate; lower lip longer trifid. Stamens declinate, shorter than the corolla. Cells of Anthers divaricate. Stigma subcapitate Capsule 2 valved. Valves entire, septiferous in the middle Seeds numerous, angular.

3104 1301*a* *Dilivária* Calyx 4-parted Upper and lower segments a little larger, entire, callous at base Corolla unilabiate Lip 3-lobed Palate convex, thickened, the upper edges entire. Anthers 1-celled, with bearded ciliated margins Filaments straight Capsule 2 celled, compressed, 4-seeded from base to middle. Seeds cordate-ovate, compressed, tubercled Retinacula thick, obtuse.

3105. 1302*a*. *Asteracántha* Calyx 4-parted to base lower segment bidentate. Corolla deeply bilabiate Upper lip bifid; lower trifid, bicallous at the origin of the segments. Stamens connate by pairs at base. Anthers 2-celled, glabrous. Stigma simple, acuminate Capsule 2-celled, compressed, 8-seeded. Seeds ovate, compressed, truncate at base, smooth, propped by small retinacula

3106. 1304*d*. *Stemonacánthus*. Calyx 5-parted, equal Corolla funnel-shaped. Limb spreading, reflexed

Stamens prominent. Cells of Anthers with a broad connective and membranous edge. Stigma bilabiate Capsule contracted and seedless at base, and inflated and ovate or oblong at top, and 4—8-seeded Seeds flat, hanging by tridentate retinacula.

3107 1304*e* *Servógraphis.* Calyx 5-parted, equal Bracts and bracteoles usually subulate Corolla ringent Tube short, furnished inside with 3 silky shining bodies, or deficient stamens: Upper lip bidentate, arched, lower lip convex, trifid. Stamens 2, adnate to the tube Stigma bifid. Capsule depressed at base and seedless, compressed at apex and 4-seeded Seeds muricated, propped by retinacula which are bifid at apex.

3108 1304*f.* *Salpixántha.* Calyx small, 5-toothed, bibracteate. Corolla funnel-shaped: Limb regular, spreading, 5-lobed. Lobes retuse Stamens equal, inserted in the narrow part of the tube Ovarium 2-celled, seated on a fleshy disk Cells biovulate Style slender Stigma obtuse

3109 1304*g* *Strobilórachis* Calyx short, 5-parted Segments membranous, equal. Corolla bilabiate, with a long, narrow, recurved tube, and a broad campanulate limb Segments large Upper lip 2-lobed, lower lip trifid, with ovate, roundish segments Anthers 1 celled, acute at base Keel villous on back Stigma funnel-shaped, 2-lobed Capsule 4-seeded.

3110 1304*h* *Whitfíeldia* Calyx large, bibracteate, 4—6-cleft. Bracts usually coloured, opposite, obovate, 3-nerved Corolla campanulate, funnel-shaped Tube with 5 elevated striæ. Limb bilabiate, spreading. Fifth or sterile stamen rudimentary. Ovarium compressed. Hypogynous disk large, fleshy, cup-shaped. Style filiform. Stigma small capitate

3111 1304*i.* *Petalidium.* Calyx equal, 5-parted, enclosed by 2 valvate bracts Corolla funnel-shaped: Limb nearly equal Stamens enclosed Anthers oblong, sagittate Cells parallel, awned at base Stigma bifid Capsule 4-seeded in the middle Seeds compressed, emarginate, suspended by subulate retinacula

3112 1304*k* *Dipteracánthus* Calyx equal, 5-cleft Corolla funnel-shaped, with a nearly equal 5-cleft limb. Stamens enclosed Anthers linear-sagittate. Cells parallel, equal, mutic. Stigma bilamellate, nodulose at base. Capsule compressed at base, seedless, large and 2—8—12—16-seeded at top Seeds orbicular, compressed, girded by a tumid margin Retinacula uncinate, præmorse

3113 1304*l* *Asystasia* Calyx 5-parted Corolla rather funnel shaped, 5-cleft, nearly equal, the hind segment rather concave Cells of Anthers parallel, villous, or appendiculate at base. Capsule stipitate, tetragonal, 2-celled, 4-seeded Seeds discoid

3114 1304*m* *Hydrométra* Calyx bibracteate, 5-parted upper segments equal, acute, the fifth or hind one obtuse. Corolla funnel-shaped, bilabiate Upper lip bifid, with revolute lobes, lower lip trifid, with equal lobes Stamens equal, bearded Anthers 1-celled, bearded at base and apex. Stigma bilabiate Capsule sessile, tetragonal, 2-celled: Cells 2-seeded Seeds discoid, furnished with hooked retinacula

3115 1305*a* *Hexacéntris* Calyx small, saucer-shaped, 5-toothed or repand Bracts 2, covering the calyx. Corolla campanulately funnel-shaped Tube short Limb nearly equal, obliquely 5 cleft Stamens inserted in the throat into a bearded ring Anthers 2-celled Cells parallel, one of the upper stamens furnished with a long spur at base, and the other a short mucrone. Lower stamens with long flexuous spurs Stigma bifurcate. Capsule 2-celled. 4-seeded, rostrate Seeds crested

3116 1305*b* *Mayenia* Calyx small, 5-lobed, enclosed in 2 large bracts Corolla funnel-shaped: Throat gradually widened Tube short, closed by a pilose ring Limb nearly equal Anthers bearded at top, 2-celled Cells of upper ones unequal, tomentose, of the lower ones parallel and nearly equal, mutic Stigma membranaceously dilated 2-lipped Lips 2-lobed Capsule 2-celled at base, conico-attenuated, 4-seeded Seeds propped by a cup-shaped spongy strophiola

3117 1314*a* *Mastacánthus.* Calyx 5-cleft Segments equal, conniving in the fruit-bearing state Corolla ringent 5-cleft Segments of the upper lip 4, ovate, erect, nearly equal, lower lip of one large, spreading, incurved segment ending in a fringe. Anthers roundish Ovarium subglobose, 4-furrowed. Style bifid Stigmas simple

3118 1314*b* *Sclerdon.* Calyx campanulate, 4-toothed Corolla funnel-shaped, 4 cleft Ovarium 4-celled Cells 1-ovulate Style short Stigmas distinct, obtuse Drupe indehiscent, covered by the unchanged calyx Putamen bony Cells 4, of these 2 are abortive, 1-seeded Seeds oblong, fixed at the side

3119 1322*a* *Cassella* Calyx tubular, 5-cleft or 5-toothed. Corolla tubular, deciduous, with an irregular 5-lobed limb Stamens enclosed Ovarium 2 celled, few-ovulate Stigma capitate, undivided Fruit a berry

3120 1331*a* *Pterostoma.* Calyx 5-parted. Corolla funnel-shaped, 5-lobed Lobes nearly equal Stamens woolly, with the rudiment of a fifth Style filiform Stigma bilabiate Lower lip recurved Fruit coriaceous, capsular, indehiscent, a little compressed, having the margins broadly 2-winged, and subtubercular in the disk, 2-celled Seed solitary pendulous, produced above

3121 1362*a* *Achimènes.* Calyx adnate Limb 5-parted Lobes lanceolate Corolla tubularly funnel-shaped, usually gibbous at base, with a flat 5-lobed limb. Lobes nearly equal roundish. Rudiment of fifth stamen present Nectary glandular, annular. Style ending in a scarcely thickened stigma Capsule semibilocular, 2-valved Placentas parallel, sessile

3122 1362*b* *Nephæa* Calyx 5-parted Corolla rotate, 5-cleft 2 upper segments smallest and more combined. Stamens enclosed, nearly equal, with a fifth sterile stamen Perigynous glands wanting Ovarium 1-celled, many-seeded Stigma simple

3123 1362*c* *Diastèma* Calyx 5-parted. Corolla with a declinate tube and a 5-cleft limb Stamens enclosed, with the rudiment of a fifth Perigynous glands 5. Style bilamellate Lobes membranous, stigmatose inside. Valve of Capsule placentiferous Seeds numerous.

3124 1362*d* *Christa* Calyx 5-cleft, valvate in æstivation Corolla tubular, bilabiate Stamens 2, antheriferous Cells of anthers diverging Upper lip of Stigma abortive or very small, lower one bilamellate Capsule elongated, with striated valves Seed inappendiculate, pendulous

3125 1362*e* *Didymocárpus* Calyx 5-cleft Corolla funnel-shaped, with a ventricose throat and a 5-lobed limb Upper lip the shortest Stamens 4, enclosed, 2 of which bear anthers, sterile ones very short Anthers adnate, with transverse cells Stigma lateral, flattish, obtuse Capsule silique-formed, 2-valved, falsely 4-celled. Seeds naked pendulous Lobes of Dissepiment revolute

3126 1362*f* *Klugea* Calyx tubular, unequal at base, gibbous above, 5-angled, 5-winged, 5-cleft Corolla with a cylindrical tube, a closed throat, and a bilabiate limb Upper lip short, 2-lobed, lower lip drawn out, undivided, or a little 4-toothed Stamens enclosed Anthers reniform, 2-celled, cohering Ovarium 1-celled, girded by a complete annular disk, with 2 parietal many-seeded placentas Seeds elliptic oblong, sulcate, wrinkled transversely.

3127 1362*g* *Æschynánthus.* Calyx ventricosely tubular, 5-cleft Corolla tubular, incurved, with a dilated cam-panulate throat and an oblique subbilabiate limb Stamens exserted, usually with the rudiment of a fifth Anthers at first conniving by pairs, with parallel cells Stigma somewhat funnel-shaped Capsule long, silique-formed, 2-valved, falsely 4-celled Seeds small, usually papillose, ending in a bristle at each end.

3128 1362*h* *Agalmyla* Calyx 5-parted, equal Corolla tubular, incurved, with a dilated throat and a 5-lobed subbilabiate limb Stamens 5, exserted, of which 2—4 are fertile. Anthers linear, connected, with parallel cells Stigma bilamellate. Capsule long, silique-formed, 2-valved, falsely 4-celled Seeds minute, ending in a hair at each end

3129 1370*a* *Chænóstoma.* Calyx 5-parted Corolla deciduous funnel-shaped or salver-shaped, 5-parted Limb spreading Stamens 7 Anthers uniform, equal to the throat or exserted. Capsule glabrous, septicidally 2-valved Valves rather bifid.

3130 1371*a* *Paulòwnia* Calyx campanulate, 5-cleft Corolla tubularly campanulate, with a 5-cleft, subbilabiate limb Stigma subtruncate. Capsule woody, 2-celled, 2-valved. Valves septicidal Seeds numerous, each surrounded by a wing

3131 1372*a* *Lindenbérgia* Calyx campanulate, 5-cleft Segments foliaceous. Corolla ringent Upper lip emarginate, lower one 3-lobed Stamens enclosed Anthers approximate by pairs. Cells separate, stipitate. Stigma entire, dilated. Capsule oblong, bisulcate, 2-valved. Dissepiment duplicate Seeds small, striated

GYMNOSPERMIA.

1244. TEU'CRIUM.

19589 8145*a* orchideum *B R.* Orchis-like or 2 au.s Y R Chili 1827. C co Bot. reg 1255
heterophýllum Cav.

1245. WESTRI'NGIA.

19590 8147*a* eremicola *Cun.* desert or 3 o.n W.R N S.W. 1822. C s.l.p Bot. reg. 1481
longifòlia B. R. 1481 not R. Br.
19591 - - longifòlia *R Br.* long-leaved or 2 au.s W.R N.S W. 1823. C s.l p
19592 - - cinèrea *R. Br.* cinereous or 2 au s W.R N. Holl. 1821. C s.l.p Bot. mag. 3307

1249. NE'PETA.

19593 8187*a* fissa *Meyer* cleft or 3 jn jl B Caucasus 1845. C co

2651 1254*b* DYSOPHY'LLA.

19594 17546*a* quadrifòlia *Benth* four-leaved or 1½ jl.o P E. Indies 1840. D s.l p
Méntha quadrifòlia Roxb
19595 - - stellàta *Benth.* stellate-leaved or 1 o P Mysore 1843 D s.l.p Bot. reg 1845, 23

1259. LA'MIUM.

19596 8270*a* intermèdium *Fries* intermediate or 1 ... P Britain clt fl. S co Eng. bot 2914

1263. STA'CHYS.

19597 8311*a* córsica *Pers.* Corsican or ½ jl au Ro W Corsica 1823. D co Rchb. icon. 7 649
β dilba *white-flowered* or ½ jl.au W Corsica 1823. D co

3075. 1263*a*. AUDIBE'RTIA *Benth.* AUDIBERTIA. (*M. Audibert*, a nursery man of Tarascon.) *Labiàtæ.*
19598 - - polystàchya *Benth* many-spiked or 3 jl. au W Californ. 1840. C co
Sálvia polystàchya Hort.
19599 - - incàna *Benth.* hoary or 2 jl s Pa.B N. Amer. 1827. C co Bot. reg. 1469
Sálvia incàna Doug.

3076. 1263*b*. POGO'GYNE *Benth* POGOGYNE (*Pogon*, a beard, *gyne*, a female, style bearded.) *Labiàtæ*
19600 - - multiflòra *Benth.* many-flowered or ½ jl.au Pa.Li Californ. 1846. S co

1268 PHLO'MIS

19601 8368 armenìaca *Willd.* Armenian or 1 jn.jl Y Armenia 1834. D co Swt.fl.g 2. s 364
19602 - - agrària *Bunge* field or 2 jl au P Altaia 1830. S co Led. fl. alt. 364
19603 - - simplex *Royle* simple-stemmd or 1 jl.au P Cashmer 1848. S co
19604 - - cashmeriàna *Royle* Cashmerian or 2 jl.au Li Cashmer. 1840. D co Bot reg 1844, 22

3077. 1268*a* EREMO'STACHYS *Bunge* (*Eremos*, a desert, *stachys*, a spike, inhabits deserts.) *Labiàtæ*
19605 - - laciniàta *Bunge* jagged-leaved or 4 my jn Y Caucasus 1831. S p.l Bot. reg 1845, 59
Phlòmis laciniàta Led. No 8380 also belongs to this genus.

3078. 1268*b* COLQUHOU'NIA *Wall.* (*Sir Robert Colquhoun*, resident at Kamaon.) *Labiàtæ*
19606 - - coccínea *Wall.* scarlet or 6 ... R E. Indies 1840. C s.l.p Bot. mag 4514

1277. CALAMI'NTHA.

19607 8432*a* mimuloides *Benth.* Mimulus-like or 1½ su Y.o Californ. 1848.
19608 - - sylvática *Bower* wood or 1 my au R Spt I Wight copse co Eng bot 2897
officinàlis Monch. *Melissa Calamintha* Benth *M Nepeta* Hoppe. *M. umbrósa* Hort.

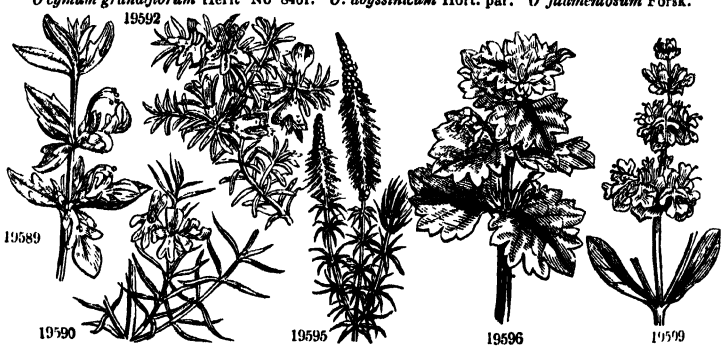
1278. MELI'SSA

19609 8434*a* microphýlla *Benth.* small-leaved or ½ my jn P Corsica 1829. C co
Thymus córsicus Pers. *A'cynos córsica* G Don

1281. O'CYMUM.

19610 847*ba* montànum *Hook.* mountain or fr 1 my.au W W. Ind. 1825. S co Bot. mag 2996
Albùca montàna Hamilt.

3079. 1281*a* BE'CIUM *Lindl.* BECIUM. (*Bekion*, a name for Sage in Dioscorides.) *Labiàtæ*
19611 - - bicolor *Lindl* 2-coloured-flwd or 2 au W Li Abyssin 1842 C s l.p Bot. reg 1843, 1.
O'cymum grandiflòrum Herit No 8461. *O. abyssínicum* Hort. par. *O filamentósum* Forsk.



History, Use, Propagation, Culture,

3075. *Audibértia.* The species of this genus have the habit of sage, with rather a disagreeable odour. Their culture is easy, and they are readily propagated by cuttings

3076. *Pogógyne multiflòra.* The seed of this plant may be sown in a pot, and the plants afterwards planted out in the open ground.

3077. *Eremóstachys laciniàta* is an inhabitant of the Eastern part of the Caucasus on dry hills. It is difficult to

GYMNOSPERMIA.

19589 Suffruticose, Lvs oblong obtuse entire or 3-lobed downy, Limb of Corolla 5-lobed secund, Flowers solitary axillary yellow variegated with red

19590 Lvs linear 3 in a whorl with revolute edges cinereous beneath, Calyx downy silky having the teeth longer than tube

19591 Lvs 3 in a whorl linear with revolute edges green on both surfaces, Teeth of Calyx length of tube

19592 Lvs 3 in a whorl linear-lanceolate divaricate mucronate pungent with revolute edges cinereous on both surfaces as is the calyx, Teeth of Calyx very short

19593 Erect glabrous, Lvs ovate-roundish subcordate at base crenated green, Racemes loose few-flowered, Corolla with a very slender much exserted tube

19594 Downy, Lvs 4 in a whorl elliptic-linear entire or serrated, Floral leaves linear shorter than whorls, Spikes elongated

19595 Downy at top, Stem creeping, Branches erect, Leaves 6-8 in a whorl narrow linear entire, Floral leaves subulate, Flowers spicate, Calyx villous

19596 Lvs orbicular, cauline ones petiolate, floral ones stem-clasping, all deeply crenate, Teeth of Calyx subulate longer than tube, Galea oblong entire

[Calyx hispid with spinescent teeth, Lower lip of Corolla large

19597 Procumbent pilose, Lvs ovate obtuse crenated rounded or subcordate at base, Whorls 2-4-flowered remote, *β* Flowers white

19598 Plant snow-white, Lvs oblong blunt crenated, Racemes one-sided, Stamens exserted

19599 Suffruticose branched canescent, Lvs obovate obtuse entire, floral ones broad ovate, Racemes simple, Stamens exserted

19600 Floral leaves and bracts shorter than corollas, Stamens exserted

[6-flowered, Bracts subulate

19601 Clothed with floccose wool, Radical leaves cordate oblong obtuse crenated, cauline leaves lanceolate, Whorls

19602 Stm simp or brnchd a little hisp, Lvs downy, lower ones hastately cord., up flor. lvs shorter than cals, Brcts subul downy cil like cal, Whorls about 10-flwd [Brcts lin cil, Cal. cil, Galea of Cor. pil.

19603 Stem nrly simp obversely pil, Low. lvs broad ov. obt cren. cord. at base wrinkled green vil., floral lvs obl.,

19604 Erect tomentose, Lvs ovate-lanceolate obtuse crenated downy above tomentose beneath, Bracts subulate ciliated, Calyx floccose with stiff subulate teeth

19605 Lvs pinnate, Segments oblong-lanceolate or linear deeply pinnatifid, Calyx large tubularly campanulate scarcely dilated at apex

[red in whorls

19606 Scandent, Leaves glabrous, the younger ones and calyxes canescent, Teeth of Calyx ovate obtuse, Flowers

[lary solitary 1-flowered, Corolla 2 inches long

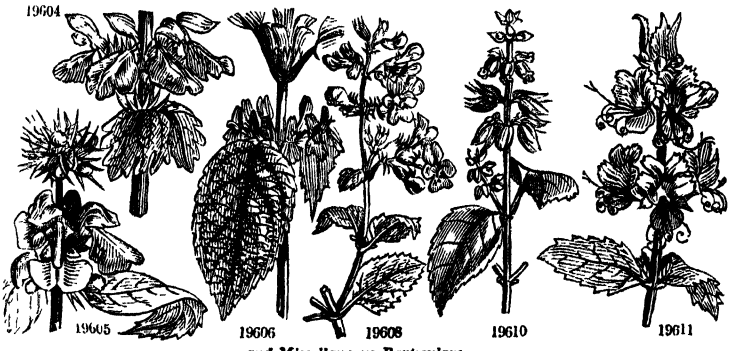
19607 Hairy woody at base, beset with viscid glands, Leaves petiolate ovate acute coarsely serrated, Peduncles axil-

19608 Root partly creeping, Stems loose, Branches elongated, Leaves ovate, upper ones acute serrate, Cymes many-flowered stalked

19609 Suffruticose diffuse nearly glabrous, Leaves roundish or ovate petiolate entire, Whorls 4—6-flowered, Flowers almost sessile, Corolla twice as long as calyx

19610 Leaves broad-ovate acute serrated, Branches downy tetragonal, Verticels approximate racemose, Filaments a little exserted entire naked, Corolla scarcely longer than calyx

19611 Downy, Leaves ovate-lanceolate serrated, Whorls of Flowers spicate, Bracts cordate, Corolla white veined with lilac



and Miscellaneous Particulars.

Cultivate on account of the large fleshy roots suffering in winter from excess of moisture. It therefore should be planted in a dry situation. It is only to be propagated by seed.

3078 *Colquhounia coccinea* has succeeded in the open air against the south wall for two or three winters. It is a plant of easy culture and readily increased by cuttings.

3079 *Becium* should be cultivated and treated like the greenhouse species of *Teucrium*.

3080. 1281*b*. CEDRONE'LLA *Moench.* (A dimin of *Cedrus*, the cedar; scent of *C triphýlla*) *Labiàtæ.*

19612 - - cordàta *Benth.* cordate leaved ☽ △ or 1 jl.au Pa.B N Amer. 1824. D s.p
Dracocéphalum cordàtum Nutt.

19613 - - mexicana *Benth* Mexican ☽ △ or 3 o R Mexico 1837. D co Bot. mag 3860
Gardoquia betonicoides Grah in B M *Dracocéphalum mexicànum* H B & Kth

19614 - - pállida *Lindl.* pale-flowered ☽ △ or 3 o Pa R N. Mex 1845. D co Bot r 1846, 29

19615 - - cana *Benth* hoary ☽ △ or 2 jn jl R Texas 1848 D co Bot mag 4615

19616 - - triphýlla *Monch* Balm of Gilead ♣ ⌴ fr 3 jl s W.P Canaries 1697 C co Comm. h 2 11
Dracocéphalum canariénse L No. 8438.

2659. 1282*a*. COLEUS

19617 - Macræ'ii *Benth.* Macrae's ♣ ⌴ or 2 jn jl Pa.B Ceylon 1826 HA s.l p Bot. mag 4656

1284. PROSTANTHE'RA.

19618 8486*a* incisa *B. Br* cut-leaved ♣ ⌴ or 3 jn jl R N S W 1840. C s.p l

19619 - - denticulàta *R Br.* denticul -lvd ♣ ⌴ or 3 jn jl ... N S.W. 1824. C s p l

19620 - - linearis *R Br* linear-leaved ♣ ⌴ or 2 jn au N.S W. 1824 C s p l

19621 - - violàcea *R Br.* violet-flowered ♣ ⌴ or 6 my.au Vi N S W. 1820. C s p l Bot. reg 1072

19622 - - retùsa *R. Br* retuse-calyxed ♣ ⌴ or 2 my au P V D L 1840 C s l p

19623 - - rhómbea *R Br.* rhomb-lvd ♣ ⌴ or 2 my au ... N.S W 1823 C s l p

3081. 1284*a* HEMIA'NDRA *R Br* (*Hemi*, a half, *aner*, a male, anthers dimidiate) *Labiàtæ*

19624 - - púngens *R Br.* pungent-leaved ♣ ⌴ or . ... Pk Swan R. ... C s p l Moor.m 3 81

19625 - - emarginàta *Lindl* emarginate ♣ ⌴ or . ... R N Holl ... C s.p l

3082. 1284*b* MONARDE'LLA *Benth* (A diminutive of *Monárda*, similarity) *Labiàtæ*

19626 - - undulata *Benth* wavy leaved ☽ △ or 2 jl.au R Californ 1840 D co

1285. SCUTELLA'RIA

19627 8496*a* macrántha *Fisch grandiflóra* Adams long-flowered ☽ △ or ½ jl.s P Dahuria 1827 D co Bot. mag 4120

19628 - - japónica *Moren* Japan ☽ △ or ½ jl s B Japan 1840. D co Bot gard 778

19629 8507*a* incarnàta *Vent* flesh-coloured ♀ ⍓ or 1½ jl o Ro Andes 1844 C s p.l Bot mag 4688

19630 - - Ventenàtii *Hook.* Ventenat's ♀ ⍓ or 2 jl o S S Martha 1845 C s p l Bot mag 4741

19631 - - cordifòlia *Benth* heart-leaved ♀ ⍓ or 1 jl.o S Mexico 1841. C s p.l Bot mag 4590
splèndens Klotsch, Bot reg 1827, t. 63 *Perilómia cordifòlia* Schlecht

1286 PRUNE'LLA.

19632 8508*a* austrâlis *Swt.* New Holland ☽ △ or ½ jn au B N Holl. 1820. D co

ANGIOSPERMIA.

1290 GE'SNERA.

19633 8525*a* purpùrea *Hort* purple-flwd ♀ ⍓ or 2 jn s P Brazil 1849 C s l p Px fl g 7 17 7

19634 - - cochleàris *Hook.* spoon-leaved ☽ ⍓ or 1 jn au S Brazil 1837 R s l.p Bot mag 3787

19635 - - polyántha *Dec.* many-flowered ♣ ▭ or 2 jn.s S Brazil 1839. C s p l Bot. mag 3969
discolor Bot reg 1851, t 64.

19636 - - tuberòsa *Mart rupéstris* Grah tuberous-rootd ☽ ⍓ or ½ aut S Brazil 1834 R s.p l Bot mag 3664

19637 - - corúscans *Paxt.* glittering ☽ ⍓ or 1 jl s S S Amer 1840 R s l p Pax m 16 1911

19638 - - Gerardiàna *Paxt.* Gerard's ☽ ⍓ or 2 jl o S Y S Amer. 1845. R s l p Pax.m 13 76 9

19639 - - Seemánni *Hook* Seemann's ♀ ⍓ or 2 o Bri Panama 1848 C s.l.p Bot. mag 4681

19640 - - longifòlia *Lindl.* long-leaved ♀ ⍓ or 2 jn jl Bri Guatem. 1840. C s l.p Bot r 1842, 59

19641 - - vestita *Benth.* clothed ♣ ▭ or 2 jn o O Bogota 1844. C s l p Bot reg 1844,19

19642 - - stricta *Hook.* strict ♀ ⍓ or 5 jl s S S Brazil 1834. C s p l Bot. mag 3738
17566 elongàta *Humb*
β fruticosa Hook *shrubby*
oblongata Paxt mag 6 p. 103 icon ♣ ▭ or 2 au s S S Amer 1836 C s.p l Bot. mag 3721



History, Use, Propagation, Culture,

3080. *Cedronélla cána* The leaves of this plant, and of *C. mexicàna* and *C. pállida*, abound in fragrant oil &c. They are handsome border plants, and will grow in any common garden soil, and are increased by division or by cuttings taken from the lower part of the stems.

3081. *Hemándra* is composed of shrubs nearly related to *Westringia*; and the culture and propagation are the same. Turfy peat and leaf-mould with loam is said to be the best for them.

19628. *Scutellària japónica* is a small evergreen trailing shrubby plant, well fitted for decorating rockwork It is a pretty little plant with blue spotted flowers.

19612 Stoloniferous downy, Leaves cordate-ovate crenated, Whorls few-flowered secund approximating into spikes or racemes
19613 Erect, Leaves ovate-cordate acuminated coarsely crenated almost glabrous purplish beneath, Cymes pedunculate in terminal racemes, Flowers crowded
19614 Erect, Leaves all cordate-ovate obtuse crenated downy beneath, Whorls naked spicate, Calyx tubular
19615 Erect, Lvs cord., lower ones hast.-ov. ent. or toothed hoary, Spikes long many-flwd, Whorls approx., Cal. tub.
19616 Shrubby, Leaves ternate, Leaflets oblong-lanceolate, Whorls collected into terete oblong spikes

19617 Downy, Leaves ovate acuminated on long petioles, floral ones deciduous, Racemes panicled, Whorls cymose, Fruit-bearing Calyx nutant

19618 Glabr. or nearly so, Lvs ovate-oblong narrowed at base glandular on both sides toothed or cut, Racs few-flwd
19619 Branchlets downy, Leaves linear glabrous glandular beneath denticulated above, Calyx pilose ciliated
19620 Glabrous, Leaves linear entire, Racemes terminal, Calyx ciliated
19621 Leaves roundish crenated downy, Racemes dense few-flowered, Calyx downy with entire lips
19622 Leaves orbicular crenated glabrous glandular on both surfaces, Flowers axillary, Lower lip of Calyx retuse
19623 Leaves rhomb-orbicular entire glandular beneath shining above, Branches and Calyxes downy, Flowers axillary [lip of Calyx acuminate prickly, lower one shorter inflexed often recurved
19624 Glabrous or with a few spreading hairs, Leaves linear spreading, Peduncles much shorter than calyx, Upper
19625 Erect downy, Leaves linear-oblong complicate pungent 3 nerved, Calyxes nearly sessile villous with pungent segments, Upper lip of Corolla rounded emarginate

19626 Procumbent at base ascending at top, Leaves oblong-linear obtuse undulated glabrous, Outer Bracts broad-ovate, Calyx villous tubular

19627 Ascending smoothish, Lvs sessile lanceolate obtuse entire ciliated, Floral Leaves longer than calyx, Racemes simple, Flowers opposite secund, Calyx pilose Corolla downy outside [rolla elongated
19628 Small evergreen trailing, Stems quadrangul., Lvs petiol. somewhat spoon-shaped serrated obt., Racs term., Co-
19629 Erect, Lvs ov. coarsely serr. acum. downy beh., Racs term., Cor elong. dilated above, upper lip hardly cleft
19630 Erect downy glandular, Leaves cordate-ovate bluntish coarsely serrated on long petioles, Racemes terminal subsecund, Corolla elongated, upper lip bifid
19631 Erect hairy glandular, Leaves roundish-cordate wrinkled acute on long petioles coarsely toothed, Flowers subverticillate glandularly hairy, Corolla elongated

19632 This differs but little from *P. vulgàris*, and is only, probably, a variety of

ANGIOSPERMIA.

[with a long tube, upper lip straight 2-lobed
19633 Leaves whorled cordate-oblong toothed downy, Panicle subverticillate, Pedicels long umbellate hairy, Corolla
19634 Leaves opposite on long petioles cordate-ovate concave tomentose rugose, Racemes simple, Pedicels elongated, Tube of Corolla long inflated beneath, limb 5-lobed, Hypogynous glands 2
19635 Leaves large opposite petiolate cordate-ovate crenated downy, Panicle branched glabrous, Pedicels elongated, slender aggregate, Flowers pendulous, Corolla glabrous clavately cylindrical, Hypogynous glands 2
19636 Stem a horizontal rhizoma, Lvs broad-ov. toothed cord. at base downy, Pedunc. from base of rhizoma [lobes long wavy, limb nearly equal, Root a round tuber 1 to 1½ inch in diameter
19637 Tubers scaly, Leaves opposite bluntly serrated, Peduncles elongated drooping, Corolla large tubular erect, lower
19638 Tubers scaly, Lvs opp. cordate serrated petiolate, Racemes ample terminal, Flowers on long peduncs drooping, Cor. scarlet above yellow below [Cor. villous cylind. gland., limb 5 lobed, Hypog. glands 4—5
19639 Hairy, Lvs opposite or 3 in a whorl pet. ovate or obov. acute serr., Racs term., Peduncs 1-flwd fascicled whorled,
19640 Downy, Leaves opposite petiolate lanceolate serrated, Racemes terminal, Pedicels whorled fascicled, Corolla villous cylindric ventricose, limb of 5 linear lobes
19641 Villous, Leaves 3 in a whorl oblong narrowed at base canescent, Peduncles short axillary 3-flowered, Pedicels elongated, Lobes of Calyx subulate, Corolla cylindrical contracted at base lobes rounded equal
9642 Downy, Leaves 3 in a whorl, lower ones opposite elliptic-ovate obtuse crenated sessile, Panicle loose, Corolla elongated curved hairy, upper lip long bifid, Hypogynous glands 5 combined
8 Leaves opposite lanceolate-ovate unequal at base on long petioles serrated downy, Peduncles 4-flowered umbellate, Corolla villous tubular rather constricted at throat



and Miscellaneous Particulars.

1290 *Gésnera.* M. Decaisne has proposed to divide this genus into several, applying the name *Corythrolòma* to *G. striata, sceptrum, ignea, Märcki*, &c., *Isolòma* to *G. vestita, spicàta, móllis, longifòlia, brevifòra*, &c., *Diacæ'a* to *G. bulbòsa, fauciàlis, laterìtia*, &c.; *Hoùttea* to *G. pardina* and *Gàrdneri*, *Tyda'a* to *G. picta*, *Rechsteinera* to *G. calliphýlla*, &c., and the true *Gésnera.* he limits to *G. tuberòsa, cochleàris, macrostàchya, discolor, polyántha, purpùrea*, and the like. Perhaps these alterations may be the means of restoring order among the confused mass of plants referred to the genus *Gésnera*.

3092 *Monardélla* will grow well in the open peat border, and is increased by division.

19643 - - Schiedeàna *Hook* Schiede's ▭ or 1½ aut Y.s Mexico 1843. C s.p.l Bot. mag. 4152
spicàta β Schiedeàna Dec
19644 - - hondènsis *H B.& K* Honda ▭ or 1 year S Y Honda 1845. R s p.l Bot. mag. 4217

19645 - - elliptica *H B. & K.* elliptic-leaved ▭ or 1 my jn Bri S. Amer. 1846. C s.p.l

β lùtea Hook. *yellow-flowered* ▭ or 1 my jn Y St Mart. 1844. C s p.l Bot. mag 4242
19646 - - triflòra *Hook.* three-flowered ▭ or ½ jl au Y R. N Gren. 1846 C s.l.p Bot. mag 4342
19647 - - libanènsis *Morren* Liban ▭ or 3 jn au S Cuba 1847. C s p.l Bot. mag 4380
Rytidophyllum floribùndum Van Houtte.
19648 - - breviflòra *Lindl.* short-flowered ▭ or 1 jl.o R S. Amer. 1847. C s.p l
Isolòma breviflòra Paxt. fl. gard 1 63
19649 - - móllis *H B & Kth.* soft ▭ or 1½ ap.my S Caraccas 1839 C s p l Bot. mag 3815
19650 - - pardìna *Hook.* leopard-spotted ▭ or 1½ au o O R Brazil 1847. R s l p Bot mag 4348

19651 - - zebrina *Paxt.* zebra-striped ▭ or 2 jl.o S Y S. Amer. 1845. C s p.l Bot reg. 1842, 16
19652 - - picta *Hook.* painted ▭ or 3 jl.o S Y Columb 1849. C s p.l Bot. mag 4431

19653 - - Márchii *Wailes* March's ▭ or 3 aut S Mexico 1844. R s p.l Bot mag 3744
19654 - - Gárdneri *Hook.* Gardner's ▭ or 2 jl.au R Brazil 1841. C s p l Bot. mag 4 21

2662 1290*b*. RYTIDOPHY'LLUM.
19655 17578*a* Humboldtii *Klotz.* Humboldt's ▭ or 3 ... G P C. Amer. 1852. C s p.l
19656 - - Oerstédtii *Klotzsch* Oerstedt's ▭ or 2 jn jl G.P C Amer. 1852 C s.p.l Moor comp 86 ic
19657 - - Tigrídia *Klotzsch* tiger-spotted ▭ or 6 jn jl G P Venez. 1852. C s p l

2663. 1290*c*. SINNI'NGIA
19658 17582*a* punctàta *Scheidw.* dotted ▭ or 1½ my.s Pa.sp Brazil 1850. C s.l.p

1291 GLOXI'NIA.
19659 8527*a* pallidiflòra *Hook.* pale-flowered ▭ or 1 aut Pa B St Mart. 1844. C s l p Bot mag 4213
19660 - - Passinghàmii *Paxt.* Passingham's ▭ or ¾ aut V Brazil 1845. C s l p Px m. 12, 267, ic

19661 - - digitaliflòra *Paxt.* Foxglove-flwd ▭ or ½ aut Pk c Mexico 1842. C s l p Px m 10, 191, ic
19662 - - tubiflòra *Hook.* tube-flowered ▭ or 1½ my W B. Ayres 1843. C s.l p Bot mag 4071

19663 - - fimbriàta *Hort.* fringed-flwd ▭ or ¾ aut P.w Hybrid 1847. C s p l Bot. mag 4440

3083 1291*a* CHRYSO'THEMIS *Don* (*Chrysothemis*, daughter of Agamemnon) *Gesneriàceæ*
19664 - - venòsa *D n* veiny ▭ or 4 jl o P W Ind. 1830 C s l p Schrank h m 11
Alopléctus mellitifòlia Mart. *Besléria melissæfolia* Hort, as well as *Besléria pulchella* Lodd. bot cab 1028, belongs to this genus
19665 - - aurantiaca *Don.* orange-flwd ▭ or 2 ... Y Antilles 1849. C s l p

3084. 1291*b*. COLLA'NDRA *Lemaire.* (*Kolla*, glue, *aner*, a male, anthers clammy) *Gesneriàceæ*
19666 - - aúro-nitens *Don.* glittering-yel. ▭ or 1½ o ap Y Columb. 1847. C s l p Bot mag 4484
Colúmnea aúro-nitens B M
19667 - - phœnícea *Don* red ▭ or 2 jl o P N. Gren. 1850 C s l p Tus ant 1 141 19
Dalbergària phœnícea Tuss. Ant. I p. 141 t. 19. *Alopléctus phœnícea* Mart. *Tussacia* Rchb *Besleria sanguinea* Pers.

3085. 1291*c*. ALLOPLE'CTUS *Mart.* (*Allos*, diverse, *plekto*, to plait, calyx diversely plicate) *Gesneriàceæ*
19668 - - dichrus *Dec* two-coloured ▭ or 2 my jl Y Brazil 1829. C s.l p Bot. mag 4216
Besleria dichrus Spreng *All spar siflòrus* Mart. *Schóttii* G. Don *Hypocýrta discolor* Lindl
19669 - - cóncolor *Hook.* self-coloured ▭ or 2 mr ap S Brazil 1846 C s l p Bot. mag 4371
19670 - - capitàtus *Hook* capitate ▭ or 2 mr.ap Y S Amer 1847 C s l p Bot. mag 4402

19671 - - rèpens *Hook* creeping ▭ or ½ f mr Y St. Mart. 1844 C s l p Bot. mag 4250
19672 - - glàber *Don* glabrous ▭ or 1 jn.jl S S Amer 1847. C s l.p Bot mag 4349
Hypocýrta glàbra B M
19673 - - splendens *Don* splendid ▭ or 1 jn jl Y P Brazil 1849 C s l p
Hypocýrta splèndens Hort *Colúmnea zebrina* Hort *Hypocýrta discolor* Lindl.
19674 - - bicolor *Don* two coloured ▭ or 1 jn jl Y P N Gren 1840 C s l p
Besleria bicolor H B & Kth, as well as *Besleria cristàta* L No 8925, belongs to this genus.



History, Use, Propagation, Culture,

19648. *Gésnera breviflòra*, if treated like *Achimènes*, may be had in flower nearly all the year.
3083. *Chrysóthemis* is a genus separated from *Besleria* by Decaisne. It consists of two known species, both of which have an orange-yellow corolla streaked with carmine, enclosed in a calyx of 5 wing-like sinuses. The culture of the species is the same as that for *Besléria* or *Gloxínia* They grow best in loose peat soil or decayed vegetable mould. *C. aurantiaca* is a showy fleshy plant, having a cinnabar-coloured calyx and purplish pedicels The corolla is yellow, with lines and dots of carmine on the face; velvety outside, and smooth inside.

19643 Downy, suffruticose, Leaves 3—4 in a whorl on short petioles oblong-lanc. wrinkled crenated tomentose ben., Peduncs axil aggregate 1—3-flwd, Cor. villous camp. fun -shaped, ventric. below, limb short, Hypog. glands 5

19644 Brnchs tetragonal, Lvs opposite ovate serrated wrinkled on short petis hairy, Peduncs solitary twin or tern, 1-flwd, Corolla hairy tubular ventricose, limb equal spreading, Hypogynous glands 5

19645 Downy, Lvs opp. ellip wrinkled ser. lower ones petiol. upper ones ses , Peduncs terminal racemose and axillary solitary, Tube of Cor. with 5 gibbosities at base, Limb obliquely bilabiate, Hypogynous glands 4

β Corollas yellow [ben , Peduncs axil 3-fid, Cal. woolly, Tube of Cor. ventric. hairy, limb contracted

19646 Stem erect nearly simple bluntly tetrag. clthd with rusty tom , Lvs opp. large ov. acum. ser wrinkled woolly

19647 Humble simple shrubby, Lvs rosulate approx obov -lanc glab. wrinkled scab obtuse coarsely ser., Petios hairy, Peduncs axil 1-flwd hairy, Cal. turbinate pilose 5-lobed, lobes foliaceous, Corolla pilose, Epigynous glands 5

19648 Villous, Leaves opposite oval petiolate crenated convex, Peduncles 1-flowered axillary 4 together shorter than petioles, Corolla villous, limb 5-cleft equal [late, Corolla hairy, limb 5-lobed reflexed spotted

19649 Leaves opposite ovate serrated downy as are the branches, Pedicels elongated umbellate, Lobes of Calyx subu-

19650 Dwny, Lvs on short petios ellip thickish ser glab above tom ben., Peduncs axil solit. 1-fid, Cor. with curved tube and spreading spotted limb, Stamens exserted, Calyx segments large spreading [Cor. drooping

19651 Stem terete downy, Lvs opp on long petis rndsh-cord , Rac term. erect, Bracts subu. involute, Pedic. long erect.

19652 Hairy erect, Lvs opp or tern ov acum serr. lower on long petis, Rac elong leafy, Pedicels whorled, Cor. cylnd. contracted at the mouth, Hypog. glands 5 [top, limb 5-lobed, Hypog glands 5, 2 upper ones joined

19653 Downy, Lvs 3 in a whorl peti ov cren., Whorls of Fls num , Pedics longer than cor., Cor. droop. cylind. glb. at

19654 Glab , Lvs opp on short petis ellip. fleshy ser , Peduncs solit. 1-fid axil , Cal. segs acum , Cor downy tubular, Perigynous ring 5-lobed [lanc. acum 5-nerved, Cor. downy outside green spotted with purple

19655 Suffrut erect-brnchd vil , Lvs obliquely-obl. ser acum , Corymbs axil on long peduncs 2—3-fid, Cal. segs ov.

19656 Epiph. subshr , Lvs obliq.-oblng, Fl greenish hairy spotted with purp 1½ inch long, with curved swollen tube

19657 Suffruticose climbing hairy, Leaves obliquely elliptic unequal in size petiolate coarsely serrated, Corymbs axillary on long peduncles 4—5-flwd, Cal segments ovate acute 3-nerved, Cor large greenish spotted with purple

19658 Root a tuber, Stem branchy, Lvs oblong-ovate crenate, Flowers numerous axillary solitary covered with glandular down, pale outside and spotted inside [near reflexed, Lobes of Corolla concave

19659 Stem erect simple spotless, Lvs broad subobliquely ovate obscurely serrated, rather pilose above, Cal segs li-

19660 Root tuberous, Stems short vil. as are the lvs petios and peduncs, Lvs ov wrinkld crenated acutish glauc , Flwrs large nutant deep rich violet [tracted purplish crimson, segments of limb regular roundish

19661 Root tuberous, Lvs broad-ov obt. rigid slightly hairy, Flwrs axil chiefly at tops of stems, Cor long and con-

19662 Caulescent downy, Lvs oblong subcrenate, Panicle terminal, Peds elongated, Cor salver-shaped, tube elongated, limb spreading, lobes unequal, Hypogynous glands 4

19663 Stem erect simple subtetragonal, Leaves ovate acute serrated glabrous, Peduncles axillary solitary 1-flowered, Segments of Calyx foliaceous, Corolla funnel-shaped, Lobes nearly equal with wavy finely fringed edges

19664 Erect velvety at top, Lvs ovate acum coarsely crenated, Cymes axillary about 3-flwd, Sepals about equal to tube of corolla lanceolate acuminate subserrated, Lobes of Corolla quite entire, Fruit capsular

19665 Leaves ovate-elliptic acuminate crenulate bullate hairy, Peduncles axillary 3-flowered, Pedicels purplish, Calyx with unequally toothed segments

19666 Clothed with yellow silky hairs or down, Leaves opposite nearly sessile unequal-sized, one obovate oblong denticulate, the other much smaller ovate, Flowers sessile aggregate, Bracts jagged, Corolla tubular

19667 Shrubby scandent, Leaves obovate obtuse acuminate toothed with a few adpressed hairs spotted with purple beneath, Peduncles axillary sessile, Sepals serrately jagged woolly, Corolla villous gibbous subbilabiate

[denticulated glabrous, Corolla clavate hairy yellow

19668 Erect, Leaves ovate-oblong entire, Flowers axillary nearly sessile aggregate, Sepals triangular blood-coloured [tricose above the mouth oblique

19669 Erect, Leaves oblong-elliptic entire glabrous, Flowers axillary nearly sessile, Corolla hairy, clavate, tube ven-

19670 Robust, Stem bluntly tetrag red, Lvs large ov ser. downy reddish beneath, Peduncs axil , Flwrs capit , Seps red foliac cucul toothed, Cor. silky, ventric above the middle [tube and 4 lobed limb, upper lobe bifid

19671 Downy, Lvs ov rather fleshy ser ou short petios, Peduncs axil solit., Seps ov. acute spotted, Cor with curved

1967 Erect glabrous, Leaves elliptic obtuse shining, Peduncles axillary aggregate 2—3 together 1-flowered bibracteate, Calyx lobes serrated, Corolla ventricose in front, with a contracted 5-toothed limb

19673 Leaves oval on long petioles smoothish entire, Flowers solitary, Segments of purple Calyx imbricate discoloured, Corolla villous, limb small erect, Gland large without a ring

19674 Erect rather woody, Branches tetragonal, Leaves ovate oblong acuminate denticulated pilose above downy beneath, Pedicels axillary 1-flowered, Lobes of Calyx ovate acuminate, denticulated, Corolla pilose



and Miscellaneous Particulars.

3084 *Collandra* is a genus separated from *Gésnera* by Lemaire, and consists at present of several known species, which are all readily distinguished by the inequality of each pair of leaves, one of which is always much smaller than the other, like those of *Goldfússia anisophýlla*. Most of the species have also, at the points of the leaves, a large blood-coloured spot, for which reason they are called *Yerba de la Doncella*. Their culture is the same as that recommended for *Gesnera*.

3085. *Alloplectus*. The species grow best on loose peat soil or decayed vegetable mould.

3086. 1291*d*. MACRO'CHLAMYS *Decaisne*. (*Makros*, long, *chlamys*, a covering ; calyx involucel by bracts.) *Gesn.*
19675 - Patrisii *Dcn.* two-coloured ▮ △ or 2 jl au S St Mart ... C s.l p
Allopléctus Patrisii Dec.

3087. 1291*e* HYPOCY'RTA *Mart.* (*Hypo*, under, *kyrtos*, a curve, corolla gibbous below) *Gesneràcee*
19676 - grácilis *Mart* slender ▲ △ or ½ ap.my S.Y Brazil 1850. C s l p Bot. mag 4531
19677 - strigilòsa *Mart* strigillose ▲ □ or 2 my S Y Brazil 1842. C s l p Bot. mag 4047

19678 - leucóstoma *Hook.* white-mouthed ▲ □ or 1 ap Y.w N. Gren. 1846 C s.l p Bot. mag 4310

3088 1291*f* EPI'SCIA *Mart.* (*Epi*, upon, *skia*, a shadow ; delighting in shady places) *Gesneràcee.*
19679 - bicolor *Hook.* two-coloured ▲ △ or ½ jl.au P N. Gren. 1847. C s.p l Bot mag. 4390

3089. 1291*g* DRYMO'NIA *Mart.* (*Drymonia*, a woodland ; plants epiphytal.) *Gesneràcee.*
19680 - punctàta *Lmdl* dotted-flowered ▲ △ or ½ jl au W P Guatem. 1843. C s l p Bot. mag 4089
19681 - serrulàta *Mart* serrulated-lvd ▲ □ or 6 s Crea Chili 1806. C s l.p Bot. reg 1838, 4
bicolor Lindl Bot reg. 1838. *Besleria serrulàta* Jacq hort. Schönb 3 p 21 t 290.
19682 - cristàta *Miquel* crested ▲ □ or 1 jl au G D Guiana ... C s p.l

3090 1291*h* NEMATA'NTHUS *Schrad.* (*Nema*, a thread, *anthos*, a flower, flowers hairy) *Gesneràcee*
19683 - lóngipes *Dec* long-stalked ▮ □ or 2 d S Brazil 1841 C s.l p Bot. mag 4018
Drymònia lóngipes Hook
19684 - ionèma *Schrad* violet-stamnd ▮ □ or 2 au o R Brazil 1848. C s l p Bot. mag 4460
corticola Schrad. *Morelliana* Hort.
19685 - chloronèma *Mart.* green-stamnd ▲ △ or 1½ jl S Brazil 1842 C s l p Bot mag 4080
19686 - Guilleminiàna Guillemin's ▲ □ or 2 n S Brazil 1841. C s.l.p Pax. mg 10 5 1c
Cotúmnea spléndens Paxt. *grandiflòra* Hort.

3091. 1291*i* CAMPA'NIA *Dcn* CAMPANIA (*Campana*, a bell, form of corolla.) *Gesneràcee*
19687 - grandiflòra *Dcn* large-flowered ▮ △ or 2 jn o W c Santa Fe 1848. C s l p Px fl g.1 91,92 94
Drymònia grandiflòra G. Don *Besleria grandiflòra* H B & Kth.

3092. 1291*j* CONRA'DIA *Mart* CONRADIA. (*Conrad Gesner* see *Gesnèria*) *Gesneràcee*
19688 - floribúnda *Mart.* bundle-flwd ▲ □ or 1 d S S Amer. 1847 C s l p Px m 15 99 1c
19689 - neglécta *Hook.* neglected ▲ △ or 1 ... ... Jamaica 1847. C s l.p

3093 1291*k* MITRA'RIA *Cav.* (*Mitra*, a mitre, mitre-formed bracts covering the calyx) *Gesneràcea*
19690 - coccínea *Cav* scarlet-flwd ▮ □ or 6 jl o S Chilce 1848 C s.l p Bot mag 4162

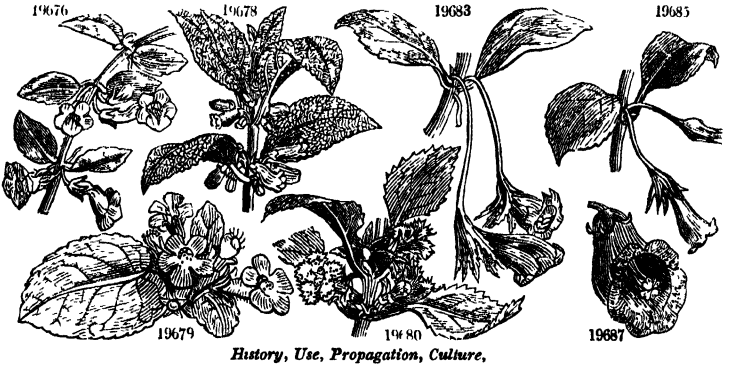
3094 1291*l* ARCTO'CALYX *Fenzl* (*Arktos*, a bear, and *calyx*, shagginess of calyx) *Gesneràcee*
19691 - Endlicheriàna *Fenzl* Endlicher's ▲ □ or 6 . Y c V Cruz 1849 C s.l p Px fl g 1 9 61

3095 1291*m* CENTROSOLE'NIA *Benth* (*Kentron*, a spur, *solen*, a tube, corolla spurred) *Gesneràcee*
19692 - pícta *Hook* painted-leaved ▲ △ or 1 jn o W Amaz B. 1845 C s l p Bot mag 4611
19693 - glábra *Benth.* glabrous ▲ △ or 1 jn o W La Guay. 1845. C s l.p Bot mag 4612

19694 - bractéscens *Hook.* bractescent ▲ △ or 2 jn o W Venezu 1850 C s.l p Bot mag 4675
Nautilocalyx hastàtus Hort

3096 1291*n*. HEI'NTZIA *Karsten* (Probably named after a botanist of the name of *Heintz*) *Gesneraceæ*
19695 - tigrina *Karsten* tiger-spotted ▲ □ or 4 ... W P Venezu 1849 C s l p

3097. 1291*o* MOUSSO'NIA *Decaisne*. (Named after some botanist of the name of *Mousson*) *Gesneraceæ*
19696 - élegans *Dcn.* elegant ▲ □ or 2 w Y P Guatem 1849. C s.p.l Px. fl g 1 1 7 88



History, Use, Propagation, Culture,

3086 *Macróchlamys* includes the species of *Allopléctus* with coriaceous glabrous leaves, and the calyx surrounded by petaloid bracts, hence the name. Their culture is the same as that for *Allopléctus*

3087. *Hypocýrta gracilis* has the leaves spotted with red beneath, and its culture is the same as that of epiphytal *Orchideæ* It may be allowed to grow over an elevated substance, covered with sods, kept moist or in baskets.

3088. *Episcia*. The culture and treatment recommended for *Drymònia* will answer for this plant.

3089. *Drymònia punctàta* has the limb of its corolla dotted with purple. The plant does well cultivated in a wire basket, filled with pieces of wood and turf, suspended from a beam in a moist stove. The other species may be treated in the same manner.

3090. *Nematánthus ionèma* has red drooping flowers. It may be either grown in a pot of turfy peat soil, or in a basket suspended from the rafters, as many epiphytal tropical *Orchideæ* are.

3091. *Campània grandiflòra*. A beautiful herbaceous plant, requiring to be grown in a temperate stove The stem is scandent, woody at the base. The leaves are opposite, oval, stalked, hairy, unequal at base, taper-pointed, and crenate-toothed. The flowers are axillary, on long peduncles at sides of shoots, terminal few on long peduncles, large, showy, nodding, irregularly campanulate, the tube curved and ventricose beneath ; the border or limb oblique with 5 broad, nearly equal, emarginate, spreading lobes, white, downy outside, elegantly marked with close dotted lines of rosy purple.

19675 Scandent fleshy, Leaves petiolate ovate-oblong acuminate nearly entire, Peduncles axillary few-flowered, bearing ample roundish obovate subciliated coloured bracts, Corolla downy outside

[tubular, lobes spreading

19676 Ascending radicant, Leaves ovate acute denticulated, Peduncles axillary solitary or twin, Corolla campanulate
19677 Stem erect villous above, Lvs obl -acum. mucron strigillose, Flws axil solitary, Cor. much swollen in front, limb contracted 5-toothed [gate, Cor tubular villous contracted at the mouth
19678 Erect downy, Stem bluntly tetragonal, Lvs opposite oblong lanceolate wrinkled serrated, Pedicels axil aggre-

[slender, Seps lin.-lanc. recur., Cor. purp with oblique white mouth a nearly equal 5-lbd limb and ruded lbs
19679 Dwarf hairy decumbent, Lvs cordate-ovate acute serrated with impressed veins, Peduncs axil short simple bifid

[late serrated, Limb of Corolla dotted with purple spreading fringed

19680 Leaves oval on long petioles serrated downy, Flowers axillary nearly sessile, Sepals unequal lanceolate spatu-
19681 Radicant downy, Leaves oval-lanceolate acute at both ends denticulated of a different colour beneath, Flowers axillary solitary, Sepals cordate foliaceous serrated, Corolla glabrous, Segments serrulated
19682 Radicant downy, Leaves broad coarsely toothed green, Flowers solitary axillary, Calyx foliaceous, Corolla lacerated pale-green

19683 Pedicels longer than the leaves, Calyx quinquefid divided beyond the middle

19684 Leaves ovate-lanceolate, Calyx violet hairy, Peduncles very long 6-12 inches hairy

19685 Peduncles hardly exceeding the leaves, Segments of Calyx about 3 times shorter than corolla
19686 Climbing or trailing, Leaves ovate-oblong acuminated fleshy, Flowers axillary mostly solitary, Pedicels long slender hairy, Segments of Calyx lanceolate hairy, Corolla large downy outside spotted inside

19687 Hairy, Leaves opposite oval acuminated oblique soft crenated stalked, Flowers in tufts at ends of long axillary and terminal peduncles, Corolla white lined and dotted with crimson

19688 Leaves oblong, Flowers axillary numerous
19689 Leaves large obovate-oblong, Flowers axillary almost hidden among the leaves

19690 Climbing radicant, Leaves small ovate acute serrated, Peduncles long slender axillary solitary 1-flowered

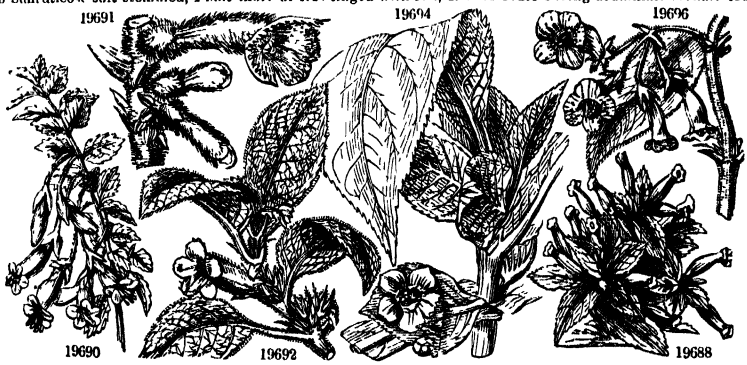
[veins beneath, Flws springing from all parts of the stem sessile, Cor yellow, with lines and dots of crimson
19691 Stem shaggy blackish brown, Leaves fleshy oval unequal at base doubly serrated shaggy with long hairs on the

[crenated, Filaments pilose at top

19692 Leaves nearly equal oval or obovate velvety painted serrated on long petioles, Corolla hairy, lobes obscurely
19693 Leaves opposite of unequal size, the large one oblique oboval-oblong serrated pilose on the ribs beneath, small leaf lanceolate, Corolla downy, lower lobes fringed
19694 Tall, Stem succulent, Lvs nearly equal large ovate acuminate coarsely and unequally serrated perfoliate at base, Peduncles short axillary many-flwd, Flws aggregate bracteate, 2 outer bracts large concave orbicular acuminate, Lobes of Corolla entire

19695 Leaves lanceolate serrate, Cymes axillary with rose-coloured bracts

[on short petioles, Peduncles umbellate 3—4-flowered axillary
19696 Suffruticose soft-stemmed, Plant more or less tinged with red, Leaves ovate-oblong acuminate crenate-toothed



and Miscellaneous Particulars

3092 *Columnea* requires the culture and treatment of *Gesnera*.
3093 *Mitraria coccinea* will perhaps succeed in the open air. A compost of leaf mould, loam, and peat is the best soil for it

3094 *Arctocalyx Endlicherianа* is a remarkable looking epiphytal shrubby plant, shaggy all over Stems radicant, usually simple, corolla 2 inches beyond the calyx, yellow It requires a cool humid stove or orchideous house, and is readily propagated by cuttings of the stem.

3095 *Centrosolenia picta* has the leaves blotched and mottled. The corollas are large and white. It is a creeping plant, and grows well in places suitable for tropical epiphytal *Orchideæ*. Light peat soil or leaf mould suits the species best. The other species require the same treatment.

3096 *Hantzsia tigrina* is a robust soft-stemmed soft-leaved subshrub, 3—4 feet high. The leaves are a foot long, green, with a bluish tinge. The calyx is large and rose-coloured, also the bracts The corolla is white, an inch long, the segments studded on the face with soft hairs, which produce a silky and spotted with purple gloss. It is a coarse-looking plant, the flowers hid by the leaves. It flowered for the first time in this country at Messrs Henderson's nurseries, near London, in 1849.

3097 *Moussonia elegans* is a pretty shrub, and requires a temperate stove. The stem and leaves are soft and hairy, and more or less tinged with red. The corolla is scarlet, about half an inch long; the segments yellowish inside, with lines of purple spots, the throat yellow. The plant is of the most easy culture and propagation.

3098. 1292*a*. ABE'LIA *R. Br.* (*Clark Abel, M D.*, physi. to Lord Amherst's embassy to China) *Caprifoliàceæ.*

19697 -	- rupéstris *Lindl.*	rock	♣ ⌴	or 3	au.s	W.R	China	1844.	C	co	Bot. reg. 1845, 8
19698 -	- floribúnda *Dcn.* *Vesàlia floribúnda* Mart. *V. hirta* Mart	bundle-flwd	♣ ⌴	or 3	ap.my	R	Mexico	1846.	C	co	Bot. mag. 4316
19699 -	- trifìora *R. Br.*	three-flwd	♣ ⌴	or 4	jn.jl	Y.w	N. India	1847.	C	co	Paxt. fl g. 3, 91
19700 -	- unifìora *R. Br.*	single-flwd	♣ ⌴	or 3	jn jl	W	China	1844.	C	co	Bot. mag. 4694

1294 BIGNO'NIA

19701	8538*a* Tweedieàna *Lindl.*	Tweedie's	⌴	or 10	jn.au	Y	B. Ayres	1838.	C	s l p	Bot reg. 1840, 43
19702 -	- grácilis *Lodd*	slender	⌴	or 20	ap	Y	S. Amer.	1810.	C	s l p	Bot cab. 1705
19703 -	- speciòsa *Hook.*	showy	⌴	or 20	ap my	Pk	Uruguay	1838	C	s l.p	Bot. mag 3888
19704 -	- Carollnæ *B. R.*	Carolina	⌴	or 10	my	Crea	B. Ayres	1840.	C	s.l.p	Bot. reg 1844, 4
19705 -	- picta *B R.*	painted-flwd	⌴	or 10	my.jl	V	B. Ayres	1840.	C	s.l p	Bot. reg 1842, 43
19706	8555*a* amœ'na *Wall*	pleasing	▢	or 20	...	Pa.Y	E Indies	1828.	C	s.l p	Wall pl as 2 183
19707 -	- adenophýlla *Wall*	gland-leaved	▢	or ...	...	...	E. Indies	1832.	C	s l p	

2666. 1294*a* TE'COMA.

19708	17587*a* jasminoides *G Don* *Bignònia jasminoides* Cun	Jasmine-like	⌴	or 10	jl.au	W.P	Moret. B.	1830.	C	s l.p	Bot. mag. 4004
19709 -	- diversifòlia *G Don*	diverse-leaved	⌴	or 10	jl au	...	N. Holl.	1830.	C	s l p	

3099. 1294*g*. SPATHO'DEA *Beauv.* SPATHODEA. (*Spathe*, a spathe, calyx spathaceous) *Bignoniàceæ*

19710 -	- serrulàta *Dec.* *Bignònia serrulata* Wall	serrulated-lvd	▢	or 20	...	...	E. Indies	1832.	C	s l.p	
19711 -	- speciòsa *Brong.*	showy	▢	or 4	jn ap	Pk	Africa	1840	C	s l p	An. gand 260
19712 -	- læ'vis *Beauv.*	smooth	▢	or 8	jn.jl	W.R	S. Leone	1847.	C	s.l.p	Bot mag 4537
19713 -	- pentándra *Hook* Also Nos. 8537 8552, 8553. belong to this genus.	pentandrous	▢	or 20	jn.jl	R	India	1830.	C	s.l p	Bot. mag 3681

3100. 1294*h*. ADENOCALY'MMA *Mart.* (*Aden*, a gland, *kalymma*, a covering; calyx.) *Bignoniàceæ*

19714 -	- nitidum *Mart.*	shining-leaved	⌴	or 10	f my	Y	Brazil	1848.	C	s l p	Paxt fl g 1, 2
19715 -	- comòsum *Dec.* *Bignònia comòsa* Cham.	tufted	⌴	or 10	s o	Y	Brazil	1841.	C	s l p	Bot. mag. 4210

3101. 1294*i* CO'LEA *Boj.* (*Sir Lowry Cole*, sometime Governor of the Mauritius, a bot patron.) *Bignoniàceæ*

19716 -	- floribúnda *Boj.*	bundle-flwd	♣ ▢	or 10	au	Y.w	Maurit.	1839.	C	s.l p	Bot. reg 1841, 19

1295 JACARA'NDA

19717	8559*a* tomentòsa *R. Br.* No 8556. belongs to this genus.	woolly	▢	or 30	au	O.w	Brazil	1824.	C	s.l p	Bot. reg 1103

3102. 1295*a*. PHYLLA'RTHRON *Decaisne* (*Phyllon*, a leaf, *arthron*, a joint; appearance of lvs) *Bignoniàceæ*

19718 -	- Bojerianum *Dcn.* *Arthrophýllum madagascarìnse* Bojer.	Bojer's	♣ ▢	or 10	au	Ro	Madagas.	1843.	C	s.l.p	Bot. mag 4173

Bignònia verticillàta Desf.

1297 PENTSTE'MON.

19719	8570*a* miniàtus *Benth*	vermilion	⌴	or 2	jn jl	Ve	Mexico	1846.	C	l s.p	Bot reg 1847, 14
19720 -	- heterophýllus *Hook*	various-leaved	△	or 1½	jn.o	R	Californ.	1839	C	s l.p	Bot mag 3853
19721 -	- azùreus *Benth.*	azure blue	△	or 2	jn jl	B	Californ	1848.	C	s.l.p	
19722 -	- cordifòlius *Benth.*	heart-leaved		or ½	jn o	R	Californ	1848.	C	s l p	Bot. mag 4197
19723 -	- cyanánthus *Hook.*	blue-flowered	△	or 3	my jn	B	Rocky M.	1848.	C	s.l.p	Bot mag 4161
19724 -	- baccharifòlius *Hook.*	Baccharis-lvd	△	or 1½	s n	S	Texas	1848.	C	s l.p	Bot. mag 4027
19725 -	- gentianoides *Benth.* *Chelòne gentianoides* H. B & Kth.	Gentian-like	△	or 4	jl.o	B	Mexico	1846.	C	s.l.p	Paxt fl. g 2, 91



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3098. *Abèlia* These shrubs are generally treated as rather tender, and are either kept in a frame or a cold part of a greenhouse, but are probably hardy enough to stand our milder winters. Rough sandy loam, with the addition of a little peat, is the soil that appears to suit them best. They are free growers, and therefore require plenty of water during their growth. Cuttings from young wood strike root readily. The flowers are sweet-scented

3099. *Spathòdea laˈvis* is a pretty plant, and grows best in a mixture of light loam and sand, and cuttings strike root if planted in white sand. The corollas are white, spotted and streaked with red. *S. speciòsa* is a splendid plant, with terminal panicles of pink flowers, stained with purple. It has been cultivated in a mixture of decayed leaves and rotten dung, mixed with one third of peat and one third of loam. Cuttings are said to be difficult to strike

3100. *Adenocalýmma comòsum* is a splendid climber; trained to the rafters in a stove it makes a fine appearance with its copious flower buds, which look like large clusters of hops; and as soon as the bracts fall the conspi... yellow blossoms burst forth in all their beauty. It requires the same treatment and culture as the climbing hot

[volucrum none, Sepals 5 obovate ciliated, Corolla downy 5 cleft, Stamens exserted

19697 Branches downy, Leaves ovate distantly serrated glabrous except the midrib beneath, Peduncles 2-flowered, In-
19698 Leaves ovate obtuse reticulated glabrous ciliated, Peduncles nearly terminal axillary 1—3-flowered bibracteate, volucrum small 1—3-toothed, Corolla tubular nutant, Stamens and style exserted

19699 Lvs ovate-lanc nearly sessile ciliated, Flws by threes, lateral ones tribracteate, Calyx villous 5 parted, segs linear acum length of tube of cor. [tomentose, Stamens a little exserted

19700 Lvs ov coriaceous opposite or tern entire and serrated glabrous, Peduncles 1—3-flwd, Sepals 2 obtuse glab., Cor

19701 Leaves conjugate, Leaflets lanceolate acuminate, Petioles downy, Peduncles 1-flowered, Calyx bilabiate 5-lobed, Corolla glabrous, limb deeply 5-parted crinated, segments emarginate

19702 Lvs conjugate, Lflts obl entire acum rather cordate at base glab, Tendrils 3 hooked Cal. cup shaped entire

19703 Leaves conjugate, Leaflets obovate-oblong shining, Peduncles terminal 2-flowered, Stamens enclosed

19704 Lvs conjugate, Lflts cordate acum. rather downy, Pans term few-flwd, Cal camp truncate downy obsoletely 5-toothed, Cor arched downy with curled spreading segments [Cor spreading wavy

19705 Lvs simple and conjugate, Lflts obl or obov -obl acute, Pedans 2-flwd, Cal camp, Teeth subulate 1 obes of

19706 Lvs tripin, Lflts 3—9 lanc. entire glab, Panicle terminal trichot, Calyx bluntly 2-lobed Cor downy outside

19707 Leaves impari-pinnate downy beneath, Leaflets obovate-oblong mucronate sessile, lowest pair close to the stem, Panicle terminal clothed with rusty down, Corollas large tomentose outside

19708 Leaves impari-pinnate glabrous shining, Leaflets 5 oblong-lanceolate entire acuminated pale beneath, Panicle terminal trichotomous

19709 Lvs impari-pinnate very variable, lower ones smallest with 11 pairs of unequal-sided deeply crenate leaflets the term lflt always lrgst, Petioles winged articulated, Lflts as they ascend become larger fewer and more entire

19710 Arborcous glabrous, Leaves pinnate, Leaflets 2—3 pairs on short stalks, the terminal one on the longer stalk ob-
ovate entire at base and serrate at top Capsule silique-formed compressed very long

19711 Glab, Lvs pin tern verti, Lflts obl-lanc acum shining ser Pans term Calyx spathaceous split on one side

19712 Glabrous, Leaves alternate pinnate 4—5 pairs, upper ones ternately verticillate, Leaflets ovate acuminated unequal-sided serrated, Racemes terminal corymbose, Corolla glandular with unequal rounded curled lobes

19713 Arborcous glabrous, Leaves pinnate, Leaflets many pairs broad-ovate acuminated undulated serrate, Panicles terminal thyrsoid, Limb of Corolla bilabiate often 6 lobed pentandrous with the rudiment of sterile stamen

[velvety, Bracts narrow glandular, Calyx 5-toothed velvety glandular, Corolla velvety

19714 Glabrous, Leaves trifoliate or conjugate tendrilled, Leaflets elliptic oblong, Racemes axillary nearly terminal

19715 Glabrous, Leaves trifoliate and conjugate tendrilled, Leaflets ovate cornaceous glandular, Racemes spike-formed axillary and terminal, Bracts comose under vernation, Calyx 5-toothed glandular

19716 Leaves pinnate verticillate 8 pairs, Leaflets oblong-lanceolate pointed, Flowers in fascicles nearly sessile rising from the old wood

19717 Leaves bipinnate with 3—5 pairs of pinnæ, Leaflets ovate-elliptic acute tomentose in the young state and beneath in the adult state, Branches downy, Corollas silky

19718 Branches and Peduncles trigonal or 2-edged, Petioles articulated, young ones viscous, Joints 2 broadly marginate, lower joint obovate, upper one elliptic, Racemes terminal trichotomous corymbose

[flowered, Peduncles 2-flowered, Cal glandular, Corolla glandular with ciliated segments, Anthers glabrous

19719 Suffruticose glaucous downy Leaves ovate, radical ones narrowed into the petioles, Racemes loose secund few-

19720 Glaucescent, Leaves entire, lower ones linear-lanceolate upper ones linear, Racemes twiggy, Sepals ovate acuminate, Corolla ventricose beardless, Sterile filament glabrous, Anthers fringed at top

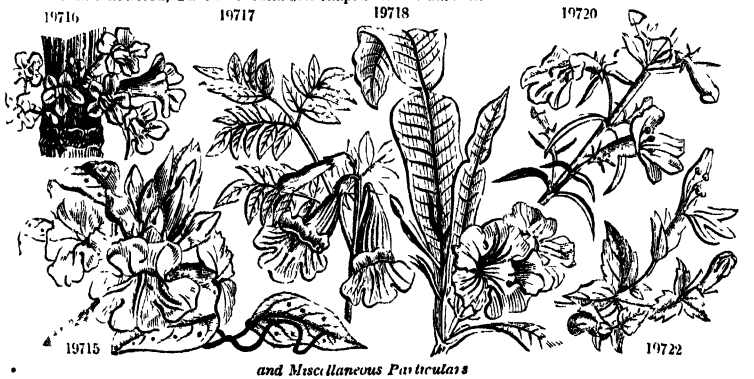
19721 Smooth glaucous, Leaves linear-lanceolate entire, Racemes terminal 1 foot long, Peduncles axillary 1—2-flwd

19722 Shrubby trailing, Lvs shining cord ser. downy, Fls in nar 1-sided leafy hairy pans, Cor covd with gland hairs

19723 Glauc green, Lvs entire, radical ones obl-spatu cauline ones ses cord acum., Peduncs axil subverticil forming a leafy raceme Sterile filament hairy [elongated, Calyx segments ovate

19724 Glandular downy, I vs glabrous spinosely ser, lower ones spatu. middle ones obl upper ones roundish Panicle

19725 Tall, Leaves lanceolate, upper ones stem clasping acum smooth, Panicle long leafy at base, Peduncles short more than 1-flowered, Tube of Corolla bell-shaped Sterile filament smooth



and Miscellaneous Particulars

Species of *Bignonia*, from which it has been separated *A. nitidum* is said to be a shy flowerer and has been found to grow best in a large tub, in a mixture half light loam, a quarter peat, and a quarter leaf mould

19701 *Cobæa floribunda* is a noble plant, with a perfectly simple stem, furnished with large pinnate leaves at the top only, and bearing flowers of a bright yellow ochre on the old wood, from just above the place whence the leaves had fallen the previous year The culture and treatment are the same as for the upright hothouse species of *Bignonia*

19702 *Phyllárthron Bojerianum* is a beautiful and singular plant. The leaves or broad petioles are curious, being composed of two joints. The plants require the same treatment as the upright hothouse kinds of *Bignonia*.

19722 *Pentstemon cordifolius* has little the appearance of the genus in habit, but being a trailing shrubby plant it is well-fitted for decorating rockwork. The flowers are of a rich dull red or scarlet.

19725 The *Pentstèmon gentianoides* figured in Bot reg and Bot. mag with long narrow scarlet flowers should be called *S. Hartwegii*, according to Paxt. Fl gard ; but why, we are not told.

19726 - - Hartwègii *Lindl* Hartweg's ⚘ △ or 2 jn n P Mexico 1825. C s l p Bot. reg 183. 3
gentianoides Bot reg. Bot mag.
β transpárens B R. *transparent* ⚘ △ or 2 jl s R Mexico 1840 C s.l p Bot reg 1845 ;.
1727 - - Wrightii *Hook.* Dr Wright's ⚘ △ or 2 jn s R Texas 1850. C s l p Bot mag 4601
19728 - - Gordonii *Lindl.* Gordon's ⚘ △ or 4 jl.s B Californ 1848. C s.l p Bot mag. 4819

3103. 1297*a* TETRANE'MA *Benth.* (*Tetra*, four, *nema*, a filament; stamens 4) *Scrophulariineæ*
19729 - - mexicàna *Benth.* Mexican ⚘ △ or ½ su P Mexico 1840 D lt.s Bot. reg 1843,,

1300 MARTY'NIA
19730 8579*a* frágrans *Lindl.* fragrant ○ fr 3 jl s P Mexico 1840. S rch s Bot mag 4292

3104. 1301*a*. DILIVA'RIA *Juss* DILIVARIA. (Name in the isle of Luçon) *Acanthàceæ*
19731 - - ilicifòlia *Juss* Holly-leaved ▲ □ or ... ... R India 1759. S s l.p
Acánthus ilicifólius L. No 8584.

3105. 1302*a* ASTERACA'NTHA *Nees.* (*Aster*, a star, *acantha*, a spine; spines stellate) *Acanthaceæ*
19732 - - longifòlia *Nees* long-leaved ▲ □ or 2 jl s R E Indies 1781 C s.l p
Barlèria longifòlia L. No. 8585.

1304 RUE'LLIA
19733 8603*a* lilácina *Hook.* lilac-flowered ▲ □ or 3 jl o Ll Jamaica 1844 C s l.p Bot mag 4415
longifòra Hort Bot reg. 1846, t. 13
19734 - - Purdieàna *Hook.* Purdie's ▲ □ or 2 jn jl C Jamaica 1844 C s l p Bot mag 42..
19735 - - élegans *Hook* elegant ⚘ ▽ or 1 au B E. Indies 1834. C s l p Bot mag 4386

2670 1304*a* STROBILA'NTHES.
19736 - - lactàtus *Hook* milky ▲ □ or 1 s n Pa B E. Indies 1847. C s.l p Bot mag 4944
Ruéllia grándis Hort
19737 - - auriculàtus auricled-leaved ▲ □ or 3 f my Pa B E Indies 1850 C s l p Moor c 54..
19738 - - scàber *Nees* scabrous ▲ □ or 4 my Y E Indies 1839 C s l p Bot reg 1841 ..
19739 - - sèssilis *Nees* sessile-flwd ▲ □ or 4 o Ll E Indies 1833 C s l p Bot mag 3402

2671 1304*b* GOLDFU'SSIA.
19740 17621*a* isophýlla *Nees* equal-leaved ▲ □ or 2 aut Pa Ll Silhet 1845 C s.l p Bot mag 4373
19741 - - glomeràta *Nees* glomerate ▲ □ or 1 n P Silhet 1838. C s l p Bot mag 3881

3106 1304*d* STEMONACA'NTHUS (*Stemon*, a stamen, and *Acanthus*, stamens prominent.) *Acanthaceæ*
19742 - - macrophýllus *Hook* long leaved ▲ □ or 2 jn jl S N Gren. 1840. C s l p Bot mag 4448
Ruéllia macrophýlla Vahl, Bot reg. 1846, t. 7.

3107 1304*e* SERICO'GRAPHIS *Nees* (*Serikos*, silk, *grapho*, to write) *Acanthàceæ*
19743 - - Ghiesbreghtiàna *Den* Ghiesbreght's ▲ □ or 2 o d Psh R ..... 1846. C s.l p Px in 15 176..

3108 1304*f* SALPIXA'NTHA *Hook.* (*Salpigx*, a tube, *anthos*, a flower, long tubular flower) *Acanthaceæ*
19744 - - coccínea *Hook* scarlet ▲ □ or 3 au S Jamaica 1842 C s l p Bot mag 4158

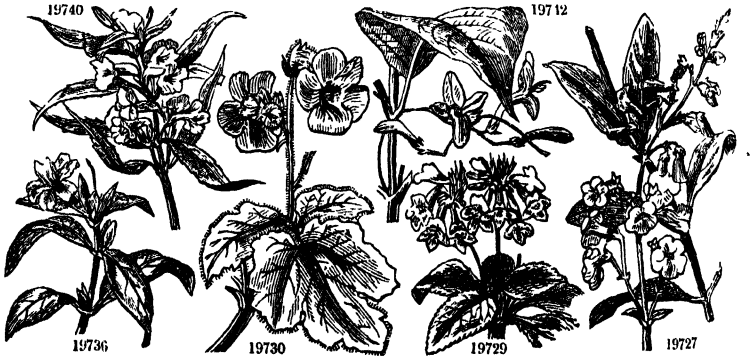
3109 1304*g* STROBILO'RACHIS *Lk & Kl* (*Strobilos*, a pine cone, and *rachis*, flowers in cones) *Acanthaceæ*
19745 - - glàbra *Lk. & Kl* glabrous ▲ □ or 3 ... Y Brazil . C s l p Px fl g 3 61 6..
prismática Nees *Ruéllia prismática* Velloz *Harpàchia macrothýrsus* Mart. *Justicia imbricata* Roxb

3110 1304*h* WHITFIE'LDIA *Hook* (*T Whitfield*, nat hist collector, Western Africa) *Acanthaceæ*
19746 - - lateritia *Hook* brick-red-flwd ▲ □ or 4 o.mr R S. Leone 1843 C s l p Bot mag 41..

3111. 1304*i* PETALI'DIUM *Nees* PETALIDIUM (*Petalon*, a petal, large flower) *Acanthaceæ*
19747 - - barlerioides *Nees* Barleria-like ▲ □ or 4 jn au W E. Indies 1840 C s.l.p Bot. mag 46..
Ruéllia barlerioides Roxb

3112. 1304*k* DIPTERACA'NTHUS *Nees* (*Dipteros*, two-winged, and *Acanthus*) *Acanthaceæ*
19748 - - spectábilis *Hook* showy ⚘ ▽ or 2 ... B Peru ... C s l.p Bot mag 4494

3113 1304*l*. ASYSTA'SIA *Nees* ASYSTASIA (Not explained by author) *Acanthaceæ*
19749 - - coromandelìana *Nees* Coromandel ▲ □ or 4 jl s Dp Ll E.Indies 1845. C s l p Bot. mag 4..
Justicia gangética L.



History, Use, Propagation, Culture,

3103. *Tetranèma mexicàna* is a pretty little plant, blossoming profusely. It is easy of cultivation, and is propagated readily by division and seed A light rich soil suits it best.

19730. *Martýnia frágrans* is a half-hardy annual. The flowers are large, of a beautiful purple, and very fragrant The culture and treatment are the same as for Balsam

3104. *Dilivária ilicifòlia* is a pretty holly-leaved plant. It can only be propagated by seed.

3105. *Asteracántha* requires the same culture and treatment as recommended for *Barlèria*

3106. *Stemonacánthus*. The same treatment and culture as recommended for the species of *Ruéllia* will suit this plant.

3107. *Sericógraphis* is a very handsome winter-flowering plant. The flowers are tubular, of a bright purplish red The cultivation and propagation of the plant are the same as for *Ruéllia*.

3108. *Salpixántha coccínea* is a splendid shrub, with its pretty graceful scarlet pendent blossoms. Its culture and propagation are the same as for *Ruéllia*.

19726 Stem downy, Leaves ovate-lanceolate entire glabrous, Segments of Calyx ovate, Corolla downy beardless, Sterile stamen glabrous, Peduncles 2-flowered downy

β Flowers pale below semidiaphanous, Stems green, Calyx and Corolla glandularly villous [Cor vent.

19727 Glab glauc, Lvs remote, lower ones obl upper ones obl.-ov. cord ses., Racs elong. bract, Peds oppo 2-flwd.

19728 Tall green, Leaves oblong-spatulate, cauline ones lanceolate sessile stem-clasping entire, Peduncles many-flowered axillary forming a spicate leafy panicle

19729 Almost stemless, Peduncles long numerous, Flowers corymbose

19730 Leaves cordate angular coarsely toothed nearly opposite on long petioles, Raceme few-flowered, Calyx campanulate oblique plicate, Bracts plano-convex, Flowers tetrandrous, Plant villous

19731 Spiny or nearly unarmed glabrous, Leaves elliptic sinuately toothed spiny wavy, Spike many-flowered, Flowers bracteate showy

19732 Rather hairy, Stem quadrangular, Leaves lanceolate tapering to the base narrow sessile serrately ciliated

[Ivy pilose with subulate segments, Corolla long slender curved, lobes nearly equal, Seeds orbicular ciliated

19733 Glabrous, Leaves ovate bluntly acuminate entire, Spikes downy panicled at base, Flowers solitary sessile, Ca- [Corolla long slender curved, lobes nearly equal wavy

19734 Glabrous, Leaves ovate pointed wavy entire, Flowers twin terminal, Segments of Calyx foliaceous subulate,

19735 Hairy pubescent, Leaves ovate acuminate coarsely serrated on long stalks, Flowers terminal usually solitary on tops of branches bracteate, Calyxes ciliated

19736 Leaves ovate acuminate entire glabrous blotched with white on short petioles, Peduncles solitary axillary and terminal bibracteate usually 2-flowered, Bracts leafy

19737 Leaves stem-clasping elliptic-oblong narrowed to base and auricled hairy, Spikes axillary imbricate leafy

19738 Hispid, Leaves obovate-elliptic dentately crenated lined above Spikes terminal by threes glandular

19739 Hairy, Leaves sessile ovate acuminated crenated, Spikes axillary opposite and terminal, Bracts ovate cuspidate

19740 Leaves lanceolate equal remotely serrulated 7-nerved

19741 Leaves ovate roundish cuspidate unequal coarsely crenated, Spikes axillary opposite solitary globose on short peduncles hairy, Bracts lanceolate entire

19742 Leaves ovate-lanceolate entire downy, Peduncles axillary dichotomous panicled, Bracts linear, Stamens exserted

19743 Glabrous, Leaves oblong-lanceolate, Flowers in loose 1-sided downy panicles, Lips of Corolla nearly equal

19744 Glabrous branched, Leaves ovate coriaceous entire, Peduncles axillary solitary pendulous or terminal by threes, Flowers sessile decussate in loose spikes

19745 Glabrous, Leaves oblong-lanceolate acuminate, Flowers arranged in quadrangular close spikes formed of keeled large bracts

19746 Leaves oblong-ovate entire undulated, Racemes terminal secund deflexed

19747 Flowers pedunculate axillary solitary, Bracts large

19748 Downy erect-branched, Leaves ovate acuminated ciliated, Flowers twin axillary sessile bractless, Segments of Calyx subulate, Tube of Corolla curved, lobes equal crenated, Capsule downy 10—12-seeded

19749 Branches diffuse, Leaves cordate-ovate, Racemes axillary elongated secund strict, Segments of Calyx acuminated



and Miscellaneous Particulars.

3109 *Strobilórachis glàbra* is very nearly related to *Apheländra*, and should be cultivated and treated like it.

3110 *Whitfièldia lateritia* is a beautiful shrub, having the branches terminated by racemes of flowers, of rather a large size. The calyx and corolla, and often the large bracts, are of one uniform brick-red colour. The plant requires plenty of heat and moisture while growing, and cuttings strike root readily.

3111 *Petalidium barlerioides* is a very pretty shrub, with much the habit of *Barlèria*, from which it has been separated. It is of the most easy culture, and a free flowerer. Loam and peat, with a little rotten dung mixed with it, is found to be the best soil for it. Cuttings from young wood strike freely in the same kind of soil.

3112 *Dipteracanthus* should be cultivated and propagated like *Petalidium*.

3113 *Asystàsia* is a genus of very pretty plants, of easy culture. They require a hot moist atmosphere. A compost of peat and loam, with the addition of a little leaf mould, suits them best, and cuttings strike root readily. *A scandens* bears clusters of large cream-coloured flowers, tinged with blush, and is well-fitted for training on trellis-work.

19750 - - scándens *Nees* climbing ♣ ☐ or 6 jl s Crea S Leone 1843 C s.l p **Bot. mag** 4449
Henfréya scándens Lindl Bot reg 1847, t 31 *Asystásia quaterna* Nees *Ruéllia quatérna* Thore

3114 1304*m* HYDROMÉSTIS *Schrebr* HYDROMESTIS (*Hydor*, water, *mestos*, full) *Acanthàceæ*
19751 - - maculàtus *Scheidw.* spotted ♣ ☐ or 2 jn s Y Mexico 1842 C s.l p Bot mag 4 [illegible]

1306 APHELA'NDRA
19752 8613*a* aurantiaca *Lindl* orange-flwd ♣ or 3 ... O S Amer 1842 C s l p Bot mag 4224

1308. THUNBE'RGIA.
19753 8610*a* chrỳsops *Hook* golden-eyed ♣ ☐ or 4 jn au P B Y S Leone 1843 C s l p Bot mag 4119

3115 1308*a* HEXACE'NTRIS *Nees* (*Hex*, six, *kentron*, a spur, flowers) *Acanthàceæ*.
19754 - - coccínea *Wall* scarlet ♣ ☐ or 6 my s S Nepal 1823 C s.l Hook ex fl [illegible]
Thunbérgia coccínea Hook. exot fl 196 No 17627
19755 - - mysorénsis *Wight* Mysore ♣ ☐ spl 6 my s Y c Mysore 1850 C s p l Pax fl g 3 [illegible]

3116 1308*b* MEYE'NIA *Nees* (*W Meyen* a celebrated physiological botanist) *Acanthàceæ*
19756 - Hawtayneàna *Nees* Hawtayne's ♣ ☐ spl 10 ... P Nepal 1826 C s p l Botanist 188
Thunbérgia Hawtayneàna Wall No 17628

1311 GMELI'NA
19757 8627*a* Rheédii *Hook* Rheede's ♀ ☐ or 20 jn au W E Indies 1824 C s l p Bot mag 43[illegible]
Cambulu Rheed mal 1 p 41

1314 LI'PPIA
19758 8646*a* argyrophýlla *Schau* silvery-leaved ✿ ☐ or ½ jn au W Y ... 1850 C s l p
19759 - - asperrima *Cham.* very rough ✿ △ or 2 jn jl Y Brazil 1840 C s l p
19760 - - réptans *Kth* creeping ✿ △ or 1 jn jl W R S Amer 1819 C s l p
stigillosa Martens & Galeotti.

3117 1314*a* MASTACA'NTHUS *Endl* (*Mastax*, moustache, and *Acanthus*, lower lip of cor fringed) *Labiatæ*
19761 - - sinénsis *Endl* Chinese ♣ ☐ or 2 o B China 1841 C s l p Bot reg 1846
Bárbula sinénsis Lour

3118 1314*b* SCLERO'ON *Benth.* SCLEROON (*Skleros*, hard, dry, dry bony fruit) *Verbenàceæ*
19762 - - oleìmum *Benth* Olive-like ♣ ☐ or 1 jl au G W Mexico 1840 C s.l p

1316 SELA'NGO
19763 8656*a* distans *E Meyer* distant ✿ ☐ or 1 ap jl W C G H 1843 C s l p Bot r 1844 [illegible]
19764 - - Gillii *Hook* Dr Gill's ✿ ☐ or ½ ap my Ro C G H 1829 C s l p Bot mag 80[illegible]

1317 VI'TEX
19765 8671*a* Domàna *Swt* African Teak ♀ ☐ or 70 ... B S Leone ... C s p l
umbrósa Hort trans vol v, not Swartz

3119 1322*a* CASSE'LIA *Nees* CASSELIA (Probably after some botanist named *Cassel*) *Verbenàceæ*
19766 - - integrifólia *Nees* entire-leaved ♣ ☐ or 4 ... P Brazil 1843. C s l p Pax in [illegible]
Duránta Fischeri Mart.

1325 CLERODE'NDRON
19767 8708*a* scándens *Beauv* scandent ♣ ☐ or 10 au o W Ro S Leone 1846. C s l p Bot mag 43[illegible]
19768 - - capitàtum *Schum.* capitate-flwd ♣ ☐ or 4 au o Crea S Leone 1846 C s l p Bot mag 44
19769 - - splèndens *G. Don* splendid ♣ ☐ or 6 jn jl S S Leone 1839 C s l p Bot reg 18[illegible]
19770 - - cordàtum *D Don* cordate-leaved ♣ ☐ or 4 jn au W Nepal ● 1826 C s l p
19771 - - dentàtum *Wall* dentate-leaved ♣ ☐ or 4 my au W Silhet 1826 C s l p
Volkaméria dentàta Roxb
19772 - - nerifólium *Wall* Oleander-lvd ♣ ☐ or 4 my au W E Indies 1826 C s.l p
Volkaméria nerifólia Roxb
19773 - - smuàtum *Hook* smuate-leaved ♣ ☐ or 4 ap my W S Leone 1846 C s l p Bot mag 4[illegible]
19774 - - Bethuneànum *Low* Capt Bethune's ♣ ☐ or 10 jl o S Borneo 1847 C s l p Bot mag 48[illegible]
19775 - - macrophýllum *Blum.* large-leaved ♣ ☐ or 6 n.d W Java 1844 C s l p



History, Use, Propagation, Culture,

3114. *Hydroméstis maculàtus.* The same culture and propagation as *Aphelándra* Readily increased by cuttings or seeds

3115. *Hexacéntris mysorénsis* Among all the plants exhibited in 1852, none excited such universal interest as this plant. It formed a small umbrella-like creeper, trained over trellis, the whole circumference of which was loaded with pendulous racemes of the most beautiful large yellow and crimson flowers. The culture and propagation of the species are the same as for *Thunbérgia*

3116. *Meyénia Hawtayneàna* is a splendid climber It should be treated like *Thunbérgia*

3117. *Mastacánthus sinensis* is an autumn-flowering plant, and furnishes rich violet blossoms at a late time of the year It grows freely in sandy loam and peat, and requires plenty of room for its roots, and plenty of water when

19760 Leaves obovate or ovate acute glabrous Racemes terminal compact thyrse-formed, Segments of Calyx linear-lanceolate, Tube of Corolla widened and recurved above, lobes of limb crenately curved, Stamens glandular

[ing water

19761 Leaves ovate-lanceolate entire petiolate, Spikes terminal solitary with imbricate cucullate bracts or scales hold-

[ovate acuminate keeled serrated, Upper lip of Corolla lanceolate erect, lower one large

19762 Leaves ovate glabrous tapering into the thick-winged petiole, Spike simple thickened rather tetragonal, Bracts

19763 Lvs cordate angular on naked petioles, Peduncs short 1-flowered, Calyx trunc , Bracts ovate ciliated, Anthers sagittate glandular at base, Glands pedicellate, Style bearded at top, Stigma foliaceous 2-lobed

19764 Leaves cordate entire, Flowers scarlet

19765 Leaves oblong acuminated 3-nerved a little toothed obtuse at base or hastate, Bracts of Calyx small, Laps of Corolla 2-lobed, upper lip galeate, tube shaggy at base inside

19766 Leaves cordate entire coriaceous, Flowers purple

19767 Arborcous downy, Lvs rhomb-cordate sometimes 3-lobed tomentose beneath, Thyrse many-flowered, Corolla downy bilabiate

[above silky beneath, Heads of flowers oblong or globular

19768 Shrubby Branches bluntly tetragonal, Leaves opposite or in threes oblong acuminate sharply serrated scabrous

19769 Rhizoma creeping, Stems erect 4-angled Lvs obl -lanc coarsely toothed Heads of flwrs nearly globose yellow

19770 Spreading suffruticose with rooting branches, Leaves obovate-cuneate sharply serrate, Heads of flowers subovate at length cylindrical

19771 Leaves ovate oblong petiolate obtuse coarsely serrated downy, Peduncles axillary fastigiate

19772 Leaves entire, Inflorescence axillary cymose few-flowered

[Segments acuminate lancer than tube of corolla

19773 Branches downy, Leaves fascicled semiterete obtuse when young viscid, Spikes terminal solitary Calyx viscid,

19774 Stems terete almost simple downy, Leaves scattered linear-oblong glabrous, Flowers umbellately capitate, Calyx trimartite downy

19775 Leaves of many leaflets, upper or floral lvs with narrow much acuminated serrated leaflets, Flowers panicled, Habit of the horsechestnut

19776 Leaves ovate-lanceolate entire wavy petiolate smooth, Racemes axillary 4—5-flowered at tops of branches

[nal Segments of Calyx white 3 nerved Corolla with a slender tube and obovate segments

19777 Downy, Stem tetragonal scandent Leaves cordate-ovate acuminate entire, Corymbs many axillary and termi-

19778 Hairy rusty, Leaves large obovate-oblong sinuately undulated, Peduncles terminal 2-leaved Flowers crowded, Calyx foliaceous ciliated, Corolla with a long pilosely glandular tube jointed beneath apex, Stamens exserted

19779 Leaves oblong wavy acuminated rather cordate at base Panicles terminal corymbose, Calyx 5-toothed, Segs of Cor obl nearly equal [Segments of Calyx foliac elliptic inner, Tube of Corolla exceeding calyx a little

19780 Branches tetragonal hairy, Leaves cordate acute dentately serrated woolly petiolate, Panicle terminal bracteate,

19781 Lvs roundish cord acute and acutely toothed, Lobes at base rounded and incumb Pan term bract col

[lute edges shining above, Cymes axil 3-flwd, Calyx obconic campan 5-toothed Tube of Cor long filiform

19782 Downy when young, glabr in adult state, Lvs coriac opp or 3 in a whorl lanc or obl acum with ent revo-

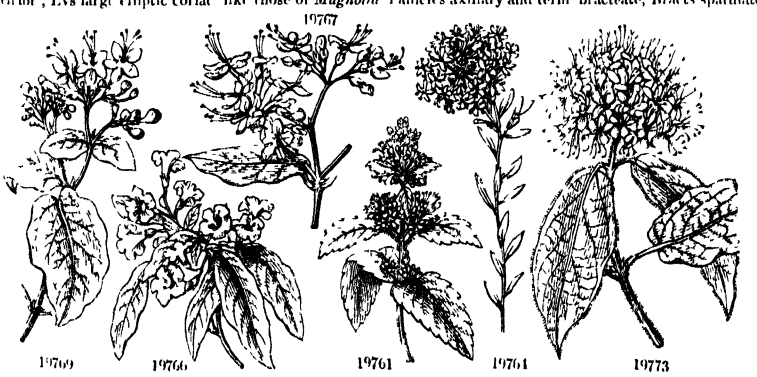
[tute Calyx bibracteate, Segments subulate, Corolla salver-shaped, Tube slender

19783 Downy, Leaves elliptic acuminated sinuated or angular rather cordate at base, Cymes many-flowered capi-

Branchs 4-furrowed, Lvs large cord -acum glabr slightly serr lepidoted beh , Panics large term thyrs bract ,

Bracts narr spat coloured, Cal large 5-angled, Tube of Cor hardly exceeding Calyx, Stams much exserted

19784 Glabr , Lvs large elliptic coriac like those of *Magnolia* Panicles axillary and term bracteate, Bracts spatulate



and Miscellaneous Particulars

Growing Cuttings of young wood strike freely Strong-scented when bruised, with much the appearance of *Nepeta*

19758 *Sclerŏon oleïnum* A small bush with habit of the olive and flower of *Verbèna.* The genus is said to come

19759 *Ægiphila* It is of easy culture and propagation

19765 *Vitex Domàna* The wood of this tree is the African Oak or African Teak, so much used for many pur-

poses It may be cultivated in the same manner as any other hothouse tree.

19769 *Cassèlia* is a pretty stove shrub when in blossom. It requires the treatment of ordinary stove plants

19774 *Clerodèndron Bithuncànum* and *splèndens* are two most showy species The whole panicle of the first is of a crimson The lobes of the corolla are oblong and reflexed, the upper lobe has a white base

3120 1331*a*. PTERODI'SCUS *Hook* PTERODISCUS (*Pteron*, wing, *diskos*, a disk) *Pedalinæ*
19776 - speciósus *Hook* showy ⁂ ▱ or 2 my R P S Africa 1843. S s.l.p Bot. mag 4117

1332. MYO'PORUM.
19777 8730*a* seriátum *R Br* serrate-leaved ⁂ ▭ or 6 my.jn W V.D.L 1840. C s.l.p Bot r 1815, 15
Pogónia tetrándra Labill nov. holl 1 t 83
19778 - ascéndens *R Br* ascending ⁂ ▭ or 2 my.jn W V D L. 1840 C s.l p

1333 STENOCHI'LUS
19779 8732*a* viscósus *Grah.* clammy ⁂ ▭ or 2 o Y N Holl 1824. C s l p Bot. mag 2911

1335. OROBA'NCHE
19780 8739*a* Picridis *F. W Schultz* Picris ⁂ △ cu 1½ ... Pa Y England par. on P hier. Eng bot 2906

1344 LINA'RIA
19781 8797*a* delphinoides *K & W.* Larkspur-like ○ or 1 jn jl P Russia 1838. S co Flor. cab 115
19782 - glandulífera *Ten* gland-bearing ○ or 1 jn jl P Naples 1838. S co
19783 - venósa *Lindl* veiny ⁂ △ or 1½ jn jl Y Br N. India 1839. D co

1345 ANARRHI'NUM
19784 8798*a* duriminium *Brot.* Douro ◯ or 1½ jn s Su Portugal 1818 S co H. & L fl p 1 t 1
pubéscens Hort *hirsútum* Hoffm.

2676 1346*a*. LOPHOSPE'RMUM
17652 erubescens
β spectábilis Paxt *showy* ⁂ ▭ or 20 jl s R w seedling ... S co Paxt mag 8 75 c

1349. PEDICULA'RIS
19785 8824*a* pyramidàlis *Royle* pyramidal ⁂ △ or 1 jn au P Himal 1839. D p.l
19786 - megalántha *Wall* large-flowered ⁂ △ or 2 ap my Y Himal 1838 D p l
19787 - móllis *Wall.* soft ⁂ △ or 2 my.jl P Nepal 1840 D p l Bot mag 4761

1351 MI'MULUS
19788 8833*a* tricolor *Hartw* three-coloured ○ or 1 jn au Pk Mexico 1849. S s l p

2678 1351*a* DI'PLACUS
19789 17665 glutinósus *Nutt* clammy ⁂ ▭ or 4 year O Californ 1794. C s.l.p Bot. mag 301
Mimulus glutinósus Wendl *auranticus* Curt

2679 1353*a* TORE'NIA
19790 17667*a* asiática *Lindl* Asiatic ⁂ ▽ or ½ all sea P E Indies 1823 C s l.p Bot. mag 421
vágans Roxb. *hians* Roxb
19791 - edéntula *Benth* toothless ⁂ ▽ or ½ jl au P Y E Indies 1845. C s l p Bot mag 4712
19792 - cóncolor *Benth* self-coloured ⁂ ▽ or ½ jn.s B China 1844 C s.l p Bot reg 1846 62

1355. DIGITA'LIS
19793 8856*a* lacinìata *Lindl.* jagged-leaved ⁂ △ or 1½ jn jl Y Spain 1827. L co Bot reg 1201

1356 SCROPHULA'RIA
19794 8859 Ehrhárta *Stevens* Ehrhart's ⁂ △ cu 2 jn au Lu P England woods D co Eng bot 287
aquática Ehrh not L

1360 BROWA'LLIA
19795 8890*a* grandiflòra *Grah* great-flowered ◯ or 2 jn d W Peru 1829 S s l p Bot mag 3069
19796 - speciòsa *Hook* showy ◯ or 2 s B Peru 1846. S s l p Bot mag 4370
19797 - Jamesòn.i *Benth* Jameson's ⁂ ▭ or 6 jn jl Y o N Gren 1846. C s.l.p Bot mag 4[illegible]

3121. 1362*a* ACHIME'NES *P Brown* (*A* augm., *cheimaino*, to suffer from cold, tenderness) *Gesneraceæ*
19798 - grandiflòra *Dec* great-flowered ⁂ ▽ or 1¼ jn s R Mexico 1842. R s l.p Bot mag 4[illegible]
19799 - pàtens *Benth* spreading ⁂ ▽ or 1 jn s V R Mexico 1845 R s l p Px m 14 199



History, Use, Propagation, Culture,

3120. *Pterodiscus speciosus* is a splendid plant belonging to the *Pedalineæ* The root is tuberous, large, and solitary quite globose, the upper part elevated above the earth, and produces from its summit a stem which soon divides into several erect succulent branches bearing opposite leaves and large handsome reddish purple flowers

2679. *Torenia* All the species here mentioned are very similar in habit, and are very pretty plants now very generally cultivated in our hothouses and orchideous houses. They are trailing plants, grow in baskets like *Æschynánthus*, and may be trained in any way They grow readily in any loose soil, and are readily increased by cuttings or division. Moist atmosphere is necessary. *T asiática* is a most elegant plant, and is spread all over India The flowers are splendid, of a bluish purple velvety colour, with three darker purple blotches on a pale ground

19797. *Browállia Jamesòni* is a showy shrubby plant four to six feet high, bearing corymbose cymes of yellow flowers It thrives best in a warm part of a greenhouse Light loam, sand, and peat, has been found to suit it well In summer it will do in the open air, planted against a wall, or in a sheltered situation. Cuttings strike freely

19776 Leaves opposite oblong sinuately toothed, Petioles short with one gland on each side, Flowers axillary solitary

19777 Leaves lanceolate acute serrated smooth, as are the branches

19778 Leaves obovate serrated, Flowers numerous white spotted with violet

19779 Leaves ovate-lanceolate serrated entire behind shining and clammy as are the branches, Flowers axillary

19780 Sepals 1—3-nerved entire or toothed in front below gradually narrowed into 1—2 subulate points, Corolla tubularly bell shaped slightly curved at base, Lips denticulate, upper lip not notched, Stamens hairy

19781 Slender-branched glabrous, Leaves alternate subulate, Flowers racemose, Spur arched very long, Peduncles and Calyx pilose, Upper Lobes of Corolla obtuse, lower ones emarginate, Calyx reflexed

19782 Clammy and villous from glandul hairs weak, Lvs opp ovate roundish, lower ones petiolate toothed obt, upper one sessile ent, Flws nearly sess, Cor small, upper lip dark purple, lower one and palate yel, Spur incurved white

19783 Ascending, Leaves linear channelled rather fleshy glaucous, Flowers loosely racemose brownish yellow, Sepals linear obtuse, Spur shorter than corolla, Palate adpressed downy

19784 Villous, Radical Leaves subspatulate deeply toothed, rameal leaves deeply tripartite having the middle lobe large and more or less denticulate

β Flowers with numerous large distinct spots of white

19785 Tall, nearly simple pilose, Leaves pinnatifid, Segments serrate-crenate or sub-bipinnatifid, Spike dense, Calyx [hairy, Beak linear twisted twice as long as helmet [der lip which is hooded and 3-lobed, Segments emarginate

19786 Leaves pinnatifid, Segments doubly toothed, Spikes long, Beak of Corolla narrow spirally twisted below the un-

19787 Tall branched hairy, Leaves bipinnatifid, segments deeply toothed, Spikes slender interrupted, Teeth of Calyx crested, Helmet narrow-oblong exceeding the lip

19788 Racemes pendulous dense many-flowered, Leaves oblong-lanceolate a little toothed, Flowers nearly sessile, Calyx narrow plicate, teeth unequal, Tube of Corolla slender

19789 Clammy erect downy, Leaves oblong or lanceolate glabrous above toothed or entire, Peduncles shorter than leaves, Calyx elongated plicate with lanceolate lobes

19790 Diffuse glab or a little hairy, Lvs ovate or ovate-lanceolate acuminate serrately crenated, Calyx with 5 nearly equal ribs or 3 narrow winged ones, Teeth of front Filaments subulate [gregate, Filaments all toothless

19791 Downy, Leaves broad-ovate subcordate coarsely serrated, Peduncles axillary solitary or terminal and rather ag-

19792 Diffuse downy, Leaves ovate roundish and cordate serrated, Calyx elongated with 5 equal acutely keeled ribs, Teeth of front Filaments short obtuse

19793 Leaves lanceolate-acuminate jagged glabrous, Racemes subsecund, Corolla downy, Segments ovate bearded, Bracts all shorter than pedicels

19794 Leaves ovate lanceolate acute subcordate at base glabrous, Stem and Petioles winged, Cymes lax few-flowered 4—8, Sepals roundish with membranous edges, Staminodium bifid with diverging lobes

19795 Lvs ovate acute tapering to base, Pedunc 1-flwd axil racemose at tops of brnchs, Brnchs and adult calyxes glab

19796 Lvs opposite or altern ovate acum, Pedun axil sol 1-flwd, Calycine segs subulate, Segs of Cor ovate acum

19797 Shrubby downy, Leaves ovate rugose, Flowers subcorymbosely cymose, Pedicels short, Calyx ovate tubular oblique, Corolla with an incurved wide tube and shorter segments

19798 Hispid, Leaves equal ovate oblique at base sparingly serrated, Limb of Corolla wide [Spur conical

19799 Pilose, Lvs ovate acum hispid above serrate, Cal downy, Tube of Cor shorter than limb, which is spreading



and Miscellaneous Particulars.

312] *Achimenes* The species are increased by the scaly caterpillar-like tubers, which are produced in quantities A compost of loam, peat, and sand, in equal proportions, is found to suit them best In the autumn, when the plants have done flowering, and the stems become dead, the tubers may be kept in the soil till spring, giving no water, in the same way as recommended for bulbs. But in spring, when they begin to grow, they should be repotted in fresh mould When growing they require plenty of water Four to six tubers in a pot will be sufficient. The plants are very elegant, and have become great favourites They are best grown in a close frame or pit, and when they are in flower may be removed and placed where they will be seen to the best advantage in a stove, or conservatory or greenhouse. Heat and moisture seem to be requisite to their growth By planting in January, February, and March, plants may be had in blossom most of the year

Trevirāna pulchĕlla, No 8893, in the body of the work, is the original species of *Achimenes*, and is as beautiful a plant as any of the more recently introduced species.

19800 -	- cándida *Lindl*	white flowered	☽ △ or	1½	jn	s	Y w	Guatem	1843	R	s l p	J H. S 3	317
19801 -	rósea *Lindl*	rose-clrd flwd	☽ △ or	1½	jn	s	Ro	Guatem.	1848	R	s l p	Bot reg	1841
19802 -	- atrosanguínea *Lindl*	dk-blood-clrd	☽ △ or	1½	jn	s	S v	Guatem	1848	R	s l p	J H S 3	318
19803 -	- oculàta *Hook*	eyed	☽ △ or	1½	aut	R v	dk sp	Hybrid	1845.	R	s l p	Bot mag	4376
19804	- hirsuta *Lindl*	hairy	☽ △ or	2½	jl	au	R v	Guatem.	1842	R	s l p	Bot reg	1842
19805 -	- cupreata *Hook*	copper-flwd	☽ △ or	½	ap	jn	S	Mexico	1845	R	s l p	Bot mag	4410
19806 -	- Ghiesbreghtiana	Ghiesbreght's	☽ △ or	1	jn	s	G p	Mexico	1842	R	s.l p	J H S 5	194
19807 -	- Kloèi *Skinner*	Kloe's	☽ △ or	½	au	s	Li	Guatem	1848	R	s l p	Px m	16 280
19808 -	- viscida *Lindl*	viscid	☽ △ or	1	jn	s	R	S Amer	1850	R	s l p	Px fl.g	2 59
	Chirantherà atrosanguínea Hort												
19809 -	- misera *Lindl.*	miserable	☽ △ or	1	jn	s	Dm W	Guatem	1848.	R	s l p	J H S 3	318
19810 -	- longiflora *Dec*	long-flowered	☽ △ or	1	jn	o	V	Guatem	1841	R	s l p	Bot. mag.	3986
19811 -	- multiflòra *Gard*	many-flowered	☽ △ or	1	au		Pa Li	Brazil	1842	R	s l p	Hook. icon	465
	β fimbriàta Hook	*fringed*	☽ △ or	1	au		Pa Li	Brazil	1843	R	s l p	Bot mag	3993
19812 -	- pedunculata *Benth*	long-peduncled	☽ △ or	1	jl	s	S v	Guatem	1840	R	s l p	Bot mag	4077
19813 -	- picta *Benth*	painted	☽ △ or	1	jl	s	Y R s	Mexico	1843	R	s l p	Bot mag	4116
19814 -	- hirta *Lindl.*	hairy	☽ △ or	1	jn	s	..	Mexico	1850	R	s.l.p	Bot mag	4144
19815 -	- argyrostigma *Hook*	silvery-dotted	☽ △ or	1	jn	au	W R	S Marth	1845.	R	s l.p	Bot mag	4171
19816 -	- gloxiniæflòra *Lemaire*	Gloxinia fld	☽ △ or	1	jn	s	W	Mexico	1845.	R			

3122 136.*b* NIPHE'A *Lindl* NIPHE'A (*Nyphos* snow, white flowers) *Gesneràceæ*

19817 -	- albolineàta *Hook*	white-lined-lvd	☿ △ or	½	au	o	W	N Gren	1845	R	s l p	Bot mag	4
19818 -	- oblonga *Lindl*	oblong	☿ △ or	1	s	d	W	Guatem	1841	R	s l p	Bot reg	184
19819	- rubida *Lemaire*	reddish-stalked	☿ △ or	½	jl	o	W	Guatem	1846	R	s l p	Moore mag	2

3123 136*c* DIASTE'MA *Benth* (*Diastema* an interval, between *Achimènes* and *Gésnera.*) *Gesneràceæ.*

19820 -	- ochroleùca *Benth*	cream-coloured	☿ △ or	1	au		Pa Y	S Nevada	1845	R	s l p	Bot mag	4284

3124 136*d* CHIRI'TA *Hamilt* CHIRI'TA (Altered from the vernacular name.) *Cyrtandràceæ*

19821 -	- sinensis *Lindl*	Chinese	☿ △ or	½	jl	o	Li w	China	1844	C	s l p	Bot mag	4384
19822 -	- Walkeri *Gard.*	Walker's	♃ □ or	1½	jn	d	Pa Y	Ceylon	1845	C	s l p	Bot mag	4405
19823 -	- zeylánica *Hook*	Ceylon	☿ △ or	1½	jn	au	Pa Y	Ceylon	1845	C	s l p	Bot mag	4385
19824 -	- Moóniì *Gard* *Martynia lanceolàta* Moon	Moon's	♃ □ or	2	jl	au	B p	Ceylon	1847	C	s l p	Bot mag	4

3125 136*e* DIDYMOCA'RPUS *Jack* (*Didymos*, twin *karpos* a fruit, twin capsules) *Cyrtandràceæ*

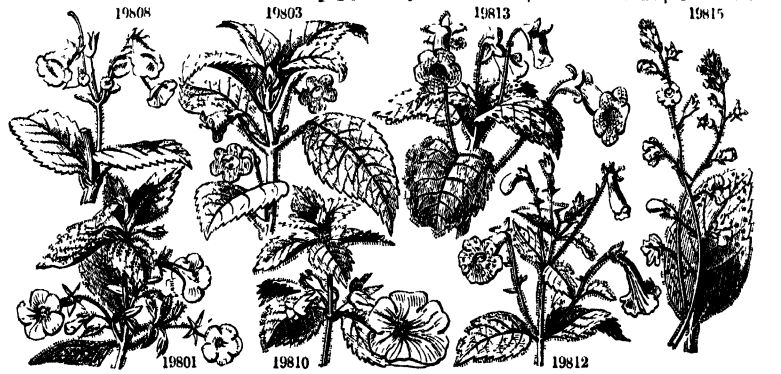
19825 -	- cimita *Jack* *Henckèlia cimita* Spreng	hairy	♃ □ or	1	ju	jl	W	Penang	1845	C	s p l	Bot mag	4

3126 136*f* KLU'GEA *Schlecht* KLU'GEA (*B Klug M D*) *Cyrtandràceæ*

19826 -	- Notoniana *Dec* *Wulfènia Notoniàna* Wall	Noton's	♃ △ or	1	su		B	E Indies	1848	C	s l p	Bot mag	4
	Incarvillea paràsitica Roxb cor 291	*Trichosporum grandiflòrum* D Don											

3127 136*g* ÆSCHYNA'NTHUS *Jack* (*Aischuno*, to be ashamed, *anthos*, flower, habitat) *Cyrtandràceæ*

19827 -	- grandiflorus *G Don*	large-flowered	☿ □ or	5	au	s	S R Y	E Indies	1838.	C	fib p	Bot mag	4
	Incarvillea paràsitica Roxb cor 291	*Trichosporum grandiflòrum* D Don											
19828 -	- maculatus *Lindl.*	spotted	☿ □ or	3	au	n	Bd R P	E Indies	1839	C	fib p	Bot r	1841
19829 -	- ramosissimus *G Don*	much-branchd	☿ □ or	3	jn		O R	Nepal	1836	C	fib p	Pax m	6 10



History, Use, Propagation, Culture,

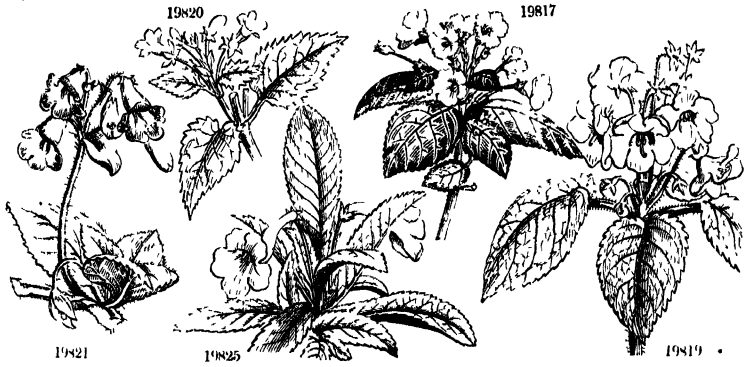
3122 *Niphæ'a* The species form bulbs or tubers like *Achimènes*, by which they are propagated Their culture and treatment should be the same as recommended for the species of that genus, to which it is very nearly related

3123 *Diastema ochroleùca* is a pretty plant nearly related to *Achimenes*, and is propagated by the tubers in the same way Its cultivation is in every respect the same as that recommended for the species of that genus

3124 *Chirita sinénsis* has the habit of a stemless *Gloxinia* or *Streptocàrpus* The plant succeeds best in a moist stove, shaded while the sun is hot By having plants in different temperatures flowers may be kept up for many months All the species are cultivated in the same way as *Gloxinia* *Chirita Moónii* is a splendid suffruticose plant with large bluish-purple flowers like those of *Gloxinia* They strike readily from cuttings, and are of the most easy culture.

3125 *Didymocàrpus cimita* is a pretty plant, bearing white flowers with a yellow lip. A mixture of light loam

19800 Leaves unequal oblique at base serrated pilose, Peduncles axillary pilose 3-flowered, Tube of Corolla gibbous at base, Limb oblique, the front segment largest
19801 Lvs sometimes 3 in a whorl pil., Pedun filif rnny-flwd pil , Limb of Cor. equal to tube [Limb small spreading
19802 Lvs pilose oblong subcor serrated unequal, Peduncl 1-flwd, Tube of Cor. 1½ in. long cylin. saccate at base pilose,
19803 Hairy, Leaves on longish petioles ovate acuminate serrated wrinkled coloured beneath, Peduncles 1-flowered, Flowers nutant Lobes nearly equal spotted, Epigynous glands 5 united
19804 Hairy, Stems bulbiferous, Lvs cordate serrated, Peduncs 1-flwd, Limb of Cor. flat with rounded serrulate segs
19805 Creeping stoloniferous downy, Lvs elliptic serrated wrinkled coloured, Peduncles 1-flwd, Calyx spotted inside with a fringed mouth, Segments of Corolla ciliately toothed, Ovaria uniglandular
19806 Stem purple rather hairy, Lvs oblong-lanceolate wrinkled serrate nettle-like, Peduncles hairy, Calyx smooth Tube of Cor. deflexed gibbous at base, Limb nearly equal, Epigynous disk 5-lobed [low in the throat
19807 Pil , Lvs ovate acum. serrated, Peduncs 1-flwd, Calyx downy, Cor lilac dark near the mouth and a dash of yel-
19808 Clothed with viscid hairs, Leaves ovate or oblong crenated, Cymes pedunculate axillary, Corolla gibbous above the base, Segments of Limb roundish nearly equal, Ovaria hairy
19809 Downy, Lvs oblong coarsely serrated, Peduncs solitary axil , Cor campanulate dingy white speckled with purple and 3-crested inside, lobes erect roundish, Segments of Calyx lanceolate, Filaments spiral
19810 Hairy, Leaves 3—4 in a whorl ovate or oblong coarsely serrated, Pedicels 1-flowered, Segments of Calyx lanceolate erect, Corolla with a long tube and an ample spreading limb
19811 Hairy, Lvs opposite or 3 in a whorl ovate deeply and doubly serrated, Peduncs axillary 3—5 flowered, Segments of Calyx linear, Corolla funnel-shaped, tube curved, lobes roundish lower lobe fringed
2 Lobes of Corolla all coarsely fringed
19812 Stem simple downy, Leaves rather unequal obliquely cordate ovate serrated, Peduncles in the axils of upper leaves Corolla nutant gibbous at base
19813 Hairy, Leaves opposite or 3 in a whorl cordate-ovate coarsely serrated velvety and elegantly painted, Peduncles solitary or twin axillary 1-flwd, Tube of Calyx turbinate, Lobes of Corolla roundish, 3 lower ones smallest
19814 Hairy, Stem panicled bulbif , Lvs cord ser , Pedun sol axil , Limb of Cor flat with rounded serrulated lobes
19815 Downy pilose Stem short, Leaves elliptic crenated spotted with white, Racemes nearly terminal elongated many-flowered covered with glandular hairs, Upper Lip of Corolla short 2-lobed, lower lip concave fringed
19816 Stems slender flexuous, Leaves serrated from middle to top, Flowers large axillary, Tube of Corolla 2 inches long, Limb broad spreading, Lobes finely serrated dotted with purple inside
19817 Hairy, Lvs oblong-cordate toothed, Flws axillary and terminal aggregate, Calyx hispid with roundish segments
19818 Hairy simple, Leaves oblong-cordate toothed rugose, Flowers axillary and terminal drooping
19819 Leaves ovate oblong rather cordate at base bluntly toothed Stem and Petioles red, Flowers aggregated axillary, Peduncles 3–4 inches long, Segments of Corolla irregular concave
19820 Hairy Leaves on longish petioles ovate acute coarsely serrated wrinkled, Panicles terminal trichotomous subfoliaceous, Corolla glabrous, Glands clavate longer than ovarium [Ovarium covered with glandular hairs
19821 Stemless, Leaves opposite elliptic-ovate crenated, Petioles trigonal, Corymbs many flowered bibracteate at base,
19822 Suffruticose, Branches villous, Lvs 3 in a whorl ovate-lanceolate acuminated downy minutely and glandularly toothed, Peduncles axillary solitary 3—4-flowered, Calyx tomentose, Corolla downy
19823 Lvs opp on long petioles brownish silky from adpr hairs ser oblique at base, Peduncs axil trichotomous, Bracts and Lobes of Calyx, Cor bilamellate inside, and with 2 hairy elevated lines bet , Stig transversely triang
19824 Suffruticose villous, Brnchs bluntly tetrag , Lvs on short petioles 3—4-in a whorl ovate-lanceolate acutish obsoletely and glandularly serrated, Peduncles axillary solitary or twin, Sepals narrow keeled, Corolla large downy
19825 Suffruticose erect simple pilose, Stem short very villous, Leaves sessile cuneate-lanceolate velvety purplish red beneath, Pedicels 3—5 axillary, Segments of Calyx broad subulate
19826 Stem fleshy marked by a dense villous line, Leaves repandly toothed half-cordate that is with an unequal base, Racemes secund, Calyx 5-angled, upper angle crested near the base
[ments ovate, Lobes of Corolla roundish and nearly equal, Style exserted
19827 Leaves oblong-lanceolate acuminated serrated obscurely nerved, Umbels many-flowered, Calyx 5-parted, seg-
[lose, Segments linear, Corolla clavate, segments obtuse with a dark mark at top equal, Anthers purple
19828 Lvs lanceolate acuminate slightly denticulated, Umbels nearly sessile terminal many-flwd, Calyx 5-parted pu-
19829 Much-branched radicant, Leaves oblong acuminate, Umbels term many-flwd, Corolla sub-clav. clothed with glandular hairs



and Miscellaneous Particulars

It should, or turfy peat, is said to be the best soil for it, and care should be taken not to over-water it in winter It is cultivated like *Orchideæ*, in a warm moist atmosphere, during the season of its growth, and strikes root readily from cuttings

19826 *Klugea Notoniana* is a soft-stemmed decumbent plant, flowering freely in a warm stove A mixture of loam and peat is found to be the best soil for it, and it appears to like moisture. The flowers are blue, disposed in one-sided racemes

19827 *Trichynánthus grandiflorus* succeeds well if planted in pots, although in its native country it is an epiphyte In fact all the species should be cultivated the same as tropical epiphytal *Orchideæ*, in baskets or on blocks of wood. Heat and a moist atmosphere are necessary. All the species are splendid plants when in blossom, and worth cultivating in every hothouse or orchidaceous house.

19830 - - **Pâxtoni** *Lindl* Paxton's ♃ ▭ or 2 jl d R E Indies 1839. C fib.p J. H S. 4 79 ic

19831 - - **purpurascens** *Hassk* purplish flwd ♂ ▭ or 1 mr PshY Java 1844. C fib.p Bot. mag 4236
álbida A Dec *Trichóporum álbidum* Nees. *Bignònia álbida* Blume.

19832 - - **Lobbiànus** *Veitch* Lobb's ♂ ▭ or 1 jn au S Java 1845. C fib p Bot mag 4260

19833 - - **pulcher** *Dec* fair ♂ ▭ or 1 jn au S Java 1845 C fib p Bot mag 4264

19834 - - **speciòsus** *Hook* showy ♂ ▭ or 2 my jn O s Java 1845. C fib.p Bot. mag 4320

19835 - - **longiflòrus** *Blume* long-flowered ♂ ▭ or 2 jl au P s Java 1845 C fib p Bot. mag 4328
Lysonòtus longiflòrus Blume

19836 - - **miniàtus** *Lindl* vermilion-flwd ♃ ▭ or 1½ jn jl V Java 1845. C fib p Bot r. 1846, 61
radicans Wall *Trichósporum radicans* Blume

19837 - - **Bosschiànus** *Verschaf* Bossch's ♃ ▭ or 1 mr S Java 1844 C fib p Px m. 13 175 ic

19838 - - **Horsfieldii** *R Br.* Horsfield's ♂ ▭ or 1 jl au S Java 1843 C fib p

19839 - - **discolor** *Lindl* 2-colrd-flwd ♂ ▭ or 1 jl au G cho Java 1848. C fib p
atrosanguinea Hort.

19840 - - **marmoràtus** *Lindl* marble-flwd ♂ ▭ or 1 jl au G cho Java 1848 C fib p

19841 - - **splèndidus** *Moor.* splendid ♂ ▭ or 1 jl au V hybrid ... C s p l Moor m 3 313 ic

19842 - - **javánicus** *Hort.* Java ♂ ▭ or 1 jn au S Java 1848 C fib p Bot mag 4503

19843 - - **zebrinus** *Paxt* zebra-striped ♂ ▭ or 1 my ap S Java 1847 C fib p

3128. 1362*b* AGALMY'LA *Blume* (*Agalma*, an ornament, *hyle*, a wood, grows in woods.) *Cyrtandàceæ*

19844 - - **staminea** *Blume* long-stamened ♃ ▭ or ½ jn au S Java 1850. D s p.l Pax m 15 73 ic
Cyrtandra staminea Vahl. *Justicia parasitica* Lam

1363 COLU'MNEA.

19845 8896*a* Schiedeana *Schlecht* Schiede's ♃ ▭ or ½ su O Mexico 1840. C s l.p Bot. mag 4015

19846 - - **crassifòlia** *Hort.* thick-leaved ♃ ▭ or 1 mr jl S Mexico 1845. C s l p Bot mag 4330

19847 - - **aurantiàca** *Den* orange-flwd ♃ ▭ or 1 su Or N Gren 1850 C s l p Px fl g 1 95 ic

2680 1368*a* COLLI'NSIA.

19848 17674*a* multicolor *Lindl* many-coloured ○ or 2 my C L w Californ 1849 S co Paxt fl g 2 ic

3129. 1370*a*. CHÆNO'STOMA *Benth* (*Chaino*, to gape, *stoma*, a mouth; wide throat of corolla.) *Scrophul*

19849 - - **linifòlium** *Benth* Flax-leaved ♃ ▭ or 1 jn au W C G H 1820 C s l p Px fl g 3 7 231
Manùlea linifòlia Thunb

19850 - - **polyánthum** *Benth* many-flowered ♃ ▭ or 1 jl s Pk C G H 1840 C s l p Bot reg 1847, 32

1371 ANGELO'NIA

19851 6919*a* cornígera *Hook.* horn-bearing ♂ ▭ or 1 au P Brazil 1839 S s l p Bot. mag 3848
ciliàta Gard

19852 - - Gàrdneri *Hook* Gardner's ♂ ▭ or 3 my Lt Brazil 1838 C s.l p Bot mag 3764

19853 - - **angustifòlia** *Benth* narrow-leaved ♂ ▭ or 1½ jn o Dp Vi Mexico 1840 C s l p J H S 3 245 ic

3130. 1371*a* PAULO'WNIA *Siebold* PAULOWNIA (Hereditary Princess of the Netherlands.) *Scrophularinæ*

19854 - - **imperiàlis** *Siebold* imperial ♀ or 20 ap B P Japan 1840. C s p Bot mag 4060
Bignònia tomentòsa Thunb

3131. 1372*a* LINDENBE'RGIA *Lk & Ott.* (*J B Lindenberg*, author of a Synopsis of Eur. Hepaticæ.) *Scroph*

19855 - - **urticifòlia** *Lehm* Nettle-leaved ○ or 1 jn jl Y Silhet 1845 S co Moor comp 72

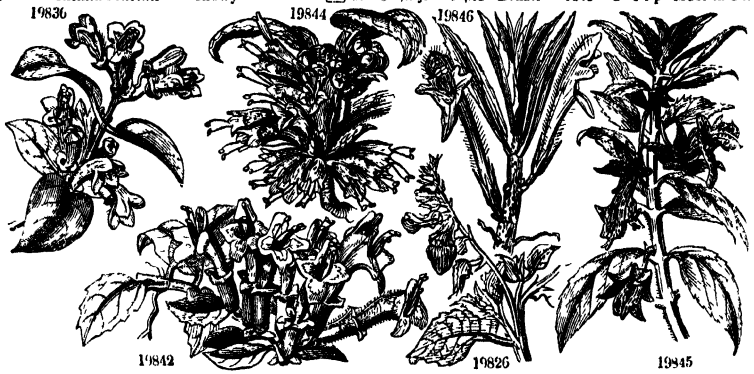
2681 1375*a* FRANCI'SCEA

19856 1767*a* calycina *Pohl* large-calyxed ♚ ▭ or 3 jn jl B Brazil 1848 C s l p Bot mag 4183
confertiflòra Henfrey in Moor mag *Brunsfèlsia calycina* Benth *Besleria inodora* Velloz.

19857 - - latifòlia *Pohl* broad leaved ♚ ▭ or 4 au.s P Brazil 1840 C s l p Bot mag 3904

19858 - - acuminàta *Pohl* acuminate-lvd ♚ ▭ or 2 jn jl P Brazil 1840 C s l p Bot mag 4180

19859 - - eximia *Schauer* showy ♚ ▭ or 3 jn jl Dp.P Brazil 1848 C s l p Moor m 2 177 c



History, Use, Propagation, Culture,

3128. *Agalmyla staminea* is a splendid plant when in blossom, and is nearly related to *Æschynánthus*. The flowers are of a bright scarlet colour. The stems are creeping and throw out roots at the joints. It requires the same treatment as the species of *Æschynánthus*, and should be potted in turfy peat mixed with a portion of loam and sand. Good drainage is necessary for this purpose the pots should be half-filled with potsherds, and a few stones should be mixed among the soil.

19848. *Collinsia multicolor* is a very pretty tall annual plant. It comes near to *C. bicolor*. The floral leaves are purple. The middle lobe of lower lip is crimson, but the rest of the lower lip is lilac, and so is the upper lip, except that there is a broad white spot in its middle relieved by numerous blood-coloured dots. The plant has a good effect when grown in large patches or beds.

3129. *Chænóstoma* consists of a great number of known species, and is separated from the old genus *Manulea*. They require the treatment of *Verbena*, and are like them well-suited for bedding out in the same way. In order to

19830 Lvs oblong-lanceolate acuminate convex dotted beneath Bracts membranous oblong concave, Sepals 5 oblong [obtuse, Limb of Corolla flat, upper lip emarginate, lateral ones truncate
19831 Lvs oblong-lanceolate acuminate serrately-toothed, Flowers fascicled axillary, Bracts minute subulate, Calyx 5-parted, segments subulate, Cor. fringed, Stamens exserted [late black from tomentum, Corolla downy
19832 Subscandent, Leaves elliptic entire or slightly serrated glaucous, Corymbs term bract, Calyx large campanu-
19833 Scand, Lvs ov obscurely tthd, Corymbs term bract Calyx ov cylind glab, Corol 3 times longer than cal
19834 Upper Lvs always verticil ovate-lanceolate acum slightly ser, Flws term numerous downy, Segs of Calyx subul, Stams exserted, Corolla with long clavate curved tube and obliquely 4-lobed limb, upper lobe bifid
19835 Pendulous, Leaves broad-lanc acuminate entire, Flowers erect fascicled, Calyx 5-parted, segs subul, Corolla with long clav curved tube and oblique contracted bilobed mouth, upper lobe bifid, Stamens exserted
19836 Leaves oval-acute entire, Peduncles axillary 3-flwd, Calyx cup-shpd obsoletely-lobed, Corolla tomentose, Upper lip bilobed, lower one tripartite, Lobes obtuse [tub with wide throat 4-cleft, upper seg. 2-lobed
19837 Lvs ovate obtuse entire, Flowers axillary clustered Calyx tubular smooth purplish-brown, lobes blunt Cor
19838 Glab, Lvs ovate-lanc sub-acum, Calyx 5-parted, segs linear-lanceolate, Seeds ending in one hair at each end
19839 Leaves elliptic acuminated glabrous sinuately toothed, Flowers axillary solitary or twin, Peduncles pentagonal, Calyx glab 5-cleft, segs subul, Cor glabrous, limb ciliated, Style enclosed Stamens exserted
19840 Leaves oblong-lanceolate or obovate-lanceolate acuminate hardly toothed, slightly veined, Flowers axillary downy, Calyx 5-cleft, segs subul, Corolla glab, limb cil blotched with chocolate, Stamens exserted villous
19841 Erect, Leaves elliptic-lanceolate acuminated entire rather undulated, Flowers in terminal fascicles, Segments of Calyx lanceolate ciliated, Corolla clavate 3 inches long Stamens exserted
19842 Scandent, Lvs small ovate slightly toothed with sunk veins Corymbs terminal bracteate, Calyx downy cylindri-
19843 Leaves said to be striped like the zebra [cal, segs ovate, Corolla downy tubular, Stamens exserted

19844 Stem radicant hairy, Petioles hairy, Lvs alternate oblong acuminate denticulated downy beneath and on edges, Flowers diandrous in axillary fascicles

19845 Clothed with silky villi, Stems simple, Leaves oblong-lanceolate entire or a little serrated, Lobes of Calyx deltoid-lanceolate spreading entire or serrated, Corolla villous spotted
19846 Stem suffruticose fleshy radicant clothed with small scales, Lvs lin-lanc acuminate almost entire glab above but covered with rufescent hairs beneath, Flowers solitary axillary, Calyx glabrous, Corolla long hairy
19847 Climbing, Flws large orange-coloured, Calyx pale yellow, Peduncles clothed with purple hairs It will grow best on rotten wood

19848 Downy, Floral Leaves smooth beneath, the lowest cordate stem-clasping ovate-lanceolate bluntly serrated, the middle ones linear blunt entire, the uppermost ones abortive, Pedicels hardly glandular, Sepals 3-ribbed

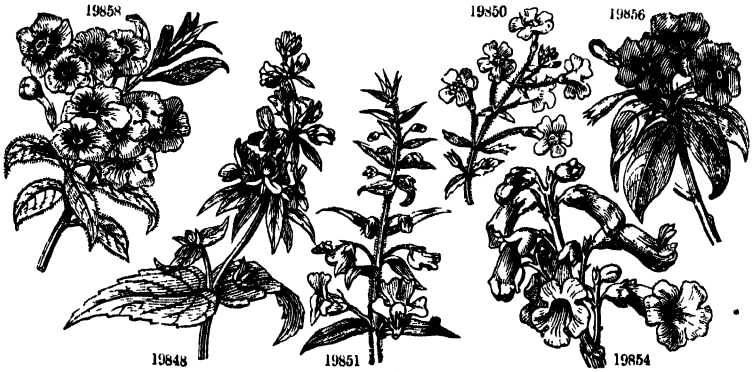
19849 Branches hairy at top, Leaves oblong-lanceolate or linear entire, Flowers racemose, Calyx segments linear exceeding the capsule but 3 times shorter than tube of corolla
19850 Much branched, Branches downy panicled, Leaves ovate toothed, upper ones oblong glabrous or canescent beneath, Racemes loose, Calyx hispid

19851 Rather hairy, Leaves lanceolate ciliated entire, upper ones smaller bract-formed, Peduncles solitary slender, Middle segment of lower lip of Corolla furnished with a long horn which is bidentate at top
19852 Cvd with gland down, Lvs lanc acum serrated, floral ones broader at base bract-formed exceeding the pedicels
19853 Suffruticose glabrous, Leaves narrow distantly toothed, Racemes terminal erect many-flowered

19854 Leaves ovate cordate at base acute undivided or 3-lobed hairy beneath, Panicle terminal covered with rusty tomentum

19855 Erect or ascending villous, Leaves ovate, upper floral leaves shorter than calyxes, Flowers axillary solitary, Corolla 3 times the length of calyx

19856 Leaves obovate-oblong or elliptic hardly acuminate glabrous or hairy beneath on the midrib, Cymes 2—4-flwd, Calyx large tubular inflated glabrous, Tube of Corolla scarcely exceeding the calyx
19857 Lvs broad-elliptic acutish, Bracts lanceolate acuminate glab as are the calyxes, Flws few subracemose terminal
19858 Lvs obl acuminate glab ciliated, Bracts lanc acuminate glab, Calyx glab, Flws few subracemose terminal
19859 Lvs oblong-lanceolate not shining, Flowers terminal about 2 together, Limb of Corolla 2½ inches across



and Miscellaneous Particulars.

have a sufficient number of plants for that purpose cuttings should be struck in autumn, kept in any part of a frame or greenhouse during winter, and turned out in the summer

19830 *Paulownia imperialis* is very similar in habit to *Catalpa syringæfolia*, but is not so hardy, for the young shoots are generally killed by the frost in winter, and consequently it does not often flower in the open ground in this country It has, however, flowered at Paris frequently The flower has the different shades from blue to purplish lilac It may be propagated by pieces of the root It is altogether a splendid tree both in flowers and foliage

3130 *Tradenbérgia urticifolia* is a plant of easy culture, and it readily produces seeds, by which it is propagated

19856 *Franciscea calycina* is a fine shrub when in flower. The flowers are at first blue, but decay to white. Loam and peat, and a portion of sand, is found to be the best soil for it The production of fine heads of flowers depends upon its vigorous growth, therefore the plants must be placed in bottom heat, and shifted from size to size of pots as they become filled with roots. The other species require the same treatment.

19860 -	- hydrangeæfórmis *Pohl* Hydrng -lk *β capitàta* Benth. *capitate-flwd*	● □	or	4	o.d	P	Brazil	1840.	C	s l p	Pohl. bras. 1 7
		● □	or	4	o d	P.	Brazil	1840.	C	s l p	Bot. mag 4209
	1375 BRUNSFE'LSIA.										
19861	8929*c* nítida *Benth* shining-leaved *β jamaicensis* Benth. *Jamaica*	● □	or	5	jn jl	Y	S Amer	1840.	C	s.l p	
		● □	or	5	jn jl	Y	Jamaica	1840.	C	s.l p	Bot. mag. 4287
	1377 ALONSO'A.										
19862	8940*a* intermèdia *Lodd.* intermediate	■ ⌴	or	2	year	S	hybrid	...	C	s.l.p	Bot. cab. 1456
	1378 ANTHOCE'RCIS										
19863	8943*a* ilicifòlia *Cun* Holly-leaved	● ⌴	or	6	jn jl	Y R G	N Holl	1844	C	s l p	Bot. mag 4290
19864 -	- álbicans *Cun.* whitish	● ⌴	or	2	ap jl	W	N S W.	1824	C	s p.l	Swt fl aust. 16

P. 536. CLASS XV.—TETRADYNAMIA. STAMENS 6, of which four are longer than the rest

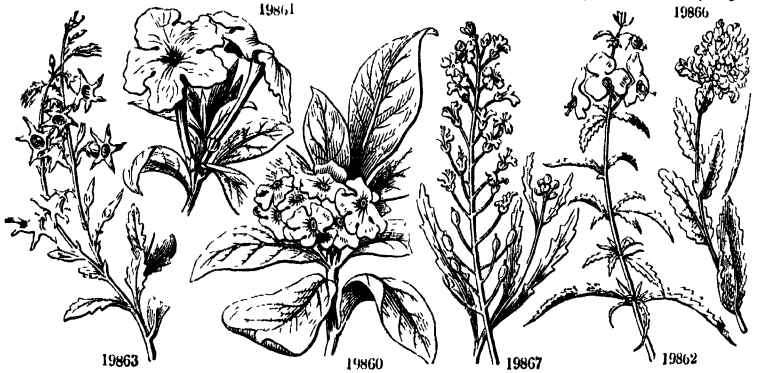
3132. 1407*a*. *Ionopsidium*. Habit of *Cochlearia*, but having the radicle lying against the back of the cotyledons

	1381 MATTHIOLA.										
19865	8947*a* maderénsis *Low* Madeira Stock	■ △	or	2	...	Vi	Madeira	1840	S	lt.m	
	1390 A'RABIS.										
19866	9001*a* arósea *Dec* rose-colrd-flwd	☽ △	or	1	f.mr	Ro	Calabria	1832	S	co	Bot mag 3210
	1401 ALY'SSUM.										
19867	9055*a* orientale *Ard.* oriental	■	or	1	my jn	Y	Candia	1820	S	co	Fl græc 624
3132	1407*a*. IONOPSI'DIUM *Rchb* (*Ion*, a violet, *opsis*, resemblance, in colour)										*Cruciferæ*
19868 -	- acáule *Rchb* stemless *Cochlearia acaúlis* Desf No. 9096	○	or	¼	ap o	B C *pusilla* Brotero	S Eur	...	S	co	Bot r 1846, 51 *Lepidium violaceum* Dec,
3133	1407*b* GRÆ'LLSIA *Boissier.* (*Mariano Græll*, Prof Zool in Acad Madrid)										*Cruciferæ*
19869 -	- saxifragifolia *Boiss* Saxifrage-lvd *Cochlearia saxifragifólia* Dec	☾ △	or	1	jl au	W	Persia	1844	S	rck	Del fl sel 2 81
	1429 ÆTHIONE'MA										
19870	9232*a* membranáceum *Dec.* membraneous	■ △	or	¼	jn jl	P	Persia	1828	SC	lt.s	Swt fl g 2.8 99
	1430 ISA'TIS										
19871	9241*a* indigótica *Lindl* Chinese Indigo	■ ○	ec	2	my jn	Y	N China	1846	S	co	J. H S 1 271 1
	1446 HELIO'PHILA										
19872	9315*a* trifida *Thunb* trifid-leaved	○	or	¾	jn jl	B	C G H	1819	S	s p l	Bot reg 180 61
	1448 CLEO'ME										
19873	9334*a* lutea *Hook* *aúrea* Torr *Peritoma aúrea* Nutt	○	or	1	jl au	Y	N W Am	1840	S	co	Bot reg 1841 6

Page 560. CLASS XVI.—MONADELPHIA.

Order I TRIANDRIA. Stamens 3

3134 1452*a* *Rigidélla* Sepals with boat-formed imbricating claws and reflexed lamina Petals very small straight, with short linear laminæ Anthers sessile on the column, with lateral cells Stigmas 3 bipartite, appendages late at back Flowers pendulous. Capsule papyraceous, many-seeded, 3-valved at top. Seeds dotted, subglobose



History, Use, Propagation, Culture,

3132. *Ionopsidium acaúle* is a pretty little annual, will grow in any rich damp soil, or on the shady side of rock-work. It makes a neat edging to borders in shady places. The flowers are at first white, but turning to lilac. It may be propagated either by seeds or by runners, which it throws out in damp soil.

3134. *Græ'llsia saxifragifólia* has much of the habit of *Saxifraga granulàta*, and the flowers are much like those of *Arabis alpina*. It does well with the treatment of ordinary alpine plants. It is a pretty little alpine plant smelling

19860 Leaves large obovate-oblong. Bracts deciduous lanceolate pilose ciliated, Racemes compound terminal large
β Calyx broader and as well as bracts smooth [hemispherical

[long tube and flattish limb, Valves of Capsule cortaceous
19861 Glabrous, Leaves obovate-oblong acute, Flowers solitary, Calyx campanulate deeply 5-cleft, Corolla with a
β Flowers larger than in the species

19862 Leaves opposite linear-lanceolate sharply-toothed tapering to both ends, Racemes terminal

[of Corolla exceeding the tube Capsule oblong longer than calyx
19863 Tall Branches twiggy, Leaves obovate spinosely toothed Racemes elongated terminal sub compound, Segments
19864 Leaves oblong obtuse tomentose as are the branches, Segments of Corolla longer than the tube, Corolla white streaked with bluish purple

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3133 1407*b* *Græ'llea* Calyx equal at base Petals on short claws with entire limbs Stamens toothless Silicle elliptic flat, 1-celled from the septum being absent, apiculated by the Stigma. Funicles free, a little thickened at base Cotyledons flat Radicle accumbent

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19865 Lower Leaves like *Cynoglóssum*, upper ones narrower wavy, Flowers large in close racemes, Corolla bright violet

19866 Cauline Leaves oblong half stem-clasping subcordate sinuately toothed scabrous from branched down, Racemes terminal, Pedicels longer than Calyx, Siliques linear elongated erect

19867 Suffruticose at base panicled, Leaves lanceolate repandly toothed wavy downy, Pods nearly orbicular 4-seeded Seeds margined

19868 Leaves ovate-roundish entire on long petioles, Pedicels radical, Pods roundish emarginate

19869 Glabrous, Stems many, Radical Lvs stalked reniform palmately and deeply toothed, cauline ones ovate 3 lobed, uppermost ones linear, Racemes corymbosely umbellate

19870 Pods 2-celled 2-seeded obcordate crowded, Valves winged on the back entire, Leaves linear distant adpressed

19871 Suffruticose, Radical Leaves glaucous oval-lanceolate slightly-toothed, cauline ones linear, Silicles linear glabrous crowned by the sessile stigma a little constricted in middle and narrowed at base

19872 Glabrous green, Siliques monthferous spreading and pendulous, Lower Leaves trifid rarely pinnately 5-cleft with filiform lobes, upper leaves entire, Lateral Stamens furnished each with a tooth

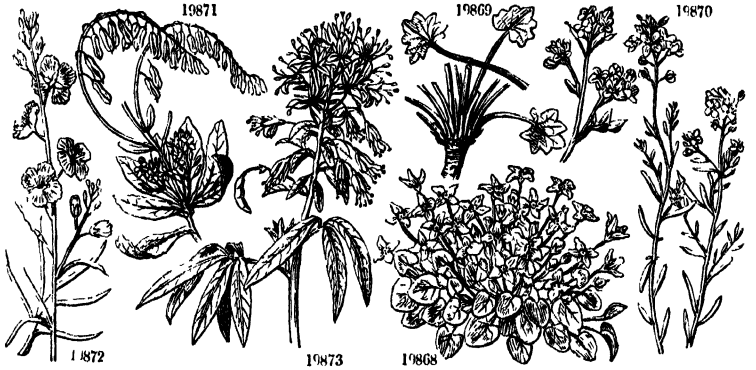
19873 Leaves 3—4-foliate, Leaflets oblong-lanceolate acute at both ends entire, Sepals connate at base, Petals oblong-elliptic nearly sessile, Stamens equal, Fruit linear longer than stipe

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3134 1159*b* *Hydrotæ'nia* Perianth campanulate, nearly equal Petals unguiculate marked by a triangular zone above the claw Anthers sessile Ovarium free, conical, many-seeded Style filiform, trifid at apex Segments tripartite linear, convolute

3135 1159*c* *Beatónia* This genus differs from *Tigridia* in the anthers being broad at base, becoming gradually smaller to the top, decurved, and in the forked lobes of the style having a minute crest placed within the fork and terminated by a minute stigma

3136 1159*d* *Phalocállis* Perianth crateriform Larger Sepals spreading Petals revolute Filaments connate



and Miscellaneous Particulars.

trongly of garlic The plant is well fitted for ornamenting rockwork.

19871 *Isatis indigótica* is called *Tien-ching* by the Chinese; and is considered by them as a plant of great importance, according to Fortune, it covers a large tract of country It is grown in rows, and in June the plants are from 6 inches to 1 foot in height, and are then considered in perfection for the manufacture of Chinese indigo or woad

at base, reflexed at top. Cells of anthers agglutinate above the style, which is trigonal and 3-lobed at top. Stigmas short, transverse, 2-lobed, obtuse, emarginate. Crests of lobes 2, petaloid, reflexed. Capsule triquetrous, oblong membranous. Operculum obsolete, indehiscent. Seeds flattish, angular, marginate.

Order 2. PENTANDRIA. Stamens 5.

3138. 1459*a* *Disémma* Calyx 10-lobed · Tube short, sulcate below Crown of throat double · outer one of distinct threads ; inner one combined into an entire or toothed membrane The rest as in *Passiflòra*.

3139 1459*b* *Tacsònia*. Tube of calyx long Limb 10-lobed. Throat furnished with a scaly membrane. The rest as in *Passiflòra*.

Order 3 HEXANDRIA. Stamens 6

3140 1460*a*. *Gelasine* Perianth regular, annulated at base Stamens 6, monadelphous, but partible Anthers forming a cylinder Style filiform. Stigma 3-lobed. Capsule obovate, 3-valved, opening at the sutures at top. Seed angular, truncate at top

Order 4. OCTANDRIA. Stamens 8.

3141. 1462*a* *Luvánga*. Calyx truncate, obscurely 4-lobed Petals 4, oblong, fleshy. Stamens 8, united into a tube Anthers linear Style cylindrical. Stigma subglobose, entire. Berry oblong, somewhat 3-lobed, 3-celled pulpy. Pulp resinous, odoriferous. Seeds solitary. Albumen none.

Order 5 DECANDRIA. Stamens 10.

3142. 1464*a* *Wallsùra* Calyx 5-toothed Corolla of 5 petals Nectary double outer one cylindrical bearing anthers in its mouth, inner one a fleshy ring round the ovarium. Ovarium 2-celled Cells 2-seeded Berry 1-seeded

3143 1464*b* *Chirostèmon* Calyx 5-parted, tribracteate Sepals deciduous, coloured inside, foveolate at the base 5 inches long in the bud. Petals wanting. Filaments connate into a tube which is cleft at top, with the lobes bent to one side, exserted, and bearing on the back of each lobe 2 anthers Stigma acute Capsule 5-angled, 5-celled 5-valved, with a villous dissepiment in the middle of each valve Seeds egg-shaped, carunculate, 15 or 18 in each cell

3144. 1464*c*. *Napoleòna* Calyx coriaceous, 5-cleft Corolla of 3 monopetalous verticils outer one large, multiplicate, many-toothed, middle one like the corona in *Passiflòra*, that is, cleft into filiform segments to the base, inner

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TRIANDRIA.

1450 PATERSO'NIA

19874 9340*a* sapphirina *Lindl* sapphire-colrd ☿ △| or 2 jl au B Swan R 1837. D s l.p Bot. r 1839, 6

3134 1452*a* RIGIDE'LLA *Lindl* (A diminutive of *rigidus*, rigid, flower-stalks stiff) *Irideæ*

19875 - flámmea *Lindl* flame-coloured ☿ △| or 3 my S Mexico 1839 O s l p Bot r 1840 [illegible]

19876 - immaculàta *Lindl.* spotless-flwd ☿ △| or 1 au S Guatem. 1840 O s l p Bot r 1841 [illegible]

19877 - orthántha *Paxt* straight-flwd ☿ △| or 1½ s o S Mexico 1840 O s l p Px. m 14 [illegible]

3135 1452*b* HYDROTÆ'NIA *Lindl* (*Hydor*, water, *tænia*, a band petals marked) *Irideæ*

19878 - meleágris *Lindl* spotted-flwd ☿ △| or 1 my Va Mexico 1838 O s.l p Bot r 1842

19879 - lobàta *Herb* lobed-stamened ☿ △| or 1½ ap my Y p Lima 1813 O s l p Lk Kl & Ott. i
Tigridia lùtea Lk. Kl & Ott

3136 1452*c* BEATO'NIA *Herb* BEATONIA (*D Beaton*, a skilful practical gardener) *Irideæ*

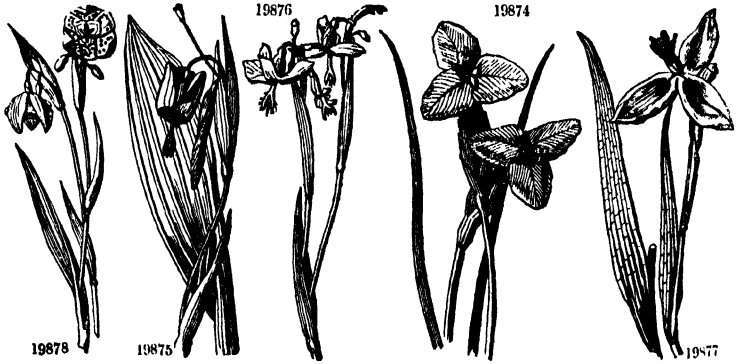
19880 - purpùrea *Herb* purple-flwd ☿ △| or 1 ap jl P Brazil 1841 O s p.l
Tigridia violàcea Lk Klotzsch & Ott.

19881 - atràta *Herb.* dark-flowered ☿ △| or 2 ap jl Dk.P Brazil 1843 O s p l

19882 - curvàta *Herb* curved-stalked ☿ △| or 1 ap jl P n R Monte 1843 O s p l

2686 1453*b*. HERBE'RTIA

19883 - Drummondi *Herb.* Drummond's ☿ △| or 1½ jn au V Texas 1839 O s p l



History, Use, Propagation, Culture,

3134 *Rigidélla* are pretty bulbs with scarlet flowers, requiring the treatment of *Tigridia*.

3135 *Hydrotæ'nia* The genus are very pretty plants when in blossom. They are greenhouse bulbs of easy culture They should have no water after the leaves begin to fade, until they begin to grow again in spring, when they should have plenty. A dry shelf in a greenhouse is a good place to keep them during winter. Equal parts of

one erect cup-shaped, having its margin inflexed and multifid Stamens 10, in a single series, monadelphous. Filaments membranous, inflexed Anthers adnate, 2-celled Disk annular, somewhat cup-shaped Ovarium adherent, fleshy, 5-celled, 20-ovulate. Style pentagonal, the angles winged Stigma disk-formed, 5-rayed.

Order 6. DODECANDRIA. Stamens 12.

3145 1467*a* *Astîrta* Involucel 3-leaved, deciduous Calyx 5-cleft Petals 5, twisted. Stamens 20, unequal, combined into an urceolus without any sterile stamens Ovarium 5-celled. Styles 5, spatulate. Ovula 2 in each cell ascending

3146 1470*b*. *Asterotrichion* Calyx campanulate, 5-cleft, with 5 nectariferous pits in the bottom. Petals 5, unguiculate joined together a little at base Stamens 10—15, fertile, outer ones shortest Anthers reniform, 1-celled, opening by a transverse chink Ovarium 2-celled. Cells 1-ovulate. Ovula pendulous Styles 2, clavate, enclosed. Stigmas thickened truncate. Perhaps dioecious.

Order 7 POLYANDRIA. Stamens indefinite in number

3147 1471*a* *Callîandra* Calyx campanulate, bidentate rarely 5-cleft Corolla funnel-shaped Stamens indefinite, much longer than corolla, joined into a tube at base Legumen linear, compressed, pulpless

3148 1479*a* *Lopîmia* Involucel longer than calyx Calyx of 20 bristle-like connivent leaflets Corolla flat Column of stamens deflexed. Stigmas 10 Anthers 30—40. Capsule of 5 carpels Carpels indehiscent, covered with mucilaginous glue

3149 1482*a* *Fugônia*. Calyx 5 cleft, girded by a 6—12-leaved involucel. The leaflets bristle-formed very short, Anthers numerous, from the sides and lower part of the staminiferous column Stigmas 3—4 agglutinate or free, clavate Capsule 3—4-celled, 3—4-valved, 3—4 seeded Seeds naked or covered with short wool

3150 1490*a* *Goethia* Calyx campanulate, 5-cleft, surrounded by a large bladdery involucel Petals 5, somewhat joined together at the base, twisted in the bud Stamens numerous Style elongated, cleft at apex into 8—10 stigmas Carpels 5 coriaceous, 1-seeded

3151 1490*b*. *Trochetia* Calyx 5-parted, spreading, naked Petals 5 Stamens 20—25, of which 5—7 are sterile Ovarium solitary, roundish, scaly. Style filiform. Stigma 5-lobed Capsule 5 celled, 5-valved. Seeds small, roundish wingless

3152 1495*a* *Polýspora* Calyx girded by accessory bracts Sepals and Petals 5 Stamens numerous Style crowned by a 4—5-lobed stigma Capsule conical, 5-celled, 5-valved, many-seeded. Seeds imbricate, ending in a wing

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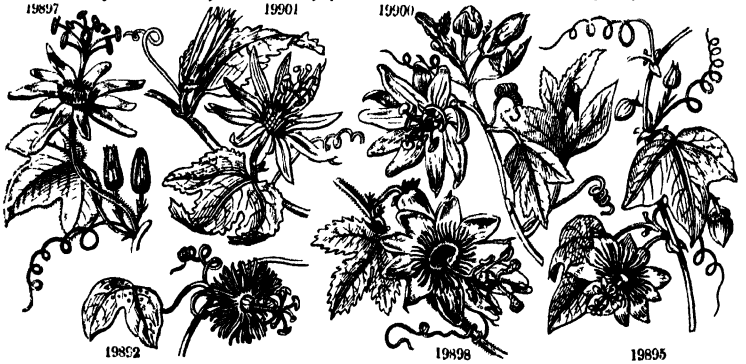
TRIANDRI 1.

19874 Leaves linear green glabrous as are the scapes young leaves finely ciliated, Scape length of leaves, Spathe many-flowered, Inner Keel tomentose, Anthers triangular

19875 Sepals obtuse flame-coloured marked at base with deep purple stripes [the slender stigmas, Pollen yellow
19876 Seps acute 1¼ inch long scarlet with paler claws Pets yel cordate acum, Anthers acute broad at base equaling
19877 Leaves lanceolate, Bracts joined sheath-like, Flowers terminal fascicled nodding, Sepals scarlet with a black spot at the base of each

19878 Flowers marked like those of *Fritillària meleágris*
19879 Flowers yellow speckled with purple, Claws of Petals faced with hyaline globules

19880 Stem forked, Leaves ensiform, Spathe margined with white, Flowers small campanulately rotate [brown lamina
19881 Stem 2 feet, Leaves plicate 1 to 1½ foot, Spathe 2-valved 2½ inches, Sepals with pale green spotted claws and dark
19882 Stem slender, Lvs plicate 8 inches, Spathe 1-valved Peduncs curved, Perianth yellowish, spotted with purple [claws, Petals small recurved, Lobes of Stigma fringed at top with a crested membrane between
19883 Leaves broad plicate 6 inches, Stem 4 inches, Spathe 2-flowered, Ovarium obovate, Sepals spotted with white on



and Miscellaneous Particulars

oam leaf-mould, and sand will suit them best. Perhaps they may succeed in the open air with the same treatment as *Tigridia*

3136 *Bealdnia* Plants with much the appearance of species of *Tigridia*, and the bulbs require the same management and treatment

3137. 1453c. PHALOCA'LLIS *Herb.* (*Phalos*, a cone; *kallos*, beauty, cone formed by crest) *Iridæ*
19884 - - plúmbea *Herb.* lead-coloured ♃ △ or 4 aut Lead Mexico 1837. O s.l.p Bot. mag 3710
Cypélla plúmbea Lindl. Bot. reg. 1838.

PENTANDRIA.

1459 PASSIFLO'RA.

19885 9397*a* actínia *Hook* sea-anemone-flwd ♃ ▭ cu 10 f G Brazil 1842 C s l p Bot. mag 4066
19886 9398*a* amábilis *Hort* lovely ♃ ▭ or 10 my S w S Amer ... C s p.l Bot mag 4194
19887 9401*a* pendulæflòra *Bert* pendulous-flwd ♃ ▭ or 6 au o Y.G Jamaica 1848 C s.l p Bot. mag 4562

19888 - - diffórmis *H B & kth* two-formed ♃ ▭ or 10 s o G Bk S Martha 1841 C s l p
19889 - - Mooreana *Hook* Moore's ♃ ▭ or 10 jl W B Ayres 1837. C s l p Bot. mag 3773

19890 9408*a* Middletoniàna *Paxt* Middleton's ♃ ▭ or 6 su G Pk P S Amer 1837 C s l p Px mag 9 [illegible]
19891 - - álba *Lk & Ott* white-flowered ♃ ▭ or 6 my s W Brazil 1830. C s l p Px fl g 3 71
19892 - - Medúsæ *Lemaire* Medusa ♃ ▭ or 10 su O S Amer C s.l.p Px. fl g 1 89
19893 2429*a* verrucífera *Lindl* wart-bearing ♃ ▭ cu 20 ap my Pa G Brazil 1837 C s.p.l Bot. reg 1840, 52

19894 - - hispídula *Lindl* hispid ♃ ▭ or 10 my jl Y.w Mexico 1838 C s.l p
19895 - - sicyoides *Schlecht odora* Lk. Sicyos-like ♃ ▭ or 6 jl au W R Mexico 1838. C s l p Paxt fl g 3 24.

3138 1459*a* DISE'MMA *Lab* DISEMMA (*Dis*, double, *stemma*, a crown, crown double) *Passiflorea*
19896 - - aurántia *Lab* orange-flwd ♃ ▭ or 20 jl s O R N Caled 1842 C s.l p Bot mag 4140
Passiflóra aurántia Forst *Murucuia aurántia* Pers.
19897 - - Herbertiàna *Dec* L. Carnarvon's ♃ ▭ or 30 jl s O G N Holl 1821. C p l.s Bot reg 737
Murucùia Herbertiàna Swt. *Passiflora Herbertiana* Ker, Bot reg 233. No. 9426

3139 1459*b* TACSO'NIA *Juss* TACSONIA (*Tacso*, the name of a species in Peru) *Passiflorea*
19898 - - pinnatistípula *Juss* pinnate-stip ♃ ▭ or 20 ap Pa Ro Chili 1828. C s l p Swt fl g 2 [illegible]
Passiflora pinnatistípula Cav *pénnipes* Smith
19899 - - mollíssima *H B & K* softest ♃ ▭ or 20 aut Ro Quito 1844 C s l p Bot mag 4187
19900 - - manicàta *Juss.* sleeved ♃ ▭ or 20 aut S Peru " 1840 C s l.p Paxt fl g 1 [illegible]

19901 - - sanguínea *Dec* blood-coloured ♃ ▭ or 20 aut DpR W Ind 1848 C s l p Bot. mag 4671
Passiflora sanguinea Smith in Rees's Cycl

HEXANDRIA.

3140 1460*a* GELASPNE *Herb* (*Gelasinos*, a smiling dimple, delicacy of flower) *Iridæ*
19902 - - azúrea *Herb* blue ♂ △ or 1 my B S. Amer 1838. O s l p Bot mag 3770

OCTANDRIA.

3141 1462*a* LUVU'NGA *Hamilt* LUVUNGA (*Luvunga-lutà*, its Sanskrit name) *Aurantiaceæ*
19903 - - scándens *Hamilt* climbing ♃ ▭ or 10 jn jl W Silhet 1848. C s.p l Bot mag 452.
Limònia scándens Roxb.

DECANDRIA.

1463 GERA'NIUM

19904 9657*a* ribifólium *Lindl* Ribes-leaved ♃ △ or 1 jl au P Himalay 1839 D co Bot reg 1840
19905 9678*a* Thunbergii *Siebold* Thunberg's ○ pr ½ jn jl P Japan 1850. S co Px fl g 1851

1464 BROWNE'A

19906 9688*a* grándiceps *Jacq* large headed ♣ ▭ spl 4 ... S Caraccas 1829 C s l.p Bot reg 1841
19907 - - Ariza *Benth* Ariza ♀ ▭ spl 40 ... S S Amer 1843 C s l p Paxt fl g 2

19908 - - racemósa *Jacq* racemose ♣ ▭ spl 4 ... Ro Caraccas 1826 C s l p Dec fl g 2



History, Use, Propagation, Culture,

3137 *Phalocállis plúmbea* has much the habit of *Márica Northiàna*, and the colouring of the flowers is almost the same. The plant will grow in rich light soil. It requires a good deal of moisture when growing; in fact, it may be cultivated exactly like *Márica*.

3138 *Disémma*. The species of this genus require the same treatment as those of *Passiflóra*.

3139. *Tacsónia*. The species are truly handsome climbing plants, deserving a place in every greenhouse and conservatory. They are readily increased by cuttings, require the same treatment as *Passiflóra*, and might prove hardy in warm sheltered situations. Loam, peat, with decayed leaves, and a little sharp sand, is said to suit them best.

19884 Habit of *Márica*, Leaves glaucous plicate, Stem 2—4 feet, Flowers solitary terminal spotted, Spathe 3 inches

PENTANDRIA.

[lary, Involucrum 3-leaved, leaves ovate cordate entire, Sepals and petals oblong equalling the corona
19885 Leaves entire ovate obtuse emarginate glaucous beneath, Petioles with many glands, Peduncles solitary axil-
19886 Leaves membranous ovate acute entire, Stipules entire, Petioles glandular, Peduncles solitary 1-flowered
19887 Lvs semiorbic cuneate transv. trun obsc 3-lbd 3-nvd 3-bristled gland ben , Pedunc sol or twin pend , Tube of Calyx with 10 gibbosities, Corona simple [dular, Peduncles 1—3-flwd, Flws small bractless
19888 Lvs peltate 2—3-lobed the middle lobe very small the lateral ones divaricate ovate acuminate, Petioles biglan-
19889 Lvs cuneate trifid slightly serrated gland in the sinuses glauc ben , Stips large, Petioles bigland , Peds 1-flwd involuc by large ser. brcts, Corona triple [glands on margins, Sep lanc , Petals narrow, Coronadouble
19890 Leaves 3-lobed ser , Petioles and veins beset with glandular hairs, Bracts leaf-like cut with several large green
19891 Lvs smth 3-lbd cord 5-nvd at base, Lbs ov with glan l sers at base Petioles biglan, Stips cord half stm-clspng
19892 Leaves bifid bat-winged, Stems slender, Flowers starry orange the first day and lilac the second
19893 Lvs 3-lobed serrated, Petioles biglandular at top longer than peduncles Bracts serrated, Sepals beset with gland-like warts on the margins, Corona shorter than petals [lar in middle, Pedicels twin 2— 3-bracteate
19894 Leaves membranous hispid 3-lobed ciliated cordate at base a little toothed apiculated, Petioles hispid biglandu-
19895 Slender hairy, Leaves 3-lobed, Flowers sweet-scented white, the corona variegated with red

19896 Lvs glabrous 3-lobed, Lobes obtuse, lateral ones furnished with an appendage, Bracts bristle-formed glandular at apex remote from the flower, Petioles biglandular
19897 Leaves downy cordate at base broadly 3-lobed, Lobes ovate acute, Petioles biglandular, Pedicels twin 1-flwd, Bracts bristle-formed

19898 Leaves white from down beneath trifid beyond the middle, Lobes serrated, Stipules pinnate, Petioles with 4—8 glands [ovate acuminate, Peduncles 1-flowered, Flowers glabrous
19899 Leaves tripartite cordate at base, Segments ovate-lanceolate serrated, Petioles with many glands, Stipules semi-
19900 Leaves downy beneath 3-lobd, Lobes serrated, Petioles with several glands, Bracts united at base downy, Stipules roundish toothed in a crested manner
19901 Leaves tomentose beneath reticulately veined deeply 3-lobed, Lobes acute serrated, Petioles glandless, Bracts glandularly toothed

HEXANDRIA.

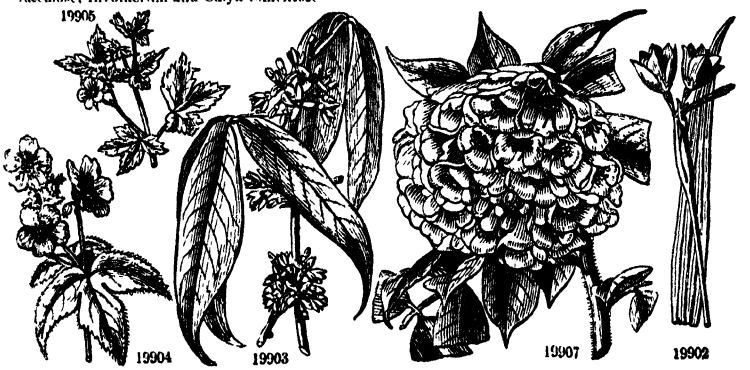
[peduncles, Petals dotted with white and black at base
19902 Leaves plicate 1½ to 2 feet long, Peduncles clasped closely by 3—4 bracts, Spathe many-flowered shorter than

OCTANDRIA.

19903 Spiny tall subscandent, Leaves trifoliate, Leaflets lanceolate acuminate, Flowers axillary fascicled

DECANDRIA.

[distinct, Peduncles terminal 2-flowered, Petals emarginate, Stamens free
19904 Erect pilose, Stem terete, Leaves cordate opposite 3-lobed, Segments ovate coarsely toothed, Stipules triangular
19905 Annual prostrate hairy, Leaves on long petioles rather fleshy 5-lobed, the lower lobes much the smallest, the others 3-lobed and slightly serrated, Peduncles 2-flowered, Petals obovate entire [capitate
19906 Lvs usually 12 pairs lanc -obl cuspidately acum , Stams length of Cor , Brnchs and Petis downy, Flws densely
19907 Leaflets 6—8 pairs oblong-lanceolate cuspidately acuminated, Bracts connate downy 3 times as long as tube of calyx, Flowers densely capitate, Stamens 11 free shorter than corolla
19908 Leaflets 4 pairs unequal-sided oblong or oblong-obovate cuspidately acuminated glanduliferous at base, Flowers racemose, Involucrum and Calyx tomentose



and Miscellaneous Particulars.

19140 *Gelasine azùrea.* This is a very pretty plant, with the habit of *Moræa*, and will thrive in a mixture of loam, [illegible] and sand, and is increased by offsets.

19141 *Luvánga scándens.* This is a climbing hothouse plant It will grow in any light rich soil, and can be easily increased by cuttings in the usual way The plant may be trained to a rafter or trellis.

19142 *Brównea grándiceps* and *Arùm* require to be grown in a moist stove. A rich free soil is the best for them- [illegible] out in a border, or in a large tub, they form splendid objects. The best way of propagating the species is by seeds, when they can be procured, which germinate readily in a hotbed.

3142. 1464*a*. WALLSU'RA *Roxb* WALLSURA (*Wallura*, its Telinga name) *Meliàceæ*
19909 - - robùsta *Roxb.* robust ♀ □ or 8 mr ap W Silhet 1827. C s p.l
19910 - - piscìdia *Roxb* fish-killing ♀ □ or 20 jn s Crea Circass 1830 C s l p

3143. 1464*b* CHEIROSTE'MON *H & B* (*Cheir*, hand, *stemon*, stamen; stamens 5, joined at base) *Bombàcea*
19911 - - platanoìdes *H & B* Plane tree like ♀ □ or 50 ... ... N. Spain 1820. C s l p Px fl g 43 [illegible]

3144 1464*c* NAPOLEO'NA *Beauv* NAPOLEONA. (*Emperor Napoleon I*) *Bicornàcee*
19912 - - imperiàlis *Beauv.* imperial ♚ □ or 6 my jl Aps c S. Leone 1843 C s p l Bot mag 4387

DODECANDRIA.

1467. DOMBE'YA.
19913 9700*a* mòllis *Hook.* soft ♀ □ or 20 mr Ro Maurit 1820 C s.l p Bot mag 4578
Astrapæ'a móllis Hort
19914 - - viburnifòlia *Bojer* Viburnum-lvd ♀ □ or 14 t W Madagas ... C s l p Bot. mag 4 [illegible]

3145 1467*a* ASTI'RIA *Lindl.* ASTIRIA. (*A*, priv, *steiros*, sterile; sterile stamens wanting.) *Byttneriacee*
19915 - - ròsea *Lindl* rose-clrd-flwd ♀ □ or ... mr.ap Pa.Ro Maurit 1838 C s p l Bot reg. 1844.

1469 ASTRAPÆ'A.
19916 9703*a* viscòsa *Sm.* clammy ♀ □ or 10 jn au W c Madagas 1823. C s l p Bot. mag 4541

3146 1470*b* ASTEROTRI'CHION. (*Aster*, a star, *thrix*, a hair; starry down on plant) *Malvacea*
19917 - - sidioìdes *Klotzsch* Sida-like ♚ □ cu 3 s Ysh V D L. 1826. C s p l Bot mag 3897
Plagiánthus sidoìdes Hook.

POLYANDRIA.

3147. 1471*a* CALLIA'NDRA *Benth* (*Kalos*, beautiful, *aner*, a male, stamens long and beautiful) *Leguminosæ*
19918 - - Harrisii *Benth* Harris's ♗ □ or 10 f Pk Mexico 1838 C s l p Bot mag 42 [illegible]
Inga Harrisii Lindl Bot reg 1839. 41.
19919 - - Tweediei *Benth* Tweedie's ♚ □ or 6 mr ap R S Brazil 1840 C s l p Bot. mag 4 [illegible]

1472 MA'LVA
19920 9730*a* Morèni *Poll* Moreni's ☽ △ or 4 jl R Italy 1820 D co
19921 - - lateritia *Hook.* brick-coloured ♌ △ pr ½ s R B Ayres 1840 D co Bot mag 381

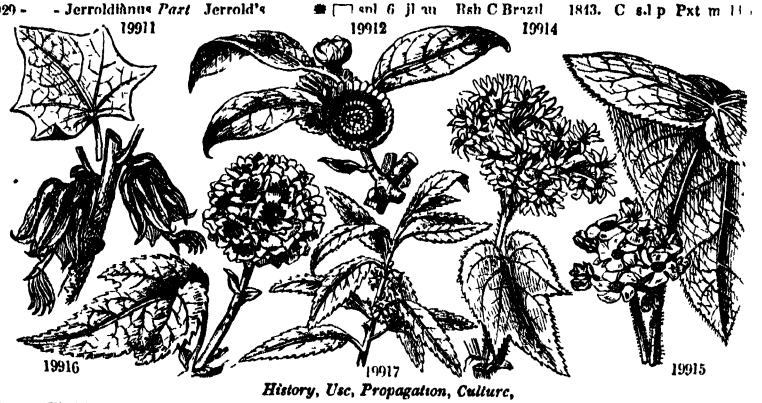
19922 9730*b* campanulàta *Paxt* campan-flwd ♏ pr 1 jn s La ... 1838 C co Pxt m. 9 171

19923 9764*c* Páxtoni *G Don* Paxton's ☽ △ or 1½ jl R Texas 1841 D co Pxt m 7 31
Nuttállia malvæflòra Paxt
19924 - - involucràta *Torr* involucrated ☽ △ or 2 jl P Cre Texas 1850 D co Bot mag 4 [illegible]
Nuttállia involucràta Nutt in Torrey, as well as all the species of *Nuttállia* in p 1936, belongs to *Mal*

1474 ALTHÆ'A
19925 9776*a* leucánthа *Fisch* white-flowered ☽ ○ or 6 au o W c. Altai 1821 S co
nudiflòra Lindl

3148 1479*a* LOPI'MIA *Mart* (*Lopimos*, easy of decortication, bark separating easily) *Malvàceæ*
19926 - - malacophýlla *Mart* soft-leaved ♚ □ or 2 jn s Ro Bra 1823 C s p l Bot mag 1 [illegible]
Sida malacophylla Lk.

1480 HIBI'SCUS
19927 9825*a* Cameròni *Kn & West* Cameron's ♐ □ or 1 jn jl Ro Madagas 1837 C s p l Bot mag 3 [illegible]
β fulgens Lindl *fulgent* ♚ □ or 4 jl au S Hybrid 1840 C s l p Bot reg 18 [illegible]
19928 - - fèrox *Hook* stinging ♐ □ or 3 my jl Y N Gren 1844 C s l p Bot. mag 4 [illegible]
19929 - - Jerroldiànus *Paxt* Jerrold's ♚ □ sml 6 jl au Rsh C Brazil 1843. C s.l p Pxt m 11 [illegible]



History, Use, Propagation, Culture,

3142. *Wallùra.* The *W robùsta* is a large timber tree, and the bark of *W. piscìdia* thrown into fishponds causes the fish to float upon the surface of the water, as is the case with Indian berries (*Cocculus indicus*), rendering the fish easily caught; and the fish so caught is said to be not the less wholesome. The trees are cultivated and propagated in the same manner as ordinary stove plants.

3143. *Cheirostèmon platanoìdes* is a noble tree, growing 15 feet in diameter, and 100 feet and more in height. It succeeds well in turfy loam and peat, or any light rich soil. Half-ripened cuttings will strike root under a hand-glass but the leaves should not be shortened. It is generally called the hand-plant

3144. *Napoleòna imperiàlis.* This shrub has excited more than ordinary interest, arising partly from the circumstance under which it was first discovered, and partly from its name, given in honour of one of the most remarkable men that ever lived, and still more from the singular structure of the flowers as exhibited by Baron Palisot de Beauvais, so remarkable, indeed, that doubts have been expressed of the very existence of such a plant. It was discovered by him in the year 1786, in the kindom of Waree, in Benin, on the west coast of Africa; and the author justly prides himself upon the discovery of the *Napoleòna*, as likely to constitute a new order of plants between

[nectary is not present

19909 Lvs pinnate, Leaflets 5 lanceolate, Panicles terminal and axillary, Filaments distinct consequently the exterior
19910 Leaves subternate, Leaflets oblong obtuse

19911 Leaves 5—6-lobed palmate-nerved, Flowers bibracteate hoary tomentose opposite the leaves, Stamens 5 joined at base and recurved at top giving the appearance of a hand

19912 Leaves rather coriaceous broad oblong acuminated, Flowers axillary apricot-coloured

DODECANDRIA

19913 Arboreous, Branches tomentose, Leaves large downy cordate serrated 3 lobed, Lobes acuminate, Stipules ovate acuminate, Peduncles elongated tomentose dichotomously umbellate, Petals lanceolate falcately flexuous
19914 Arboreous, Brnchs and Petioles hairy, Lvs cordate usually serrulated downy above tomentose beneath, Stipules ovate acuminate, Peduncles elongated, Corymbs compound, Sepals reflexed, Petals obliquely spatulate

19915 Covered with stellate tomentum, Leaves roundish-cordate serrulated, Peduncles axillary, Cymes 10—12-flwd, Leaflets of Involucel roundish a little shorter than calyx reflexed and deciduous

19916 Arbor., Brnchs clammy, Lvs rndsh cord 3—5-lbd scr , Lbs acum , Stips cord acute, Pedunes axil nearly term sol bibract , Bracts cord. concave keeled, Pedcs and Cals hairy, Pets spreading, Ster Fils elong , Anthers 15

19917 Lvs lanceolate acuminate serrated exstipulate pale green above but covered with scurfy stellate down beneath as are the branches, Flowers racemose at top of branches

POLYANDRIA.

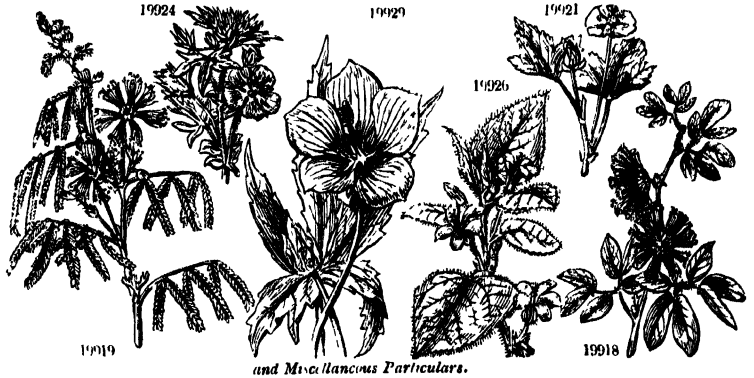
19918 Branches puberulous, Stipules small falcate, Pinnæ 1 pair, Leaflets obovate falcate downy, Peduncles axillary fascicled glandularly downy
19919 Branches and Petioles pilose, Stipules ovate acuminate, Pinnæ 3—4 pairs, Leaflets many pairs oblong-linear acutish ciliated pilose beneath, Peduncles longer than petioles, Bracts linear deciduous, Legume villous

19920 Lower lvs 5-lobed, upper ones palmately 5-cleft, Lobes toothed, Stems and Calyxes rough from stellate hairs
19921 Prostrate hairy, Lvs on long petioles 3—5-lobed, Lobes oblong-cuneated deeply toothed, Stipules broad-ovate Peduncles axillary solitary 1-flowered, Ovaria hairy about 13
19922 Hairy subshrubby deciduous partly decumbent, Leaves sessile embracing the stem thrice pinnate or pinnatifid, Stipules ovate dry, Bracts often bifurcate, Corolla campanulate, Petals obcordate
19923 Downy, Leaves lobed or pedate 5—6-parted, cauline leaves divided into long linear lobes, Segments of Calyx ovate acute hairy, Leaves of Involucrum subulate, Flowers in terminal racemes
19924 Stems elongated procumbent, Lvs deeply 3-parted Lobes trifid or multifid lin -lanc acute, Stipules large broad, Peduncles axillary solitary 1-flwd, Leaflets of Involucrum 3 lin -lanc , Petals purple cream-coloured at base

19925 Lvs roundish-cordate 5 angled or 3-lobed crenate pilose, Stem Petioles and Peduncles hispid, Racemes bractless, Flowers twin, Petals emarginate, Involucrum 6—7 cleft

19926 Covered with starry down, Leaves orbicular cordate hardly toothed, Flowers axillary solitary or crowded at tops of branches

[Calyx large inflated 5-lobed 10-ribbed, Petals obliquely cuneate truncate, Stam column exceeding petals
19927 Lvs cord 5-lobed coarsely serrated, Lobes acute constricted at base, Lvs of Involucel minute subulate about 9,
2 This is a fine hybrid between *H Camedòni* and *H Rósa sinénsis*
19928 Prickly, Lvs large shining cordate 5—7-lobed villous beneath, Stipules cordate acuminate, Peduncles axillary twin 1-flowered, Leaves of Involucrum 10 lanceolate, Calyx pentagonal hispid inflated in front
19929 Lvs digitate, Lbs lanc acum toothed smooth, Flws axil sol on long pedunes, Lvs of Involucrum 12—19 narrow



and Miscellaneous Particulars.

Cucurbitaceæ and *Passifloreæ*. In 1843, Mr. Whitfield, a celebrated collector of objects of natural history, returned from one of his many voyages to Sierra Leone, and brought with him living and dried specimens of the plant In 1848 one of the living plants brought home by Mr Whitfield flowered in one of the hothouses at Sion House, the seat of the Duke of Northumberland

3145 *Astíria* is rather a handsome tree, with pink flowers. It is nearly related to *Ruízia*, and requires the same culture and treatment.

3146 *Asterotrichion* The ordinary culture given to greenhouse shrubs will answer this plant

3147 *Callisándra*. Pretty shrubs, with the habit of *Inga*, requiring the same culture and treatment

19922 *Málva campanulàta* should be kept in a cold frame in winter, and planted out into beds in summer, where it will make a fine show

3148 *Lopezia malacophýlla*. This is a pretty plant when in blossom, at which time it has much the appearance of *Cuphea*

Chirónia frutéscens. A mixture of loam, peat, and sand is a good soil for it, and half-ripened cuttings will root freely planted in sand under a hand-glass in bottom heat. The best way of increasing it is by seed, if procurable

19930 -	- multifidus *Hort*	multifid-leaved	●	⊔	or	3	jl au	B.c	Swan R.	1837.	C	s.l p	Px m	7. 103	lc	
19931 -	- grossulariæfolius *Miq*	Gooseb lvd	●	⊔	or	4	jn au	Bsh P	Swan R.	...	C	s p.l	Bot mag	4329		
19932 -	- Wrayæ *Lindl*	Wray's	●	⊔	or	10	o	Li	Swan R	1839	C	s p.l	Bot reg	1840, 69		
19933 -	- Telfairiæ *Hook*	Telfair's	●	□	or	3	jl	Pa R	Maurit.	1825.	C	s.p.l	Botanist, 212			
3149	1482*a* FUGO'SIA *Cav*	(*Bernard Cienfuegos*, a Spanish botanist of the 16th century)											*Malvàceæ*			
19934 -	hakeæfòlia *Hook*. Hakea-leaved	●	⊔	or	5	au	P Li	Swan R	1846	C	s p.l	Bot mag	4461			
	Hibiscus hakeæfòlius Giord mo															
19935 -	- lilacinus *G Don* Lilac-flowered	●	⊔	or	5	au	Li	Swan R	1836	C	s p.l	Bot reg	2009			
	Hibiscus lilacinus Lindl.															
	2701 1487*a* ABU'TILON															
19936	1735*a* venòsum *Hort*	veined-flwd	●	□	or	10	jl au	O Br	Brazil	...	C	r m	Bot mag	4463		
	Sida venòsa B. M															
19937 -	- vitifòlium *G Don*	Vine-leaved	●	⊔	or	6	my jl	Pa.B	Chili	1844	C	r m	Bot mag	42.7		
	Sida vitifòlia Cav															
19938 -	- graveolens *W & A.*	strong-scented	●	□	or	6	au s	Y o	E Ind	1842.	C	r m	Bot. mag	4134		
	Sida graveolens Roxb *hirta* Roth *tomentòsa* Wall															
19939 -	- integérrimum *Hook*	entire-leaved	●	□	or	14	my jl	Y	N Gren	...	C	r m	Bot. mag	4360		
	Sida integérrima B M															
19940 -	- Bedfordiànum *Hook*	D of Bedford's	●	□	or	14	n	Y R	Brazil	1838.	C	r m	Bot mag	3892		
	Sida Bedfordiàna B M															
19941 -	- pæoniæflòrum *Hook*.	Pæony-flwd	●	□	or	6	jn jl	Ro	Brazil	1843	C	r m	Bot mag	4170		
19942 -	- rufinérve *St Hil*	rusty-nerved	●	□	or	6	jl au	Str	Brazil	1846.	C	r m				
19943 -	- esculéntum *St Hil*	esculent-flwd	●	□	esc	8	s	P	Brazil	...	C	r m				
19944 -	- striàtum *Dicks*	striped-flwd	●	⊔	or	10	mr s	R Y	Brazil	1837	C	r m	Bot mag	3840		
	Sida picta Gillies, B M															
19945 -	- insigne *Planchon*	beautiful	●	⊔	or	6	jn jl	W c	N. Gren	1851.	C	r m	Px fl. g	1, 92 65		
19946 -	- globiflòrum *G Don*	globe-flowered	●	⊔	or	4	n	Crea	Maurit.	1825.	C	r.m	Bot. mag	2821		
	Sida globiflòra Hook															
	1490. CAROLI'NEA															
19947	9940*a* macrocárpa *G Don*	long fruited	●	□	or	6	jn jl	W	Mexico	1840.	C	s.p.l	Bot. mag	4549		
	Pachira macrocárpa Cham B M															
3150	1490*a* GOE'THIA *Nees & Mart*	(*Baron Goethe*, of Weimar, the celebrated German poet)											*Byttneriàceæ*			
19948 -	- strictiflòra *Hook*	upright-flwd	●	□	or	2	jl	R.w	Brazil	1850.	C	s l p	Bot mag	4677		
3151.	1490*b* TROCHE'TIA *Dec*	(*M Dutrochet*, celebrated French physiologist)											*Byttneriàceæ*			
19949 -	- grandiflòra *Lindl*	large-flowered	●	□	or	6	d	W Y	Maurit.	1842	C	s.l p	Bot reg	1844, 21		
	1494 GORDO'NIA.															
19950	9948*a* javánica *Hort.*	Java	●	□	or	3	n	W	Java	...	C	s l p	Bot. mag	4539		
3152	1495*a* POLY'SPORA *Swt*	(*Polys*, many, *spora*, a seed, seeds numerous)											*Ternstrœmiàceæ*			
19951 -	- axillàris *Swt*	axillary-flwd	●	⊔	or	3	n	W	Penang	1816	C	s l.p	Bot mag	4019		
	Camèllia axillàris Roxb Ker, Bot reg 349. Bot mag. 2047 *Gordònia anómala* Spreng															

Page 598. CLASS XVII.—DIADELPHIA STAMENS united in two separate parcels.

Order 2 HEXANDRIA Stamens 6.

3153. 1503*a*. *Dactylocápnos* Petals 4, cruciate, deciduous: the 2 outer ones sessile, equally gibbous at base, the 2 inner ones on long claws Stamens 4—6, collected into 2 bodies Berry cylindrical-oblong, many-seeded

Order 4 DECANDRIA Stamens 10

3154. 1545*a* *Brongniàrtia*. Calyx bibracteate, with a short tube 3 lower segments elongated, linear-lanceolate,



History, Use, Propagation, Culture,

3149. *Fugòsa* is a genus of pretty plants, which will grow best in a mixture of loam, peat, and sand, and may be readily increased by cuttings or seed They should be treated like greenhouse species of *Hibiscus*

19943 *Abùtilon esculéntum* is called *Bencao de Dios* in the province of Rio Janeiro in Brazil, where the inhabitants dress and eat the flowers with their viands

3150 *Goèthia striatiflòra* is a handsome small shrub, with scarlet peduncles and calyxes, and whitish corollas Any rich light mould will suit it, and cuttings strike root readily The plant thrives best in a moist warm heat.

19930 Branched, Lvs glab divided to base into many linear segments which are again divided, Segments of Calyx lanceolate, Corolla blue with a crimson base [solitary 1-flwd bracteate, Involucre 1-leaved 10–12-parted
19931 Covered with stellate hairs, Lvs cordate 3—5-lobed, Lobes obovate obtuse sinuately lobed, Peduncles axillary
19932 Tomentose, Leaves palmate cordate 3—5-lobed, Lobes obovate pinnatifid, Segments roundish rather crenate, Peduncles axillary 2-flowered, Involucel 15-toothed, Stigmas reflexed
19933 Branched, Lvs on long petioles ovate bluntish glabrous crenated or toothed, Petioles downy, Stipules subulate, Peduncles shorter than leaves

19934 Erect, Leaves bipinnate trifid or entire, Segments linear acuminated entire channelled rather fleshy, Peduncles axillary solitary 1-flowered bibracteate, Corolla lilac with a dark base
19935 Glabrous, Leaves entire or tripartite filiform or trifid, Segments linear-lanceolate acuminate pinnatifid in the lower ones coarsely toothed, Involucel obsolete or 6-parted with subulate segments, Segments of Calyx acuminate 3-ribbed, Stigma clavate

19936 Glab, Lvs cord deeply 7-lobed, Lobes lanc acum deeply ser, Stips subul lanc, Peduncs axillary solitary 1-flwd jointed at top, Calyx large camp, Tube glob. with 10 lamellæ, Petals broad spatu conc. connivent veiny
19937 Leaves cordate 3—5—7-lobed, Lobes acuminated serrated, Peduncles terminal racemosely umbellate, Carpels bristate at top
19938 Hairy and downy, Leaves cordate obsoletely lobed and toothed, Peduncles axillary solitary 1-flowered, Petals imbricate yellow dark red at base Carpels numerous downy incurved
19939 Leaves orbicularly cordate acuminated glabrous above but clothed with stellate tomentum beneath 5–7-nerved entire, Peduncles axillary solitary 1-flwd, Flws large Petals retuse yellow with an orange spot at base
19940 Glabrous, Leaves cordate acuminated serrated 7-nerved Peduncles axillary solitary or twin jointed at top, Calyx covered with powdery down, Petals concave roundish painted Fruit downy
19941 Branchs hairy, Lvs downy 3-nerved at base, Stips subu, Peduncs axil twin or tern 1-flwd hairy, Cal ventric. 5-cleft with reflexed segments, Petals concave roundish veiny [globose villous muth 13–16-celled
19942 Covd with rusty tom, Lvs ov-lanc -obl obt acum toothed at top tom beat, Flws corymb capit, Caps sub-
19943 Clothed with grey down, Leaves cordate acuminate, Flowers axillary solitary Cells of Capsule 3-seeded
19944 Glabrous, Leaves cordate 3—5-lobed coarsely toothed acuminate, Peduncles axillary slender, Calyx campanulate, Petals erect ornamented with dark branched veins
19945 Lvs large cordate crenated, Flws pendulous with broad rich crimson veins almost covering the white ground
19946 Glabrous, Leaves cordate serrated tapering much to the apex entire, Peduncles solitary, Calyx truncate at base, Corolla large subglobose, Anthers collected into a globe exserted, Stigmas 10 capitate, Carpels 10

19947 Leaflets 7—11 oblong obovate cuneated at base acuminate at top glabrous, Flowers large, Tube of Calyx short truncate glandular at base, Petals very long white silky outside, Style slender, Stigma 5-lobed, Stamens yellowish red equal to petals, Anthers curved

19948 Leaves ovate acuminate coarsely and sinuately serrated at apex Flowers axillary aggregate on short red peduncles, Involucrum red 4-leaved, Leaflets cordate, Corolla white

19949 Leaves oval acute a little toothed, Peduncles 3—4-flowered pendulous, Petals longer than calyx

19950 Lvs obl-lanc acum glab entire on short petioles, Peduncs solit axil 1-flwd having 3—4 spatu bracts under the flwr, Sepals ovel-ellipt concave rather hairy, Ovary hairy 5 celd, Lobes of Stigma rudish lobat, Caps pea-formed

19951 Leaves obovate-oblong serrulated, upper ones entire, Flowers sessile solitary usually axillary cream-coloured, Styles 4 hardly unconnected

---

the 2 upper segments joined into a lip, which is bidentate at apex. Bracts longer than calyx Style filiform, simple at apex Legume oblong-compressed, stipitate, the seminiferous suture wingless

1155 1551*a* *Cajánus* Calyx campanulate, 5-cleft. Segments subulate, incurved at apex, the 2 upper ones joined together higher up than the rest Corolla with an ample vexillum, which is bicallous at base, and an obtuse straight keel Legume oblong-compressed, oblique, tomentose, 2-valved. Seeds many, nearly round, separated by membranous partitions

1156 1636*a* *Plagiolóbium* Calyx bilabiate Upper lip broad and retuse, lower lip tripartite Keel obtuse Ovarium sessile Style persistent, unilateral Legume inflated coriaceous, obliquely transverse, 2-seeded Seeds strophiolate



and Miscellaneous Particulars.

3151 *Trochetia grandiflóra* is a pretty shrub, with pendulous red peduncles and white flowers It will grow best in a compost of sand, loam, and peat, or leaf mould, and young cuttings will strike root readily. It requires a moist heat

3152 *Polýspora axillàris* is a beautiful shrub when in blossom. A mixture of loam, peat, and sand will suit it, and cuttings not too much ripened will strike root if planted in sand, placed under a hand-glass in heat, or it may be grafted on the single red *Camélia japónica*.

3157. 1552*a*. *Wistària* Calyx campanulate rather bilabiate: Upper lip with 2 short teeth, lower lip with 3 subulate teeth. Vexillum bicallous. Wings conforming to the keel, which is 2-edged. Legume on a short stipe, coriaceous, 2-valved, 1-celled, rather torulose at the seeds

3158 1553*a* *Physaldbium* Calyx campanulate, bilabiate Upper lip bidentate, lower one tripartite. Corolla Vexillum shortly unguiculate, broad, orbicular, subreflexed, longer than wings, exappendiculate at base; Wings adhering beyond the middle to the keel, which is incurved and obtuse Ovarium many-ovulate. Style short, ascending glabrous Stigma capitate Legume oblong, turgid, coriaceous, many-celled Seeds strophiolate.

3159 1553*b* *Hardenbérgia* Calyx campanulate, 5-toothed, subbilabiate Vexillum orbicular, exappendiculate, hardly unguiculate, longer than wings, which are obliquely obovate-oblong. Keel adhering beyond the middle to the wings, incurved, obtuse Style short, subulate Stigma capitate, a little pencilled Legume linear-compressed, somewhat many-celled, and many-seeded Seeds strophiolate.

3160 1553*c*. *Zichya*. Calyx campanulate, 4-cleft Upper segment bidentate, the 3 lower ones approximating into a lower lip Corolla Vexillum, unguiculate very broad, rather reflexed. Legume coriaceous, oblong-linear, compressed, thickened at semmiferous suture, many-celled, exappendiculate at base Wings oblong, shorter than vexillum, adhering to the keel beyond the middle Ovarium many-ovulate Style short, subulate, dilated into a capitate stigma.

3161 1553*d* *Comptosèma*. Calyx bibracteate 4-cleft Petals of Corolla equal, obtuse, on long claws. Vexillum and Keel bicallous at base Wings unicallous Legume linear-oblong, many seeded. Vexillum ovate oblong Keel of 2 nearly separate petals

HEXANDRIA.

1502 CORYDA'LIS

19952	9967*a*	longiflòra *Pers*	long-flowered	♃	△	or	1	ap my	Pa P	Siberia	1836	D	s p l	Ac pet 1779, 2		
19953	9970*a*	flávula *Raf*	yellowish-flwd	♃	◯	or	1	my jl	Y	N. Amer.	...	S	s.l.p	[267 14 1–		

3153. 1503*a* DACTYLOCA'PNOS *Wall* (*Dakýlos*, finger, *kapnos*, fumitory, berries finger-shpd) *Fumariàc*

19954 -		- thalictrifòlia *Wall*	Thalictrum-lvd	♗	◯	or	6	jn jl	Y Ru	Nepal	1836	S	co	Paxt ff g 3 503		

1504. DIE'LYTRA

19955	9977*a*	spectábilis *Dec* *Fumária spectábilis* L	beautiful	♃	△	or	1½	ap.my	R.w	N. China	1846	R	s.p.l	J H S 2 3		

1507 FUMA'RIA

19956	9984*a*	Vaillántii *Loss*	Vaillant's		◯	or	1	my au	P	England	sa. pl.	S	co	Eng. bot 2877		

OCTANDRIA.

2706 1508*a* MONNI'NA

19957	1774*a*	crotalarioides *Dec*	Crotalaria-like	♃	▭	or	2	..	.	S Amer	1840.	C	s l p			

DECANDRIA.

1521 ERYTHRI'NA

19958	10037*a*	umbrósa *H B & Kth*	shady	☿	▭	or	40	...	S	Trinidad	1820.	C	s.l.p			
19959	10035	Bidwillii *Herb*	Bidwill's	☿	▭	or	6	...	S	Hybrid	1840.	C	s.l.p	Bot. reg 1847, 6		

1524 PISCI'DIA

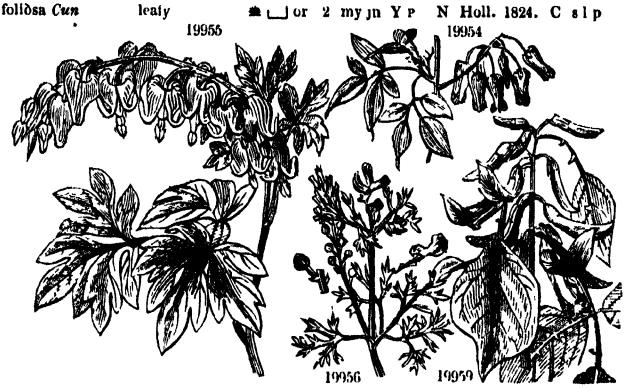
19960 -		- carthagenénsis *Jacq*	Carthagena	♀	▭	or	30	.	W	Carthag.	1690	C	s l.p	Pl ed.Bur. 233		

2709 1525*a* LA'LAGE

19961 -		- hoveæfòlia *Benth.*	Hovea-leaved	♚	⌴	or	2	mr my	Y o	N. Holl.	1840.	C	s l p	Px. m 9 171 a		

1531 BOSSIÆ'A

19962	10127*a*	paucifòlia *Benth* *virgàta* Hook. B M	few-leaved	♚	⌴	or	3	jl d	Y o P	Swan R	1841.	C	s l p	Bot mag. 3980		
19963 -		- cordifòlia *Sm*	cordate-leaved	♚	⌴	or	3	my jn	Y P	N Holl.	1824	C	s.l.p	Swt aust 20		
19964 -		- distícha *Lindl*	distich-leaved	♚	⌴	or	1½	mr my	Y R	Swan R	1840	C	s l p	Bot reg. 1841, 55		
19965 -		- linnæoides *G. Don*	Linnæa-like	♚	⌴	or	1½	my jn	Y P	N Holl	1824	C	s.l p			
19966 -		- tenuicaúlis *Grah*	slender-stemd	♚	⌴	or	1	mr ap	Y R	V D L	1836.	C	s l p	Bot mag 3895		
19967 -		- foliósa *Cun*	leafy	♚	⌴	or	2	my jn	Y P	N Holl.	1824.	C	s l p			



History, Use, Propagation, Culture,

3153. *Dactylocápnos thalictrifolia* grows freely in any light rich earth, and grows well against a south wall, training it to a support. It is increased by seed.

3162. 1557*a* *Platystylis.* Calyx campanulate, 5-cleft, the 2 upper lobes shortest Style broad, spatulate, and villous at apex. Legume many-seeded Seeds nearly globose

3163 1566*a* *Calycblome* Calyx bilabiate. Lips minutely toothed, short, deciduous, leaving a circumcised tube Petals 4, free. Keel oblong, bluntly beaked Glands of Stigma capitate. Legume oblong-linear, many-seeded, at length spongy Endocarp coriaceous, separating from the epicarp

3164. 1588*a* *Onobrychis.* Calyx 5-cleft, nearly equal. Corolla with short wings and truncate keel Legume of one compressed, indehiscent, echinated crested or winged, 1-seeded joint, which is thickest on the upper suture

3165 1588*b*, *Oxytropis* Calyx bilabiate Upper lip bidentate, lower tripartite Petals of equal length Vexillum acuminate, plicate Keel beaked. Ovarium stipitate, compressed, elliptic-subrhomboid. Legume ovate, compressed villous, 1-seeded

3166 1588*c* *Amicia* Calyx campanulate, 5-cleft 2 upper lobes roundish, large, 2 lateral ones minute, the lowest one oblong, keeled and concave Corolla with an orbicular vexillum, and with the wings applied to the keel Stamens monadelphous, with tube cleft in front Legume linear, compressed, many-jointed Joints truncate at both ends

3167 1591*a* *Cyclogyne* Calyx campanulate, with unequal segments Vexillum emarginate Wings short Keel larger than wings, of 2 petals, which are connate at base Ovarium villous, many-ovulate Legume inflated oblong, 1-celled

3168 1601*a* *Iénnea* Calyx campanulate, subbilabiate Upper lip bidentate, lower one tridentate Corolla Vexillum obcordate, length of wings Stamens monadelphous Style filiform, with a pilose line Stigma capitellate.

HEXANDRIA.

[lobes Bracts oblong entire, Racemes elongated, Spur longer than pedicels

19952 Stem simple furnished with leafy scales under the leaves Leaves biternate with tripartite segments and oblong

19953 Stem a little branched, Leaves bipinnate glaucous, Lobes oblong-linear, Bracts ovate-pointed, Capsule linear torulose twice as long as pedicels

19954 Glab glauc, Stems and branchs twisted Petioles ending in branched tendrils, Lvs tritern, Racs axil or opp the lvs on long peduncs, Fls abt 20 lge obl flesh yellish with rubesc mouth, Berys obl indehis. fleshy pale yl

19955 Spurs 2 blunt ventricose short, Stems leafy, Segments of leaves obovate cuneated cut

[Leaves supradecomposed with linear lobes

19956 Pods globose hardly mucronate, Floriferous Pedicels erect longer than bracts, Racemes short, Stems erectish,

OCTANDRIA

19957 Shrubby, Leaves elliptic-acuminate at both ends, lower ones ovate, Branches downy, Racemes elongated

DECANDRIA

[rather deltoid, Calyx campanulate spathaceous, Vexillum linear cuneated straight long

19958 Arboreous prickly, Leaflets ovate acuminate 3-nerved glabrous rounded and truncate at base, the middle one

19959 A beautiful hybrid from *E. herbácea* impregnated by *E. Crista-gálli* It was reared at Sidney by Mr Bidwill.

19960 Leaves pinnate, Leaflets obovate downy, Stipe of Legume scarcely longer than calyx, Wings continuous

[Bracts ovate lanceolate

19961 Branches weak downy, Leaves oblong-lanceolate mucronate rather cordate at base, Stipules ovate acuminate,

[Calyx straight, Legume glabrous

19962 Glabrous, Branches elongated twiggy 2-edged winged leafy, Leaves petiolate elliptic obovately linear, Teeth of [lose on the nerves beneath with revolute edges, Peduncles bibracteate equal to leaves

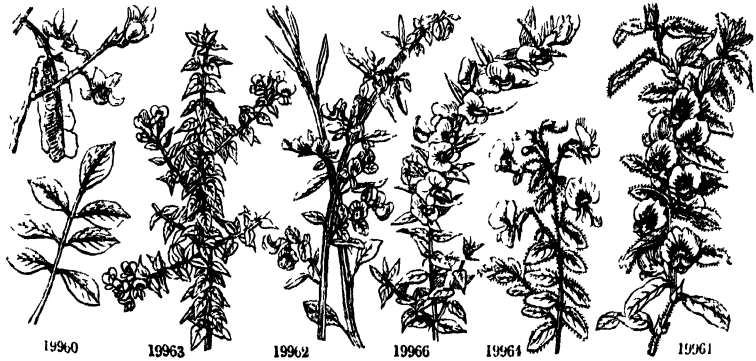
19963 Branches terete crowded with leaves villous, Leaves nearly sessile cordate acute mucronate scabrous above pi-

19964 Young branchs terete, Lvs distich ov obt mut, Stips longer than petis, Pedunes solit. axil 1-fld longer than lvs

19965 Branchs ter prost downy, Lvs ellipt muc, Pedunes elong. solit 1-fld, Bracts downy, Cor twice as long as calyx

19966 Procumbent, Branches terete diffuse filiform, Leaves ovate acutish rigid mucronate downy as are the branches, Flowers solitary axillary forming racemes at tops of branches [sistent hooked longer than petioles

19967 Branches terete villous, Leaves small orbicular retuse scabrous with revolute edges silky beneath, Stipules per-



and Miscellaneous Particulars.

19968 *Erythrina umbrosa* This tree is planted in Caracas and Trinidad for shade to the plantations of *Theobroma Cacao*, for two rows of *Theobroma* there is one of *Erythrina*

1536. HO'VEA

19968 10138 latifòlia *Lodd* broad-leaved ▲ ▭ or 3 mr jl B P N Holl. 1820. C s.l p Bot. cab. 30
19969 - - púngens *Hug.* pungent-leaved ▲ ▭ or 4 mr.jl B.P K.G.S. 1837. C s.l p Px. m. 10. 51. ic

19970 - - spléndens *Paxt* splendid ▲ ▭ or 3 mr.jl P.B w Swan R. 1840. C s l.p Px. m. 10. 103 ic
19971 - - racemulòsa *Benth* small racemed ▲ ▭ or 3 mr jl Y.P Swan R 1841. C s.l p Bot. reg. 1843, 4
19772 - - pannòsa *Cunn. lanígera* Lodd. cloth-leaved ▲ ▭ or 4 mr jl Pa P N. Holl. 1824. C s l.p
19973 - - apiculàta *Cunn* apiculated lvd ▲ ▭ or 3 mr jl P Vi N. Holl. 1824. C s l.p
19974 - - mucronàta *Cunn* mucronate-lvd ▲ ▭ or 3 mr jl P.B N Holl. 1824 C s l.p
19975 - - trispérma *Hug* three-seeded ▲ ▭ or 3 mr jl P B K.G S 1848 C s.l p
19976 - - acutifòlia *Cunn* acute-leaved ▲ ▭ or 3 mr jl P B N Holl 1823. C s.l.p

19977 - - purpùrea *Swt* purple-flwd ▲ ▭ or 3 my jn P N Holl. 1820 C s l p Swt fl. aust 13
19978 - - rosmarinifòlia *Cun* Rosemary-lvd ▲ ▭ or 2 mr jl B N.S W. 1824. C s l.p
19979 - - ilicifòlia *B. R* Holly-leaved ▲ ▭ or 2 mr my V.B w Swan R 1843. C s p.l Bot.reg. 1844, 58

3154. 1536a PLAGIOLO'BIUM. (*Plagios*, transverse, *lobos*, a pod, pods obliquely transverse) *Legum*
19980 - - chorozemæfòlium *Swt* Choroz -lvd *Hòvea chorozemæfòlia* Cun ▲ ▭ or 2 f.my B N. Holl. 1824. C s.l.p Swt fl aust. 2
19981 - - ilicifòlium *Swt* Holly-leaved *Hòvea ilicifòlia* Cun ▲ ▭ or 2 f my P.B N. Holl. 1824. C s.l.p Bot.reg 1844, 59

1538 GENI'STA

19982 10161*a* Spachiàna *Webb* Spach's ▲ ▭ or 4 ... Y Teneriffe 1840 C s l.p Bot. mag 4195
19983 - - bracteolàta see No 10180 bracteol. *Cytisus racemòsus* Marn ▲ ▭ or 6 jn jl Y Teneriffe 1830. C s l p Bot. m. 1840, 23
19984 10178*a* ephedroides *Dec* Ephedra-like ▲ or 2 jn jl Y Sardinia 1832. S co Bot gard 498
19985 - - triacánthos *Brot.* *β interrúpta* Dec 3-thorned *interrupted* ▲ or 2 my jl Y Portugal . S co Brot phyt 54
19986 10178*b* amsántica *Dec* Amsantic ▲ or 3 jn jl Y Naples 1818 S co Ten fl.nap 2 66

1540 U'LEX

19987 10185*a* strictus *Mack* *hibérnicus* G Don. upright ▲ or 8 jl au Y Ireland heaths S co

1541 ONO'NIS.

19988 10210*a* pedunculàris *B R* long peduncd ▲ △ or ... su W RO Teneriffe ... C co Bot reg. 1447
19989 - - hispida *Desf* hispid ▲ △ or 1 jn jl ... Barbary S co Desf. atl 2 189

1542 ANTHY'LLIS

19990 10212*a* polycéphala *Desf* many-headed ▲ △ or 1 jn jl Y Algiers 1829 S co Desf atl 2 195
19991 10217*a* Webbiàna *Hort* Webb's ▲ △ or ½ my Ro Teneriffe 1830 S co Bot. mag 3284

1544 LUPI'NUS

19992 17761*a* ramosíssimus *Benth* much-brnchd ▲ ▭ or 3 jn.o B P Chimbor. 1843 S lt m Bot. reg. 1845, 28
19993 - - leptocárpus *Lindl* slender-podded ▲ ◯ or 1 jl s P Mexico 1839. S co Bot. reg. 1840, 38
19994 - - Ehrenbérgii *Schlecht* Ehrenberg's ▲ ◯ or 2 jn s P.w Mexico 1846. S co Bot reg 1847 11
19995 - - pubéscens *Benth.* downy ○ or 2 jl au Vi Californ 1846 S co Moor. m. 3 57 2
19996 - - arvénsis *Benth* corn-field ▲ ◯ or 1 jn s Li Y Peru 1843 S co Bot. reg. 1844, 1
19997 - - affínis *Agardh* allied ○ or 1 jn.jl B w Californ. 1840. S co

3155 1545. BRONGNIA'RTIA (*Adolphe Brongniart*, a celebrated French botanist) *Legumindeæ*
19998 - - sericea *Schlecht.* silky ▲ ▭ or 4 ja jn P Mexico 1842 C co

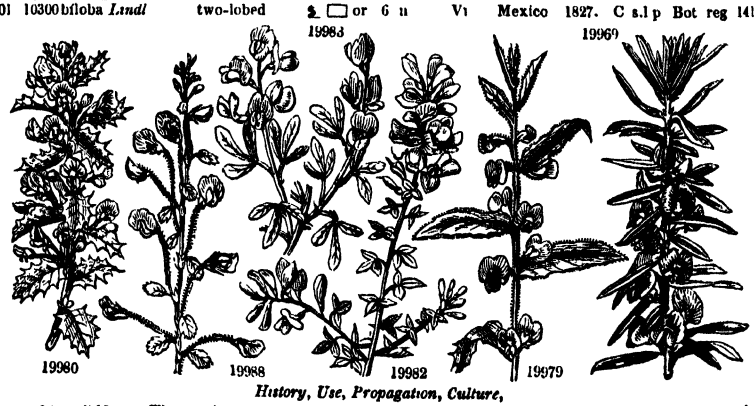
1547 PHASE'OLUS

19999 10264*a* lobàtus *B M.* lobed-leaved ▲ ⧋ or 10 s Y B Ayres 1843 S s.l p Bot. mag. 4076

3156 1551*a* CAJA'NUS *Dec* PIGEON-PEA (*Cajang* is the name of *C. flávus* in Amboyna) *Legum*
20000 - - bicolor *Dec* 2-coloured-flwd ▲ ▭ or 4 jl.au Y P E Indies 1800. C s.l p Jacq vind 2 119
Cytisus Pseudo-Cájan Jacq *Cajanus flávus* is *Cytisus Cájan* L. No. 10443., the common Pigeon Pea

1552 GLY'CINE

20001 10300 bíloba *Lindl* two-lobed ▲ ▭ or 6 u Vi Mexico 1827. C s.l p Bot reg 1418



History, Use, Propagation, Culture,

3154 *Plagiòbium*. The species are worth cultivating in every collection of greenhouse plants, for the sake of the beauty of their flowers and for their holly-like leaves. They may be propagated by cuttings planted in a pot of sand, having a bell-glass placed over them; but better plants may be produced by seeds, which often ripen in our greenhouses.

19967. *Ulex stricˈtus*, the Irish furze, is an upright plant with soft spines. It is an excellent plant for hedges.

19968 Lvs elliptic-oblong acute glabrous as are the branches, Peduncles axillary solitary hardly longer than petioles
19969 Lvs linear with revo. edges glab. or a little pilose stiff mucronately pungent, Stips bristle-formed Pedicels a little longer than calyx, Ovarium stipitate glabrous [most sessile
19970 Lvs slightly cordate at base mucronate, Calyx clothed with dark brown tomentum, Peduncs usually in pairs al-
19971 Lvs lanc glab above and finely reticulated tom ben, Racs axillary loose many-flwd, Upper Lip of Calyx large
19972 Lvs lanc. obt terminat in a tuft of hairs glab above clothed with long dense tom ben, Brnchs villous as are the legumes and calyxes, Peduncles almost sessile 1—2—3-flwd [nerve ending in a mucrone
19973 Lvs lanc with revo edges tom beneath and smooth above coriaceous tapering to the apex with strong middle
19974 Lvs ov.-lanc tap to the apex muc. tom ben. and smooth ab Brnchs vil Peduncs very short few-fld, Fl small
19975 Lvs obl.-lin or lanc. lower ones ellipt retic ab downy ben, Pedncls shorter than cal, Leg. stipl glab 3 seeded
19976 Lvs lanc tapering to both ends mucron. clothed with rusty tom ben as are the brnchs glab ab, Peduncs 2—3-flwd Pedicels longer than peduncles [Peduncles twin axillary
19977 Lvs obl.-lin. mucron smooth above tom. and retic veined ben with revo. edges, Brnchs clthd with rusty tom,
19978 Leaves linear reticulated with revolute edges clothed with rusty tomentum beneath as well as legumes
19979 Branchlets tomentose Leaves oval spiny-toothed mucronate pungent reticulated beneath, Stipules spinescent, Peduncles 2—3-flowered, Calyx tomentose bracteate pungent glabrous, Legume roundish glabrous

19980 Leaves oblong-lanceolate spiny-toothed mucronate coriaceous glabrous, Pedicels axillary 3—4 together, Legume transverse glabrous
19981 Leaves ovate or elliptic coriaceous spiny-toothed mucronate glabrous, Pedicels axillary twin legume kidney-shaped downy

[neath, Stipules lanceolate short, Spikes terminal, Lower lip tridentate, Legume hairy
19982 Branches nodulose, sterile ones mucronate, floral ones pendulous, Leaves trifoliate, Leaflets elliptic silky be-
19983 Hoary-downy, Leaves trifoliate, Leaflets obovate very blunt narrowed at base, Racemes terminal elongated [cate, Calyx and Corolla a little silky
19984 Leaves few sessile trifoliate and simple, Leaflets linear smoothish, Branches spinescent, Flowers alternate spi-
19985 Leaves sessile trifoliate and simple glabrous, Leaflets linear-lanceolate, Branches spiny, Spines branched, Ra-
19986 Leaflets linear, Branches usually simple and shorter [cemes term, Calyx Corolla and Legume glabrous
19987 Glabrous diffuse, Branches angular, Leaves ovate-elliptic veiny, Flowers racemose, Corolla three times longer than calyx, Legume 8—10-seeded

19988 Erect, Leaves linear ciliated, Spines branched pubescent as are the branches

[arched, at length recurved
19989 Diffuse covered with glandular down, Leaves obovate toothed simple, Stipules entire, Peduncles long 1-flowered
19990 Erect hairy unarmed, Leaves trifoliate, Leaflets obovate serrated, Flowers solitary, Calyx hispid equal in length to corolla but twice the length of legume [silo distant alternate
19991 Procumbent, Lvs pinnate villous as are the branches, Leaflets 23—35 oval-oblong equal, Heads numerous ses-
19992 Erect white from silky down, Leaves pinnate, Leaflets 7—11 oval-acute, terminal one largest, Heads of Flowers subcompound bracteate, Bracts cuneate roundish hardly multifid, Calyx subcylindrical

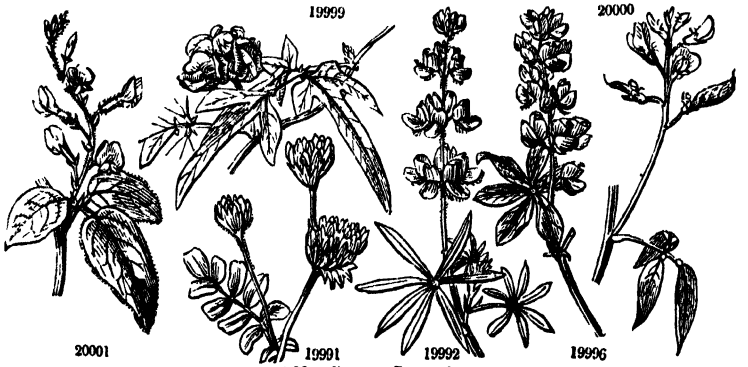
19993 Hairy, Leaflets 7 lanceolate-linear, Flowers racemose verticillate, Whorls 5—6-flowered
19994 Decumbent hardly canescent, Leaflets 7—5 oblong-lanceolate bluntish mucronate downy beneath, Flws densely racemose, Bracts pilose, Calyx bractl downy, Legume elongated downy [Wings purple, Standard white
19995 Downy pilose, Lfls 5—7 obl.-lanc. mucron, Racs elongated, Flws verticil, Leg hairy tom 8-seeded, Keel and
19996 Canescent hairy, Stipules small subulate, Leaflets 7—9 oblong-lanceolate acute shorter than petioles, Flowers in loose whorls, Bracts short caducous, Corolla glabrous
19997 Decumbent downy, Leaflets 5—9 lanceolate, Stipules setaceous free, Racemes subverticillate, Bracts subulate, Corolla glabrous, Wings obtuse, Legume hairy slender about 4-seeded, Seeds cinereous clouded
19998 Stem hairy a little branched, Leaflets 5—7 narrow obovate rather fleshy blunt silky beneath, Racemes whorled, Legume narrow tumid, Standard having a white spot in the middle

19999 Leaflets oval mucronate 9 pairs downy on midrib and beneath smooth above, Flowers axillary solitary dirty purple

19999 Leaflets hastately 3-lobed, middle lobe on a long petiole, lateral lobes lobed, middle lobe elongated, Peduncles equalling the lvs many-flwd, Petals yellow twisted a little, Keel long acum. densely and spirally convol as style

20000 Vexillum purplish outside, Legume 4—5-seeded spotted, Stipules of lateral leaflets about equal in length to the petiolule

[Vexillum 2-lobed
20001 Twining pilose, Leaflets oval mucronate pubescent, Racemes erect axillary many-flowered shorter than leaves,



and Miscellaneous Particulars.

3155 *Brongniártia sericea* is a pretty shrub, and will thrive in any rich light soil; and young cuttings will root if planted in sand under a bell-glass.

3156. *Cajánus* is generally propagated by seed received from the tropics, where they are used in the same manner as we do common peas, and esteemed a wholesome pulse, which some prefer to common peas. In Jamaica they are chiefly used for feeding pigeons.

3157. 1552*a*. WISTA'RIA *Nutt* (*Caspar Wistar*, late prof Anatomy, univ Pennsylvania) *Leguminosæ*

20002 - - sinénsis *Dec.* Chinese ♗ or 40 my jn B China 1818. C co Bot mag 2083
Consequàna Loud. h brit *G. chinénsis* Sims No. 10312, as well as *G. frutéscens* L., belongs to this genus
β alba *white-flowered* ♗ or 40 my jn W China 1844 C co

1553 KE'NNEDYA.

20003 10315*a* tabácina *Labill.* Tobacco-like ♣ ▭ or 4 my jn S Swan R. 1845. C co Px m 16 3
exímia Pax mag

3158. 1553*a*. PHYSALO'BIUM *Benth* (*Physa*, a bladder *lobos*, a pod, bladdery pods) *Leguminosæ*

20004 - - Stirlíngii *Benth* Stirling's ♣ ▭ or 3 mr jn S K G S 1834. C s.p l Bot. reg 181
Kennédya Stirlingi Lindl. No. 17795.

3159 1553*b* HARDENBE'RGIA (*Countess of Hardenberg*, sister of Baron Hugel) *Leguminosæ*

20005 - - macrophýlla *Benth* large-leaved ♣ ▭ or 6 ... P Swan R. 1835 C s.l p Bot reg 1
Kennédya macrophýlla B R No 17796

20006 - - digitàta *Lindl* digitate-leaved ♣ ▭ or 6 ap my B Swan R 1839 C s l p Bot. reg 181

20007 - - Comptoniàna *Benth* Compton's ♣ ▭ or 6 mr jn S N Holl 1803 C s l p Bot reg 2

Kennédya Comptoniàna Lk No 10318, as well as 10319 10920 17796, belongs to this genus

20008 - - cordàta *Benth* cordate-leaved ♣ ▭ or 6 ap my P B Swan R 1820 C s l p Bot reg 941

3160 1553*c* ZI'CHYA *Hugel* (*Countess Molly Zichy Ferraris*, now Princess Metternich) *Leguminosæ*

20009 - - glabràta *Benth* glabrous ♣ ▭ or 6 su S Swan R 1834 C s l p Bot mag
Kennedya glabràta Bot reg. 1838

20010 - - villòsa *Benth* villous ♣ ▭ or 3 su S Y Swan R. 1841 C s l p Bot reg 1

20011 - - móllis *Hugel* soft ♣ ▭ or 3 su D C Swan R 1837 C s l p

20012 - - pannòsa *Paxt* cloth-leaved ♣ ▭ or 4 su S Y Swan R 1840 C s l p Pax m 8

20013 - - inophýlla *Benth* nerved-leaved ♣ ▭ or 6 my jn S Y N Holl 1824 C s p l Bot reg 14
Kennedya inophýlla Cun

20014 - - sericea *Benth* silky ♣ ▭ or mr jn S N. Holl 1823 C s p l Bot reg 10
Kennédya dilatàta Cun, as well as 10316 and 17794, belongs to this genus.

3161. 1553*d* CAMPTOSE'MA *Hook & Arn* (*Kamptos*, flexible, *sema*, a standard) *Leguminosæ*

20015 - - rubicúndum *H & A* reddish-flwd ♣ ▭ or 10 ... S Brazil 1840 C s l p Bot. mag
Kennédya splendens Meisn

1556 CLITO'RIA.

20016 10332*a* fúlgens *Paxt* fulgent ♣ ▭ or 6 my S Brazil 1841 C s.l p Px m. 11

1557 O'ROBUS

20017 10348*b* Jordánii *Tenore* Jordan's ✱ △ or 1 my jn B Lucania 1830 D co

20018 - - longifólius *Nutt* long-leaved ✱ △ or 1 my jn R Missouri ... D co
Psoràlea longifólia Ph

3162 1557*a* PLATY'STYLIS *Swt.* (*Platys*, broad, *stylos*, a style, style with spat. villous apex) *Legu*

20019 - - cyáneus *Swt* blue ✱ △ or 1 my jn B P Caucasus 1823. D co Swt fl gard
Orobus cyáneus Stev

20020 - - sessilifólius *Swt* sessile-leaved ✱ △ or 1 my jn B P Tauria 1823 D co Fl grec 60
O sessilifólius Smith fl. gr 692, *O. digitátus* Bieb 10335, and *O stipulàceus* 17805, belong to this ge

1558. LA'THYRUS

20021 10378*a* Armitageànus *K & W* Armi's ❀ ▭ or 2 jn au B Li S Brazil 1838 S s l p Flor cab
20022 - - nervósus *Lam* nerved-leaved ♗ ▭ or 3 su P.B S Brazil 1840 S s l.p Bot mag

20023 - - pubéscens *Hook.* downy ♗ ▭ or 3 my P B S Brazil 1840 S s l p Bot. mag
acutifólius Vogel

20024 - - tomentósus *Lam* tomentose ♗ ▭ or 10 jn au Li B B Ayres 1839 S co Botanist 20

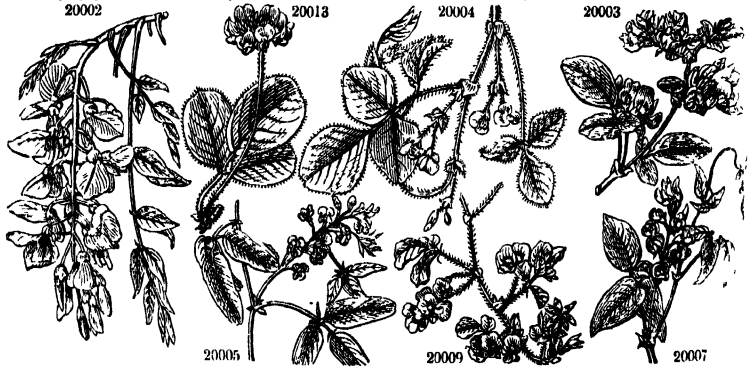
20025 - - purp cærùl *K & W.* purple-blue ♗ ▭ or 10 jn au Psh B Brazil 1839 S co Flor cab

20026 - - Macræi *Hook* Macrae's ♗ △ or 10 jn au Chili 1826 S co Bot gard 87

1561. VI'CIA

20027 10413*a* grácilis *Lois.* slender ♗ ○ or 2 jn au P England fields S co Eng bot
laxiflóra Brot *E'rvum tenuissimum* Pers

20028 - - polysperma *Tenor* many-seeded ♣ △ or 6 jn Pa B Naples 1837 S co Swt fl g



History, Use, Propagation, Culture,

3157 *Wistária* is a genus of splendid, early-flowering, climbing woody plants They like a light soil best but will grow in any soil. They are quite hardy If planted and trained against a south wall, or to the front of a house, flowers in great profusion They are increased by cuttings.

3158. *Physalóbium*. Splendid climbers, requiring the same treatment as *Hardenbérgia*. Like the species of all the genera separated from *Kennédya*, it is well fitted for training up rafters or trellis-work in a conservatory

3159. *Hardenbérgia* is a genus separated from the old genus *Kennédya*. Loam, peat, and sand are found to be

20002 Wings of Corolla with one auricle each, Ovarium villous

β Flowers pure white

20003 Hairy, Leaves trifoliate Leaflets ovate-oblong, Racemes axillary, Peduncles pilose, Calyx villous, Flws scarlet, Standard with a yellow blotch at base

20004 Leaflets ovate or orbicular retuse mucronate silky pilose as are the branches, Stipules and bracts ovate-cordate, Peduncles 2-flowered axillary shorter than leaves, Keel shorter than wings

20005 Leaves trifoliate, Leaflets ovate-oblong retuse mucronate, Racemes many-flowered half-erect or partially drooping [ny-flowered, Vexillum acute

20006 Lvs digitate, Lflts 5 ovate-oblong obtuse, terminal one on a longer petiole, Stips triang Racs pedunculate ma-

20007 Lvs trifoliate, Leaflets oblong-obtuse mucronate, Stipules ovate-acuminate, Racs many-flwd longer than leaves pedunculate

20008 Leaflet solitary simple cordate-ovate apiculate equal to petiole in length, Superior stipules ovate, Racemes many-flowered longer than leaves

20009 Leaflets 3 cuneate glabrous, Petioles and stems pilose, Stipules broad-ovate acute, Bracts deciduous, Peduncle 6-flowered length of leaves [Corymbs dense capitate many-flowered on long peduncles

20010 Villous, Leaflets 3 ovate obtuse, Segments of Calyx shorter than tube, Keel equal to wings, Style simple at apex

20011 Leaflets 3 obovate obtuse subrepand, lower ones ovate lanceolate acute downy beneath, Keel nearly equal-

20012 Vexillum scarlet with a yellow base, Keel and wings purplish [ing wings, Style hardly dilated at apex

20013 Leaves trifoliate, Leaflets cuneate mucronate a little hairy above and silky beneath, Stipules ovate-acute, Peduncles many-flowered, Flowers umbellate Calyxes covered with black hairs

20014 Leaves trifoliate, Leaflets obovate emarginate clothed with silky hairs especially in the young state, Calyxes villous

20015 Glabrous Leaves trifoliate, Leaflets elliptic retuse, middle one on a long petiole, Racemes compound axillary, Pedicels hardly equalling the calyx in length

[expanded

15 Stems many hairy, Leaflets 3 ovate pilose with fringed edges, Racemes pedunculate, Vexillum hardly

[dunces 4—6-flowered, Style jointed

20017 Roots tuberous fascicled, Leaflets 3—4 pairs oblong-lanceolate cuspidate, Stipules semi-sagittate subulate, Pe-

20018 Villous, Root creeping, Leaves ternate and with 2 pairs of leaflets, uppermost ones simple, Leaflets long filiform, Stipules ovate-lanceolate acuminated, Racemes pedunculate filiform, Two upper teeth of Calyx shorter

20019 Leaflets 2—3 pairs approximate linear-lanceolate acute, Stipules equal in length to petiole, Peduncles few-flowered longer than leaves, Legume oblong

20020 Leaflets 1 pair linear-subulate, Stipules semi-sagittate subulate longer than petiole, Peduncles few-flowered longer than leaves, Style jointed spatulate, Legume narrow

[dunc racemose blue, Tendrils branched

20021 Suffruticose branched glaucous, Lvs 1 pair, Leaflets ovate sessile mucr. veiny, Stipules arrow-shaped, Flws pe-

20022 Glabrous, Stem angled, Leaflets 1 pair elliptic-ovate acute mucronate nerved, Tendrils twice trifid, Petioles very short, Stipules semi-sagittate, Peduncles many-flowered

20023 Downy, stem 4-angled winged, Leaflets 1 pair oblong-lanceolate nerved mucronate tendrilled, Stipules semi-sagit, Tendrils trifid, Peduncles many-flwd, Calyx and ovarium silky [cles longer than lvs usually 4-flwd

20024 Suffrutic. tom, Stem angul. branched, Stips semi sagit twice as long as petis, Lflts obl-linear mucr, Pedun-

20025 Suffruticose, Stems angular, Leaves on long petioles, Leaflets 1 pair lanceolate rather downy mucronate, *Stipules minute, Peduncles 6—8-flowered longer than leaves*

20026 Pilose, Stems angular, Leaflets 6 pairs elliptic retuse veined white beneath full of pellucid dots, Stipules small semi-sagittate entire, Peduncles many-flowered Style pilose, Upper segments of Calyx long subulate

20027 Peduncles 1—7-flowered, Leaflets 3—4 pairs linear-acute, Tendrils simple, Legume sublinear-oblong mostly 6-seeded, Seed mottled [flowered, Legume lanceolate 14—20-seeded

20028 Leaves tendrilled, Leaflets ovate-oblong obtuse entire mucronate glabrous, Stipules toothed, Peduncles 8—10-



and Miscellaneous Particulars

for the species They require the same treatment as other twining greenhouse plants, by being trained up a or on any convenient trellis-work.

Zichya Splendid greenhouse climbers, requiring the same culture and treatment as *Hardenbérgia*

Camptosèma requires the same treatment as *Hardenbérgia*.

Platystylis is a genus of elegant early-flowering plants, well adapted for the front of flower borders. A light soil suits them best, and they are readily increased by seed, or by dividing the plants at the root.

1565 LIPA'RIA

20029 10434*a* párva *Vogel* small ▭ ⌴ or 2 mr ap Y C G H 1840. C s.l p
β angustifólia B.M. *narrow-leaved* ▭ ⌴ or 2 mr.ap Y C G.H 1840. C s.l.p Bot. mag 4034

1566 CY'TISUS.

20030 10436*a* Weldènii *Visiani* Welden's ▭ or 6 my jl Y Dalmatia 1838. L co Bot r. 1843 4

3163 1566*a* CALYCO'TOME *Lk.* (*Kalyx*, a calyx, *tome* a section, lips of calyx fall off.) *Leguminòsæ*
20031 - - spinòsa *Lk* spiny ▭ or 2 jn.jl Y Europe 1596. L co Bot. r 1846 5.
Cytisus spinòsus Lam. *Spártium spinòsum* L

1568. ROBI'NIA.

10460 Pseudacàcia
γ umbraculifera *umbrella* ▭ or 10 my jn W seedling ... G co
20032 10465*a* macrophýlla *Schr.* large-leaved ▭ or 5 my jn Ro N. Amer ... S co
hispida β macrophýlla Dec.

1569. CARAGA'NA

20033 10476*a* triflòra *Lindl* three-flowered ▭ or ... .. G Y Nepal 1847. L co P fl g 2 14
20034 - - Redówskii *Dec.* Redowski's ▭ or 3 ap.mr Y Siberia 1827 L co Dec leg 11 4

1570 SWAINSO'NIA

20035 10478*a* Greyàna *Lindl* Capt. Grey's ▭ ⌴ or 2 jn jl P w N. Holl 1844. C s.p l Bot reg 1846
20036 - - Osbórni *Moore* Osborn's ▭ ⌴ or 2 au o Ro Y Darl Ds 1850. C s.p l Moor.comp

2715 1571*a* CLIA'NTHUS

20037 17812*a* Dampièri *Cun* Dampier's ▭ ⌴ or 1 ap S N. Holl 1836. C s.l.p Paxt. fl g 1
Oxlèyi Cun. *Dòria speciòsa* G & D Don
20038 - - cárneus *Endl.* flesh-clrd-flwd ▭ ⌴ or 6 ap.my Pk Philip I 1836. C r m Bot. reg. 1841
Streblorrhiza cárnea Endl.

1580 SMI'THIA

20039 10520*a* purpùrea *Hook.* purple ▭ O or 1 o P Bombay 1846 S s l.p Bot. mag 4[illegible]

3164. 1588*a*. ONOBRY'CHIS *Desf.* SAINTFOIN. (*Onos*, an ass, *brycho*, to gnaw, fond of.) *Leguminosæ*
20040 - - radiàta *Bieb* rayed ▭ O or 2 jn.au W Y Caucasus 1818. S co Bot reg 184[illegible]
Hedýsarum radiàtum Desf, *H. Buxbaúmi* Bieb.

3165. 1588*b* OXYRA'MPHIS *Wall* (*Oxys*, sharp, and *ramphos*, a beak.) *Leguminòsæ*
20041 - - macróstyla *Wall.* long-styled ▭ ⌴ or 4 o n C.Ro Nepal 1837. C s.l.p Bot reg. 1846
Crotalària macróstyla D Don.

3166. 1588*c*. AMI'CIA *Dec* (*Jos Bapt. Amici*, a celebrated French physician.) *Leguminòsæ*
20042 - - zygómeris *Dec.* 2-jntd podded ▭ ▭ or 10 ... Y Mexico 1826. C s.p.l Bot mag 4[illegible]

1589 INDIGO'FERA.

20043 10625*a* decòra *Lindl* comely ▭ ⌴ or 3 ... R w Shanghae 1844 C s l p Bot reg 1846
20044 - - Dósua *D Don* Dosua ▭ ⌴ or 6 s Ro Nepal 1840. C s l.p Bot reg 184[illegible]
20045 - - stachyoides *Lindl* Stachys-like ▭ ⌴ or 6 s P India 1839 C s.l.p Bot reg 1843

1590 TEPHRO'SIA.

20046 10637*a* chinénsis *Lindl.* Chinese ▭ ⌴ or 3 jn Ro China 1823. C s.p.l

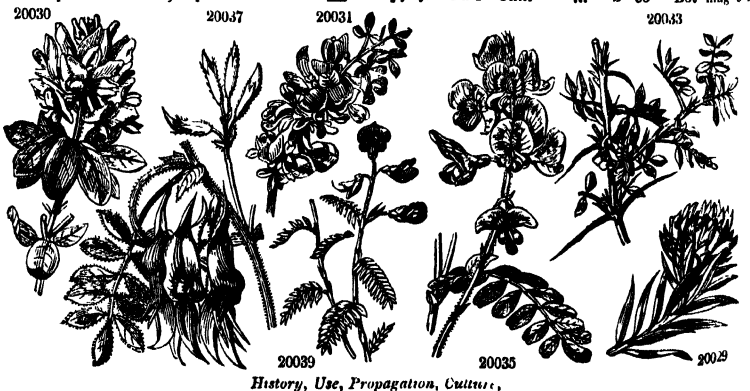
1591 GALE'GA.

20047 10640*a* pérsica *Pers* Persian ▭ △ or 2 jn s W Persia 1823 S co Swt fl g 241
20048 - - bíloba *Swt.* two-lobed ▭ △ or 3 jn s Li ..... 1823. S co Swt fl g [illegible]

3167. 1591*a* CYCLO'GYNE *Lk* (*Kyklos*, a circle, *gyne*, a female, style circular.) *Leguminòsæ*
20049 - - canéscens *Lk* canescent ▭ △ or 2 my P Swan R. 1839 C s.p.l Pax m 7 120

1594 ASTRA'GALUS

20050 10723*a* strobiliferus *Lindl.* strobile-bearing ▭ ⌴ or ½ jn jl P S. Europ 1836. S co
20051 - - brevifòrus *Dec* short-flowered ▭ ⌴ or ½ jn jl P America 1826 S co Bot cab 13[illegible]
20052 - - procúmbens *H & A* procumbent ▭ △ or ½ jn jl Pa P Chili ... S co Bot mag 3[illegible]



History, Use, Propagation, Culture,

20030. *Cytisus Weldènii* is now a common shrub in our gardens and pleasure-grounds. It has leaves as large as those of *Laburnum*, but the racemes of flowers are erect.

3163. *Calycótome spinòsa* is a pretty shrub, and will be hardy in mild winters. It grows in any light rich soil in an airy situation It may be propagated by layers, but best by seed

3164 *Onobrýchis* requires the same treatment as the species of *Hedýsarum*

3165. *Oxyrámphis macróstyla* is a pretty greenhouse shrub, and is said to grow freely in a mixture of sandy loam and peat. It loses its leaves in winter The flowers are half crimson and half rose-coloured, disposed in

[ed edges, Segments of calyx lanceolate elliptic bearded
20029 Slender branchd, Leaves ovate-elliptic acuminate 3-nerved, Flowers capitate, Bracts orbicular acum. with beard-
β Leaves narrower

20030 Erect Leaves ternate, Leaflets broad-elliptic entire obtuse glabrous, Racemes terminal pedunculate erect, Pe-
dicels villous, Calyx 3-lobed ciliated, Keel villous, Legume glabrous

20031 Branches angular, Leaflets obovate-oblong, Legume glabrous

[on the ordinary Locust Tree
? This is a fine tree pretty common in our gardens It has a dense umbrella-formed head. It is generally grafted
20032 Unarmed Leaflets ovate roundish, Branches and Peduncles glabrous, the three lower teeth of Calyx acumi-
nated, Flower large rose-coloured racemose

[bracteate at base
20033 Petioles spinescent, Leaflets 4—5 pairs oval obtuse apiculated silky, Peduncles 3-flowered, Calyx glabrous bi-
20034 Leaflets 2 pairs ovate acute glabrous, Stipules spinose

[gume inflated stipitate
20035 Hoary tomentose, Leaflets 5—8 pairs oblong or retuse, Racemes many-flowered, Calyx woolly bibracteate, Le-
20036 Suffruticose smooth, Leaflets 9—15 pairs linear-oblong retuse, Racemes few-flowered, Pedicels bractless, Calyx
ciliately toothed, Standard yellow at base

20037 Herbaceous villous decumbent, Leaves opposite seldom alternate obovate-oblong, Stipules toothed, Peduncles
few-flowered umbellate shorter than leaves, Segments of Calyx acuminate Ovarium shaggy
20038 Leaflets 2—3 pairs ovate shining glabrous, Racemes erect few-flowered, Vexillum straight bluntish

20039 Erect glabrous, Leaflets oblong apiculated ciliated, Stipules adnate, Racemes terminal and lateral, Peduncles se-
tose, Calyxes ciliated

20040 Stem erect hispid, Leaflets ovate obtuse mucronate hairy beneath, Spike long many-flowered, Wings of Corolla
sagittate much shorter than calyx, Calyx and Legume villous

20041 Leaves trifoliate, Leaflets obovate retuse coriaceous mucronate silky villous beneath as are the branches, Ra-
cemes axillary, Legumes ovate compressed 1-seeded villous

20042 Leaflets 2 pairs cuneate obcordate truncately retuse, Legumes biarticulate

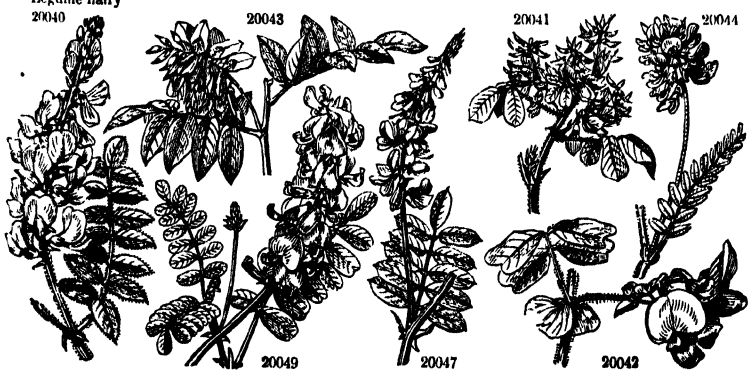
[dense, Calyx 5-toothed Vexillum oblong, upper edge of Keel villous
20043 Glabrous glaucescent, Leaflets 2—6 pairs ovate obtuse mucronate with a few peltate hairs beneath, Racemes
20044 Clthd with rufes down, Lflts 10—16 prs oval ret muc, Spks axil, Brcts and Stips lin. hisp, Teeth of Cal ov. ac.
20045 Downy, Leaflets 18—22 pairs linear acute, Racemes axillary sessile, Calyx cup-shaped, Ovarium 7-ovulate

[downy, Style glabrous, Stigma capitate
20046 Leaflets 9—10 pairs oblong obtuse downy, Racemes axillary horizontal many-flowered, Calyx bibracteolate

[ceolate sagittate, Bracts linear subulate
20047 Stem angular flexuous, Leaflets usually 5 pairs ovate oblong rather retuse mucronate glaucescent, Stipules lan-
20048 Stem striated flexuous, Leaflets usually 5—8 pairs oblong downy mucronate 2-lobed, Stipules ovate-lanceolate
acute serrated sagittate, Flowers crowded, Bracts subulate

20049 Clothed with white down, Stems numerous villous, Leaves pinnate, Leaflets 13—15 obovate-oblong smooth above
and white from down beneath, Peduncles erect many flowered, Flowers almost sessile

[of Cor equal
20050 Flws in capt heads ov. ses Brcts imbricate, Cal plumose 5-cleft, Lvs woolly, Lflts 3 pairs oval awned, Segs
20051 Flws axil ses somewhat capit, Cal 5-cleft rather longer than cor with woolly lobes, Lflts 6—7 pairs lanc vil
20052 Tomentose prostrate branched, Stipules concrete, Leaflets 11—14 pairs elliptic retuse, Peduncles racemose,
Legume hairy



and Miscellaneous Particulars.

a short close raceme. The leaves are much like those of a species of *Tephrósia*

3166 *Amicia* requires the culture and treatment of other hothouse climbing shrubs.

3167 *Cyclógyne canéscens* is a pretty greenhouse plant. The flowers are numerous, purple, with a blotch of green in the centre A rich loam and airy place in the greenhouse is said to suit it best.

3168 *Lennèa*. This is a shrub with small impari-pinnate leaves, and clusters of pretty drooping flowers It loses its leaves in winter, and grows well in the open air in summer; but, as it flowers in May or earlier, it can only be treated as a greenhouse plant.

1596 DA'LEA.

20053 10735*a* **argentea** *G Don* silvery ♃ □ or 2 jn jl Pk Mexico 1850. C s l p Moor.m 2 231

1598 MELILO'TUS

20054 10772*a* **arvénsis** *Wallr.* corn ◯ or 1½ jn au Y England sa. pl. S co Eng. bot 2960
diffùsa Koch. *officinàlis* Koch. *Petitpierriàna* Koch

1600 TRIFO'LIUM.

20055 10851*a* **reflexum** *L* Buffalo-clover ♃ △ or 1 jn jl Ro W Texas 1835 D co Bot. mag 3471
20056 - **- lucàtum** *Lindl.* tinted ♃ △ or 1 jn Crea R Californ 1834. D v m Bot reg 1885

2717 1601*a*. HOSA'CKIA

20057 17824 **stolonifera** *B. R* stoloniferous ♃ △ or 3 jn Choc Californ 1830 D co Bot. reg 1977

3168 1601*b*. LENNE'A *Lk & Kl* (Some German botanist named *Lenne*.) *Leguminòsæ*
20058 - **- robinioides** *Lk & Kl* Robinia-like ♣ □ or 6 my S Mexico 1848 C s.l.p Px fl g 3 74

1605. MEDICA'GO.

20059 10917*a* **clypeàta** *Lindl.* clypeate ⚓ ○ or ½ jn.jl Y N India 1840. S co

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Page 650. CLASS XVIII. — POLYADELPHIA. STAMENS united into several parcels.

Order 2 POLYANDRIA. Stamens indefinite

3169. 1610*a* ***Astartèa*** Calyx with a hemispherical tube and a 5-parted limb, and semiorbicular lobes Petals Bundles of Stamens alternating with petals, and shorter than them. Style short Stigma capitate. Capsule h adhering to calyx, 3-celled, 3-valved, many-seeded

3170. 1615*a* ***Severnia*** Calyx 5-toothed. Petals 5. Stamens 10, disposed in 5 bodies. Anthers semibin 2-celled. Style 1 Stigma simple. Fruit 2-seeded.

POLYANDRIA

1610. MELALEU'CA

20060 10962*a* **Hugèlii** *Benth.* Hugel's ♣ □ or 5 su W Swan R 1837 C s l p
20061 - **- juniperoides** *Dec.* Juniper-like ♣ □ or 3 jn au Y N Holl. 1830 C s.l p
Metrosidèros juniperoides Rchb.
20062 - **- párviceps** *Lindl.* small-headed ♣ □ or ... my jl W Swan R. 1842. C s p l
20063 - **- viminea** *Lindl* twiggy ♣ □ or .. ... W Swan R 1839. C s.p l

3169. 1610*a*. ASTARTE'A *Dec.* ASTARTEA . (The *Syrian Venus*, a mythological name.) *Myrt a*
20064 - **- fasciculàris** *Dec* fascicled ♣ □ or 3 my au W N. Holl. 1830. C s.l p Lab n ho 2 1
Melaleùca fasciculàris Lab.

1611. TRISTA'NIA.

20065 10965*a* **álbicans** *Cun.* White turpentine tree ♀ □ or 80 jl au W N Holl 1818. C s.l.p
álbens Lk & Otto.

1612 CALOTHA'MNUS.

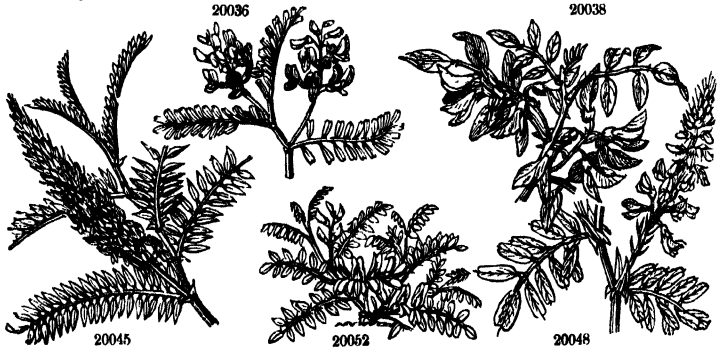
20066 10968*a* **clavàtus** *Cun* clavate-leaved ♣ □ or 3 jl s S N Holl 1824 C s l p
20067 - **- longifólius** *Lehm* long-leaved ♣ □ or 3 jl s S Swan R 1840 C s.p.l

1613. BEAUFO'RTIA

20068 10970*a* **splèndens** *Paxt.* splendid ♣ □ or 3 jl au S N Holl. 1830 C s l.p Px.m 11 18
20069 - **- purpùrea** *Lindl.* purple ♣ □ or 3 jl au P Swan R 1841 C s l p Lindl. sw n r 1

20070 - **- macrostèmon** *Lindl* long-stamened ♣ □ or 3 jl.au P Swan R. 1843 C s l p
Schizopleura macrostemon Colla

20036 20038



20045 20052 20048

History, Use, Propagation, Culture,

3169 ***Astartèa fasciculàris*** is a very pretty greenhouse shrub, and differs principally from *Melaleùca* in the bundles of stamens being alternate with the petals, not opposite to them as in that genus; and in the flowers being pedicellate

20053 Erect silky, Leaflets 3—5 obovate-oblong mucronate glandular beneath, Spikes ovate, Calyx downy with lanceolate pointed teeth

20054 Lflts obcord or obl scr. upper ones lanc., Stips subu , Racs loose, Pedicels half as long as calyx, Wings and Stand equal longer than keel, Pods ov obt. muc. rnded and slightly keeled on back, transvly. plic. rug glab

[Teeth elong , Wings shorter than obov vexillum and longer than apiculated keel, Legume obl. 3—4-seeded
20055 Ascending, Leaflets rhomb-oval denticulate, Heads globose terminal, Flowers reflexed, Tube of Calyx short,
20056 Leaflets roundish spinosely denticulated, Stipules large membranous entire cuspidate, Heads round involucrated, Leaflets of Involucrum connate at base ovate-lanceolate acuminate with membranous edges

20057 Leaflets 7 pairs ovate or oblong mucronate, Stipules ovate Umbels many-flowered capitate, Peduncles furnished with a simple or trifoliate bract just under the umbel, Teeth of Calyx very short

20058 Glabrous, Leaflets 4—5 pairs elliptic yellowish green membranous retusely emarginate at top, Racemes solitary, Teeth of Calyx puberulous on the margin

20059 Leaflets rhomb-obovate apiculate denticulated towards the top Stipules pinnatifid, Peduncles usually 3-flwd, Legume depressed biconvex of 5 cycles veiny with smooth edges

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3171 1619*c*. *Caióphora*. Calyx 5-parted, with jagged segments Petals 5, unguiculate. Scales 5, emarginate or 4-toothed at apex, each furnished with 4 sterile filaments inside Stamens numerous, disposed in 5 bundles Style trigonal Stigmas 3, connivent Capsule ovate-oblong, with elevated spiral ribs, and covered by the reflexed calyx, 1-celled, many-seeded, opening at 3 of the sutures Seeds angular, echinated

3172 1619*d* *Microspérma* Calyx with an ovate tube and a 5-parted spreading limb Petals 5, spreading, obovate Stamens numerous, in 5 bundles, joined with the bases of the petals Ovarium free at top Style filiform Stigma furrowed, not divided. Capsule 1-celled, many-seeded Receptacles 5, filiform, parallel Seeds numerous, very minute oval-oblong, angular

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POLYANDRIA.

[Flowers spicate, Calyx glabrous

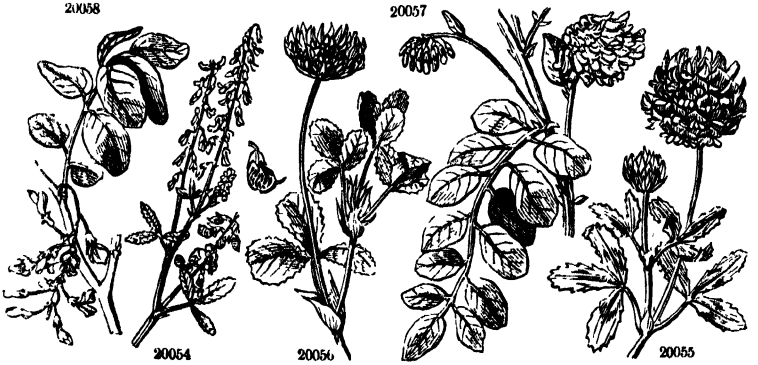
20060 Leaves alternate approximate subimbricate ovate-lanceolate acuminate broad at base sessile spreading at top,
20061 Leaves alternate terete stiff mucronate glabrous in adult state, Heads of Flowers small globose hairy the rachis villous, Bundles of Stamens 4—6-anthered with the claws equal in length to petals
20062 Leaves alternate coriaceous linear-oblong narrow at base veinless, Flowers axillary dense quite glabrous, Bundles of Stamens 8—12-anthered a little longer than petals
20063 Branches twiggy glabrous, Leaves alternate linear acute glabrous distant recurved at top, Bundles of Stamens few-anthered, having the claws length of petals

20064 Leaves opposite linear fleshy downy disposed in axillary fascicles when young, Flowers pedicellate axillary solitary

20065 Leaves elliptic ciliated rather hairy on the nerves

20066 Bundles of Stamens equal polyandrous, Leaves clavate downy
20067 Glabrous, Leaves opposite or subverticillate tern or quatern strict very long terete filiform mucronate, Flowers numerous unilateral tetramerous, Bundles of Stamens nearly equal 5—7-androus declinate pinnatifid

20068 Branchs straggling slen , Lvs ovals ses obt ent smth pale green small, Clusters of Flls short, Style very long
20069 Rameal Leaves imbricate linear-lanceolate keeled obtuse 3-nerved at base, Floral Leaves cordate-ovate 3-nerved marginate, Bundles of Stamens hexandrous downy at base, Heads globose
20070 Leaves linear obtuse flat or lanceolate 3-nerved marginate spreading pilose as are the branches, Bundles of Stamens 3—4-androus villous at base



and Miscellaneous Particulars.

not adnate to the branches The plant grows and flowers freely in equal parts of loam, peat, and sand ; and ripened cuttings not too old, strike root freely in sand under a bell-glass

. 1613b. CANDO'LLEA.

20071 17628a tetrándra *Lindl* tetrandrous ■ ⊔ or 7 jn Y Swan R. 1842. C s p.l Bot reg. 1843,56
20072 - - Hugélii *Benth* Hugel's ■ ⊔ or 6 my.au Y Swan R. 183.. C s.p.l

1614. SY'MPLOCOS.

20073 10972a japónica *Dec.* Japan ♀ ⊔ or 20 jn jl W Japan 1850. C s.l.p Moor. m. 2 277
Ilicina Zucc. Px. fl g 1 61

1615 CITRUS

20074 10974a deliciósa *Ten* delicious ♀ ⊔ or 8 ap W China 1840 B s l p
20075 - - japónica *Thunb* Japan ♀ ⊔ or 6 my jn W Japan 1846 B s.l p J H S 3 240

3170 1615b SEVERI'NIA *Ten* (Not explained by author) *Aurantiàceæ*
20076 - - buxifòlia *Ten* Box-leaved ■ ⊔ or 4 my jl W China ... G s.l.p
Citrus buxifòlia Thunb No 10977.

1617. HYPE'RICUM

20077 11010a verticillátum *Thunb* whorled-lvd ■ ⊔ or ½ au Y C G H 1784 C s.p.l Bot. gard 630
20078 11022a linariæfòlium *Vahl* Linaria leaved ♆ △ or ½ jn au Y Cornwall ba r D co Eng bot 2485

1619. LOA'SA.

20079 11051a picta *Hook* painted-flwd ○ or 1 jn jl W Y Andes 1847. S co Bot. mag 4429
20080 - - bicolor *Klotzsch* two-coloured ○ or 1½ jn jl W C Amer 1852. S co

3171. 1619c CAIO'PHORA (*Kaio*, to burn, *phoreo*, to bear, fiery red flowers.) *Loàseæ*
20081 - - Pentlándii *G Don* Pentland's ⅄ ○ or 6 aut R Peru 1840. S s p l Bot. mag 4[illegible]
Loàsa Pentlándii Paxt
20082 - - Herbérti *G Don* Herbert's ⅄ ○ or 6 au S hybrid 1842 S s.l p Px m 9 269
Loàsa Herbérti Paxt *Loasa lateritia* No 17832 belongs to this genus

3172 1619d MICROSPE'RMA *Walp* (*Mikros*, small, *sperma*, a seed, seeds very small) *Loàseæ*
20083 - - bartonioides *Walp* Bartonia-like ○ or 1 su Y America 1849 S co Bot mag 4491
Eucnida bartonioides Zucc.

Page 660. CLASS XIX.—SYNGENESIA. STAMENS 5 ANTHERS united by their edges.

Order 1 *AEQUALES* Florets of the disk and ray all hermaphrodite

3173. 1627a. *Mulgédium* Heads many-flowered Involucrum calyculately imbricate outer scales much the shortest, imbricate Receptacle naked foveolate Achenia glabrous, compressed, often nerved, tapering above into a beak expanded into a cup-shaped ciliated disk. Pappus in one or few series. Bristles stiff, scabrous

3174. 1650a *Achyróphorus* All as in *Hypochæris*, except that the pappus is in one series and plumose.

3175 1668a. *Rhapónticum* Heads many-flowered equal. Scales of involucrum in many series adpressed ending each in an entire or toothed acuminate or roundish appendage with scabrous margins Receptacle beset with linear fimbrillæ Corollas all 5-cleft, nearly regular Filaments papillose Anthers terminated by an appendage Achenia oblong, compressed, glabrous, with an oblique basilar areola Pappus rufescent, in many series. Bristles stiff, scabrous

3176 1702a *Cerádia* Heads few-flowered, rayless Receptacle flat, alveolate. Involucrum 5-leaved, naked at base. Florets of the ray female, with oblong tubes downy achenia Pappus in many series, setose, scabrous Corollas filiform, truncate, shorter than styles, and branches of style linear obtuse Florets of the disk male with short linear achenia, and smaller subdeciduous pappus. Corollas ventricose, 5-toothed. Style filiform, truncate Anthers mutic at base.

3177 1706a *Barnadésia* Heads many-flowered Involucrum turbinate, of many series of imbricate scales outer scales radiating Paleæ of receptacle dense, hair-formed, twisted Flowers all bilabiate Anthers tailless Achenia turbinate, villous. Pappus in one series, plumose

3178 1706b *Stiffta* Heads discous, many- and equal flowered Involucrum closely imbricate Scales coriaceous dry, many-nerved, ovate-rounded, inner ones linear Receptacle alveolate, naked. Corollas subcoriaceous, glabrous regular, 5-cleft, 10-nerved Lobes circumnately revolute Filaments smooth Anthers exserted, long-tailed Style gla



History, Use, Propagation, Culture,

20073. *Símplocos japónica* is much used by the Japanese for decorating the shrines of their idols. It is known in Japan by the name of *Furoggi* When Thunberg first discovered the tree he took it for a myrtle, and Fortune for a holly

20075. *Citrus japónica* is called *Kum-quat* by the Chinese, and the *Kum-quat* groves of the Island of Chusan are formed on the sides of hills in those situations where the tea plant (*Thea viridis*) flourishes, and attain the height of 6 feet. The fruit ripens late in autumn, being then about the size of a gooseberry, of an oval form, having a sweet rind and a sharp acid pulp. It is largely used by the Chinese as a preserve, and very frequently finds its way to England as presents to those who have friends in China Preserved in sugar according to the Chinese method, it is said

20071 Leaves oblong-cuneate toothed, Flowers solitary, Bundles of Stamens tetrandrous, Branches pilose, Petals [emarginate
20072 Lvs lin quite ent vil when young but glab. in adult state, Floral ones naked at top, Flws at tops of branches among the lvs on short pedicels, Petals obl obov emarg., Sepals acum hoary downy outside longer than petals

20073 Leaves obovate cuspidate green and shining bay-like, Flowers in axillary clusters

20074 Shrub spiny, Leaves lanceolate tapering to both ends a little toothed, Petioles linear, Fruit compressed, Pulp [very sapid, Rind brownish orange
20075 Petioles winged, Stem angular, Flowers axillary solitary or twin, Fruit 9-celled

20076 Shrub spiny, Leaves emarginate oval-oblong nearly sessile quite entire obtuse with parallel veins, Flowers axillary fascicled or solitary

20077 Herbaceous, Leaves 4 in a whorl
20078 Stems erect or ascending terete Leaves linear obtuse with revolute margins, Flowers cymose, Sepals rather unequal Lanceolate with gland serratures and num black dots beneath, Stams about 30, Styles half as long as capsule

20079 Erect downy dichotomous beset with pungent bristles, Leaves rhomb-obovate or lanceolate acuminated lobed serrated, lower ones petiolate, upper ones sessile, Racemes terminal leafy, Petals indentate and Cal reflexed

20080 Hispid robust erect, Leaves impari-pinnate, Pinnæ 3 pairs oval ultimate ones confluent, Segments serrated, Calyx campan. hispid, Petals white downy ending in 2 bristles at apex scaly boat-shaped white striped with red

20081 Bristly, Leaves opposite elongated pinnatifid, Lobes of Calyx pinnatifid, Appendages 2 clavate filiform at top of smaller petals, Styles 3 winged, Epigynous disk lobed, Fruit straight turbinate

20082 A beautiful garden hybrid with scarlet flower

20083 Leaves ovate acute lobed serrated, Peduncles elongated 1-flowered, Flowers large, Petals acute, Stamens exceed ing the petals

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Leaves bifid Achenia glabrous, elongated, short-beaked Pappus paleaceous, in many series, long, unequal Paleæ linear, serrated

1707 1708*a* *Helenium* Heads many-flowered Involucrum campanulate Scales in many series, subimbricate, ending in a coloured appendage Receptacle elevated, hairy Achenia angular Pappus in one series, scabrous

1708 1713*a* *Chabræa* Involucrum campanulate Scales in two series, oblong Receptacle chaffless Corollas bilabiate, glabrous Outer lobe of disk florets tridentate, inner lobe bipartite, with the lobes usually concrete Outer lobe of ray florets strap-shaped, revolute, tridentate, inner lobe smaller, bipartite Anthers bisetose at base and appendiculate at apex Achenia ovate, cylindrical, beakless, papillosely setose. Pappus in one series Paleæ concrete, combined into a ring at base, equal, subplumose

Order 2 SUPERFLUA Florets of the disk hermaphrodite, of the ray female.

3181 1730*a* *Helipterum.* All as in *Helichrysum*, except that the pappus is plumose.
3182 1744*a* *Monolopia* Heads many-flowered Florets of the ray ligulate, sometimes subbilabiate, those of the disk tubular, hispid Scales of involucrum 8—10, in one series, concrete to the middle Receptacle convex, chaffless Anthers tailless Branches of the styles of ray florets terminated by a cone Achenia glabrous
3183 1746*a* *Eurybia* Heads many-flowered Ray florets in one series, ligulate Receptacle small, flat, or a little convex, alveolate Involucrum imbricate with chartaceous scales Stigmas of the ray florets elongated, erect, obtuse scarcely hispid Achenia obovate-oblong, cylindrical, striated, or angularly winged, glabrous or downy at top Pappus in one series Bristles scabrous
3184 1746*b* *Olearia* Heads many flowered Ray florets in one series ligulate Receptacle alveolate, flattish, seated on the top of a hollow obcon cal p duncle Scales of involucrum at first adpressed, but at length spreading.



and Miscellaneous Particulars.

The excellent *Citrus decúmana* is nearly allied to *Citrus nóbilis*, the mandarin orange, with which it is confounded by gardens It differs from that kind of orange in the plant being spiny, in the leaves being a little toothed, in the fruit being small, 2 inches in diameter, and by no red outside or inside, and has a very agreeable pulp

3171 *Severinia buxifolia* is the small box-leaved orange It is best propagated by grafting on the common orange.

3172 *Gonophora* is a genus of pretty twining annual plants, with beautiful reddish flowers They require the treatment of *Ibasa* or other tender annuals

3173 *Microspérma bartonioides* only requires to be treated like other tender annuals, by being raised on a hot-bed, and afterwards planted out in the open border.

Stigmas of disk florets shell-shaped. Achenia cylindrically tetragonal, villous. Pappus double: outer short, paleaceous, inner setose, long, and scabrous

3182. 1746*c* *Machæranthèra.* Heads radiate. Ligulæ female or neuter, linear, 3-nerved. Involucrum of many series, imbricate Scales green with pale edges, spreading at top Receptacle naked, alveolate, or fringed Stigmas of the disk florets elongated at top, sterile Anthers longer than corolla, mutic at base, and terminated by a cultriform appendage Achenia compressed, hairy Pappus pilose, equal

3186 1748*a* *Espaletia* Heads many-flowered, monœcious Ray florets numerous, Disk florets bisexual, or male only from abortion Involucrum campanulate, imbricate, of many leaves Receptacle flattish, paleaceous Paleæ membranous Anthers exserted. Styles of ray florets bifid, slender, those of the disk florets simple Achenia obovate, subangular, naked

3187 1749*a* *Swammerdàmia* Heads many-flowered Ray florets few, tridentate Scales of involucrum imbricate linear-oblong, obtuse, yellow, rather scabrous Receptacle narrow, naked. Anthers of the disk florets tailed Styles bifid, of the ray florets exserted; branches of those of the disk florets deflexed, both capitellate Achenia nearly terete Pappus one series, hairy; the bristles rather clavate

3188. 1752*a*. *Schæ'ma* Heads many-flowered Florets all tubular, few in the circumference hermaphrodite, fertile, the rest central, male, sterile, with abortive styles Involucrum cylindrical, of many series of scarious scales outer scales shortest without any appendage, but the inner ones are furnished with a petaloid radiating appendage at top Receptacle without paleæ, rather convex, alveolate Corollas slender, 5-toothed. Styles in hermaphrodite florets bifid, swollen at base; in the male florets simple Fertile achenia obovate, beakless, silky: Sterile ones filiform nearly naked pilose at base Pappus all similar, in one series, setose Setæ serrated or subplumose

3189 1754*c* *Burrièlia* Heads many flowered Ray florets ligulate, female, obovate, Disk ones tubular, 5-cleft hermaphrodite, or sterile from abortion Involucrum spreadingly campanulate Scales oval acuminate, a little longer than the disk, in 1 or 2 series, equal. Receptacle without paleæ Lobes of disk florets bearded outside Achenia of the disk tetragonal, with 3—4-leaved pappus, and those of the ray obcompressed, bearing long 2—3-awned pappus

3190 1754*d* *Callichròa.* Heads many-flowered. Scales of involucrum about 20, in two series, the outer series

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ÆQUALIS.

3173. 1627*a* MULGE'DIUM *Dec.* MULGEDIUM (*Mulgeo*, to milk, milky juice) *Compósitæ*

20084 - macrorhizon *Royle* large-rooted ♃ △ or 2 s o B Cashmere 1842 S s p l Bot reg 1846, 17
Sónchus Nos 11109, 11110, 11111, 11112. 11116, 11117 11122, 11123 belong to this genus.

1635. HIERA'CIUM

20085 11207*a* Lapeyrousii *Bab* La Peyrouse's ♃ △ or 1½ s Y England woods D co Eng bot 2915
praecum Fries

1638 CRE'PIS

20086 11272*a* macrorhiza *Hervt.* long rooted ☾ △ or 1 jn jl Y Madeira 1829 S co Bot. mag 2988
20087 11279*a* setòsa *Hall* bristly ○ or 1½ jn jl Y England fields S co Eng bot 2915

3174 1650*a* ACHYRO'PHORUS (*A* privative *achuron*, chaff, *phoreo*, to bear, receptacle naked) *Compositæ*

20088 - schkuhrioides *L &O* Schkuhria-like ○ or 1 s Y Mexico 1840 S co Px fl g 3 117 *sec.*

1656 TRIPTI'LION

20089 11335*a* spinòsum *R & P* spiny ♃ △ pr 2½ jl s B Peru 1840 D l s p Bot reg 1840, 2
Naussaùvia spinòsa D Don

1662 SAUSSU'REA

20090 11366*a* pulchélla *Dec* neat ♃ △ pr 3 jl s P Dahuria 1835. D co Bot reg 1842, 8
Serrátula pulchélla Bot mag. 2589

3175 1668*a* RHAPO'NTICUM *Dec* (*Rha*, rhubarb, *ponticus*, of Pontus; similarity of lvs) *Compósitæ*

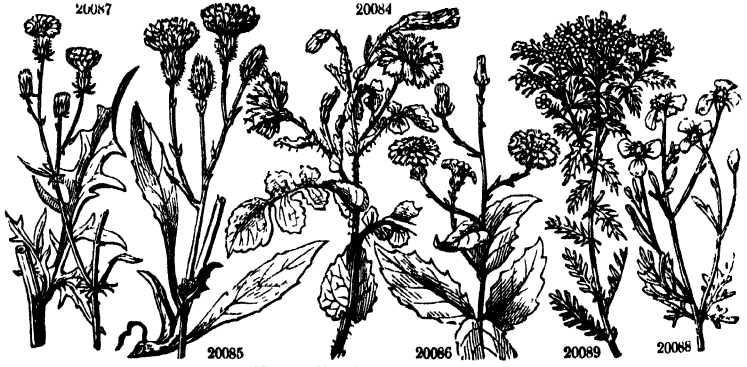
20091 - acaúle *Dec* stemless ♃ △ cu 1 jl P Barbary 1799 D co Px fl g 1 61 *sec.*
Cýnara acaúlis Lin No 11164, as well as *Onopórdum dealbatum* No 11450, *Cnicus centaurioides* 11441 and *uniflòrus* 11445, belongs to this genus

1682 LIA'TRIS.

20092 11514*a* propínqua *Hook.* allied ♃ △ or 2 s P N Amer 1838. D p l Bot mag 3889

1689 STE'VIA

20093 11567*a* trachelioides *Dec* Trachelium-like ☾ △ pr 3 au P Mexico 1838 D co Bot mag 3866
20094 - breviaristàta *H & A.* short-awned ☾ △ pr 3 jl Pk S. Amer 1836 D co Bot mag 3562



History, Use, Propagation, Culture,

3178. *Mulgèdium macrorhizon* grows well in a mixture of loam, peat, and sand, but should only be planted in very dry situations, as the large fleshy roots are often destroyed by moisture in winter It is an excellent plant for decorating rockwork among autumnal flowers.

covering the achenia of the female florets. Ray florets ligulate. Achenia fusiform, compressed, truncate those of the hermaphrodite florets downy, crowned by pappus, those of the female florets naked and glabrous Bristles of pappus numerous, in one series, serrulately scabrous persistent Receptacle flat, downy, scaly on the margins

3191 1754e *Myriáctis* Heads many-flowered Ray florets in 2—3 series, ligulate, entire Receptacle naked. Scales of involucrum in 2—3 series, linear, acute. Achenia compressed, flat, naked, glabrous, beakless, usually glandulíferous at apex

3192 1754f *Hymenóxys* Heads many-flowered Scales of involucrum in 2 series, rigid, adpressed; inner ones longest Receptacle conical, alveolate from paleæ, and furnished with small glands Styles truncate, bearded Achenia uniform, turbinate, villous Pappus paleaceous Paleæ 5—8, unequal, membranous, oval-lanceolate, acuminate erect

3193 1754g *Gynóxys* Heads many-flowered. Ray florets in one series ligulate, female; disk ones tubular, 5-toothed, hermaphrodite Involucrum in one series, with a few bracts at its base Receptacle flat, alveolate Styles of hermaphrodite florets drawn out into a hispid acute cone Achenia beakless, wingless terete Pappus uniform, pilose, in many series

3194 1754h *Brachýcome* Heads many-flowered. Receptacle subconical, subalveolate, without paleæ Involucrum campanulate of a few series of scales Scales membranous on the margins Achenia compressed laterally, beakless Pappus subsetiform, very short.

Order 3 FRUSTRANEA. Florets of the disk fertile, of the ray sterile

3195 1800b *Echináceа* Heads many-flowered. Ray florets neuter, long, ligulate, in one series, disk ones hermaphrodite, 5-cleft, with scarcely any tube Scales of involucrum in 3 series, lanceolate, ciliated Receptacle ovate, paleaceous Paleæ stiff, cartilaginous at top, exceeding the disk florets Filaments rising from the base of corollas. Branches of stigma tipped by a semilanceolate appendage Achenia tetragonal, obpyramidal, thick, crowned by irregularly jagged deciduous pappus.

ÆQUALIS.

20084 Glab, Root thick, Stems prostrate, Lvs stem-clasping pin pinnatifid sinuated or entire, Segms roundish toothd, Heads pedicellate subcorymb, Involucel twice shorter than involucrum, Scales of invol blackish when dry

20085 Stem simp corymb at top hairy, Lvs persistent obl. acute, Petioles short shaggy winged, Cauline leaves stem-clasping ovate acum with small teeth in middle but entire at ends hairy, Pedunes and invol. setose

[thickish scaly, Invol farinosely downy, Root thick

20086 Glab, Stems solid leafy, Lvs oblong toothed shining fleshy coriac, lower ones tapering to the base, Pedunes
20087 Leaves runcinate toothed or lyrate-runcinate, Cauline lvs sagittate entire or deeply toothed at base, Heads erect, Involucrum and peduncles hispid, Outer scales of involucrum lanceolate acuminate

20088 Leaves bipinnatifid with linear segments clothed with a few scattered hairs, Heads on long peduncles, Scales of involucrum keeled, Receptacle naked, Ray flowers usually three

20089 Stem herbaceous downy corymbose at top, Leaves pinnate lobed, Lobes ending each in a spiny mucrone, Root fleshy

20090 Lvs scabrous pinnatifid, segments lin.-acute a little toothed, cauline leaves decurrent, upper ones undivided, Heads globose corymbose, Outer scales of invol rather tomentose lanc acum, middle and inner ones ending in a scarious coloured jagged erect appendage

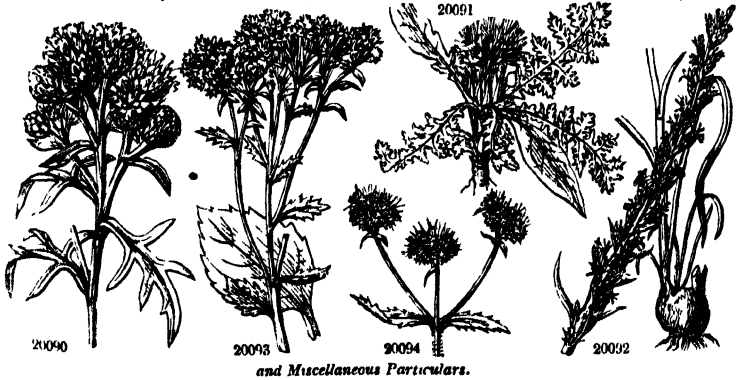
20091 Leaves pinnate, Lobes pinnatifid or coarsely toothed, Heads sessile

[bracts loosely spicate, Involucrum about 6-flowered

20092 Root tuberous, Stems simple, Lvs remote dotted acum. ciliated at base, Heads in the axils of upper leaves or

[much larger ovate acute 3-nerved coarsely serrated, Invol usually 5-flowered, Pappus crown-formed toothd

20093 Erect downy, Branches corymbose, Lvs opposite sessile cuneate at base lanc usually quite entire, lower ones
20094 Smoothish, Lvs ovate or ovate-lanc 3-nerved coarsely and bluntly serrated, Corymbs densely capitate, Involclothed with clammy down, Awns of pappus three, two of which are subulate and the third very small



and Miscellaneous Particulars.

3174 *Achyróphorus* requires the same treatment and culture as other hardy annuals.
3175 *Rhaponticum.* Cultivated and treated like ordinary perennial plants.

3176. 1702*a*. CERA'DIA *Lindl* CERADIA (*Keras*, a horn; appearance of branches) *Compósitæ Necessária*
20095 - - furcàta *Lindl* forked ● ⌴ or 1½ ja f Pa Y Ichaboe 1844 C s.l p

3177. 1706*a* BARNADE'ZIA *L* BARNADEZIA (*Michael Barnadez*, a Spanish botanist) *Compósitæ*
20096 - - rósea *Lindl.* rose-cld-flwd ● ⌴ or 1½ my Ro S. Amer 1840 C s l.p Bot reg. 1843, 29

3178 1706*b* STI'FFTIA *Mikan.* (Probably from some botanist of the name of *Stiff.*) *Compósitæ*
20097 - - chrysántha *Mikan* golden-flwd ● ▭ or 10 sp Y Brazil 1840. C s l p Bot mag. 4434
Augústa grandiflóra Lcand. *Plazia brasiliénsis* Spreng

3179 1708*a* HEBECLI'NIUM *Hook.* HEBECLINIUM (*Hebe*, down, *klinos*, a bed, receptacle) *Compósitæ*
20098 - - iánthinum *Hook.* purple ● ▭ or 2 au P Brazil 1840 C s l p Bot. mag 4574
Conoclinium iánthinum Morren.

3180. 1713*a* CHABRÆ'A *Dec* CHABRÆA (*Dr. Chabrey*, of Geneva, a botanist of the 17th century) *Compósitæ*
20099 - - runcinàta *Hook* runcinate-lvd ○ or 1½ jl au W Chili 1840 S s.l p Bot mag 4116
Leuchèria runcinàta Gill. & D. Don *Perdicium róseum* Popp

SUPERFLUA.

1730. HELICHRY'SUM
20100 7844*a* níveum *Grah.* white-flowered ☿ △ or 4 jn W Y Swan R. 1838. S co Bot mag 3857
spectábile G Don
20101 - - macránthum *Benth.* large-flowered ☿ △ or 2 au.s W R Swan R 1838 S s.p.l Bot reg 1838 58
20102 - - incánum *Hook* hoary ☿ △ or 2 jl o Crea R V.D L. 1826. S co Bot. mag 2881

3181 1730*a* HELI'PTERUM *Dec* HELIPTERUM (*Helios*, the sun, *pteron*, a wing) *Compósitæ*
20103 - - húmilis *G Don* humble ● ⌴ or 2 ap my Ro C B S ... S s l p Px m 15 2691
Aphelézis húmilis Paxt and most of the Cape species of *Elichrysum* in p. 700—702 belong to this genus

1736 ERI'GERON
20104 17846*a* squarrósum *Lindl* squarrose ☿ △ or 2 jl o B N Amer 1839. D co

1738 SENE'CIO
20105 11916*a* calamifólia *Hook* reed-leaved ● ⌴ or 1 au Y C G H. 1730. C s.p Bot mag 4011

1739 A'STER
20106 12065*a* cabúlicus *Lindl* Cabul ● ⌴ or 3 au.o P Cabul 1842 C s l p
20107 - - sikkiménsis *Hook* Sikkim ☿ △ or 2 o. P Sikkim 1849. C s l.p Bot mag 4767

1744 I'NULA
20108 12147*a* Royleana *Dec.* Royle's ☿ △ or 4 jl au Y Cashmere 1840. D co Royle Ill 60 1
Corvisártia índica Royle.

3182 1744*a* MONOLO'PIA *Dec* MONOLOPIA. (*Monolopos*, a simple covering, involucrum) *Compósita*
20109 - - májor *Dec* larger ○ or 3 su Y Californ 1826. S co Bot mag 3849

1746 GRINDE'LIA.
20110 12179*a* grandiflóra *Hook.* great-flowered ☿ △ or 4 su O Texas 1840 C co Bot. mag 4628
20111 - - speciósa *Lindl* showy ● ⌴ or 2 my Y Patagon 1851 C co Px fig 3 119 90

3183 1746*a* EURY'BIA *Dec* EURYBIA (*Eurybios*, spreading wide, growth) *Compósitæ*
20112 - - alpina *Lindl* alpine ● ⌴ or 4 su W N Zeal 1847 C s.l p Px fig 2 85 177
20113 - - chrysótricha *Ten* golden-haired ● ⌴ or 4 su W N Holl. 1848 C s l.p
Aster, Nos 11957 11960, 11961 and 11967 belong to this species.

3184 1746*b* OLEA'RIA *Mœnch* OLEARIA (Probably from *olea*, the olive, similarity in habit) *Compósita*
20114 - - Gunniána *J Hook* Gunn's ● ⌴ or 4 jn jl W Y V D L. 1820. C s l.p Bot mag 4608
Eurýbia Gunniána Dec
20115 - - pannósa *Hook.* cloth-leaved ● ⌴ or 4 jn jl W Y S. Austr 1850 C s l p Px fig 3 41 2



History, Use, Propagation, Culture,

3176. *Cerádia furcàta* is very nearly allied to *Kleinia*, and the fleshy-stemmed kinds of *Cacàlia* It is said it yields a kind of gum-resin similar to Olibanum It requires the treatment of other greenhouse succulents

3177. *Barnadézia rósea* is a spiny shrub with simple leaves and heads of rose-coloured flowers similar to those of *Mutisia*. It requires a warm greenhouse, giving plenty of water in summer but sparingly in winter. Cuttings will strike root in the usual manner

3178. *Stiffia chrysántha* This is a beautiful shrub when in blossom, with its simple leaves and heads of orange-coloured flowers. Cultivated and treated like other stove plants, cuttings will strike root in the ordinary way

3179. *Hebeclínium iánthinum* is similar to *Agératum*, and answers well if treated like the species of that genus

3180. *Chabræ'a runcinata* is a very pretty annual and may be grown in the open border. It is generally grown in pots like other tender annuals.

20095 Branches fleshy horned forked leafy at top, Lvs fascicled spatulate obtuse veinless glabrous, Peduncles solitary naked a little longer than leaves, Leaflets of invol. ovate with membranous edges

20096 Heads solitary ovate cylindrical downy sessile, Florets bilabiate, one lip oblong emarginate villous, the other filiform, Filaments free, Hairs on receptacle twisted, Pappus stiff plumose

20097 Leaves broad-lanceolate, Flowers in heads indefinite

20098 Clothed with rusty down, Lvs large on long stalks rhomb-ovate cuneated at base quite entire scabrous above and hoary and downy beneath, Corymbs terminal compound many-headed, Achenia angular glabrous, Scales of invol. without appendages

20099 Beset with pilose glands, Cauline leaves pinnatifid white beneath, Lobes remotish oblong acute entire or somewhat pinnatifid, Heads on long peduncles solitary, Invol. hemispheric with lanc glandular scales, Achenia silky villous

SUPERFLUA.

[spatulate green downy narrowed into petiole at base and a little stem-clasping

20100 Stems erect scabrous, Heads large solitary terminal, Scales of invol white connivng ovate mucronate, Lvs obl.

[base green on both surf., Heads white rose-col outside, Inner sc of invol radiat., Recep naked, Pap scaly

20101 Ascend or erect scab, Branl-headed, Lvs lanc-obt., lower spatul obt entire narr into petiols stem-clasp at

20102 Clothed with hoary tomentum, Leaves long linear acute attenuated at base, Cauline ones remote and smaller, Stem simple one-headed

20103 Branches numerous slender covered with white tomentum, Lvs subulate erect imbricate, Peduncles scaly 1-flowered

[sessile ovate-lanc acum, Ligula linear, Invol glandular squarrose

20104 Stems erect corymbose downy, Leaves glabrous shining, Radical ones spatulate on long petioles, Cauline ones

[late, Pedunc axillary corymbosely panicled Pedicels bracteate, Ray florets about sixty

20105 Covered with cobwebbed down, Lvs crowded at tops of branches cylindrical flat at top and often dilatedly spatu-

[invol ovate-lin apiculate, Ray 20-flowered

20106 Beset with rusty down, Lvs lanc on short petioles denticulate downy, Flowers corymbosely panicled, Scales of

20107 Erect glab branchd, Lvs lanc acum spinosely dentic, radical larger on longer petis, cauline sessile, Corymbs large of many heads leafy, Pedunc and peds downy, Lflts of invol lin acum subsquar, Achenia scabrous

20108 Villously tomentose, Stems simple 1 headed, Leaves ovate denticulate Lower cauline leaves with a winged petiole which is auricled at base and stem-clasping, Achenia 4-cornered

20109 Lvs ligulate obscurely toothed obtuse half stem-clasping broader, Ligulæ thrice as long as involucrum

[Invol glutin., Scales of invol ending in long subul points squar, Ray flrts twice as long as disk ones

20110 Stem tall simp corymb at top, Lvs stem clasp at base coarsely tthd taper to point from base, Branchs 1-headed,

20111 Suffruticose clammy glab, Lvs oblong narrower at base toothd, Heads solitary pedunculate, Invol subsquarrose very clammy, Receptacle flat

[beneath, Heads densely panicled, Invol villous

20112 Branchs angular rather toment, Lvs alternate petiolate coriaceous obl acute toothd glab above and tomentose

20113 Lvs alternate on short petioles ovate-obl denticately repand bluntish green and scabrous above clothed with yellow silky tomentum beneath as are the branchlets, Pedunes axillary 1-headed twice as long as leaves

20114 Clothed with white tomentum, Lvs elliptic-lanc on short petioles sinuately toothd glabrous above, Peduncles on short branchlets nearly terminal solitary or subcorymbose bracteolate, Achenia tubercularly dotted

20115 Whole plant covered with felt except on the upper sides of the leaves which is of a shining green, Heads large solitary axillary on long peduncles Leaves oblong entire



and Miscellaneous Articulates

3181 *Helipterum* requires the same treatment as the Cape species of *Helichrysum*

3182 *Monoldpia major* is a rampant plant with dark green foliage growing in our gardens under the name of *Helenium Douglasii* It flowers in great perfection during the summer months, which renders it worthy of a place in the garden The plant is of easy culture

20119 *Grindelia grandiflora* comes nearest to *G. inuloides*, and will grow well in the open border in summer, where it makes a showy appearance

3183 *Eurybia* is a genus of Australian shrubs separated from *Aster*. They only require the treatment and culture of ordinary greenhouse shrubs

3184 *Olearia* is similar to *Eurybia*, and the species require the same culture and treatment.

3185. 1746c MACHÆRANTHE'RA (*Machairos*, a sickle, *anthera*, an anther, form) *Compósitæ*
20116 - tanacetifòlia *Nees* Tansy-leaved ☽ ○ or 1 jn au P N Mex 1840. S co Bot. mag. 4624
A'ster tanacetifolia H. B & Kth *A chrysanthemoides* Willd & Spreng

3186 1748a ESPALE'TIA *Mut.* ESPALETIA. (*Don José Espaleta*, Viceroy of New Grenada) *Compósitæ*
20117 - argéntea *H. & K* silvery ♀ △ or 2 jn au Y N. Gren 1845. C s.p Bot mag 4480
20118 - grandiflora *H. & B.* great-flowered ♀ △ or 2 jn.jl. Y N Gren 1845 S s l.p H. et B. p æ 2 7(

3187 1749a SWAMMERDA'MIA *Dec* (*John Swammerdam*, a distinguished entomologist.) *Compósitæ*
20119 - antennària *Dec* antennæ-like ♚ ⌐ cu 2 jn.mr Pa Y V D L 1840 C s l.p J H.S 4 77 1(
20120 - glomerâta *Raoul* glomerate ♚ ⌐ cu 2 su W N. Zeal 1850 C s l.p

3188 1752a SCHŒ'NIA *Stietz* SCHŒNIA. (*Dr. Schœn*, an excellent botanist) *Compósitæ*
20121 - oppositifòlia *Stietz.* opposite-leaved ○ or 1 su P Y Swan R. 1845. S s.p.l Bot mag 4560

3189. 1754c. BURRIE'LIA *Dec* (*John Mark Burriel*, who published a journey into California, in 1798) *Comp*
20122 - grácilis *Dec.* slender ○ or ½ su Y Californ 1834. S co Bot mag 17(8

3190 1754d CALLICHRO'A *Fisch & Mey* CALLICHROA (*Kallos*, beautiful, *chroa*, colour; flowers) *Compósita*
20123 - platyglóssa *F. & M.* broad-tongued ○ or 1 aut Y Californ 1836 S co Bot. mag. 3719

3191 1754e MYRIA'CTIS *Less* MYRIACTIS (*Myrios* a myriad, *aktin*, a ray) *Compósitæ.*
20124 - Gmelini *Dec* Gmelin's ☽ △ or 1 jn jl Y Persia 1846. S co
Botryadènia Gmelini Fisch. & Meyer.

3192 1754f HYMENO'XYS *Dec* (*Hymen*, a membrane, *oxys*, sharp, scales of pappus) *Compósitæ*
20125 - californica *Dec* Californian ○ or 1 s Y Californ 1838. S co Bot mag 3828

3193 1754g GYNO'XYS *Dec* GYNOXYS. (*Gyne*, a female, *oxys*, sharp, achenia.) *Compósitæ*
20126 - fragrans *Hook* fragrant ♃ △ or 3 su Y Guatem 1840. C co Bot mag 4511

1756 BE'LLIS
20127 12204 integrifòlia *Mx* entire leaved ○ pr ½ jn jl W.Y Texas 1830. S co Bot. mag 3150
Eclipta integrifolia Spreng

1757 BE'LLIUM
20128 12205a crassifòlium *Moris* thick leaved ♀ △ pr ½ jn jl W Y Sardinia 1831. D s.l.p Swt fl g. 2 s 278

3194 1757a BRACHY'COME *Dec* (*Brachys* short, *kome*, hair, shortness of pappus) *Compósitæ*
20129 - iberidifòlium *Benth.* Candytuft-lvd ○ pr ½ su R P L Swan R. 1840 S co Bot reg 1841 6
β albiflòrum *white-flowered* ○ pr ½ su W Swan R. 1840. S co [Bot m 187(

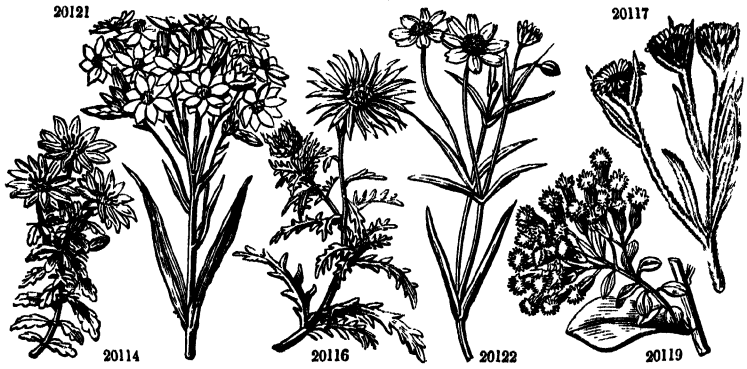
1758. DA'HLIA
20130 12208a Mérkii *Lehm.* Merk's ⁂ △ or 3 jl Li O Mexico 1840. R co Bot reg 1840 90
glabràta Lindl [Bot m 4878
20131 - scapígera *Lk. & Ot.* scape-bearing ⁂ △ or 2 jn W Mexico 1837 R co Flor cab 118
20132 - Barkeriæ *K & W.* Barker's ⁂ △ or 2 jl.n Bh Mexico 1837. R co Flor cab 127
excélsa Hort.
β anemonæflòra *Anemone-flwd* ❀ ⌐ or 30 n Li Mexico 1830 C co Botanist 88

1781 ACHILLE'A
20133 12361a vermiculâta *Trin.* worm-like ✿ or 1½ jl.au Y Persia 1835 D co
amœ'na Meyer.
20134 12371a albicaúlis *Dec.* white-stemmed ✿ or 1½ jl au Pa.Y Caucasus 1836 D co
20135 12389a sylvática *Tenore* wood ☽ △ or 1½ jl s W Calabria 1830. D co

FRUSTRANEA.

3195. 1800b ECHINA'CEA *Mœnch.* ECHINACEA (*Echinos*, a hedgehog; receptacle) *Compósitæ*
20136 - heterophýlla *D Don* various-lvd ☽ △ or 1½ s o P Li Mexico 1829 D co Sw fl g 2 s 1(
Coreópsis heterophýlla Cav *Ximenèsia Cavanillèsii* Spreng.
20137 - intermèdia *Penny* Intermediate ☽ △ or 4 au P hybrid 1826 D co Px m 15 , 1(
20138 - Dicksoni *Lindl* Dickson's ☽ △ or 1 au s Li Mexico 1830 D co Bot reg 1838 7
Rudbéckia No 12469 and 12470 belong to this genus

20121 20117



20114 20116 20122 20119

History, Use, Propagation, Culture,

3185. *Machæranthèra tanacetifòlia* is a pretty half-shrubby plant with ascending stems and purple flowers resembling those of some species of *A'ster* It will flourish in the open air during summer. It may either be increased by cuttings or by seed, the latter method is the best, as the plant is said to be a biennial.

3186. *Espalèsia argéntea* is a pretty plant when in blossom. A light sandy peat soil suits it best. It should be kept in an airy part of a greenhouse

3187. *Swammerdàmia* requires the treatment and culture of any ordinary greenhouse plant

3188. *Schœ'nia oppositifòlia* comes very near to *Helichrysum*, is equal in beauty to *Rhodánthe Manglesii*, and should be treated in the same manner. The ray and scales of involucrum are rose colour, and the centre yellow

3189. *Burrièlia grácilis* is nearly allied to *Lasthenia*, but is readily distinguished from it by the different structure of the involucrum. The present plant is often cultivated in our gardens under the name of *Lasthènia californica*

20116 Downy, Leaves alternate pinnatifid, Heads solitary, Ligulæ purple

[corymbose bracteate, Lvs long-lanc. with oblique nerves, Rays of heads hardly exceeding the involucrum
20117 Clothed with silky tomentum, Stem short thick leafy at length florliferous elongated nearly naked paniculately
20118 Clothed with rufescent wool, Radical leaves lanceolate lined beneath, Corymbs loose simple, Ligulæ about 60

[petioles, Heads in panicles, Bristles of pappus like the antennæ of insects
20119 Branches angular, Leaves alternate obovate cuneate obtuse entire 1-nerved coriaceous whitish beneath on short
20120 Lvs small roundish dull green above white beneath, Branches straggling bearing small clusters of white flowers

[radiating red, Bristles of Pappus stiffish serrated
20121 Stem hairy canescent, Leaves opposite sessile lanceolate acute, Corymbs terminal, Scales of involucrum long

20122 Ligulæ and involucra 8—10–12, Leaves opposite lanceolate, Heads terminating the naked branches

20124 Very like *Burrièlia* in habit, Leaves alternate sessile, Heads solitary pedunculate, Ray florets large cuneate

20124 Stem erect hairy from articulated pili and bristles, Leaves petiolate membranous coarsely-toothed, Scales of invol 2-3 series linear-oblong ciliately fringed, Achænia glandular

20125 Plant erect slender, Lvs pinnatifid glabrous, Peduncles filiform 1-headed, Scales of pappus 5 unequal serrated

20126 Scandent glabrous, Leaves alternate on longish petioles ovate or ovate-lanc acute rather fleshy entire, Racemes corymbose terminal, Florets of the ray few, Bracts 4—6 spreading subulate

20127 Caulescent divaricately branched, Leaves entire ciliated, lower ones obovate, upper ones lanceolate, Scales of involucrum smooth so taper-pointed as to appear awned

[exceeding the leaves downy
20128 Stems many ascending, Leaves subradical thick obovate entire attenuate at base rather downy, Scales much

[of invol obl acutish membranous at apex, Achænia subterete clavate plicate at apex Pappus almost wanting
20129 Glabrous, Stems erect branched, Lvs pinnate, Segms lin -subulate distant quite entire, Peduncs 1-headed, Scales
β Flowers white very like those of the common daisy

[ovate acute coarsely serrated, Ligulæ female, Outer leaves of involucrum linear spreading
20130 Stem quite smooth fistular, Leaves bipinnate glabrous, upper ones linear undivided, Rachis winged, Leaflets
[Rachis of leaves downy beneath, Outer involucrum 5-leaved erect
20131 Stem almost wanting scaly glabrous 1-headed, Leaves pinnate glabrous, Pinnæ serrated, upper ones decurrent
20132 Stem solid scabrous hairy much branched, Leaflets ovate deeply toothed unequal at base, Heads crowded, Peduncles slender glabrous at top
β Flowers resembling those of an *Anthémis*

[entire Paleæ bearded on back
[cronately denticulate, Corymbs simple 5 headed, Invol nearly glob with ovate scales, Ligulæ 5 - 6 nearly
20133 Hoary tomentose, Stem shrubby erect branched Lvs pinnate, Segms short imbricate approx 3-lobed, Lobes mu-
[per undiv, Cory comp fastig 30—50 hdd, Sc of invol obov obt with membr edg Lig 5—6 obov glab
20134 Stem shrub erect nrly simp white tom, Lvs nearly glab pectinately pin, Segms distant nrly sessile tripar, up-
20135 Downy, Stems erect subangular or striated simple Lvs pinnatifid rarely bipinnatifid, Rachis entire, Lbs lanc. obl deeply ser. at apex, Corymbs compound fastig Invol ov obl Ligulæ 5 obov obt hardly thd, Paleæ ac

FRUSTRANEA.

20136 Stem hispid, Radical leaves fiddle-shaped running along the petiole, Cauline leaves lanc. subserrated

20137 This is a very pretty garden hybrid

20138 Plant rather scabrous, Radical leaves fiddle-shaped subtrilobed subdentate, Cauline leaves ovate-lanceolate, Paleæ shorter than florets



and Miscellaneous Particulars.

3190 *Callichròa platyglóssa* is nearly allied to *Burrielia* and *Lasthènia*, and requires the same treatment
3191 *Myriactis Wrightii* will require protection in severe weather It should be treated like any ordinary herbaceous perennial. Vegetable mould suits it best
3192 *Hymenóxys californica* is nearly allied to *Burrielia* and *Callichròa*, and is treated in a similar manner
3193 *Grindèlia fragrans* A pretty climbing plant with a tuberous root and very fragrant yellowish flowers. It is of easy culture and may be increased by cuttings
3194 *Brachýcome iberidifolium* is a most beautiful plant, the flowers exhibiting a variety of colours, as white, lilac, and dark purple It flowers freely in the open border, and it has a very fine effect when grown in pots
3195 *Echinácea*. The species prefer a peat soil, otherwise they require the same treatment as ordinary perennial plants

1800. RUDBE'CKIA

20139 12465*a* chrysomēla *D Don* yel and bk-flwd ☿ △ or 2 jl.au Y N. Amer. 1760. D co
Newmàni Hort *Centrocárpha chrysomēla* D Don. *acutifólia* Swt.
20140 - -nudicaúlis *Nutt* naked-stmmd ☿ △ or 3½ s Y P N Amer 1830. D co Swt. fl. g s. 2. 67
Centrocárpha grandiflora Swt.

1803 COSMEA

20141 12476*a* tenuifólia *Lindl.* fine-leaved ○ pr 2 s n P Mexico 1836. S co Bot reg 2007

20142 - -diversifólia *Ott.* diverse leaved ○ pr 3 jn o Li Mexico 1835 S co Flor cab 2 47
20143 - -scabiosoides *H B* Scabious-like ☆ △ pr 3 s.o S Mexico 1834. R l s p Bot. reg 1838 15

1819. CENTAUREA.

20144 12549*a* púlchra *Lindl* beautiful ○ or 1 jn jl B P Cashm. 1838. S co Bot. reg 1840, 28

2744. 1819*a*. PLECTOCEPHALUS

20145 17892*a* chilénsis *G Don* Chili ⊠ ⎯ or 1½ au s B Chili 1840 S co
Centaurea chilénsis Miers Hook & Arn

NECESSARIA.

2746 1829*a*. CENTROCLI'NIUM

20146 17894*a* reflexum *Hook* reflexed-scaled ⊡ or 2 au Ro Peru 1830. S lt m Bot. mag 3114

Page 748. CLASS XX. — GYNANDRIA.

Order 1. MONANDRIA Stamens 1.

3196 2747*a* *Physosiphon* Sepals combined into a ventricose tube, hispid at apex Petals short fleshy, in the bottom of the tube Lip short, similar to petals Column continuous with the ovarium short, mutic Pollen masses 2, spherical. Habit of *Pleurothallis*.

3197. 1894*a* *Centranthèra*. Lateral sepals connate upper one galeate. Petals smaller, cuneiform Lip 3-lobed articulated with the column Lateral lobes small, acute middle lobe ovate-obtuse Column winged, rather membranous, jagged at top Anthers apiculated, 1-celled Pollen masses 2, cohering

3198 1894*b* *Restrephia* Sepals spreading lateral ones under the lip, all connate Petals filiform, with a triangular base. Lip free similar, biauriculate at base, or 2-horned, spreading Column short, semiterete, drawn out into a wing at apex Anther 1-celled Pollen masses 2, waxy, oblong

3199. 1897*a* *Pleurone* Lip undivided, broad, concave, having the disk crested, the margin fringed, and a free simple base Column elongated, free, attenuated at base. Sepals and petals uniform. Pollen masses waxy, with a complete dissepiment

3200 1897*b* *Earina* Sepals erect, equal, acute, membranous, keeled Petals fleshy, obtuse Lip behind continuous with the column, fleshy, cuculiate, 3-lobed, with a naked disk. Column short, terete Anther 2-celled Pollen masses 4, cohering by pairs collateral

3201. 1897*c* *Trichosma* Sepals spreading, equal lateral ones drawn out at base, and adnate to the foot of the column. Petals conform, erect Lip 3-lobed crested, cuculliate, articulated with the foot of the column Column fleshy, margimate Anther fleshy, arched 2-celled Valves vertical, with aphaceiate margins. Pollen masses 8, cohering by fours, two in each bundle smaller

3202 1908*a* *Epiphora*. Sepals free, acute Petals shorter, obovate Lip behind articulate with the base of the column, which is much drawn out at base Lip sigmoid, unguiculate, keeled, 3-lobed. Column and stigma vertical with 3 tubercles. Anther 1-celled Pollen masses 4, fixed to linear caudicula

3203 1912*a* *Mycaranthes*. Sepals conniving or spreading, equal or unequal, woolly outside lateral ones unequal at base, adnate to the foot of the column Petals smaller Lip articulate with the foot of the column, 3-lobed cuculiate, with a crested or appendiculate disk Column short, drawn out a long way at base, with a winged introflexed margin. Anther 2-celled Pollen masses 8, ovate.

3204 1900*a*. *Ponera* Sepals erect, fleshy lateral ones larger, drawn out at base, combined with the elongated foot of the column, dorsal one flat. Petals oval, free, narrowed at base. Lip cuneate, 2-lobed, ascending, arched, articulated with the base of the column, naked Column short, terete Anther membranous, depressed, 4-celled Stigma roundish, excavated, 2-lobed Pollen masses 4, adhering by pairs

3205 1907*a* *Eriopsis*. Sepals and petals almost uniform, oblong-obtuse. Lip concave, 3-lobed, lamellate in the disk, drawn out at the base, articulated with the column. Column semiterete, clavate, wingless. Anther oblong, 1-celled Pollen masses 4, unequal, fixed by pairs to two elastic threads. Gland rather membranous, square

3206 1907*b*. *Hexadesmia* Sepals connivent upper one oblong-lanceolate, lateral ones triangular, united with the column into a kind of spur. Petals oblong, about equal to the sepals Lip articulated with base of the column nearly entire, plicate. Column semiterete, shorter than petals, clavate at top. Anther 6-celled. Pollen masses 6 equal, four behind and two in front

3207 1907*c*. *Arpophyllum* Perigone spreading. Sepals connate at base. Petals much narrower Lip articulated with the drawn-out base of the column, undivided, concave, shortly spurred. Column erect Pollen masses 8, pear-shaped, glutinous

3208 1907*d*. *Otochilus*. Sepals and petals similar Lip 3-lobed lateral lobes short, clasping the column, middle lobe elongated, spreading, crestless. Column elongated, semiterete, clavate. Anther 2 celled, 2-valved. Pollen masses incumbent, granular

3209 1907*e*. *Barkèria* Sepals and petals equal, free, membranous, spreading Lip flat, quite entire, naked, pressed to the column. Column petaloid Anthers 4-celled, fleshy Pollen masses 4, connate by pairs, on as many reflexed stipulate caudiculæ Flowers large, conspicuous, drooping

3210 1907*f* *Arundina* Sepals linear-lanceolate, equal, spreading, connate a little at base Petals conform but broader. Lip convolute around the column, 3-lobed or entire, curled or lamellate in the middle Column straight, parallel with the lip, semiterete, clavate. Anther 4-celled, truncate, roundish. Pollen masses 8, equal, cohering. Stigma arched, prominent, a little lobed.

3211 2765*a* *Barlea* Flowers subglobose, nearly regular, with a short rounded snout. Lip continuous, undivided, with fleshy elevated lines in centre. Column semiterete, clavate. Pollen masses 4, inserted by pairs on a short linear caudicula Gland triangular. Terrestrial.

3212. 1911*a*. *Spathoglottis* Sepals spreading, free, equal Petals a little broader, spreading, or connivent Lip articulated with the base of the column usually saccate, tripartite, middle segment unguiculate, tuberculate at base, or crested, generally with one tooth on each side Column winged, petaloid Anther 2-celled. Pollen masses 8

3213. 1911*b*. *Schlimma*. Sepals fleshy, unequal dorsal one linear, straight, free, lateral ones large, combined into a sac at base. Petals equal to the dorsal sepal. Lip minute, with a fleshy claw, articulate with the column,

20139 Stem branched angular, Leaves hispid, Heads of Flowers with a dark centre

20140 Stem branched angular hispid, Leaves petiolate acute tapering at base reticulately veined, lower ones ovate 7-nerved crenately toothed, upper ones lanceolate scabrous obsoletely crenated, Stipules hispid on the back, Palea of receptacle pungent, Pappus very short nearly entire

20141 Glab , Lvs bipin., Lobes linear remote acute ent or lobed, Outer Scales of Involuc ov acum., Achenia rough mutic or 1—2-awned [entire, Scales of Involuc lanc ac., Achenia glab, biaristate

20142 Stem glab , Lvs petiol bipin , Lobes subapic with scab margins, Ray Florets lilac ov -lanc toothed at top or

20143 Stem downy, Leaves pinnate-parted hispid beneath with 2 pairs of lanceolate-oblong subserrated leaflets, the terminal one the largest, Outer Scales of Involucrum lanceolate acute shorter, Achenia bi-triaristate

20144 White from tomentum, Lvs broad linear nearly sessile and stem-clasping entire or a little denticulated bearded at apex, Pappus double, Outer palea linear

20145 Stem branched furrowed, Leaves sessile glabrous pinnate, Lobes linear acute entire or a little toothed, Heads globose, Outer Scales of Involucrum drawn out into an ovate pectinately ciliated scabrous appendage, middle bristle longer stiffer and shining

NECESSARIA.

20146 Annual, Lvs ov -lanc. coarsely toothed, Peduncs furnished with large setac brcts, Scales of Involucre reflex at top

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tubercular Limb simple, membranous Column semiterete, auricled on both sides at apex Pollen masses 2, waxy; with an elongated cuneated caudicula, and a small lunate gland.

214 1911c *Arsia* Sepals and petals linear-lanceolate, conniving, uniform Lip connate with the base of the column which is often drawn out into a spur or sac, 3 lobed, flat, bilamellate in the middle. Column erect, elongated, winged Anther 6—8-celled Pollen masses 8

215 1772a *Dignathe* Flower solitary, resupinate, fleshy Sepals and petals spreading, equal Lip flat, reflexed, rather saccate at base, with two fleshy lamellæ adnate to the column Column short, acute, rather connate, semiconnate Pollen masses 2, on a linear caudicula. Gland small, oval

216 1772b *Pilumna* Ovarium 3-ribbed Sepals and petals equal, spreading, inserted obliquely Lip adnate to the column at base, nearly entire, unguiculate, convolute, mappendiculate Column clavate, terete, surrounded by a membranous toothed hood at apex Stigma vertical Pollen masses 2, cleft behind, adnate to a short caudicula and small gland

217 1902 *Ornithárium* Flowers resupinate, closed, fleshy Lateral sepals connate at base, parallel with the column, the dorsal one separate Petals conform Lip free, unguiculate, fleshy, sagittate Column semiterete, short Stigma vertical Pollen masses 2, on an obovate fleshy caudicula, with a triangular gland, and reflexed beak

218 1902a *Prominæa* Sepals spreading Lip 3-lobed middle one crested, or with many tubercles Column short semiterete Gland ovate Pollen masses 4, sessile by pairs. The rest as in *Maxillaria*

219 1902b *Scuticaria* Flowers ringent, drawn into a roundish snout in front Lip continuous, membranous, keeled, tuberculate in middle Column semiterete clavate Pollen masses 4, inserted by pairs in a short linear caudicula Gland triangular The rest as in *Maxillaria*

220 1902c *Paphinia* Flowers nearly regular, expanded, petaloid, rather drawn out into a snout Lip small, unguiculate tripartite, beset with hiform glands Column clavate, elongated, semiterete auricled at top Pollen masses 4 fixed by pairs to an elongated caudicula, which is setaceous at top. Gland minute, rather triangular Rostellum subulate The rest as in *Maxillaria*

221 1902d *Lycáste* Flowers ringent, drawn out into a short snout at base Petals usually dissimilar Lip crushed with an entire or emarginate, fleshy, transverse appendage in the middle Column elongated, semiterete, fully pilose Pollen masses 4, adnate by pairs to a narrow elongated caudicula. Gland small, roundish Rostellum subulate The rest as in *Maxillaria*

222 1902e *Colax.* Flowers subglobose, scarcely ringent drawn out in a short snout Sepals and petals nearly equal Lip unguiculate, 3-lobed, mappendiculate flattish Column rather elongated, semiterete, with a marginate androdium Anther fleshy crested Pollen masses 4, collected into globose pairs, adnate to an obovate membranous caudicula Gland none Rostellum cleft

223 1902f *Acineta.* Perianth fleshy, spreading Sepals connate at base upper one ascending Petals connate a little smaller Lip continuous with the column, very fleshy. Hypochilium oblong, concave Epichilium strongly articulated, tripartite, ascending, furnished with a fleshy appendage at base Column erect, drawn out into a broad margin on both sides. Anther crestless, 2-celled. Pollen masses 2, sulcate behind Caudicula linear. Gland lunate

224 1902g *Aganisia* Perianth spreading, equal Lateral sepals scarcely drawn out at base Lip free, movable, unguiculate Hypochilium small, concave, separated from the epichilium by a transverse glandular crest Column short semiterete, marginate, furnished with an active spreading arm on each side Anther crestless. Rostellum bifid Pollen masses 4, combined by pairs to a linear caudicula Gland small, oval

225 1902h *Houlletia* Perianth spreading Sepals nearly free Petals a little smaller, unguiculate Lip connate with the base of the column Column erect, arched, clavate, semiterete, a little shorter than lip Anther lunular, depressed Pollen masses 2, cleft behind, fixed to a linear-lanceolate elongated caudicula. Gland small

226 2776a *Stenorhynchus* Flowers ringent, closed, long-horned Sepals much drawn out at base, and connate Petals conform Lip on a long claw, 3-lobed, with a callous disk. Pollen masses 4, connate by unequal pairs, semi-pilose Caudiculæ 2 Glands 2, oval

227 2776a *Helcia* Sepals and petals coriaceous, conform, spreading Lip spreading, membranous, flat, connected in middle, furnished with a fleshy, elevated, truncate appendage, which is foveate in middle, on both sides Column free, terete Clinandrium erect, fringed all round Anther fleshy, 2 celled, drawn out into an incurved pilea or cap Pollen masses 2, excavated behind Caudicula cuneated. Gland small, oval

228 2776b *Trichoglottis* Perianth spreading Sepals equal lateral ones under the lip Petals a little smaller Lip connate with the edges of the column, saccate, horned on the margins on both sides, with a fleshy undivided Column erect, 1-horned at base. Anther 2-celled Pollen masses 2, globose, 2-lobed, with a linear caudicula and small hooked or peltate gland.

229 2776c *Waitesia* Sepals and petals equal, spreading lateral ones rather oblique at base. Lip saddle-shaped, parallel with the column villous in middle, bidentate at base Column short, truncate, semi-cylindrical Anther 2-celled Pollen masses 2, globose, excavated on back, with two linear diverging caudiculæ connected by 2 small glands

230 2782c *Dendrochilum.* Perianth spreading Sepals and petals similar. Lip 3-lobed, or auricled at base, bicarinate Appendages of column subulate

231 2784d *Cleisomeria.* Sepals keeled. Lip didymous. Lateral lobes erect bifid: middle one concave bisected at top Caudicula cuneate, bifid, elongated.

3232. 2785*a*. *Scelochilus* Perianth conniving Sepals narrow, navicular, keeled, cohering at base · lateral one under the lip and connate in one, and drawn out into a blunt spur at base Petals broader, free. Lip entire continuous above the base of the column, callous, and downy on disk, bicostate, bidentate in front, emarginate at apex Column semiterete, naked, shorter than lip. Anther 2-celled. Pollen masses 2, spherical, solid with linear caudicula on a small obovate gland.

3233 2786*a* *Clowesia* Flowers subglobose, spreading Petals nearly equal · lateral ones a little oblique, drawn out in a short snout, connate at base Petals conform, but broader and fringed Lip concave, fleshy, continuous with the column, not articulated, obsoletely 3-lobed, with a glandular jagged fringe on the margin, and a smooth disk. Column semiterete, clavate, obtuse, horned. Cinandrium tall, fleshy, serrated. Stigma transverse. Pollen masses 2, linear, furrowed on back Caudicula membranous.

3234 2790*a*. *Lacæna* Perianth fleshy, spreading, nearly equal, rather connate at base. Petals conform but smaller Lip articulated with column in middle Hypochilum unguiculate, cuneate, 2-lobed, pulvinate at top Epichilum entire. Column erect, semiterete. Pollen masses 2, cleft behind. Caudicula setaceous Gland minute.

3235 2790*b* *Odontoglóssum* Lateral sepals spreading, free Lip flat, unguiculate, ascending, having the limb reflexed, toothed, narrowed at top, concave at base, and furnished with a bilamellate rarely fringed crest, which is generally bidentate in front Column elongated, auricled, or wingless at apex.

3236 2793*a* *Ansellia* Sepals oblong, spreading, fleshy, free Petals conform, straight, broader. Lip sessile, spreading, 3-lobed, bilamellate Middle lobe smaller and warted. Column elongated, marginate, auricled on both sides Anther 2-celled Pollen masses 4, sessile, contiguous at base, the 2 dorsal ones much the smallest Gland narrow, acuminated at both ends

3237 2795*b* *Bromheádia* Perianth cylindrically conniving Segments all linear-oblong, curved, channeled, bluntish Lip cucullate, 3-lobed, nearly parallel with the column middle segment retuse, yellowish, glandular in disk, lateral segments ovate, shorter, violaceous. Column inarticulate at base, broadly winged, obtuse fleshy Anther 2-celled, dehiscing lengthwise Pollen masses 2, reniform, excavated behind, sessile on a broad triangular gland

3238 2807*a* *Leochilus* Sepals and petals spreading, lateral, connate Lip undivided, tuberculate, or laminate at base, and furnished with melliferous hollow Column short, terete, free Anther broader than column, 1-celled. Pollen masses 2, with a narrow elongated caudicula, on an ovate minute gland

3239 1897*a* *Acianthera* Sepals conniving lateral ones connate, upper ones galeate Petals smaller, wedge-shaped, dilated at apex Lip articulated with the column, 3-lobed Lateral lobes acute middle lobe flat, obtuse Column winged, membranous, jagged at top. Anther apiculated, 1-celled Pollen masses 2, cohering at base

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MONANDRIA.

1894. PLEUROTHA'LLIS

20147 12903*a*	picta *Lindl*	painted-flwd	☇ ⧄ or	½	mr	W R	Demera	1833	D	fib.p	Bot	mag 3897
20148 -	- bicarinàta *Lindl*	two-keeled	☇ ⧄ or	½	ap au	G Y	Brazil	1841	D	fib.p	Bot	mag 4112
20149 -	- prolifera *Herb*	proliferous	☇ ⧄ or	½	jl	R	Brazil	1827	D	fib p	Bot	reg 1298
20150 -	- saurocéphala *Lodd*	lizard-head-fl	☇ ⧄ or	¼	my	G	Brazil	1829	D	fib p	Bot	mag 3090
20151 -	- Lanceàna *Lodd*	Lance's	☇ ⧄ or	½	au	Y G	Surinam	1831.	D	fib p	Bot. cab	1767
20152 -	- Grôbyi *Lindl*	Ld Grey of Groby's	☇ ⧄ or	½	ap	Y R	Brazil	1834	D	fib.p	Bot re.	1797
20153 -	- ciliàta *K & W*	ciliated	☇ ⧄ or	½	ap	O	Demera	1836.	D	fib p	Flor cab	19

1913 OCTOMERIA.

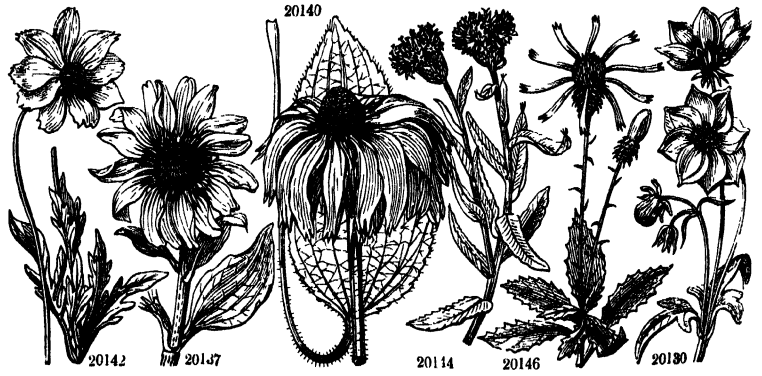
20154 12904*a*	grandiflora *Lindl*	great-flowered	☇ ⧄ or	½	mr ap	Pa Y	Brazil	1840	D	fib p		
20155 -	- serratifòlia *Hook*	serrate-leaved	☇ ⧄ or	½	n.d	W	Nepal	1826.	D	fib p	Bot	mag 2801

2748 SPECKLI'NIA.

20156 -	- ciliàris *Lindl.*	ciliated-sepaled	☇ ⧄ cu	1½	jl	Pa G	Mexico	1838	D	fib p		
20157 -	- orbiculàris *Lindl*	orbicular-lippd	☇ ⧄ cu	½	jl	P	Demera	1838	D	fib p		
20158 -	- obovàta *Lindl*	obovate-lipped	☇ ⧄ cu	½	jl	Pa Y	Brazil	1838.	D	fib p		

1924 STE'LIS

20159 12985*a*	crassifòlia *Lindl.*	thick-leaved	☇ ⧄ cu	½	d	G	W Ind	1841.	D	fib p		
20160 -	- argentàta *Lindl*	silvery	☇ ⧄ cu	½	f mr	G P	Guiana	1839	D	fib p		
	calàris Lindl Comp bot mag 2 353											
20161 -	- atropurpùrea *Hook*	dk purple-flwd	☇ ⧄ pr	½	f	Dk P	Mexico	1838	D	fib p	Bot	mag 3870



3240 1916*a*. *Telipogon*. Perigone spreading Sepals narrow, acute Petals broad-ovate. Lip similar, but larger Column terete, pilose. Clinandrium furnished with subulate hooked processes behind. Anther 1-celled, 2-valved. Pollen masses 4

3241 2417*a* *Arthynchium*. Sepals and petals flat, free, equal at base Lip sessile, spurred, undivided Column short terete, hardly drawn out at base Stigma circular Anther roundish, 2-celled, membranous, depressed. Pollen masses 4, by equal pairs, with a subulate caudicula, and a triangular, nearly free, membranous gland. Rostellum truncate.

3242 2817*b* *Malachadenia* Flowers resupinate, lateral Sepals connate at base, reflexed, and free at top, forming a galea dorsal sepal cordate-acuminate Petals small, scale-formed, roundish. Lip fleshy, with revolute edges, mucronate at base, articulated with the foot of the column, and adnate to the galeate lateral sepals Column with 2 tendrils or horns in front, stretched out at base. Stigma linear-oblong Anther 2-celled, deciduous. Pollen masses 2, waxy, sessile, with a soft naked gland

3243 1915*b* *Acropera* Perigone spreading, nearly equal Sepals and petals similar Lip connate with the base of the column, with a spreading, cordate, crested limb Column erect, furnished on both sides with 2 horns, which are glandular at top. Anther 2-celled hidden by the cucullate clinandrium. Pollen masses 2, fusiform; with a filiform caudicula, and a small subglobose gland

3244 1923*a* *Limatodes*. Perianth erectly spreading Sepals and petals nearly equal, free Lip undivided, spurred at base, tumid inside Column erect, semiterete Anther 2-celled Cells 4-valved. Pollen masses 8, obovate, with a short filiform caudicula and a minute gland.

3245 1874*a* *Sarcoglottis*. This genus differs from *Spiranthes*, from which it has been separated by Presl, in the sepals being saccate at base, the upper one arched

3246 1861*a* *Peristylus* Perianth campanulate Sepals and petals equal, similar Lip entire, or tripartite, with a short bag-formed spur. Anther erect. Cells diverging Beak flat, adnate to the anther. Pollen masses on 2 subulated naked glands

3247 2838*a* *Physurus* Perianth subringent. Sepals linear-lanceolate, spreading, upper one combined with the petals into an arch, which is tridentate at apex. Lip pendulous, narrowed at base, and drawn out into a short 2-lobed spur at base Anther acute, 2-celled

3248 2838*b*. *Chenóstylis* Perianth bilabiate Sepals connate at base into a ventricose tube Petals free, equal Lip much larger, unguiculate, bicallous inside, with a dilated, deeply spreading, 2-lobed limb Column short, long-beaked Beak emarginate Anther intra-marginal, 2-celled Cells 2-celled Pollen masses 2, 2 lobed, with a common caudicula.

MONANDRIA.

[acute, Lip linear obtuse fleshy with one furrow above

20147 Leaf spatulate marginate retuse shorter than racemes, Bracts small, Sepals acuminated, Petals linear-lanceolate

20148 Leaf obl cordate keeled subcord at base, Petiole chan Seps linear equal, lateral ones keeled, Petals linear obovate minutely serrated glabrous, Lip obovate fleshy with an inflexed tooth on both sides near the base

20149 Stems 2-edged, Leaf oblong cochleate fleshy prolifrous double the length of the raceme Bracts cuneate cuspidate cucullate shorter than pedics, Seps con, lat ones semicon, Petals and lip same form, Clinand. tooth d

20150 Leaf cordate obl sheathing the stem shorter than race, Bracts ov, Seps cordate obl downy, lateral ones semicon, Petals short acute, Lip obl. hollow in middle bilamellate [late ciliated, Lip ov emarg unguic

20151 Lvs fleshy oval ac, Spike solit pend longer than lvs, Seps connivng ac, lateral ones connate, Petals subu-

20152 Leaf obov emarg much longer than stem and much shorter than loose erect raceme, Bracts small membran, Seps costate obl ac, lateral ones separate at apex, Petals lanc u, Lip linear obt fleshy 1-furr above

20153 Leaf obl.-lanc emarg cordate longer than stem, Racs nutant many-flwd shorter than leaf, Seps lin.-lanc. acum lateral ones conn, Petals conform much smaller serr, Lip tongue-shpd serrul with marg thick waited

20154 Leaf long lanceolate arched, Sheath close to the stem, Lip 3-lobed unguiculate, Lateral Segments short subfalcate acute, middle one obovate cuneated denticulated cleft, Lamellæ 2 fleshy

20155 Stem leafy, Leaves linear-lanceolate distich denticulately serrated, Racemes terminal few-flowered

[keeled ciliated lin bifid, Petals elliptobt cili at top, Lip obov obt, cili 3-nerved, Top of Column ciliate

20156 Leaf narrow lanceolate obtuse about equal to the stem, Spikes secund fasciculed not half so long as lvs, Sepals

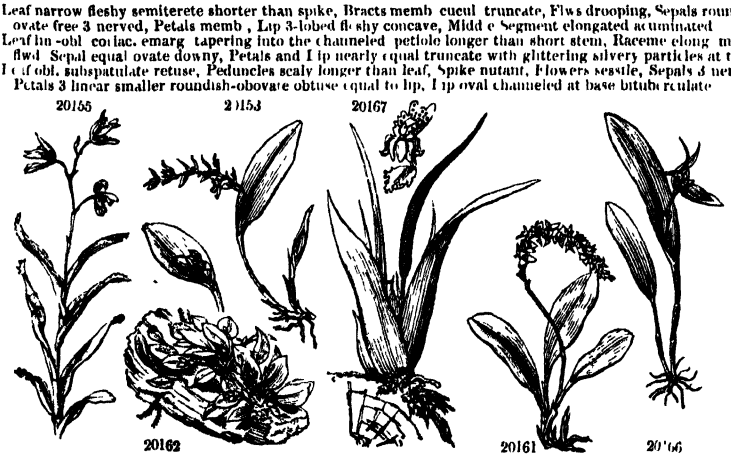
20157 Leaf roundish-ovate emarg shorter than stem, Flowers fasciculed, Sepals linear obtuse glabrous, lower one bipartite, Petals elliptic ac ser, Lip ov beaked concave at base cili at top obt, Top of Column serrated

20158 Leaf coriaceous wavy emarginate narrow and channeled at base longer than stem, Spikes short fasciculed Flws glab, Seps and pets lin. acum, Lip lin abruptly ac a little constricted in mid, Col. cucul winged subdentate

20159 Leaf narrow fleshy semiterete shorter than spike, Bracts membcucul truncate, Flws drooping, Sepals roundish ovate free 3 nerved, Petals memb, Lip 3-lobed fleshy concave, Middle Segment elongated acuminated

20160 Leaf lin-obl cordac. emarg tapering into the channeled petiole longer than short stem, Raceme elong many-flwd Sepal equal ovate downy, Petals and Lip nearly equal truncate with glittering silvery particles at top

20161 Leaf obl. subspatulate retuse, Peduncles scaly longer than leaf, Spike nutant, Flowers sessile, Sepals 3 nerved, Petals 3 linear smaller roundish-obovate obtuse equal to lip, Lip oval channeled at base bituberculate



2747 LEPA'NTHES

20162 17896*a* sanguínea blood-coloured ☇ △ cu ✳ ja Bd Jamaica 1843. D fib.p Bot. mag. 4112

3196 2747*a* PHYSOSI'PHON *B R.* (*Physa*, a bladder, *siphon*, a pipe, flower.) *Orchideæ.*

20163 - carinàtus *Lindl.* keeled ☇ △ or ½ my O Mexico 1837. D fib.p

20164 - Loddigèsii *B R* *Stelis tubata* Lodd. Loddiges's ☇ △ or ½ mr.my O N Spain 1828 D fib.p Bot. cab. 1601

3197 1894*a* CENTRANTHE'RA *Schiedw* (*Kentron*, a spur, *anthera*, an anther; anthers apiculated.) *Orchideæ*

20165 - punctàta *Schiedw* dotted-leaved ☇ △ or ½ ... P Brazil 1840 D fib p

3198. 1894*b*. RESTRE'PHIA *Kunth.* RESTREPHIA. (Not explained by author.) *Orchideæ*

20166 - vittàta *Lindl* vittate ☇ △ or ½ ju jl W R Y Colomb. ... D fib.p J H. S 3. 314 ic

2749 OBERO'NIA.

20167 - iridifòlia *Lindl* Iris-leaved ☇ △ or ½ su Br Ceylon 1840. D fib p Bot. mag 4517
Cymbidium iridifolium Roxb. *Malaxis ensiformis* Smith in Rees's Cycl.

20168 - cylindrica *B R* cylindrical ☇ △ cu ... su G Manilla 1836. D fib.p

20169 - mimàta *Lindl* vermilion ☇ △ pr ½ s d Ve Singap 1841. D fib p

1927. MICRO'STYLIS

20170 12988*a* histionantha *Ik & K.* sail-flwd ☇ △ cu 1 n Br G Columb 1842 D p l Bot mag 4103
Malaxis Porthòni Morren

20171 - versicolor *Lindl* party-coloured ☇ △ cu 1 jn.o O China 1830 D p.l Bot. cab 1751
Liparis parochilus Bot. cab.

1928 LI'PARIS

20172 12993*a* spatulàta *Lindl.* spatulate-lvd ☇ △ cu ½ au o G Burma 1838. D fib p

20173 - alàta *Scheidw.* winged ☇ △ cu ½ au o P Mexico 1850. D fib p

20174 - Walkèriæ *Graham* Walker's ☇ △ cu ½ au o Pa Y Ceylon 1834 O s l p Bot mag 3770

20175 - elàta *B R* tall ☇ △ cu 2 jl au G Br Brazil 1826 D p s Bot reg 1175

20176 - guineénsis *B. R.* Guinea ☇ △ cu ½ s G S Leone 1832 O s l p Bot reg 1671

2752 CŒ'LIA

20177 17899*a* macrostàchya *Lindl* long-spiked ☇ △ or 1½ ap jn R Guatem. 1840. D fib p Bot. mag 4712

1904 PHOLIDO'TA.

20178 12933*a* chinénsis *Lindl* Chinese ☇ △ or ½ my G w China 1844. D fib p

20179 - clypeàta *Lindl.* hooded ☇ △ or ½ sp ... Borneo 1845. D fib.p

20180 - conchoidea *Lindl* shell-like ☇ △ or ½ sp Br w Manilla 1836 D fib p

20181 - undulàta *Lindl* undulated-lvd ☇ △ or ½ su Pa R E Indies 1839 D fib p

20182 - pállida *Lindl* pale-flowered ☇ △ or ½ my W Nepal 1824. D hb p Bot reg 1213
imbricàta Lindl in Bot reg 1213, not of Bot. reg 1777 *Ornithidium imbricàtum* Wall *Pholidota bracteolàta* D. Don

1897 CŒLO'GYNE

20183 12917*a* cristàta *Lindl* crested ☇ △ or 1 su W India 1843. D fib p Bot reg 1811 7

20184 - ocellàta *Lindl* eyed ☇ △ or 1 su W o Nepal 1843. D fib p Bot mag 4706

20185 - asperàta *Lindl.* rough ☇ △ or 1 su W India 1849. D fib p

20186 - flàccida *Hook.* flaccid ☇ △ or 1 f W Y Nepal 1829 D fib p Bot. mag 3118

20187 - Cumíngii *Lindl* Cuming's ☇ △ or 2 ja W Y Singap 1840 D fib p Bot mag 4611

20188 - Gardneriàna *Wall* Gardner's ☇ △ or 1 d W.Y Khos hls 1837 D fib p Px. mag 6 73

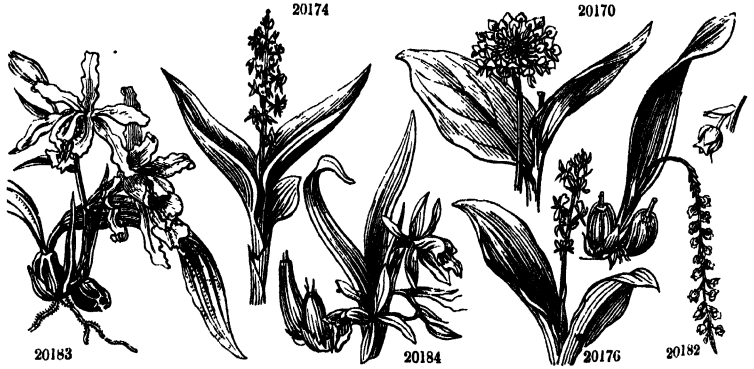
20189 - testàcea *Lindl* shell like ☇ △ or 1 my ju Clay Br Singap 1839. D fib p

20190 - speciòsa *Lindl* showy ☇ △ or ¾ o Taw.Br Java 1846. D fib p Bot reg 1847, 23
Chelonanthera speciòsa Blume

20191 - ochràcea *Lindl.* ochre-coloured ☇ △ or 1 au o W Och India 1815. D fib.p Bot mag 4661

20192 - Lòwii *Hort* Low's ☇ △ or 2½ au o Cre.o Borneo 1845. D fib.p Px. m. 16 225 ic

20193 - trisaccàta *Griff* trisaccate ☇ △ or 1 n W Y India 1845. D fib p



History, Use, Propagation, Culture,

3196. *Physosiphon* Curious little epiphytes, with the habit of *Stelis*, and differ principally from that genus in the sepals being combined into a tube

3197. *Centranthèra* is a small epiphyte, with purple flowers

3198. *Restrèphia* is an epiphyte, with recurved flowers, white petals spotted with red, and a yellow lip.

20162 Leaf ovate tridentate, Peduncles aggregate shorter than leaf, Sepals ovate glandularly ciliated as also the lip Lateral lobes of Lip wing-formed spreading, middle lobe 3-lobed pressed to the column

20163 Leaf oblong narrow obtuse or emarginate shorter than twin racemes, Tube of Perianth triquetrous with winged angles, Middle lobe of Lip serrated scabrous

20164 This differs from *P carinàtus* in the middle lobe of lip being entire and not broken by callous sharp teeth on the surface

20165 Leaf ovate obtuse glaucous dotted with brown, Sepals very villous outside dotted with brown inside, Lip purple, Racemes radical drooping

20166 Petals white spotted with red filiform recurved with a broad ciliated base, Lip dull yellow ciliated convex, the lateral segments small and bluntish, Leaf solitary, Sepals white

20167 Lvs broad ensiform, Raceme long 2-edged at base many-flowered, Flowers verticillate, Bracts fringed, Sepals reflexed, Petals erose, Lip obtuse fringed concave at base obsoletely lobed [side, Lip cordate truncate

20168 Spike dense cylindric, Bracts channeled a little cil, Flws small, Seps and pets reflexed fimbriately downy in-

20169 Caulesc, Lvs equitant subfalc acute, Spike long pendul loose-flwd, Bracts linear convex jagged Pedics hair glandul pilose, Seps ovate erect acute, Petals conform smaller, Lip obl conc nar. retuse towards apex

20170 Pseudo bulb ovate sheathed 2-lvd, Lvs broad-ovate membranous Sheaths elongated involving angular scape at base, Flws corymb, Seps oblong deflexed, front ones coadunate at base, Pets lanc. lin. revol, Lip orbic. obtuse

20171 Leaves ovate-lanceolate, Flowers party-coloured

[liform, Petals linear-oblong, Lip ovate-lanceolate channeled recurved

20172 Pseudo-bulb ovate oblong 2-leaved, Leaves ensiform, Scape 2-edged, Rac dense erect cylindrical, Sepals li-

20173 Lvs 6 obl -ovate acute plicate petiol, Spike erect many-flowered, Scape winged scaly purple, Wings 6 membr, Seps and pets lin, Lip muc dark pur [green, Seps spread obl with rev margs, Ov and pets lin filif

20174 Lvs 2—3 rndsh-ov ac petio plic obl at base cucul shrtr than many-flwd spike, Pedunc ang, Lip rndsh rflxd

20175 Lvs oblong lanceolate acuminate wavy plicate, Bracts foliaceous reflexed, Lip obcordate bituberculate

20176 Lvs many oblong-acute plicate shorter than few-flwd raceme, Scape angular, Lip cuneate flat 2-lobed bituberculate at base, Petals and upper sepal linear spreading, lateral sepals roundish ovate shorter than lip

20177 Pseudo-bulb ovate, Lvs ensiform plicate, Raceme long many-flowered, Bracts linear-lanceolate acute squarrose, Lip lanceolate bisaccate at base

20178 Tufted, Rhizoma short, Pseudo-bulb tetrag ovate rugose 1—2-leaved, Leaves obl undul acum 3-nerved, Ra-

20179 cemes short sec, Brcts cucul obt persist, Seps ov, Pets lin, Lip obl ac conc at base refracted at top Spike short flexuous, Bracts persistent, Column large somewhat petaloid antheriferous on the face in the middle, Lip concave hastate at top 2-lobed

20180 Spike pendulous distich imbricate, Bracts oblong concave apiculated, Lip 3-lobed

20181 Pseudo-bulb ovate tapering to the base 2-leaved, Leaves narrow, Racemes drooping, Flws small dull reddish

20182 Pseudo-bulb subcate ovate obtuse fasciculed, Leaf oblong coriaceous plicate, Racemes distich pendulous imbricate

[with horny scales, Brcts obl divar persist, Pets obl -lanc wavy, Lip 3-lbd with a triple interrupted crest

20183 Pseudo-bulb obl seated on a thick scaly rhizoma, Lvs lin lanc, Racs radical erect shorter than lvs sheathed

20184 Pseudo bulb ovate tufted clothed with shining scales, Leaves lanc acum narrowed into petiole, Raceme strict, Bracts decid, Seps and pets obl -lanc., Middle lobe of Lip ov, Disk with 3 lamel. lines, Col obsoltly 3-lbd

20185 Racemes pendulous dense many-flowered downy, Bracts roundish ovate concave dry, Flowers large resupinate, Sepals lanceol keeled, Pets narrower, Lip cucullate 3-lobed, Lobes obtuse, mid lobe crested, Disk wa ted

20186 Pseudo-bulb oblong angular covd by coriac pointed withered scales Lvs oblong lanceol. on long petioles, Racs flex drooping, Bracts decid, Petals lin lanc, Lip ov 3 lobed with 3 elev. flex lines, Col tthd at apex

20187 Pseudo-bulb ov, Lvs twin lanc 5-nerved longer than few-flwd rac, Scape naked at base, Bracts convolute, Pe-

20188 Pseudo-bulb ovate-oblong, Leaves 5-nerved [tals lin -lanceol., Lip 3-lobed, Lamellæ 3 curled continuous

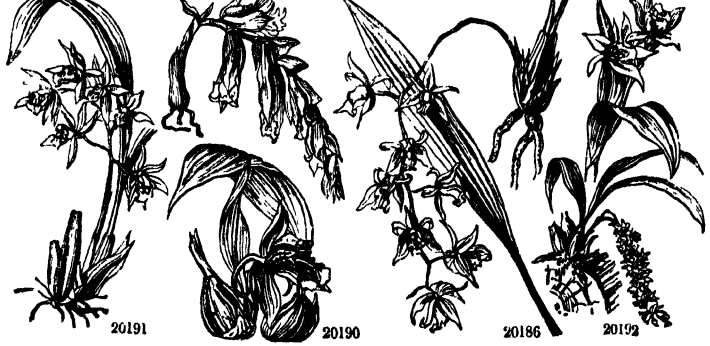
20189 Pseudo-bulb oval narrow angular, Leaves linear-lanceolate tricostate, Raceme pendulous, Bracts ovate cucullate, Seps and pets nearly eq, Lip obl, Lat lobes rndsh obsolete, Middle lobe obt with 4 papil crested veins

20190 Pseudo-bulb ovate ribbed 1-leaved, Leaf oblong-lanceolate 5—7-nerved, Peduncles 1-flowered scaly, Sepals oblong, Petals linear Lip 3-lobed, Lateral segments denticulate, middle one rounded 2-lobed

20191 Pseudo-bulb obl tetrag at top, Lvs lanc 5-nrvd, Rac few-flwd, Lip 3-lobed downy inside with rounded lobes

20192 Pseudo-bulbs large, Leaves large 2 feet long, Scape 30 inches, Flowers numerous close set, Sepals and column cream-coloured, Lip slightly 3-lobed cream-coloured marked with orange

20193 Pseudo-bulb elongated, Leaves membranous obovate-lanceolate 5-nerved, Racemes recurved, Bracts broad-ovate obtuse cucullate Flowers closed trisaccate at base, Petals linear, Lip 3-lobed



and Miscellaneous Particulars.

20180 ***Pholidòta conchoidea*** This species comes very near *P. imbricàta*, but the flowers are almost twice as large, and the keels of the lateral sepals are so deep and concave as to give the flowers the appearance of the inside of a bivalve shell

20194 - fuscéscens *Lindl.* brownish ℰ ☐ or 1 n G Y R India 1843 D fib p
20195 - fuliginòsa *Lodd* fuliginose ℰ ☐ or ... ... G P India 1838. D fib p Bot. mag 4440

3199 1897*a* PLEIONE *D Don.* PLEIONE. (A mythological name) *Orchideæ*
20196 - lagenària *Lindl.* pitcher ℰ ☐ or ... W R Khos hls 1840. O r m
Calógyne lagenària Wall
20197 - maculàta *Lindl.* spotted-flwd ℰ ☐ spl ½ au W R E Indies . O r m Bot mag 4691
Calógyne maculàta Lindl
20198 - humilis *D Don* humble ℰ ☐ or ½ aut Pk E Indies 1841 O r m Smith ex bot
Calógyne humilis Lindl *Epidéndron húmile* Smith ex bot t 98. *Cymbídium húmile* Smith Rees's Cycl
20199 - præcox *D Don* early-flowered ℰ ☐ or ½ n P Nepal 1840 O r m Px mag 14 7
20200 - Wallichiàna *Lindl* Wallich's ℰ ▽ or ½ o P Sylhet 1838 O r m Bot mag 4496
Calógyne Wallichiàna Lindl Bot. reg 1140, t 24.

3200 1897*b* EARINA *Lindl.* (Not explained by author) *Orchideæ*
20201 - suavèolens *Lindl.* sweet-scented ℰ ☐ or 1 su N Zeal 1842 D fib p

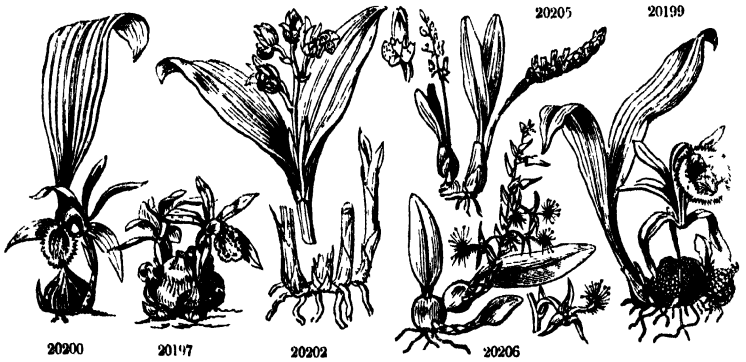
3201 1897*c*. TRICHOSMA *Lindl* (*Thrix*, a hair, *kosmos*, ornament) *Orchideæ*
20202 - suàvis *Lindl* sweet-scented ℰ ☐ or 1 su W Y P Indies 1840 D fib p Bot reg 1842 41
Calógyne coronària Bot reg 1840

2753. MEGACLINIUM
20203 17900 velutinum *Lindl* velvety ℰ ☐ cu ½ ju au Y Cape Co 1846 D fib p
20204 - bufo *Lindl.* toad ℰ ☐ cu ½ mr ju Br P S Leone 1839 D fib p
20205 - falcàtum *Lindl.* falcate-leaved ℰ ☐ cu ½ ap Y R S Leone 1822 D fib p Bot reg 989

2754 BOLBOPHYLLUM
20206 17902 barbigerum *Lindl* beard-bearing ℰ ☐ or ½ ju R S Leone 1835 D fib.p Bot. reg 1942
20207 - bracteolàtum *Lindl* bracteolate ℰ ☐ or ½ jl Y R sp S Leone 1835 D fib p Bot reg 1838, 57
20208 - cocòinum *Batem* cocoa-nut-scen ℰ ☐ or ½ ja F S Leone 1835 D bloc Bot reg 1961
20209 - umbellàtum *Lindl* umbellate-flwd ℰ ☐ or ½ au Y R Nepal 1837 D bloc Bot. mag 4267
20210 - sórdidum *Lindl* dirty-flowered ℰ ☐ or . sp Ol G Guatem 1839 D bloc
20211 - limbàtum *Lindl* bordered ℰ ☐ or ... sp Dk P Singapor. 1839 D bloc
20212 - flávidum *Lindl* yellowish ℰ ☐ or . . su Pa Y S Leone 1838 D bloc
20213 - clandestinum *Lindl* clandestine-fld ℰ ☐ or ½ vear Pa St Singapor 1838. D bloc
20214 - adenopétalum *Lin* gland-petaled ℓ ☐ or ... year Y Singapor 1838 D bloc
Diphiza flavéscens Blume
20215 - macránthum *Lindl* large-flowered ℰ ☐ or ½ mr L c sp Singapor 1842 D bloc Bot reg 1844
20216 - Careyànum *Spreng* Carey's ℰ ☐ or ½ s o Y P sp Nepal 1823 D bloc Bot mag 19
Anisopétalum Careyànum Hk ex fl 149 *Tribràchia purpùrea* Lindl *Plurothállis purpurea* D Don

20217 - hirtum *Lindl* hairy ℰ ☐ or ... ... Wsh F Indies 1846 D bloc
Tribràchia hirta Lindl
20218 - Lobbii *Lindl* Lobb's ℰ ☐ or .. ... Y Br Java 1848 D bloc Bot. mag 4
20219 - chelrii *Lindl* hand-flowered ℰ ☐ or ½ ju,jl G Br Manilla 1843 D bloc
20220 - pileàtum *Lindl* capped ℰ ☐ or ½ o Pa.Y Singapor 1840 D bloc
20221 - recúrvum *Lindl* recurved ℰ ☐ or ½ su Y S. Leone 1830. D bloc Bot. reg 965
Tribràchia pendula B R
20222 - calamárium *Lindl* reed-like ℰ ☐ or ½ ... Y P Guiana 1842 D bloc Bot. mag 4

2755 CIRRHOPETALUM
20223 17903*a* Medusæ *Lindl* Medusa's head ℰ ☐ or ½ . Ysh Singapor 1840 D fib p Bot. reg 181



History, Use, Propagation, Culture,

3199 *Pleione* is a genus of terrestrial Alpine *Orchideæ*. Rich mould, mixed with pebbles or small stones covered with moss and kept moderately moist, in beds raised with bricks, suits all the species well *P. Wallichiana* covers the oak trees in its native place

3200. *Earina suaveolens* is an epiphyte, and a native of New Zealand on trees.

20194 The blossom of this species is larger than any of the others
20195 Caudex creeping scaly, Pseudo-bulbs small obl compressed smooth, Leaves 2 broad-lanc , Rac term. bract. 4—5-flwd, Seps ov.-oblong, Petals oval smaller, Lip spat. with a bilamel disk, Mid lobe cil fringed orbic

20196 Pseudo-bulb flask-shaped clouded, Bract hooded acute tapering to base, Sepals and petals linear-lanceolate acuminate, Lip rounded emarginate with 5 crested lines
20197 Pseudo-bulb all same colour short thick rounded narrowed at base, Bract short inflated roundish hooded, Sepals and petals ovate acute, Lip rounded emarginate with 7 crested lines
20198 Pseudo-bulb ovate, Sepals and petals striated, Lip 2-coloured spotted with 5 crested lines

20199 Pseudo-bulb roundish, Lip crested by 5 lines, Perianth pink Leaves elliptic-oblong acute nerved
20200 Pseudo-bulb ampullaceous, Sheath tubercul , Pedunc radic sheathed at base, Lip 3-lobed sac at base, middle lobe denticulated curled trunc. at top apiculated with 4—5 incomplete dentic crests in disk, Col tthd at top

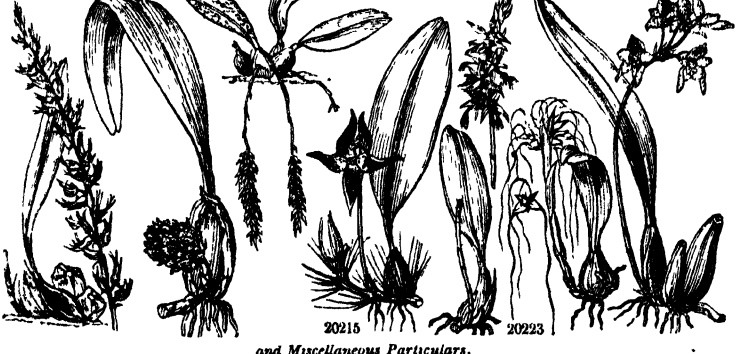
20201 Spike oblong dense rather compound at base, Lip transverse rhomboid bicallous towards the base obsoletely 3-lobed, Middle segment roundish wavy emarginate, Leaves distich

20202 Stem 2-leaved covered with warted scales, Leaves rather fleshy petiolate, Spikes terminal spathaceous at base

[lose, upper one recurved obt callous, lateral ones refracted, Petals linear, Lip ovate corrugated
20203 Pseudo-bulb ovate trigonal, Leaves oblong-lanceolate emarginate, Rachis linear-oblong crenated, Sepals pu-
20204 Rachis large lanceolate, Flowers covered with black hairs, Seps acute, upper one smooth, lateral ones downy inside, Petals small acute glabrous, Lip ovate fleshy wrinkled
20205 Pseudo-bulb tufted rather tetrag 2-lvd, Lvs oval emarg biplic , Rachis comp. falc cren , Upper segs of Perianth obt callous on both sides at apex, outer lat ones reflexed bident , inner ones or pets smaller subulate obtuse

20206 Pseudo-bulb lenticular 1-leaved shorter than erect racemes, Bracts ovate stem-clasping, Sepals linear-lanceolate acuminated, Petals subulate shorter than column, Lip linear-lanceolate acuminate villous bearded at top
20207 Ps -b ov -obt 4-wgd 2-lvd, Lvs nar obl fleshy, Seps radic pend mch shrtr than tusif many-flo rachis, I ls fleshy bibract outside, Seps ov.-obt., lat ones con at base shorter than ov pets Lip triq ac chan ser at back
20208 Pseudo-bulb ovate tetrag 1-lvd, Lf lanc shorter than erect many-flwd spike, Brcts membranous lin -acute, Seps awned, Pets linear denticul longer than 2-horned column, Lip ov -lanc obt cil at base tov under the apex
20209 Rhizoma creeping, Pseudo-b obl ang , Lf obl. lorate obt emarg , Flws umbel. lateral, Seps oblique falcate obt upper one short, Pets ov obt., Lip cord -ov complicate emarg Column furnished with a bristle on each side
20210 Pseudo-bulb tetragonal, Spike fleshy acuminate conical, Flws sessile fleshy, Bracts ov. obt , Sepals ov acute, Pets lin obt, Lip unguicul. ovate flat convex auriculed at base, Column furnished with 2 bristles on each side
20211 Pseudo-bulb ampullaceous depressed with 2 distant sheaths, Rac cylind many-flwd on long pedunc , Brcts small, Seps obt cil shorter than pets which are obov. with vil edges, Lip ov obt bident at base polished in middle
20212 Pseudo-bulbs obl. compressed covered with 2 membranous sheaths, Leaf narrow at base longer than loose spike, Sepals acum , Petals oblong obcord acute, Lip bicarinate recurved, lat. lobes undul obsol , Column 2-horned
20213 Rhizoma creeping covered with membranous scales distinctly bulbiferous, Pseudo-b small, Lvs mucr obl fleshy convex on back, Flws small, Seps closed ov equal ending in soft bristle, Pets oval obt , Lip mar ov obt smooth
20214 Lvs obl obt petl scarcely bulbous at base, Spike secund loosely sheathed at base many-flwd, Seps acum spath acute glandular inside, Lip ovate narrow bluntly acum cil channeled at base
20215 Lvs obl flat petiol coriaceous, Flws sol flat resupinate, Dorsal sepal flat ovate acuminate, lateral ones and petals same form twisted, Lip small unguiculate subtrilobed acuminated
20216 Pseudo-b obl.-ovate sheathed 1-lvd on a creeping rhizoma, Lf obl -lanc obt narrowed at base, Rac length of bulbs, Pedunc. short scaly, Flws imbricate, Seps ovate acum , lat ones twice the size of rest and connivent, Pets small acum , Lip ovate unguiculate unidentate on both sides, Column 2-horned
20217 Pseudo-b long-ovate, Lvs broad-lig obt shorter than glab. scape, Spike tail-formed many-flwd drooping dwny, Seps acum hairy and gland , Pets short acute fringed, Lip obl -lin emarginate obt hairy above, Anther gland
20218 Lvs obov -obl coriac petiolate, Pedunc naked 1-flwd rising from falcate cucul brcts, Seps oblong acute, lateral ones falcate, Petals smaller reflexed, Lip unguiculate cordate-ovate acute channeled recurved at apex
20219 Lvs obl coriaceous margin at top chan eled at base, Flwr large solitary, Seps lanc , lateral ones ventric at base, Pets lin converging into the form of the hand, Lip ov conc at base beaked at apex, Column toothless
20220 Flws solitary glabrous, Sepals obl obt , lateral ones convex longer, Petals conform but narrower, Lip tongue-shaped obtuse smooth bijugated at base behind and rough between the juga
20221 Pseudo-b tufted ovate compressed 1 lvd, Leaf oval of a different colour beneath unequal at top emarginate, Scape pendulous, Spike imbricate Sepals ovate acuminate, Petals obovate
20222 Pseudo-bulb tetragonal, Leaf obl obt Scape long, Bracts membranous, Seps triangular downy on edges, Petals horn formed glabrous, Lip sessile linear downy on edges bearded, Horns of column falcate

20223 Pseudo-b ovate tetrag , Leaf obl convex emar , Sheaths of scape obl. vent , Flws in dense heads, Upper sepal acum , lower ones very long pendulous, Petals triangular acum., Lip ovate bicar nate, Auricle of column acute



and Miscellaneous Particulars.

3291 *Trichósma* A bulbless epiphyte, very similar in habit to a species of *Cælógyne*, but from that genus it differs in the projecting foot of the wingless column, in the singular fleshy anther, and in the eight pollen masses
20204 *Megaclinium bífo.* The rachis of the flowers of this species resembles a flattened snake with a single row of toads on its back, hence its specific name.

20224 -	- vaginàtum *Lindl*	sheathed	⚷ ⧄ or	½	sp	Str	India	1838	D	fib p
20225 -	- auràtum *Lindl.*	gold-edged	⚷ ⧄ or	½	sp	Y.c	Manilla	1840.	D	fib p Bot. reg 1843, 61
20226 -	- Macraëi *Lindl.*	MacRae's	⚷ ⧄ or	...	su	Y P	Ceylon	1839.	D	fib p Bot. mag. 4422
20227 -	- fimbriàtum *Lindl.*	fringed	⚷ ⧄ or	½	su	G P	Bombay	1838.	D	fib p Bot. mag 4391
20228 -	- Cumingii *Lindl.*	Cuming's	⚷ ⧄ or	½	...	P	Philipp.	1838	D	fib.p
20229 -	- nùtans *Lindl.*	nutant-flowerd	⚷ ⧄ or	½	su	Str	Manilla	1838.	D	fib.p Bot. mag. 4418
20230 -	- chinénse *Lindl.*	Chinese	⚷ ⧄ or	½	jn	Taw G	China	1840	D	fib p Bot. reg 1843, 49
20231 -	- picturàtum *Lodd.*	pictured	⚷ ⧄ or	½	sp	P R	India	1838	D	fib.p
20232 -	- Wallíchii *Lindl*	Wallich's	⚷ ⧄ or	½	sp	Fulv	Nepal	...	D	fib p Bot. reg 1960
	1912 E'RIA.									
20233 12963*a*	acervàta *Lindl*	heaped	⚷ ⧄ or	½	au	W.G	E. Indies	1848.	D	fib.p J H. S 6 58 1
20234 -	- bractéscens *Lindl*	bracteate	⚷ ⧄ or	½	au	W R	Singapor	1842.	D	fib p Bot reg 1844, 20
20235 -	- convallarioides *Lind*	Lil of Val like	⚷ ⧄ or	½	au	W	E Indies	1839	D	fib p Bot reg 1841, 62
	Octomeria spicàta D Don. *O convallarioides* Wall. *Pinòlia álba* Haw.									
	β májor Lindl	*larger*	⚷ ⧄ or	1	au	W	E Indies	...	D	fib p Bot reg 1847, 63
20236 -	- Armeniaca *Lindl*	Apricot-colord	⚷ ⧄ or	1	o	O c	Philipp	1834	D	fib p Bot reg 1841, 42
20237 -	- Dillwýnii *Lindl*	Dillwyn's	⚷ ⧄ or	1	mr	Crea	Philipp	1842.	D	fib p Bot mag 4163
20238 -	- polyùra *Lindl.*	many-tailed	⚷ ⧄ or	½	o	W Pk	Manilla	1840.	D	fib p Bot reg 1842 32
20239 -	- floribúnda *Lindl*	bundle-flowerd	⚷ ⧄ or	1	su	W.Pk	Singapor.	1842.	D	fib.p Bot reg 1841, 29
	β leucóstachys Lindl	*white-spiked*	⚷ ⧄ or	2	su	W	Borneo	1850.	D	fib p Px fig 3 116 288
20240 -	- vestita *Lindl*	clothed	⚷ ⧄ or	1	su	Br w	Singapor.	1842.	D	fib.p Bot. reg 1845, 2
	Dendróbium vestitum Wall									
20241 -	- ferrugínea *Lindl*	rusty	⚷ ⧄ or	2	mr	Pk	E Indies	1837.	D	fib p Bot. reg 1839 33
20242 -	- ròsea *Lindl*	rose flowered	⚷ ⧄ or	½	n	Ro	China	1824	D	fib p Bot reg 978
20243 -	- paniculàta *Lindl.*	panicled	⚷ ⧄ or	2	w	Ysh	Silhet	1839.	D	fib p Wal pl rar 1 10
	2758 A'PORUM									
20244 17906*a*	leònis *Lindl*	lion's mouth	⚷ ⧄ or	½	year	R Br	Singapor	1837.	D	fib.p
	indivisum Lindl									
20245 -	- sinuàtum *Lindl*	sinuated	⚷ ⧄ cu		su	Y G	Singapor	1839.	D	fib p
20246 -	- cuspidàtum *Wall*	cuspidate	⚷ ⧄ cu	...	year	Str	E. Indies	1836	D	fib p
	1908 POLYSTA'CHYA.									
20247 12953*a*	bracteòsa *Lindl*	large-bracted	⚷ ⧄ cu	½	su	Dk O Y	S Leone	1838.	D	fib p Bot mag 4161
20248	- clavàta *Lindl*	clavate	⚷ ⧄ cu	...	su	Pa.Y	Belize	1840	D	fib p
20249 -	- cèrea *Lindl.*	waxy	⚷ ⧄ cu	..	aut	Br Y	Oaxaca	1839.	D	fib p
20250 -	- reflèxa *Lindl.*	reflexed	⚷ ⧄ cu	.	f	W.Pk	S. Leone	1840	D	fib.p
3202	1908*a* EPI'PHORA *Lindl*		EPIPHORA			(*Epi*, upon, *phoreo*, to bear.)				*Orchidaceæ*
20251 -	- pubéscens *Lindl*	downy	⚷ ⧄ cu	½	...	Y.R	Caffraria	...	D	fib.p
3203.	1912*a* MYCARA'NTHES *Blume.*		MYCARANTHES.			(Not explained.)				*Orchidaceæ*
20252 -	- obliqua *Lindl*	oblique-leaved	⚷ ⧄ or	1	su	...	Singapor.	1839.	D	fib p
	1900. DENDRO'BIUM									
20253 12923*a*	macrophýllum *Lind*	long-leaved	⚷ ⧄ or	2	ap	Ro	Manilla	1841.	D	fib.p Bot. mag 3970.
	macránthum Bot mag 3970.									



History, Use, Propagation, Culture,

20225 *Cirrhopétalum auriàtum.* This is the most interesting species of the genus It hangs down from the branch of a tree or a piece of wood, which it soon overruns with its delicate green roots and egg-shaped furrowed pseudo-bulbs The leaves are deep green above, and stained with purple beneath. The flower stems or scapes are slender and thread-like, and bear at top an umbel of flowers, which hang down gracefully and are balanced in the air. The flowers have a yellowish ground, striped and mottled with crimson

20224 Pseudo-bulb pyramidal truncate, Leaf oblong convex emarginate, Sheaths of scape oblong ventricose distant, Upper sepal ovate, lower ones very long petal cil., Pets obl cil., Lip obl bicarinate, Auricles of col setac.

20225 Pseudo-b ovate sulcate, Leaf convex obl. purple beneath, Flws umbellate, Upper sepal and petals setaceously acuminated ciliated, lateral ones acute, Lip linear recurved, Auricles of column rounded entire

20226 Pseudo-b ovate smooth, Leaf oblong acute tapering into petiole shorter than scape, Raceme scarcely umbelled loose, Seps lanceolate acuminate lateral ones very long, upper one acuminate incurved, Petals ovate acum., Column winged on both sides bidentate at top, Lip ovate acuminate fleshy recurved

20227 Pseudo-b glomerate ov -rndsh rather tetrag , Lvs usually 3 ov -lanc small ac , Seps rad. slend., Umb many-flwd Lat seps nar ligu ac cohering, upper one and pets ov acum fringed, Lip small tongue-shaped thick naked

20228 Pseudo b tetrag., Leaf oblong obt shorter than scape, Umbel dimidiate many-flwd, Dorsal sepal ovate, lateral ones linear-lanceolate, Petals ovate acuminate fringed, Lip ovate trisulcate bituberculate behind

20229 Pseudo-b ov -roundish rugose, Lvs ov -obl obt thick Scps terete elong Umbel many-flwd nutant, Lat. seps very long ligu , Pets ov ac cil at base, Lip tongue-shaped biaristate, Angles of column obsoletely bidentate

20230 Leaves lanceolate, Umbel many-flwd, Upper sepal galeate, Petals oblong obtuse serrulate apiculated, lateral ones lanceolate, Lip tongue-shaped obtuse fleshy

20231 Pseudo-b obl angular, Lf obl convex emarg , Flws convolute, Upper sepal cil set acum , lat ones obl obt., Pets acum cil villous, Lip linear recurved elevated along the middle, Auricles of column obtuse entire

20232 Lvs lanceolate cleft at top length of erect scape, Racemes many-flwd pendulous, Bracts linear acuminated, Sep. glab., upper one acum , lateral ones linear ligulat hardly acute, Pets acuminate subciliate

20233 Pseudo-b compressed one above another with a short 2-lvd neck Lvs erect ensate, Rac axil 2-3-flwd, Brcts on peduncs many ov. acum revolute, Seps and pets ov ac , Lip 3-lobed trilamellate, Lobes ac , middle obl larger

20234 Pseudo-b short obl usually 2-leaved, Lvs obl undulated, Rac erect, Bracts membranous coloured with revol. edges up ones lin reff., Lip 3-lbd with 2 short lamellæ and one long one, Mid lobe of lip trunc rugged apic.

20235 Stems compressed densely and loosely sheathed, Lvs obl -lanc many nerved, Racemes dense obl drooping on short peduncles, Flowers subglobose downy, Lip subcordate-ovate acute without appendages

β Stems twice the size of those of species, Spikes on longer pedunc, Flwr closer glob resembl small cowrie shells

20236 Pseudo-b oval compressed 4-lvd, Lvs obl -lanc coriaceous smooth, Rac tomentad sheathing at base, Lvs of scape or brcts lanc acum apricot-cld, Lat lobes of lip tooth-fmd, middle rhomb curled with 8 straight lamellæ

20237 Pseudo-b obl smooth 2—4-leaved, Lvs obl , Bracts membranous obl obt reflexed, Rac erect, Petals and sepals erect, Lip 3-lobed trilamellate at base, middle lobe roundish obt 5-lamellate

20238 Stem elongated leafy, Lvs lanc acute spreading striated, Spikes opposite the leaves many-flwd nutant, Bracts adpressed, Sepals and petals ovate acute erect smooth, Lip cordati-ovate acute bicarinate at base

20239 Stems fleshy rather flexuous terete, Lvs lanc acum , Racemes opposite the leaves spreading many-flwd downy, Bracts ovate concave turned back, Lip narrow naked sac ute at base, the middle segm cuneate tridentate

β Spikes long, Flowers white

20240 Stems pend densely clothed with decid hairs, Lvs lanc coriaceous obt entire densely vill. beneath, Rac elong many-flwd, Brcts coriaceous persistent, Flws villous, Sepals lanceolate lateral ones ending in a horn connate Petals shorter glabrous, Lip 3-lobed, middle lobe curled emarginate pilose

20241 Stems terete jointed sheathed, Lvs obl obt , Rac erect lateral many-flwd sc dv at base, Bracts ov acute ovary villous, Lat lobes of lip erect trunc , middle lobe ov serrated subplicate, Crests 4-tthd, middle one fleshy

20242 Pseudo-bulb sheathed wrinkled 1-leaved, Leaf coriaceous lanc , Spike axillary few-flowered glabrous

20243 Lvs linear-lanceol acum glauc beneath, Stems terete elong pend , Racs term aggregate cylind. many-flwd, Seps woolly ov obt , Pets smaller spotted, Lip 3-lbd callous at base and apex, Lbs spottd, middle one trunc

20244 Lvs coriaceous ovate or shortly cultrate obt , Flws sol term., Lip linear-obl. emarginate without a crest ciliately toothed rather downy [situated horseshoe-formed line

20245 Lvs lanc equal-sided approximate acute, Flower sol. axil., Lip cuneated elong surrounded at apex with a thick

20246 Lvs lanc , Flws solitary axillary, Lip emarg. curled at top with 2 obsolete lines running along the middle

[Pets obovate-oblong glabrous, Lip broad-oblong revolute villous in middle, the middle lobe roundish

20247 Pseudo-bulbs roundish compressed aggregate 1-lvd, Lt petiol nutant downy, Pedunes bract , Brcts folia concave,

20248 Lvs lin obl obt recurved channeled, Panicle short strict spicate with clavate branches, Lip fleshy, middle lobe emarg crenate, lat ones short ac , Disk mealy convex at base [Lat lobes short, middle one obt undulated

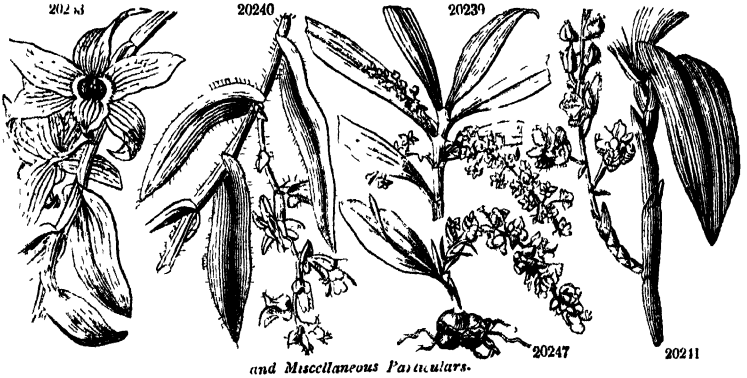
20249 Pseudo-b ov , Lvs obl -lin undulated shorter than the simple obt raceme, Flws drooping, Lip 3-lobed downy,

20250 Pseudo-bulbs conical subcompressed annulate, Scape subclavate racemose at top, Sepals expanded emarginate, lateral ones large, Lip fiddle-shaped crenulated in the middle pulvinate dilated at apex and membranous

20251 Lvs 2 obl -linear flat oblique at apex, Scape 2-edged terminated by yellow flowers streaked with red, Rac term 7—8-flwd downy, Sepals lanceolate acute, upper one oblong linear concave spiculate, Pets a little shorter flat obovate obtuse, Lip bidentate bearded with long hairs

20252 Lvs broad-lin fleshy channeled obliquely emarginate shorter than scape, Lat seps keeled, Lip cuneate 5-lobed clothed with dense deciduous down similar to powder

20253 Stems pendulous, Lvs ovate-oblong obtuse nerved subcordate at base, Sepals lanceolate, Petals oblong acute, Lip downy convolute denticulate subunguiculate ovate or soletely 3 lobed



and Miscellaneous Particulars.

20252 *Epiphora* A curious little epiphyte, bearing yellow flowers streaked with red.

20253 *Mycaránthes.* A fleshy-leaved epiphyte covered with rusty down, with small white flowers

20253 *Dendróbium macrophýllum* is said to be one of the handsomest of the species. The flowers being 9 inches in circumference, of a bright rose colour, the lip deeply stained *D. cucumérinum* is a curious little species, with the stems and branches resembling small cucumbers, and the flowers rather small of a dirty white streaked with pink

20254 - **pulchéllum** *Rozb* neat ♣ △ or 1 f mr Pk.Y Sylhet 1830. D fib p Bot. cab. 1935

20255 - **Devoniânum** *Paxt* D of Devonshi. ♣ △ or 1 ap.my Pa.Y Khoosea 1837. D fib p Px m 7 169 ic

20256 - **macrostâchyum** *Lindl* long-spiked ♣ △ or 1 ap my Pa.Y w Ceylon 1829. D fib p Bot. reg 1865
20257 - **chrysânthum** *Wall* golden-flowerd ♣ △ or 1 f Dp Y P Nepal 1828. D fib p Bot. reg 1299

20258 - **Paxtôni** *Lindl.* Paxton's ♣ △ or 2 su O Y Khoosea 1837 D fib p Px m 6 169 ic

20259 - **ochreâtum** *Lindl.* ochre-coloured ♣ △ or 1 o Y P Khoosea 1837. D fib p Bot. mag 4459
cambrigeânum Paxt mag 6 p 265 icon
20260 - **heterocârpum** *Wall* various-fruited ♣ △ or 1 sp Pa.Y R Ceylon 1837 D fib p Bot mag 4768
aûreum Lindl Bot reg 1839, t 20
20261 - **cretâceum** *Lindl.* chalk-white ♣ △ or 2 jl W.R Moulme 1847. D fib.p Bot mag 4686

20262 - **transpârens** *Wall.* transparent ♣ △ or 1 su Ro Nepal 1848 D fib p Bot mag 4663

20263 - **sulcâtum** *Lindl* sulcate-stmd ♣ △ or 1 ap O India 1837 D fib p Bot. reg 1848

20264 - **Rückert** *Lindl* Rucker's ♣ △ or 1½ f Y W Philippi 1840. D fib p Bot. reg 1811, 60

20265 - **sanguinoléntum** *Lindl* bloody ♣ △ or ½ au Br Y Ceylon 1842 D fib p Bot reg 1843 6

20266 - **âqueum** *Lindl* watery-green fl ♣ △ or 1 n W G Bombay 1841 D fib p Bot mag 4640
album Wight, Paxt fl gar 2 p 175 t 226
20267 - **longicórnu** *Lindl* long-horned ♣ △ or 1 my W Nepal 1828 D fib p Bot reg 1315

20268 12924*a* **rhômbeum** *Lindl* rhomb-lipped ♣ △ or 1 my Y Manilla 1840 D fib p Bot reg 1843, 17

20269 - **formôsum** *Rozb* showy ♣ △ or 1½ ap my W E Ind 1837. D bloc Bot. reg 1839 64
12924 fimbriâtum
β oculâtum Hook *eyed* ♣ △ or 3 su Y c E Ind . D fib p Bot mag 4648
20270 - **polyânthum** *Wall* many flowered ♣ △ or 1 su Y c Moolme. 1840 D fib p

20271 - **moschâtum** *Wall* musk-scented ♣ △ or 1 su Y c Sylhet 1828 D fib p Bot mag 3837
Calcéolus Hook exot fl t 184 *capréum* Herb in Bot. reg 1779 *clavatum* Wall *Cymbidium mos*
chatum Wall *Epidéndrum moschâtum* Hamilt
20272 - **taurinum** *Lindl* bull-headed ♣ △ or 3 o Pa Y Manilla 1841 D fib p Bot reg 1843 28
20273 - **Kûhlii** *Lindl* Kuhl's ♣ △ or 2 o Ro Java 1844 D fib p Bot reg 1847 47
Pedilanum Kuhlii Blume
20274 - **secûndum** *Wall* side-flowering ♣ △ or 1 su P Java 1828 D fib p Bot mag 4469
Pedilonum secûndum Blume
20275 - **tórtile** *Lindl* twisted-sepaled ♣ △ or 1 my W P Moulm 1846 D fib p Bot mag 4477

20276 - **anósmum** *Lindl* scentless ♣ △ or 1½ my jn Li P Philippi 1840 D bloc Px mag 15 28 6

20277 - **Fármeri** *Lindl* Farmer's ♣ △ or 1½ mr Ro Str E Ind 1847 D bloc Bot mag 4659

20278 - **villósulum** *Wall* villous ♣ △ or 1½ su O E Ind 1848 D fib p Px fl g 2 82 1

20279 - **Gibsôni** *Paxt.* Gibson's ♣ △ or 1½ jn o Y.o F Ind 1837 D fib p Px. fl g 2 131 14

20280 - **discolor** *Lindl* two-coloured ♣ △ or 4 o Y Br Java 1838 D fib p Bot reg 1811 9

20281 - **Kingeânum** *Bidw.* Capt King's ♣ △ or ½ sp R Pk N Holl. 1843 D bloc Bot mag 4307

20282 - **albosanguíneum** *Lindl* w & bl. cld ♣ △ or 1 sp W R Moulm 1850 D fib p

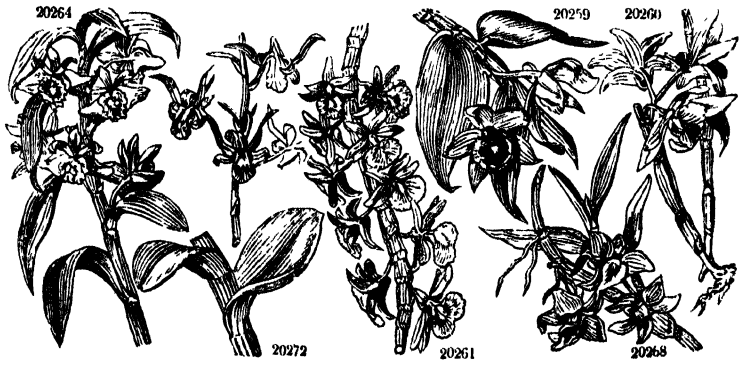
20283 - **compréssum** *Lindl* compd-bulbed ♣ △ or ¼ au Y Ceylon 1840 D tfy p Bot. reg 1841 3

20284 - **crepidâtum** *Lindl* slippered ♣ △ or ½ mr W.Pk Y India 1849 D tfy p Px. fl. g 1 63 4

20285 - **cucumerínum** *Macleay* cucum -like ♣ △ or ½ jn W Pk N Holl 1842 D p.r w Bot reg 1841 37

20286 - **Mooreânum** *Lindl* Moore's ♣ △ or 1 su W Y Aniteura 1850 D fib p
20287 - **pálpebræ** *Lindl* eyelash ♣ △ or 1 u W Y Moulm 1849 D fib.p

20288 - **bigibbum** bigibbous ♣ △ or 2 ja P N Holl 1850 D fib p Px. fl g 3 25 19



20254 Stems terete pendulous, Lvs obl -lanc subplic , Rac. lat. strict many-flwd, Brcts short ov obt , Seps ov acum. subcord , Petals oblong obtuse more slender and broader, Lip unguiculate shell-shaped very blunt ciliated
20255 Stems pendul., Lvs ov -lanc. acute, Peduncs 2—3 flwd, Sepals oblong acute entire, Petals broader fringed, Lip large shell-formed with plumose edges [cecd , Lip cuculiate veiny, the limb ov obt cil. downy inside
20256 Stems terete pendul whip-formed, Lvs ov lanc. rather membran , Flowers by threes, Sepals ov ac , Petals lan-
20257 Stems ter. pendul , Lvs contorted ov.-lanc. acum , Flws rising from among leaves, Seps fleshy obl. obt with tuberc vems outside, Pets obov. retuse fleshy shorter than up sepal, Lip cucul dentic retuse slightly 3-lobed
20258 Stms terete sulcate, Lvs ovate-lanc. acum obsoletely emarg , Peduncs 2-flwd, Seps oblong acute, Pets broader obov acute serrulated, Lip unguic ovate concave undivided vil with multifid fringed margins
20259 Stms pendulous thickened in the middle, Lvs ovate very acute, Peduncs 2-flwd, Pets lanceolate broader than seps, Lip cuculiate rounded undivided pilose above
20260 Stms pend terete clav., Lvs obl ac. flat obliquely emarg., Peduncs usually 2-flwd aggregate lat., Seps lin ov. acum obt., Pets broader ov. ac undulated, Lip oval undulated blunt undiv serrul in middle downy in centre
20261 Stems terete, Lvs lanc obliquely emarg bluntish, Flws solitary, Seps lin -lanc spreading bluntish, Lip roundish undivided cucul fimbriately toothed downy on both sides foveate and bilamellate at base, Snout short obtuse
20262 Stems terete pendulous Leaves ovate-lanceolate acuminate oblique at top, Flowers geminate, Sepals acuminate, Petals obtuse larger than upper sepals, Lip oblong undulated ciliated downy inside
20263 Stems erect clavate sulcate subflexuous comp , Lvs oblong acute 3-nerved Peduncles lateral 3-flwd, Bracts small minute adpressed, Pets oblong obt glab about equal to seps Lip obcord hairy with a channeled sulcate claw
20264 Stems terete, Leaves ovate-lanceolate acuminate flat, Flowers twin, Sepals spreading bluntish convex with reflexed edges, Lobes of Lip rounded, middle ones undulated with an elevated villous line
20265 Stems terete pendulous, Leaves ovate-lanceolate, Flowers twin, Sepals and petals ovate bluntish spreading, Lip 3-lobed glab , Middle lobe retuse plicate, Claw conic short furnished with a horn-formed downy appendage
20266 Leaves ovate-oblong undulated acuminated, Flowers spreading, Sepals and petals ovate, Lip 3-lobed pubescent, Middle lobe denticulated, lateral ones broader serrulated
20267 Stems erect hispid flexuous, Lvs ov lanc very oblique at top, Flws fascic or solitary term , Bracts ovate acum hisp , Lateral sepals combined with a long spur, Lip funnel-shaped cucul dentate adhering at base to column
20268 Stems terete leafy, Lvs lanc acute, Racs short 4 flwd Seps oval obt , Petals broader ovate, Lip rhomb undul acute downy in middle, Column tubercled on both sides and furnished with a deflexed horn behind at base
20269 Stems terete pendulous pil , Lvs distich ovate obliquely emarginate obtuse, Racs short terminal 4—5 flwd, Bracts short ovate, Seps oblong acute, lateral ones drawn out at base, Pets broader acute, Lip obovate dilated retuse
20270 Flower larger, Lip with a large black spot in the middle [joined with column into a spur
20270 Stems terete pendulous, Leaves oblong-lanceolate entire at apex, Racemes 3—4 flowered Sepals lanceolate, Petals larger oblong undulated obtuse, Lip obovate cuculiate ciliated
20271 Stems terete pend , Lvs lin -lanc and oblong Racs lateral loose 5—6-flwd, Bracts short, Seps spreading, Pets broader oblong obtuse reticul , Lip ungnic very blunt with abruptly inflexed fringed downy edges
[longer than sepals, Lip oblong curled at top and furnished with 3 elevated lines
20272 Leaves oblong obliquely-emarginate, Racemes oblong lateral, Sepals ovate bluntish, Petals linear contorted
20273 Leaves oval-oblong acute 7-nerved, Racemes short many-flowered, Sepals ovate spreading broader than petals, Lip linear-spatulate acute beardless, Spur thick length of ovary
20274 Stems erect, Leaves oblong retuse, Racemes lateral terminal secund, Sepals ovate, lateral ones combined into an obtuse incurved horn, Lip entire acute tumid at apex
20275 Stems clav artic furrowed, Lvs lin retuse Peduncs 2-flwd, Seps oblong acutish undulated twisted, 2 lateral ones running into a retuse spur, Pets oblong Lip large downy obovate shell-formed pulvinate inside at base
20276 Stems strong pendulous, Leaves ovate-oblong obtuse nerved subcordate at base, Sepals ovate-lanceolate, Petals oblong rather undulated, Lip roundish acute
20277 Pseudo bulbs angular, Stems swelling at joints leafy towards the tops Lvs obl acute nerved, Racs lateral many flwd, Bracts plicate, Seps ovate-oblong spreading rose-cld, Pets larger straw-cld ciliated, Lip nearly square broad ciliated straw-cld with a deep yellow blotch
20278 Stem erect covered with black villi, Leaves linear acutely and obliquely 2-lobed, Peduncles 2-flowered, Sepals and petals acuminate recurved, Lip linear-lanceolate 3-lobed trilamellate, Lateral lobes short
20279 Lvs acuminate, Racemes nutant elongated many-flowered, Bracts minute obtuse, Flowers rather fleshy, Sepals roundish combined into a short horn at base, Pets broader entire, Lip cochleate obtuse villous fringed
20280 Stems erect fusiform, Leaves oblong emarginate distich, Racemes terminal many-flowered, Sepals and petals linear-obl spreading curled, Lip crenulated, Lateral lobes acute, middle lobe lanceolate with 5 wavy lamellæ
20281 Pseudo-bulbs ovate lengthening into a neck 2-lvd at top, Lvs oval emarg , Peduncles terminal 2—3-flwd, Seps ovate emarg , Pets obovate apiculate, Lip 3-lobed downy, Middle lobe with 3 elevated lines along the centre
20282 Stems erect Flowers twin nutant white, Lip blood-coloured, Bracts scale-like, Sepals linear-lanceolate, Petals oblong incurved broader, Lip roundish-obovate flat retuse apiculate entire
20283 Stem obovate compressed 2—6-leaved, Leaves oval acute striated dilated at base stem clasping, Racemes about 4 flowered drooping, Sepals and petals ovate erect, Horn elongated obtuse, Lip cuneate smooth sulcate
20284 Stems terete erect, Flowers twin, Sepals and petals oblong obtuse fleshy, Lip oblong entire subsinuated obtuse plicately veined, Horn short obtuse
20285 Dwarf nitric tufted, Branchs short artic cylind 1-lvd, Lvs obl terete beset with rows of tubercs, Peduncs short 3-flwd, Seps and pets lin acum obt , Lip 3 lbd, lat lbs triang , middle ones ov curled with 4 wavy lamellæ in centre, Cinandrium denticulated [flwd peduncles, Seps and pets lanc , Lip short rhomb ovate
20286 Stem clavate short sulcate 3-leaved at top, Leaves ovate-lanceolate obliquely emarginate shorter than 4—5-
20287 Stems slender, Racemes loose white with a deep yellow stain on the base of lip, Lip downy fringed near the base with long hairs furnished with a 3-lobed tubercle, Flowers something like hawthorn
20288 Stems elongated 3—5-leaved at top, Racemes erect elongated few-flowered, Petals roundish twice as broad as seps, Lip 4-lobed crested in middle bigibbous at base, Lobes roundish , Lateral seps drawn out into a spur



20289 - - adúncum *Wall.* hooked ℰ ⧄ or 2 jl Pk E Ind 1841 D tfy p Bot. reg. 1846, 15

20290 - - triadènum *Lindl.* three glanded ℰ ⧄ or 2 su W R E Ind. 1845. D fib.p Bot. reg 1847 1

20291 - - chrysostóxum *Lindl* golden-arched ℰ ⧄ or 1 mr Y E Ind 1846. D fib.p Bot reg. 1847 36

20292 - - chlòrops *Lindl* green-eyed ℰ ⧄ or 1 jn Pa Y P sp Bombay 1843. D fib p
bashátulum Lindl

20293 - - teretifólium *R. Br* terete-leaved ℰ ⧄ or 1 su W.R N. Holl. 1840 D fib p Bot. mag 4711

1204 1900*a*. PONE'RA *Lindl* • (*Poneros*, unhappy, starved-like appearance of species) *Orchideæ*

20294 - - striàta *Lindl.* striated ℰ ⧄ or 3 au Buff Guatem 1840 D fib p

20295 - - graminifólia *Lindl* Grass-leaved ℰ ⧄ or 3 au Buff Mexico 1838 D fib p Fl. cab p. 127
juncifolia Lindl *Nemacòma graminifólia* Floral cab p 127.

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20296 12941*a* longicólle *Lindl.* long-necked ℰ ⧄ or 1 f Y w Demera 1837 D fib p Bot mag. 4165

20297 - - vandifolium *Lindl* Vanda-leaved ℰ ⧄ fra 1 ap P Mexico 1848 D fib p
20298 - - latilabre *Lindl* broad-lipped ℰ ⧄ cu 1 sp G Brazil 1838 D fib p

20299 - - lacertinum *Lindl* lizard tailed ℰ ⧄ or 1 su G Y Guatem. 1837 D fib p J H S. 2 309 ic

20300 - - ramòsum *Jacq* branched ℰ ⧄ or 1 sp G Y Jamaica 1828 D fib p Jacq am 221 13
rigidum Bot cab 1666

20301 - - verrucòsum *Swz* warted pedicld ℰ ⧄ or 1 su G Y Jamaica 1845. D bloc Bot mag 4686
20302 - - clavàtum *Lindl* clavate-stmd ℰ ⧄ or ½ jl G w Cumana 1834 D p r w Bot reg 1870

20303 - - falcatum *Lindl.* falcate-leaved ℰ ⧄ or 2 s Br G o Mexico 1838 D p r w Bot. mag 3778
Parkinsonianum Hook *alcifolium* Batem orch t 250.

20304 - - Stamfordiànum Stamford's ℰ ⧄ or 1 s Pa Y Guatem 1836 D fib p Bat orch m 4
hastàte Lk Kl & Otto icon 2. t 49

20305 12938*a* glumàceum *Lindl* glumaceous ℰ ⧄ or 1 su R w Brazil 1848 D p.r w Bot reg 1840 6

20306 - - radiàtum *Lindl* rayed ℰ ⧄ or 1½ su G Y w P Mexico 1840. D p.r w Bot reg 1844 4

20307 - - lancifólium *Lindl.* lance-leaved ℰ ⧄ or 1 su Y P Mexico 1840 D p r.w Bot reg 1842 50
20308 - - pàtens *Swz* spreading ℰ ⧄ or 1 su Pa R W Ind 1840 D p r w Bot cab 1547

20309 12944*a* dìpus *Lindl* two-footed ℰ ⧄ or 1 ja G w S Amer 1840 D fib p Bot reg. 1845, 41

20310 - - armeniacum *Lindl* Apricot-cld ℰ ⧄ or ½ jn Apric Brazil 1834 D p.r w Bot reg 1867
Encyclia macrostachya

20311 - - ranìferum *Lindl* frog bearing ℰ ⧄ or ½ jn G P Guiana 1841 D p r.w Bot. reg 1842 10

20312 12942*a* corifólium *Lindl* Cori.-leaved ℰ ⧄ or ½ su Pa G C Amer 1840 D p.r w J. H. S. 6 209 c

20313 - - ellipticum *Grah* elliptic-leaved ℰ ⧄ or 1 su R Brazil 1830 D p r w Bot. cab 1216
crassifolium Lindl

20314 - - cinnabárinum *Lindl* cinnabar-cld ℰ ⧄ or 1 my Dp R Y Brazil 1841 D p.r w Bot reg 1842

20315 - - Schombúrgkii *Lindl* Schombgk's ℰ ⧄ or 2 jl au S Demera 1837 D p r w Bot. reg 1848 3

20316 - - densifòrum *B M* dense-flowered ℰ ⧄ fra 1 au Y P Brazil 1838 D fib p Bot mag 3791
subconcinnum B M 3791 *

20317 - - pallidiflòrum *Hook* pale-flowered ℰ ⧄ or 1 au Pa Y P Mexico 1840 D fib p Bot. mag 4

20318 - - antenniferum *H B* antennæ-brng ℰ ⧄ or ½ au my Dk Br Mexico 1837 D p r w
20319 - - polyánthum *brèvium* Lindl many-flowered ℰ ⧄ or 1 su O Guaya 1838 D p r w Bate orch 3

20320 17912*a* vitellinum *Lindl* yolk-of-egg-cld ℰ ⧄ or 1 n O Mexico 1842 D tfy p Bot mag 4

20321 - - Candóllei *Lindl* De Candolle's ℰ ⧄ or 1 ju jl Dk Y Mexico 1839. D fib p Bot mag 4

20322 - - pterocárpum *Lindl* wing-fruited ℰ ⧄ or 1 su Y c Mexico 1836. D fib p Bot reg 1844



History, Use, Propagation, Culture,

3204. *Ponèra.* The species have the roots of *Neóttia*; the stems are tall, the leaves are grass-like, and the flowers are fascicled and buff-coloured. They are terrestrial plants.

20289 Stems pend., Lvs lin.-lan. acute ent. Flws by threes, Seps and pets ov.-obt., Lat. ones broadest with a rounded horn, Lip unguic. ovate conc. spic. closely appressed to the column vill. inside glab. on the disk, Stigma vill.

20290 Roots villous, Stems elongated branched, Lvs ovate-oblong obtuse, Panicle racemose terminal many-flwd, Seps ovate acute, Pets and lip obl. undul. rounded emarg. with a 3 lobed yellow tubercle in the middle, Style vill.

20291 Pseudo-bulbs clavate many-ribbed 2—4-leaved, Leaves oblong horizontal, Racemes lateral loose slender arched, Seps and pets flat oblong very blunt, Lip undivided cuneat. roundish downy minutely pectinated and fringed

20292 Stems terete, Flowers loosely corymbose, Pedicels filiform glaucescent, Sepals linear-oblong, Petals broader obovate, Lip 3-lobed, Lateral lobes small acute, middle one linear-oblong villous at base pea-green

20293 Stems creeping, Leaves filiform terete, Leaflets of perianth long linear narrower at top, Lip tricarinate, Middle lobe linear-lanceolate curled

20294 Leaves linear-lanceolate obliquely emarginate, Spike about 2-flowered axillary on a leafless stem, Lip 2-lobed entire, Clinandrium furnished with a dorsal tooth

20295 Leaves linear-lanceolate obliquely-emarg., Spike about 2 flwd terminal on a leafy stem, Lip acute crenulated and recurved at apex, Clinandrium mutic

20296 Stem erect compr., Lvs lin., Flws axill. and term. nutant, Seps lin.-lanc. spreading, Pets lin. converging, Lip 3-lobed, Middle lobe linear acuminate [tuse with 3 elevated lines and 2 callosities

20297 Leaves long narrow distich recurved, Racemes short drooping nearly sessile, Lip tripartite, Mid. lobe linear re-

20298 Leaves ovate obtuse, Peduncles 2—4-flowered sessile, Sepals and petals linear-oblong obtuse spreading, Lip repand a little lobed emarginate bicallous at base

20299 Stem branched, Flowers racemose, Ovaries subsecund pendulous much longer than setaceous bracts, Sepals lanceolate acuminated, Lip adnate 3-lobed bilamellate at base, Lateral segm. triang., middle one lanc.-oblong

20300 Leaves linear obtuse emarginate, Racemes terminal loose few-flowered, Sepals ovate-lanceolate, Petals linear spreading, Lip subcordate-ovate acute concave [tals linear-lanceolate, Lip 4-lobed, Lobes linear blunt

20301 Leaves distich lanceolate sheathed with warted sheaths, Flowers rather panicled, Sepals oblong concave, Pe-

20302 Stem clavate 2-leaved, Leaves lanceolate, Raceme simple, Bracts ovate channelled, Sepals and petals lanceolate linear, Column clavate, Lip 3-parted bicallous at base, Middle lobe unguiculate obtuse

20303 Stem branched sheathed by loose imbricate membranes, Leaf solitary falcate acute, Peduncles long, Sepals and petals linear-lanceolate, Lip 4-parted bituberculate at base, Middle lobe linear-lanceolate

20304 Pseudo-bulb fusiform, Leaves oblong obtuse, Raceme radical panicled, Sepals lanceolate, Petals narrower, Lip tripartite, Middle lobe transverse 2-lobed or emarginate fringed

20305 Pseudo-bulb obovate 2-leaved, Leaves narrow oblong, Raceme terminal cylindrical, Flowers rising from scales, Sepals linear, Petals linear-lanceolate acuminate, Lip oblong convex entire

20306 Pseudo-bulb ovate compressed ribbed 3-leaved, Leaves narrow elongated acute, Raceme dense many-flowered, Ovary 3-winged, Sepals linear, Petals lanceolate, Lip cochleate crenated curled

20307 Pseudo-bulb elongated, Lvs obl.-lanc. ac., Racs short term., Seps and pets lanc. acum. reflxd, Lip ov. shell-fmd

20308 Leaves distich oblong-lanceolate, Raceme terminal, Sepals and petals nearly equal oblong acute concave spreading, Lip 4-lobed, Sepals keeled

20309 Leaves long distich, Panicle nutant dense many-flowered rising from 2 spathes, Sepals oblong-lanceolate, Petals linear obtuse, Lip 3-lobed, Lateral lobes semicircular, middle lobe 2-lobed linear

20310 Stems erect simple, Leaves lanceolate acute subplicate, Racemes pedunculate cylindrical nutant, Sepals ovate, Petals setaceous, Lip subcuculate, Lateral lobes roundish, middle lobes ovate acuminate

20311 Leaves distich lanceolate, Racemes terminal and lateral many flowered, Sepals ligulate obtuse, Petals linear cuneate mucronate, Lip 6-lobed with 3 callosities at base

20312 Leaves distich lanceolate acuminate, Stem naked scaly, Racemes cylindrical many-flowered, Flowers drooping, Sepals linear-lanceolate, Petals ovate acute, Lip ovate acuminate entire crested at base

20313 Leaves narrow sub-distich keeled concave obtuse, Spike dense terminal, Bracts keeled distich, Sepals keeled, Petals linear spatulate, Lip roundish flat emarginate callous in centre

20314 Leaves distich elliptic-obtuse concave, Stems naked scaly, Sepals and petals linear-lanceolate, Lip 3-lobed, Lateral lobes jagged, middle one small truncate denticulate callous at base

20315 Leaves distich oblong, Sepals and petals lanceolate nearly equal, Lip 3-lobed keeled bituberculate at base, Lateral lobes jagged, middle one obcuneate truncate

20316 Leaves distich oblong obtuse with dotted edges, Stem simple leafless at top, Sepals and petals linear-lanceolate acute equal, Lip 3-lobed keeled, Lateral lobes rounded jagged, middle one cuneate curled triangular at top

20317 Leaves oblong-ligulate acuminate, Panicle large drooping, Sepals oblong-concave acute, Petals narrow linear, Lip 3-lobed 3-keeled, Middle lobe 3-lobed minute [sulcate bicallous with involute edges

20318 Lvs distich obl.-lin. obt., Pedunc. sheathed, Flws panicled, Seps and pets lanc. obt., Lip 3-lobed, Middle lobe tri-

20319 Leaves coriaceous oblong acute, Peduncles slender subpanicled at top, Petals long filiform, Lip ovate toothed with 3 tubercles at base

20320 Pseudo-bulb ovate acuminate 2-leaved, Lvs oblong-ligulate acute sheathing at base, Raceme erect many-flowered, Sepals and petals ovate-lanceolate acute, Lip linear callous and bifoveate at base

20321 Pseudo-bulb spherical, Scape panicled, Sepals and petals obovate-oblong, Lip free 3-lobed cucullate, Middle lobe curled acuminate with an elevated callous furrowed downy disk

20322 Pseudo-bulb oval compressed 2-leaved, Raceme narrow, Sepals and petals equal linear acuminate, Lip roundish 3-lobed cordate, Middle lobe longer obscurely tridentate downy at base, Capsule 3-winged



and Miscellaneous Particulars

20324 *Epidendrum stamfordianum* is found on the coast of Guatemala in shady moist lands, the plant, therefore, will require an unusually moist atmosphere.

20323 -	- Boothiànum *Lindl*	Booth's	☾ ▽	or	1	su	G Y w	Cuba	1840	D	p.r w
20324 -	- tessellàtum *Batem*	tessellated-lipd	☾ ▽	or	1	jl	Ol c	Mexico	1836.	D	p.r.w Bot mag 3634
20325 -	- glaúcum *Lindl* *Epithecium glaúcum* K. & W	glaucous	☾ ▽	or	1	o d	Dull P	Mexico	1836.	D	p r.w Flo. cab 87
20326 -	- crispàtum *K & W*	curled	☾ ▽	or	1	jn jl	Y w	Mexico	1837	D	p r.w
20327 -	- ochroleùcum *Hook* *chloranthum* Lindl	cream-coloured	☾ ▽	or	1	su	Pa G	Demera.	1840	D	... Bot mag 3577
20328 -	- aciculàre *Batem*	acicular-stmd	☾ ▽	or	¾	my jn	P w	Bahamas	1840.	D	fib p Px fl g 1 30
20329 -	grácile *Lindl.*	slender	☾ ▽	fra	3	s	G Y.P	Bahamas	1833.	D	p.r w Bot reg 1760
20330 -	- alàtum *Batem* *calochèilum* Hook	winged	☾ ▽	or	1	jl	G Y P	Guatem	1845	D	bask Bot reg 1847,
20331 -	- phœnicèum *Lindl*	purple-flwd	☾ ▽	or	3	su	D P	Cuba	1840	D	p r.w Px mag 9 67 n
20332 -	- adenocárpum *Lindl* *papillòsum* Batem	gland-fruited	☾ ▽	or	2	jn	Gy.w	Guatem	1837	D	p.r.w Bot. mag 3631
20333 -	- macrochilum *Hook*	long-lipped	☾ ▽	or	1	sp	R G	Guatem.	1835	D	fib p Bot mag 3534
20334 -	*β rósceum* - bifidum *Lindl*	*rose-coloured* bifid-lipped	☾ ▽ ☾ ▽	or or	1 1½	su jl	Ro G.P	Guatem W Ind.	1833 1834	D D	fib p Px mag 11 243 n fib p.r w Bot reg 1879
20335 -	- Wagèneri *Klotsch*	Wagener's	☾ ▽	fra	1½	su	Y w	Venez	1851.	D	p.r.w
20336 -	- varicòsum *Batem* *leuchálbum* Hook	varicose	☾ ▽	or	1	sp jn	P	Guatem.	1834	D	fib p Hk. bot j 3 10
20337 -	- ochrâceum *Lindl*	ochre-coloured	☾ ▽	or	1	jl.au	O Y	Guatem	1836	D	fib.p Bot. reg 1838
20338 17913a	longipétalum *Lindl*	long-petaled	☾ ▽	or	1	su	Br P w	Guat.	1847.	D	fib p Px fl. g 1 30
20339 -	- linearifòlium *Hook* *aciculàre* Batem. Bot reg 1841, Paxt fl gard. 1 t 30	linear-leaved	☾ ▽	or	1	su	Br.P Y w	Mex.	1847	D	fib p Bot. mag 4577
20340 -	- Grahàmi *Hook* *altissimum* Batem.	Graham's	☾ ▽	or	2	s	Br G Y	Cuba	1840	D	fib p Bot mag 3 8
20341 -	- pyriformè *Lindl*	pear-shape blbd	☾ ▽	or	½	ja	G Y P	Cuba	1846	D	fib p Bot. reg 184
20342 -	- plicàtum *Lindl.*	plaited-lipped	☾ ▽	or	1	ja	G.Y P	Cuba	1846	D	fib p Bot reg 1847
20343 -	- grávidum *Lindl*	heavy	☾ ▽	cu	½	su	G	Australia	1837	...	fib.p
20344 -	- replicatum *Lindl*	replicate	☾ ▽	or	½	su	Y w pk N	Gren	1847	...	fib.p Px fl g 2 107 n

3205 1907*a* ERIO'PSIS *Lindl* ERIOPSIS. (*Erva* and *opsis*, resemblance, habit of *Erva*.) *Orchidea*

20345 -	- rutibúlbum *Lindl*	rough-bulbed	☾ ▽	or	1	s	O	N Gren	1847	D	fib p Bot mag 41
20346 -	- biloba *Lindl*	two-lobed	☾ ▽	or	1	s	O R G	Mexico	...	D	fib.p Bot reg 18 7

3206 1907*b* HEXADE'SMIA *Brong* (*Hex*, six, *desmos*, a bond, pollen masses.) *Orchidea*

20347 -	- crurigera *Lindl* *Hexópia crurigera* Batem	leg-bearing	☾ ▽	cu	¼	my	W	Guatem	1836.	D	fib.p
20348 -	- bicórnis *Lindl*	two-horned	☾ ▽	cu	½	su	P G	Columb.	1843	D	fib p
20349 -	- micrántha *Lindl*	small-flowered	☾ ▽	cu	⅛	su	W G	Guatem.	1843	D	fib p
20350 -	- fasciculàta *Brong.*	fascicled	☾ ▽	cu	⅛	sp	P G	Mexico	1836	D	fib p

3207 1907*c* ARPOPHY'LLUM *Llave* ARPOPHYLLUM (*Arpe*, a sickle, *phyllon*, a leaf.) *Orchidea*

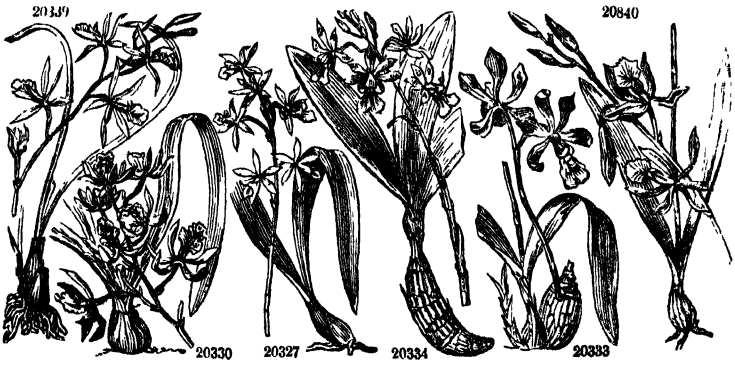
20351 -	- spicàtum *Llave*	spicate	☾ ▽	or	1½	s o	Pk	Mexico	1839	D	fib p

3208 1907*d*. OTOCHI'LUS *Lindl* (*Otos*, an ear, *cheilos*, a lip, appendages at base of lip) *Orchidea*

20352	- fúsca *Lindl*	brown-flwd	☾ ▽	cu	..		W.Br	Nepal	1840.	D	fib p Bot mag 4125

3209. 1907*e* BARKE'RIA *K & W* (*G Barker* of Springfield, a grower of *Orchideæ*) *Orchidea*

20353 -	- elegans *K & W*	elegant	☾ ▽	or	1½	sp	Pk w	Mexico	1836	D	bloc Flor cab 40
20354 -	- spectábilis *Batem*	showy	☾ ▽	or	1	jn	Li sp	Guatem	1841.	D	bloc Bot mag 4084



History, Use, Propagation, Culture,

3205 *Eriópsis biloba* has the habit of *Erva* when not in flower. It has large plicate leaves. The history of its introduction is unknown

3206. *Hexadésmia* The flowers are those of *Aporum*, and the structure of the pollen is that of *Epidendrum* The stems are erect and rise from rhizomata.

20323 Pseudo-b compressed imbric ov. usually 2-lvd, Lvs ligu -obl. undul rather oblique at apex, Rac loose about 7-flowered spathaceous at base longer than lvs, Seps and pets equal spreading oval-linear acute variegated with brown, Lip nearly free rhomboid acute deflexed on both sides

20324 Pseudo-bulb ovate compressed 2—3-leaved, Leaves linear-lanceolate, Scape flexuous many-flowered, Sepals lanceolate acute, Petals smaller subspatulate, Lip free 3-lobed, Middle lobe obl cucul. with 3 crested callos.

20325 Glaucous, Pseudo-bulb oval compressed 1-leaved, Leaves ensiform, Scape pendulous panicled, Sepals and petals oval obtuse Lip linear 3-lobed Middle one oval callous in centre

20326 Pseudo-bulb ovate 2-leaved, Leaves linear-lanceolate obtuse mucronate, Scape many-flowered, Sepals and petals linear striated, Lip 3-parted, Lateral segments inclosing the column, middle one long curled

20327 Leaves ligulate rounded and obscurely 2-lobed at top, Raceme panicled, Sepals and petals nearly equal lanceolate-obovate, Lip 3-lobed free, Middle lobe ovate with elevated veins in centre

20328 Pseudo-bulb oblong 2-leaved Leaves linear channeled acute, Raceme simple, Sepals and petals linear-lanceolate equal acute, Lip 3-lobed Middle lobe ovate-oblong, lateral ones linear

20329 Pseudo-bulb ovate corrugated many-leaved, Leaves ensiform, Raceme simple very long, Sepals oblong, Petals cuneate, Lip free 3-lobed, Middle lobe oblong obtuse curled

20330 Pseudo-bulb ovate-oblong 2 leaved, Leaves ensiform obtuse, Scape panicled tall many-flowered, Sepals and petals lin -obl spatulate uniform, Lip nearly orbicular 3-lobed keeled at base Middle lobe broad lined wavy curled

20331 Pseudo-bulb roundish-ovate 2-leaved, Leaves oblong-linear scabrous as are the scape and petioles, Sepals and petals nearly equal obovate-lanceolate, Lip 3-lobed, Middle lobe emarginate bilamellate at base

20332 Pseudo-bulb pear shaped 3-leaved Leaves linear acute keeled glaucescent Scape erect simple many-flowered, Flws distant, Seps ovate-lanceol te acute Pets narrower obt , Lip 3-parted, Middle segment obscurely 4-lobed

20333 Pseudo-bulb ovate wrinkled 2-leaved, Leaves linear-oblong bluntish, Sepals and petals obovate-lanceolate incurved, Lip 3-lobed, Middle lobe large obcordate, Disk callous

β Lip base-coloured

20334 Pseudo-bulb 3 leaved, Leaves lanceolate Scape branched, Sepals oblong acute, Petals linear-lanceolate, Lip cuneate 3-lobed, Middle lobe large ciliated subremiform furrowed mappendiculate in disk

20335 Ps -b tufted ov 2—4-lvd, Lvs lin ribbd twisted, Rac panicled term Ovar scab from dots Seps and pets equal spat ac spread , Lip 3-lbd bical at base Lat lbs short connv falc , mid cord Col uncinly auric at top

20336 Pseudo-bulb 2-lvd, Lvs ligul acute, Scape simple slender, Seps and pets nearly equal lanc -lanc varnished, Lip free unguic 3-lobed downy at base Middle lobe reniform emarg painted with tubercled and varicose veins

20337 Pseudo bulb obversely pear-shaped tufted 1—3-leaved, Lvs lin acute recurved grassy, Spike term loose-flwd, Bracts scale-formed, Seps and pets nearly equal lin -obl obt , Lip 3-lbd callous in middle, Middle lobe emarg

20338 Pseudo-bulb ovate 2-leaved Leaves ensate obtuse, Panicle loose Sepals and petals uniform spatulate unguiculate obtuse, Lip 3-lobed free, Claw concave, Segments rounded

20339 Pseudo bulb ovate smooth tufted 2-leaved, Leaves long linear obtuse, Panicle elongated loose slender, Sepals and pets lin -spatul , Lip nearly free 3-lobed, Lat lobes reflxd, mid one rounded entire undul , Disk b cost

20340 Pseudo-bulb ovate 3-leaved, Scape terminal, Raceme many-flowered Sepals broad-linear, Petals spatulate, Lip 3 lobed bilamellate, Middle segment roundish curled [tals lanc ac , Lip 3-lobed Middle lobe roundish

20341 Pseudo-bulb obversely pear-shaped aggregate 2-leaved, Leaves lanceolate acute, Scape 2-flwd Sepals and pe-

20342 Pseudo-bulb ovate-oblong terete 2-leaved, Leaves ensiform, Raceme few-flowered, Bracts small, Sepals and petals obovate-lanceolate acuminate, Lip 3-lobed, Middle segment cordate plicate cuspidate

20343 Scape few-flowered, Flowers pendulous on long peduncles closed, Ovary fusiform large warted, Lip 3-lobed Lateral lobes linear, middle lobe ovate with elevated veins

20344 Flowers densely racemose, Sepals oblong-lanceolate acute, Petals roundish unguiculate apiculate, Lip 3-lobed, Lateral lobes oblong truncate reflexed, Middle one longer curled rhomboid acuminate with replicate leaves

20345 Pseudo-bulb oblong-ovate wrinkled 2-leaved, Raceme radical many-flowered nutant, Lip hairy striated, Mid-

20346 Stem succulent leafy at top, Racemes radical many-flowered erect [dle lobe small entire

20347 Stem fusiform, Lvs linear, Racs flexuous few-flowered, Bracts ovate membranous, Lip obovate deeply 2-lobed [2-horned on both sides

20348 Stems fusiform elongated, Lvs linear obliquely bidentate, Flws usually solitary, Lip ovate retuse subserrated

20349 Raceme many-flwd, Bracts lin acum membranous, Lip 3 lobed, Lateral segm roundish, middle one apiculate

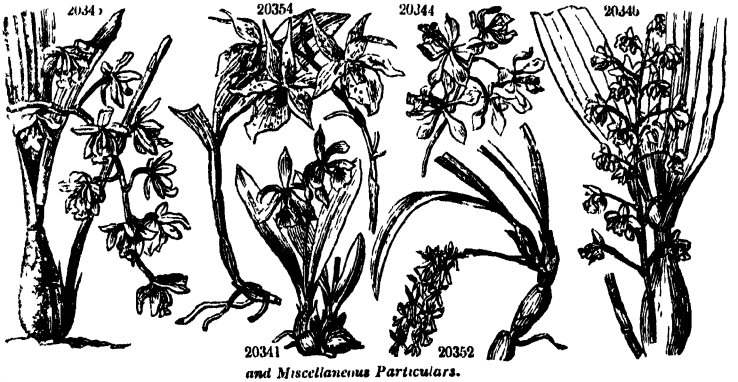
20350 Stem fusiform compressed 2-leaved, Leaves linear emarginate, Flowers in fascicles of 2—4 rising from bracts, Lip plicate

20351 Stem slender with rough sheaths, Leaf solitary long curved, Spike dense, Flowers pink

20352 Pseudo-bulbs elongated fusiform, Leaves linear-lanceolate, Sepals and petals obtuse

20353 Stems fusiform Leaves narrow, Peduncles slender racemose scaly terminal, Flowers drooping

20354 Stems 2—3-leaved, Leaves oblong coriaceous, Raceme loose many-flowered terminal, Sepals lanceolate-acuminate, Petals ovate-oblong acuminate, Lip ovate subunguiculate lamellate in centre



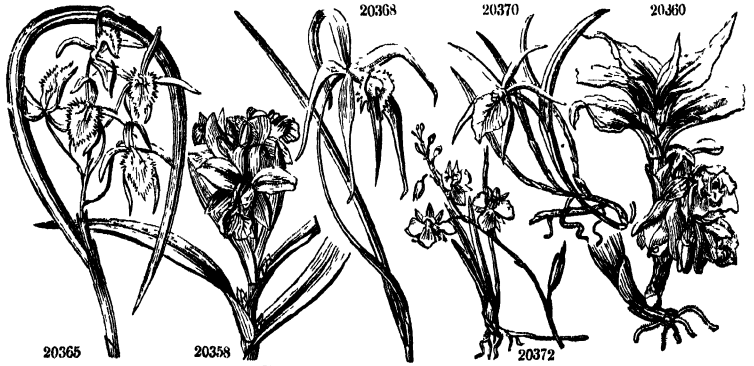
and Miscellaneous Particulars.

3207 *Arpophyllum* is an epiphyte with pink flowers.

3208 *Otochilus.* A curious little epiphyte from Nepal.

1809 *Barkeria.* Elegant Mexican plants, with much the habit of *Cattleya.* The flowers are large, elegant, and drooping

20355 -	- Lindleyàna *Batem.*	Lindley's	♂ ⧄	or	1	d	Ro.P	Costa Ri	1841	D	bloc	Px.mg 13 193
20356 -	- Skinneri *Lindl*	Skinner's	♂ ⧄	or	2		R Li Y	Guatem.	...	D	bloc	Px mag 1 1849
	Epidendrum Skinneri Bot mag. 3951, Bot. reg. 1881.											
3210	1907*f* ARUNDI'NIA *Blume*		(Diminutive of *arundo*, a reed, resemblance)									*Orchideæ*
20357 -	- bambusæfòlia *Blume*	Bambusa-lvd	♂ ⧄	or	4	mr.ap	P Ro	Chittago.	1836.	D	fib p	
	Cymbidium bambusæfolium Roxb.											
20358 -	- densa *Lindl.*	dense-flowered	♂ ⧄	or	1	s.d	P	Singap	1842	D	fib p	Bot reg 1842 38
	2760 DINE'MA											
20359	1791*b* paleàceum *Lindl*	paleaceous-brct	♂ ⧄	or	½	w	Pa.Str	Guatem.	1835	D	fib.p	
	2762 CHY'SIS.											
	1791*a* aúrea											
	β maculàta B M	*spotted-lipped*	♂ ⧄	or	1	ja	Y P.sp	Columb	1850	D	fib p	Bot. mag 4576
20360	1791*a* bractéscens *Lindl.*	bractescent	♂ ⧄	or	1	s	W Y	Mexico	1839	D	fib.p	Bot reg 1841, 23
20361 -	- lævis *Lindl*	smooth	♂ ⧄	or	1	su	Y Br	Brazil	1839.	D	fib.p	
	2764 HARTWE'GIA											
	1792*0* purpùrea											
	β angustifòlia Lindl	*narrow-leaved*	♂ ⧄	or	1	su	Pk	Guatem.	1841	D	fib.p	
	1914 BRASSAVO'LA											
20362	1296*5a* glaúca *Batem*	glaucous	♂ ⧄	or	1	..	W G Y	Mexico	1837	D	fib p	Bot reg 1840 41
20363 -	- Digbyàna *Lindl*	Digby's	♂ ⧄	or	1	jl	G w	Hondur	1845	D	fib p	Bot mag 4471
20364 -	- venòsa *Lindl*	veiny lipped	♂ ⧄	or	1	o	W Y G	Hondur	...	D	fib p	Bot mag 4021
20365 -	- Martiàna *Lindl*	Martius's	♂ ⧄	or	1	o	W Y	Brazil		...	fib p	Bot reg 1845 [illegible]
20366 -	- cordàta *Lindl*	cordate-lipped	♂ ⧄	or	1	jn	G w	Brazil	...	D	fib p	Bot mag 3782
20367 -	- acaúlis *Lindl*	stemless	♂ ⧄	or	½	jn jl	Crea	Guatem	1850.	D	fib p	Px fl g 2 102 [illegible]
20368 -	- cuspidàta *Hook*	cuspidate-lippd	♂ ⧄	or	½	..	W	Trinidad	1838	D	fib p	Bot mag 3722
20369 -	- nodòsa *Lindl*	knotty	♂ ⧄	fra	1½	o	Y.G	Mexico	1828	D	fib.p	Bot reg 1465
	Cymbidium nodosum Swartz		*Epidendrum nodosum* L									
20370 -	- Perrinii *Lindl*	Perrin's	♂ ⧄	or	1	s	G w	Rio Jan	1841	D	fib p	Bot mag 3711
20371 -	- tuberculata *Hook*	tubercled	♂ ⧄	or	½	jl	W P sp	Botafo B	1827	D	fib p	Bot mag 2858
20372 -	- élegans *Lindl*	elegant	♂ ⧄	or	½	su	P	Antigua		D	fib p	Bot mag 3098
	Cyrtopòdium élegans Hamilt											
20373 -	- grandiflòra *Lindl*	great-flowered	♂ ⧄	or	1	o	W	Hondur.	1838	D	fib p	Bot reg 1861
	2765 LÆ'LIA											
20374	1792*2* purpuràta *Lindl*	purplish-flwd	♂ ⧄	or	1	au	W P	Brazil	1839.	D	fib p	Px. fl g [illegible]
20375 -	- álbida *Lindl*	whitish-flwd	♂ ⧄	fra	1	su	W Y C	Oaxaca	1837	D	fib p	Bot mag 3967
20376 -	- supérbiens *Lindl*	superb	♂ ⧄	or	1	n	Li P Y	Guatem	1840	D	fib.p	Bot mag 4000
20377 -	- pedunculàta *Lindl.*	long-peduncled	♂ ⧄	or	1	au s	Pa Li	Guatem.	1840	D	fib p	Bot mag 4099
20378 -	- cinnabárina *Batem*	cinnabar-cld	♂ ⧄	or	2	my	V	Brazil	1836	D	fib.p	Bot. mag 4402
20379 -	- flàva *Lindl*	yellow-flwd	♂ ⧄	or	1	my	Y	Brazil	1840	D	fib.p	Bot reg. 1842, [illegible]
	caulescens Lindl B M 1841											
20380 -	- acuminàta *Lindl*	acum -lipped	♂ ⧄	or	2	ja	Pk w	Mexico	1840	D	fib p	Bot reg 1841, 24
20381 -	- majàlis *Lindl*	showy	♂ ⧄	spl	⅔	my	Pk w	Guatem	..	D	bloc	Bot. reg. 1844, [illegible]
	Grahàmi Lindl											
20382 -	- rubéscens *Lindl.*	reddish-flwd	♂ ⧄	or	½	my	Pk w	.....	...	D	fib.p	Bot. reg 1840 41
20383 -	- grándis *Lindl.*	great-flwd	♂ ⧄	or	1	au	Y	Bahia	1849.	D	fib.p	Px fl g 1 60 38
20384 -	- vírens *Lindl*	green-flwd	♂ ⧄	or	1	my	G Y	Brazil	1843	D	fib p	
20385 -	- furfurácea *Lindl.*	scurfy	♂ ⧄	or	1½	n	Pk	Mexico	1838	D	fib p	Bot mag 3810
3211.	2765*a* WA'RREA *Lindl.*	(*Fred. Warre*, an amateur collector of plants in Brazil)										*Orchideæ*
20386 -	- discolor *Lindl.*	two-coloured	♀ ⧄	or	1	sp	Str P	Costa R.	1848	D	fib.p	
20387 -	- Wallesiàna *Lindl*	Walles's	♀ ⧄	or	1	sp	Crea	Brazil	1848	D	fib p.	
20388 -	- bidentàta *Lindl*	bidentate	♀ ⧄	or	1	sp	W P	Caraccas	1843	D	fib p	
20389 -	- cyánea *Lindl.*	blue-lipped	♀ ⧄	or	1	f mr	W B	Columb	1843	D	fib p	Bot reg 184[illegible]
20390 -	- Lindeniàna	Linden's	♀ ⧄	or	1	w	Li P	Peru	1849.	D	fib p	Moor m 1,177



History, Use, Propagation, Culture.

3210. *Arundina* is a genus of splendid plants, having the appearance of reeds. The flowers are like those of *Cattleya*. The species are said to grow on rocks. Pot them in brown turfy peat, with the pot well drained, giving the plant plenty of water when growing freely. *A bambusæfolia* grows in a forest of Chittagong on the face of moist rocks

20355 Leaves oval acute, Bracts linear, Lip oblong apiculated bicarinate unguic, Column clavate winged tridentate
20356 Leaves distich lanceolate-acuminate, Stem naked scaly, Raceme cylindrical many-flowered, Flowers drooping, Sepals linear-lanceolate, Petals oval acute, Lip ovate acuminate crested at base

20357 Caulescent, Leaves bifarious linear-lanceolate acuminate, Raceme terminal, Sepals linear-lanceolate, Petals obovate ventricose, Lip length of petals 3-lobed, Middle lobe more or less cloven
20358 Lip obovate rounded 4-lobed apiculated, Segments roundish, Lamellæ 3 equal curled straight, Petals oblong

20359 Pseudo-bulb oval compressed 1-leaved, Lvs ensiform flat longer than few-flwd spike, Bracts lin.-lanc. acum. chaffy, Flowers secund, Seps and pets linear-lanceolate, Lip fleshy dilated at top furrowed along the middle

β Sepals and petals brownish-yellow, Middle lobe of lip spotted [2-lobed
20360 Bracts cucullate veiny leafy longer than ovary, Seps and pets ovate obtuse, Lip 3-lobed, Middle lobe smaller
20361 Bracts short ovate, length of pedicel, Dorsal sepal linear-oblong, lateral ones acuminate, Petals falcate, Lip 3-lobed, Lateral lobes falcate, middle one roundish curled emarginate

β Leaves narrower, Sepals ovate-oblong not obliquely cordate as in the species

[Lip sessile roundish acute lobed on margin
20362 Leaves coriaceous flat obtuse oblong glaucous, Spathe 1-flowered, Sepals and petals linear-lanceolate obtuse,
20363 Lvs oval flat glauc fleshy, Lip sess cucul cord subtrilobed edged with long hairs and a large callosity on disk
20364 Lvs lan.-lanc fleshy channeled, Seps and pets lin.-lan., Lip obcord acum veiny ser at base on long ser claw
20365 Lip oval or ovate acum ciliately toothed sessile, Pets and seps lin.-lanc acum, Clinandrum cucullate cut
20366 Lip cordate acuminate length of claw, Petals and sepals linear acuminate glabrous, Stems nodose at base
20367 Lvs terete straight, Flws almost sess, Seps and pets lin. spreading, Lip roundish-ov twice as long as its claw
20368 Lip 3-lobed, Lateral lobes roundish fringedly denticulate, middle lobe very long cuspidate awl-shaped entire, Sepals and petals long acuminate
20369 Lip ovate acuminate entire, Sepals and petals linear acuminate, Lateral teeth of clinandrium emarg behind

20370 Stem branched, Leaves teretely compressed subulate channeled, Seps and pets linear obtuse, Lip cordate
20371 Stem 1-flowered, Lip entire exterior, Petals tuberculate [acuminate entire
20372 Scape racemose, Lip large clasping the base of the column deeply 3-lobed, Column broadly winged [acuminate
20373 Leaf flat narrow-lanceolate stiff, Lip large roundish quadrate acuminate longer than claw, Seps and pets linear

[lin.-lanc, Pets obl.-lanc. obtuse, Lip large convolute about column roundish Lateral lobes obsolete
20374 Pseudo-bulb oblong, Leaves narrow-oblong emarginate, Peduncle 2-flowered rising from the spathe Sepals
20375 Pseudo bulb ovate 2 leaved, Leaves linear shorter than many-flowered spike, Sepals oblong-lanceolate acute, Lip 3-lobed Lobes roundish, middle larger apiculate reflexed [lamellæ on disk, Crest of anther 2-eared
20376 Scape long many-flwd, Seps and pets lin.-obl obtuse, Lip 3 lobed, Middle lobe with 5 large subserrated truncate
20377 Pseudo-bulb ovate compressed oblong obtuse shorter than scape, Corymb 3—4-flowered Sepals lanceolate obt Pets elliptobt ttish, Lip 3-lbd, Lat lobes roundish, middle one obl wavy larger with 2 elevated lines
20378 Pseudo bulb cylindrical elongated 2-leaved, Leaves oblong wavy, Scape slender 4—5-flowered, Sepals and petals lanceol, Lip convol recurved 3-lbd, Lateral lobes acute, middle one oval curled with 4 elevated lines
20379 Pseudo-bulb 1—2-lvd, Lvs obl. cornic, Scape longer than lvs with distant sheathing scales, Racemes cylind, Seps and pets obl.-lin obt, Lip 3-lbd Lat lbs wavy having 4 elevated lines, middle one sess, curled recurved
20380 Pseudo bulb ovate compressed wrinkled 1-leaved, Leaf emarginate, Flowers corymbose, Bracts linear, Sepals linear pointed, Petals lanceolate wavy pointed, Lip 3-lobed, Lateral lobes rounded, middle lanc wavy pointed
20381 Leaves narrow equal to few-flowered scape, Bracts ovate, Sepals lanceolate, Petals oblong-lanceolate, Middle lobe of lip roundish emarginate flat, lateral ones small obtuse
20382 Pseudo-bulb roundish compressed, Leaves oblong obtuse shorter than sheathing scape, Raceme many-flowered, Sepals linear, Petals lanceolate wavy, Lip auricled downy in centre with 2 elevated lines
20383 Pseudo-bulb clavate 1-leaved, Leaf coriaceous, Scape 2-flowered, Sepals lanceolate reflexed, Petals broad linear denticulately curled conv, Lip membr veiny undul 3-lobed, Lateral segments convol around the column
20384 Seps erectish ov, Pets lanc., Lip obl obsoletely 3-lobed cucul ov curled with an obsolete elevated line at base
20385 Pseudo-bulb ovate striated 1-leaved, Leaf oblong acute shorter than 1-flowered scape, Sepals lanceolate acuminate, Petals rhomboid-lanceolate, Ovary sublobate, Ovarium black with scurfy glands

20386 Scape 1-flowered bibracteate at top under the flower, Sepals oblong, lateral ones straight channeled upper one erect revo, Petals erect obl revo at apex, Lip roundish 3-lobed emarg with a pectinate rudish appendage
20387 Scape 1-flowered with a double acute cucullate bract just under the flower, Ovarium rather downy Sepals and petals ovate acute spreading, Lip roundish smooth with a 5-rayed appendage [mid one largest
20388 Bracts 4 times shorter than pedicel, Lip bidentate at top with convex flabellate veins and elevated lamellæ,
20389 Spk shrt, Brcts length of ovary, Seps ov. ac, Pets nearly conf, Lip rndsh cune ap cu wavy, with 5 elev lines
20390 Racemon many-flwd, Flws expand, Seps and pets lanc conc acum, Lip cord incurv. bifid, with 5 elev lam



and Miscellaneous Particulars.

3211 *Bárrea* is a genus of terrestrial pseudo-bulbs, with reed-like leaves, tall radical scapes, and racemose very showy flowers

20391 - - cándida *Lindl* white-flowered ♀ △ or 1 sp W.Vi Bahia 1848 D fib p Paxt. fl. 1 32 22
Huntleya cándida Hort.
20392 - - tricolor *Lindl* three-coloured ♀ △ or 1½ au Y.Br P Brazil 1829 D fib.p Bot. cab 1884
Maxillária Warreàna Bot. cab. 1884, No 17942

2766 SCHOMBU'RGKIA

20393 17923*a* tibicina *Batem.* cow's horn ♂ △ or 10 my Pk.w Cnoc Hond. 1836. D bloc Bate. or m 30

β grandiflòra Hook great-flowered ♂ △ or 7 mr P Y w vi Hond 1843 D bloc Bot mag 4476
20394 - - crispa *Lindl.* curled-flwd ♂ △ or 3 sp Y.Br Demera. 1837. D bloc Bot. reg. 1844, 23
marginàta var. *Hook* Bot mag 3729
20395 - - undulàta *Lindl* undulated-flwd ♂ △ or 2 w Br P N Gren 1843. D bloc

1906 CATTLE'YA.

20396 12937*a* superba *Lindl.* superb ♂ △ or 1 aut Ro c Demera 1838. D bloc Bot mag 4083
Schombúrgkii Lodd *Cymbidium violaceum* H B & Kth
20397 - - élegans *Morren* elegant ♂ △ or 1 aut Ro v Brazil 1850 D bloc Bot. mag 4788
20398 - - Skinneri *Batem.* Skinner's ♂ △ or 1½ aut Ro c Guatem. 1836 D bloc Bot mag 4276
20399 - - Walkeriàna *Gard* Walker's ♂ △ or ½ sp Ro Brazil 1846 D fib p Bot reg 1846, 42
bulbósa Lindl.
20400 - - máxima *Lindl.* largest ♂ △ or 1½ sp Ro c var Guaiaq 1843 D bloc Bot reg 1846, 1
20401 - - Lemoniàna *Lindl* Lemon's ♂ △ or ½ s Pk Y Brazil 1842. D bloc Bot. reg 1846, 37
labiàta var *Lemoniana* Booth
20402 - - lobàta *Lindl* lobed ♂ △ or ½ aut Ro Brazil 1847 D bloc
20403 - - crispa *Lindl.* curled ♂ △ or 1 aut W.c Brazil 1826 D bloc Bot. mag 3910
20404 - - citrina *Lindl* citron-colrd ♂ △ or 1 sp Y Mexico 1835 D bloc Bot mag 3742
Karwinskii Mart Choix pl t 10 *Sobrália citrina* Llave
20405 - - Harrisonii *Batem.* Harrison's ♂ △ or 1 su Li P Brazil 1825 D bloc
20406 - - granulósa *Lindl.* granulose ♂ △ or 1 su Ol Y c Guatem 1838 D bloc Bot reg 1842 [1844
guttàta β Russelliàna Hook Bot mag 3093.
20407 - - bícolor *Lindl* two-coloured ♂ △ or 1 su Taw P Brazil 1837 D bloc
20408 - - Aclándiæ *Lindl.* Lady Acland's ♂ △ or ½ jl au Choc Y R Brazil 1839 D bloc Bot reg 1840 48

20409 - - pállida *Lindl* pale-flowered ♂ △ or 1 su W Pk.Y Mex 1840 D bloc Paxt fl g 2 18
20410 - - domingénsis *Lindl* St Domingo ♂ △ or 1 ap P St. Domin 1848 D bloc Px fl g 3 106
Broughtónia domingénsis Heni in Moor. mag 3. p. 201. ic. *Laliópsis domingensis* Paxt. fl gard

1905 BROUGHTO'NIA.

20411 12931*a* aúrea *Lindl* golden-flwd ♂ △ or 1 jl d Y R Mexico 1836. D fib p

1911 BI'ETIA

20412 12961 acutipétala *Hook* acute-petaled ✱ △ or 5 jn.s Pa Ro S. Carol 1831 O p l Bot mag 3217
Limodórum áltum var *tuberósum* Jacq icon 3 t 602
20413 - - Parkinsónii *Hook* Parkinson's ✱ △ or 1 ja R Y P Mexico 1833 O p l Bot. mag 3736
20414 - - secúnda *Lindl* secund-flwd ✱ △ or 1 aut G Str c Mexico . O p l
[prod 2
20415 - - catenulàta *R & P.* linked ✱ △ or 1½ my jn P Peru 1844 O p l Ru et P fl per
20416 - - gebina *Lindl* Japanese ✱ △ or 1½ ap W Pa V Japan 1846 O p.l Bot reg 1847, 6

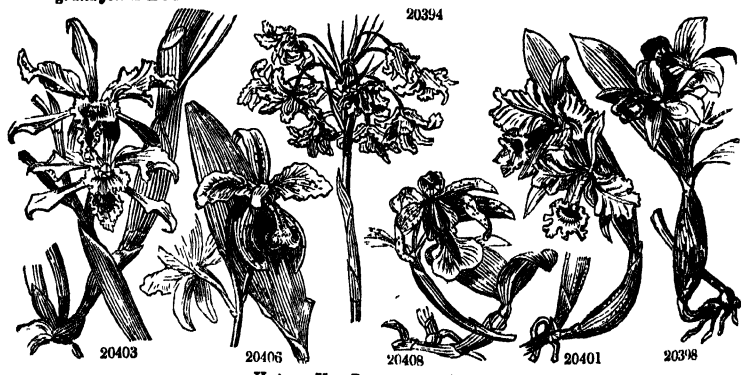
3212. 1911*a*. SPATHOGLO'TTIS *Blume* (*Spathe*, a spathe, *glotta*, a tongue.) *Orchideæ*
20417 - - aúrea *Lindl* golden ✱ △ or 2 jl Y Malacca 1849. R s.l p
20418 - - Fortúnii *Lindl* Fortune's ✱ △ or ½ jl d Y H Kong 1844 R s.l p Bot reg 184[illegible]

3213 1911*b* SCHLI'MMIA *Planchon* SCHLIMMIA. (*M Schlumm*, its discoverer.) *Orch dea*
20419 - - jasminodòra *Planch.* Jasmine-scentd ♂ △ fra 1 su W C Amer. 1852. D fib p Px.fl g 3 115 28

3214 1911*c* A'NIA *Lindl* (The name of a Roman widow, celebrated for her beauty.) *Orchideæ*
20420 - - bicórnis *Lindl.* two-horned ♀ △ cu ½ mr Y G Ceylon 1841. D fib p Bot reg 184[illegible]
20421 - - latifólia *Lindl* broad-leaved ♀ △ cu 1½ ap G Br Assam 1850 D fib p Bot. mag 4964
Calánthe viridifúsca Hook. Bot. mag. 4669.

2770 PHA'IUS.

20422 17934*a* bícolor *Lindl.* two coloured ♀ △ or 2 jl Ro Y Ceylon 1837. D p.r.w Bot mag 4078
20423 - - Wallichii *Lindl* Wallich's ♀ △ or 2 jl Buff.w Khos. h. 1837. D fib.p Wall pl as 150
grandiflòrus Lindl



History, Use, Propagation, Culture,

2766. *Schombúrgkia* is a genus of remarkable plants. *S. tibicina*, the cow's-horn orchis of Honduras, has the flower-stem 9 feet high, and the pseudo-bulbs from 1 to 2 feet are hollow and smooth inside, as the Bamboo; and at their base is a small hole which leads to the interior and gives access to colonies of ants.

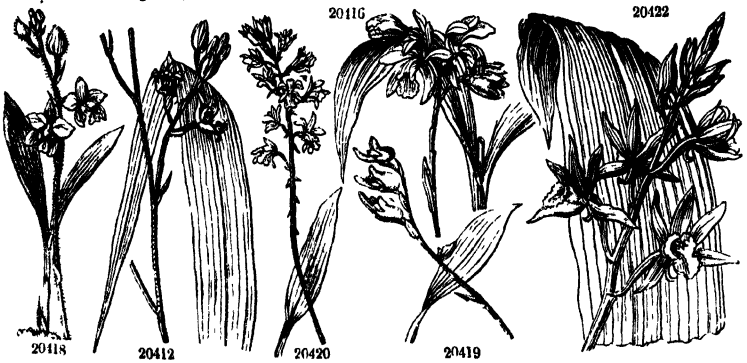
20391 Lvs broad ligulate recurved at top, Flowers 2—3, Sepals and petals oval acute, Lip nearly square narrower at apex retuse saccate at base angular reflexed fleshy with 3 small plicæ in middle on each side
20392 Scape many-flowered longer than leaves, Sepals ovate, Petals smaller conform, Lip shortly unguiculate obovate oblong undivided cucullate obtuse with 3 elevated fleshy lines in the middle corrugated

20393 Pseudo-bulb conical norn-formed annulate sulcate 3 leaved, Leaves oblong coriaceous, Scape long terete scaly, Panicle pyramidal loose, Sepals and petals wavy and curled, Lip oblong cucullate with 5 elevated approximate lines along the centre, Lat segs rounded at top, mid one subrhomboid emarg, Anthers emarg.
β Flws twice the size of those of the species, Lip pale outside, Mid lobe of lip yel. inside white edged with violet
20394 Pseudo-bulb fusi , Flws racemose, Bracts about equal to the ovarium, Lip ovate-oblong obtuse scarcely cucull obsoletly 3-lobed about eq. to obl curled seps and pets with 5 wavy lamellæ and 2 lat. slend straight ones
20395 Pseudo-bulb fusiform, Flws racemose, Bracts long spathac., Seps and pets equal lin undulately curled longer than lip, Lip cucul., Lateral lobes rounded, mid one ov. acute with 5 wavy lamellæ and 2 lat. straight ones

20396 Stems clavate sulcate, Leaves oblong margmate, Sepals oblong acute, Petals lanceolate acute broader, Lip 3-lobed, Lat lbs ac , mid one transverse emarg. dentic wrinkled from elev veins, Callosities 2 behind at base
20397 Stems clavate, Leaves ovate-lanceolate, Petals oblong wavy, Lip 3-lobed wavy, Middle lobe large
20398 Stems clav , Lvs 2 oval obt , Spathe short, Seps nar obl -lanc , Pets obl broader, Lip entire convol emarg flat
20399 Stem cylind , Lvs obl ellipt coriac marg , Seps obl -lanc callosely apicu , Pets ov -lanc acute broader, Lip 3-lobed cucul Lat lobes obliquely trun , mid one broad round emarg flat wrinkled from elev veins at base
20400 Stems clav obov ingular 1—2-lvd, Lvs ov -obl., Spathe shorter than peduncle, Seps lin -obl obt , Pets roundish-oval wavy, Lip large curled obtuse obsoletely 3-lobed, Middle lobe wavy emarginate with a smooth disk
20401 Stems short fusiform, Leaves obtuse, Spathe none, Seps lanceolate acute, Petals large thin wavy, Lip convolute with a convex undulated reflexed curled expanded limb [undiv ov. acum undul curled
20402 Stms thick obl -clav 1-lvd, Spth lge green, Seps lin -obov ac lanc , Pets broader oblong-lanc wavy curid Lip
20403 Stems ov covered by loose white mem scales, Lvs lanc glauc , Peduncle long solit , Flws fleshy pendul., Seps obl -ellipt , Pets conf broader Lip 3-lbd, Mid lb ov undu emarg with a broad elev. line along the middle
20404 Lvs narrow lanc , Seps obl apic , Pets oval, Lip 3-lbd, Lat lobes rounded, middle narrow curled shorter with numer elev lines [ments semi-ov , middle one with a broad sinus dilated rnded plic granu. denticu
20405 Stms terete slender 2-lvd, Lvs obl -lanc obt Pets obov -spatu wavy obt , Lip cucul 3 parted, Lateral segments ov -obl narrow, Stem tall terete, Seps lanc falcate acute, Pets broader reflexed wavy obt , Lip undivided flat dilated at top rounded crenated convex [Lip undiv flat bold orbic uniformly emarginate
20406 Lvs
20407 Stems cylind striated decumb 2-lvd, Lvs obl , Flws usually solit , Seps and pets lanc equal incurved spotted,
20408 Stems long fur 1-lvd, Lvs wavy obl obt emarg , Spathe large 1 flwd , Seps lanc , Pets obl wavy much broader, Lip obl emarg wavy cucullate at base [expand part crim. bord with white wavy, Seps rosy crim.
20409 Pseudo-b 2 inches long 2-lvd, Lvs ellipt , Flowers solit on long drooping pedunes, Pets much larger than seps
20410 Pseudo bulb 2-leaved, Lvs oblong coriaceous, Scape slender 8-flowered, Lip 2-lobed, Segments denticulate wavy recurved having the central veins bearded

20411 Sepals linear acute, Petals similar, Lip ovate convoluted acuminate

[nvent ov ac equal, Disk of Lip with 5 straight wavy lamellæ, Lat. lbs ov , mid one dilated curled at apex
20412 Lvs ensiform plicate, Scape tall radical, Seps two of which are lamellate in the middle and are with petals con-
[middle lobe ovate curled with 5 elevated wavy lines
20413 Scape simple long, Sepals and petals lanceolate-linear erect, Lip oblong 3-lobed, Lateral lobes short incurved,
20414 Lvs obl -lanc 7-nerved acum , Flws racemose, Seps and pets green nearly equal cuneate-oblong secund collateral, Lip 3-lobed, Lateral segs short erect, middle one mem obov emarg bilamellate along the middle
20415 Sepals obl -lanc , Petals ovate lanc spreading, Lip cucullate, Lateral lobes rounded short, middle one roundish emarginate convex unguiculate, Leaves lanceolate
20416 Lvs obl -lanc plicate acute, Racemes 6—9-flwd, Bracts obl obt. cucullate deciduous, Seps spreading linear-obl Pets broader undulate, Lip 3-lbd, Segs obt , middle one crenu curled with 5 lamellæ and 2 short lat. ones
20417 Lvs broad-lanc 9—11-nerved equal to scape, Raceme contracted, Bracts green concave obtuse, Lateral lobes of lip linear erect about equal to column [dle one cuneate emarg with 3 villous lamellæ
20418 Lvs 2 lanc lin shorter than downy scape, Rac. secund downy, Bracts acum , Lat lobes of lip obl. erect, mid-
[and 3 secund flws, Lower sep large and grown into a bag beyond which project a pair of lin reflexed petals
20419 Pseudo-b slender tapering 1-lvd, Leaf petiol oval thin, Scpe radical furnished with about 6 loose distant scales
[bilamellate at base, Anther 2-horned
20420 Leaf oblong-lanceolate fleshy petiolate shorter than scape, Middle lobe of lip emarginate apiculate spurless
20421 Pseudo-b broad-ovate furrowed, Leaf solitary lanceolate l boot to gon a very long petiole, Spike many-flowered bracteolate, Petals and seps lanceolate, Lip oblong 3-lobed, Middle lobe roundish short, Spur short
[entire, Spur subulate arched length of ovarium
20422 Stemless, Leaves broad-lanceolate acuminate, Sepals and petals oblong-lanceolate, Lip cucullate ventricose
20423 Stemless, Leaves oblong lanceolate acute, Sepals and petals lanceolate, Lip cucullate curled entire acuminate, Spur arched emarginate, Bracts acuminate



and Miscellaneous Particulars

3212 *Spathoglóttis* requires the same treatment as *Blétia.*
3213 *Schlimma.* An epiphyte with much the habit of a *Cypripedium*
4414 *Arnia.* A terrestrial plant with the habit of the species of *Eulóphia.*

20424 - - maculàtus *Lindl.* spotted flwd ☾ △ or 3 ja jn Y Nepal 1823 D p r.w Bot. mag 3960
Blètia Woodfórdii Loud. hort. brit, Bot mag 2719. *flàva* Wall.

2772 ASPA'SIA.

20425 17930*a* epidendroides *Lindl* Epidendrum-lk ☾ △ cu 1 f W Y Panama 1833. D p.r w Bot. mag 3962
20426 - - lunàta *Lindl* crescent-mrkd ☾ △ cu 1 f G w Br Rio Jan 1843 D p r w

3215 2772*a* DIGNA'THE *Lindl.* DIGNATHE (Not explained by author) *Orchideæ*
20427 - - pygmæ'a *Lindl* dwarf ☾ △ cu ½ su G Y.sp Mexico ... D fib p

3216 2772*b* PILU'MNA *Lindl* PILUMNA (*Pileos*, a cap.) *Orchideæ.*
20428 - - làxa *Lindl* loose ☾ △ or ½ o W Y P Popayan 1844. D fib p Bot. reg 1846, 57
20429 - - frâgrans *Lindl.* fragrant ☾ △ fra ¾ my jl W.o Popayan 1845 D fib p

1902 ORNITHI'DIUM.

20430 12930*a* álbum *Hook* white-flowered ☾ △ or 1 n W Trinidad 1833 D p r w Bot mag 3946

3217 1902*a* ORNITHA'RIUM *Lindl.* ORNITHARIUM. (*Ornithárion*, a small bird) *Orchideæ*
20431 - - striátulum *Lindl* striated ☾ △ or 1 su Y.w Indla 1847. D fib p Px.fl g 1 [illegible] 117
Ornithochilus striátulus Hort Calcutta

2773 SOPHRONI'TIS.

20432 17947*a* cérnua *Lindl* drooping ☾ △ or ½ n d Ro Brazil 1820. D p r w Bot reg 1129
nùtans et *Hoffmanséggii* Rchb *stapelia* Hoffmansegg
20433 - - pterocárpa *Lindl* wing-fruited ☾ △ or ½ mr.my R Guatem 1842 D p r w Px fl g 3 11 [illegible]
20434 - - violàcea *Lindl.* violet-flowered ☾ △ or ½ f my V Mexico 1838 D p.r w Px fl g 3 11 [illegible]

2774 CIRRHÆ'A

20435 17949*a* obtusàta *Lindl.* bluntish-petald ☾ △ or ¾ s Y P sp Brazil 1835 D fib p Bot. reg 2001

20436 - - saccàta *Lindl.* saccate ☾ △ cu ½ my s Y G Brazil 1835. D fib p Bot mag 3729
fúsco-lùtea Hook B m 3726, not Lindl B reg

2775 SARCOCHI'LUS.

20437 17940*a* calcèolus *Lindl* slippered ☾ △ or ½ su W Manilla 1839 D fib p Bot reg 1840 [illegible]
20438 - - fúsco-lùteus *Lindl* tawny-yellow ☾ △ or ¾ su Taw Y Borneo 1846 D fib p

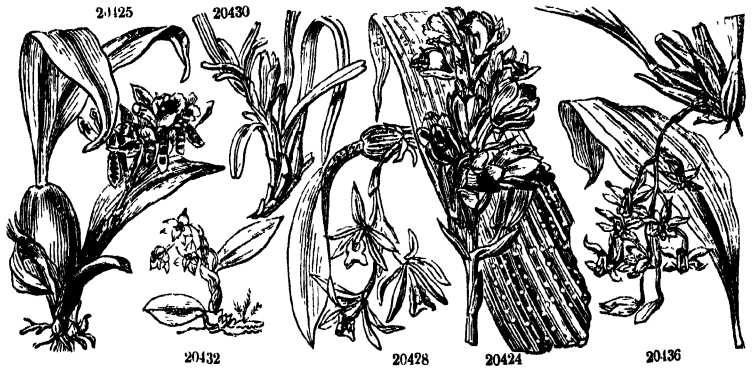
1892 MAXILLA'RIA

20439 12900*a* aciculàris *Hort* needle-shaped ☾ △ or ½ w P Brazil 1836. D fib p Bot mag 4174
[Bot reg [illegible]
20440 - - acutipétala *Hook* acute-petaled ☾ △ or ½ su Y P Mexico 1837 D fib p Bot reg 1838 17
[Bot mag [illegible]
20441 - - ciliàta *R & P* ciliated ☾ △ or ½ my G Peru 1826. D fib p Bot mag 4081
[Bot reg 1[illegible]
20442 - - leptosépala *Hook* narrow-sepaled ☾ △ or ½ jl Pa Y.P N Gren. 1846 D fib.p Bot mag 4151

20443 - - cucullàta *Lindl.* hooded ☾ △ or ¾ s P S Amer. 1837 D fib.p Bot reg 1840 [illegible]

20444 - - Párkeri *B M.* Parker's ☾ △ or ½ my jl Y w P Demera ... D fib p Bot mag 3[illegible]
20445 - - pùmila *Hook.* dwarf ☾ △ or ¼ ap my P Demera 1835. D fib.p Bot mag 4[illegible]
20446 - - crócea *Lindl.* copper-colored ☾ △ or ½ au Y Rio Jan 1833. D fib.p Bot reg 1[illegible]

20447 - - tetragòna *Hook* tetragonal-bulb ☾ △ or ½ jn G Y P Brazil 1830 D fib p Bot. reg 1[illegible]
20448 - - vitellìna *Lindl* yolk of egg ☾ △ or ½ jn Y Brazil 1838 D fib p Bot reg 1[illegible]
20449 - - ruféscens *Hook* rufescent ☾ △ or ½ d Y P sp Trinidad 1834. D fib p Bot mag 4[illegible]
20450 - - tenuifòlia *Lindl.* fine-leaved ☾ △ or ½ su Y P Mexico 1837. D fib p Bot reg 1[illegible]



History, Use, Propagation, Culture,

3215. *Dignàthe* is a genus nearly allied to *Aspàsia*. It is a small epiphytal plant, with scaly 1-leaved pseudo-bulbs and green flowers spotted with yellow

3216. *Pilúmna* is a genus said to be closely allied to *Aspàsia* Its habit is that of *Trichopilia* *P laxa* has the sepals and petals of a pale watery green, tinged with purple, the lip cream-coloured, and rolled round the column which is terete, a singular fringed hood overlying the anthers (hence the name), and a nearly vertical stigma They are pseudo-bulbous epiphytes, with coriaceous leaves and radical peduncles.

20424 Bluish, Leaves ovate-lanceolate acuminate spotted, Sepals and petals oblong obtuse, Lip 3-lobed, Lobes plicately crenated at top, Lateral ones small roundish, middle one ovate obtuse, Spur straight obtuse

[tire, middle lobe crenated emarginate

20425 Pseudo-b. oblong 2-edged, Sepals linear-oblong acute, Petals obtuse concave, Lateral lobes of lip roundish en-
20426 Pseudo-b oblong 2-edged, Sepals and petals linear obtuse spreading, Lip 3-lobed, Lateral lobes short, middle one flat nearly square wavy, Flowers solitary

20427 Pseudo bulb scaly 1-leaved, Flower green, with a few yellow spots

[Sepals and petals linear-lanc , Lip oblong undivided roundish constricted in middle unilamellate in middle

20428 Pseudo-b, thin 2-edged 1-lvd, Leaf obl spotted beneath, Raceme loose many-flwd, Bracts loose cucullate obtuse,
20429 Leaf broad-oblong, Raceme 2—3-flowered, Bracts lanceolate erect obtuse, Sepals and petals oblong-lanceolate acuminate, Lip oblong apiculated somewhat 3-lobed smooth

20430 Flowers sessile, Segments of Perianth oblong-obtuse, Lip 3-lobed, Middle lobe obtuse with a glandular disk Gland wrinkled setose at base

20431 Sepals and petals obtuse fleshy, yellow spotted inside, Lip oblong spongy white wrinkled rather scabrous

20432 Leaves ovate-oblong, Raceme corymbose few-flowered, Sepals and petals ovate acute, Lip repand acute, Wings of column short obtuse, Ovarium 6-ribbed

20433 Lvs roundish-oblong coriaceous, Raceme short corymbose, Ovarium 6-winged long beaked, Lip ovate crested
20434 Pseudo b oval 1-leaved, Leaf linear, Scape terminal many-bracteate at base 1-flowered, Lip obovate acute naked gibbous at base, Wings of column fleshy blunt falcate

20435 Pseudo-bulb 1-leaved, Leaves lanceolate acuminate at both ends, Petals and sepals linear-oblong bluntish flat, Lip 3-lobed, Middle lobe obovate acute inflexed unguiculate, lateral ones acuminate

20436 Leaves ovate-lanceolate, Petals linear-lanceolate, Lip 3-lobed, Middle lobe ovate concave, Lateral ones linear-oblong reflexed hairy

[fleshy obl ac , Lip 3-lobed, Middle lobe obl spongy, Lat. segs triang ascending acum. with 2 cili warts

20437 Caulescent radicant, Lvs obl fleshy obt obliquely emarg , Ped short scaly 2-flwd supra-axillary, Seps and pets
20438 Lvs distich coriac rounded at top and obliquely 2 lobed, Spikes dense conical Dorsal seps and pets narrower lanc ac Lat. ones rounded at apex, Lip 3 lbd, Lat segs ac , mid one obl obt cornute and toothed in. disk

20439 Subcaulescent, Pseudo-b rather fusiform sulcate 2-lvd scaly at base, Lvs linear channeled convex on back, Peduncles scaly axil 1-flwd, Perianth connivent, Seps and pets ovate, Lip undivided oblong obtuse

20440 Pseudo-bulb obovate angular 2-leaved, Leaves broad linear, Scape radical 1—2-flwd, Sepals and petals oblong acute, Lip oblong 3-lobed, Lobes short involving the column, middle one acute reflexed

20441 Pseudo-bulb ovate compressed, Leaves lanceolate, Scape 1-flowered bracteate deflexed, Lateral lobes of lip oblong, middle one large much fringed ending in a saccate appendage, Spur short conical

20442 Pseudo-bulb ovate-roundish 2-edged flattened 1-leaved, Leaves broad-lanceolate coriaceous obtuse, Scape radical short, Sepals and petals narrow lanceol acuminate with revolute edges, Lip obovate-oblong 3-lobed, Lateral lobes obtuse, middle one large revolute obtuse with dentately fringed edges and a pulvinate hairy disk

20443 Pseudo-b oval flattened 1-lvd, Lvs broad longer than scape which is clothed with scale-like sheaths, Bracts hooded longer than ovarium, Sepals ovate acuminate erect, Petals ensiform smaller, Lip oblong fleshy 3-lobed, Lateral lobes short, middle lobe elongated obtuse apiculated with a spatul. callosity in disk

20444 Pseudo-b ellip compr wrinkled 1-lvd, Leaf lanc -lingulate coriac obscurely stri tapering into the compres petiole, Scape 1-flwd imbri by bracts, Pets lin -lanc , Lip 3-lobed, Lat lobes incurv , mid one spread wavy

20445 Stem short scaly, Pseudo-bulb aggregate oblong furrowed 1-leaved, Leaf lanceolate, Scape 1-flowered, Petals and sepals erect oblong obtuse, Lip erect oblong obscurely 3-lobed with a callous disk, Middle lobe bifid

20446 Pseudo-b oblong compressed leafy, Lvs oblong wavy obtuse emarginate broadly sheathed, Scp erect 1 flwd loosely sheathed one half shorter than lvs, Seps and pets narrow triangular elongate, Lip obovate obtuse 3-lbd fleshy and curled at top with one tubercle above middle

20447 Pseudo-b ov tetrag 1-lvd, Lvs obl -lanc plic Fls rad sol , Seps obl. obt spread , Pets sim. smaller, Lip fleshy ventric. 3-lobed erect, Lat lobes small ac , middle one convex outside with tabul incumb append in disk

20448 Pseudo b ov obt angular 1-lvd, Lvs lanc , Petioles channeled, Rac drooping length of radical lvs, Lip cuneate 3 lobed, Lat lobes ac crenulated in front, middle lobe 2-lobed cord cucul with 3-lbd blunt tubercle in disk

20449 Pseudo b ovate subtetrag 1-lvd , Lvs lanc acum at both ends Scpe 1-flwd with distant sheaths, Seps and pets obl obt , Lip obl 3-lobed without tubercles, Lateral segments small ac , middle ones elong emarginate

20450 Pseudo-bulb ovate-oblong compressed 1-lvd longer than scales, Lvs linear-lanceolate acute recurved, Peduncs axillary solitary scaly at base, Flws drooping, Seps ovate-lanceolate revolute, Pets ovate obtuse connivent, Lip oblong undivided ovate arched reflexed at top contracted below the apex with an oblong callosity in disk



and Miscellaneous Particulars

3217 *Ornithárrum strictulum* is a caulescent plant with distich leaves and spikes of resupinate closed flowers which are yellow and spotted inside; but the lip is white and dark purple at top. It is very nearly allied to *Ornithocharus*

2774 *Cirrhæa* The flowers of all the species have, for what is called the rostellum, a prolongation in the form of a tendril or cirrhus, hence the generic name

20451 - - dénsa *Lindl.* dense-racemed ♂ △ or ½ ja W.R Mexico ... D fib p Bot. reg 1804

20452 - - elongàta *Lindl.* elongated ♂ △ or 1 su Y Br C Amer 1847. D fib.p Px. fl g 3,88 264

3218. 1892*a* PROMINÆ'A *Lindl* PROMINÆA (Not explained by author) *Orchideæ.*
20453 - - stapeliòides *Lindl* Stapelia-like ♂ △ or ½ s G Y P Brazil 1828. D fib p Bot. mag 3877
Maxillària stapeliòides Lindl.

20454 - - xánthina *Lindl* yellow ♂ △ or ½ aut Y Brazil 1840 D fib.p
Maxillària xánthina Lindl., as well as *M Rollissònz* No 17944, belongs to this genus.

20455 - - lentiginòsa *Lindl* lentiginose ♂ △ or ½ aut Y P st Brazil 1838. D fib p
Maxillària lentiginòsa Lindl.

3219. 1892*b* SCUTICA'RIA *Lindl.* SCUTICARIA. (Not explained by author) *Orchideæ*
20456 - - Steèlii *Lindl* Steel's ♂ △ or ½ o Y P sp Guiana 1834. D fib p Bot. mag 3573
Maxillaria Steèlii Bot mag 3573, Bot reg 1986

3220 1892*c* PAPHI'NIA *Lindl* PAPHINIA (Not explained by author) *Orchideæ*
20457 - - cristàta *Lindl* crested ♂ △ or ½ jn au W P Trinidad 1834 D fib p Bot. reg 1811
Maxillària cristàta Bot reg 1811

3221. 1892*d* LYCA'STE *Lindl* LYCASTE (A mythological name) *Orchideæ*
20458 - - chrysóptera *Morren* golden-winged ♂ △ or 1 jn au ... Mexico 1850 D fib p Morren gand 232
20459 - - macrophýlla *Lindl* long-leaved ♂ △ or 1 w G P Peru 1837. D fib p Pop. gen pl 1 61
Maxillària macrophýlla Popp.

20460 - - gigantèa *Lindl.* giant ♂ △ or 2½ w G Guayaq 1844 D fib.p Bot reg 1845 34

20461 - - Déppei *Lindl.* Deppe's ♂ △ or 1 ju jl Cho w Mexico 1828 D fib p Bot cab 1612
Maxillaria Déppei Bot cab 1612.

20462 - - Skínneri *Lindl* Skinner's ♂ △ or 1 w W Ro Guatem. 1841 D fib.p Bot mag 4410
Maxillària Skinneri Batem.

20463 - - aromática *Lindl* aromatic ♂ △ or 1 my Y Mexico 1825. D fib p Bot reg 1871
Maxillària aromática Hook Bot reg 1871. *Còlax aromáticus* Spreng

20464 - - cruénta *Lindl* crimson ♂ △ or 1 w Y c sp Guatem 1841. D fib p Bot reg 1840 [illegible]
balsàmea Rich. *Maxillaria cruénta* Bot reg 1842, t. 13.

20465 - - fulvéscens *Lindl* fulvescent ♂ △ or 2 w Taw.o Columb ... D fib p Bot mag 4193

20466 - - macrobúlba *Lind* large-bulbed ♂ △ or 1 w ... ... D fib p Bot mag 4 [illegible]
Maxillària macrobúlba Bot mag, *Maxillaria Barringtòniæ* No 12899., and *M. Harrisòniæ* No 1260
belong to this genus.

20467 - - plàna *Lindl* flat ♂ △ or 1 my au R c Bolivia 1842 D fib p Bot. reg 1811 [illegible]

3222. 1892*e* CO'LAX *Lindl.* COLAX (Not explained) *Orchideæ*
20468 - - víridis *Lindl* green-flowered ♂ △ or 1 my jn G Vi Brazil 1828. D fib p Bot reg 1510
Maxillària víridis Lindl. Bot reg 1510

20469 - - platanthèra *Lindl* broad-antherd ♂ △ or 1 my jn G Vi Brazil 1828. D fib p Bot mag 3177
Maxillària platanthèra Bot. mag. 3173

3223 1892*f* ACINE'TA *Lindl* ACINETA (Not explained) *Orchideæ.*
20470 - - chrysántha *Lindl* golden flwd ♂ △ fra 2 my Y w c Mexico 1850 D p.r w An gand 282
Neippérgia chrysántha Morren

20471 - - Humbòldtii *Lindl* Humboldt's ♂ △ or 1 mr P Br Venezu 1841 D p r.w Bot reg 1811
Peristeria Humbòldtii Lindl Bot reg 1843, t 18 *Angulòa supérba* H B & Kth
β fúlva *fulvous-flwd* ♂ △ or 2 mr Fulv Venezu 1842 D p r.w Bot mag 41[illegible]

20472 - - Bárkeri *Lindl.* Barker's ♂ △ or 2 mr jn Y Mexico 1837. D p.r.w Batem or mex
Peristeria Bárkeri Batem Orch. mex t 8

3224. 1892*g* AGANI'SIA *Lindl* AGANISIA (*Aganos*, desirable; neat appearance of plant) *Orchideæ*
20473 - - pulchélla *Lindl.* neat ♂ △ or ½ sp W.y c Demerar. 1839 D p.r.w Bot. reg 1840 [illegible]



History, Use, Propagation, Culture,

3218. *Prominæ'a* A genus of pseudo-bulbous epiphytes separated from *Maxillària*, with 1—2-leaved bulbs and 1—2 flowered-scapes and showy yellow flowers, often spotted or streaked with purple.

3219. *Scuticària Steèlii* is an old inhabitant of our stoves. It has an articulated branched bulbless rhizoma, fan-shaped leaves, and large yellow flowers spotted with purple.

3220. *Paphinia cristàta* is a pseudo-bulbous epiphyte with few-flowered pendulous scapes and very pretty flowers white outside and faced with purple inside, and the petals are altogether purple.

3221. *Lycàste* is a genus separated from the old *Maxillària*, and consists of pseudo-bulbous epiphytes with plicate leaves, and erect, radical, one-flowered scapes The flowers of all are showy, and propped by a large spathe-like bract

9451 Pseudo-b obl. compr. 1-lvd, Lvs obl.-lanc. emarg., Rac. axil. densely aggre., Brcts cucul., Perianth bilab, Seps lin.-lanc acum keeled, Pets smaller, Lip obl. undiv recurv channelled at top with elev transv. line in mid.

9452 Pseudo-b cylind elong 2-lvd, Lvs lanc 3-ribbed, Scape erect with 2 sheaths, Rac. dense oblong, Brcts setaceous, Seps and pets linear acuminate, Lip ovate-oblong fleshy lobed on both sides and warted on the face

9453 Pseudo-b ovate tetrag. 2-lvd, Lvs thin lanc. spreading pale glaucous reticulated, Pedunc. diffuse 2-flwd, Seps and pets roundish-ovate acute spreading nearly equal, Lip oblong 3-lobed, Lateral segms erect linear oblique obtuse, middle one ovate-oblong cuculiate furnished with a fleshy flexuous transverse 1-toothed crest

9454 Pseudo-b oval tetrag. 1—2-lvd, Lvs narrow-lanc, Pedunc ascend 1-flwd terminated by a sterile pedicel, Brct ovate mucro cucul., Seps and pets obl. ac spread nearly equal, Lip obl 3 lobed, Lateral segms erect lin middle obt entire, middle one bilabiate, Upper lip fleshy short trunc 5-dentate, lower lip oblong acute

9455 Bracts broad-ovate acuminate, Middle lobe of lip ovate-oblong obtuse, Crest transverse furnished with a quadrate tridentate process, Anther incurved at apex.

9456 Plant rhizomatose, Rhizoma articulated branched bulbless, Lvs flagelliform, Flowers large yellow spotted with purple

9457 Plant pseudo-bulbous, Scapes pendulous few-flwd, Flwrs beautiful, white outside interruptedly banded with purple inside, Petals all purple

[3 lobed, Column hairy, Petals naked

9458 Lip roundish spotted with crimson, Lateral lobes short, middle one lanc acute denticulated, Appendage

9459 Bract green cucul acute length of ovary, Seps obl wavy spreading recurved at top pilose inside at base, Pets erect longer than column oblong fleshy recurved at top lobed towards the top Lip shorter oblong concave 3-lobed, Middle lobe roundish crenated pilose with a tongue-shaped appendage, Anther villous

9460 Bract green about equal to oblong-lanceolate seps, Lateral seps falcate Pets conform smaller, Lip lanceolate acuminate, Lateral segs acute, middle one ovate acum serrated, Appendage fleshy emarginate

9461 Scape shorter than lvs, Sheaths ventricose acum., Seps obl.-lanc spreading, Pets smaller obl wavy connivent, Lip cuculiate 3-lobed recurved at top, Lat segms roundish, middle one obl obt, Callosity elevated ovate

9462 Bret green cucul acute much longer than ovary, Seps obl.-lanc acute spread, Pets much shorter oval erect convol above the column reflexed at top, Lip 3 lobed, Lat lobes erect trunc, middle one longer ovate rounded deflexed. Appendages fleshy tongue-shaped, Column downy, Flower 6 inches across

9463 Sheaths distant obt cucul, Seps ovate-obl, Pets conform acute, Lip semicylind, Lat segms acuminate, middle one cuneate serrulate at apex, Appendage large concave fleshy truncate, Face of column villous

9464 Pedunc rarely 2-flwd, Sheaths distant obtuse cucul, Seps ovate-obt, Pets smaller conform, Lip shorter than seps concave 3-lobed, Lobes roundish, Middle one curled downy, Tubercle small flat, Column downy

9465 Bracts green shorter than ovary, Seps lanc, Lateral ones falcate, Pets conform but a little smaller, Lip oblong, Lateral segms small acute, middle one ovate obtuse fringed with a fleshy emarginate appendage

9466 Pseudo bulb large ovate compressed Lvs numerous oblong membranous nerved, Peduncs radical solitary 1-flwd, Seps oblong-ovate drawn out a little at base, Pets smaller broadish, Lip length of pets 3-lobed with a bilamellate disk, Middle lobe oblong ovate incurved curled

9467 Upper bract cuculiate, Seps oblong flat, Pets conform, Lip 3-lobed, Lateral lobes crenulated at apex, middle one rounded serrated, Column downy, Anthers villous, Tubercle of lip elevated slightly 3-lobed

9468 Seps and pets conniving oblong roundish obtuse nearly equal, Lip short 3-lobed, Middle lobe transversely rhomboid unguiculate flat

9469 Seps linear oblong obtuse with a series of spots along the middle, Pets narrower conform spotted, Lip narrow 3-lobed downy smooth, Lateral segs short acute, middle one dilated rounded cuneate, Column lobed at top downy bisulcate towards the base

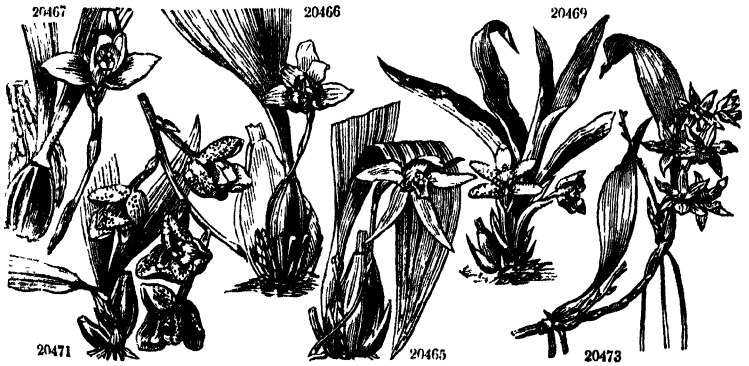
9470 Racemes erect, Hypochilum having a long blunt papillose horn

9471 Petals much smaller than seps, Lip 3 lobed, Middle segm 2-lobed, lateral ones cuneated, Column short with broad wings, Callosity of lip linear simple, Raceme pendulous

β Flowers fulvous

9472 Pets equal with seps, Callosity of lip double, Lower one linear villous, upper one subhastate tridentate at top and many-dentate at base, Lip 3-lobed, Middle segment emarginate, lateral ones scimitar-shaped, Column elongated with narrow wings, Scape pendulous

9473 Rhizoma creeping, Pseudo-b small 1-lvd, Leaf oblong 5-ribbed, Racemes erect radical shorter than leaves



and Miscellaneous Particulars.

3222 *Calax* is a genus of pseudo-bulbous epiphytes with terminal and radical plicate leaves. The peduncles are radical, erect, one-flowered, and sheathed; and the flowers are greenish.

3223 *Acanthia*. This genus is composed of subterrestrial pseudo-bulbs with much the habit of *Peristeria*, with plicate leaves and pendulous racemes of large yellow or purplish brown flowers

3224 *Aganisia*. A pretty epiphyte with creeping pseudo bulbous rhizomes. The pseudo-bulbs are 1-leaved, the scapes are erect and radical, shorter than the leaves, which are plicate. The flowers are white with a yellow lip, having a blood-coloured spot at the base.

3225. 1892*b*. HOULLE'TIA *Lindl.* HOULLETIA. (*M Houllet*, a French gardener.) *Orchidæ*
20474 - Brocklehurstiàna *L.* Brocklehurst's ℰ ⧄ or 2 su G Vi Brazil 1841. D p.r.w Bot. mag 4072
Maxillària Brocklehurstiàna Lindl. B R 1841.
20475 - vittàta *Lindl* ribanded ℰ ⧄ or 1 su Y Cho Brazil 1841. D bloc Bot. reg 1841, 69

2776 BIFRENA'RIA.
20476 17947*a* Hardwèni *Lindl.* Hardwen's ℰ ⧄ or 1 my s Y G w Brazil 1851. D fib.p Bot. mag 4629
20477 - inodòra *Lindl.* sceutless ℰ ⧄ or 1½ ap G v Brazil 1839 D fib.p

20478 - atropurpùrea *Lindl* dark purple ℰ ⧄ fra 1 jl.au Dk.P Brazil 1828 D fib p Bot. cab 1877
Maxillària atropurpùrea Lodd Bot cab 1877.
20479 - racemòsa *Lindl.* racemose ℰ ⧄ or 1 jl au Str w Brazil 1825. D fib p Bot. reg 1566
Maxillària racemòsa Hook. Bot. mag 2789 [Bot mag 2789
20480 - aúreo-fúlva *Lindl* golden brown ℰ ⧄ or 1 jl au O Brazil 1840 D fib p Bot mag 3629
Maxillària aureo-fúlva K. & W. Fl cab t 83. *Maxillària stenopétala* K & W Fl. cab. 2 p. 112
20481 - vitellina *Lindl* yolk of egg ℰ ⧄ or 1 jl au ½ P Brazil 1838 D fib p Bot. reg 1839 12
Maxillària vitellina Lindl. Bot. reg 1839, t 12 *Maxillària barbàta* Westw. in Phyt p 7

3226 2776*a* STENOCO'RYNE *Lindl* STENOCORYNE (*Stenos*, narrow, *koryne*, a club.) *Orchidcæ*
20482 - longicórnis *Lindl* long-horned ℰ ⧄ or 1 su O.Br.sp Dem. 1836 D p.r.w
Bifrenària longicórnis Lindl Bot reg 1838.

2777 TRIGONI'DIUM *Lindl.*
20483 - ringens *Lindl.* ringent ℰ ⧄ or 1 year Y.G Mexico 1839. D p.r.w

20484 - obtùsum *Lindl* obtuse ℰ ⧄ or 1 au s W.o P Demera 1834. D p.r.w Bot reg 1923

2778. TRICHOPI'LIA.
20485 17948*a* suàvis *Lindl* sweet-scented ℰ ⧄ or ½ jn W R. S Amer 1850. D p.r.w Bot mag 4694
20486 - coccínea *Warcz.* scarlet-flwrd ℰ ⧄ or ½ jn Y Car C Am 1845. D p.r w [Px fl g 1 11
marginàta Henf. in Moor mag 2. p 184

3227. 2778*a* HE'LCIA *Lindl.* HELCIA (*Helcium*, the collar of a horse; anther and column.) *Orchidcæ*
20487 - sanguinolénta *Lindl* bloody ℰ ⧄ or ½ mr Ol R Mexico 1844. D p r w Px fl. g 2 97 182

3228. 2778*b* TRICHOGLO'TTIS *Lindl* TRICHOGLOTTIS (*Thrix*, a hair, *glotta*, a tongue.) *Orchidcæ*
20488 - pállens *Lindl.* pale-flowered ℰ ⧄ or ½ aut Y G. Br sp Manilla 1849 D p r w

3229. 2778*c* WAILE'SIA *Lindl* WAILESIA (*G. Wailes* of Newcastle, a cultivator of Orchidcæ.) *Orchidcæ*
20489 - pícta *Lindl* painted flwd ℰ ⧄ or 1 su P Y C Java 1848. D p r w

2780 GOVE'NIA.
20490 17951*a* fasciàta *Lindl* fasciate ℰ ⧄ or 1½ s Y c Mexico 1842 D p r w Bot reg 1845, 67
20491 - utriculata *Lindl* bladdery ℰ ⧄ or 1½ s W Jamaica 1843 D p r w Bot mag 4191
Cymbidium utriculàtum Swartz. *Limodòrum utriculàtum* Swartz
20492 - Gárdneri *Hook* Gardner's ℰ ⧄ or 2 d W.sp Brazil 1837 D p r.w Bot mag 3660

2782 CYCNO'CHES.
20493 17953 barbàtum *Lindl.* bearded ℰ ⧄ or 2 my Pa R Y N Gren 1849 D p r.w Bot mag 4479

20494 - maculàtum *Lindl.* spotted ℰ ⧄ or 2 d Y Br. sp Guatem. 1839. D p r w Lindl sorch 33

20495 - Egertoniànum *Batem* Egerton's ℰ ⧄ or 2 aut Dk.P Mexico 1835 D p r.w Orch mex 10
β *virìde* Lindl *green-flowered* ℰ ⧄ or 2 aut G Mexico 1842. D p.r w Bot reg 1846, 16
stellifórme Lodd
20496 - musciferum *Lindl* fly-bearing ℰ ⧄ or 1 f Pa.Br Columb 1849. D p.r.w Rw fl g 3 29 248
20497 - Pescatórei *Lindl* Pescatore's ℰ ⧄ or 2 au Y.Br N. Gren 1848 D p r.w

20498 - aúreum *Lindl.* golden-flwrd ℰ ⧄ or 1 aut Y C Amer 1850. D p r w Px. fl g 3 75

20499 - pentadáctylon *Lindl.* five-fingered ℰ ⧄ or 1 mr G.Y.P Brazil 1841. D p r w Bot reg 1843 22

3230 2782*a*. DENDROCHI'LUM *Blume.* DENDROCHILUM (*Dendron*, a tree, *cheilos*, a lip.) *Orchidcæ*
20500 - abbreviàtum *Blume* short ℰ ⧄ or 1 su G.w.Y Java 1840. D p r w



History, Use, Propagation, Culture,

3225. *Houllètia* is a genus of splendid epiphytes. The leaves are on long petioles and the flowers are in racemes.
3226 *Stenocóryne longicórnis* is a pseudo-bulbous epiphyte, with a solitary leaf to each bulb, and radical racemes of flowers, which are of an orange colour spotted with brown
3227 *Hélcia sanguinolénta* is nearly related to *Trichopilia* and *Aspàsia*, and its culture and treatment are the same, but it differs in not having the lip united to the column, and in its deep-fringed anther bed.

20474 Lvs on long petioles, Raceme 6-flowered, Sepals oblong rounded at top as are the petals
[rounded at apex with lateral acute angles, Flwrs racemose yellow striped with chocolate colour
20475 Petals linear-lanceolate twisted at base, Lobes of hypochilum ovate obtuse straight, Epichilum rhomboid

[Lip large cucullate subrepand downy inside with a downy crest
20476 Lvs long terete pendent acute sulcate, Pedicels erect sheathed 1-flwd, Seps oblong acuminate spreading uniform,
20477 Pseudo-b tetrag, Leaf obl-ac plic. curled, Ped. 1 fld, Seps obl-obt with an elevated clav horn, Pets conform wavy Lip 3-lbd cucul with rounded undu subdent edges, Mid lbe pilose Callosity of disk fleshy cun emarg
20478 Pseudo-b ovate obt tetrag 1-lvd, Lvs obl-lanc plicate, Racemes radical 3-flowered, Lip 3-lobed, Lateral lobes short diverging, middle one transverse a little 3-lobed revolute suberose, Callosity in disk tridentate in front
20479 Pseudo-b ov compressed tetrag. 1-lvd, Lvs obl-lanc 3-ribbed, Scape many-flwrd slender, Seps obl. ac., Pets lin spatul smaller, Lip obl cucul undivided undulated emarg. callous in the axis, Column downy
20480 Pseudo-b rndsh-ov ang wrinkled 1-lvd, Lvs obl.-lanc rbbd ac., Scpe rad many-flwd, Flws on long peds, Seps lanc acum, lat ones reflexed at top, Pets lin-lanc. stri, Lip ungui 3 lbd stri in mid., Mid seg lanc acum.
20481 Pseudo bulb ovate bluntly angular 1-lvd, Lvs lanceolate, Racemes drooping, Lip cuneate 3-lobed, Lateral lobes acute crenulated with a blunt 3-lobed tubercle in the disk and a downy claw

20482 Pseudo-bulb elongated tetragonal, Lvs oblong-lanceolate subplicate shining, Raceme loose many-flwd, Lateral sepals ovate acute, Pets ovate acute, Lip unguiculate spatulate 3-lobed at top downy in middle with an elevated disk, Lobes rounded

20483 Pseudo-b compr roundish, Lvs obt recurved coriac shining, Scape filiform strict sheathed, Perianth bilab, Hind sepal arched, Pets obl with revol edges, Lip 3-lobed short cil downy, Lateral lobes tooth-formed, mid lobe revol. shining in cent. furnished with reniform callosity which is obsoletely triden. in front, Col downy
20484 Lvs lin.-lanc., Sheaths acute, Seps obov., Pets obtuse, Lip tubercled on back, Anther glandularly pilose

[white dashed with pink, Lip large 2-lobed wavy curled white with rose-coloured blotches
20485 Pseudo-bulb slender obcordate, Pedunc 2-flwd, Lvs broad-oblong coriaceous wavy, Pets linear not twisted
20486 Pseudo-b narrow compressed furrowed, Lvs lanceolate flat slightly cordate, Pets twisted yellow, Lip even flat carmine with a white border

20487 Pseudo-b ovate elongated, Lvs 4—6 inches wavy narrowed into a channeled petiole, Peduncs shorter than bulbs 1-flwd bibracteate, Seps and pets olive spotted with blood colour, Lip white striped with blood colour obovate emarginate with yellow denticulated striated appendages

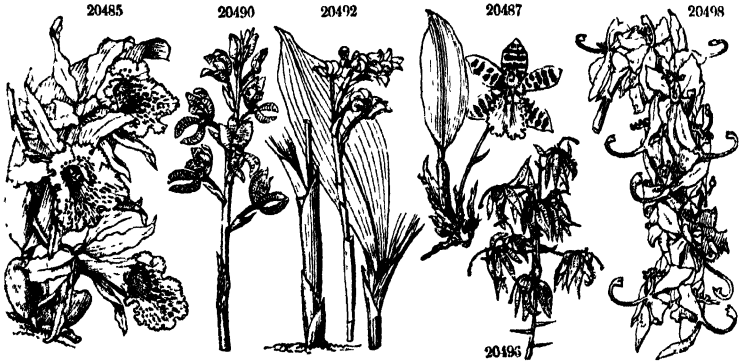
20488 Flws lateral usually solitary, Lip 3-lobed, Lateral lobes scimitar-shaped erect callous in middle, middle segment obovate denticulate with a villous keel, Column glabrous mutic running into the lip at base

20489 Caulescent, Lvs distich coriaceous, Peduncles many-flowered lateral erect

[oblong apiculated smooth inside, Anther with an inflexed mucrone
20490 Spike elongated cylindrical, Bracts equal to ovarium, Seps narrow acute, Pets obovate-lanceolate broader, Lip
20491 Pseudo-b ovate enclosed in a large membranous oblong pellucid striated sheath, Lvs twin broad-oblong plicate, Rac elongated many-flwd, Seps and pets curved acuminate, Lip oblong-ovate acute
20492 Scape bluntly tetragonal sheathed in middle, Raceme elongated, Flws retracted after florescence, Bracts oblong green, Seps and pets ovate bluntish, Lip ovate acute naked marked with 5 marginal spots and 2 convergent convex lines in middle, Anther horned
20493 Rac ascending 2 feet many-flwd, Lip 3-lobed bearded at base, Lateral segments erect triangular acuminate equal sided, Middle lobe rhomb-lanceolate acuminate, Ovarium hairy
20494 Raceme very long many-flwd, Lip linear-lanceolate, Hypochilum lin, Metachilum horned at base pinnatifidly margined with terete bent glands [cesses, Column slender very long
20495 Rac very long pendulous, Seps and pets membranac. recurved, Disk of lip roundish broken into clavate pro-
b Flowers pale green

[segments linear ascending, middle one bearded at base tongue-formed at apex
20496 Rac loose, Brcts subulate, Seps lin-lanc acute, Dorsal one refracted, Pets lin, Lip membr hastate, Lateral
20497 Lvs coriaceous glaucous beneath, Rac many-flwd pendulous, Ovarium tomentose, Seps oblong acute, Pets smaller lanceolate narrow at base, Lip flat 3-lobed tomentose in middle, Middle lobe thicker acute
20498 Rac long pendulous compact, Seps lanc. flat, Pets similar rolled backward, Lip unguiculate ov ac. with round disk the end of which is broken off into short curved processes forked at the point, Column length of lip
20499 Seps and pets lanceolate reflexed, Lip unguiculate, Hypochilum with an incurved horn, Metachilum 4-lobed

20500 Pseudo-b ovate 2-lvd, Lvs oblong narrowed at base equal to raceme, Ovarium 6-winged equal to striated oblong acute deciduous bracts, Lip saccate cordate dilated at top retuse with a tooth between bicallous inside, Column truncate denticulate with tooth-formed angles in front



and Miscellaneous Particulars.

20501 *Trichoglóttis pállens* A small epiphyte with yellowish green flowers spotted with brown.
20502 *Wailesia picta* is a pretty epiphyte with painted flowers
20503 *Dendrochilum* Small epiphytes of little beauty, with two-leaved bulbs, and racemes of flowers.

20501 -	- filifórme *Lindl*	filiform	☇ ⧋ or	1	su	G	Manilla	1836	D p.r.w
20502 -	- latifòlium *Lindl.*	broad-leaved	☇ ⧋ or	1	su	G	Manilla	1836	D p.r.w

3231. 27826 CLEISOME'RIA *Lindl.* CLEISOMERIA (*Kleisos*, closed, *meris*, a part) *Orchidæ.*

20503 -	- lanàtum *Lindl.*	woolly	☇ ⧋ or	½	su	Y.P	E. Indies	1845	D p.r.w

1889 CATASE'TUM (Monachánthus 2784 and Myánthus 2783 are of this genus)

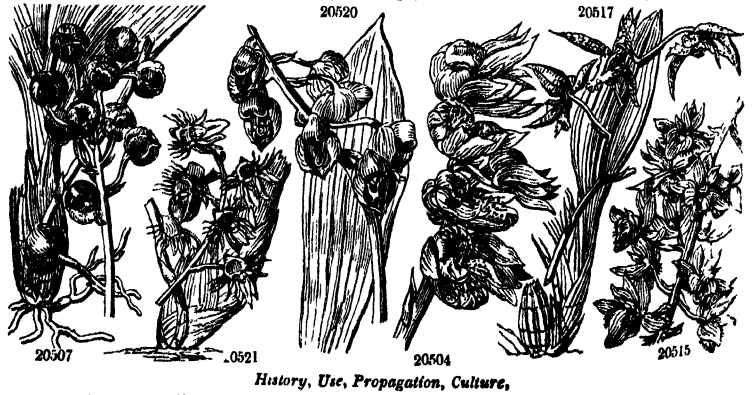
20504 12895*a*	integérrimum *Hook*	quite entire	☇ ⧋ or	1	aut	G.P sp	Guatem	1836.	D p r w Bot. mag 3825
	maculàtum Lindl Bot reg. 1840, t. 62 not of Kth.								
20505 -	- plàniceps *Lindl.*	flat-flowered	☇ ⧋ or	1	su	G.Y	Sp Main	1840	D p r w Bot reg 1840
20506 -	- semiapértum *Hook*	half-open-flwd	☇ ⧋ or	1	n	G	Brazil	1826	D p r w Bot reg 1708
20507 -	- globiflòrum *Hook.*	globe-flowered	☇ ⧋ or	1	w	Ol Br	Brazil	1840	D p r w Bot. mag 3942
20508 -	- longifòlium *Lindl*	long-leaved	☇ ⧋ or	2	aut	O.Vi	Demera.	1839.	D p r w Sert orch 41
	Monachánthus longifolius Bot mag 3262 and 3819								
20509 -	- atràtum *Lindl*	dark-coloured	☇ ⧋ or	1	au s	G P sp	Brazil	1837	D p r w Bot reg 1838
20510 -	- Russelliànum *Hook*	Russell's	☇ ⧋ or	2	aut	G w	Guatem.	1838.	D p.r w Bot mag 3777
20511 -	- laminātum *Lindl*	plated	☇ ⧋ or	1	aut	P G P	Mexico	1839	D p r w Sert orch 48
	β maculàtum Lindl	*spotted-flwd*	☇ ⧋ or	1	aut	G P	Mexico	1839.	D p r w Sert orch 48
	γ ebúrneum Lindl	*ivory-flowered*	☇ ⧋ or	1	aut	W G	Mexico	1839	D p r w Bot reg 1841, 24
20512 -	- spinòsum *Lindl*	spiny	☇ ⧋ or	1	aut	G.Br	Brazil	1840	D fib p Bot mag 3802
	Myánthus spinòsus Hook								
20513	- saccàtum *Lindl*	saccate	☇ ⧋ or	1	aut	Y P sp	Demera	1840.	D p r w Sert orch 41
20514 -	- nàsum *Lindl.*	nose-lipped	☇ ⧋ or	1	yl au	G pk c	Caraccas	1842.	D p r w
20515 -	- trúlla *Lindl*	trowel-lipped	☇ ⧋ or	1	su	G w br	C. Amer.	1840	D p r w Bot reg 1841 24
20516 -	- callòsum *Lindl*	callous	☇ ⧋ or	1	aut	R Br	La Guay.	1840	D p r w Bot reg 1841
20517 -	- deltoídeum *Lindl.*	deltoid	☇ ⧋ or	1½	aut	G P	Demera	1835.	D p.r w Bot. mag 3604
	Myánthus deltoídeus Bot reg 1896								
20518 -	- cornùtum *Lindl.*	horned	☇ ⧋ or	1	su	G.P sp	Demera	1840	D p r w Bot. reg 1841
	Myánthus cornùtus Lindl								
20519 -	- lanciferum *Lindl*	lance-bearing	☇ ⧋ or	1	su	G P	Brazil	1839	D p r w Bot reg 1841,
20520 -	- Wailèsii *Hook.*	Wailes's	☇ ⧋ or	1	w	G	Hondur	1840.	D p r.w Bot mag 4001
20521 -	- ròseo-álbum *Lindl*	rose and white fl	☇ ⧋ or	2	su.au	Ro w	Para	1836	D p r w Bot mag 37
	Monachánthus ròseo-álbus Hook								
20522 -	- viridi-flàvum *Hook*	greenish-yellow	☇ ⧋ or	1	w	G Y	Brazil	1842.	D p r w Bot mag 4007
20523 -	- fimbriàtum *Hook*	fringe-flwrd	☇ ⧋ or	1	aut	W Pk	Brazil	1837	D p r w Bot mag 3708
	Monachánthus fimbriàtus Gardn. *Myánthus fimbriàtus* Morren, Ann gand t 231.								
20524 -	- ochràceum *Lindl*	ochraceous	☇ ⧋ cu	1	w	Y	Brazil	1842.	D p r w
20525 -	- serràtum *Lindl*	serrate-lipped	☇ ⧋ cu	1	aut	Pa G Y	Panama	1844.	D p r w
20526 -	- Warczewítzii *Lindl*	Warczewitz's	☇ ⧋ fra	1	ap	Pa G	Panama	1849.	D p.r.w Px fl g 1 6

2785 MORMO'DES.

20527 17961*a*	pardínum *Batem*	leopard	☇ ⧋ or	1	su	Y P sp	Oaxaca	1840.	D p r w Flor cab 117
	β unicolor B M.	*one-coloured*	☇ ⧋ or	1	su	Y	Mexico	...	D p r w Bot mag 1871
20528 -	- Cartòni *Hook*	Carton's	☇ ⧋ or	1	o.n	Y.R st	S Marth.	1843.	D p.r w Bot mag 4300 6
20529 -	- aromáticum *Lindl*	aromatic	☇ ⧋ fra	¾	su	G.Y P	Mexico	1840	D p.r w Bot reg 1841
20530 -	- luxàtum *Lindl.*	dislocated	☇ ⧋ fra	1	jn	Pa.Y	Mexico	1842.	D p r w Bot reg 1841
20531 -	- buccinàtor *Lindl.*	shell-shaped	☇ ⧋ or	1	aut	Pa G.	La Guay	1835.	D p.r.w
20532 -	- lineàtum	lined	☇ ⧋ or	1	su	Ol G	Guatem	1840	D p r w Bot reg 1842 4
20533 -	- lentiginòsum	freckled	☇ ⧋ or	1	su	W dot	Mexico	1843	D p r w Bot mag 4057
20534 -	- ígneum *Lindl*	fiery	☇ ⧋ or	1	ap	R	S Marth.	1850.	D fib p Px fl g 3 99
20535 -	- flávidum *Klotzsch*	yellow	☇ ⧋ or	1	ja	Y	C Amer	...	D p.r w

3232 2785*a*. SCELOCHI'LUS *Lk Kl & Ott.* (*Skelos*, a foot, *cheilos*, a lip, unguiculate.) *Orchidæ.*

20536 -	- Ottòni *Lk. K & O*	Otto's	☇ ⧋ or	½	jl	Y.P	Caraccas	1840	D p r w Px fl g 3 99



History, Use, Propagation, Culture,

3231. *Cleisomèria.* A small woolly epiphyte of little beauty

20501 Pseudo-b conical, Scape filiform terminal elong., Rac. many-flwd, Rachis flexuous angular, Brcts paleaceous convolute, Pets obovate, Lip cuneate-roundish auricled at base, Appendages of column subulate glabrous
20502 Leaves oblong-lanceolate coriaceous 3-nerved, Pedunes elongated with a long spike at top, Lip smooth, Lobes linear-lanceolate acuminate ciliate, Segments shorter than the toothed column

20503 Lvs broad bluntly 2-lobed, Racemes dense branched much longer than lvs, Bracts ovate concave reflexed, Rachis and ovaria woolly

20504 Seps and pets conniving, Lip fleshy galeate inflexed at base with an entire or serrate margin

20505 Seps and pets ov. conniving, Lip fleshy galeate roundish compressed apiculated undivided with serrate margin
20506 Lvs oblong-lanceolate many-plicate longer than compact raceme, Perianth spreading a little, Lip galeate incurved at apex with denticulated sides
20507 Spike elong many-flwd, Perianth globose, Seps and pets conform ov ac concave imbricate, Lip glob. denticu
20508 Lvs very long grassy, Rac. cylind. pend many-flwd, Seps ovate-roundish conform to the pets, Lip urceol truncate apiculate waxy inside, fringed on the margin [roundish reflexed thick and denticulate
20509 Raceme decurved, Seps and pets spread ovate acute, Lip fleshy cucul with a thin pectinate margin, the apex
20510 Rac large, Lip membr infl in front contract at mouth the inner margin drawn out undu and fringed-crested in disk, Pseudo-b large elliptical, Lvs broad lanc [dent plate along the cent. which is 2-lbd at base, Col. tendr
20511 Lip lanc sac at base margins incurved at top and fringed towards the base, furnished with a fleshy ent. or
β Lip, column, and pets spotted with purplish brown
γ Lip ivory-coloured spotless like the column and petals
20512 Petals serrated towards the top, Lip saccate beneath the middle fringed with long succulent white slender hairs attenuated and recurved at top with a tripartite spine above at base, Spine large toothed
20513 Seps lanc spread. dorsal one and pets arched, Lip rndsh abruptly acum. fringed sac. in middle, Col cirrhate
20514 Spike short erect, Seps oblong-lanceolate complicate equal to lanceolate ascending pets, Lip hemispheric drawn out into an abrupt ovate fleshy blunt appendage at apex lacerated at base
20515 Seps and pets spread oval flat, Lip broad-ov acum obt subcord. concave fringed smooth at top, Column short
20516 Pets linear-lanceolate same form as dorsal sep, Lip ovate-oblong obtuse saccate towards the base crenated and furnished above the sac with a large orange-coloured callosity, Column acuminate
20517 Lip beardless sagittately triangular, Angles roundish behind and toothed callous and dilated at top with the margin recurved and tuberculated at base
20518 Pets spotted linear-lanc, Lip subcordate ovate saccate towards the base furnished with a strong inflexed horn under the sac, Column cirrhate [horn under the sac, Column cirrhate
20519 Pets spotted linear-lanceolate, Lip subcordate-ovate fringed saccate towards the base furnished with triparted
20520 Lvs obl.-lanc, Perianth ovate compressed connivent, Seps and pets acum, Lip subconical cucullate contracted at mouth entire, Anther hemispherical compressed umbonate, Umbo bearing scales beneath
20521 Lip triangular very acute concavely hemispherical not ventricose, downy inside ciliated with long hairs on the margin at base [tracted entire ciliated mouth
20522 Lvs oblong acute, Seps spreading, Pets ovate acute concave, Lip subconically saccate cucullate with a con-
20523 Raceme drooping many-flwd, Seps and pets linear acuminate, Lateral ones longer, Lip flat cordate membranous toothed or fringed saccate at base conical, Teeth of disk prominent [Pendril short
20524 Seps and pets ovate secund, Lip cucullate entire smooth contracted into a short broad blunt fleshy beak at apex,
20525 Lip fleshy galeate resupinate rather compressed saccate behind entire and emarg at top sharply denticulate at the sides, Pendrils hardly longer than column
20526 Racemes short dense pend, Seps and pets rndsh spreading incurved, Lip galeate compressed at base and ventri. at top with membr flat lobes, Lat ones small and ser, middle one 2-lbd with divaric fringed segs, Col mutic [lanceolate acute conniving, Lip 3-lobed, Lateral lobes acute, middle one elongate acuminate
20527 Pseudo-b turbinate, Lvs strict, Raceme nutant many-flwd shorter than lvs, Seps and pets nearly equal ovate-
β Flowers yellow without any purple spots
20528 Pseudo-b elong terete articulate streaked 2—3-lvd, Lvs lin-lanc acum, Raceme elong many-flwd, Seps and pets spread unif obl-lanc ac, Lip obl. narrowed at base unident on both sides beneath mid. with refl. edges
20529 Rac short erect, Seps and pets roundish-ov ac conc, Lip narrow cun convex, Mid. seg. triang acum cucul
20530 Lvs very long narrow glauc beneath much longer than rac, Raceme obl., Seps ovate lanc, Pets concave fleshy incurved with scarious edges, Lip concave slightly 3-lobed apiculate cucullate above the column
20531 Seps linear-oblong, Lateral ones reflexed, dorsal ones and pets oval-lanceolate erect, Lip unguiculate fleshy roundish cuneate apiculate emarginate on both sides with the edges turned over in form of a shell
20532 Seps and pets oblong linear abruptly acute with reflexed edges, Lip linear incurved fleshy sparingly pilose with a short tooth towards the base on both sides, Back and margin of column downy
20533 Pseudo-b. obl, Lvs lanc. striated, Scape racemose, Flws remote pendulous dotted with brown, Seps reflexed oblong acute with revolute edges, Pets same form, Lip obovate with revolute edges, Column twisted
20534 Raceme long many-flwd, Seps reflexed, Pets ascending lanceolate flat acute, Lip stalked fleshy elliptic with a distinct point rolled back on the sides scarcely angular
20535 Pseudo-bulb elongate articulate sheathed leafy at top, Peduncs taller than bulbs, Flws yellowish erect pedicellate, Seps and pets linear-lanceolate, Lip obovate apiculate entire, Column twisted
[obtuse striped with purple, Rhizoma tufted bulbless
20536 Lvs oblong coriaceous pale green twisted conduplicate acute recurved, Raceme radical branched, Pets obovate



and Miscellaneous Particulars

3232. *Scelochilus* has much the structure of an *Oncidium*, with broad leaves and spikes of yellow flowers.

2786. STANHO'PEA

20537 17967*a* ecornûta *Lemaire* hornless ♂ △ or 1 su W Y P C. Amer 1850 D p r w Px fl g. t 31 2
20538 - - tricórnis *Lindl* three-horned ♂ △ or 1 su Pk w Peru 1850 D p.r.w Px fl g t 31 21
20539 - - buréphalus *Lindl* ox-head ♂ △ fra 2 au Y P c Quito 1843 D p r.w Bot reg 1845 23
Epidéndrum grandiflórum H & B *Angulòa grandiflòra* H B & Kth.
20540 - - Martiàna *Batem* Martius's ♂ △ fra 1 su Str P dot Mex. 1827 D p r w Batem orch 27
β bicolor Lindl *two-coloured* ♂ △ or 1 su W c.sp Mex 1840 D p r w Bot reg 1844, 44
20541 - - inodòra *Lodd.* scentless ♂ △ or 1 jn P w Y Mexico 1842. D fib.p Bot reg 1845 6
20542 - - Wárdii *Lodd* Ward's ♂ △ fra 1 jl au Y Br C Amer 1836. D p r w Sert orch 20
20543 - - gravèolens *Lindl.* strong-scented ♂ △ or 1 jn S Apr Guatem 1842 D fib p
20544 - - saccàta *Batem* saccate ♂ △ or 1 su G Y Br Guatem 1836 D fib p Batem orch 15
20545 - - Rúckeri *Lindl* Rucker's ♂ ▲ or 1 su G Br Mexico 1841 D fib p
20546 - - Devoniénsis *Lindl* D Devonshire ♂ △ or 1 au Y c Mexico 1839 D fib p Sert. orch 1
maculosa K & W. Flor cab t 121. *Maxillària lyncea* Lindl *Angulòa Hernandesii* Kth
20547 - - cirrhàta *Lindl* tendrilled ♂ △ or 1 ... ... Nicarag 1840 D fib p Px fl g. t 31 19

3233 2786*a* CLOWE'SIA *Lindl.* Clowesia (*Rev. John Clowes*, a cultivator of Orchideæ) *Orchideæ*
20548 - - rosea *Lindl* rose-clrd-flwrd ♂ △ or ½ mr Pa R Brazil 1842. D p r w Bot. reg 1843, 60

2787 GONGO'RA
17968 maculàta
β tricolor *three-coloured* ♂ △ or 2 my Y P Peru 1841. D p r.w Bot reg 1847, 69
20549 17968*a* bufònis *Lindl.* toad ♂ △ or 1 my Var Brazil 1838. D p r w Bot reg 1841 2
β leucochila Lindl *white-lipped* ♂ △ or 1 ap Pa P w Y Mex 1844 D p r w Bot reg 1847 17
20550 - - fúlva *Lindl.* fulvous ♂ △ or ½ jl Y B P Mexico 1838 D p r w Bot reg 1839, 51
β vitellina Lindl *yolk of egg* ♂ △ or ½ jl Y Mexico 1845 D p r w
20551 - - truncata *Lindl* truncate-flwd ♂ △ or 1 my o Y Br Mexico 1842 D p r w Bot reg 1845, 50
Galeottiana Rich
20552 - - atropurpùrea *Hook* dark purple ♂ △ or 2 jn jl Choc Trinidad 1824. D p r w Bot mag 3220

2788 CORYA'NTHES
20553 17969*a* Fieldingii *Lindl.* Fielding's ♂ △ cu 1 au Br Y sp ..... 1841 D p r w J H S 3 17 69
20554 - - speciòsa *Hook* showy ♂ △ or 1 ap jn Y c Brazil 1826 D p r w Bot mag 27
Gongòra speciòsa Hook
β álba Lindl *white-flowered* ♂ △ or 1 ap jn P Brazil .. D p r w
20555 - - macrántha *Hook* large-flowered ♂ △ or 1 jn Y P sp Caracas 1826 D p r w Bot reg 1841

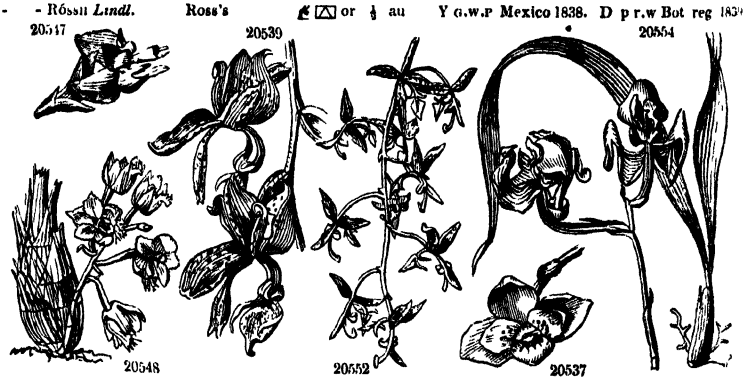
2789 ANGULO'A.
20556 - - Rúckeri *Lindl* Rucker's ♂ △ or 1½ my Y c Columb 1845 D fib p Bot reg 1846, 41
20557 - - Clowèsii *Lindl* Clowes's ♂ △ or 1½ mr Str w Columb 1842 D fib p Bot reg 1841
β flóribus flàvis *yellow-flowered* ♂ △ or 1½ my Y Columb 1845 D fib p Bot mag 4761
20558 - - uniflòra *R & P* one-flowered ♂ △ or 1 ap jn W.Y Columb 1843 D fib p Bot reg 1844 6
β flóribus ròsis rosy-flowered ♂ △ or 1 ap jn Ro Columb 1843. D fib p

2790. PERISTE'RIA.
20559 17970*a* elàta *Hook* tall ♂ △ fra 6 su W Li sp Panama 1826 D p r w Bot mag 3116
20560 - - péndula *Hook* drooping ♂ △ fra 1 ja P Li sp Demera 1835. D p r.w Bot mag 3170
maculàta Hort.
20561 - - guttàta *K & B.* spotted ♂ △ fra ½ au Br.P Demera. 1837. D p r w K &W fl cab 71

3234 2790*a* LACÆ'NA *Lindl* Lacæna (*Lakis*, a cleft, divisions of lip) *Orchideæ*
20562 - - bicolor *Lindl* two-coloured ♂ △ or 1½ my Y P sp Guatem 1843. D p.r w Bot. reg 1844, 50

3235 2790*b* ODON'TOGLO'SSUM *H & K* (*Odous* a tooth *glossa*, a tongue, crest of lip) *Orchideæ*
20563 - - pulchéllum *Batem* neat ♂ △ or 1 f W Y c Guatem 1840. D p r w Bot mag 4104
20564 - - Egertònii *Lindl* Egerton's ♂ △ or 1 f C w Guatem .. D p r w
20565 - - citrósmum *Lindl.* citron-scented ♂ △ fra 1 my W Li Mexico 1841. D p r.w Bot reg 1843 3

20566 - - Róssii *Lindl.* Ross's ♂ △ or ½ au Y G.w.P Mexico 1838. D p r.w Bot reg 1839 48



History, Use, Propagation, Culture,

3233. *Clowèsia* is like *Catasètum* in habit, and requires the same culture and treatment.

2789. *Angulòa* is a genus of splendid epiphytes which will grow in a compost of peat and rotten wood, in baskets or pots, and they may be tied on blocks of wood

2790. *Peristèria* is a splendid genus of pseudo-bulbous epiphytes They grow well in a mixture of turfy peat and rotten wood. They require plenty of pot-room, heat, and water

3234. *Lacæ'na* is a pretty pseudo-bulbous epiphyte, and it may be grown in a basket, or tied to a block of wood and suspended to a rafter in a moist stove It requires an ample supply of water and heat

20537 Lip without any horns, Flws in pairs [inside with 3 straight horns shorter than lip
20538 Ovary much longer than bracts, Pets fleshy oval convex obliquely ovate-acute, Hypochilum roundish glandular
20539 Bracts about equal to ovarium, Lip unguiculate with a roundish limb, Horns slender, Column winged
[dentate, Column downy with margins a little dilated
20540 Lip constricted in middle, Hypochilum short sessile with cirrhose horns at top, Epichilum oblong-linear tri
8 Flowers white spotted with crimson
20541 Spike contracted, Bracts broad-obl , Lateral seps ov -obl , Hypochilum short saccate bidentate in front, Epichilum roundish-ovate entire longer than incurved horns Wings of column hardly evident [winged
20542 Brcts acum shorter than ova Hypoch obl sess cleft, Epich rndsh ov ent , Horns talc incurved Col broadly
20543 Hypoch compressed sac bident , Epich roundish-ov ent , Horns acum incurved, Column with broad wings
20544 Lip a little contracted in mid . Hypoch gibbous beneath gland. inside, Epich 3-lobed, Middle lobe short, Horns lanc incurved equal, Column glab narrowly marginate [Horns incurv , Column broadly winged
20545 Brcts acum shorter than ovarium, Hypoch open obov sess with inflexed tooth Epich roundish-ovate entire,
20546 Hypochilum subglobose gibbous in front equal to epichilum which is ovate entire or slightly tridentate, Horns falcate incurved equal, Column marginate
20547 Pedums 1-flwd Bracts spathaceous imbricate, Pets ovate acute reflexed much shorter than the obtuse sepals, Column wingless cirrhate, Lateral horns of lip short fleshy

20548 Pseudo-bulb fleshy leafy, Scapes radical many-flwd erect shorter than leaves

[brown and a few large clear distinct blotches of the same colour on the seps, the lip itself is white
8 The ground colour of the flower except the lip is yellow the column and pets are delicately streaked with rich
20549 Hypochilum convex longer than awns with the lateral horns papilioform, Epichilum acute triangular
3 Flowers pale purplish, Lip white with a yellowish apex [ovate Pseudo-b furrowed, Lvs plicate petiolate
20550 Hypochilum convex having the lateral horns elongate and capitate with setaceous awns, Epichilum acumi-
3 Flowers pure yellow
20551 Lateral seps roundish obl uppermost one obov apiculated keeled, Pets small ov ac decurrent 5-nerved, Lip varnished, Hypochilum compressed in the middle 2-horned at apex, Epichilum ovate channeled
20552 Three exterior petals with reflexed margins, Lip about 7-toothed at apex, Leaves ovate-lanceolate subplicate

[galeate rather quadrate and roundish Lateral lobes minute, middle one truncate erect
20553 Hypochilum stipitate convex subcompressed tomentose at base, Mesochilum plicate and warted, Epichilum
20554 Pets approximate, Lip saccate with a large stalked galeate appendage, Column bidentate at base

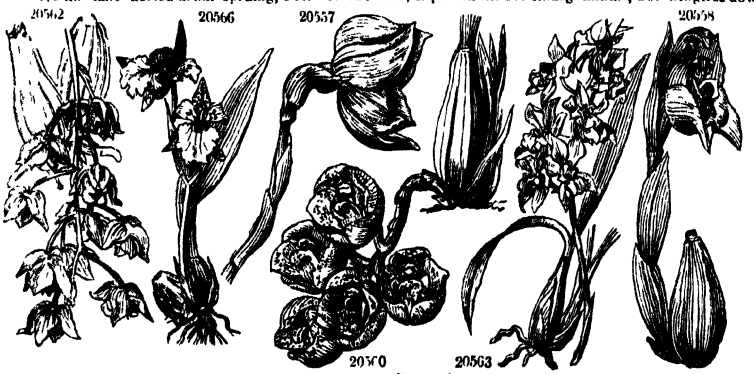
3 Flowers white
20555 Leaves narrow lanceolate, Pseudo-bulb ovate-conical deeply furrowed, Lip with 4 deflexed plicæ

[conniving into a globe, Lip 3-lobed Lateral lobes obl , middle one pilose funnel-shaped bilabiate
6 Peduncle 1-flwd radical sheathed by imbricate inflated scales, Seps roundish apiculated and with the obtuse pets
20556 7 Pedunc 1-flwd radical loosely scaled, Flwr fleshy resupinate, Sepals and petals ovate convex conniving, Lip 3-lbd, Middle lobe pilose funnel-shaped bilabiate
Flowers yellowish Middle lobe of lip orange-coloured
20557 8 Pedunc 1-flwd rad cal sheathed by 2 inflated scales, Flwr a little longer than spathe-like bract, Seps and pets acu-
3 Flowers rose-coloured [minate, Lip glab 3-lobed, Middle lobe narrow reflexed, lateral ones rounded

[Lobes obtuse 1-toothed on disk longer than column
20558 Scape erect tall, Raceme loose elongated Epichilum roundish serrulated callous in middle, Hypochilum large,
20559 Scape short pendulous, Raceme dense Epichilum roundish entire bilamellate above, Hypochilum elongated, Lobes roundish with a large lunate callosity in middle, Column 2-horned, Rostellum truncate
20560 Raceme short dense pendulous, Epichilum rhomboid-oblong serrulated warted, Hypochilum short, Lobes acute, Column mutic, Rostellum short

20562 Habit of *Peristèria*, Racemes long drooping, Flowers pale yellow spotted with dark purple

[Pets obov ac a little undulate, Lip 3-lbd, Lat segm triang , middle one obl , Wings of column jagged
20563 Pseudo-bulb oblong comp 2-leaved, Lvs linear emarginate, Scape 2-edged, Raceme 6—7 flwd, Seps ovate acute,
20564 Like *L. pulchellum* but the flowers are smaller, the Lip is acute and excavated behind
20565 Pseudo-bulb roundish comp smooth 1-lvd, Leaf obl -ligul obt shorter than rac , Seps and pets obl obt nearly equal Lip ungue remf with 2 tubercs at base Lat wings of col rather trunc , dors ones roundish dentic
20566 Pseudo-b ov tuitd 2-edged 1 lvd, Lvs obl -lanc longer than radical 2-flwd scape, Bracts membr keeled acum , Seps lin -lanc keeled acum spreading, Pets obl obt rev , Lip roundish ov emarg undul , Col wingless downy



and Miscellaneous Particulars

20567 *Odontoglóssum* is composed of pseudo-bulbous epiphytes, and forms three different sections or *forms*. In one the anther bed is surrounded by a deep fringe or membranous border. The other two are without any fringe, these form the subgenus *Trymènium*. In the second the lip is white, and generally broad and flat In the third the lip is generally yellow, never white, and generally narrow. They will all grow among free turfy peat or rotten wood or they may be tied to blocks of wood.

20567 - - Cervantèsii *Llave* Cervantes's £ △ fra ½ mr Γ R Y Mexico 1843 D p r.w Bot. reg 1845,30

20568 - - membranàceum *Lm* memb sheathd £ △ fra ½ mr W R.sp Mexico 1844 D p r w Bot. reg. 1846, 34

20569 - - stellàtum *Lindl* starry £ △ or ½ su aut Ol.G.w Mexico 1839. D p.r.w

20570 - - constrictum *Lindl* constricted £ △ or ½ su aut Y.Br.w Guatem. 1837. D p r w

20571 - - rubéscens *Lindl* reddish £ △ or ½ su aut W R Nicarag. 1849 D p r w

20572 - - cordàtum *Lindl.* cordate-lipped £ △ el 1 d Y G.br P Mexico 1837. D p.r.w Px. m. 13 147 ic

20573 - - gránde *Batem.* great £ △ or 1 d Y Br Guatem. 1832. D p.r w Bot. mag 3955

β *labéllo álbo* *white-lipped* £ △ or 1 w Y w Guatem 1832 D p.r.w

20574 - - maculatum *Lindl* spotted-lipped £ △ or 2 au Y Br Guatem 1839. D p r.w Bot reg 1840 50

20575 - - Pescatòrei *Lindl.* Pescatore's £ △ or 2 ap W.R N. Gren 1852. D p.r w Px fl. g 3 90

20576 - - hastilàbrum *Lindl* halberd-lipped £ △ or 1 au Pa G.P N. Gren. 1841 D p r w Bot mag 4272

20577 - - læ've *Lindl.* smooth-lipped £ △ or 1 my Y Br w Guatem. 1841 D p r w Bot reg 1844, 39

20578 - - Wárneri *Lindl.* Warner's £ △ or 1 my Y.c Guatem 1844. D p.r.w

β *purpurátum* Lindl *purplish-flwd* £ △ or ½ my Y w P Mexico ... D p r.w Bot. reg 1847 20

20579 - - bictoniénse *Lindl* Bicton £ △ or ½ jn au G.Br R Guatem 1837. D p.r w Bot reg. 1840,66

β *álbum* Lindl. *white-flowered* £ △ or 1 su aut W G Guatem 1837. D p.r w

Zygopétalum africànum B M 3812 *Cyrtochilum bictonense* Batem orch mex 6

20580 - - mæ'vium *Lindl* freckled £ △ or ½ su aut W C.Y C Amer. 1846 D p.r w

20581 - - ánceps *Klotzsch* 2-edged-bulbed £ △ or ½ su G Y P w Brazil 1852 D p r.w

1885. CYMBI'DIUM.

20582 12885*a* pubéscens *Lindl.* downy £ △ or ½ o C G Y Singap. 1834 D p.r.w Bot. reg 1841,..

20583 - - ebúrneum *Lindl* ivory £ △ or 1 my W Y India 1846. D p r w Bot reg 1847 67

20584 - - Devoniànum *Paxt* D of Devon 's £ △ or 1½ mr.ap P G Khos h. 1837 D bloc Px. m. 10 98 ic

20585 - - iridifòlium *Lindl* Iris-leaved £ △ or 1 jl R N Holl 1828 D bloc

20586 - - Mastérsii *Griffiths* Masters's £ △ or 1½ d W E Indies 1841 D p.r w Bot. reg 1845, 40

20587 - - mádidum *Lindl* moist £ △ or 1 d G Y.P E Indies 1840 D p r w

20588 - - gigantèum *Lindl.* giant £ △ or 3 jn o G Y.R Khos h. 1837 D p r.w Px. m. 12 241 ic

20589 - - chloránthum *Lindl.* green-flowered £ △ or 2 w G Y br Nepaul 1840 D p.r w

20590 - - péndulum *Swartz* pend -racemed £ △ or 3 my Y.R E Indies 1837. D fib p Bot reg 1840 ..

Epidéndron péndulum Roxb. cor. 1 p 35 t 44.

β *brevilabre* Lindl *short-lipped* £ △ or 3 jl G Y P E Indies 1840 D fib p Bot reg 1841 53

20591 - - marginàtum *Lindl* marginate £ △ or ½ n Y P Brazil 1829 D fib p Bot reg 1850

Maxillària grácilis Lodd bot cab. 1807

2791 GROBYA.

20592 17971*a* galeàta *Lindl* helmeted £ △ or ½ su G.P Brazil 1836 D p r w

2792. ACROPE'RA.

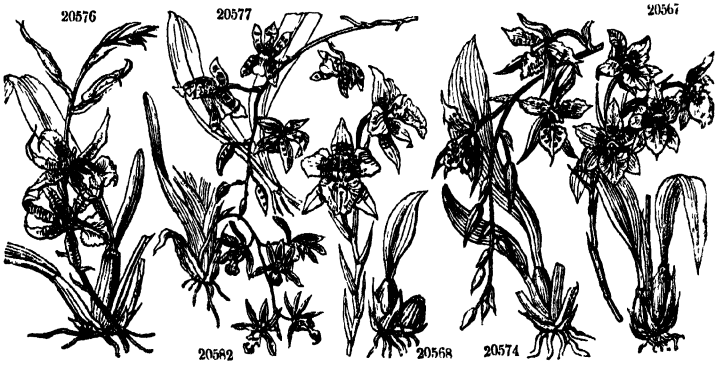
20593 17972*a* cornùta *Klotzsch* horned £ △ or 1 au s Pa.Y Guatem. 1853. D fib p

20594 - - flávida *Klotzsch* yellowish £ △ or 1 jl Pa Y Mexico 1850 D fib p

20595 - - armeniàca *Lindl* apricot-cld £ △ or 1 au.s Apric. Nicarag. 1850 D fib p Px fl. g 1 94 66

17972 Loddigèsii

β *citrina* Lindl. *citron-coloured* £ △ or ½ au s Pa Y Mexico ... D fib p



20567 Pseudo-bulb ovate angular 1-leaved, Leaf oblong, Petiole channeled Scape few-flowered, Bracts and sheaths membranous acute, Sepals oblong lanceolate acute, Petals broader subunguiculate acute, Lip subcordate ovate acute unguiculate, Claw fleshy cup-shaped downy, Auricles of column rounded

20568 Habit of *O. Cervantesii*, Sepals unguiculate lanceolate, Petals broader oblong obtuse, Lip cordate very blunt unguic, Claw fleshy cup-shaped downy bidentate in front tuberculate in middle, Auricles of column rounded

20569 Pseudo-bulb ovate compressed 1-leaved, Leaf lanceolate recurved, Scape 2-flowered, Bracts as high as triquetrous ovarium, Sepals and petals equal linear acuminate, Lip rhomboid toothed, Appendage trunc 4-toothed

20570 Panicle loose leafy at base, Sepals and petals expanded linear-lanceolate acuminate, Lip constricted in middle, Hypoch obl Epich rather fiddle-shaped cusp ser furnished with 2 ser lamellæ at base, Col subcurrhose

20571 Pseudo-bulb oblong comp 1-leaved, Raceme 2—6-flowered length of leaf, Sepals linear-lanceolate acute, Pets thin obl wavy, Lip cord obt curled, Crest spoon-shaped fleshy blunt in front bident in middle, Col. narrow

20572 Pseudo bulb obl comp 2-lvd, Lvs broad-obl. flat acute, Scape sheathed with keeled scales, Rac. short distich, Bracts boat shaped acum, Lip cord acum entire with a 2-lobed append at base Col downy clav wingless

20573 Seps lanc, Lateral ones convex falcate, Pets obl obt subundulate, Lip roundish auricled at base much shorter than seps with 3 tubercs at base and tooth-formed lat wing, Col tom with rounded conv. incurv. margins
5 Lip white

20574 Pseudo-bulb oblong compressed 1-leaved, Leaf oblong nerved acutish, Racemes pendulous many-flowered longer than leaves, Bracts boat-shaped shorter than ovary, Sepals linear lanceolate acuminate, Petals oblong wavy acum, Lip cord. acum subcrenated, Appendage of claw conic shell shaped serrul, Col downy wingless

20575 Pseudo-bulb ovate 2-lvd subc, Lvs lorate flat, Panicle erect diffuse many-flwd, Bracts minute, Seps ovate-obl wavy, Pets broader comf Lip cord obl cusp rather fiddle-shpd deutic at base, Col with short jaggy wings

20576 Lvs oblong coriac, Branches of panicle spicate, Bracts boat shaped acum, Seps and pets narrow lanc -acum wavy Lip roundish ov ac with lanc auricls at base and 5 elevated lamellæ, Col downy with obsolete wings

20577 Pseudo-bulb comp furrowed, Lvs obl -ensif obt oblique at apex, Flws panicled, Bracts loose, Seps and pets obl -lin acute flat, Lip fiddle-shaped apic with a smooth bidentate claw, Wings of column rounded curled

20578 Pseudo-bulb ovate 2-edged rather angular elongated and 2-leaved at top, Leaves spreading linear-lanceolate shorter than few-flowered raceme, Bracts small, Sepals oval spreading, Pets narrower obt ascending, Lip 3-lobed flat, Mid lobe cuneate 2-lobed, lat ones square with a single tubercle on disk, Col along wingless
11 purplish [Seps and pets subequ lin -lanc sptd, Lip with bilam. claw and cord acum lam, Wings of col ent.

20579 Pseudo-bulb obl -comp 2—3-lvd, Lvs ensif. wavy spread longer than rac scpe, Bracts lanc -acum. shorter than ovy,
5 Lip white

20580 Pseudo-bulb ribbed, Lvs thin lanc nar at base, Panic diffuse Seps and pets narrow ovate-lanc acum. wavy, Lip conf scarcely hastate, Teeth of crest 2 large somewhat 4-lobed down, Processes of col subul spreading

20581 Pseudo-bulb comp atten towards apex, Lvs 2 oblong obliquely rounded at apex, Raceme 2-edged 1-flowered barticulate, Sepals and petals lanceolate obtuse recurved, Lip rhomb-ovate with a bidentate appendage

20582 Lvs ensif strl obliquely bident at apex, Rac short pend, Bracts small scape-frnd, Seps and pets lin, Lip 3-lbd sacc at base downy inside, Lat segm acute, middle obl wavy obt with nearly straight lamellæ in middle

20583 Leaves narrow ensiform, Raceme 2 flowered decumbent furnished with long acute scales, Sepals oblong-lanceolate fleshy acute wavy, Lip 3-lobed, Middle lobe triangular curled lateral ones rounded

20584 Lvs ov -lanc coriac 1 foot long their bases covering the pseudo-bulbs, the midrib strong, Scape pend 1 to 1½ foot many-flwd with large sheathg bracts, Seps ov -lanc. ac Pets broader, Lip ov bluntish purplish crimson

20585 Leaves long linear, Racemes many-flowered bracteate Perianth spreading, outer 3 segments obtuse, Lip 3-lobed, Middle lobe tongue-shaped glandularly dotted shining

20586 Lvs ensif obt, Scape erect with imbr acute scales, Spike few-flwd, Seps and pets lin -obl acute, Lip obov 3-lobed downy inside with confluent lamellæ, Middle segment oblong wavy, lateral ones rounded flat

20587 Leaves ensiform channeled at base, Racemes pendulous, Sepals oval obtuse apiculated spreading, Petals conform erect, Lip naked oblong, Lateral lobes small, middle one oblong obtuse narrowed a little at base

20588 Leaves narrow-strap-shaped thick distich, Scape nutant covered with imbricate scales, Sepals oblong, Petals linear-lanceolate, Lip oblong folded 3-lobed, Middle lobe ciliated

20589 Leaves ensiform obtuse recurved, Raceme erect, Bracts very minute, Sepals and petals obtuse, Lip downy at base retuse and emarginate at top, Lateral segments short triangular with distant arched warted lamellæ

20590 Leaves ensiform coriaceous obliquely-obtuse, Racemes pendulous many-flowered Bracts minute, Petals and sepals lin -obl obt, Lip 3-lobed, Lateral lobes acute, middle one oblong apiculated with confluent lamellæ
7 Lip broader, Lateral lobes more acute, middle one roundish-oblong

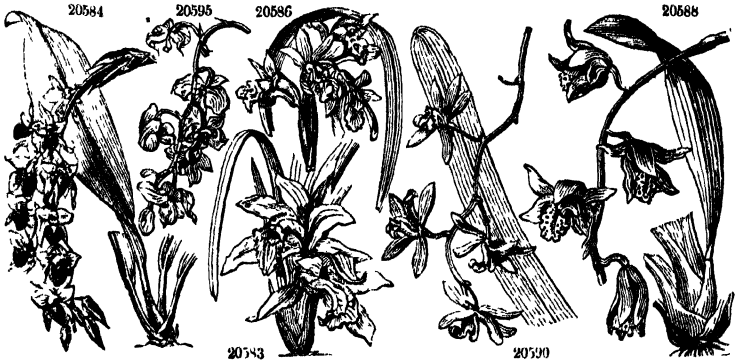
20591 Leaves linear-lanceolate coriaceous erectly-recurved, Scape 1 flowered slender shorter than leaves, Sepals oblong lanceolate, Pets smaller conform, Lip oblong-lanceolate obtuse cuculate subrepand undivided, Pseudo-bulb ovate-oblong 1—3-lvd

20592 Petals oblong obliquely-rhomboid rounded at top disposed into a galea along with the shorter dorsal sepal, Lateral sepals deflexed connate at base, Lip tripartite, Lateral segments linear, middle one cuneate-truncate with a toothed disk warted from shining tubercles
[leate, Lip unguiculate saccate with a very long horn at apex

20593 Pseudo-b tufted ovate 2-lvd, Leaves oblong 3—4 ribbed, Raceme basilar pendulous purplish 16—20-flwd brac-
[Bracts membranous lanceolate, Upper sepal galeate, Ovary furrowed scabrous

20594 Pseudo-bulb ovate 2-leaved tapering to apex, Leaves oblong 3—5-ribbed acuminate, Racemes pendulous,

20595 Raceme loose many-flowered, Sepals apiculated, Lateral ones oblique rounded at apex, Petals free shorter than column, Lip fleshy free ovate acuminate furnished with a tuberculate crest at base below
5 Flowers citron-coloured



2793. GRAMMATOPHY'LLUM.

20596 17973*a* multiflòrum many-flowered ⚷ △ or 2 su G B P Manilla 1838. D p r w Bot. reg 1839 65
β tigrinum *tiger-spotted* ⚷ △ or 2 su Y.P sp E. Indies 1840. D p r.w Bot reg. 1842, 69

3236 2793*a* ANSE'LLIA *Lindl* (*Mr Ansell*, who accompanied the Niger Expedition.) *Orchidæ*
20597 - africàna *Lindl* African ⚷ △ or 2 f my G.Y.P sp Fern. Po 1840 D p r w Bot. reg 1840, 30

3237 2793*b* BROMHEA'DIA *Lindl* BROMHEADIA (*Sir Edward Finch Bromhead.*) *Orchideæ*
20598 - palùstris *Lindl* marble ⚷ △ or 2 jn. Y.vi Singapor 1840. D tfy p Bot. mag 4001
Grammatophyllum Finlaysonianum Lindl

2794 SOBRA'LIA.

20599 17974*a* sèssilis *Lindl* sessile-flowered ⚷ △ or 2 d Ro Demera. 1840 D p r.w Bot. mag 4570
20600 - chlorántha *Hook.* green-flowered ⚷ △ or 1 jn Y Brazil 1852. D p.r.w Bot mag 4682

20601 - macrántha *Lindl.* large-flowered ⚷ △ or 6 jn s C Guatem. 1840 D p r w Bot mag 4446
β splèndens Paxt *splendid* ⚷ △ or 3 jl au C P Mexico 1845. D p r w Px. m. 14 241 ic

2795 ACANTHOPHI'PPIUM.

20602 17975*a* javánicum *Blume* Java ⚷ △ or 1½ s P.v.li Java 1843. D p r w Bot mag 4492
20603 - sylhetènse *Lindl* Sylhet ⚷ △ or ¾ my.au W Sylhet 1839 D p.r w
20604 - striàtum *Lindl* striated ⚷ △ or ¾ jn.jl Y.P Ceylon 1836. D p r w

1920 EULOPHI'A.

20605 12977*a* squálida *Lindl* squalid ⚷ △ or 1½ su dingy Manilla 1838 D fib p

20606 - lùrida *Lindl* lurid ⚷ △ or 1½ year G w P S Leone 1833. D fib p Bot reg 1821

20607 - macrostàchya *Lindl* long-spiked ⚷ △ or 2 jn d G Y c Ceylon 1836. D fib.p Bot. reg 1972

20608 - ensàta *Lindl.* sword-leaved ⚷ △ or 1 su Y C G H 1822. D fib p Bot. reg 1147

2797. GALEA'NDRA.

20609 17977*a* Baùeri *Batem.* Bauer's ⚷ △ or ½ d f G P Mexico 1839 D p r w Bot reg 1840, 49

20610 - Devoniàna *Lindl.* D of Devon.'s ⚷ △ or 1 ap my P G w Brazil 1840 D p r w Bot mag 4610
20611 - cristàta *Lindl* crested ⚷ △ or 1 my jl P G w Cayenne 1840 D p r.w

2798 ZYGOPE'TALUM.

20612 17980*a* africànum *Hook* African ⚷ △ or 2 d G Y.w R Sierra L 1838 D p r.w Bot. mag 3812

20613 - tricolor *Lindl* three-coloured ⚷ △ or ½ su G w c Guiana 1845 D p.r w

20614 - stenochìlum *Lodd* narrow-lipped ⚷ △ or ¾ o Br w Brazil 1828. D p.r w Bot cab 1923
20615 - cochleàre *Lindl* spoon-lipped ⚷ △ or 1 au W B Trinidad . D p r.w Bot. reg 1857

20616 - rostràtum *Hook.* beaked ⚷ △ or 1 au G w vi Demera 1840 D p.r.w Bot. mag 2819

20617 - intermèdium *Lodd* intermediate ⚷ △ or 1 o ... Brazil 1830. D p r w Bot. reg 1433
velutinum Hoffsgg. *Eulòphia Mackuyàna* Bot reg 1433
20618 - crinitum *Lodd* long-haired ⚷ △ or 1 o W sp G Brazil 1829 D p.r w Bot mag 3402
pubéscens Hoffsgg

2799 HUNTLE'YA.

20619 17981*a* violàcea *Lindl* violaceous-flwd ⚷ △ or 1 jn jl Vi S Amer. 1835 D p.r.w Px m. 8. 1 ic

20620 - cérina *Lindl* waxy ⚷ △ or 1 ap Y P C. Amer. 1851. D p r w Px. fl g 3 203

1896. CYRTOPO'DIUM

20621 12914*a* punctàtum *Lindl.* dotted-flowered ⚷ △ or 3 ap my Gsh Y R Brazil 1823 D fib p Bot. mag. 3507
Wilmòrei Flor cab 4 *Epidéndrum punctàtum* Lin
20622 - cardiochìlum *Lindl* heart-lipped ⚷ △ or 2 my jn Str.P. Costa R 1846. D fib p

2801 CYRTOPE'RA

20623 17983*a* flavéscens *Lindl.* yellowish ⚷ △ or 2 jn jl Pa.Y.sp Mexico 1836. D fib.p Bot. reg 1627
Cyrtochilum flavéscens B R.

1887 LISSOCHI'LUS.

20624 12888*a* ròseus *Lindl.* rose-colrd-fld ⚷ △ or 2½ f Ro S Leone 1841 D l.p Bot reg 1844 12



History, Use, Propagation, Culture,

3236. *Ansèllia africàna.* This plant was first discovered by Mr Ansell growing on the oily palm, *Elæ'is guineènsis*, at Fernando Po; but, although it is epiphyte in its native country, it will succeed very well in a pot filled with turfy heath mould. It requires plenty of water while growing. A moist atmosphere is necessary at all times.

[Middle lobe oblong rounded, lateral ones erect subfalcate with 4 elevated lamellæ in middle

20596 Rac long many-flwd, Bracts obl. scale formed, Seps obl. obt, Pets similar acute narrower, Lip 3-lobed downy,
β Flowers yellow spotted with purple

20597 Stems tall terete leafy at top, Leaves plicate cortaceous, Panicles terminal

20598 Caulescent bulbless, Leaves distich oblong-linear emarginate, Spike terminal distich flexuous many-flowered on a long peduncle, Bracts short stiff tooth-formed

[upper ones scale-formed and green, Flowers sessile, Lip rhomboid-oblong glabrous

20599 Stem and plicate leaves covered with black pubescence, Leaves sessile oblong lanceolate acuminate, the 2
20600 Stem short, Leaves broad few terminal elliptic-ovate bluntish striated long-sheathed, Lower one the largest, upper ones bract-formed, Flowers large solitary sessile terminal, Petals and sepals equal conniving Lanceolate, Lip obovate striated on disk wavy on margins elevated on disk, Column with short lateral lobes

20601 Lvs plicate ovate acuminate rayed, Flws large 7—8 in. diam, Seps lanceolate spreading acuminate, Pets oblong,
β Flowers large deep rich crimson purple [Lip emarginate flat smooth

[culate at apex fleshy on both sides at base with truncate emarginate inflexed teeth

20602 Pets triangular, Lip 3-lobed Lateral lobes truncate, intermediate lobe constricted in middle ovate and tuber-
20603 Lateral lobes of lip acute with 3 denticulated fleshy lamellæ
20604 Lateral lobes of lip rounded cuneated, middle one ovate rather scabrous with 2 lamellæ which are concave at base

20605 Leaves broad ensiform 5-nerved, Spike many-flowered, Lower flowers more remote, Bracts ovate acuminate shorter than the acute-angled ovary, Lip oblong 3-lobed, Segments roundish, Middle segment curled emarginate naked with many parallel elevated veins, Spur short

20606 Lvs lin-lanc much shorter than racemose scape, Bracts small subul, Seps lin-spatul obt recurved, Pets a little broader, Lip 3 parted callous at base, Lateral lobes obtuse recurv, middle obcord, Spur cylind. obtuse

20607 Lvs obl plic acum at both ends, Scape simp rad, Seps lin-lanc acum, Pets similar wavy, Lip suborb 3-lbd, Lat lbs nearly equal to the middle one which is short 2-lbd with 2 short lam at base Spur round infla obt.

20608 Leaves strict ensiform plicate, Scape radical sheathed Racemes capitate, Lip 3-lobed, Middle lobe longest bicrded, Spur straight conical short, Bracts membranous veiny

20609 Stem simple Lvs lanc 3-nrvd, Corymb term, panic nutant shorter than lvs, Pedunc sheathed with lin-lanc. memb scales, Seps and pets lin-obl acutish, Lip large emarg in front apicul. crenul, Spur equal to ovary

20610 Stem simple, Lvs lanc 3-nerved, Racs sessile many-flwd, Lip ovate obtuse crenulated, Anther crested fleshy

20611 Sepals and petals linear-lanceolate reflexed, Lip convolute with curled margins downy inside bicarinate at base, Spur acuminate horizontal, Anther furnished with an unguiculate rhomboid crest

20612 Leaves lanceolate striated, Scape very long, Raceme elongated loose simple, Sepals and petals linear-lanceolate, Lip stipitate oblong acute with 2 fleshy lamellæ at base, Middle lobe ovate wavy acuminate

20613 Leaves small grassy much shorter than 7—8-flwd racemose scape, Lip roundish concave constricted in middle and lunate at top bituberculate in middle [oblong obtuse villous with an emarginate callosity

20614 Leaves broader, Racemes equal or longer, Sepals oblong acuminate, Petals shorter narrower, Lip narrow

20615 Leaves obovate-oblong longer than 1-flowered peduncles, Sepals and petals ovate-lanceolate conniving, lower ones larger, Lip cochleate roundish 2-lobed velvety, Crest arched crenated, Anther crestless

20616 Leaves broad-lanceolate spreading longer than few-flowered scape, Sepals and petals linear-lanceolate wavy acum, Lip roundish ovate with a lunate crest callus at base, Col cucul and toothed at top, Anth rostrate

20617 Leaves ensiform shorter than raceme, Sepals and petals oblong acute, Lip roundish wavy narrow at base broadly 2-lobed downy with a crenulated undivided callosity

20618 Leaves broad-lanceolate, Bracts cucullate, Sepals and petals linear-lanceolate acute, Lip obovate emarginate narrowed at base with villous veins and a narrow incurved emarginate callosity

20619 Stemless, Lvs embracing each other at base erect acute slightly plicate, Peduncles axillary 1-flowered pendulous, Sepals and petals oblong obtuse curled at edge, Lip kidney-shaped emarginate, Column large fleshy

20620 Sepals roundish conc, Lip ovate convex retuse, Crest thick semicircular truncate plicate, Column naked at top

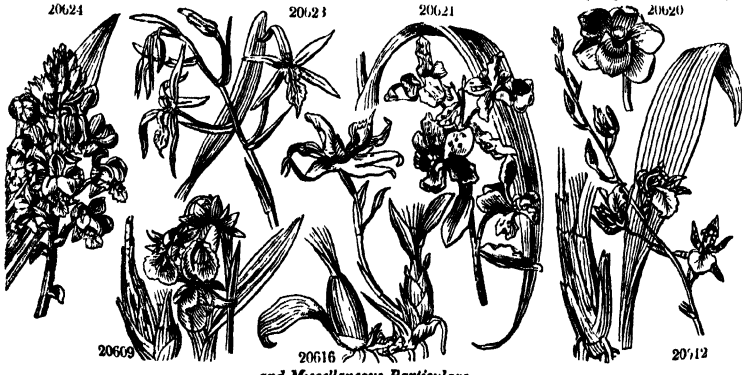
20621 Leaves lanceolate plicate, Sheaths large loose membranous, Sepals and petals undulated acute spotted, Lateral lobes of lip cuneate, middle one roundish papillose

20622 Raceme many-flowered, Bracts ovate-oblong membranous, Sepals and petals oblong bluntish, Lip sessile cordate-roundish with thin plicate edge, Lat lobes scimitar-shaped erect, Crest pulvinate with 5 series of warts

20623 Lvs linear ensiform twin equal to scape, Scape compressed closely sheathed, Racemes many-flowered, Bracts glumaceous yellowish, Flws nearly equal, Lip ses ov lanc repandly curled downy at base inappendiculate

[obl apic, Lip 3-lobed, Lobes roundish, middle one emarg with a muc and 3 undu serru lamellæ in disk

20624 Lvs broad-lanc pli, Scape sheathed with lanc. distant bracts, Rac dense bract, Seps spat conc. reflxd, Pets



and Miscellaneous Particulars.

3237 *Bromheádia palústris* is an epiphyte of a peculiar habit. It will grow with the same culture and treatment
as *Vanda*

20625 - - streptopétala *Lindl.* twisted-petald £ ⧄ or 1 mr Y Brazil 1822. D p.l Bot. reg. 1602
Eulóphia streptopétala B. R.

1893. NOTY'LIA

20626 12901*a* aromática *Lindl.* aromatic £ ⧄ or ½ su G Para 1836. D p r.w
20627 - - pubéscens *Lindl.* downy £ ⧄ or ½ su O Brazil 1838 D p.r.w

2802 MASDEVA'LLIA

20628 17984*a* fenestráta *Lindl* windowed £ ⧄ or ½ o d Rd Jamaica 1843 D p r w Bot mag 4164
20629 - - floribúnda *Lindl* bundle-flwd £ ⧄ or ½ my au Br.Y Mexico 1842 D p.r w

20630 - - Wagneriàna *Lindl* Wagener's £ ⧄ or ½ my au Dl.R C Amer. 1848. D p.r.w Px fl g 3 74 .67

1883 RODRIGUE'ZIA.

20631 12877*a* crispa *Lindl* curled £ ⧄ fra 1 s.n G Y Brazil 1837 D fib p Bot. reg 1840, 4

20632 - - cárnea *Lindl.* flesh-coloured £ ⧄ or 1 my.o W Columb. 1842 D fib p

20633 - - suavèolens *Lindl* sweet-scented £ ⧄ or 1½ f my Str Y Brazil 1825 D fib p Bot. mag 274
Pleurothállis foliósa B M
20634 - - laxiflòra *B R* loose-flowered £ ⧄ or ½ jn mr G Brazil 1834 D fib p Bot mag 3494
20635 - - Bárkeri *Hook.* Barker's £ ⧄ cu 1 ja Pa Gr Brazil 1835. D fib p Bot mag 3[illegible]7

2805 BURLINGTO'NIA

20636 17987*a* venústa *Lindl* beautiful £ ⧄ or 1 ap jl W Brazil 1840 D p r w
20637 - - pubéscens *Lindl* downy £ ⧄ or 1 ap my W Brazil 1842. D p r w

20638 - - rígida *Lindl.* rigid £ ⧄ or ½ ap Pk w Brazil 1838 D p r.w Px. m. 8 193

20639 - - maculàta *Lindl.* spotted £ ⧄ fra ½ my jn Y B sp Brazil 1837. D p r.w Bot reg 1839 41

20640 - - decóra *Lemaire* pleasant £ ⧄ or ½ my jn Ro w Brazil 1852 D p r w Px.fl g 3 99

2806 COMPARE'TTIA.

20641 17988*a* rósea *Lindl* rose-colrd-fld £ ⧄ or ½ su Ro S. Mam 1840. D p r w Pax m 10 1

1895 ONCI'DIUM

20642 12910*a* divaricátum *Lindl* divaricate £ ⧄ or 2 aut G Y B sp Brazil 1830 D p r w Bot reg 1050
20643 - - pùbes *Lindl* downy £ ⧄ or 1 aut Y Br sp Brazil 1824 D p r w Bot. mag 3[illegible]
• *bicornàtum* B M 3109
20644 - - ampliátum *Lindl.* broad-lipped £ ⧄ or 2 mr Y.B sp S Amer. 1832 D p r.w Bot. reg 1669

20645 - - serrátum *Lindl.* serrate-petaled £ ⧄ or ½ jn Oliv Y sp Peru. 1851 D p r w Px fl g 1 28
20646 - - curtum *Lindl* short-eared £ ⧄ or 2 jl Br.Y S Amer. 1846. D fib p Bot reg 1847

20647 - - cornígerum *Lindl* horn-bearing £ ⧄ or ½ au Y sp Brazil 1829. D p r w Bot reg 1[illegible]2

20648 - - ciliátum *Lindl.* fringed-lipped £ ⧄ or ½ f o Y.B sp Brazil 1818 D p r w Bot reg 1660

20649 - - citrínum *Lindl* citron-colrd £ ⧄ or 1 aut Ci Trinidad ... D p r w Bot reg 17[illegible]

20650 - - pulchéllum *Hook* neat £ ⧄ or 1 aut W Pk Y W Ind 1826. D p r w Bot. mag 2[illegible]

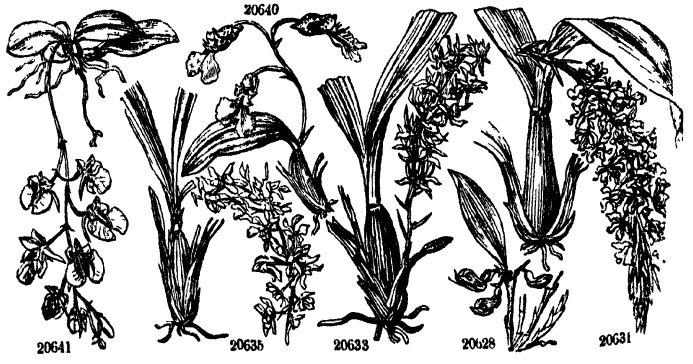
20651 - - Cebollèta *Swartz* awl-leaved £ ⧄ or 1 jl au Y a sp Carthag 1824 D p r w Bot reg 1[illegible]
Epidéndrum Cebolleta Jacq
20652 - - Harrisonianum *Lindl* Harrison's £ ⧄ or 1 o Y B sp Brazil 1830 D p.r w Bot reg 1[illegible]

20653 - - lunàtum *Lindl.* crescent-lipped £ ⧄ or 1 jn Y o sp Demera 1836. D p r.w Bot reg 1[illegible]

20654 - - lácerum *Hook.* jagged-lipped £ ⧄ or 1 aut Y B.sp Panama 1844. D fib.p Bot reg 1846

20655 - - nigràtum *Lindl.* blackish £ ⧄ or 1½ aut C Br sp Guiana 1848 D fib p

20656 - - phymatochílum *Lindl.* long-lipped £ ⧄ or 2 ap my G.w Mexico 1838. D fib.p



20625 Lvs linear-lanceolate nerved, Scape simple, Sepals oblong-obtuse, Petals twice the size twisted at base, Middle lobe of lip roundish emarginate, Spur short conical

[lobed, Petals linear straight acute

20626 Lip unguiculate ovate-rhomboid acuminate deflexed on both sides at base, Sepals revolute at top, lower one 2-

20627 Lip rhom keeled at base dwny as is the col., Lat. seps conn at base, Racs longer than lvs, Lvs obl. wavy rather concave

[sides at back, Pets obov mucron, Lip 3-lobed Lat Lobes triangular, middle ovate ciliated

20628 Leaf oblong emarginate longer than petiole, Flowers aggregate, Sepals keeled connate at top and free on both

20629 Leaf fleshy spatulate obtuse tridentate longer than 1-flowered scape, Flowers bilabiate, Lateral sepals oblong acuminate, Petals truncate 1-toothed beneath the middle, Lip ovate-oblong smooth with 2 elevated lines

20630 Leaves obovate-oblong narrowed into petioles, Scape angular 1-flowered, Sepals ovate erect equal ending each in a long bristle, Petals truncate rather fleshy bluntly tridendate rhomboid serrulated

20631 Pseudo-bulb ovate elongated compressed 2-leaved, Leaves oblong-lanceolate undulated, Raceme long dense nutant, Sepals all free undulately curled as are the petals Lip sigmoid lanceolate bicristate

20632 Pseudo-b compressed oval, Lvs lanc channeled acute, Rac. secund shorter than leaves, Upper sepal arched, lower one bident., Pets ov. obt, Lip cared near base bilam. in disk cun and emarg at top, Col woolly at base

20633 Ps-bulb oblong compressed leafy at base and apex, Scape many-flwd, Lip ovate reflexed bituberculate

[rium, Lip recurved obsoletely bicristate, Front sepal narrow cuneate bifid

20634 Pseudo-bulb 2-edged oval, Leaves linear-lanceolate acute, Racemes loose drooping, Bracts about equal to ova-

20635 Pseudo bulb compressed 2-edged oblong, Leaves linear-lanceolate smooth, Racemes droop ng, Perianth wavy, Lower sepal formed of 2, nearly bifid to the middle with spreading segments, Lip entire at top

[arranged

20636 Column smooth, Lip in no degree hastate with many shallow ridges on each side near the base, Flowers loosely

20637 Lvs coriaceous keeled at top mucronate, Racemes dense pendulous, Lip obovate 2-lobed slightly hastate, Lamellæ of crest 3 on both sides, Col downy with 2 minute subulate white wings and 2 oblong-linear ones

20638 Leaves ovate-lanceolate rigid articulated to the petiole the rest without a petiole, Scapes bearing an umbel-like raceme of large drooping white flowers tinged with pink

20639 Raceme pendulous, Anterior sepal emarginate, upper one and petals ovate-oblong wavy denticulated lacerated towards the claw, Leaves linear-lanceolate

20640 Pseudo-bulb 1-lvd compressed, Leaf lanceolate wavy, Raceme 3—5-flowered, Sepals and petals connivng, Lip large 2-lobed dilated with a downy lacerated appendage at base, Spur short conical

20641 Lvs sessile, Racemes pendulous loose few-flwd, Lip roundish-oblong furnished with plates, Spur short subulate

[transverse emarg narrower, Disk downy pulvinate, Stigma mutic, Wings of column semilunate entire

20642 Pseudo-b roundish 2-edged compressed, Lvs oval apicul fleshy, Pan divaricate, Lip acuminate, Middle lobe

20643 Pseudo-b cylindrical 1 leaved, Leaf lanc nerved, Panicle simple many-flwd subsecund, Seps t fasciate, Lower one spotted bidentate, Lip fiddle-shaped, Lateral lobes narrow, Crest 2-horned, Wings of column lin obt

20644 Pseudo-bulb roundish compressed, Leaves flat oblong lanceolate, Scape erect branched at top, Sepals all free, Lip 2-lobed roundish transverse, Lateral segments very short, Base of callosity 3-lobed, Lateral lobes spreading flat truncate, middle one terete, Wings of column cuneate toothed reflexed

20645 Pseudo-b terete 2 leaved, Lvs broad ensiform, Flower stem partly climbing branched, each branch 4—6-flwd

20646 Flws panicled Lateral sepals free obtuse, Lip roundish 2-lobed wavy auricled at base, Crest 5-lobed tuberculed, Wings of column small truncate, Anther downy

20647 Pseudo-bulb oblong furrowed 1-leaved, Leaves oval acute sessile shorter than decumbent few-flowered simple scape, Upper sepal as petals obovate concave wavy obtuse, lower ones smaller narrower and connate at base, Lat lobes of lip linear, middle one obovate repand wavy, Crest warted, Wings of column linear obtuse

20648 Pseudo-bulb ovate compressed 1-leaved, Lvs complicate linear-oblong much shorter than erect flexuous few-flowered scape, Sepals lanceolate oblong wavy obtuse, anterior one 2 lobed, Petals obovate and curled, Lip tripartite segments obovate and sinuses broad and fringed, Crest 5-horned, Wings of col ovate acute

20649 Pseudo-bulb oblong compressed, Leaves ensiform stiff shorter than simple scape, Sepals and petals length of lip linear-oblong wavy, Lip cordate arched inwardly on both sides dilated and rather reniform at apex, Crest of 8 tubercles downy, Wings of column small, Stigma orbicular

20650 Leaves acutely triquetrous keeled subfalcate entire, Scape many-flowered drooping, Sepals boat-shaped acuminate, lateral ones connate, Petals ovate wavy acute, Lip 3-lobed, Lateral lobes roundish, middle one roundish sessile retuse or emarginate, Crest 5-lobed, Wings of column scimitar-shaped

20651 Lvs radical terete subu, Scape panicled stiff clammy, Seps and pets obov acute conc. unguic, Lat segs of lip obov, middle one remf wavy emarg, Crest wavy truncate tubere at base, Wings of column small fleshy

20652 Pseudo bulb subglobose 1-lvd, Leaf fleshy linear-oblong acute recurved, Panicle branched many-flwd, Sepals and petals linear obtuse, Lip 3-lobed, Lateral segments minute ear-formed, middle one unguiculate transverse emarginate, Crest 5-lobed downy in centre, Wings of column deltoid straight

20653 Pseudo-bulb oblong compressed 1—2-leaved, Lvs narrow oblong flat obtuse shorter than scape, Scape racemose, Sepals and petals spatulate retuse, Lip downy lunate pilose at base, Lateral segments small reflexed, Crest linear depressed at top bidentate on both sides the teeth bearing glands, Wings of column cuneate

20654 Leaves long terete keeled, Panicle contracted many-flwd, Seps and pets conform obov concave, Lip elongated, Lat segs linear, middle one unguicul 2-lbd jagged on margin, Col short downy with semiovate wings

20655 Panicle branched, Seps linear-lanceolate wavy acute, Lip triangular rounded behind acute at top, Crest many-tuberculed, Wings of column narrow subdentate drawn out at base

20656 Racemes subpanicled, Sepals linear acuminate recurved at top, lateral ones very long, Auricles of lip convex dilated crenated, Middle lobe unguic crenated many-tuberculed at base Wings of col semi-cord acuminate



20657 - - Schlimmii *Linden* Schlimm's ℄ ⧄ or 1½ n Y.Br C. Amer. 1845. D fib p

20658 - - trilíngue *Lindl.* three-tongued ℄ ⧄ or 2 ap Y Peru 1848. D fib.p See Book 9, 13

20659 - - planilàbre *Lindl.* flat-lipped ℄ ⧄ or 1½ aut. Y Brazil 1848 D fib p

20660 - - Bárkeri *Lindl.* Barker's ℄ ⧄ or 1 f mr Cr Br sp Mexico 1840. D fib p Px. m. 14 97

20661 - - Insleàyii *Paxt.* Insleay's ℄ ⧄ or 1½ sp Br Y Mexico 1840. D fib.p Px m 8 265

20662 - - spilópterum *Lindl* spotted-winged ℄ ⧄ or 1 sp Y.P Mexico 1845. D tfy.p Bot reg 184

gallopavinum Morren.

20663 - - longifòlium long-leaved ℄ ⧄ or 3 sp Y Br Mexico 1841. D tfy.p Bot. reg. 1842

20664 - - urophýllum *Lodd.* tail-leaved ℄ ⧄ or 4 mr Y P Brazil 1840 D tfy p Bot reg 1842

20665 - - panchrỳsum *Lindl* all yellow ℄ ⧄ or 1 sp Y N. Gren. 1846. D fib p J.H S 4 267

20666 - - sarcòdes *Lindl.* fleshy-toothed ℄ ⧄ or 1½ sp Y R W Brazil 1848 D fib p

20667 - - varicòsum *Lindl* large-veined ℄ ⧄ or 1½ sp G.Y Brazil 1849 D fib.p

20668 - - ténue *Lindl* slender ℄ ⧄ or 1 my Y.BR Guatem. 1841 D fib.p J H S. 3 77

20669 - - unguiculàtum *Swt* unguiculate ℄ ⧄ or 3 au.s Y Mexico 1845. D fib.p

20670 - - bicallòsum *Lindl.* bicallous-crestd ℄ ⧄ or 1 su Y.P Guatem 1842. D fib p Bot reg 1843

20671 - - tricolor *Hook* three-coloured ℄ ⧄ or 1½ mr.ap W Y R Jamaica 1843. D fib p Bot mag 4190

20672 - - bicolor *Lindl* two-coloured ℄ ⧄ or ½ s Y P S. Main 1841. D fib p Bot reg 1841,60

20673 - - ornithorhýnchum bird-beaked ℄ ⧄ or 2 w P Guatem 1835. D fib.p Bot mag 6

20674 - - monóceras *Hook.* one-horned ℄ ⧄ or 2 ja Y Brazil 1839 D fib p Bot mag 3891

20675 - - Wràyæ *Hook.* Wray's ℄ ⧄ or 2 w Y Br Mexico 1838. D fib p Bot mag 3854

20676 - - amictum *Lindl.* frilled ℄ ⧄ or 1½ ap Br Y P sp Brazil 1845. D fib.p Bot reg 1847

20677 - - deltoideum *Lindl.* deltoid-lipped ℄ ⧄ or 1 o Y Peru 1836 D fib p Bot reg 2080

20678 - - iridifòlium *Lindl* Iris-leaved ℄ ⧄ or ½ au Y Mexico 1835. D p r.w Bot reg 1911

20679 - - intermèdium *K & W* intermediate ℄ ⧄ or 2 mr O.Br sp Cuba ... D p r.w Flor cab 60

20680 - - Hunteànum *Lindl* Hunt's D p r.w Flor cab 60

ideum Hook. *Henchmánni* Lindl

20681 - - pachyphýllum *Hook* thick-leaved ℄ ⧄ or 2 ja Y R Mexico 1839 D fib p Bot mag 3887

20682 - - cóncolor *Hook* self-coloured ℄ ⧄ or 1 au Y Brazil 1837 D fib p Bot. mag 3711

20683 - - hæmatochilum *Lindl* bloody-lipd ℄ ⧄ or 2 s Y Br.P N Gren. 1846. D fib p Paxt. fl g 1 9

20684 - - hastàtum *Lindl.* hastate-lipped ℄ ⧄ or ... su Var.w N. Gren. 1840. D fib p Ann. gand 271

Odontoglóssum phyllochìlum Morren Ann gand. 271.

20685 - - lóngipes *Lindl.* long-stalked ℄ ⧄ or 2 su Y Br Brazil 1848. D fib p

20686 - - sèssile *Lindl.* sessile ℄ ⧄ or 1 su Y S Martha 1848. D fib p Px fl g 1 10

20664 20660 20670 20668 20672



20665

20657 **Leaves 2 straight ensiform, Scape scandent racemosely panicled, Racemes flexuous, Lip 2-lobed roundish narrower at base auricled, Crest tubercled, Wings of column triangular acuminate**

20658 **Raceme twining panicled at base, Flowers few, Bracts oblong spathac shorter than ovary, Lat. sepals ungule. connate at base lanc wavy elong. dorsal one rndsh curled auried at claw length of col. Pets lanc. revol crld, Lip dagger-shpd crld with coarsely-toothed auries and large 3-tongued crest, Wings of col. small setac.**

20659 **Ps -b. 2-edged slender ribbed, Lvs ensate, Rac simple, Seps and pets lanc. unguic acum. wavy nearly eq., Lat. seg of lip small obl, mid one semicirc flat emarg Crest rhomb cusp., Wings of col. short fleshy inflexed**

20660 **Ps -b. oval compr. 2-lvd, Lvs nar. erect, Rac droop simp, Seps free, Pets lanc wavy, Lat. lbs of lip small nrly square, mid transv. hardly emarg, Tuber obl bident at base obsol 3-lbd at top. Wings of col short rndsh**

20661 **Ps -b ov flat fur 2-lvd, Lvs ellipt rec. at top, Racs simp erect or partly droop, Seps and pets obl. nearly eq. wvy, Lip obov ret. with deprsd tubercs on both sides at base and trhd lam. in mid., Wngs of col. slendr wvy**

20662 **Pseudo-b flattened obl 2-lvd, Lvs obl., Scape racem, Seps ov ac free, Pets conform broader, Lp large 3-lbd rndsh emarg apicul, Lat. lobes small obt, Crest 3 lobed warted, Wings of col semicord crenul. spotted**

20663 **Lvs terete 3 feet long diffuse, Scape erect densely panicled, Sepals and petals obtuse apiculate concave, Lateral lobes of lip spreading obliquely oblong nearly square, middle one obovate bifid with a depressed tubercle at base and 3-horned at top glabrous, Wings of column sublunate short rounded**

20664 **Lvs equit ac, Scpe long pend panic, Seps lin acum, lat ones almst conn to apex, Pets obov rndsh-apic., Lat. lbs of lip short conv. obt, mid one ung renif. emarg, Tuberc on crest 2—3 lbd, Wings of col large rounded**

20665 **Lvs short ensiform obtuse, Panicle spreading, Seps ov acute flat free, Pets conform rather wavy, Lip 3-lobed, Lat lobes rounded curled downy at base, mid lobe 2-lobed, Crest flat rather 4-lobed at top, Col. wingless**

20666 **Panicle racemose Sepals free obovate, Petals larger unguic obov spat., Lateral lobes of lip short serrulated, middle one large wavy emarginate, Crest linear 2-lobed Column with fleshy truncate glabrous wings**

20667 **Pseudo-bulb oblong sub-tetragonal 2-leaved, Leaves stiff spatulate-lanceolate, Scape slender pyramidal almost simple racemose, Flowers distant, Petals and sepals acute reflexed, Lip large roundish obsoletely 4-lobed, Crest triden arched behind cuneate in front with varicose veins, Upper wings of col rounded denticulate**

20668 **Pseudo-bulb oval slender, Leaves membranous ovate-lanceolate flat, Panicle racemose, Bracts 3—4-flowered, Middle lobe of lip roundish 2-lobed, Tubercle of crest 5—7-toothed glab, Wings of column triangular**

20669 **Pseudo-bulb oval shining 2-edged 2—3-leaved, Leaves lanceolate erect recurved at top, Scape panicled, Flowers secund, Sepals and petals lanceolate wavy equal free spotted, Lip 3-lobed, Lateral lobes roundish, middle one unguiculate transverse 2-lobed, Crest linear tridentate at top bidentate in middle, Wings of col trunc.**

20670 **Bracts ovate membranous obtuse, Lateral lobes of lip short, middle one large transverse emarginate obcordate, Crest bicallous, Tubercles distant one placed in front of the other, Auricles of col linear falcately recurved**

20671 **Leaves coriaceous acutely triquetrous complicate keeled, Scape panicled many-flowered, Sepals 2 spatulate, Petals ovate unguiculate wavy, Lateral lobes of lip small linear-obovate, middle one reniformly lunate emarginate, Crest double, upper 5-lobed, lower 3-lobed, Wings of column crenulated**

20672 **Pseudo-bulb oval flattened 3-ribbed on both sides 1-leaved, Leaf oblong sessile striated, Panicle divaricate, Lateral sepals connate at base ovate acute as are the petals, Lip large 2-lobed, Crest tubercled hastate 3-parted, Wings of column rounded toothed**

20673 **Pseudo bulb ovate 2-leaved, Leaves ensiform recurved, Scape panicled, Sepals linear-oblong wavy reflexed, Lip fiddle-shaped, Lateral lobes acute middle one 2-lobed, Crest of 5 crenated lamellæ rostrate at top, Wings of column cuneated toothed, Stigma beaked**

20674 **Pseudo-bulb oblong flattened furrowed 1—2-leaved, Leaves oblong-lanc coriaceous shining, Flws panicd, Seps green lanc, lower ones conn, Pets obov. spat, Lip 3-lbd with elong horn in centre, Col elong. wingless**

20675 **Pseudo-bulb ovate-flattened furrowed 2-leaved, Leaves linear-lanceolate, Scape long panicled, Sepals and petals conform ovate acute spreading, Lip broadly cuneate 3-lobed, Crest elevated acutely 3-lobed**

20676 **Pseudo-bulb elongated 2 leaved, Lvs oblong, Panicle racemose dense many-flowered, drooping, Lip obcuneate 2-lobed, Auricles ciliated, Crest of 4 tubercles, Wings of column oblong ciliated**

20677 **Pseudo-bulb narrow angular, Leaves lanceolate channeled, Scape panicled with many-flowered branches, Upper sepal unguiculate obovate, lateral ones longer spatulate-lanceolate, Petals broader obovate curled, Lip deltoid with rounded angles, Crest tubered at base bilamel at top, Wings of col scimitar-shaped toothed**

20678 **Leaves ensiform short equitant, Scape simple 1-flowered, Upper sepal obtuse, lateral ones acute collateral green, Petals obtuse undulated larger, Lat. Lobes of lip small roundish unguic, middle one much larger rndsh 2-lbd emarg on both sides towrds marg., Crest depr 5 lobed trunc at top, Wings of col. crenulate**

20679 **Lvs obl-lc stiff fleshy, Scape flexuous panicled many-flwd, Seps nearly ent. upper rndsh, lat ones spat., Pets rndsh crenately curled, Lat lobes of lip short revol, mid one renif., Crest of 2 lobes and 3 callosities**

20680 **Pseudo-bulb 1-lvd, Leaf coriaceous, Scape panicled elongated, Pedicels 1—2-flowered, Sepals and petals oblong-ovate curled, Lip 3-lobed 5 tubercled above the base, Middle lobe emarginate rather fan-shaped**

20681 **Bulbless, Leaves elliptic-oblong, Panicle ample, Sepals obovate-spatulate wavy, Petals conform but narrower, Lip tripartite with 5 tubercles in middle, Wings of column deflexed oblong**

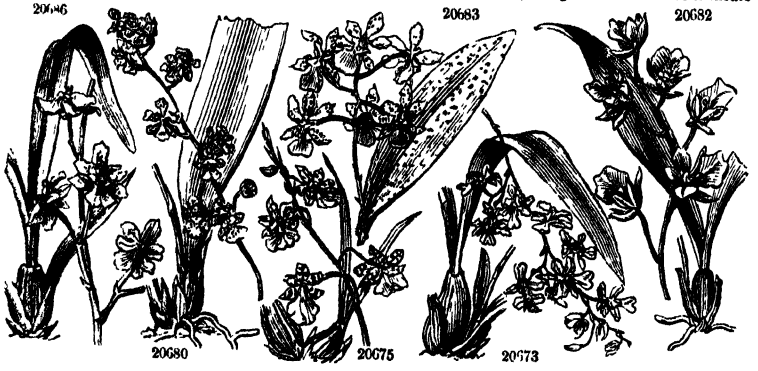
20682 **Pseudo-bulb ovate 2-leaved, Leaves ligulate-lanceolate, Scape racemose, Lateral sepals united almost to the middle, Lip 3-lobed bilamellate at base, Middle lobe bifid**

20683 **Bulbless, Leaves oblong acuminate flat spotted growing singly, Racemes compact stiff, Sepals and petals similar spatulate wavy, Lip roundish auricled at base with scarcely any crest wavy in front like the letter W elevated with a toothlet on each side, Wings of column rounded a little lobed [white tinged with green**

20684 **Column short obtuse protuberant at base forming an obtuse angle with the lip Flowers large variegated, Lip [dulous connate at base, Petals oblong flat, Lateral lobes of lip small obtuse, middle one transverse**

2068 **Pseudo-bulb oval 2-leaved, Leaves narrow thin, Scape 2-flwd equal to leaves, Lateral sepals elongated pen-**

20686 **Pseudo-bulb 2-leaved oblong compressed ribbed, Leaves terete bluntish shorter than racemosely panicled scape, Sepals and petals distinct oblong obtuse uniform all sessile, Lip cuneate dilated retuse at top somewhat lobed at sinus, Crest excavated smooth 3-lobed bilamellate in front, Wings of column short truncate**



20687 - - cucullàtum *Lindl.* cucullate ☐ or 1½ jn R vl La Guay. 1848. D fib.p Paxt. fl. g 3 87
Leochilus sanguinolèntus Lindl. Bot reg misc. 1844. No. 91.
20688 - - variegàtum *Swartz* variegated ☐ or 1½ su Pk R W.Indies 1847. D fib.p Paxt. fl g 1 23

20689 - - incúrvum *Bark.* incurved ☐ or 1½ su W.R. va Mexico 1840 D fib p Bot reg 1845 61

20690 - - stramíneum *Lindl.* straw-coloured ☐ or 2 su Str.sp V. Cruz 1838. D fib p Bot. reg 1840, 11

20691 - - pelicànum *Mart* frilled ☐ or 2 su Y.P Mexico 1845. D fib p Bot. reg 1847 7

20692 - - sphacelàtum *Lindl.* scorched ☐ or 2 f Y P Mexico 1840. D fib.p Bot. reg 1842, 3

20693 - - unifìdrum *Lindl.* one-flowered ☐ or ¼ n G Y Brazil 1841. D fib p Bot reg 1843, 4
12912 papilio
β limbatum *limbate* ☐ or 1½ sp Y o P Trinidad 1840 D fib p Bot. mag 3733

2807 FERNANDE'ZIA.

20694 17996*a* acùta *Lindl* acute-leaved ☐ cu ½ jn Y Trinidad 1834. D fib.p Bot reg 1806

3238. 2807*a*. LEOCHI'LUS *Lindl* LEOCHILUS (*Leios*, smooth, *cheilos*, a lip) *Orchideæ*
20695 - - oncidioides *K & W.* Oncidium-like ☐ pr ½ su Y P sp La Guay 1843 D p.r w Bot mag 3845
herbàceus Lindl. *Oncidium micranthe'rum* B M. 3845 *Rodriguèzia maculata* Lindl
20696 - - carinatus *Lindl* keeled ☐ pr ... ... O sp Mexico 1843. D p r.w
Oncidium carinàtum K & W. Flor cab.

3239. 1897*a* ACIANTHE'RA *Scheidw* (*Akis*, a point, *anthera*, an anther) *Orchideæ Malaxideæ*
20697 - - punctàta *Scheidw* dotted flowered ☐ cu ½ ap.jl Gah Brazil 1840 D fib p

3240. 1916*a* TELIPO'GON *R Br.* (*Telos*, the end, *pogon*, a beard, column) *Orchideæ.*
20698 - - obovàtus *Lindl.* obovate-lipped ☐ cu ½ ... ... Peru 1846 D fib p

2810 DICHÆ'A.

20699 17998*a* glaûca *Lindl* glaucous ☐ fr ¼ su W.Y Mexico 1844. D fib p

2811 MILTO'NIA

20700 17999*a* flavéscens *Lindl* yellowish ☐ or 1 jn Y.sp Brazil 1830 D p r w Lindl sert 48
Cyrtochilum flavéscens Lindl Bot. reg 1627.
20701 - - cándida *Lindl* white-lipped ☐ or 2 n Y.R w Brazil 1838. D fib p Px m 6 241 ic
β flavéscens Hook *yellowish* ☐ or 2 n Y Brazil 1845 D fib p Bot mag 3794
20702 - - Clowèsii *Paxt* Clowes's ☐ or 1 o d P o br Brazil 1840 D fib p Bot mag 4109
Odontoglóssum Clowesii Lindl B.M
20703 - - Karwinskii *Lindl* Karwinski's ☐ or 3 aut G v w B Mex 1839 D fib p J H S 4 83
Cyrtochilum Karwinskii Bot reg 1992 *Oncidium Karwinskii* Lindl. Sert orch under 25 *Brassia Clowesii* Lindl
20704 - - Russelliàna *Part* Russell's ☐ or 1 au G P.Y Brazil ... D fib p Px m 7 217 ic
Oncidium Russellianum Bot. reg 1840
20705 - - cuneàta *Lindl.* cuneate-lipped ☐ or 1 sp W Br Y Mexico 1843. D fib.p Bot reg 1844 8

20706 - - stellàta *Lindl.* stellate ☐ or ... sp su Y.w c Brazil 1839. D p r.w Lindl. sert 7
Cyrtochilum stellàtum Lindl. Sert orch t 7

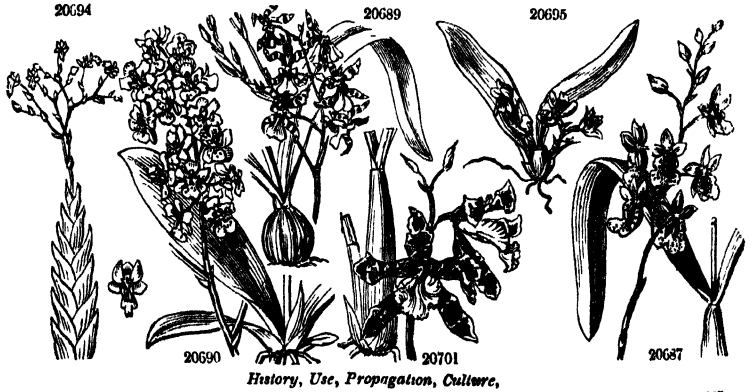
2812 CYRTOCHI'LUM.

20707 18000*a* maculâtum *Lindl* spotted-flwd ☐ cu 1 sp *Gy* R.w V Cruz 1839. D p.r.w Bot mag 3880

β parviflórum Lindl. *small-flowered* ☐ cu 1 sp W Y.P Mexico 1839 D p r w
γ cornûtum Hook. *horntes* ☐ cu 1 sp ... Mexico 1840 D p r w Bot. mag 3830
20708 - - filipes *Lindl* thread-scaped ☐ or 1 jn Y.Br Guatem 1840. D p r w Bot reg 1841, 54

20709 - - citrinum *Hook.* citron-coloured ☐ or 1 ap Ci C Amer. 1847 D p.r w Bot mag 4454

20710 - - mystacinum *Lindl* whiskered ☐ or 1½ su Y Peru 1837. D p.r.w



History, Use, Propagation, Culture,

3238. *Leochilus* Similar in habit to *Oncidium*, and they may be cultivated and treated in the same manner
3239. *Acianthèra punctàta* is a small plant with the habit of *Pleurothallis*, with oval leaves and 5—6 greenish grey flowers

20687 Lip fiddle-shaped 2-lobed much larger than sepals, Segments roundish flat with 3 tubercles above the base villous at base, Wings of column short

20688 Leaves fleshy acuminated serrulated, Flowers panicled, Upper sepals united into a spoon-shaped body, Petals obovate emarginate unguiculate cuspidate, Lip 3 lobed, Lateral lobes small, middle one broad 2-lobed with a toothed claw and double fleshy crest, Wings of column hatchet-shaped acuminated entire

20689 Pseudo-bulb ovate 2-edged 3—4-ribbed 2—3 leaved, Leaves ensiform acute, Scape long racemosely panicled, Sepals linear-lanceolate wavy free, Petals conform incurved, Lateral segments of lip short rounded, middle one roundish concave acute, Crest ovate depressed, lower half lined, upper ribbed, Column nearly wingless

20690 Bulbless, Leaves thick ovate-lanceolate acute, Scape panicled, Sepals roundish wavy unguiculate concave free quite entire, Pets much larger oblong obtuse emarginate curled, Lateral lobes of lip oblong fleshy acute with revolute edges, middle lobe reniform 2-lobed with 4 twin tubercles in mid., Wings of column linear obtuse

20691 Pseudo-bulb ovate furrowed 1-leaved, Leaves narrow lanceolate acute, Racemes subcompound many-flowered, Sepals and petals linear-lanceolate wavy acute reflexed Lip reniform emarginate, Lateral segments roundish erect glabrous 5-toothed bidentate at apex Wings of column large oblong toothleted

20692 Pseudo-bulb elongated ovate 2-edged, Leaves long ensiform recurved at top, Raceme compound many-flowered Seps and pets linear-lanc. wavy equal to lip, Lip constricted in middle cuneated at base dilated and rounded at top 2-lobed, Crest depressed downy 3 lobed at top, Wings of col elong truncate erose sphacelate

20693 Tufted, Pseudo-b narrow-lin scaly furrowed 1-lvd, Lvs lin-lanc. obt. wavy apicu, Scape 1-flwd short, Lat. seps connate at base obov-obl like pets, Lip fiddle-shaped, Mid lobe large emarg, lat ones short fringed in
β Mid lobe of lip yel. with a brown border [sinus Crest downy fringed, Wings of col trunc. erose

[short, mid emar obt, Disk pulv with small tub. behind at base

20694 Leaves acuminate keeled, Corymb loose, Bracts obtuse membranous, Lip linear 3-lobed, Lateral lobes straight

20695 Racemes nutant sheathed at base, Lateral sepals connate, Lip oblong convex retuse with downy crest below the middle melliferous at base

20696 Pseudo bulb ovate, Leaves lanceolate, Scape erect flowers secund racemose, Sepals and petals linear, Lip lin.-obl emarginate with a melliferous crest at base, Lamellæ 2 short truncate furnished with 2 filif. glands

20697 Leaf solitary ovate obtuse glaucous dotted with purple, Sepals villous outside dotted with purple inside, Lip purple, Petals dotted, Racemes few-flowered drooping spathaceous at base

20698 Rachis flexuous winged, Bracts ovate acute falcate cucullate, Petals oblong acute, Lip large obovate-roundish

20699 Leaves distich imbricate blue from bloom beneath, Flowers pure white except a spot of yellow at base of each division

20700 Pseudo-b. very narrow 2-edged smooth, Lvs linear ensif twin, Scape compr closely sheathed, Rac many-flwd, Brcts yellowish keeled length of pedunes, Seps and pets lin acum Lip ov-lanc. curled dwny at base mapp n.

20701 Pseudo-bulb ov 2-lvd, Lvs nar shorter than race, Bracts ov scale-formed, Seps and pets obl eq., Lip round
β Column and lip yellowish [ish curled convol about the col with 5 lamellæ, Col downy 2-eared at base

20702 Pseudo-bulb oval 2-leaved, Leaves ensiform narrow erect longer than scape, Raceme few flowered loose, Bracts small setac., Seps and pets lanc equal, Lip cord constricted in middle rounded at apex with 5 abrupt lamel

20703 Scape panicled, Sepals and petals oblong-lanceolate apiculate, Lip obovate rigid crestless lamellate with central incurving veins, Margins of column simple, Flower 2 inches in diameter

20704 Pseudo-b ov ribbed 2-lvd, Lvs ligu-lanc, Rac few-flwd, Bracts acum., Seps and petals conform ovate oblong wavy, Lip obl-cun retuse apicu, subsinuated with many trun lamellæ in disk, Col biden with falcate wings

20705 Pseudo-bulb ovate-oblong, Leaves striated, Racemes many-flowered, Sepals and petals lanceolate wavy, Lip cuneate roundish bilamellate at base, Column bidentate in middle, Clinandrium entire

20706 Pseudo-bulb 2-leaved oval 2-edged, Leaves ligulate obtuse, Scape terete erect sheathed, Raceme distich many-flowered, Bracts keeled convolute acuminate, Sepals and petals linear-obovate acute stellate, Lip oblong wavy acute, Wings of column scimitar-shaped entire

20707 Pseudo-bulb ovate compressed subangular 2-leaved, Leaves broad-ligulate acuminate striated obliquely emarginate, Scape simple, Flowers racemose, Bracts short scale-formed, Sepals and petals fleshy obovate-lanceolate acute, Lip membranous oblong apiculate toothed on both sides bilamellate at base, Wings of column falcate entire
β Lip subhastate, Lateral segments larger
γ Leaves narrower, Lip with 4 lamellæ at base, Horns wanting

20708 Scape long filiform few flowered, Sepals and petals lanceolate conform acute flat, Lip cuneate bifid furnished at base with subtuberculate teeth, Wings of column small cuneate truncate

20709 Pseudo-bulb short ovate furrowed 2-lvd, Lvs lin.-obl., Scape longer than leaves, Rac 8—10-flwd, Bracts small, Seps ov.-lanc acuminate, Pets ovate wavy, Lip large roundish fiddle-shaped bilamellate, Column bidentate

20710 Pseudo-b oval compressed corrugated 1-lvd many-lvd at base, Lvs ligulate acute flattish keeled much shorter than branches of scape, Bracts lanc much shorter than pedunes, Seps and pets ov acum Lip unguic. cord obov, Limb subrep and flat reflexed at apex downy in mid. obsoly lamel at base, Wings of col multifid



and Miscellaneous Particulars.

3210 *Telipogon.* Curious little terrestrial plants. They will grow well in turfy peat. The plants require moisture, heat, and shade.

20711 - - graminifòlium *Lindl.* Grass-lvd £ ⧄ or 1 ... ... Oaxaco ... D p.r.w

1886. BRA'SSIA

20712 12887*a* verrucòsa *Batem.* warted £ ⧄ or .. su Gsh y Guatem. 1838. D p.r.w Bate or m. 22

20713 - - Lanceàna *Lindl* Lance's £ ⧄ or ¾ f my Y sp Surinam 1833. D p r.w Bot mag 3577
β viridiflòra *green-flowered* £ ⧄ or ¾ su G y S Amer ... D p r w Bot mag 37 4
20714 - - Laurenceàna *Lindl* Lawrence's £ ⧄ or 1 ja Y Br Brazil 1839. D p r.w Bot reg. 1411 1s
20715 - - angùsta *Lindl.* narrow-lvd £ ⧄ or 3 sp W sp Brazil ... D p r w

20716 - - guttàta *Lindl* spotted £ ⧄ or 2 w Pa.Y.br.sp Guatem. 1840. D p.r.w Bot. mag 4003
Wràyæ Bot. mag.
2 717 - - brachiàta *Lindl.* armed £ ⧄ or 2 w G y Guatem 1840. D p r.w

20718 - - Clowèsii *Lindl.* Clowes's £ ⧄ or 1 o d Y Br Brazil 1840 D p.r w Bot mag 3793
Odontoglóssum Clowesii Lindl *Miltonia Clowesii* Lindl Sert. orch t 34
20719 - - cochleàta *K & W* shell-formed £ ⧄ or 1 my jn G Br Demera 1834. D p r w Flor cab 53
20720 - - macrostàchya *Lindl* long-spiked £ ⧄ or 2 o Y Demera 1835 D p.r.w Lindl sert or 9

20721 - - bidens *Lindl.* two-toothed £ ⧄ or 1 su Y.Br sp Brazil 1836 D p r.w

2814 PHALÆNO'PSIS

20722 18002*a* intermèdia *Lindl.* Intermediate £ ⧄ or 1 su Pk w hybrid 1850 D p r w Px fl g 3 161 3[illegible]
20723 - - rosea *Lindl* rose-colrd-flwd £ ⧄ or 1½ jn Pk w Manilla 1848. D p r w Paxt fl g 2 72
equéstris Rchb. *stauroglóttis* Schaur.

1916 VA'NDA

20724 12971*a* tères *Lindl.* terete-leaved £ ⧄ or 2 jn P y w Sylhet 1828 D p r w Bot mag 4114
20725 - - tricolor *Lindl* three-coloured £ ⧄ or 1 jn Y R p Java 1847 D p r w Bot mag 4432
suaveolens Blume.
20726 - - cristàta *Lindl* crested £ ⧄ or 1 ap G p Nepal 1840 D p r w Bot mag 4364

20727 - - insignis *Blume* showy £ ⧄ or 2 f Ol y br Java 1848 D p r w
20728 - - cærùlea *Gr fflths* blue-flowered £ ⧄ or 2 ... B Khos h 1849 D p r w Paxt fl g 1, 36

20729 - - violàcea *Lindl.* violaceous £ ⧄ or 1 f W vi sp Manilla 1840 D p r w Bot reg 184[illegible]

20730 - - Batemànii *Lindl* Bateman's £ ⧄ or 2 jn jl Y c p Moluccas 1845 D fib p Bot reg 1846, 3
Issochilòides Lindl. *Ficàlda Issochiloides* Gaud voy t. 26

20731 - - fúrva *Lindl* dusky £ ⧄ or 5 jn au Choc China 1837 D fib p Bot mag 3816
Rorbúrghii unicolor B M *Angræ'cum fúrvum* Rumph *Epidéndrum furvum* L. *Cymbidium fúrvum* Willd.
20732 - - parviflòra *Lindl* small-flowered £ ⧄ or 1 su Pa.och p dot Bombay 1843 D fib p
20733 - - lamellàta *Lindl* lamellate £ ⧄ or 2 jn au Pa Y Manilla 1837 D fib p

20734 - - pedunculàris *Lindl* long-peduncled £ ⧄ or 2 mr Pa G.p Ceylon 1850 D fib p Px fl g 3 41 [illegible]

28 5 CAMARO'TIS.

25735 18003*a* obtùsa *Lindl* blunt-leaved £ ⧄ pr ½ ap jn Dl Ro y India 1844 D fib p

1918 RENANTHE'RA.

20736 12974*a* matùtina *Lindl* morning £ ⧄ pr 1 s Br s Java 1842 D p r w Bot reg 1844, 41
moluccàna Pol. *Aérides matútinum* Blume.

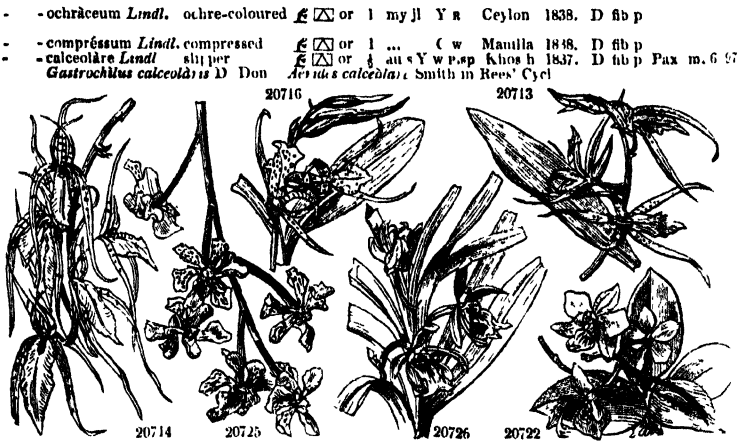
2817 SACCOLA'BIUM

20737 18005*a* guttàtum *Lindl* spotted-flwd £ ⧄ or 1 my W p sp India 1819 D fib p Bot. mag 4108
Saccánthus guttàtus B R *Aérides venusum* Swartz.
20738 - - ampullàceum *Lindl* flask-bearing £ ⧄ or ½ au R Sylhet ... D fib p Px. m 13 49
Aerides ampullàceum Lindl
20739 - - denticulàtum *Paxt* toothleted £ ⧄ or ½ ap G y w Khos h 1837. D fib p Px m 7 11[illegible]
20740 - - miniàtum *Lindl.* vermilion-cld £ ⧄ or ½ l O.R Java 1846 D fib.p Bot reg 1847 [illegible]

20741 - - Blùmei *Lindl.* Blume's £ ⧄ or 1 mr jn R Vi Java 1835. D fib p

20742 - - ochràceum *Lindl.* ochre-coloured £ ⧄ or 1 my jl Y R Ceylon 1838. D fib p

20743 - - compréssum *Lindl.* compressed £ ⧄ or 1 ... C w Manilla 1848. D fib p
20744 - - calceolàre *Lindl* slipper £ ⧄ or ½ au s Y w p.sp Khos h 1837. D fib p Pax m. 6 97
Gastrochilus calceolàris D Don *Aerides calceolaria* Smith in Rees' Cycl



20711 Close to *maculatum* in habit, but has a yellow wedge-shaped lip It differs also from *C. filipes* in the shape of the lip

20712 Leaves shorter than slender scape, Lateral sepals acuminate, Lip unguiculate obovate apiculate warted shorter than sepals with villous recurved lamellæ

20713 Sepals ovate-lanceolate acuminate, Lip oblong acuminate wavy much shorter than lateral sepals

β Flowers green, Sepals and petals longer and narrower

20714 Lateral sepals elongated double the length of the lip Lip oblong lanceolate at top rather wavy

20715 Pseudo-bulb oblong 2-edged, Leaves twin oblong sessile wavy length of raceme, Sepals linear acuminate, lateral ones tailed, Petals linear acuminate, Lip linear-lanceolate acuminate with downy lamellæ

20716 Pseudo-b obl 2-edged 2-leaved, Lvs oblong obt shorter than many-flwd raceme, Bracts spreading scale-formed, Sepals linear acuminate, Petals contorm shorter, Lip cordate-ovate curled with connate downy lamellæ

20717 Pseudo-bulb oblong compressed 2-leaved, Leaves obtuse shorter than many-flowered raceme, Bracts spreading scale-formed, Seps and pets lin acum very long Lip cord -subrhomboid acum curled with bidentate lamellæ

20718 Pseudo-bulb oval 2-leaved, Leaves narrower ensiform erect larger than scape Raceme loose few-flwd, Bracts small set receous, Sepals and petals lanceolate equal, Lip cordate constricted in middle with 5 unequal lamellæ

20719 Sepals and petals nearly equal linear acuminate, Lip elongated cochleate acuminate

20720 Pseudo-bulb compressed 2—3-leaved, Scape nutant many-flowered Sepals linear acuminate, lateral ones very long, Lip oblong-lanceolate acuminate longer than petals with villous lamellæ

20721 Pseudo bulb narrow 2-edged, I eaves oblong lanceolate, Scape many-flowered equal to leaves, Sepals acuminate, lateral ones twice as long as lip, Lip rhomboid wavy shorter than petals with straight lamellæ

[Mule between *P. amabilis* and *P. rosea*

20722 Petals broadly rhomboid acute, Lat lobes of lip cuneate obtuse angled middle one ovate bicarinate at apex,

20723 Lvs obl cori ac recurv at top, Scpe nod brnchd twisted clav Flwrs fleshy, Seps ov , Pets oval a little broader, Lip ascend tripar , Lat segs lin -spatu lunate, mid one ovate, Crest lunate roundish depressed crenigunate

[deeply 3-lobed downy inside and with a conical spur at base Lat lbs incurv , mid one dilated at apex 2 lbd

20724 Lvs terete obt , Racs 2 or many-flwd longer than lvs Seps and pets suborbicular rather wavy spreading, Lip

20725 Leaves distich channeled, Racemes many-flowered, Sepals coriaceous unguiculate obovate obtuse, Lip 3-lobed 3-lined with a short blunt spur, Lateral segments rounded, middle one broader cuneate emarginate

20726 Lvs channeled recurved truncate obliquely tridentate, Raceme erect 4-flowered, Seps oblong obtuse arched, Pets narrower incurved, Lip 3-lobed, Lateral lobes short incurved, middle one vittate oblong saccate at apex unequal 3-horned, Horns short conical

20727 Leaves coriaceous, Spike loose many-flowered

20728 Lvs distich coriaceous truncate, Spike dense erect many-flowered, Bracts oblong concave obtuse, Lip leathery linear-obl with 2 diverging lobes having 3 lamellæ along the middle and 2 trun acum lobes Spur short obt

20729 Leaves channeled obliquely 2-lobed, Raceme many-flowered dense pedunculate pendulous, Sepals obovate obl obtuse flat incurved, Petals narrower, Lip obl apiculated flat with 5 thick elevated veins, Sac downy inside

20730 Roots thick, Leaves distich coriaceous obliquely emarginate obtuse shorter than many-flowered lateral raceme, Bracts coriaceous cucullate scale-formed, Flowers large flat coriaceous but the flower buds are globose, Sepals obovate-cuneate obtuse, Lip triangular saccate at base with a transverse line in the middle

20731 Stem tall, Leaves loose membranous obliquely tridentate Racemes lateral many flwd, Flowers distant Sepals and petals obl obovate wavy of one colour obt , Lip 3-lobed, Lat l bes obt , middle one cuneate 2 lbd

[oblong channeled spongy bilamellate denticulate, Spur narrow obtuse

20732 Raceme simple, Sepals oblong, Petals linear-spatulate, Lip 3-lobed, Lateral lobes ascending acute middle one

20733 Lvs distich coriaceous obliquely and acutely bidentate, Spike many-flwd, Seps and pets obov undulated, lower ones incurved and larger Lip teated at base obcuneate ret auricled bilamel bitubercu behind ben the apex

20734 Lip fleshy sessile with a small bearded tubercle, Column short tomentose unidentate on both sides, Lvs distich, Peduncles long racemose at top

20735 Lip slipper-shaped, Terminal lobule truncate obsoletely tridentate inflexed furnished with a 2-lobed channeled appendage inside, Column twisted

20736 Raceme dense cylindrical on long peduncles panicled and simple, Sepals and petals obovate-linear obtuse, Lip ovate acute, Spur obtuse

20737 Lvs long channeled truncate, Racemes cylindrical dense-flowered arched equal, Sepals ovate, Spur compressed downy inside

20738 Stem short, Leaves thick distich ligulate truncate or toothed at top, Racemes oblong erect shorter than leaves, Sepals and petals ovate spreading nearly equal, Lip acuminate concave, Spur short compressed drooping

20739 Stem strong erect, Lvs large oblong acute, Racemes lateral many-flwd, Sepals and petals oblong blunt ish

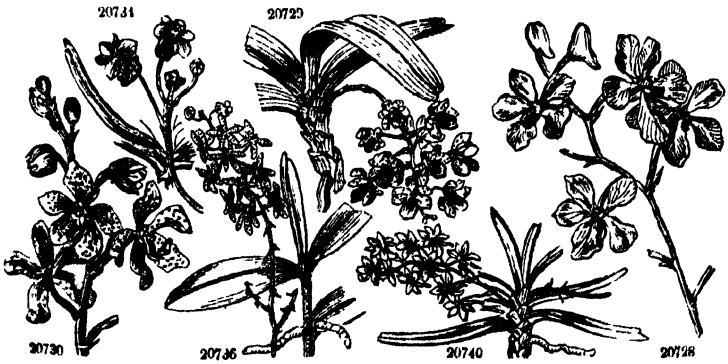
20740 Leaves distich imbricate lorate channeled obliquely truncate at apex, Racemes short spreading, Bracts small, Sepals and petals ovate acute spreading, Lip linear obtuse recurved, Spur straight pendulous

20741 Leaves long channeled arched acute mucronate equal to pendulous racemes, Seps ovate, Pets oblong narrower, Lip oblong emarginate ribbed on both sides, Spur compressed very blunt downy inside

20742 Leaves distich coriaceous obliquely 2-lobed at apex, Racemes a little branched, Sepals and petals linear obtuse fleshy, Lip subsagittate recurved papillose with erose edges, Spur obtuse [formed Spur obtuse falcate

20743 Young stem 2-edged, Lvs distich stem-clasp wavy obt obliq triden., Rac cylind pend., Lip fleshy small tooth-

20744 Stemless, Leaves lorate acuminate obliquely bidentate at apex, Corymbs many-flowered on short peduncles, Sepals and petals obovate-oblong obtuse, Spur of lip inflated orbicular, Lamina lunate roundish ciliated



3241. 2817*a*. ARRHY'NCHUM *Lindl.* ARRHYNCHUM. (*A* priv., *rhynchos*, a snout.) *Orchideæ*

20745 - - labròsum *Lindl.* lipped £ ⧄ or ½ o P Y.sp Asia ... D fib p

3242. 2817*b* MALACHADE'NIA *Lindl.* (*Malachos*, soft, *aden*, a gland; gland on pollen masses) *Orchideæ*

20746 - - clavàta *Lindl.* clavate £ ⧄ or ½ su aut G.Br.sp Brazil 1843. D fib p Bot. mag 4334

1915. SARCA'NTHUS.

20747 12968*a* oxyphýllus *Wall.* sharp-leaved £ ⧄ or 1 aut Y.R India 1838. D fib p

20748 - - filiformis *Lindl.* filiform £ ⧄ or ... s Choc.w Y P India 1842 D fib p Bot mag 4639

20749 - - guttàtus *Lindl.* spotted £ ⧄ or 1 mr W.o.Ro Dacca 1818 D fib p Bot reg 1413
Aérides guttàtum Roxb

2818. CLEISO'STOMA

20750 - - ròseum *Lindl.* rose-colrd-flwd £ ⧄ pr .. mr Pa Y R Manilla 1838 D fib p

20751 - - fonòsmum *Lindl.* violet-scented £ ⧄ pr 2 mr Y.Br Manilla 1843 D fib p Bot reg 1847

20752 - - decíplens *Lindl.* deceiving £ ⧄ pr ... su aut Och Ceylon 1843 D fib.p

20753 - - spicàtum *Lindl* spiked £ ⧄ pr 2 my R Y Borneo 1846 D fib.p

20754 - - fúscum *Lindl* brown £ ⧄ pr 1 su.aut Br E Indies 1846 D fib p

20755 - - maculòsum *Lindl* spotted-flwd £ ⧄ pr ... su aut Y Br Ceylon 1839 D fib p

20756 - - latifòlium *Lindl* broad-leaved £ ⧄ pr 1 su.aut Y R Sincapore 1839 D fib p

20757 - - crassifolium *Lindl* thick-leaved £ ⧄ pr ½ su Y R Moulmein 1850. D fib p Paxt fl g

20758 - - bicolor *Lindl* two-coloured £ ⧄ pr . su Pk P Manilla 1848. D fib p

3243 1915*b* ACRIO'PSIS *Blume* (*Akris*, the summit, *opsis*, the eye) *Orchideæ*

20759 - - densiflòra *Lindl* dense-flowered £ ⧄ pr ½ jl s Y G Ro.w Borneo 1846. D fib p

20760 - - picta *Lindl.* painted £ ⧄ pr ½ jl s W G P Bantam 1842. D fib p

20761 - - javánica *Blume* Java £ ⧄ pr ½ su Y G Java 1840 D fib p

1917 AE'RIDES

20762 1297*a* tessellàtum tessellated £ ⧄ or 1 n Br P E Indies 1820 D p r w Bot mag 2245
Vánda tessellàta Lodd *Cymbidium tessellatum* Roxb. *Jánda Roxbúrghii* B M. & B R

20763 - - affine *Wall.* allied £ ⧄ or 1½ au Pnh Ro Nepal 1838 D p.r w
multiflórum Roxb

20764 - - crispum *Lindl* curled £ ⧄ or 1 my W Ro E. Indies 1840 D p r w Bot reg 1842
Brookii Batem Paxt mag 9. p 145 ic

20765 - - quinquevúlneum five-holed £ ⧄ or ½ jn Pk G Philippi 1838 D p r w Px m 8 211

20766 - - maculòsum *Lindl.* spotted £ ⧄ or 1½ jn jl Pa Ro sp E Ind. 1842. D bloc Bot reg 1811

20767 - - virens *Lindl* green £ ⧄ or 1 ap W blitch c Java 1842. D bloc Bot reg 1811

20768 - - flávidum *Lindl.* yellowish £ ⧄ or 1 ... Y Pk ..... 1840. D fib p

20769 - - suavíssimum *Lindl.* vy sweet-sctd £ ⧄ or 1 jn W Li.o Malacca 1848. D bloc
flávidum Paxt

20770 - - ròseum *Lodd* rose-colrd-flwd £ ⧄ or 1 aut Ro E. Indies 1840 D fib.p Bot mag 4040
affine B M. 4049 not of Wall.

1921. ANGRÆ'CUM.

20771 18007*a* bilobum *Lindl* two-lobed-lvd £ ⧄ or ½ s W Pk Cape C 1830 D bloc Bot reg 1841

20772 - - distichum *Lindl* distich-leaved £ ⧄ or ½ o W Sierra L 1834. D p r.w Bot mag 411

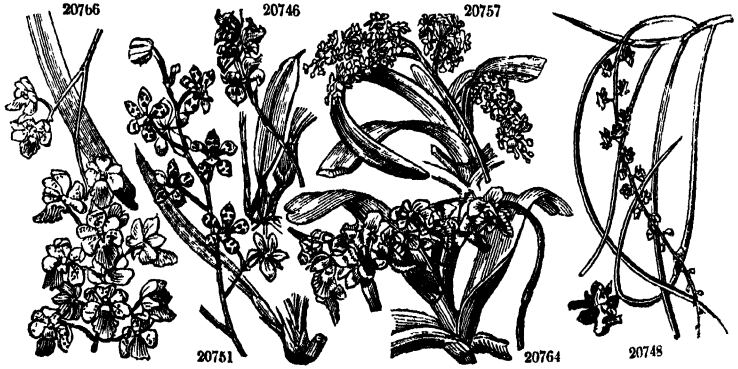
20773 - - micránthum *Lindl* small-flowered £ ⧄ or ½ f W Sierra L. 1834. D p.r.w Bot. reg 1772

20774 - - funàle *Lindl* cord-like £ ⧄ or 1 n d G w W.Indies 1845. D p r w Bot mag 4275
(*Ecéoclades funàlis* Lindl. *Epidéndrum funàle* Swartz *Limodórum funàle* Swartz.

20775 - - apiculàtum *Hook* apiculated £ ⧄ or ½ s W Sierra L. 1844. D p.r w Bot mag 4179

20776 - - ashanténse *Lindl* Ashantee £ ⧄ or ½ jn Cin Ashantee 1842. D p.r w

20777 - - pellùcidum *Lindl.* pellucid £ ⧄ or ½ n W Sierra L. 1840. D p.r w Bot reg 1844, 2



History, Use, Propagation, Culture,

3241. *Arrhýnchum.* A pretty little epiphyte

3242. *Malachadènia.* A singular plant requiring the culture of the hothouse epiphytes.

20745 Leaves distich coriaceous, Lip fleshy concave at base biauriculate oval cleft horizontally wrinkled adnate to spur, Spur ascending obtuse recurved thickened at the mouth and nearly closed

20746 Plant with creeping 1-leaved pseudo-bulbs, Scapes radical, Flowers fleshy galeate

[*trâtus*

20747 This plant has flowered in several hot houses, but appears to be nothing but a narrow-leaved variety of *S. ros-*
20748 Leaves terete filiform, Racemes many-flowered drooping, Sepals and petals reflexed, Lip ovate at top, Throat bidentate on both sides didymous at top of spur, Column glabrous

20749 Lvs lorate keeled truncate at top nearly equal, Spikes cylind. drooping dense-flwd equal to lvs, Lat. seps ov. obt., Petals and upper sepal twice the size, Lip ovate-oblong obtuse, Spur blunt shorter than ovarium

[one and pets lin blunt, Lip fleshy 3-lobed, Mid lobe roundish, lat ones very thick transversely truncate

20750 Stem leafy, Lvs narrow-lanc coriac acute, Corymbs few-flwd nearly sessile, Lat seps obliquely ov. acute, upper
20751 Lvs distich coriaceous ensiform obliquely retuse, Panicle spreading, Seps and pets obov obt. nearly equal, Lip hastate fleshy downy, Middle segment cordate triangular, Spur conical, Column downy bidentate in front

20752 Leaves distich lorate obliquely emarginate wavy, Spike recurved compound, Sepals and petals oblong rounded, Lip roundish transverse with a subventricose downy sac

20753 Spikes dense short many-flowered, Flowers pilose, Lip ovate acute crested in middle with a 2-lobed dorsal tooth, Lobes acuminate denticulated, Spur blunt longer than lip

20754 Lvs oblong distich rounded emarg at top much shorter than elong peduncle, Panicle small contracted, Flws crowded corymb, Seps and pets obl obt, Lip 3-lobed Lat lbs erect rudish, mid ov acute smooth, Spur fleshy

20755 This species has the habit of *Vánda* with long stalked spikes of small ysh brown and pink rudish fleshy blossoms

20756 Leaves oblong obtuse almost equally 2-lobed at top, Flowers panicled, Branches simple rigid, Petals and sepals linear obtuse, Lip reniform with membranous 2-lobed tooth, Spur ventricose

20757 Leaves fleshy channeled arched stiff, Branches of simple panicle densely spicate nutant, Lateral lobes of lip minute erect, middle one roundish, Spur small obtuse fleshy

20758 Flowers small pink stained at base with dingy purple

[ment roundish emarg, lat ones acute, with an elevated tooth in middle, Cup of clinandrium entire rounded

20759 Pseudo-b oval, Racs many-flwd cylind, Pedicels longer than internodes, Lip downy fiddle-shaped, Middle seg-
20760 Pseudo-bulb ovate, Lvs solitary linear channeled spreading emarginate, Scape panicled, Lip 3-lobed, Lateral segments triangular, middle one elongated linear with a bilamellate disk Arms of column biglandular

20761 Leaves linear-lanceolate seated on the pseudo-bulbs, Peduncles radical panicled, Flowers pedicellate

20762 Leaves distich channeled obliquely tridentate at apex, Ovarium twisted, Petals oblong-ovate wavy

[obtuse, Petals conform larger, Lip larger ovate obsoletely 3-lobed, Claw saccate jointed, Spur small

20763 Leaves channeled retuse mucronate, Racemes cylindrical many-flowered erect equal to leaves, Sepals oblong

[rulate somewhat bidentate, lateral ones erect ovate, Spur horned incurved

20764 Lvs flat obtuse oblique, Racs many-flwd nutant, Seps and pets nearly equal obtuse, Lip large ovate retuse ser-

[shaped, Lateral lobes erect, middle oblong inflexed toothed, Spur conical secund green

20765 Lvs obliquely emarg mucronate, Racs pendulous many flwd longer than lvs, Seps and pets fleshy, Lip tunnel-
20766 Leaves coriaceous oblique and obtuse at apex, Raceme dense nutant rather panicled, Sepals roundish-oblong, Petals conform but twice the size, Lip ovate wavy entire with one tooth at base on each side, Column short

20767 Leaves distich channeled broad thick obtuse oblique at top, Raceme pendulous many flowered, Sepals obovate obtuse, Petals conform, Lip large 3-lobed denticulate at top, Middle lobe large

768 Lip horned, Lat segs roundish quite entire, middle one short lahd glabrous Near *quinquevilinerum*

20769 Racemes oblong horizontal 12-flwd, Bracts ovate small scabrous, Sepals and petals oval obtuse, Lip horned ascending 3-lobed pressed to column Lateral lobes oblong denticulate, middle one linear bifid

0770 Leaves rounded at end 2-lobed sometimes toothed, Spikes strict, Sepals and petals acute, Lip rhomboid quite entire acuminate, Ovarium 3-winged equal

[pets lanceolate spreading, Lip conform a little larger shorter than filiform emargin te spur

20771 Stem short, Leaves cuneate-obovate obliquely 2-lobed reticulated, Racemes long pendulous many-flwd, Seps and
20772 Stem imbricate, Lvs distich compressed recurved imbricate obtuse channeled, Flws axil solitary, Seps ovate, Pets narrower secund obtuse, Lip behind obl concave triden., Spur terete horizontal shorter than peduncle

20773 Stem short, Lvs obl 3-nrvd oblique at apex, Spikes secund many-flwd horizon. crowded shorter than lvs, Seps and pets nrly eq nar ov spread at top, Lip similar 2-lbd at base bilden. downy in mid, Spur obt inc behind

774 Stemless, leafless, Roots copious elongated articulated, Peduncles generally 2-flowered, Petals and sepals obl.-lanceolate reflexed, Lip 3-lobed, Lateral lobes small erect, middle lobe broad obcordate, Spur filiform

20775 Stem short radicant, Lvs distich obov.-lanc obliquely acum opaque striated, Racs long pend many-flowered, Seps and pets lanc spreading, Lip conform a little broader shorter than filif spur, Crest of anther glandless

20776 Stems creeping, Lvs distich coria ovate obliquely emarg at top, Spikes equal in length to the lvs, Flws resupin, Seps and pets galeate dentic ov -lanc, Lip fid -shpd obtuse dentic l tthd at base, Spur arched length of lip

20777 Stemless Leaves distich oblong rather wavy recurved oblique at top, Racemes dense nutant axillary shorter than leaves, Sepals and petals linear-lanceolate, Lip fringed cordate-ovate truncate, Spur short lanceolate



and Miscellaneous Particulars.

3243 *Acrópera* Curious little epiphytes, with compactly arranged flowers in racemes about 2 inches long. Their culture is the same as for other orchideous epiphytes.

20778 - - gladiifòlium *Pet Thou* sword-leaved *Orchis mauritiàna* Poir *Aerobium gladiifolium* Spreng — £ ⧄ or 1 f W Madagas 1838 D p r.w Bot. reg 1840,
20779 - - armeniacum *Lindl.* apricot-coird — £ ⧄ or ½ su aut Apric Sierra L. 1838 D p.r w
20780 - - vìrens *Lindl* green — £ ⧄ or ½ su.aut W Seramp. 1845 D p r.w Pax fl gar 1 2 [9—
20781 - - vesicàtum *Lindl.* bladdery — £ ⧄ or ½ o.n W Ashantee 1840 D p r w
20782 - - arcuàtum *Lindl.* arched — £ ⧄ or ½ jl W C G H 1850. D p r w Px. fl.g 2 120
20783 - - Pescatoreànum *Lindl.* Pescatore's — £ ⧄ or ½ su W Bourbon 1850 D p r w

1923 CALA'NTHE.

20784 12983*a* - grácilis *Lindl* slender — £ ⧄ or 1 s Y E Indies 1859 D s l p Bot mag 4714
20785 - - Masùca *Lindl* Masuca — £ ⧄ or 3 jn au Li P Nepal 1838 D tly p Bot reg 1844 3
Bletia Masùca D Don *Amblyglóttis veratrifòlia* Blume.
20786 - - vestìta *Lindl* clothed — ⁂ ⧄ or 2 ap n W Tavoy 1848 D s l p Bot mag 4671
Amblyglóttis Blume *Alismóchis* Pet Thouars *Centrósia* Richard

20787 - - sylvática *Lindl.* wood — £ ⧄ or 2 jn au W Y Bourbon 1850 D s l p

20788 - - discolor *Lindl* two-coloured — £ ⧄ or 1 ap.jn P Ro Japan 1836 D s l p Bot reg 1840 5
20789 - - densiflòra *Lindl* dense-flowered — £ ⧄ or ½ o Y Sylhet 1832 D s.l p Bot reg 1646

20790 - - curculigoides *Wall* Curculigo-like — £ ⧄ or 2 n Bt Y Malacca 1844 D p r w Bot. reg 1847,

20791 - - versicolor *Lindl.* party-clrd-flwd — £ ⧄ or 2 aut W B Maurit 1836 D p r w Lindl. sert or 4

20792 - - viridifòlia *Hook* greenish-leaved — £ ⧄ or 1½ n G Br Assam 1851 D s l p Bot mag 4669

3244. 1923*a*. LIMATO'DES *Blume* LIMATODES (Not explained by author) *Orchideæ*
20793 - - ròsea *Lindl.* rose-clrd-flwd — £ ⧄ or 3 d Ro Martab 1850 D p l s Paxt fl g 3

2820. TRICHOCE'NTRUM.

20794 12808*a* tenuifiòrum *Lindl.* thin-flowered — £ ⧄ cu ½ ja Br w Bahia 1850 D p r w

20795 - - recùrvum *Lindl.* recurved — £ ⧄ cu ½ su aut W P Y Guiana 1842. D fib p
20796 - - cándidum *Lindl.* white-flowered — £ ⧄ cu ½ su W Y Guatem 1840 D fib p

1859 O'RCHIS

20797 12816*a* sambùcina *Ten.* Elder-smelling — ⁂ △ or ¾ ap my W Y Italy 1820. O p l
20798 - - foliòsa *Sol.* leafy — ⁂ △ or ¾ ap my P Canaries 1829 O p l Bot reg 1701

20799 - - ps -sambùcina *Ten.* false-Elder-sm. — ⁂ △ or ¾ ap my P Y Italy 1820 O p l Ten nap 86

1865 A'CERAS

20800 12835*a* secundiflòra *Lindl.* one-sided-spkd — ⁂ △ or ¾ ap Dl Vi S Europe 1829 D l p Bot reg 1522
Orchis secundiflòra Bertol *Ophrys densiflòra* Desf

1857 PLATANTHE'RA

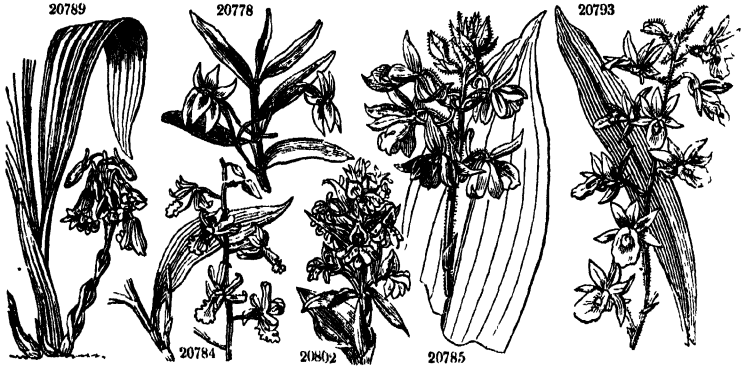
20801 12800*a* incìsa *Lindl* cut — ⁂ △ or 1 sp P N. Amer. 1840 R l p Px fl g 2 21 11
Habenària incìsa Spreng

1856. SATY'RIUM

20802 12797*a* pustulàtum *Lindl* pustulate — ⁂ △ or 1 jn Pk C G H. 1800 R s l p Bot r 1810 18
20803 - - aúreum *Paxt* golden-flwd — ⁂ △ or 1 my O C G H 1842 R s p l Px m 1851, 31

1866 O'PHRYS

20804 12841*a* vespìfera *Wild* wasp-bearing — ⁂ △ or ½ ap my Y Br Corfu ... R p l Cav ic 2 46 160
lùtea Cav.
20805- - mammòsa *Desf.* teated — ⁂ △ or 1 ap my G Br Africa ... R p l An mus 10 17
20806 - - fuciflòra *Hall* drone flowered — ⁂ △ or ¾ ap my G P.Y Zante R p l Bot reg 1847 2
arachnìtis Eng bot sup 2596 *exaltàta* Ten *œstìfera* Rchb *crabronifera* Seb & Maur *apiculata* Rchb
20807 - - cornùta *Stev* horned — ⁂ △ or ¾ ap my G P Y B Crimea R p l Bot reg 1846
bicórnis Sadler. *œstìfera* Wahlenb



History, Use, Propagation, Culture,

3244 *Limatòdes ròsea* is a terrestrial plant, has much the habit of a species of *Calánthe*, and may be cul ivated and treated like the species of that genus It is a splendid plant when in blossom, and flowers most abundantly

20778 Caulescent, Leaves distant lanceolate acute, Peduncles axillary 1-flowered, Sepals and petals ovate-lanceolate acute, Spur slender pendulous equal to peduncle

20779 Caules l vs distich channeled acutely and oblıq biden at apex, Spikes lat horizontal secund, Seps ov., Pets linear, Lip 3-lbd, Lat. lbs acuminate longer than triang middle one, Spur pendulous clavate compr at base

20780 Leaves broad distich, Lip roundish convolute at top cuspidate with an elevated acuminate broad flat line in middle, Spur horizontal acuminate straight twice as long as lip

20781 Stemless, Leaves channeled recurved equal to pendulous recurved raceme, Flowers distant divaricate, Sepals ovate, Petals linear acute Spur arched inflated at top diaphanous

20782 Leaves coriaceous distich unequally 2-lobed at apex Flowers in lateral horizontal racemes, Bracts membranous, Sepals and petals almost uniform linear taper-pointed, Spur long blunt

20783 Leaves narrow channeled obliquely obtuse, Spikes short dense cylindrical, Flowers beset with black hairs outside, Lip cuneate truncate 3-lobed, Spur curved clavate obtuse length of lip

[short, middle roundish crested undivided

20784 Scapes slender many-flowered sheathed at base, Lip saccate at base 3-lobed bilamellate, Lateral lobes acute

20785 Scape erect, Lvs broad obl. petiolate acum., Racs many-flwd, Lip 3-parted crested by 5 series of tubercles, Lat. segs lin subtal, mid one cun emarg, Spur long falc clav Col. oblique bifoveate in front, Ovary downy

20786 Pseudo b ovate or roundish striated reticulated, l vs plicate broad-lanc acum channeled glabrous, Scape 3 feet radical hairy with small lanc adpressed sheaths, Spike 2 feet, Flws villous white stained with crimson in mid Seps refixd, Lip longer than seps 3-parted, Segs ruded, mid one bifid, Col short thick, Spur filif infixd

20787 Like *C. veratrifolia* in foliage and general habit but with far finer flws, at first white, then changing to yellow, so that the upper part of the raceme is pure white and the lower bright yellow [downy acute

20788 Racs l ose dwn, Seps and pets ac., Lip 3-lbd jointed with col downy at base bilam, Mid lb 2-lbd 3-keeled, Spur

20789 Scape shorter than leave, Scales loose ventricose, Racemes many-flowered corymbose, Lip rather connate with column Middle lobe cuneate 2-lobed, Disk bilamellate, Spur long straight pendulous clavate

20790 Leaves oblong glabrous twice as long as thick scape Racemes dense cylindrical glabrous, Bracts membranous deflexed deciduous, Lip hastate, Lateral lobes short obtuse, middle one lanceolate, Spur hooked

20791 Leaves oblong-lanceolate concave 7—9-nerved glabrous, Scape downy at top, Raceme dense pyramidal, Lip joined to column 2-lobed Lateral lobes ovate short middle one cuneate 2-lobed longer with 4 tubercles at base and warts along the middle, Spur glabrous Ovary downy

20792 Pseudo-bulb ovate sulcate 1-leaved, Leaf lanceolate acuminate striated sheathed at base, Scape radical glabr Spike elong loose many flwd Sepals and petals lanceolate, Lip erect oblong-spatulate clasping the col 3-lbd Lat lbs short obt, mid one broad semi-orbic muer, Disk lamel spotted, Spur short obt incrvd

20793 Pseudo-bulb fusiform, Leaves oblong-l anceolate plicate smooth, Scape loosely many-flowered shaggy, Bracts curved backwards, Lip oblong flat retuse, Spur straight blunt horizontal, Column dwarf downy

20794 Sepals linear acute, Petals conform obtuse, Lip obovate emarginate rather wavy narrowed at base and lamellate, Wings of column semicord acute [curved length of ovy, Wings of col cun dentic, Anthr dwny

20795 Bracts distich cucullate ovate acute, Seps and petals ovate acute, Lip oblong purple at base bident, Spur re-

20796 Bracts ovate acute, Sepals and petals ovate acute, Lip oblong emarginate obsoletely bidentate at base spurless gibbous, Wings of column ovate acute, Anther villous

20797 Lip scrrul roundish slightly 3-lobed, Mid lobe emarg, Spur conic, Lat sepals reflexed, Bracts length of flws

20798 Leaves oblong-lanceolate acuminate loosely sheathed, Spike oblong many-flowered, Sepals ovate acute, Lip broader than long obsoletely 3-lobed flat, Lateral lobes emarginate much larger than middle one which is acute, Spur pendulous horned shorter than lip, Bracts green acuminate sometimes longer than flower

20799 Lip 3-lobed, Lobes ovate, mid one smaller emarginate all crenately cut, Pets obt, outer ones refixd, Spur cylindrical ascend, longer than ovary, Bracts lohac twice as long as flws. There is a variety with purple flws

20800 Leaves spotted, Spike dense secund, Flowers small, Petals subulate, Lip spreading oblong equal to the sepals gibbous at base 3-lobed, Middle lobe obovate mucronate

20801 Lip 3-parted, Segments wedge-shaped deeply-toothed, middle one emarginate, Lateral sepals obtuse a little toothed, Horn subulate ascending length of ovarium

[obl obt many-flwd, Seps lin-conv recurved Petals conform smaller, Lip obl-ac, Spur shrtr than ovy

20802 Leaves twin radical cordate orbic flat papillose, Sheaths adpressed to stem acute foliac complicate, Spike

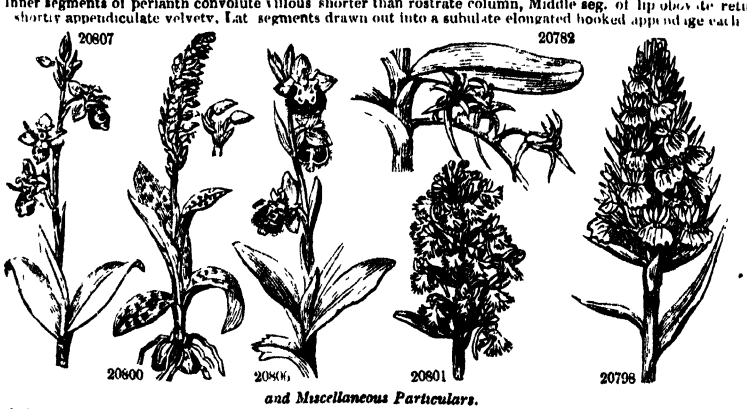
20803 Lower Leaves broad ovate obtuse many-nerved becoming smaller and oblong as they ascend the stem, Upper ones near the bracts tinged with red Bracts foliaceous coloured, Sepals and petals linear-lanceolate acute, Lip large with a projecting point and curved denticulated border

20804 Lip wedge-shaped dilated, Lateral segments broad, middle one oblong scarcely emarginate

20805 Bulb roundish, Racemes loose longer than ovaria, Lip with 2 teats crenate

20806 Lip obovate-triangular velvety undivided bigibbous at base and with an inflexed rhomboid appendage at top, Petals convolute velvety about equal to the short beaked column

20807 Inner segments of perianth convolute villous shorter than rostrate column, Middle seg. of lip obovate retuse shortly appendiculate velvety, Lat segments drawn out into a subulate elongated hooked appendage each



and Miscellaneous Particulars.

pseudo-bulbs have the peculiarity of producing a kind of neck about their middle. The genus was first made known by Blume, and the species mentioned by him are said to be fibrous-rooted plants.

20808 - - tabanifera *Wildd* dun-fly-like ⁂ △ or ½ ap my G cho.R Greece ... O p.l Bot r 1847, 46.
20809 - - ferrum-equinum *D* horse-shoe-like ⁂ △ or ½ ap my V i w.R Corfu ... O p.l Bot.r 1847, 46.

1861 HABENA'RIA

20810 12831*a* cándida *Lindl.* white-flowered ⁂ ⁂ or 1 aut W S. Leone 1844. O p l

20811 - - procèra *Lindl* tall ⁂ ⁂ or 2 au W.G S. Leone 1835. O p l Bot. reg 18 x
O'rchis procèra Swz

20812 - - gigantèa *Lindl* giant ⁂ ⁂ or 4 au W.G Bombay 1834. O p.l Bot. mag 3371
O'rchis gigantea Smith, Exot. bot. 2 t 100

2828 PTERO'STYLIS

20813 18016*a* nùtans *R Br* nodding-flwd ⁂ ⁂ cu ½ my jl G N S W 1826. R fib p Bot. mag 3[illegible]
20814 - - cúrta *R Br* short ⁂ ⁂ cu ½ ap jn G N S W 1822 R fib.p Bot mag 3[illegible]
20815 - - acuminata *R. Br* acum -lipped ⁂ ⁂ cu ½ ap jn G N S.W. 1826. R fib p Bot mag 446

20816 - - concínna *R Br* neat ⁂ ⁂ cu ½ ap jn G N.S W 1826. R fib p Bot mag 40[illegible]

2830 CHLORÆ'A.

20817 18018*a* virésc ns *Lindl* greenish-vemd ⁂ ⁂ or 1½ my O.G Chili ... D s p Bot reg 184[illegible]
chrysántha Popp

3245 1874*a* SARCOGLO'TTIS *Presl* SARCOGLOTTIS (*Sarx*, flesh, *glotta*, a tongue) ♦ *Orchidæ*
20818 - - cérina *Lindl* waxy ⁂ ⁂ cu ... my au G Guatem. 1840. D tfy p
Spiránthes cérina Lindl.

20819 - - rosulàta *Lindl* rosulate -lvd ⁂ ⁂ cu ½ ap jn G Guatem 1842 D tfy p
Spiránthes rosulàta Lindl
20820 - - lobata *Lindl* lobed ⁂ ⁂ cu ½ mr my Y Real del M 1843. D tfy p
Spiránthes lobàta Lindl
20821 - - diáphana *Lindl* diaphanous ⁂ ⁂ cu ap.jn W G Y Mexico ... D tfy p
Spiránthes diáphana Lindl
20822 - - rufescens *Presl* brownish ⁂ ⁂ cu f ap Br Brazil ... D tfy p

20823 - - grandiflòra *Presl* great-flowered ⁂ ⁂ cu 2 ap jn Y G Brazil ... D tfy p Bot mag 2730
Spir grandiflòra Hook B M 2730., *Sp picta β* Lindl., and Nos 12855 12856, belong to this genus

1875 STENORHY'NCHUS

20824 12862*a* cinnabárina *Lindl* cinnabar-clrd ⁂ ⁂ or 1½ jl O R Y Mexico 1846 D fib p Bot r 1847, [illegible]
Neóttia cinnabárina Llave

2837 MICRO'TIS

20825 18023*a* parviflòra *R Br* small-flowered ⁂ ⁂ cu ½ my jl G N S W 1826 R fib.p Bot mag 3[illegible]
20826 - - média *R Br* intermediate ⁂ ⁂ cu ½ o G N S.W. 1823 R fib p Bot mag 3[illegible]

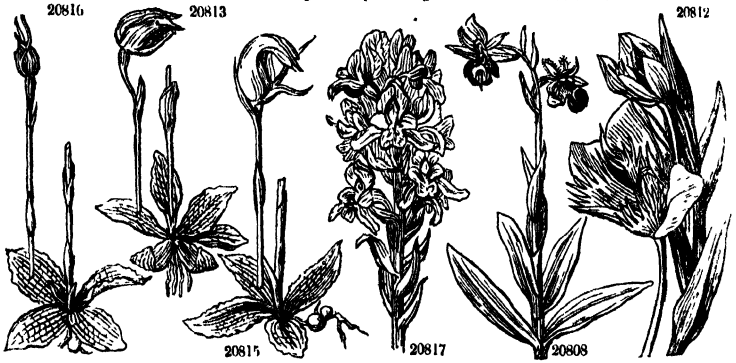
3246 1861*a* PERISTYLIS *Ik & Ott* PERISTYLIS (*Peri*, around, *stylos*, a style.) *Orchidæ*
20827 - - cordàtus *Lindl* cordate-leaved ⁂ ⁂ fra 1 au G Y N Africa 1830 O p l Bot mag 3[illegible]
Satyrium diphyllum Lk *Habenària cordàta* R. Br.
20828 - - goodyeroides *Lindl* Goodyera-like ⁂ ⁂ fra 1 d W N India 1834 O p l Bot mag 3[illegible]
Habenària goodyeroides D Don, as well as *Gymnadènia viridis* and *Gymnadènia álbida*, Nos 12802, 12803, belongs to this genus

2838 ANŒCTOCHI'LUS.

20829 18026*a* Lobbiànus *Hort* Lobb's ⁂ ⁂ or ½ jn jl W Java ... D fib p
latimaculàtus Hort Moor comp 95
20830 - - striàtus *Hort* striated-leaved ⁂ ⁂ or ½ jn jl W Java ... D fib p
20831 - - intermèdius *Hort.* intermediate ⁂ ⁂ or ½ jn jl W Java ... D fib p

3247 2838*a* PHYSURUS *Lindl* PHYSURUS (*Physa*, a bladder, *oura*, a tail) *Orchidæ*
20832 - - argénteus *Lindl.* silvery ⁂ ⁂ el ½ jn jl W Brazil 1843 D fib p
20833 - - pictus *Lindl* painted-leaved ⁂ ⁂ el ½ jn jl W Rio Jan 1843. D fib p
Anactochilus pictus Herb *Anactochilus argénteus pictus* *P argénteus pictus* Hort

3248 2838*b* CHEIRO'STYLIS *Linden* CHEIROSTYLIS. (*Cheir*, the hand, *stylos*, a style) *Orchidæ*
20834 - marmoràta *Linden* marble-leaved ⁂ ⁂ el ½ jn jl W Java 1849 D fib.p Houtte 1849 37
Dossinia marmorata Morren in Ann gand 4 p 171 fig *Anœctochilus Lowii* Hort



History, Use, Propagation, Culture,

3245. *Sarcoglóttis* is a genus separated from *Spiránthes* by Presl The species require the constant heat of a st[illegible] and thrive in a rich loamy soil, kept moist when in a growing state, but dry after the leaves have decayed
3246 *Peristylis* A genus separated from *Habenària*, and may be cultivated in the way recommended for *Sarcoglóttis*

20808 Lip bigibbous ovate acute 3-parted villous, Lateral lobes deflexed acute, middle one ovate, Petals ciliated acute
20809 Lip oblong nearly square violet with a white horseshoe-shaped spot in middle, Sepals rose-coloured

20810 Stem 2-leaved, Leaves wavy acuminate, Spike few-flowered, Bracts acuminate green shorter than ovary, Sepals ovate acute nearly equal, dorsal one horizontal, Petals undivided galeate obtuse, Lip entire ensiform, Spur pendulous twice as long as ovary 2-lobed at apex
20811 Stem leafy Leaves oblong cucullate at base spreading gradually decreasing into bracts, Racemes many-flowered, Bracts green, lower ones foliaceous, upper ones small ovate Lip 3-parted, Lateral segments linear a little shorter than the broader middle one, Spur pendulous clavate twice the length of ovarium
20812 Tubers undivided Lip tripartite, Lateral lobes curled upwards pectinate, middle one stretched out linear-spatulate, Horns veiny, Two inner petals linear-falcate Flowers large

20813 Leaves radical stellate Flower nutant, Lips about equal in length Galea acuminate, Lip tapering to apex truncate
20814 Leaves radical stellate, Bracts on scape 2—3, Flower erectish, Lower lip shortest, Galea acutish Lamina of lip ent.
20815 Leaves radical stellate, Bracts of scape near the flower, Flower erect, Lower lip rather the longest, Galea acuminate, Lamina of lip entire tapering to apex and exceeding the column
20816 Leaves radical stellate, Scape furnished with one bract in the middle, Lamina of lip emarginate equal to column

20817 Lip 4-lobed, Lobes ovate obtuse, middle one larger having 9 veins with as many parallel equal lamellæ at base, Sepals obtuse concave warted outside, Veins of petals warted

20818 Plant olive-brown hairy, Scales distant lanceolate disposed generally about the stem Spike 7—8-flowered, Bracts lanceolate acuminate incurved longer, Ovary hairy, Sepals glabrous, upper one retuse, lateral ones obtuse concave at top, Lip glabrous at base sagittate villous above base obovate obtuse conic shining a little crenated
20819 Leaves oblong coriaceous rosulate glabrous, Scape leafless hairy with 2—3 sheaths, Spikes ovate hairy, Bracts linear-lanceolate glabrous on back, Lip oblong rounded veiny, Claw excavated at apex 2-legged at base
20820 Leaves oblong acute spotless, Scape rufescent downy as is the ovarium Lateral sepals deflexed Lip 3-lobed cucul Mid lobe reniform, lat ones ascending roundish, Claw villous on both sides, Callosities along free twisted
20821 Leaves before flowers Sheaths of stem inflated glabrous diaphanous, Flowers capit to tomentose outside, Lip flat at top oblong quite entire
20822 Leaves radical spatulate acute, Scape glabrous, Flowers villous, Leaflets of perianth narrow dirty white at length rufescent glabrous towards apex, Lip spreading acuminate
20824 Leaves radical spatulate acute pale green, Scape downy towards apex, as are the flowers, Leaflets of perianth yellowish green, outer and lower ones falcate obtuse, Lip deflexed tridentate

20824 Leaves oblong-lanceolate acute, Scape pilose, Spike conical thyrsoid compact, Bracts lanceolate green shorter than pilose flowers, Sepals and petals linear-lanceolate acuminate, Lip conform glabrous at base channeled

[spike approximate
20825 Lower leaflets of perianth revolute, inner one linear, Lip linear-oblong with naked margins, Flowers of
20826 Lower leaflets of perianth revolute oblong acute, inner ones linear obtuse, Lip oblong cuneate retuse at apex warted with callous tubercled margins

20827 Stem 2-leaved, Lvs cordate acute, Spike secund, Sepals and petals ovate-lanceolate acute nearly equal, Lip 3-lobed saccate at base, Lateral scales of anther elongated clavate
20828 Stem elongated, Leaves elliptic-lanceolate, Spike many-flowered, Lip nearly entire obtuse as are the pets, Spur globose saccate, Seps ovate acuminate green

20829 Leaves rich green the midrib silvery white and the rest of the surface marked with fine transverse silvery lines

20830 Leaves narrow-lanceolate marked with a bar of gold colour through the centre upon a dark green ground
20831 Leaves having a narrow bar of gold colour down the centre, otherwise marked with golden meshes on a dark velvety green ground

20832 Leaves green thickly netted with silvery lines
20833 Leaves curiously veined and appearing as if covered with a film of silver, Flowers small white in short spikes

20834 Leaves of a deep reddish olive green with a velvety surface traversed by fine golden yellow veins, and a bar of gold colour down the centre



and Miscellaneous Particulars

3247 *Physàrus.* This genus rivals the *Anæctochilus* in the beauty of the leaves It requires the same kind of treatment as that plant. It is found on the hills of Botofogo near Rio Janeiro among decayed leaves

3248 *Cheirόstylis marmorâta* is less beautiful than the *Anæctochîlus setâceus*, a plant of similar habit A damp heat is required. Three parts of chopped *Sphagnum* and one third of decayed leaf-mould make the best compost for it.

1871. DIU'RIS

20835 12851*a* **maculàta** *R Br.* spotted-flwd ♀ ☐ or 1 su Y P.sp N S W 1823. D fib p Bot. mag 3156

1930. VANI'LLA

20836 12996*a* **palmàrum** *Lindl* Palm-tree ♂ ☐ fra ... ... Pa G Bahia 1841. D fib p

DIANDRIA.

1931 CYPRIPE'DIUM

20837 13001*a* **barbàtum** *Lindl* bearded ♀ ☐ or ½ su Va Java 1840. D s.l p Bot mag 4234
Javánicum Blume

20838 - - **guttàtum** *Swartz* spotted ♂ △ or ½ su W P Siberia 1828 R s.l p Px fl g l 183
20839 - - **Lòwei** *Lindl.* Low's ♂ ☐ or 1 ap my G P Y Borneo 1846. D s l p Moor m l 297

20840 - - **caudàtum** *Lindl.* tailed ♀ ☐ or 1 su G Y P Quito 1850 D s l p Paxt fl g l 9

20841 - - **irapeànum** *Llave* Irapeo ♀ ☐ or 1 jn Y Mexico 1847 D s l.p Bot. reg 1846

20842 - - **purpuràtum** *Lindl.* purplish-flwd ♀ △ or ½ n W P Malay.A. 1835 D s l p Bot reg 1991

20843 - - **macránthum** *Swz* large-flowered ✱ △ or 1 sp P Siberia 1828. R s.l p Bot mag 2938
20844 - - **ventricòsum** *Swz* ventricose-flwd ✱ △ or 1 sp P Siberia 1826. R s.l p Swt fl g 2 81

1932 STYLI'DIUM.

20845 13008*a* **ciliàtum** *Lindl* ciliated-leaved ♀ ⧻ cu 1 ap my Pa Y Swan R. 1840. D s p Bot. mag 3883
seligerum Dec.

20846 - - **recúrvum** *Graham* recurved-leavd ✱ ⌴ pr ½ my Pk Swan R 1840 C s p Bot mag 3911
20847 - - **Hoókeri** *Moor* Hooker's ♀ ⧻ pr ½ su Y Swan R 1850. C s p Moor m 2 181
mucronifòlia Moor mag

20848 - - **Armèria** *Labill* Thrift ♀ ⧻ pr 1 su Ro V D L. 1850 C s p Moor comp 7
20849 - - **saxifragoides** *Lindl.* Saxifrage-like ♀ ⧻ pr ½ my Y Swan R. 1849 D s p Bot mag 4
assimile Benth

20850 - - **amœ'num** *R Br* pleasant ♀ ⧻ pr ½ ap my Ro N. Holl 1850 C s p l Moor co 128

20851 - - **mucronifòlium** *Sond* pointed-leaved ♀ ⧻ pr ½ ap my Y.o Swan R 1850 D s p Bot mag 4938

20852 - - **pilòsum** *Lab* pilose ♀ ⧻ pr 1 su W R Swan R 1841 D s p Bot reg 1842 11
longifòlium Rich *Dicksònii* Hort

20853 - - **fasciculàtum** *R Br* fascicled ⚭ ⌴ pr ½ au Pk N Holl 1830 C s.p Bot reg. 1459

20854 - - **Brunoniànum** *Benth.* Brown's ♀ ⧻ pr 1 my Ro Swan R 1841 S s p Bot reg 1842, 15

20855 - - **hirsùtum** *R Br.* hairy ♀ ⧻ pr ½ my jn Ro K G S 1830 S s.p Bot mag 3194

20856 - - **Drummóndi** *Grah* Drummond's ♀ ⧻ pr 2 n mr Pk Swan R 1838. D s p Botanist 213

20857 - - **piliferum** *R Br* piliferous ⧻ pr ½ my Pk Swan R. 1839. S s p

20858 - - **nùdum** *Lindl* naked-stemmd ♀ ⧻ pr jn W Swan R 1840 D s.p
20859 - - **pycnostáchyum** *Lindl* dense-spiked ♀ ⧻ pr ... . Pk Swan R 1843. D s.p

20860 - - **scábridum** *Lindl* roughish ♀ ⧻ pr ... jl au W Swan R. 1841 D s.p

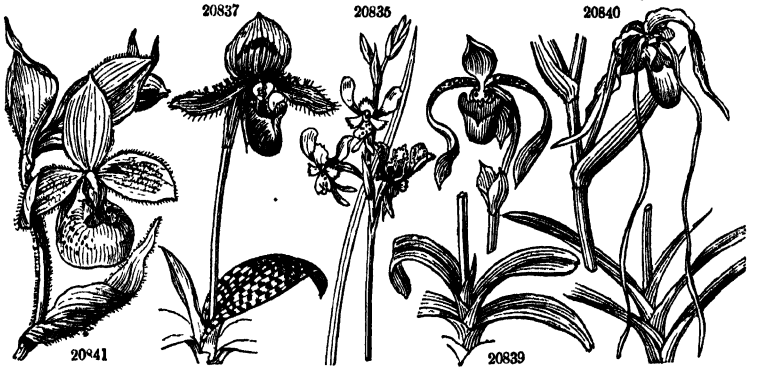
HEXANDRIA

1934 ARISTOLO'CHIA

20861 18035*a* **fœtens** *Lindl* stinking ♀ ☐ or 20 jn Va P Y W Indies 1832. C p.l Bot. reg 1824
20862 - - **hyperbòrea** *Hort* northern ♀ ☐ or 20 my P N. India 1837. C p.l Px. m 6 55

20863 - - **grandiflòra** *Swartz* great-flowered ♀ ☐ or 10 jn jl P S. Amer 1841. C p l B m 4368 4369
gigas Lindl Bot reg. 1842, 60. *cordifòlia* Mutis.

20864 - - **gigantèa** *Mart.* giant ♀ ☐ or 20 ap P Y Brazil 1844. C l p Bot. mag 4221



History, Use, Propagation, Culture,

20863. *Aristolòchia grandiflòra.* The flowers of this species are very large On the banks of the river Magdalena children adorn their heads with them in place of hat or bonnet. *A. macradènia* does very well cultivated in a pot and trained to a balloon trellis. A piece of the root of *A. anguicida*, according to Jacquin, mixed with the saliva by mas-

20835 Lip bicarinate at base inside, Lateral segments about equal to middle one, Petals obovate

20836 Leaves ovate-subc[illegible]te succulent on short petioles, Flwrs twin, Seps and pets narrow-oblong erect channeled Lip membranou[illegible]ovate emarginate with 3 downy elevations at base, Column clavate bearded on the face, Ovary caliculate

DIANDRIA.

20837 Stemless, Lvs coriaceous acute channeled spotted, Scape downy, Dorsal sepal cuspidate ciliated with revolute edges, Pets linear-oblong rather wavy fringed, Upper margin warted, Sterile stamen lunate downy

20838 Leaves 2 broad plicate, Flowers solitary

20839 Lvs distich long obt slightly ntchd at apex sheathing at base, Scape gland few-flwd, Lip with a notch in front of pouch and large triang tooth on each side, Lat segs narrow lanc -spat. acum much longer than outer

20840 Stemless, Lvs 3 stich uniform leathery smooth, Scape bearing several flowers longer than leaves, Bracts as long as ovary, Seps ovate-lanceolate gracefully curved, Pets extended into very long pendent wavy linear tails, Lip oblong glandular on edge at base, Sterile stamens broader than long 2-lobed bristly

20841 Stem leafy pilose many-flowered, Lvs ovate acuminate stem-clasping, Sterile stamen ovate acum rather 3-lobed, Seps and pets oblong equal bearded at base bipartite in front at apex, Lip obovate constricted at mouth

20842 Lvs oblong ac striated spotted equitant at base, Scape downy leafless, Dorsal sepal acum ciliated with revolute edges, Petals oblong wavy downy, Sterile stamen lunate [leafy, Lvs nearly glabrous

20843 Lobe of col elongated cord, Mouth of lip shorter than peri. contracted crenul., Anthers awned on back, Stem

20844 Nearly allied to *C. maculatum*, but the 2 lateral innermost segms of perianth are much narrower and longer than the lip, the mouth of the lip is also larger and with a small cleft at the lower extremity, and is not so regularly notched and is deeper purple

20845 Lvs linear ciliated piliferous at top, Scapes and flwrs covered with glandular hairs, Rachis very villous, Panicle pyramidal [duncles crowded subcorymbose terminal, Ovarium linear

20846 Stem branched Lvs crowded at top of branches subulate recurved membranous towards margins at base, Pe-

20847 Stems tufted, Lvs linear subulate glabrous ending in a bristle-like mucrone, Scape panicled at top, Segments marked with a zigzag line around the mouth ovate nearly equal

20848 Lvs linear ensiform glossy with entire edges, Scape glabrous, Raceme simple downy, Lip appendiculate

20849 Tufted, Lvs radical rosulate copious linear acute ciliately scabrous on margins piliferous at apex, Scape glabrous bracts bracteate, Racemes and flowers covered with glandular hairs, Lip tuberculate

20850 Scape inarticulate glabrous furnished with one whorl of leaves beyond the middle, Radical leaves rosulate spatulate mucronate, Throat of corolla crowned, Lip appendiculate

20851 Stems short branched at base, Lvs glabrous lin -subulate setaceously mucronate, Scapes and pedunc terminal naked panicled at top and beset with glandular hairs, Lip appendiculate on both sides, Ovarium cylind elong

20852 Scape covered with gland. down branched a little, Lvs flat elong lanc ensiform, Pets 4 wavy repand denticu., the 5th obl deflexed callous in mid with 2 appends at base, Scales in throat 2 semilanc ciliated denticulate

20853 Glabrous Stems numerous leafy, Lvs linear acute, Upper ones fasciculately subverticillate, Flowers in terminal racemose spikes, Capsule compressed lanceolate

20854 Glaucous, Radical lvs rosulate lin -spat., Caul lvs verticil., Racemes loose verticil., Calyx eq 5 parted, Segments of corolla obov 2 smaller, Throat crowned with capitate glands, Lip linear acp a tuberculate at base

20855 Scape beset with acute hairs, Raceme nearly simple, Capsule ventricose ovate, Leaves linear attenuate at base with the margins a little recurved, Scales scarious

20856 Lvs rad tfid lanc -lin acum reflexed on the marg naked and shining with elong shi thg scales at base, Scpe twice as long as lvs gland -dwny panicled, Calyx bilab, Up lip trifid, lower 2-parted Throat of cor crowned

20857 Lvs radical linear glabrous piliferous with entire edges, Raceme simple, Rachis downy Scape glabrous, Throat of corolla naked, Lip app nduiculate [R beset with black glands

20858 Stem elongate imbricate, Lvs spatulate acute with denticulated edges, Scape leafless taceme cylindrical sim-

20859 Scape beset with acute hairs, Lvs radical spatulate apiculate ciliated, Panicle den cylindrical glandularly tomentose, Rachis villous, Calyxes obtuse

20860 Scape glandularly pilose decumbent, Lvs linear reduplicate scariously pubescent, R me loose subcorymbose glandularly hairy

HEXANDRIA.

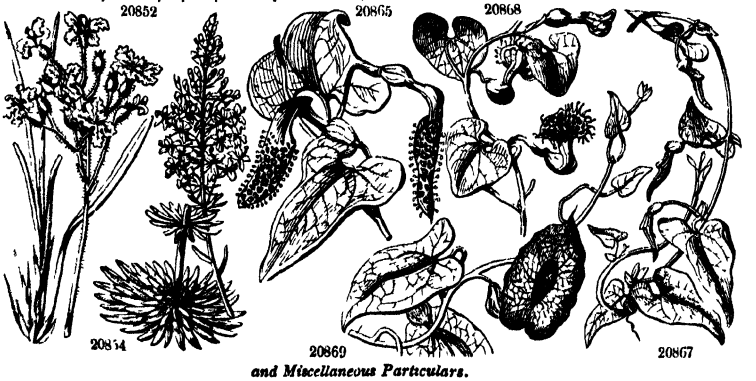
[in a very long l, Tube glabrous outside

20861 Lvs broad-cordate acute Peduncles solitary 1-flowered furnished with a perfoliate bra t, Lip large entire ending

20862 Leaves large petiolate, Stipules stem-clasping oblong acute, Peduncles solitary axillary, Perianth tubular bilabiate, Lower lip short, upper spatulate emarginate 6 inches long

20863 Lvs downy cordate acum., Peduncle solitary bracteate, Perianth large cordate ribbed outside reticulated downy, Tube inflated contracted in middle, Limb large cordate-ovate with a long tail

20864 Lvs cordate acute, Peduncles 1-flowered, Perianth large unilabiate obliquely pendent, Tube curved upwards, the lower part oblong furrowed and contracted, the upper part assurgent and inflated ending in a large shell-formed concave veiny white purple-spotted lip tailed at top



and Miscellaneous Particulars.

tication, renders powerless a serpent of moderate size, if one or two drops are put into its mouth, when it may be handled with impunity. It also cures the bite of a serpent.

20865 -	- macradênia *Hook.*	long-glanded	♀ □ or 20	sp	G	Br.v Mexico	1848	C	p l	Bot mag	4467
20866 -	- ornithocéphala *Hook*	bird-headed	♀ □ or 20	my	Y.P	Brazil	1838	C	p.l	Bot. mag	41[illegible]
20867 -	- anguicida *Jacq.*	snake-killing	♀ □ or 10	d	W.Br	sp N. Gran.	1845	C	p l	Bot mag	43[illegible]
20868 -	- ciliàta *Hook*	ciliated	♀ □ or 6	s	P	G N Patago	1836	C	p l	Bot mag	37[illegible]
20869 -	- picta *Karsten*	painted	♀ □ or 20	sp	P	P Cabal	1850.	C	s.l p	Px. fl. g	l [illegible]

Page 768. CLASS XXI. — MONŒCIA.

Order 2. DIANDRIA Stamens 2

3249. 1939*a*. *Pistia.* Spathe tubular at base, and connate with the spadix Limb spreading. Spadix female at base and male at apex. Anthers 3—8, or diandrous Ovarium one, adnate to spadix, seated obliquely. Style thick terminal. Stigma cup-shaped Berry 1-celled, few- or many-ovulate Seeds cylindrical.

Order 4 TETRANDRIA. Stamens 4

3250 1971*a* *Fortunæ'a* Lindl Male aments lateral, heart-shaped, erect Scales foliaceous, hairy inside, whit tetrandrous at base —Female aments terminal, composed of dense, 1-flowered, erect, imbricate, mucronate, glabrous scales Calyx 4-toothed, superior Corolla none Ovarium 1-celled, compressed, 2-winged Ovulum solitary erect Style short. Stigmas 2, linear, spreading Strobile oblong, composed of hard, mucronate, downy scales Nut slightly compressed

Order 6 HEXANDRIA Stamens 6

3251 1972*a*. *Holboëlla* Perianth 6-leaved, disposed in two series Stamens distinct Glands 6, opposite the base of the stamens —Female flowers with 6 sterile stamens. Stigma simple Berries 3, distinct, oblong, follicular 1-celled many-seeded

3252 1972*b* *Akèbia* Perianth 3-leaved. Stamens free Glands 6 —Female flowers with 6 sterile short stamens Ovaria 3—9 distinct oblong-cylindrical, terminated by a peltate stigma

3253 1985*a* *Leopoldìna* Spadix paniculately branched without a spathe Lower flowers female, at base of branches upper ones, male. Sepals 3 Stamens 6, flattened, connate at base —Female flowers. Ovarium turbinately trigonous 3-celled, 2 of the cells small Stigmas 3, sessile, short, spreading. Berry drupe-formed, orbicular, compressed, 1-seeded

3254. 1985*b* *Astrocáryon* Spathe fusiform Flowers dense. — Male flower Calyx trifid. Petals 3 Stamens filiform Rudiment of ovary with 3 subulate styles —Female flowers below the male ones, bracteate Calyx urceolate 3-toothed Corolla urceolate, tridentate Style 1 Stigmas 3, confluent, conical or lobed Drupe ovate, 1 seeded fibry Nut with 3 pores at top

3255. 1985*c*. *Acrocòmia.* Spathe simple, lanceolate. — Male flowers dense on the upper parts of the branch sessile Calyx small, of 3 sepals Petals 3, lanceolate-oblong — Female flowers on the lower part, remotish, sessile Calyx of 3 sepals. Petals 3 Cupula annular, 6-toothed, girding the ovary Ovarium ovate, 3-celled, hairy Style short Stigmas 3, lanceolate Drupe globose, 1-seeded. Nuts lenticular, with 3 pores at the side

3256 1985*d* *Œnocárpus* Flowers bractless Spadix double, inner one complete.—Male flower Calyx tripartite with keeled segments Petals 3 Stamens 6, in bottom of corolla.—Female flowers. Sepals 3 Petals 3 Ovarium 3-celled, 2 of the cells very small Stigmas 3, sessile, connivent Berry 1-seeded, fibry, crowned by the stigmas

3257 1985*e*. *Wallichia* Flowers sessile, bracteate. Spathes many incomplete — Male flowers Calyx trideutate Petals 3 Stamens 6 —Female flower Calyx urceolate trifid. Petals 3. Ovarium 2- rarely 3-celled Stigmas 2—3 connate Berry 2—3-seeded

3258 1985*f*. *Martinèzia* Upper flowers male, lower female Spathe 1-leaved —Male flower Calyx small tetraquetrous, 3-lobed Petals 3, acuminate Stamens 6, adnate to petals —Female flower. Sepals 3 Petals 3, with barren filaments. Stigmas 3, sessile, obtuse, connivent. Ovarium 3-celled Drupe globose, 1-seeded

3259 1985*g* *Oncospérma* Spathe triple, inner one incomplete Male flowers twin, female single. — Male calyx 3-parted, with keeled imbricate segments. Petals 3, valvate Stamens 6 Anthers sagittate, fixed by the base —Female with 3 sepals and 3 petals, convolute Ovarium 3-celled, only 1 of which is fertile Stigmas 3, sessile, connivent Berry 1-seeded.

3260 1985*h*. *Syagrus.* Flowers sessile, bracteolate, male in the upper part, lower female. Spathe double outer short, open at top, inner one fusiform, rather woody, open in front its whole length —Male Sepals 3, triangular membranous Petals 3, rather fleshy, lanceolate, carinately crested, connivent Stamens 6-16, inclosed —Female flower with erect sepals and petals, the former keeled, the latter oblong and exceeding the sepals, imbricate Ovarium 3-celled, 2 of which are abortive, therefore 1-celled. Style none. Stigmas 3, sessile, pyramidately trigonal Drupe oblong, 1-seeded, fibry. Nut bony, with 3 pores at base

3261. 1985*i*. *Euterpe* Flowers monœcious in the same spadix: lower ones male, sessile, bracteate Spathe double, outer one short —Male. Sepals 3, ovate, concave, keeled, imbricate Petals 3, coriaceous, ovate or lanceolate erect, valvate. Stamens 6, inclosed. Anther linear, subsagittate, fixed by the base, erect Rudiment of pistil trifid —Female. Sepals 3, ovate, obtuse, concave, imbricate. Petals 3, similar but thinner. Ovarium 3-celled, 2 of the cells small. Stigmas 3, sessile, acute, connivent. Berry 1-seeded, globose, crowned by the stigmas, fibry Nut smooth

3262. 1985*k* *Maximiliàna.* Flowers sessile, bracteate. Spadix girded by a thick, woody, oblong, long, beaked furrowed, simple spathe —Male. Sepals 3, membranous, ovate-triangular. Petals 3, lanceolate, subcoriaceous Stamens 6. Anthers linear, fixed by the back.—Female bracteate, situated at base of spadix Sepals 3, imbricate Petals 3, large. Cup membranous girding the ovarium. Ovarium ovate-conical, 3-celled, 2 of the cells abortive, the retorted 1-celled. Stigmas 3, revolute. Drupe ovate, 1-seeded, fibry. Nut bony, acuminate at top, with 3 pores at base

3263 1985*l* *Geónoma.* Flowers monœcious in the same or in distinct spadixes, rarely dicœcious, immersed in pits on the rachis, female ones single, male ones in twos or threes. Spathe double, rarely triple, outer one truncate complete, concave, inner one compressed or fusiform —Male. Sepals 3, concave and keeled Petals 3, flat Stamens 6 Filaments connate into a cylinder, free at top Cells of anthers divaricate —Female Sepals 3. Corolla trifid Staminous urceolus 6-toothed, covering the ovarium. Ovarium 3 celled. Style basilar. Stigmas 3, subulate, revolute Berry 1-seeded

3264 1985*m*. *Diplothèmium.* Flowers, lower male, upper female Spathe double: outer one shorter, open at top inner one clavate or cylindrical, at length cleft in front —Male flowers coriaceous, with 3 sepals and 3 petals *former narrow-lanceolate and keeled, and connate at the very base, the latter ovate and a little keeled,* erect or convivent. Stamens 6—12, or indefinite Anthers sagittate, erect —Female flowers coriaceous, ovate-globose Sepals 3, ovate, keeled, imbricate. Petals 3, entire or repandly toothed. Ovarium globose, trigonal, 3-celled, 2 of the cells abortive, therefore only 1-celled Stigmas 3, sessile, triquetrous, pyramidally conniving, at length spreading Drupe ovate or obovate, fibry. Nut bony with 3 pores at base.

3265. 1985*n*. *Duvaüa.* Calyx 4-cleft, persistent. Petals 4, concave. Stamens 6—10, inserted in the disk Ovary 6-toothed. Ovary sessile, conical, 1-ovulate. Styles 3—4, short. Stigma capitate. Drupe globose, containing a coriaceous nut. Seed pendulous.

2965 Glabrous. Lvs cordate-hastate with a deep broad sinus and rounded lobes on long petioles, Peduncles axillary solitary 1-flowered Perianth unilabiate, Tube inflated at base striated, Limb ovate with reflexed sides reticulated above glandular. Glands large globose stipitate

2966 Glabrous, Lvs and stipules uniformly cordate, Flower large solitary, Perianth tube inflated obovate globose, Limb cylindrical at base bilabiate, Upper lip lanceolate acute densely pilose inside, Lower lip extended from a linear channelled base to a very broad reniform reticulated lamina

2967 Lvs on short petioles cordate acuminate, Stipules cordate-roundish, Peduncles axillary solitary 1-flowered, Tube of perianth inflated at base dilated and oblique at the mouth

2968 Stem flexuous not twining nearly simp., Lvs on long petis unifmly cord obt glauc. beneath, Pedunc axil sol 1-flwd, Tube of perianth curved infla at base, Limb unilat rndsh obt painted cil. with long gland. flshy hairs

2969 Glabrous, Lvs cordate acute, Flowers purple tessellate terminated by a short tail, in the centre leading to the throat is a rich spot of golden colour

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Order 7 POLYANDRIA. Stamens more than 6.

3265 2005*a* *Ambrosinia.* Spathe convolute at base and cucullate at top, and cuspidate. Spadix flattened; female in front at base, and male at top on back. Anthers usually 10, adnate to back of spadix Pistil solitary, free. Ovarium subglobose, sessile, 1-celled Style terminal curved in towards the spadix Stigma roundish Capsule globose, depressed, sessile, 1-celled, indehiscent, many-seeded

3267 2005*b* *Arisæma.* Spathe convolute at the base Spadix naked at top Anthers verticillate, on distinct filaments Cells open by a transverse chink or pore Ovaria numerous, free, 2—6-ovulate. Style short, or wanting Stigma capitate Berry 1- or few-seeded Seeds globose, with a broad basilar hilum.

3268 2005*c* *Cryptocóryne* Spathe or spadix inclosed or connate together at apex, or exserted, free. Male flowers very remote from the female flowers Anthers at top of spadix, sessile, or shortly stipitate. Ovaria 6 or more in a whorl at the base of spadix, combined into one many-celled fruit Styles distinct

3269 2005*d* *Pothandra* Spathe elongated, undulated recurved at top Spadix interruptedly androgynous Sterile appendage short, naked Anthers 1-celled, verticillate, opening by a pore at apex Ovaria numerous, scattered, 1-celled Style short Stigma subcapitate. Berry 3—4-seeded

3270 2005*e* *Xanthosóma* Spathe convolute at base, straight. Anthers 2-celled, verticillate Cells contiguous, opening by chinks Ovaria numerous, about 4-celled, cohering by the thick placenta-formed styles. Ovula many. Stigma depressed, lobed, glutinous

3271 2005*f* *Acontias* Spathe as in *Xanthosóma* Spadix interruptedly androgynous Anthers 2-celled, verticillate Cells contiguous, opening by transverse chink at apex Ovaria many, about 3-celled, many-ovulate Styles combined Stigma minute orbiculate, clammy

3272 2005*g* *Syngónium* Spathe as in *Xanthosóma* Anthers by fours or fives 2 celled Cells opposite, opening by pores Ovaria numerous, connate, 1-celled, 1-ovulate Stigmas distinct, sessile, glutinous. Berries many, concrete, 1-seeded

3274 2005*h* *Culcásia* Spathe straight, gaping, short Anthers sessile, 2 from each dot Ovaria numerous, crowded, free, 1-celled, 1-ovulate Stigma sessile, capitate

3275 2005*i* *Philodéndron* Spathe convolute at base, straight Spadix continuous, androgynous Anthers 2-celled, distinct Cells opening at top Ovaria numerous, free, 5—15-celled many-ovulate. Style short. Stigma capitate, or obscurely lobed Berries free, many seeded

3276 2005*k* *Spathicárpa* Spathe involute Spadix adnate to spathe. Stamens numerous Anthers 6—8, 1-celled opening by a pore in the middle Ovaria numerous, free, 1 celled, 1-ovulate Style elongated Stigmas capitate Berry 1-celled, 1-seeded

3277 2005*l* *Dieffenbáchia* Spathe convolute. Spadix adnate to spathe, upper part male, free. Stamens numerous Anthers 3—4, 2-celled, verticillate Cells parallel, opening by a pore at apex. Ovaria numerous, free, 1-celled, 1-ovulate Stigma discoid, sessile Berry 1-celled, 1-seeded

3277 2005*m* *Anthurium.* Spathe gaping at base, convolute at apex Spadix, the female part adnate to the spathe, sterile appendage filiform. Anthers numerous, crowded, conadunate, 2-celled Cells opposite, opening by a transverse chink Ovaria numerous, free, 1-celled, 1 ovulate Style filiform Stigma depressed, round Berry 1-celled 1-seeded

3278 2005*n* *Aglaonema* Spathe gaping, convolute Spadix continuous, androgynous. Anthers many, free, sessile 1 celled, opening by a pore beneath the apex. Ovaria numerous, free, 1-celled. Stigma discoid, sessile. Berries 1-celled, 1-seeded

3279 2005*o* *Homalonèma.* Spathe gaping Spadix androgynous Anthers numerous, sessile. Ovaria numerous, free 3-celled, many-ovulate Stigma sessile, trifid, concave

3280 2005*p* *Monstera* Spathe gaping, deciduous Spadix female at base, and pseudo-hermaphrodite at apex Filaments flattened Anthers 2-celled. Cells opposite, dehiscing lengthwise Ovaria 2-celled. Cells biovulate Style short Stigma capitate Berries connate

3281 2005*q* *Scindápsus* Spathe gaping, deciduous Spadix sessile, base female, top pseudo-hermaphrodite Filaments cuneate, compressed Anthers 2-celled. Cells divaricate, dehiscing lengthwise Ovaria 1-celled, 1—2-ovulate Stigma sessile, oblong. Berries 1-seeded Seed hooked.

3282 2005*r* *Sauromátum.* Spathe tubular at base, with a flat spreading limb. Spadix interruptedly androgynous rather clavate and naked at top. Anthers sessile, distinct Cells dehiscing by a short oblique chink. Ovaria numerous, free, 1-celled, biovulate. Stigma depressed, sessile. Berries 1-seeded.

3283 2005*s* *Dracúnculus.* Spathe convolute at base, with a flat spreading limb. Spadix androgynous, subclavate at top and naked Anthers combined in clusters, 2-celled Cell opening by a short oblique chink. Ovaria numerous, free 1-celled, 3—5-ovulate Stigma depressed, sessile. Berries 1, few-seeded.

3284 2005*t* *Pythonium.* Spathe convolute at base, with an arched limb Spadix androgynous, naked at top and 2-horned Anthers distinct, on short filaments, 4-celled, dehiscing by 4 pores. Ovaria numerous, free, 1-celled, 1-ovulate Style subulate Stigma valvately 3-lobed Berries 1-seeded.

3285 2005*u* *Amorphophállus* Spathe convolute at base Spadix androgynous. Sterile appendage elongated, smooth or warted Anthers distinct, on very short filaments, 2-celled, dehiscing by a double pore Ovaria numerous, free, 2—3—4-celled, ovate Cells 1-ovulate Stigma capitate, entire or lobed Berries distinct, 1- or few-seeded

3286 2005*v* *Remusátia* Spathe convolute at base, with a refracted convolute limb. Spadix short, interruptedly androgynous. Stamens combined by twos or threes Anthers 2-celled, connate by the back. Cells verticillately disposed opening by a longitudinal chink. Ovaria numerous, crowded, free, 1-celled, many-ovulate. Stigma sessile, depressed

3287 2005*w.* *Colocásia* Spathe straight or cucullate. Spadix interruptedly androgynous. Sterile appendage ovate or acuminate Anthers numerous, 2-celled, free. Cells contiguous, opening by a pore at apex. Ovaria numerous, free, 1-celled, 6—7-ovulate Style short. Stigma subcapitate.

3288 2005*x* *Gonatánthus.* Spathe convolute at base, with a lanceolate refracted limb. Spadix short, interruptedly androgynous Stamens connate by threes Anthers 2-celled, adhering by the back, opening by a longitudinal pore formed chink Ovaria numerous, crowded, free, 1-celled, many-ovulate. Stigmas sessile, depressed, orbicular

3289 2005*y* *Typhónium.* Spathe convolute at base Spadix interruptedly androgynous, naked, and subulate at apex Anthers distinct, 2-celled Cells opposite, dehiscing lengthwise. Ovaria numerous, free, 1-ovulate. Stigma sessile, depressed. Berries 1-seeded

3290. 2005*bb*. *Bidrum*. Spathe subulate at base, with a flat spreading limb. Spadix interruptedly androgynous, naked at top. Anthers sessile, crowded. Cells opposite, opening by a chink or pore Ovaria numerous, free, 1-celled. Style distinct Stigma subcapitate Berries 1-seeded.

3291 2007*a* *Ordnia* Male and female flowers in different spathes, sessile, bracteolate Spathes many, imbricate — Male flowers with 3 sepals and 3 petals. Stamens many, filiform Anthers linear.— Female flowers. Calyx of 3 sepals Corolla urceolate, trifid. Ovarium 2-celled Stigmas 2, sessile, acute. Berry 2-seeded. Seed flat on one side, and convex on the other.

3292 2007*b*. *Irdrtia* Flowers sessile, bractless: outer spathe incomplete, obliquely truncate at top, inner complete, open lengthwise.—Male. Calyx of 3 concave sepals Petals 3, erect, valvate Stamens 12—50 rarely Filaments short, terete. Anthers tetragonal —Female Calyx of 3 orbicular sepals. Petals 3, orbicular Ovary 3-celled, 2 of the cells abortive. Stigmas 3, sessile. Berry 1-seeded, yellowish.

Order 8. MONADELPHIA. Stamens united into a single body

3293 2009*a*. *Desmóncus* Spadix girded by a double spathe; outer one short, inner one cylindrical —Male flowers with a triangular trifid calyx and 3 petals. Stamens 6, from the bottom of the flower, filiform, with linear anthers Female flower firmer than that of the male Calyx cupular, truncate, or tridentate Corolla urceolate, truncate-tridentate Ovarium 3-celled, 2 of the cells rudimentary. Style short. Stigmas 3, acute. Drupe ovate or subglobose, 1-seeded. Nut with 3 pores at top.

3294 2009*b*. *Jubæ'a* Spathe simple —Male flowers panicled, pedicillate Calyx 3-parted Petals 3 Stamens numerous, inserted in bottom of corolla —Female flowers like those of the males Ovarium 3-celled, 2 of which are small Stigmas 3, spreading. Drupe obovate, 1-seeded Nut with 3 pores at apex.

3295. 2009*c* *Attalea* Flowers sessile, bracteate, upper ones male, lower female.—Male flowers of 3 sepals and 3 petals. Stamens 10—24, crowded Female flowers of 3 sepals and 3 petals Ovarium 3- rarely 4—5- and more rarely 2-celled Stigmas as many as there are cells, subulate, connivent. Drupe elliptic, fibry, containing a 2—3-celled nut Cells porose at base

3296 2009*d* *Manicària* Flowers, lower female, upper male, bracteate Spathe simple, fusiform, reticulated — Male Sepals 3, scarious, ovate-suborbicular, imbricate. Petals 3, coriaceous, oblong Stamens 24—30 Anthers linear-sagittate, erect —Female. Sepals 3, scarious, ovate, imbricate. Petals 3, coriaceous, oblong-lanceolate Rudimentary stamens about 12 Ovarium turbinate, trigonal, furrowed or angular, 3-celled. Stigmas 3, sessile, ovate-triangular at first erect but at length spreading Drupe containing 3 nuts, rarely 1—2 nuts by abortion, corky angularly echinated Nut crustaceous, covered with reticulated fibres, with a hole at bottom

3297 2009*e*. *Arénga* Flowers sessile, bracteate. Spathe complete Calyx 3-sepaled Petals 3 Stamens indefinite Anthers cuspidate —Female flowers Ovarium 3-celled. Stigmas 3, conical, connate at base Drupe containing 2—3 trigonal nuts.

3298 2009*f*. *Cyclánthus*. Flowers surrounding the spadix in a spiral manner. the male series alternating with the female series Spathe 4-leaved, imbricate — Male flowers earliest Stamens numerous, free, filiform Anthers oblong, 4-celled, dehiscing lengthwise. — Female flower. Ovaria numerous, within a double lamina, and surrounded by the spathe, biseriate, sessile, 1-celled, many-ovulate. Style short. Stigma spatulate. Fruit fleshy, spiral, many-seeded

3299 2011*a* *Dámmara* Flowers dioecious, terminal —Male ament extra-axillary. Stamens numerous, inserted on the axis, imbricate, short, drawn out into a thick connate connective. Cells of anther 8—15, cylindrical, free Female ament terminal, nearly ovate. Scales bractless, imbricate. Ovulum solitary under the scales Strobile ovate globose, imbricate Seed ending in a wing at both ends.

DIANDRIA.

3249.	1939*a* PI'STIA *L.*	PISTIA				(*Pistos*, aquatic; plants)								*Lemnàceæ*
20870 -	- stratiòtes *Lin*	Water-soldier	≛	⍁	cu	¼ su	G	Y	Tropics	1843	D	wat	Bot mag 4594	
20871 -	- occidentàlis *Blume*	western	≛	⍁	cu	¼ su	G	Y	W. Ind	1843	D	wat	Jnq amer 165	
	1940 ANGU'RIA													
20872	13047*a* Makoyàna *Hort.*	Makoy's	⅄	⍁	cu	10 su	G		S Amer.	1847.	C	s l p		

TRIANDRIA.

	1947. CA'REX													
20873	13147*a* irrigua *Smith*	watered	⅄	△	un	1	jn	Ap	Britain	bogs	Sk	bog	Eng bot 2nd	
20874	13127*a* Grahàmii *Boot*	Graham's	⅄	△	un	1	my jn	Ap	Scotland	moun	Sk	bog	Eng bot 2nd	
20875	13133*a* depauperàta *Good.*	few-flwd	⅄	△	un	1½	my.jn	Ap	England	dr wo.	Sk	co	Eng bot 1098	
20876	13102*a* paradóxa *W.*	paradoxical	⅄	△	un	1	my.jn	Ap	England	bogs	Sk	co	Eng bot 2nd	
20877	13092*a* montàna *Lin.*	mountain	⅄	△	un	1	my jn	Ap	England	moun.	Sk	bog	Eng bot 2924	
20878	13105*a* Vàhlii *Schk.*	Vahl's	⅄	△	un	1	au	Ap	Scotland	moun.	Sk	co	Eng bot 2880	
20879	13092*b* Bonninghausenìana	*Weihe* Bonn.'s	⅄	△	cu	1	my jn	Ap	Britain	bogs	Sk	co		
20880	13133*a* vaginàta *Tausch.* *phæostàchya* Smith	sheathed	⅄	△	un	½	my jn	Ap	Scotland	moun.	Sk	co	Eng bot 273	
20881	13133*b* Gibsoni *Bab*	Gibson's	⅄	△	un	½	my.jn	Ap	Britain	bogs.	Sk	co		
20882	13089*a* vitilis *Fries* *Persoonii* Sieb.	pliant	⅄	△	un	1	my jn	Ap	Britain	moun.	Sk	co		
20883	13080 alagopina *Wahl* *leporina* Lin	*cùsta β apiculàta* Wahl Hare's	⅄	△	un	1	my jn	Ap	Scotland	moun	Sk	co	Eng bot 281	
	1955. A'LNUS.													
20884	13187*a* jorullensis *H B & K*	Mount Jorullo	⅄		or	20 ...		G	Mexico	1834	L	co		
20885 -	- barbàta *Meyer*	bearded	⅄		or	6	mr	Ap	Russia	1838.	L	co	Loud I I I 4	
	1956 BE'TULA													
	13188 álba													
	β dalecárlica L.	*Dalecarlian*	⅄		tm	40	ap.my	Ap	Dalecar.	...	S	co		
20886	13195*a* mòllis *Lindl.*	Ind. Paper Bi.	⅄		or	40	ap.au	Ap	Himalay	1840.	S	co		

History, Use, Propagation, Culture,

3249 *Pistia* is composed of floating water-plants, nearly related to *Lémna* The species only require to be thrown into water in a stove. Plenty of heat is requisite. They are singular plants, and one species has become very common

3300. 2013*e*. *Cédrus*. Almost the same as *Làrix*, but having the carpels separating from the axes, and the leaves evergreen. Cones erect, large, solitary Anthers terminated by an elliptic scabrous crest. Carpels coriaceous, compressed, deciduous.

3301. 2018*a* *Callitris* Male catkin terminal, ovoid Stamens numerous, naked, Filaments peltate, loosely imbricate. Cells of anthers 2—5, longitudinally 2-valved, inserted in the stipe under the pelta —Female receptacle terminal, very short, girded by 4—5 scales Ovula 3—9, at base of scales, sessile, erect, open at top Cone formed of woody, mucronate, connivent scales, which separate into 4—6 valves Seed drawn out into a wing at both ends

3302. 2018*b* *Phyllocladus* Flowers terminal —Male catkin spike-formed, girded by imbricate bracts at base Stamens numerous, short, the connective drawn out into a lacerated scale Anthers 2 celled. Cells adnate to the connective, dehiscing lengthwise. Female catkin nearly globose, imbricate by bracts. Flowers terminal by threes: middle one abortive. Disk cup-shaped, fleshy, girding the ovulum, which is sessile and attenuated at apex, obliquely pertuse Fruit subdrupaceous pervious at top Seed nut-formed, erect

3303 2018*c* *Widdringtònia*. Female receptacle terminal, reflexed, of 4 similar valvately-verticillate scales, with 4—5 ovula at the base of each scale Ovula erect, disposed in one or two series, pertuse at apex. Strobile subglobose, 4 valved Valves equal 5—10-seeded Seeds ending in a wing at both ends

3304 2018*d* *Stàchæ'a*. Anthers of male flowers spicate Female cones imbricate. Scales acuminate, monospermous below the middle. Seed nucumentaceous, triangular

3305 2018*e*. *Frenela* Male catkin terminal, ovate-subglobose. Stamens numerous, ternately verticillate, imbricate in 6 rows. Filaments short, prolonged into a scale-formed, excentric, peltate connective or process, bearing each 4 horizontal, longitudinally 2-valved cells.—Female catkins solitary, terminal, or panicled, composed of 6 scales, alternate ones narrower. Seeds many, at base of scales, in many series. Cone subglobose, 6 valved, woody. Seeds numerous, wingless

3306 2018*f* *Fitzróya*. Male flowers unknown. Female catkin solitary, sessile, globose, terminal Scales 6, inserted by 2 series: the lower 3 ovate-orbicular, thick, coriaceous, with a short spine above the middle on the back, 3 exterior smaller, more spreading and abortive, the [illegible] ones erect, bearing ovula Ovula 3, at the base of each scale. Fruit like a cone. Seeds orbicular, subbidobed, ciliately compressed.

3307 2018*g* *Cryptomèria*. Male catkin spicate Antheriferous scales roundish, adpressed, imbricate Cells of anthers 5, connate, altogether aduate to the base of the scales, dehiscing by a broad foramen in front Ovula erect. Cone solitary, globose, squarrose, composed of 3—6-toothed scales Bracts acuminated, lanceolate, concrete at base, Seeds 4—6, compressed, angular, hardly winged

3308. 2018*h* *Libocedrus*. Male catkin cylindrical, terminal Stamens 5—7 Filaments short, prolonged into a scale-formed, deltoid, peltate process, bearing 4 cells on the lower margin —Female catkin solitary, terminal Gemmiferous scales 4, verticillate, mucronate beneath the apex Cone 4-valved, alternate Valves smaller, 1-seeded. Seed unequally winged at both ends

3309 2018*i* *Biota* Male catkins ovoid, terminal Stamens imbricate, in four rows Connective peltately orbicular, mutic, with 3—4 horizontal cells —Female catkins solitary, terminal Gemmiferous scales 6—8, broad, decussate, opposite, sessile, mucronate, imbricate, inner ones sterile. Scales of cone coriaceous, 2-seeded. Seeds with a wing at both ends

3310 2032*a*. *Codiæ'um* Male Calyx 5-parted reflexed, convolute in æstivation. Petals 5, scale-formed, shorter than calyx and alternating with as many glands Stamens numerous, hypogynous Cells of anthers adnate to the rather dilated connective on both sides —Female Calyx 5-cleft Corolla none Ovarium girded by 5 hypogynous scales at base, 3-celled, 3-ovulate. Styles 3, filiform, reflexed. Berry dry or subbaccate, tricoccous Cocci 1-seeded

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DIANDRIA.

20870 Leaves roundish-obcordate with wavy margins, Lamellæform nerves confluent in a basilar truncate area
20871 Leaves oblong-obovate retuse, Lamellæform nerve confluent in a large basilar area

20872 Leaves lobed, Flowers axillary

TRIANDRIA.

[acute, Fruit roundish-ovate compressed with a very short entire beak, Nut elliptic triangular, Leaves flat
20873 Fertile spikes 2—3 upon long stalks oblong dense flowered, Bracts auricled foliaceous, Glumes ovate-lanceolate
20874 Barren spikes 1—2 slender acute fertile, 2—3 ovate-obtuse, lower one stalked bracteate sheathless, Fruit oblong-ovate nerved inflated narrowed into a short bifid beak, Glumes acute
20875 Fertile spikes erect remote 3—4-flwd pedunculate, Bracts sheathing leafy, Glumes acute, Fruit large nearly globose with a long bifid beak and rough edges, Nut elliptic trigonal with bluntish angles
20876 Spikes panicled, Lower branches rather distant, Fruit ovate ribbed at base, Beak bidentate serrulated, Nut rhomboid convex on both sides with a short beak, Stem trigonal scabrous at top
20877 Fertile spikes 1—3 ovate near together sessile, Bracts small membranous the lowest with an awl-shaped point, Glumes of fertile spikes notched and muc , Fruit narrow below obl.-obov trig with a short notched beak
20878 Spikes 1—4 roundish or oblong continuous nearly sessile, Fruit obovate triquetrous scabrous above with a short beak, Nut obov triq blunt with a short beak, Bracts length of spikes, Stem triang rough towards the top
20879 Spikelets several, upper ones simple crowded lower ones distant composed of alternate spicula, Nut lanceolate plano-convex with an entire beak Lower bracts longer than spike
20880 Fertile spikes remote with distant flowers on exserted stalks, Bracts sheathing scarcely leafy, Glumes bluntish, Fruit ovate triquetrous glabrous with a short truncate beak, Nut elliptic triangular beaked
20881 Barren spike solitary, fertile ones 2—4 oblong slightly stalked, Bracts leafy, Fruit longer than glume lanceolate entire beaked many-nerved, Nut obovate rounded at end and shortly beaked
20882 Spikelets 4—8 ovate or oblong approximate, Fruit erect ovate plano-convex, Beak short split to the base rough on edge, Nuts elliptic, Glume ovate shorter than fruit
20883 Spikelets 3—4 roundish-elliptic contiguous, terminal one longer, Fruit erect elliptic acuminate plano convex with smooth edges, Nut elliptic tipped with the persistent style, Glumes ovate as long as fruit

20884 Leaves oblong acute bluntish at base clothed with fine fuscescent down beneath
20885 Leaves ovate-oblong acuminate serrulated

β Leaves much cut almost palmate, Lobes deeply toothed, Middle lobe long acuminate
20886 Leaves soft round heart-shaped

and Miscellaneous Particulars.

In our hothouse aquaria. In tropical countries the ponds and pools are densely covered with either one or other of the species of *Pistia*. It is doubtful whether they are not all merely varieties depending upon climate

20887 13190*a* **grándis** *Schr* great ♆ tm 40 ap my Ap N Amer 1834 S co
20888 13195*a* **Bhojpáttra** *Wall* Ind. Pap. Birch ♆ tm 40 ap au Ap Himalay. 1840. S co Wall pl as 2.7

1960 BŒHMERIA

20889 12215*a* **castaneæfólia** *Cun* Chestnut-lvd ♆ ⊔ un 15 n Gsh Norfolk I 1821 C s.l p Bau ill pl nor [1959 3.4
Elatostémma monádnum Endl.

TETRANDRIA.

3250. 1971*a* FORTUNÆ'A *Lindl.* FORTUNÆA. (*Robert Fortune*, collector of plants in China) *Jugländre*
20890 - **chinénsis** *Lindl.* China ♆ or 30 jn au G Chusan 1844. S co J. H. S 1 151

HEXANDRIA.

3251. 1972*a* HOLBŒ'LLIA *Wall* (*F. L. Holboll*, superintend Royal Bot Gard Copenhagen) *Lardizabalæ*
20891 - **latifólia** *Wall* broad-leaved ♇ fra 20 mr G Nepal 1840 C s l p Bot reg 1840, 4
20892 - **acuminàta** *Lindl* acuminate-lvd ♇ ⊔ fra 10 ... G Y N. India 1846 C s l p

3252 1972*b*. AKE'BIA *Decaisne* AKEBIA (*Fugi-Kadsura-Akebi*, name of the plant in Japan) *Lardizab æ*
20893 - **quìnata** *Dec* quinate-leaved ♇ fra 10 mr P China 1844. C s l.p Bot. reg 1847
Rajánia quinàta Thunb.

1983 CO'COS.

20894 13322*a* **comòsa** *Mart.* comose ♆ ⊓ or 15 ... G Brazil 1823 S r m M palm 88 1
20895 - **flexuòsa** *Mart.* flexuous ♆ ⊓ or 15 .. G Brazil 1823 S r m M. palm 64

1985 BA'CTRIS.

20896 13325*a* **macracántha** *Mart* long-spined ♆ ⊓ or 8 ... Str Brazil 1822 S r.m Mart palm 73

20897 - **caryotæfólia** *Mart* Caryota-lvd ♆ ⊓ or 6 . Str Brazil 1825. S r.m Mart p. 74 3

20898 - **pectinàta** *Mart.* pectinate-lvd ♆ ⊓ or 5 ... Str Brazil 1825 S r m M p 60 73*a*

20899 - **Maraja** *Mart.* cuspidate-lvd ♆ ⊓ or 50 ... Str Brazil 1840 S r m Mart. p 93 7

3253. 1985*a* LEOPOLDI'NA *Mart.* LEOPOLDINA (Empress of Brazil) *Palmæ*
20900 - **púlchra** *Mart* fair ♆ ⊓ or 10 .. Rsh Brazil 1825. S r.m Mart p 52

3254. 1985*b* ASTROCA'RYON *G. F. Meyer* ASTROCARYON. (*Astron*, a star, *karyon*, a nut) *Palmæ*
20901 - **Ayri** *Mart* Ayri ♆ ⊓ or 30 .. Str Brazil 1830 S r m Mart palm
20902 - **Murumùri** *Mart.* Murumuri ♆ ⊓ or 20 ... Str Brazil 1823 S r m Mart p 58

20903 - **Tucùma** *Mart.* Tucuma ♆ ⊓ or 40 ... Str Amazon 1810. S r m

20904 - **acaûle** *Mart* stemless ♆ ⊓ or 10 ... Str Brazil 1823 S r m Mart p 77

20905 - **campéstre** *Mart.* field ♆ ⊓ or 15 ... Str Brazil 1824 S r m Mart p 63

20906 - **vulgàre** *Mart.* common ♆ ⊓ or 40 ... Str Brazil 1823. S r m Mart p 6

20907 - **aculeàtum** *G F Mey* prickly ♆ ⊓ or 30 Str Essequib 1824 S r m Jacq. amer 17

3255 1985*c* ACROCO'MIA *Mart* ACROCOMIA (*Akros*, the summit, *kome*, a tuft, leaves) *Palmæ*
20908 - **sclerocárpa** *Mart* dry-fruited ♆ ⊓ or 40 ... Y Brazil 1731 S r m M p 56—7
Báctris globosa minor Gaertn *Cocos fusiformis* Swartz



History, Use, Propagation, Culture,

20888. *Bétula Bhojpáttra*. The epidermis of this tree is used by the mountaineers in the Himalaya instead of paper for writing upon It is of a very delicate texture, and peels off in large masses, of which great quantities are brought down into the plains of Hindostan, where it is employed for covering the inside of the long flexible tubes of the hookas used for smoking The Sanscrit name of the substance is *Bhoorja*, the Bengalee name is *Bhoorjapattra*, and the Hindostani name is *Bhojpattra*

3250 *Fortunæ'a chinénsis* A hardy tree, of as easy culture as the walnut

3251 *Holbollia*. The natives of Nepal eat the fruit, the pulp of which has a sweetish, but otherwise insipid, taste The species flower very well trained against a wall, without any other protection

3252. *Akebia quinàta* is a very pretty climber while in blossom. In China it grows in hedges, and there it climbs on other trees, and hangs down in graceful festoons from the ends of their branches. The colour of the flower is dark brown, and it is very sweet-scented It succeeds very well trained against a wall or trellis, and is perfectly hardy

20887 Leaves very large
20888 Leaves oblong acute serrated rather cordate at base having the stalks and veins hairy beneath, Branchlets hairy, Female catkins erect, Bracts smooth 2-parted obtuse longer than narrowly winged fruit

20889 Arboreous, Leaves alternate on short petioles obliquely oblong cuspidate serrated roughish, Male flowers panicled, female ones capitate, Heads on short pedicels baccate in the fruit-bearing state

TETRANDRIA.

20890 Leaves pinnate with 4—5 pairs of ovate-lanceolate biserrated leaflets and an odd one

HEXANDRIA.

20891 Leaves ternate or quinate coriaceous, Leaflets oblong obtuse mucronate, Peduncles longer than petioles
20892 Leaves ternate or quinate coriaceous, Leaflets oblong-lanceolate acuminate, Peduncles shorter than petioles, Spals acute

20893 Leaves ternate or quinate, Leaflets ovate or obovate entire obtuse or emarginate mucronately setaceous

[Female flowers ovate-globose, Drupe obovate-elliptic

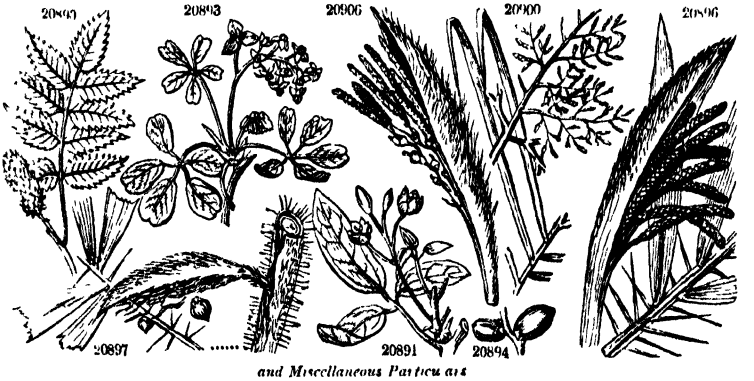
20894 Caudex dwarf annulate at base, Fronds short with approximate lanceolate pinnæ, Petals of male flowers thick,
20895 Caudex flexuous scaly from the bases of the fallen leaves, Fronds spreading, Pinnæ loose curled distantly aggregate linear, Female flowers oblong angular, Drupe oblong beaked

20896 Caudex and rachis glabrous beset with long terete prickles, Pinnæ nearly opposite or scattered lanceolate subfalcate ciliated, Spathe densely imbricate by compressed shining prickles, Spadix branched
20897 Caudex prickly, Petioles sheathing at base prickly, Rachis glabrous prickly behind and unarmed in front, Pinnæ scattered delto d cuneated præmorse with a longer marginal tooth on each side unarmed clothed with silvery tomentum beneath, Spathe prickly, Spadix bristly branched Drupe turbinate globose
20898 Caudex reed-like unarmed, Sheaths of petioles prickly, Rachis nearly unarmed, Pinnæ pectinate linear falcately acuminate pilosely ciliated, Spathe prickly, Spadix 2—5-cleft, Drupe globose unarmed glabrous
20899 Caudex tall glabrous as well as rachis but prickly, Prickles large compressed, Pinnæ subaggregate falcate-lanceolate or oblong-cuspidate ciliated, Spathe prickly, Spadix branched, Drupe globose glabrous unarmed

20900 Pinnæ linear acuminate same colour on both surfaces, Outer fibres of berry free and filiform

Chairs Bracts of male flws hairy, Calyx ciliately multifid, Female flws sessile Drupes obovate beaked bristly
20901 Very prickly, Pinnæ narrow-lanceolate acuminate silvery beneath, Peduncle of spadix beset with turned back
20902 Very prickly, Pinnæ lanceolate subfalcate silvery beneath, Bracts of male flowers smoothish, Female flowers nearly sessile, Calyx glabrous shorter than hairy corolla, Drupe pear-shaped spiny
20903 Full, Pinnæ lanceolate acuminate silvery beneath, Bracts of male flowers ciliated, Calyx of female flowers hairy arcolate exceeding the glabrous corolla, Drupe globose unarmed
20904 Stemless Pinnæ narrow-lanceolate acuminate paler beneath, Bracts of male flowers penciled on back, Calyx entire Female flowers pedunculate, Calyx and corollas equal glabrous, Drupes globose unarmed
20905 Stemless, Pinnæ linear subfalcate white beneath, Bracts of male flowers ciliated, Calyx fringed, Female flowers with glabrous equal calyxes and corollas, Drupes obovate beaked unarmed
20906 Pinnæ lanceolate acuminate white beneath, Bracts of male flowers ciliately villous on the back, Calyx nearly entire, Female flowers pedunculate, Calyx and corollas equal glabrous, Drupe ovate unarmed
20907 Pinnæ linear præmorse paler beneath, outer ones connate, Female flowers sessile prickly, Drupe subglobose unarmed

20908 Petioles of fronds prickly or bristly, Pinnæ linear-lanceolate downy beneath rather glaucous, Drupes globose



and Miscellaneous Particulars

20903 *Lepidocaryum pulchra* is a middle sized palm tree, with a fibry caudex, and pinnate unarmed leaves. The head is paniculately branched, and covered with rusty tomentum, as well as the bracts and bracteoles. The flowers are small and reddish The culture is the same as for other tropical palms.

20904 *Iatrocarpon* is a genus of middle-sized palm trees, some of which have stems, and some without, which are armed with strong dark prickles The fronds or leaves of all are pinnate and ciliate with prickles. The spadix is simply branched and prickly, usually white from tomentum. The spathes are woody and also prickly. Flowers dense and yellow or orange

20905 *Acrocomia* is a genus of gigantic palm trees The caudex or stem is usually swollen in the middle, and prickly. The fronds or leaves are pinnate, and curled The petioles and spathes are prickly. The spadix is simply branched. The fruit is olive brown

3256. 1985*d*. **ŒNOCA'RPUS** *Mart.* ŒNOCARPUS. (*Oinos*, wine, *karpos*, a fruit) *Pálmæ*
20909 - - Bataúa *Mart.* Bataua ☤ ☐ or 80 ... Str Brazil 1822. S r.m

3257. 1985*e*. **WALLI'CHIA** *Roxb.* (*Nath Wallich*, formerly superintend of Bot Gard. Calcutta) *Palmæ*
20910 - - caryotoides *Roxb* Caryota-like ☤ ☐ or 8 Str E. Indies 1818. S r.m Roxb. cor 3 28
Harina caryotoides Hamilt *Wrighia caryotoides* Roxb
20911 - - densiflòra *Hook* dense-flowered ☤ ☐ or 8 ... Str E Indies 1840. S r m Bot mag 4584
oblongifòlia Griffiths

3258. 198*f*. **MARTINE'SIA** *H. B. & Kth* (*Balthasar Martines*, a Spanish naturalist) *Palmæ*
20912 - - caryotæfòlia *H & K.* Caryota-lvd ☤ ☐ or 30 ... Str S Main 1824. S r.m H.B.&K n g 67

3259 1985*g*. **ONCOSPE'RMA** *Blume* ONCOSPERMA (*Ogkos*, a hook, *sperma*, a seed) *Pálmæ*
20913 - - filamentòsum *Blu.* thready ☤ ☐ or 50 ... Str India 1840. S r.m Bl Rum 82 [illegible]

3260. 1985*h*. **SY'AGRUS** *Mart* (*Syagrus* who first wrote the Trojan war in verse) *Pálmæ.*
20914 - - cocoides *Mart.* Coco-like ☤ ☐ or 10 ... Crea Brazil 1823 S r.m M p 140, 85—9

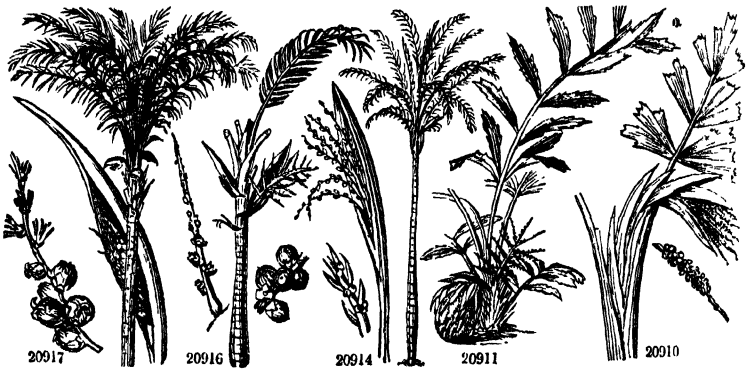
3261. 1985*i* **EUTE'RPE** *Mart* EUTERPE. (*Euterpes*, pleasing, trees) *Pálmæ*
20915 - - oleràcea *Mart.* oleraceous ☤ ☐ or 100 ... Crea Brazil 1819 S r.m M p 29, 2[illegible]—9
globòsa Gaertn.
20916 - - montàna *Hort.* mountain ☤ ☐ or 20 .. Crea S. Amer. 1815 S r n Bot. mag 48[illegible]

3262. 1985*k*. **MAXIMILIA'NA** *Mart.* MAXIMILIANA (*Maximilian* Prince Wied-Nieuwied) *Palmæ*
20917 - - règia *Mart.* royal ☤ ☐ or 20 ... Crea Brazil 1823 S r.m M p. 132, 91

3263. 1985*l*. **GEO'NOMA** *Wild* GENOMA (*Geonomos*, skilled in agriculture, propagation) *Palmæ*
20918 - - simplicifrons *Mart* simple fronded ☤ ☐ or 10 ... Str Brazil 1823 S r m M p 14[illegible]
20919 - - macrostáchya *Mart.* long-spiked ☤ ☐ or 6 ... Str Brazil 1823. S r m Mart p 19—2
20920 - - acaúlis *Mart* stemless ☤ ☐ or 4 ... Str Brazil 1822 S r m Mart p 18 4
20921 - - pinnátifrons *W.* pinnate-frond ☤ ☐ or 15 ... Str Brazil 1822 S r m M p 9, 8 2—[illegible]
20922 - - Spixiàna *Mart.* Spix's ☤ ☐ or 8 .. Str Brazil 1824 S r m M. p 15, 15—[illegible]
20923 - - Schottiàna *Mart.* Schott's ☤ ☐ or 8 ... Str Brazil 1830. S r m Mart p 143, 11

3264. 1985*m*. **DIPLOTHE'MIUM** *Mart* (*Diploos*, double, *themos*, a spathe, spathe double) *Palmæ*
20924 - - maritimum *Mart.* sea-side ☤ ☐ or 6 ... Crea Brazil 1823 S r.m Mart palm 7[illegible]
20925 - - campéstre *Mart.* field ☤ ☐ or 3 ... Crea Brazil 1823 S r.m Mart palm 7[illegible]
20926 - - caudéscens *Mart.* caudescent ☤ ☐ or 20 ... Crea Brazil 1823. S r.m Mart palm 70

3265 1985*n*. **DUVAU'A** *Kth* DUVAUA. (*M Duvau*, a French botanist) *Terebinthàcea*
20927 - - longifòlia *B R* long-leaved ☤ ☐ or 4 jn jl Ysh B Ayres 1835. C co Bot reg 1843 7
20928 - - dependens *Dec.* dependent ☤ ☐ or 20 jn jl Ysh Chili 1790 C co Bot reg 1[illegible]
Schinus dependens Cav. *Amyris polygama* Ortega
20929 - - dentàta *Dec* toothed ☤ ☐ or 20 my jl Ysh Owhyhee 1795 C co Andr reg 62[illegible]
Schinus dentàta Andr. rep
20930 - - ovàta *B. R* ovate-leaved ☤ ☐ or 6 jn jl Ysh Chili 1824 C co Bot reg 1[illegible]
20931 - - latifòlia *Gillies* broad-leaved ☤ ☐ or 20 jn jl Ysh Chili 1830 C co Bot reg 1[illegible]
dependens Hook Bot. misc



History, Use, Propagation, Culture,

3256. *Œnocárpus* is a genus of gigantic palm trees, with annulate soft stems and pinnate curled fronds The spadix rises beneath the fronds, and is fastigiately branched and broom-formed, and the branches are covered w granular brown tomentum. The spathes are double and woody. The drupes are globose and pruinose

3257. *Wallichia* is a genus of small East Indian palm trees, with pinnate fronds and præmorse cuneate pinnæ T spadix is simply branched, and the branches are pendulous. The flowers are small and cream-coloured, and the berries are brown and dry.

3258. *Martínesia caryotæfòlia* is a tall palm tree, with roots issuing from the caudex, which is prickly. The fronds are pinnate, and the pinnæ are cuneiform, obsoletely 3-lobed, alternate, and having a prickly rachis The petioles are also beset with straight twin prickles beneath. The spathes are ovate, and also prickly. The spadix is prickly with flexuous branches. The fruit is reddish yellow.

3259. *Oncospérma filamentòsum* is an elegant palm tree, growing in humid places by the sea shore The stem is tall, slender, and prickly The fronds are terminal and pectinately pinnatifid, and the segments are conduplicate The fruit is small and globose.

3260. *Syagrus cocoides* is a middle-sized palm tree. The fronds are terminal and loosely pinnate. The spadix is simply branched The spathe is sulcate on the back The flowers are rather larger and cream-coloured. The fruit is dry, and of a yellowish green colour

3261 *Euterpe oleràcea* is a beautiful palm, with pectinately pinnate fronds. The spadix is branched and scur

20909 Caudex naked, Fronds scattered, Pinnæ linear-lanceolate, Calyx of male flowers 4 times shorter than the acutish petals, Segments ovate-triangular, Berries ovate-elliptic obtuse

20910 Caudex subterraneous, Pinnæ cuneate præmorse, Branches of spadix drooping, Berry ovate-oblong dry

20911 Almost stemless, Pinnæ white beneath, the lower ones rising in twos, the rest solitary linear-oblong cuneated, at base entire, the rest spinosely toothed or erosely serrated, Female flowers dense

20912 Caudex prickly, Pinnæ wedge-shaped 3-lobed and erose, Rachis prickly, Petioles prickly, Spathe ovate prickly, Branches of spadix simple flexuous

20913 Caudex tall slender, Fronds terminal pectinately pinnatifid, Segments reduplicate acuminate, Petioles sheathing a great way at base, Spadix solitary under the leaves simply branched at top, Branches fastigiate pendulous

20914 Caudex annular below, Fronds pinnate, Pinnæ linear narrow curled a little, Drupes obovate elliptic

20915 Fronds pinnate pectinate, Flowers dense covering all parts of the branches of spadix, Sepals of male flowers broad-ovate denticulated, Petals lanceolate not so long as sepals

20916 Leaves elliptic obovate, Pinnæ quite entire lanceolate spreading tapering to apex, Petioles unarmed lepidoted beneath, Floriferous branches of spadix spreading much, Flowers loose by pairs, Fruit roundish

20917 Caudex middle-sized crowned by the vestiges of the fallen leaves Anthers exserted double the length of petals, Female flowers some in each branch

[Flowers imbricate in 4—5 rows, Calyx and corollas of male flowers equal, Berries nearly globose

20918 Fronds terminal lanceolate tapering at base bifid at top sometimes irregularly pinnate cut, Spadix branched,

20919 Stemless, Fronds lanceolate cuneate at base bifid at apex, Spadix radical simple cylindrical Cor of male flowers exceeding the calyx, Berries ovate [long as the corollas

20920 Stemless, Fronds pinnate, Pinnæ lanceolate, Spadix radical simple cylindrical, Calyx of male flws not half so

20921 Fronds terminal pinnate, Pinnæ præmorse, Spadix branched downy, Flowers imbricate in 4—5 rows, Male flws with equal calyxes and corollas, Berries globose

20922 Fronds terminal undivided lanceolate cuneated at base bifurcate at top, Spadix panicled downy, Flowers imbricate in 6—8 rows, Male flowers with the calyxes about equal to corollas, Berry ovate-globose

20923 Fronds terminal pinnate, Pinnæ linear approximate, Spadix panicled with elongated tomentose branches, Female flowers solitary, Berries ovate

20924 Stemless, Fronds loose curled, Pinnæ linear glaucous beneath, Drupe obovate pentagonal

20925 Stemless, Fronds split, Pinnæ stiff lin glaucese beneath, Male flwrs hexandr, Anthers obt, Drupes ov. glob

20926 Caudex middle-sized, Fronds rather curled, Pinnæ linear long acum. silvery beneath, Male flowrs polyandrous

20927 Leaves linear-oblong narrowed at base quite entire, Corymbs sessile axillary, Flowers 7—8-androus

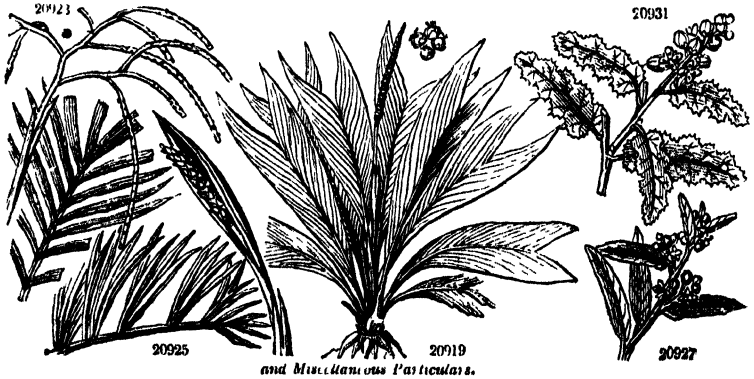
20928 Leaves ovate-lanceolate entire and sometimes trifid, Racemes length of leaves, Flowers octandrous

20929 Leaves lanceolate toothed, Racemes compound a little longer than leaves, Flowers decandrous

[drous

20930 Leaves ovate toothed acute or obtuse, Racemes axillary and a little longer than leaves, Flowers usually octan-

20931 Leaves oblong coarsely toothed wavy acute, Racemes dense about equal to leaves, Flowers hermaphrodite



and Miscellaneous Particulars.

The spathe is double: the outer one short and open at top, the inner one open all its length The flowers are sessile, and the fruit dark purple.

3262 *Maximiliàna régia* is a showy middle-sized palm tree. The fronds are pinnate, and the pinnæ are aggregate The spathes are persistent. The spadix is simply branched. The flowers are compact. The drupe is brownish

3263 *Geónoma* is a genus of small reed-like palms The stems are slender, annulate, and smooth, rarely wanting. The fronds are rather simple or pinnate. The petioles are sheathing. The spadixes are spicate, and very often panicled. The berries are ovate, or nearly globose, spiny, of an obscure colour, rather fleshy, but insipid.

3264. *Diplothémium* is a genus of Brazilian palms usually stemless. The fronds are pinnate, on short petioles. The pinnæ are stiffly spreading or curled and interruptedly aggregate. The spadix is simple, bearing the flowers in front The outer spathe is hidden among the leaves The flowers are large and cream-coloured. The drupes are yellowish, and the flesh is fibrous but edible.

3265 *Duvália* is a genus of half-hardy shrubs or trees. They would probably stand in the open air in Devonshire without injury. They require only common treatment, and may be increased by layers or cuttings. The same phenomenon in the leaves as that in those of *Schinus Mólle*. After lying a short time in the water, they will begin to start and jump, as if they were alive, while at the same instant of each start a jet of oily matter is discharged into the water The *D. latifólia* is called *Huingan* in Chili

POLYANDRIA.

1989. BEGO'NIA.

20932 13340*a* bulbulifera *Lk.* bulb-bearing ⁂ △ or 1 mr W.Pk Mexico 1827. B s.l lf.m Px. fl g.3 15 241
20933 - picta *Smith* painted-leaved ⁂ △ or 1 s Pk Nepal 1830. R s.l.lf.m Bot. mag 2962
hirta Wall.
20934 - Barkèrii *K. & W.* Barker's ⁂ △ or 4 year W Mexico 1830. R s.l lf m Flor. cab. 3, 13.
20935 - diptera *Dry.* two-winged ⁂ △ or 1 my.jl W Brazil 1822. R s.l.lf m
obliqua Lin.
20936 - Martiàna *Lk & Ot.* Martius's ⁂ △ or 3 jl.au C P Mexico 1829. R s.l lf.m Px. fl g 2 176 227
20937 - scándens *Swz.* climbing ⁂ △ or 3 jn jl W Guiana 1822. R s.l.lf.m Aubl. gui 2 34
glàbra Aubl. *populifòlia* Schott. *denticulàta* H B & Kth.
20938 - cinnabárina *Hook.* cinnabar-clrd ⁂ △ or 2 my jl O.Y Bolivia 1849. R s l.lf.m Bot. mag. 4483
auranliaca Paxt mag. 15. p 215
20939 - peltifòlia *Schott* peltate-leaved ⁂ △ or 3 my.jl W Brazil ... R s.l.lf.m

20940 - muricàta *Bl* muricated ❀ △ or 2 jn au W Java 1830. D s.l.lf m
20941 - punctàta *Klotzsch* dotted ❀ △ or 2 my.o Ro.s Mexico 1839. D s.l lf m Px fl. gar 3 249
18046 heracleifòlia *Cham.*
β radiàta Graham *rayed* ❀ △ or 2 year Pk Mexico 1832 D s.l.lf m

20942 - ramentàcea *Paxt.* ramentaceous ❀ △ or 1 year Pk Brazil 1839 D s.l.lf m Px m 12. 73

20943 - crassicaúlis *Lindl* thick-stemmed ❀ △ or 2 ap.jl W Guatem. 1841. D s.l.lf m Bot reg 1842, 44

20944 - hydrocotylifòlia *Hook* Hydroc.-lvd ❀ △ or ½ mr.ap Pk S Amer. ... D s l.lf m Bot. mag 3968

20945 - pentaphýlla *Walp.* five-leaved ⁂ △ or 2 jl.s W Brazil 1840. D s.l.lf.m
muricàta Scheidw

20946 - digitàta *Radd* digitate-leaved ⁂ △ or 7 jn jl W Brazil ... C s l.lf.m
verticillàta Velloz
20947 - rubricaúlis *Hook.* red-stemmed ⁂ △ or 1½ year W.R S. Amer. ... D s l.lf.m Bot. mag 4171

20948 - Lindleyàna *Walp.* Lindley's ❀ □ or 3 jn jl W Guatem. ... C s l lf m
vitifòlia Lindl.

20949 - palmàta *D. Don* palmate-leaved ⁂ △ or 1 jl.au W Nepal 1839. D s l lf m

20950 - sinuàta *Graham* sinuate-leaved ❀ □ or 2 my.jn W Brazil ... C s l.lf.m Bot. mag 3731

20951 - vitifòlia *Schott* Vine-leaved ❀ □ or 4 ap.my W Brazil ... C s l lf.m Bot mag 3224
grándis Otto. *reniformis* Hook B M 3225.
20952 - acerifòlia *H. B. & Kth.* Maple-leaved ⁂ △ or 3 au.s W Mexico 1829. C s l.lf m

20953 - álbo-coccínea *Hook.* scarlet & white ⁂ △ or 1 ap.my W s India 1844. C s.l.lf m Bot. mag 4172

20954 - incàna *Lindl.* hoary ⁂ △ or 1 ap.my Pk Mexico ... C s.l lf.m

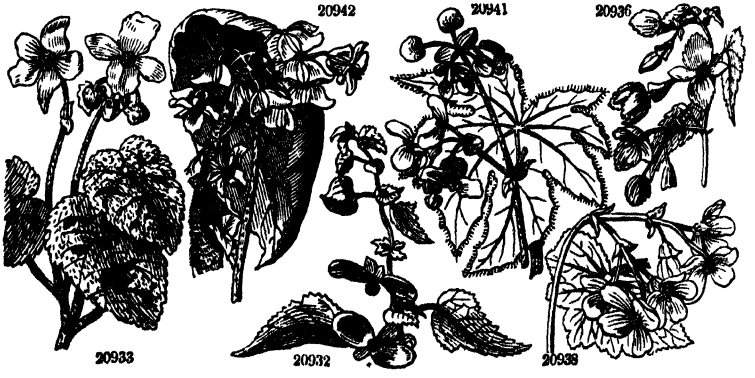
20955 - Dréggei *Otto* Dregge's ❀ □ or 2 year W G.G.H. 1838. C s l lf m
parvifòlia E. Meyer.
20956 - cucullàta *W.* cucullate-lvd ❀ □ or 3 year W Brazil ... C s.l.lf m

20957 - reniformis *Dry.* kidney-shpd-lv ❀ □ or 1 jn jl W Brazil 1818. C s.l lf m Lin tr 1,14 1-2
20958 - acutifòlia *Jacq.* acute-leaved ❀ □ or 1 jn.au W W. Ind. 1822 C s.l lf.m
purpùrea Swt.
20959 - àptera *Blume* wingless-frtd ⁂ △ or 3 jn jl W Java ... C s.l.lf.m

20960 - undulàta *Schott* wavy-leaved ❀ □ or 2 jn jl W Brazil 1826. C s.l.lf.m Bot. mag. 2725

20961 - Ottònis *Walp.* Otto's ❀ □ or 2 jn.jl W Caraccas ... C s l.lf.m

20962 - castaneæfòlia *Hort.* Chestnut-lvd ❀ □ or 2 mr.ap F Brazil 1838. C s l.lf m
20963 - pulchélla *Radd* neat ⁂ △ or ½ jl.au W Brazil 1823. D s.l.lf.m



POLYANDRIA.

[ciliated, primordial ones roundish-cordate, Peduncles axillary 1-flwd, Ovarium acutely triangular wingless
20932 Rhizoma tuberous, Stem simple bearing bulbules, Leaves obliquely cordate acuminate angularly crenate rather
20933 Root tuber., Stem short, Lvs deeply cord. ser acute rugose hairy spot. beu., Cap. tom. with short uneq wings
[long pilose, Male flws dipetalous cymose, Cyme dichotomous much branched, Petals obovate hairy beneath
20934 Stemless, Lvs unequally cordate obsoletely lobed acute glabrous and shining above hairy beneath, Scape very
20935 Tuberous, stemless, Leaves unequally cordate denticulate, Peduncles dichot., Wings of capsule 2 unequal
[brous, Peduncles axillary few-flwd, Capsule elongated with 2 narrow wings and the third larger
20936 Rhizoma tuberous, Stem branched bulbiferous, Lvs dimidiately-cordate acuminate angularly serrated gla-
20937 Root tuberous, Stem scandent radicant, Leaves roundish-ovate obsoletely toothed glabrous shining, Petals
serrated, Peduncles 2-flowered largest wing of capsule obtuse-angled the rest parallel small
20938 Leaves large palmate oblique at base, Stipules oblong cuspidate keeled, Male flowers with 4 sepals 2 small and
2 large, Female flowers with nearly equal petals, Racemes axillary, Peduncles long
20939 Stemless, tuberous, Leaves peltate ovate acute entire glabrous above clothed with rusty tomentum beneath,
Wings of capsule 2 roundish and 1 large and obtuse
20940 Creeping, Leaves ovate acute unequally cordate muricated above and downy beneath, Wings of capsule parallel
20941 Rhizoma creeping, Leaves cordate 7-lobed unequally toothed setosely ciliated pale beneath with reddish mar-
gins, Petioles pilose, Pets 2 rose-clrd dotted with scarlet, Cap. 3-winged one of which is large and rose-clrd
β Stemless, Leaves palmate pilose as are the tall scapes and petioles, Leaves 7 lobed, Lobes lanceolate-oblong
wavy sinuated, Flowers dipetalous, Filaments cohering at base, Wings of fruit roundish
20942 Stems short thick short-jointed a little tortuous, Leaves obliquely ovate short acuminate many-nerved entire
studded with numerous fascicles of setæ, Petioles as long as leaves beset with fringed depressed scales, Sti-
pules ovate concave dry setose, Peduncles longer than petioles beset with similar scales
20943 Leaves deeply palmate, Segments acuminate subpinnatifid deeply-toothed covered with rusty hairs beneath,
Stem short fleshy articulated unequal creeping, Panicles dense many-flwd covered with rusty down, Flowers
dipetalous glabrous as are the bracts, Sepals roundish, Wings of fruit unequal, upper angle rounded
20944 Downy, Stem thick short creeping scaly, Leaves petiolate roundish cordate much longer than the axillary
peduncles, Flowers racemosely panicled all dipetalous, Wings of capsule nearly equal
20945 Stem simple nodose muricated, Lvs alternate digitate 5 or 7 lanc acum uneq. ser. leaflets which are shining
and glandularly muricated on both surfaces, Petioles terete, Stipules none, Cymes axillary dichotomous on
long peduncles, Flowers dioecious, male ones 4-leaved, Leaflets equal reflexed in 2 series
20946 Leaves digitate about 10, Leaflets lanceolate unequally serrated scabrous, Wings of capsule roundish equal

20947 Stemless downy pilose, Leaves on short petioles obliquely cordate sinuately lobed serrated wrinkled deeply 2-
lobed at base, Lobes rounded imbricate, Scape much longer than leaves thick paniculately branched, Flowers
showy, Pets 5 obov., Fruit turbinately triq., 2 of the angles with narrow wings, the third with an elong wing
20948 Stems fleshy covered with rusty down, Leaves on long petioles concave obliquely ovate coarsely and deeply
toothed glabrous above and downy beneath, Panicles axillary covered with rusty tomentum, Bracts roundish-
ovate convex, Flowers dipetalous glabrous, Wings of fruit emarginate nearly erect
20949 Covered with brown hairs, Leaves unequally cordate palmately lobed, Scape 3-flowered, Capsule villous with
obtuse-angled wings one of which is prolonged
20950 Much branched glab., Lvs unequally cord lobed acute bluntly toothed shining pale beneath with col veins, Male
flws dipetalous, Female 5-petaled uneq., Peduncs bifid with 2-flwd branches, Wings of cap. nearly equal acute
20951 Arborescent, Leaves unequally reniform angularly lobed serrated hairy, Cymes dichotomous, Perigone downy,
Wings of capsule 2 very narrow and the third large and acute-angled
20952 Suffruticose dichotomously branched glabrous, Leaves on long petioles semicordate 5—6-cleft acute sharply
serrulated rather hairy, Peduncles terminal elongated dichotomous
20953 Stemless, Leaves obliquely ovate obtuse subreniformly peltate fleshy lobately sinuated glabrous, Petioles hairy,
Two outer sepals scarlet roundish, the rest smaller and whiter, Cap turbinate 3-winged, Wings broad uneq.
20954 Caulescent erect hoary tomentose, Leaves coriaceous peltate oblong acute subangular white beneath, Panicle
small contracted, Male flowers 4-petaled downy, Female unknown
20955 Stem fleshy nodose, Leaves unequal-sided reniformly cordate angularly serrated glabrous shining, Peduncles
axillary dichotomous few-flowered, Wings of capsule nearly equal, 2 roundish, the third acute-angled
20956 Leaves oblong cucullate denticulated glabrous, Stipules oblong-toothed, One wing of the capsule is large acute-
angled, the rest parallel [tuse, the third large and acute
20957 Suffruticose, Leaves unequally reniform clothed with rusty tomentum beneath, two of the wings of fruit ob-
20958 Lvs oblong acuminated angular serrated glabrous, Petioles thickened, One wing of capsule large obtuse-angled,
the rest acute-angled
20959 Caulescent, Leaves ovate-oblong unequally cordate acuminate denticulate rather angular outside at base, Cymes
on short peduncles extra-axillary, Capsule tetragonal
20960 Shrubby erect, Leaves nearly sessile unequally oblong-cordate undulately repand entire glabrous shining,
Cymes dichotomous, Wings of capsule rounded equal
20961 Shrubby erect-branched, Leaves on short petioles oblique at base almost equally elliptic-lanceolate glabrous
shining glaucescent beneath toothed, the teeth setose at apex, Cymes axillary few-flowered shorter than the
lvs, Petals nearly equal ovate-oblong, Dorsal wing of capsule large dotted acute, the rest almost wanting
20962 Shrubby erect, Leaves lanc. unequal-sided acum subcordate at base with crested margins glabrous and shining
20963 Subherbac., Lvs semicord. uneq toothed glab., Stips reticu. with veins, Wings of cap roundish nearly equal



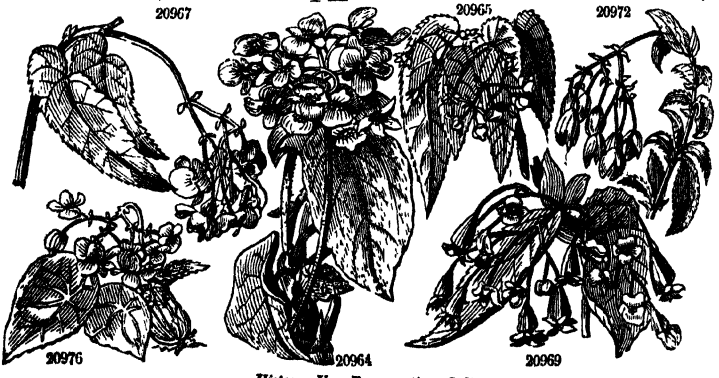
20964 -	- Meyeri *Hook.*	Meyer's	☘ □	or	2	year	W	Brazil	1838. C	s.l.lf.m Bot. mag 4160
20965 -	- Fischeri *Otto*	Fischer's	☘ □	or	1½	f.mr	W	Brazil	1835 C	s.l.lf.m Bot mag 3382
20966 -	- maculàta *Raddi* *argyrostigma* Fisch	spotted-leaved	☘ □	or	2	jl o	W	Brazil	1819 C	s l lf.m Bot. reg 0[illegible]
20967 -	- incarnàta *Lk.* *insignis* Graham, No 18042.	flesh-coloured	☘ □	or	2	aut	Pk	Brazil	1826. C	s.l.lf.m Bot. mag 2900
20968 -	- suavèolens *Haw.* *odoràta* W. *humilis* B R 284.	sweet-scented	☘ □	or	1½	jl.o	W	W. Ind.	1816. C	s.l.lf.m Bot. cab 69
20969 -	- coccinea *Hook.*	scarlet	☘ □	or	2	mr.myS		Brazil	1842. C	s.l.lf.m Bot. mag 3990
20970 -	- manicàta *Cels*	sleeved	☘ □	or	2	mr my	Pk	Brazil	1842. C	s.l.lf.m
20971 -	- fagifòlia *Fisch.*	Beech-leaved	🌲 □	or	3	mr.au	F	Brazil	1838. C	s.l lf m
209 2 -	- fuchsioìdes *Hook.*	Fuchsia-like	❀ □	or	4	jn s	S	N. Gren.	1846. C	s l.lf.m Bot. mag 4281
20973 -	- àcida *Vellos*	sour	⸙ △	or	1	jn s	W	Brazil	1847. C	s.l.lf.m
20974 -	- biserràta *Lindl.*	dbly-serra.-lvd	⸙ △	or	2	jn s	Pk	Guatem.	1847. C	s.l.lf.m
20975 -	- zebrina *Hort.*	zebra-striped	☘ □	or	2	jn s	Pk	Brazil	1845. C	s l.lf.m
20976 -	- hernandiæfòlia *Hk.*	Hernandia-lvd	❀ △	or	1½	jn jl	R	C Amer	1848 C	s.l.lf.m Bot mag 4[illegible]
20977 -	- xánthina *Hort.*	yellow-flwd	⸙ △	or	1	jl	Y	N. India	1836. C	s l lf m Bot mag 4[illegible]
20978 -	- conchæfòlia *Dietr.*	shell-leaved	❀ △	or	¾	su	R	Co. Rica	1852 C	s l.lf m
20979 -	- strigillòsa *Dietr.*	strigose	❀ △	or	¾	su	Ro	C. Amer.	1852. D	s.l lf.m
20980 -	- Thwaitèsii *Hook.*	Thwaites's	⸙ □	or	½	jn	W	Ceylon	1851. D	s.l lf m Bot mag 4[illegible]
20981 -	- rubrovènia *Hook.*	red-veined	☘ □	or	¾	jn	W.R st	N. India	1836 D	s.l p Bot mag 4[illegible]
20982 -	- Ingràmu *Moor.*	Ingram's	☘ □	or	2	su	Pk	Hybrid	1850. C	s.l p Moor m 2 [illegible]

1997 FA'GUS.

20983	13369*a* antárctica *Forst.*	Antarctic		or	40	..		T.d.Fue.	1830. S	co Hook fl an 212
20984 -	- betuloìdes *Mirbel*	Birch like		or	41	...	...	T d.Fue	1830. S	co Hook fl an 2 1 [illegible]
20985 -	- obliqua *Mirbel*	oblique-leaved		or	50	...	...	Andes	... S	co Mém mus [illegible]
20986 -	- Cunninghàmii *J Hook*	Cunningham's		or	40		..	V D.L	... S	co Jour bot 2 [illegible]

2000. QUE'RCUS.

20987	13394*a* Brántii *Lindl*	Brant's		or	50	...	...	Koordis.	1850 S	co J H S 8 [illegible]
20988	13434*a* acutifòlia *Necs*	acute-leaved		or	...	...	Ap	Mexico	... S	co H B eq 2 [illegible]
20989 -	- reticulàta *H & B*	reticulate-lvd		or	...	...	Ap	Mexico	... S	co H B eq 2 [illegible]



History, Use, Propagation, Culture,

1997. ***Fágus antárctica*** and ***F. betuloìdes*** form a predominant feature in the Fuegian landscape. The leaves of the first resemble those of our common beech, and are deciduous; but the ***F. betuloìdes*** is evergreen, and is the antarctic

20964 Tall, Lvs obliq auricled at base obsoletely sinuated hoary tom , Peduncs elong. downy, Panicle simple many-flwd, Male flwr 4-petaled, 2 roundish and 2 smaller obl , Female flwr of 2 obov. pets, Wings of cap nearly eq.

20965 Caules., Lvs obl ac unequally cordate ser glabrous shining, Stipules ov ent., Male flws 4-petaled

20966 Shrubby, Leaves long semicordate acuminate repand spotted with white above red beneath, Wings of capsule roundish nearly equal

20967 Shrubby erect, Leaves semicordate doubly serrated ciliated, Cymes nutant ditrichotomous, Two of the wings of capsule narrow, the third large and bluntly triangular

20968 Shrubby erect, Leaves unequally cordate acuminate shining hairy rather rough, Cymes dichotomous, Wings of capsule nearly equal

20969 Leaves obliquely oblong-ovate acuminate fleshy sinuated serrated red on the margin, Stipules largo obovate concave coloured deciduous, Panicle nutant, Flws deep scarlet, Male flws of 4 roundish petals 2 of which are small, Female flws of 5—6 nearly equal ovate petals, Capsule pear-shaped with equal wings

20970 Glabrous fleshy, Stem woody decumbent, Leaves obliquely cordate repandly toothed acuminate with purple filamentose scales on nerves ben and on margins, Petioles girded by a mass of connate scales at apex ciliated, Cymes large dichotomous on long peduncs, Male and female flws both dipetalous, Wings of capsule nearly eq.

20971 Scandent, Leaves oval unequal-sided subangular serrulated plicate hairy, Cymes dichotomous, 2 of the wings of capsule very narrow and the third large and acute-angled

20972 Erect-branched smooth, Leaves semiovate obliquely falcate acute serrated ciliated, Panicle pendent, Male flws of 4 conniving petals, 2 outer ones largest and boat-shaped, Female flowers of 5 conniving petals, Pedicels triquetrous, Third wing of capsule much larger than the rest

20973 Fleshy branched humble, Stem setosely scaly, Leaves on long bristly petioles deeply cordate roundish 7-nerved repand entire scabrous above pilose on nerves beneath, Stipules cordate, Peduncles terminal corymbosely few-flowered nutant, Third wing of capsule subdeltoid roundish, the other 2 smaller

20974 Erect scabrous, Root fibrous, Leaves palmate or 3-lobed biserrated, Peduncles terminal and axillary Flowers of 2 roundish-ovate biserrated petals and 2 smaller subunguate toothed ones glabrous, Capsule villous

20975 Leaves striped like the Zebra This species is not sufficiently known.

20976 Stemless, Lvs all radical aggregate on long petioles obliquely roundish-ov short acum glandularly ser peltate conc purple beneath, Scapes longer than lvs di hotomously corymb at apex, Pedicels nutant, Male flws of 4 seps 2 of which smaller, Fem. flws of 3 seps 1 of which is small, One wing of fruit larger than the other two

20977 Stemless, Rhizoma short rooting, Leaves large obliquely cordate-ovate short acuminate crenately denticulated red beneath on thick bristly stipulate petioles the lower bristles reflexed, Scape twice as long as leaves, Flws nutant corymbose yellow, Male ones of 4 oblong-cuneate sepals one of which is larger and more concave, Female flowers small of 5 equal oblong sepals, One wing of fruit horizontally elongated and striated

20978 Stemless, Rhizoma creeping, Lvs semipeltate concave obliquely ovate angularly toothed acuminate rounded at base shining above white beneath and covered with rufous tomentum on the nerves, Petioles and dichotomous scapes coloured and covered with rufous tomentum, Flowers dipetalous, Female ones bibracteate, Wings of capsule roundish, 2 narrower green, the third a little broader crenulated and coloured

20979 Stemless, Rhizoma creep , Lvs obliqly cord margined with red angularly toothed acum. covered with coloured scales which are usually bipartite and filamentose at top on the nerves beneath and on the margin as well as scapes, Cymes dichot , Flws dipet , Two wings of cap obt -angled, the third a little broader ac -angled

20980 Stemless, Lvs nearly regular on long petioles cord ac obscurely lobed crenately ser. greenish purple blotched with white and beset with purple hairs as are the petioles, Stipules ov. acum , Scapes numerous shorter than petioles, Flws subumbel. of 4 sepals, Capsule triquetr. with short roundish nearly equal doubly cili angles

20981 Glabrous, Stem short, Leaves on long petioles obliquely ovate acuminate unequally dentate serrated with white blotches above purple beneath, Stipules large acuminate, Peduncles axillary exceeding the petioles, Flowers corymbose, Petals 4, 2 outer ones largest painted with red veins, the 2 inner ones white, Two of the wings of the fruit short and roundish, third horizontally elongated elliptic obtuse

20982 Caulescent, Leaves stalked obliquely ovate acuminate subcordate at base glossy rather hairy on margins, Panicle dichotomous drooping, Outer sepals roundish-ovate inner ones shorter and narrower, Female flowers of 5 nearly equal oblong sepals, Wings of fruit unequal

20983 Lvs obl -ov. obt. rather obliquely trunc unequally dent ser. minutely reticu. beneath when young plicate, Cupula invol -frnid deeply 4-parted, Segs unequ ent with a series of fringed scales on back, Nuts cili at top

20984 Lvs ovate-elliptic obtuse crenulate coriaceous shining glabrous rounded at base on short petioles, Male perianth solitary turbinate 5—7-lobed 10—16-androus, Cupula involucre-formed with marginate angles, Branches covered with a resinous varnish More the habit of a hornbeam than a beech

20985 Leaves ovate-oblong oblique subrhomboid obtuse doubly serrated entire at base tapering into the petiole rather pilose, Male perianth solitary hemispherical sinuated 30—40-androus, Cupula capsule-formed muricated 4-parted, Segments ovate obtuse, Ovaria enclosed triquetrous, Angles winged

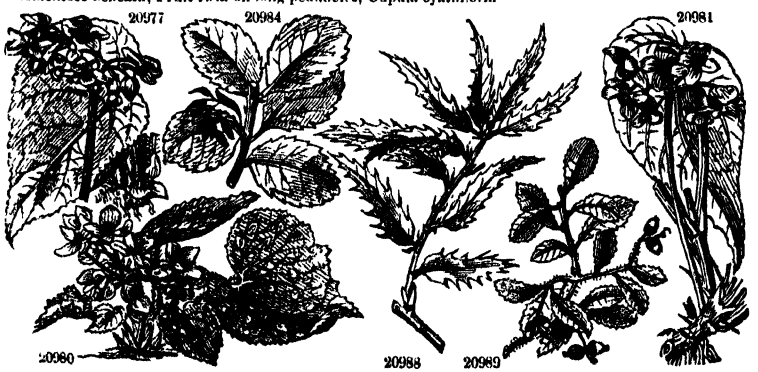
20986 Lvs deltoid coriaceous coarsely and unequally toothed obsoletely nerved, Cupula capsule-formed at length deeply 4-parted, Segments lanceolate beset with soft spines tipped with glands

[with stellate down above

20987 Branchs petis and under side of lvs densely tomentum, Lvs cord.-ov. aristately toothed ac cinerous and covered

20988 Lvs ovate-lanceolate acuminate subcordate at base covered with powdery tomentum rusty beneath sinuately toothed, Teeth elongated cuspidate, Fruit by twos or fours on short peduncles

20989 Branches rather downy, Leaves nearly sessile obovate cordate remotely toothed coriaceous rugose finely tomentose beneath, Fruit twin on long peduncles, Cupula cyathiform



and Miscellaneous Particulars.

evergreen beech. They are both quite hardy, and grow to trees of large size. The Van Diemen's Land Beech is a ne evergreen tree, with coarsely toothed leaves. The wood is valuable and close grained.

20990 -	- crássipes *H. & B.*	thick-stalked	♆ ⌴ or	30	...	Ap	Mexico	1839.	S	co	H. B. eq. 2, 63		
20991 -	- spicàta *H. & B.*	spicate	♆ ⌴ or	40	...	Ap	Mexico	...	S	co	H. B eq 2 46		
20992 -	- mexicàna *H. & B.*	Mexican	♆ ⌴ or	...	...	Ap	Mexico	1839.	S	co	H. B eq 2 35		
20993 -	- glaucéscens *H & B*	glaucescent	♆ ⌴ or	..	...	Ap	Mexico	1839.	S	co	H. B. eq 2 7		
20994 -	- sideróxyla *H. & B.*	iron-wooded	♆ ⌴ or	..	...	Ap	Mexico	1839.	S	co	H B eq 2		
20995 -	- lancifòlia *Cham.*	lance-leaved	♆ ⌴ or	...	...	Ap	Mexico	1839	S	co			
20996 -	- petiolàris *Benth.*	long-petioled	♆ ⌴ or	40	...	Ap	Mexico	1839.	S	co			
20997 -	- invérsa *Lindl.*	inverted	♆ ⌴ or	...	...	Ap	China	1850.	S.G	s l.p	Px fl g l		
20998 -	- sclerophýlla *Lindl.*	hard-leaved	♆ ⌴ or	...	...	Ap	China	1850.	S.G	s.l.p	Px. fl. g l		
20999 -	- agrifòlia *Ph.*	Holly-leaved	♆ or	30	...	Ap	N W.Am	1846	S.G	co			

2005 CALA'DIUM

21000 13457	*azamiæfòlium Lodd.*	Zamia-leaved	☙ △ cu	2	jn.jl	Y	Brazil	1828	R	s l.p	Bot. cab 1408	
21001 -	- violàceum *Desf.*	violet	⁂ △ cu	1	s	P	Antilles	1840	R	s l p		

3266. 2005*a*. AMBROSI'NIA *Lin.* (*B Ambrosinus*, curator, of the Botanic Garden, Bologna.) *Aroideæ*

21002 -	- Bássii *Lin.*	Bass's	⁂ △ cu	1	my jl	G P	S.Europe	1823	R	co	Linnæa 11 28	
	A'rum proboscídeum B W											

3267. 2005*b* ARISÆ'MA *Mart* ARISÆMA. (Not explained.) *Aroideæ.*

21003 -	- Murràyi *Hook*	Murray's	⁂ △ cu	1	su	P	S. Amer.	1847	R	s.p.l	Bot. mag 43	
	A'rum Murràyi Graham.											
21004 -	- macrospàthum *Bnth*	long-spathed	⁂ △ cu	1	su	P	Mexico	1844	R	s.p.l		
	A'rum, No 13462, 13463, 13464, 13465, and 13466, belong to this genus.											

3268 2005*c* CRYPTOCO'RYNE *Blume.* CRYPTOCORYNE (*Kryptos*, hidden, *koryne*, a club.) *Aroideæ*

21005 -	- ciliàta *Fisch*	ciliated	⁂ △ cu	1	my.jl	G P	E. Indies	1823.	R	s p l	Rox c 3 90	
	Ambrosínia ciliàta Roxb *A'rum ciliàtum* Hort., as well as *A'rum spiràle*, belongs to this genus											

3269. 2005*d* PELTA'NDRA *Raf* PELTANDRA. (*Pelte*, a buckler, *aner*, a male, anthers.) *Aroideæ*

21006 -	- virginica *Rafin*	Virginian	⁂ △ cu	1	jn jl	G R	Virginia	1759.	R	s p	Hook. ex fl	
	A'rum virginicum Lin No 13476. *Caládium virginicum* Hook. *Cálla virginica* Mx. *Leróntia virginica* Torr.											

3270. 2005*e* XANTHOSO'MA *Schott.* XANTHOSOMA. (*Xanthos*, yellow; *soma*, body.) *Aroideæ*

21007 -	- Jacquínii *Schott*	Jacquin's	⁂ △ cu	4	jn.jl	Y	W Indies	1822	R	s p	Jac schœn 1	
	A'rum xanthorhízum Jac. *Caládium xanthorhízum*, No. 13460 and 13449 belong to this genus.											

3271. 2005*f* ACO'NTIAS *Schott.* ACONTIAS. (Not explained by author.) *Aroideæ*

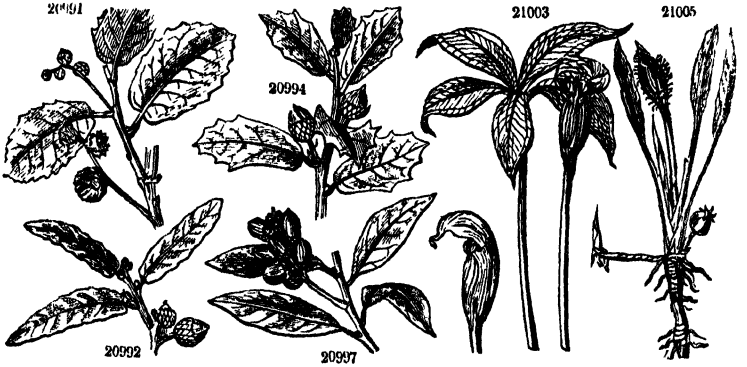
21008 -	- variegàtus *Schott*	variegated	⁂ △ cu	1½	ap jn	G Y	S Amer.	1838.	R	s.l p		
	Caládium variegàtum Desf											
21009 -	- hastifòlius *Schott*	halberd-leaved	⁂ △ cu	1	ap jl	G Y	S. Amer	1824	R	s l p		
	A'rum sagittifólium Hort. ang. Lk as well as *Caládium*, No 13445, belongs to this genus											

3272 2005*g*. SYNGO'NIUM *Schott* SYNGONIUM. (*Syn*, together, *gonia*, an angle, leaves.) *Aroideæ*

21010 -	- auritum *Schott*	ear-leaved	⁂ ▭ cu	4	jn jl	W	W.Indies	1769.	C	s.l.p	Jacschœn 2	
	Caládium auritum Vent. No 13465. *A'rum auritum* Lin.											

3273 2005*h*. CULCA'SIA *Beauv.* CULCASIA (*Culcas*, Arabic name.) *Aroideæ*

21011 -	- scándens *Beauv*	scandent	⁂ ▭ cu	6	jn.jl	W Br	W.Africa	1822.	C	s l p	Beau fl d l 43	
	Caládium scándens W No. 13459. *Denhámia scándens* Schott.											



History, Use, Propagation, Culture,

3266. *Ambrosínia Bássii* has a tuberous-branched rhizomatose root and cordate-elliptic entire leaves, and the scapes rise from among the petioles. The culture is the same as for the tropical species of *A'rum*.

3267. *Arisæ'ma* is composed of tuberous-rooted plants like those of *A'rum*, and should be treated like the tropical species of that genus.

3268. *Cryptocóryne*. Marsh plants with tuberous stoloniferous roots. The leaves are entire, petiolate, and feather-nerved; the inflorescence solitary and nearly sessile at the base of the petioles, or on a more or less manifest scape. The flowers are sweet-scented. The culture of the species is the same as that of the tropical species of *A'rum*.

3269 *Peltándra virginica* has rhizomatose tuberous roots and sagittate nerved leaves. The scapes are solitary and elongated, and rise from the sheath of the petioles. The culture is the same as for the other hardy species of *A'rum*.

20950 Branches tuberc., Lvs on short petioles oblong-lanc. acum. mucronate rounded at base entire coriac clothed with cinereous toment. beneath, Fruit pedunc. usually twin, Peduncs thickened, Cupula rather turbinate

20951 Branches tomentose, Leaves elliptic obtuse cordate remotely and bluntly toothed membranous tomentose beneath, Fruit on long pedancles subspicate, Cupula hemispherical

20952 Branches and under side of lvs covered with stellate down shining above lin.-obl. acute submucro. somewhat cordate undulately sublobuated rather coriaceous, Fruit solitary on a short peduncle, Cupula cyathiform

20953 Glab., Lvs wedge-shaped obov. on short petioles entire at base but slightly tthd at top, Flwrs and fruit racem.

20954 Branches downy, Lvs obov.-obl. rounded at base sharply and sinuately toothed towards the apex coriaceous shining above but clothed with canesc. down ben., Fruit usually twin on short peduncs, Cupula cyathiform

20955 Lvs smooth oblong-lanceolate serrated rather coriaceous, Fruit sessile, Cup subhemispherical, Nut conical

20956 Lvs oblong-acute entire woolly beneath, Fruit nearly sessile and usually solitary

20957 Evergreen, Branches toment., Lvs coriac. obov. petiolate cuspidate obtuse sometimes serrated at top quite glab. above but clothed with glauc. toment. beneath, Acorns spic. obov much longer than scaly tomentose cup

20958 Evergreen, Branches glabrous, Lvs petiolate coriaceous glabrous acuminate obtuse coarsely serrated beyond the middle glabrous above but clothed with glaucous down beneath, Acorns spicate spherical protruding a little beyond the cup, Cup tomentose tuberculate from scales

20959 Evergreen, Lvs roundish-ovate subcordate glabrous remotely spiny-toothed, Cupula hemispherical loose, Acorn ovate acute

[base female and top male, Spathe elliptic acute reflexed exceeding the spadix

21000 Stemless, Lvs pinnate 1—2 feet long, Leaflets alternate nearly sessile obl. ac reflexed, Spadix obtuse with the

21001 Lvs ternately compound, Lflts pinnatifid entire or divided, Scape and petioles muricated at base, Spathe oblong acuminate exceeding the spadix, Ovaria ovate reflexed tubercled

21002 Leaves radical about 4 ovate-cordate, Spathe navicular horizontal terminated by a straight tail

21003 Leaves peltate cut into 5—6 ovate-lanceolate acuminate feather-nerved segments, Lower part of spathe green connate with the tube, upper part ovate convex pointed white with a transverse red mark

21004 Leaves pedate 6—7-parted, Scape purple, Spathe purple or pink 5—6 inches long obovate-oblong

21005 Leaves oblong-lanceolate, Spathe pedunculate long tubular fringed at top

21006 Stemless, Lvs hastately cordate acute, Lobes obtuse, Spadix male-flowered at top

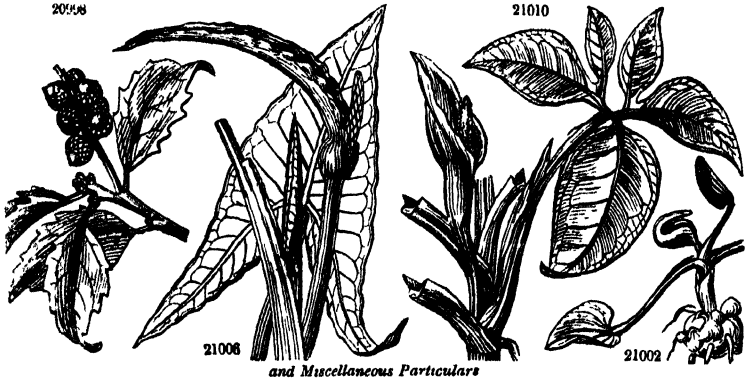
21007 Caulescent, Leaves cordate-sagittate, Spadix contracted in the middle shorter than the spathe

21008 Lvs pedate, Leaflets lanceolate horizontal, Spathe subterete inflated lanceolate at top acute, Spadix acuminate, Petioles a foot high variegated with brown spots

21009 Stemless, Leaves sagittate acute rounded at base

21010 Caulescent radicant, Leaves deeply tripartite, Lateral segments auriculed on the outside at base, Petioles winged below, Spathe exceeding the spadix

21011 Stem twining suffrutescent, Lvs ovate-lanceolate acuminate, Sheaths petiolar long equal to scape, Spathe whitish brown



and Miscellaneous Particulars

21010 *Xanthosòma* are West Indian caulescent plants with sagittate leaves and yellowish spathes. Their culture is the same as that for the caulescent tropical species of *Pothos*.

21011 *Acóntias* are South American plants with rhizomatose tuberous roots and pedate leaves, naked elongated peduncles and green spathes. Their culture is the same as for the tropical species of *Arum*.

21012 *Syngónium auritum* is a tropical herb having the rhizoma changed into a scandent elongated stem and 5-parted leaves. The peduncles are short and naked, and the spathes are of a dirty yellowish green. The culture is the same as for the tropical caulescent species of *Pothos*.

21013 *Cuicàsia scándens* is a tropical African herb with scandent stems, ovate-lanceolate acuminate leaves, and brownish spathes. The petiolar sheaths are equal to the spathes. The culture is the same as for the tropical caulescent species of *Pothos*.

3274. 2005*i*. PHILODE'NDRON *Schott*. PHILODENDRON. (*Phileo*, to love, *dendron*, a tree; epiphytal.) *Aroideæ*.
21012 - - lăcerum *Schott* jagged-leaved ♣ ▭ cu 6 d G.w Brazil 1835. C s.p Jac. sch 4 298.
Calàdium lăcerum W *A'rum lăcerum* Jac. sch. 4. 468.
21013 - - fragrantissimum *K.* very fragrant ♣ ▭ fra 6 ja Cre R Demera 1832 C s.p Bot. mag. 3314
Calàdium fragrantissimum Hook., as well as Nos 13449, 13450, 13452, 13453, 13454, 13455, 13456., and *A'rum* 13486. belong to this genus.
21014 - - crassinérvium *Lindl.* thick-nerved ♣ ▭ cu 20 d G w Brazil 1835. C s.l.p Bot. reg. 1958
21015 - - auritum *Lindl.* ear-leaved ♣ ▭ cu 10 my jl G w Guatem. 1851. C s.l.p

21016 - - cannæfŏlium *Mart.* Canna-lvd ♣ ▭ cu 1 my jl G.w Brazil 1820. C s.l.p
Calàdium crássipes Hort.

21017 - - Linnæ'a *Kth* Linnæus's ♣ ▭ cu 2 my jl R.w Surinam 1785. C s l p
A'rum cannæfŏlium Lin
21018 - - Simsii *Schott* Sims's ♣ ▭ cu 6 ap.my W. Demera. 1803. C s.l.p Bot. mag 2643
Calàdium grandifŏlium Sims. *Simsii* Hook.
21019 - - incîso-crenàtum *Kth* deeply-cren. ♣ ▭ cu 6 ap my G.w S. Amer. 1840. C s.l.p
lacinĭdsum Schott. *Calàdium lăcerum* Hort berol

3275. 2005*k*. SPATHICA'RPA *Hook* SPATHICARPA (*Spathe*, a sheath, *karpos*, a fruit.) *Aroideæ*. [2 147 77
21020 - - hastifŏlia *Hook.* halberd-leaved ♣ ▭ cu 1 jn jl W Chili ... D s.l.p Hook bot misc.

3276. 2005*l*. DIFFENB'ACHIA *Schott*. DIEFFENBACHIA. (*H Dieffenbach*, a German botanist.) *Aroideæ*
21021 - - seguina *Schott* Dumb-cane ♣ ▭ or 4 my W W Indies 1759 C s l p Hook. ex fl 1
A'rum seguinum Lin. *Calàdium seguinum* Vent No. 13451.
β *maculàta* B M. *spotted-leaved* ♣ ▭ or 4 my W Trinidad 1820. C s.l.p Bot. mag 2606

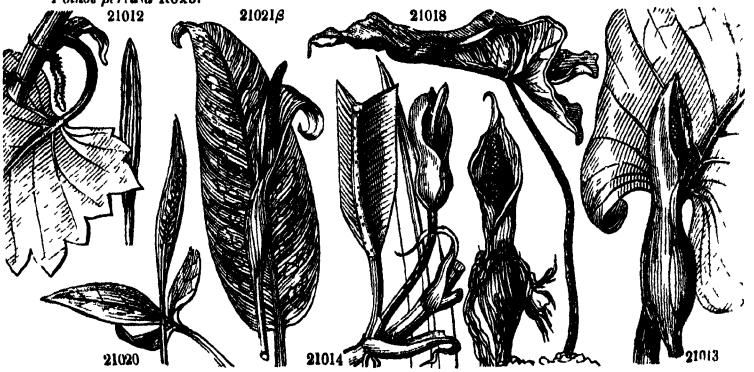
3277. 2005*m*. ANTHERU'RUS *Blume* ANTHERURUS. (*Anthera*, an anther, *oura*, a tail.) *Aroideæ*
21022 - - ternàtus *Blume* ternate-leaved ♣ ▲ cu ½ my jl P Japan 1774. R s.l.p
A'rum ternàtum Thun. No 13467 *A. bulbŏsum* Pers

3278. 2005*n* AGLAONE'MA *Schott*. AGLAONEMA. (*Aglaos*, splendid, *nema*, a filament.) *Aroideæ*
21023 - - simplex *Blume* simple ♣ ▭ or ... ... W S Amer. 1820. C s.l p Blume Rumphia [1. 65
integrifŏlium Schott. *A'rum integrifŏlium* Hort. Lk. *Calàdium simplex* Blume.

3279. 2005*o* HOMALONE'MA *Schott*. HOMALONEMA. (*Homalos*, equal, *nema*, a filament.) *Aroideæ*
21024 - - aromática *Schott* sweet-scented ♣ ▲ or 2 jl W China 1813 D r.m Bot. mag 2279
Cálla aromática Roxb. No. 5071. *Cálla occúlta* Lodd. cab 12

3280. 2005*p* MO'NSTERA *Schott*. MONSTERA. (Not explained.) *Aroideæ*. [Dec
21025 - - Adansŏnii *Schott* Adanson's ♣ ▭ cu 6 ap jn Y w W Indies 1752 Sk s l p Jac. sch 2 184
Dracóntium pertúsum Lin. No 5068 *Calla Dracóntium* Meyer
21026 - - cannæfŏlia *Schott* Canna-leaved ♣ ▲ cu 3 ap my Y w W Indies 1789 Sk s l.p Bot mag 603
Pothos cannæfŏlia Sims No 1498, as well as *A'rum lingulàtum* Lin No. 13487, belongs to this genus

3281. 2005*q* SCINDA'PSUS *Schott* SCINDAPSUS (*Skindapsos*, a plant like Ivy.) *Aroideæ*
21027 - - glaŭcus *Schott* glaucous ♣ ▭ cu 4 my jl Y Nepal 1830. Sk s l p Wall pl r 2 1 9
Pothos glaŭcus Wall.
21028 - - decursivus *Schott* running down ♣ ▭ cu 4 my jl G v E Indies 1824. Sk s l p Wall.pl r 2 19.
Pothos decursivus Roxb
21029 - - Peepla *Schott* Peepla ♣ ▭ cu 4 my.jl Y Sp E Indies 1820 Sk s l p
Pothos Peepla Roxb
21030 - - pinnatus *Schott* pinnate-leaved ♣ ▭ cu 4 my jl G v E Indies 1820. Sk s.l.p
Pothos pinnàta Roxb
21031 - - pinnatifidus *Schott* pinnatifid-lvd ♣ ▭ cu 4 my jl G v E Indies 1825. Sk s l p
Pothos pinnatifida Roxb.
21032 - - officinàlis *Schott* officinal ♣ ▭ cu 4 my jl G v E. Indies 1820. Sk s.l.p
Pothos officinàlis Roxb
21033 - - pertúsus *Schott* perforated-lvd ♣ ▭ cu 4 my jl G.v E. Indies 1824 Sk s l.p
Pothos pertúsa Roxb.



History, Use, Propagation, Culture,

3274. ***Philodéndron*** is a genus of tropical plants having the rhizomas changed into scandent or subarborescent stems The leaves are large, remote, and often lobed The culture is the same as for the tropical species of *Pothos*
3275. *Spathicárpa hastifŏlia* is a South American herb, with a solitary radical hastately 3-lobed membranous reticulately veined leaf on a long stalk, and slender erect scapes. Culture the same as for the tropical species of *A'rum*
3276. *Dieffenbáchia seguina*. This is a tropical plant with a thickish erect stem and oblong-ovate nerved leaves The peduncles are short and recurved in the fruit-bearing state. The culture is the same as for *Pothos*
3277 *Antherúrus* Stemless herbs with tuberous roots, and triparted leaves on long petioles. The scapes are solitary, and sometimes bear bulbs as do the petioles. The spathes are narrow, green, and striated Culture the same as for hardy species of *A'rum*.

21012 Caulescent radicant, Leaves cordate sinuately pinnatifid

21013 Caulescent radicant, Lvs cordate-oblong sagittate, Petiole semiterete marginate, Spadix acute, about equal to the spathe which is cucullately cylindrical contracted in the middle and ventricose at base [apiculate length of spadix

21014 Caulescent radicant, Lvs petiolate lanceolate acuminate with a very thick inflated midrib, Spathe obtuse cucullate

21015 Caulescent radicant, Leaves hastate 3-parted subcordate with an open recess, Lobes oblong acuminate wavy divergingly veined, Style fleshy, Stigma membranous rayed Cells of fruit 1 ovulate

21016 Stemless, Lvs on longish petioles ovate-lanc. acute rounded at base finely ribbed coriaceous deep green shining paler beneath, Midrib thickened, Petioles thick shorter than leaves, Spadix on short peduncles, Spathe convolute at base exceeding the spadix a little

21017 Stemless, Lvs lanceolate veinless, Leaves 2 feet longer than scape, Spathe bluntish red outside and white inside and on the edges

21018 Caulescent radicant, Lvs shining cordate-sagittate acute, Petioles terete, Spadix obtuse about equal to spathe which is cucullately cylindrical constricted in the middle and ventricose at base

21019 Caulescent radicant, Leaves on long petioles ovate-elliptic cordate at base rounded at top entire or deeply crenated 5-nerved at base, Petioles longer than leaves thickened a little at base

21020 Stemless, Leaf radical solitary on a long petiole hastately 3-lobed membranous reticulately veined, Petioles sheathing at base, Scape slender erect exceeding the leaves, Spathe linear

21021 Stem thickish erect, Leaves oblong-ovate cuspidate, Peduncles short reflexed when bearing the fruit

β Leaves spotted and blotched with white and yellow

21022 Leaves ternate, Scape longer than the bulb-bearing petiole

21023 Caulescent, Leaves oblong with risen veins, Spathe yellowish green and lined lengthwise white and varnished inside

21024 Caulescent, Lvs subsagittately cordate acuminate, Lobes rounded and divaricate, Spadix cylindric, obtuse equal to the beak-shaped spathe, Anthers many-celled

21025 Leaves obliquely ovate-cordate pertuse, Spathe boat-shaped

21026 Lvs obovate-lanceolate acuminate at both ends ribbed, Spathe oblong acuminate flat subpetiolate sheathed about equal to the spadix

21027 Shrubby radicant, Lvs ovate on long petioles cordate acuminate shining glaucous beneath irregularly pinnate, Segments oblong-falcate acuminate 3—5-nerved, Spadix axillary solitary on long peduncles

21028 Caulescent radicant, Lvs elliptic-oblong cordate on long petioles pinnate, Segments linear-falcate cuspidate 3—4-nerved, Spadixes axillary and lateral on short peduncles

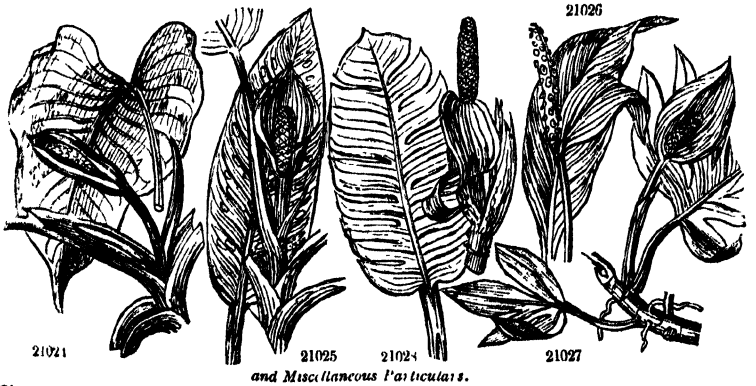
21029 Caulescent radicant, Leaves on long petioles oblong acuminate entire, Spadix nearly terminal pedunculate, Flowers subtetrandrous

21030 Leaves ovate pinnate filamentosely fibrous at base, young ones entire, Spathe ovate-oblong acuminate erect, Spadix oblong cylindrical obtuse

21031 Caulescent radicant, Outer branches leaflets whip-formed and pendulous, Leaves ovate-cordate entire or pinnatifid, Segments subensiform 1-nerved

21032 Caulescent radicant, Leaves petiolate oblong-cordate cuspidate, Spadix terminal solitary on short peduncles, Flowers suboctandrous

21033 Caulescent radicant, Leaves on long petioles cordate perforated on one side and pinnatifid on the other, Spadix on short peduncles, Spathe gibbous exceeding the spadix, Flowers subtetrandrous



and Miscellaneous Particulars.

3278 *Aglaonèma* is a genus of erect tropical caulescent herbs, with oblong nerved leaves, having the petioles sheathing even to the very top. The peduncles are very short, and the spathes are white and sweet-scented. Culture of *Pothos*

3279 *Homalonèma* are subcaulescent herbs with cordate or sagittate leaves, short peduncles, and aromatic spathes. Culture the same as for the tropical caulescent species of *Pothos*.

3280 *Monstera* Caulescent scandent radicant plants, with simple leaves, cultivated in the same manner as tropical species of *Pothos*.

3281 *Scindápsus*. Caulescent scandent plants, similar to *Monstera*, and requiring the same treatment.

3282. 2005*r*. SAUROMA'TUM *Schott*. SAUROMATUM. (*Saura*, a lizard; spadix like.) *Aroideæ*.
21034 - - pedàtum *Schott* pedate-leaved ¥ ⍓ cu 1½ mr G Y P Caracas 1815. D s.l.p L.k. et Ot. 19 8
A'rum pedàtum Willd., as well as No 13464 belongs to this genus
21035 - - guttàtum *Schott* spotted ¥ ⍓ or 1½ mr Br.P Bengal 1830. D s.l p Wal. pl as 2. 111
A'rum guttàtum Wall.

3283. 2005*s*. DRACU'NCULUS *Tourn*. DRACUNCULUS. (*Drakon*, a dragon) *Aroideæ*.
21036 - - vulgàris *Schott* common Drag. ⅄ △ cu 3 jn jl Br S.Europe 1548 R s.l Lam ill. 740 2
polyphýllus Blume *A'rum Dracúnculus* Lin. No. 13462, as well as No. 13461., belongs to this genus

3284 2005*t*. PYTHO'NIUM *Schott*. PYTHONIUM (*Python*, a serpent; form of spadix.) *Aroideæ*.
21037 - - Hookèrii *Kth*. Hooker's ⅄ ⍓ cu 1 ap jl G.Y P N Guin. 1840 R s.l.p Bot. mag. 3728
Calàdium petiolàtum Bot mag 3728.
21038 - - Wallichiànum *Kth* Wallich's ⅄ ⍓ cu 1½ su W Nepal 1816. R s.l p Wal. pl rar 1
Thomsònia nepalénsis Wall

3285. 2005*u* AMORPHOPHA'LLUS *Blume*. (*Amorphos*, disfigured, *phallos*; form of spadix.) *Aroideæ*
21039 - - gigantèus *Blume* giant ⅄ ⍓ cu 1½ ... P E. Indies 1799. R s.l p Bot rep 706
Dracóntium polyphýllum Houtt.
21040 - - campanulàtus *Blum*. campanulate ⅄ ⍓ cu 1½ ... P Ceylon 1816. R s l.p Bot. mag. 2812
Tácca phallifera Blume. *A'rum campanulàtum* Roxb *Candàrum Roxbúrghii* Schott.
21041 - - búlbifer *Blume* bulb-bearing ⅄ ⍓ cu 1½ mr jn R E Indies 1813. R s l p Bot mag 2672
A'rum bulbíferum Roxb. *Pythónium bulbíferum* Schott. *Calàdium bulbíferum* B. mag. No. 13488 [2508

3286. 2005*v*. REMUSA'TIA *Schott*. REMUSATIA. (*Abel Remusat*, a celebrated linguist) *Aroideæ*
21042 - - vivípara *Schott* viviparous ¥ ⍓ cu 1½ my Y Nepal 1817. R s.l.p Lod bot.cab 281
Calàdium vivíparum Nees. *A vivíparum* Roxb. No. 13483. *Ariópsis peltàta* J. Graham, Bot. mag. 4222

3287. 2005*w*. COLOCA'SIA *Rajan* COLOCASIA (*Culcas*, its Arabic name?) *Aroideæ*. [110
21043 - - antiquòrum *Schott* Egyptian ⅄ ⍓ cu 2 ... G Greece 1551. R s.l.p Rum amb. 5 100
A'rum Colocàsia Lin. No. 13468, and Nos. 13447, 13448, 13457. 13469. 13479, 13480., belong to this genus

3288. 2005*x* GONATA'NTHUS *Klotzsch*. GONATANTHUS. (*Gonia*, an angle, *anthos*, a flower.) *Aroideæ*
21044 - - sarmentòsus *Klotz* sarmentose ¥ ⍓ or 1 ... Y Brazil 1848. D s.l p
Calàdium sarmentòsum Hort. Berol.

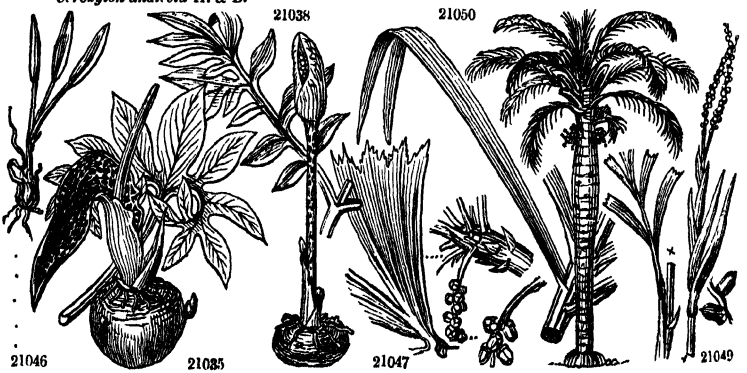
3289. 2005*y* TYPHO'NIUM *Schott*. TYPHONIUM (*Typho*, to burn; acrid.) *Aroideæ*
21045 - - trilobàtum *Schott* three-lobed-lvd ⅄ ⍓ cu 1 my.jn P E Indies 1714 R s.l p Bot mag 339
A'rum orientàle Roxb. *A. trilobàtum* Lin No. 13471., as well as No. 13473., belongs to this genus

3290. 2005*z*. BIA'RUM *Schott*. BIARUM. (*Bis*, twice, and *Aron*.) *Aroideæ*
21046 - - gramíneum *Schott* grassy-leaved ⅄ △ cu 1 ap my W S Europe 1824. D co Bocc sic 49
A'rum gramíneum Lam., as well as No. 13478, belongs to this genus.

2007. CARYO'TA.
21047 13492*as*oboliféra *Wall*. soboliferous ⅄ ▭ or 20 ... Str E. Indies 1788. S r.m Mart. palm 167 2
úrens Jac frag. 12. 0.
21048 - - hórrida *Jacq*. horrid ⅄ ▭ or 20 ... Str Caracas 1820. S r m

3291. 2007*a* ORA'NIA *Blume* ORANIA. (*Ouranos*, heaven) *Pálmæ*.
21049 - - porphyrocárpa *Bl*. red-fruited ⅄ ▭ or 7 ... Str Java 1840. S r m Mart. palm 167
Caryòta húmilis Reinw. *Oránia regàlis* Blume in Rumph. 2. t. 87.

3292. 2007*b* IRIA'RTIA *Ruiz & Pav*. IRIARTIA. (*Juan Iriarte*, a Spanish amateur botanist) *Pálmæ*
21050 - - andícola *Spreng*. Andes ⅄ ▭ or 60 ... Crea Quindiu 1840. S r.m H B eq 1 1 1 1
Ceróxylon andícola H. & B.



History, Use, Propagation, Culture,

3282. *Sauromàtum*. Tropical herbs having globose fleshy tubers and short radical scapes, which are solitary and scaly at base. The leaves are pedate-parted and many-lobed. Culture of tropical species of *A'rum*.

3283 *Dracúnculus*. Stemless plants with globose tuberous roots and pedate-parted leaves. The petioles are dilated and stem-clasping at the base. The scapes rise from sheaths of the inner leaves. The spathes are fetid Culture of *A'rum*.

3284. *Pythónium*. Stemless herbs with flattened, nearly globose, tuberous roots, with generally a solitary bipinnatifidly compound leaf, longish erect scapes which are sheathed at base, and reticulated spathe inclosing the spadix. Culture the same as for the tropical species of *A'rum*.

3285. *Amorphophállus* is a genus of tropical herbs, with flat tuberous roots, decompound leaves, and radical scapes Culture same as for tropical species of *A'rum*

3286. *Remusàtia vivípara* Stemless succulent herbs with tuberous rhizomatose roots, having the branches elongated and bearing bulbs The leaves are petiolate and peltate caudate acuminate, the peduncles are short, and bracteate, and the spathes yellow. Culture of tropical species of *A'rum*.

3287. *Colocàsia*. Herbs with tuberous roots, or shrubs with stems. The leaves are peltate.

21034 Stemless, Lvs simple ternate and pedate, Leaflets 5—9 oblong acuminate entire, Spathe ventricose at base connate with a flattish lamina exceeding the spadix

21035 Nearly stemless, Lvs pedately many-parted, Lobes oblong acuminate, Spathe irregularly undulately repand at the mouth of the tube

21036 Lvs pedate-parted, Segments uniform lanceolate middle one the largest, Spathe furrowed inside warted, Spadix smooth at apex

21037 Lvs ternate on long petioles, Lflts pinnatifid, Segms ovate acute entire or divided, Scape and petioles muricated at bottom, Spathe oblong acum much exceeding spadix, Ovaria ovate attenuated reflexed tubercled

21038 Tuber depressed, Leaf large solitary tripartedly cut several times petiolate, Secondary segms lanceolate acuminate, Outer segments pinnate, Scape variegated with purple involved in two membranous scales at base, Spathe thick boat-shaped convolute at bottom cucullate at top, Spadix clavate length of spathe

21039 Petioles rough from warts, Spathe ovate acute spreading equal to conoid spadix

21040 Petioles rough from warts, Spathe ovate bluntish spreading at top exceeding a little the cylindrical fusiform spadix

21041 Petioles smooth, Rachis of leaves bearing bulbs, Spathe ovate obtuse cucullate equalling the obtuse clavate spadix

21042 Rhizoma tuberous throwing out elongated bulb-bearing leafless branches, Lvs on long petioles peltate cordate acuminate, Peduncles short bracteate, Spathe yellow

21043 Stemless, Leaves peltate ovate repand semibifid at base, Scape shorter than petioles, Spathe much longer than spadix, Anthers many-celled

21044 Stemless sarmentose, Leaves on long petioles peltate cordate acuminate, Spadix terminating the scape, Spathe yellow

21045 Lvs cordate sagittate entire or tripartite, Lobes with a prominent angle outside at base, Spathe ovate-lanceolate reflexed at apex equal to the awl-shaped spadix, Rudimentary organs glomerate bristle-formed

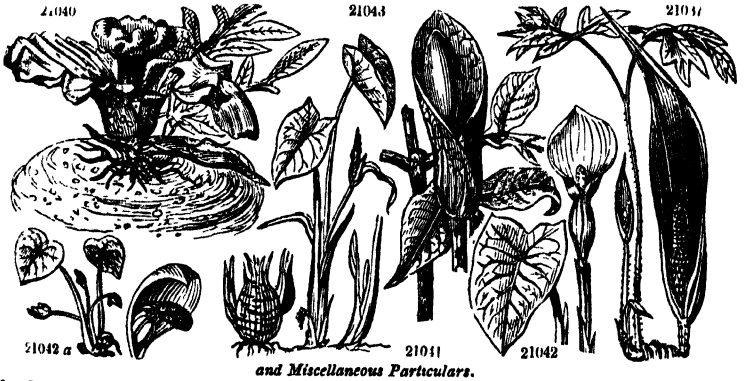
21046 Lvs linear-lanceolate, Spathe erectly incurved, Spadix elongated filiform obtuse nutant

21047 Soboliferous, Pinnula obliquely triangular cuneate downward, drawn out on the outside, unequally and deeply jagged in front, Male flowers with 12—18 stamens, Berry globose depressed 1-seeded

21048 Caudex and fronds very spiny

21049 Caudex humble slender annulate, Fronds pinnate, Leaflets sinuately fiddle-shaped with a solitary primary nerve erosely and doubly toothed white beneath

21050 Caudex a little tumid above, Lvs pinnate, Pinnæ coriaceous plicate entire bifid at top covered with silvery powder, Spathe solitary deciduous, Spadix compound pendulous hermaphrodite above and mixed with male flowers, Lower female flowers subdodecandrous, Berries globose



and Miscellaneous Particulars.

3288 *Gonatánthus sarmentósus* is a stemless sarmentose herb, with peltate cordate acute leaves on long petioles, and a yellow spathe. Culture of *Póthos*.

3289 *Typhónium* Stemless herbs with rhizomatose tuberous roots, and cordate or hastate nerved long-stalked leaves The scapes are elongated, and rise from the sheathed bases of the leaves. Culture as for tropical species of *Arum*.

3290. *Bidrum* is a genus of European humble stemless herbs, with tuberous rhizomatose roots, and lanceolate or ovate undivided feather-nerved leaves on long petioles, petioles membranous, dilated, and sheathing at base The scapes are usually solitary, rarely aggregate. The spathes are dirty green outside and purple inside, as well as the naked top of the spadix. Culture the same as for hardy kinds of *Arum*.

3291 *Ordóna porphyrocárpa* is a slender palm tree with annulate unarmed caudex and pinnate fronds. The pinnæ are cuneate and a little lobed, and erosely toothed. The fruit is red, about the size of an olive.

3292 *Iriártia andícola* is a palm tree having a very tall unarmed annulate cylindrical caudex tumid in the middle, pinnate fronds, cream-coloured flowers, and yellowish brown fruit.

MONADELPHIA.

2009. ARE'CA.

21051	13498	*atriándra Rozb.*	triandrous		or	30	...	Str	Silhet	1819.	S	r.m	Mart. palm 149
21052	-	*crínita Bory*	hairy		or	40	...	Str	Bourbon	1819.	S	r.m	Ma. p. 154. 155 1
21053	-	*álba Bory bonbónica* Hort.	white		or	30	...	Str	Bourbon	1820.	S	r.m	Mart. palm 154 2
21054	-	*rúbra Bory Eutérpe pinifera* Gærtn.	red		or	30	...	Str	Bourbon	1823.	S	r.m	M. p. 154 155 3
21055	-	*sápida Sol. Bánksii* Cun.	sapid	*E. oleràcea β* Mart.	or	20	..	Str	Norf. Isl.	1826.	S	r.m	Mart. p. 151-1 2

3293. 2009*a*. DESMO'NCUS *Mart.* (*Desmos*, a bond; *ogkos*, a hook; hooks at end of rachis.) *Pálmæ*

21056	-	orthacánthos *Mart*	straight-spined		or	6	..	Crea	Brazil	1822.	S	r.m	Mart. palm 97 98
21057	-	polyacánthos *Mart.*	many-spined		or	6	.	Crea	Brazil	1822	S	r.m	Mart palm 96
21058	-	oxyacánthos *Mart.*	sharp-spined		or	6	...	Crea	Brazil	1824.	S	r.m	

3294. 2009*b* JUBÆ'A *H B. & Kth.* JUBÆA (*Juba*, King of Numidia.) *Pálmæ.*

21059	-	yuccoides *H K.*	Yucca-like		or	10	.	Str	S Amer.	...	S	r m	[1 96
21060	-	spectábilis *H B & K*	showy		or	36	...	Str	Chili	...	S	r.m	H B & K n gen

3295 2009*c* ATTA'LEA *Mart.* (*Attalus III. Philometor*, King of Pergamus.) *Pálmæ*

21061	-	húmilis *Mart.*	humble		or	6	...	Str	Brazil	1823	S	r m	
21062	-	cómpta *Mart*	decked		or	10	...	Str	Brazil	1823.	S	r.m	M p 41 75 97
21063	-	funífera *Mart.* *Cócus lapídea* Gærtn	rope-bearing		or	30	...	Str	Brazil	1823.	S	r.m	M p 95 96 4
21064	-	excélsa *Mart*	tall		or	100	...	Str	Brazil	1823	S	r m	Mart. palm. 96 3
21065	-	speciósa *Mart*	handsome		or	60	...	Str	Brazil	1824	S	r m	
21066	-	spectábilis *Mart.*	showy		or	20	.	Str	Brazil	1824.	S	r m	Mart p 96 1 2

3296 2009*d* MANICA'RIA *Gærtn* MANICARIA (*Manica*, a glove; spathe like) *Pálmæ.* [230 198 199

21067	-	saccífera *Gærtn*	sack-bearing		or	25	...	Crea	Guiana	1822.	S	r.m	Mart. palm 193

3297. 2009*e* ARE'NGA *Labill* ARENGA. (Not explained by author) *Pálmæ*

21068	-	saccharífera *Labill*	sugar-bearing		or		...	Str	Asiatic I.	1830.	S	r m	Mart palm 196

3298 2009*f* CYCLA'NTHUS *Poit* CYCLANTHUS (*Kuklos*, a circle, *anthos*, a flower.) *Pandàncæ*

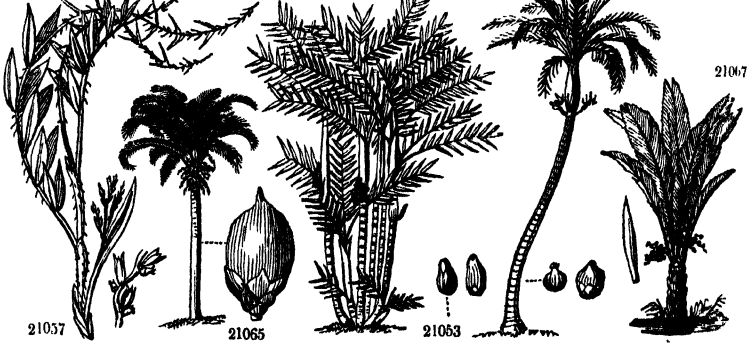
21069	-	bipartítus *Poit*	bipartite-lvd		or	3	su	G	Trinidad	1820.	D	r.m	Poit. ann m 6 2

3299 2011*a* DA'MMARA *Lamb* DAMMARA (Ambovna name of *D orientàlis.*) *Conifræ*

21070	-	Moórei *Lindl*	Moore's		or	30	.	Ap	N Caled	1850	C	p l	
21071	-	obtúsa *Lindl*	blunt-leaved		or	40	...	Ap	Amiteura	1850	C	p l	Px fl. g 2 116 200
21072	-	macrophýlla *Lindl*	large-leaved		or	100	...	Ap	Vanicola	1850.	C	p l	

2012 PI'NUS

21073	18070*a*	Devoniàna *Lindl*	D of Devonsh.		or	80	...	Ap	Mexico	1839.	S	s l p	Loud tr 1877 8
21074	-	Russelliàna *Lindl.*	D of Bedford's		or	60	...	Ap	Mexico	1839.	S	s l p	Loud tr 1877 80
21075	-	Hartwégii *Lindl*	Hartweg's		or	40	...	Ap	Mexico	1839.	S	s l p	Loud tr 187
21076	-	filifólia *Lindl*	thread-leaved		or	60	.	Ap	Guatem.	1839.	S	s l p	Loud tr 1880 90
21077	-	macrophýlla *Lindl*	long-leaved		or	60		Ap	Mexico	1839	S	s l p	Loud tr 1880



History, Use, Propagation, Culture,

3293. *Desmóncus* is a genus of Brazilian palms, with reed-like flexuous stems and sometimes scandent, all of them supported by other plants. They are all furnished with large straight or hooked prickles. The fronds are scattered distantly on all parts of the stem or caudex, and they are remotely pinnate. The petioles are furnished with long sheaths, and are extended into strong tendrils with recurved hooks by which they hold by other plants. Flowers cream-coloured. Drupes red.

3294. *Juba'a.* Tall palm trees, with thick stems, beset with the scale-like rudiments of the petioles. The spadix is branched. *J. spectábilis* is called *Coquito* in Chili, and is cultivated in gardens about Popayan for the sake of the nuts, which are edible.

3295. *Attálea* is composed of tall or middle-sized palm trees, which are often prickly. The fronds are large and pinnate, and very neat. The spadixes rise from the bases of the fronds, and are simply branched, but in the fruit bearing state they are large, and droop from the weight of the fruit. The flowers are cream-coloured, the fruit is brown, and the nuts are edible.

MONADELPHIA.

[much branched erect, Male flowers twin triandrous uniserial, Fruit oblong

21051 Unarmed, Stem tall stoloniferous, Pinnæ oblong-linear, Upper ones usually confluent truncate toothed, Spadix
21052 Caudex tall, Petioles densely clothed with brown hairs inside and rachis with brown scales, Pinnæ linear-lanc. acute at length bifid at apex, Spathe toment., Spadix flexuous at base, Male flwrs 12-androus, Fruit obl.
21053 Unarmed, Caudex tall, Margins of petioles and nerves reddish, Pinnæ narrow-lanceolate acuminate at length equally bifid, Spadix fastigiate, Male flowers hexandrous, Fruit ovate-conical beaked
21054 Caudex tall, Petioles and rachis prickly, Pinnæ linear-lanceolate acuminate glaucous beneath with setose edges, Spadix and spathe prickly at base straight, Male flowers hexandrous, Fruit ovate-globose beaked
21055 Unarmed, Caudex middle-sized, Pinnæ linear-lanceolate, terminal one præmorse, Ribs and rachis beset with blood-red dots beneath, Spadix much branched, Fruit ovate

21056 Subscandent, Petiolar sheaths as well as hind part of rachis prickly, Prickles straight compressed, Tendrils hooked, Pinnæ oblong-lanceolate acuminate, Inner spathe unarmed, Fruit pea-formed
21057 Petiolar sheaths beset with hooked prickles as is the rachis, Tendrils hooked, Pinnæ oblong tapering to both ends, Inner spathe prickly, Prickles nodose at base, Fruit globose
21058 Prickles on petiolar sheaths straight thickened at base, those of the rachis hooked, Tendrils hooked, Pinnæ oblong-lanceolate acuminate, Inner spathe very prickly, Fruit obovate

21059 A very pretty palm cultivated in Kew Gardens, but we know nothing else about it
21060 Caudex tall thick, Fronds pinnate, Spadix branched, Rudiments of petiole scaly

21061 Humble, Fronds erectly spreading, Fruit elliptic umbonate
21062 Caudex middle-sized thick often wanting, Fronds spreading, Base of petioles naked, Drupe obovate beaked
21063 Caudex tall, Fronds erect, Base of petioles fibry, Drupes elliptic

21064 Caudex very tall, Fronds erectly spreading, Drupes oblong rather 5-angled acute
21065 Caudex very tall, Fronds erectly spreading, Drupes ovate-oblong conically beaked
21066 Caudex short 3—4 feet or wanting, Fronds erectly spreading, Drupes ovate umbonate, Fronds 18—20 feet

21067 Fronds large entire oblong serrated, Calyxes jagged

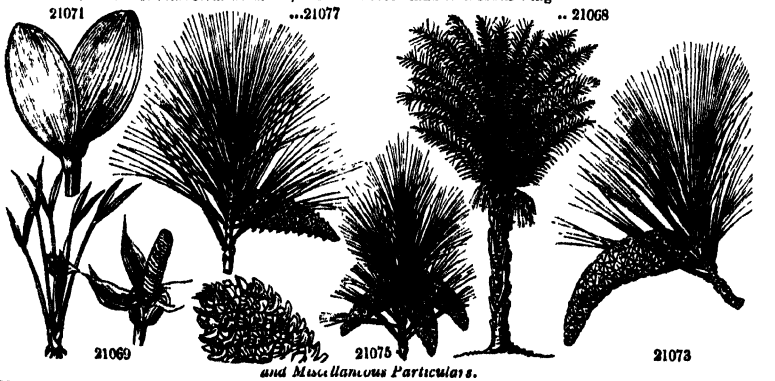
21068 Petioles unarmed, Pinnæ linear-lanceolate acuminate entire or emarginate and subdenticulate biauriculate at base white and silvery beneath, Lower auricle largest, Branches of spadix elongated fastigiate pendulous

21069 Leaves deeply bipartite, Segments lanceolate-linear acuminate

[*D. austrâlis*

21070 Lvs narrow-lanceolate acuminate subfalcate thin willow-like 5—6 in long, Cone smaller and more rigid than in
21071 Lvs oblong rounded at top 4 inches long, Cones oblong cylindrical 3 inches long, Tops of scales convex closely pressed 4 times broader than long, Timber valuable
21072 Lvs large ovate-lanceolate acute 7 inches long, Cones spheroid 4 inches long, Tops of scales flat closely pressed 5 times broader than long

21073 Lvs in fives long, Cones pendulous solitary curved, Scales rounded at apex rhomboidal abruptly umbonate in middle obtuse smooth, Seeds ovate 5 times shorter than blackish wing
21074 Lvs in fives long Cones elongated horizontal verticillate straightish sessile, Scales rhomboidal at apex pyramidal obtuse, Seeds oblong 4 times shorter than their blackish wing
21075 Lvs in fours 6 inches long, secondary one narrowest primary ones membr. elong. scar, Scales transv., of apex depressed in middle umbonate and keeled, Seeds roundish wedge-shpd 4 times shorter than testaceous wing
21076 Branches stiff thick, Scales of bud linear ciliated, Lvs in fives 1½ foot long triangular, Sheath long smooth, Cones elongated obt., Scales with lozenge-shaped depressed pyramidal apexes terminated by an obt. mucrone
21077 Lvs in fives very long, Cones straight horizontal ovate elongated solitary, Scales transverse at apex rhomboidal uncinate, Seed subrhomboidal wrinkled, 4 times shorter than testaceous wing



and Miscellaneous Particulars.

3296. *Manicaria* is a middle-sized palm tree. The fronds are 15—20 feet long on unarmed petioles, which are beset with short brown hairs. The spadix is 2—3 feet long. The flowers have a very strong narcotic smell. The spathe is 3—4 feet long, fusiform or compressed, tapering to both ends, and terminated by a 2-edged echinate mucro.

3297. *Arénga saccharífera.* This palm has various uses: the fibres of the petioles are twisted into ropes, the mealy medulla of the trunk is used for the preparation of sago, and the saccharine juice of the spadix is made into sugar. The berries are full of stings.

3298. *Cyclánthus.* A stemless plant nearly related to *Carludóvica.* The leaves are all radical, on long petioles, and bifid and plicate. The peduncles are radical, and shorter than the petioles. The spathes are entire or 2-lobed and deciduous. The plants are of easy culture, and require shade and moisture.

3299. *Dammara.* This genus is the same as *Agathis* No. 2011. The species are all broad-leaved coniferous trees, which furnish very valuable timber. They are all of easy culture, and can be increased by cuttings.

21078 -	- Pseudo-Strobus *Ldl.* False Strobus		♀	⌐	or ...	...	Ap	Mexico	1839	S	s.l.p	Loud. tr 1867
21079 -	- apulcénsis *Lindl.*	Apulco	♀	⌐	or ...	...	Ap	Mexico	1839.	S	s.l.p	L. tr. 1869-1966
21080 -	- Grenvilleæ *Gord.*	Lady Grenville's	♀	⌐	or 80	...	Ap	Mexico	1846.	S	s.l.p	J. H. S. 2 78
21081 -	- Gordoniàna *Hartw.*	Gordon's	♀	⌐	or 80	..	Ap	Mexico	1846.	S	s.l.p	J. H. S 2 80
21082 -	- Orizàbæ *Hartw.*	Orizaba	♀	⌐	or 30	...	Ap	Mexico	1845.	S	s.l.p	J. H S 1 234
21083 18066*a*	radiàta *D Don*	rayed	♀		or 100	..	Ap	Californ.	1829.	S	co	Lamb pin 3 [illegible]
21084 -	- tuberculàta *D Don*	tuberculate	♀		or 100	...	Ap	Californ.	1829.	S	co	Lamb pin 3 [illegible]
21085 ·	*californica* Hartw. - cembroides *Zucc.*	Cembra-like	♀	⌐	ec 20	...	Ap	Mexico	1845.	S	co	J. H S 1 226
21086 -	- Fremontiàna *Endl* *monophýlla* or *Nut Pine* Torrey.	Cap Fremont's	♀		ec 20	...	Ap	Californ	1848.	S	co	*Elaveàna* with a thin-shelled seed *Hartw*
21087 -	- muricàta *D Don*	muricate coned	♀		or 40	...	Ap	Californ.	1848	S	co	Lamb pin 3 [illegible]
21088 -	*Edgariàna* Hartw. - Benthamiàna *Hart.*	Bentham's	♀		or 200	...	Ap	Californ.	1847.	S	co	J H. S 4 217

2013 A'BIES.

21089 18078*a*	jezoénsis *Siebold*	Jezo	♀		or	jn	Ap	Japan	1849.	S	co	Px fl g 1 43
21090 -	- religiòsa *Lindl*	sacred	♀	⌐	or 100	...	Ap	Mexico	1839.	S	co	Lamb pin 1 [illegible]
	Pinus religiòsa Kth. *Picea religiòsa* Lamb											

3300. 2013*a*. CE'DRUS *Barrel* CEDAR (*Cedrus*, cedar) *Coniferæ*

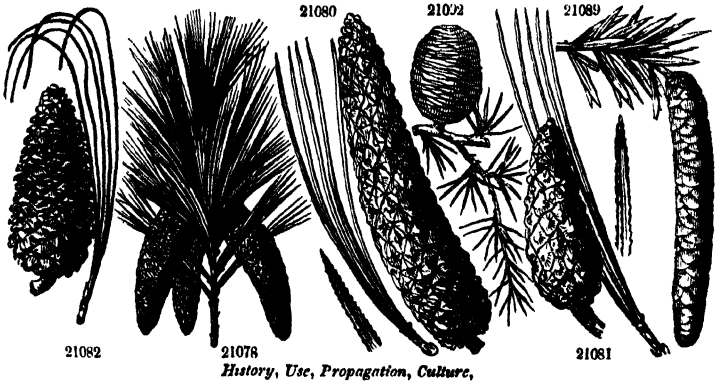
21091 -	- Libàni *Barrel.*	C. of Lebanon	♀		or 80	...	Ap	Syria	1683	S	co	Lamb pt 2 ed
21092 -	- Deodàra *Roxb*	Deodar	♀		or 100	...	Ap	Nepal	1822	S	co	Lamb pt 2 ed
	Pinus Deodàra Lamb											

2016. PODOCA'RPUS.

21093 13542*a*	acuprésinus *R Br* *imbricàta* Blume.	Cypress-like	♀	⌐	or 60	...	Ap	P Penang	1840.	C	s.l p	Horsf pl [illegible]
21094 -	- Totárra *D Don*	Totarra	♀	⌐	or 60	..	Ap	N Zeal.	1840.	C	s.l p	
	Dacrýdium taxifólium Sol. MS											
21095 -	- ferrugíneus *D Don*	rusty	♀	⌐	or 60	..	Ap	N Zeal	1840	C	s l p	
21096 -	- latifólius *Wall.*	broad-leaved	♀	⌐	or 100	...	Ap	Japan	1828	C	s l p	Wall p 1 [illegible]
21097 -	- coriáceus *Rich.*	leathery	♀	▭	or 50		Ap	Jamaica	1824	C	s.l p	Hook Lond J [illegible] 1 3 21 [illegible]
21098 -	- nubígenus *Lindl*	cloud	♀	⌐	...	...	Ap	Patagon	1850.	C	s l p	
21099 -	- neriifólius *D. Don*	Oleander-lvd	♀	⌐	...	...	Ap	Nepal	1809	C	s.l.p	Bot. mag 4
	macrophýllus Wall.											
21100 -	- Yácca *G. Don*	Yacca	♀	▭	or 120	...	Ap	Jamaica	1840.	C	s l p	Hook ic 638
	Purdeànus Hook.											

2017. CUPRE'SSUS

21101 13544*a*	Goveniàna *Gord*	Gowen's	♂		or 10	...	Ap	Californ	1848	C	co	J.H S 1 [illegible]
21102 -	- torulòsa *D Don*	torulose	♀		or ..	...	Ap	Himalay	1836	C	co	P fl g 1 [illegible]
21103 -	- macrocárpa *Hartw*	large-fruited	♀		or 60		Ap	Californ.	1836.	C	co	J H S 4 [illegible]
	Lambertiàna Hort.											
21104 -	- thurífera *H B & K*	frankincense	♀	⌐	or 60	...	Ap	Mexico	1838	S	co	
21105 -	- funèbris *Endl*	funeral	♀		or ...	..	Ap	China	1849	C	co	Px. fl g 1 67 3
	péndula Lamb pin. ed 2 66. Staunt emb t 41., not Thunb.											



History, Use, Propagation, Culture,

21086. *Pinus Fremontiàna*, or Nut Pine. The kernels of the seed are pleasant in flavour and very nutritious, and they constitute the principal subsistence of the Indians who live in the mountains where the tree grows, for six months out of the twelve The shell of the seed is so thin that it can be broken between the thumb and finger

21089. *Abies jezoénsis*, or Jezo Spruce, is so called because it grows in the islands of Jezo and Krafto in Japan whence it has been introduced to the gardens of the wealthy inhabitants of Jedo. Siebold describes it as a large tree, with a soft light wood, employed by the Japanese for arrows, and in the construction of domestic utensils. The plant is now introduced into England by Messrs. Standish and Noble. The leaves are of a bright green when young in two rows; about 1½ inch long and a line and a half broad; soft when young, but stiff when old, and terminated gradually by a distinct spine. The branches, when young, are covered with rusty down, but, when old, become smooth The cones are narrow, tapering, rather more than 6 inches long.

21092. *Cèdrus Deodàra*, or Indian Cedar, furnishes an excellent timber, and possesses all the qualities attributed by the ancients to Cedar of Lebanon. It is very compact and resinous, and has a fine, fragrant, refreshing smell, and

21078 Lvs in fives slender glaucescent, Cones oval verticillate horizontal, Scales rhomboidal at apex pyramidal erect with a transverse elevated line, Seed oval 4—5 times shorter than blackish wing
21079 Lvs in fives short slender glaucous, Cones pendulous verticillate ovate acute, Scales rhomboidal pyramidal straight sometimes prolonged and contracted in the middle, Seed oval 4 times shorter than the linear wing
21080 Lvs by fives 14 inches long triquetrous strong serrulated with rather long subscarious sheaths, Cones sessile solitary pendulous very long, Scales rhomb-tetragonal wrinkled, Wing 2-lobed longer than the seed
21081 Lvs by fives slender very minutely serrulated very long with scaly subscarious sheaths, Cones usually solitary pendu ov.-oblong, Scales rhomboid hardly pyram. wrinkled obt., Seed small with a sublanc. obt. wing
21082 Lvs by fives filiform triquetrous 8—10 inches long with rough angles and terete glabrous sheaths, Cones pedunculate pendulous 4—5 together ovate obtuse, Scales truncate ribbed recurved and obtuse at top
21083 Lvs in threes Cones ovate with unequal sides, Scales cleft radiately truncate with a depressed umbilicus gibbous somewhat recurved
21084 Lvs in threes, Cones oblong with unequal sides, Scales quadrangular truncate at apex with a depressed umbilicus, those at base larger elevated and conical
[long with 6—7 rows of scales, Scales ruded those at base rather hooked each scale containing 2 wingless seeds
21085 Lvs in threes ½ inch long stiff twisted pale green, Brnchs vert 5 or more in a whorl, Cones sol. sessile 3 inches
21086 Lvs in twos or threes or even solit glauc green 1½ to 3 inches long stiff ending in a spiny point, Sheaths very short and rolled backwards, Brnchs in whorls, Cones 2½ inches long with from 6—7 rows of scales, Scales thick larger ones near the middle bluntly pyramidal slightly angular and more or less recurved downwards, Seeds wingless oblong or egg-shaped ¼ inch long dark brown with a thin shell
21087 Lvs in threes, Cones ovate with unequal scales, Scales wedge-shaped flattened mucronate, those at base elongated compressed recurved
21088 Lvs in threes resembling those of Pinaster 11 inches long, Sheaths slightly shaggy, Cones 3—4 together slightly pendulous 6 inches long, Scales largest in the widest part of the cone all elevated in the centre

21089 Lvs green distich mucronate, Cones narrow 6 inches long, Scales loose rounded convex
21090 Lvs linear acute entire distich, Cones roundish-oval, Scales trapeziformly cordate, Bracts length of scales spatulate-oblong sharply toothed, Wing of seed plicate

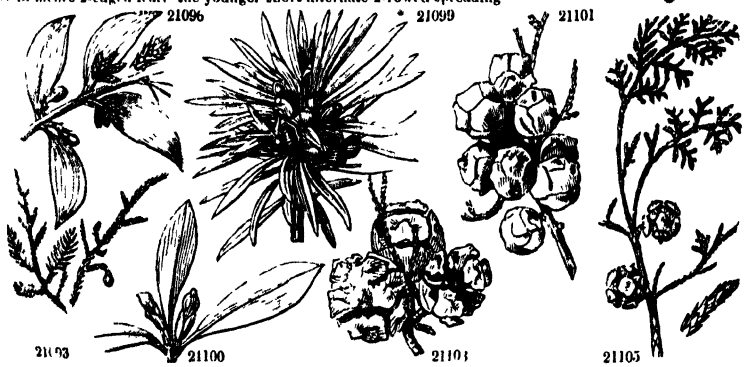
21091 Lvs in tufts, Cones ovate abrupt, Scales adpressed, Crest of anther ovate flat erect
21092 Lvs in fascicles glaucous acute triquetrous, Cones twin oval-oblong erect

21093 Lvs lanceolate all spiny mucronate imbricate in 5 ranks or linear-lanceolate tumid falcate elongated distichly and horizontally spreading, Fruit terminating the short drooping branches
21094 Lvs linear-lanceolate mucronate glaucous beneath

21095 Lvs pectinate linear-lanceolate acuminate falcate [tacle narrow covered with scattered bracts
21096 Lvs ovate-lanceolate acuminate, Male catkins in fascicles axillary on a common peduncle, Nut globose, Recep-
21097 Lvs coriaceous lanceolate acute, Peduncle solitary 1-flowered length of receptacle, Drupe globose oblique bluntly mucronate [the obov. 2-lobed receptacle, Fruit oblong obliquely and bluntly apiculated
21098 Lvs stiff linear mucr. with a double glauc line beneath very like those of the Yew, Peduncles solitary shorter than
21099 Lvs lanceolate acum. glabrous with revolute margins, Male aments by threes 4 times shorter than the leaves

21100 Leaves lanceolate obtuse mucronate, Peduncles solitary 1-flowered, Drupe length of receptacle with an obtuse hardly oblique point.

[or alternate, Cones in clusters of 6—8 scales which are nearly 4-sided with elevated centres many-seeded
21101 Leaves bright imbricate in 4 rows in old plants but expanded and awl-shaped in seedlings, Branches opposite
21102 Lvs ovate-obtuse imbricate in 4 rows, Berries globose, Scales umbonate, Branches terete tom divaric spread.
21103 Leaves ovate-imbricate in 4 rows grass-green closely set in old plants, but expanded and awl-shaped in seedlings, Branches spiral alternate or opposite dense, Cones 3—4 together oblong 1½ inch long of about 10 scales, the largest of which are in the middle, Seeds large dark brown
21104 Leaves ovate-lanceolate taper-pointed pungent scarcely a line in length. A tall tree called Mexican Cedar
21105 Branches 2-edged leafy the younger short alternate 2-rowed spreading



and Miscellaneous Particulars.

is much used in the Himalayas in the construction of buildings, and for bridges and boats. It is much cultivated in Britain as an ornamental tree It has also been successfully grafted on the Cedar of Lebanon

21094 *Podocárpus Totárra* is regarded with great esteem by the New Zealanders when growing. The wood is used to construct canoes, it being light, tough, and durable. It grows from 20 to 60 feet high, and the diameter of the trunk is from 6 to 18 feet *P ferruginea* is called *Miro-Maori* by the natives of New Zealand. It grows from 50 to 60 feet high Its wood is brittle, close-grained, and durable, of a red colour, and capable of receiving a high polish The fruit is eaten by wood-pigeons. *Podocárpus Yácca* furnishes most beautiful grained wood

21105 *Cupréssus funèbris* is, perhaps, the most interesting coniferous tree yet introduced into this country; and will, probably, displace the weeping willow. A figure of it is given in Lord Macartney's "Embassy to China," where it forms a weeping tree in the foreground of a view of the "Vale of Tombs,"—a place situated in the inclement climate of Zhe-kol. It is used to adorn cemetories.

2018. THU'JA.

21106 13551 aplicāta *Donn* plicate ♀ or 20 ... Ap Nootka S. 1796. S co Loud. tr 2108

3301. 2018a. CA'LLITRIS *Rich.* CALLITRIS. (*Kallistos*, most beautiful; trees.) *Coniferæ.*

21107 - quadrivālvis *Vent.* 4-valved ♀ ⌐ or 20 ... Ap Barbary 1815. S co Lod. bot c. 844 *Thùja articulāta* Vahl, No 13550

3302 2018b PHYLLO'CLADUS *Rich.* PHYLLOCLADUS. (*Phullon*, a leaf, *klados*, a branch.) *Coniferæ*

21108 - rhomboidālis *D. Don* Parsley-lvd ♀ ⌐ or 60 ... Ap V.D.L 1825. C s.l.p Rich. conif 169 *Podocārpus asplenifōlius* Labill. nov holl. 2 71. 221

21109 - trichomanoides *D Don* Fern-lvd ♀ ⌐ or 60 ... Ap N Zeal. 1840. C s.l.p *rhomboidālis* A. Rich. flor. nov. zel p 363., but not D Don and L Rich.

3303. 2018c. WIDDRINGTO'NIA *Endl.* (*Captain Widdrington.*) *Coniferæ.*

21110 - cupressoides *Kew.* Cypress-like ♀ ⌐ or 20 ap ju Ap C G H 1799. C s.l.p *Thùja cupressoides* Lin. *Callitris cupressoides* Schrad *Callitris stricta* Schrad. *Pachylepis cupressoides* Brong.

21111 - juniperoides *Endl* Juniper-like ♀ ⌐ or 10 ap my Ap C G.H 1756. C s.l.p *Cupréssus africāna* Mill *Juniperus capénsis* Lin. *Callitris arbórea* Schrad. *Pachylepis juniperoides* Brong.

3304. 2018d. SAXEGOTHÆ'A *Lindl.* SAXEGOTHÆA (In honour of Prince Albert) *Coniferæ*

21112 - conspicua *Lindl.* conspicuous ♀ or 30 ... Ap Patagon. 1846. C s.l.p J H S 6 780

3305 2018e. FRENE'LA *Mirb.* FRENELA. (*M. Frenel*, member of the Academy of Sciences, Paris.) *Coniferæ*

21113 - triquetra *Spach* triquetrous-lvd ♀ ⌐ or 20 . Ap N. Holl. 1824. C s l p *Cupréssus austrālis* Desf. *Callitris cupressiformis* Vent *Cupréssus triquetra* Lodd. *Cupréssus articulata* Pin woh *Juniperus Cunninghāmii* Hort

21114 - rhomboides *Endl* rhomb-leaved ♀ ⌐ or 20 ... Ap N. Holl. 1822. C s l p Rich c 17 pl 1 *Callitris rhomboidea* R Br.

21115 - australis *Mirb.* southern ♀ ⌐ or 20 ... Ap N. Holl. ... C s l p *Callitris austrālis* R Br *Thùja austrālis* Desf *Cupréssus austrālis* Pers

21116 - fruticōsa *Endl* shrubby ♠ ⌐ or 6 ... Ap N. Holl. ... C s.l.p Rich c 19 pl 18 *Callitris fruticōsa* R. Br. *Callitris oblónga* Rich

3306 2018f. FI'TZRO'YA *J Hook.* (*Captain Robert Fitzroy*, R.N, of H M.S. Beagle.) *Coniferæ*

21117 - patagónica *J Hook* Patagonian ♀ or 20 ... Ap Patagon 1846. C s l p Bot mag 40..

3307 2018g CRYPTOME'RIA *D Don.* CRYPTOMERIA. (*Kryptos*, hidden, *meros*, a part.) *Coniferæ*

21118 - japónica *D. Don* Japan Cedar ♀ or 100 my jl Ap Japan 1846. S co *Cupréssus japónica* Thunb

β *pygmæ'a* Hort. *dwarf* ♠ or 2 my jl Ap Japan 1846 S co

3308. 2018h. LIBOCE'DRUS *Endl* LIBOCEDRUS. (Not explained.) *Coniferæ*

21119 - tetragōna *Endl.* tetragonal ♀ ⌐ or 80 ap Ap Patagon 1849 S.G.s.l.p Px. fl g 1 47 2

Thùja tetragōna Hook. *Pinus cupressoides* Mol *Juniperus uvifera* D Don.

21120 - chilénsis *Endl.* Chili ♀ ⌐ or 80 ap Ap Chili 1849. S G s l p Px fl.g 1 48 32

Thùja chilénsis D Don, Hook and Lond. journ. bot 2 p. 199 t. 4. *T. andina* Popp. nov gen 3 p 17. t 220.

21121 - Doniāna *Endl.* Don's ♀ ⌐ or 40 ap Ap N. Zeal. 1845. S G s.l.p *Thùja Doniāna* Hook. *Dacrydium plumōsum* D Don

3309. 2018i BIO'TA *D. Don.* BIOTA. (*M Biot*, a celebrated French astronomer.) *Coniferæ.*

21122 - péndula *Endl.* pendulous-br ♀ or 30 .. Ap Tartary 1800. C s.l p Bot reg. 1842 *Cupréssus péndula* Thun. *pátula* Pers *Thùja péndula* Lamb *Cupréssus flitformis* Hort.

21123 - tatárica *Endl.* Tartarian ♀ or 20 Ap Tartary 1830 C s l p

Thùja nepalénsis Hort. *tatárica* Hort, as well as *Thùja orientālis* Lin No. 13549, belongs to this genus



History, Use, Propagation, Culture,

3301. *Callitris* A pretty coniferous tree, and may be increased by cuttings or seed.

3302. *Phyllócladus rhomboidālis* is a native of Van Diemen's Land, where it is called by the colonists Parsley-leaved, or Adventure Bay, Pine. *P. trichomanoides* is a native of New Zealand, and is called *Tanekaha* by the natives, who use the wood for building purposes, and the bark for dyeing a red colour.

3303. *Widdringtònia cupressoides.* This is a very pretty tree, and is the cypress of South Africa.

3304. *Saxegothæ'a conspícua* is an evergreen tree, about 30 feet high, with the habit of *Táxus.* The leaves are linear and flat, and marked with a pale double line beneath.

3305. *Frenēla* is a genus composed of resinous trees or shrubs. The leaves are ternately verticillate, scale-formed, adnately decurrent, persistent, and glandless. Being natives of New Holland they require protection, and may be increased by cuttings

3306. *Fitzróya patagónica* is a graceful drooping evergreen tree with the habit of *Libocèdrus tetragòna* When young, the leaves are spreading and linear; when old, they become triangular, sessile, and closely imbricated scales. The female flowers are terminal and stellate cones, remarkable in having the axis terminating in three short clavate glands or abortive scales. The fruit is of 9 scales, 3 in each whorl; the middle 3 are alone fertile, and each fertile scale has 3 erect seeds surrounded by a broad wing and ending in a narrow neck.

21106 Branchlets compressed spreading, Leaves rhomb-ovate adpressed imbricate in 4 rows tuberculed in middle, Cones oblong nodding, Seeds obcordate

21107 Leaves flattened articulated, Female catkin tetragonal with 4 oval valves each furnished with a point and 2 of which bear seed only

21108 Fronds rhomboid lined deeply serrated, Lower ones cuneate decurrent

21109 Fronds pinnate, Leaflets cuneate deeply lobed, Lobes truncate toothed

21110 Branches elongated fastigiate, Leaves on branches acute distant spreading, those on the branchlets bluntish more approximate and adpressed arranged in 4 rows, Fruit nearly globose, Scales of strobile thick terminated by a conical mucrone, Seeds 10 in a double series

21111 Branches erectly spreading rather drooping, Leaves in young plants strong and elongated linear spreading flat sessile glaucescent, in more adult trees short and triangular acutish adpressed on the pendulous branches subimbricate and cypress-like, Fruit subglobose

21112 Habit of Yew, Leaves linear flat apiculated marked by a pale double line beneath

21113 Resembles an Evergreen Cypress

21114 Habit of Cypress, Branches thin articulated, Lvs imbricate adpressed, Female catkins small solitary terminal

21115 Leaves linear crossing appressed, Branches very slender

21116 Habits of *rhomboidea*, but the catkins are much longer

21117 Tree evergreen drooping, Leaves sessile imbricate, Female flowers of 9 scales in 3 series stellate

21118 Tall Leaves like those of *Araucaria Cunninghàmi* but larger subulate disposed in 5 rows vertically compressed hardly 1 inch long, Male aments aggregate into a terminal spike, Seed solitary globose

β A small stunted variety

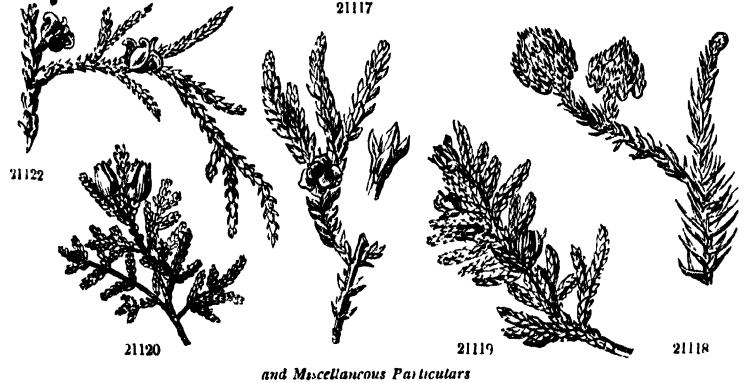
21119 Leaves opposite scale-formed, so placed on the branches as to constitute a 4-sided arrangement, Cones consist of 2 opposite pairs of scales each having a long horn or beak

21120 Habit of Arbor Vitæ, Leaves opposite ovate-oblong scale-formed decussate imbricate in 4 rows, Cones oval-oblong of 4 scales, Seed winged at top

21121 Leaves pectinate on the young branches linear mucronate, adult leaves small compressedly triquetrous distich closely imbricate keeled obtuse concave above, Branches opposite flattened

21122 Branches pendulous filiform terete tetragonal at top, Lvs spreading acute, Scales of strobile roundish bluntly mucronate at apex recurved 1-seeded, inner one abortive, Seed wingless

21123 Branches flattened imbricate, Leaves in 4 ranks smaller than in other species



and Miscellaneous Particulars

3307 *Cryptomeria japónica*, or Japan Cedar, is a fine evergreen perfectly hardy tree. Thunberg, who was the first to make this tree known in Europe, states that it is found, both cultivated and spontaneous, on the mountains of Nagasaki and elsewhere The Japanese call it *San*, or *Sugi*, which, in their language, means evergreen tree. It is a tall upright tree, with a pyramidal head. The timber is said to be soft, and easily worked; and is used for various purposes, particularly for cabinetwork, among the Japanese According to Siebold, it is a majestic tree, growing from 60 to 100 feet high Nothing was known of the living plant, until Mr. Fortune succeeded in obtaining seed at Shanghae in the North of China, where it had probably been introduced from Japan; and from these seeds the first plants were raised in Britain.

3308 *Libocèdrus tetragòna* promises to outvie the *Araucària imbricàta*, and to be as hardy, for it comes just below the snow-line in the Andes of Patagonia. The leaves are rather broad, and are imbricate in four ranks. It is a magnificent evergreen tree *L. chilénsis* is a fine evergreen tree, resembling the Chinese Arbor Vitæ but is of a less robust habit, and will probably, prove hardy *L. Doniàna* is a tree from 30 to 40 feet high, and is called *Kawa* by the New Zealanders. Its trunk is from 1 to 3 feet in diameter. The wood is beautifully grained and heavy, and would make handsome picture-frames if they were required of a deep colour.

3309 *Biota*. The species are very showy coniferous trees, of easy culture.

3310. 2032*a*. CODIÆ'UM *Juss.* CODIÆUM. (Not explained by author.) *Euphorbiàceæ*

21124 - pictum *Juss* painted-leaved ♣ ▢ or 4 jl.au W.G E Indies 1810. C s l.p Bot. cab 870
Crôton pictum Lin No 13611.

2033 JA'TROPHA

21125 13651*a* apodágrica *Hook* gouty-stalked ♣ ▢ or 1½ su O R S.Martha 1847. C s.l.p Bot mag 4175

2036 STERCU'LIA.

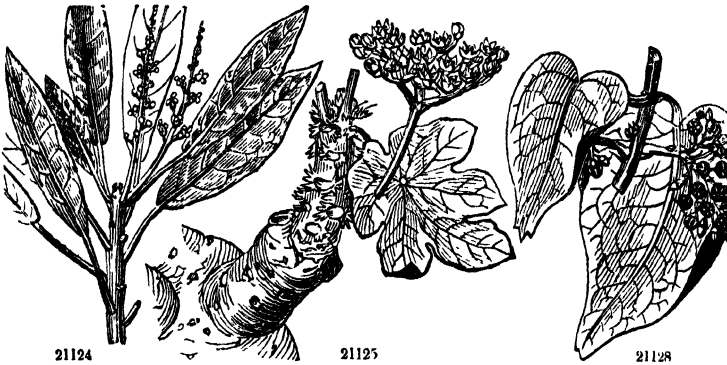
21126 13664*a* cariæfolia Fig-leaved ♣ ▢ or 20 ... W S. Leone 1793. C s l p
Cour tenia Afzélii R Br

21127 - - diversifólia *Cun* diverse-leaved ♀ ▢ or 20 .. ... N. Holl 1824. C s.l.p
heterophýlla G Don *Brachychiton dives sifólia* R Br

21128 13661*a* pubéscens *G Don* downy-leaved ♀ ▢ or 20 .. G R S Leone 1793 C s.l p Bot reg. 1[illegible]
Tragacántha Lindl

21129 - - macrocárpa *G Don* White Cola ♀ ▢ ed 40 ... W Guinea 1823 C s.l p

21130 - - acuminàta *Beauv.* Red Cola ♀ ▢ ed 40 ... W Guinea 1795 C s.l.p Beauv. fl d l 2.
Cóla acuminà'a R Br.



21124 21125 21128

History, Use, Propagation, Culture,

3310. *Codiæ'um.* This genus is separated from *Crôton* They are Asiatic trees, with alternate, entire, glabrous shining leaves, which are sometimes beautifully variegated. The flowers are disposed in unisexual, axillary or terminal racemes, each of which is furnished with a bract. They are of easy culture, and only require the treatment of ordinary stove shrubs.

21128 *Sterculia pubéscens* There is a gum collected from this tree resembling gum Tragacanth in its properties

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Page 816. CLASS XXII. — DICŒCIA.

Order 2. DIANDRIA. Stamens 2.

3311 2044*a*. *Gynèrium.* Spikelets 2-flowered, one flower sessile, the other stalked —Male Glumes lanceolate membranous Keel unequal Paleæ 2, membranous, 1-nerved, concave, beardless, upper one shortest, bicarinate Stamens 2 Scales 2, minute, collateral —Female. Glumes 2, upper one longest Paleæ 2, upper one beset with long hairs, inner one small, bicarinate Keels pectinately ciliated Stamens 2, effete. Ovaria 2, glabrous Styles 2 terminal Stigmas plumose. Scales 2, membranous, subciliated

Order 5. PENTANDRIA. Stamens 5.

3312. 2066*a* *Cordìa* Male plant unknown. — Female flowers having the calyx tube adhering to the ovarium Limb 5-cleft, valvate in æstivation, persistent. Segments lanceolate, deciduous. Petals 5, epigynous Disk fleshy glandular Ovarium 2-celled, inferior. Style simple Stigma capitate, lobed. Drupe dry, spherical, brittle shell umbilicate, villous Seeds solitary in the cells.

Order 6. HEXANDRIA. Stamens 6.

3313 2084*a* *Cocsinium* Sepals and petals in threes — Male flowers with 6 stamens. — Female flowers with 3 ovaria. Styles slender Berries 1—3 together. Seed pierced by a large hole.

3314 2085*a*. *Hilmia* Dicœcious, rarely monœcious —Male Perianth rotate or urceolately campanulate Stamens usually 6 sometimes only 3 —Female Perianth 6-cleft, with equal spreading or reflexed segments. Styles combined into a column, or wanting. Stigmas 3, entire, or 2-lobed Ovarium triangular, 3-celled. Capsule triquetrous, 3-celled Cells 2-seeded Seeds winged at base

3315. 2086*a* *Lusc'a* Flowers covered by bud-scales Perianth 4—5—6-parted.—Male Stamens 6 of which 4 or 2 are biglandular Anthers introrse, 4-celled dehiscing by as many ascending valves —Female Sterile stamens 4, submucronate. Style short Stigma discoid, lacerated Berry 1-celled, 1-seeded, naked, standing on thickened pedicels.

Order 8 ENNEANDRIA Stamens 9.

3316. 2089*a* *Anâchaxis* Calyx 3-parted Petals 3 —Male with ovate-oblong sepals, and linear petals Stamens 9. Filaments combined into a column at base —Female flowers with a long filiform tube, 3 abortive filaments at base ligulate stigmas. Capsule 1-celled, few-seeded

3317 2090*a*. *Tetranthèra.* Dicœcious, rarely hermaphrodite Perianth 6-parted, nearly equal, deciduous sometimes fewer or wanting altogether Stamens 9, in 6-cleft flowers, in three series, fertile in petaloid or naked flowers 12—21, the inner ones furnished each with 2 sessile or stipitate glands at base Anthers introrse, 4-celled, dehiscing by as many ascending valves. Ovarium immersed in the tube of the perianth. Style short. Stigma peltate Berry 1-seeded.

21121 Leaves oblong-lanceolate obtuse at base variegated and stained with red and yellow, Spikes axillary erect

21125 Stem erect-branched gouty at base, Leaves peltate-cordate 5-lobed glabrous Lobes subovate blunt, Stipules glandularly fringed, Cymes on long peduncles terminal, Teeth of calyx and lobes of corolla blunt

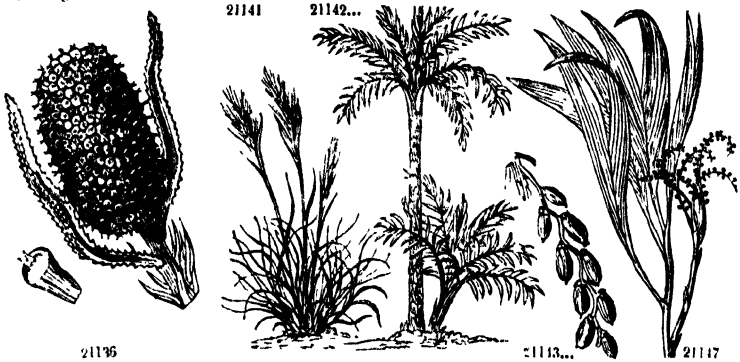
21126 Leaves palmately 5-lobed with wide recesses, Lobes spatulately oboovate acuminate hairy on the nerves beneath and petioles

21127 Leaves coriaceous obtuse lanceolate entire or 3-lobed glabrous, Lobes acuminate

21128 Leaves oval-oblong cordate at base downy as are the petioles and young branches, Flowers axillary panicled, Segments of calyx cohering at apex Carpels 4—5 downy 4—5-seeded, Seeds small red

21129 Leaves oblong acuminate entire smooth on long petioles, Flowers panicled axillary, Carpels 4—6 seeded, Seeds white large

21130 Leaves oblong acuminate entire smooth on long petioles, Flowers axillary panicled, Carpels 1—2-seeded, Seeds red large



and Miscellaneous Particulars

but it is probable that many of the species have the same kind of substance, as it seems nothing more than the concrete state of the mucilage

21129 *Sterculia macrocarpa* and *S. acuminata* The seeds are known in Africa by the names of White and Red Cola or Kola They have long been celebrated by travellers as possessing a high degree of value among the natives of Guinea, who take a portion of one of them before each meal for they enhance the flavour of anything they may subsequently eat or drink The seeds are extremely bitter

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Order 9 DECANDRIA Stamens 10

3318, 2092*a* *Nuttallia* Calyx free, campanulate 5-cleft, of the female separating transversely above the base Petals 5, oblong-oval rather unguiculate. Stamens 10, in 2 series Anthers roundish —Female Stamens as in the male, but sterile Ovaria 5, free, 1-celled, obliquely obovate, glabrous, biovulate Style filiform, articulated at base deciduous Stigma dilated Carpels subdrupaceous, 2—3, sometimes solitary by abortion, 1-seeded, a little incurved

Order 12. POLYANDRIA Stamens numerous, inserted under the ovarium

3319 2106*a* *Boldoa* Male Perianth campanulate, 5-cleft, having 5 petaloid scales in the throat, alternating with its segments Stamens numerous, inserted in the throat of the calyx Filaments flattened, auricled on both sides above the base Anthers 2 celled —Female Perianth as in the male, but with the scales in the throat narrower, and abortive and gland-formed stamens Ovaria 2—9, conical, conniving, on short stipes, coloring at top. Style filiform, distinct Stigmas simple Drupes 2—9, 1-seeded, naked in consequence of the perianth being deciduous

3320 2106*b* *Tasmannia* Dioecious or polygamous —Male Stamens indefinite, a little curved Pistil rudimentary. —Female Sepals 2 Petals 2—5, deciduous Stigma adhering longitudinally to the inner side of the ovaria. Fruit a berry-like drupe, indehiscent, 1-celled, many-seeded

3321 2108*a* *Encephalártos* Male Anthers open, collected into a terminal pedunculate strobile, inserted all over the common rachis —Female Carpels numerous, collected into a terminal pedunculate strobile all over the common rachis Fruit syncarpous Single scales oblong-cuneate, thickened at apex, obtuse or acuminate

3322 2108*b* *Dion* Strobile ovate, dense, woolly, size of an infant's head, composed of densely woolly stalked scales which are cordate acuminate, smooth inside, with a solitary seed on each side at base Seed size of a Spanish chestnut

3323 2108*c* *Freycinetia* Dioecious or pseudo-polygamous —Male Spadix simple, covered with flowers Filaments filiform Anthers 2-celled, dehiscing lengthwise —Female Spadix simple, covered with pistils Ovaria combined by the sides, 1-celled Fruit baccate, many-seeded and many-celled from the carpels being combined. Seeds numerous, minute fusiform

Order 13 MONADELPHIA Stamens united into one body.

3324 2109*a* *Pleiocóleus* Flowers on an elongated spadix, disposed in simple or branched spikes, hidden by incomplete scale-formed distichly sessile imbricate spathes Male flowers twin · female solitary. Calyx trifid. Corolla 3-parted, valvate Stamens 6, subulate, monadelphous at base —Female calyx as in male Filaments without anthers, combined into a 6-cleft membranous cupula. Ovarium 3-celled Stigmas 3, nearly sessile, subulate Berry 1-celled, 1-seeded loricate from retrograde scales

3325 2109*b* *Lodoicea.* Male catkins cylindrical, closely imbricate from the coalition of the scales. Flowers bracteate, arranged in 2 rows in the pits of the rachis, aggregate. Calyx deeply 3-parted, or of 3 sepals. Stamens 24 in 6 monadelphous at base Anthers linear, truncate, rather 2-lobed at both ends —Female flowers solitary within the peculiar scales of the catkin. Calyx of 3 sepals Petals 3 Ovarium 2—4-celled. Stigmas 2—4, sessile, con-

niving Drupe fibry, 2-lobed, 2—4-seeded, but usually only 1 seeded Sarcocarp thick, fibry. Nuts or seeds bony adhering to the fibres of the sarcocarp.

3326 2114*a*. *Torrèya*. Male catkins at first globose, but at length elongated, the rachis ultimately becoming naked except at the base, where it is bracteate by quadrifariously imbricate scales. Staminiferous scales pedicellate rather peltate, each bearing a 4-celled anther.—Female catkin ovate, 1-flowered, bracteate at base as in the male. Seed ovate, bony, bractеate at base by the increased scales.

3327. 2114*b* *Cephalotáxus* Male catkins axillary, capitate, propped by bracts Stamens 4—6, or more, in each scale.—Female catkins from the axils of the shoots of the present year. Fruit 2—3 in each head, drupaceous, adnate to a closed fleshy urceolus.

3328. 2114*c*. *Dacrýdium*. Male catkin ovoid, girded by imbricating bracts at base. Stamens numerous, imbricate

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MONANDRIA.

2041. PANDA'NUS.

21131	13689*a*	læ'vis *Rumph.*	smooth		or	10	...	W	Java	1823.	S	r.m		
21132	-	inérmis *Roxb.*	unarmed		or	10	...	W	Amboyn.	1825.	S	r m		
21133	-	élegans *P. Thou.*	elegant		or	20	...	W	Bourbon	1826.	S	r m		
21134	-	muricátus *P Thou.*	muricated		or	30	...	W	Madagas.	1826	S	r m		
21135	-	fœ'tidus *Roxb.*	fetid		or	6	.	W	Bengal	1822	S	r m		
21136	-	furcátus *Roxb.*	forked-spined		or	...	...	W	Chittag.	1823	S	r m	Rheed mal 2, 9	
21137	-	edúlis *P. Thouars*	edible		or	12	...	W	Madagas	1825	S	r m		
21138	-	pygmæ'us *P. Thou.*	least		or	10	...	W	Madagas	1830	S	r.m		
21139	-	pedunculátus *R. Br*	pedunculate		or	...	...	W	N Holl.	1825	S	r.m		
21140	-	amaryllidifólius *Roxb.*	Amaryl -lvd		or	3	...	W	Amboyn.	1825	S	r m		

DIANDRIA.

3311	2044*a*	GYNE'REUM *H. et B.*	GYNERIUM	(*Gyne*, a female, *erion*, wool, stigmas)										*Gramina*
21141	-	argénteum *Nees*	Pampas grass		cu	40	...	Ap	S.Amer.	...	S	r m	Pax fl g 1 1 1	

TRIANDRIA.

2049. PHŒ'NIX.

21142	13834*a*	paludósa *Roxb*	marsh		or	16	...	Str	E Indies	1820	S	r.m	Mart palm 1	
21143	-	sylvéstris *Roxb.*	wood		or	16	...	Str	E Indies	1820.	S	r.m	Rh. mal 3 22 2	
		É'late sylvéstris Lin												

TETRANDRIA.

2846. GA'RRYA.

21144	18087*a*	laurifólia *Benth.*	Laurel-leaved		or	15	.	W	Mexico	1829.	C	s.l p		

PENTANDRIA

2066. XANTHO'XYLUM

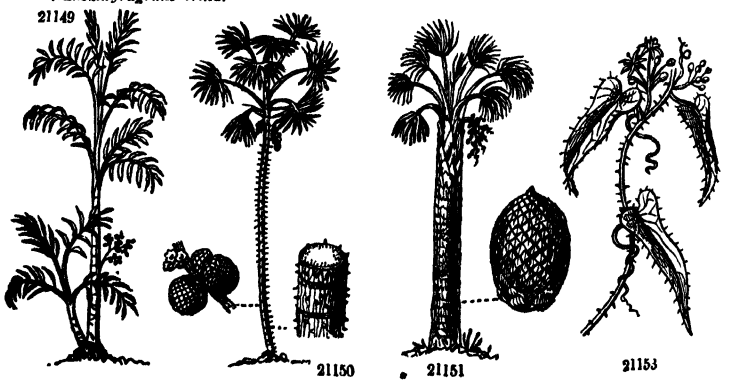
21145	13895*a*	Budrúnga *Roxb*	Budrung		or	20	...	W	Silhet	1825.	C	s p l		
3312	2066*a*	CORO'KIA *Cun*	COROKIA	(*Corokia-taranga*, its vernacular name.)										*Rhámnaceæ*
21146	-	buddleoides *Cun.*	Buddlea-like		or	4	...	W	N. Holl.	1835	C	s.l p		

HEXANDRIA.

2078. CHAMÆDO'REA.

21147	13916*a*	frágrans *Mart.*	fragrant		or	6	...	Str	Peru	1823.	S	r m	Mar p 4 3 1	
		Nunézia fragrans Willd.												

21149



21150 21151 21153

History, Use, Propagation, Culture,

21141. *Gynéreum argénteum* is a noble grass, called Pampas grass in consequence of its inhabiting the vast plains of South America called Pampas. It rivals the Bamboo in height, exceeding several times that of a man. It appears to be hardy.

short, dilated into an ovate-lanceolate connective. Anthers 2-celled. Cells adnate to the connective — Female flowers solitary, sessile on a cup-shaped fleshy disk Ovarium solitary, sessile at the bottom of the disk, open at top.

21129 2116*a*. *Sphæróstémma* Calyx bibracteate, of 3 sepals Petals 6, ternary. Stamens numerous, seated on a globose receptacle, monadelphous — Female Ovaria numerous, seated on a conical receptacle, which is at length elongated Berries 2-seeded.

2130. 2116*b* *Lardizabàla*. Sepals and petals ternary, in 2 or 3 series —Male. Stamens 6, monadelphous —Female. Berries 3—6 celled Cells many-seeded Pulp of fruit sweet and edible.

2131 2116*c* *Phytocrène*. Flowers collected on a globose fleshy receptacle.—Male. Scale urceolate, 4-lobed, bearing a 4-parted perianth Stamens 4, monadelphous. Anthers versatile Rudiment of pistil pilose, pedicellate between the filaments, and beset with purple hairs.—Female flowers unknown.

MONANDRIA.

21131 Trunk spiny, Leaves very long glaucous smooth, Male spadix spicate with distinct bracts
21132 Diffuse, Leaves ensiform channeled unarmed shining
21133 Heads solitary pedunculate Nuts 1-seeded pyramidal at top, Tree pyramidal, Lvs a foot long 9—10 lines broad
21134 Heads solitary conical drooping, Nuts 1-seeded flat at top armed with spines, Top of tree conical, Lvs oblong
21135 Partial racemes or thyrse male simple, Ovaria distinct, Drupes spirosely cuspidate, Nuts 1-celled dense short
21136 Drupes of compound fruit oblong cuneated crowned by smooth acuminated incurved forked spines, Nuts 1-celled Leaves broad-lanceolate having the keel and margins serrulated
21137 Heads oblong racemose erect, Nuts 1-seeded flat at top Pulp sweet and edible
21138 Heads racemose erect, Nuts 1-seeded pyramidal at top Leaves 6 inches long and 6—9 lines broad
21139 Caudex stolonifer, Bundles of drupes 8—12-celled depressed and tessellated at top and rather angular at base
21140 Diffuse, Leaves linear 3-nerved broad at top spinosely serrated, Trunk and branches emitting roots

DIANDRIA

21141 Tall tufted, Leaves spiny serrulated, Panicle much branched, Spikelets pedicellate

TRIANDRIA

21142 Pinnæ solitary ensiform flaccid bifarious, Embryo at base of seed, Spadix branched
21143 Pinnæ disposed in nearly opposite fascicles ensiform terminated by a spine

TETRANDRIA.

21144 Leaves oval laurel-like downy under side, a handsomer plant than *G. elliptica*

PENTANDRIA.

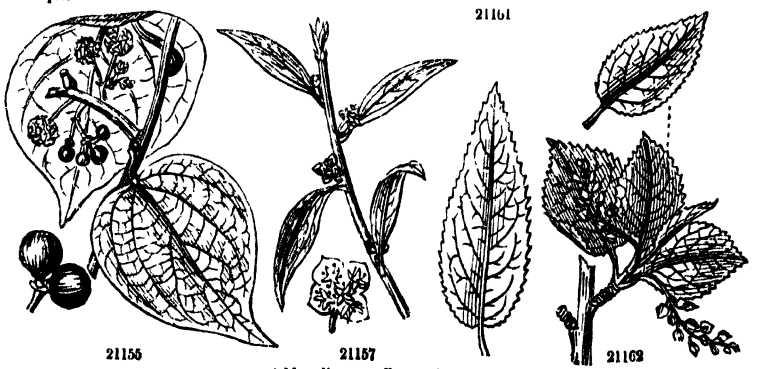
21145 Armed with small incurved prickles, Leaves abruptly or impari-pinnate with 5—6 pairs of unequal ovate-lanceolate entire acuminate smooth leaflets, Panicles terminal crowded

21146 Branches erect white from tomentum, Lvs alter petiol. lanc acute coriac usually glab. and shining above and white from tom. ben, Flws small panicled, Panicles short axil and term. white from pili, Fruit pea-formed

HEXANDRIA.

21147 Fronds forked, Segments scimitar-shaped serrated outside, Spadix branched, Male branches erect, Berries elliptic

21161



21155 21157 21162

and Miscellaneous Particulars.

21145 ***Xanthóxylum Budrúnga*** is a tree, a native of Sylhet, where it is called Budrung by the natives, who use the seeds medicinally, being of a warm spicy nature, with the fragrance of lemon peel.

21146 *Cordìna buddleoìdes* is a very pretty shrub, and only requires the culture and treatment of ordinary greenhouse shrubs

21148 -	- élegans *Mart.*	elegant		or	4	...	Str	Mexico	1840.	S	r.m	M.p. 159 t R f.
21149 -	- elàtior *Mart.*	taller		or	...	...	Str	Mexico	1840.	S	r.m	M. p. 157 t 26 f.
	2080 MAURI'TIA.											
21150 13918	armàta *Mart.*	armed		or	20	...	Str	Brazil	1822.	S	r m	Mar p 45 t 41-42
21151 -	- vinífera *Mart*	wine-bearing		or	150	...	Str	Brazil	1822.	S	r.m	M. p. 42. 38-9 t 2
	2081 SMI'LAX											
21152 13923*a*	Wálteri *Ph China* Walt	Walter's		or	5	aut	G w	Virginia	1820.	Sk	s p	
21153 13924*a*	sagittæfòlia *Lodd*	arrow-leaved		or	2	au	W	China	1820.	Sk	s l.p	Bot cab 1799
	2083. TESTUDINA'RIA.											
21154 13943*a*	mexicàna *H Kew.*	Mexican		or	6	...	Y	Mexico	...	R	p.l	

3313. 2084*b* COSCI'NIUM *Coleb* (*Koskinon*, a little sieve, seed pierced by holes.) *Menispèrmeæ*
21155 - - fenestràtum *Coleb* windowed-seed or 20 n d G.Y Ceylon 1820 C s.l p Bot mag 4658
Menispèrmum fenestràtum Gærtn.

3314 2085*a* HE'LMIA *Kth.* HELMIA. (*C Helm*, a German ecclesiastic) *Dioscòreæ*
21156 - - racemòsa *Klotzsch* racemose or 8 ... Y P C Amer. 1850. R s.l.p

3315. 2086*a*. LITSÆ'A *Juss.* LITSÆA (Not explained by author) *Lauràceæ*.
21157 - - involucràta *Juss.* involucrate or 20 ja my G Y E Indies 1820. C s l.p Rox. cor 2 187
Laurus involucràta Roxb. *Tetradenia involucràta* Nees

OCTANDRIA.

	2087. PO'PULUS											
21158 13970*a*	trístis *Fisch cándicans* Hort.	dark leaved		or	20	mr ap	Ap	N.Amer	1835.	C	co	
21159 -	- longifòlia *Fisch*	long-leaved		or	20	mr.ap	Ap	N Amer.	1826	C	co	
21160 -	- pseudo-balsamífera *Fisch*	False Balsam		or	20	mr ap	Ap	N Amer.	...	C	co	
21161 -	- laurifòlia *Led balsamífera* Pall fl ross, t. 41 fig B	Laurel-leaved		or	20	mr ap	Ap	Altai	1826	C	co	Pall fl ross 41 f
21162 -	- suavèolens *Fisch balsamífera* Pall fl ross, t. 41 and 41, A.	sweet-scented		or	20	mr.ap	Ap	Dahuria	1824	C	co	Pall fl ross 41

ENNEANDRIA.

3316	2089*a* ANA'CHARIS *Rich*	ANACHARIS.	(*Ana*, without, *charis*, beauty)									*Hydrocharidæ*
21163 -	- alsinástrum *Bab.*	Chickweed-like	cu	ft	jl	G	Britain	canals	O	co	An	n h sect 21
3317	2090*a* TETRANTHE'RA *R. Br*		(*Tetra*, four, *anthera*, an anther)									*Lauràceæ*
21164 -	- laurifòlia *B R*	Laurel-leaved	or	...	ja	my	G Y	Bengal	1823	C	s l p	Bot. reg 803
21165 -	- japónica *Siebold* *monopètala* Roxb	Japan *Tòmex japónica* Thunb	or	...	...	...	G y	Japan	1843.	C	s.l p	*Litsæ'a japónica* Juss.

DECANDRIA.

	2091. CORIA'RIA.											
21166 13981*a*	nepalénsis *Wall*	Nepal		or	4	jn	R	Nepal	1837.	C	co	Px. fl g 2 87 b
3318	2092*a*. NUTTA'LLIA *Torrey*		(*Thomas Nuttall*, the celebrated American botanist.)									*Rosaceæ*
21167 -	- cerasifórmis *Torrey*	Cherry-formed		or	10	f mr	W	Californ.	1848.	Sk	co	J. H S 4 22



21166 21167

History, Use, Propagation, Culture,

21151 *Mauritia vinífera*. The berries are ovate, the size of a hen's egg, and of a chestnut colour, and are called Buriti or Bruti, by the natives of Brazil These berries are used for many purposes The caudex yields a large quantity of palm wine when wounded, which is of a sweetish acid taste, not unlike ginger beer

21156. *Hélmia racemòsa* is nearly related to *Dioscòrea*, or Yam The flowers are small, yellow and purple The root is tuberous and fleshy The plant requires the same treatment as *Dioscòrea*

21155. *Coscínium fenestràtum* is in repute among the inhabitants of Colomba, in Ceylon, who slice the wood which is yellow and bitter, in thin pieces, and swallow them with the liquid, after steeping them in water several hours They commend it as an excellent stomachic. It is the Colomba wood of commerce.

21148 **Caudex ringed, Sheath short auricled at top, Pinnæ neat lanceolate, Spadix loose angular, of the female doubly branched, Female corollas tridentate, Drupes subglobose**

21149 **Stolonif., Caudex covered with sheaths of fronds, Petis short nearly terete, Lvs pin., Pinnæ flat lanc. subfalc. taper-pntd at both ends, Spadix under the fronds simply brnchd, Berries glob size of a pea blackish green**

21150 **Caudex flexuous spinose, Fronds pinnately fan-shaped, Pinnæ linear glaucescent beneath, Petioles terete, Spadix glabrous, Fruit ovate, Scales of fruit broader than long, Spadix 2 feet**

21151 **Caudex tall erect unarmed, Fronds pinnately fan-shaped same colour on both sides, Petioles semi-terete channeled, Scales of fruit ovate rhomboid, Spadix 6—10 feet**

21152 **Stem prickly, Leaves ovate cordate smooth 3-nerved, Berries acuminate**

21153 **Leaves sagittate**

21154 **Very like the Cape species and perhaps only the same plant cultivated in Mexico**

21155 **Leaves cordate entire 5—7-nerved shining above hoary beneath, Peduncles umbellulate, Berries villous**

21156 **Twining glabrous fleshy, Root tuberous, Leaves scattered cordate-ovate acuminate 9-nerved glandular at base, Male raceme axillary solitary**

21157 **Leaves alternate nerved, Flowers in axillary fascicles imbricated by dense scales**

OCTANDRIA.

21158 **Leaves loose drooping coriaceous ovate rather concave wavy generally cordate acuminate coarsely crenated on** [long loose weak petioles, Stipules acute spreading

21159 **Leaves flat erect oblong-lanceolate obtuse glandularly crenated paler beneath on short petioles, Stipules acute** [spreading

21160 **Leaves spreading flat ovate or roundish ovate shortly acuminate closely and slightly glandularly crenated paler beneath on long petioles, Stipules apparently adpressed**

21161 **Leaves flat oblong or lanceolate oblong rounded or cordate at base acuminate glandularly crenated paler beneath on longish petioles, Stipules erect mucronate**

21162 **Leaves spreading variable in form oblong-roundish rhomboid-oval or ovate-elliptic cordate at base closely and minutely glandularly crenated whitish beneath on short petioles, Stipules obtuse adpressed**

ENNEANDRIA

21163 **Leaves 3 in a whorl obtuse serrulated, Male flowers unknown, Female flower with a long tubular bifid spathe many times longer than the sessile ovarium, Sepals and petals broad nearly equal, Stigmas reflexed**

21164 **Leaves cuneate obovate obtuse smooth**

21165 **Segments of perianth petaloid ovate lanceolate, Leaves oblong marginate glabrous above and hoary tomentose beneath, Umbels axillary aggregate on short peduncles, Involucrum 5-leaved 5—6-flwd, Calyx 5-cleft**

DECANDRIA.

21166 **Leaves ovate-lanceolate acute opposite about 5-nerved nearly sessile, Racemes fascicled axillary, Flowers hermaphrodite**

21167 **Arboreous, Lvs rising with flowers from same buds alternate cuneate oblong apiculate entire downy or glab narrowed into the short petioles, Racs pend, Bracts membacum, Flws white with odour of bitter almonds**



21168 21170 21178 21175

and Miscellaneous Particulars

3315 *Tutsa'a* A plant of easy culture, only requiring the treatment of other stove shrubs

21163 *Anácharis alsinástrum* is a plant in habit much like some species of *Potamogèton*, and has been recently discovered as a native of Britain, but may have been introduced from North America, as the female plant has only been found. It grows so fast when introduced into canals, ponds, or rivers, that it soon chokes them up, and for this reason is a great pest wherever it grows.

3317 *Tetranthèra* Cultivated and treated like any ordinary hothouse plant.

21167 *Nuttallia cerasiformis* is a hardy shrub, with much the habit of a species of *Spiræ'a*, or *Cerasus*, or Bird-cherry

POLYANDRIA.

3319. 21168 - 2106*a* BOLDO'A *Juss.* BOLDOA. (*D. Boldo*, a Spanish botanist.) *Monimiàceæ*
- frâgrans *Juss.* fragrant ♀ fra 20 d W.v Chili 1844. C s.p.l Bot. reg 1845, 57
Peùmos frâgrans Pers. *P. Bóldu* Molin. *Ruizia frâgrans* Ruiz & Pav.

3320. 21169 - 2106*b*. TASMA'NNIA *R Br* (*C Tasmann*, a Dutch navigator and discoverer of V. D. L.) *Winteràceæ*
- dipétala *Bonpl* two-petaled ♣ or 6 my au W N Holl 1824. C s.l p
insipida R Br.

21170 - - aromática *R. Br.* aromatic ♣ fra 10 ap.my W.Pk V. D. L. 1843 C s.l.p Bot. reg 1845, 43
Winteràna lanceolàta Poir

2107. CY'CAS

21171 - - sphæ'rica *Hort. Kew.* spherical ♀ or . ... Ap E Indies ... Sk r m

2108 ZA'MIA.

21172 - - Loddigèsii *Miq.* Loddiges's ♀ or .. ... Ap S. Amer ... Sk r m
β serrulàta Lodd *serrulated* ♀ or ... ... Ap S Amer ... Sk p l
γ caracasàna Lodd. *Caraccas* ♀ or ... ... Ap Caracas ... Sk p l

21173 14031*a* - Skinneri *Warch* Skinner's ♀ or .. ... C Amer. ... Sk p l

21174 - - mexicâna *G Don* Mexican ♀ or 5 my jn Ap Mexico ... Sk p l
Dipsacozàmia mexicàna Benth.

3321. 21175 - 2108*a* ENCEPHALA'RTOS *Lehm* (*Enkephalos*, edible top of the palm, *artos*, bread) *Cycàdeæ*
- cáffer *Lehm* Caffrarian ♀ or 10 jn jl Ap C G H. 1837 Sk p l Nov. fact ups 2 5
Cycas cáffra Thunb. *Zàmia cáffra* Thunb, as well as *Zàmia*, Nos. 14024, 14025, and 14033 to 14038, belongs to this genus

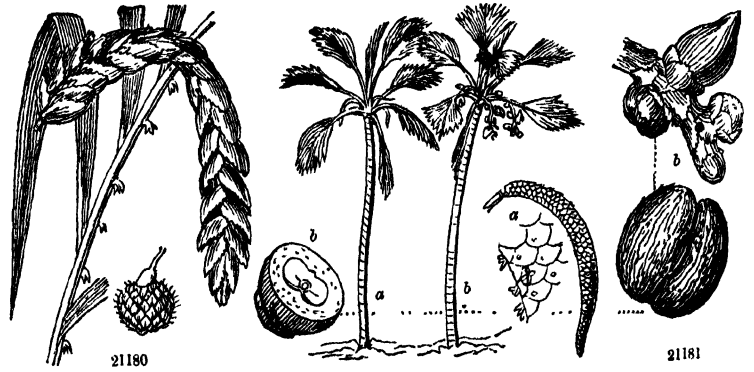
3322 21176 - 2108*b* DI'ON *Lindl.* (*Dis*, two, *oon*, an egg; each scale of strobile bears two seeds) *Cycàdeæ*
- edùle *Lindl.* edible ♀ or 6 .. ... Mexico 1840. S r.m

3323. 21177 - 2108*c* FREYCINE'TIA. (*Capt Freycinet*, a French circumnavigator) *Pandàneæ*
- javánica *Blume* Java ♀ or 15 ... ... Java ... C s.l p Bl rumph 1 41
21178 - - imbricàta *Blume* imbricate ♀ or 15 .. ... Java ... C s.l.p Bl rumph 1 39
21179 - - Baueriàna *Endl.* Bauer's ♀ or 20 ... ... Norfolk I. ... C s.l.p Pl.nf.190-193 [illegible]

MONADELPHIA.

3324. 21180 - 2107*a*. PLECTOCO'MIA *Mart.* (*Plektos*, twined, *kome*, hair; leaves at top of long climbing stem) *Pàlmæ*
- elongàta *Mart.* elongated ♀ or 500 au Ash India 1840 S r.m M p 3 196 111

3325. 21181 - 2109*b* LODOI'CEA *Comm* LODOICEA. (Not explained by author) *Pàlmæ*
- seychellàrum *Lab.* Seychelles ♀ or 60 ... Ap Seychelles ... S r m B m 2731-5-6 7 8
maldivica Pers *Cocos maldivica* Rumph. *Cocos maldivica* Gmel.



21180 21181

History, Use, Propagation, Culture,

3319 *Boldòa* The plant is valued in Chili on account of its wood, which forms a valuable charcoal, and the aromatic fruit is eaten.

3320 *Tasmánnia* is a genus of smooth shrubs, having the flowers crowded in the axils of the upper leaves, and readily increased by cuttings

21180 *Plectocòmia elongàta* is a climbing palm, extending to the length of 500 feet, with pinnate leaves and lateral spadixes, which are divided into elongated branches. The spathes are coriaceous, and loosely imbricate The fruit is chestnut-coloured.

3321 *Encephalártos* is a genus separated from *Zàmia*, and requires the same treatment as the species of that genus They are principally natives of the Cape of Good Hope. The New Holland species of *Zàmia* are now called *Macrozàmia*. There is another genus, *Dipsacozàmia mexicàna* of Bentham, which does not appear to differ from *Zamia*

21176, *Dion edùle* The seeds of this plant are said to be a source of arrow-root in Mexico. This is probably only a species of *Macrozàmia*

3323 *Freycinetia* is a genus of trees having stems often radicant or scandent. The leaves are imbricate and narrow, sheathing and stem-clasping at the base, having the margins and back spinulose The floral leaves are bract formed and coloured The spadix is terminal, sometimes disposed in spikes, and sometimes in fascicles, cylindrical or oval-oblong

3325. *Lodoicea*. According to Mr. Clark the *Lodoicea* is completely extirpated in Round Island, and exists at present, in a state of nature, only on the islands of Praslin and Curieuse. The few which are found in the islands of the Seychelles Archipelago have all been planted, and only two or three of these appear to thrive The native place of growth of the *Lodoicea* was not discovered until 1743, the nuts were solely known from having been found floating on the ocean It was highly prized, and the value of one was estimated at from 60 to 100 crowns It was considered to possess great medicinal virtues, and many fabulous accounts have been given of it The trees which produced the nut were supposed to form a forest at the bottom of the sea. Water kept in the shell was considered to preserve those who drank of it from every complaint The crown or texture of the top of the tree is said to be used like that of the cabbage palm, *Arèca oleràcea*, but is less delicate, and slightly bitter, and is often preserved in vinegar. Out of the

POLYANDRIA.

21168 Aromatic tree with opposite short-stalked ovate-oblong [illegible]ous evergreen entire papillosely scabrous leaves and axillary racemes of flowers

21169 Leaves oval-oblong abruptly eared at the top of the very short petiole

21170 Leaves oblong gradually tapering at base along the petiole, Fruit globose subdidymous

21171 This plant is cultivated in Kew Gardens, but is not yet described any where

[nulosely serrulated towards apex with revolute edges

21172 Rachis rather spiny, Leaflets erectly incumbent tapering to apex acuminate contracted at base coriaceous spi-
β Leaflets less attenuated towards the apex
γ Leaflets narrowed towards the apex

21173 Vespin consist of many pairs of ellip lanc lifts which are ac, at both ends and serru near point, Petis prickly

21174 Stem cylindrical short, Leaves pinnate consisting of l neeolate glabrous coriaceous leaflets

21175 Caudex glabrous, Leaves pinnate, Leaflets lanceolate acute mucronate green glabrous furnished with 1 or 2 teeth when young but entire in the adult state glabrous

21176 Shrub dwarf, Leaves pinnate, Leaflets broad at base adnate to the petioles

[male of 3 or 5 cylindrical ovaries 3—4-gynous

21177 Caudex scandent Leaves linear-lanceolate spiny toothleted at apex, Spadix terminal on short peduncles, Fe-

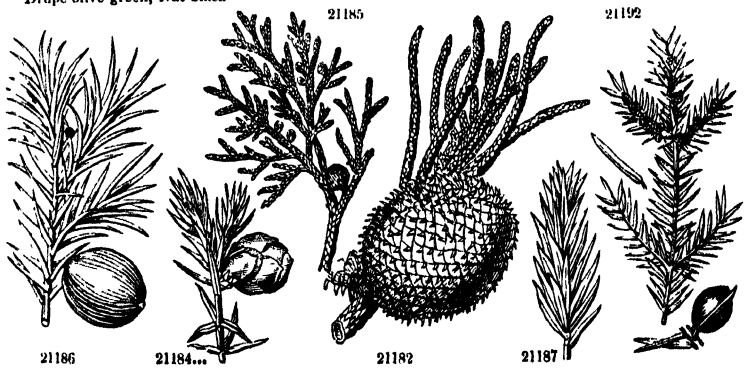
21178 Caudex scand, Lvs long lin spiny-tthed, Spadix term on short pedunes, Fem elipt-glob, Ovaries 3—5-gynous

21179 Caudex scandent rooting annulate, Leaves linear-lanceolate elongated spins on the back and margins as are the ovate acuminate bracts, Ovaria 9—12 in bundles, Stigmas sessile emarginately horseshoe-formed

MONADELPHIA.

21180 Caudex long scandent, Fronds large pinnate, Pinnæ reduplicate, Rachis often ending in a tendril armed with many-lobed hooked prickles

21181 Caudex tall, Wood black, Fronds terminal ample palmately fan-shaped, Segments bifid, Spadix large persistent, Drupe olive-green, Nut black



and Miscellaneous Particulars

[illegible] vessels of different forms and uses are made The leaves are employed to thatch houses The young [illegible] affords an excellent material for hats. The trunk is split and used for palisades for surrounding houses and gardens

Lodoicea seychellarum is the Sea or Double Cocoa-nut of the Seychelles or Praslin, and is a beautiful palm tree, growing to the height of 60 to 80, or even to 100 feet, the trunk is annulated from the scars of the fallen leaves, about a foot in diameter, and is equal in thickness from top to bottom. The trunk yields to the slightest breeze, and when the wind is moderately strong the huge leaves are crashed together with an astonishing noise The part of the trunk immediately above the surface of the ground forms an inverted cone, which is terminated below by a hemispherical base whence spread in all directions a great number of cord-like roots, penetrating to a considerable distance around. These roots remain long after the destruction of the plant itself. So firmly are the leaves attached to the trunk, that a man may seat himself at the end of one of them with perfect safety The texture of the leaflets is very strong, and consists of fine threads or fibres, disposed in three layers, the direction of the two outer layers is longitudinal, and that of the central layer transverse. Mr Clark estimates that three of the leaves, only one of which is produced each year, occupy 8 inches on the stem, and that consequently a tree of 80 feet in height must be about 400 years old According to the same authority, the male and female spadix, instead of rising from the angle of the accompanying leaf-stalk passes through a fissure at its base he also states that, although the tree puts forth only one spadix in a year ten or more may be seen flowering at the same time, this is to be explained by the multiplicity of flowers in the [illegible]kin, which blossom successively. The female trees bear flowers and fruit in all their different states at the same time As many as seven well-formed drupes are sometimes produced on a single spadix, and 7 or 8 years are required for the full maturing of the nut This fact Mr Clark states to have been ascertained on one of the female Lodoiceas planted at Mahé, which had flowered for several years without producing fruit, owing to the absence of the male plant A male flower was procured from an estate a few miles distant, and suspended in the tree, and about two months afterwards one of the buds expanded, and finally arrived at maturity. The experiment was made in 1833, and the fruit fell at the latter end of 1841. The drupe attains the length of 15 inches, is about 3 feet in circumference, and weighs from 30 to 40 pounds. When the fruit has reached its full size but is still soft (in which state it is called

2112. ARAUCA'RIA

21182 14048*a* Cookii *R. Br.* Capt Cook's ♀ ▭ or 60 ... Ap N Caled 1850. C r.m Bot. mag 4[illegible]
columnàris Hook. *Dombeya columnaris* Forst *Cupréssus columnàris* Forst.
21183 - Bidwillii *Hook* Bidwill's ♀ ▭ or 60 ... Ap Moret B. 1840. S r.m Hook Lond J[illegible]

2113 JUNI'PERUS.

21184 14062*a* drupàcea *Lab* drupaceous ♣ or 4 my jn Ap Syria 1820 L s.l p Loud enc t[illegible]
21185 - sphæ'rica *Lindl* spherical ♀ or 30 my jn Ap China 1848. L s l p Px fl g l ½

21186 - macrocárpa *Smith* large-fruited ♣ or 10 my jn Ap Greece 1838 L s l.p Loud enc tr

21187 14063*b* squamàta *D. Don* scaly ♣ or 4 my jn Ap Nepal 1824 L s l p Loud enc t[illegible]
21188 - recúrva *Hamilt* recurved ♣ or 4 my jn Ap Nepal 1817 L s l p Loud enc t
21189 - tetragòna *Lindl* tetragonal ♣ ▭ or 4 my jn Ap Mexico 1838 L s l p
21190 - flàccida *Lindl* flaccid ♀ ▭ or 20 myjn Ap Mexico 1836 L s l p
21191 - mexicàna *Schiede* Mexican ♀ ▭ or 20 my jn Ap Mexico 1846 L s l p

3326. 2114*a* TORRE'YA *Arnott* (*John Torrey, M D*, one of the authors of *N American Flora*) *Taxà.*
21192 - taxifòlia *Arn* Stinking cedar ♀ or 40 ... Ap Florida 1840 C p l Loud enc t[illegible]
Táxus montàna Nutt
21193 - Humboldtii *Hort.* Humboldt's ♀ or 40 ... Ap Mexico 1848 C p l

[*Coniferæ*

3327. 2114*b* CEPHALOTA'XUS *Sieb. & Zucc* (*Kephale*, head, *taxus*, yew; habit of yew with glob *anth*
21194 - Fortùnii *S & Z* Fortune's ♀ or 60 .. Ap Japan 1848 C s l p Bot mag 4[illegible]
21195 - pedunculàta *S & Z* pedunculate ♀ or 40 ap my Ap Japan 1837 C co Loud enc tr
Taxus Harringtònia Hort. *macrophylla* Thunb

3328. 2014*c* DACRY'DIUM *Sol* DACRYDIUM (*Dakry* a tear, resinous exudations) *Coniferæ*
21196 - cupressinum *Sol* Cypress-like ♀ ▭ or 80 Ap N Zeal 1825 C s l p Lamb pin
Thalamia cupréssina Spreng
21197 - elàtum *Wall* tall ♀ ▭ or 60 ... Ap PaloPen. 1830 C s.l p
Juniperus elàtus Hook.
21198 - Franklinii *J Hook.* Huon Pine ♀ ▭ or 80 ... Ap V D L 1844. C s l p

21199 - excelsum *D Don* tall ♀ ▭ or 200 Ap N Zeal ... C s l p
thuioides S. & Z *Podocárpus dacrydioides* A Rich. Fl nov zel p 358 t 39. *P thuioides* R Br
21200 - Mâi *Cunn* Mai or Metai ♀ ▭ or 80 ... Ap V.D L 1843 s l p

3329. 2116*a* LARDIZABA'LA *R & P* (*Michael Lardizabala y Uribe*, mentioned in *Fl Per*) *Lardizabalàceæ*
21201 - biternàta *R & P.* biternate-lvd ♃ or 20 ... P.Choc Chili ... C co Bot mag 4[illegible]

3330. 2116*b* SPHÆROSTE'MMA *Blume* (*Sphaira*, sphere, *stemma*, crown, stams on glob disk) *Schizandr*
21202 - propínquum *Blume* allied ♀ ▢ or 10 jl Y Or Nepal 1828 C s l p Bot. mag 4[illegible]
Kadsùra propínqua Wall tent. nep t. 15.

3331 2116*c* PHYTOCRE'NE *Wall* (*Phyton*, a plant, *krene*, a fountain; vegetable fountain) *Tiliac*
21203 - gigantea *Wall* giant ♀ ▭ or 40 Martaba 1830 C s l p Wall pl[illegible]



History, Use, Propagation, Culture,

coco-tendre), it may easily be cut through with a knife. A transverse section, Mr Clark states, successively dis[illegible] the husk, green on the outside, but whitish within, of a harsh astringent taste, much like the husk of a [illegible] cocoa-nut, inside of which is a substance which is destined to form the shell, next follows a layer, more or less th[illegible] of a mealy insipid substance, of a white colour, covering a yellow substance of a very decided bitter, and sam[illegible] poisonous, which encloses the perisperm. This is a white translucent mass of a gelatinous consistence, and sw[illegible] taste; taken at the proper period it furnishes an agreeable food, much esteemed by the Seychellois. In the cen[illegible] this, where the two lobes of the perisperm unite, is the germ, at this period scarcely visible. The germination of [illegible] seed sometimes commences before the fall of the fruit, but most frequently after. It is prevented by burying [illegible] nut, but readily takes place on the surface of the earth, in a situation not too much exposed to the sun. The le[illegible] of time from the germination to the period when the trunk begins to form above the ground, is stated at from [illegible] 20 years, and even in favourable situations the *Lodoicea* is full 25 years before producing flowers.

21182. *Araucària Cookii* is more dense in habit than *A excélsa*, the Norfolk Island pine. The scales of the c[illegible] do not terminate in a hard woody truncate extremity, as in that species, but in a long reflexed appendage. In th[illegible] of Aniteura, where it was first discovered, the tree has become scarce, the English having cut down the trees [illegible] spars. Mr Moore, the colonial botanist in New South Wales, saw only one plant there, and this was [illegible] rendered sacred by the natives, but in New Caledonia, on the south-east coast, whole forests of this tree are [illegible] observed. In such situations the tops are not unlike basaltic columns. Mr Moore mentions the first plant of it [illegible] by Captain Cook, who describes it in his account of New Caledonia as an elevation like a tower. It still stands [illegible] in a flourishing condition. Its appearance now is like a well proportioned factory chimney of great height [illegible] *willii* is a fine species, and grows also to a large tree. It is called *Banza-Tunza* or *Banya-Tunya*.

21192. *Torrèya taxifòlia*. This tree has a strong and peculiar odour when burnt or bruised, and hence it is [illegible] Stinking Cedar in its native country. The wood is not liable to the attacks of insects. *T. Humboldtii* is a tree [illegible] much paler green colour than *T. taxifolia*

Adult leaves closely imbricate incurved convex obtuse keeled on the back, Female aments ovate-elliptic, Scale 2-seeded terminated by a long reflexed mucrone

Branchlets opposite, Leaves flat ovate-lanceolate pungent, young ones subsecund, adult ones spreading on all sides, Scales of strobile with a hooked reflexed point

Leaves tern spreading acute 3 times shorter than fruit, Nut 3-celled

Arboreous, Leaves all scale-formed in 4 ranks obtuse marked by a circular hollow on the back, Branches slender tetragonal Fruit spherical glaucous on short stalks

Leaves tern spreading mucronate keeled 1-nerved, Berry elliptic longer than leaf A handsome shrub covered with violet bloom [bilicate, Branches and branchlets crowded terete, Stem prostrate

Leaves tern acute speedily imbricate ovate-oblong acute or acuminate persistent young ones inflexed, Berries ovate umbilicate

Leaves linear-lanceolate loosely imbricate smooth convex beneath, Berries reddish-oval tubercled, Branches and branchlets recurved

Branches flattened, Leaves in 4 rows closely imbricate rather thick obtuse ovate, Berries globular small

Branches pendent, Leaves ovate lanceolate in 4 rows, Berries globular with projecting pointed scales

Leaves in 3 rows often only opposite ovate acuminate, on the young shoots they are only half-line long

Leaves distich stiff mucronate exstipulate, Branches distich and forked

This species is in the Gardens, but is not yet described, but it appears very distinct

[on short bracteate peduncs, Amentules or scales shorter than the broad-ovate erose bracts

Leaves of branchs distich sessile pectinately disposed linear acum 3—4 inches long stiff paler beneath, Male aments globose.

Leaves distich flat 1½ inch long green above and glaucous beneath except on the midrib and revolute edges where they are green mucronate on short foot-stalks

Leaves linear-subulate tetragonal mutic green with elevated angles, when young divaricate but loosely imbricate in the adult state, Branches flexuous dependent

Arboreous, Leaves crowded without order erectly spreading mucronate A large timber tree of slow growth

Branches tetragonal, Leaves small opposite adpressed ovate-acuminate keeled Female aments terminal curved drooping 5—7 flowered, Fruit loosely spicate, Male scales small, Fructiferous scales concave cleft in front, seed small erect elliptic subdrupaceous

Leaves loosely imbricate subulate compressedly tetragonal mucronate glaucous with depressed angles [branches stiff, younger ones twiggy

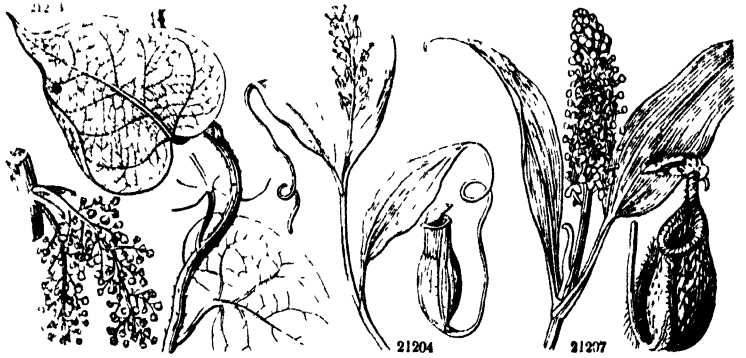
Ivs turned linear obtuse with a callous point and revolute margins green above and glaucous beneath, Adult

Leaves twice or thrice ternate often simple, Leaflets oblong acute unequal at base and with one or two teeth on one side, Bracts 2 large unequally cordate at base of peduncles

Twining Leaves ovate lanceolate entire, Flowers in fascicles, Peduncles bracteate hardly equalling the petioles in length, Anthers sessile immersed, Berries 2-seeded, Spike a tuberculated receptacle

[naked

Leaves broad cordate a little lobed at base villous beneath, Racemes crowded at the base of the branches



21204 21207

and Miscellaneous Particulars

Cephalotáxus Fortúnii is said by Mr Fortune to grow to the height of 40 to 60 feet. The leaves are set in alternate, opposite, close together, 3 or 4 inches long, acuminate, 1-nerved. It increases by cuttings, like Yew.

Dacrydium cupréssinum is a red pine which attains the greatest perfection in moist rich soil The tree rises to the height of 80 feet, and the trunk is 4 feet in diameter. The foliage is said to be graceful. Captain Cook prepared a kind of spruce-beer out of the bitter resinous juice, which he found excellent in scorbutic complaints The wood is close-grained, and much resembles the Bermuda Cedar. It is the New Spruce Tree of New Zealand, described in Cook's "Second Voyage," vol i p. 70, t. 51. *D excélsum* grows to a very large tree, and is called Rimu Kaica by the New Zealanders. *D Franklínii* is the Huon Pine of Van Diemen's Land. It is a noble timber tree growing in swampy places, is of a pyramidal form with rather drooping branches, the ultimate ones are very slender The wood burns briskly, giving out a pleasant aromatic odour. It is close-grained and valuable for ship-building and for all purposes to which pine wood is applied; and is readily obtained in logs 40 or 50 feet long. The Huon Pine forms the principal article of exportation from Macquarie Harbour. 2869 logs were collected, in one year, from different spots near the neighbourhood

Lardizabàla bitérnata is a hardy evergreen creeper, well adapted for covering high walls, the foliage being always green The flowers are of a deep purplish chocolate colour. The fruit is sweet and edible, and is sold in the Chilian markets under the name of *Aquilboquil*, of *Guilbogus* in Peru, and of *Coguill-Vochi* in Chili

Sphærostémma propinquum is a climbing shrub requiring protection in winter, but it is otherwise of easy culture.

Phytocrene gigantèa is a large twining shrub, with soft porous wood, from which issues a quantity of limpid watery juice in great quantities on being cut. The leaves are large, cordate, and petiolate. This plant should be cultivated and treated like other stove climbing shrubs.

2121 NEPE'NTHES

21204 14077*a* Phyllámphora *Jack* pitcher-leaf — *Phyllámphora mirabilis* Lour. *cantharifera* Rumph — ... Sincapore ... S C p l sph Ru. amb

21205 - - *lævis Lindl.* smooth — .. Java 1848. S C p l sph

21206 - - ampullária *Jack* bottle-like — Rusty Sincap 1847 S C p l sph

21207 - - Rafflesiána *Jack* Sir T Raffles's — Y Br Sincap 1845 S C p l sph Bot mag 42

21208 - - *Lindleyàna Low.* Lindley's — P *Borneo* 1847. S C p l sph

21209 - - Hookeriàna *Low* Hooker's — . Sarawak 1847 S C p l sph

21210 - - álbo-marginàta *Ho.* white-margind — .. Sincap 1848 S C p l sph

21211 - - sanguínea *Hort.* blood-coloured — .. E Indies 1848 S C p l sph

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Order I. MONŒCIA Flowers monœcious.

3332 2126*a* *Neptunia* Flowers polygamous Calyx 5-toothed Petals 5, distinct, oblong, spatulate Stamens rarely 5, having the filaments of the lower flowers of the spike all sterile and petaloid. Legume oblong, dry, 4—6-seeded, broadest at base

3333 2126*b* *Prosópis* Flowers polygamous Calyx 5 toothed Petals 5, free Stamens 10 with the filaments scarcely connected at base Legume continuous, filled with pulp, linear, rather compressed, swollen above the seeds and at length separating into 1-seeded parts

3334 2128*a* *Stenánthium* Flowers either hermaphrodite or polygamous. Perianth of 6 coloured persistent segments turbinate at base, where they are adnate to the ovarium. Stamens 6, filiform Anthers reniform, 1-celled opening outside Seminiferous ovarium 3-celled Cells many-seeded Styles 3 continuous, distinct, stigmatose at the Stigma simple Capsule oblong, 3 celled, tripartible crowned by the styles Carpels dehiscing inside Seeds ... sulcultriform, compressed, bract-formed Testa girded by a wing.

MONŒCIA.

2123 I'NGA

21212 14098*a* pulchérrima *Past* fairest — or 10 su S Mexico 1846. C s.l p Px m

2124 MIMO'SA

21213 14108 uruquénsis *H & A* Uruquay — or 2 jn jl Br R Banda O 1841 C s l p Bot rep

3372 2126*a* NEPTU'NIA *Lour* (So called from the species growing in Lakes and ponds) *Legum*

21214 - - plèna *Dec* full — or fl jl s Pa Y Mexico 1733 S w Bot mag

Mimosa plena Lin., Mill fig. 182 1 2 belongs to this genus. *Desmánthus plenus* W, No 14114., as well as No

3333. 2126*b* PROSO'PIS *Lin.* ALGAROBA (*Prosopon* a mask) *Leguminosæ*

21215 - - spicígera *Lin.* spike bearing — ed 40 G Y Coroman 1812 S s.l p Roxb

21216 - - dúlcis *Kth* sweet — ed 50 .. G Y N Spain 1818. C s l p Kth mon

Acácia edúlis W *lævigàta* W.

21217 - - juliflóra *Dec* July flower — ed 30 ... G Y Jamaica 1800. C s l p

Mimósa juliflóra Swartz *Acácia falcàta* Desf.

2127 ACA'CIA

21218 14120*a* ruscifólia *Cun* Broom-leaved — or 2 mr.my Y N S.W. 1824 S s l p

21219 - - Oxýcedrus *Sieb* Cedar — or 6 mr my Y N.S.W. 1823. S s l p Bot mag

taxifólia Lodd bot cab. 1225 *pugioniformis* Cun.

21220 - - oncinophýlla *Lindl* hooked-leaved — or 4 mr.my Y Swan R 1848. S s l.p

21221 14121*a* Riceàna *Hensl.* Ld Monteagle's — or 4 mr my Y V.D L. 1835. S s.l.p Px. fl g

setigera Hook



History, Use, Propagation, Culture,

3332. *Nepthùia* is a genus of floating water-plants, with leaves sensitive to the touch, like those of the sensitive plant. They grow well in a stove aquarium, or in tubs or pans filled with water, having a few inches of mould in the bottom. They require to be placed in a warm situation in a hothouse.

21304 Leaves petiolate oblong, Pitchers naked somewhat ventricose at base thickish marcescent above depressed and striated at the mouth, Racemes very long, Pedicels 1-flowered
21305 In the Gardens, but not yet described, not having flowered

21306 Stem creeping at base with uliniferous surculi but at length folliferous and erect, Tendrils of leaves mutic, Pitchers petiolate winged in front coarctate at the mouth roundish and striated having the lid lanceolate reflexed and tricuspidate behind, Plant covered with rusty down
21307 Leaves petiolate, lower ones bearing ventricosely campanulate pitchers which bear broad membranous wings in front Wings ciliated, those of the upper leaves funnel-shaped and naked, all beautifully striped
21308 In the Gardens, but not yet described
21309 In the Gardens, but not yet described
21310 In the Gardens, but not yet described
21311 Dwarf, Pitchers deep reddish brown outside and marked with the same colour inside

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Order 2. DIŒCIA. Flowers dioecious.

2135 2153a *Phytélephas.* Flowers polygamous, dioecious Spathe 1 leaved Spadix simple clavate, densely beset with flowers Calyx urceolate obsoletely many toothed Stamens numerous. Styles 5—6-cleft. Drupes aggregate, connate 4 celled Cells 1-seeded Albumen horny

2149 2150a *Mimusa* Flowers polygamous Calyx 4-cleft, persistent Petals 4 unguiculate, deciduous —Male Stamens 4, hypogynous, alternating with the petals Disk fleshy, 4 lobed, girding the short apiculated rudiment of an ovarium —Female flowers with rudiments of stamens on an annular disk, which girds the ovarium. Ovarium free, 4 celled Ovula solitary in the cells, pendulous Style cylindrical, simple. Stigma thick, 4-lobed. Drupe fleshy

2157 2157a *Antiaris* Flowers monoecious —Male Involucrum many-leaved, many-flowered Leaves in many series imbricate, connate at base, girding the orbicular flat convex receptacle, which is concave below Flowers sessile, crowded Perigone 3—4-leaved. Leaves spatulate, conniving at top Stamens 3—4, opposite the leaves Filaments short or wanting Anthers extrorse, 2 celled —Female flowers Involucrum 1-flowered, urceolate, multifid at top. Perigone wanting Ovarium 1-celled combined with the involucrum, containing only one pendulous ovulum. Style terminal, bifid, the legs filiform and stigmatose inside Drupe formed of the baccate involucrum.

MONŒCIA.

21212 Branches slender spreading villous when young Leaves with 4—5 pairs of pinnæ, each pinna bearing from 20—26 pairs of small lin. obt closely imbricate adpressedly ciliated leaflets, Heads solitary pedunculate pendulous

21213 Fibrous, Prickles scattered straight, Stipules broad ovate acute, Leaves of 2—3 pairs of pinnæ, each pinna bearing 8—12 pairs of obl.-lin leaflets, Pedunes rather longer than lvs, Bracts small, Legume lin.-fal. scab

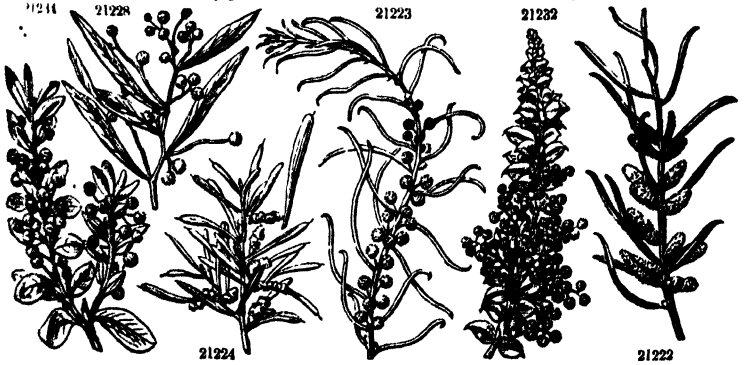
21214 Stems prostrate compressed, Leaves with 2—4 pairs of pinnæ, and each pinna bearing 12 pairs of leaflets, Peduncles bracteate

[leaflets

21215 Prickles scattered, Leaves with 1—2 pairs of pinnæ, and each pinna bearing 7—10 pairs of oblong-linear obtuse
21216 Stipules stipular or wanting, Leaves with 1—2 pairs of pinnæ, each pinna bearing 18—25 pairs of ciliated leaflets, Petiole bearing 1—2 small glands
21217 Stipules stipular straight small, Leaves with 1—2 pairs of pinnæ, each pinna bearing 18—20 pairs of linear lfts, Gland small on the petiole between the pairs of pinnæ, Spikes cylindrical sessile

[flexedly divaricate

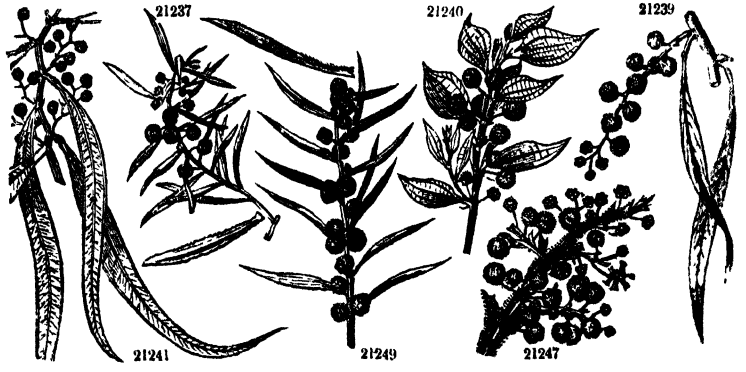
21218 Phyllodia lanceolate-linear ending in a sharp point verticillate, Spikes axillary cylindrical, Branches stiff de-
21219 Stipules spiny, Phyllodia scattered or verticillate linear-lanceolate 3-nerved ending in a sharp point glabrous glandless, Spikes axillary solitary elongated, Flowers 4-cleft
21220 Branches angular, Phyllodia very long linear hard striated narrow at base retrorsely hooked at apex glandulose above the base, Stipules wanting, Spikes ament-formed twin shorter than phyllodia
21221 Phyllodia linear in clusters deep green mucronate glandless, Spikes solitary axillary loose



and Miscellaneous Particulars.

2213 *Prosopis* is a genus of large trees, which require the same treatment and culture as the stove species of *Mimosa* or *Acacia*. The pulp in the pods has a sweetish taste, not unlike gingerbread, or the Spanish Algaroba, or St. John's bread (*Ceratonia Siliqua*), and is eaten by the inhabitants where the trees grow.

21222 -	- uncinifólia *Lindl.*	hook-leaved	♂	⊔	fra	6	mr my	Y	Swan R	1846	S	s l p	Bot mag 4[illegible]	
21223 -	- leptoneùra *Benth*	slender-nerved	♂	⊔	or	6	mr my	Y	Swan R.	1846.	S	s.l.p	Bot mag 4	
21224 14127*a*	mucronàta *W*	mucronate-lvd	♂	⊔	or	6	ap jn	Y	N Holl	1818	S	s.l.p	Bot mag 2[illegible]	
21225 -	- doratóxylum *Cunn.*	spear-wood	♀	⊔	or	20	ap jn	Y	N Holl	1823	S	s l.p		
21226 -	- intertéxta *Lieb* *obtusifólia* Cunn	interwoven	♂	⊔	or	6	ap jn	Y	N Holl	1824	S	s l p		
21227 -	- holosericea *Cunn* *heteromélla* Swt.	silky	♀	□	or	20	ap jn	Y	N Holl	1818.	S	s l p		
21228 14133*a*	penninérvis *Lieb* *impressa* Cunn Bot reg 1116 Lodd bot cab 131[illegible]	feather-nerved	♂	⊔	or	6	ap jn	Y	N Holl	1824	S	s l p	Bot. mag [illegible]	
21229 -	- oleifólia *Cunn.* *uncinàta* Lindl Bot reg 1232	Olive-leaved	♂	⊔	or	6	mr my	Y	N S W	1824.	S	s.l p	Bot reg 13[illegible]	
21230 -	- podalyriæfólia *Cun*	Podalyria-lvd	♂	⊔	or	6	mr my	Y	N S W	1824	S	s l p		
21231 -	- celastrifólia *Benth*	Celastrus-lvd	♂	⊔	fra	6	ap jn	Y	N Holl	1843	S	s l p	Bot mag 4[illegible]	
21232 -	- cultriformis *Cunn.*	knife form-lvd	♂	⊔	or	6	ap jn	Y	N S.W.	1830.	S	s.l p	Px m [illegible]	
21233 -	- dentifera *Benth*	tooth-bearing	♂	⊔	or	6	mr jn	Y	N Holl	1845	S	s l p	Botanist [illegible]	
21234 -	- argyrophýlla *Cunn*	silver-leaved	♂	⊔	or	6	mr	Y	Swan R	1846.	S	s l p	Bot mag [illegible]	
21235 -	- brevifólia *Lodd*	short-leaved	♂	⊔	or	4	ap.jn	Y	N S W.	1820	S	s l p	Lodd. b [illegible]	
21236 -	- buxifólia *Cunn* *conférta* Cunn MS.	Box-leaved	♂	⊔	or	6	mr	Y	N Holl	1824	S	s l p		
21237 -	- viscidula *Benth* *ixiophýlla* Hort	viscid	♂	⊔	or	6	f my	Y	N S W.	1844	S	s l p	Px fig 2 [illegible]	
21238 -	- ixiophýlla *Benth*	Ixia-leaved	♂	⊔	or	2	mr jn	Y	N S W	1844	S	s p l		
21239 -	- cyanophýlla *Lindl.*	blue-leaved	♀	⊔	or	18	mr jn	Y	Swan R.	1838	S	s p l	Px fig 2 [illegible]	
21240 -	- urophýlla *Benth* *smilacifólia* Fielding sert. pl t 3. 1843	tail-leaved	♂	⊔	or	6	mr jn	Pa Y	Swan R	1836	S	s l p	Bot mag 4[illegible]	
21241 -	- macradènia *Benth*	large-glanded	♂	⊔	fra	10	mr jn	Y	Vict R	1818	S	s l p	Px fig 1 [illegible]	
21242 -	- squamàta *Benth.*	scaly	♂	⊔	or	6	mr jn	Y	Swan R	1818	S	s l p	Moor [illegible]	
21243 -	- péndula *Cunn*	weeping	♂	⊔	or	8	mr jn	Y	N S W	1824	S	s l p		
21244 14145*a*	deltòides *Cunn.*	deltoid-leaved	♂	⊔	or	6	mr.jn	Y	N Holl	1824	S	s l p		
21245 -	- ornithóphora *Swt.*	bird-bearing	♂	⊔	or	6	mr jn	Y	N Holl	1824	S	s l p	Swt fl [illegible]	
21246 14147*a*	paradóxa *Dec* *undulàta* W	paradoxical	♂	⊔	or	6	mr jn	Y	N Holl	...	S	s l p	Wendl [illegible]	
21247 14148*a*	platýptera *Lindl*	broad-winged	♂	⊔	or	3	mr.jn	Y	Swan R	1840	S	s l p	Bot mag [illegible]	
21248 -	- dodonæifólia *W.* *viscòsa* Wendl	Dodonia-leaved	♂	⊔	or	6	mr jn	Y	N Holl	1816	S	s l p	Wendl [illegible]	
21249 -	- lanigera *Cunn*	wool-bearing	♂	⊔	or	6	mr jn	Y	N Holl	1821	S	s l p	Bot [illegible]	
21250 -	- linearis *Cunn*	linear-leaved	♂	⊔	or	6	mr jn	Y	N Holl	1824	S	s l p	Bot [illegible]	
21251 -	rotundifólia *Hook*	round-leaved	♂	⊔	or	6	mr jn	Y	N. Holl	1842	S	s l p	Bot mag [illegible]	
21252 -	- bombycina *Benth.* *podalyriæfólia* Hort.	Bombyx-like	♂	⊔	or	6	f mr	Y	N.S W	1824	S	s l p	Px fig 2[illegible]	
21253 -	- cochlearis *Wendl* *Mimòsa cochleàris* Labill. nov holl 2 t 234.	spoon-leaved	♂	⊔	or	6	mr jn	Y	N Holl	1818.	S	s l p	Px fig [illegible]	
21254 -	cyclops *Cunn.*	circle-eyed	♂	⊔	or	6	mr jn	Y	N. Holl	1824	S	s l p		
21255 -	- gravèolens *Cunn.*	strong-scented	♂	⊔	or	6	mr jn	Y	N.S W	1820.	S	s l p		
21256 1416*3a*	spectábilis *Cunn*	showy	♂	⊔	or	6	ap	Y	N S W.	1837	S	s l p	Bot reg [illegible]	
21257 -	- cygnòrum *Benth.*	swans'	♂	⊔	or	4	ap	Y	Swan R.	1850.	S	s l p	Bot mag [illegible]	



Glab. or resinose, puberulous Branches angular, Phyllodia long lin.-subu. flat recurved mucr. 3-nerved with an obscure gland near the base, Spikes usually twin dense on short peduncs cylind. Sepals free spatulate

Glabrous but when young downy, Phyllodia subulate teretely compressed many-nerved mutic or uncinately mucronate Peduncles short solitary or twin Sepals free narrow-spatulate

Phyllodia lin.-spatul. 1—3-nerved rounded and mucronate at apex, Spikes solit. or hairy, Calyx usually 5-lbd

Phyllodia lanceolate-linear falcate striated tapering at base, Spikes cylindrical axillary twin nearly sessile

Phyllodia long lanceolate bluntish 3-nerved and reticulate tapering at base with an obscure gland on the upper margin at base, Spikes twin, Flowers 4-cleft

Phyllodia oblong-lanceolate obliquely cuneate at base 3-nerved terminating in a mucrone with one gland on the upper margin, Spikes axillary usually twin

Phyllodia oblong acuminate at both ends 1-nerved and feather-veined with one gland in front at base, Heads of flowers racemose

Stipules caducous Phyllodia ovate-oblong oblique marginate falcate mucronate downy as are the branches, Heads solitary axillary

Powdery Phyllodia elliptic-obtuse wavy 1-nerved terminated by an oblique mucrone, Heads of flwrs racemose

Glabrous, glaucous when young, Branches tr quetrous Phyllodia obliquely ovate or obovate mucronate coriaceous tapering at base marginate with a gland beneath the middle Heads racemose on short peduncles

Branches angular Phyllodia cultriform ending in a hooked mucrone which leans to one side and furnished with a gland in the middle on the upper margin 1-nerved Heads racemose

Branches angular Phyllodia long linear-lanceolate falcate acute feather nerved glandless tapering at base, Racemes at first leafy Heads numerous globose, Legume long linear terete

Branches angular, Phyllodia obovate-oblong obtuse feather-nerved silky with one gland towards the middle, Heads many-flowered solitary or racemose, Petals clavate elevated as is the calyx

Branches angular, Phyllodia elliptic ending in a spine-like mucrone 1-nerved and feather-nerved glaucous with a gland on one side Heads racemose

Glabrous Phyllodia ovate acute bearing a gland on the upper margin, Heads axillary twice the length of the phyllodia

Erect Branches slender, Phyllodia linear clammy as are the branches, Heads globular on short stalks axillary solitary or twin

Much branched glabrous or minutely downy viscid, Phyllodia narrow oblong-lanceolate subfalcate obtuse obliquely mucr. or glandulif. at apex many-nrvd, Pedunc. downy shortly rac. or solit., Heads about 6-flwd

Arcuous Branches drooping, Phyllodia lanceolate often 1 foot long glaucous green almost blue, Racemes axillary, Heads globose

Glabrous or hispid Branches angular Stipules setaceous-spinescent, Phyllodia petiolate ovate-lanceolate oblique subulately acuminated wavy, Upper margin often crenated 2-nerved or forked and 2—3-nerved transversely veiny or reticulate with large gland near base Pedunc. simple or shortly rac., Heads few flwd glab

Phyllodia green curved 8—9 inches long marginate 1-nerved and feather veined, Heads racemose, Bracts short

Branches and phyllodia straight recurved at top glandless acute terete glabrous, Stipules none Heads twin or tern pedunculate rising from deciduous imbricate bracts

Greyish Branches weeping or pendulous, Phyllodia linear-lanceolate arched a little tapering to both ends terminated by a hooked mucrone with one gland in front at base and 2—3 longitudinal nerves, Heads racem.

Stipules acicular twin spinescent Phyllodia dolabriform smooth terminated by a spine like mucrone many-nerved convex on the upper side and nearly straight on the lower, Branches slightly angular downy, Heads of flowers solitary pedunculate Peduncles longer than phyllodia

Stipules spinescent, Phyllodia obliquely oblong-lanceolate 1-nerved rather pilose ending in a hooked mucrone with a gland-bearing tooth on the upper margin Branches hairy Heads of flowers solitary or twin

Stipules spinescent, Phyllodia obliquely oblong-lanceolate entire wavy 1-nerved, Branches clammy glabrous, Heads solitary [cronate with one glandular tooth on the upper margin Heads solit. on short peduncs

Hairy, Branches broadly winged, Stips small pungent, Phyllodia short bifarious decurrent obliquely truncate mucronate with one glandular tooth on the upper margin Heads solit. on short peduncs

Stipules wanting, Phyllodia linear-lanceolate rather falcate tapering at base 1-nerved terminated by an incurved callous mucrone clammy as are the branchlets, Heads of flowers twin

Villous Phyllodia lanceolate acute stiff nerved falcate ending in a pungent mucrone, Heads twin

Hairy Stipules deciduous, Phyllodia linear ending in an oblique callous mucrone 1-nerved glandless, Heads of flowers twin on long peduncles

Branches angular puberulous, Stipules scale-formed very minute, Phyllodia on short petioles obliquely rounded obtuse or retuse mucr. with one gland towards middle on upper margin, Heads glob. solit. on long peduncs.

Silky from minute down, Branches rather angular, Phyllodia obovate or oblong rather oblique very blunt marginate glandless or with one obscure gland 1-nerved feather veined, Heads solitary or few shortly racemose many-flowered

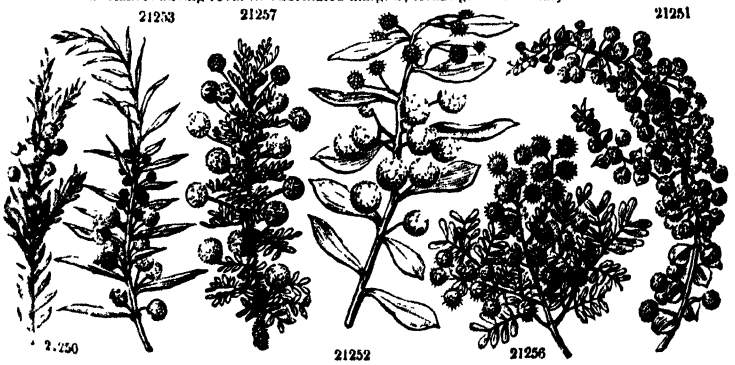
Stipules almost wanting, Phyllodia linear-lanceolate many-nerved rather pilose mucronate, Heads solitary

Stipules almost wanting, Phyllodia oblong-lanceolate obtuse obliquely mucronate tapering at base 3—7-nerved with one gland on the upper margin, Heads solitary

Stipules almost wanting, Phyllodia lanceolate tapering to both ends shining 2-nerved with a gland on upper margin at base clammy as are the branches, Heads of flowers usually twin

Glaucescent glabrous or branches and petioles hairy, Leaves with 2—3 pairs of pinnæ with a depressed bracteate gland on the petiole beneath the pairs of pinnæ, Leaflets 4—8 pairs on each pinna obovate-oblong obtuse obscurely 2—3-nerved, Heads in racemes, upper ones panicled

Branches hairy, Spines axillary subulate often wanting, Leaves with one pair of pinnæ, each pinna bearing 3—7 pairs of linear leaflets having revolute subciliated margins, Heads globose solitary



21258 - - grándis *Lindley* grea ⛃ ⌴ or 6 f.my Y N. Holl. 1850. S s.l.p Moor m 1

21259 14179a hispidíssima *Dec* very hispid ⛃ ⌴ or 4 ap.jl Y N.S.W. 1840. S s l.p Bot. mag

21260 - - Drummóndi *Lindl.* Drummond's ⛃ ⌴ or ... sp Y Swan R. ... S s l.p

3334. 2128a STENA'NTHIUM *Kth.* STENANTHIUM (*Stenos*, narrow, *anthos*, a flower.) *Melanthàcea*

21261 - - frig dum *Kth* frigid £ △ cu 3 jn.jl Dk.P Mexico 1846. D s l p J H S
Veratrum frigidum Schlecht.

2139. A'TRIPLEX.

21262 14256a deltoídea *Bab* deltoid-leaved ○ w 2 jn.o G England wa pl. s co Eng bot

21263 14267a marina *Lin* sea-side ○ w 1½ jl s G Britain sea sh S co

2140. TERMINA'LIA

21264 14272a bengalénsis *Roxb* Bengal ♀ ▭ or 30 jl au W Bengal 1826. C p l
rotúta Roxb *myrobálana* Roth.

2143 A'CER.

21265 14278a oblóngum *Wall* oblong-leaved ♆ ⌴ or 20 f G Y Nepal 1824. L co Arb Brit
laurifólium D Don

21266 - - lævigátum *Wall.* smooth ♆ ⌴ or 40 f G Y Nepal 1840. L co Wall p 2

21267 14280a eriocarpum *Mx* hairy-fruited ♆ or 25 ap.my G Y N Amer. 1725 L co Tratt ar
dasycárpum W *tomentósum* H Par. *glaúcum* Marsh *virginiánum* Duh *rúbrum* Wangh

21268 14285a macrophýllum *Ph.* large-leaved ♆ or 30 my jn G Y N Amer. 1812. L co Hook ame

21269 - - caudátum *Wall* tailed-leaved ♆ or 50 ap.my G Y N. India 1845. L co

21270 14289a dissóctum *Thunb.* dissected-lvd ♆ or 30 my G Y Japan 1845 L co

21271 - - palmátum *Thunb.* palmate-leaved ♆ ⌴ or 10 my G Y Japan 1820. L co Tratt arr

21272 - - circinátum *Ph.* circinate-lvd ♆ or 40 ap my G Y N. Amer 1827. L co Hook amer

21273 - - villósum *Wall.* villous ♆ fra 50 ap.my G Y Kamaon 1850. L co

21274 14293a hyrcánium *F & M* Hyrcanian ♆ or 40 my.jn G Y Caucasus 1838. L co

DIŒCIA

3335. 2153a PHYTE'LEPHAS *R. & P* (*Phyton*, a plant, *elephas*, an elephant, vegetable ivory) *Palmæ*

21275 - - macrocárpa *R. & P* large-fruited ♇ ▭ ec ... ... Ap Peru 1822 S r m Hook jun
Elephantúsia macrocárpa W [1 3

21276 - - microcárpa *R & P.* small-fruited ♇ ▭ or ... ... Ap Peru 1822. S r.m

2154 CHAMÆ'ROPS

21277 14322a excélsa *Thunb* tall ♇ ▭ or 12 ... ... Ap China 1822. S r m Mart jun

21278 - - Martiána *Wall.* Martius's ♇ ▭ or 40 ... ... Ap Nepal 1822 S r m Wall p 3

3336. 2154a SKI'MMIA *Thunb* SKIMMIA (*Skimmi*, in Japanese, means a hurtful fruit) *Aurantiæ*

21279 - - japónica *Thunb* Japan ⛃ ⌴ or 30 su W Japan 1845 C p l Bot ma
Limónia laureola Wall.

3337. 2157a. ANTIA'RIS *Lesch* UPAS-TREE (*Antjar* or *Antejar*, its Javanese name.) *Urticeæ*

21280 - - toxicária *Lesch* poisonous ♇ ▭ p 100 . . . G Java 1844 C s.l p Horsf
Arbor toxicária Ipo mas Rumph



History, Use, Propagation, Culture,

3334. ***Stenánthium frígidum*** is said to be poisonous, and may be supposed to furnish a part of the venomo
dilla seeds of commerce from which veratra is obtained.

3335 ***Phytélephas*** is the genus the nuts of which are the vegetable ivory, now imported to this countr
quantities, so much used by the turners for toys, knobs of umbrellas and walking-sticks, buttons, &c
Cabeno de Negro in Peru, where the leaves are used for thatch for houses. The young fruit is devoured
The plant has been cultivated by Messrs Loddiges of Hackney since 1820, and therefore is an old inhabitant
hot-houses. Whether the plant found on the banks of the Magdalena is the same as the plant from Peru is
This has also been introduced to Kew Gardens by Mr Purdie, formerly a collector for that establishment
stance of the nuts is the hardened perisperm.

3336. ***Skimmia japónica*** is a tree generally cultivated in Japan in gardens and around temples
Japanese, is said to mean a hurtful fruit.

21280. ***Antiáris toxicária*** is the Upas tree of Java and Jpu of Macassar, and is a large lactescent tree with
stipulate unequal-sided subcordate costately veined entire leaves, and axillary or lateral drooping peduncles
of the older travellers who have visited the islands of the Indian Archipelago make mention of this tree
the kingdom of Macassar on the Island of Celebes, and producing a poisonous juice of the most deadly
substance of these several statements is, that the natives of Macassar make use of the juice to poison

21256 Branches hairy Leaves of one pair of pinnæ, each pinna bearing 8—10 pairs of linear-lanceolate leaflets, Peduncles solitary or twin axillary 1-headed Heads globular

21259 Branches downy and hispid, Spines axillary subulate, Leaves of one pair of pinnæ on a short petiole bearing a pedicellate gland between the pairs of pinnæ, Leaflets 5—7 pairs on each pinna linear glabrous or ciliated on the margins Heads globose

21262 Stem hairy unarmed, Leaves with 2 pairs of pinnæ each pinna bearing 2—3 pairs of linear obtuse leaflets, Petioles marginate glandless, Peduncles longer than leaves, Spikes axillary drooping simple

21261 Stem simple leafy, Leaves linear complicate, Flowers large pedicellate racemose hermaphrodite

21263 Stem erect, Leaves usually opposite nearly all hastately triangular with spreading lobes, Perigone ovate-triangular muricate on back scarcely longer than fruit united only at base, Fruit panicled in dense spikes, Seeds black polished and a few dark brown and larger than the others

21264 Stem erect, Leaves oblong-lanceolate irregularly toothed rarely entire, Perigone obcordately triangular obtuse toothed to the keeled on the back closed

21264 Leaves alternate obovate entire glabrous glandless as are the petioles

21265 Leaves oblong-lanceolate entire coriaceous smooth rounded at base rather glaucous beneath, Racemes compound Fruit hairy in disk, Wings short parallel smooth

21266 Leaves oblong acuminate serrulated shining smooth, Corymbs terminal, Petals cuneated, Wings of fruit diverging cultriform

21267 Leaves truncate at base smooth and glaucous beneath palmately 5-lobed, Lobes deeply toothed Flowers apetalous pentandrous conglomerate on short pedicels, Ovaria downy [9 hairy, Ovaria hairy

21268 Leaves digitately 5-lobed, Lobes rather 3-lobed repandly toothed downy beneath, Racemes compound erect Filaments

21269 Leaves cordate 5-lobed downy beneath short, smooth in the adult state, Lobes ovate acuminate doubly serrated, Serratures awned, Racemes smooth, Wings of fruit diverging

21270 Leaves 9—10 parted, Lobes oblong acuminate deeply serrated or pinnatifid, Umbels 4—6-flowered

21271 Leaves smooth palmately divided into 5-7 lobes beyond the middle, Lobes oblong acuminate serrated, Umbels 5-7 flowered

21272 Leaves orbicular rather cordate at base 7-lobed smooth, Lobes acutely toothed hairy at the origin of the nerves beneath

21273 Leaves cordate 5-lobed villous beneath as are the petioles, Lobes ovate acute Racemes lateral, Petals bearded at apex Fruit villous with cultriform crenulated wings

21274 Leaves glabrous glaucous beneath and bearded in the axils of the veins suborbicularly cordate 5 cleft, Lobes obovate cut or toothed acutish, Corymbs nearly sessile nutant in the fruit-bearing state, Pedicels glabrous, Samara glabrous roundish with obovate erect conniving wings

DIŒCIA

21275 Fronds very long pinnate, Caudex humble, Heads of fruit large

21276 Fronds very long pinnate, Caudex none, Heads of fruit small

[Spadix paniculately branched, Berries globose blue furrowed on one side

21277 Frond digitately many parted, Petioles unarmed or denticulated Segments linear bluntish bidentate or bifid,

21278 Frond multifid, Segments bifid at top, Petioles toothed and covered with white scurf above, Partial spathes many Berries ovate nearly solitary lepidioted furrowed on one side

21279 Leaves alternate crowded towards the tops of the branches petiolate oblong coriaceous entire full of pellucid dots green above and pale beneath, Flowers terminal dichotomously panicled

21280 Segments of male involucrum ovate length of perianth, Leaves oblong-elliptic cordate at base, Heads hemispherical pendulous



and Miscellaneous Particulars

which are discharged through a tube, so fatal in its effects that a slight wound even in the heel, just sufficient to draw blood, not only produces immediate death but renders the flesh, within half an hour, so putrid as to separate from the bones on the mere application of the hands. "This," adds Bontius, "is no idle invention, but depends on the ocular testimony, not only of our own countrymen (the Dutch), but also on the English and French." Tavernier states the upas tree to be the produce of a certain tree growing on the island of Borneo, and capable of being so tempered as to prolong the suffering of the victim. Deschamps describes the tree as having much the habit of an elm having both male and female flowers growing on the same tree, and that the mere atmosphere of the tree is far less pernicious as it has been represented, he himself having cut branches from it with impunity The reports related concerning it, he thinks, may be explained by transferring the odium to the marshy and unwholesome air of the low island on the southern coast, to which, he says, state criminals and especially those of the highest rank are sometimes banished, and where they speedily die of malaria, not as the vulgar believe of emanations of the upas tree. He states also that the poison is the inspissated juice obtained by means of incision in the bark, and that if introduced into the circulation by the slightest wound it proves instantly fatal, although the natives feed with impunity upon the animals killed by arrows impregnated with the poison The Antjar Dr Horsfield states, is one of the largest trees in the forests of Java, the stem being completely naked to the height of 60 to 70 or 80 feet, and the bark white A puncture or incision being made in the bark, the juice or sap appears oozing out, of a yellowish

2159. DIOSPYROS.

21281 14376*a* amplexicaúlis *Lmd.* stem-clasping ♀ ▭ ed ... ... G Mauritius 1840. C s l.p
21282 - - Sapòta *Roxb.* *edùlis* Lodd. Sapota ♀ ▭ ed 26 ... ... G E Indies 1824. C s.l.p Bot. mag 7...

2167 FICUS

21283 14405*a* Roxbúrghii *Wall* *macrophýlla* Roxb. Roxburgh's ♀ ▭ or 20 ... ... G Silhet 1840. C s l.p
21284 - - virgàta *Roxb.* twiggy ♚ ▭ or 4 . ... Ap N. India ... C s.l p Px fl g 2126, 2...
21285 - - acuminàta *Hamilt* *cerasifórmis* Hort acuminate-lvd ♚ ▭ or 6 ... ... Ap Silhet 1830 C s l p Bot mag 3...
21286 - - urophýlla *Wall* *marginàlis* Hunter tail-leaved MS. ♚ ▭ or 13 ... ... Ap P Pinang 1829 C s l p Bot cab ...

21287 14407*a* pandurædfolia *Hort.* *pubérula* Kunth. *Urostigma Gardenæfolia* Miquel. fiddle-leaved ♀ ▭ or 20 . ... G India 1850 C s l p
21288 14419*a* Afzélii *G Don* *Sausumeána* Dec *Brássii* Hort Afzelius's ♚ ▭ or 10 ... ... G S Leone 1822 C s l p Mem ... but not of *H. T. Galactodéndron speciósum* Hort. Cels. [9 ...

21289 14435*a* barbàta *Wall* bearded ♚ ▭ or 3 ... ... G Sincapor 1850. C s l.p

21275



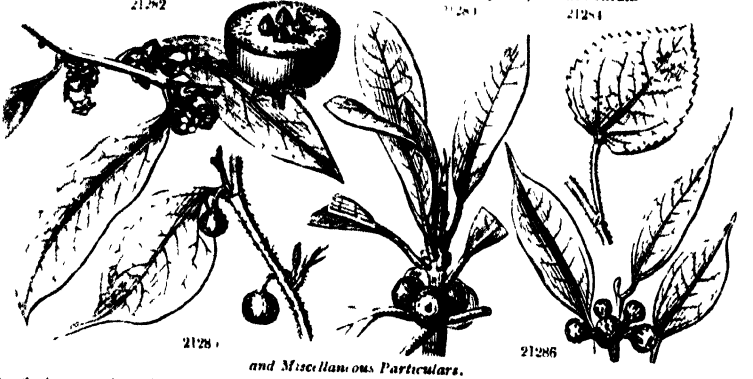
21279 21278 21280

History, Use, Propagation, Culture,

colour and rather frothy from old trees, but paler and nearly white from young trees; when exposed to the surface becomes brown. The consistence much resembles milk, only it is thicker and viscid. The sap is contai in the true bark (cortex), which yields the juice in considerable quantities The inner bark (liber) is of a close fib texture like that of *Morus papyrifera*, and when separated from the outer bark resembles a coarse piece of linen a is made into ropes and coarse clothing. It is only when the trees are largely wounded and when felled, by w large portion of the juice is disengaged, the effluvia of which mixing with the atmosphere affects the pers exposed to it with cutaneous eruptions, and heat and itching of the eyes The rapidity of the effects of the ...

[10-celled seated in a campanulate 6-lobed calyx
21281 Glabrous Leaves sessile stem-clasping coriaceous orbicular obtuse or acute, Fruit turbinate woody 10-seeded
21282 Leaves bifarious oblong-lanceolate glabrous, Pedunc les axillary on the younger branches, Flowers silky, Male peduncles 3- or many flowered Female 1-flowered Corolla urceolate with a 5-lobed spreading limb those of the hermaphrodite flowers with about 16 stamens and a 5-lobed stigma

21283 Lvs large smooth reddish cord 3-nerved downy on the nerves beneath sometimes repandly tlthd, Fruit collected in bundles of 8-12 near root, turnip-shpd ribbed with ribs having umbilicus closed by numer cord imbric scales
21284 Lvs cordate-ovate obt ser-crenate 3-nerved downy, Fruit axil and lat pedunc sol oval smooth Near *F. Carica*
21285 Branches and petioles clothed with rusty tomentum, Lvs broad elliptic and obovate long acum glabrous above but downy beneath with prominent nerves, Fruit solitary globose pendulous almost as long as peduncles
21286 Branches and petioles rather scaly, Lvs alternate on short petioles elliptic or obov-oblong pointed shining above and ruteavent beneath ent 5 nerved and reticulately veined Fruit axil twin or Lateral subfascicled globose or ellip contracted into a long stipe at base tribracteate Stipe hispid
21287 Leaves rough oblong narrowed at base fiddle-shaped 3-nerved entire deep green above puberulous on the nerves beneath
21288 Branches terete hairy at tops Petioles hairy Lvs broad-oblong lanc short acum tapering to base entire feather-veined shining above glabrous, Fruit usually twin sessile globose rather depressed covered with silky villi. Habit of *F. elastica*
21289 Creeping radicant Branches subretrorsely villous, Lvs distich alternate on short petioles ovate cordate acutely apiculated entire 3-nerved 4-ribbed on both sides, glabrous above or pilose, villous beneath



and Miscellaneous Particulars.

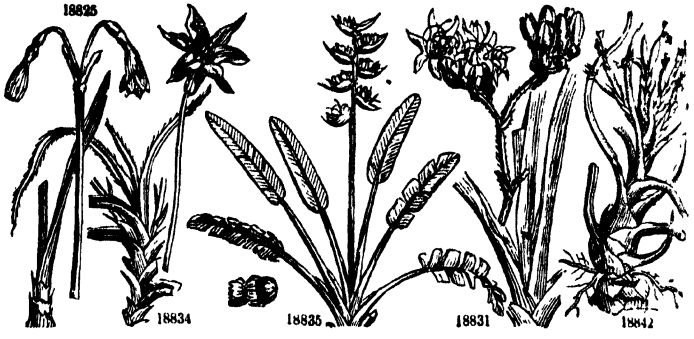
The Hon. Field states, depends in a great degree on the size of the vessels wounded, and on the quantity of the poison conveyed into the circulation but in general it is from a quarter to half an hour after its introduction it proves fatal He regards the convulsions accompanying the action of the poison as a subordinate and secondary symptom, and not as the result of any direct action of the poison upon the brain or nerves, but by rendering the heart insensible to the impetus of the blood and stopping the circulation

Ficus Roxburghii The fruit is larger than the common fig, and eaten by the natives in their curries, where it is indigenous

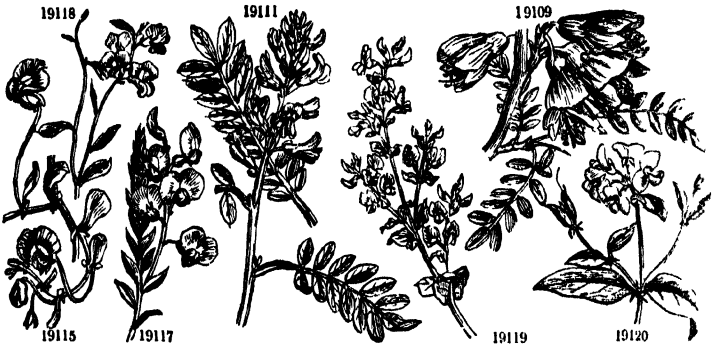
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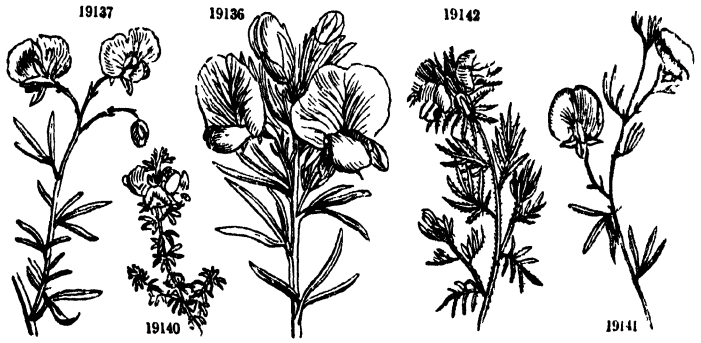
The following additional Figures are illustrative of Plants described in Pages 1334, 1356, and 1358.

Page 1334.



Pages 1356, 1358.





SUPPLEMENTARY LIST

OF

PLANTS LATELY INTRODUCED, AND NOT INCLUDED IN THE BODY OF THIS SUPPLEMENT,

WHICH ARE REMARKABLE FOR THEIR RARITY, UTILITY, OR BEAUTY.

ABELIA TRIFLÒRA *R Br* Bot Mag t 4694 An ornamental hardy shrub from the north of China, with blush-tinged flowers the sepals of the calyx being of a reddish brown

ABIES BRACTEATA *Hook & Arnott*, Bot Mag t 4740 A very beautiful fir from California, remarkable for the long spiny bracts of its cones Seeds of this species have been sent home to Messrs. Veitch by their collector, Mr William Lobb, and numerous plants have been raised.

ABIES KEMPFERI *Lindl* This species forms a beautiful tree, 120 or 130 feet in height, with a deciduous habit It has been introduced by Mr Glendinning, and it is supposed that it will prove quite hardy, having been found in the central, northern, and eastern provinces of China

ABIES HOOKERIANA *Murray* This exceedingly beautiful A'bies is one of the conifers introduced by Mr William Murray of San Francisco who found it high up in the Californian mountains, about lat 41° N., where the ground was already covered with snow on the 16th of October It is closely allied to *A Pattoniàna*, but there are distinguishing characteristics The cones are of a light fawn colour, somewhat of the hue of the cone of the common larch The scales are larger than those of *A. Pattoniàna*, and are not crenulated. The bract commences to contract near the top The seed and the wing are longer than in *A Pattoniàna*, and the wing is of a rich fawn coloured The tree attains the height of about 50 feet.

ABIES PATTONIANA This is also a very beautiful species, introduced by Jeffrey, and figured by the Oregon Committee Jeffrey describes it as attaining the height of 150 feet, towering over the rest of the forest The cones are uniformly of a dark brown colour The scales are at least a third less than those of *A Hookeriàna*, and are deeply and firmly crenulated The bract does not contract near the top The seed and wing are about one third shorter than in *A Hookeriàna*, and the wing has a purplish brown tinge at the top and back

ACROCLINIUM ROSEUM A beautiful new half-hardy annual from South-West Australia, with everlasting lively rose-coloured flowers It requires the same treatment as other greenhouse annuals

ADENOCHILUS CHRYSANTHUS A rather showy species from Colombia, requiring the ordinary treatment of other stove perennials Flowers golden yellow, with a red velvety calyx The leaves are of a glossy velvet-like purple on the under side

ADIANTOPSIS SCHIMPERI A coarse-growing stove perennial from New Grenada, with violet flowers, which are white within below and have a red calyx The leaves are purplish violet on the under side

ALLOPLECTUS ACUTIFOLIA *B & P* A rather pretty greenhouse undershrub from Bolivia, with bright scarlet flowers

ANDROMEDA DANIELLI This is a curious stove perennial from western tropical Africa, and is one of the Mellagetta Peppers The flowers are red and whitish, tinged with rose and yellow

ANGRÆCUM RUCKERI SANGUÍNEA A handsome variety of a beautiful and well known orchid, with flowers of a uniform reddish chocolate brown

ANOECTOCHILUS ÁLBO-MARGINÀTUS. A dwarf variegated-leaved terrestrial orchid, requiring a warm damp stove.

ARGHLANDRA LATEVÍTIA A beautiful stove shrub from Guatemala. The flowers are arranged in a cone-like head, and are of a dull scarlet, with the tube yellowish

ARGHLANDRA SQUARROSA LEOPÓLDI A very showy variegated-leaved soft-wooded stove shrub from Brazil, with very handsome spikes of yellow flowers. The leaves, which are of a deep green, are marked by well-defined longitudinal white veins

ARECASTRUM ROSTRATUM A noble palm from Brazil, which has flowered in the palm-house at the Royal Botanic Gardens Kew The leaves are from 6 to 8 feet in length, and the flowers are whitish

AZALEA AMŒNA *Lindl*, Bot Mag t 4728 A neat-growing and very pretty species from China, with purplish crimson flowers, the calyx being large and coloured like the corolla It requires a greenhouse.

AZALEA CRISPIFLÒRA *Hook* Bot Mag t 4726 A very showy plant, differing from other Chinese Azaleas chiefly in its flowers which are of a rosy crimson, having a crisped margin, which is a very pleasing feature Introduced from China and requires the treatment of the greenhouse species of *Azalea*

AZALEA INDICA BEALEI *Hort* A very beautiful variety from China, with the flowers striped with bright vermilion on a white ground An evergreen shrub, very suitable for conservatories.

AZALEA INDICA NARCISSIFLÒRA A curious and, at the same time, handsome variety, with double white flowers, from China and forming an useful greenhouse evergreen shrub

AZALEA INDICA STRIATA FORMOSÍSSIMA A seedling raised by Mr. Taylor, gardener to J Coster, Esq , of Streatham, and brought out by Messrs. Veitch and Son The flowers, which are of good form and substance, are of a pure white flaked and spotted with light purple , and the habit of growth of the plant is exceedingly good.

BAHIA LATIPÒLIA *Lindl* A handsome hardy Californian annual, with deep yellow flowers.

BEGÒNIA MINIÀTA. This is a broad-leaved variety of *B fuchsioides*, with vermilion-coloured flowers. Introduced from Colombia, and requiring the treatment of a stove perennial

BEGÒNIA OPULIFLÒRA An ornamental stove undershrub from New Grenada, with pure white flowers, which have golden stamens, produced in heads resembling the Guelder Rose

BEGÒNIA PRESTONIÉNSIS. A very beautiful variety of this fine hybrid scarlet-flowered Begonia, named *superba* was exhibited in the summer of 1854 It is, like the original, a very showy plant

BÉRBERIS CONCINNA *J D Hook* Bot Mag t 4744 A very pretty hardy shrub from the Sikkim Himalaya, with small spiny-edged leaves and yellow flowers, which are succeeded by oblong scarlet berries

BILLBÉRGIA BIFRONS *Lindl.* A showy dry-stove perennial from Brazil In one variety the flowers are of a fiery red while in another they are of a whitish yellow

BORÒNIA DRUMMÒNDI *Hort*, Planch. Flore des Serr ix. t 881 This is a charming little shrub from the west coast of New Holland, the flowers are of a beautiful rose colour, with a balsamic odour. It requires only a moderate greenhouse, and is easily multiplied by cuttings

BRASSAVÒLA FIMBRÀTA *Hook*, Bot Mag t 4734 An ornamental stove epiphyte from South America, with large white flowers, the sepals being tinged with yellowish green and red

BRAVÒA GEMINIFLÒRA *La Llave et Lex*, Bot Mag t 4741 This is a very beautiful Amaryllidaceous plant from Mexico, where it is found, according to La Llave and Lexarça, growing on the mountains of Valladolid at Michiacan It has a tuberous root, and is easily cultivated in a warm greenhouse, where it blossoms in May The flowers, usually geminate in the upper part of the raceme, are very graceful, always drooping, and of a fine orange-red

BRILLANTAÍSIA OWARIÉNSIS *Palis de Beauv*, Bot Mag t 4717 *Acanthàceæ* This plant in its habit of growth resembles some of the largest species of *Sàlvia*, the flowers are of a violet blue It is a native of Sierra Leone, whence it was introduced in 1853

BÚDDLEA CRÍSPA *Benth.*, Bot. Mag. t 4793 A native of the Himalaya, much hardier than the common kinds its leaves are heart-shaped at the base, and covered on both sides with a thick whitish down, and the flowers are of a pale violet It was introduced by Major Madden.

BRYA EBENUS *Dec* Under this name is figured in the *Bot Mag* t 4670, the well known Jamaica Ebony which is given in p 604. No 10,014, under the name by which it was formerly known, viz *Amerimnum Ebenus*

CALCEOLÀRIA ERICOÌDES *Vahl* A curious half-hardy subshrubby species from Colombia, with small yellow flowers

CALCEOLÀRIA HYSSOPIFÒLIA *H B. et Kunth* An elegant half-hardy undershrub from Quito, the flowers of which are white and yellow.

CALCEOLÀRIA VIOLACEA A half-hardy shrub from Chili, having a novel and interesting appearance The flowers are of a dull violet

CALYPTRÀRIA HÆMÁNTHA *Planch*, Flore des Serr ix t 924 *Melastomàceæ* A magnificent plant, nearly allied to *Medinilla magnifica* the flowers are large, of a dark purple, with long white anthers It is a native of New Grenada, and requires only a moderate stove

CAMPANUMŒA LANCEOLÀTA *Sieb & Zucc*, Flor Jap 1, 174 *Campanulàceæ*. A curious perennial plant found in Japan, with greenish flowers, requiring protection during winter

CASSIOPE FASTIGIÀTA A charming little hardy evergreen shrub from the Himalaya, requiring a cool, moist peaty soil. The leaves are closely imbricated in four rows, the flowers are drooping, white, and bell-shaped

CATTLÉYA LUTÉOLA A rather pretty small-flowered epiphytal orchid from Brazil The flowers are of a clear yellow

CEANÒTHUS FLORIBÚNDUS A beautiful hardy evergreen shrub from California, having a good habit The flowers are of a rich deep blue, and are produced in dense globular heads, which are thickly studded over the branches and branchlets Introduced by Messrs Veitch through Mr Lobb

CEANÒTHUS LOBBIÀNUS This is another of Mr Lobb's introductions from California. It is a distinct and showy hardy evergreen shrub, with deep blue flowers, which are produced on stalked oblong or roundish heads

CENTROPÒGON TOVARIÀNSIS A very handsome stove perennial from Venezuela, with beautiful rosy-crimson flowers

CERATOSTÈMA GRANDIFLÒRUM *Ruiz & Pav*, Bot Mag t 4479 A small shrub, a native of the Andes of Peru, extremely elegant in its appearance, and remarkable for the beauty of its flowers, which are of a reddish colour and bear considerable resemblance to those of *Cántua dependens*

CÉRCIS JAPÓNICA *Van-Houtte*, Flore des Serr. viii p 269. t 849. A species of the Judas-tree, with leathery leaves and an abundance of flowers It is a native of Japan, and is perfectly hardy in this country

CÈREUS LEMAÍRII This is a very fine new bright-blooming species, which is reported to have been introduced from Antigua The flowers are very large, being twelve inches long and nine inches broad, on the outside green tinged with red, and white inside The plant, which has a straggling habit of growth, requires a dry stove

CÈREUS MACDONALDIÆ *Hook*, Bot Mag t 4707 A magnificent species of *Cèreus* from the Honduras, nearly allied to *C grandiflorus*, and flowering in the night, like that species

CEROCHÍLUS RUBENS An orchid of no great beauty, allied to *Physùrus* The flowers are greenish with pink bracts The plant requires the treatment of stove perennials It is supposed to be from the East Indies

CEROPÈGIA THWAITÉSII A botanically interesting stove climber from Ceylon, with the flowers green and brown

CÉSTRUM REGELII *Planch.*, Fl des Serres, ix t. 946, Habrothámnus aurantiacus *Regel* This very elegant shrub which is quite different from *C aurantiacum*, is a native of Central America, and flowered for the first time in Europe in the Botanic Garden at Zurich in 1850

CHÆTOGÁSTRA LINDENIÀNA A very ornamental species from the alpine districts of the Andes of Colombia and requiring a cool stove or greenhouse. The flowers are large, and of a blackish purple.

CHEIRANTHÈRA LINEÀRIS A handsome greenhouse shrub from New Holland, with violet-blue flowers.

CHIONÁNTHUS RETÙSUS. A shrub with white sweet-scented flowers, from China, which will probably prove hardy in this country.

CLÉMATIS BARBELLÀTA *Hook*, Bot Mag t 4794. A very beautiful species from the Himalayas, introduced by Major Madden, which flowered for the first time in Europe in the Glasnevin Garden in 1854. The flowers are rose coloured, with the edges of the sepals marked with white.

CLÉMATIS CORIÀCEA *Dec.* This is a showy greenhouse climbing species from New Holland, with large pendulous white flowers.

CLÉMATIS LANUGINÓSA PÁLLIDA. A variety with much paler flowers than the species While in the species the flowers are blue, in this variety they are greyish, almost white A hardy climber, from the north of China.

CLÉMATIS PÁTENS This is the correct name for the species which in England is generally called *C. cerùlea* A fine large-flowered variety of it, called "Sophia," has recently been raised, having a broad green band down the sepals of the calyx

CLERODÉNDRON BÚNGEI When well cultivated, this forms a showy shrub somewhat resembling the single-flowered *C. fragrans* It is from the north of China, and has rose-coloured flowers

CYRTÁNTHUS PANDURÁTA A fine stove epiphyte from Borneo, introduced by Messrs. Low, of Clapton. The flowers are large and of a pale green, the lip being of a yellowish green with broad black veins and stains.

DRACÆNA BEÇKERI *Benth*, Bot Mag t 4754 The leaves of this species, which forms an undershrub requiring a stove, are curiously and beautifully variegated with dark chocolate on a pale green The plant is a native of Java, and produces its purple and white flowers in whorled racemes

ECHEVÈRIA ALBANIÁCEA This is a showy subshrubby greenhouse species from Central America, with brilliant orange scarlet flowers

ERYTHRÆA DIEREILLOIDES A very showy stove shrub from Colombia The flowers which resemble those of the beautiful *Weigela rosea*, are white inside and pink on the outside, and they are produced in rich terminal panicles

EURYANDRA FLAVA *Hook*, Bot Mag t 4710 A rather weedy looking stove undershrub from Sierra Leone. The foliage is somewhat coarse, and the flowers, which are yellow, are sparingly produced and of short duration.

FINUS LAMBERTIANA This was the handsomest tree seen during the whole of the expedition under the direction of Mr. William Murray of San Francisco, for exploring the range of mountains which runs between the coast range and the Rocky Mountains, lat 40°, 41°, &c., N It was found on the banks of a stream in a valley on the mountains, attaining the height of 100 feet, with a stem 2 feet in diameter The foliage is most delicate and graceful The branches spread upwards like a Spruce Fir, and hang down at the tips like an ostrich feather, the top shoots drooping like a Deodar The timber is good, clear, and workable "

FUCHSIA MACNABIANA "This is the same species as one sent home by Jeffrey without a name, and distributed by the Oregon Committee in 1852 The cone is about the size of a hazel nut, with hard scales, having a projecting umbo in the centre " The plant is of low growth, and very suitable for a shrubbery

GYNANDRIRIS MACROPHYLLUM An ornamental very large leaved species from Algiers, with pink and rose coloured flowers, requiring the treatment of a greenhouse tuberous rooted perennial

GYMBIDIUM PÉNDULUM ATROPURPÚREUM A variety of the well-known orchid *C. pénduluum* with deep purple flowers, the lip being ribbed with yellow Introduced from Borneo and requiring to be treated as a stove epiphyte

CYPRIPEDIUM VILLOSUM This fine showy orchid which in some degree resembles *C. insigne* was introduced from Moulmein by Messrs Veitch and Son The flowers are green, brown, and purple, and the plant requires the treatment of a stove perennial

DENDROBIUM CYMBIDIOIDES *Lindl*, Bot Mag t 4755 An epiphytal orchid from Java, with ochreous yellow and red very showy flowers

DIEFFENBACHIA MACROPHYLLUM GIGANTÈUM This is a very showy plant, with light rose-coloured flowers, which are considerably larger than usual Obtained from the Continent by Messrs Veitch and Son

DIPLOTHRIZANDRA LEUCOPHTHÁLMOS *Hook*. Bot Mag t 4743 An interesting stove perennial from Brazil, the flowers of which are of a deep blue with a white eye, and are produced in radical panicles

DIPLOTHRIZANDRA PÍCTA This is a very neat and pretty stove perennial, introduced by Messrs Low and Co., and said to come from Brazil The leaves are longitudinally blotched with brown on the upper side, and are pink on the underside The flowers are white and purple

DORYANTHUS PAVONII *Decaisne*, Bot. Mag t 4750 A somewhat curious stove climber from New Spain, with rather dingy Sapotia like flowers, which are greenish and marked with concentric pale-brown lines

DRACOCARPUS HUMBOLDTIANA *Gardn*, Bot Mag t 4757 A pretty little plant, with pale violet flowers, introduced from Ceylon by Mr Thwaites, in 1853.

EUCHARIDIUM AMABILE *Carr* Flor des Serres, t 855, Weigèla amábilis *Hort* A very handsome shrub, a native of Japan nearly allied to *Weigela rósea*

EUCHARIDIUM MIDDENDORFIANA This is the plant which is called the yellow *Weigela* It is a hardy shrub with primrose coloured flowers, which are about half the size of those of *Weigela rósea* Continental nurserymen received the plant from Russia

DIOSCOREA BATATAS *Dec*, D japónica *Hort* This new Chinese yam, which promises to be one of the most valuable vegetables introduced since the potato differs from the *D. japónica* of *Humb*, with which it was at first confounded The edible part is a long tuberous rhizoma, which, when cooked, is white, extremely farinaceous, and almost destitute of woody fibre; in fact, it is only to be distinguished by the shape from the best kind of potatoes The plant is perfectly hardy, and M Vilmorin, who has cultivated it on a large scale near Paris finds its produce enormous The only difficulty is that the long tubers penetrate deeply into the ground, and are troublesome to take up, and on this account the plant is generally grown in trenches, so that the tubers may extend horizontally

DRYOPTERIS HOÓKERI A succulent greenhouse shrub from Mexico, resembling a species of *Echevèria* The flowers are of a yellowish red

DIPLADENIA FLAVA *Hook*, Bot Mag t 4702 A showy climbing shrub from New Grenada, requiring a stove The flowers which are produced in May, are large and of a rich yellow, resembling those of a species of *Allamánda*

DRACÆNA ELLIPTICA MACULÀTA An evergreen stove shrub from Java, with variegated leaves and greenish flowers. Very ornamental in the habit of its growth

ECHITES PELLIERI This is a synonyme of *Nerùndra suberécta*, which see.

EMBOTHRIUM LANCEOLÀTUM. A fine evergreen Proteaceous shrub from Chili, which will probably prove half-hardy this country It is allied to *Telopea*.

ERICA MELITTIFOLIA *Mart* Bot Mag t 4720 A rather coarse-growing stove perennial from the West Indies, with tall stems, large leaves, and small red flowers, which are produced in March and April

ERIGERON COMPÓSITUM *Dougl*, Bot Mag t 4703 This is a hardy perennial, of botanical interest, from Oregon, having rather a weedy appearance It produces its small yellowish-white flowers in great abundance

FABRONIA PÚNGENS *Linden* A pretty greenhouse shrub from Merida, producing numerous pinkish-white flowers

FICOIDES NOLTZIA TENUIFÒLIA A very pretty hardy annual from California, with a compact and dwarf habit The flowers are yellow, and an inch across Introduced by Messrs Veitch and Son.

EUGÈNIA OLEÓIDES. An evergreen greenhouse shrub, having a very graceful appearance. The flowers are white, and are produced in axillary panicles. It does not appear to be known whence the plant has been obtained.

EXACUM MACRÁNTHUM. A beautiful stove annual or biennial (probably an annual) from Ceylon, with rich deep-purple flowers.

FRÁXINUS DIPÉTALA. A fine hardy tree from Mexico, with purple branches, green leaves, and elegant white flowers.

FRITILLÀRIA OXYPÉTALA *Royle*, Bot Mag. t 4731. A pretty half-hardy bulbous perennial from Kumaon. The flowers are of a purplish lilac, with purple dots near the centre, and are produced in June.

FÚCHSIA DOMINIÀNA This is a fine hybrid, raised in the nursery of Messrs Veitch and Son, at Exeter, by the foreman of the houses there, in compliment to whom it is named In it the distinguishing characteristics of the two beautiful species *F serratifólia* and *F spectábilis*, may be said to be combined, for it has the foliage of the former, with the flowers very much resembling those of the latter species Moreover, it is very valuable for the conservatory, as it blossoms during the winter months, a period of the year when generally there are so few plants in flower.

FÚCHSIA VIOLÆFLÒRA PLÈNA This is a beautiful new double purple variety, raised by Messrs Lucombe, Pince, and Co., of the Exeter Nursery, with a rich purplish-blue corolla, resembling a fine double violet.

FUCHSIAS WITH A WHITE COROLLA Some very beautiful hybrids, with the corolla of a beautifully pure white are just being brought out by Messrs E G Henderson and Son, of the Wellington Nursery, St John's Wood, London, and Messrs. Lucombe, Pince, and Co , of Exeter. These were raised by the late W Storey, Esq of Newton, in Devonshire, an energetic hybridiser, who, by well-directed efforts, succeeded in obtaining, after two or three generations of seedlings, varieties of improved form, good substance, and excellent habit of growth One of these hybrids has a pure white corolla, with brilliant scarlet sepals, which are finely reflexed, while another has a pure double white corolla, resembling a fine large double Snowdrop, the sepals being of a rich scarlet

GALEÁNDRA BAÉRII FLÓRIBUS LÚTEIS *Hook*, Bot. Mag t. 4701. This pretty epiphytal orchid from South America has drooping bunches of deep yellow flowers, the lip being marked with crimson dotted lines.

GARDÈNIA GLOBÒSA. This is a neat evergreen greenhouse shrub from Caffraria, with fragrant white flowers

GRISSOMÈRIA NÍTIDA *Nees* An ornamental stove undershrub from Brazil, with brilliant scarlet flowers.

GENTIÀNA FORTUNI An exceedingly beautiful herbaceous plant, the flowers of which are of a deep blue, spotted with white. It is from the north of China, and it is considered that it will prove quite hardy.

GÉSNERA DONCKELAARIÀNA This is a beautiful hybrid, which is said to have been raised in the Ghent Botanic Garden, between *Gésnera discolor* and *Gloxínia sùbsa*. The plant is very showy, bearing panicles of rich crimson Gloxinia-like flowers

GÍLIA LÚTEA. See *Leptosíphon lúteus*

GOLDFÚSSIA GLOMERÀTA SPECIÒSA A showy, although a coarse-growing, soft-wooded stove shrub from Sylhet, the flowers of which are of a deep purple

GOMPHRÈNA COCCÍNEA An ornamental perennial from Mexico, requiring a warm greenhouse, and the treatment usual for tender annuals.

GONÓLOBUS PYRRHÓTRICHUS This is rather a coarse-growing, though curious stove climber, from Brazil The flowers are of a dull green, with obscure netting and fine bright yellow coronal teeth.

GYMNOSTÀCHYUM ZEYLÓNICUM *Arn et Nees*, Bot Mag t 4706 A stove perennial from Ceylon, with variegated leaves, having milk-white stains upon a dark green ground. The flowers are white, tipped with green and yellow.

HÆMÁNTHUS INSÍGNIS *Hook.*, Bot Mag t 4745. A very showy greenhouse bulbous plant from Natal, with crimson flowers, which are produced in large heads surrounded by leafy bracts.

HEDARÒMA TULIPÍFERUM. This promises to be a valuable greenhouse evergreen shrub. It resembles a broad-leaved *Diósma*. The beauty of the plant consists in the involucre surrounding the flowers. this is cup-shaped, and of a greenish white stained with dull red. *The plant is from New Holland*

HEDÝRA GLOMERULÀTA This is a curious evergreen stove shrub from Java. It is very elegant when in flower though the flowers themselves are green and inconspicuous.

HEXACÁNTRIS MYSORÉNSIS LÚTEA. One of the many beautiful introductions of Messrs Veitch and Son It is a showy evergreen stove climber from India, with large yellow flowers, which are produced in pendent racemes

HIPPEÁSTRUM FORMOSÍSSIMUM. A very showy stove bulb, the flowers of which are of a deep crimson, resembling in colour the Jacobean Lily, but being larger and of the form of *H vittàtum*.

HÓLCUS SACCHARÀTUS *Hort.*; Andropògon saccharàtus *Kunth*, the Chinese sugar-cane. This plant, though very recent introduction into this country, appears to have been first sent to Europe nearly a century ago as is mentioned in the *Bon Jardinier* for 1855, from which the following account is extracted, that a Chinese plant apparently identical with it was used in the fabrication of sugar at Florence, in 1766, by Pietro Arduino appears however, to have been soon lost, as no other traces have been discovered of it The present plant has the habit of growth of the maize or Indian corn, and it forms a tuft of eight or ten stalks from each root The flowers, which are in conical panicles, are green at first, but afterwards become purple. The plant, which is an annual, appears quite as hardy as the Indian corn, and it should be sown in a light rich soil, about the same time as the first sowing of kidney-beans. Juice is found in abundance in the pith of the stalks, and it produces sugar and alcohol, like the juice of the true sugar-cane. The leaves also furnish an excellent forage, and a kind of cider is made from the young or imperfectly ripened shoots. The importance of this plant, if only a part of the qualities attributed to it prove correct, can hardly be overrated, not only as regards the sugar, which is about a third more than is produced by an equal weight of beet-root, but with regard to the alcohol, which is in the proportion of 63 to 3 equal weights of the Hólcus and the Beet-root.

HOY'A FRATÉRNA *Blume*, Bot Mag. t. 4684 This very fine, new, and distinct species of *Hoya* was first detected in Java by Blume. subsequently it has been found by Mr Thomas Lobb, and sent by him to Messrs. Veitch and Son. It is a climbing stove plant with leaves remarkable for their great size, firmness, and thickness The flowers are of a pale yellowish buff colour, and are produced during a great part of the summer and autumn

HYDRÒLEA AZÚREA A pretty little greenhouse branching perennial plant from Mexico, profusely covered with beautiful azure flowers, against which the stamens stand out like little stars.

HYPÉRICUM OBLONGIFÒLIUM *Choisy*. A handsome and, it is said, a hardy shrub from the East Indies, with reddish yellow flowers.

HYPÓXIS LATIFÒLIA. An interesting bulbous or tuberous-rooted greenhouse perennial from Natal, with star-shaped yellow flowers.

ECLINUS CANARIENSIS *Lem. & Koch.* Fl. des Serres, t 913 *Loaseæ*. A splendid climbing plant from Central America, with orange-scarlet flowers as large as those of the *Cobæa*. It is half-hardy, and may be propagated by cuttings or by seeds which it ripens freely.

HANTOPHYLLUM MINIATUM *Hook.*, Bot. Mag t 4783. *Amaryllidàceæ* Introduced in 1854 from Western Africa, with crimson or rose-coloured flowers, as large as those of a *Crinum*

IMPATIENS HOOKERIANA *Arn* Bot Mag t 4704 A lovely Balsam from Ceylon, which blossomed in the stove at the Royal Botanic Gardens, Kew in the summer of 1852 The leaves are large and glabrous; and the flowers, which are of a pure white with deep blood-coloured veins on the lower portion, are the largest of any known species

IMPATIENS JERDONIÆ *Wight*, Bot. Mag t 4739 This is a very beautiful species received from the Neilgherries, at the Royal Gardens of Kew, in 1852 It has a neat dwarf habit, is of easy cultivation, requiring the temperature of a warm greenhouse or stove, and continues to produce a profusion of its large and strikingly formed flowers, which have a mixture of green bright red, and yellow in them, for several months. Messrs. Veitch and Son have succeeded in raising a good supply of this charming little Balsam

IXORA FERRUGINEA A beautiful stove shrub from Brasil, with the flowers crimson shading off to pink.

IXORA LOBBII This handsome Ixora is one of the numerous beautiful plants received by Messrs Veitch and Son from their collector Mr Lobb, in compliment to whom it is named

KNIPHOFIA UVARIA This is an old name, proposed to be revived for a Cape plant bearing a dense ovate cylindrical head of rich orange or scarlet flowers, and forming one of the handsomest of border plants, introduced long since, and known as *Tritòma*

LACHENALIA AUREA This is a very handsome greenhouse bulbous plant from the Cape of Good Hope, with tubular pendent flowers, which are of a deep orange-yellow.

LACUSTA AROMATICA A handsome fragrant fleshy-leaved evergreen shrub from the mountains of Chili Introduced by Messrs Standish and Noble, who are not able as yet to speak positively as to its hardiness.

LEPACHYS COLUMNARIS *Dec Compositæ*. A native of Texas, nearly allied to *Rudbeckia*.

LEPTOSIPHON CILIATUS *Benth* A rather pretty hardy annual from California, the flowers of which are rose coloured, with a yellow throat

LEPTOSIPHON LUTEUS *Benth.*, Gilia lùtea *Steud*, Bot Mag t. 4735 This highly ornamental dwarf half-hardy annual was introduced in 1852 by Messrs Veitch and Son, through Mr William Lobb, from California The unusual length and slenderness, in conjunction with the colour, of the corolla, which is of a bright sulphur-yellow with a dark, almost orange-coloured eye, and the great quantity of flowers produced on the stems and branches, render this plant extremely ornamental, especially when cultivated in beds in masses. There is a variety called *L. luteus aúreus*, the flowers of which are of a deeper colour than those of the species

LIBOCEDRUS DECURRENS *Torrey* This is a newly introduced species of this fine genus of conifers. It is in the possession of Messrs Lawson and Son, of Edinburgh and London By some it is thought to be synonymous with the rare *Thùya gigantèa*.

LILIUM GIGANTEUM *Wall*, L cordifolium *Don*, Bot Mag t 4673 For the discovery of this noble plant, which may justly be called the Prince of Lilies, we are indebted to the exertions of the late Dr Wallich, who detected it in moist shady places on Sheopore in Nepal "This majestic lily," observes Dr Wallich, "grows sometimes to a size which is quite astonishing, a fruit-bearing specimen of the whole plant, which is destined for the museum of the Honourable East India Company, measured full ten feet from the base of the stem to the apex. The flowers are proportionably large and delightfully fragrant, not unlike those of the common White Lily" Nor is it found to degenerate in cultivation, for flowering plants have attained a height of ten feet in one season, the flowered portion occupying twenty inches. Such a raceme of flowers, accompanied by bold heart-shaped leaves ten or twelve inches long and eight inches broad, cannot but afford a striking spectacle The flowers are white or rather cream coloured, marked with purplish-crimson. The plant should be treated as a greenhouse or hardy bulb It produces seed abundantly

LINANTHUS SULPHUREA ODORATA A new and beautiful hardy annual, with a rather dwarf bushy habit of growth, and very suitable for pot culture as well as for the open border in the flower garden. The lower half of the petals is of a deep sulphur colour, while the upper half is of a beautifully pure white, and there are rosy pink markings down each petal which are darker near the base than at the apex The filaments of the stamens are also of a rosy pink The flowers are larger than those of either of the other kinds of *Limnánthes*, and delightfully fragrant

LITTONIA MODESTA *Hook*, Bot. Mag t 4723. *Uvulariæ*. A native of Port Natal in Western Africa It produced its fine orange-coloured flowers in the Kew Gardens in April 1853, only three months after the planting of the tubers.

LOBELIA GRUNDIFLORA A rather pretty Mexican greenhouse perennial with red flowers, which continue expanding in succession the whole of the summer

LOMARIA CHILENSIS This is a fine robust-looking and ornamental hardy fern from Chili.

LOPEZIA MACROPHYLLA *Benth*, L grandiflòra *Fl Bot Zeit*; Jàlibi fuchsioides *Hort. Germ.*, Bot Mag. 4724 An ornamental greenhouse undershrub from Mexico, with bright-red fuchsia-like flowers, which are produced in March The root is said to be tuberous and fleshy.

LYCASTE CONSTATA A large-flowered epiphytal orchid from Peru. The colour of the flowers is green with a tint of white lip

LYSIMACHIA PSCHENAULTII. This is a pretty plant, and it is found to be very useful for planting in the flower garden as well as suitable for being grown in pots It is a half-hardy undershrub, a native of the Neilgherries, whence it was introduced by Messrs. Osborn and Son, of the Fulham Nursery. The flowers are rose-coloured, and are produced in dense racemes.

MARANTA WARSCEWICZII This is a stove perennial from Central America, remarkable for its finely variegated leaves which are of a deep green, marbled with grey about the midrib, and purple on the underside. The flowers do not appear to be known

MARCETIA ANDICOLA *Linden*. Fl des Serres, t 914. *Melastomàceæ* A beautiful little shrub from the mountains of Venezuela with leaves like those of a myrtle, and rose-coloured flowers, which it produces in great abundance It only requires protection from frost.

MARSDENIA LUCIDA This is a robust-growing climbing plant from the Himalayas, with rather dingy purple flowers, and fine thick foliage. In Ireland it has proved to be hardy

MATHIEU'S GALANTHOIDES A rather diminutive stove bulb from Peru, with the habit of a Snowdrop. The flowers, which are erect, are white tipped with green.

MAXILLÀRIA HIRTILÀBIA *Lindl.* A showy epiphytal orchid from New Grenada, the flowers of which are yellow stained with purple.

MERIÀNA MACRÁNTHA. This is an ornamental stove shrub from Venezuela. The habit of growth is compact and neat, and the flowers are scarlet.

METHÓNICA VIRÉSCENS PLÁNTII This is the *Gloriòsa Plantii* of English gardens It is a native of Natal and a curious and showy The flowers are orange-coloured The plant should be treated as a warm-greenhouse tuberous-rooted perennial.

METTERNÍCHIA PRÍNCIPIS *Mikan*; M. princeps *Miers*; Lisiánthus ophiorrhiza *Vell*, Bot Mag t 4747 This new genus from Brazil, belonging to *Solanàceæ*, which has been named in compliment to the Austrian Prince Metternich. In its native country it attains the height of twenty-five feet In England it must be regarded as a cool-stove shrub, and as flowering in August The flowers are large and funnel-shaped, though not very showy their greatest charm, perhaps, consisting in their being powerfully and deliciously fragrant They are white with the tube greenish.

MONÓCERA GRANDIFLÒRA *Hook.*, Bot. Mag t. 4680 This is the new name for *Elæocárpus grandiflòra* Smith and *E. lanceolàta* Blume. a handsome evergreen stove shrub from Java

NERIÁNDRA SUBERÉCTA This is a fine showy stove climber with yellow flowers, which has been recently introduced from France under the name of *Echites Pellièri*

NYCTERÍNIA SELAGINÒIDES A pretty greenhouse annual from the Cape of Good Hope, with a dwarf spreading habit. Introduced by the Horticultural Society of London. The flowers are white, with a deep yellow eye they are produced in corymbs.

ODONTOGLÓSSUM EHRENBÉRGII A very neat and pretty epiphytal orchid from Mexico. It resembles, in a degree, *O. Róssii* The lip and petals are white, the sepals are of a greenish-yellow and spotted

ONCÍDIUM IONÓSMUM A beautiful species with yellow flowers, the sepals and petals being spotted with brown flowers have a delightful fragrance resembling that of violets

ONCÍDIUM REFLÉXUM CÆSIUM. This is a glaucous-leaved variety of *O reflèxum*, bearing the name of *O cæsium* the German gardens.

ONCÍDIUM UMBRÒSUM. A species from New Grenada, with unattractive flowers, which are green and dull purple

PAPÀVER PILÒSUM *Smith*, P olýmpicum *Sibth. MSS*, Bot. Mag t 4749 This is a hardy herbaceous Poppy it is believed, perennial roots, the flowers of which are large and handsome and of a brick-red colour pale, nearly white, spot at the base of each petal. It is said to be from Greece, but when or by whom into this country, there is no record

PÉNTAS CÁRNEA RÒSEA This is an improved variety of the well-known *Péntas cárnea*, which has been imported Messrs Osborn and Sons, of the Fulham Nursery, and which has much deeper coloured flowers, of a rose

PHACÈLIA RAMOSÍSSIMA *Benth* A hardy annual from California, with unattractive dull white and violet flowers

PHRYNIUM MICANS This is a stemless stove perennial from Peru, with dark-green leaves, having a central gitudinal streak of whitish red, while the underside is of a dull brownish red. The flowers are white, with bracts

PINCKNÈYA IONÁNTHA. A fine stove shrub from New Grenada, with dark violet flowers and a purple calyx which is divided so as to resemble a stalked petaloid leaf

PÍNUS BEARDSLÈYI *Murray*. From the description given of this new pine (which is one of those introduced by Murray, of San Francisco), it would appear more nearly to resemble *P. Benthamiana* than any other scribed species The cone, however, is not so long, being only three inches in length, while the leaves only six inches in length The sheath of the leaf is short, being only an eighth of an inch. Both the the seed and the seed itself are neither so long nor so large as in *P Benthamiàna*. The timber of *P Beardsleyi* is homogeneous all through "The tree is of great beauty and size one that was cut down measured in height and 44 inches in diameter at the stump Another tree next it measured 17 feet 4 inches ference, at 3 feet from the ground The stem was a very handsome column, about 30 feet to the first the timber good and clear It was found on the top of the mountain, at the same altitude as *P Jeffreyi monticola*, and *P grandis*, and higher than either *P Benthamiàna* or *P Lambertiàna*" The species named in honour of A F. Beardsley, Esq, who accompanied Mr Murray in his expedition

PÍNUS CRAIGIÀNA This is a Pine which also bears some resemblance to *P Benthamiàna* as well as to the preceding species (*P Beardsleyi*), from which, however, it differs in having the prickle of the scale pointing the tip instead of the base the prickle, too, in *P Craigiàna* is strong and firm, while in *P. Beardsleyi* small and weak, and the excrescence on the exposed part of the scale is much more developed in the than in the latter species, which has the exposed part somewhat flat, while in *P Craigiàna* the upper projects considerably over the lower "The wing of the seed of *P Craigiàna* is shorter and relatively broad the seed is nearly twice the size of that of *P Beardsleyi*, although the cones are about the same size of *P Craigiàna* is also very distinct from that of *P. Beardsleyi*, it is much finer and not so long, while its is considerably longer and more delicate. This species was found in the same mountains as *P Beardsleyi* one-fourth of a mile further down, though higher up than *P. Benthamiàna*. It spreads its branches wide the stems than *P Benthamiàna*, and sheds its seed a month later This Pine has been dedicated to Sir W Gibson Craig, who has done so much for the introduction and cultivation of this valuable family"

PÍNUS JEFFREYÀNA This is a hardy Californian Pine in the possession of Messrs. Low and Co, of Clapton which very little is at present known.

PÍNUS PARRYANA Another hardy Californian Pine, respecting which also little is known Also in the nurseries Messrs Low and Co.

PÍNUS ROYLEÀNA A new Indian two-leaved Pine, with small cones, named in honour of Dr J Forbes Royle is supposed that the species will prove quite hardy in this country, from its having been found growing at an elevation of from 8,000 to 10,000 feet. Introduced through the Horticultural Society of London

PITCAIRNIA ECHINÀTA *Hook*, Bot Mag t 4709 In a flowerless state this curious stove perennial may be said to be stemless, the leaves, which are two or three feet long, being all radical, as in the common Pine-apple The sepals of the calyx are red and yellow, and covered with prominent glands the petals are white or cream coloured, and twice as long as the sepals. The plant is reported to have been introduced from Mexico flowered for the first time in England in January, 1853, and continued a long time in blossom.

PITCAÍRNIA LONGIFÒLIA. This is an ornamental species from Lima. It is a stove shrub, with an erect elongated stem, and branched panicles of scarlet flowers.

PITCAÍRNIA MACRÓCALYX *Hook.*, Bot. Mag. t 4705 This is a South American species, coming nearest to *P maidifolia* *violens*, but quite distinct. It has the largest calyx of any known species, and it is altogether a fine looking plant. The sepals of the calyx are yellow the petals are large and white, and thrice as long as the calyx The plant requires a stove, and it flowers in December.

PITCAIRNIA SPECIOSA. This is a Brazilian species, forming a pretty and lively winter-blooming plant. It is a stove perennial with red flowers.

PITCAIRNIA SUAVEOLENS A showy stove perennial from Venezuela, with the flowers rose and scarlet.

PITTOSPORUM CRASSIFOLIUM This is a fine greenhouse evergreen shrub from New Zealand, with crimson flowers

PITTOSPORUM FLAVUM A very fine showy species from East Australia. It is a greenhouse evergreen shrub with large yellow flowers, which are produced in large corymbs.

PLUMBÁGO JAMESÓNI *Hook*, Bot Mag t 4751 This handsome stove shrub is named in honour of Professor Jameson, by whom it was found in the vicinity of Guayaquil. "Its great beauty consists in the fine red of the peduncles and outside of the flower, and the rich yellow of the upper or inner side of the corolla, and which, together with the great breadth of the lobes of the corolla and their acute apices, constitute the chief specific distinction." In these particulars no other species is found to accord with it. The plant flowers in the stove in July

POLYGÁLA CHRYSÁNTHA *Endlicher* A showy half-hardy annual from New Holland, with golden yellow flowers

POMAPÉDIS REVOLÚTA *Nees* This beautiful Brazilian stove shrub has recently been introduced by Messrs Veitch and Son It has fine laurel-like leaves, and clusters of graceful snow-white flowers, the tube of which is more than three inches long "The specific name," Dr Lindley observes, "was given upon the supposition that the leaves have their edges rolled back, but this occurs in so slight a degree as to cause regret that so fine a plant should not bear a more characteristic title."

PRIMULA MÓLLIS This is a very handsome hardy or half-hardy perennial species, with the habit of *P. cortusoides*. It has been introduced from the Mountains of Bhotan, and it has deep rose-coloured flowers.

PSAMMISIA PENDULIFLÒRA *Dec Frucheæ* A handsome low-growing cool-stove shrub from Venezuela, probably belonging to the genus *Thibaudia* The flowers are vermilion, with yellowish green —*P. sarcantha* Dec is also her dwarf shrub from the same country.

PSAMMISIA SCABROPHYLLA This is a showy stove shrub from Venezuela, with tubular drooping crimson flowers, which are tipped with yellowish white.

PUYA CHILÉNSIS *Molina*, Bot Mag t 4715. This is from North Chili, and is one of the most striking of Bromeliaceous plants The stem, or caudex, of a plant in the Royal Gardens of Kew, has now attained a height of four feet independent of the leaves, which are from three to four feet in length, spreading in all directions, the lower ones being reflexed "The compound spike of flowers upon the column-like perfectly straight peduncle, is remarkable for its size, the large full yellow (but inclining to green) flowers and the copious bracteas turning brown or black in age" This plant is called *Cardon* and *Puya* in Chili, where the soft substance of the stem is used for corks and bungs "The flowers yield a remedy for hernia, and the Indians use the spines of the leaves for pack-hooks" In this country the plant requires a cool stove A young plant was first brought home by Mrs Maria Graham, afterwards Lady Calcott

PUYA SCHIEDEÀNA *Hort Hernhauss*, Bot Mag t 4696 Although this species is far inferior in point of beauty and size to the splendid *Puya Altensteinii* var *gigantèa*, it is nevertheless a handsome-looking plant, and has the merit of flowering in the winter months (in December in the stove at Kew) The native country is unknown. The principal leaves of the plant at Kew spring directly from the root, they are two or three feet long, and gradually taper to a long point upwards, while below they lengthen into a narrow channelled base From the centre of the plant the peduncle arises, two feet or more in length and leafy below, the leaves like those from the root, but smaller, passing gradually into bracteas, which latter are erect, of a purplish red, and taper to a slender, rather pungent green point. The moderately large, pale, sulphur-coloured flowers are protruded much beyond the bracteas, and are sessile

QUÉRCUS INFECTÒRIA *Olivier* This is the Nut-gall Oak, a small evergreen tree from Kurdistan, which it is thought will prove scarcely hardy in this country

RHODODÉNDRON CAMELLIÆFLÒRUM *J D Hooker* This is one of the six new Rhododendrons of Assam and Bhotan discovered by Thomas J. Booth, Esq., and introduced in 1854 by Messrs F G Henderson and Son, all of which have been described in *The Magazine of Botany*, by Mr Booth's uncle, Thomas Nuttall, Esq., of Rainhill, the well known botanist and traveller This is a somewhat curious species, with pure white flowers, having a faint rosy tinge, and resembling a single Camellia It was found at Lablung, and also on the Bhotan Alps at an elevation of from 9,000 to 12,000 feet Dr Hooker first found this plant, but he did not succeed in sending either seeds or living plants home

RHODODÉNDRON CINNABÁRINUM PÁLLIDUM This is an elegant variety of one of the beautiful Sikkim Himalaya species, with rosy pink flowers It is quite hardy.

RHODODÉNDRON CITRÍNUM *Hasskarl*, Bot Mag. t 4797. An interesting greenhouse species, with pretty primrose-coloured campanulate flowers It is a native of Java, where it was found growing at an elevation of from 5000 to 6000 feet

RHODODÉNDRON KÉYSI *Nutt* Another of the beautiful Rhododendrons discovered by Mr Booth on the Bhotan Alps It was found on the northern ridges of the Lablung at an elevation of 10,000 feet, forming low thickets, above the range of *R. Hookeri* and *R. Falconeri* The habit of the plant is very distinct, and it is quite hardy The flowers are produced in corymbs below the summit of the branch each corymb containing five or six flowers — The other four species detected by Mr Booth are. *R. Jénkinsi* Nutt., a fine species, hardy, or nearly so somewhat similar to *R Máddeni*, growing to the height of six or seven feet, and having, it is believed, yellow flowers, *R longifolium* Nutt, a plant with magnificent leaves, discovered on the slopes of the Oola Mountains, at an elevation of from 6000 to 7000 feet, and likely to prove hardy in this country, *R Nuttallii* Booth, a magnificent greenhouse species from Bhotan, with very large white flowers tinted with rose and yellow at the base, and delightfully fragrant, the flowers are indeed larger than those of any other known Rhododendron; and *R Wrightiæ* Nutt a fine hardy species, having a dwarf habit, and producing its deep crimson-scarlet flowers in large trusses

RHODODÉNDRON NÍVEUM *J D Hook*, Bot Mag. t 4730 This very beautiful species was found by Dr. Hooker in the Sikkim Himalaya, at an elevation of from 10,000 to 12,000 feet It flowered for the first time in this country in the Royal Gardens of Kew, in May, 1853 It forms a small shrub, with moderately large leaves and rather numerous flowers, which are externally of a yellowish lilac, internally of a pallish lilac blotched with deeper lilac, and having, a the inner base five deep blood-purple spots. The form of the flower is broadly campanulate.

RUBUS BIFLÒRUS *Buchanan*, R pedunculòsus *D. Don*, Bot Mag t 4678 This extremely handsome Bramble was received by Messrs Veitch and Son from Nepal, and cultivated by them for some time under the name of *R leucostémus*, a name which it might justly claim (from the pure white of the stems of the plant) were it not that a North-west American species had been so designated by Douglas, and the name adopted by Drs Torrey and Gray in their *Flora of North America* The plant is quite hardy and very ornamental and striking from the bold white stems and the copious white flowers, which are produced in May and June, and which are succeeded by "the good-sized and well-flavoured orange or rather deep amber coloured fruit in the early autumn" It would be worth considering, whether this very handsome and agreeable fruit would not be deserving of cultivation for the table.

SABBÀTIA STELLÀRIS. A beautiful greenhouse herbaceous perennial from the Southern United States, with deep rose-coloured flowers, having a yellowish-green star-shaped eye

SALVIA IÁNTHINA *Otto & Dietr.* This very ornamental species has flowers of a dark violet, the calyx and bracts being of the same colour. It is a native of the mountains of Peru, and half-hardy in this country.—S. PARRY-NÁNTHA *Dec* is a dwarf species, a native of Mexico and Central America, with erect racemes of brilliant scarlet flowers.

SANDERSÒNIA AURANTÌACA *Hook.*, Bot Mag t 4716 *Liliàceæ*. This remarkable plant was discovered on "Five Hill near D'Urban, and on the Swartkop Hill, near Pietermaritzborg, Natal, flowering on the 15th of November 1851," by John Sanderson, Esq., secretary of the Horticultural Society of Natal, in compliment to whom the genus has been named The flowers are produced from the axils of the superior leaves, they are large for the size of the plant, sub-globularly campanulate, drooping, and of a deep orange colour. The plant is a tuberous-rooted greenhouse perennial.

SCHRÈBIA MEXICANA *Seemann*, Bot Mag t 4743 A splendid plant with large violet flowers, nearly allied to *Achimènes*. It is a Mexican cool-stove perennial.

SCHIZÁNTHUS VIOLÀCEUS *Hort* A handsome half-hardy annual, with violet-coloured flowers, which has been raised in the French gardens

SCIADÓCALYX WARSCEWICZII *Regel*, *Gésnera* Regeliàna *Hort*, is a magnificent plant from Santa Martha, with a profusion of scarlet and purple flowers.

SCUTELLÀRIA VILLÒSA. A rather coarse-leaved soft-wooded stove shrub from the Andes of Peru, with bright scarlet flowers.

SEMEIÁNDRA GRANDIFLÒRA *Hook.*, Bot Mag. t 4727. A dwarf shrub, with scarlet flowers about the size of those of a *Fúchsia*, to which genus it is nearly allied

SENÈCIO PRAÆCOX This is a tree groundsel from Mexico, the foliage of which is coarse, but its yellow flowers are extremely showy in the spring It is a greenhouse shrub

SIPHOCÁMPYLOS ORBIGNIANUS *D C*, Bot Mag t 4713 This plant has a peculiarly lax habit, so that the stems require to be supported by a stick, and the branches are quite pendent It is a native of Bolivia, where it was discovered by D'Orbigny, after whom the species is named It is a stove perennial, with handsome foliage and good yellowish flowers, tinged on the back or superior side with red, which, however, are not so highly coloured as those of many of the other species

SIPHOCAMPYLOS PENDULIFLORUS A handsome scandent stove perennial from the Caraccas, the flowers of which are white and rose.

SOLLYA DRUMMÓNDII A pretty, slender, greenhouse evergreen climber from Australia, with bright blue flowers

SONERILA MARGARITACEA. A beautiful little stove perennial from India, with deep green leaves, marked with white oval spots, "as if sown with pearls," and bright rose-coloured flowers Introduced by Messrs Veitch and Son

SONNERÌLA ORBICULÀTA *Lindl* This is a pretty perennial species from the Neilgherries, also with rose-coloured flowers It requires a stove

SOPHÒRA SECUNDIFLÒRA *Dec* A shrub with blue flowers and one-seeded legumes, the seeds being as large as a pea and the colour of coral. It is a native of Texas, and nearly hardy in Europe

SPIRÆ'A GRANDIFLÒRA *Hook.*, Bot Mag t 4795 A splendid species, introduced by Mr Fortune, which flowered in England for the first time in May 1854 the flowers are large and white, resembling those of an *Amelánchier* the shrub appears hardy in the climate of London.

TÁXUS LINDLEYÀNA. This species was found growing on the banks of a creek, under the shade of lofty trees by Mr W Murray of San Francisco, when exploring the range of mountains which runs between the coast range and the Rocky Mountains, lat 40°, 41°, &c N It formed a tree of considerable size, with the trunk measuring fifty inches in circumference at five feet from the ground The branches were very long and pendulous, and the wood, which is used by the savages for their bows, is extremely elastic The berry is red, and grows on the under side of the branches It is exactly like the berry of the Irish Yew, each berry having one seed

TÉCOMA SPECTÁBILIS. A very showy cool-stove shrub or small tree from New Grenada, with large, bright red flowers, which are produced in terminal clusters

THUÍOPSIS BOREÁLIS. This is a garden name for some unrecognised and possibly new hardy conifer, which is reported to have come from the north of India. It is in the possession of Mr Pontey, of Plymouth

THUÍOPSIS DOLABRÀTA *Sieb et Zucc* A very beautiful large evergreen tree, indigenous to Japan, the Island of Nipon, &c, with a thick trunk and verticillate drooping branches It is doubtful whether it will prove hardy in this country. It is the *Platycladus dolabràta* of Spach, and the *Thùja dolabràta* of Thunberg

THUJA GIGANTÈA *Nutt* A very handsome hardy evergreen tree indigenous to North-West America, along the banks of the Columbia River, and Nootka Sound, and attaining the height of from 60 to 170 feet The branches which resemble some of the more graceful species of *Lycopòdium*, are spreading, with compressed flattened erect branchlets It is the *Thùja Menzièsii* of Douglas, and it has, in addition, as synonymes the names *Thùja Craigiàna* and *Libocedrus decúrrens*. The species is in the possession of Messrs Low and Co, of Clapton and of Messrs. Lawson and Son, of Edinburgh.

TORREÝA MYRÍSTICA *Hook*, Bot Mag t. 4780 A very ornamental tree, found on the Sierra Nevada, a mountain range in California, by Mr W Lobb, the well-known and very successful collector of Messrs Veitch of Exeter. Its habit of growth resembles that of the *Cephalotáxus*, but the fruit is very curious, as it forms a kind of drupe about the size of a walnut, the stone of which contains a kernel enveloped in a ligament resembling that of the nutmeg, and hence the specific name. The plant is called the Californian Nutmeg.

TOVÀRIA PÈNDULA A greenhouse annual from Venezuela, with yellowish-white flowers. Of botanical interest chiefly.

TRICHOCÈNTRUM PINÈLII and T PURPÚREUM. These are two small and rather unimportant stove epiphytes, the first from Demerara, with olive-green flowers, and the second from Rio, with cinnamon-coloured flowers

VACCINIUM OVÀTUM *Pursh*, V prunifòlium *Hort*, Bot Reg t. 1354, and Bot. Mag t 4732 This very little known species was first discovered by Menzies in North-west America, and afterwards traced by Lewis and Scouler and by Douglas, extending in the Oregon territory from the 40° to the 49° of latitude. It was introduced by Douglas to the Horticultural Society of London, and is perfectly hardy, and very ornamental The leaves are glossy and evergreen; and the flowers, though much concealed by the foliage when looked on from above are of a waxy yellowish-white, delicately tinged with pale pink.

VALLISNÈRIA SPIRÀLIS For a considerable time we only possessed the female plant of the curious and interesting *Vallisnèria spirális*, recently, however, the male plant has been obtained. It has sessile flowers At present it is extremely rare in this country

VERÓNICA KERMESÍNA. A handsome dark variety of *Verónica speciòsa*, which has been raised by J. Luscombe, Esq

of Coombe Royal, Devonshire, and which is being sent out by Messrs. Lucombe, Pince, and Co., of Exeter. The flowers, which are produced in beautiful large spikes, are of a deep purplish-crimson; and the plants blossom when in a young state, which is not often the case with *I. speciosa*.

SALVIA VARIEGATA A very beautiful hybrid Veronica, raised by J. Anderson, Esq., of Maryfield, Edinburgh, between *V. Andersonii* and *V. salicifolia*, and being intermediate between the two parents. It has a compact habit of growth, and small glossy foliage. The flowers are produced in racemes abundantly on first appearing they are of a clear bright pink, gradually shading off to a pure white, and producing a striking effect. The plant has been brought into notice by Messrs. Veitch and Son.

SENECIO SUFFRUTICOSUS *Hort.* This promises to be a valuable evergreen shrub. It resembles the Laurustinus, and has greenish-white flowers. It has yet to be ascertained whether it will prove hardy in this country.

SIDA PEDATA *Willd.* This plant was introduced long ago, but it has been little known; now, however, it is being again brought into notice. It is in the possession of Messrs. Low and Co., of Clapton.

STANHOPEA QUADRATA A pretty orchid from Central America. The flowers are large and white, with an involute *Gloxinia*-like lip, which is deeply bordered with red.

STRUCKIA AMABILIS See *Dierrilla amabilis*.

WELLINGTONIA GIGANTEA *Lindl.*, Sequoia gigantea *Endl.*? The following particulars respecting this beautiful and remarkable tree, are extracted from an interesting account given by Dr. Lindley, in the *Gardeners' Chronicle*, at the close of 1853, when the plant received from that able botanist the name which it now bears. "The other day," Dr. Lindley observes, "we received from Messrs. Veitch, branches and cones of a most remarkable coniferous tree from California, seeds and a living specimen of which had just been brought them by their excellent collector, Mr. William Lobb, who, we are happy to say, has returned loaded with fine things. Of that tree Mr. Lobb has furnished the following memorandum:—'This magnificent evergreen tree, from its extraordinary height and large dimensions, may be termed the monarch of the Californian forest. It inhabits a solitary district on the elevated slopes of the Sierra Nevada, near the head waters of the Stanislau and San Antonio rivers, in lat. 38° N., long. 120° 10' W., at an elevation of 5000 feet above the level of the sea. From eighty to ninety trees exist, all within the circuit of a mile, and these varying from 250 feet to 310 feet in height, and from 10 to 20 feet in diameter. Their manner of growth is much like the *Sequoia* (*Taxodium*) *sempervirens*: some are solitary, some are in pairs; while some, and not unfrequently, stand three and four together. A tree recently felled measured about 300 feet in length, with a diameter, including the bark, 29 feet 2 inches, at 5 feet from the ground, at 18 feet from the ground it was 14 feet 6 inches through, at 100 feet from the ground, 14 feet, and at 200 feet from the ground, 5 feet 5 inches. The bark is of a pale cinnamon brown, and from 12 to 18 inches in thickness. The branchlets are round, somewhat pendent, and resembling a cypress or juniper. The leaves are of a pale grass green, those of the young trees are spreading, with a sharp acuminate point. The cones are about 2½ inches long, and 2 inches across at the thickest part. The trunk of the tree in question was perfectly solid, from the sap wood to the centre, and, judging from the number of concentric rings, its age has been estimated at 3000 years. The wood is light, soft, and of a reddish colour like Redwood or *Sequoia* (*Taxodium*) *sempervirens*. Of this vegetable monster 21 feet of the bark, from the lower part of the trunk, have been put in the natural form in San Francisco for exhibition: it there forms a spacious carpeted room, and contains a piano with seats for forty persons. On one occasion 140 children were admitted without inconvenience." An exact representation of this tree, in lithograph, from a drawing made on the spot, has been published by Messrs. Veitch, since the return of Mr. Lobb from his successful mission to California. From an account by Dr. C. F. Winslow, given in the *Californian Farmer* (a weekly journal published at San Francisco), subsequently to that by Dr. Lindley from which the above is a quotation, we learn that the dimensions recorded by Mr. Lobb do not give us the full height to which this splendid conifer attains, by more than 100 feet, one specimen having been found measuring 450 feet from its head to its root! This specimen is said to have been 51 feet in diameter at 350 feet from its upturn root! We learn further from Dr. Winslow's observations, that the locality in which this gigantic tree is found, seems to be confined to an area of a few acres, and that the soil and atmosphere of the place of growth are singularly humid. But what concerns us most to know is, that this very important acquisition to our hardy conifers is now readily obtainable, those enterprising nurserymen, Messrs. Veitch and Son, having succeeded in raising a large number of fine healthy young plants from the seeds brought home by Mr. Lobb. In the *Bon Jardinier* for 1855 it is said to be identical with the *Sequoia gigantea* of Endlicher, but a plant growing under that name in the Exeter Nursery appears to be quite distinct.

WHITLAVIA GRANDIFLORA A very beautiful hardy Californian annual, with the habit of *Eutoca viscida*. Introduced by Messrs. Veitch and Son. The flowers are large and bell-shaped, and of a deep purple.

XANTHORRHŒA HASTILE *R. Br.*, Bot. Mag. t. 4722. In describing this plant in the *Botanical Magazine*, Sir William Hooker observes, "The Gum trees, or Grass Gum trees, as they are sometimes called, of Australia, are among the most remarkable vegetable features of the colony. An excellent group of them is represented in Mr. Backhouse's *Narrative of a Missionary Journey in New South Wales*, in the table at p. 171. That peculiar species, however, is considered to be the *X. arborea*, having an arborescent and branched stem." All the species, probably, yield a resinous gum, which, when strewed on hot coals, emits a fragrant smoke, "smelling like a mixture of balsam of Tolu and benzoin," and now used, we are told, as incense in the Roman Catholic churches of the colony. The "Yellow Resin" is the product of the plant under notice, *X. hastile*, which is said to have been introduced as long ago as 1803, but soon lost. It was, however, reintroduced from Port Jackson in 1845, through Mr. Kidd then having the temporary charge of the Botanic Garden of Sydney. The specimen thus obtained blossomed in the Royal Gardens of Kew in the spring of 1853, while still, it is presumed, comparatively a small plant, the whole height being barely six feet, whereas in its native country the scape of the plant alone attains a height of eighteen or twenty feet, and is used by the natives in making spears (whence the specific name *hastile*) and fish-gigs, being pointed with the teeth of fish or other animals. The leaves are three feet or more in length, the scape is terminal, solitary, and quite erect, bearing at the apex a dark brown downy spike (not unlike the head of the greater Reed-mace), consisting of a vast quantity of scaly bracts, which give the colour to the spike, and the flowers are amongst these bracts, and are small and sessile. This plant is the Yellow Resin Tree of White.

GENERAL INDEX,

COMPREHENDING

THE SYSTEMATIC AND ENGLISH GENERIC NAMES, AND THE ENGLISH AND SYSTEMATIC SYNONYMES IN COMMON USE.

Where *n.* is added after the name, it refers to the note: *s.* indicates a synonyme.

Page of Lin Art	Nat. Art		No of Spec	No of Gen
840		Abele-tree	13958	2087
1406		Abèlia		3098
804				
1274	1084	A'bies		2013
1516				
650	1060	Abrôma		1609
118	1080	Abrônia		323
1154				
614	1066	A'brus		1546
1236		Abûtilon		2701
1426				
856				
1278	1067	Acâcia		2127
1530				
1530		A. see Prosôpis		3333
814	1082	Acâlypha		2038
	1097	ACANTHA'CEÆ, Or.		117
1330		Acantholimon		2949
1264		Acanthophippium		2795
1478				
1334		Acanthóstachys		2958
816	1079	Acánthus		1301
1408		A. see Dilivâria		3104
686	1074	Acârna		1671
864				
1278	1060	A'cer		2143
1514				
752	1085	A'ceras		1865
1490				
	1060	ACERI'NEÆ, Or	33	
584	1059	Achânia		1479
726	1073	Achillèa		1781
1444				
1412		Achimènes		3121
1212		A'chlys		2636
926	1091	Achnánthes		2259
58	1089	Achnodónton		166
150	1076	A'chras		427
190	1080	Achyránthes		552
1440		Achyróphorus		3174
1484		Acianthèra		3239
1258		Acánthus		2751
744	1072	Acicárpha		1842
792	1083	Acidôton		1992
1468		Acinèta		3223
1022	1092	Acinula		2407
1176		A'cis		2666
364	1068	Acisanthèra		1031
728	1074	Acmélla		1793
834	1081	Aculda		2072
474		Aconite, *n.*		
474	1054	Aconitum		1205
1390				
1390		A see Consólida		3070
1508		Acóntias		3271
256	1089	A'corus		755
1362		Acradènia		3014
1038	1093	Acremònium		2477
1488		Acriópsis		3243
1500		Acrocòmia		3255
1348		Acronychia		2993
1361		Acropèra		2792
1476				
1370		Acrophýllum		3038
1020	1092	Acrospérmum		2403
1040	1093	Acrosporium		2480
878	1090	Acróstichum		2169
460	1055	Actæ'a		1164
1250		Actinélla, *s.*		2737
294	1087	Actinocárpus		860

Page of Lin Art	Nat. Art		No of Spec	No of Gen
230	1070	Actinophýllum		697
1032	1093	Actinothýrium		2435
214	1070	Actinôtus		644
508	1079	A'cynos		1276
1398		A see Melissa		1278
244		Adam's apple, *n.*		
268		Adam's needle		781
1196		Adâmia		2612
1370				
592	1059	Adansônia		1471
888		Adder's tongue		2209
850	1082	Adèlia		2118
180	1067	Adenándra		518
350	1063	Adenanthèra		982
1294		Adenánthos		2466
1314		Adènium		2900
1406		Adenocalýmma		3100
1318		Adenóphora		2915
1384		Adenóstoma		3061
1248		Adenotrichia		2727
1244		Adésmia		2716
884	1090	Adiántum		2194
98	1072	Adina		286
600	1056	Adlùmia		1505
484	1054	Adònis		1230
328	1070	Adóxa		930
1518		Adventure Bay Pine, *n.*		
1336		Æchmèa		2961
1044	1093	Æcídium		2497
862	1089	Æ'gilops		2134
1152		Æginètia, *s*		2514
96				
1298	1079	Ægiphila		274
468	1062	Æ'gle		1196
1160		Ægóchloa		2523
216	1070	Ægopòdium		652
1376		Æônium		3047
764	1085	Aeránthes		1924
762				
1488	1085	Aérides		1917
1486		A see Renanthèra		1918
1486		A. see Saccolàbium		2817
1488		A see Sarcánthus		1915
1490		Aerôbium, *s.*		1921
192	1080	Æ'rua		560
1414		Æschynánthus		3127
630	1066	Æschynómene		1584
296	1060	Æ'sculus		866
1182		Æ. see Pâvia		2593
552				
1418	1057	Æthionèma		1429
218	1071	Æthùsa		661
864		African almond		2142
694		African fleabane		1706
260		African lily		767
	1063	African lote		
718		African marigold	12212	1760
1411		African Oak, *n.*		
1411		African Teak, *n*		
346	1069	Afzèlia		971
1416		Agalmýla		3128
1468		Aganisia		3224
1312		Aganósma		2893
260		Agapánthus		767
1340				
986		Agaric		2365
986	1092	Agáricus		2365
1366		Agarista		3022
1364		A. see Leucóthoe		3020

Page of Lin Art	Nat. Art		No of Spec	No of Gen
1366		A. see Leucóthoe		3020
1152		Agástachys		2
802	1084	A'gathis		2
1515		A see Dámmara, *n*		
394				
1454	1081	Agathophýllum		1[illegible]
182	1063	Agathósma		[illegible]
241	1087	Agâve		7 [illegible]
630	1073	Agêratum		1[illegible]
1510		Aglaonèma		3[illegible]
1296		Agnóstus, *s.*		24[illegible]
1380		Agônis, *s.*		3[illegible]
398	1067	Agrimònia		1[illegible]
398		Agrimony		1[illegible]
388				
1198	1058	Agrostémma		1[illegible]
56	1089	Agrôstis		1[illegible]
1292		A. see Apèra		2[illegible]
1020	1092	Agýrium		2[illegible]
866		Ailântus		2[illegible]
58	1089	Aira		1
160	1089	Airópsis		[illegible]
762		Air plant		1[illegible]
578	1093	Aitônia		1[illegible]
428	1069	Aizôon		1[illegible]
494				
1220	1079	A'juga		1[illegible]
1500		Akèbia		3[illegible]
302		Akee-tree		[illegible]
468	1068	Alângium		[illegible]
176		Alatérnus	2802	
274	1086	Albûca		[illegible]
1398		A see O'cymum		1[illegible]
88	1067	Alchemilla		
391		Alcohol, *n*		
928	1091	Alcyonidium		[illegible]
780	1083	Alder		1
690		Ale-cost, *n*		
970	1092	Alectòria		2[illegible]
268	1086	Alètris		7[illegible]
1340		A see Blandfórdia		2[illegible]
812	1082	Aleurites		2[illegible]
216		Alexanders		[illegible]
846		Alexandrian laurel	14046	2[illegible]
1530		Algaroba		3335
868		Algaroba-bean, *n*		
205		Alicant soda, *n*		
294	1087	Alisma		861
	1087	ALISMA'CEÆ, Or	160	
1490		Alismórchis, *s*		1922
146				
1312	1076	Allamánda		4[illegible]
882	1090	Allantòdia		2[illegible]
550	1057	Alliária		1442
480		Alligator apple, *n*		
334	1081	Alligator pear	5651	634
272				
1342	1086	A'llium		798
1402		Alloplèctus		3083
1402		A. see Chrysóthemis		3083
1402		A. see Collándra		3084
1404		A. see Macróchlamys		3100
				2[illegible]
880	1090	Allosôrus		2[illegible]
74		All-seed		1[illegible]
454	1061	Allspice		1129
418		Allspice-tree	6995	958
1324		Almeida		1[illegible]
420		Almond		

Lin.	Nat		Sp.	Gen.
1324		Anácharis		3116
724	1073	Anácyclus		1777
1152		Anadènia		2812
1264				
1268		Anaectochilus		2838
1492				
1492		A. see Cheiróstylis		3248
1492		A. see Physúrus		3247
128				
1156	1080	Anagállis		357
1306				
342	1066	Anagýris		943
526				
1412	1078	Anarrhínum		1345
548	1057	Anastática		1416
466		Anchovy pear		1188
120				
1304	1078	Anchúsa		343
1306		A. see Arnèbia		2875
26	1067	Ancistrum		68
142		Andersònia		398
810	1082	Andráchne		2028
916	1091	Andreæ'a		2252
290	1087	Androsýmbium		649
358	1075	Andromeda		1016
1366		A. see Agarista		3022
1366		A. see Gaultherìa		1018
1360		A. see Gaylussacia		
				3023
1364				
1366		A. see Leucóthoe		3020
1366		A. see Lyònia		3021
1364		A. see Pieris		2995
860	1089	Andropógon		2120
126				
1156	1080	Andrósace		349
1306				
676	1072	Andryàla		1642
36	1087	Aneilèma		80
886	1090	Anèmia		2207
482				
1218	1084	Anemòne		1226
1302				
218	1071	Anèthum		654
220	1071	Angélica		664
230		Angelica-tree	3899	626
544	1078	Angelònia		1371
1416				
1342		Angóphora		3056
	1062	Angostura-bark		
764				
1266	1085	Angræ'cum		1921
1488				
1266		A. see Œreóclades		2819
1486		A. see Vánda		1916
1256				
1474		Anguloa		2789
1468		A. see Acinèta		3223
1474		A. see Stanhòpea		2786
772				
1498	1069	Angùria		1940
59		Angus oat, n		
1464		A'nia		3214
912	1091	Anictangium		2242
244				
1174	1085	Anigozánthos		720
1434				
60		Animal oat	1051	171
1150		Anisánthus		2504
212		Anise		636
478		Aniseed-tree		1215
1392		Anise tree, n		
1308		Anisodus, s		2882
494	1079	Anisómeles		1243
758	1085	Anisopétalum		1899
1452		A see Bolbophýllum		
				2754
480	1055	Annòna		1220
	1055	Annonàceæ, Or. 4		
588	1059	Anòda		1485
42				
1150	1086	Anomathèca		106
912	1091	Anómodon		2246
1346		Anópteris		2988
1478		Anselìia		3236
1506		Antarctic evergreen beech, n.		
702	1073	Antennària		1725
1948				
724	1073	Anthemis		1778
280	1086	Anthéricum		809
1344		A. see Bidwillia		2981
1344		A. see Echeándia		2983
1344		A. see Simèthis		2982

Lin.	Nat		Sp.	Gen.
1180		A. see Trichopetalum, s		3382
1510		Antherùrus		3277
534				
1418	1078	Anthocércis		1378
942	1091	Anthoceros		2256
44	1086	Antholỳza		107
852	1072	Anthospérmum		2063
28	1089	Anthoxánthum		76
208	1071	Anthríscus		620
1298		Anthúrium		2868
612	1066	Anthýllis		1542
1430				
1534		Antiaris		3337
834	1093	Antidesma		2058
526	1078	Antirrhinum		1343
1288				
892	1090	Antrophyum		2193
1335		Antsar, n		
584		Antwerp holly-hock	9776	1474
192	1080	Anýchia		559
344	1066	Adtus		959
1300				
670	1073	Apárgia		1632
464	1060	Apeiba		1181
1292		Apèra		2865
324	1080	Aphananthe		918
1222		Aphanochilus		2690
518	1079	Aphelándra		1306
1410				
1288		A see Thyrsacánthus, s		2858
1442		Aphelèxis, s		3181
	1091	Aphy'llæ, Cl 2		
272	1086	Aphyllánthes		794
246	1070	A'pium		681
1258		Aplectrum		2750
	1076	Apoc'yneæ, Or 101		
194	1077	Apócynum		572
292	1090	Aponogèton		854
1346				
1260		A'porum		2758
1484				
466		Apothecaries' boxes, n.		
180		Apple-berry		513
1166				
426	1067	Apple-tree	7090	1133
422	1067	Apricot	7056	1129
1529		Aquilboquil, n.		
476				
1218	1054	Aquilè'gia		1208
1392				
940				
1418	1057	A'rabis		1390
614	1067	A'rachis		1543
230	1070	Arália		696
1330				
	1070	Araliaceæ, Or 78		
846				
1276	1084	Araucària		2112
1528				
1534		A'rbor toxicària, s.		3337
806	1064	A'rbor Vitæ		2018
360				
1194	1075	A'rbutus		1019
1366				
1366		A see Arctostáphylos		3025
1194		A. see Pernéttya		2606
592	1079	Archangel		1259
1222				
680	1074	A'rctium		1660
1404		Arctócalyx		3094
872	1070	Arctópus		2105
1366		Arctostáphylos		3025
734	1073	Arctotìdea		1815
740	1073	Arctótis		1831
152				
1162	1075	Ardísia		435
1314				
152	1077	Ardúina		436
800	1088	Arèca		2009
1514				
378	1059	Arenària		1050
1372				
1514		Aréuga		3297
754	1084	Arethùsa		1877
124	1080	Arètia		348
1186				
462	1056	Argemòne		1172
1212				
967		Argol, n		
244	1085	Argophàsia		715

Lin	Not.		Sp.	Gen.
140 1310	1077	**Argyrèia**		385
1512		**Ariópsis**, *s.*		3286
1508		**Arisæ'ma**		3267
44	1086	**Aristea**		112
766 1268 1494	1082	**Aristolòchia**		1934
	1082	**Aristolochiæ**, Or 135.		
394	1064	**Aristotèlia**		1084
234	1080	**Armèria**		705
1306		**Arnèbia**		2875
716	1074	**Arnica**		1749
666	1073	**Arnopògon**		1623
464	1058	**Arnótta**		1623
	1089	**Aroideæ**, Or 176.		
1208		**Ardnia**, *s*		1138
1460		**Arpophyllum**		3207
1488		**Arrhynchium**		3241
290		**Arrow-grass**		841
790		**Arrow-head**		1989
2 1144	1085	**Arrow-root**		2
1034	1093	**Arsacèria**		2480
480	1065	**Artabotrys**		1221
220	1071	**Artèdia**		667
696	1073	**Artemisia**		1721
976	1092	**Arthònia**		2363
1406		**Arthrophyllum**, *s*		3102
280	1086	**Arthropòdium**		810
1184 1350		**Arthrostémma**		2795
684	1072	**Artichoke**		1668
770	1083	**Artocárpus**		1935
800	1089	**Arum**		2006
1508		**A** see **Acóntias**		3271
1510		**A.** see **Aglaonèma**		3278
1508		**A** see **Ambrosinia**		3266
1512		**A.** see **Amorphophál'lus**		3285
1510		**A** see **Antherdrus**		3277
1508		**A** see **Arisæ'ma**		3267
1512		**A** see **Bidrum**		3290
1512		**A** see **Colocàsia**		3287
1508		**A.** see **Cryptocóryne**		3268
1510		**A** see **Dieffenbáchia**		3276
1512		**A** see **Dracúnculus**		3283
1510		**A** see **Mónstera**		3280
1508		**A.** see **Peltándra**		3269
1510		**A.** see **Philodéndron**		3274
1512		**A** see **Remusátia**		3286
1512		**A.** see **Sauromátum**		3282
1508		**A** see **Syngónium**		3272
1512		**A.** see **Typhónium**		3289
1508		**A** see **Xanthosóma**		3270
74	1089	**Arundinària**		219
1462		**Arundinia**		3216
60	1089	**Arúndo**		175
1330		**Asafœ'tida**, *s.*		2047
392		**Asarabacca**		1072
392	1082	**A'sarum**		1072
	1077	**Asclepia'deæ**, Or. 102.		
196 1328	1077	**Asclèpias**		588
1328		**A** see **Raphistémma**		2941
1018	1092	**Ascóbolus**		2391
1036	1093	**Ascóphora**		2462
658	1061	**A'scyrum**		1618
868	1076	**Ash-tree**		2157
480 1218	1055	**Asimina**		1223
1347		**Asòca**, *n.*		
606	1066	**Aspálathus**		1528
282 1344	1086	**Aspáragus**		816
1262 1466		**Aspàsia**		2772
840		**Aspen**	13961	2087
1040	1093	**Aspergillus**		2482
124	1078	**Asperúgo**		342
94	1072	**Aspérula**		268
280		**Asphodel**		808
	1086	**Asphode'leæ**, Or. 160.		
28	1086	**Asphódelus**		808
8	1061	**Aspicárpa**		29
258	1089	**Aspidistra**		759
884	1092	**Aspidium**		2199
880	1090	**Asplènium**		2186
230	1070	**Assafœtida**	3702	668
617		**Asses' eyes**, *n.*		
1226		**Assònia**		2697
1436		**Astartèa**		3169
700	1073	**Astélma**		1727
70	1074	**A'ster**		1739
1248 1442	1074	**A'ster**		1729
1442		**A** see **Eurybia**		3183
1444		**A** see **Machæranthèra**		3185
1408		**Asteracántha**		3105
1032	1093	**Asterònia**		2429
1424		**Asterotrichion**		3146
1424		**Astiria**		3145
636 1434	1066	**Astrágalus**		1594
298	1064	**Astránthus**		873
222	1070	**Astrántia**		674
580 1424	1060	**Astrapæ'a**		1469
1424		**A.** see **Dombèya**		1467
1500		**Astrocàryon**		3254
142		**Astroldma**		396
1376		**Astróphytum**, *s*		2625
1330		**Astrótriche**		2946
1408		**Asyatàsia**		3113
1340		**Atáccia**		2971
254		**Atamasco lily**	4273	743
212	1071	**Athamánta**		634
696	1073	**Athanàsia**		1717
	1083	**Atherospe'rmeæ**, Or 139		
700	1073	**Athrixia**		1728
1024	1092	**Atractólobus**		2416
686	1074	**Atráctylis**		1670
1392		**Atrágene**, *s*		1226
248	1081	**Atraphàxis**		838
862 1534	1081	**A'triplex**		2138
154	1078	**A'tropa**		446
1316		**A.** see **Hebécladus**		2908
1514		**Attàlea**		3295
442		**Attar**, *n.*		
	1078	**Aubergines**		
544 1230	1057	**Aubriètia**		1399
784	1093	**Aúcuba**		1966
1398		**Audibértia**		3075
1442		**Augústa**, *s.*		3178
828	1081	**Aúlax**		2052
	1062	**Aurantia'ceæ**, Or. 45		
126		**Auricula**	2031	350
58	1089	**Avèna**		171
454		**Avens**		1155
380	1061	**Averrhòa**		1058
520	1079	**Avicénnia**		1325
177		**Avignon berries**, *n*		
558		**Awlwort**		1447
52	1089	**Axónopus**		140
772	1081	**A'xyris**		1943
	1072	**Ayapana of Brazil**		
182	1060	**Ayènia**		527
144 1162 1312	1075	**Azàlea**		403
1190		**A** see **Rhododéndron**		1014
1212		**Azàra**		2639
424		**Azarole**	7078	1132
42	1086	**Babiàna**		102
1380		**Babingtònia**		3052
678	1074	**Bacárra**		1658
702	1074	**Báccharis**		1732
1380		**Backhoúsia**		3054
790 1500	1088	**Báctris**		1985
1500		**B.** see **Acrocòmia**		3255
304 1350	1068	**Bæ'ckia**		891
1380		**B.** see **Babingtònia**		3052
154	1075	**Bæbotrys**		443
970	1092	**Bæómyces**		2350
1250		**Baèria**		2736
176		**Bahama red wood**	2870	503
1250		**Bàhia**, *s.*		2747
884	1090	**Balánt um**		2198
1198		**Balbísia**		2619
504	1079	**Balldta**		1265
1222		**B.** see **Roylea**		2655
508	1079	**Balm**		1278
	1064	**Balm of Acouchi**		
1400		**Balm of Gilead**	19616	3080
804		**Balm of Gilead fir**	13526	2013
184		**Balsam**		538
808		**Balsam apple**	13555	2020
	1061	**Balsami'neæ**, Or 41.		
696	1073	**Balsamita**		1718
350	1065	**Balsam of Capivi**		996
305	1064	**Balsam of Mecca**, *n.*		
	1065	**Balsam of Peru**		
	1064	**Balsam of Tolu**		
866		**Balsam-tree**		2145
738	1074	**Baltimòra**		1822
256		**Bamboo-cane**		752
256	1089	**Bambùsa**		752
244		**Banana-tree**	4088	721
793		**Bandboxes**, *n.*		
100		**Bandhooka**	1743	2881
460		**Bane-berry**	7649	1164
	1083	**Bang**		
932	1091	**Bángia**		2280
380 1372	1061	**Banistèria**		1655
1372		**B** see **Stigmatophyllum**		2644
86 1296	1081	**Bánksia**		247
1196		**Bansook**, *n.*		
872		**Banyan tree**	14430	2170
1528		**Banya-tunya**, *n*		
1528		**Banza-tunza**, *n*		
592		**Baobab**, *n.*		
342	1066	**Baptísia**		1594
1174 13 4		**Barbacènia**		2777
848		**Barbadoes cedar**	14062	2133
380		**Barbadoes cherry**		1011
414 1202		**Barbadoes gooseberry**	6904	1100 2837
252		**Barbadoes lily**	4238	734
540	1057	**Barbarèa**		1330
286		**Barberry**		2877
1242		**Barbitèria**		2710
1410		**Bárbula**, *s*		3172
205		**Barilla**, *n.*		
1460		**Barkèria**		3177
516 1226	1079	**Barlèria**		1800
1408		**B.** see **Asteracántha**		3105
72	1088	**Barley**		
75		**Barley sugar**, *n*		
1180		**Barnárdia**		2...
1442		**Barnadèsia**		2...
100 1152		**Barren-wort**		2...
596	1068	**Barringtònia**		1170
1238		**B** see **Stravádium**		2...
752	1085	**Barthollna**		1...
414 1202	1069	**Bartònia**		1100
908	1091	**Bartrâmia**		2...
524	1078	**Bártsia**		1...
180	1063	**Baryósma**		
228	1081	**Basélla**		
1314		**B** see **Ullúcus**		
400		**Base-rocket**	6673	1...
510		**Basil**		1...
822		**Basket osier**	13733	2...
394	1076	**Bássia**		2074
120		**Bastard alkanet**, *n*		
510		**Bastard balm**		1...
604		**Bastard cabbage-tree**		1...
182 650		**Bastard cedar**		3... 1688
332		**Bastard cinnamon**	5641	648
208		**Bastard hare's-ear**		617
614		**Bastard indigo**		1545
640		**Bastard lupine**		1599
148		**Bastard manchineel**		417
810		**Bastard orpine**		2021
96		**Bastard pimpernel**		1...
426		**Bastard quince**	7104	1...
194		**Bastard toadflax**		1...
20		**Bastard vervain**		1...
636		**Bastard vetch**		1...
1022	1092	**Batárrea**		2410
1310		**Batátas**		2...
1158		**Batátas**, *s*		2...
1262		**Batemánnia**		2...
932	1091	**Batrachospérmum**		2...
120	1078	**Bátschia**		337
1381		**Batu of the New Zealanders**, *n*		1...
470	1070	**Baúera**		1...
346	1067	**Bauhínia**		1...
216		**Bawd-money**		
831		**Bayberry-bush**, *n*		

Lin.	Nat.		Sp.	Gen.
332	1061	Bay-tree	9646	934
342		Bead-tree		988
425		Beam-tree, n.		
421	1053	Bean	10420	1561
353		Bean-caper		994
353		Bean-trefoil		943
343		Bear-berry	5967	1019
397		Bear-bind		387
140		Bear's breech		1301
515		Bear's-ear sanicle		351
128		Bear's foot	9085	1237
4[illegible]		Bear's grape		3025
1366		Beatonia		3136
1430				
614				
1214	1068	Beaufórtia		1613
1436				
479		Beaver-tree, n		
1284		Bèckium		3079
60	1069	Beckmánnia		192
92		Bed straw		266
793		Beech		1997
208	1081	Beet		612
730				
1268	1062	Begónia		1989
1504				
	1061	Begoniàceæ, Or 128.		
324				
1374	1075	Béjária		1076
802	1084	Bélis		2010
202		Belladonna lily	4255	739
540		Belle-isle cress	8978	1386
1344		Bellevália		2986
162		Bell flower		463
718				
1444	1074	Béllis		1756
718				
1443	1074	Bélium		1757
146		Beloperone		2500
1125		Bencao de Dios, n.		
400		Bengal quince		1196
534		Benjamin-tree	5656	934
56		Bent-grass		156
1152				
1360		Benthàmia		2515
903	1068	Benzoin, n		
624	1074	Berárdia		1667
	1065	Berberidæ Or 6		
1				
1	1055	Bérberis		829
144				
286				
1				
144		Berberry		829
732	1073	Berckhèya		1810
848		Bermudas ce-dar	14050	2113
54	1057	Berteròa		1398
90		Bertoldnia		3034
94		Boschornèria		2957
344	1078	Besléria		1373
1472		B see Alloplectus		3085
1454		B see Campánia		3091
1472		B see Chrysóthemis		3083
1402		B see Colfándra		3084
1370		B see Drymónia		3089
1		B see Francisca		2681
536		Besoms, n.		
570	1081	Beta		612
1138		Bétckia		2502
28		Betel-nut	507	77
503	1079	Betónica		1262
52		Betony		1262
1	1083	Bétula		1956
60		Bhoppáttra, n		
1		Bhoorja, n		
60		Bhoorjapattra, n		
1		Bilàrga		
1	1074	Bildea		3290
44		Bidwillia		1697
1		Bieberstelnia		2981
1				3016
1		Bifrenária		2776
1		B see Stenocóryne		3226
1	1077	Bignònia		1294
1		B see Adenocalymma		3107
1		B see Æschynánthus		
1		B see Paulòwnia		3127
1		B see Phyllárthron		3130
1		B see Spathódea		3102
1		B see Técoma		3099
				2666

Lin.	Nat.		Sp.	Gen.
	1077	Bignonia'ceæ, Or. 104.		
320		Bilberry	5497	907
180				
1166		Billardiéra		515
1324				
1324		B see Pronáya		2926
1324		B. see Sóllya		2925
1176				
1336		Billbérgia		2565
1380		Billòtia		3051
140		Bindweed		384
384	1061	Biophytum		1064
1518		Bíota		3309
780	1083	Birch		1956
830		Bird-lime, n.		
160		Bird-pepper	2591	453
126		Bird's eye	2023	350
628		Bird's-foot		1578
642		Bird's-foot trefoil		1601
766		Birthwort		1942
846	1057	Biscutélla		1413
638	1066	Bisérrula		1595
326		Bistort	5595	921
	1067	Bitter almond		
618				
1242	1066	Bitter vetch		1557
464	1058	Bixa		1178
	1058	Bixíneæ Or 18		
372		Bizarres, n.		
964		Black ash, n.		
838		Black bryony		2042
1396		Black hellebore, n		
648		Black nonesuch, n		
56		Black quitch, n		
194		Black saltwort		567
476		Black snakeroot		
			7877	1207
406	1064	Blackwéllia		1108
586		Bladder ketmia		
			9850	1480
226		Bladder-nut		684
626				
1244	1060	Bladder Senna		1573
98	1075	Blæ'ria		284
394	1068	Blákea		1075
260				
1310	1086	Blandfórdia		768
320		Bleaberry	5502	907
880	1090	Blechnum		2183
518	1079	Blechum		1305
736		Blessed thistle		
			12597	1819
762				
1260	1085	Blètia		1911
1464				
1490		B see Calánthe		1923
1466		B see Phájus		2770
302	1060	Blighia		885
1041		Blight, n.		
8	1081	Blitum		28
218		Blood-flower		731
460		Blood-wort	7681	1165
734		Blue-bottle	12549	1819
1383		Blue gum-tree, n		
320		Blue tangles	5507	907
320		Bluets	5504	907
1246		Blumenbáchia		2720
392	1056	Boccònia		1073
718				
1250	1074	Bœ'bera		1759
782				
1500	1083	Bœhmèria		1960
6	1080	Boerhaàvia		19
130		Bog bean, n.		
48		Bog rush		119
1230		Bois mabonia, n.		
1213		Bois sans écorce, n.		
1330		Bòlax, s.		2946
1258				
1452		Bolbophýllum		2754
1260		B see Cirrhopétalum		2755
1526		Boldo'a		3319
1008	1092	Bolètus		2373
722	1074	Boltònia		1772
1340		Bomària		2970
	1059	Bomba'ceæ, Or 24		
592	1059	Bómbax		1472
322		Bonace bark	5532	910
249		Bonana bird's nest, n.		
1266		Bo[illegible]tea		2821
942	1091	Bonnemaisònia		2315
894	1079	Bóntia		1334
1214		Boóthia, s.		2643

Lin.	Nat.		Sp.	Gen.
122		Borage		340
	1077	Boragineæ, Or. 108.		
122	1078	Borágo		340
836	1088	Borássus		3079
606	1066	Borbónia		1526
674	1073	Borkhausia		1637
302				
1348	1063	Borónia		878
964	1092	Bórrera		2342
826	1082	Bórya		2044
206	1081	Bósea		613
608				
1428	1066	Bossiæ'a		1531
838		Botany-bay tea		
			13934	2081
1444		Botrvadènia, s.		3191
1152		Botryceras		2611
886	1090	Botrychium		2208
1040	1093	Botrytis		2481
846		Bourbon palm		2109
152	1078	Bourrèria		431
98				
1300	1072	Bouvárdia		287
1034	1093	Bovista		2444
466		Bowls, n		
864		Box elder		2141
136		Box thorn		480
780		Box tree		1957
864	1081	Brabèjum		2142
1520		Brachychiton, s		2036
1414		Brachycome		3194
1248		Brachyglóttis		2729
64	1089	Brachypódium		185
1218		Brachyrhýnchos, s.		1741
342				
1338	1066	Brachysèma		953
202	1077	Brachystélma		597
842		Brake		2190
450		Bramble		1149
350		Brasiletto		978
762				
1462	1085	Brassavòla		1914
756				
1486	1085	Brássia		1886
1484		B see Miltònia		2811
552	1057	Brássica		1432
540	1057	Bráya		1387
350	1064	Brazil-wood, n.		
770	1083	Bread fruit		1935
870		Bread nut		2158
640		Bread root	10756	1597
144	1093	Bréxia		405
866	1082	Bridèlia		2148
705		British herb tobacco, n.		
66	1089	Brìza		195
218		Broad-seed		660
555		Broccoli		
44				
272	1086	Brodiæ'a		114
1292				792
1292		B see Leucocóryne		2506
64		Brome grass		184
246				
1334	1087	Bromèlia		726
1346		B see Billbérgia		2565
	1086	Bromelia'ceæ, Or. 162		
1478		Bromheádia		3237
64	1089	Brómus		184
1430		Brongniártia		3155
16		Brooklime	234	40
168		Brookweed		471
610	1064	Broom rape		1335
870	1083	Brósimum		2158
184	1075	Brossæ'a		534
746	1074	Bróter a		1852
760				
1464	1085	Broughtònia		1905
1464		B. see Cattlèya		1906
812	1083	Broussonètia		2059
532				
1412	1078	Browállia		1360
418		Brown gum-tree		
			6988	1126
580				
1422	1067	Brównea		1464
852	1064	Brúcea		2061
134				
1158	1078	Brugmánsia		377
1308				
1308		B. see Juanulloa		2880
184	1063	Brúnia		533
	1063	Brunniaceæ, Or 55		
380	1081	Brunnichia		1092

Lin.	Nat.		Sp.	Gen.
1154		Brunònia		2540
534 / 1418	1078	Brunsfélsia		1375
1416		B see Franciscea		2681
250	1086	Brunsvigia		737
1524		Bruti, n		
1364		Bryánthus		2018
1250		Bryóbium		2757
810	1069	Bryònia		2024
810		Bryony		2024
328	1070	Bryophýllum		928
940	1091	Bryópsis		2306
909	1091	Bryum		2240
214	1071	Bubon		640
650	1060	Bubròma		1608
532	1078	Búchnera		1369
364	1082	Bucida		1033
130		Buckbean		362
546		Bucsler mustard		1413
168		Buck's-horn	2740	464
176		Buckthorn		503
346 / 1354	1081	Buckwheat	5602	921
362		Buckwheat-tree		1021
98 / 1298	1078	Búddlea		279
1528		Budrung, n		
642 / 1436		Buffalo clo- ver	10803 / 20035	1600
104	1059	Buffónia		311
1352		Buginvillæ'a		3000
494 / 1220	1079	Bugle		1242
120		Bugloss		333
476		Bugwort		1214
280	1086	Bulbine		807
936	1091	Bulbochæ'te		2293
270	1087	Bulbocódium		784
1182		B see Merendèra		2591
1018	1092	Bulgária		2392
422		Bullace-tree	7046	1120
176		Bull-grape	2863	501
54	1089	Bull-rush	976	148
150		Bully-tree, n		
204	1063	Bumálda		605
148	1076	Bumèlia		423
558	1057	Búnias		1444
212	1071	Búnium		631
244	1087	Buonapárten		723
728	1073	Buphthálmum		1797
218 / 1172	1070	Bupleúrum		657
52		Bur	914	134
162	1072	Burchéllia		459
680		Burdock		1660
1191		Burg-i-tibbut, n		
804		Burgundy pitch, n.		
1524		Buriti, n		
1264 / 1480		Burlingtònia		2805
790		Burnet		1990
212		Burnet saxifrage		635
210		Bur parsley		626
774		Bur reed		1946
1444		Burrícha		3189
182		Bursária		830
872	1064	Búrsera		2164
344 / 1190 / 1360	1066	Burtònia		955
846		Butcher's broom		2111
840		Butcher's trays, n		
606	1066	Bútea		1522
	1087	Butòmeæ, Or 165		
336	1087	Bútomus		939
240		Butter and eggs	4035	711
704		Butter bur	11891	1737
487		Butter cups, n		
487		Butter-flower, n		
758		Butterfly plant	12912	1805
794		Butter nut	13377	1999
	1076	Butter-tree		
20		Butterwort		52
182	1060	Buttnèria		526
354		Button flower		1401
188		Button-tree		544
94		Button weed		270
96		Button wood		275
908	1091	Buxbaúmia		2236
780	1082	Búxus		1957
930	1091	Byssecládium		2273
500	1079	Bystropógon		1254
182	1060	Byttnèria		526

Lin.	Nat.		Sp.	Gen.
	1069	Byttneria'ceæ, Or	25	
1302		Caa-cuys, n.		
1302		Caa-mini, n.		
1302		Caa-quazu, n.		
393		Cabaret, n.		
552	1057	Cabbage	1432	
800		Cabbage-tree	2009	
1534		Cabezo de Negro, n.		
692	1074	Cacália		1701
	1065	Cachou		
214	1071	Cáchrys		677
	1069	Ca'ci, Or 72.		
410	1069	Cáctus		1111
1202 / 1478		C see Cèreus		2627
1200 / 1378		C see Pchinocáctus		2625
1202		C see Epiphýllum		2628
1200		C see Mammillária		2626
1200		C see Melocáctus		2624
1202		C see Opúntia		2629
1202		C see Pereskia		2630
350	1067	Cádia		983
690	1073	Cælestina		1688
350	1067	Cæsalpina		978
1362		C see Coultèria		3010
280	1086	Cæ'sia		812
694	1074	Cæsúlia		1712
1438		Caiophora		3171
1246		C see Loása		1619
	1065	Calan		
1430		Cajánus		3156
	1068	Cajeputi-oil		
		Cajeputi-tree	10938	1610
548	1057	Cakile		1417
524		Calabash-tree		1336
1266		Caladènia		2831
798 / 1508	1089	Caladium		2005
1508		C see Acóntias		3271
1510		C see Aglaonèma		3278
1512		C see Amorphophál- lus		3285
1508		C see Culcásia		3273
1510		C see Dieffenbáchia		3276
1512		C see Gonatánthus		3288
1508		C see Peltándra		3269
1510		C see Philodén- dron		3274
1512		C see Pythiúlum		3284
1512		C see Remusátia		3286
1508		C see Syngónium		3272
1508		C. see Xanthosóma		3270
508		Calamint		1277
508 / 1398	1079	Calamintha		1277
1224		Calámpelis		2668
256	1088	Cálamus		753
1198 / 1374		Calandrínia		2621
764 / 1490	1085	Calánthe		1923
1464		C see A'nia		3214
2 / 1144 / 1284	1085	Calàthea		3
202		Calathian violet	3368	600
1310		Calbòa		2889
18 / 1146 / 1288	1078	Calceolária		51
148 / 520	1079	Caldásia	622 / 1324	
694	1074	Cálea		1907
696	1076	Caleácte		1716
756	1084	Caleána		1881
740	1074	Calédula		1830
556	1057	Calepina		1441
954	1092	Calicium		2333
356		Calico-bush	5915	1011
1334		Caliphúrea		2953
208	1089	Cálla		869
1510		C see Homalonèma		3279
1510		C see Mónstera		3280
1508		C. see Peltándra		3269
1424		Calliándra		3147
96 / 1298	1079	Callicárpa		272
1444		Callichròa		3190
1322		Callicócca, s.		497
398	1070	Callicoma		1099
406	1081	Calligonum		1106
1252		Calliópsis		2743
1178		Callisprùra		2577

Lin.	Nat.		Sp.	Gen.
1334		Callipeyche		2892
26	1087	Callísia		87
342 / 1354	1066	Callistachys		942
1382		Callistémon		3070
1338		Callithaúma		2981
8 / 1284	1089	Callitriche		27
1518		Cállitris		3300
1518		C. see Frenèla		3300
1518		C see Widdringtònia		3300
1342		Callixene		3373
1170		Calobótrya, s		2577
1012	1092	Calócera		2380
1268		Calochilus		2840
1182		Calochórtus		2840
1178		Calochórtus, s		2840
182	1063	Calodéndrum		2271
1226		Calóphanes		2827
466	1061	Calophýllum		1100
756	1084	Calopógon		1870
1342		Caloscórdon, s.		3000
242 / 1334	1086	Calostémma		717
652 / 1436	1068	Calothámnus		1612
942	1091	Cálothrix		2240
714	1074	Calòtis		1700
196	1077	Calótropis		1000
490 / 1394	1054	Cáltha		1270
364		Caltrope		3000
	1083	Calyca'nthe æ, Or		1300
454 / 1386	1083	Calycánthus		1100
	1063	Calyciflo'ræ, Sub		2
	1072	Calyce'ræ, Or	88	
1370		Calycòmus, s		3000
1414		Calycótome		3000
36	1080	Calymènia		2000
704	1085	Calýpso		1900
418	1068	Calyptránthes		1000
140 / 1310	1077	Calystègia		1000
1214 / 1388		Cálythrix		2000
700	1085	Camaridium		1900
1266 / 1486		Camarótis		2800
1180		Camássia		2400
550	1057	Camelina		1400
592 / 1248	1062	Camélia		1400
1426		C see Polýspora		
	1062	Camelie'æ, Or	4	
148	1077	Camerária		1000
1404		Campánia		3000
162 / 1164 / 1318	1075	Campánula		1000
1318		C see Adenóphora		2800
1318		C see Platycódon		2800
1318		C see Wahlenbergia		2800
	1075	Campanula'ceæ, Or 90		
332	1081	Camphire-tree	5643	1000
333	1081	Camphor, n.		
88	1081	Camphorósma		2400
372		Campion		1000
1432		Camptosèma		3000
1300		Campylobóthrys		2700
788		Canada rice	13313	2000
288	1075	Canarina		1900
58		Canary-grass		1000
1512		Candarum, s		3000
830		Candleberry myrtle		2000
1246 / 1438		Candóllea		3000
1390		C see Hibbértia		1400
212		Candy carrot	3559	634
546 / 1232	1057	Candy-tuft		1400
74		Cane-brake		1000
394	1061	Canélla		1000
2 / 1144 / 1284	1085	Cánna		1900
834	1083	Cánnabis		2677
	1085	Ca'nneæ, Or	152	
164		Canterbury bells	2675	863
1006	1092	Cantharellus		2300
172	1072	Cánthium		492

Lin.	Not.		Sp.	Gen.
1208		Cástus		2878
141 / 1162	1077	Cástus	389	390 z
	1082	Cawutchouc		
172		Cape jasmine	2836	487
220		Cape phillyrea	3817	682
462	1058	Caper	6748	1103
438		Caper-tree		1162
458	1084	Cápparis		1162
1240		C see Morisónia		2705
1140		C see Sepónia		2589
332 / 1	78	Caprária		1308
	1071	CAPRIFOLIA'CEÆ, Or		82
17 / 1364	1071	Caprifólium		474
540	1047	Capsélla		1409
191 / 1350	1078	Cápsicum		453
629 / 1434	1066	Caragána		1569
212		Carallúma		988
218		Caraway		655
542	1087	Cardámine		1392
8	1085	Cardamom	48	8
166		Cardinal flower	2715	464
328	1060	Cardiospermum		928
664	1072	Cardoon	11458	1668
660	1074	Cardopatum		1676
661	1074	Carduus		1663
274 / 1448	1080	Carex		1947
506	1068	Cárova		1499
542	1077	Carica		2005
134	1077	Carissa		438
654	1074	Carlina		1669
684		Carline thistle		1669
720	1087	Carludórica		2004
871		Carnation	6164	1046
866		Carob tree		2156
688		Carolina vanilla plant, n		
962 / 1150	1089	Carolinea		1490
2	73	Carpésium		1731
58	1083	Carpínus		1996
6	1	Carpopogon		1540
4	87	Carrichtéra		1438
2	1070	Carrot		625
42		Carthagenian apple, n		
18	1074	Carthamus		1675
20	1067	Cartonema		10
2148	1 73	Carum		655
10	0	CARYOPHY'LLEÆ, Or		20
42	1068	Caryophyllus		1120
806	1088	Caryóta		2007
15		C see Oránia		3201
813		Cascarilla bark, n.		
334	1064	Cashew nut		935
6	1082	Cassava	13649	2033
1100		Cassélia		3119
348	1 67	Cassia		974
893		Cassia buds, n		
2	0 3	Cassine		682
144	0 3	Cassinia		1848
274		Castleberry-bush		
1			3766	679
1		Cassúvium, s		2800
334	1 0	Cassytha		936
364		Castália, s		1174
2	1083	Castanea		1904
836	1078	Castanospérmum		2601
874		Castile		1337
		Castor-oil plant		
178	1063	Castórina	13652	2034
1	1064	CASTORINEÆ, Or		144
284	1 77	Catalpa		64
1	73	Catanánche		1655
1	1085	Catasétum		1889
4		C see Myánthus		2783
87		Catchfly		1048
53		Catch-weed, n		
1		Catechu, n.		
109		Caterpillar		
2	1072	Catesbæ'a		1579
27		Catha		289
1	1077	Cathartocárpus		2924
94		Cathártia		975
26		Catmint		3073
				1249

Lin.	Not.		Sp.	Gen.
834		Cat's claw mimosa, n		
676		Cat's-ear		1680
774		Cat's-tail		1945
58		Cat's-tail grass		165
494		Cat thyme	8109	1944
760 / 1260 / 1464	1083	Cattléya		1906
1262		C see Sophronítis		2779
210	1071	Caúcalis		626
558		Cauliflower		
286	1055	Cauliphýllum		826
161		Cayenne butter, n		
161		Cayenne pepper, n		
178 / 1168 / 1834	1063	Ceánothus		510
826	1083	Cecrópia		2 83
806		Cedar of Goa	13544	2016
806 / 1516		Cedar of Le banon	13548 / 21091	2014 3300
182	1062	Cedrèla		931
	1062	CEDRÈLEÆ, Or		44
1400		Cedronélla		
1516		Cédrus		3300
460		Celándine		1167
	1063	CELASTRINEÆ, Or		53
178 / 1322	1063	Celástrus		507
217		Celeriac, n		
216	1070	Celery	3618	651
	1090	CELTIDÆ, Or		2
192	1080	Celósia		565
534	1078	Celsia		1476
864	1083	Céltis		2115
1018	1092	Cenangium		2304
52	1089	Cenchrus		134
722	1073	Cénia		1774
966	1092	Cenomyce		2449
734 / 1446	1074	Centaurea		1819
1252 / 1440		C see Plectocephalus		2714
734		Centaury		1819
1350		Centradénia		2996
1450		Centranthera		4197
6 / 1284	1072	Centránthus		20
1416		Centrocárpha, s		1800
1292 / 1416		Centroclínium		2716
1320		Centropógon		2919
1490		Centrósia, s		1923
1404		Centrosolénia		3095
724	1074	Centrospermum		1779
96	1080	Centunculus		277
174 / 1322	1072	Cephaëlis		497
96	1072	Cephalánthus		275
90	1072	Cephalária		263
690	1074	Cephalóphora		1690
1528		Cephalotaxus		3327
1200		Cephalótus		2623
1442		Ceradia		3176
936	1091	Cerámium		2256
1036	1059	Cerástium		2465
1384		Cérasus		3058
1268		Ceratiola		2842
1036	1093	Cerátium		2465
772	1081	Ceratocárpus		1937
34	1054	Ceratocéphalus		708
1262		Ceratochílus, s		2786
66	1089	Ceratóchloa		189
868	1067	Ceratónia		2156
1196		Ceratopétalum		2609
790	1093	Ceratophýllum		1986
1374		Ceratostèma		3046
1304		Ceratostigma, s.		2872
148 / 1314	1077	Cérbera		420
346	1067	Cércis		968
1202 / 1378		Cèreus		2647
1378		C. see Echinocáctus		2625
1378		C see Echinópsis		3048
1378		C see Epiphýllum		2628
1380		C see Lepísmium		3050
1380		C see Rhipsalis		1112
410		Cerasmus, n		
122	1078	Cerinthe		339
198 / 1328	1077	Ceropégia		593
1512		Ceróxylon, s.		3202

Lin.	Not.		Sp.	Gen.
134 / 1316	1078	Céstrum		445
1316		C see Habrothámnus		
878	1090	Céterach		2906
964	1092	Ceratária		2174
1442		Chabræ'a		2343
1316		Chæ tates		3180
1416		Chænóstoma		2909
208	1071	Chærophýllum		3129
240		Chætachlæ'na		621
716	1074	Chætanthera		2734
1196 / 1368		Chætogastra		1748
928	1091	Chætóphora		2608
338	1091	Chæto pera		2271
54	1089	Chætúrus		2288
1192		Chamæclátus		182
886 / 1442	1088	Chamædórea	3935	1014 2078
1370		Chamælaúcium, s		3037
144	1075	Chamæ'dorea		404
868 / 1534	1088	Chamæ'rops		2154
774	1072	Chamomila		1778
774	1085	Chamorchis		1867
1094		Champignon, n		
1006		Chantarell		2368
740	1073	Chaptália		1849
936	1091	Chára		2295
1368		Charianthus		3027
1178		Charlwoodia		2676
1312		C see Cordyline		2974
520	1079	Chaste tree		1317
866		Chawstick	14704	2146
101		Chay-root, n		
465		Cheese-colouring, n		
92		Cheese-rennet	1601	266
884	1090	Chéilanthes		2195
1414		Cheiranthèra, s		3121
548	1057	Cheiránthus		1382
1424		Cheirostémon		3143
1492		Chiróstylis		3248
490	1056	Chelidónium		1167
1340		Chelonanthèra, s		1897
516 / 1226	1078	Chelóne		1298
1406		C see Pentastémon		1297
192	1081	Chenópica		558
	1080	CHENOPÒDIEÆ, Or		126
206	1081	Chenopódium		611
480	1055	Cherimoyer	7921	1220
380	1059	Cherlèria		1051
422 / 1384		Cherry	1129 / 6068	
160		Cherry pepper	2596	453
208	1070	Chervil		621
702	1083	Chestnut		1904
624	1065	Chick pea		1564
76 / 288		Chickweed	224 / 688	
1313		Chili jasmine, n		
58	1089	Chilóchloa		167
1222		Chilódra		2660
1266		Chiloglottis		2833
362	1075	Chimaphila		1023
454	1083	Chimonánthus		1158
586		China rose	9819	1480
423		Chinese cherry, n.		
1419		Chinese indigo, n.		
12	1076	Chionánthus		34
1290		C see Chondrospérmum		2862
833		Chio turpentine, n.		
1414		Chirita		3124
172	1072	Chirocócca		480
130 / 1306	1077	Chirónia		364
1300		C see E'xacum		280
274		Chives	4688	796
242	1086	Chlidánthus		716
1228		Chloánthes		2675
316	1077	Chlóra		894
1266 / 1492		Chloræ'a		2830
	1084	CHLORA'NTHEÆ, Or.		146.
8	1084	Chloránthus		25
860	1089	Chlóris		2130
280	1086	Chlorophytum		811
680		Chocolate nut		1607
98	1072	Chomélia		485
942	1091	Chóndria		2313
670	1173	Chondrilla		1629

Lin.	Nat.		Sp	Gen
1290		Chondrospérmum		2902
944	1091	Chordária		2319
1174		Chordèle		2555
548	1067	Chorispora		1419
342 / 1188 / 1358	1066	Chorózema		949
1360		C. see Davièsia		966
1360		C see Gastrolòbium		963
1358		C see Oxylòbium		951
342 / 1188 / 1358	1066	Choroxèmia		949
708		Christmas daisies, n.		
488		Christmas rose	8080	1237
178 / 1168		Christ's thorn		505
980	1091	Chroólepus		2275
728	1073	Chrysanthéllum		1788
720	1073	Chrysánthemum		1769
1218		Chrysèis, s. n.		2647
242	1086	Chrysiphiala		717
1344		Chrysobáctron		2984
424	1067	Chrysobálanus		1130
1170		Chrysobótrya, s.		550
694 / 1248	1074	Chrysócoma		1705
1248		C see Ozothámnus		2725
740	1074	Chrysógonum		1827
1332		Chrysophiala, s.		2560
150	1076	Chrysophýllum		424
366	1070	Chrysosplènium		1040
1402		Chrysóthemis		3083
60	1089	Chrysúrus		176
1184		Chymocárpus		2594
1260 / 1462		Chýsis		2762
782	1082	Cicca		1958
624	1066	Cicer		1564
678	1073	Cichòrium		1657
216	1071	Cicúta		648
476	1055	Cimicifuga		1207
1316		Cinchóna, s		458
904	1091	Cinclidótus		2227
712 / 1248	1074	Cinerària		1741
1248		C see Senècio		1738
56	1089	Cinna		161
332	1081	Cinnamon	5640	934
452 / 1210	1067	Cinquefoil		1153
1292		Cipùra, s		117
26	1069	Circæ'a		71
1262 / 1466		Cirrhæ'a		2774
1260 / 1462		Cirrhopétalum		2755
848	1055	Cissámpelos		2116
1027 / 1300	1061	Cissus		305
	1058	Cistineæ, Or. 19		
468 / 1214	1058	Cistus		1197
358		Cistus Lèdum, n		
520	1079	Citharéxylum		1329
654		Citron	10979	1615
652 / 1438	1062	Citrus		1615
1438		C see Severínia		3170
1250		Cladánthus		2740
26	1089	Clàdium		74
1038	1093	Cladospòrium		2472
940	1091	Cladóstephus		2303
151		Clammy cherry, n		
1186		Clárkia		2597
24		Clary	438	62
1012	1092	Clavária		2379
146 / 1312	1075	Clavija		409
184	1069	Claytònia		537
152		Clearing nut	2447	437
94		Cleavers	1620	266
1472		Cleisomèria		3231
1257 / 1488 / 482		Cleistóstoma		2818
1220 / 1394	1054	Clématis		1227
1392 / 558		C. see Anemòne		1226
1333 / 1418	1058	Cleòme		1448
512	1079	Clerodéndron		1287
822	1079	Clerodéndron		1325
1224 / 1410	1079	Clerodéndron		1325
362 / 1366 / 1244 / 1434	1075	Clèthra		1020
		Clianthus		2715
844	1067	Cliffórtia		2106
506	1079	Clinopòdium		1272
1234		Clintònia		2691
1342		Clitánthus, s		2560
618 / 1432	1066	Clitòria		1556
1176		Clivea		2567
492		Cloud-berry	7563	1149
372	1068	Clove	6164	1046
642		Clover	10804	1600
416		Clove-tree		1120
1474		Clowèsia		3233
504		Clown's all-heel	8295	1263
58		Club grass		169
892		Club moss		2212
48		Club rush		123
866	1061	Clùsia		2151
850	1082	Cluytia		2122
544	1057	Clypèola		1402
36	1064	Cnèorum		84
380	1061	Cnéstis		1057
682	1074	Cnicus		1665
1440		C see Rhapónticum	3175	
218	1070	Cnídium		656
792		Cob	13370	1998
373		Cob-pinks n.		
142 / 1310	1077	Cobæ'a		388
	1077	Cobæ'aceæ, Or 105		
778	1089	Cobrèsia		1948
1174 / 1332		Cobúrghia		2560
100	1072	Coccocýpselum		293
326 / 1354	1081	Cocculoba		922
1354		C see Sarcogònum		3002
844	1055	Cocculus		2101
412		Cochineal fig	6888	1111
516	1057	Cochleària		1407
1418		C see Grælísia		3133
1418		C see Ionopsídium		3132
192	1080	Cock's-comb		965
62		Cock's foot grass		180
651		Cocoa-nut, n		
788		Cocoa-nut-tree		1983
424		Cocoa plum		1130
788 / 1500	1088	Cocos		1983
1500		C see Acrocòmia		3255
1526		C see Lodoícea		3325
1528		Coco-tendre, n		
1514		Cocus, s.		3255
10	1067	Codárium		30
1370		Còdia		3019
1520		Codiæ'um		3310
940	1091	Còdium		2305
820		Codlins and cream	5477	903
354	1078	Còdon		1000
1288 / 1450		Cœ'lia		2752
758 / 1450	1085	Cœlógyne		1897
1452		C see Pleione		3196
1482		C see Trichosma		3201
170	1072	Coffea		479
170	1072	Coffee-tree		479
1529		Coguill-vochi, n		
332		Cog-wood-tree	5644	934
778	1089	Còix		1951
1520		Còla, s.		2036
1468		Còlax		3222
1468		C see Lycáste		3221
476	1055	Colbértia		1211
292	1087	Cólchicum		851
1182		C see Merendèra		2591
106	1078	Coldènia		816
1406		Còlea		3101
1166		Coleonèma		2547
1222 / 1400		Còleus		2659
1402		Collándra		3084
1338		Collánia		2969
972	1092	Collèma		2358
1168 / 1324		Collètia		2544
1230		Collinsia		2680
1416		Collinsia		2680
24	1079	Collinsònia		2680
1156		Collòmia		2677
1512		Colocàsia		3267
	1068	Colocynth resin		
1242		Cologánia		2714
1524		Colomba wood, n		
844		Colombo-root, n		
869	1068	Coloquintida gourd, n		
864		Colpoon		2115
226		Colpoon-tree		2115
1398		Colquhoúnia		3067
704		Colt's-foot		1734
476 / 1218	1054	Columbine		1227
	1055	Columbo-root		
728	1073	Columéllia		1787
1402		C see Allopléctus		3084
1402		C see Collándra		3084
1404		C see Nematánthus		3094
456	1067	Colúria		1136
626 / 1244	1066	Colútea		1573
1366		Comarostáphylos		3067
1266		Comaròtis		2837
452	1067	Cómarum		1150
	1068	Combreta'ceæ, Or		1161
324 / 1186 / 1352	1068	Combrètum		1161
122		Comfrey		331
36 / 1290	1087	Commelina		2837
	1087	Commelinèæ, Or		1837
232	1060	Commersònia		1837
626		Common acacia	10460	1564
36	1064	Comoclàdia		84
1264 / 1480		Compariétia		1837
	1072	Compósitæ, Or		1837
772	1083	Comptònia		1837
254	1086	Conanthèra		1837
1311		C see Echeandia		1837
934	1091	Conferva		1837
	1083	Coniferæ, Or		1837
216	1071	Conium		1837
188	1068	Conocárpus		1837
1412		Conoclinium		1837
1152 / 1294		Conospérmum		1837
906	1091	Conóstomum		1837
1404		Conradia		1837
1190		Consólida		1837
88		Contrayerva root		1837
270	1086	Convallária		1837
	1077	Convolvula'ceæ, Or		1837
140 / 1310	1077	Convólvulus		1837
1310		C see Exogònium		1837
1310		C see Jacquemónt		1837
1310		C see Pharbitis		1837
702	1073	Conyza		1837
356	1062	Coókia		1837
351		Copaiba balsam, n		
350	1067	Copaifera		1837
1004	1092	Coprinus		1837
488	1054	Cóptis		1837
222		Coquaine parsnep, n		
1514		Coquito, n		
756	1085	Corallorhiza		1837
1258		C see Aplectrum		1837
604 / 1240	1066	Coral tree		1837
466	1060	Córchorus		1837
454 / 1210		C. see Kèrria		1837
150 / 1162	1078	Córdia		1837
	1078	Cordiaceæ, Or		1837
1342		Cordyline		1837
732 / 1252	1074	Coreópsis		1837
1444		C see Echinácea		1837
1168		Coreósma, s		1837
1326		Corethróstylis		1837
208		Coriander		1837
208	1071	Coriándrum		1837
842 / 1524	1063	Coriària		1837
	1063	Coriarie'æ, Or		1837
130	1080	Còris		1837

Lin.	Nat.		Sp.	Gen.
8	1081	Corispérmum		26
754		Cork-tree	13293	2000
680		Corkwood	7925	1220
102		Cormier, *n*		
394		Corn cockle	6535	1066
42 / 1136		Corn flag		105
102		Cornelian cherry	1794	206
976	1092	Corniculària		2356
322		Cornish moneywort	8887	1358
	1072	Corn salad		133
82	1089	Cornuelòpiæ		306
102	1071	Córnus		2515
1000		C. see Benthàmia		2515
20	1079	Cornùtia		1318
1424		Coròkia		3312
	1075	Corolliflòræ, Subc. 3		
6, 8	1096	Coronilla		1576
880	1067	Coronopus		1427
972 / 1384	1084	Corræ'a		880
128	1069	Corrigiola		690
428	1080	Cortùsa		331
1442		Corvisartia, *s*		1744
96 / 1474		Coryánthes		2788
1000		Coryèum		2824
668 / 1434	1056	Corydàlis		1502
7	1083	Corylus		1908
131		Corynecárpus		2994
632	1061	Corynéphora		2269
88	1080	Coryneph'rus		169
456	1088	Corypha		762
1		Corycánthes		2827
911		Corythrolòma, *n*		
1		Coscínium		3313
1		Cosmanthus, *s.*		373
772 / 118	1074	Cósmea		1803
1142		Cosmèlia		2532
486	1060	Cossignia		831
676		Costmary		1718
4	1085	Cóstus		11
428 / 1248 / 1384	1067	Cotoneáster		1139
1384		C. see Nagèlia		3062
384		Cotton		1481
50		Cotton grass		125
702		Cotton rose		1838
680		Cotton thistle		1666
72	1073	Cotula		1775
38, 1	0	Cotyledon		1060
70		Couch grass	1239	206
962		Coulteria		3010
1		Courtenia, *s.*		2076
	1074	Coutarèa		461
666		Cowage or cowitch		1551
120		Cowania		2632
110		Cowbane		648
324		Cowberry	5319	907
802		Cowdie pine, *n*	13501	2011
224 / 1000		Cow parsnep		672
4		Cow's horn orchis of Honduras, *n*		
176	1060	Cowslip	2022	350
1278		Cow-tree		2819
	1070	Cow-tree of South America		
550		Cow wheat		1315
466		Cradles *n.*		
706	1057	Crambe		1442
380		Cranberry		906
1234	1061	Crane's bill		1463
1298		Cranichis		2839
1.48		Craspèdia		2722
89	1070	Crassula		699
1350		C. see Grammánthes		2948
634 / 1384	1067	Crat'gus		1132
1384		C. see Stranvæ'sia		2633
2	1085	Cratæ'va		1086
1134	1093	Cratèrium		2446
1314		Cream fruit		2895
624 / 1440	1073	Crèpis		1638
504	1078	Cre'zeutia		1336
504		Cress	9212	1428

Lin.	Nat.		Sp.	Gen.
846		Cress rocket		1437
1034	1093	Cribrària		2448
230 / 1176 / 1338	1086	Crinum		738
588	1089	Cristària		1484
212	1071	Crithmum		633
36 / 1148	1085	Cròcus		93
518	1079	Crossándra		1307
94 / 1152		Crosswort		271
608 / 1240	1066	Crotalària		1530
1242		C. see Neurocárpum		2713
1434		C. see Oxyrámphis		3165
812	1084	Cròton		2032
1320		C. see Codiæ'um		3310
826		Crowberry		2045
354 / 1362	1063	Crówea		969
486	1054	Crowfoot		1233
388		Crown of the field, *n.*		
94 / 1152	1072	Cruciancella		271
	1056	Cruciferæ, Or. 12		
1198		Cruickshankia *s*		2619
1260		Crybe		2768
56	1089	Crypsis		164
1326		Cryptándra		2936
760	1085	Cryptarrhèna		1909
1264		Cryptochilus		2803
1508		Cryptocoryne		3268
874	1090	Cryptogamia Cl. 24		
876	1090	C. Filices, Or. 1		
890	1090	C. Equisetàceæ, Or. 2		
892	1090	C. Lycopodi'neæ, Or. 3		
894	1090	C. Marsilea'ceæ, Or. 4		
894	1091	C. Mu'sci, Or. 5		
918	1091	C. Hepa'ticæ, Or. 6		
921	1091	C. Á'lgæ, Or. 7		
948	1091	C. Liche'nes, Or. 8		
978	1092	C. Fúngi Or. 9		
1518		Cryptomèria		3307
1020	1092	Cryptomyces		2396
88	1072	Cryptospermum		251
1026	1092	Cryptosphæ'ria		2423
196	1077	Cryptostègia		575
734	1073	Cryptostemma		1814
480		Cubebs, *n*		
794		Cuckold	13373	1998
858		Cuckold-tree	14187	2127
487		Cuckoo buds of yellow hue, *n*		
542		Cuckoo flower	9026	1302
372	1059	Cucúbalus		1017
808	1068	Cucumber		2022
479		Cucumber-tree, *n*		
808	1069	Cucúmis		2022
808	1069	Cucúrbita		2021
	1068	Cucurbita'ceæ, Or. 66		
1026	1092	Cucurbitària		2422
960		Cudbear	15521	2340
1366		Cuellària, *s*		1020
1508		Culcàsia		3275
832		Culilàban	5647	944
732	1073	Cullùmia		1809
188 / 214		Cumin	518 / 641	
214	1071	Cuminum		641
1178		Cummingia		2572
20	1079	Cunila		58
366	1070	Cunònia		1038
	1070	Cunoniàceæ, Or. 77		
1362		Cupánia		3011
398 / 1374	1068	Cúphea		1097
806 / 1516	1084	Cupréssus		2017
1528		C. see Araucaria		2112
1518		C. see Bìdia		3309
1518		C. see Cryptomèria		3307
1518		C. see Krenèla		3305
1518		C. see Widdringtònia		3303
472	1055	Curatélla		1201
256	1086	Curcúligo		751
6 / 1284	1085	Curcùma		14
190 / 1168	1069	Currant		550
100	1063	Curtísia		300
104	1077	Cúscuta		310
204	1070	Cussònia		607

Lin.	Nat.		Sp.	Gen.
440		Custard apple		1220
1308		Cyanánthus		2877
286	1086	Cyanella		824
1370		Cyanétis, *s.*		2612
1340		Cyanòtis		2972
886	1090	Cyathèa		2201
1312		Cyathòdes		2890
	1084	Cycàdeæ, Or. 148		
840 / 1520	1084	Cycas		2107
1526		C. see Encephalártos		3321
128 / 1196 / 1306	1080	Cyclamen		354
1514		Cyclánthus		3298
1178 / 1342		Cyclobóthra		2574
1434		Cyclogyne		3167
344 / 1358	1066	Cyclòpia		946
1262 / 1470		Cynòches		2782
426	1067	Cydònia		1134
1042	1093	Cylindrosp'rium		2496
618	1066	Cytisus		1554
544	1078	Cymbària		1379
756 / 1476	1085	Cymbidium		1885
1488		C. see Aerides		1917
1462		C. see Arundina		3210
1462		C. see Brassavòla		1914
1464		C. see Cattlèya		1906
1456		C. see Dendròbium		1900
1470		C. see Govènia		2780
1150		C. see Oberònia		2749
1452		C. see Pleione		3109
1486		C. see Vanda		1916
190	1077	Cynanchum		581
684	1074	Cynara		1668
1440		C. see Rhaponticum		3175
68	1089	Cynodon		203
122 / 1406	1078	Cynoglossum		536
348	1067	Cynomètra		973
1266		Cynorchis		2822
1168		Cynosbati, *s*		550
62	1089	Cynosùrus		178
1234		Cypélla		2685
1422		C. see Phalocállis		3137
	1089	Cyperàceæ, Or. 175.		
50	1089	Cyperus		127
188	1075	Cyphia		545
806		Cypress		2017
1518		Cypress of South Africa, *n*		
800		Cypress powder, *n*		
834		Cypress turpentine, *n.*		
766 / 1494	1085	Cypripèdium		1931
184	1075	Cyrilla		536
1413		Cyrilla, *n*		
1416		Cyrtándra, *s*		3128
1288		Cyrtanthera		2857
250	1086	Cyrtánthus		736
1328		Cyrtoceras		2940
1266 / 1484		Cyrtochilum		2812
1478		C. see Cyrtopèra		2801
1484		C. see Miltònia		2811
1476		C. see Odontoglóssum		3235
1264 / 1478		Cyrtopèra		2801
758 / 1478	1085	Cyrtopodium		1896
1402		C. see Brassavòla		1914
1266		Cyrtóstylis		2814
1312		Cystánthe		2891
600	1056	Cysticápnos		1503
1328		Cystidiánthus, *s.*		592
946	1091	Cystoseira		2329
1040	1093	Cytispora		2429
624 / 1214 / 1434	1066	Cytisus		1566
1430		C. see Cajànus		3156
1434		C. see Calycótome		3163
1430		C. see Genista		1536
1356		C. see Thermópsis		944
1528		Dacrydium		3328
1518		D. see Libocèdrus		3308
1516		D. see Podocarpus		2016
1020	1092	Dacrymyces		2399

Lin.	Nat		Sp	Gen
62 / 1292	1089	Dáctylis		180
1428		Dactylocápnos		3153
68	1089	Dactyloctènium		201
1006	1092	Dædálea		2371
196	1077	Dæ'mia		580
242		Daffodil	4040	711
718 / 1250 / 1444	1074	Dáhlia		1758
864	1082	Dáis		1032
718		Daisy		1756
1402		Dalbergària, *s.*		3084
604	1067	Dalbérgia		1513
638 / 1430	1066	Dàlea		1896
814	1084	Dalechámpia		2039
452	1067	Dalibárda		1150
912	1091	Daltònia		2248
294	1084	Damasònium		859
802		Dammar pine		2011
1514		Dámmara		3499
168 / 1320	1075	Dampièra		470
670		Dandelion		1631
60	1089	Danthònia		173
322 / 1352	1082	Dáphne		910
1352		D see Edgwórthia		2999
1352		D see Lagétta		2998
70		Darnel		207
1196 / 1368		Darwínia		2610
1334		Dasylírion		2956
828		Date palm		2049
870		Date plum		2159
844	1083	Datisca		2099
134	1078	Datùra		376
1308		D see Brugmánsia		377
1180		Daubènya		2580
210	1071	Daúcus		625
884	1090	Davállia		2196
1188		Daveària, *s.*		950
346 / 1360	1066	Davièsia		966
260		Day lily		769
502		Dead nettle		1261
214		Deadly carrot		643
154		Deadly nightshade	2479	446
802		Deal wood, *n*		
338		DECÁNDRIA, Cl 10		
340		D MONOGY'NIA, Or. 1		
364		D DIGY'NIA, Or 2		
372		D. TRIGY'NIA Or 3		
380		D PENTAGY'NIA, Or 4.		
390		D. DECAGY'NIA, Or 5		
806		Deciduous cypress	13538	2015
394	1068	Decumària		1082
192	1080	Deeringia		503
944	1091	Delessèria		2317
472 / 1216 / 1390	1054	Delphinium		1204
1390		D see Consólida		3070
1038	1093	Demàtium		2471
758 / 1260 / 1454	1085	Dendròbium		1900
1454		D see Epìria		1912
1470		Dendrochilum		3230
1214		Dendromècon		2642
1508		Denhàmia, *s.*		3273
542	1057	Dentària		1394
162	1072	Dentélla		456
1516		Deodar cedar, *n.*		
1308		Desfontainea		2879
856	1067	Desmánthus		2126
1530		D. see Neptùnia		3332
926	1091	Desmidium		2263
192	1080	Desmochæ'ta		554
1514		Desmóncus		3293
1196 / 1372		Deútzia		2617
90		Devil's bit	1563	264
450		Dewberry	7530	1149
598		DIADÉLPHIA, Cl. 17		
600		D. PENTÁNDRIA, Or 1		
600		D. HEXÁNDRIA, Or 2.		
602		D. OCTÁNDRIA, Or. 3.		
604		D DECÁNDRIA, Or. 4		
8		DIÁNDRIA, Cl. 2		
10		D. MONOGY'NIA, Or. 1.		
28		D DIGY'NIA, Or. 2.		
24		D TRIGY'NIA, Or. 3		
282	1086	Dianélla		814
370 / 1196 / 1370	1059	Diánthus		1046
130	1077	Diapénsia		358
74	1089	Diarrhèna		218
1414		Diastèma		3123
926	1091	Diátoma		2269
1266 / 1481		D chæ'a		2810
	1054	DICHLAMY'DEÆ, Subd. 1		
204	1077	Dichóndra		663
260 / 1340	1087	Dichorizándra		766
1358		Dichosèma		3008
1036	1093	Dichospòrium		2458
884	1090	D chaònia		2197
18	1079	Dicliptera		48
	1054	DICOTYLÉDONES, Cl 1.		
902	1091	Dicranum		2224
1262		Dicrypta		2779
354	1063	Dictámnus		997
1328		Dictyánthus		2939
1034	1093	Dictydium		2449
732	1078	Didélta		1811
1034	1093	Didérma		2453
1414		Didymocárpus		3125
1146		D see Streptocárpus		2501
904	1091	Didýmodon		2230
490		DIDYNA'MIA, Cl 14		
494		D GYMNOSPE'RMIA, Or 1		
514		D ANGIOSPE'RMIA, Or 2		
1510		Dieffenbàchia		3276
600 / 1428	1056	Diélytra		1504
170	1071	Diervilla		477
1150		Dietes		2505
530 / 1412	1078	Digitàlis		1355
1288		D. see Pterostigma		2860
52	1089	Digitària		143
1466		Dignàth		3215
44	1085	Dilatris		113
1408		Dilivària		3104
218		Dill		654
478	1055	Dillènia		1214
	1055	DILLENIÀCEÆ, Or 2.		
344 / 1360	1066	Dillwýnia		960
1358		D see Chorozèma		949
1360		D see Euténia		961
1360		D see Pultenæ'a		965
302	1060	Dimocárpus		883
68	1089	Dinèbra		204
1260 / 1462		Dinèma		2760
816		DIOE'CIA, Cl 22		
820		D MONA'NDRIA, Or 1.		
820		D DIA'NDRIA, Or 2		
826		D TRIA'NDRIA, Or 3		
828		D TE'TRA'NDRIA, Or 4		
832		D PENTA'NDRIA, Or 5		
836		D HEXA'NDRIA, Or 6		
840		D OCTA'NDRIA, Or 7		
840		D ENNEA'NDRIA, Or 8		
842		D DECA'NDRIA, Or 9		
842		D DODECA'NDRIA, Or 10		
844		D ICOSA'NDRIA, Or 11		
844		D POLYA'NDRIA, Or 12		
846		D MONADE'LPHIA, Or 13		
1526		Dion		3322
356	1058	Dionæ'a		1009
838	1086	Dioscórea		2085
	1086	DIOSCÓREÆ, Or 158		
180	1063	Diósma		517
870 / 1536	1076	Diospýros		2159
784	1081	Diótis		1964
1452		Diphýes, *s.*		2754
286	1055	Diphyllèia		827
908	1091	Diphýscium		2235
64	1089	Diplachne		188
1230 / 1412		Diplacus		2678
1314		Dipladènia		2896
882	1090	Diplàzium		2189
1250		Diplócoma		2731
1362		Diplolæ'na		3015
1248		Diplopáppus		2728
1252		Diplosástera, *s.*		2743
554	1057	Diplotáxis		1435
1502		Diplothèmium		3244
1264		Dipódium		2744
	1072	DIPSA'CEÆ, Or 87		
1526		Dipsacostæ'mia, *s*		2744
90	1072	Dipsacus		264
1408		Dipteracánthus		3044
604	1067	Dipterix		1513
324	1082	Dircæ		884
1401		Dircæ'a, *n.*		3121
750	1085	Disa		1844
296	1078	Disándra		1844
196	1077	Dischídia		579
1422		Disémma		3144
466		Dishes, *n*		
1378		Disocáctus, *s.*		2944
1266		Dispèris		2811
687		Distaff thistle, *n*		
1018	1092	Ditíola		2350
506		Dittany of Crete	8388	1274
754 / 1494	1084	Diúris		1877
292		Dock		844
542	1078	Dodártia		1395
104		Dodder		349
892		DODECA'NDRIA, Cl 11		
892		D MONOGY'NIA Or 1		
898		D DIGY'NIA, Or 2		
906		D TRIGY'NIA, Or 3		
906		D TETRAGY'NIA Or 4		
906		D PENTAGY'NIA, Or		
906		D DODECAGY'NIA, Or		
128 / 1186	1080	Dodecàtheon		393
316 / 1330	1060	Dodonæ'a		907
1266		Dog orchis		2844
219		Dog-parsley, *n.*		
194		Dog's bane		575
792		Dog's cabbage	13360	1973
62		Dog's-tail grass		144
270 / 1178	1087	Dog's-tooth violet		781
102	1071	Dogwood		349
616	1066	Dólichos		1000
580 / 1424	1060	Dombèya		1467
1528		D see Araucaria		3344
1350		Doncklæ'ria, *s*		3000
214	1070	Dóndia		644
1244 / 1414		Dònia, *s.*		3000
880	1090	Doódia		2181
1331		Doogoo, *n.*		
716	1074	Dorónicum		1700
88	1083	Dorstènia		2103
254	1086	Doryánthes		741
644	1066	Doryénium		1004
1492		Dossinia, *s*		3400
1030	1093	Dothídea		2433
1527		Double cocoa-nut, *n*		
1156		Douglàsia		2709
589		Down, *n.*		
544	1057	Dràba		1401
266	1086	Dracæ'na		774
1178		D see Charlwoódia		2600
1342		D. see Cordyline		2971
510	1079	Dracocéphalum		1300
1400		D see Cedronélla		3000
298	1089	Dracóntium		866
1512		D see Amorphophállus		3000
1510		D. see Mónstera		3000
1512		Dracúnculus		3000
298		Dragon		867
	1065	Dragon's blood		1477
510		Dragon's head		1300
266		Dragon-tree		774
932	1091	Draparnáldia		2344
282	1086	Drímia		827
1344		Drimmiópsis		2900
428		Dropwort	7147	1107
232	1058	Drósera		1000
	1058	DROSERA'CEÆ, Or 17		
86 / 1296	1081	Dryándra		2000
1298		D see Hemiclídia		2000
454	1067	Dryas		1100
1404		Drymónia		3000
1404		D see Campánia		3000
1404		D see Nematánthus		3000
228	1059	Drýpis		1000
1006	1092	Dry rot		2371

Line	Not		Sp.	Gen.
460		Duck's-foot		1166
779		Duck-weed		2315
942		Dulse		2712
1361		Dumâsia		2005
794	1069	Dumb cane	13451	3276
1310		Dumb cane	21021	1686
691	1074	Dumeritia		1330
71		Dunstable straw, *n*		
592	1069	Duranta		3119
1419		D see Cassèlia		
208		Dutch elm, *n*		
424		Dutch medlar, *n*		
309		Dutch pink, *n*		
1080	1080	Dutch rush	14631	2211
1302		Duvana		2465
1081		Dwarf fan palm		
			14319	2184
1374		Dyckia		2564
1379		Dyer's-weed	6658	1102
1380		Dysodia *s*		1789
1374		Dysophylla		2651
1381				
1452		Earina		3200
620		Earth pea	10531	1558
1418		Earth tongue		2381
213		Earth-nut		631
214				1543
206		Easter giant, *n*		
	1047	Eau medicinale		
	1076	Ebena'ceæ, Or 98		
	1076	Ebony		
601	1067	Ecastaphyllum		1516
1226		Echeremocarpus		2669
1214		E see Calampelis		2668
1744		Echrandia		2983
1367				
1372		Echeveria		2618
1444		Echinacea		3195
68	1089	Echinaria		205
928	1091	Echinella		2266
1369				
1376		Echinocactus		2625
1378		E see Cereus		2627
1378		F see Echinopsis		3048
84	1089	Echinochloa		144
240	1070	Echinophora		626
746	1074	Echinops		1850
1378		Echinopsis		3048
140	1078	Echinospermum		327
146				
1312	1078	Echites		413
1313		F see Agamósma		2893
314		E see Dipladénia		2896
124				
1408	1078	Echium		315
72	1074	Pelipta		1786
1744		E see Bélilis		1756
58	1091	Petocárpus		2301
154		Edgwórthia		2999
342				
1408				
1324	1066	Edwárdsia		940
90				
472		Egg-plant	2565	451
472		Egyptian lotus	7681	1174
152	1078	Ehrétia		430
1	1086	Ehrhárta		754
1	1074	Ekebergia		991
1	1082	Elæa'gneæ, Or 134		
96				
1298	1082	Elæagnus		259
	1061	Elæoca'rpeæ, Or 28		
468	1088	Elæocárpus		1192
180				
324	1063	Elæodéndrum		516
53	1088	Elæis		2077
750	1084	Elate		1984
1372		E see Phœnix		2019
876	1059	Elátine		941
1200		Elatostemma, *s*		1960
724	1071	Elder		680
734		Elecampane	12147	1744
838	1087	Elegia		2048
1734		Elephantùsia, *s.*		3335
48	1086	Eleocharis		124
866		Elephant apple		2149
744	1074	Elephántopus		1843
741		Elephant's foot		1843
838		Elephant's-foot, or Hottentot's bread		2083
68	1089	Eleusine		200
1349		Eleutherine		2989
776	1073	Elichrysum		1730
1442		E see Helipterum		3481

Line	Not		Sp.	Gen.
1234		Elisèna		2980
152	1078	Elitsia		432
1254		Elixir of Love, *n.*		
880	1090	Ellobocárpus		2181
208				
1170	1083	Elm tree		615
498	1079	Elsholtzia		1250
72	1089	Elymus		208
18	1079	Elytraria		45
1296		Embóthrium see Lomátia		245
1296		E see Stenocárpus		241
	1083	Empe'trum, Or 140.		
926	1083	Empetrum		2045
784	1063	Empleùrum		1965
900	1091	Encalypta		2222
732	1074	Encèlia		1807
1526		Encephalártos		3321
26		Enchanter's night-shade		71
944	1091	Encœlium		2324
1260		Enevélia		2761
1260				
1458		F see Epidéndrum		1907
678	1072	Endive	11478	1657
956	1092	Endocarpon		2335
206		English Mercury	3114	611
360	1075	Enkiánthus		1017
332		Ennea'ndria, Cl 9		
332		F Monogy'nia Or 1		
344		F Trigy'nia Or 2		
336		F Hexagy'nia, Or 3		
464	1060	Entèlea		1183
142				
1162		F'pacris		393
1312				
848	1083	Ephedra		2115
1472		Epidéndron *s*		1490
1476		F see Cymbidium		1885
760				
1260	1085	Epidendrum		1907
1458				
1488		F see Angræ'cum		1921
1462		F see Ba kèria		1709
1462		F see Brassavòla		1914
1478		F see Cyrtopódium		1896
1456		F see Dendròbium		1900
1480		F see Oncídium		1895
1474		F see Stanhópea		2786
1486		F see Vanda		1916
358	1075	Epigæ'a		1015
318	1069	Epilòbium		903
1350				
100				
1152	1055	Epimèdium		297
1300				
1266		E see Eriochilus		2832
756	1084	Epipáctis		1880
1454		Epiphora		3202
1202				
1378		Epiphyllum		2628
1404		Episcia		3088
1460		Epi hèbium, *s*		1907
890	1090	Equisètum		2211
68	1089	Eragróstis		197
18				
1146	1079	Eránthemum		49
1286				
1268		E see Thyrsacánthus *s*		2838
488	1054	Erántis		236
1398		Eremóstachys		3077
278	1086	Eremúrus		806
1022	1092	Ergot		2407
762				
1434	1085	Erica		1912
304				
1181	1075	Erica		892
	1075	Ericeæ, Or 94		
704				
1248	1074	Erigeron		1786
1442				
1040	1093	Erineum		2487
1208		E see Cotonéaster		1139
528	1078	Erinus		1350
426	1067	Eriobótrya		1137
	1087	Ericaceæ Or 169.		
76	1087	Eriocaulon		223
742	1073	Eriocéphalus		1837
1265		Eriochilus		2832
1368		Eriocnèma		3036
1252		Eriócoma		2741
334	1081	Eriógonum		937

Line	Not		Sp.	Gen.
1188	1081	Eriógonum		947
1338		Eriolæ'na		2702
80	1089	Eriophorum		125
1250		Eriophýllum		2737
1460		Eriópsis		3205
276	1086	Eriospermum		800
1190				
1382		Eriostèmon		2603
1382		E see Phebálium		2604
174	1072	Erl halis		493
100	1072	Erodéa		291
568	1061	Eródium		1460
544	1057	Eróphila		1406
1388		Erósium, *s*		3065
1166		Erpètion		2549
546	1057	Erica		1426
558	1057	Ervicària		1445
624	1066	Ervilia		1063
624	1066	Ervum		1062
1432		F see Vicia		1561
210	1070	Eryngium		628
210		Erungo		632
1022	1092	Erysibe		2408
550				
1232	1057	Erysimum		1424
140	1077	Erythræ'a		366
688				
1240	1066	Erythrina		1021
1428				
1324		Erythrochiton		2932
1238		Erythrolæ'na		2733
270				
1178	1087	Erythrònium		782
1166				
1326		Escallònia		2548
1218		Eschscholtzia		2617
1414		Espalètia		3186
501		Essence of peppermint, *n*		
414		Essential oil of roses, *n*		
388		Essential salt of lemons, *n*		
694	1074	Éthulia		1703
418				
1382	1068	Eucalyptus		1126
1186		Eucharidium		2598
344	1066	Euchilus		984
842	1093	Euclèa		2098
548	1057	Euclidium		1414
1438		Euculda, *s*		3172
272	1086	Eúconus		791
242	1086	Eucrósia		713
1394		Eucryphia		3074
1241		Eudesmia		2718
416				
1382	1068	Eugènia		1119
1382		E see Myrtus		1121
1238		E see Stravádium		2704
762				
1478	1085	Eulophia		1920
1480		F see Lissochilus		1847
1478		E see Zygopétalum		2798
178				
1168	1063	Euónymus		509
1321				
648	1073	Eupatòrium		1685
1248		E see Ozothámnus		2725
400				
1200	1083	Euphórbia		1103
	1082	Euphorbiaceæ, Or. 136		
526	1078	Euphrásia		1342
1036	1093	Eurótium		2463
894	1062	Eúrya		1083
464	1056	Euryale		1177
1388		E see Victória		3004
1442		Euryòia		3183
1442		E see Oleària		3184
242				
1174	1086	Eúryeles		714
130	10 7	Eústoma		365
282	1086	Eústrephus		815
314				
1360	1066	Eutáxia		961
1502		Eutérpe		3261
1514		E see Arèca		2009
168				
1320	1075	Eúthales		469
1158		Eútoca		2518
746				
1252	1074	Euxènia		1854
700	1073	Evax		1724
40		Evening flower		98
1507		Evergreen beech, *n.*		
698		Everlasting		1722
966	1092	Evérnia		2348

Lin.	Nat.		Sp.	Gen.
228 / 1330	1077	Evólvulus		695
98 / 1300	1077	E'xacum		280
850	1083	Excæcària		2117
1020	1092	Exidia		2398
786	1084	Exoárpus		1970
1310		Exogònium		2885
1042		Exospòrium		2490
162 / 1316	1072	Exostémma		458
526		Eye-bright		1347
414	1068	Fabricia		1116
102	1063	Fagàra		303
854	1064	Fagònia		995
1354		Fagopỳrum		3003
1316		Fagræ'a		2905
792 / 1306	1003	Fàgus		1997
991		Fairy rings, *n*		
204	1077	Fálkia		602
1366		False bilberry	19243	3023
258		Fan palm		762
542	1057	Farsètia		1397
54		Feather-grass		150
26	1072	Fèdia		72
202		Felwort		599
218		Fennel	3626	654
476		Fennel flower		1209
644		Fenugræek		1603
1160		Fénzlia		2527
1264 / 1484		Fernandèzia		2802
870	1090	Ferns		
866	1062	Ferònia		2149
562 / 1232	1086	Ferrària		1451
220	1071	Férula		668
1330		F see Nárthex		2947
62		Fescue-grass		182
62	1089	Festùca		182
1292		F. see Dáctylis		180
722		Feverfew		1770
170		Feverwort		478
484	1054	Ficària		1232
	1069	Ficoidem, Or. 70.		
872 / 1530	1083	Ficus		2167
292		Fiddle	5009	856
522		Fiddle-wood		1329
1224		Fièldia		2665
1486		F see Vánda		1916
94		Field madder		269
430		Fig marigold		1146
872	1053	Fig-tree		2167
530		Figwort		1350
742	1073	Filàgo		1838
792		Filbert	13370	1998
886		Filmy leaf		2203
48	1089	Fimbristylis		121
52		Finger-grass		143
56		Florin	995	156
804		Fir		2013
706		Fire-weed, *n.*		
793		Fishing-rods, *n*		
552		Fish-poison	9224	1428
912	1091	Fissidens		2243
1008	1092	Fistulina		2374
1518		Fitzroỳa		3306
844	1058	Flacourtia		2101
	1058	Flacourtianeæ, Or		23
290	1087	Flagellària		839
372		Flakes, *n.*		
1176		Flame lily		2568
606		Flat pea		1525
744	1074	Flavèria		1845
232 / 1172	1059	Flax		701
286		Flax lily		823
702		Flea bane		1754
98		Fleawort	1714	278
630	1066	Flemingia		1586
550		Flixweed		1422
350		Flower-fence	5840	977
26		Flowering ash		69
886		Flowering fern		
			14607	2205
336		Flowering rush		939
834	1082	Fluggea		2071
	1090	Fluvia'les, Or. 177.		
	1090	Folia'ceæ, Cl. 1. Div. 2		
26	1076	Fontanèsia		66
912	1091	Fontinàlis		2245
218		Fool's parsley		661
119		Forget-me-not, *n.*		
320	1083	Forskòhlea		933
1286		Forsỳthia		2853
1500		Fortunæ'a		3250
470	1071	Fothergilla		1200
246 / 1334		Fourcræ'a		725
1334		Fourcroỳa, *s.*		2957
118		Four o'clock flower, *n*		
530		Fox-glove		1355
174		Fox-grape	2860	501
56		Fox-tail grass		164
452	1067	Fragària		1151
926	1091	Fragillària		2261
1230 / 1416		Franciscea		2681
1186		Francòa		2599
286	1059	Frankènia		835
	1059	Frankenia'ceæ, Or		22.
	1064	Frankincense of Indian temples		
786	1083	Franzèria		1973
98	1077	Frasera		282
354		Fraxinélla		997
868	1076	Fráxinus		2157
1270		F. see Pterocàrya		2844
	1065	French beans		
177		French berries, *n.*		
632		French honeysuckle	10592	1588
718		French marigold	12211	1760
998		French mushroom	15936	2365
26		French oak, *n.*		
	1081	French sorrel		
1518		Frenèla		3305
1526		Freycinètia		3324
1388		Frezièra		3065
800		Friar's cowl	13477	2006
1388		Frièsia		3066
60		Friesland oat, *n*		
	1086	Fringed violet of New Holland		
12		Fringe-tree		34
266 / 1342	1087	Fritillària		773
1340		F see Lilium		771
266		Fritillary		773
842		Frogbit		2089
870		Fruit of Jove, *n.*		
60		Frumerty, *n*		
320 / 1186 / 1352	1069	Fúchsia		904
1180		F see Schrádera		2588
946	1091	Fúcus		2328
1426		Fugòsia		3149
602 / 1428	1056	Fumària		1507
1428		F see Dièlytra		1504
	1056	Fumaria'ceæ, Or.		11.
602		Fumitory		1507
908	1091	Funària		2237
1293		Fundi, *n.*		
1293		Fundungi, *n.*		
1517		Funeral cypress, *n.*		
978		Funguses		
1178		Fúnkia		2573
946	1091	Furcellària		2327
246 / 1334	1087	Furcræ'a		725
1438		Furoggi, *n.*		
612 / 1240	1066	Furze		1540
864	1082	Fusànu		2141
1042	1093	Fusàrium		2489
1042	1093	Fusidium		2491
782		Fustick-wood	13211	1959
356	1061	Gæ'rtnera		1007
276	1086	Gàgea		801
732 / 1252	1073	Gaillárdia / Galárdia		1801
618	1066	Galáctia		1555
738	1074	Galactites		1820
1978		Galactodéndron		2849
1036		G see Ficus		2167
4	1085	Galangale		12
248 / 1338	1056	Galánthus		732
130	1070	Gálax		361
562	1086	Galáxia		1453
	1070	Galbanum		
1264 / 1478		Galcándra		2797
634 / 1434	1066	Galèga		1491
324	1081	Galènia		917
502	1079	Galeóbdolon		1261
502	1079	Galeópsis		1269
728	1074	Galinsògea		1792
16	1063	Galipèa		41
92 / 1298	1072	Gàlium		286
668		Gall of the earth, *n*		
1196		Galphimia		2617
1166		Gámbier	17004	2943
1166		Gambier, *n.*		
	1061	Gamboge		
394	1061	Garcinia		1074
18		Garden-balsam	297	4.
61		Gardener's garters, *n*		
172 / 1322	1072	Gardènia		487
1322		G see Oxyánthus		489
1322		G see Sherbouènia		2921
1222		Gardoquia		2637
1400		G see Cedronélla		3067
380	1054	Garidélla		1013
2 / 1144		Garland-flowers		
272		Garlic		778
396		Garlic pear		1057
1276 / 1522		Gárrya		2807
356	1064	Garùga		1011
406	1070	Gastònia		1166
56	1089	Gastridium		156
1252		Gastrocárpha, *s*		2718
1284		Gastrochilus		2
1486		G see Saccolàbium		2917
1266		Gastròdia		2827
344 / 1360	1066	Gastrolòbium		961
1360		G see Adtus		5
1338		Gastronèma		2919
60	1089	Gaudinia		154
360 / 1194 / 1366	1075	Gaulthèria		1015
318	1069	Gaúra		880
1366		Gaylussàcia		3013
734	1073	Garània		1811
1034	1093	Geástrum		2707
1352		Geissois		3011
1226		Geissomèria		2811
40	1085	Geissorhiza		67
1180		Geitonoplèsium		2707
1422		Gelasine		3111
84	1083	Geldnium		2107
154	1077	Gelsèmium		1437
1306		*Geniòstoma*		2979
172	1072	Genipa		488
172		Genip tree		488
610 / 1430	1066	Genista		1538
202 / 1170	1077	Gentian		600
202 / 1170	1077	Gentiàna		600
	1077	Gentia'neæ, Or		103
756	1085	Geodòrum		1888
604	1067	Geoffróya		1517
1012	1092	Geoglóssum		2381
1502		Geónoma		3403
1250		Georgina, *s.*		28
	1061	Gerania'ceæ, Or		38
578 / 1234 / 1422	1061	Geránium		1463
528	1078	Gerárdia		1348
1288		G see Pterostigma		2768
716	1074	Gerbèra		1728
494		Germander		1464
124		German madwort		342
	1089	German sarsaparilla		
666	1078	Geropògon		1620
512 / 1222 / 1400	1075	Gésnera		1490
1401		Gésnera, *n.*		2961
1224		G see Pentaráphia		
	1075	Gesneria'ceæ, Or		93.
234	1086	Gethýllis		1277
362	1068	Getònia		1170
454	1067	Gèum		1
26	1079	Ghínia		

Lin.	Nat.		Sp.	Gen.
720		Giant fennel		698
1355		Giel hout, *n.*		
1160		Gilia		2322
1312		G see Navarétia		2533
438	1057	Gillènia		1149
538	1057	Gilliflower	8946	1391
4	1095	Ginger		10
248		Ginger-bread-tree	5073	870
873	1070	Ginseng	14391	2166
232		Gisèkia		700
42				
1150	1086	Gladiolus		105
1290				
6		Glasswort		22
454		Glastonbury-thorn	7075	1132
480	1056	Glaúcium		1169
194	1068	Glaux		568
872	1079	Glechòma		1258
806	1057	Gleditschia		2155
406	1059	Gliwus		1107
6	1068	Glóbba		15
194	1080	Globe amaranth		566
488		Globe flower		1234
746		Globe thistle		1880
90	1060	Globulària		960
	1080	GLOBULARIÆ, Or.		120
276	1067	Gloriòsa		783
1414		Glossánthus, *s.*		3126
22		Glossocòmia		2917
422		Glossòdia		2820
752	1085	Glóssula		1863
814				
1291	1075	Gloxínia		1291
1410				
62	1080	Glycèria		181
678	1066	Glycine		1552
1410				
1412		G see Wistària		3157
356	1062	Glycosmis		1004
1258	1060	Glycyrrhiza		1574
518	1079	Gmelina		1311
1410				
1398	1073	Gnaphalium		1722
514	1082	Gnidia		912
716		Goat's beard		1621
384		Goat's-foot	6483	1065
436		Goat's-horn	10694	1594
634		Goat's-rue		1591
634		Goat's-thorn	10724	1594
532		Goat-weed	8903	1368
1190				
1350		Godètia		2596
1214		G wloya		2641
1426		Goethia		3150
467		Gold cups, *n.*		
710		Golden rod		1740
709		Golden-rod-tree		613
366		Golden saxifrage		1040
674		Golden thistle		1659
1236				
1406		Goldfússia		2671
570		Gold of pleasure		1425
694		Goldylocks		1705
776	1085	Gomèza		1884
468	1083	Gomphia		1001
196	1077	Gomphocárpus		587
344				
1358	1066	Gompholòbium		954
141				
1430	1080	Gomphrèna		566
1096	1092	Gómphus		2367
1512		Gonatánthus		3288
1304		Gongonha, *n.*		
1264				
1474		Gongòra		2787
1292		G see Cirrhæ'a		2774
1474		G see Coryánthes		2788
1290				
1426	1077	Conólobus		589
158	1075	Goodènia		468
	1075	GOODENÒVIÆ, Or.		91.
6	1066	Goódia		1534
744	1084	Goodyèra		1870
146				
1256	1069	Gooseberry	3127	550
256		Goose corn	4333	760
266		Goose-foot		611
93		Goose-grass, *n.*		
1292				
1426	1062	Gordònia		1494
1426		G see Polýspora		3152
454	1075	Gorteria		1812

Lin.	Nat.		Sp.	Gen.
868	1089	Gossýpium		1481
866	1063	Gouánia		2146
808	1068	Gourd		2021
216		Gout-weed		652
1262				
1470		Govènia		2780
1418		Græ'lsia		3133
4		Grains of Paradise	76	13
	1088	GRAMINÆ, Or.		174.
1330		Grammánthes		2948
1264				
1478		Grammatophýllum		2793
1478		G see Hromheédia		3237
564		Granádilla, *n.*		
724	1073	Grángea		1776
394	1067	Grangèria		1060
174	1061	Grape	3857	501
284		Grape hyacinth		821
976	1092	Gràphis		2364
288		Grass of Parnassus		694
16	1078	Gratíola		43
88		Great burnet		256
788		Great Macaw tree	13322	1983
139				
1158	1089	Greek valerian		370
423		Greengage, *n.*		
940		Green laver	15272	2308
752		Green man	12835	1865
822		Green osier	13732	2042
84				
1154	1081	Grevíllea		239
1296				
1294		G. see Anadènia		2812
466	1060	Grèwia		1185
466	1061	Grías		1188
384	1067	Griélum		1063
254				
1338	1086	Griffínia		741
938	1091	Griffíthsia		2297
900	1091	Grimmia		2223
716				
1250	1074	Grindèlia		1746
1442				
302	1068	Grísles		877
60		Grist, *n.*		
1264		Gróbya		2791
1476				
120		Gromwell		330
190	1069	Grondvia		551
	1069	GROSSULA'CEÆ, Or		73
502	1079	Ground ivy		1258
494		Ground pine	8097	1242
704	1074	Groundsel		1738
1248				
702		Groundsel-tree	11821	1732
1382		Grumi-chama, *n*		
640		Gruyère cheese, *n.*		
	1079	Guaco of Peru		
352	1062	Guácum		993
304	1062	Guárea		888
480	1055	Guattèria		1222
416	1068	Guava		1118
	1062	Guayacine		
224		Guelder rose	3774	679
252		Guernsey lily	4222	738
788	1072	Guettárda		1981
1326		Guichenótia		2934
350	1067	Guilandina		979
1529		Guilbogui, *n.*		
297		Guinea-hen weed, *n.*		
174		Guinea peach		498
298		Guinea plum	5072	870
347		Gum anime, *n*		
857		Gum arabic *n.*		
858	1065	Gum-arabic tree	14192	2127
468		Gum-cistus	7740	1197
	1065	Gum lac		
	1084	Gum sandarach		
670		Gum succory		1629
638		Gum tragacanth, *n.*		
746	1074	Gundèlia		1853
26				75
766	1083	Gúnnera		1933
596	1068	Gustàvia		1498
	1061	GUTTÍFERÆ, Or.		36.
246	1087	Guzmánnia		797
750	1085	Gymnadènia		1858
1492		G see Peristylis		3246
196	1077	Gymnèma		583
842	1067	Gymnócladus		2094
878	1090	Gymnográmma		2171

Lin.	Nat.		Sp.	Gen.
730	1074	Gymnolòmia		1799
898	1091	Gymnóstomum		2219
748		GYNA'NDRIA, Cl		20.
750		G. MONA'NDRIA, Or.		1.
766		G. DIA'NDRIA, Or		2.
766		G HEXA'NDRIA, Or.		3.
1822		Gynèreum		3311
1234		Gynopleùra, *s.*		2690
1444		Gynóxys		3193
368	1089	Gypsophila		1044
1370		G see Ì única		3042
954	1092	Gyróphora		2334
752				
1492	1085	Habenària		1861
1492		H. see Peristylis		3246
1490		H. see Platanthèra		1857
254				
1176	1086	Habránthus		744
1338				
1316		Habrothámnus		2906
1316		H see Isochròma		2907
248				
1336	1086	Hæmánthus		731
350	1067	Hæmatóxylon		985
1392		Hæmocharis, *s*		3072
	1085	HÆMODORA'CEÆ, Or.		104.
44	1085	Hæmodòrum		111
58		Hair-grass		170
84				
1296	1081	Hákea		240
694		Halberd-weed		1710
394	1076	Halèsia		1081
944	1091	Halliseris		2322
524	1078	Hallèria		1378
630	1066	Hallia		1584
	1069	HALORAGEÆ, Or.		68.
310	1069	Haloràgis		932
942	1091	Halymènia		2315
	1071	HAMAMELÍDEÆ, Or		81
104	1071	Hamamèlis		312
216		Hamburgh parsley, *n*		
172	1072	Hamellia		484
870	1082	Hamiltònia		2162
1424		Hand-plant, *n.*		
1432		Hardenbergia		3159
68				199
72		Hard grass		212
862				2134
232		Hare, *n.*		
278		Harebells	4770	803
218				
1172	1070	Hare's-ear		657
884		Hare's-foot fern	14565	2196
54		Hare's-tail grass		153
1502		Harina, *s.*		3257
1408		Harràchia, *s.*		3109
1170		Harrisònia		2552
100	1063	Hartògia		301
882		Hart's tongue		2188
1260				
1462		Hartwègia		2764
222		Hartwort		673
	1083	Haschisch		
100		Hassagay-tree		300
220	1071	Hasselquistia		666
638		Hatchet vetch		1595
452		Hautboy	7569	1151
672		Hawkweed		1645
424				
1204	1067	Hawthorn		1182
1176		Haylóckia		2571
792		Hazel	13370	1998
146		Heart's-ease	3060	540
328		Heart-seed		923
304				
1184	1075	Heath		892
870		Heavenly fruit, *n.*		
1316		Hebécladus		2908
1442		Hebeclínium		3179
518	1079	Hebenstrettia		1309
20	1079	Hedeòma		59
188	1070	Hédera		549
550		Hedge garlic		1423
16		Hedge hyssop		44
550				
1232	1057	Hedge mustard		1424
504		Hedge nettle		1263
2				
1144	1085	Hedýchium		6
1284				
1152		Hedyòtis, *s.*		2514
676	1073	Hedýpnois		1646
630	1066	Hedýsarum		1588

Lin.	Nat.		Sp.	Gen.
1434		H. see Onobrỳchis		3164
1330		Heeng, *n*		
398 / 1374	1068	Heimia		1096
1322		Heinsia		2923
1404		Heintzia		3096
1470		Hélcia		3227
716	1074	Helènium		1755
1250		H. see Eriophỳllum		2737
1443		H. see Monolòpia, *n.*		
470 / 1214 / 1390	1058	Helianthemum		1198
730 / 1252 / 700	1074	Helianthus		1798
1248 / 1442	1073	Helichrỳsum		1730
194 / 1170 / 1326	1085	Helicònia		570
1334		H. see Phenakospérmum		2955
1038	1093	Helicospòrium		2473
880	1099	Helicteris		1466
398	1060	Helicocárpus		1100
558 / 1418	1057	Heliòphila		1446
728	1074	Heliòpsis		1796
118 / 1304	1078	Heliotròpium		325
1442		Helipterum		3181
488		Hellebore		1237
1395		Hellebore of the ancients, *n.*		
488 / 1394	1054	Helléborus		1237
4	1085	Hellènia		9
1524		Hélmia		3314
676	1073	Helminthia		1639
292	1087	Helonías		852
1014	1092	Helvélla		2387
	1086	Hemerocallídeæ, Or 159		
260	1086	Hemerocállis		769
1400		Hemiándra		3081
1298		Hemicléidia		2867
196	1077	Hemidésmus		576
878	1090	Hemionítis		2170
216		Hemlock		649
804		Hemlock spruce	13527	2013
834	1083	Hemp		2073
689		Hemp agrimony	11530	1685
502		Hemp nettle		1260
406		Hen and chicken	6831	1110
136	1078	Henbane		381
502		Henbit	8277	1259
1414		Henckèlia, *s.*		3125
1410		Henfrèya, *s*		3113
316		Henna plant	5422	898
480	1054	Hepática		1225
263		Hepatic aloes, *n.*		
296		Heptándria, Cl. 7.		
296		H. Monogy'nia, Or. 1		
298		H. Digy'nia, Or. 2		
298		H Tetragy'nia, Or. 3.		
298		H. Heptagy'nia, Or. 4		
222 / 1172	1071	Heraclèum		672
726		Herbarota	12346	1781
1303		Herbe du Paraguai, *n.*		
354		Herb of grace, *n.*		
328		Herb Paris	5633	929
580		Herb Robert	9685	1463
1234 / 1420		Herbértia		2686
814	1060	Heritièra		2037
562	1060	Hermánnia		1455
866	1070	Hérmas		2147
734	1085	Herminium		1868
772	1081	Hernándia		1942
208	1080	Herniària		614
568		Heron's bill		1460
532	1078	Herpéstis		1367
1180		Herrèria		2585
40	1085	Hesperántha		98
548	1087	Hésperis		1421
780	1089	Heteropògon		1953
1372		Heterópteris		3044
1718	1074	Heterospérmum		1761
1038	1092	Heterosphæ'ria		2424
1262		Heterotáxis, *s.*		2779
1368		Heterótrichum		3030
204 / 1170	1070	Heùchera		606
1410		Hexacéntris		3115
1460		Hexadésmia		3206
236		Hexándria, Cl 6		
240		H Monogy'nia, Or 1.		
288		H. Digy'nia, Or. 2.		
290		H Trigy'nia, Or 3.		
294		H. Polygy'nia, Or 4		
1460		H xòpia, *s*		3206
3 2	1062	Heýnea		992
472 / 1390	1055	Hibbértia		1203
584 / 1236 / 1424	1059	Hibiscus		1480
1426		H see Fugòsia		3149
794		Hickory-tree	13379	1999
672 / 1440	1073	Hieràcium		1635
1318		Higginsia		2913
286	1072	Hillia		832
60		Hill oat, *n*		
1318		Hindsia		2912
1176 / 1438		Hippeástrum		2569
742	1073	Hippia		1834
	1060	Hippocastàneæ, Or		30
36	1060	Hippocrátea		83
	1060	Hippocratèaceæ, Or 31		
628	1066	Hippocrèpis		1577
812	1083	Hippómane		2030
224	1071	Hippomárathum		678
832 / 1276	1082	Hippóphae		2058
6	1069	Hippùris		23
380	1061	Hiræ'a		1056
174	1067	Hirtélla		499
350	1067	Hoffmanséggia		981
794		Hog-nut	13384	1999
382		Hog-plum		1059
6		Hog-weed		19
142 / 1162	1077	Hoitzia		390
1500		Holbóllia		3251
860	1089	Hólcus		2132
104		Holly		315
584	1059	Hollyhock	9772	1474
520	1079	Holmskióldia		1327
1250		Hologýmne		2735
74	1059	Holósteum		220
	1055	Holy cyamus		
	1064	Homali'neæ, Or 57.		
1510		Homalonèma		3279
272		Homer's moly	4623	796
1234		Homèria		2688
542		Honesty		1395
216		Honewort		647
302		Honey-berry		884
514		Honey-flower		1293
868		Honey locust tree	14333	2155
170 / 1164	1071	Honeysuckle		474
122		Honeywort		339
1 14		Honghel-bush	18551	2900
20		Hooded milfoil		53
912	1091	Hookèria		2249
1191		Hoolas-kasmeeree, *n.*		
864		Hoop ash	14299	2145
240		Hoop petticoat	4031	711
88		Hoop-withy, *n.*		
834	1083	Hop		2074
792		Hop hornbeam		1995
792		Hop-poles, *n.*		
648		Hop trefoil, *n.*		
72 / 1294	1089	Hórdeum		210
504		Horehound		1266
502	1079	Horminum		1257
792	1083	Hornbeam		1996
528	1078	Hornemánnia		1352
66		Horn-grass		189
52		Horn of plenty, *n.*		
460		Horn-poppy		1169
790		Hornwort		1986
296		Horse-chestnut		866
546	1057	Horse-radish	9089	1407
350		Horse-radish-tree		980
628		Horse-shoe vetch		1577
890		Horse tail		2211
772		Horse-tail-tree	13034	1936
682		Horse-thistle		1665
26		Horse-weed, *n.*		
1244 / 1436		Hosàckia	3819	2717
518	1079	Hósta		1310
1370		Hotèia		3041
838		Hottentot bread		2087
226		Hottentot cherry	3819	684
434		Hottentot fig	7271	1164
128	1080	Hottònia		3 5
1470		Houllètia		3225
122		Hound's tongue		336
406		Houseleek		1110
90 / 1152 / 1398	1072	Houstònia		261
1401		Houttea, *n.*		
610 / 1240 / 1430	1066	Hòvea		1536
1430		H. see Plagioibbium		3154
184	1063	Hovènia		532
198 / 1328	1077	Hoya		502
1328		H see Cyrtóceras		2940
396	1058	Hudsònia		1099
202	1077	Huérnia		500
1160 / 1312		Hugèlia		2525
1503		Huingan, *n.*		
854		Humble plant	14104	2124
694	1073	Húmea		1711
834	1083	Húmulus		2074
1292		Hungry rice, *n*		
1212		Hunnemánia		2537
1264 / 1478		Huntlèya		3170
1464		H see Wárrea		3.11
1529		Huon pine, *n.*		
814	1083	Hùra		2075
546	1057	Hutchínsia		1410
284		Hyacinth		814
278		Hyacinth of Peru, *n*		
284	1086	Hyacinthus		815
1344		H. see Bellevàlia		2966
842	1082	Hyænánche		2097
842		Hyæna poison		2097
1010	1092	Hýdnum		237
366 / 1370	1070	Hydrángea		1034
490	1054	Hydrástis		1210
	1084	Hydrocharì'deæ, Or 149		
842	1084	Hydrócharis		2096
218	1070	Hydrocótyle		636
934	1091	Hydrodictyon		2491
204	1977	Hydròlea		691
1410		Hydroméstis		3114
	1055	Hydropeti'deæ, Or		8
490	1055	Hydropéltis		1210
132	1078	Hydrophýllum		372
1420		Hydrotæ'nia		3117
930	1091	Hygrócrocis		2486
346	1067	Hymenæ'a		972
1166		Hymenanthèra		2 56
1020		Hymenélla		2671
1334		Hymenocállis		2 1
648	1066	Hymenocárpus		1569
442	1069	Hymenógyne		111
690	1074	Hymenopáppus		1711
886	1090	Hymenophýllum		2251
898	1091	Hymenóstomum		2229
1444		Hymenóxys		3107
136	1078	Hyoscýamus		380
1308		H see Physochlaina		2903
676	1073	Hyóseris		1643
104	1056	Hypécoum		61
350		Hyperanthèra		984
	1061	Hyperici'neæ, Or 35		
656 / 1438	1061	Hypéricum		1017
914	1091	Hýpnum		2231
1380		Hypocalýmma		3035
676	1073	Hypochæ'ris		1659
1404		Hypocýrta		3097
1402		H see Alloplectus		3095
18	1079	Hypoéstes		4
	1086	Hypoxi'deæ, Or		157
254	1086	Hypóxis		736
502	1079	Hýptis		1307
496		Hyssop		1305

Lin.	Nat.		Sp.	Gen.
[illegible]	1079	Hyssòpus		1248
[illegible]	1093	Hystèrium		2434
[illegible]	1057	Ilèris		1412
113		Iceland moss	13506	2343
[illegible]		Ice-plant	7376	1146
[illegible]	1076	Ichnocárpus		414
[illegible]		ICOSA'NDRIA, Cl. 12		
[illegible]		I Monogy'nia Or 1.		
[illegible]		I Di pentagy'nia, Or. 2		
[illegible]		I Polygy'nia, Or. 3.		
1[illegible]	1063	I'lex		315
1[illegible]		I see Rôrberis		829
1346	1080	ILLECE'BRÆ, Or 125.		
192	1080	Illecebrum		551
474	1055	Illicium		1215
992		Imatophýllum, s		2567
1[illegible]	1061	Impátiens		538
[illegible]	1089	Imperàta		216
[illegible]	1070	Imperatòria		662
[illegible]		Incarvillea, s.		3127
[illegible]		Indian arrow root		
[illegible]		Indian berries, n		
[illegible]		Indian cedar, n		
[illegible]		Indian cordage, n.		
778		Indian corn		1950
892		Indian cress		875
[illegible]		Indian cucumber	4962	846
962		Indian date, n		
412		Indian fig	6884	1111
[illegible]		Indian fig		2629
426		Indian hawthorn		1136
482		Indian lotus	7682	1174
[illegible]		Indian madder		295
[illegible]		Indian millet	14220	2131
174		Indian mulberry, n.		
	1058	Indian muslin		
[illegible]		Indian paper birch	30886 / 20888	1956
328		Indian soap, n.		
2		Indian shot		1
[illegible]		Indian rubber, n.		
[illegible]	1065	Indigo		1589
[illegible]		Indigo, n.		
[illegible]	1066	Indigofera		1589
[illegible]	1067	I'nga		2123
424		I see Calliándra		3147
362	1076	Inocárpus		1024
[illegible]	1073	I'nula		1744
188	10[illegible]	Ionidium		541
1418		Ionopsidium		3132
762	1085	Ionópsis		1919
492		Ipecacuanha	6739	1103
1722		I see note.		
[illegible]	1077	Ipomœ'a		383
1310		I see Exogònium		2885
934	1060	Iresine		2069
1512		Iridrtia		3292
	1085	Iri'dee, Or. 155		
44				
1150	1086	I'ris		115
1222				
1346		I see Trimèxia		2991
1430		Irish furze, n		
316		Irish heath	5412	893
613		Irish whin, n.		
[illegible]		Iron tree		292
150				
416		Iron-wood	6947	425
794, n.				
497		Iron-wort		1252
1034	1093	Isária		2466
552				
14[illegible]	1057	Isàtis		1430
860	1081	Ischæ'mum		2133
970	1092	Isidium		2351
	1081	Isle of France cinnamon		
1174				
1332		Iumene		2558
1334		I. see Hymenocállis		2951
90	1069	Ismárda		258
694	1074	Isocárpha		1708
760	1085	Isochilus		1903
1316		Isochróma		2907
894	1090	Isòetes		2214
48	1089	Isólepis		122
1401		Isolòma, n.		
1402		I. see Gesnera		1200
1346		Isómeris		2987
528	1078	Isopléxis		1354
80				
1152	1081	Isopógon		230
1294				
498	1054	Isopýrum		1235
1320		Isótoma		2918
184	1075	I'tea		535
744	1073	I'va		1841
188	1070	Ivy		549
38	1085	I'xia		95
1338		Ixiolírion		2967
694	1073	Ixòdia		1713
100	1072	Ixòra		288
514	1077	Jacaránda		1295
1406				
770		Jaca tree	13033	1935
772		Jack in a box		1942
344	1066	Jacksònia		956
1340				
252		Jacobæa lily	4234	739
1310		Jacquemóntia		2881
150	1076	Jacquínia		426
801		Jaggory, n.		
138	1077	Jalap	2231	383
606		Jamaica dog-wood	10048	1524
604		Jamaica ebony	10034	1520
1352		Jamaica lace-bark tree, n		
870		Jamaica milkwood	14363	2158
418		Jamaica pepper, n		
1368		Jamaica rose		3028
418		Jambolana-tree	6982	1122
320	1062	Jambolífera		905
1382		Jambòsa, s.		1119
1350		Janca tree, n.		
1358		Jansònia		3009
1519		Japan cedar, n.		
188	1075	Jasíone		547
12				
1141	1076	Jasmine		39
1286				
	1076	Jasmi'neæ, Or. 100.		
12				
1144	1076	Jasminum		39
1286				
812	1082	Játropha		2033
1520				
418		Java plum, n.		
316	1055	Jeffersònia		896
736		Jersey thistle	12592	1819
730		Jerusalem artichoke	12439	1798
506		Jerusalem sage	8355	1268
104		Jesuits' nuts, n.		
1516		Jezo spruce, n.		
778		Job's tears		1951
479		Joiner's planes, n.		
1271		Jolliffa, s		2848
298	1067	Jonèsia		867
1346				
1241		Jonèsia, n.		
240		Jonquil	4021	711
1382		Jossinia, s.		1121
1534		Jpu, n		
1308		Juanulloa		2880
1514		Jubæ'a		3294
346		Judas-tree		968
794	1064	Jùglans		1999
1270		J see Pterocárya		2844
1530		July flower	21217	3333
	1087	Ju'ncæ, Or 168.		
258	1087	Júncus		760
918	1091	Jungermánnia		2253
848		Juniper		2113
848	1084	Juniperus		2113
1523				
1528		J. see Dacrýdium		3328
1518		J. see Frenèla		3305
1518		J. see Libocèdrus		3308
1518		J see Wildringtònia		3303
614		Jupiter's beard	10218	1542
362	1069	Jussiæ'a		1026
18	1079	Justícia		47
1144				
1416		J see Agalmýla		3128
1408		J see Asystásia		3113
1288		J see Cyrtanthèra, s		2857
1286		J see Eránthemum, s.		49
1288		J see Philogacánthus, s		9856
1408		J. see Strobilórachis		3109
1528		Kadsùra, s		3330
4	1085	Kæmpfèria		12
1141				
1208		Kageneckia		2634
1529		kahi-katea, n		
356	1075	Kálmia		1011
102		Kanguru vine	1779	305
246		Karattas	4114	726
714	1074	Kaulfussia		1743
1519		kawa, n		
216		Keckatea, n.		
205	947	Kelp, n.		
618				
1242	1066	Kennèdya		1553
1432				
1432		K see Camptosèma		3161
1432		K see Hardenbérgia		3159
1432		K see Physalòbium		3158
1432		K see Zichya		3160
1292		Kentrophýllum		3289
454	1067	Kérria		1156
1210				
1004		Ketchup, n		
1281		Kheu, n.		
614		Kidney-bean		1547
612		Kidney-vetch		1542
842	1082	Kiggelária		2092
50	1089	Killinga		129
487		King-cups, n.		
210		Kissing comfits of Falstaff, n.		
584	1059	Kitaibèlia		1473
398	1060	Kleinhòfia		1098
694	1074	Kielnia		1702
1414		Klügea		3126
52	1089	Knáppia		142
734		Knapweed	12544	1819
92	1072	Knaútia		265
866		Knawel		1037
1176		Knight's star		2569
192		Knot-grass		555
508		Knotted marjoram, n		
484	1054	Knowltònia		1231
204	1081	Kòchia		610
62	1089	Kœlèria		179
76	1081	Kœnigia		228
304	1060	Koireutèria		887
1278		Koumé, n		
1244		Kowain gutukaka, n.		
676	1073	Krigia		1644
1438		Kum-quat, n.		
	1079	Labiatæ, Or. 113.		
1490		Labichea		2863
1314		Labisia		2903
358		Labrador tea		1012
624		Laburnum	10435	1566
1474		Lacæ'na		3234
322		Lace-bark	5525	909
1352				
1314		Lacepèdia		2901
284	1086	Lachenália		822
1180				
321	1082	Lachnæ'a		915
668	1073	Lactùca		1628
670		Lactucarium, n.		
359		Ladanum, n.		
228		Ladies' bed-straw	3842	691
88		Ladies' mantle		255
766		Ladies' slipper		1931
754		Ladies' traces	12860	1874
884		Lady-fern	14586	2199
542		Lady's smock		1392

Lin.	Nat.		Sp.	Gen.
1250 / 1462		Læ'lia		2765
1464		Lælióps'is, *s.*		1906
1212		Læ'tia		2640
692	1074	Lagásca		1699
1250		Lagenóphora		2738
468 / 1290	1068	Lagerstræ'mia		1195
322 / 1352	1082	Lagétta		909
184	1070	Lagœ'cia		548
674	1083	Lagóseris		1636
592	1059	Lagunèa		1468
54	1089	Lagùrus		153
1240 / 1428		Lálage		2709
84 / 1296	1081	Lambértia		242
34 / 1148		Lamb's lettuce		80
944	1091	Laminària		2325
502 / 1222 / 1398	1079	Làmium		1259
	1022	La mort du safran, *n*		
506		Lamp-wick	8360	1268
280		Lancashire asphodel	4432	813
480		Lancewood	7929	480
1286		Lankestèria, *s.*		49
518 / 1224	1079	Lantàna		1312
1342		Lapagèria		2978
42	1086	Lapeyroúsia		103
1892		Lapiácea		3072
54	1089	Lappago		149
678	1073	Lápsana		1651
388	1059	Larbrèa		1069
806		Larch		2014
1528		Lardizabàla		3129
806	1084	Làrix		2014
1270		L. see Pinus		2012
472 / 1216	1054	Larkspur		1204
1275		Larmes de sapin, *n.*		
220	1071	Laserpítium		669
220		Laserwort		669
1368		Laslándra		3031
1368		L. see Plerdma		3032
1032	1093	Lasiobotrys		2138
182 / 1326	1062	Lasiopétalum		523
1250		Lasthènia		2735
1444		L. see Burriélia, *n*		
816	1088	Latània		2109
521	1078	Lathræ'a		1339
620 / 1242 / 1432	1066	Láthyrus		1558
332		Laurel		934
	1067	Laurel-water		
224		Laurestine	3754	679
	1081	LAURI'NEÆ, Or. 129		
870	1093	Laurophýllus		2164
332 / 1354	1081	Laúrus		934
1524		L. see Litsæ'a		3315
1304		L. see Oreodáphne		3006
498	1079	Lavándula		1251
544	1059	Lavátera		1475
498	1079	Lavender		1251
694		Lavender cotton		1714
692	1073	Lavènia		1700
316	1068	Lawsònia		898
1178		Laxmánnia		2578
118		Leadwort		324
1084	1093	Leangium		2451
324		Leather-wood		911
612	1066	Lebéckia		1539
1236		Lebretònia		2700
958	1092	Lecanòra		2340
74	1058	Lechèa		222
950	1092	Lecidea		2332
1164		Lechenaúltia		2539
		L. see Leschenaúltia		
1508		Lecóntia, *s*		3269
212	1070	Ledebùria		629
1194		Ledocárpon, *s*		2619
358	1075	Lèdum		1012
1362		L. see Ammýrsine		3017
162	1061	Leêa		454
302		Lee chee		5101 883
272		Leek		4617 796
74	1089	Leérsia		217
71		Leghorn straw, *n*		
	1064	LEGUMINO SÆ, Or. 59.		
1308		Leiánthus		2881
1252		Leighia, *s.*		1798
944	1091	Lemànea		2318
772	1090	Lémna		1939
652	1062	Lemon	10973	1615
860		Lemon-grass	14210	2129
1324		Lemònia		2928
1436		Lennèa		3168
1435		Lennèa, *n.*		
	1079	LENTIBULA'RIÆ, Or 118		
624	1065	Lentil	10421	1562
1036	1093	Leocárpus		2455
1484		Leochilus		3238
1484		L. see Oncídium		1895
506	1079	Leonòtis		1270
286	1055	Leóntice		825
670	1073	Leóntodon		1631
700	1073	Leontopòdium		1723
506	1079	Leonúrus		1267
716		Leopard's bane		1751
1500		Leopoldìna		3253
1016	1092	Leòtia		2389
1258 / 1450		Lepánthes		2747
552	1057	Lepídium		1428
1418		L. see Ionopsídium		3132
1380		Lepísmium		3050
974	1092	Leprària		2359
1286		Leptándra		2854
44	1090	Leptánthus		109
540	1057	Leptocarpæ'a		1384
846	1087	Leptocárpus		2110
68	1089	Leptóchloa		202
930	1091	Leptómitus		2281
1248		Leptorhýnchos, *s.*		1705
1160		Leptosiphon		2526
414 / 1380	1068	Leptospérmum		1115
1380		L. see Billòtia		3051
1382		L. see Metrosidèros		1117
1248		Leptostèlma		2726
1032	1093	Leptostròma		2436
1260		Leptòtes		2767
1320		Leschenaúltia		2539
		See Lechenaúltia		
912	1091	Léskea		2250
630	1066	Lespedèza		1585
626	1066	Lessértia		1572
192	1080	Lestibudèsia		516
668	1072	Lettuce		1628
830	1081	Leucadéndron		2053
506	1079	Leùcas		1269
1442		Leuchèria, *s*		3180
1378		Leuchtenbérgia		3049
1150 / 1292		Leucocóryne		2506
912	1091	Leùcodon		2244
248	1089	Leucòjum		733
144 / 1312		Leucopògon		401
80	1081	Leucospérmum		232
1364		Leucóthoe		3020
734	1074	Leùzea		1818
792		Lever-wood, *n.*		
1164		Leycestèria		2541
720	1073	Leýsera		1765
1250		L. see Chætachlæ'na		2734
1380		Lhótskya		3053
688 / 1440	1073	Liàtris		1682
1518		Libocèdrus		3308
1036	1093	Licea		2459
946	1091	Lichina		2326
290	1087	Lichtensteinia		842
260 / 1340	1088	Licuàla		763
722	1073	Lidbéckia		1773
1288		Liebígia		2861
188	1075	Lightfoótia		546
352		Lignum-vitæ-tree		993
1248		Ligulària		1741
220	1071	Ligústicum		66
12 / 1144 / 1286	1076	Ligústrum		36
1290		L see Chondrospérmum		2862
12 / 1144	1076	Lilac		37
	1087	LILIA'CEÆ, Or. 163.		
	1086	Lilies of the field		
264 / 1178 / 1340	1067	Lilium		771
264 / 1178	1087	Lily		771
270	1086	Lily of the valley		787
272		Lily pink		794
100		Lily thorn		200
1490		Limatòdes		3481
652		Lime	10974	1615
466	1060	Lime tree		1100
298	1069	Limeum		871
1194 / 1366		Limnánthes		2677
464 / 1212	1067	Limnócharis		1177
762 / 1464		Limodòrum, *s*		1911
1488		L. see Angræ'cum		1921
1470		L. see Govènia		2780
356	1062	Limònia		1003
1422		L. see Luvúnga		3111
1514		L. see Skimmia		3336
542	1078	Limoséllа		1430
1160		Linánthus		2614
526 / 1412	1078	Linària		1341
1416		Lindenbérgia		3131
1318		Lindènia		2784
732	1078	Lindérnia		1902
1384		Lindlèya		3079
	1059	LI'NEÆ, Or. 21		
232		Linen cloth, *n*		
303		Ling, *n.*		
514	1071	Linnæ'a		1
26	1076	Linocièra		17
232		Lint, *n*		
232 / 1172 / 1340	1059	Linum		761
700		Lion's-foot		1727
286		Lion's-leaf	4913	8
1454		Lion's-mouth	20244	2
506		Lion's-tail		127
624 / 1434	1066	Lipària		1
764 / 1450	1085	Liparis		1
1450		L. see Microstylis		1
1152		Lipóstoma		2
520 / 1228 / 1410	1079	Lippia		1314
798	1083	Liquidámbar		
628	1065	Liquorice		1
628	1066	Liquoritia		1
478	1055	Liriodéndron		120
134 / 1138 / 1308	1077	Lisiánthus		3
1308		L. see Leiánthus		2881
142 / 1312		Lissánthe		398
756 / 1478	1085	Lissochilus		1987
754	1084	Listera		1870
302		Litchi	5101	883
120	1078	Lithospérmum		33
1306		L. see Arnèbia		2871
1524		Litsæ'a		331
1524		L. s e Tetranthèra		3317
784	1080	Littoréлla		1967
1188		Litzèa, *s*		2040
68		Live-grass		17
1182		Livistònia		2572
298		Lizard's-tail		872
75		Loaf sugar, *n*		
658 / 1246 / 1438	1069	Loàsa		1602
1438		L. see Calophora		3171
	1069	LOÀSEÆ, Or. 67		
166 / 1164	1075	Lobèlia		464
1318		L. see Centropógon		2919
1320		L. see Isótoma		2918
1320		L. see Siphocámpylos		2939
1264		Lockhártia, *s.*		2837
346		Locust-tree		971
610	1066	Loddigèsia		1539
1526		Lodoícea		3325
36	1080	Lœflingia		91

Lin.	Nat.		Sp.	Gen.
[illegible]	[illegible]	Loxèlia, *s*		290
13	1077	Loxónia		868
[illegible]		L. see Geniόstoma		2876
351		Lyewood		985
79	1080	Lòlium		307
1264				
680	1080	Lomària		2182
84	1081	Lomàtia		245
1264				
861	1080	Lonchitis		2192
766		London pride	6063	1041
540		London rocket	9172	1412
902		Longan	5102	883
718	1073	Longchàmpsia		1764
170	1071	Lonicera		475
132				
914		Looking-glass plant		2037
128		Loose strife		356
6	1069	Lopèzia		18
1284				
1224		Lophánthus		2649
344	1085	Lophìola		718
1430	1080	Lòphium		2426
1 28		Lophospérmum		2676
161				
1424		Loptòmia		3148
42	1077	Loquat		1137
	1071	Lora'nthem, Or		83
610		Lord Anson's pea	10368	1558
178		Lote-tree	2897	506
648	1066	Lòtus		1601
1244		L. see Honáckia		2717
1388		L. see Nymphæ'a		1174
1354		Loudònia		3004
1444		L. see Adésmia		2716
854	1082	Loureira		2119
528		Lousewort		1349
220		Lovage		665
186		Love-apple	2517	481
68		Love grass	1210	198
780	1080	Love-lies-bleeding	13302	1975
142	1080	Lubìnia		302
1300		L. see Lysimàchia		356
600		Lucern	10892	1605
1160				
1324		Lucùlia		2542
1214		Lùdia		2638
104	1066	Ludwigia		309
784	1081	Luffa		1976
844	1078	Lunaria		1915
122		Lungwort		338
640	1080	Lupinaster		1599
614				
1200	1066	Lupine		1544
1430				
614				
1200	1066	Lupinus		1544
1430				
1424		Luvùnga		3141
1300		Luxemburgia		3069
258	1087	Luzula		761
1342		Luzuriàga		2976
1430		Luzuriàga, *s*		2586
1468		Lycáste		3221
142		Lychnidea		369
388	1059	Lychnis		1067
1198		L. see Agrostémma		1066
1198		L. see Viscària		2020
1430	1078	Lycium		450
1316		L. see Bérberis, *n.*		
1316		L. see Chænéstes		2909
1436	1061	Lycógala		2456
1434	1064	Lycopérdon		2443
52	1080	Lycopòdium		2212
78	1078	Lycópsis		344
444		L. see Arnèbia		2875
78	1079	Lycópus		55
1336		Lycóris		2968
52	1069	Lygeum		132
886	1090	Lygódium		2206
7		Lyme grass		208
52	1091	Lyngbia		2287
1276		Lysònia		3021
1304		Lysonia		2899
138				
1316	1080	Lysimàchia		356
142		Lysinèma		399
1446		Lysionòtus, *s.*		3127
1284	1068	Lythrum		1094
1284		L. see Heimia		1094
448	1075	Màba		1096
48	1076	Mabolo-fruit	14373	2159

Lin.	Nat.		Sp.	Gen.
788		Macaw-tree	13322	1983
850	1081	Mace, *n.*		
1444		Machæranthèra		3185
1366		Macleània		3024
784	1083	Maclùra		1969
1302		Macoucoùa, *s*	18398	315
756	1085	Macradènia		1898
1260		M. see Epidéndrum		1907
1372		Macræ'a, *s*		3043
1266		Macrochilus, *s.*		2811
1404		Macróchlamys		3066
162	1072	Macrocnèmum		457
1306		Macromèria		2874
542	1057	Macropòdium		1391
1526		Macrozàmia, *n.*		
394		Madagascar nutmeg		1077
1358		Madagascar nutmeg, *n*		
1248		Madària, *s*		1735
160		Mad apple	2566	481
94	1071	Madder		267
334		Madeira mahogany, *n*		
1418		Madeira stock	19865	1381
352		Madeira wood, *n.*		
704				
1248	1074	Màdia		1735
544		Madwort		1401
1308		Magic tree, *n.*		
478				
1218	1055	Magnòlia		1217
1218		M. see Talaúma		2648
	1055	Magnoliàceæ, Or		3
1234		Mahernia		2689
352	1062	Mahogany-tree		990
1180		Mahònia		2587
1346		M. see Berberis		829
	1055	Mahonias		
1528		Mai	21200	3328
884		Maiden-hair		2194
798		Maiden hair-tree	13441	2003
36		Maiden plum		85
	1088	Maize		
288		Malabar nightshade		693
18		Malabar nut	302	47
1488		Malachadènia		3242
584	1059	Málachra		1476
764	1085	Maláxis		1925
1450		M. see Micróstylis		1927
1450		M see Oberònia		2749
416		Malay apple-tree	6958	1119
518	1067	Malcòmia		1420
884		Male-fern	14590	2199
1234		Maleshérbia		2690
1190		Mal de ojos, *n*		
582	1059	Málope		1471
582				
1236	1059	Mallow		1472
380	1060	Malpighia		1054
	1060	Malpighiàceæ, Or		34.
73		Malt, *n.*		
582				
1236	1059	Málva		1472
1424				
	1059	Malva'ceæ, Or		23.
466	1061	Mammèa		1190
150		Mammee	2409	427
466		Mammee-tree		1190
1200				
1378		Mammillària		2626
812		Manchineel		2030
1312		Mandevílla		2894
814		Mandioca, *n*		
154	1078	Mandrágora		447
154	1078	Mandrake		447
161		Man-dram, *n*		
100				
1152	1072	Manéttia		296
1300				
180	1064	Mangifera		513
1294		Manglèsia, *s*		2512
152	1076	Manglilla		434
6		Mango-ginger	94	14
394		Mangosteen		1079
180	1064	Mango-tree		513
394	1071	Mangrove		1078
1514		Manicària		3296
862	1089	Maniatùris		2135
26	1076	Manna, *n.*		
26		Manna ash	484	69
62		Manna seeds, *n.*		
631		Manna trungebeen, *n.*		
6	1085	Mantísia		16

Lin.	Nat.		Sp.	Gen.
532	1078	Manù'lea		1370
1416		M see Chænóstoma		3129
864				
1278	1060	Maple		2143
2				
1144	1085	Marànta		2
1284				
1284		M. see Phrynium, *s*		5
888	1070	Maráttia		2210
1350		Marcètia		2998
458	1060	Marcgravia		1163
	1060	Marcgravia'ceæ, Or		32.
922	1091	Marchàntia		2284
6		Mare's-tail		23
46				
1292	1086	Màrica		117
1346		M. see Eleutherino		2989
506	1079	Marjoram		1274
1324		Marianthus		2927
50	1089	Maríscus		130
173		Marmalade box, *n*		
504	1079	Marrùbium		1266
57		Marrum, *n*		
198				
1328	1077	Maradènia		891
690	1074	Marshàllia		1694
452		Marsh cinquefoil	7875	1152
584		Marsh mallow		1474
490		Marsh marigold		1239
218		Marsh pennywort	3656	658
7		Marsh samphire, *n.*		
264		Martagon	4495	771
1502		Martinèsia		3258
516				
1226	1079	Martynia		1300
1708				
1411		M. see Chirita		3194
	1079	Màrum		
118	1080	Marvel of Peru		322
740		Marigold		1830
1264				
1480		Masdevállia		2802
278	1086	Massònia		805
1180		M see Daubènya, *s*		2580
1410		Mastacánthus		3117
220		Masterwort	662	
222			674	
508		Mastick	8411	1275
834	1064	Mastick tree	13893	2065
52		Mat-grass	137	
56			162	
722	1073	Matricària		1771
538				
1418	1057	Matthìola		1381
120	1078	Máttia		328
528				
1228	1078	Maurándya		1347
836				
1524	1088	Mauritia		2080
758				
1262	1085	Maxillària		1852
1466				
1470		M. see Bifrenaria		2776
1468		M see Cólax		3222
1176		M see Cymbidium		1885
1470		M see Houlletia		3225
1468		M see Lycáste		3221
1468		M see Paphinia		3220
1468		M. see Prominæ'a		3218
1468		M. see Scuticària		3219
1474		M see Stanhòpea		2786
1464		M. see Wárrea		3211
1502		Maximiliàna		3262
460				
566, *n.*		May apple	7652	1166
10				
1144	1063	Màytenus		31
528	1078	Mázus		1353
128		Meádia, *n*		
66		Meadow grass		196
484		Meadow rue		1229
292		Meadow saffron		851
214		Meadow saxifrage		642
428		Meadow sweet	7148	1141
60		Meal, *n*		
462				
1388	1056	Meconópsis		1171
290	1086	Medèola		846
646				
1436	1066	Medicàgo		1605

Lin.	Nat.		Sp.	Gen.
646		Medick		1606
1368		Medinilla		3029
424	1067	Medlar		1131
1383		Medlar-wood, *n.*		
402		Medusa's head	6697	1103
1452		Medusa's head	20223	2755
1268 / 1452		Megarlinium		2753
68 / 652	1089	Megastachya		198
1244 / 1436	1068	Melaleuca		1610
1436		M see Astartea		3169
740	1074	Melampodium		1828
520	1078	Melampyrum		1315
690	1074	Melananthera		1693
684		Melancholy thistle, *n.*		
1280		Melanorrhœa		2851
	1087	Melantha'ceæ, Or		164
290	1087	Melanthium		845
42	1086	Melasphæ'rula		104
364	1068	Melastoma		1029
1368		M. see Charianthus		3027
1368		M see Medinilla		3029
1360		M see Oxyspora		2994
1368		M see Tetrazygia		3034
	1068	Melastoma'ceæ, Or		62
504	1060	Melhania		1457
352	1062	Melia		998
	1062	Melia'ceæ, Or. 43.		
514	1062	Melianthus		1293
66	1089	Melica		193
66		Melic-grass		193
1169		Melichrus		2528
302	1060	Melicocca		891
640		Melilot		1598
640 / 1436	1066	Melilotus		1598
508 / 1398	1079	Melissa		1278
1398		M. see Calamintha		1277
510	1079	Melittis		1280
1314		Melloca, *n.*		2902
1315		Melloco, *n.*		
1200		Melocactus		2624
564	1060	Melochia		1456
194	1077	Melodinus		573
810	1068	Melon	13573	2022
410 / 1200		Melon-thistle		2024
926	1091	Meloselra		2262
322	1082	Memecylon		908
878	1090	Meniscium		2172
	1055	Menispe'rmeæ, Or		5
844	1055	Menispermum		2100
1524		M. see Coscinium		3313
500	1079	Mentha		1251
1222		M. see Aphanochilus		2650
1222 / 1398		M. see Dysophyl'la		2651
468 / 1214	1069	Mentrelia		1194
130	1077	Menyanthes		362
316	1075	Menziesia		893
840	1082	Mercurialis		2088
840		Mercury		2088
1182		Merendera		2591
1368		Meriania		3028
1006	1092	Merulius		2369
480	1069	Mesembryanthemum		1146
932	1091	Mesoglœa		2282
424	1067	Mespilus		1131
1208		M. see Amelanchier		1138
1208		M see Cotoneaster		1139
1204 / 1394		M see Crataegus		1132
1241		Mesua, *n*		
1528		Metai	21200	3328
304	1060	Metaiba		886
700	1073	Metalasia		1726
1324		Metrodorea		2930
416 / 1380	1068	Metrosideros		1117
1382		M. see Angophora		3056
1380		M. see Billotia		3051
1382		M. see Callistemon		3057
1382		M. see Eucalyptus		1126
1436		M. see Melaleuca		1610
216	1070	Meum		653
252		Mexican lily	4239	739
638		Mexican tea	10750	1597
562		Mexican tiger-flower	9343	1452
1410		Meyenia		3116
1316		M see Habrothamnus		2906
728	1074	Meyera		1787
322		Mezereon	5526	910
1352		Mezereum, *s*		910
710		Michaelmas daisy	12037	1739
316	1075	Michauxia		895
480	1055	Michelia		1219
72	1089	Microchloa		211
196	1077	Microloma		578
1222		Micromeria		2656
1266		Micropera		2816
744	1073	Micropus		1839
1438		Microsperma		3172
764 / 1450	1085	Microstylis		1927
1360		M. see Pultenæa		965
1266 / 1492		Microtis		2835
400		Mignonette	6676	1102
698	1073	Mikania		1683
1022 / 1041, *n*		Mildew		2108
726		Milfoil		1781
52	1089	Milium		141
220		Milk parsley		663
149		Milk tree, *n.*		
636		Milk vetch		1594
870		Milk wood	14364	2158
602		Milk wort		1508
738	1074	Millèria		1822
52		Millet grass		141
1266 / 1484		Miltonia		2811
1486		M. see Brassia		1886
82	1081	Mimetes		213
854 / 1530	1067	Mimosa		2124
1530		M see Acacia		2127
1530		M. see Neptunia		3332
1530		M. see Prosopis		3333
528 / 1230	1078	Mimulus		1351
1412		M see Diplacus		2678
302 / 1300	1076	Mimusops		881
1410		Mina		2888
500	1079	Mint		1254
76	1080	Minuartia		226
118	1080	Mirabilis		322
346 / 1190 / 1362	1066	Mirbelia		967
1398		M see Chorozema		949
1517		Miro-mairi, *n.*		
830	1071	Mistletoe		2054
100	1072	Mitchella		294
368	1070	Mitella		1013
1404		Mitraria		3093
1014	1092	Mitrula		2383
794		Mocker nut, *n.*		
836	1068	Modecca		2075
324	1059	Mœhringia		920
510		Moldavian balm	8446	1279
702	1074	Molina		1733
66	1089	Molinia		194
194	1080	Mollia		567
76	1059	Mollugo		225
506		Molucca balm		1271
506	1079	Moluccella		1271
808	1069	Momordica		2020
1262		Monachanthus		2784
1472		M see Catasetum		1889
560		Monade'lphia, Cl 16.		
562		M Tria'ndria, Or 1.		
562		M Penta'ndria, Or. 2		
568		M. Hepta'ndria, Or. 3		
578		M. Octa'ndria, Or. 4.		
578		M Deca'ndria, Or. 5.		
580		M Dodeca'ndria, Or 6		
582		M Polya'ndria, Or. 7.		
1		Mona'ndria, Cl. 1.		
2		M Monogy'nia, Or. 1.		
8		M Digy'nia, Or. 2.		
20	1079	Monarda		60
1146 / 1288	1079	Monarda		60
1400		Monardella		2084
72	1089	Monerma		213
100	1077	Monetia		296
128		Money-wort	2058	350
1088	1093	Monilia		2402
528 / 1230	1078	Monkey-flower		1351
592		Monkies'-bread, *n*		
474		Monk's-hood	7872	1220
600	1063	Monnieria		1503
1240 / 1428		Monnina		2709
	1080	Monochlamy'de'æ, Subd 2		
	1084	Monocotyle'donez, Cl 2.		
768		Monce'cia, Cl 21		
770		M Mona'ndria, Or. 1.		
772		M Dia'ndria, Or 2		
772		M Tria'ndria, Or 3.		
780		M Tetra'ndria, Or 4		
786		M Penta'ndria, Or 5.		
788		M. Hexa'ndria, Or 6.		
790		M Polya'ndria, Or 7		
800		M Monade'lphia, Or 8		
1442		Monolobia		3162
142		Monotoca		409
356	1075	Monotropa		1008
580	1061	Monsonia		1465
1510		Monstera		3240
1236		Montezuma		2645
70	1069	Montia		224
832	1069	Montinia		2 64
844		Moon-seed		2100
616		Moon-trefoil	10890	1605
886		Moon-wort		2200
46	1086	Moræa		116
1234		M see Cypella		2
1150		M see Diætes		2
1014	1092	Morchella		2366
1014		Morel		2366
554	1057	Moricandia		1434
26 / 1290	1072	Morina		70
174	1072	Morinda		466
1258		Morisonia		2655
1262 / 1172		Mormodes		2785
462		Morphia, *n.*		
782	1083	Morus		1900
678 / 1252	1073	Moscaria		1
328		Moschatel		1
894		Mosses		1
506		Motherwort		1277
994		Mouceron, *n.*		
934	1091	Mougeotia		2350
1040	1092	Mouldiness		2402
426		Mountain ash	7101	1135
355		Mountain damson, *n*		
346		Mountain ebony		970
	1065	Mountain liquorice		
294		Mountain sorrel		857
863		Mountain spinach, *n*		
672		Mouse-ear	11184	1635
388		Mouse-ear-chick-weed		1008
64 / 234		Mouse tail		183 / 717
1404		Moussonia		3067
632		Moving-plant	10568	1588
699		Moxa, *n.*		
1036	1093	Mucor		2460
532		Mudwort		1339
698		Mugwort	11733	1791
54	1089	Muhlenbergia		151
782	1083	Mulberry		1700
1440		Mulgedium		3170
132		Mullein		377
626	1066	Mullera		1500
602	1058	Mundia		1500
1362		Munronia		3033
464	1060	Multingia		1140
602	1058	Muraltia		1502
356	1062	Murraya		1066
1382		Murtilla, *n*		3138
1422		Murucuia, *s.*		721
244 / 1170	1085	Musa		5708
	1085	Musa'ceæ, Or. 163.		821
284	1066	Muscari		
423		Muscle plum, *n*		

Lin.	Nat.		Sp.	Gen.
75		Muscovado sugar, *n.*		
1408		Mushroom	16013	2365
305		Musk okro	9639	1480
174	1072	Mussæ'nda		491
1333				
854	1057	Mustard		1473
1299		Mutísia		2733
852	1057	Mỳagrum		1431
1402		Mỳánthus		2783
1403		M see Catasètum		1889
1472		Mycaránthes		3203
1434		Mycinèma		2274
91	1061	Mỳgalòrus		184
94	1060	Mỳginda		314
104	1063	Mỳlocárpum		1021
362	1 73	Mỳoporà'ncæ, Or.		115
1	1 71			
934	1079	Mỳóporum		1332
1412				
858	1073	Mỳóseris		1640
1314	1078	Myosòtis		326
1354				
231	1044	Myosúrus		707
1444		Myriactis		3191
859	1083	Myrica		2085
1 21	1062	Myriocóccum		2414
7 0	1060	Myriophýllum		1987
859	1081	Myristica		2120
	1081	Myristi'cæ, Or		130.
422		Myrobalan plum		
			7047	1129
1 2	1039	Myrodia		1473
212		Myrrh		630
212	1071	Mỳrrhis		630
870	1079	Mỳrsine		2160
	1075	Myrsi'neæ, Or	95.	
290	1080	Myrsiphýllum		843
	1068	Myrta'ceæ, Or.	63	
1443		Myrtilla, *n.*		
414				
1402	1066	Myrtle		1121
415				
1402	1068	Mỳrtus		1121
1402				
1382		M see Eugènia		1119
1043	1093	Næmáspora		2495
1370	1092	Næmatélia		2402
852	1083	Nagèia		2056
1384		Nagélia		3062
	1087	Nai'adæ, Or	171.	
1 91		Naked barley, *n.*		
90		Naked oat, *n.*		
486	1055	Nandina		830
1 1		Nandòrea		2771
1 4		Nap lèona		3144
482	1 54	N ravèlia		1228
240				
1 4	1060	Narcissus		711
1 1	1 0	Nardus		137
1 1	1 0	Narthècium		813
1358		Nárthex		2947
1 0		Naseberry tree	2411	427
858	1057	Nastúrtium		1383
353		Native gum, *n.*		
291		Natural marmalade, *n*		
192	1072	Naúclea		521
344	1074	Nauenbèrgia		1847
1 0		Naussaúvia, *s*		1656
1 4		Nauticalyx, *s.*		3095
1312		Navarettia		2523
39		Navelwort		1060
1 2	1091	Neckera		2447
311		Necklace-tree, *n*		
429	1067	Nectarine	7020	1128
901		Negro Guinea corn, *n*		
864	1069	Negúndium		2144
184		Neíllia		3060
1408		Neippérgia, *s.*		3 23
1 0		Nèja		2732
475				
1 2	1096	Nelúmbium		1213
476				
1458		Nelumbo *n*		
1404		Nemaránthus, *s*		3204
595		Nematanthus		3090
1224	1078	Nemèsia		1346
146				
1160	1078	Nemóphila		386
1310				
754	1084	Neóttia		1873
1368		N. see Peléxia		2836
1454		N see Stenorhýnchus		
1294		Nepal barley, *n.*		1875
852	1073	Nepénthes		2121

Lin.	Nat.		Sp.	Gen.
1530	1093	Nepénthes		2121
498	1079	Népeta		1249
1398				
786	1060	Nephèlium		1971
966	1092	Nephròma		2346
1530		Neptúnia		3333
252	1096	Nerine		738
1338		N. see Lycòris		2968
146	1076	Nèrium		411
398	1068	Nesæ'a		1005
550	1057	Néslia		1426
782		Nettle		1962
861		Nettle-tree		2145
1943		Neurocárpum		2713
694	1073	Neurolæ'na		1710
	1062	New Holland cedar		
178		New Jersey tea		
			2918	510
1529		New spruce tree of New Zealand, *n.*		
	1086	New Zealand flax		
430		New Zealand spinage		
			7161	1145
414		New Zealand tea		
			6918	1115
134	1078	Nicándra		380
350		Nicker-tree		979
136				
1158	1078	Nicotiàna		382
1308				
1024	1092	Nidulària		2413
1158		Nierembèrgia		2519
470	1074	Nigélla		1209
13		Night-flower, *n.*		
318		Night-primrose, *n.*		
156	1078	Nightshade		451
752	1085	Nigritélla		1860
800	1088	Nipa		2008
1414		Niphæ'a		3122
678		Nipplewort		1651
604	1066	Nissòlia		1512
946	1091	Nitélla		2294
396	1069	Nitrària		1090
82	1081	Nivènia		235
124				
1154	1078	Nolàna		347
1306				
292	1087	Nollna		853
185		Nolitangere, *n*		
124				
1154	1078	Nònea		343
646		Nonesuch	10898	1605
846		Norfolk Island pine		
			14048	2112
804		Norway deal, *n.*		
804		Norway spruce		
			13550	2013
928	1091	Nóstoc		2268
12	1076	Notelæ'a		35
880	1090	Nothochlæ'na		2177
540	1047	Notoceras		1385
758				
1480	1085	Notýlia		1893
1522		Nundèzia, *s.*		2078
464	1056	Núphar		1176
850	1081	Nutmeg		2120
1516		Nut pine, *n.*		
792		Nut-tree		1994
1236		Nuttállia	9699	
1524			3118	
1424		N see Málva		1472
	1076	Nux vomica tree		
	1080	Nyctagi'neæ, Or.	123	
12	1076	Nyctánthes		38
1162		Nycteri'tition		2511
160	1078	Nyctèrium		452
462				
1388	1056	Nymphæ'a		1171
1388		N see Victòria		3061
	1055	Nymphæa'ceæ, Or.	9	
870	1082	Nýssa		2161
774	1083	Oak		2000
	1083	Oak gall		
58	1088	Oat-grass		171
1254		Oberònia		2749
1450				
1315		Oca-quina, *n.*		
468	1063	O'chna		1191
	1063	Ochna'ceæ, Or.	51.	
564	1099	Ochròma		1458
620	1066	O'chrus		1559
548	1057	Ochthòdium		1415
300		Octa'ndria, Cl	8	
302		O Monogy'nia, Or	1	

Lin.	Nat.		Sp.	Gen.
334		O. Digy'nia, Or.	2	
336		O Trigy'nia, Or.	3.	
338		O Tetragy'nia, Or.	4.	
762	1085	Octomèria		1913
1448				
1454		O. see E'ria		1919
810	1079	O'cymum		1981
1348				
1398		O see Bècium		3079
1474		O lontoglóssum		3235
1486		O see Brássia		1896
1484		O see Miltònia		2911
1482		O see Oncídium		1895
1266		Œcoclades		2019
1488		Œ see Angræ'cum		1921
744	1073	Œ'dera		1814
212				
1330	1070	Œnánthe		632
1502		Œnocárpus		3256
176	1063	Œnóplia		504
318				
1184	1069	Œnothèra		901
1350				
1186		Œ see Godètia		2596
870		Ogechee-lime		
			14385	2161
870		Oil-nut		2162
	1065	Oil of ben		
333		Oil of camphor, *n*		
333				
417	1068	Oil of cloves, *n.*		
342		Oil of roses, *n*		
814		Oily grain		1296
836		Oily palm		2017
	1062	Olaci'neæ, Or	48	
100				
1152	1072	Oldenlándia		295
666		Old man's beard		1630
10	1076	O'lea		32
146	1076	Oleander		411
1442		Oleària		3184
90		Oleaster		259
	1076	Ole'ineæ, Or.	99	
849				
1442		Olibanum, *n.*		
1368		Olinia		3035
10	1076	Olivo		32
364		Olive bark-tree		1033
212	1071	Olivèria		628
180		Olive-wood		516
418	1068	Olỳnthia		1124
780	1089	Olỳra		1954
510		Omine plant	8182	1282
812	1083	Omphálea		2029
1236		Omphalòbium		2693
122	1078	Omphalòdes		337
	1069	Onagra'riæ, Or.	69.	
758				
1264	1085	Oncídium		1895
1480				
1484		O see Cochlius		3238
1484		O. see Miltònia		2811
1502		Oncospérma		3259
74		Onion	4086	796
686	1074	Onobrùma		1674
1434		Onobrychis		3164
880	1090	Onoclèa		2178
112				
1430	1066	Onònis		1541
684	1074	Onopórdum		1666
1440		O. see Rhapónticum		
				3175
1250		Onóseris, *s.*		2734
1252				2716
120				
1154	1078	Onósma		332
122	1078	Onosmòdium		335
1032	1093	Onýgena		2410
974	1092	Opégrapha		2360
6		Opera girls	90	16
88	1072	Operculària		250
	1072	Opercularinèæ, Or		85
1300		Ophèlia		2469
888	1090	Ophioglóssum		2209
272				
1342	1086	Ophiopógon		790
144	1072	Ophiorhiza		406
846	1077	Ophióxylon		2152
72	1089	Ophiúrus		212
752				
1490	1085	O'phrys		1866
1490		O see A'ceras		1865
461	1056	Opium, *n.*		
1170		Oplothèca		2551

Lin	Nat		Sp.	Gen.
1202 / 1390		Opúntia		2629
862		Orache		2138
552	1062	Orange-tree		1615
1512		Orània		3291
	1091	Orchal		
	1084	ORCHIDEÆ, Or	150	
750 / 1490	1085	O'rchis		1859
1490		O. see A'ceras		1865
1490		O see Angræ'cum		1921
1492		O see Habenà'ria		1861
1314		Ordeal-tree of Madagascar		420
1354		Oreodáphne		3006
506	1079	Origanum		1274
340	1066	Ormòsia		942
1466		Ornithà'rium		3217
760 / 1466	1085	Ornithídium		1902
1450		O see Pholidòta		1904
762	1085	Ornithocéphalus		1910
1466		Ornithochílus, *s.*		3217
276 / 1344	1086	Ornithógalum		802
1344		O see Scílla		803
628	1066	Ornithopus		1578
302	1060	Ornitrophe		882
26	1070	O'rnus		69
524 / 1412	1078	Orobánche		1335
	1078	OROBA'NCHEÆ, Or.		111.
618 / 1242 / 1432	1066	O'robus		1557
1432		O. see Platystylis		3162
256	1089	Oróntium		756
228		Orpine		689
46		Orrice-root, *n.*		
36	1059	Ortègia		91
54	1089	Orthopógon		147
906	1091	Orthótrichum		2233
1232		Orthrosánthes		2684
288	1089	Oryza		837
52	1089	Oryzópsis		138
784		Osage orange		1969
316 / 1350	1068	Osbéckia		899
932	1091	Oscillatória		2285
826		Osier	13802	2042
732	1073	Osmites		1806
886	1090	Osmúnda		2205
742	1074	Osteospérmum		1832
792	1083	O'strya		1995
22		Oswego tea	364	60
828	1082	Osýris		2051
382		Otaheite apple	6102	1059
362		Otaheite chestnut		1024
788		Otaheite myrtle		1978
696	1073	Otánthus		1715
742	1074	Othónna		1833
1460		Otochílus		3208
	1061	OXALIDEÆ, Or.	89	
384 / 1196 / 1372	1061	O'xalis		1065
728		Ox-eye		1797
720		Ox-eye daisy	12238	1769
126		Ox-lip	2021	350
674		Ox-tongue		1634
172 / 1322	1072	Oxyánthus		489
1322		O. see Posoquèria		485
320	1075	Oxycóccus		906
342 / 1358	1065	Oxylòbium		951
1360		O see Gastrolòbium		963
1362		O see Mirbèlia		967
1328		Oxypétalum		2943
1434		Oxyrámphis		3165
294	1081	Oxýria		857
1350		Oxýspora		2994
196	1077	Oxystélma		582
636	1066	Oxýtropis		1593
1250		Oxýtra		2739
1038	1093	Ózonium		2474
1248		Ozothámnus		2725
1426		Pachíra, *s.*		1490
1518		Pachýlepis, *s.*		3403
1196		Pachynéma		2611
1374		Pachýphyton, *s.*		2618
1162		Pachypódium		2533
784	1082	Pachysándra		1963
1390		Pachystígma		3068
152	1072	Pædèria		439
472 / 1216 / 1390	1055	Pædònia		1202
472 / 1216		Pæony		1202
686	1073	Palafóxia		1678
588	1059	Palàvia		1483
178 / 1166	1063	Palùrus		505
259	1088	Palm, *n.*		
814		Palma Christi		2034
	1088	PA'LMÆ, Or.	173	
926	1091	Palmélla		2265
790		Palm-oil, *n.*		
1524		Palm wine, *n.*		
1279		Palo de vaca, *n*		
1522		Pampas grass, *n*		
872	1070	Pánax		2166
242 / 1174	1086	Pancrátium		712
1338		P see Callithaúma		2965
1332		P. see Cobúrghia		2560
1334		P see Hymenocállis		2951
1334		P see Stenomesson		2561
	1087	PANDANEÆ, Or.	170	
820 / 1522	1087	Pandánus		2041
52		Panic-grass		144
52	1089	Pánicum		144
460 / 1212	1056	Papáver		1170
	1056	PAPAVERA'CEÆ, Or.	10	
842	1068	Papaw-tree		1095
832		Paper mulberry	13880	2059
1468		Paphínia		3220
50	1089	Papýrus		128
	1063	Paraguay tea		
1300		Paraguay tea, *n.*		
48	1086	Pardánthus		118
848	1055	Pareira brava root		2116
789		Pariah arrack, *n.*		
862	1083	Parietària		2137
298	1067	Parinàrium		870
328	1086	Páris		929
604	1067	Parivòa		1519
1236		Párkia		2694
350	1067	Parkinsònia		976
962	1092	Parmèlia		2341
228	1061	Parnássia		691
192	1080	Paronychia		557
1244		Parrot's bill, *s.*		2715
540	1057	Párrya		1388
216		Parsley		651
518		Parsley-leaved pine, *n*		
88		Parsley-piert	1519	255
222	1070	Parsnep		671
1314		Parsónsia		2898
744	1074	Parthènium		1840
128	1074	Pascália		1795
52 / 1292	1089	Páspalum		139
482		Pasque flower	7957	1226
324	1082	Passerina		914
564 / 1234 / 1422	1068	Passiflòra		1459
1422		P. see Disémma		3138
1422		P. see Tacsònia		3139
564 / 1234	1068	Passion flower		1459
	1068	PASSIFLÒREÆ, Or.	65	
222	1071	Pastináca		671
562 / 1420	1086	Pateraònia		1450
292		Patience	4997	856
326		Patience dock, *n.*		
34	1072	Patrínia		79
1212		P. see Ryánea		2635
328	1060	Paullínia		923
1416		Paulòwnia		3130
100 / 1300	1072	Pavétta		290
1300		P see Ixòra		288
1182	1060	Pávia		2593
584	1059	Pavònia		1478
1260		Paxtònia		2759
620	1065	Pea		1560
420	1067	Peach	7020	1128
426	1067	Pear	7086	1130
73		Pearl-barley, *n.*		
106		Pearlwort		317
718	1074	Péctis		1763
	1079	PEDALÍNEÆ, Or.	114	
524	1079	Pedálium		1231
528 / 1412	1078	Pediculària		1349
406	1083	Pedilánthus		1164
1456		Pedilònum, *s.*		1956
60		Peel corn, *n.*		
396	1062	Péganum		1068
794		Pekan-nut, *n.*		
568	1061	Pelargònium		1405
1268		Peléxia		2805
272	1086	Peliosánthes		780
862		Pellitory		2137
724		Pellitory of Spain	12330	1[illegible]
1508		Peltándra		3[illegible]
544	1057	Peltària		1413
966	1092	Peltídea		2340
98 / 1152		Penæ'a		282
54	1089	Penicillària		144
1040	1093	Penicillium		2464
52	1089	Pennisètum		133
546		Penny cress	9064	14[illegible]
500		Pennyroyal	8254	1254
496		Pennyroyal-tree	8157	1249
218		Pennywort		[illegible]
108		PENTA'NDRIA, Cl.	5	
118		P MONOGY'NIA, Or.	1	
194		P DIGY'NIA, Or.	2	
224		P TRIGY'NIA, Or.	3	
228		P TETRAGY'NIA, Or.	4	
228		P. PENTAGY'NIA, Or.	[illegible]	
234		P. POLYGY'NIA, Or.	[illegible]	
580	1060	Pentápetes		1[illegible]
1224 / 1324		Pentaràphia		[illegible]
1318		Péntas		2[illegible]
384	1070	Pénthorum		[illegible]
514 / 1226 / 1406	1078	Pentstèmon		1[illegible]
696	1073	Péntzia		1[illegible]
288	1068	Pèplis		[illegible]
28	1084	Pepper		[illegible]
942		Pepper dulse	15287	[illegible]
894		Pepper-grass	14649	2[illegible]
500		Peppermint	8229	[illegible]
418		Peppermint-tree	6916	[illegible]
501		Peppermint water, *n*		
543		Pepper-root, *n*		
176		Pepper-vine	2[illegible]	
552		Pepperwort		[illegible]
716	1074	Perdícium		[illegible]
1442		P see Chabræ'a		[illegible]
1202		Peréskia		[illegible]
198	1077	Pergulària		[illegible]
1248		Pericállis, *s.*		[illegible]
502	1079	Perilla		[illegible]
1222		Perilòmia		[illegible]
1400		P. see Scutellària		[illegible]
1022	1092	Periòla		[illegible]
1308		Periphrágmos, *s*		[illegible]
194	1077	Periploca		[illegible]
588	1059	Periptera		[illegible]
1264 / 1474		Peristèria		[illegible]
1468		P see Acinèta		[illegible]
1492		Peristylis		[illegible]
1418		Peritoma, *s.*		[illegible]
146		Periwinkle		[illegible]
1194 / 1366		Pernéttya		[illegible]
74	1089	Pérotis		[illegible]
326		Persicària		[illegible]
84 / 1294	1081	Persoónia		[illegible]
1260		Pesomèria		[illegible]
	1081	Peruvian cinnamon		
705		Pestilent-wort, *n*		
1408		Petalídium		[illegible]
364	1068	Petalòma		[illegible]
600	1066	Petalostèmum		[illegible]
296	1081	Petivèria		[illegible]
520	1079	Petrèa		[illegible]
694	1074	Petròbium		[illegible]
544	1057	Petrocállis		[illegible]
80 / 1294	1081	Petróphila		[illegible]
612		Petty-whin	10176	[illegible]
1158		Petúnia		[illegible]
222	1071	Peucédanum		

Lin.	Nat.		Sp.	Gen.
1536		Pedmos, *s.*		3319
444	1083	Pedmus		2103
1016	1059	Pedza		3290
636	1065	Phâca		1502
132	1078	Phacèlia		373
1134				
1200				
1020	1088	Phacidium		2433
1324		Phædranâssa		2962
1196		Phædostoma, *s.*		2697
1263		Phâlus		2770
1454				
1266		Phalænópsis		2814
1446				
48	1089	Phâlaris		168
1022	1082	Phâllus		2409
1422		Phalocâllis		3137
1134		Pharbitis		2521
1310				
228	1049	Pharnáceum		691
780	1089	Phârus		1980
900	1091	Phâscum		2217
614	1096	Phaséolus		1547
1431				
516	1079	Phaylópsis		1303
484		Pheasant's-eye		1230
1190		Phebâlium		2604
1362				
574	1070	Phellándrium		636
1334		Phenakospérmum		2955
	1070	PHILADÉLPHEÆ, Or.		76
414				
1202	1070	Philadelphus		1114
1390				
1342		Philèsia		2979
170		Philibertia		2554
12	1076	Phillýrea		33
1310		Philodéndron		3274
1234		Philothèca		2692
192	1080	Philóxerus		553
6	1087	Phlýdrum		17
1010	1092	Phlœbia		2377
98	1060	Phlœum		165
1200		Phlogacánthus		2856
960				
1222	1079	Phlómis		1268
1300				
1300		P see Eremóstachys		3077
140				
156	1077	Phlóx		369
1306				
828	1088	Phœ'nix		2049
1322				
760	1085	Pholidòta		1904
1450				
1400	1093	Phœma		2430
746	1086	Phórmium		823
426	1067	Photinia		1135
512	1079	Phrýma		1289
2				
1144	1085	Phrýnium		5
1264				
1336		Phycélla		2964
1336		P see Phædranâssa		2962
188	1063	Phýlica		542
1170		Phyllámphora, *s.*		2121
1180	1092	Phyllánthus		2027
1480		Phyllárthron		3102
308	1072	Phýllis		617
1340		Phyllocáctus, *s.*		2628
1518		Phyllócladus		3302
268	1086	Phyllóma		775
156	1078	Phýsalis		448
1432		Physalòbium		3158
1044	1093	Phýsarum		2454
1170		Physiánthus		2585
1328		P. see Schubértia		2937
412		Physic-nut		2033
1500		Physinga		2763
1308		Physochlaina		2883
1440		Physosiphon		3196
1422		Physostègia		2658
1330		Physostelma, *s.*		592
1492		Physúrus		3347
1534		Phytelephas		3335
108	1075	Phyteùma		465
1728		Phytocrène		3331
260	1063	Phytolácca		1071
262	1077	Piarànthus		595
1274		Picea		2845
1274				
1516		P. see A'bies		2013
	1081	Pichurim-bean		

Lin.	Nat.		Sp.	Gen.
11		Pickled olives, *n.*		
390		Pickpurse, *n.*		
372		Picotees, *n.*		
834	1064	Picrámnia		2067
668	1073	Picridium		1626
672	1073	Picris		1634
1194		Pieris		2605
1364				
624		Pigeon pea 10443		1566
1430				3156
782	1083	Pilea		1961
484		Pilewort		1232
894		Pillwort		2215
1024	1092	Pilóbolus		2415
894	1090	Pilulária		2215
1466		Pilúmna		3216
26				
1148	1082	Pimelèa		73
1290				
418	1068	Piménta		1133
128		Pimpernel		357
1156				
212	1070	Pimpinélla		635
174	1072	Pincknèya		492
802				
1270	1083	Pine		2012
246	1086	Pine-apple		726
20				
1288	1097	Pinguícula		52
370				
1196	1059	Pink		1046
1454		Pinòlia, *s.*		1912
412		Pin-pillow	6897	1111
802				
1270	1083	Pinus		2012
1514				
1274		P see A'bies		2013
1516				
1516		P. see Cèdrus		3300
1518		P. see Libocèdrus		3308
1274		P see Picea		2845
28	1084	Piper		77
	1084	PIPERÀCEÆ, Or		147
76		Pipewort		223
694	1073	Piquèria		1701
606				
1428	1066	Piscídia		1524
296	1080	Pisònia		864
832	1064	Pistachia-tree		2065
832	1064	Pistàcia		2065
1498		Pistia		3249
1014	1092	Pistillária		2385
620	1065	Pisum		1560
246				
1174	1087	Pitcairnia		728
1336				
1336		P. see Æchmèa		2961
1336		P see Pùya		2959
	1084	Pitch		
850		Pitcher-plant		2121
182				
1324		Pittósporum		522
1236		Plagiánthus		2698
1424		P. see Asterotrichion		3146
1430		Plagiolòbium		3154
208	1083	Plánera		616
798	1083	Plane-tree		2002
608		Plank-plant 10121		1531
	1080	PLANTAGÍNEÆ, Or		122.
96	1080	Plantàgo		278
		Plantain		278
244	1085	Plantain-tree		721
1170				570 *a*
108		Plant of gluttony, *n.*		
750	1086	Platanthèra		1857
1490				
798	1083	Platanus		2002
1318		Platycòdon		2916
606	1066	Platylòbium		1525
1240				
692	1074	Platýpteris		1698
1214		Platystèmon		2643
1214		Platystigma		2644
1432		Platýstylis		3162
1442		Plàzia, *s.*		3178
1390		Plectanthèra, *s*		3069
1252		Plectocéphalus		2744
1446				
1526		Plectocòmia		3324
510	1079	Plectránthus		1282
188	1063	Plectrònia		543
1368		Pleròma		3032
1368		P see Lasiándra		3031

Lin.	Nat.		Sp.	Gen.
1216		Pleuránthe		2646
728	1085	Pleurothállis		1894
1448				
1452		P. see Bolbophýllum		2754
756		P see Rodriguèzia		1883
1460				
174	1072	Plócama		495
702		Ploughman's spikenard		1732
816	1082	Plukenètia		2040
422	1067	Plum		1129
	1080	PLUMBAGÍNEÆ, Or.		121.
1304		Plumbagínélla		2871
118	1080	Plumbàgo		324
1304				
1304		P. see Plumbagínélla		2871
1304		P see Valorádia		2872
148	1076	Plumièria		415
1162				
66	1089	Pòa		196
1292				
1323		Poaia de Matto, *n.*		
342	1066	Podalýria		948
1358		P see Ammodéndron		3007
880		Pod fern		2181
806	1084	Podocárpus		2016
1516				
1526		P. see Dacrýdium		3328
1518		P. see Phyllócladus		3302
716	1073	Podólepis		1747
1250				
342	1066	Podolòbium		950
1188				
1358				
	1055	PODOPHYLLÀCEÆ, Or		7
460	1055	Podophýllum		1166
666	1073	Podospérmum		1624
828		Poet's cassia		2051
1398		Pogógyne		3076
786	1084	Pogònia		1879
1412		P see Myóporum		1332
908	1091	Póhlia		2239
1535		Pohon Upas, *n*		
350	1067	Poinciàna		977
1190				
1200		Poinséttia		2622
250		Poison-bulb	4187	735
152		Poison-nut	2146	437
226		Poison-oak	3801	681
	1077	POLEMONIA'CEÆ, Or.		106.
132				
1158	1077	Polemònium		370
1208				
254	1086	Polliánthes		747
6	1081	Pollíchia		21
496		Poly	8137	1244
650		POLYADÉLPHIA, Cl.		18.
650		P DECA'NDRIA, Or.		1.
652		P. POLYA'NDRIA, Or.		2.
456		POLYA'NDRIA, Cl.		13.
458		P. MONOGY'NIA, Or.		1.
470		P DI-TRIGY'NIA, Or		2.
474		P PENTAGY'NIA, Or.		3.
476		P. POLYGY'NIA, Or.		4.
1024	1092	Polyanglum		2415
240		Polyánthus	4008	711
876	1090	Polybótrya		2168
74	1080	Polycárpon		221
36	1081	Polycnèmum		92
602	1058	Polýgala		1508
1238				
	1058	POLYGA'LEÆ, Or		16.
852		POLYGA'MIA, Cl		23.
854		P. MONŒ'CIA, Or		1
868		P. DIŒ'CIA, Or.		2.
270	1086	Polygónatum		789
	1081	POLYGÒNEÆ, Or		127.
326	1081	Polýgonum		921
1352				
1354		P. see Fagopýrum		3003
1354		P. see Sarcogònum		3002
940	1091	Polyides		2110
740	1074	Polýmnia		1826
878	1090	Polypòdium		2175
878		Polypody		2175
56	1089	Polypogon		154
1006	1092	Polýporus		2372
938	1091	Polysiphònia		2299
1426		Polýspora		3152
760	1085	Polystàchya		1908
1454				

Lin.	Nat.		Sp.	Gen.
1042	1093	Polythrincium		2492
910	1091	Polytrichum		2241
180 / 1224	1063	Pomadérris		512
420	1068	Pomegranate		1127
1162		Ponceléția		2531
106 / 772		Pond-weed	316 / 1098	
1458		Ponêra		3204
604	1067	Pongâmia		1514
248 / 1176	1087	Pontedèria		730
754	1084	Ponthièva		1872
674		Poor Robin's plantain, *n.*		
840	1083	Poplar		2087
460 / 1213	1056	Poppy		1170
840 / 1524	1083	Pópulus		2087
976	1092	Porina		2362
940	1091	Pórphyra		2309
1288		Porphyrócoma		2855
102 / 1318	1072	Portlándia		462
800		Portland sago, *n.*		
422		Portugal laurel	7030	1129
396 / 1198 / 1374	1069	Portulâca		1091
228	1069	Portulacâria		692
	1069	Portula'ceæ, Or. 71.		
172 / 1322	1072	Posoquèria		485
106	1090	Potamogèton		317
205	947	Potash, *n.*		
156	1078	Potato	2521	451
59		Potato oat, *n.*		
73		Pot-barley, *n.*		
452 / 1210 / 1386	1067	Potentilla		1153
790	1067	Potèrium		1990
88	1089	Pòthos		252
1298		P. see Anthùrium		2868
1510		P. see Mónstera		3280
1510		P. see Scindápsus		3281
818		Pounce, *n.*		
1174		Pourrètia		2563
1336		P. see Billbérgia		2565
1336		P. see Pùya		2959
512	1079	Prâsium		1288
1268		Prasophýllum		2841
1164		Prâtia		2536
670	1073	Prenánthes		1630
1346		Prepùsa		2990
764	1084	Prescòtia		1926
54		Prickly-grass		146
413		Prickly pear, *n.*		
875		Priest's-tree, *n.*		
126 / 1156	1080	Primrose		350
126 / 1156 / 1306	1080	Primula		350
	1080	Primula'ceæ, Or. 119.		
786		Prince's feather	13299	1975
286	1063	Prinos		828
520	1079	Priva		1320
12 / 1144		Privet		36
464	1058	Próckia		1179
1468		Prominæ'a		3218
1324		Pronàya		2926
350 / 1530	1067	Prosòpis	984 / 3333	
512 / 1400	1079	Prostanthèra		1284
80 / 1294	1081	Prôtea		231
	1081	Protèaceæ, Or. 131.		
1295		Proteàceæ, culture of, *n.*		
927		Protococcus, *n.*		
930	1091	Protonèma		2279
512 / 400	1079	Prunélla		1286
422	1067	Prùnus		1129
1384		P. see Cérasus		3058
	1067	Prussic acid		
56	1089	Psamma		162
742	1074	Psiâdia		1836
416	1068	Psidium		1181
892	1090	Psilòtum		2213
638 / 1244	1066	Psoràlea		1597
1431		P. see O'robus		1557
172	1072	Psychòtria		483
100	1064	Ptâlea		298
882	1090	Ptèris		2190
604	1067	Pterocárpus		1515
1270		Pterocárya		2844
1412		Pterodiscus		3190
904	1091	Pterogònium		2229
542	1057	Pteroneùron		1398
686	1074	Pterònia		1679
580	1060	Pterospérmum		1470
1288		Pterostigma		2860
1266 / 1492		Pteróstylis		2828
1266		Pterygòdium		2823
1450		Ptilocnêma, *s*		1904
940	1091	Ptilòta		2311
1046	1093	Puccínia		2498
460		Puccoon		1165
1034		Puffball		2443
716	1073	Pulicària		1745
122	1078	Pulmonària		338
1392		Pulsatílla, *s.*		1226
	1064	Pulse		
344 / 1190 / 1360	1066	Pultenæ'a		965
808		Pumpkin	13563	2021
420	1068	Púnica		1127
1202		Púrshia		2631
396	1069	Purslane		1091
228		Purslane-tree		692
278	1086	Puschkinia		804
1336		Pùya		2959
506	1079	Pycnánthemum		1273
1222		Pycnóstachys		2652
424 / 1206		Pyracántha	7072	1132
956	1092	Pyrénula		2337
722	1073	Pyrèthrum		1770
362	1075	Pýrola		1022
1176		Pyrolírion		2568
424 / 1208	1067	Pýrus		1133
1208		P. see Amelánchier		1138
	1054	Pythagorean bean of antiquity		
1512		Pythònium		3284
1512		P. see Amorphophâllus		3285
130	1077	Pyxidánthera		359
66		Quaking grass		195
278		Quamash	4773	803
1180		Quamash, *n.*		
354	1063	Quássia		1002
1264		Quekéttia		2804
794 / 1506	1083	Quércus		2000
76	1080	Quèria		227
56		Quick, *n.*		
1374		Quillàja		3045
894		Quillwort		2214
426	1067	Quince		1134
364 / 1368	1068	Quisqualis		1028
852	1062	Quivisia		989
1038	1093	Racòdium		2470
108	1089	Radíola		321
556	1057	Radish		1443
606	1066	Ráfnia		1527
388		Ragged robin	6540	1067
742		Ragwort		1833
838	1086	Rajânia		2084
1500		R. see Akèbia		3252
970	1092	Ramalina		2355
786		Rambutan		1971
132	1078	Ramónda		374
832		Ramoon-tree		2063
168	1075	Rampion		465
974		Ramson	4671	796
174 / 1322	1072	Rándia		490
	1054	Ranunculàceæ, Or. 1.		
486 / 1394	1054	Ranúnculus		1233
554	1057	Rape	9247	1432
556	1057	Ráphanus		1443
426	1067	Raphiólepis		1136
1328		Raphistémma		2941
548	1057	Rapistrum		1418
450		Raspberry	7524	1149
256		Rattan-cane, *n.*		
686		Rattlesnake-fern		
			14619	2203
602		Rattlesnake-root		
			10005	1478
154	1077	Rauwólfia		441
75		Raw-sugar, *n.*		
476	1069	Reaumúria		1210
1401		Rechsteinera, *n.*		
334		Red bay	5653	934
793		Red beech, *n.*		
848		Red cedar	14056	2113
1521		Red cola, *n.*		
802		Red deal, *n.*		
1043		Red gum, *n.*		
418		Red gum-tree	6992	1136
226		Red-lac	3792	681
588	1069	Redoutèa		1442
604		Red saunders-wood		1513
927		Red snow plant, *n.*		
586		Red sorrel, *n.*		
65		Red-top, *n.*		
176		Red-wood	2872	503
60		Reed		17[illegible]
1238		Reevèsia		2703
1190		Reichárdia		2072
720	1073	Reihânia		1701
50	1089	Remirèa		3[illegible]
1512		Remusàtia		3280
762 / 1486	1085	Renanthèra		1648
1150		Renealmia		[illegible]
398	1083	Resèda		1[illegible]
	1083	Reseda'ceæ, Or 137		
612		Restharrow		1481
	1087	Restiaceæ, Or 172		
828	1087	Réstio		2[illegible]
1450		Restrèphia		[illegible]
1166		Retanilla		[illegible]
142	1077	Rétzia		[illegible]
678	1073	Rhagadíolus		1633
192 / 862 / 1326	1081	Rhagòdia	[illegible] / [illegible]	
	1063	Rhamnea, Or. 54		
176 / 1322	1063	Rhámnus		950
866	1088	Rhàpis		2[illegible]
1440		Rhapónticum		3[illegible]
121	1058	Rhatany-root		[illegible]
334	1081	Rhèum		[illegible]
318	1068	Rhexia		[illegible]
524	1078	Rhinánthus		[illegible]
1178		Rhinopétalum		[illegible]
414 / 1380	1069	Rhipsalis		[illegible]
1022	1092	Rhizoctònia		[illegible]
1038	1093	Rhizomórpha		[illegible]
394	1071	Rhizóphora		[illegible]
	1071	Rhizophoreæ, Or [illegible]		
1024	1092	Rhizopògon		[illegible]
1250		Rhodánthe		[illegible]
1276		Rhodíola		[illegible]
1228		Rhodochiton	17654	[illegible]
358 / 1190 / 1362	1075	Rhododéndron		[illegible]
1370		Rhodoleia		[illegible]
942	1091	Rhodómela		[illegible]
358 / 1194	1075	Rhodòra	[illegible] / 5936	
1270		R. see Pterocárya		[illegible]
1322		Rhodóstoma		[illegible]
86	1081	Rhopâla		[illegible]
334	1081	Rhubarb		[illegible]
224	1064	Rhús		[illegible]
1288		Rhynchoglóssum		[illegible]
48	1089	Rhynchóspora		[illegible]
1314		Rhynchospérmum		[illegible]
1030	1093	Rhytísma		[illegible]
190 / 1168 / 1326	1069	Ribes		[illegible]
96	1080	Rib-grass	1687	[illegible]
922	1091	Riccia		[illegible]
288	1088	Rice		[illegible]
288	1072	Richárdia		[illegible]
814	1082	Ricinus		[illegible]
542	1057	Ricótia		[illegible]
1420		Rigidélla		[illegible]
1342		Ripógonum		[illegible]
1310		Rivea		[illegible]
88	1081	Rivina		[illegible]

Lin.	Nat.		Sp.	Gen.
	1091	Rivulària		2270
676	1073	Robértia		1647
836 / 1434	1066	Robínia		1568
1356		R. see Ammodéndron		3007
224		Rocambole	4648	796
965	1092	Roccélla		2247
220	1070	Róchea		698
548 / 556		Rocket	1421	1436
468 / 1214	1069	Rock rose		1197
756 / 1460	1085	Rodrigués'a		1883
1044		R see Leochílus		3238
168	1075	Roélia		467
1318		Rogiéra		2910
746	1074	Rolándra		1851
460	1056	Roméria		1168
164 / 1164 / 1340	1072	Rondelétia		460
1164		R see Hindsia		2912
1318		R see Rogiéra		2910
828		Rope-grass		2047
442 / 1248 / 1286	1067	Rósa		1148
	1057	Rosáceæ, Or 60.		
4 / 1244	1085	Roscóea		7
442 / 1248	1067	Rose		1148
636		Rose acacia	10465	1568
	1068	Rose apple		
318		Rose bay	5474	903
444		Rose campion		1066
22	1079	Rosemary		61
1308		Rose of Jamaica, *n.*		
544		Rose of Jericho		1416
1276		Rose-root		2847
441		Rose-water, *n.*		
22	1079	Rosmarínus		61
233		Rossoli, *n.*		
76	1066 / 1073	Róthia		1643
74		Rottbœllia, *n.*		
444	1082	Róttlera		2105
464		Roucon, *n.*		
288		Rough chervil		620
1194		Roulínia, *s.*		2956
1314		Roupéllia		2895
302	1089	Roxburghia		876
334		Royal bay	5648	934
464	1076	Royéna		1035
52		Royléa		2655
94	1072	Rúbia		267
	1071	Rubiáceæ, Or 84.		
1040	1093	Rubígo		2486
450	1067	Rúbus		1149
790 / 1440	1074	Rudbéckia		1800
1444		R see Echinácea		3195
1240		Rudólphia		2708
354		Rue		998
416 / 1226 / 1408	1079	Ruéllia		1304
1410		R see Asystásia		3113
1236		R see Calóphanes		2672
1236		R see Goldfússia		2671
1408		R see Petalídium		3111
1408		R see Stemonacánthus		3106
1236 / 1408		R. see Strobilánthes		2670
1408		R. see Strobilórachis		3109
592	1060	Ruízia		1489
1236		R see Boldóa		3319
234	1060	Rullngia		704
22		Rum, *n.*		
292	1061	Rumex		856
222	1071	Rumia		676
108	1069	Ruppia		318
288		Rupture-wort		614
446	1065	Rúscus		2111
254		Rush		760
344		Rush-broom		957
90		Rush-nut	896	127
532 / 1230	1078	Russélia		1364
	1060	Russian mats		

Lin.	Nat.		Sp.	Gen.
	1092	Rust		
854	1052	Rúta		998
	1062	Ruta'ceæ, Or. 49.		
1212		Rydnea		2635
72	1088	Rye		208
70		Rye-grass	1946	207
1224 / 1402		Rytidophýllum		2662
1402		R. see Gésnera		1290
938	1091	Rytiphlœ'a		2300
1534		Sabadilla seeds, *n.*		
292 / 1182	1088	Sábal		855
130	1077	Sabbátia		367
74	1089	Sáccharum		215
1266 / 1482		Saccolábium		2817
476		Sacred bean		1213
38	1085	Saffron	614	93
22 / 1146	1079	Sage		62
23		Sage-apple, *n*		
106	1059	Sagina		319
790	1087	Sagittária		1988
846		Sago, *n.*		
788		Sago palm		1982
788	1088	Ságus		1982
658		St. Andrew's cross	11047	1618
736		St. Barnaby's thistle	12598	1819
632 / 1434		Saintfoin	10597	1588 / 3164
868		St. John's bread	14328	2156
656		St. John's wort		1617
170		St. Peter's wort		476
256 / 752, *n* / 1254		Salep	4321	758
	1068	Salica'riæ, Or 61		
6	1081	Salicórnia		22
798		Salisbúria		2003
820		Sálix		2042
690	1074	Salmea		1696
	1084	Salop		
1224		Salpiglóssis		2667
1158		Salpiglóssis, *s.*		2520
1408		Salpixántha		3108
666	1072	Salsify	11066	1621
204	1081	Salsóla		609
388		Salt of lemons, *n.*		
204		Saltwort		609
22 / 1146 / 1288	1079	Sálvia		62
1398		S see Audibértia		3075
224	1071	Sambúcus		680
168	1080	Sámolus		471
212		Samphire		633
364	1063	Samýda		1034
1519	1063	Samy'deæ, Or. 56.		
	1065	San, *n.*		
102		Sandal		
848		Sandal-wood		307
814		Sandarach, *n.*		
878		Sandbox-tree		2035
450	1056	Sandwort		1050
88	1067	Sanguinária		1165
210		Sanguisórba		256
210	1070	Sanicle		623
268	1086	Sanícula		623
1342		Sansevièra		779
	1082	S. see Cordyline		2974
102	1062	Santala'ceæ, Or 133.		
694	1073	Sántalum		307
724	1074	Santolina		1734
177		Sanvitália		1780
	1060	Sap-green, *n.*		
328	1060	Sapíndus		926
812	1083	Sáptum		2031
370 / 1196	1059	Saponária		1045
1370		S. see Túnica		3042
150	1076	Sapóta		427
	1076	Sapo'teæ, Or. 96		
156	1078	Sáracha		449
762 / 1488	1085	Sarcánthus		1915
1486		S see Saccolábium		2817
602	1056	Sarcocápnos		1506
1236		Sarcocaúlon		2695
174	1072	Sarcocéphalus		498

Lin.	Nat.		Sp.	Gen.
1262 / 1466		Sarcochílus		2775
1268		Sarcocócca		2843
1492		Sarcoglóttis		3245
1354		Sarcogýnum		3002
608	1066	Sarcophýllum		1529
196 / 1328	1077	Sarcostémma		579
462 / 1388	1056	Sarracénia		1173
	1086	Sarsaparilla		
334	1061	Sassafras-tree	5657	934
496	1079	Saturéja		1246
750 / 1490	1085	Satýrium		1856
1492		S see Peristylis		3246
1388		Sauradja		3067
1388		Sauroglóssum		3837
1312		Sauromátum		3262
298	1084	Saururus		872
680 / 1440	1074	Saussúrea		1662
186	1058	Sauvagésia		539
46		Savanna flower	2356	413
848	1084	Savin	14053	2113
496	1079	Savory		1246
554		Savoy		
260		Savoy spiderwort	4382	769
680		Saw-wort		1661
1518		Saxe-Gotha'a		3304
366 / 1370	1070	Saxífraga		1041
366		Saxífrage		1041
	1070	Saxifra'geæ, Or. 75.		
90	1072	Scabiósa		264
90		Scabious		264
168 / 1320	1075	Scæ'vola		473
140	1071	Scammony	2260	384
208	1071	Scándix		619
1264		Scaphyglóttis		2808
1472		Scelochílus		3232
1176		Sceptránthes		2570
832	1063	Schæfférla		2060
290	1090	Scheuchzéria		840
842	1061	Schínus		2093
1502		S see Duvalia		3265
66	1089	Schismus		190
898	1091	Schistóstega		2219
1230		Schiverékia		2683
786	1055	Schizándra		1972
16 / 534 / 1144 / 1286	1078	Schizánthus	44	1372
926	1091	Schizonéma		2264
1386		Schizonótus		3063
538	1058	Schizopétalon		1380
1006	1092	Schizophýllum		2370
1436		Schizopleúra, *s*		1613
1328		Schizóstoma, *s*		2943
718	1074	Schkúhria		1762
1464		Schlimmia		3213
1444		Schœ'nia		3188
48	1089	Schœ'nus		119
1260 / 1464		Schombúrgkia		2766
446	1067	Schótia		969
1180		Schrádera		2588
854	1067	Schránkia		2125
180	1063	Schrébera		514
806	1084	Schubértia		2015
1328		Schubértia		2937
1326		Schweiggéria		2935
16	1080	Schwénckia		42
278 / 1178 / 1344	1066	Scilla		803
1344		S. see Bellevália		2986
1510		Scindápsus		3281
48	1089	Scirpus		123
	1085	Scitamíneæ, Or. 151.		
366	1069	Scleránthus		1037
732	1074	Sclerocárpus		1808
68	1089	Sclerochloa		199
1032	1093	Sclerodérma		2442
1410		Sclerdon		3118
344	1066	Sclerothámnus		962
1020	1092	Sclerótium		2404
882	1090	Scolopéndrium		2188
678	1073	Scólymus		1639
96	1078	Scopária		476

Lin.	Nat.		Sp.	Gen.
118		Scorpion-grass		326
626		Scorpion senna	10494	1576
628	1066	Scorpiùrus		1579
666	1073	Scorzonèra		1625
290		Scotch asphodel	14954	844
73		Scotch barley, *n.*		
994		Scotch bonnets, *n.*		
608 / 1240	1066	Scóttia		1532
93		Scratch-weed, *n.*		
620		Screw-pine		2041
660		Screw-tree		1466
530 / 1412	1078	Scrophulària		1356
	1078	SCROPHULARINEÆ, Or. 112		
88		Scunkweed	1504	252
846	1057	Scurvy-grass		1407
512 / 1400	1079	Scutellària		1285
1468		Scuticària		3219
1246		Scyphánthus		2721
928	1091	Scythymènia		2272
930	1091	Scytonèma		2277
944	1091	Scytosiphon		2340
206		Sea blite	3443	611
832		Sea buckthorn		2058
380		Sea chickweed		1050
1527		Sea cocoa-nut, *n.*		
288		Sea heath		835
210		Sea holly	3502	622
556		Sea-kale		1442
234 / 1172	1080	Sea lavender		706
561		Sea matgrass	1011	162
210		Sea parsnep		624
714		Sea ragwort	12138	1741
548		Sea rocket	9144	1417
812		Seaside balsam	13632	2032
326	1081	Seaside grape		922
812		Seaside laurel	13617	2027
64		Seaside oat		186
945		Sea trumpet, *n*		
8		Sea-wrackgrass		24
98	1077	Sebæ'a		281
72	1089	Secàle		209
196	1077	Secamòne		577
602	1058	Securidàca		1511
788	1082	Securinega		1978
744	1089	Sedge		1947
382 / 1196 / 1372	1070	Sèdum		1061
520 / 1410	1079	Selàgo		1316
512		Self-heal		1286
220	1071	Seltnum		663
720	1074	Sellòa		1766
	1069	SEMPERVIVEÆ, Or. 74.		
406	1070	Sempervivum		1110
1376		S see Æònium		3047
178		Senàcia		508
704 / 1248 / 1442	1074	Senècio		1738
1248		S. see Cinerària		1741
880		Sensitive fern	14487	2178
854	1064	Sensitive plant	14101	2124
1038	1093	Sepedònium		2476
1030	1093	Septària		2428
298	1070	Séptas		874
454		Septfoil		1154
754	1085	Seràpias		1869
328	1060	Seriàna		924
1408		Sericógraphis		3107
182	1060	Seringia		525
676	1073	Serìola		1648
172	1072	Serissa		481
866		Serpent-wood	14316	2152
784	1069	Serpicula		1968
628		Serradilla	10515	1578
680	1074	Serrátula		1661
1440		S. see Saussùrea		1662
82	1081	Serrùria		234
152	1076	Sersalisia		433
426		Service	7100	1133
514	1079	Sésamum		1296
630	1066	Sesbània		1581
214	1070	Séseli		642
60	1089	Sesléria		177
428	1069	Sesùvium		1143
54	1089	Setària		145
1438		Severinia		3170
1228		Seymèria		2677
654		Shaddock	10980	1615
274		Shallot	4664	796
648		Shamrock, *n.*		
356		Sheep laurel	5916	1011
666		Sheep's beard		1623
188		Sheep's scabious		547
294		Sheep's sorrel		856
794		Shell-bark hickory, *n*		
832 / 1276	1082	Shephérdia		2057
132		Shepherd's club	2133	375
546		Shepherd's purse	1408 / 1409	
94	1072	Sherárdia		269
1322		Sherboúrnia		2922
884		Shield fern		2199
353		Ship blocks, *n.*		
784		Shore-weed		1967
100		Shrubby trefoil		298
588		Shuttlecock	9865	1486
236	1067	Sibbáldia		710
426		Siberian crab	7092	1133
626		Siberian pea-tree		1569
532	1078	Sibthórpia		1358
810	1069	Sicyos		2023
588	1067	Sida		1487
1236 / 1426		S see Abùtilon		2701
1424		S see Lopímia		3148
498	1079	Sideritis		1252
100	1072	Siderodéndrum		292
150	1076	Sideróxylon		425
462		Side-saddle flower		1173
728	1074	Siegesbéckia		1789
456	1059	Sievérsia		1161
1386				
374	1059	Silène		1048
1372				
592		Silk-cotton-tree		1492
856		Silk-tree	14159	2127
738	1074	Silphium		1824
830		Silver-tree	13840	2053
140		Silver-weed		385
682	1074	Silybum		1664
	1063	SIMARUBA'CEÆ, Or 52.		
1344		Simèthis		2982
732	1074	Simsia		1805
554	1057	Sinàpis		1433
810		Single-seeded cucumber		2023
1224 / 1402		Sinníngia		2663
1164 / 1320		Siphocámpylos		2538
1320		S see Tùpa		2537
846		Sir Joseph Banks's pine	14047	2112
216	1070	Sison		647
1010	1092	Sistotrèma		2376
550	1057	Sisýmbrium		1422
1150 / 1292		Sisyrinchium		2508
1346		S. see Eleutherine		2989
1346		S. see Trimèzia		2991
214	1071	Slum		646
1534		Skimmia		3336
214		Skirret	3598	646
140		Skirret of Peru, *n.*		
512		Skullcap		1285
406		Slipper-plant		1104
187 / 1146		Slipperwort		51
464	1060	Sloánea		1180
422		Sloe-tree	7052	1129
1392		Smeathmánnia		3071
1374		Smegmària, *s*		3045
	1086	SMILACEÆ, Or. 161.		
270 / 1342	1086	Smilacina		788
836 / 1524	1086	Smilax		2081
628 / 1434	1066	Smíthia		1580
216	1071	Smýrnium		650
616		Snail-flower	10256	1547
808		Snake gourd		2019
144	1076	Snake-root		406
272		Snake's beard		799
886		Snake's tongue		2206
326		Snake's weed	5594	921
826		Snakewood		2043
526 / 1238	1078	Snap-dragon		1343
18		Snap-tree	204	47
26		Sneezewort	12348	1781
224		Snowball-tree	3774	679
172		Snowberry		440
248		Snowdrop		732
294	1076	Snowdrop-tree		1075
248		Snowflake		733
328		Soap-berry		928
370 / 1196	1059	Soapwort		1045
1264 / 1478		Sobràlia		2754
1464		S see Cattlèya		1906
205		Soda, *n.*		
860		Soft-grass		2132
154 / 1162 / 1316	1078	Solándra		444
	1078	SOLANEÆ, Or 110.		
156 / 1162 / 1316	1078	Solànum		471
128 / 1306	1080	Soldanélla		3511
676	1073	Soldevilla		1649
854		Soldier-wood		2123
940	1091	Solènia		2317
710	1074	Solidàgo		1740
742	1073	Soliva		1833
1324		Sóllya		2723
1166		Sóllya, *s.*		513
270		Solomon's seal		798
900	1092	Solorina		2331
668	1073	Sónchus		1627
1440		S see Mulgèdium		3173
1292		Sonerila		2964
340 / 1356	1066	Sophòra		901
1358		S see Ammodéndron		3007
1356		S. see Thermópsis		900
1262 / 1466		Sophrontis		2773
860	1089	Sórghum		2141
82	1081	Sorocéphalus		230
294	1081	Sorrel	5031	886
587		Sorrel cool drink, *n*		
360		Sorrel-tree	5952	1010
592		Sour gourd	9941	14
870		Sour gum	14581	216
480		Soursop	7920	122
696		Southernwood	11685	1711
106		South Sea tea	1831	31
272 / 1342	1086	Sowerbæ'a		790
60		Sowins, *n.*		
668		Sow-thistle		1627
616		Soy	10289	1550
218	1070	Spanánthe		650
552		Spanish cress	9221	1426
150		Spanish elm	2415	426
46		Spanish nut	824	66
140		Spanish potato, *n.*		
205		Spanish soda, *n*		
40 / 1148	1085	Sparáxis		99
774	1090	Spargánium		1466
688	1074	Sparganóphorus		1684
464	1060	Sparmánnia		1187
324		Sparrow-wort		914
52	1089	Spartina		136
610 / 1240	1066	Spártium		1537
1434		S see Calycótome		3163
1234		Spatalánthus		2667
82	1081	Spatálla		237
226	1064	Spathèlia		693
1510		Spathicárpa		3357
1406		Spathódea		3099
1464		Spathoglóttis		3313
1014	1092	Spatulària		2363
500		Spearmint, *n*		
486		Spearwort	8025	1333
1254 / 1448		Specklínia		2748
14		Speedwell	1235	88
70		Spelt		1978
390	1059	Spérgula		

Lin.	Nat.		Sp.	Gen.
1373		S. see Arenária		1050
94	1072	Spermacèce		270
163 / 1164	1072	Spermadictyon		455
946	1091	Sphacellária		2302
744	1073	Sphæránthus		1849
1028	1072	Sphæ'ria		2425
1094	1092	Sphæróbolus		2419
922	1091	Sphærocárpus		2258
942	1091	Sphærococcus		2314
344 / 1560	1066	Sphæroldbium		958
1030	1093	Sphæronêma		2427
970	1092	Sphæróphoron		2353
1378		Sphærostemma		3330
1334		Sphærótele		2954
868	1091	Sphágnum		2216
734 / 1252	1073	Sphenógyne		1816
1161		Sphenótoma		2529
	1061	Spice		
742		Spider ophrys	12838	1866
1174	1067	Spiderwort		765
1320	1079	Spielmánnia		1321
134	1077	Spigélia		379
212		Spignell		634
48		Spike rush		124
690	1074	Spilánthes		1695
990	1092	Spiloma		2330
834	1091	Spinácia		2070
834	1091	Spinage		2070
178 / 1168		Spindle-tree		509
428				
1208 / 1241	1067	Spiræ'a		1141
1340		S see Hoteia		3041
1366		S see Schizonôtus		3063
1724		Spiranthèra, s.		2926
754	1084	Spiránthes		1874
1492		S see Sarcoglóttis		3245
1314		Spironêma		2975
960	1091	Splâchnum		2231
880		Spleenwort		2186
342	1064	Spóndias		1059
558		Sponge-tree	14190	2127
1342	1093	Sporidérmium		2494
96	1089	Sporóbolus		159
944	1091	Sporóchnus		2321
1038	1093	Sporótrichum		2478
1336		Sprekélia		2966
142		Sprengélia		397
48		Spring-grass		76
275		Spring salad onion, n.		
904 / 1254		Spruce-beer, n.		
1036	1093	Spumária		2457
400 / 1168	1063	Spurge		1103
322		Spurge laurel	5530	910
1366		Spurless violet		2549
360		Spurrey		1070
178 / 1178	1086	Squill		803
72		Squirrel grass, n.		
906	1068	Squirting cucumber	13559	2020
56		Squitch, n.		
178	1093	Staávia		511
1490	1093	Stachylidium		2483
564 / 1274	1079	Stárhys		1263
1722 / 1798		S see Sphácele		2653
30 / 1288	1079	Stachytárpheta		54
178		Stackhousia		2557
312		Stadmánnia, s.		3011
906	1074	Stæhelina		1677
178		Staff-tree		507
1242 / 1474		Stanhópea		2786
722		Stánnia, s.		485
1480 / 1530	1077	Stapélia		594
1724		S see Dictyánthus		2939
28	1063	Staphylèa		684
1480	1076	Star-apple		424
1480		Star-fish	3278	594
276		Star of Bethlehem		802
98		Star of the earth		
704			1710	278
		Star-thistle	12605	1819

Lin.	Nat.		Sp.	Gen.
706 / 1248	1071	Star-wort		1739
738 / 284	1074	Stárkea		1784
1172 / 1330	1080	Státice		706
1330		S see Acantholimon		2949
764 / 1448	1085	Stèlis		1924
1450		S see Physosiphon		3196
376	1059	Stellária		1049
324	1082	Stellera		913
532	1078	Stemódia		1361
1408		Stemonacánthus		3106
1034	1093	Stemonítis		2447
1248		Stenáctis, s.		1736
144		Stenanthèra		402
1534		Stenánthium		3334
1264		Stènia		2800
84 / 1296	1081	Stenocárpus		241
524 / 1412	1079	Stenochilus		1333
1470		Stenocóryne		3226
1174 / 1334		Stenomésson		2561
1334		S. see Sphærótele		2954
784 / 1492	1084	Stenorhýnchus		1875
1180		Stephánia		2589
1328		Stephanòtis		2942
814 / 1520	1060	Stercúlia		2036
970	1092	Stereocaúlon		2332
294	1086	Sternbérgia		742
690 / 1248 / 1440	1073	Stèria		1689
966	1092	Stícta		2341
1018	1092	Stictis		2395
1442		Stifftia		3178
1196 / 1372		Stigmatophýllum		2614
930	1091	Stigonêma		2278
828	1083	Stilágo		2050
1042	1093	Stilbóspora		2493
1038	1093	Stilbum		2467
810	1083	Stillingia		2026
	1083	Stinging nettle		
1355		Stink-hout, n.		
1528		Stinking cedar, n.		
504		Stinking horehound		1265
1355		Stink-wood, n.		
54	1089	Stipa		150
376		Stitchwort		1049
616	1066	Stizolóbium		1551
686	1074	Stobæ'a		1673
538	1059	Stock		1381
744	1073	Stæ'be		1846
686	1074	Stokèsia		1672
382 / 1196	1070	Stonecrop		1061
362		Storax		1025
568		Stork's-bill		1461
134		Stramónium	2165	376
1206		Stranvæ'sia		2633
228		Strapwort		690
482	1084	Stratiótes		2056
418 / 1238 / 1382	1068	Stravádium	1125 / 2704	
452		Strawberry		1151
8		Strawberry blight		27
412		Strawberry pear, n.		
360 / 1194	1075	Strawberry-tree		1019
1434		Strelitzia, s.		2715
194	1085	Strelítzia		571
1148		Streptanthèra		2503
1230		Streptánthus		2682
1146		Streptocárpus		2501
270	1086	Streptópus		786
1226 / 1408		Strobilánthes		2670
1408		Strobiliórachis		3109
1026	1092	Stromatosphæ'ria		2421
148	1076	Strophánthus		416
240	1046	Strúmaria		734
86	1082	Struthíola		249
880	1090	Struthiópteris		2179
152	1077	Strychnos		437
592	1062	Stuártia		1475
	1075	Stylídeæ, Or. 92.		

Lin.	Nat.		Sp.	Gen.
766 / 1494	1075	Stylídium		1932
630	1066	Stylosánthes		1583
1180		Stypándra		2583
142		Styphèlia		394
362	1076	Styrax		1025
558	1058	Subulária		1447
678	1072	Succory		1657
263		Succotrine aloe, n.		
556	1057	Succòwia		1439
76		Sugar, n.		
76		Sugarcandy, n.		
74	1088	Sugar-cane		215
1319		Sugi, n.		
228		Sulphurwort		670
294		Sumach		681
266		Summer cypress	2413	610
232	1058	Sundew		702
730		Sunflower		1798
470 / 1214	1058	Sun rose		1198
328		Supple Jack	5615	923
626	1066	Sutherlándia		1571
626 / 1434	1066	Swainsònia		1570
196		Swallow-wort		588
1444		Swammerdámia		3187
868		Swamp locust-tree	11325	2155
479		Swamp sassafras, n.		
426		Swedish beam-tree	7097	1133
554		Swedish turnip	9245	1432
332		Sweet bay	5616	934
448		Sweet briar	7503	1148
564		Sweet calabash	9394	1459
256		Sweet flag	4316	755
830		Sweet gale	13865	2085
798		Sweet gum	13435	2001
	1076	Sweet leaf		
736		Sweet maudlin	12350	1781
620		Sweet pea	10362	1568
140	1077	Sweet potato	2264	384
480		Sweet sop	7922	1220
738		Sweet sultan	12627	1819
370		Sweet William	6140	1016
202	1077	Swértia		599
362	1062	Swietènia		990
676		Swine's succory		1645
878		Sword fern		2173
1502		Sỳagrus		3260
864		Sycamore	14279	2143
170	1071	Symphòtia		476
122	1078	Sýmphytum		334
	1076	Symploca'ceæ, Or 97.		
652 / 1438	1076	Sýmplocos		1614
728	1074	Synedrélla		1791
660		Syngene'sia, Cl. 19		
666		S. Æqua'lis, Or 1		
696		S. Supe'rflua, Or 2.		
730		S Frustra'nea, Or 3.		
738		S. Necessa'ria, Or. 4.		
744		S. Segrega'ta, Or. 5.		
1508		Syngònium		3272
396		Syrian rue	6611	1088
12 / 1144 / 1286	1076	Syringa		37
414 / 1202 / 148 / 1314	1070	Syringa		1114
1162	1077	Tabernæmontàna		418
840	1083	Tacamahac	13970	2087
256	1089	Tácca		758
1340		T. see Atáccia		2971
1308		Táchia, s.		2881
1512		T see Amorphophállus		3285
1422		Tacsònia		3139
880	1090	Tænitis		2176
718 / 1250	1074	Tagètes		1760
1218		Talaúma		2648
258		Tallera palm	4358	760
396	1069	Tallnum		1092
1374		T see Calandrínia		2634
259		Tallipot palm, n.		
831		Tallow shrub, n.		
810		Tallow-tree	13603	2026

Lin.	Nat.		Sp.	Gen.
562		Tamarind-tree		1449
562	1067	Tamarindus		1449
228		Tamarisk		685
228	1069	Tămarix		685
838	1086	Tâmus		2082
696	1073	Tanacētum		1720
1190		Tanahou, *n.*		
1518		Tanekaha, *n.*		
1314		Tanghinia, *s.*		420
620		Tangier pea	10365	1558
696		Tansy		1720
814		Tapioca, *n.*		
694	1074	Tarconánthus		1706
624		Tare		1562
912	1091	Targiònia		2257
	1072	Tarragon		
337	1081	Tart rhubarb		
557		Tartarian-bread, *n*		
1526		Tasmánnia		3320
848 / 1278	1084	Táxus		2114
1528		T see Cephalotáxus		3327
528		T see Torrèya		3326
148	1079	Teak-wood		421
90		Teasel		262
592		Tea-tree		1496
224 / 406		Técoma		2666
148	1079	Téctona		421
534	1078	Teèdia		1374
546	1057	Teesdàlia		1411
419		Tein-ching, *n.*		
228	1069	Telèphium		689
1484		Telipògon		3240
1196		Téllima		2613
84	1081	Teldpea		244
608	1066	Templetònia		1533
634 / 1434	1066	Tephrôsia		1590
616	1066	Terámnus		1548
	1064	TEREBINTHÀCEÆ, Or. 58.		
864 / 534	1068	Terminàlia		2140
388		Ternstrœ'mia		3064*
	1062	TERNSTRŒMIÀCEÆ, Or 46		
166		Terra japonica, *n.*		
464		Terra orellana, *n.*		
838 / 524	1086	Testudinària		2083
272		Teta, *n.*		
476	1055	Tetrácera		1212
524		Tetradènia, *s.*		3315
536		TETRADYNÀMIA, Cl. 15.		
430	1069	Tetragònia		1145
644	1066	Tetragonólobus		1602
716	1074	Tetragonothèca		1753
76		TETRÁNDRIA, Cl 4.		
80		T. MONOGY'NIA, Or. 1.		
104		T DIGY'NIA, Or. 2		
104		T. TETRAGY'NIA, Or. 3.		
1408		Tetranêma		3103
1188 / 1524		Tetranthèra		2600 / 3317
1266		Tetrapéltis		2813
898	1091	Tétraphis		2221
302 / 1350	1060	Tetrathèca		879
1368		Tetrazygia		3034
494 / 1398	1079	Teúcrium		1244
528		Thalâmia, *s.*		3328
	1054	THALAMIFLÒRÆ, Subc 1.		
2	1085	Thâlia		4
484 / 1394	1054	Thalictrum		1229
1086	1093	Thamnidium		2461
214	1071	Thâpsia		643
1281		Theet-tsee, *n.*		
1094	1092	Thelébolus		2417
1010	1092	Theléphora		2378
956	1092	Thelotrèma		2336
792	1083	Thelygonum		1993
650	1060	Theobròma		1607
1429		Theobròma, *n.*		
446	1075	Theophrásta		408
3240		Therèsia		2973
342 / 1356	1066	Thermopsis		944
194	1062	Thèsium		569
1364		Thibaúdia		3019
680		Thistle		1663
546	1057	Thlâspi		1408
1240		Thoka, *n.*		
182 / 1326	1060	Thomâsia		524
1512		Thomsònia, *s.*		3284
134		Thorn apple		376
218		Thorough-wax	3684	657
234		Thrift		705
260	1088	Thrinax		764
672	1073	Thrincia		1633
168		Throatwort		466
1196		Thryálilis		2615
806 / 1818	1084	Thûja		2018
1518		T see Bîota		3309
1518		T see Cállitris		3301
1518		T. see Frenèla		3305
1518		T. see Libocèdrus		3308
1518		T. see Widdringtònia		3303
518 / 1228 / 1410	1079	Thunbérgia		1308
1410		T. see Hexacéntris		3115
1410		T. see Meyènia		3116
496	1079	Thýmbra		1247
508	1079	Thyme		1279
	1082	THYMELÆ'E, Or. 132		
508	1079	Thymus		1275
1398		T see Melissa		1278
1222		T. see Micromèria		2656
1288		Thyrsacánthus		2858
276 / 1344	1086	Thysanôtus		799
368	1070	Tiarélla		1042
120	1078	Tiaridium		329
623		Ticks, *n*		
8		Tickseed		26
1202		Tigàrea, *s.*		2631
562 / 1232	1086	Tiger-flower		1452
562 / 1232	1086	Tigridia		1452
1420		T. see Beatònia		3136
1234		T. see Cypélla		2685
1420		T. see Hydrotæ'nia		3135
40		Tile-root		97
466	1060	Tilia		1186
	1060	TILIÀCEÆ, Or. 27.		
108	1070	Tillæ'a		320
246 / 1174 / 1336	1087	Tillándsia		729
1336		T see Vrièsia		2960
58		Timothy grass, *n.*		
732	1074	Tithònia		1802
526		Toad-flax		1344
136 / 1158	1078	Tobacco		382
182	1064	Toddàlia		529
789		Toddy, *n.*		
886	1090	Tòdea		2204
290	1087	Tofiéldia		844
676	1073	Tólpis		1641
	1078	Tomatoes		
1524		Tòmex, *s.*		3317
604	1065	Tonquin bean		1518
834		Toothache-tree		2066
524		Toothwort		1339
410		Torch-thistle, *n.*		
222	1071	Tordýlium		673
1230 / 1412		Torènia		2679
212	1071	Torilis		627
454	1067	Tormentilla		1154
1528		Torrèya		3326
904	1091	Tórtula		2228
1038	1093	Tórula		2468
184		Touch-me-not	3019	538
124 / 1154	1078	Tournefórtia		346
516	1078	Tourréttia		1299
232		Tow, *n.*		
540		Tower mustard		1389
168	1075	Trachèlium		466
214	1071	Trachyspérmum		638
474	1055	Trachytélia		1206
260 / 1178 / 1340	1087	Tradescántia		765
1340		T. see Cyanòtis		2572
774	1062	Trâgia		1944
666	1073	Tragopògon		1621
104	1069 / 1084	Trâpa		308
484		Traveller's joy	7962	1277
544		Treacle mustard		1402
392		Tree celandine	6592	1073
984		Tree fern, *n.*		
864		Tree mallow	9777	1471
274		Tree onion	4684	796
294		Tree sorrel	5019	856
640		Trefoil		1610
1350		Tremándra, *s.*		879
	1060	TREMÁNDRÆ, Or. 26.		
840		Trembling American-tree	13960	2047
1020	1092	Tremélla		2297
350		Trenails, *n.*		
930	1091	Trentepòhlia		2275
532	1078	Trevirâna		1362
1168		Trevòa ●		2545
30		TRIÁNDRIA, Cl 3.		
34		T. MONOGY'NIA, Or 1.		
52		T. DIGY'NIA, Or 2		
74		T. TRIGY'NIA, Or 3		
192 / 366	1069	Triánthema		344 / 1016
1260		Trias		2744
1452		Tribràchia, *s.*		2414
354	1062	Tribulus		946
1314		Tricerâtia, *s.*		2901
1314		Triceros, *s.*		2851
1034	1093	Trichia		2459
352	1062	Trichilia		967
1266 / 1490		Trichocéntrum		2820
1199		Trichócladus		3536
1040	1093	Trichodérma		2483
122	1078	Trichodésma		341
56	1089	Trichòdium		177
1470		Trichoglóttis		3178
886	1090	Trichómanes		2267
40 / 1290	1085	Trichonêma		16
1180		Trichopétalum		2582
50	1089	Trichóphorum		159
1250		Trichophýllum, *s.*		2711
1262 / 1470		Trichopilia ●		2774
1528		Trichosáchme		2954
808	1069	Trichosánthes		2
1452		Trichósma		3281
1414 / 1416		Trichósporum, *s*		3127
512	1079	Trichostèma		1253
902	1091	Trichóstomum		2270
1040	1093	Trichothècium		2477
1180		Tricóryne		2584
64	1089	Tricúspis		147
726	1074	Tridax		1782
296	1080	Trientàlis		862
640 / 1436	1066	Trifólium		1570
290	1090	Triglòchin		841
644	1066	Trigonella		1593
1256 / 1470		Trigonídium		2777
290	1086	Trillium		850
1346		Trimèzia		2961
214	1071	Trinia		645
66	1089	Tríodia		151
170	1071	Triósteum		467
174	1062	Triphàsia		439
482	1081	Tríplaris		1192
780	1089	Tripsacum		1989
678 / 1440	1074	Triptilion		1781
60	1089	Trisètum		173
652 / 1436	1068	Tristânia		1811
56	1089	Tristegis		156
1150		Tritelela		3007
68	1089	Triticum		205
268	1086	Tritoma		777
40 / 1290	1085	Tritônia		100
396	1060	Triumfétta		1907
740	1074	Trixis		1855
758	1085	Trizeûxis		1849
1426		Trochètia		3147
1162		Trochocárpa		2530

Lin.	Nat.		Sp.	Gen.
668	1054	Trèllius		1224
1394		Tromsdórffia, *s.*		2861
1208	1061	TROPÆOLEÆ, Or. 40.		
309	1061	Tropæ'olum		875
1184		T. see Chymocárpus		2894
1345				2063
838	1063	Tróphis		1622
666	1073	Tróximon	7100	1133
426		True service		2411
1032		Truffle		2411
514		Trumpet flower		1294
1675		Trymènium, see Odontoglóssum, *n.*		
1022	1092	Tùber		2411
1040	1093	Tuberculària		2488
234		Tuberose		747
1342	1086	Tulbàghia		780
1174	1087	Tulip		772
1742	1087	Tùlipa		772
478		Tulip tree		1216
1032	1093	Tulóstoma		2441
1370		Tùnica		3042
1164		Tùpa		2537
1320				
670		Tupelo		2161
256	1089	Tupístra		757
181		Turkey-berry-tree, *n.*		
354		Turkey-blossom, *n.*		
6	1085	Turmeric		14
228	1069	Túrnera		686
584	1057	Turnip	9246	1432
118	1082	Turnsole		325
804		Turpentine, *n*		
839		Turpentine-tree	13891	2065
1436		Turpentine-tree	20065	1611
1362		Turræ'a		3012
340	1057	Turritis		1389
701	1074	Tussilágo		1737
1293		Tussock grass, *n.*		
696		Tutsan	11000	1617
754		Twayblade		1876
1170		Twèdia		2553
1378		T. see Oxypétalum		2943
1401		Tydæ'a, *n.*		
1170		Týlophora		2556
1328		Tympanánthe, *s.*		2939
774	1060	Typha		1945
1 12		Typhònium		3289
0 11	1092	Týphula		2384
1393		Ugni, *n.*		
612				
1400	1066	Ulex		1540
1400				
1508		Ulloa, *s*		2880
1310		Ulluco, *n.*		
1304		Ullùcus		2902
	1083	ULMA'CEÆ, Or. 143.		
2 m	1083	U'lmus		615
1170				
218	1071	Ulospérmum		660
940	1061	U'lva		2308
	1070	UMBELLI'FERÆ, Or. 79.		
478		Umbrella-tree	7914	1217
36		Umbrella-wort		81
1166		Uncària		2543
778	1089	Uncínia		1949
278		Underground onion, *n.*		
1346		Ungnàdia		2992
64	1089	Uniola		186
1134	1083	Upas-tree		3337
244	1065	Urània		722
1334		U see Phenakospérmum		2955
958	1092	Urceolària		2339
1042	1093	Urèdo		2497
884				
1336	1059	Urèna		1477
382	1086	Uropétalon		818
1536		Urostigma, *s*		2167
782	1083	Urtica		1962
	1083	URTI'CEÆ, Or. 141.		
974	1092	Usnea		2357
20	1079	Utriculària		53
490	1065	Uvària		1219

Lin.	Nat.		Sp.	Gen.
270	1086	Uvulària		785
330	1075	Vaccínium		907
1392				
1366		V. see Gaylussàcia		3023
862	1072	Valántia		2136
34	1072	Valerian		78
34	1072	Valeriàna		78
1290				
	1072	VALERIA'NEÆ, Or. 86.		
34	1072	Valerianélla		80
1148				
154	1088	Vallèsia		442
252	1086	Vallòta		740
1304		Valoràdia		2872
762	1085	Vánda		1916
1486				
1488		V. see Aérides		1917
530	1078	Vandéllia		1357
1507		Van Diemen's Land beech, *n.*		
172	1072	Vanguiéra		486
764	1084	Vanílla		1930
1494				
956	1092	Variolària		2338
150	1078	Varrònia		429
	1054	VASCULA'RES, Div 1		
1330		Vauánthes, *s*		2948
940	1091	Vauchèria		2304
1534		Vegetable ivory, *n.*		
1334		Veitchia, *s.*		2962
204	1059	Velèzia		604
556	1057	Vélla		1437
168	1075	Vellèia		472
1320				
268	1086	Velthèimia		778
	1064	Venetian turpentine		
	1084			
208		Venus's comb	3478	619
356		Venus's flytrap	5913	1009
166		Venus's looking-glass	2695	463
122		Venus's navelwort		337
1534		Veratra, *n.*		
858	1087	Verátrum		2128
1534		V. see Stenánthium		3334
132	1078	Verbáscum		375
520	1079	Verbèna		1322
1228				
	1079	VERBENA'CEÆ, Or. 116		
728	1074	Verbesìna		1790
328	1070	Vèrea		927
686	1074	Vernònia		1680
14	1078	Verónica		40
1286				
1286		V see Leptándra		2854
1014	1092	Vérpa		2388
974	1092	Verrucària		2361
1370		Verticórdia		3037
520	1079	Vervain		1322
1228				
1406		Vesàlia, *s.*		3098
544	1057	Vesicària		1400
132	1078	Véstia		371
622		Vetch		1561
620		Vetchling	10349	1558
606	1066	Vibórgia		1523
224	1071	Vibúrnum		679
1172				
1330				
622	1066	Vícia		1561
1432				
1388		Victòria		3064
1388		V. see Nymphæ'a		1174
1252		Viguièra		2742
130	1077	Villársia		363
1242		Vilmorinia		271
344	1066	Viminària		957
146	1076	Vínca		410
174	1061	Vine		501
	1061	VINÍFERÆ, Or. 37.		
186	1058	Viola		540
1166				
1326				
	1058	VIOLÀRIÆ, Or. 15.		
186	1058	Violet		540
1166				
124		Viper's bugloss		345
666		Viper's grass		1625
1364		Virèya, *s.*		3014
342	1066	Virgília		945
176		Virginian creeper	2868	502

Lin.	Nat.		Sp.	Gen.
834		Virginian hemp		2072
390		Virginian poke	6878	1071
482	1054	Virgin's bower		1227
1220				
830	1071	Viscum		2084
1198		Viscària		2630
1374				
1378		Visnàga, *n.*		
406	1076	Vísnea		1105
520	1079	Vitex		1317
1410				
174	1061	Vitis		501
882	1090	Vittària		2191
1372		Viviània		3043
522	1079	Volkamèria		1326
1410		V. see Clerodéndron		1325
1323		Vomit-root, *n*		
1336		Vrídsia		2960
44	1085	Wachendórfia		110
1164		Wahlenbèrg a		2835
1318				
1470		Waillèsia		3229
328		Waistcoat buttons, *n.*		
428	1067	Waldsteinia		1140
892		Walking fern	14646	2212
328		Walking-stick, *n*		
540		Wall cress		1390
538		Wallflower		1382
1502		Wallichia		3257
880		Wall rue	14506	2186
1424		Wallaùra		3142
794	1064	Walnut		1909
562	1060	Walthèria		1454
356		Wampee-tree		1006
84		Warratah		244
1462		Wárrea		3211
550		Wart cress		1427
104		Water caltrops		308
49		Water chestnut, *n.*		
76		Water chickweed	1297	224
538		Water cress	8964	1383
488		Water crowfoot, *n.*		
212		Water dropwort		632
214		Water hemlock		633
20		Water horehound		55
132		Water leaf		372
565		Water lemon, *n.*		
462		Water lily		1174
808		Water melon	13567	2021
790		Water milfoil		1987
214		Water parsnep		646
326		Water pepper	5572	721
294		Water plantain		861
288		Water purslane		836
842		Water soldier		2096
1498		Water soldier	20870	3249
8		Water starwort		27
476		Water vine	7897	1212
128		Water violet		355
328		Waterwort		931
40	1086	Watsònia		101
12		Wax-tree	158	36
98		Way-bread, *n.*		
224		Wayfaring-tree	3771	679
174	1072	Wébera		494
738	1074	Wedèlia		1821
1322		Weigèla		2920
324	1070	Weinmánnia		919
1370		W. see Acrophýllum		3038
900	1091	Weissia		2224
274		Welsh onion	4687	796
294	1055	Wendlándia		858
496	1079	Westringia		1245
1398				
68	1088	Wheat		206
1294		Wheat barley, *n.*		
71		Wheat starch, *n*		
1308		Whitlèya		2882
426		Whitebeam-tree	7096	1133
1350		White candlewood, *n.*		
806		White cedar	13545	2017
1521		White cola, *n*		
804		White deal, *n.*		
860		White hellebore, *n.*		
479		White laurel, *n.*		
804		White spruce	13531	
694		White wood		
408		Whitfieldia		

Lin.	Not.		Sp.	Gen.
844		Whitlow grass		1495
320		Whortle-berry		907
1818		Widdringtònia		3308
26		Widow-wail		64
1330		Wigándia		2944
806		Wild basil		1272
134		Wild bugloss		344
722		Wild chamomile	12291	1771
418		Wild cinnamon, *n.*		
418		Wild clove-tree	6978	1121
188		Wild cumin	3104	548
614		Wild liquorice		1546
60		Wild oat	1058	171
2		Wild plantain, *n.*		
360		Wild rosemary	5944	1016
424		Wild service	7062	1132
10		Wild tamarind		30
452		Wild tansy	7579	1153
826	1067	Willdenòvia		2046
820	1063	Willow		2042
318		Willow-herb		903
798		Willow oak, *n.*		
423		Winesour, *n.*		
644		Winged pea	10667	1602
488		Winter aconite		1236
1526		Winterâna, *s.*		3320
286		Winter berry		828
156		Winter cherry		448
540		Winter cress		1386
176		Winter grape	286 1	501
296 / 362		Winter green	862 / 1022	3157
432		Wistària		312
104		Witch-hazel		273
96	1078	Witheringia		94
38	1085	Witsènia		1430
552		Woad		419
419		Woad, *n.*		1205
474		Wolf's bane		170
170		Woodbine	2787	474
85		Wooden apple, *n.*		
690		Wood everlasting pea	10373	1558
94		Woodroof		268
496		Wood sage	8123	1244
896	1090	Woódsia		2200
387		Wood sorrel, *n.*		

Lin.	Not.		Sp.	Gen.
880	1090	Woodwárdia		2184
134		Worm-grass		279
696		Wormwood		1721
1264		Wourali		
146 / 1319	1075	Wrightia		412
1502 / 18 / 1288		W. see Wallichia		3287
		Wulfènia		50
1414		W. see Klùgea		3126
290	1087	Wurmbèa		648
208		Wych	3464	615
786	1073	Xánthium		1974
656	1061	Xanthochymus		1616
226	1051	Xanthorrhiza		709
276	1086	Xanthorrhœ'a		798
1332		Xanthòsia		2945
1806		Xanthosòma		3270
834 / 1522	1063	Xanthóxylum		2066
700	1074	Xeránthemum		1729
290	1087	Xerophýllum		647
836	1087	Xerótes		2076
716	1074	Ximenèsia		1754
1444		X. see Echinàcea		3195
804	1062	Ximènia		890
44 / 1292	1085	Xiphídium		108
878	1090	Xiphópteris		2173
1024	1092	Xylària		2490
758	1085	Xylòbium		1891
1032	1093	Xylòma		2437
84	1081	Xylomèlum		243
480	1055	Xylòpia		1224
36	1087	Xýris		86
196	1077	Xysmalòbium		586
838	1086	Yam		2085
232		Yarn, *n.*		
390		Yarr, *n.*		
726		Yarrow	12383	1781
488		Yellow bachelor's buttons, *n.*		
356		Yellow bird's nest		1008
502		Yellow dead-nettle	8283	1261
802		Yellow deal, *n.*		
524		Yellow rattle		1340
236		Yellow-root		709
738		Yellow sultan	12630	1819
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